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Cembre

Certified Quality Management System

GENERAL CATALOG

PRESENTATION

This catalogue illustrates the range of our standard products.
For each product family we indicate the principal features, and sometimes the most frequent applications and the necessary guidelines for a correct application.
Our sales personnel are at your disposal to supply more detailed information and our design and development engineers are available to study new solutions to particular applications.

On 22nd December 1992 ***the Quality Management System*** *of our company was upgraded by* ***Lloyd's Register Quality Assurance (LRQA) to ISO 9001*** *with field of application enlarged to:* ***"Design and Manufacture of cable accessories, electrical connectors and associated tools"****.*
In fact, our previous ***Quality Management System*** *already assessed on 14th December 1990 according to ISO 9002, has been enlarged to the* ***Design and Manufacture of all our products; Cembre's Quality is now guaranteed across our whole range of production****.*
The activity of the main premises in Brescia, the Italian regional offices and the subsidiary companies in Great Britain, France, Spain, Germany and USA operate within the same Quality System, ***according to the prescriptions of the ISO 9001:2008 norm for the design, manufacture and sales of electrical connectors and associated tools, cable accessories, marking systems, toolings and products for railway applications. In house repair, refurbishment and calibration of toolings.***
This guarantees a homoge-neous and high quality level of the products and services that Cembre provides to its customers.

Cembre SpA has recently recognised the need to align its ***Environmental Management System*** *with the spirit and content of* ***UNI EN ISO 14001: 2004 as fundamental to future development.***
To this end the company undertook a wide-ranging review of all functions including development and design stages, material selection, usage and manufacturing processes. The resulting definition of operational procedures in line with these aims and provisions has enabled Cembre SpA to achieve ***Environmental Certification****, further highlighting the companies sensitive and careful approach to environmental protection.*

Cembre S.p.A. *has recently enhanced its business processes with* ***the certification by Lloyd's Register of Quality Assurance, of its Management System for the Health and Safety of Workers, in accordance with the standard OHSAS18001:2007 (Occupational Health and Safety Management System).***
The project, launched in early 2011, was strategically designed to facilitate the active participation of all employees at every level in the application of systems management, in order to optimise compliance of risk management capability with regard to laws and regulations concerning the health and safety of workers.
All employees have received exhaustive training and are involved, by exercising their individual responsibility and competence, as key players in the identification of residual risk situations and the proposal of corrective solutions.
For Cembre then, this certification is not only the proper recognition of the quality of work performed, but also an incentive to maintain a determined competitive advantage in increasingly difficult and aggressive international markets.

RoHS compliant 2002/95/EC

All Cembre products comply with Directive 2002/95/CE of the European Parliament and Council dated 27 January 2003 (and subsequent amendment).

Cembre Inc;
Edison - New Jersey

Operative since March 1999, Cembre Inc. based in Edison, NJ, provides full stock of our products available to customers, technical assistance and repair capabilities with immediate availability of spare-parts.
Our head-office in Edison serves the United States, Canada and Mexico.

Cembre S.p.A. *factory in Brescia (ITALY) covers an area of approximately 128,000 m²*

Cembre Ltd.
factory in Curdworth (Birmingham)

Production Units

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ELECTRICAL CONNECTORS

HALOGEN FREE INSULATED TERMINALS

VP RP BP GP

P range funnel entry

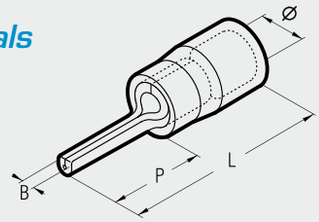
OPERATING TEMPERATURE UP TO 239° F

HALOGEN FREE

File no. E125401

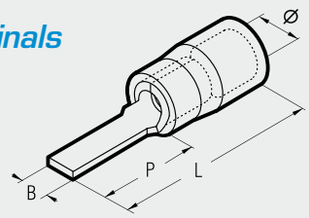
The "P" range of terminals has been designed, to meet the increasing demands for improved safety and reliability of electrical connectors.
The polycarbonate insulation, is a halogen free, self extinguishing (V = 0, as per UL Specification for flammability) thermoplastic material.
The unique funnel shaped entry of the insulation sleeve, guarantees total insertion of the conductor strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection.
The operating temperature range is – 4 to + 239°F (Surge + 266°F).
Recommended installation tools are shown on pages 96 to 117, 145, 191.

pin terminals



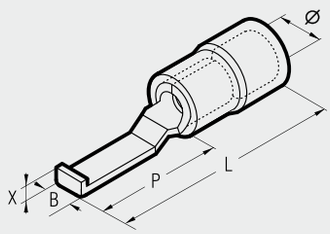
Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	Quantity Box/Bag
 24÷20 (0.2÷0.5)	**VP-P 10**	0.12	0.04	0.39	0.79	*4.000/100*
 22÷16 (0.25÷1.5)	**RP-P 8**	0.16	0.06	0.31	0.70	*3,500/100*
	RP-P 10	0.16	0.06	0.39	0.78	*3,500/100*
	RP-P 12	0.16	0.06	0.47	0.87	*3,000/100*
 16÷14 (1.5÷2.5)	**BP-P 8**	0.19	0.07	0.31	0.70	*3,000/100*
	BP-P 10	0.19	0.07	0.39	0.78	*3,000/100*
	BP-P 12	0.19	0.07	0.46	0.86	*3,000/100*
 12÷10 (4÷6)	**GP-P 10**	0.26	0.09	0.41	0.96	*1,500/100*
	GP-P 12	0.26	0.09	0.50	1.05	*1,500/100*
	GP-P 14	0.26	0.09	0.57	1.13	*1,500/100*

blade terminals



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	Quantity Box/Bag
 24÷20 (0.2÷0.5)	**VP-PP 12/19**	0.12	0.07	0.49	0.88	*4,000/100*
 22÷16 (0.25÷1.5)	**RP-PP 12**	0.16	0.12	0.50	0.90	*3,500/100*
	RP-PP 12/1	0.16	0.12	0.44	0.84	*3,500/100*
	RP-PP 12/19	0.16	0.07	0.52	0.92	*3,500/100*
	RP-PP 12/23	0.16	0.09	0.52	0.92	*3,500/100*
	RP-PP 14	0.16	0.12	0.58	0.98	*3,000/100*
	RP-PP 16/23	0.16	0.09	0.68	1.07	*2,500/100*
 16÷14 (1.5÷2.5)	**BP-PP 12**	0.19	0.14	0.50	0.90	*2,500/100*
	BP-PP 12/25	0.19	0.10	0.52	0.92	*2,500/100*
	BP-PP 12/29	0.19	0.11	0.52	0.92	*2,500/100*
	BP-PP 16/25	0.19	0.10	0.68	1.07	*2,500/100*
 12÷10 (4÷6)	**GP-PP 12**	0.26	0.16	0.52	1.08	*1,000/100*
	GP-PP 17	0.26	0.11	0.75	1.31	*1,000/100*

hooked blade terminals



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	X	Quantity Box/Bag
 22÷16 (0,25÷1,5)	**RP-PPL 30**	0.15	0.12	0.69	1.11	0.07	*3,000/100*
	RP-PPL 46	0.15	0.18	0.69	1.11	0.07	*3,000/100*
 16÷14 (1,5÷2,5)	**BP-PPL 30**	0.19	0.12	0.69	1.11	0.07	*2,500/100*
	BP-PPL 46	0.19	0.18	0.69	1.13	0.07	*2,500/100*
 12÷10 (4÷6)	**GP-PPL 46**	0.26	0.18	0.69	1.28	0.07	*1,000/100*

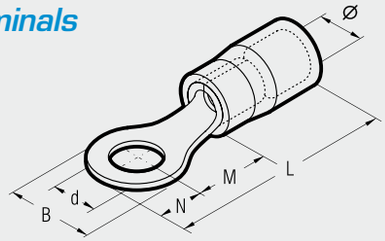
HALOGEN FREE INSULATED TERMINALS

P range funnel entry

VP RP BP GP

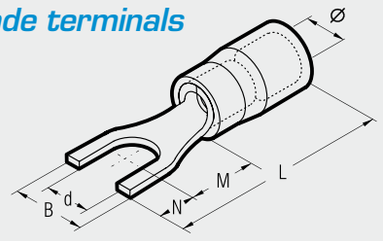
File no. E125401

ring terminals



Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag
			Ø	B	M	N	L	d	
	#3	*VP-M 2	0.12	0.22	0.18	0.11	0.69	0.09	4,000/100
	#4	VP-M 3	0.12	0.22	0.18	0.11	0.69	0.13	4,000/100
	#6	VP-M 3.5	0.12	0.22	0.18	0.11	0.,69	0.15	4,000/100
	#8	VP-M 4	0.12	0.28	0.26	0.14	0.80	0.17	4,000/100
	#10	VP-M 5	0.12	0.31	0.28	0.15	0.83	0.21	4,000/100
24÷20 (0.2÷0.5)	1/4"	*VP-M 6	0.12	0.37	0.32	0.19	0.91	0.25	4,000/100
	#3	*RP-M 2	0.16	0.22	0.18	0.11	0.69	0.09	3,000/100
	#4	RP-M 3	0.16	0.22	0.18	0.11	0.69	0.13	3,000/100
	#6	RP-M 3.5	0.16	0.22	0.18	0.11	0.69	0.15	3,000/100
	#6	RP-M 3.5/1	0.16	0.24	0.28	0.12	0.80	0.15	3,000/100
	#8	RP-M 4	0.16	0.28	0.26	0.14	0.79	0.17	3,000/100
	#8	RP-M 4/3	0.16	0.31	0.28	0.15	0.83	0.17	3,000/100
	#10	RP-M 5	0.16	0.31	0.28	0.15	0.83	0.21	3,000/100
	1/4"	RP-M 6	0.16	0.37	0.32	0.19	0.90	0.25	3,000/100
	1/4"	RP-M 6/1	0.16	0.47	0.41	0.24	1.04	0.25	2,000/100
	17/64"	RP-M 7	0.16	0.37	0.32	0.19	0.90	0.28	2,500/100
	5/16"	RP-M 8	0.16	0.47	0.41	0.24	1.04	0.33	2,500/100
22÷16 (0.25÷1.5)	3/8"	RP-M 10	0.16	0.61	0.51	0.30	1.22	0.41	2,000/100
	1/2"	RP-M 12	0.16	0.71	0.61	0.35	1.36	0.51	2,000/100
	#3	*BP-M 2	0.19	0.22	0.20	0.11	0.70	0.09	2,500/100
	#4	BP-M 3	0.19	0.22	0.20	0.11	0.70	0.13	2,500/100
	#6	BP-M 3.5	0.19	0.22	0.20	0.11	0.70	0.15	3,000/100
	#6	BP-M 3.5/1	0.19	0.24	0.26	0.12	0.78	0.15	2,500/100
	#8	BP-M 4	0.19	0.31	0.26	0.16	0.81	0.17	2,500/100
	#10	BP-M 5	0.19	0.31	0.30	0.16	0.85	0.,21	2,500/100
	1/4"	BP-M 6	0.19	0.37	0.34	0.19	0.92	0.25	2,500/100
	1/4"	BP-M 6/1	0.19	0.47	0.24	1.04	0.25	0.25	2,500/100
	1/4"	*BP-M 6/2	0.19	0.33	0.21	0.17	0.78	0.25	2,500/100
	17/64"	BP-M 7	0.19	0.39	0.31	0.20	0.90	0.28	2,500/100
	5/16"	BP-M 8	0.19	0.47	0.41	0.24	1.04	0.33	1,500/100
16÷14 (1.5÷2.5)	3/8"	BP-M 10	0.19	0.61	0.51	0.30	1.22	0.41	1,500/100
	1/2"	BP-M 12	0.19	0.71	0.61	0.35	1.36	0.51	1,500/100
	#4	GP-M 3	0.26	0.31	0.32	0.16	1.03	0.13	1,500/100
	#6	GP-M 3.5	0.26	0.31	0.32	0.16	1.03	0.15	1,500/100
	#8	GP-M 4	0.26	0.35	0.32	0.18	1.05	0.17	1,000/100
	#10	GP-M 5	0.26	0.35	0.32	0.18	1.05	0.21	1,000/100
	1/4"	GP-M 6	0.26	0.43	0.44	0.22	1.21	0.25	1,000/100
	1/4"	GP-M 6/1	0.26	0.43	0.32	0.22	1.09	0.25	1,000/100
	17/64"	GP-M 7	0.26	0.43	0.44	0.22	1.21	0.28	1,000/100
	5/16"	*GP-M 8	0.26	0.54	0.48	0.27	1.30	0.33	1,000/100
	5/16"	GP-M 8/1	0.26	0.43	0.32	0.22	1.09	0.33	1,000/100
	3/8"	GP-M 10	0.26	0.54	0.48	0.27	1.30	0.41	1,000/100
	3/8"	GP-M 10/1	0.26	0.61	0.54	0.30	1.41	0.41	1,000/100
	1/2"	GP-M 12	0.26	0.75	0.59	0.37	1.52	0.51	500/100
12÷10 (4÷6)	9/16"	GP-M 14	0.26	0.83	0.63	0.41	1.60	0.59	500/100
	5/8"	GP-M 16	0.26	0.94	0.67	0.47	1.70	0.67	500/100

fork/spade terminals



Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag
			Ø	B	M	N	L	d	
	#4	VP-U 3	0.12	0.22	0.22	0.16	0.74	0.13	4,000/100
	#6	VP-U 3.5	0.12	0.24	0.26	0.15	0.77	0.15	4,000/100
24÷20 (0.2÷0.5)	#8	VP-U 4	0.12	0.26	0.30	0.15	0.80	0.17	4,000/100
	#4	RP-U 3	0.16	0.22	0.22	0.16	0.77	0.13	3,500/100
	#6	RP-U 3.5	0.16	0.24	0.26	0.15	0.80	0.15	3,000/100
	#6	RP-U 3.5/2	0.16	0.25	0.26	0.15	0.80	0.15	3,500/100
	#8	RP-U 4	0.16	0.26	0.30	0.15	0.84	0.17	3,000/100
	#8	RP-U 4/1	0.16	0.33	0.30	0.15	0.84	0.17	3,500/100
	#8	RP-U 4/2	0.16	0.30	0.30	0.15	0.84	0.17	3,500/100
	#10	*RP-U 5	0.16	0.33	0.30	0.15	0.84	0.21	3,000/100
	#10	RP-U 5/1	0.16	0.37	0.30	0.15	0.84	0.21	3,000/100
	1/4"	RP-U 6	0.16	0.37	0.32	0.19	0.90	0.25	2,500/100
	1/4"	RP-U 6/1	0.16	0.47	0.36	0.28	1.04	0.25	2,500/100
	5/16"	RP-U 8	0.16	0.55	0.39	0.25	1.04	0.33	2,500/100
22÷16 (0.25÷1.5)	3/8"	RP-U 10	0.16	0.69	0.51	0.30	1.22	0.41	1,500/100
	1/2"	RP-U 12	0.16	0.79	0.61	0.35	1.36	0.51	1,500/100
	#4	BP-U 3	0.19	0.22	0.22	0.16	0.77	0.13	2,500/100
	#6	BP-U 3.5	0.19	0.25	0.26	0.25	0.80	0.15	2,500/100
	#6	*BP-U 3.5/1	0.19	0.28	0.26	0.15	0.80	0.15	2,500/100
	#8	BP-U 4	0.19	0.26	0.30	0.15	0.84	0.17	2,500/100
	#8	BP-U 4/1	0.19	0.33	0.30	0.15	0.84	0.17	3,000/100
	#8	BP-U 4/2	0.19	0.30	0.30	0.15	0.84	0.17	2,000/100
	#10	BP-U 5	0.19	0.33	0.30	0.15	0.84	0.21	2,500/100
	1/4"	BP-U 6	0.19	0.37	0.32	0.19	0.90	0.25	2,500/100
	1/4"	BP-U 6/1	0.19	0.47	0.36	0.28	1.04	0.25	2,500/100
	5/16"	BP-U 8	0.19	0.55	0.39	0.25	1.04	0.33	1,500/100
16÷14 (1.5÷2.5)	3/8"	BP-U 10	0.19	0.69	0.51	0.30	1.22	0.41	2,000/100
	1/2"	BP-U 12	0.19	0.79	0.61	0.35	1.36	0.51	1,500/100
	#6	GP-U 3.5	0.26	0.30	0.33	0.15	1.04	0.15	1,500/100
	#8	GP-U 4	0.26	0.30	0.31	0.17	1.04	0.17	1,000/100
	#10	GP-U 5	0.26	0.37	0.31	0.17	1.04	0.21	1,000/100
	1/4"	GP-U 6	0.26	0.39	0.43	0.22	1.20	0.25	1,000/100
	5/16"	GP-U 8	0.26	0.53	0.47	0.31	1.34	0.33	1,000/100
	3/8"	GP-U 10	0.26	0.61	0.51	0.31	1.38	0.41	1,000/100
	3/8"	GP-U 10/1	0.26	0.69	0.54	0.30	1.41	0.41	1,000/100
	1/2"	GP-U 12	0.26	0.83	0.59	0.37	1.52	0.51	500/100
	9/16"	GP-U 14	0.26	0.91	0.63	0.41	1.60	0.59	500/100
12÷10 (4÷6)	5/8"	GP-U 16	0.26	1.02	0.67	0.45	1.68	0.67	500/100

**Available on request*

INSULATED CHAIN TERMINALS

CRP
CBP
CGP

CP range with easy entry

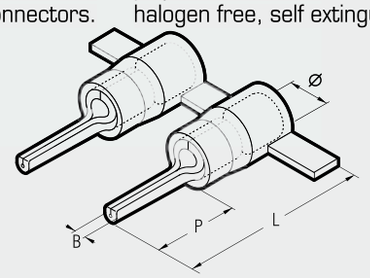
HALOGEN FREE

OPERATING TEMPERATURE UP TO 239° F

The "CP" range of terminals has been designed to meet the increasing demands for improved safety and reliability of electrical connectors. Developed for use with production machinery, to give a quick and reliable crimped joint. The polycarbonate insulation, is a halogen free, self extinguishing (V = 0, as per UL Specification for flammability) thermoplastic material. The unique funnel shaped entry of the insulation sleeve, guarantees total insertion of the conductor strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection. The operating temperature range is – 4 to + 239°F (Surge + 266°F).

pin terminals

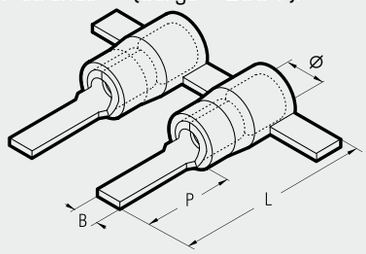
c UL us
File no. E125401



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	Quantity
22÷16 (0.25÷1.5)	CRP-P 8	0.16	0.06	0.31	0.70	2,000
	CRP-P 10	0.16	0.06	0.39	0.78	2,000
	CRP-P 12	0.16	0.06	0.47	0.87	2,000
16÷14 (1.5÷2.5)	CBP-P 8	0.19	0.07	0.31	0.70	1,750
	CBP-P 10	0.19	0.07	0.39	0.78	1,750
	CBP-P 12	0.19	0.07	0.47	0.86	1,750
12÷10 (4÷6)	CGP-P 10	0.26	0.09	0.39	0.96	1,250
	CGP-P 12	0.26	0.09	0.47	1.05	1,250
	CGP-P 14	0.26	0.09	0.55	1.13	1,250

blade terminal

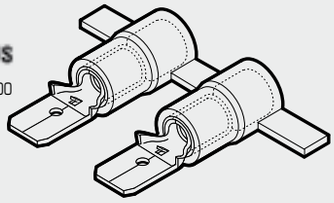
c UL us
File no. E125401



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	Quantity
22÷16 (0.25÷1.5)	CRP-PP 12	0.16	0.12	0.50	0.90	2,000
	*CRP-PP 12/1	0.16	0.12	0.44	0.84	2,000
	*CRP-PP 12/23	0.16	0.09	0.52	0.92	2,000
	CRP-PP 14	0.16	0.12	0.58	0.98	2,000
16÷14 (1.5÷2.5)	CBP-PP 12	0.19	0.14	0.50	0.90	1,750
	*CBP-PP 12/25	0.19	0.10	0.52	0.92	1,750
12÷10 (4÷6)	CGP-PP 12	0.26	0.16	0.52	1.08	1,250
	*CGP-PP 17	0.26	0.11	0.75	1.31	1,250

male disconnect terminals

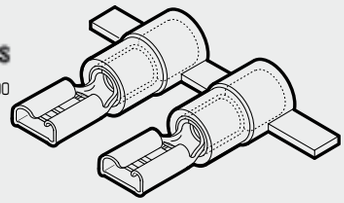
c UL us
File no. E212000



Conductor Size AWG (sqmm)	Ref.	TAB in.	Quantity
22÷16 (0.25÷1.5)	CRP-M 608	0.25 x 0.03	2,000
16÷14 (1.5÷2.5)	CBP-M 608	0.25 x 0.03	1,750
12÷10 (4÷6)	CGP-M 608	0.25 x 0.03	1,250

female disconnect terminals

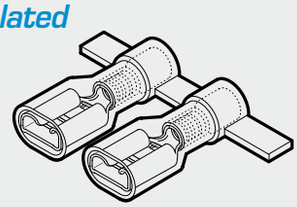
c UL us
File no. E212000



Conductor Size AWG (sqmm)	Ref.	TAB in.	Quantity
22÷16 (0.25÷1.5)	CRP-F 305	0.11 x 0.02	2,000
	CRP-F 308	0.11 x 0.03	2,000
	CRP-F 405	0.19 x 0.02	2,000
	CRP-F 408	0.19 x 0.03	2,000
	CRP-F 608	0.25 x 0.03	2,000
16÷14 (1.5÷2.5)	CBP-F 405	0.19 x 0.02	1,750
	CBP-F 408	0.19 x 0.03	1,750
	CBP-F 608	0.25 x 0.03	1,750
12÷10 (4÷6)	CGP-F 608	0.25 x 0.03	1,250

female disconnect terminals fully insulated

c UL us
File no. E212000



Conductor Size AWG (sqmm)	Ref.	TAB in.	Quantity
22÷16 (0.25÷1.5)	CRP-F 405P	0.19 x 0.02	2,000
	CRP-F 408P	0.19 x 0.03	2,000
	CRP-F 608P	0.25 x 0.03	1,500
16÷14 (1.5÷2.5)	CBP-F 408P	0.19 x 0.03	1,500
	CBP-F 608P	0.25 x 0.03	1,500
12÷10 (4÷6)	CGP-F 608P	0.25 x 0.03	1,250

**Available on request*

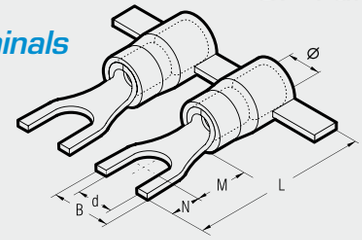
INSULATED CHAIN TERMINALS

CP range with easy entry

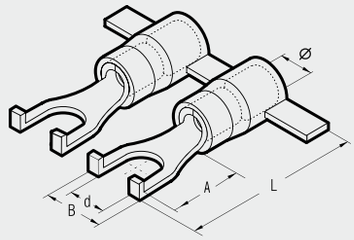
CRP
CBP
CGP

fork/spade terminals

File no. E125401

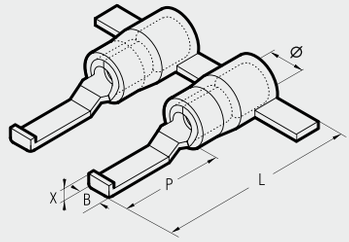


Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.						Quantity
			Ø	B	M	N	L	d	
22÷16 (0.25÷1.5)	#4	CRP-U 3	0.16	0.22	0.22	0.16	0.77	0.13	2,000
	#6	CRP-U 3.5	0.16	0.24	0.26	0.15	0.80	0.15	2,000
	#6	*CRP-U 3.5/2	0.16	0.25	0.26	0.15	0.80	0.15	2,000
	#8	CRP-U 4	0.16	0.26	0.30	0.15	0.84	0.17	2,000
	#8	*CRP-U 4/1	0.16	0.33	0.30	0.15	0.84	0.17	2,000
	#8	*CRP-U 4/2	0.16	0.30	0.30	0.15	0.84	0.17	2,000
	#10	CRP-U 5	0.16	0.33	0.30	0.15	0.84	0.21	2,000
	1/4"	CRP-U 6	0.16	0.37	0.32	0.19	0.90	0.25	2,000
	1/4"	*CRP-U 6/1	0.16	0.47	0.36	0.28	1.04	0.25	2,000
	5/16"	*CRP-U 8	0.16	0.55	0.39	0.25	1.04	0.33	2,000
16÷14 (1.5÷2.5)	#4	CBP-U 3	0.19	0.22	0.22	0.16	0.77	0.13	1,750
	#6	CBP-U 3.5	0.19	0.25	0.26	0.15	0.80	0.15	1,750
	#8	CBP-U 4	0.19	0.26	0.30	0.15	0.84	0.17	1,750
	#8	*CBP-U 4/1	0.19	0.33	0.30	0.15	0.84	0.17	1,750
	#8	*CBP-U 4/2	0.19	0.30	0.30	0.15	0.84	0.17	1,750
	#10	CBP-U 5	0.19	0.33	0.30	0.15	0.84	0.21	1,750
	1/4"	CBP-U 6	0.19	0.37	0.32	0.19	0.90	0.25	1,750
12÷10 (4÷6)	#6	CGP-U 3.5	0.26	0.30	0.33	0.15	1.04	0.15	1,250
	#8	CGP-U 4	0.26	0.30	0.31	0.17	1.04	0.17	1,250
	#10	CGP-U 5	0.26	0.37	0.31	0.17	1.04	0.21	1,250
	1/4"	CGP-U 6	0.26	0.39	0.43	0.22	1.20	0.25	1,250



Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.					Quantity
			Ø	B	A	L	d	
16÷14 (1.5÷2.5)	#8	CBP-U 4/3L	0.19	0.26	0.37	0.57	0.17	1,750

hooked blade terminals

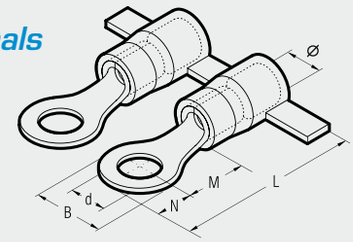


Cond. Size AWG (sqmm)	Ref.	Dimensions in.					Quantity
		Ø	B	P	L	X	
22÷16 (0.25÷1.5)	CRP-PPL30	0.16	0.12	0.69	1.13	0.07	2,000
16÷14 (1.5÷2.5)	CBP-PPL30	0.19	0.12	0.69	1.13	0.07	1,750

**Available on request*

ring terminals

File no. E125401



Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.						Quantity
			Ø	B	M	N	L	d	
22÷16 (0.25÷1.5)	#4	CRP-M 3	0.16	0.22	0.18	0.11	0.69	0.13	2,000
	#6	CRP-M 3.5	0.16	0.22	0.18	0.11	0.69	0.15	2,000
	#6	*CRP-M 3.5/1	0.16	0.24	0.28	0.12	0.80	0.15	2,000
	#8	CRP-M 4	0.16	0.28	0.26	0.14	0.79	0.17	2,000
	#8	*CRP-M 4/3	0.16	0.31	0.28	0.15	0.83	0.17	2,000
	#10	CRP-M 5	0.16	0.31	0.28	0.15	0.83	0.21	2,000
	1/4"	CRP-M 6	0.16	0.37	0.32	0.19	0.90	0.25	2,000
	1/4"	*CRP-M 6/1	0.16	0.47	0.41	0.24	1.04	0.25	2,000
	17/64"	CRP-M 7	0.16	0.37	0.32	0.19	0.90	0.28	2,000
	5/16"	CRP-M 8	0.16	0.47	0.41	0.24	1.04	0.33	2,000
16÷14 (1.5÷2.5)	#4	CBP-M 3	0.19	0.22	0.20	0.11	0.70	0.13	1,750
	#6	CBP-M 3.5	0.19	0.22	0.20	0.11	0.70	0.15	1,750
	#6	*CBP-M 3.5/1	0.19	0.24	0.26	0.12	0.77	0.15	1,750
	#8	CBP-M 4	0.19	0.31	0.26	0.16	0.81	0.17	1,750
	#10	CBP-M 5	0.19	0.31	0.30	0.16	0.85	0.21	1,750
	1/4"	CBP-M 6	0.19	0.37	0.34	0.19	0.92	0.25	1,750
	1/4"	*CBP-M 6/1	0.19	0.47	0.41	0.24	1.04	0.25	1,750
	17/64"	CBP-M 7	0.19	0.39	0.31	0.20	0.90	0.28	1,750
	5/16"	CBP-M 8	0.19	0.47	0.41	0.24	1.04	0.33	1,750
12÷10 (4÷6)	#4	CGP-M 3	0.26	0.31	0.32	0.16	1.03	0.13	1,250
	#6	CGP-M 3.5	0.26	0.31	0.32	0.16	1.03	0.15	1,250
	#8	CGP-M 4	0.26	0.35	0.32	0.18	1.05	0.17	1,250
	#10	CGP-M 5	0.26	0.35	0.32	0.18	1.05	0.21	1,250
	1/4"	CGP-M 6	0.26	0.43	0.44	0.22	1.21	0.25	1,250
	1/4"	*CGP-M 6/1	0.26	0.43	0.32	0.22	1.09	0.25	1,250
	17/64"	CGP-M 7	0.26	0.3	0.44	0.22	1.21	0.28	1,250
	5/16"	CGP-M 8	0.26	0.54	0.48	0.27	1.30	0.33	1,250
	5/16"	CGP-M 8/1	0.26	0.43	0.32	0.22	1.09	0.33	1,250

Interchangeable application heads are available for the bench press ELB-3Y to suit the crimping of these connectors (see page 120).

PVC INSULATED CRIMP TERMINALS

RVF
BVF
YVF

F range funnel entry

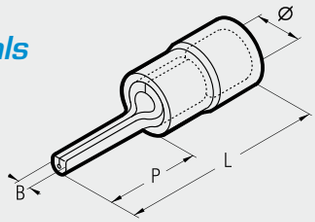
VALSTAR V3-F
Comprising:
- An assortment of crimp terminals for conductor sizes 23 ÷ 10 AWG
- Tool HP3

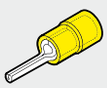
File no. E125401

The unique funnel shape of PVC sleeve, guarantees total insertion of the conductor strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection .

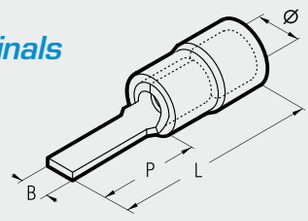
The internal surface of the barrel is rifled to improve contact with conductor strands when crimped and to increase tensile strength.
The "F" range of terminals offers a wide selection of rings, forks, pins and blades, designed to meet the ever changing requirements of the end users.
Recommended crimping tools are shown on pages 96 to 117, 145, 191.
The operating temperature range is – 4 to + 176°F (Surge + 194°F).

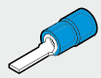
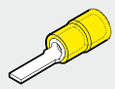
pin terminals



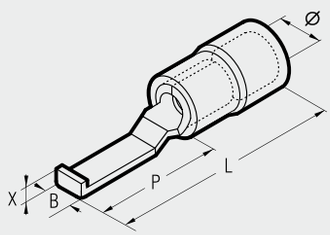
Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	Quantity Box/Bag
 22÷16 (0.25÷1.5)	**RVF-P 8**	0.15	0.06	0.31	0.70	*3,500/100*
	RVF-P 10	0.15	0.06	0.39	0.78	*3,500/100*
	RVF-P 12	0.15	0.06	0.47	0.87	*3,000/100*
 16÷14 (1.5÷2.5)	**BVF-P 8**	0.19	0.07	0.31	0.72	*3,000/100*
	BVF-P 10	0.19	0.07	0.39	0.78	*3,000/100*
	BVF-P 12	0.19	0.07	0.47	0.87	*3,000/100*
 12÷10 (4÷6)	**YVF-P 10**	0.26	0.09	0.39	0.96	*1,500/100*
	YVF-P 12	0.26	0.09	0.47	1.05	*1,500/100*
	YVF-P 14	0.26	0.09	0.55	1.13	*1,500/100*

blade terminals



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	Quantity Box/Bag
 22÷16 (0.25÷1.5)	**RVF-BL 12**	0.15	0.12	0.50	0.90	*3,500/100*
	RVF-BL 12-3/32	0.15	0.09	0.52	0.91	*3,000/100*
	RVF-BL 14	0.15	0.12	0.58	0.98	*3,000/100*
	RVF-BL 16-3/32	0.15	0.09	0.68	1.07	*2,500/100*
 16÷14 (1.5÷2.5)	**BVF-BL 12**	0.19	0.14	0.50	0.90	*2,000/100*
	BVF-BL 12-3/32	0.19	0.10	0.52	0.92	*2,000/100*
	BVF-BL 16-3/32	0.19	0.10	0.68	1.07	*2,000/100*
 12÷10 (4÷6)	**YVF-BL 12**	0.26	0.16	0.52	1.07	*1,000/100*
	YVF-BL 17	0.26	0.11	0.76	1.31	*1,000/100*

hooked blade terminals



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	X	Quantity Box/Bag
 22÷16 (0.25÷1.5)	**RVF-HBL 30**	0.15	0.12	0.69	1.11	0.07	*3,000/100*
	RVF-HBL 46	0.15	0.18	0.69	1.11	0.07	*2,500/100*
 16÷14 (1.5÷2.5)	**BVF-HBL 30**	0.19	0.12	0.69	1.11	0.07	*2,500/100*
	BVFHBL 46	0.19	0.18	0.69	1.13	0.07	*2,500/100*
 12÷10 (4÷6)	**YVF-HBL 46**	0.26	0.18	0.69	1.28	0.07	*1,000/100*

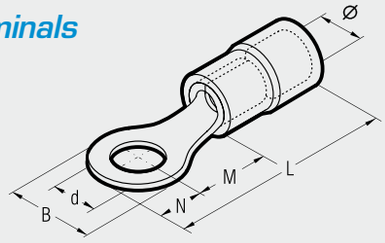
PVC INSULATED CRIMP TERMINALS

F range funnel entry

RVF
BVF
YVF

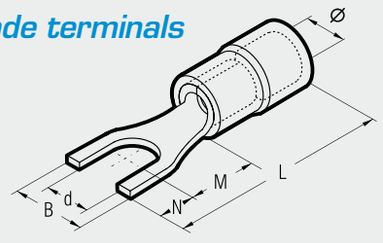
File no. E125401

ring terminals



Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag
			Ø	B	M	N	L	d	
	#4	**RVF - R 4**	0.15	0.22	0.18	0.11	0.69	0.13	*3,000/100*
	#6	**RVF - R 6**	0.15	0.22	0.18	0.11	0.69	0.15	*3,000/100*
	#8	**RVF - R 8**	0.15	0.28	0.26	0.14	0.79	0.17	*3,000/100*
	#10	**RVF - R 10**	0.15	0.31	0.28	0.15	0.83	0.21	*3,000/100*
	1/4"	**RVF - R 14**	0.15	0.37	0.32	0.19	0.90	0.25	*3,000/100*
	5/16"	**RVF - R 516**	0.15	0.47	0.41	0.24	1.04	0.33	*2,000/100*
	3/8"	**RVF - R 38**	0.15	0.61	0.52	0.30	1.22	0.41	*1,500/100*
22÷16 *(0.25÷1.5)*	1/2"	**RVF - R 12**	0.15	0.71	0.61	0.35	1.36	0.51	*1,500/100*
	#4	**BVF - R 4**	0.19	0.22	0.20	0.11	0.70	0.13	*2,500/100*
	#6	**BVF - R 6**	0.19	0.22	0.20	0.11	0.70	0.15	*2,500/100*
	#8	**BVF - R 8**	0.19	0.31	0.26	0.16	0.81	0.17	*2,500/100*
	#10	**BVF - R 10**	0.19	0.31	0.30	0.16	0.85	0.21	*2,500/100*
	1/4"	**BVF - R 14**	0.19	0.37	0.34	0.19	0.92	0.25	*2,500/100*
	5/16"	**BVF - R 516**	0.19	0.47	0.41	0.24	1.04	0.33	*1,500/100*
	3/8"	**BVF - R 38**	0.19	0.61	0.52	0.30	1.22	0.41	*1,500/100*
16÷14 *(1.5÷2.5)*	1/2"	**BVF - R 12**	0.19	0.71	0.61	0.35	1.36	0.51	*1,000/100*
	#4	**YVF - R 4**	0.26	0.31	0.32	0.16	1.04	0.13	*1,500/100*
	#6	**YVF - R 6**	0.26	0.31	0.32	0.16	1.04	0.15	*1,500/100*
	#8	**YVF - R 8**	0.26	0.35	0.32	0.18	1.06	0.17	*1,000/100*
	#10	**YVF - R 10**	0.26	0.35	0.32	0.18	1.06	0.21	*1,000/100*
	1/4"	**YVF - R 14**	0.26	0.43	0.44	0.22	1.21	0.25	*1,000/100*
	5/16"	**YVF - R 516**	0.26	0.54	0.48	0.27	1.30	0.33	*1,000/100*
	3/8"	**YVF - R 38**	0.26	0.54	0.48	0.27	1.30	0.41	*1,000/100*
	1/2"	**YVF - R 12**	0.26	0.75	0.59	0.37	1.53	0.51	*1,000/100*
	9/16"	**YVF - R 916**	0.26	0.83	0.63	0.41	1.61	0.59	*500/100*
12÷10 *(4÷6)*	5/8"	**YVF - R 58**	0.26	0.94	0.67	0.47	1.70	0.67	*500/100*

fork/spade terminals

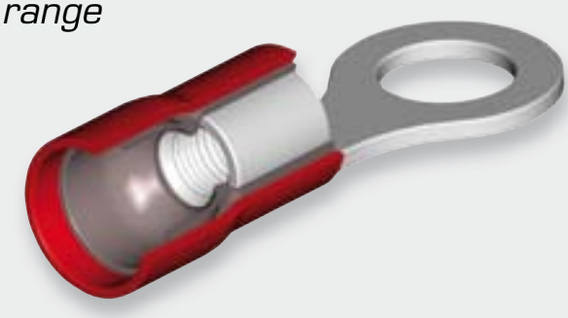


Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag
			Ø	B	M	N	L	d	
	#4	**RVF - F 4**	0.15	0.22	0.22	0.16	0.77	0.13	*3,500/100*
	#6	**RVF - F 6**	0.15	0.25	0.26	0.15	0.80	0.15	*3,500/100*
	#8	**RVF - F 8**	0.15	0.26	0.30	0.15	0.84	0.17	*3,000/100*
	#10	**RVF - F 10**	0.15	0.33	0.30	0.15	0.84	0.17	*3,000/100*
	1/4"	**RVF - F 14**	0.15	0.37	0.32	0.19	0.90	0.25	*2,500/100*
	5/16"	**RVF - F 516**	0.15	0.55	0.39	0.25	1.04	0.33	*2,000/100*
	3/8"	**RVF - F 38**	0.15	0.69	0.52	0.30	1.22	0.41	*1,500/100*
22÷16 *(0.25÷1.5)*	1/2"	**RVF - F 12**	0.15	0.79	0.61	0.35	1.36	0.51	*1,500/100*
	#4	**BVF - F 4**	0.19	0.22	0.22	0.16	0.77	0.13	*2,500/100*
	#6	**BVF - F6**	0.19	0.25	0.26	0.15	0.80	0.15	*2,500/100*
	#8	**BVF - F 8**	0.19	0.26	0.30	0.15	0.84	0.17	*2,500/100*
	#10	**BVF - F 10**	0.19	0.33	0.30	0.15	0.84	0.21	*2,500/100*
	1/4"	**BVF - F 14**	0.19	0.37	0.32	0.19	0.90	0.25	*2,500/100*
	5/16"	**BVF - F 516**	0.19	0.55	0.39	0.25	1.04	0.33	*1,500/100*
	3/8"	**BVF - F 38**	0.19	0.69	0.51	0.30	1.22	0.41	*2,000/100*
16÷14 *(1.5÷2.5)*	1/2"	**BVF - F 12**	0.19	0.79	0.61	0.35	1.36	0.51	*1,000/100*
	#6	**YVF - F 6**	0.26	0.30	0.33	0.15	1.05	0.15	*1,500/100*
	#8	**YVF - F 8**	0.26	0.30	0.31	0.17	1.05	0.17	*1,000/100*
	#10	**YVF - F 10**	0.26	0.37	0.31	0.17	1.05	0.21	*1,000/100*
	1/4"	**YVF - F 14**	0.26	0.39	0.43	0.22	1.21	0.25	*1,000/100*
	5/16"	**YVF - F 516**	0.26	0.53	0.47	0.31	1.35	0.33	*1,000/100*
	3/8"	**YVF - F 38**	0.26	0.61	0.51	0.31	1.39	0.41	*1,000/100*
	1/2"	**YVF - F 12**	0.26	0.83	0.59	0.37	1.53	0.51	*500/100*
	9/16"	**YVF - F916**	0.26	0.91	0.63	0.41	1.61	0.59	*500/100*
12÷10 *(4÷6)*	5/8"	**YVF - F 58**	0.26	1.02	0.67	0.45	1.69	0.67	*500/100*

REINFORCED PA 6.6 INSULATED TERMINALS

RKY
BKY
GKY

KY range

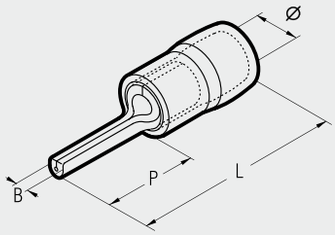


HALOGEN FREE

'KY' type terminals are designed to offer improved mechanical and electrical integrity under heavy-duty application.
This is achieved via a Copper sleeve located between the Copper barrel and Polyamide insulation of the terminal.
Then, during crimping, the insulation of the conductor is integrated into the crimp due to the Copper sleeve being deformed around it to maintain the level of 'grip' required in applications subject to continuous mechanical vibrations (e.g: mobile plant, vehicles, moving components).
The operating temperature range is – 4 to + 221°F (Surge + 230°F).

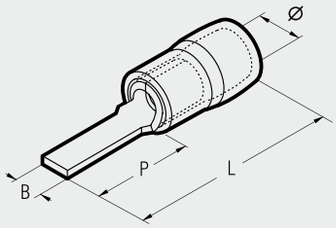
Recommended crimping tools are shown on pages 96 to 117, 145, 191.

pin type



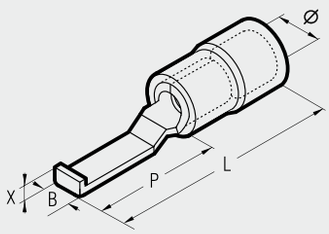
Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	Quantity Box/Bag
 22÷16 (0.25÷1.5)	**RKY-P 8**	0.18	0.07	0.35	0.78	*3,500/100*
	RKY-P 10	0.18	0.07	0.39	0.82	*3,500/100*
	RKY-P 12	0.18	0.07	0.47	0.90	*3,000/100*
 16÷14 (1.5÷2.5)	**BKY-P 8**	0.20	0.07	0.35	0.78	*3,000/100*
	BKY-P 10	0.20	0.07	0.39	0.82	*3,000/100*
	BKY-P 12	0.20	0.07	0.47	0.90	*3,000/100*
 12÷10 (4÷6)	**GKY-P 14**	0.28	0.11	0.55	1.06	*1,500/100*

blade type



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	Quantity Box/Bag
 22÷16 (0.25÷1.5)	**RKY-PP 12**	0.18	0.12	0.51	0.94	*3,500/100*
	RKY-PP 12/19	0.18	0.08	0.71	1.13	*3,000/100*
	RKY-PP 16/23	0.18	0.09	0.71	1.13	*2,500/100*
 16÷14 (1.5÷2.5)	**BKY-PP 12**	0.20	0.12	0.51	0.94	*2,500/100*
	BKY-PP 12/25	0.20	0.09	0.51	0.94	*2,500/100*
	BKY-PP 16/23	0.20	0.09	0.71	1.13	*2,500/100*
 12÷10 (4÷6)	**GKY-PP 12**	0.28	0.16	0.55	1.06	*1,000/100*
	GKY-PP 17	0.28	0.08	0.71	1.22	*1,000/100*

hooked blade terminals



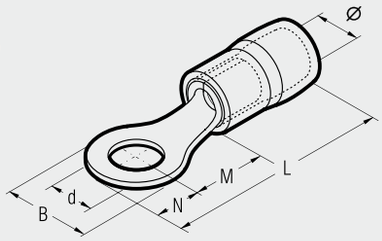
Conductor Size AWG (sqmm)	Ref.	Dimensions in. Ø	B	P	L	X	Quantity Box/Bag
 22÷16 (0.25÷1.5)	**RKY-PPL 30**	0.18	0.12	0.66	1.11	0.08	*3,000/100*
	RKY-PPL 46	0.18	0.18	0.66	1.11	0.08	*3.000/100*
 16÷14 (1.5÷2.5)	**BKY-PPL 30**	0.20	0.12	0.66	1.11	0.08	*2,500/100*
	BKY-PPL 46	0.20	0.18	0.66	1.11	0.08	2,500/100
 12÷10 (4÷6)	**GKY-PPL 46**	0.28	0.18	0.68	1.19	0.09	*1.000/100*

REINFORCED PA 6.6 INSULATED TERMINALS

KY range

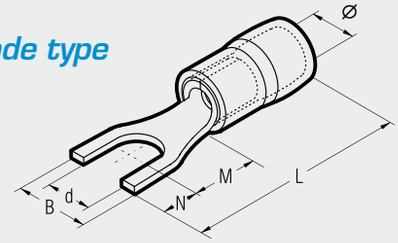
RKY
BKY
GKY

ring type



Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in. Ø	B	M	N	L	d	Quantity Box/Bag
22÷16 (0.25÷1.5)	#4	**RKY-M 3**	0.18	0.22	0.20	0.10	0.73	0.13	*3,000/100*
	#6	**RKY-M 3.5**	0.18	0.22	0.20	0.10	0.73	0.15	*3,000/100*
	#6	**RKY-M 3.5/1**	0.18	0.26	0.25	0.12	0.80	0.15	*3,000/100*
	#8	**RKY-M 4**	0.18	0.26	0.25	0.12	0.80	0.17	*3,000/100*
	#10	**RKY-M 5**	0.18	0.31	0.28	0.15	0.86	0.21	*3,000/100*
	1/4"	**RKY-M 6/1**	0.18	0.46	0.43	0.23	1.09	0.25	*2,000/100*
	5/16"	**RKY-M 8**	0.18	0.46	0.43	0.23	1.09	0.33	*2,500/100*
	3/8"	**RKY-M 10**	0.18	0.54	0.55	0.26	1.24	0.41	*1,500/100*
	1/2"	**RKY-M 12**	0.18	0.77	0.63	0.37	1.43	0.51	*1,500/100*
16÷14 (1.5÷2.5)	#4	**BKY-M 3**	0.20	0.26	0.19	0.12	0.74	0.13	*2,500/100*
	#6	**BKY-M 3.5**	0.20	0.26	0.19	0.12	0.74	0.15	*2,500/100*
	#6	**BKY-M 3.5/1**	0.20	0.26	0.25	0.12	0.80	0.15	*2,500/100*
	#8	**BKY-M 4**	0.20	0.33	0.31	0.16	0.90	0.17	*2,500/100*
	#10	**BKY-M 5**	0.20	0.33	0.31	0.16	0.90	0.21	*2,500/100*
	1/4"	**BKY-M 6/1**	0.20	0.47	0.43	0.23	1.09	0.25	*2,000/100*
	5/16"	**BKY-M 8**	0.20	0.47	0.43	0.23	1.09	0.33	*1,500/100*
	3/8"	**BKY-M 10**	0.20	0.54	0.55	0.26	1.24	0.41	*1,500/100*
	1/2"	**BKY-M 12**	0.20	0.76	0.63	0.37	1.43	0.51	*1,000/100*
12÷10 (4÷6)	#6	**GKY-M 3.5**	0.28	0.28	0.24	0.14	0.89	0.15	*1,500/100*
	#8	**GKY-M 4**	0.28	0.37	0.36	0.18	1.05	0.17	*1,000/100*
	#10	**GKY-M 5**	0.28	0.37	0.36	0.18	1.05	0.21	*1,000/100*
	1/4"	**GKY-M 6**	0.28	0.47	0.41	0.24	1.16	0.25	*1,000/100*
	5/16"	**GKY-M 8**	0.28	0.59	0.53	0.30	1.34	0.33	*1,000/100*
	3/8"	**GKY-M 10**	0.28	0.59	0.53	0.30	1.34	0.41	*1,000/100*
	1/2"	**GKY-M 12**	0.28	0.76	0.63	0.38	1.52	0.51	*1,000/100*
	9/16"	**GKY-M 14**	0.28	1.26	0.99	0.63	2.13	0.59	*500/100*
	5/8"	**GKY-M 16**	0.28	1.26	0.99	0.63	2.13	0.67	*500/100*

fork/spade type



Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in. Ø	B	M	N	L	d	Quantity Box/Bag
22÷16 (0.25÷1.5)	#4	**RKY-U 3**	0.18	0.22	0.26	0.18	0.87	0.13	*3,000/100*
	#6	**RKY-U 3.5**	0.18	0.22	0.26	0.18	0.87	0.15	*3,000/100*
	#8	**RKY-U 4**	0.18	0.25	0.26	0.18	0.87	0.17	*3,000/100*
	#10	**RKY-U 5**	0.18	0.32	0.26	0.18	0.87	0.21	*3,000/100*
	1/4"	**RKY-U 6**	0.18	0.37	0.26	0.18	0.87	0.25	*3,000/100*
	1/4"	**RKY-U 6/1**	0.18	0.47	0.43	0.24	1.10	0.25	*3,000/100*
16÷14 (1.5÷2.5)	#4	**BKY-U 3**	0.20	0.22	0.26	0.18	0.87	0.13	*2,500/100*
	#6	**BKY-U 3.5**	0.20	0.24	0.26	0.18	0.87	0.15	*2,500/100*
	#8	**BKY-U 4**	0.20	0.25	0.26	0.18	0.87	0.17	*2,500/100*
	#10	**BKY-U 5**	0.20	0.31	0.26	0.18	0.87	0.21	*2,500/100*
	1/4"	**BKY-U 6**	0.20	0.37	0.26	0.18	0.87	0.25	*2,500/100*
	1/4"	**BKY-U 6/1**	0.20	0.47	0.43	0.24	1.10	0.25	*2,000/100*
12÷10 (4÷6)	#6	**GKY-U 3.5**	0.28	0.28	0.30	0.15	0.96	0.15	*1,500/100*
	#8	**GKY-U 4**	0.28	0.28	0.30	0.15	0.96	0.17	*1,000/100*
	#10	**GKY-U 5**	0.28	0.35	0.28	0.22	1.00	0.21	*1,000/100*
	1/4"	**GKY-U 6**	0.28	0.47	0.47	0.26	1.24	0.25	*1,000/100*
	5/16"	**GKY-U 8**	0.28	0.55	0.41	0.28	1.20	0.33	*1,000/100*

FEMALE DISCONNECT TERMINALS

RPF-F
BPF-F
YPF-F

Manufactured from brass strip
- Electrolytically tin plated
- The operating temperature range is – 4 to + 239°F (Surge + 266°F).
- Recommended crimping tools are shown on pages 96 to 117, 145, 191.

File no. E212000

polycarbonate insulated terminals - partially reinforced with copper sleeve

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	RPF-111FD	0.11 x 0.02	3,500/100
	RPF-110FD	0.11 x 0.03	3,500/100
	RPF-188FD	0.19 x 0.02	3,000/100
	RPF-187FD	0.19 x 0.03	3,000/100
	RPF-250FD	0.25 x 0.03	2,000/100
16÷14 (1.5÷2.5)	BPF-188FD	0.19 x 0.02	3,000/100
	BPF-187FD	0.19 x 0.03	2,500/100
	BPF-250FD	0.25 x 0.03	2,000/100
12÷10 (4÷6)	YPF-250FD	0.25 x 0.03	1,000/100

polycarbonate fully insulated terminals - partially reinforced with copper sleeve

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	RPF-111FIFD	0.11 x 0.02	2,500/100
	RPF-110FIFD	0.11 x 0.03	2,500/100
	RPF-188FIFD	0.19 x 0.02	2,000/100
	RPF-187FIFD	0.19 x 0.03	2,000/100
	RPF-250FIFD	0.25 x 0.03	1,500/100
16÷14 (1.5÷2.5)	BPF-188FIFD	0.19 x 0.02	2,000/100
	BPF-187FIFD	0.19 x 0.03	2,000/100
	BPF-250FIFD	0.25 x 0.03	1,500/100
12÷10 (4÷6)	YPF-250FIFD	0.25 x 0.03	1,000/100

MALE DISCONNECT TERMINALS

RPF-M
BPF-M
YPF-M

Manufactured from brass strip
- Electrolytically tin plated
- The operating temperature range is – 4 to + 239°F (Surge + 266°F).
- Recommended crimping tools are shown on pages 96 to 117, 145, 191.

File no. E212000

polycarbonate insulated terminals - partially reinforced with copper sleeve

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	RPF-250MD	0.25 x 0.03	3,000/100
16÷14 (1.5÷2.5)	BPF-250MD	0.25 x 0.03	2,500/100
12÷10 (4÷6)	YPF-250MD	0.25 x 0.03	1,000/100

polycarbonate fully insulated terminals - partially reinforced with copper sleeve

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	RPF-250FIMD	0.25 x 0.03	1,000/100
16÷14 (1.5÷2.5)	BPF-250FIMD	0.25 x 0.03	1,000/100

MALE/FEMALE CONNECTORS AND BULLET

RNF-F
BNF-F
RPF–B
BPF-B

Manufactured from brass strip
- Electrolytically tin plated
- The operating temperature range is – 4 to + 239°F (Surge + 266°F).
- Recommended crimping tools are shown on pages 96 to 117, 145, 191.

File no. E212000

polycarbonate insulated terminals - partially reinforced with copper sleeve

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	RPF-250PD	0.25 x 0.03	1,500/100
16÷14 (1.5÷2.5)	BPF-250PD	0.25 x 0.03	1,500/100

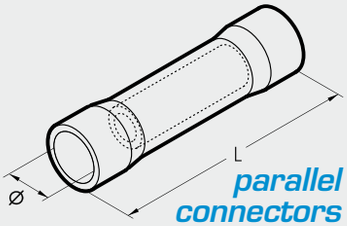
polycarbonate insulated terminals - partially reinforced with copper sleeve

Cond. Size AWG (sqmm)	Ref.	Ø in.	Quantity Box/Bag
22÷16 (0.25÷1.5)	RPF-BM5/32	0.16	2,500/100
	RPF-BF5/32	0.16	1,000/100
16÷14 (1.5÷2.5)	BPF-BM13/64	0.20	2,000/100
	BPF-BF13/64	0.20	800/100

END TO END AND PARALLEL CONNECTORS

File no. E125401

end to end connectors



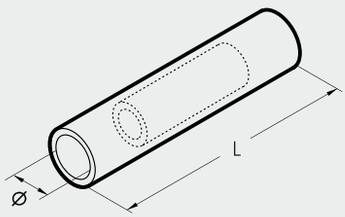
parallel connectors

PVC insulated

Cond. Size AWG (sqmm)		Ref.	Ø in.	L in.	Quantity Box/Bag
22÷16 (0.25÷1.5)		RV-BS	0.16	0.98	2,000/100
16÷14 (1.5÷2.5)		BV-BS	0.21	0.98	1,500/100
12÷10 (4÷6)		YV-BS	0.24	1.26	500/100
22÷16 (0.25÷1.5)		PL 03-P	0.16	0.79	3,000/100
16÷14 (1.5÷2.5)		PL 06-P	0.20	0.63	2,000/100

Manufactured from copper tube
- Electrolytically tin plated
- The operating temperature range is – 4 to + 176°F (Surge + 194°F).
- Recommended crimping tools are shown on pages 96 to 117, 145, 191.

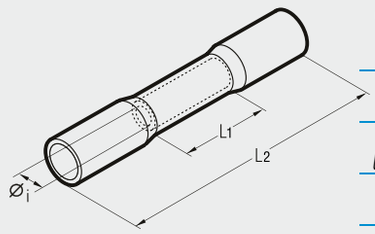
END TO END CONNECTORS



Nylon insulated

Cond. Size AWG (sqmm)		Ref.	Ø in.	L in.	Quantity Box/Bag
22÷16 (0.25÷1.5)		RN-BS	0.16	0.98	2,000/100
16÷14 (1.5÷2.5)		BN-BS	0.21	1.00	1,500/100
12÷10 (4÷6)		YN-BS	0.21	1.26	1,000/100

Manufactured from copper tube
- Electrolytically tin plated
- The operating temperature range is – 4 to + 239°F (Surge + 266°F).
- Recommended crimping tools are shown on pages 96 to 117, 145, 191.



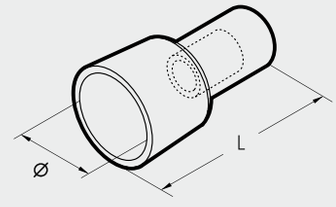
PE HD insulated, heat shrinkable

Cond. Size AWG (sqmm)		Ref.	Ø i in.	L1 in.	L2 in.	Quantity Box/Bag
20÷17 (0,5÷1)		WL 03-M	0.07	1.42	0.59	1,500/100
16÷14 (1,5÷2,5)		WL 06-M	0.09	1.42	0.59	1,000/100
12÷10 (4÷6)		WL 1-M	0.13	1.61	0.59	500/100

Max operating voltage: 600 V
Shrink temperature: 302 °F
Temperature range: from -40 °F to 221 °F

Manufactured from copper tube
- Electrolytically tin plated
- Heat shrink sleeve with sealant
- Recommended crimping tools are shown on pages 96 to 117.

CLOSED END CONNECTORS



Nylon insulated

Cond. Size AWG (sqmm)		Ref.	Ø in.	L in.	Quantity Box/Bag
16÷14 (1.5÷2.5)		N 14 - EC	0.31	0.78	1,000/100
		N 14 - BEC	0.26	0.54	1,500/100
12÷10 (4÷6)		N 10 - EC	0.41	0.85	800/100
		N 10 - YEC	0.35	0.70	1,000/100

Manufactured from copper tube
- Electrolytically tin plated
- The operating temperature range is – 4 to + 239°F (Surge + 266°F).
- Recommended crimping tools are shown on pages 96 to 117, 145, 191.

REINFORCED DISCONNECT TERMINALS

for copper cables

RKF-F
BKF-F
GK-F

Manufactured from brass strip
- Electrolytically tin plated
- fully reinforced with copper sleeve, funnel entry
- The operating temperature range is –4 to +221°F (Surge +230°F)
- Recommended crimping tools are shown on pages 96 to 117, 145, 191.

female connectors, fully reinforced with copper sleeve

PA6.6 insulated terminals

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	**RKF-F 305**	0.11 x 0.02	3,500/100
	RKF-F 308	0.11 x 0.03	3,500/100
	RKF-F 405	0.19 x 0.02	3,000/100
	RKF-F 408	0.19 x 0.03	3,000/100
	RKF-F 608	0.25 x 0.03	2,500/100
16÷14 (1.5÷2.5)	**BKF-F 405**	0.19 x 0.02	3,000/100
	BKF-F 408	0.19 x 0.03	3,000/100
	BKF-F 608	0.25 x 0.03	2,000/100
12÷10 (4÷6)	**GK-F 608**	0.25 x 0.03	1,500/100

PA6.6 fully insulated terminals

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	**RKF-F 405P**	0.19 x 0.02	2,500/100
	RKF-F 408P	0.19 x 0.03	2,000/100
	RKF-F 608P	0.25 x 0.03	1,000/100
16÷14 (1.5÷2.5)	**BKF-F 405P**	0.19 x 0.02	2,000/100
	BKF-F 408P	0.19 x 0.03	2,000/100
	BKF-F 608P	0.25 x 0.03	1,000/100
12÷10 (4÷6)	**GK-F 608P**	0.25 x 0.03	1,000/100

RKF
BKF
GKF

Manufactured from brass strip
- Electrolytically tin plated
- fully reinforced with copper sleeve, funnel entry
- The operating temperature range is –4 to +221°F (Surge +230°F)
- Recommended crimping tools are shown on pages 96 to 117, 145, 191.

male connectors, fully reinforced with copper sleeve - PA6.6 insulated terminals

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	**RKF-M 608**	0.25 x 0.03	3,000/100
16÷14 (1.5÷2.5)	**BKF-M 608**	0.25 x 0.03	2,500/100
12÷10 (4÷6)	**GKF-M 608**	0.25 x 0.03	1,000/100

male/female connectors, fully reinforced with copper sleeve - PA6.6 insulated terminals

Cond. Size AWG (sqmm)	Ref.	Tab Size (in.)	Quantity Box/Bag
22÷16 (0.25÷1.5)	**RKF-FM 608**	0.25 x 0.03	1,500/100
16÷14 (1.5÷2.5)	**BKF-FM 608**	0.25 x 0.03	1,500/100

bullet and socket connectors fully reinforced with copper sleeve PA6.6 insulated terminals

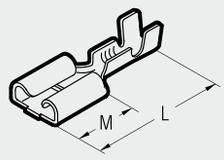
Cond. Size AWG (sqmm)	Ref.	Ø in.	Quantity Box/Bag
22÷16 (0.25÷1.5)	**RKF-BM 4**	0.16	2,500/100
	RKF-BF 4	0.16	1,000/100
16÷14 (1.5÷2.5)	**BKF-BM 4**	0.16	2,000/100
	BKF-BF 4	0.16	800/100

FEMALE CONNECTORS

open barrel

RN-FA
BN-FA

- Manufactured from brass strip
- The operating temperature range is – 40 to + 257°F.
- Recommended crimping tools are shown on pages 96 to 117, 191.

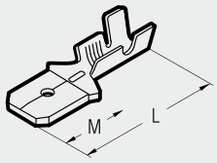


Cond. Size AWG (sqmm)	Ref.	Tab in.	M in.	L in.	Quantity Box/Bag
20÷17 (0.5÷1)	**RN-FA 305**	0.11 x 0.02	0.25	0.59	6,000/100
	RN-FA 405	0.19 x 0.02	0.25	0.59	5,000/100
	RN-FA 608	0.26 x 0.03	0.30	0.75	3,000/100
17÷14 (1÷2.5)	**BN-FA 608**	0.25 x 0.03	0.30	0.75	3,000/100
	* **BN-FAB 608**	0.25 x 0.03	0.30	0.61	1,000/100
	** **BN-FAR 608**	0.25 x 0.03	0.30	0.75	3,000/100

**flag type **with retainer*

MALE CONNECTORS

open barrel



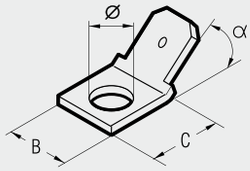
Cond. Size AWG (sqmm)	Ref.	Tab size in.	M in.	L in.	Quantity Box/Bag
20÷17 (0.5÷1)	**RN-MA 305**	0.11 x 0.02	0.23	0.51	*6,000/100*
	RN-MA 405	0.19 x 0.02	0.25	0.68	*5,000/100*
	RN-MA 608	0.25 x 0.03	0.31	0.78	*4,000/100*
17÷14 (1÷2.5)	**BN-MA 608**	0.25 x 0.03	0.31	0.79	*4,000/100*

RN-MA
BN-MA

- Manufactured from brass strip
- The operating temperature range is – 40 to + 257°F.
- Recommended crimping tool is shown on page 96 to 117, 191.

MALE TABS

for board mounting



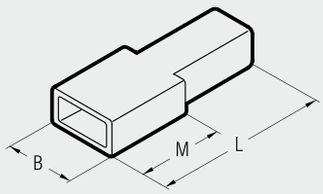
Ref.	Tab size in.	Ø Stud in.	B in.	C in.	α	Quantity Box/Bag
MP 608	0.25 x 0.03	0.16	0.31	0.33	0°	*5,000/100*
MP 608/45	0.25 x 0.03	0.16	0.31	0.33	45°	*6,000/100*
MP 608/90	0.25 x 0.03	0.16	0.31	0.33	90°	*5,000/100*
***MP 608D**	0.25 x 0.03	0.19	0.31	0.55	0°	*5,000/100*

**double tab*

MP
MPD

- Manufactured from brass strip
- The operating temperature range is – 40 to + 257°F.

CONNECTOR SLEEVES



Ref.	Connector	B in.	M in.	L in.	Material	Quantity Box/Bag
CFA 300	Female 2.8	0.22	0.28	0.71	Polyethylene	*3,000/100*
***CFA 400**	Female 4.8	0.30	0.35	0.79	Polyethylene	*2,000/100*
***CFA 600**	Female 6.3	0.35	0.43	0.94	Polyethylene	*1,500/100*
****CFA2 600**	Female 6.3	0.35	0.35	0.87	Polyethylene	*1,500/100*
CFAR 600	Female 6.3 frontal insertion with retainer	0.35	0.47	0.98	Polyamide 6.6	*1,000/100*
CFAB 600	Female 6.3 flag	0.39	–	0.71	Polyamide 6.6	*1,000/100*
***CMA 600**	Male 6.3	0.47	0.43	0.87	Polyethylene	*1,000/100*

CFA
CMA

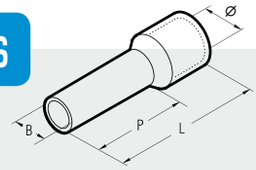
* For a single cable.
Colours available:
Transparent: no suffix
Red: add suffix R
Black: add suffix N

** For twin cables.
Colours available:
Transparent: no suffix
Red: add suffix R
Black: add suffix N
Green: add suffix V
Blue: add suffix B
Yellow: add suffix G

POLYPROPYLENE INSULATED END SLEEVES

for flexible copper cables

PKD
PKE
PKC
CPKD



The PK.. range of end sleeves is manufactured from tin plated electrolytic copper. Designed and developed to reinforce the fine wire strands, when terminating a cable into a connector block. The PKD series of insulated end sleeves comply with specification DIN 46 228/4. The operating temperature range is – 4 to + 221°F (Surge + 230°F). Recommended crimping tools are shown on pages 96 to 120, 145, 147, 191.

HALOGEN FREE

VALSTAR ND#2/PKD
Comprising:
- a selection of end sleeves PKD conductor size 17÷10 AWG
- tool ND#2

VALSTAR ND#2/PKE
Comprising:
- a selection of end sleeves PKE conductor size 17÷10 AWG
- tool ND#2

VALSTAR ND#2/PKC
Comprising:
- a selection of end sleeves PKC conductor size 17÷10 AWG
- tool ND#2

Conductor Size AWG	Ref.	Dimensions in. Ø	B	P	L	Insulation Color	Quantity Box/Bag
26÷22	**PKE 308**	0.07	0.04	0.31	0.49	yellow	25,000/500
22÷20	***PKE 508**	0.10	0.05	0.31	0.55	white	10,000/500
18	**PKE 7508**	0.11	0.06	0.31	0.55	blue	10,000/500
17	***PKE 108**	0.12	0.07	0.31	0.55	red	10,000/500
16	***PKE 1508**	0.14	0.08	0.31	0.55	black	10,000/500
	***PKE 1510**	0.14	0.08	0.39	0.65		7,500/500
	***PKE 1518**	0.14	0.08	0.71	0.96		5,000/500
14	**PKE 2508**	0.17	0.10	0.31	0.59	grey	7,500/500
	PKE 2512	0.17	0.10	0.47	0.75		5,000/500
	PKE 2518	0.17	0.10	0.71	0.98		5,000/500
12	**PKE 410**	0.19	0.13	0.39	0.67	orange	5,000/200
	PKE 412	0.19	0.13	0.47	0.75		4,000/200
	PKE 418	0.19	0.13	0.71	0.98		3,000/200
10	**PKE 612**	0.23	0.15	0.47	0.79	green	2,500/100
	PKE 618	0.23	0.15	0.71	1.02		2,000/100
8÷7	**PKE 1012**	0.29	0.19	0.47	0.85	brown	1,500/100
	PKE 1018	0.29	0.19	0.71	1.08		1,500/100
6÷5	**PKE 1612**	0.35	0.24	0.47	0.89	white	1,000/100
	PKE 1618	0.35	0.24	0.71	1.13		1,000/100
4	**PKE 25016**	0.39	0.31	0.63	1.14	black	500/50
	PKE 25022	0.39	0.31	0.87	1.38		500/50

insulated chain end sleeves

HALOGEN FREE

Developed for use with production equipment, to give a quick and reliable crimped joint. Conforms to DIN standard 46 228/4.

Conductor Size AWG	Ref.	Dimensions in. Ø	B	P	L	Insulation Color	Quantity Reel
22÷20	**CPKD 508**	0.10	0.05	0.31	0.55	white	5,000
18	**CPKD 7508**	0.11	0.06	0.31	0.55	grey	5,000
17	**CPKD 108**	0.12	0.07	0.31	0.55	red	5,000
15	**CPKD 1508**	0.14	0.08	0.31	0.55	black	5,000
13	**CPKD 2508**	0.17	0.10	0.31	0.55	blue	3,000

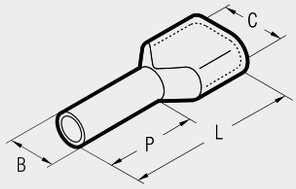
Conductor Size AWG	Ref.	Dimensions in. Ø	B	P	L	Insulation Color	Quantity Box/Bag
22÷20	**PKD 506**	0.10	0.06	0.24	0.47	white	10,000/500
	PKD 508	0.10	0.06	0.31	0.55		10,000/500
	PKD 510	0.10	0.06	0.39	0.63		10,000/500
18	**PKD 7506**	0.11	0.06	0.24	0.49	grey	10,000/500
	PKD 7508	0.11	0.06	0.31	0.55		10,000/500
	PKD 7510	0.11	0.06	0.39	0.65		10,000/500
	PKD 7512	0.11	0.06	0.47	0.72		10,000/500
17	**PKD 106**	0.12	0.07	0.24	0.49	red	10,000/500
	PKD 108	0.12	0.07	0.31	0.55		10,000/500
	PKD 110	0.12	0.07	0.39	0.65		10,000/500
	PKD 112	0.12	0.07	0.47	0.72		10,000/500
16	**PKD 1508**	0.14	0.08	0.31	0.55	black	10,000/500
	PKD 1510	0.14	0.08	0.39	0.65		7,500/500
	PKD 1512	0.14	0.08	0.47	0.72		7,500/500
	PKD 1518	0.14	0.08	0.71	0.96		5,000/500
14	**PKD 2508**	0.17	0.10	0.31	0.59	blue	7,500/500
	PKD 2512	0.17	0.10	0.47	0.75		5,000/500
	PKD 2518	0.17	0.10	0.71	0.98		5,000/500
12	**PKD 410**	0.19	0.13	0.39	0.67	grey	5,000/200
	PKD 412	0.19	0.13	0.47	0.75		4,000/200
	PKD 418	0.19	0.13	0.71	0.98		3,000/200
10	**PKD 612**	0.25	0.16	0.47	0.79	yellow	2,500/100
	PKD 618	0.25	0.16	0.71	1.02		2,000/100
8÷7	**PKD 1012**	0.30	0.20	0.47	0.85	red	1,500/100
	PKD 1018	0.30	0.20	0.71	1.08		1,500/100
6÷5	**PKD 1612**	0.35	0.25	0.47	0.89	blue	1,000/100
	PKD 1618	0.35	0.25	0.71	1.12		1,000/100
4	**PKD 25016**	0.44	0.31	0.63	1.14	yellow	500/50
	PKD 25022	0.44	0.31	0.87	1.38		500/50
2	**PKD 35016**	0.50	0.35	0.63	1.18	red	500/50
	PKD 35025	0.50	0.35	0.98	1.54		400/50
1/0	**PKD 50020**	0.59	0.43	0.79	1.42	blue	300/50
	PKD 50025	0.59	0.43	0.98	1.61		300/50

Conductor Size AWG	Ref.	Dimensions in. Ø	B	P	L	Insulation Color	Quantity Box/Bag
26÷22	**PKC 306**	0.07	0.04	0.24	0.41	light blue	25,000/500
	PKC 308	0.07	0.04	0.31	0.49		25,000/500
22÷20	**PKC 508**	0.10	0.05	0.31	0.55	orange	10,000/500
	PKC 510	0.10	0.05	0.39	0.63		10,000/500
18	**PKC 7508**	0.11	0.06	0.31	0.55	white	10,000/500
	PKC 7512	0.11	0.06	0.47	0.72		10,000/500
17	**PKC 108**	0.12	0.07	0.31	0.55	yellow	10,000/500
	PKC 112	0.12	0.07	0.47	0.72		10,000/500
16	**PKC 1508**	0.14	0.08	0.31	0.55	red	10,000/500
	PKC 1510	0.14	0.08	0.39	0.65		7,500/500
	PKC 1518	0.14	0.08	0.71	0.96		5,000/500
14	***PKC 2508**	0.17	0.10	0.31	0.59	blue	7,500/500
	***PKC 2512**	0.17	0.10	0.47	0.75		5,000/500
	***PKC 2518**	0.17	0.10	0.71	0.98		5,000/500
12	***PKC 410**	0.19	0.13	0.39	0.67	grey	5,000/200
	***PKC 412**	0.19	0.13	0.47	0.75		4,000/200
	***PKC 418**	0.19	0.13	0.71	0.98		3,000/200
10	**PKC 612**	0.23	0.15	0.47	0.79	black	2,500/100
	PKC 618	0.23	0.15	0.71	1.02		2,000/100
8÷7	**PKC 1012**	0.29	0.19	0.47	0.85	ivory	1,500/100
	PKC 1018	0.29	0.19	0.71	1.08		1,500/100
6÷5	**PKC 1612**	0.35	0.24	0.47	0.89	green	1,000/100
	PKC 1618	0.35	0.24	0.71	1.13		1,000/100
4	**PKC 25016**	0.39	0.31	0.63	1.14	brown	500/50
	PKC 25022	0.39	0.31	0.87	1.38		500/50
2	**PKC 35016**	0.47	0.35	0.63	1.18	beige	500/50
	PKC 35025	0.47	0.35	0.98	1.54		400/50
1/0	**PKC 50020**	0.54	0.43	0.79	1.42	olive	300/50
	PKC 50030	0.54	0.43	1.18	1.81		250/50
2/0	**PKC 70022**	0.63	0.56	0.87	1.49	yellow	100/25
3/0	**PKC 95025**	0.71	0.62	0.98	1.73	red	100/25
250 MCM	**PKC 120027**	0.82	0.69	1.06	1.89	blue	100/25

**To DIN standard 46 228/4*

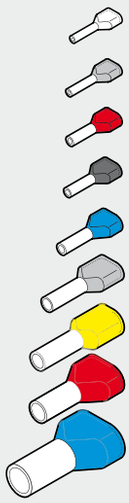
"TWIN" POLYPROPYLENE INSULATED END SLEEVES

for fine stranded cables



HALOGEN FREE

PKT



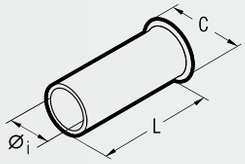
Conductor Size AWG	Ref.	Dimensions in. C	B	P	L	Insulation Colour	ND#1,ND#2,ND#3 and HNKE 50 Compression Aperture	Quantity Box/Bag
2 x 20	**PKT 508**	0.19x0.10	0.07	0.31	0.63	white	1	5.000/500
	PKT 510	0.19x0.10	0.07	0.39	0.71			5.000/500
2 x 18	**PKT 7508**	0.20x0.10	0.08	0.31	0.59	grey	1,5	2.500/100
	PKT 7512	0.20x0.10	0.08	0.47	0.75			2.500/100
2 x 17	**PKT 108**	0.23x0.13	0.10	0.31	0.63	red	2,5	2.500/100
	PKT 112	0.23x0.13	0.10	0.47	0.79			2.500/100
2 x 16	**PKT 1508**	0.26x0.14	0.10	0.31	0.63	black	2,5	2.500/100
	PKT 1512	0.26x0.14	0.10	0.47	0.79			2.500/100
2 x 14	**PKT 2510**	0.30x0.17	0.13	0.35	0.77	blue	4	2.500/100
	PKT 2512	0.30x0.17	0.13	0.47	0.83			2.500/100
2 x 12	**PKT 412**	0.35x0.20	0.17	0.47	0.91	grey	6	1.500/100
2 x 10	**PKT 614**	0.39x0.28	0.21	0.55	1.02	yellow	10	1.000/100
2 x 8÷7	**PKT 1014**	0.51x0.28	0.28	0.55	1.02	red	16	500/50
2 x 6÷5	**PKT 1614**	0.71x0.37	0.35	0.55	1.18	blue	35	300/50

Type PKT range of end sleeves is manufactured from tin plated electrolytic copper.
Designed to accomodate two cables terminating in the same sleeve.
The operating temperature range is – 4 to + 221°F (Surge + 230°F).

Recommended crimping tools are shown on pages 96 to 120, 145, 147, 191.

UNINSULATED END SLEEVES

for flexible copper cables



KE

Conductor Size AWG	Ref.	Dimensions in. Øi	L	C	Quantity Box/Bag
22÷20	***KE 506 ST**	0.04	0.24	0.08	50,000/500
	KE 508 ST	0.04	0.31	0.08	50,000/500
18	***KE 7506 ST**	0.05	0.24	0.09	50,000/500
	KE 7508 ST	0.05	0.31	0.09	50,000/500
17	***KE 106 ST**	0.06	0.24	0.10	25,000/500
	***KE 110 ST**	0.06	0.39	0.10	25,000/500
16	***KE 1508 ST**	0.07	0.28	0.11	25,000/500
	***KE 1510 ST**	0.07	0.39	0.11	25,000/500
14	***KE 2508 ST**	0.09	0.28	0.13	25,000/500
	***KE 2510 ST**	0.09	0.39	0.13	20,000/500
12	***KE 410 ST**	0.11	0.35	0.16	12,500/500
	***KE 412 ST**	0.11	0.47	0.16	12,500/500
10	***KE 610 ST**	0.14	0.39	0.19	10,000/500
	***KE 612 ST**	0.14	0.47	0.19	7,500/500
	***KE 616 ST**	0.14	0.59	0.19	5,000/500
8÷7	***KE 1016 ST**	0.18	0.59	0.23	4,000/250
6÷5	***KE 1616 ST**	0.23	0.59	0.30	3,000/250
4	**KE 25012 ST**	0.29	0.47	0.37	2,500/100
	***KE 25018 ST**	0.29	0.71	0.37	1,500/100
2	**KE 35012 ST**	0.33	0.47	0.43	1,500/100
	***KE 35018 ST**	0.33	0.71	0.43	1,000/100

**To DIN standard 46 228/1*

Type KE series end sleeves is manufactured from tin plated electrolytic copper.
Designed and developed for use with flexible cables.

Recommended crimping tools are shown on pages 96 to 120, 145, 147, 191.

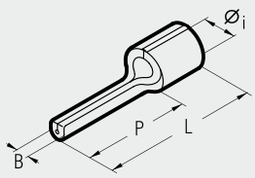
S

S range - brazed seam

S range terminals are manufactured from electrolytic copper strip and tin plated. The seam is brazed to provide uniform mechanical strength.
The terminal barrel is rifled to enhance electrical contact and to improve mechanical strength.

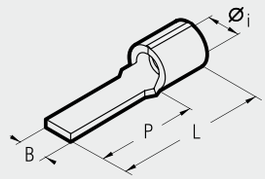
Recommended crimping tools are shown on pages 96 to 117, 145.

pin terminals



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Øi	B	P	L	Quantity Box/Bag
22÷16 (0.25÷1.25)	**S 1.5-P 8**	0.07	0.06	0.31	0.47	*8,000/100*
	S 1.5-P 10	0.07	0.06	0.39	0.55	*8,000/100*
	S 1.5-P 12	0.07	0.06	0.47	0.64	*8,000/100*
16÷14 (1.5÷2.5)	**S 2.5-P 8**	0.09	0.07	0.31	0.47	*7,000/100*
	S 2.5-P 10	0.09	0.07	0.39	0.55	*7,000/100*
	S 2.5-P 12	0.09	0.07	0.47	0.63	*7,000/100*
12÷10 (4÷6)	**S 6-P 10**	0.14	0.09	0.39	0.66	*4,000/100*
	S 6-P 12	0.14	0.09	0.47	0.76	*4,000/100*
	S 6-P 14	0.14	0.09	0.55	0.83	*3,500/100*

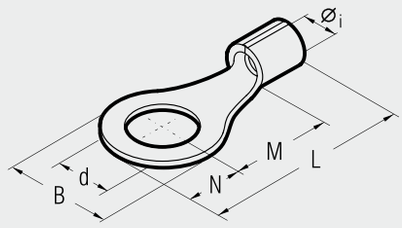
blade terminals



Conductor Size AWG (sqmm)	Ref.	Dimensions in. Øi	B	P	L	Quantity Box/Bag
22÷16 (0.25÷1.25)	**S 1.5-PP 12**	0.07	0.12	0.50	0.67	*8,000/100*
	***S 1.5-PP 12/1**	0.07	0.12	0.44	0.61	*8,000/100*
	S 1.5-PP 12/19	0.07	0.07	0.52	0.69	*8,000/100*
	S 1.5-PP 14	0.07	0.12	0.58	0.75	*8,000/100*
16÷14 (1.5÷2.5)	**S 2.5-PP 12**	0.09	0.14	0.50	0.67	*7,000/100*
	S 2.5-PP 12/25	0.09	0.10	0.52	0.69	*7,000/100*
	S 2.5-PP 16/25	0.09	0.10	0.68	0.84	*7,000/100*
12÷10 (4÷6)	**S 6-PP 12**	0.14	0.16	0.52	0.78	*4,000/100*
	S 6-PP 17	0.14	0.11	0.75	1.00	*4,000/100*

**Available on request*

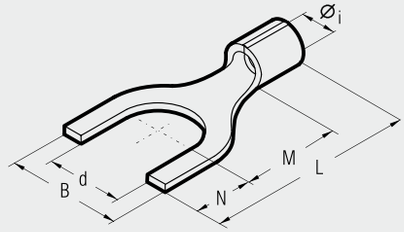
ring terminals



Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag
			Øi	B	M	N	L	d	
22÷16 (0.25÷1.25)	#3	*S 1.5-M 2	0.07	0.22	0.18	0.11	0.45	0.09	7,000/100
	#4	S 1.5-M 3	0.07	0.22	0.18	0.11	0.45	0.13	7,000/100
	#6	S 1.5-M 3.5	0.07	0.22	0.18	0.11	0.45	0.15	7,000/100
	#6	*S 1.5-M 3.5/1	0.07	0.24	0.28	0.12	0.57	0.15	7,000/100
	#8	S 1.5-M 4	0.07	0.28	0.26	0.14	0.56	0.17	7,000/100
	#8	*S 1.5-M 4/3	0.07	0.31	0.28	0.15	0.60	0.17	7,000/100
	#10	S 1.5-M 5	0.07	0.31	0.28	0.15	0.60	0.21	7,000/100
	1/4"	S 1.5-M 6	0.07	0.37	0.32	0.19	0.67	0.25	6,000/100
	1/4"	S 1.5-M 6/1	0.07	0.47	0.41	0.24	0.81	0.25	5,000/100
	17/64"	S 1.5-M 7	0.07	0.37	0.32	0.19	0.67	0.28	6,000/100
	5/16"	S 1.5-M 8	0.07	0.47	0.41	0.24	0.81	0.33	4,000/100
	3/8"	S 1.5-M 10	0.07	0.61	0.51	0.30	0.98	0.41	3,000/100
	1/2"	S 1.5-M 12	0.07	0.71	0.61	0.35	1.13	0.51	2,000/100
16÷14 (1.5÷2.5)	#4	*S 2.5-M 3	0.09	0.22	0.20	0.11	0.47	0.13	6,000/100
	#6	S 2.5-M 3.5	0.09	0.22	0.20	0.11	0.47	0.15	6,000/100
	#6	S 2.5-M 3.5/1	0.09	0.24	0.26	0.12	0.54	0.15	5,000/100
	#8	*S 2.5-M 4	0.09	0.31	0.26	0.16	0.58	0.17	5,000/100
	#10	S 2.5-M 5	0.09	0.31	0.30	0.16	0.62	0.21	5,000/100
	1/4"	S 2.5-M 6	0.09	0.37	0.34	0.19	0.69	0.25	5,000/100
	1/4"	S 2.5-M 6/1	0.09	0.47	0.41	0.24	0.81	0.25	5,000/100
	17/64"	S 2.5-M 7	0.09	0.39	0.31	0.20	0.67	0.28	5,000/100
	5/16"	S 2.5-M 8	0.09	0.47	0.41	0.24	0.81	0.33	4,000/100
	3/8"	S 2.5-M 10	0.09	0.61	0.51	0.30	0.98	0.41	2,500/100
	1/2"	S 2.5-M 12	0.09	0.71	0.61	0.35	1.13	0.51	2,000/100
12÷10 (4÷6)	#4	S 6-M 3	0.14	0.31	0.32	0.16	0.73	0.13	3,000/100
	#6	S 6-M 3.5	0.14	0.31	0.32	0.16	0.73	0.15	3,000/100
	#8	S 6-M 4	0.14	0.35	0.32	0.18	0.75	0.17	3,000/100
	#10	S 6-M 5	0.14	0.35	0.32	0.18	0.75	0.21	2,500/100
	1/4"	S 6-M 6	0.14	0.43	0.44	0.22	0.91	0.25	2,500/100
	1/4"	*S 6-M 6/1	0.14	0.43	0.32	0.22	0.79	0.25	2,500/100
	17/64"	S 6-M 7	0.14	0.43	0.44	0.22	0.91	0.28	2,500/100
	5/16"	S 6-M 8	0.14	0.54	0.48	0.27	1.00	0.33	2,000/100
	3/8"	*S 6-M 8/1	0.14	0.43	0.32	0.22	0.79	0.33	2,500/100
	3/8"	S 6-M 10	0.14	0.54	0.48	0.27	1.00	0.41	2,000/100
	3/8"	S 6-M 10/1	0.14	0.61	0.54	0.30	1.10	0.41	2,000/100
	1/2"	S 6-M 12	0.14	0.75	0.59	0.37	1.22	0.51	1,000/100
	9/16"	S 6-M 14	0.14	0.83	0.63	0.41	1.30	0.59	1,000/100
	5/8"	S 6-M 16	0.14	0.94	0.67	0.47	1.40	0.67	1,000/100
8÷7 (10)	#8	S 10-M 4	0.19	0.45	0.35	0.23	0.94	0.17	2,000/100
	#10	S 10-M 5	0.19	0.45	0.35	0.23	0.94	0.21	2,000/100
	1/4"	S 10-M 6	0.19	0.45	0.35	0.23	0.94	0.25	2,000/100
	17/64"	S 10-M 7	0.19	0.45	0.35	0.23	0.94	0.28	1,500/100

*Available on request

fork/spade terminals

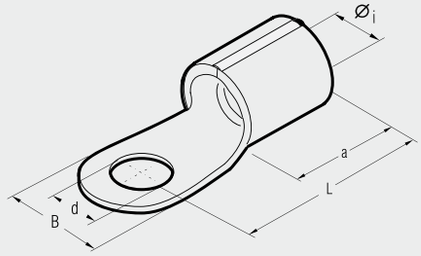


Cond. Size AWG (sqmm)	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag
			Øi	B	M	N	L	d	
22÷16 (0.25÷1.25)	#4	S 1.5-U 3	0.07	0.22	0.22	0.16	0.54	0.13	7,000/100
	#6	S 1.5-U 3.5	0.07	0.24	0.26	0.15	0.57	0.15	7,000/100
	#6	*S 1.5-U 3.5/2	0.07	0.25	0.26	0.15	0.57	0.15	7,000/100
	#8	S 1.5-U 4	0.07	0.26	0.30	0.15	0.61	0.17	7,000/100
	#8	*S 1.5-U 4/1	0.07	0.33	0.30	0.15	0.61	0.17	7,000/100
	#8	S 1.5-U 4/2	0.07	0.30	0.30	0.15	0.61	0.17	7,000/100
	#10	S 1.5-U 5	0.07	0.33	0.30	0.15	0.61	0.21	7,000/100
	#10	*S 1.5-U 5/1	0.07	0.37	0.30	0.15	0.61	0.21	7,000/100
	1/4"	S 1.5-U 6	0.07	0.37	0.32	0.19	0.67	0.25	6,000/100
	1/4"	*S 1.5-U 6/1	0.07	0.47	0.36	0.28	0.81	0.25	6,000/100
	5/16"	S 1.5-U 8	0.07	0.55	0.39	0.25	0.81	0.33	3,000/100
	3/8"	S 1.5-U 10	0.07	0.69	0.51	0.30	0.98	0.41	2,500/100
	1/2"	S 1.5-U 12	0.07	0.79	0.61	0.35	1.13	0.51	2,000/100
16÷14 (1.5÷2.5)	#4	S 2.5-U 3	0.09	0.22	0.22	0.16	0.54	0.13	6,000/100
	#6	S 2.5-U 3.5	0.09	0.25	0.26	0.15	0.57	0.15	6,000/100
	#6	*S 2.5-U 3.5/1	0.09	0.28	0.26	0.15	0.57	0.15	6,000/100
	#8	S 2.5-U 4	0.09	0.26	0.30	0.15	0.61	0.17	5,000/100
	#8	*S 2.5-U 4/1	0.09	0.33	0.30	0.15	0.61	0.17	6,000/100
	#8	*S 2.5-U 4/2	0.09	0.30	0.30	0.15	0.61	0.17	6,000/100
	#10	S 2.5-U 5	0.09	0.33	0.30	0.15	0.61	0.21	6,000/100
	1/4"	S 2.5-U 6	0.09	0.37	0.32	0.19	0.67	0.25	5,000/100
	1/4"	*S 2.5-U 6/1	0.09	0.47	0.36	0.28	0.81	0.25	4,000/100
	5/16"	S 2.5-U 8	0.09	0.55	0.39	0.25	0.81	0.33	2,500/100
	3/8"	S 2.5-U 10	0.09	0.69	0.51	0.30	0.98	0.41	2,000/100
	1/2"	S 2.5-U 12	0.09	0.79	0.61	0.35	1.13	0.51	2,000/100
12÷10 (4÷6)	#6	S 6-U 3.5	0.14	0.30	0.33	0.15	0.74	0.15	3,000/100
	#8	S 6-U 4	0.14	0.30	0.31	0.17	0.74	0.17	3,000/100
	#10	S 6-U 5	0.14	0.37	0.31	0.17	0.74	0.21	2,500/100
	1/4"	S 6-U 6	0.14	0.39	0.43	0.22	0.90	0.25	2,500/100
	5/16"	S 6-U 8	0.14	0.53	0.47	0.31	1.04	0.33	2,000/100
	3/8"	S 6-U 10	0.14	0.61	0.51	0.31	1.08	0.41	2,000/100
	3/8"	*S 6-U 10/1	0.14	0.69	0.54	0.30	1.10	0.41	2,000/100
	1/2"	S 6-U 12	0.14	0.83	0.59	0.37	1.22	0.51	1,000/100
	9/16"	*S 6-U 14	0.14	0.91	0.63	0.41	1.30	0.59	1,000/100
	5/8"	*S 6-U 16	0.14	1.02	0.67	0.45	1.38	0.67	1,000/100

CRIMPING CONNECTORS ACCORDING TO DIN 46234

Q

for copper cables



Q type connectors are manufactured from electrolytic copper strip, annealed and surface protected by tin plating; dimensions are compliant with DIN 46234; the sleeve is brazed with a silver-copper alloy.
Details of the conductor csa and stud diameter are engraved on the palm.
Details of the appropriate crimping tools and dies are shown on page 204.

Consult us for special requirements.

Conductor Size AWG	Ø Stud in.	Ref.	Dimensions in.					*Quantity* Box/Bag	Mechanical Tools	Hydraulic Tools				
			Øi	d	L	B	a							
10÷8	#10	**Q 10-5**	0.18	0.21	0.63	0.39	0.31	*1,500/100*	HN 5	B 35-50A	HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC HT 81-U RHU 81	B131LN-CA and similar tools for U dies	ECW-H3D
	1/4"	**Q 10-6**	0.18	0.26	0.67	0.43	0.31	*1,000/100*					
	5/16"	**Q 10-8**	0.18	0.33	0.79	0.55	0.31	*1,000/100*					
	3/8"	**Q 10-10**	0.18	0.41	0.83	0.71	0.31	*1,000/100*					
	1/2"	**Q 10-12**	0.18	0.51	0.87	0.87	0.31	*500/100*					
8÷6	#10	**Q 16-5**	0.23	0.21	0.79	0.43	0.39	*1,000/100*					
	1/4"	**Q 16-6**	0.23	0.26	0.79	0.43	0.39	*1,000/100*					
	5/16"	**Q 16-8**	0.23	0.33	0.87	0.55	0.39	*500/100*					
	3/8"	**Q 16-10**	0.23	0.41	0.94	0.71	0.39	*500/100*					
	1/2"	**Q 16-12**	0.23	0.51	1.02	0.87	0.39	*500/100*					
6÷4	#10	**Q 25-5**	0.30	0.21	0.98	0.47	0.43	*500/100*					
	1/4"	**Q 25-6**	0.30	0.26	0.98	0.47	0.43	*500/100*					
	5/16"	**Q 25-8**	0.30	0.33	0.98	0.63	0.43	*500/100*					
	3/8"	**Q 25-10**	0.30	0.41	1.02	0.71	0.43	*500/100*					
	1/2"	**Q 25-12**	0.30	0.51	1.22	0.87	0.43	*500/100*					
	5/8"	**Q 25-16**	0.30	0.67	1.38	1.10	0.43	*200/100*					
4÷2	1/4"	**Q 35-6**	0.35	0.26	1.02	0.59	0.47	*400/100*					
	5/16"	**Q 35-8**	0.35	0.33	1.02	0.63	0.47	*400/100*					
	3/8"	**Q 35-10**	0.35	0.41	1.06	0.71	0.47	*300/100*					
	1/2"	**Q 35-12**	0.35	0.51	1.22	0.87	0.47	*250/50*					
	5/8"	**Q 35-16**	0.35	0.67	1.42	1.10	0.47	*200/50*					
2÷1/0	1/4"	**Q 50-6**	0.43	0.26	1.34	0.71	0.63	*200/50*					
	5/16"	**Q 50-8**	0.43	0.33	1.34	0.71	0.63	*200/50*					
	3/8"	**Q 50-10**	0.43	0.41	1.34	0.71	0.63	*200/50*					
	1/2"	**Q 50-12**	0.43	0.51	1.42	0.87	0.63	*200/50*					
	5/8"	**Q 50-16**	0.43	0.67	1.57	1.10	0.63	*200/50*					
1/0 2/0	1/4"	**Q 70-6**	0.51	0.26	1.50	0.87	0.71	*100/50*					
	5/16"	**Q 70-8**	0.51	0.33	1.50	0.87	0.71	*100/50*					
	3/8"	**Q 70-10**	0.51	0.41	1.50	0.87	0.71	*100/50*					
	1/2"	**Q 70-12**	0.51	0.51	1.50	0.87	0.71	*100/50*					
	5/8"	**Q 70-16**	0.51	0.67	1.65	1.10	0.71	*100/50*					
2/0 3/0	5/16"	**Q 95-8**	0.59	0.33	1.65	0.94	0.79	*100/25*					
	3/8"	**Q 95-10**	0.59	0.41	1.65	0.94	0.79	*100/25*					
	1/2"	**Q 95-12**	0.59	0.51	1.73	0.94	0.79	*100/25*					
	5/8"	**Q 95-16**	0.59	0.67	2.76	1.10	0.79	*100/25*					

CRIMPING CONNECTORS ACCORDING TO DIN 46234

for copper cables

Conductor Size AWG	Ø Stud in.	Ref.	Dimensions in.					*Quantity* Box/Bag	Hydraulic Tools	
			Øi	d	L	B	a			
3/0 250	5/16"	**Q 120-8**	0.65	0.33	1.73	0.94	0.87	*100/25*	B131LN-CA and similar tools for U dies	ECW-H3D
	3/8"	**Q 120-10**	0.65	0.41	1.73	0.94	0.87	*100/25*		
	1/2"	**Q 120-12**	0.65	0.51	1.73	0.94	0.87	*100/25*		
	5/8"	**Q 120-16**	0.65	0.67	1.89	1.10	0.87	*50/25*		
250 300 MCM	3/8"	**Q 150-10**	0.75	0.41	1.97	1.18	0.94	*50/25*		
	1/2"	**Q 150-12**	0.75	0.51	1.97	1.18	0.94	*50/25*		
	5/8"	**Q 150-16**	0.75	0.67	1.97	1.18	0.94	*50/25*		
300 350 MCM	3/8"	**Q 185-10**	0.83	0.41	1.97	1.42	1.10	*40/20*		
	1/2"	**Q 185-12**	0.83	0.51	1.97	1.42	1.10	*40/20*		
	5/8"	**Q 185-16**	0.83	0.67	1.97	1.42	1.10	*30/15*		
350 500 MCM	3/8"	**Q 240-10**	0.93	0.41	2.20	1.50	1.26	*15/15*		
	1/2"	**Q 240-12**	0.93	0.51	2.20	1.50	1.26	*15/15*		
	5/8"	**Q 240-16**	0.93	0.67	2.20	1.50	1.26	*15/15*		

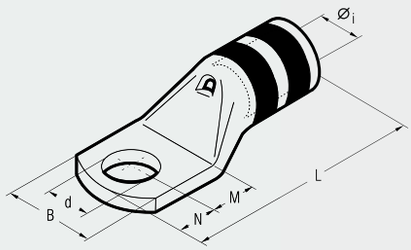
Consult us for further information.

Consult us for special requirements.

COLOR CODED COPPER CRIMPING LUGS

C

for copper conductors



File no. E125401

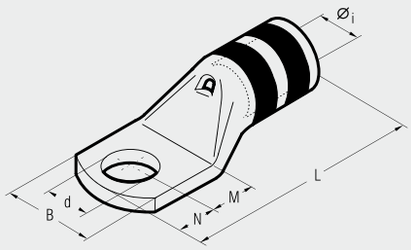
C series lugs are manufactured from electrolytic copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility, an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals have to perform a reliable connection, the annealing process plays a vital role in avoiding cracking or breaks between the barrel and palm.
The presence of an inspection hole facilitates full insertion of the conductor.
The barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically tin-plated to avoid oxidization.
The tongue is clearly marked with wire size and die index for Cembre tools.
UL listed for US and Canada per UL486A up to 35 KV.
C series lugs are an important part of Cembre crimping systems for power carrying conductors.
Details of the appropriate crimping tools and dies are shown on page 194.
Cembre technicians are available to provide technical advice as required.
Please consult Cembre for products not listed.

Conductor AWG Size	Conductor AWG Navy	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	Color Code	Quantity Box	Mechanical Tools: TN 70 SEY	TN 120 SEY	Hydraulic Tools: B15Y	B35-50A	HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC B131LN-CA and similar tools for U dies	ECW-H3D	RHU 520
8	23	# 8	C8-8	0.18	0.39	0.20	0.16	0.89	0.17	RED	600/50							
		# 10	C8-10	0.18	0.39	0.26	0.24	1.02	0.21		600/50							
		1/4	C8-14	0.18	0.43	0.28	0.24	1.04	0.25		600/50							
		5/16	C8-516	0.18	0.59	0.35	0.31	1.20	0.33		600/50							
		3/8	C8-38	0.18	0.71	0.43	0.39	1.36	0.41		600/50							
		1/2	C8-12	0.18	0.75	0.55	0.47	1.56	0.52		600/50							
6		# 8	C6-8	0.23	0.45	0.20	0.16	1.00	0.17	BLUE	600/50							
		# 10	C6-10	0.23	0.45	0.26	0.24	1.14	0.21		600/50							
		1/4	C6-14	0.23	0.45	0.28	0.24	1.16	0.25		600/50							
		5/16	C6-516	0.23	0.59	0.35	0.31	1.32	0.33		600/50							
		3/8	C6-38	0.23	0.71	0.43	0.39	1.48	0.41		600/50							
		1/2	C6-12	0.23	0.79	0.55	0.47	1.67	0.52		400/50							
4	40	# 8	C4-8	0.24	0.49	0.20	0.16	1.10	0.17	GRAY	600/50							
		# 10	C4-10	0.24	0.49	0.26	0.24	1.24	0.21		600/50							
		1/4	C4-14	0.24	0.49	0.28	0.24	1.26	0.25		600/50							
		5/16	C4-516	0.24	0.59	0.35	0.31	1.42	0.33		600/50							
		3/8	C4-38	0.24	0.71	0.43	0.39	1.57	0.41		400/50							
		1/2	C4-12	0.24	0.79	0.55	0.47	1.77	0.52		400/50							
3	50	# 8	C3-8	0.28	0.55	0.20	0.16	1.10	0.17	WHITE	600/50							
		# 10	C3-10	0.28	0.55	0.26	0.24	1.24	0.21		600/50							
		1/4	C3-14	0.28	0.55	0.28	0.24	1.26	0.25		600/50							
		5/16	C3-516	0.28	0.59	0.35	0.31	1.42	0.33		600/50							
		3/8	C3-38	0.28	0.71	0.43	0.39	1.57	0.41		400/50							
		1/2	C3-12	0.28	0.83	0.55	0.47	1.77	0.52		400/50							
2	60	# 10	C2-10	0.30	0.67	0.26	0.24	1.30	0.21	BROWN	400/50							
		1/4	C2-14	0.30	0.67	0.28	0.24	1.32	0.25		400/50							
		5/16	C2-516	0.30	0.67	0.35	0.31	1.48	0.33		400/50							
		3/8	C2-38	0.30	0.75	0.43	0.39	1.63	0.41		400/50							
		1/2	C2-12	0.30	0.83	0.55	0.47	1.83	0.52		200/50							
1	75	1/4	C1-14	0.35	0.67	0.28	0.24	1.36	0.25	GREEN	400/50							
		5/16	C1-516	0.35	0.67	0.35	0.31	1.52	0.33		400/50							
		3/8	C1-38	0.35	0.75	0.43	0.39	1.67	0.41		400/50							
		1/2	C1-12	0.35	0.83	0.55	0.47	1.87	0.52		200/50							
1/0	100	1/4	C1/0-14	0.39	0.75	0.31	0.28	1.59	0.25	PINK	200/25							
		5/16	C1/0-516	0.39	0.75	0.35	0.31	1.67	0.33		200/25							
		3/8	C1/0-38	0.39	0.79	0.43	0.39	1.83	0.41		200/25							
		1/2	C1/0-12	0.39	0.83	0.55	0.47	2.03	0.52		200/25							
		9/16	C1/0-916	0.39	0.98	0.63	0.55	2.19	0.59		200/25							
		5/8	C1/0-58	0.39	1.02	0.71	0.63	2.34	0.67		200/25							
2/0	125	1/4	C2/0-14	0.44	0.83	0.31	0.28	1.73	0.25	BLACK	200/25							
		5/16	C2/0-516	0.44	0.83	0.35	0.31	1.81	0.33		200/25							
		3/8	C2/0-38	0.44	0.83	0.43	0.39	1.97	0.41		200/25							
		1/2	C2/0-12	0.44	0.87	0.55	0.47	2.17	0.52		200/25							
		9/16	C2/0-916	0.44	0.98	0.63	0.55	2.32	0.59		100/25							
		5/8	C2/0-58	0.44	1.02	0.71	0.63	2.48	0.67		100/25							
		3/4	C2/0-34	0.44	1.16	0.87	0.79	2.79	0.83		100/25							
3/0	150	1/4	C3/0-14	0.49	0.91	0.31	0.28	1.77	0.25	ORANGE	200/25							
		5/16	C3/0-516	0.49	0.91	0.35	0.31	1.85	0.33		200/25							
		3/8	C3/0-38	0.49	0.91	0.43	0.39	2.01	0.41		100/25							
		1/2	C3/0-12	0.49	0.94	0.55	0.47	2.20	0.52		100/25							
		9/16	C3/0-916	0.49	1.06	0.63	0.55	2.36	0.59		100/25							
		5/8	C3/0-58	0.49	1.10	0.71	0.63	2.52	0.67		100/25							
		3/4	C3/0-34	0.49	1.24	0.87	0.79	2.83	0.83		100/25							

COLOR CODED COPPER CRIMPING LUGS

for copper conductors

File no. E125401

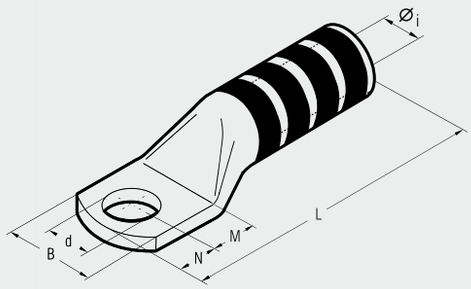


Conductor AWG Size	Navy	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	Color Code	Quantity Box	Mechanical Tools	Hydraulic Tools
4/0	200	1/4	**C4/0-14**	0.53	0.98	0.31	0.28	1.99	0.25	PURPLE	100/25	TN 120 SEY	B35-50A, B 51A, B 51 LA, B 55-YC, RH 50, HT 51, HT 51L, B131LN-CA and similar tools for U dies, ECW-H3D, RHU 520
		5/16	**C4/0-516**	0.53	0.98	0.35	0.31	2.07	0.33		100/25		
		3/8	**C4/0-38**	0.53	0.98	0.43	0.39	2.22	0.41		100/25		
		1/2	**C4/0-12**	0.53	0.98	0.55	0.47	2.42	0.52		100/25		
		9/16	**C4/0-916**	0.53	0.98	0.63	0.55	2.58	0.59		100/25		
		5/8	**C4/0-58**	0.53	1.06	0.71	0.63	2.74	0.67		50/25		
		3/4	**C4/0-34**	0.53	1.16	0.87	0.79	3.05	0.83		50/25		
250 MCM	250	1/4	**C250-14**	0.60	1.12	0.31	0.28	2.05	0.25	YELLOW	100/25		
		5/16	**C250-516**	0.60	1.12	0.35	0.31	2.13	0.33		100/25		
		3/8	**C250-38**	0.60	1.12	0.43	0.39	2.28	0.41		100/25		
		1/2	**C250-12**	0.60	1.12	0.55	0.47	2.48	0.52		50/25		
		9/16	**C250-916**	0.60	1.12	0.63	0.55	2.64	0.59		50/25		
		5/8	**C250-58**	0.60	1.12	0.71	0.63	2.80	0.67		50/25		
		3/4	**C250-34**	0.60	1.18	0.87	0.79	3.11	0.83		50/25		
		7/8	**C250-78**	0.60	1.26	0.94	0.91	3.39	0.91		50/25		
300 MCM	300	5/16	**C300-516**	0.66	1.24	0.51	0.43	2.72	0.33	WHITE	40/10		
		3/8	**C300-38**	0.66	1.24	0.51	0.43	2.72	0.41		40/10		
		1/2	**C300-12**	0.66	1.24	0.63	0.55	2.95	0.52		40/10		
		9/16	**C300-916**	0.66	1.24	0.71	0.63	3.11	0.59		40/10		
		5/8	**C300-58**	0.66	1.24	0.75	0.67	3.19	0.67		40/10		
		3/4	**C300-34**	0.66	1.24	0.87	0.79	3.43	0.83		40/10		
		7/8	**C300-78**	0.66	1.24	0.94	0.91	3.62	0.91		40/10		
350 MCM	350	3/8	**C350-38**	0.69	1.30	0.51	0.43	2.78	0.41	RED	40/20		
		1/2	**C350-12**	0.69	1.30	0.63	0.55	3.01	0.52		40/20		
		9/16	**C350-916**	0.69	1.30	0.71	0.63	3.17	0.59		40/20		
		5/8	**C350-58**	0.69	1.30	0.75	0.67	3.25	0.67		40/20		
		3/4	**C350-34**	0.69	1.30	0.87	0.79	3.48	0.83		40/20		
		7/8	**C350-78**	0.69	1.46	0.94	0.91	3.68	0.91		30/15		
400 MCM	400	3/8	**C400-38**	0.76	1.40	0.51	0.43	2.99	0.41	BLUE	40/20		
		1/2	**C400-12**	0.76	1.40	0.63	0.55	3.23	0.52		40/20		
		9/16	**C400-916**	0.76	1.40	0.71	0.63	3.39	0.59		40/20		
		5/8	**C400-58**	0.76	1.40	0.75	0.67	3.46	0.67		40/20		
		3/4	**C400-34**	0.76	1.40	0.87	0.79	3.70	0.83		40/20		
		7/8	**C400-78**	0.76	1.40	0.94	0.91	3.90	0.91		40/20		
500 MCM		3/8	**C500-38**	0.83	1.54	0.51	0.43	3.23	0.41	BROWN	30/15		
		1/2	**C500-12**	0.83	1.54	0.63	0.55	3.46	0.52		30/15		
		9/16	**C500-916**	0.83	1.54	0.71	0.63	3.62	0.59		30/15		
		5/8	**C500-58**	0.83	1.54	0.75	0.67	3.70	0.67		30/15		
		3/4	**C500-34**	0.83	1.54	0.87	0.79	3.94	0.83		20/10		
		7/8	**C500-78**	0.83	1.54	0.94	0.91	4.13	0.91		20/10		
600 MCM		1/2	**C600-12**	0.93	1.73	0.79	0.55	3.90	0.52	GREEN	20/10		
		9/16	**C600-916**	0.93	1.73	0.87	0.63	4.06	0.59		20/10		
		5/8	**C600-58**	0.93	1.73	0.87	0.75	4.17	0.67		20/10		
		3/4	**C600-34**	0.93	1.73	0.94	0.91	4.41	0.83		10/5		
		7/8	**C600-78**	0.93	1.73	0.94	0.91	4.41	0.91		10/5		
750 MCM		1/2	**C750-12**	1.02	1.89	0.87	0.75	4.45	0.52	BLACK	10/5		
		5/8	**C750-58**	1.02	1.89	0.87	0.75	4.45	0.67		10/5		
		3/4	**C750-34**	1.02	1.89	0.94	0.91	4.69	0.83		10/5		
		7/8	**C750-78**	1.02	1.89	0.94	0.91	4.69	0.91		10/5		

CL

COLOR CODED COPPER CRIMPING LUGS

one hole long barrel for copper conductors



File no. E125401

CL series lugs are manufactured from electrolytic copper tube for use in heavy duty applications.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility which is an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals have to perform a reliable connection, the annealing process plays a vital role in avoiding cracking or breaks between the barrel and palm.
The long barrel provides better mechanical pull-out strenght.
Lugs are electrolytically tinplated to avoid oxidization.
The tongue is clearly marked with wire size and die index for Cembre tools.
UL listed for US and Canada per UL486A up to 35 KV.
CL series lugs are an important part of Cembre crimping systems for power carrying conductors. Details of the appropriate crimping tools and dies are shown on page 194.
Cembre technicians are available to provide technical advice as required.
Please consult Cembre for products not listed.

Conductor AWG Size	Navy	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	Color Code	Quantity Box	Mechanical Tools: TN 70 SEY	TN 120 SEY	Hydraulic Tools: B15Y	B35-50A	B 51 A	B 51 LA	B 55-YC	HT 51	HT 51L	RH 50	B131LN-CA and similar tools for U dies	ECW-H3D	RHU 52D
8	23	# 10	**CL8-10**	0.18	0.39	0.25	0.23	1.47	0.20	RED	400/50	●	●	●	●	●	●	●	●	●	●	●	●	●
		1/4	**CL8-14**	0.18	0.43	0.27	0.23	1.49	0.25		400/50													
		3/8	**CL8-38**	0.18	0.70	0.43	0.39	1.81	0.41		400/50													
6		# 10	**CL6-10**	0.22	0.45	0.25	0.23	1.57	0.20	BLUE	400/50													
		1/4	**CL6-14**	0.22	0.45	0.27	0.23	1.59	0.25		400/50													
		1/2	**CL6-12**	0.22	0.78	0.55	0.47	2.10	0.51		400/50													
4	40	# 10	**CL4-10**	0.24	0.49	0.25	0.23	1.85	0.20	GRAY	400/50													
		1/4	**CL4-14**	0.24	0.49	0.27	0.23	1.87	0.25		400/50													
		3/8	**CL4-38**	0.24	0.70	0.43	0.39	2.18	0.41		400/50													
		1/2	**CL4-12**	0.24	0.78	0.55	0.47	2.38	0.51		400/50													
3	50	1/4	**CL3-14**	0.27	0.55	0.27	0.23	1.87	0.25	WHITE	200/100													
		5/16	**CL3-516**	0.27	0.59	0.35	0.31	2.02	0.33		200/100													
		3/8	**CL3-38**	0.27	0.70	0.43	0.39	2.18	0.41		200/100													
		1/2	**CL3-12**	0.27	0.82	0.55	0.47	2.38	0.51		200/100													
2	60	# 10	**CL2-10**	0.29	0.66	0.25	0.23	1.81	0.20	BROWN	200/50													
		1/4	**CL2-14**	0.29	0.66	0.27	0.23	1.83	0.25		200/50													
		5/16	**CL2-516**	0.29	0.66	0.35	0.31	1.98	0.33		200/50													
		1/2	**CL2-12**	0.29	0.82	0.55	0.47	2.34	0.51		200/50													
1	75	# 10	**CL1-10**	0.35	0.66	0.25	0.23	1.88	0.20	GREEN	200/50													
		5/16	**CL1-516**	0.35	0.66	0.35	0.31	2.06	0.33		200/50													
		1/2	**CL1-12**	0.35	0.82	0.55	0.47	2.42	0.51		200/50													
1/0	100	# 10	**CL1/0-10**	0.39	0.74	0.31	0.27	2.10	0.20	PINK	100/50													
		5/16	**CL1/0-516**	0.39	0.74	0.35	0.31	2.18	0.33		100/50													
		3/8	**CL1/0-38**	0.39	0.78	0.43	0.39	2.34	0.41		100/50													
		1/2	**CL1/0-12**	0.39	0.82	0.55	0.47	2.53	0.51		100/50													
2/0	125	3/8	**CL2/0-38**	0.44	0.82	0.43	0.39	2.65	0.41	BLACK	100/50													
		1/2	**CL2/0-12**	0.44	0.86	0.55	0.47	2.85	0.51		100/50													
3/0	150	1/2	**CL3/0-12**	0.48	0.94	0.55	0.47	2.81	0.51	ORANGE	100/50													
4/0	200	3/8	**CL4/0-38**	0.53	0.98	0.43	0.39	2.89	0.41	PURPLE	60/30													
		1/2	**CL4/0-12**	0.53	0.98	0.55	0.47	3.09	0.51		60/30													
250 MCM	250	1/2	**CL250-12**	0.59	1.12	0.55	0.47	3.30	0.51	YELLOW	50/25													
300 MCM	300	1/2	**CL300-12**	0.65	1.24	0.62	0.55	3.85	0.51	WHITE	30/15													
350 MCM	350	1/2	**CL350-12**	0.69	1.29	0.62	0.55	3.85	0.51	RED	30/15													
400 MCM	400	1/2	**CL400-12**	0.75	1.39	0.62	0.55	4.21	0.51	BLUE	20/10													
		5/8	**CL400-58**	0.75	1.39	0.74	0.66	4.44	0.66		20/10													
500 MCM		1/2	**CL500-12**	0.83	1.53	0.62	0.55	4.25	0.51	BROWN	20/10													
		5/8	**CL500-58**	0.83	1.53	0.74	0.66	4.48	0.66		20/10													
600 MCM		1/2	**CL600-12**	0.93	1.73	0.78	0.55	5.05	0.51	GREEN	10/5													
		5/8	**CL600-58**	0.93	1.73	0.86	0.74	5.33	0.66		10/5													
750 MCM		1/2	**CL750-12**	1.02	1.88	0.86	0.74	5.53	0.51	BLACK	10/5													
		5/8	**CL750-58**	1.02	1.88	0.86	0.74	5.53	0.66		10/5													

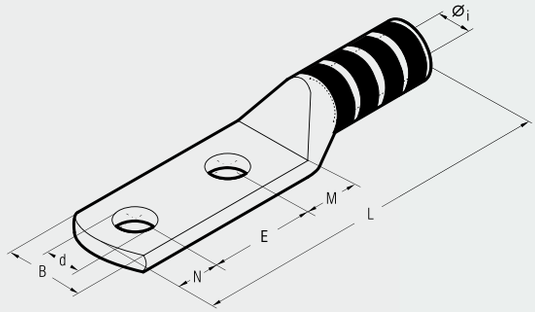
Also available with inspection hole.
In case of order, add suffix IH to the part number.
E.g.: CL250IH-12

COLOR CODED COPPER CRIMPING LUGS

double hole long barrel for copper conductors

CL-D

File no. E125401



Conductor AWG Size	Navy	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	E	N	L	d	Color Code	Quantity Box	Mechanical Tools	Hydraulic Tools
8	23	1/4	CL8-D14	0.18	0.43	0.28	5/8"	0.24	2.09	0.25	RED	400/50	TN 70 SEY TN 120 SEY	B15Y B35-50A HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC B1131LN-CA and similar tools for U dies EQW-H3D RHU 520
		1/4	CL8-D141	0.18	0.43	0.28	3/4"	0.24	2.20	0.25		400/50		
		3/8	CL8-D38	0.18	0.71	0.43	1"	0.39	2.78	0.41		400/50		
6		1/4	CL6-D14	0.23	0.45	0.28	5/8"	0.24	2.15	0.25	BLUE	400/50		
		1/4	CL6-D141	0.23	0.45	0.28	3/4"	0.24	2.26	0.25		400/50		
		3/8	CL6-D38	0.23	0.71	0.43	1"	0.39	2.83	0.41		400/50		
		1/2	CL6-DN	0.23	0.79	0.55	1 3/4"	0.47	3.78	0.52		400/50		
4	40	1/4	CL4-D14	0.24	0.49	0.28	5/8"	0.24	2.44	0.25	GRAY	200/50		
		1/4	CL4-D141	0.24	0.49	0.28	3/4"	0.24	2.56	0.25		200/50		
		3/8	CL4-D38	0.24	0.71	0.43	1"	0.39	3.13	0.41		200/50		
		1/2	CL4-DN	0.24	0.79	0.55	1 3/4"	0.47	4.07	0.52		200/50		
3	50	3/8	CL3-D38	0.28	0.71	0.43	1"	0.39	3.13	0.41	WHITE	200/50		
		1/2	CL3-DN	0.28	0.83	0.55	1 3/4"	0.47	4.07	0.52		200/50		
2	60	1/4	CL2-D14	0.30	0.67	0.28	5/8"	0.24	2.40	0.25	BROWN	200/50		
		1/4	CL2-D141	0.30	0.67	0.28	3/4"	0.24	2.52	0.25		200/50		
		3/8	CL2-D38	0.30	0.75	0.43	1"	0.39	3.09	0.41		100/50		
		3/8	CL2-DN38	0.30	0.75	0.43	1 3/4"	0.39	3.84	0.41		100/50		
		1/2	CL2-DN	0.30	0.83	0.55	1 3/4"	0.47	4.04	0.52		100/50		
1	75	1/4	CL1-D14	0.35	0.67	0.28	5/8"	0.24	2.48	0.25	GREEN	200/50		
		1/4	CL1-D141	0.35	0.67	0.28	3/4"	0.24	2.60	0.25		200/50		
		3/8	CL1-D38	0.35	0.75	0.43	1"	0.39	3.17	0.41		100/25		
		1/2	CL1-DN	0.35	0.83	0.55	1 3/4"	0.47	4.11	0.52		100/25		
1/0	100	1/4	CL1/0-D14	0.39	0.75	0.31	5/8"	0.28	2.68	0.25	PINK	100/25		
		1/4	CL1/0-D141	0.39	0.75	0.31	3/4"	0.28	2.80	0.25		100/25		
		3/8	CL1/0-D38	0.39	0.79	0.43	1"	0.39	3.29	0.41		100/25		
		1/2	CL1/0-DN	0.39	0.83	0.55	1 3/4"	0.47	4.23	0.52		100/25		
2/0	125	1/4	CL2/0-D14	0.44	0.83	0.31	5/8"	0.28	2.99	0.25	BLACK	60/30		
		1/4	CL2/0-D141	0.44	0.83	0.31	3/4"	0.28	3.11	0.25		60/30		
		3/8	CL2/0-D38	0.44	0.83	0.43	1"	0.39	3.60	0.41		60/30		
		1/2	CL2/0-DN	0.44	0.87	0.55	1 3/4"	0.47	4.55	0.52		60/30		
3/0	150	1/4	CL3/0-D141	0.49	0.91	0.31	3/4"	0.28	3.23	0.25	ORANGE	60/30		
		3/8	CL3/0-D38	0.49	0.91	0.43	1"	0.39	3.72	0.41		60/30		
		1/2	CL3/0-DN	0.49	0.94	0.55	1 3/4"	0.47	4.67	0.52		60/30		
4/0	200	1/4	CL4/0-D141	0.53	0.98	0.51	3/4"	0.43	3.70	0.25	PURPLE	50/25		
		3/8	CL4/0-D38	0.53	0.98	0.43	1"	0.39	3.84	0.41		50/25		
		3/8	CL4/0-DN38	0.53	0.98	0.43	1 3/4"	0.39	4.59	0.41		50/25		
		1/2	CL4/0-DN	0.53	0.98	0.55	1 3/4"	0.47	4.78	0.52		50/25		
250 MCM	250	3/8	CL250-D38	0.60	1.12	0.43	1"	0.39	4.06	0.41	YELLOW	40/20		
		1/2	CL250-DN	0.60	1.12	0.55	1 3/4"	0.47	5.00	0.52		40/20		
300 MCM	300	3/8	CL300-D38	0.66	1.24	0.51	1"	0.43	4.57	0.41	WHITE	30/15		
		1/2	CL300-DN	0.66	1.24	5/8"	1 3/4"	0.55	5.55	0.52		30/15		
350 MCM	350	1/4	CL350-D141	0.69	1.30	0.51	3/4"	0.43	4.31	0.25	RED	30/15		
		3/8	CL350-D38	0.69	1.30	0.51	1"	0.43	4.57	0.41		30/15		
		1/2	CL350-DN	0.69	1.30	5/8"	1 3/4"	0.55	5.55	0.52		30/15		
400 MCM	400	1/4	CL400-D141	0.76	1.40	0.51	3/4"	0.43	4.67	0.25	BLUE	20/10		
		3/8	CL400-D38	0.76	1.40	0.51	1"	0.43	4.92	0.41		20/10		
		1/2	CL400-DN	0.76	1.40	5/8"	1 3/4"	0.55	5.91	0.52		20/10		
500 MCM		1/4	CL500-D141	0.83	1.54	0.51	3/4"	0.43	4.70	0.25	BROWN	20/10		
		3/8	CL500-D38	0.83	1.54	0.51	1"	0.43	4.96	0.41		10/5		
		1/2	CL500-DN	0.83	1.54	5/8"	1 3/4"	0.55	5.94	0.52		10/5		
600 MCM		3/8	CL600-D38	0.93	1.73	0.79	1"	0.43	5.89	0.41	GREEN	20/5		
		1/2	CL600-DN	0.93	1.73	0.79	1 3/4"	0.55	6.75	0.52		20/5		
750 MCM		3/8	CL750-DN38	1.02	1.89	0.79	1 3/4"	0.43	6.83	0.41	BLACK	15/5		
		3/8	CL750-D38	1.02	1.89	0.79	1"	0.43	6.08	0.41		15/5		
		1/2	CL750-DN	1.02	1.89	0.79	1 3/4"	0.55	6.95	0.52		15/5		

CL series lugs are manufactured from electrolytic copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility, an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals have to perform a reliable connection, the annealing process plays a vital role in avoiding cracking or breaks between the barrel and palm.
The barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically tinplated to avoid oxidization.
The tongue is clearly marked with wire size and die index for Cembre tools.
UL listed for US and Canada per UL486A up to 35 KV.
CL series lugs are an important part of Cembre crimping systems for power carrying conductors. Details of the appropriate crimping tools and dies are shown on page 194.
Cembre technicians are available to provide technical advice as required.
Please consult Cembre for products not listed.

A-M

COPPER TUBE CRIMPING LUGS

for copper conductors

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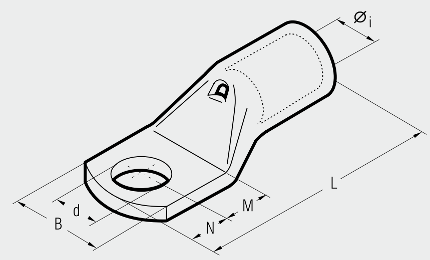

A-M series lugs are manufactured from electrolytic copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility, an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals still have to perform a reliable connection, annealing plays a vital role in avoiding cracking or breaks between the barrel and palm.
The presence of an inspection hole facilitates full insertion of the conductor, whilst the barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically tin-plated to avoid oxidation.
A-M series lugs form an important part of Cembre crimping systems for power carrying conductors, details of the appropriate crimping tools and dies are shown opposite and in detail on page 196-197, whilst our technicians are always available to provide any technical advice which may be required.
The enclosed table is only indicative of the range and many variations in stud fixing and palm lengths are also available.
UL listed for US and Canada per UL486A up to 35 KV.

Cond. Size AWG	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
22÷16	#4	A 03-M 3	0.07	0.24	0.18	0.14	0.63	0.13	5,000/100	HN1	B 15Y
	#6	A 03-M 3.5	0.07	0.26	0.18	0.14	0.63	0.15	5,000/100		
	#8	A 03-M 4	0.07	0.26	0.20	0.16	0.67	0.17	5,000/100		
	#10	A 03-M 5	0.07	0.30	0.22	0.18	0.71	0.21	5,000/100		
	1/4"	A 03-M 6	0.07	0.35	0.24	0.20	0.75	0.25	5,000/100		
16÷14	#4	A 06-M 3	0.09	0.24	0.18	0.14	0.67	0.13	4,000/100	HN1	B 15Y
	#6	A 06-M 3.5	0.09	0.26	0.18	0.14	0.67	0.15	4,000/100		
	#8	A 06-M 4	0.09	0.30	0.20	0.16	0.71	0.17	4,000/100		
	#10	A 06-M 5	0.09	0.33	0.22	0.18	0.75	0.21	4,000/100		
	1/4"	A 06-M 6	0.09	0.35	0.24	0.20	0.79	0.25	4,000/100		
	5/16"	A 06-M 8	0.09	0.47	0.35	0.31	1.02	0.33	2,500/100		
12÷10	#4	A 1-M 3	0.14	0.30	0.18	0.14	0.81	0.13	2,000/100	HN1, TN 70 SEY	B 15Y, B 35-45A, B 35-50A, HT 45-E, HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC
	#6	A 1-M 3.5	0.14	0.30	0.18	0.14	0.81	0.15	2,000/100		
	#8	A 1-M 4	0.14	0.31	0.20	0.16	0.85	0.17	2,000/100		
	#10	A 1-M 5	0.14	0.35	0.26	0.24	0.98	0.21	2,000/100		
	1/4"	A 1-M 6	0.14	0.43	0.28	0.24	1.00	0.25	2,000/100		
	5/16"	A 1-M 8	0.14	0.55	0.35	0.31	1.16	0.33	1,500/100		
	3/8"	A 1-M 10	0.14	0.65	0.43	0.39	1.32	0.41	1,000/100		
8	#8	A 2-M 4	0.18	0.39	0.20	0.16	0.89	0.17	1,500/100	HN5, HN-A25, TN 70 SEY, TN 120 SEY	B 15Y, B 35-45A, B 35-50A, HT 45-E, HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC, HT 81-U RHU 81, B131LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	#10	A 2-M 5	0.18	0.39	0.26	0.24	1.02	0.21	1,500/100		
	1/4"	A 2-M 6	0.18	0.43	0.28	0.24	1.04	0.25	1,500/100		
	5/16"	A 2-M 8	0.18	0.59	0.35	0.31	1.20	0.33	1,000/100		
	3/8"	A 2-M 10	0.18	0.71	0.43	0.39	1.36	0.41	1,000/100		
	1/2"	A 2-M 12	0.18	0.75	0.55	0.47	1.56	0.52	500/100		
6	#8	A 3-M 4	0.23	0.45	0.20	0.16	1.00	0.17	1,000/100	HN5, HN-A25, TN 70 SEY, TN 120 SEY	B 15Y, B 35-45A, B 35-50A, HT 45-E, HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC, HT 81-U RHU 81, B131LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	#10	A 3-M 5	0.23	0.45	0.26	0.24	1.14	0.21	1,000/100		
	1/4"	A 3-M 6	0.23	0.45	0.28	0.24	1.16	0.25	1,000/100		
	5/16"	A 3-M 8	0.23	0.59	0.35	0.31	1.32	0.33	500/100		
	3/8"	A 3-M 10	0.23	0.71	0.43	0.39	1.48	0.41	500/100		
	1/2"	A 3-M 12	0.23	0.79	0.55	0.47	1.67	0.52	500/100		
4	#8	A 5-M 4	0.28	0.55	0.20	0.16	1.10	0.17	1,000/100	HN-A25, TN 70 SEY, TN 120 SEY	B 35-45A, B 35-50A, HT 45-E, HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC, HT 81-U RHU 81, B131LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	#10	A 5-M 5	0.28	0.55	0.26	0.24	1.24	0.21	500/100		
	1/4"	A 5-M 6	0.28	0.55	0.28	0.24	1.26	0.25	500/100		
	5/16"	A 5-M 8	0.28	0.59	0.35	0.31	1.42	0.33	500/100		
	3/8"	A 5-M 10	0.28	0.71	0.43	0.39	1.57	0.41	500/100		
	1/2"	A 5-M 12	0.28	0.83	0.55	0.47	1.77	0.52	500/100		
2	#10	A 7-M 5	0.35	0.67	0.26	0.24	1.34	0.21	500/100	TN 70 SEY, TN 120 SEY	B 35-45A, B 35-50A, HT 45-E, HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC, HT 81-U RHU 81, B131LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	1/4"	A 7-M 6	0.35	0.67	0.28	0.24	1.36	0.25	500/100		
	5/16"	A 7-M 8	0.35	0.67	0.35	0.31	1.52	0.33	400/100		
	3/8"	A 7-M 10	0.35	0.75	0.43	0.39	1.67	0.41	400/100		
	1/2"	A 7-M 12	0.35	0.83	0.55	0.47	1.87	0.52	300/50		
2 - 1/0	1/4"	A 10-M 6	0.39	0.75	0.31	0.28	1.59	0.25	200/50	TN 70 SEY, TN 120 SEY	B 35-45A, B 35-50A, HT 45-E, HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC, HT 81-U RHU 81, B131LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	5/16"	A 10-M 8	0.39	0.75	0.35	0.31	1.67	0.33	200/50		
	3/8"	A 10-M 10	0.39	0.79	0.43	0.39	1.83	0.41	200/50		
	1/2"	A 10-M 12	0.39	0.83	0.55	0.47	2.03	0.52	200/50		
	9/16"	A 10-M 14	0.39	0.98	0.63	0.55	2.18	0.59	200/50		
	5/8"	A 10-M 16	0.39	1.02	0.71	0.63	2.34	0.67	200/50		
1/0 2/0	1/4"	A 14-M 6	0.44	0.83	0.31	0.28	1.73	0.25	200/50	TN 70 SEY, TN 120 SEY	B 35-45A, B 35-50A, HT 45-E, HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC, HT 81-U RHU 81, B131LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	5/16"	A 14-M 8	0.44	0.83	0.35	0.31	1.81	0.33	200/50		
	3/8"	A 14-M 10	0.44	0.83	0.43	0.39	1.97	0.41	200/50		
	1/2"	A 14-M 12	0.44	0.87	0.55	0.47	2.17	0.52	150/50		
	9/16"	A 14-M 14	0.44	0.98	0.63	0.55	2.32	0.59	100/50		
	5/8"	A 14-M 16	0.44	1.02	0.71	0.63	2.48	0.67	100/50		

COPPER TUBE CRIMPING LUGS

for copper conductors

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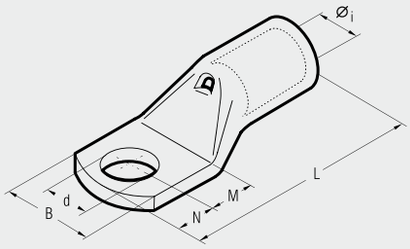
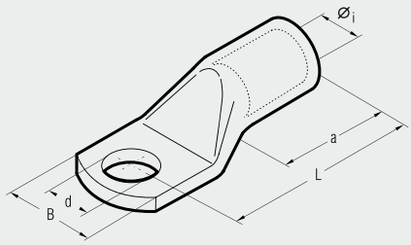


Cond. Size AWG	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
			Øi	B	M	N	L	d			
2/0 3/0	1/4"	**A 19-M 6**	0.53	0.98	0.31	0.28	1.99	0.25	*100/25*	TN 12D SEY	B 35-45A, B 35-50A, HT 45-E, B 55-YC, B 51 LA, B 51 A, RH 50, HT 81-U, RHU 81, B1311LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	5/16"	**A 19-M 8**	0.53	0.98	0.35	0.31	2.07	0.33	*100/25*		
	3/8"	**A 19-M 10**	0.53	0.98	0.43	0.39	2.22	0.41	*100/25*		
	1/2"	**A 19-M 12**	0.53	0.98	0.55	0.47	2.42	0.52	*100/25*		
	9/16"	**A 19-M 14**	0.53	0.98	0.63	0.55	2.58	0.59	*100/25*		
	5/8"	**A 19-M 16**	0.53	1.06	0.71	0.63	2.74	0.67	*100/25*		
	3/4"	**A 19-M 20**	0.53	1.16	0.87	0.79	3.05	0.83	*50/25*		
3/0 250	5/16"	**A 24-M 8**	0.60	1.12	0.35	0.31	2.13	0.33	*100/25*		
	3/8"	**A 24-M 10**	0.60	1.12	0.43	0.39	2.28	0.41	*100/25*		
	1/2"	**A 24-M 12**	0.60	1.12	0.55	0.47	2.48	0.52	*100/25*		
	9/16"	**A 24-M 14**	0.60	1.12	0.63	0.55	2.64	0.59	*50/25*		
	5/8"	**A 24-M 16**	0.60	1.12	0.71	0.63	2.80	0.67	*50/25*		
	3/4"	**A 24-M 20**	0.60	1.18	0.87	0.79	3.11	0.83	*50/25*		
250 300 MCM	5/16"	**A 30-M 8**	0.66	1.24	0.51	0.43	2.72	0.33	*50/25*		
	3/8"	**A 30-M 10**	0.66	1.24	0.51	0.43	2.72	0.41	*50/25*		
	1/2"	**A 30-M 12**	0.66	1.24	0.63	0.55	2.95	0.52	*50/25*		
	9/16"	**A 30-M 14**	0.66	1.24	0.71	0.63	3.11	0.59	*50/25*		
	5/8"	**A 30-M 16**	0.66	1.24	0.75	0.67	3.19	0.67	*50/25*		
	3/4"	**A 30-M 20**	0.66	1.24	0.87	0.79	3.43	0.83	*50/25*		
300 350 MCM	5/16"	**A 37-M 8**	0.76	1.40	0.51	0.43	2.99	0.33	*50/25*		HT 51, HT 51L, RH 50, B 51 A, HT 81-U, RHU 81, B1311LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	3/8"	**A 37-M 10**	0.76	1.40	0.51	0.43	2.99	0.41	*40/20*		
	1/2"	**A 37-M 12**	0.76	1.40	0.63	0.55	3.23	0.52	*40/20*		
	9/16"	**A 37-M 14**	0.76	1.40	0.71	0.63	3.39	0.59	*30/15*		
	5/8"	**A 37-M 16**	0.76	1.40	0.75	0.67	3.46	0.67	*30/15*		
	3/4"	**A 37-M 20**	0.76	1.40	0.87	0.79	3.70	0.83	*30/15*		
350 500 MCM	5/16"	**A 48-M 8**	0.83	1.54	0.51	0.43	3.05	0.33	*30/15*		
	3/8"	**A 48-M 10**	0.83	1.54	0.51	0.43	3.05	0.41	*30/15*		
	1/2"	**A 48-M 12**	0.83	1.54	0.55	0.47	3.13	0.52	*30/15*		
	9/16"	**A 48-M 14**	0.83	1.54	0.71	0.63	3.62	0.59	*30/15*		
	5/8"	**A 48-M 16**	0.83	1.54	0.75	0.67	3.70	0.67	*30/15*		
	3/4"	**A 48-M 20**	0.83	1.54	0.87	0.79	3.94	0.83	*30/15*		
500 600 MCM	3/8"	**A 60-M 10**	0.93	1.73	0.79	0.43	3.78	0.41	*20/10*		B1311LN-CA and similar tools for U dies, ECW-H3D, RHU 520
	1/2"	**A 60-M 12**	0.93	1.73	0.79	0.55	3.90	0.52	*20/10*		
	9/16"	**A 60-M 14**	0.93	1.73	0.87	0.63	4.06	0.59	*20/10*		
	5/8"	**A 60-M 16**	0.93	1.73	0.87	0.75	4.17	0.67	*20/10*		
	3/4"	**A 60-M 20**	0.93	1.73	0.94	0.91	4.41	0.83	*20/10*		
800 MCM	1/2"	**A 80-M 12**	1.06	2.01	0.87	0.75	4.45	0.52	*15/5*		
	9/16"	**A 80-M 14**	1.06	2.01	0.87	0.75	4.45	0.59	*20/5*		
	5/8"	**A 80-M 16**	1.06	2.01	0.87	0.75	4.45	0.67	*20/5*		
	3/4"	**A 80-M 20**	1.06	2.01	0.94	0.91	4.68	0.83	*20/5*		
1000 MCM	5/8"	**A 100-M 16**	1.19	2.22	0.87	0.75	4.61	0.67	*15/1*		ECW-H3D, RHU 520
	3/4"	**A 100-M 20**	1.19	2.22	0.94	0.91	4.84	0.83	*15/1*		
1250 MCM	5/8"	**A 120-M 16**	1.31	2.43	0.87	0.75	5.04	0.67	*12/1*		
	3/4"	**A 120-M 20**	1.31	2.43	0.94	0.91	5.28	0.83	*10/1*		
1500 MCM	5/8"	**A 160-M 16**	1.50	2.83	0.94	0.75	5.55	0.67	*6/1*		RHU 520
	3/4"	**A 160-M 20**	1.50	2.83	0.94	0.91	5.71	0.83	*6/3*		
2000 MCM	5/8"	**A 200-M 16**	1.73	3.15	0.94	0.75	6.22	0.67	*6/1*		
	3/4"	**A 200-M 20**	1.73	3.15	0.94	0.91	6.38	0.83	*6/1*		

COPPER TUBE CRIMPING LUGS ACCORDING TO DIN 46235

DR

for copper conductors



DR series lugs are manufactured from electrolytic copper tube and designed to obtain high electrical conductivity combined with the mechanical strength required to resist vibration and pull out.
Cembre lugs are annealed and tin plated for improved surface protection.
The annealing process optimizes the structural features of the material allowing easier crimping and greater resistance to mechanical stresses.
Dimensions are according to DIN 46235.
The barrel entrance of the lug is chamfered to allow easy conductor insertion, while its length facilitates precise positioning in the crimping die.
Details of the appropriate crimping tools and dies are shown on page 204.

Each lug is marked with:
- Cembre logo and part code.
- conductor type and csa (mm^2).
- Stud Ø (mm).
- crimping die code (Kennzahl)

Consult us for special requirements

Conductor Size AWG	Ø Stud in.	Ref.	Code	Dimensions in. Øi	d	L	B	a	Quantity Box/Bag	Mechanical Tools: HN-D25	TND 6-70	TND 10-120	Hydraulic Tools: B 15Y	B 35-45A	B 35-50A	HT 45-E	HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC HT 81-U RHU 81	B131LN-CA and similar tools for U dies	ECW-H3D	RHU 520
10	#10	**DR6-5**	5	0.15	0.21	0.94	0.33	0.39	800/100											
	1/4"	**DR6-6**	5	0.15	0.25	0.94	0.35	0.39	800/100											
	5/16"	**DR6-8***	5	0.15	0.33	1.02	0.51	0.39	800/100											
8	#10	**DR10-5**	6	0.17	0.21	1.08	0.39	0.39	800/100											
	1/4"	**DR10-6**	6	0.17	0.25	1.06	0.39	0.39	800/100											
	5/16"	**DR10-8***	6	0.17	0.33	1.10	0.51	0.39	800/100											
	3/8"	**DR10-10***	6	0.17	0.41	1.12	0.59	0.39	800/100											
6	#10	**DR16-5***	8	0.22	0.21	1.42	0.51	0.79	400/100											
	1/4"	**DR16-6**	8	0.22	0.25	1.42	0.51	0.79	400/100											
	5/16"	**DR16-8**	8	0.22	0.33	1.46	0.51	0.79	400/100											
	3/8"	**DR16-10**	8	0.22	0.41	1.57	0.65	0.79	400/100											
	1/2"	**DR16-12***	8	0.22	0.51	1.61	0.75	0.79	400/100											
4	1/4"	**DR25-6**	10	0.28	0.25	1.54	0.57	0.79	400/100											
	5/16"	**DR25-8**	10	0.28	0.33	1.56	0.63	0.79	400/100											
	3/8"	**DR25-10**	10	0.28	0.41	1.57	0.63	0.79	200/100											
	1/2"	**DR25-12**	10	0.28	0.51	1.59	0.71	0.79	200/100											
2	1/4"	**DR35-6***	12	0.32	0.25	1.67	0.69	0.79	200/100											
	5/16"	**DR35-8**	12	0.32	0.33	1.65	0.67	0.79	200/100											
	3/8"	**DR35-10**	12	0.32	0.41	1.69	0.75	0.79	200/100											
	1/2"	**DR35-12**	12	0.32	0.51	1.69	0.83	0.79	200/100											
	5/8"	**DR35-16***	12	0.32	0.67	1.73	1.10	0.79	200/100											
1/0	1/4"	**DR50-6***	14	0.39	0.25	2.05	0.79	1.10	100/25											
	5/16"	**DR50-8**	14	0.39	0.33	2.05	0.79	1.10	100/25											
	3/8"	**DR50-10**	14	0.39	0.41	2.09	0.87	1.10	100/25											
	1/2"	**DR50-12**	14	0.39	0.51	2.09	0.94	1.10	100/25											
	5/8"	**DR50-16**	14	0.39	0.67	2.24	1.10	1.10	100/25											
2/0	5/16"	**DR70-8**	16	0.45	0.33	2.20	0.94	1.10	50/25											
	3/8"	**DR70-10**	16	0.45	0.41	2.20	0.94	1.10	50/25											
	1/2"	**DR70-12**	16	0.45	0.51	2.20	0.94	1.10	50/25											
	5/8"	**DR70-16**	16	0.45	0.67	2.36	1.18	1.10	50/25											
	3/4"	**DR70-20***	16	0.45	0.83	3.33	1.18	1.10	50/25											
3/0	5/16"	**DR95-8***	18	0.53	0.33	2.56	1.10	1.38	50/25											
	3/8"	**DR95-10**	18	0.53	0.41	2.60	1.10	1.38	50/25											
	1/2"	**DR95-12**	18	0.53	0.51	2.60	1.10	1.38	50/25											
	5/8"	**DR95-16**	18	0.53	0.67	2.58	1.26	1.38	50/25											
	3/4"	**DR95-20***	18	0.53	0.83	2.80	1.30	1.38	50/25											
250 MCM	5/16"	**DR120-8***	20	0.61	0.33	2.76	1.22	1.38	50/25											
	3/8"	**DR120-10**	20	0.61	0.41	2.76	1.22	1.38	50/25											
	1/2"	**DR120-12**	20	0.61	0.51	2.78	1.22	1.38	50/25											
	5/8"	**DR120-16**	20	0.61	0.67	2.76	1.24	1.38	50/25											
	3/4"	**DR120-20**	20	0.61	0.83	2.83	1.42	1.38	50/25											
300 MCM	3/8"	**DR150-10**	22	0.67	0.41	3.11	1.34	1.38	50/25											
	1/2"	**DR150-12**	22	0.67	0.51	3.09	1.34	1.38	50/25											
	5/8"	**DR150-16**	22	0.67	0.67	3.07	1.34	1.38	50/25											
	3/4"	**DR150-20**	22	0.67	0.83	3.07	1.50	1.38	50/25											
350 MCM	3/8"	**DR185-10**	25	0.75	0.41	3.27	1.46	1.57	25/25											
	1/2"	**DR185-12**	25	0.75	0.51	3.25	1.46	1.57	25/25											
	5/8"	**DR185-16**	25	0.75	0.67	3.23	1.46	1.57	25/25											
	3/4"	**DR185-20**	25	0.75	0.83	3.27	1.57	1.57	25/25											
500 MCM	3/8"	**DR240-10***	28	0.85	0.41	3.62	1.65	1.57	20/10											
	1/2"	**DR240-12**	28	0.85	0.51	3.62	1.67	1.57	20/10											
	5/8"	**DR240-16**	28	0.85	0.67	3.62	1.67	1.57	20/10											
	3/4"	**DR240-20**	28	0.85	0.83	3.62	1.77	1.57	20/10											

** Non-standard; dimensions of the tube according to DIN 46.235*

COPPER TUBE CRIMPING LUGS ACCORDING TO DIN 46235

for copper conductors

DR

Conductor Size AWG	Ø Stud in.	Ref.	Code	Dimensions in. Øi	d	L	B	a	Quantity Box/Bag	Hydraulic Tools: B131LN-CA and similar tools for U dies	ECW-H3D	RHU 520
600 MCM	1/2"	**DR300-12***	32	0.96	0.51	4.09	1.85	1.97	*10/5*			
	5/8"	**DR300-16**	32	0.96	0.67	3.94	1.89	1.97	*10/5*			
	3/4"	**DR300-20**	32	0.96	0.83	3.94	1.85	1.97	*10/5*			
800 MCM	1/2"	**DR400-12***	38	1.08	0.51	4.61	2.17	2.76	*5/5*			
	5/8"	**DR400-16**	38	1.08	0.67	4.61	2.17	2.76	*5/5*			
	3/4"	**DR400-20**	38	1.08	0.83	4.61	2.17	2.76	*5/5*			
1000 MCM	1/2"	**DR500-12***	42	1.22	0.51	5.12	2.36	2.76	*5/5*			
	5/8"	**DR500-16***	42	1.22	0.67	5.12	2.36	2.76	*5/5*			
	3/4"	**DR500-20**	42	1.22	0.83	5.12	2.36	2.76	*5/5*			
1250 MCM	3/4"	**DR625-20**	44	1.36	0.83	5.31	2.48	3.15	*5/5*			

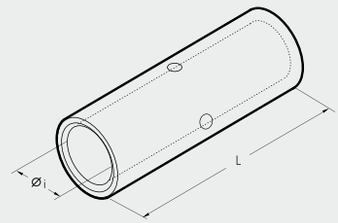
** Non-standard; dimensions of the tube according to DIN 46.235*

Consult us for special requirements

CRIMPING THROUGH CONNECTORS ACCORDING TO DIN 46267 T.1

for copper cables

DSV



Conductor Size AWG	Ref.	Code	Dimensions in. Øi	L	Quantity Box/Bag	Mechanical Tools: HN-025	TND 6-70	TND 10-120	Hydraulic Tools: B 15Y	B 35-45A	B 35-50A	HT 45-E	HT 51	HT 51L	RH 50	HT 81-U	B 51 A	B 51 LA	B 55-YC	RHU 81	B131LN-CA and similar tools for U dies	ECW-H3D	RHU 520
10	**DSV 6**	5	0.15	1.18	*1,200/100*																		
8	**DSV 10**	6	0.17	1.18	*1,200/100*																		
6	**DSV 16**	8	0.22	1.97	*400/100*																		
4	**DSV 25**	10	0.28	1.97	*200/100*																		
2	**DSV 35**	12	0.32	1.97	*200/100*																		
1/0	**DSV 50**	14	0.39	2.20	*200/50*																		
2/0	**DSV 70**	16	0.45	2.20	*100/50*																		
3/0	**DSV 95**	18	0.53	2.76	*100/50*																		
250 MCM	**DSV 120**	20	0.61	2.76	*50/25*																		
300 MCM	**DSV 150**	22	0.67	3.15	*50/25*																		
350 MCM	**DSV 185**	25	0.75	3.35	*25/25*																		
500 MCM	**DSV 240**	28	0.85	3.54	*15/15*																		
600 MCM	**DSV 300**	32	0.96	3.94	*10/5*																		
800 MCM	**DSV 400**	38	1.08	5.91	*10/5*																		
1000 MCM	**DSV 500**	42	1.22	6.30	*5/5*																		
1250 MCM	**DSV 625**	44	1.36	6.30	*5/5*																		

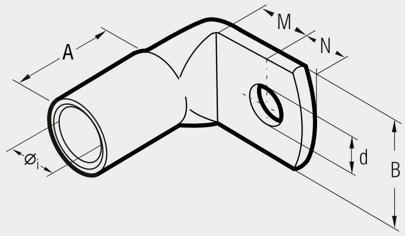
DSV series through connectors are manufactured from electrolytic copper tube, annealed and surface protected by tin plating.
Internal and external dimensions match those of DR series lugs.
Chamfered ends and a central stop provide easy and correct insertion of the conductor.
Details of the appropriate crimping tools and dies are shown on page 204.

Consult us for special requirements

A-L

COPPER TUBE CRIMPING LUGS ANGLED 90°

for copper conductors



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A-L series lugs angled 90° are manufactured from electrolytic copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility which is an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, terminals still have to perform a reliable connection, annealing plays a vital role in avoiding cracking or breaks between the barrel and palm.
The presence of an inspection hole facilitates full insertion of the conductor, whilst the barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically tin-plated to avoid oxidation.
Details of the appropriate crimping tools and dies are shown opposite and in detail on page 196-197.

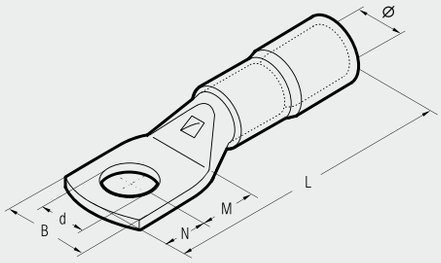
Cond. Size AWG	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag
			Øi	B	M	N	A	d	
12÷10	1/4"	**A 1-L 6**	0.14	0.43	0.28	0.24	0.37	0.25	*2,000/100*
8	#10	**A 2-L 5**	0.18	0.39	0.26	0.24	0.41	0.21	*1,500/100*
	1/4"	**A 2-L 6**	0.18	0.43	0.28	0.24	0.41	0.25	*1,500/100*
	5/16"	**A 2-L 8**	0.18	0.59	0.35	0.31	0.41	0.33	*500/100*
6	#10	**A 3-L 5**	0.23	0.45	0.26	0.24	0.47	0.21	*1,000/100*
	1/4"	**A 3-L 6**	0.23	0.45	0.28	0.24	0.47	0.25	*1,000/100*
	5/16"	**A 3-L 8**	0.23	0.59	0.35	0.31	0.47	0.33	*1,000/100*
	3/8"	**A 3-L 10**	0.23	0.71	0.43	0.39	0.47	0.41	*500/100*
4	1/4"	**A 5-L 6**	0.28	0.55	0.28	0.24	0.51	0.25	*500/100*
	5/16"	**A 5-L 8**	0.28	0.59	0.35	0.31	0.51	0.33	*500/100*
	3/8"	**A 5-L 10**	0.28	0.71	0.43	0.39	0.51	0.41	*500/100*
2	1/4"	**A 7-L 6**	0.35	0.67	0.28	0.24	0.61	0.25	*500/100*
	5/16"	**A 7-L 8**	0.35	0.67	0.35	0.31	0.61	0.33	*300/100*
	3/8"	**A 7-L 10**	0.35	0.75	0.43	0.39	0.61	0.41	*400/100*
	1/2"	**A 7-L 12**	0.35	0.83	0.55	0.47	0.61	0.52	*300/100*
2 - 1/0	1/4"	**A 10-L 6**	0.39	0.75	0.31	0.28	0.73	0.25	*300/100*
	5/16"	**A 10-L 8**	0.39	0.75	0.35	0.31	0.73	0.33	*300/100*
	3/8"	**A 10-L 10**	0.39	0.79	0.43	0.39	0.73	0.41	*200/50*
	1/2"	**A 10-L 12**	0.39	0.83	0.55	0.47	0.73	0.52	*200/50*
1/0 2/0	5/16"	**A 14-L 8**	0.44	0.83	0.35	0.31	0.79	0.33	*200/50*
	3/8"	**A 14-L 10**	0.44	0.83	0.43	0.39	0.79	0.41	*200/50*
	1/2"	**A 14-L 12**	0.44	0.87	0.55	0.47	0.79	0.52	*150/50*
	5/8"	**A 14-L 16**	0.44	1.02	0.71	0.63	0.79	0.67	*150/50*
2/0 3/0	5/16"	**A 19-L 8**	0.53	0.98	0.35	0.31	0.96	0.33	*100/25*
	3/8"	**A 19-L 10**	0.53	0.98	0.43	0.39	0.96	0.41	*100/25*
	1/2"	**A 19-L 12**	0.53	0.98	0.55	0.47	0.96	0.52	*100/25*
3/0 250	3/8"	**A 24-L 10**	0.60	1.12	0.43	0.39	1.00	0.41	*50/25*
	1/2"	**A 24-L 12**	0.60	1.12	0.56	0.47	1.00	0.52	*50/25*
250-300 MCM	3/8"	**A 30-L 10**	0.66	1.24	0.51	0.43	1.12	0.41	*50/25*
	1/2"	**A 30-L 12**	0.66	1.24	0.63	0.55	1.12	0.52	*50/25*
300-350 MCM	3/8"	**A 37-L 10**	0.76	1.24	0.51	0.43	1.24	0.41	*50/25*
	1/2"	**A 37-L 12**	0.76	1.24	0.63	0.55	1.24	0.52	*50/25*
350-500 MCM	1/2"	**A 48-L 12**	0.83	1.54	0.63	0.55	1.30	0.52	*30/15*
500-600 MCM	1/2"	**A 60-L 12**	0.93	1.54	0.79	0.55	1.65	0.52	*20/10*

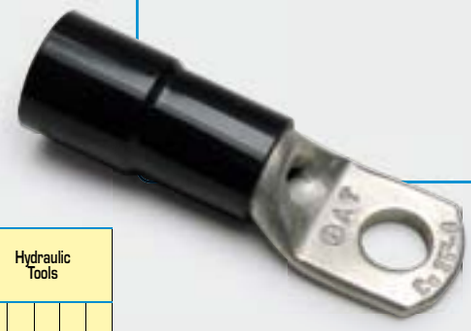
Mechanical Tools: HN1, HN5, HN-A25, TN 70 SEY, TN 120 SEY

Hydraulic Tools: B 15Y, B 35-45A, B 35-50A, HT 45-E, HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC, HT 81-U RHU 81, B131LN-CA and similar tools for U dies, ECW-H3D, RHU 520

NYLON INSULATED COPPER TUBE LUGS

ANE-M





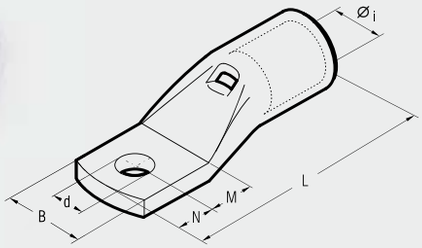
Conductor Size Flexible AWG	Ø Stud in.	Ref.	Dimensions in. Ø	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools: HNN 3	HNN 4	TNN 70	TNN 120	Hydraulic Tools: B 15Y	B 35-50A	B 55-YC	B 51 LA	B 51 A	RH 50	HT 51L	HT 51	B13 1LN-CA and similar tools for U dies	ECW-H3D
8	#8	**ANE 2-M 4**	0.31	0.39	0.20	0.16	1.34	0.17	500/100	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	#10	**ANE 2-M 5**	0.31	0.39	0.26	0.24	1.48	0.21	500/100	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	1/4"	**ANE 2-M 6**	0.31	0.43	0.28	0.24	1.50	0.25	500/100	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	5/16"	**ANE 2-M 8**	0.31	0.59	0.35	0.31	1.66	0.33	500/100	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	3/8"	**ANE 2-M 10**	0.31	0.71	0.43	0.39	1.81	0.41	500/100	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	1/2"	**ANE 2-M 12**	0.31	0.75	0.55	0.47	2.01	0.52	500/100	●	●	●	●	●	●	●	●	●	●	●	●	●	●
6	#8	**ANE 3-M 4**	0.36	0.45	0.20	0.16	1.52	0.17	500/100		●	●	●	●	●	●	●	●	●	●	●	●	●
	#10	**ANE 3-M 5**	0.36	0.45	0.26	0.24	1.66	0.21	500/100		●	●	●	●	●	●	●	●	●	●	●	●	●
	1/4"	**ANE 3-M 6**	0.36	0.45	0.28	0.24	1.68	0.25	500/100		●	●	●	●	●	●	●	●	●	●	●	●	●
	5/16"	**ANE 3-M 8**	0.36	0.59	0.35	0.31	1.83	0.33	500/100		●	●	●	●	●	●	●	●	●	●	●	●	●
	3/8"	**ANE 3-M 10**	0.36	0.71	0.43	0.39	1.99	0.41	400/100		●	●	●	●	●	●	●	●	●	●	●	●	●
	1/2"	**ANE 3-M 12**	0.36	0.79	0.55	0.47	2.19	0.52	300/100		●	●	●	●	●	●	●	●	●	●	●	●	●
4	#8	**ANE 5-M 4**	0.44	0.55	0.20	0.16	1.61	0.17	300/100			●	●									●	●
	#10	**ANE 5-M 5**	0.44	0.55	0.26	0.24	1.75	0.21	300/100			●	●									●	●
	1/4"	**ANE 5-M 6**	0.44	0.55	0.28	0.24	1.77	0.25	300/100			●	●									●	●
	5/16"	**ANE 5-M 8**	0.44	0.59	0.35	0.31	1.93	0.33	300/100			●	●									●	●
	3/8"	**ANE 5-M 10**	0.44	0.71	0.43	0.39	2.09	0.41	300/100			●	●									●	●
	1/2"	**ANE 5-M 12**	0.44	0.83	0.55	0.47	2.28	0.52	250/50			●	●									●	●
2	1/4"	**ANE 7-M 6**	0.54	0.67	0.28	0.24	1.97	0.25	200/50			●	●									●	●
	5/16"	**ANE 7-M 8**	0.54	0.67	0.35	0.31	2.13	0.33	200/50			●	●									●	●
	3/8"	**ANE 7-M 10**	0.54	0.75	0.43	0.39	2.28	0.41	200/50			●	●									●	●
	1/2"	**ANE 7-M 12**	0.54	0.83	0.55	0.47	2.48	0.52	200/50			●	●									●	●
2-1/0	1/4"	**ANE 10-M 6**	0.54	0.75	0.31	0.28	2.17	0.25	200/50			●	●									●	●
	5/16"	**ANE 10-M 8**	0.54	0.75	0.35	0.31	2.24	0.33	200/50			●	●									●	●
	3/8"	**ANE 10-M 10**	0.54	0.79	0.43	0.39	2.40	0.41	150/50			●	●									●	●
	1/2"	**ANE 10-M 12**	0.54	0.83	0.55	0.47	2.60	0.52	150/50			●	●									●	●
1/0-2/0	1/4"	**ANE 14-M 6**	0.62	0.83	0.31	0.28	2.40	0.25	100/25			●	●									●	●
	5/16"	**ANE 14-M 8**	0.62	0.83	0.35	0.31	2.48	0.31	100/25			●	●									●	●
	3/8"	**ANE 14-M 10**	0.62	0.83	0.43	0.39	2.64	0.41	100/25			●	●									●	●
	1/2"	**ANE 14-M 12**	0.62	0.87	0.55	0.47	2.83	0.52	100/25			●	●									●	●
	9/16"	**ANE 14-M 14**	0.62	0.98	0.63	0.55	2.99	0.59	100/25			●	●									●	●
2/0 3/0	5/16"	**ANE 19-M 8**	0.71	0.98	0.35	0.31	2.87	0.33	50/25				●									●	●
	3/8"	**ANE 19-M 10**	0.71	0.98	0.43	0.39	3.03	0.41	50/25				●									●	●
	1/2"	**ANE 19-M 12**	0.71	0.98	0.55	0.47	3.23	0.52	50/25				●									●	●
	9/16"	**ANE 19-M 14**	0.71	0.98	0.63	0.55	3.39	0.59	50/25				●									●	●
	5/8"	**ANE 19-M 16**	0.71	1.06	0.71	0.63	3.15	0.67	50/25				●									●	●
3/0 250	3/8"	**ANE 24-M 10**	0.79	1.12	0.43	0.39	3.06	0.41	50/25				●									●	●
	1/2"	**ANE 24-M 12**	0.79	1.12	0.55	0.47	3.41	0.52	50/25				●									●	●
	9/16"	**ANE 24-M 14**	0.79	1.12	0.63	0.55	3.48	0.59	50/25				●									●	●
	5/8"	**ANE 24-M 16**	0.79	1.12	0.71	0.63	3.56	0.67	50/25				●									●	●
250 300 MCM	1/2"	**ANE 30-M 12**	0.91	1.24	0.63	0.55	3.98	0.52	30/15				●									●	●
	9/16"	**ANE 30-M 14**	0.91	1.24	0.71	0.63	4.13	0.59	30/15				●									●	●
	5/8"	**ANE 30-M 16**	0.91	1.24	0.75	0.67	4.21	0.67	30/15				●									●	●
	3/4"	**ANE 30-M 20**	0.91	1.24	0.87	0.79	4.45	0.83	30/15				●									●	●

ANE-M series terminals are manufactured from electrolytic copper tube annealed and tin plated.
The interior of the Nylon insulation sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands.
The Nylon insulated sleeve eliminates the need to insulate the terminal by either taping or using heat shrinkable tubes.
Furthermore the Nylon sleeve avoids the possibility of conductor breakage at the barrel entrance.
The items tabulated all feature black insulated sleeves, other coloured sleeves are available against specific request.
The operating temperature range is –4 to +239°F (Surge + 266°F).
In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by Cembre.
Details of the appropriate crimping tools and dies are shown opposite and in detail on page 198-199.

RING TONGUE TERMINALS WITH CONTAINED PALM

A-M

for L.V. circuit breakers
for copper conductors



File no. E125401

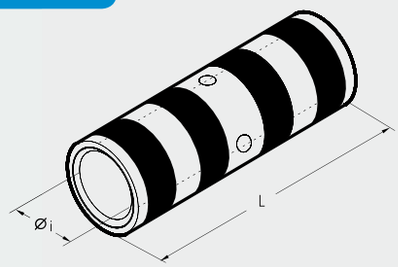
This range of lugs features contained palm width.
Our lugs have been specifically developed for application on L.V. circuit breakers with reduced space terminal blocks. In fact the contained palm width allows an immediate and easier installation. Our lugs are manufactured from electrolytic copper tube. The specifically designed section of the barrel and the choice of principal dimensions are optimising the best combination of mechanical strength and electrical conductivity.
Our lugs are annealed to guarantee optimum ductility and are electrolytically tin-plated to avoid oxidation.
The barrel is provided with an internal taper to ease the introduction of the conductor; furthermore, its length grants a comfortable and correct positioning between dies, during crimping operations.
Each lug palm is marked with the Cembre logo and part number. Details of the appropriate crimping tools and dies are shown opposite and in detail on page 196-197.

Conductor Size Flexible AWG	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools: HN5	HV-A25	TN 70 SEY	TN 120 SEY	Hydraulic Tools: B 15Y	B 35-45A	B 35-50A	HT 45-E	B 51 LA	B 55-YC	B 51 A	RH 50	HT 51L	HT 81-U	RHU 81	HT 51	B131LN-CA and similar tools for U dies	ECW-H3D
8	#10	**A 2-M 5/9**	0.18	0.35	0.26	0.24	1.02	0.21	*1,000/100*																		
6	#10	**A 3-M 5/9**	0.23	0.35	0.26	0.24	1.14	0.21	*1,000/100*																		
4	#10	**A 5-M 5/9**	0.28	0.35	0.26	0.24	1.24	0.21	*500/100*																		
2	1/4"	**A 7 B-M 6/11.5**	0.35	0.45	0.31	0.28	1.44	0.25	*400/100*																		
2-1/0	1/4"	**A 10 B-M 6/11.5**	0.39	0.45	0.31	0.28	1.59	0.25	*200/50*																		
1/0-2/0	1/4"	**A 14 B-M 6/11.5**	0.44	0.45	0.31	0.28	1.73	0.25	*200/50*																		
2/0-3/0	5/16"	**A 19 B-M 8/15.5**	0.53	0.61	0.35	0.31	2.07	0.33	*100/25*																		
3/0-250	5/16"	**A 24 B-M 8/19**	0.60	0.75	0.55	0.35	2.36	0.33	*100/25*																		
	3/8"	**A 24 B-M 10/19**	0.60	0.75	0.55	0.35	2.36	0.41	*100/25*																		
250-300 MCM	5/16"	**A 30 B-M 8/19**	0.66	0.75	0.71	0.35	2.76	0.33	*50/25*																		
	3/8"	**A 30 B-M 10/19**	0.66	0.75	0.71	0.35	2.76	0.41	*50/25*																		
300-350 MCM	3/8"	**A 37 B-M 10/24.5**	0.76	0.96	0.71	0.35	3.03	0.41	*50/25*																		
350-500 MCM	3/8"	**A 48-M 10/31**	0.83	1.22	0.51	0.35	3.15	0.41	*30/15*																		
	1/2"	**A 48-M 12/31**	0.83	1.22	0.63	0.47	3.39	0.52	*30/15*																		
	5/8"	**A 48-M 16/31**	0.83	1.22	0.75	0.67	3.70	0.67	*30/15*																		
500-600 MCM	3/8"	**A 60 B-M 10/31**	0.93	1.22	0.63	0.47	3.74	0.41	*20/10*																		
	1/2"	**A 60 B-M 12/31**	0.93	1.22	0.63	0.47	3.74	0.52	*20/10*																		

COLOR CODED SPLICES

BSCL

long barrel



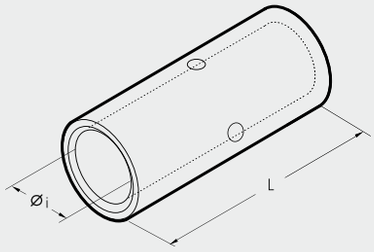
File no. E125401

BSCL range of connectors are designed for jointing low voltage conductors in heavy duty applications. Made of electrolytic copper tube having the same dimension as C and CL series lugs, BSCL connectors are annealed and electrolytically tin plated. They feature an internal taper at both ends to ease the introduction of the conductor and a central stop to ensure correct positioning. **UL listed for US and Canada per UL486A up to 35 KV.** Appropriate crimping tools and dies are shown in details on page 194.

Conductor Size AWG	Ref.	Dimensions in. Øi	L	Color Code	Quantity Box	Mechanical Tools: HN 1	HN 5	TN 70 SEY	TN 120 SEY	Hydraulic Tools: B15Y	B35-50A	B 51 A	B 51 LA	B 55-YC	HT 51	HT 51L	RH 50	HT 120	HT 131-C	HT131-UC	RHC 131	RHU 131-C	B 131-CA	B 131-UC	B131LN-CA and similar tools for U dies	ECW-H3D	RHU 52D
8	**BSCL8**	0.18	1.99	RED	*600/150*																						
6	**BSCL6**	0.23	1.99	BLUE	*400/100*																						
4	**BSCL4**	0.24	2.38	GRAY	*200/100*																						
3	**BSCL3**	0.28	2.38	WHITE	*200/50*																						
2	**BSCL2**	0.30	2.38	BROWN	*200/50*																						
1	**BSCL1**	0.35	2.58	GREEN	*200/50*																						
1/0	**BSCL1/0**	0.39	2.87	PINK	*200/50*																						
2/0	**BSCL2/0**	0.44	3.11	BLACK	*100/50*																						
3/0	**BSCL3/0**	0.49	3.11	ORANGE	*80/40*																						
4/0	**BSCL4/0**	0.53	3.37	PURPLE	*50/25*																						
250 MCM	**BSCL250**	0.60	3.37	YELLOW	*50/25*																						
300 MCM	**BSCL300**	0.66	4.11	WHITE	*40/20*																						
350 MCM	**BSCL350**	0.69	4.11	RED	*40/20*																						
400 MCM	**BSCL400**	0.76	4.37	BLUE	*20/10*																						
500 MCM	**BSCL500**	0.83	4.61	BROWN	*20/10*																						
600 MCM	**BSCL600**	0.93	5.49	GREEN	*20/10*																						
750 MCM	**BSCL750**	1.02	5.87	BLACK	*10/10*																						

THROUGH CONNECTORS

File no. E125401

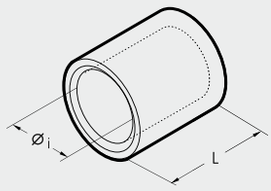


L-M

Conductor Size AWG	Ref.	Dimensions in. Øi	Dimensions in. L	Quantity Box/Bag	Mechanical Tools: HN 1	Mechanical Tools: HN 5	Mechanical Tools: HN-A25	Mechanical Tools: TN 70 SEY	Mechanical Tools: TN 120 SEY	Hydraulic Tools: B 15Y	Hydraulic Tools: B 35-45A	Hydraulic Tools: B 35-50A	Hydraulic Tools: HT 45-E	Hydraulic Tools: B 51 LA	Hydraulic Tools: B 55VC	Hydraulic Tools: HT 51	Hydraulic Tools: HT 51L	Hydraulic Tools: RH 50	Hydraulic Tools: B 51 A	Hydraulic Tools: HT 81-U	Hydraulic Tools: RHU 81	Hydraulic Tools: HT 120	Hydraulic Tools: HT 131-C	Hydraulic Tools: RHU 131-C	Hydraulic Tools: HT131-UC	Hydraulic Tools: B 131-CA	Hydraulic Tools: RHC 131	Hydraulic Tools: B 131-UC	Hydraulic Tools: B131LN-CA and similar tools for U dies	Hydraulic Tools: ECW-H3D	Hydraulic Tools: RHU 520
22÷16	**L 03-M**	0.07	0.59	*6,000/100*	●					●																					
16÷14	**L 06-M**	0.09	0.59	*4,000/100*	●					●																					
12÷10	**L 1-M**	0.14	0.87	*2,000/100*	●					●																					
8	**L 2-M**	0.18	0.98	*1,000/100*		●	●	●	●	●	●	●	●	●	●																
6	**L 3-M**	0.23	1.06	*1,000/100*		●	●	●	●	●	●	●	●	●	●																
4	**L 5-M**	0.28	1.14	*500/100*				●	●	●	●	●	●	●	●																
2	**L 7-M**	0.35	1.30	*400/100*				●	●	●	●	●	●	●	●																
2-01-2000	**L 10-M**	0.39	1.46	*200/50*				●	●	●	●	●	●	●	●																
1/0-2/0	**L 14-M**	0.44	1.54	*200/50*				●	●	●	●	●	●	●	●																
2/0-3/0	**L 19-M**	0.53	1.69	*100/25*					●	●	●	●	●	●	●																
3/0-250	**L 24-M**	0.60	1.85	*100/25*					●	●	●	●	●	●	●																
250-300 MCM	**L 30-M**	0.66	2.28	*50/25*						●	●	●	●	●	●																
300-350 MCM	**L 37-M**	0.76	2.52	*50/25*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
350-500 MCM	**L 48-M**	0.83	2.95	*30/15*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
500-600 MCM	**L 60-M**	0.93	3.54	*20/10*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
800 MCM	**L 80-M**	1.06	3.70	*20/5*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1000 MCM	**L 100-M**	1.19	3.86	*12/1*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1250 MCM	**L 120-M**	1.31	4.13	*12/1*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1500 MCM	**L 160-M**	1.50	4.41	*9/1*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2000 MCM	**L 200-M**	1.73	4.72	*6/1*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

L-M range of connectors are designed for jointing low voltage conductors.
Made of electrolytic copper tube having the same dimension as A-M series lugs: L-M connectors are annealed and electrolytically tin plated.
They feature an internal taper at both ends to ease the introduction of the conductor and a central stop to ensure correct positioning.
Appropriate crimping tools and dies are shown in details on page 196-197.
UL listed per UL486A up to 35 KV.

PARALLEL CONNECTORS



L-P

Conductor Size AWG	Ref.	Dimensions in. Øi	Dimensions in. L	Quantity Box/Bag	Mechanical Tools: HN 1	Mechanical Tools: HN 5	Mechanical Tools: HN-A25	Mechanical Tools: TN 70 SEY	Mechanical Tools: TN 120 SEY	Hydraulic Tools: B 15Y	Hydraulic Tools: B 35-45A	Hydraulic Tools: B 35-50A	Hydraulic Tools: HT 45-E	Hydraulic Tools: B 51 LA	Hydraulic Tools: B 55VC	Hydraulic Tools: HT 51	Hydraulic Tools: HT 51L	Hydraulic Tools: RH 50	Hydraulic Tools: B 51 A	Hydraulic Tools: HT 81-U	Hydraulic Tools: RHU 81	Hydraulic Tools: HT 120	Hydraulic Tools: HT 131-C	Hydraulic Tools: RHU 131-C	Hydraulic Tools: HT131-UC	Hydraulic Tools: B 131-CA	Hydraulic Tools: RHC 131	Hydraulic Tools: B 131-UC	Hydraulic Tools: B131LN-CA and similar tools for U dies	Hydraulic Tools: ECW-H3D	Hydraulic Tools: RHU 520
22÷16	**L 03-P**	0.07	0.24	*10,000/100*	●					●																					
16÷14	**L 06-P**	0.09	0.24	*5,000/100*	●					●																					
12÷10	**L 1-P**	0.14	0.35	*3,000/100*	●					●																					
8	**L 2-P**	0.18	0.41	*3,000/100*		●	●	●	●	●	●	●	●	●	●																
6	**L 3-P**	0.23	0.45	*2,000/100*		●	●	●	●	●	●	●	●	●	●																
4	**L 5-P**	0.28	0.51	*1,500/100*				●	●	●	●	●	●	●	●																
2	**L 7-P**	0.35	0.55	*500/100*				●	●	●	●	●	●	●	●																
2-01-2000	**L 10-P**	0.39	0.63	*500/100*				●	●	●	●	●	●	●	●																
1/0-2/0	**L 14-P**	0.44	0.71	*500/100*				●	●	●	●	●	●	●	●																
2/0-3/0	**L 19-P**	0.53	0.75	*300/50*					●	●	●	●	●	●	●																
3/0-250	**L 24-P**	0.60	0.87	*200/50*					●	●	●	●	●	●	●																
250-300 MCM	**L 30-P**	0.66	1.04	*100/50*						●	●	●	●	●	●																
300-350 MCM	**L 37-P**	0.76	1.04	*100/50*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
350-500 MCM	**L 48-P**	0.83	1.34	*60/15*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
500-600 MCM	**L 60-P**	0.93	1.69	*50/25*						●						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

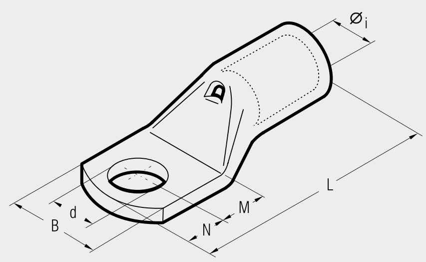
Made of electrolytic copper tube, having the same dimensions as A-M series lugs, L-P connectors are annealed and electrolytically tin plated.
They feature an internal taper to ease the introduction of the conductor.
Appropriate crimping tools and dies are shown in details on page 196-197.

A-M

COPPER TUBE CRIMPING LUGS

for extra flexible copper conductors

CE



These terminals are particularly recommended to be used with extra flexible conductors such as those equipping, for instance, welding machines or similar.
A-M series lugs are designed to suit panel applications.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility and electrolytically tin plated to avoid oxidation.
The presence of an inspection hole facilitates full insertion of the conductor.

Appropriate crimping tools and dies are shown in details on page 196-197.

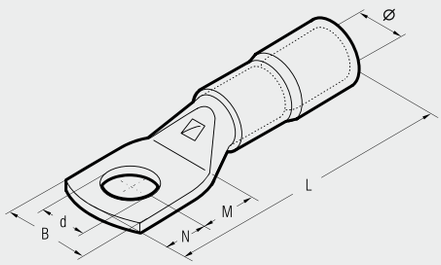
Cond. Size Extra Flexible AWG	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	*Quantity* *Box/Bag*
2	1/4"	**A 9-M 6/15**	0.37	0.59	0.31	0.28	1.52	0.25	*400/100*
	5/16"	**A 9-M 8**	0.37	0.67	0.35	0.31	1.59	0.33	*400/100*
	3/8"	**A 9-M 10**	0.37	0.73	0.43	0.39	1.75	0.41	*400/100*
	1/2"	**A 9-M 12**	0.37	0.83	0.55	0.47	1.95	0.52	*300/50*
1/0	1/4"	**A 12-M 6/15**	0.43	0.59	0.31	0.28	1.59	0.25	*200/50*
	5/16"	**A 12-M 8**	0.43	0.76	0.35	0.31	1.67	0.33	*200/50*
	3/8"	**A 12-M 10**	0.43	0.76	0.43	0.39	1.83	0.41	*200/50*
	3/8"	**A 12-M 10/19**	0.43	0.75	0.43	0.39	1.83	0.41	*200/50*
	1/2"	**A 12-M 12**	0.43	0.87	0.55	0.47	2.03	0.52	*200/50*
2/0	1/4"	**A 17-M 6**	0.51	0.91	0.31	0.28	1.77	0.25	*200/50*
	5/16"	**A 17-M 8**	0.51	0.91	0.35	0.31	1.85	0.33	*150/50*
	3/8"	**A 17-M 10**	0.51	0.91	0.43	0.39	2.01	0.41	*150/50*
	3/8"	**A 17-M 10/19**	0.51	0.75	0.43	0.39	2.01	0.41	*200/50*
	1/2"	**A 17-M 12**	0.51	0.91	0.55	0.47	2.20	0.52	*150/50*
	9/16"	**A 17-M 14**	0.51	0.98	0.61	0.47	2.26	0.59	*150/25*
	5/8"	**A 17-M 16**	0.51	1.06	0.65	0.53	2.36	0.67	*150/25*
3/0	5/16"	**A 20-M 8**	0.59	1.06	0.35	0.31	1.97	0.33	*100/25*
	3/8"	**A 20-M 10**	0.59	1.06	0.43	0.39	2.13	0.41	*100/25*
	1/2"	**A 20-M 12**	0.59	1.06	0.55	0.47	2.32	0.52	*100/25*
	9/16"	**A 20-M 14**	0.59	1.06	0.61	0.47	2.38	0.59	*100/25*
	5/8"	**A 20-M 16**	0.59	1.06	0.65	0.53	2.48	0.67	*100/25*
250 MCM	5/16"	**A 29-M 8**	0.65	1.18	0.35	0.31	2.11	0.33	*100/25*
	3/8"	**A 29-M 10**	0.65	1.18	0.43	0.39	2.26	0.41	*100/25*
	1/2"	**A 29-M 12**	0.65	1.18	0.55	0.47	2.46	0.52	*100/25*
	9/16"	**A 29-M 14**	0.65	1.18	0.61	0.47	2.52	0.59	*100/25*
	5/8"	**A 29-M 16**	0.65	1.18	0.65	0.53	2.62	0.67	*100/25*
	3/4"	**A 29-M 20**	0.65	1.18	0.87	0.79	3.09	0.83	*75/25*
300 MCM	3/8"	**A 35-M 10**	0.76	1.35	0.51	0.43	2.58	0.41	*50/25*
	1/2"	**A 35-M 12**	0.76	1.35	0.63	0.55	2.81	0.52	*50/25*
	9/16"	**A 35-M 14**	0.76	1.35	0.71	0.63	2.97	0.59	*50/25*
	5/8"	**A 35-M 16**	0.76	1.35	0.75	0.67	3.05	0.67	*50/25*
	3/4"	**A 35-M 20**	0.76	1.35	0.87	0.79	3.29	0.83	*50/25*
350 MCM	3/8"	**A 40-M 10**	0.83	1.48	0.51	0.43	2.87	0.41	*30/15*
	1/2"	**A 40-M 12**	0.83	1.48	0.63	0.55	3.11	0.52	*30/15*
	9/16"	**A 40-M 14**	0.83	1.48	0.71	0.63	3.27	0.59	*30/15*
	5/8"	**A 40-M 16**	0.83	1.48	0.75	0.67	3.35	0.67	*30/15*
	3/4"	**A 40-M 20**	0.83	1.48	0.87	0.79	3.58	0.83	*30/15*

Tools		Applicable Ref.
Mechanical Tools	TN 70 SEY	A 9-M 6/15 to A 17-M 16
	TN 120 SEY	A 9-M 6/15 to A 29-M 20
Hydraulic Tools	B 35-45A	A 9-M 6/15 to A 29-M 20
	B 35-50A	A 9-M 6/15 to A 29-M 20
	HT 45-E	A 9-M 6/15 to A 29-M 20
	HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC	A 9-M 6/15 to A 40-M 20
	HT 81-U RHU 81	A 9-M 6/15 to A 40-M 20
	B131LN-CA and similar tools for U dies	A 9-M 6/15 to A 40-M 20
	ECW-H3D	A 9-M 6/15 to A 40-M 20
	RHU 520	A 9-M 6/15 to A 40-M 20

NYLON INSULATED COPPER TUBE LUGS

for extra flexible copper conductors

ANE-M

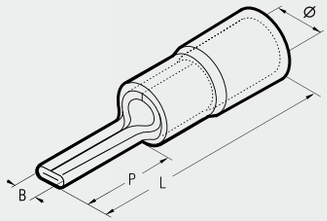


Conductor Size Extra Flexible AWG	Ø Stud in.	Ref.	Dimensions in. Ø	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools: TNN 70	Mechanical Tools: TNN 120	Hydraulic Tools: B 35-50A	B 55-YC	B 51 LA	B 51 A	RH 50	HT 51L	HT 51	B131LN-CA and similar tools for U dies	ECWH3D
2	1/4"	**ANE 9-M 6/15**	0.54	0.59	0.31	0.28	2.13	0.25	200/50											
	5/16"	**ANE 9-M 8**	0.54	0.67	0.35	0.31	2.20	0.33	200/50											
	3/8"	**ANE 9-M 10**	0.54	0.73	0.43	0.39	2.36	0.41	150/50											
	1/2"	**ANE 9-M 12**	0.54	0.83	0.55	0.47	2.56	0.52	150/50											
1/0	1/4"	**ANE 12-M 6/15**	0.62	0.59	0.31	0.28	2.34	0.25	100/25											
	5/16"	**ANE 12-M 8**	0.62	0.78	0.35	0.31	2.42	0.33	100/25											
	3/8"	**ANE 12-M 10**	0.62	0.78	0.43	0.39	2.58	0.41	100/25											
	3/8"	**ANE 12-M 10/19**	0.62	0.75	0.43	0.39	2.58	0.41	100/25											
	1/2"	**ANE 12-M 12**	0.62	0.87	0.55	0.47	2.78	0.52	100/25											
2/0	1/4"	**ANE 17-M 6**	0.70	0.91	0.31	0.28	2.51	0.25	100/25											
	5/16"	**ANE 17-M 8**	0.70	0.91	0.35	0.31	2.59	0.33	100/25											
	3/8"	**ANE 17-M 10**	0.70	0.91	0.43	0.39	2.75	0.41	50/25											
	3/8"	**ANE 17-M 10/19**	0.70	0.75	0.43	0.39	2.75	0.41	100/25											
	1/2"	**ANE 17-M 12**	0.70	0.91	0.55	0.47	2.94	0.52	50/25											
	9/16"	**ANE 17-M 14**	0.70	0.98	0.61	0.47	3.00	0.59	50/25											
	5/8"	**ANE 17-M 16**	0.70	1.06	0.65	0.53	3.10	0.67	50/25											
3/0	5/16"	**ANE 20-M 8**	0.79	1.06	0.35	0.31	2.78	0.33	50/25											
	3/8"	**ANE 20-M 10**	0.79	1.06	0.43	0.39	2.94	0.41	50/25											
	1/2"	**ANE 20-M 12**	0.79	1.06	0.55	0.47	3.13	0.52	50/25											
	9/16"	**ANE 20-M 14**	0.79	1.06	0.61	0.47	3.19	0.59	50/25											
	5/8"	**ANE 20-M 16**	0.79	1.06	0.65	0.53	3.29	0.67	50/25											
250 MCM	3/8"	**ANE 29-M 10**	0.88	1.18	0.43	0.39	3.21	0.41	50/25											
	1/2"	**ANE 29-M 12**	0.88	1.18	0.55	0.47	3.41	0.52	50/25											
	9/16"	**ANE 29-M 14**	0.88	1.18	0.61	0.47	3.48	0.59	50/25											
	5/8"	**ANE 29-M 16**	0.88	1.18	0.65	0.53	3.56	0.67	50/25											
	3/4"	**ANE 29-M 20**	0.88	1.18	0.87	0.79	4.04	0.83	50/25											
300 MCM	1/2"	**ANE 35-M 12**	0.98	1.35	0.63	0.55	3.74	0.52	30/15											
	9/16"	**ANE 35-M 14**	0.98	1.35	0.71	0.63	3.90	0.59	30/15											
	5/8"	**ANE 35-M 16**	0.98	1.35	0.75	0.67	3.98	0.67	30/15											
	3/4"	**ANE 35-M 20**	0.98	1.35	0.87	0.79	4.21	0.83	30/15											

These terminals are particularly recommended to be used with extra flexible conductors such as those equipping, for instance, welding machines or similar.
ANE-M series terminals are manufactured from electrolytic copper tube annealed and tin plated.
The interior of the Nylon insulation sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands.
The Nylon insulated sleeve eliminates the need to insulate the terminal by either taping or using heat shrinkable tubes.
Furthermore the Nylon sleeve avoids the possibility of conductor breakage at the barrel entrance.
The items tabulated all feature black insulated sleeves, other coloured sleeves are available against specific request.
The operating temperature range is – 4 to + 239°F (Surge + 266°F).
In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by Cembre (see page 198-199).

NYLON INSULATED PIN TERMINALS

ANE-P

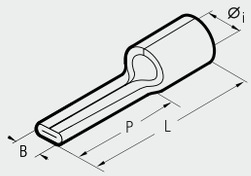


ANE-P series terminals are made from electrolytic copper, rolled, tin plated and brazed. The interior of the Nylon insulation sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands.
In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by Cembre (see page 198-199).

Conductor Size Flexible AWG	Ref.	Dimensions in. Ø	B	P	L	Quantity Box/Bag	Mechanical Tools HNN 3	HNN 4	TNN 70	TNN 120	Hydraulic Tools B 15Y	B 35-50A	HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC	B1131LN-CA and similar tools for U dies	ECW-H3D
8	**ANE 2-P 12**	0.31	0.17	0.57	1.38	*500/100*									
6	**ANE 3-P 14**	0.36	0.22	0.71	1.62	*500/100*									
4	**ANE 5-P 16**	0.44	0.27	0.80	1.77	*300/100*									
2	**ANE 7-P 20**	0.54	0.31	0.96	2.17	*200/50*									

UNINSULATED PIN TERMINALS

A-P

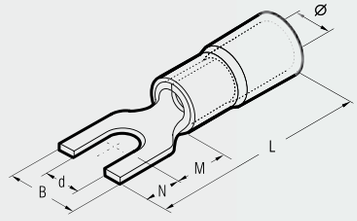


A-P series pin connectors are designed to terminate conductors into contact blocks.
They are manufactured from copper strip, rolled, brazed and tin plated.
Appropriate crimping tools and dies are shown in details on page 196-197.

Conductor Size AWG	Ref.	Dimensions in. Øi	B	P	L	Quantity Box/Bag	Mechanical Tools HN 1	HN 5	HN-A25	TN 70 SEY	TN 120 SEY	Hydraulic Tools B 15Y	B 35-45A	B 35-50A	HT 45-E	HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC	B1131LN-CA and similar tools for U dies	ECW-H3D
8	**A 2-P 12**	0.19	0.17	0.57	0.93	*1,500/100*												
6	**A 3-P 14**	0.23	0.22	0.71	1.10	*1,500/100*												
4	**A 5-P 16**	0.28	0.28	0.80	1.26	*1,000/100*												
2	**A 7-P 20**	0.35	0.31	0.96	1.54	*500/100*												
2-1/0	**A 10-P 25**	0.39	0.37	1.02	1.77	*250/50*												
1/0-2/0	**A 14-P 30**	0.45	0.43	1.22	2.17	*200/50*												

NYLON INSULATED FORK TERMINALS

ANE-U

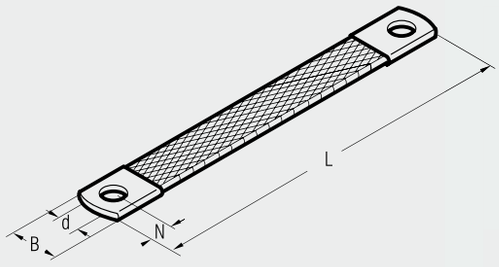


Conductor Size Flexible AWG	Ø Stud in.	Ref.	Dimensions in. Ø	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools HNN 3	HNN 4	TNN70	TNN 120	Hydraulic Tools B 15	B 35-50	HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC	B131 LN-CA and similar tools for U dies	ECW-H3D
8	#8	**ANE 2-U 4**	0.31	0.39	0.30	0.28	1.38	0.17	*500/100*									
	#10	**ANE 2-U 5**	0.31	0.45	0.30	0.28	1.38	0.21	*500/100*									
6	#8	**ANE 3-U 4**	0.36	0.39	0.39	0.31	1.62	0.17	*500/100*									
	#10	**ANE 3-U 5**	0.36	0.45	0.39	0.31	1.62	0.21	*500/100*									

ANE-U series terminals are made from electrolytic copper, rolled, tin plated and brazed. The interior of the Nylon insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands.
In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by Cembre (see page 198-199).

FLEXIBLE BRAIDS

FL



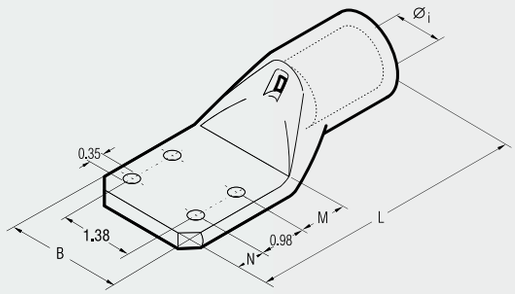
Size AWG	Ø Stud in.	Ref.	Dimensions in. B	N	L	d	Quantity
8	5/16"	**FL 10-150**	0.67	0.39	5.91	0.33	*50*
	5/16"	**FL 10-200**	0.67	0.39	7.87	0.33	*50*
	5/16"	**FL 10-250**	0.67	0.39	9.84	0.33	*50*
6	5/16"	**FL 16-150**	0.67	0.39	5.91	0.33	*50*
	5/16"	**FL 16-200**	0.67	0.39	7.87	0.33	*50*
	5/16"	**FL 16-250**	0.67	0.39	9.84	0.33	*50*
	5/16"	**FL 16-320**	0.67	0.39	12.60	0.33	*50*
	5/16"	**FL 16-350**	0.67	0.39	13.78	0.33	*50*
	5/16"	**FL 16-420**	0.67	0.39	16.54	0.33	*25*
	5/16"	**FL 16-570**	0.67	0.39	22.44	0.33	*25*
	5/16"	**FL 16-660**	0.67	0.39	25.98	0.33	*25*
4	5/16"	**FL 25-150**	0.83	0.39	5.91	0.33	*50*
	5/16"	**FL 25-200**	0.83	0.39	7.87	0.33	*50*
	5/16"	**FL 25-250**	0.83	0.39	9.84	0.33	*50*
	5/16"	**FL 25-300**	0.83	0.39	11.81	0.33	*50*

Flexible braids are manufactured from electrolytic copper wire.
Braids of different conductor sizes or lengths are available on request.
Standard finish - bright copper.

Flexible braids can be supplied tin plated, in this case add the suffix "ST" to reference.
E.g.:
- FL 10-150 (Bright copper)
- FL 10-150-ST (Tin plated)

COPPER TUBE LUGS 4-ESI FIXING

A-4ESI



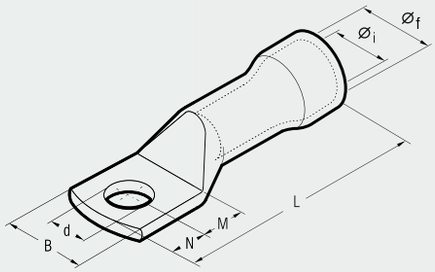
A-4ESI series lugs are made from high purity electrolytic copper tube, annealed and tin plated.
The four hole stud fixing in accordance with E.A. specifications ensure compatibility with most transformer fixing arrangements.
Appropriate crimping tools and dies are shown in details on page 196-197.

Conductor Size MCM	Ref.	Dimensions in. Øi	B	M	N	L	Quantity Box/Bag	Hydraulic Tools: HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC; HT 81-U RHU 81; B131LN-CA and similar tools for U dies; ECW-H3D; RHU 520
300-350	**A 37-4ESI**	0.76	2.40	0.79	0.59	4.88	*20/10*	
500	**A 48-4ESI**	0.83	2.40	0.79	0.59	5.04	*20/10*	
600	**A 60-4ESI**	1.07	2.40	0.79	0.59	5.24	*20/10*	
800	**A 80-4ESI**	1.06	2.40	0.79	0.59	5.28	*15/5*	
1000	**A 100-4ESI**	1.19	2.40	0.79	0.59	5.47	*10/5*	
1250	**A 120-4ESI**	1.31	2.40	0.79	0.59	5.67	*10/5*	
1500	**A 160-4ESI**	1.50	2.40	0.79	0.59	6.22	*8/4*	

COPPER TUBE TERMINALS

2A.-M

belled end

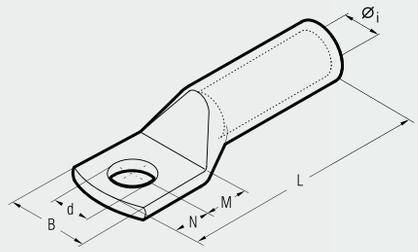


2A.-M series are made from high purity copper tube, annealed and tin plated.
They feature a long belled barrel for enhanced electrical and mechanical performance in heavy duty applications on insulated cables.
The absence of an inspection hole prevents the entry of water or moisture into the crimped joint making these terminals suitable for outdoor applications.
Appropriate crimping tools and dies are shown in details on page 200.

Conductor Size AWG	Ø Stud in.	Ref.	Dimensions in. Øf	Øi	B	M	N	L	d	Quantity Box/Bag	Hydraulic Tools: B35-45A; B35-50A; HT 45-E; HT 51 HT 51L RH 50 B 51 A B 51 LA B 55-YC; B131LN-CA and similar tools for U dies; ECW-H3D; RHU 520
4	1/2"	**2A 5S.15,3-M12**	0.60	0.28	0.83	0.55	0.47	2.48	0.52	*150/50*	
2	3/8"	**2A 7.12-M10**	0.47	0.35	0.83	0.43	0.39	2.20	0.41	*200/50*	
	1/2"	**2A 7.12-M12**	0.47	0.35	0.83	0.55	0.47	2.40	0.52	*200/50*	
2-1/0	1/2"	**2A 10.14-M12**	0.56	0.39	0.83	0.55	0.47	2.64	0.52	*100/50*	
1/0-2/0	1/2"	**2A 14.14-M12**	0.55	0.44	0.87	0.55	0.47	2.83	0.52	*100/50*	
	1/2"	**2A 14.16-M12**	0.63	0.44	0.87	0.55	0.47	2.80	0.52	*100/50*	
2/0-3/0	3/8"	**2A 19.19-M10**	0.73	0.53	0.98	0.51	0.43	3.09	0.41	*50/25*	
	1/2"	**2A 19.19-M12**	0.73	0.53	0.98	0.63	0.55	3.33	0.52	*50/25*	
3/0-250	3/8"	**2A 24.21-M10**	0.81	0.60	1.12	0.51	0.43	3.31	0.41	*50/25*	
	1/2"	**2A 24.21-M12**	0.81	0.60	1.12	0.63	0.55	3.54	0.52	*50/25*	
	5/8"	**2A 24.21-M16**	0.81	0.60	1.12	0.71	0.63	3.70	0.67	*50/25*	
250-300 MCM	1/2"	**2A 30.23-M12**	0.91	0.66	1.24	0.63	0.55	3.82	0.52	*30/15*	
350-500 MCM	1/2"	**2A 48.33-M12**	1.30	0.83	1.54	0.63	0.55	4.21	0.52	*20/10*	
500-600 MCM	1/2"	**2A 60.29-M12**	1.18	0.93	1.73	0.79	0.55	5.00	0.52	*20/5*	

HEAVY DUTY COPPER TUBE TERMINALS

2A-M

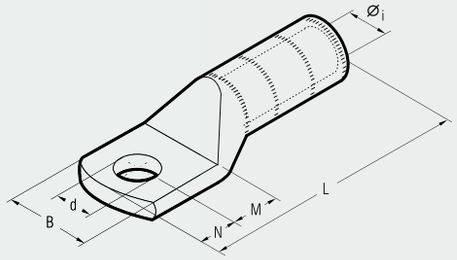


Conductor Size AWG	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools: HN5	HN-A25	TN 70 SEY	TN 120 SEY	Hydraulic Tools: B 15Y	B 35-45A	B 35-50A	HT 45-E	B 55-YC	HT 51	HT 51L	RH 50	B 51 A	B 51 LA	HT 81-U	RHU 81	B131LN-CA and similar tools for U dies	ECW-H3D	RHU 520
6	5/16"	**2 A 3-M 8**	0.23	0.59	0.35	0.31	1.71	0.33	*600/100*	●				●														
	3/8"	**2 A 3-M10**	0.23	0.71	0.43	0.39	1.87	0.41	*500/100*	●				●														
4	5/16"	**2 A 5-M 8**	0.28	0.59	0.35	0.31	2.01	0.33	*400/100*		●			●														
	3/8"	**2 A 5-M 10**	0.28	0.71	0.43	0.39	2.17	0.41	*300/50*		●			●														
	1/2"	**2 A 5-M 12**	0.28	0.83	0.55	0.47	2.36	0.52	*300/50*		●			●														
2	5/16"	**2 A 7-M 8**	0.35	0.67	0.35	0.31	2.09	0.33	*250/50*			●		●														
	3/8"	**2 A 7-M 10**	0.35	0.75	0.43	0.39	2.24	0.41	*250/50*			●		●														
	1/2"	**2 A 7-M 12**	0.35	0.83	0.55	0.47	2.44	0.52	*200/50*			●		●														
2-1/0	3/8"	**2 A 10-M 10**	0.39	0.79	0.43	0.39	2.48	0.41	*200/50*			●		●														
	1/2"	**2 A 10-M 12**	0.39	0.83	0.55	0.47	2.68	0.52	*150/50*			●		●														
	9/16"	**2 A 10-M 14**	0.39	0.98	0.63	0.55	2.83	0.59	*150/50*			●		●														
	5/8"	**2 A 10-M 16**	0.39	1.02	0.71	0.63	2.99	0.67	*150/50*			●		●														
1/0-2/0	3/8"	**2 A 14-M 10**	0.44	0.83	0.43	0.39	2.76	0.41	*100/50*			●		●														
	1/2"	**2 A 14-M 12**	0.44	0.87	0.55	0.47	2.95	0.52	*100/50*			●		●														
	9/16"	**2 A 14-M 14**	0.44	0.98	0.63	0.55	3.11	0.59	*100/50*			●		●														
	5/8"	**2 A 14-M 16**	0.44	1.02	0.71	0.63	3.27	0.67	*100/50*			●		●														
95	3/8"	**2 A 19-M 10**	0.53	0.98	0.43	0.39	3.01	0.41	*75/25*				●	●														
	1/2"	**2 A 19-M 12**	0.53	0.98	0.55	0.47	3.21	0.52	*75/25*				●	●														
	9/16"	**2 A 19-M 14**	0.53	0.98	0.63	0.55	3.37	0.59	*75/25*				●	●														
	5/8"	**2 A 19-M 16**	0.53	1.06	0.71	0.63	3.56	0.67	*75/25*				●	●														
	3/4"	**2 A 19-M 20**	0.53	1.16	0.87	0.79	3.84	0.83	*75/25*				●	●														
3/0-250	3/8"	**2 A 24-M 10**	0.60	1.12	0.43	0.39	3.23	0.41	*50/25*				●	●														
	1/2"	**2 A 24-M 12**	0.60	1.12	0.55	0.47	3.43	0.52	*50/25*				●	●														
	9/16"	**2 A 24-M 14**	0.60	1.12	0.63	0.55	3.58	0.59	*50/25*				●	●														
	5/8"	**2 A 24-M 16**	0.60	1.12	0.71	0.63	3.74	0.67	*50/25*				●	●														
	3/4"	**2 A 24-M 20**	0.60	1.18	0.87	0.79	4.06	0.83	*50/25*				●	●														
250 300 MCM	3/8"	**2 A 30-M 10**	0.66	1.24	0.51	0.43	3.62	0.41	*50/25*					●		●	●	●	●										
	1/2"	**2 A 30-M 12**	0.66	1.24	0.63	0.55	3.86	0.52	*30/15*					●		●	●	●	●										
	9/16"	**2 A 30-M 14**	0.66	1.24	0.71	0.63	4.02	0.59	*30/15*					●		●	●	●	●										
	5/8"	**2 A 30-M 16**	0.66	1.24	0.75	0.67	4.09	0.67	*30/15*					●		●	●	●	●										
	3/4"	**2 A 30-M 20**	0.66	1.24	0.87	0.79	4.33	0.83	*30/15*					●		●	●	●	●										
300 350 MCM	1/2"	**2 A 37-M 12**	0.76	1.40	0.63	0.55	4.25	0.52	*30/15*					●					●	●	●	●	●	●	●				
	9/16"	**2 A 37-M 14**	0.76	1.40	0.71	0.63	4.41	0.59	*30/15*					●					●	●	●	●	●	●	●				
	5/8"	**2 A 37-M 16**	0.76	1.40	0.75	0.67	4.49	0.67	*30/15*					●					●	●	●	●	●	●	●				
	3/4"	**2 A 37-M 20**	0.76	1.40	0.87	0.79	4.72	0.83	*30/15*					●					●	●	●	●	●	●	●				
350 500 MCM	1/2"	**2 A 48-M 12**	0.83	1.54	0.63	0.55	4.29	0.52	*20/5*					●					●	●	●	●	●	●	●	●			
	9/16"	**2 A 48-M 14**	0.83	1.54	0.71	0.63	4.45	0.59	*20/5*					●					●	●	●	●	●	●	●	●			
	5/8"	**2 A 48-M 16**	0.83	1.54	0.75	0.67	4.53	0.67	*20/5*					●					●	●	●	●	●	●	●	●			
	3/4"	**2 A 48-M 20**	0.83	1.54	0.87	0.79	4.76	0.83	*25/5*					●					●	●	●	●	●	●	●	●			
500 600 MCM	1/2"	**2 A 60-M 12**	0.93	1.73	0.79	0.55	5.10	0.52	*20/5*					●												●	●	●	●
	9/16"	**2 A 60-M 14**	0.93	1.73	0.87	0.63	5.26	0.59	*20/5*					●												●	●	●	●
	5/8"	**2 A 60-M 16**	0.93	1.73	0.87	0.75	5.37	0.67	*20/5*					●												●	●	●	●
	3/4"	**2 A 60-M 20**	0.93	1.73	0.94	0.91	5.61	0.83	*20/5*					●												●	●	●	●
800 MCM	1/2"	**2 A 80-M 12**	1.06	2.01	0.87	0.75	5.51	0.52	*15/5*					●												●	●	●	●
	9/16"	**2 A 80-M 14**	1.06	2.01	0.87	0.75	5.51	0.59	*10/5*					●												●	●	●	●
	5/8"	**2 A 80-M 16**	1.06	2.01	0.87	0.75	5.51	0.67	*10/5*					●												●	●	●	●
	3/4"	**2 A 80-M 20**	1.06	2.01	0.94	0.91	5.75	0.83	*15/5*					●												●	●	●	●
1000 MCM	5/8"	**2 A 100-M 16**	1.19	2.22	0.87	0.75	5.79	0.67	*10/1*					●													●	●	●
	3/4"	**2 A 100-M 20**	1.19	2.22	0.94	0.91	6.02	0.83	*10/1*					●													●	●	●
1250 MCM	5/8"	**2 A 120-M 16**	1.31	2.42	0.87	0.75	6.26	0.67	*20/1*					●													●	●	●
	3/4"	**2 A 120-M 20**	1.31	2.42	0.94	0.91	6.50	0.83	*20/1*					●													●	●	●
1500 MCM	3/4"	**2 A 160-M 20**	1.50	2.83	0.94	0.91	7.36	0.83	*12/1*					●														●	●
2000 MCM	3/4"	**2 A 200-M 20**	1.73	3.15	0.94	0.91	7.95	0.83	*6/1*					●															●

2A-M series are made from high purity copper tube, and are annealed. They feature a double length barrel for enhanced electrical and mechanical performance in heavy duty applications.
The absence of an inspection hole prevents the entry of water or moisture into the crimped joint making these terminals suitable for outdoor applications.
The terminals are electrolytically tin plated to prevent atmospheric corrosion.
Appropriate crimping tools and dies are shown in details on page 196-197.

2A-2M series terminals with double stud hole palm are available against specific requirements.

CA-M
2A-M



Series CA-M and 2A-M terminals are designed for high voltage applications up to 33 kV.
They are manufactured from high purity copper tube, annealed and tin plated.
The extended barrel enhances both electrical and mechanical performance. The absence of an inspection hole prevents moisture entry into the crimped joint and makes these terminals suitable for outdoor applications.
Appropriate crimping tools and dies are shown in details on page 200.

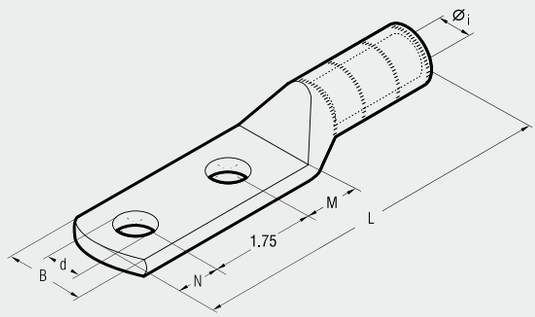
Conductor Size sqmm	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	Quantity Box/Bag	Hydraulic Tools: B35-50A	B 55-YC	B 51 LA	B 51 A	RH 50	HT 51L	HT 51	RHU 81	HT 81-J	B1131LN-CA and similar tools for U dies	ECW-H3D	RHU 520
25 R	5/16"	**CA 25-M 8**	0.27	0.55	0.35	0.31	2.56	0.33	*300/50*	●	●	●									
	3/8"	**CA 25-M 10**	0.27	0.71	0.51	0.43	2.83	0.41	*200/50*	●	●	●									
	1/2"	**CA 25-M 12**	0.27	0.83	0.63	0.55	3.07	0.52	*200/50*	●	●	●									
30 RC/S ÷ 40 S	1/2"	**CA 40 S-M 12**	0.32	0.83	0.63	0.55	3.11	0.52	*150/50*	●	●	●									
	5/8"	**CA 40 S-M 16**	0.32	1.02	0.75	0.67	3.35	0.67	*100/50*	●	●	●									
50 RC	1/2"	**CA 50 R-M 12**	0.34	0.81	0.63	0.55	3.11	0.52	*150/50*	●	●	●									
50 S	1/2"	**CA 50 S-M 12**	0.37	0.83	0.63	0.55	3.11	0.52	*150/50*	●	●	●									
	5/8"	**CA 50 S-M 16**	0.37	1.02	0.75	0.67	3.35	0.67	*100/50*	●	●	●									
63 S ÷ 70 S	1/2"	**CA 70 S-M 12**	0.43	1.10	0.63	0.55	3.20	0.52	*50/25*		●	●	●								
	1/2"	**CA 70 S-M 16**	0.43	1.18	0.75	0.67	3.43	0.67	*50/25*		●	●	●								
80 S ÷ 95 RC	1/2"	**CA 95 R-M 12**	0.47	1.10	0.63	0.55	3.58	0.52	*50/25*		●	●	●	●							
	9/16"	**CA 95 R-M 14**	0.47	1.10	0.71	0.63	3.74	0.59	*50/25*		●	●	●	●							
95 S ÷ 100 S	1/2"	**CA 95 S-M 12**	0.53	1.10	0.63	0.55	3.58	0.52	*50/25*		●	●	●	●							
	9/16"	**CA 95 S-M 14**	0.53	1.14	0.71	0.63	3.72	0.59	*50/25*		●	●	●	●							
	5/8"	**CA 95 S-M 16**	0.53	1.18	0.79	0.67	3.82	0.67	*50/25*		●	●	●	●							
120 RC/S ÷ 150 RC	1/2"	**CA 150 R-M 12**	0.59	1.22	0.63	0.55	3.82	0.52	*30/15*		●	●	●	●	●	●	●	●			
	9/16"	**CA 150 R-M 14**	0.59	1.22	0.71	0.63	3.98	0.59	*30/15*		●	●	●	●	●	●	●	●			
150 S ÷ 160 RC	1/2"	**CA 150 S-M 12**	0.65	1.26	0.63	0.55	3.82	0.52	*30/15*		●	●	●	●	●	●	●	●			
	9/16"	**CA 150 S-M 14**	0.65	1.26	0.71	0.63	3.98	0.59	*30/15*		●	●	●	●	●	●	●	●			
160 S ÷ 200 RC	9/16"	**CA 200 R-M 14**	0.67	1.28	0.71	0.63	3.98	0.59	*30/15*		●	●	●	●	●	●	●	●			
200 S ÷ 240 RC	9/16"	**CA 240 R-M 14**	0.76	1.69	0.71	0.63	4.21	0.59	*15/5*										●		
240 S ÷ 315 RC	9/16"	**CA 315 R-M 14**	0.85	1.69	0.71	0.63	4.13	0.59	*15/5*										●		
315 S	9/16"	**CA 315 S-M 14**	0.93	1.73	0.71	0.63	4.13	0.59	*15/5*										●		
400 R	9/16"	**2 A 80-M 14**	1.06	2.01	0.87	0.75	5.51	0.59	*15/5*										●		
	5/8"	**2 A 80-M 16**	1.06	2.01	0.87	0.75	5.51	0.67	*15/5*										●		
	3/4"	**2 A 80-M 20**	1.06	2.01	0.94	0.91	5.75	0.83	*15/5*										●		
500 R	5/8"	**2 A 100-M 16**	1.19	2.22	0.87	0.75	5.79	0.67	*10/5*											●	●
	3/4"	**2 A 100-M 20**	1.19	2.22	0.94	0.91	6.02	0.83	*10/5*											●	●
600 R ÷ 630 R	5/8"	**2 A 120-M 16**	1.31	2.42	0.87	0.75	6.26	0.67	*20/5*											●	●
	3/4"	**2 A 120-M 20**	1.31	2.42	0.94	0.91	6.50	0.83	*20/5*											●	●

R = Round conductors RC = Round Compact conductors S = Sector shaped conductors

HIGH VOLTAGE COPPER TERMINALS

CA-2M
2A-2M

two hole fixing

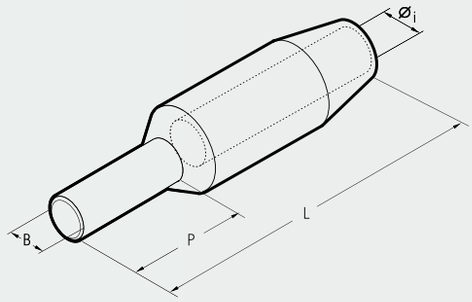


Conductor Size sqmm	Ø Stud in.	Ref.	Dimensions in. Øi	B	M	N	L	d	Quantity Box/Bag	Hydraulic Tools: B35-50A	B55-YC	B51LA	B51A	RH30	HT51L	HT51	HT81-U	RHU 81	B131LN-CA and similar tools for U dies	EOW-H3D	RHU 520
25 R	5/16"	**CA 25-2 M 8**	0.27	0.55	0.39	0.43	4.47	0.33	*200/50*	●	●	●	●	●	●	●	●	●	●	●	●
	1/2"	**CA 25-2 M 12**	0.27	0.83	0.63	0.55	4.82	0.52	*150/50*	●	●	●	●	●	●	●	●	●	●	●	●
30 RC/S ÷ 40 S	1/2"	**CA 40 S-2 M 12**	0.32	0.85	0.63	0.55	4.86	0.52	*100/50*	●	●	●	●	●	●	●	●	●	●	●	●
50 RC	1/2"	**CA 50 R-2 M 12**	0.34	0.81	0.63	0.55	4.86	0.52	*100/50*	●	●	●	●	●	●	●	●	●	●	●	●
50 S	1/2"	**CA 50 S-2 M 12**	0.37	0.83	0.63	0.55	4.86	0.52	*100/50*	●	●	●	●	●	●	●	●	●	●	●	●
63 S ÷ 70 S	1/2"	**CA 70 S-2 M 12**	0.43	1.02	0.63	0.55	5.03	0.52	*50/25*					●	●	●	●	●	●	●	●
80 S ÷ 95 RC	9/16"	**CA 95 R-2 M 14**	0.47	1.10	0.71	0.63	5.49	0.59	*30/15*					●	●	●	●	●	●	●	●
95 S ÷ 100 S	9/16"	**CA 95 S-2 M 14**	0.53	1.14	0.71	0.63	5.49	0.59	*30/15*					●	●	●	●	●	●	●	●
120 RC/S ÷ 150 RC	9/16"	**CA 150 R-2 M 14**	0.59	1.22	0.71	0.63	5.73	0.59	*30/15*					●	●	●	●	●	●	●	●
150 S ÷ 160 RC	9/16"	**CA 150 S-2 M 14**	0.65	1.26	0.71	0.63	5.73	0.59	*30/15*					●	●	●	●	●	●	●	●
160 S ÷ 200 RC	9/16"	**CA 200 R-2 M 14**	0.67	1.28	0.71	0.63	5.71	0.59	*30/15*					●	●	●	●	●	●	●	●
200 S ÷ 240 RC	9/16"	**CA 240 R-2 M 14**	0.76	1.69	0.71	0.63	5.96	0.59	*15/5*										●	●	●
240 S ÷ 315 RC	9/16"	**CA 315 R-2 M 14**	0.85	1.69	0.71	0.63	5.89	0.59	*20/5*										●	●	●
315 S	9/16"	**CA 315 S-2 M 14**	0.93	1.73	0.71	0.63	5.89	0.59	*20/5*										●	●	●
400 R	1/2"	**2 A 80-2 M 12**	1.06	2.01	0.79	0.55	6.99	0.52	*15/5*										●	●	●
	9/16"	**2 A 80-2 M 14**	1.06	2.01	0.87	0.63	7.15	0.59	*15/5*										●	●	●
	5/8"	**2 A 80-2 M 16**	1.06	2.01	0.87	0.75	7.26	0.67	*15/5*										●	●	●
500 R	9/16"	**2 A 100-2 M 14**	1.19	2.22	0.87	0.63	7.18	0.59	*10/5*											●	●
	5/8"	**2 A 100-2 M 16**	1.19	2.22	0.87	0.75	7.30	0.67	*10/5*											●	●
600 R ÷ 630 R	9/16"	**2 A 120-2 M 14**	1.31	2.42	0.87	0.63	7.89	0.59	*15/5*											●	●
	5/8"	**2 A 120-2 M 16**	1.31	2.42	0.87	0.75	7.97	0.67	*15/5*											●	●

R = Round conductors RC = Round Compact conductors S = Sector shaped conductors

CA-2M and 2A-2M Copper Tube Terminal Lugs are designed for high voltage applications up to 33kV.
Manufactured from high purity copper tube, annealed and tin-plated.
The extended barrel enhances electrical and mechanical performance.
The absence of an inspection hole prevents moisture entry into the crimped joint. Featuring an extended palm with two fixing holes at 1.75 in. centres.
Appropriate crimping tools and dies are shown in details on page 200.

MT-C



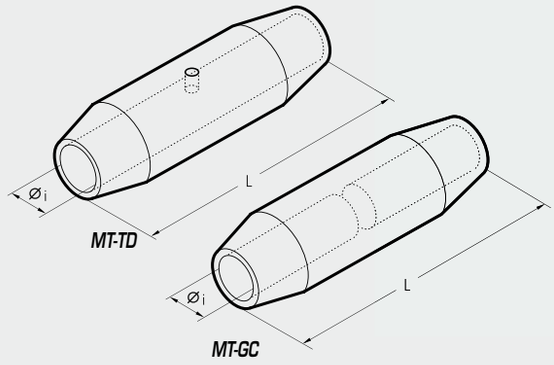
MT-C series connectors are designed for high voltage applications up to 33 kV. They are manufactured from high purity copper, annealed and tin plated.
The extended barrel enhances both electrical and mechanical performance.
The stalk or pin makes these connectors ideal for terminating conductors into contact blocks.
Appropriate crimping tools and dies are shown in details on page 200.

Conductor Size sqmm	Ref.	Dimensions in.				Quantity Box/Bag	Hydraulic Tools								
		Øi	B	P	L		B35-50A	B 55-YC	B 51 LA	RHU 81	B131LN-CA and similar tools for U dies	ECW-H3D	RHU 520		
25 R	**MT 25-C 8**	0.27	0.31	1.38	3.15	*90/3*									
30 RC/S ÷ 40 S	**MT 40 S-C 8**	0.32	0.31	1.38	3.15	*90/3*									
	MT 40 S-C 10	0.32	0.39	1.38	3.15	*90/3*									
	MT 40 S-C 14-80	0.32	0.55	3.15	4.84	*30/3*									
50 RC	**MT 50 R-C 8**	0.35	0.31	1.38	3.15	*90/3*									
	MT 50 R-C 10	0.35	0.39	1.38	3.15	*90/3*									
50 S	**MT 50 S-C 8**	0.37	0.31	1.38	3.15	*90/3*									
	MT 50 S-C 10	0.37	0.39	1.38	3.15	*90/3*									
	MT 50 S-C 14-80	0.37	0.55	3.15	4.84	*30/3*									
63 S ÷ 70 S	**MT 70 S-C 10**	0.44	0.39	1.38	3.54	*30/3*									
80 S ÷ 95 RC	**MT 95 R-C 10**	0.47	0.39	1.77	4.33	*60/3*									
	MT 95 R-C 12	0.47	0.47	1.77	4.33	*60/3*									
95 S ÷ 100 S	**MT 95 S-C 10**	0.53	0.39	1.77	4.33	*60/3*									
	MT 95 S-C 12	0.53	0.47	1.77	4.33	*60/3*									
	MT 95 S-C 14-80	0.53	0.55	3.15	5.71	*60/3*									
120 RC/S ÷ 150 RC	**MT 150 R-C 12**	0.59	0.47	1.77	4.33	*60/3*									
	MT 150 R-C 16	0.59	0.63	1.77	4.33	*60/3*									
150 S ÷ 160 RC	**MT 150 S-C 12**	0.65	0.47	1.77	4.33	*60/3*									
	MT 150 S-C 14-80	0.65	0.55	3.15	5.71	*45/3*									
	MT 150 S-C 16	0.65	0.63	1.77	4.33	*60/3*									
160 S ÷ 200 RC	**MT 200 R-C 10**	0.67	0.39	1.77	4.33	*30/3*									
	MT 200 R-C 16	0.67	0.63	1.77	4.33	*30/3*									
200 S ÷ 240 RC	**MT 240 R-C 12**	0.77	0.47	1.97	4.53	*30/3*									
	MT 240 R-C 16	0.77	0.63	1.97	4.53	*30/3*									
240 S ÷ 315 RC	**MT 315 R-C 16**	0.85	0.63	1.97	4.53	*30/3*									
315 S	**MT 315 S-C 16**	0.94	0.63	2.36	5.12	*30/3*									

R = Round conductors RC = Round Compact conductors S = Sector shaped conductors

HIGH VOLTAGE COPPER THROUGH CONNECTORS

MT-TD
MT-GC



Conductor Size sqmm	Ref.	Ref.	Dimensions in.		Quantity Box/Bag	Hydraulic Tools								
			Øi	L		B35-50A	B51A B51LA B55NC	RHU 81	B131LN-CA and similar tools for U dies	ECW-H3D	RHU 52D			
25 R	**MT 25-TD**	**MT 25-GC**	0.27	2.36	*90/3*									
30 RC/S ÷ 40 S	**MT 40 S-TD**	**MT 40 S-GC**	0.32	2.36	*90/3*									
50 RC	**MT 50 R-TD**	**MT 50 R-GC**	0.34	2.36	*90/3*									
50 S	**MT 50 S-TD**	**MT 50 S-GC**	0.37	2.36	*90/3*									
63 S ÷ 70 S	**MT 70 S-TD**	**MT 70 S-GC**	0.43	2.76	*30/3*									
80 S ÷ 95 RC	**MT 95 R-TD**	**MT 95 R-GC**	0.47	3.15	*30/3*									
95 S ÷ 100 S	**MT 95 S-TD**	**MT 95 S-GC**	0.53	3.15	*30/3*									
120 RC/S ÷ 150 RC	**MT 150 R-TD**	**MT 150 R-GC**	0.59	3.15	*30/3*									
150 S ÷ 160 RC	**MT 150 S-TD**	**MT 150 S-GC**	0.65	3.15	*21/3*									
160 S ÷ 200 RC	**MT 200 R-TD**	**MT 200 R-GC**	0.67	3.94	*30/3*									
200 S ÷ 240 RC	**MT 240 R-TD**	**MT 240 R-GC**	0.76	3.94	*30/3*									
240 S ÷ 315 RC	**MT 315 R-TD**	**MT 315 R-GC**	0.85	3.94	*30/3*									
315 S	**MT 315 S-TD**	**MT 315 S-GC**	0.93	3.94	*30/3*									
400 R	**MT 400-TD**		1.06	4.72	*15/3*									
500 R	**MT 500-TD**		1.19	4.65	*15/3*									
600 R ÷ 630 R	**MT 630-TD**		1.31	5.12	*9/3*									

HT51 HT51L RH50 B51A B51LA B55NC

R = Round conductors RC = Round Compact conductors S = Sector shaped conductors

MT-TD and MT-GC series connectors are designed to join conductors in high voltage applications up to 33 kV.

They are manufactured from high purity copper, annealed and tin plated.

MT-GC series feature a solid stop which forms a barrier between the two conductors being joined, this prevents the migration of oils or greases. which may be present, in one cable contaminating the other cable.

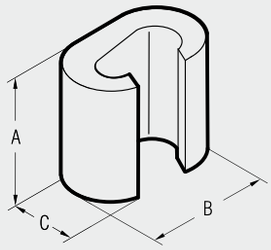
MT-TD connectors are unblocked and are suitable for joining cables of the same type.

Appropriate crimping tools and dies are shown in details on page 200.

SLEEVE CONNECTORS

C-C

Tin plated version



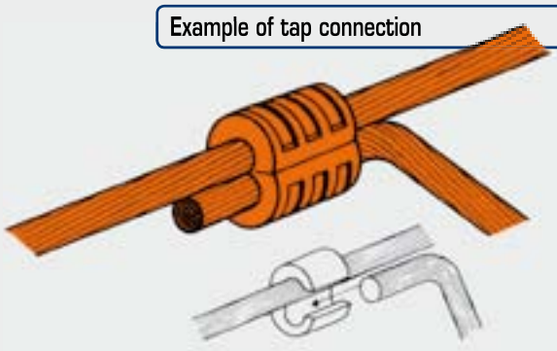
"C" connectors are manufactured from high purity copper profiles and are suitable for a variety of uses either to create an earthing network or tapping off from overhead distribution lines. Each connector is marked as follows:
- Cembre trade mark
- Reference number
- Conductor size-Run
- Conductor size-Tap
- Number of crimps
- Die reference.

Appropriate crimping tools and dies are shown in details on page 195.

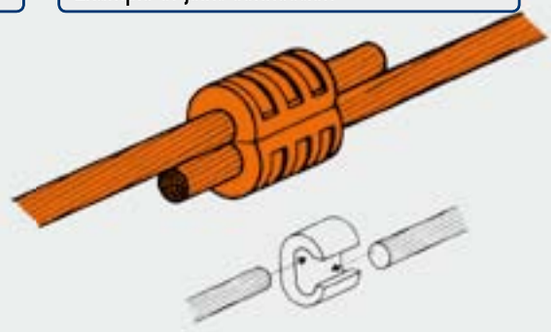
Conductor Size AWG Run	Conductor Size AWG Tap	Ref.	Dimensions in. A	B	C	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
#9÷#13	#9÷#15	**C 6-C 6 ST**	0.35	0.39	0.25	*1,000/100*	HP4-C10	
#7	#7÷#15	**C 10-C 10 ST**	0.47	0.50	0.33	*500/100*		
#5	#5÷#15	**C 16-C 16 ST**	0.67	0.76	0.47	*500/100*		
#3÷#5	#7÷#15	**C 25-C 10 ST**	0.67	0.78	0.51	*400/50*		
#3	#3÷#5	**C 25-C 25 ST**	0.67	0.84	0.51	*300/50*		
#1÷#2	#5÷#15	**C 35-C 16 ST**	0.83	0.97	0.61	*200/25*		
#1÷#2	#1÷#3	**C 35-C 35 ST**	0.83	1.05	0.61	*200/25*		
1/0	#3÷#7							
2/0	#3÷#15	**C 70-C 25 N ST**	0.83	1.04	0.69	*200/25*		
1/0	#3÷#11	**C 50-C 25 ST**	0.98	1.30	0.83	*100/25*		
1/0	1/0÷#2	**C 50-C 50 ST**	1.02	1.30	0.83	*100/25*		
2/0÷1/0	#1	**C 70-C 35 ST**	1.10	1.30	0.83	*100/25*		
2/0÷1/0	2/0÷#11	**C 70-C 70 ST**	1.10	1.34	0.83	*100/25*		
4/0	#1	**C 95-C 35 ST**	1.14	1.60	1.02	*50/25*		
4/0	2/0	**C 95-C 70 ST**	1.14	1.61	1.02	*50/25*		
4/0	4/0	**C 95-C 95 ST**	1.14	1.61	1.02	*50/25*		
250÷4/0	250÷#3	**C 120-C 120 ST**	1.18	1.77	1.10	*50/25*		
300 MCM	250÷#3	**C 150-C 120 ST**	1.22	1.77	1.10	*50/25*		
300 MCM	300 MCM	**C 150-C 150 ST**	1.18	1.77	1.10	*50/25*		
350 MCM	4/0÷#5	**C 185-C 95 ST**	1.22	1.77	1.10	*50/25*		
350÷250 MCM	350÷250 MCM	**C 185-C 185 ST**	0.89	2.68	1.34	*30/15*		
500÷300 MCM	250÷2/0	**C 240-C 120 ST**	0.89	2.68	1.34	*30/15*		

Hydraulic Tools: B 35-45A, B 35-50A, HT 45-E, B 55-YC, B 51 LA, B 51 A, RH 50, HT 51L, HT 51, HT 81-U, RHU 81, B1131LN-CA and similar tools for U dies, ECW-H3D

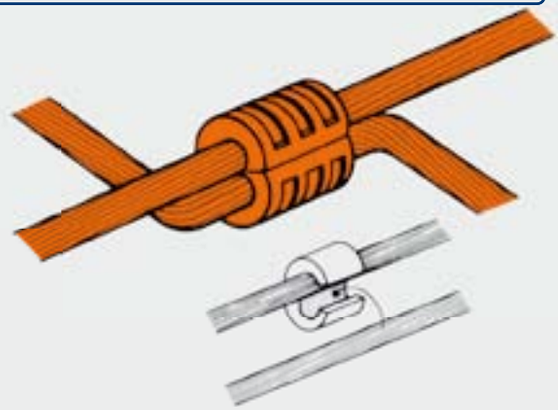
Example of tap connection



Example of joint connection



Example of joining two running conductors

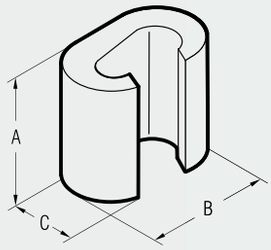


Conductor Size AWG	Ref.
3-3	**C 35-C 16 ST**
2-2	**C 35-C 35 ST**
1/0-1/0	**C 70-C 70 ST**
2/0-2/0	**C 95-C 70 ST**
3/0-3/0	**C 150-C 120 ST**
250-250 MCM	
300-300 MCM	**C 150-C 150 ST**
250-250 MCM	**C 185-C 95 ST**

SLEEVE CONNECTORS

Bright surface version

C-C



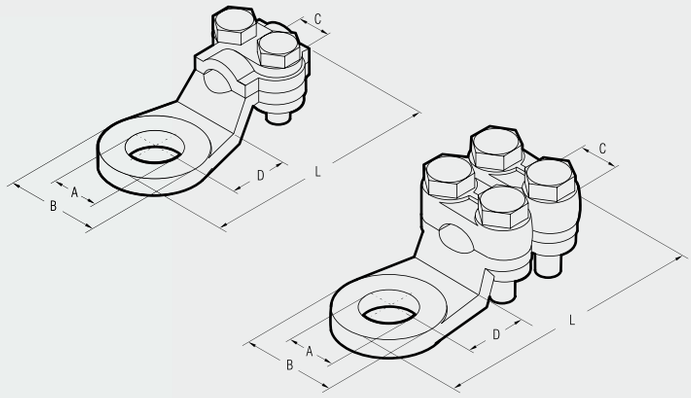
Conductor Size AWG Run	Conductor Size AWG Tap	Ref.	Dimensions in. A	B	C	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
#9÷#13	#9÷#15	**C 6-C 6**	0.35	0.39	0.25	*1,000/100*	HP4-C10	
#7	#7÷#15	**C 10-C 10**	0.47	0.50	0.33	*500/100*		
#5	#5÷#15	**C 16-C 16**	0.67	0.76	0.47	*500/100*		
#3÷#5	#7÷#15	**C 25-C 10**	0.67	0.78	0.51	*400/50*		
#3	#3÷#5	**C 25-C 25**	0.67	0.84	0.51	*300/50*		
#1÷#2	#5÷#15	**C 35-C 16**	0.83	0.97	0.61	*200/25*		
#1÷#2	#1÷#3	**C 35-C 35**	0.83	1.05	0.61	*200/25*		
1/0	#3÷#7							
2/0	#3÷#15	**C 70-C 25 N**	0.83	1.04	0.69	*200/25*		
1/0	#3÷#11	**C 50-C 25**	0.98	1.30	0.83	*100/25*		
1/0	1/0÷#2	**C 50-C 50**	1.02	1.30	0.83	*100/25*		
2/0÷1/0	#1	**C 70-C 35**	1.10	1.30	0.83	*100/25*		
2/0÷1/0	2/0÷#11	**C 70-C 70**	1.10	1.34	0.83	*100/25*		
4/0	#1	**C 95-C 35**	1.14	1.60	1.02	*50/25*		
4/0	2/0	**C 95-C 70**	1.14	1.61	1.02	*50/25*		
4/0	4/0	**C 95-C 95**	1.14	1.61	1.02	*50/25*		
250÷4/0	250÷#3	**C 120-C 120**	1.18	1.77	1.10	*50/25*		
300 MCM	250÷#3	**C 150-C 120**	1.22	1.77	1.10	*50/25*		
300 MCM	300 MCM	**C 150-C 150**	1.18	1.77	1.10	*50/25*		
350 MCM	4/0÷#5	**C 185-C 95**	1.22	1.77	1.10	*50/25*		
350÷250 MCM	350÷250 MCM	**C 185-C 185**	0.89	2.68	1.34	*30/15*		
500÷300 MCM	250÷2/0	**C 240-C 120**	0.89	2.68	1.34	*30/15*		

Hydraulic Tools: B 35-45A, B 35-50A, HT 45-E, B 55-YC, B 51 LA, B 51 A, RH 50, HT 51L, HT 51, HT 81-U, RHU 81, B1 31LN-CA and similar tools for U dies, ECW-H3D

Featuring same characteristics of tin plated version, (see opposite page).

Accepted

MECHANICAL FIXING LUGS



Material:
Brass OT 58 UNI 5705 nickel-plated.
Zinc plated steel bolts.

2 bolt fixing lugs Ø A standard

Conductor Size AWG	Ref.	A bolt	Dimensions in.				Quantity Box/Bag
			B	C	D	L	
6	**2155**	M8	0.71	0.18	0.49	1.57	*100*
4	**2156**	M8	0.77	0.24	0.51	1.69	*100*
2	**2157**	M12	0.91	0.28	0.59	1.93	*50*

4 bolt fixing lugs Ø A standard

Conductor Size AWG	Ref.	A bolt	Dimensions in.				Quantity Box/Bag
			B	C	D	L	
1/0	**2158**	M12	0.93	0.31	0.63	2.24	*50/50*
2/0	**2160**	M12	1.10	0.39	0.79	2.56	*25*
3/0	**2161**	M12	1.22	0.51	0.67	2.60	*50/25*
250 MCM	**2162**	M15	1.30	0.55	0.71	2.80	*25/25*
300 MCM	**2163**	M14	1.34	0.63	0.77	2.95	*25/25*
350 MCM	**2164**	M15	1.42	0.63	0.83	3.07	*25/25*

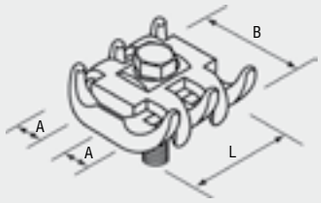
2 bolt fixing lugs Ø A large

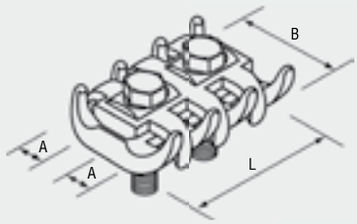
Conductor Size AWG	Ref.	A bolt	Dimensions in.				Quantity Box/Bag
			B	C	D	L	
6	**2171**	M10	0.71	0.18	0.49	1.57	*100*
4	**2172**	M10	0.77	0.24	0.51	1.69	*100*
2	**2173**	M14	0.91	0.28	0.59	1.93	*150/50*
2-1/0	**2174**	M14	0.98	0.31	0.67	2.20	*50*

4 bolt fixing lugs Ø A large

Conductor Size AWG	Ref.	A bolt	Dimensions in.				Quantity Box/Bag
			B	C	D	L	
2/0	**2176**	M16	1.10	0.39	0.79	2.56	*25*

CABLE CLAMPS





Single bolt fixing

Conductor Size AWG	Ref.	Ø A for cable in.	Dimensions in.		Quantity Box/Bag
			B	L	
10÷6	**2323**	0.12÷ 0.20	0.94	0.79	*50*
6÷1/0	**2326**	0.20÷ 0.31	1.18	0.98	*50*
2÷2/0	**2329**	0.28÷0.47	1.54	1.18	*25*

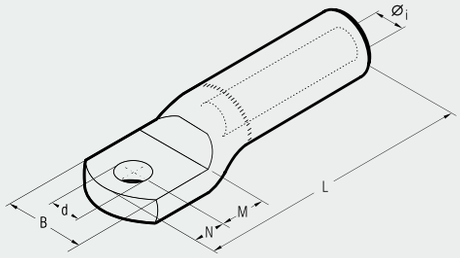
2 bolt fixing

Conductor Size AWG	Ref.	Ø A for cable in.	Dimensions in.		Quantity Box/Bag
			B	L	
10÷6	**2333**	0.12÷0.20	1.06	1.26	*50*
6÷1/0	**2336**	0.20÷0.31	1.26	1.57	*50/50*
2÷2/0	**2339**	0.28÷0.47	1.54	1.69	*25/25*
1/0÷3/0	**2342**	0.31÷0.55	1.89	1.89	*10*
2/0÷300	**2344**	0.55÷0.63	2.01	2.09	*20/10*
300÷400-600	**2346**	0.71÷0.87	2.76	2.76	*5/5*

Material:
Brass OT 58 UNI 5705.
Zinc plated steel bolts.
Zinc plated steel nut.

ALUMINUM TERMINALS

AA-M

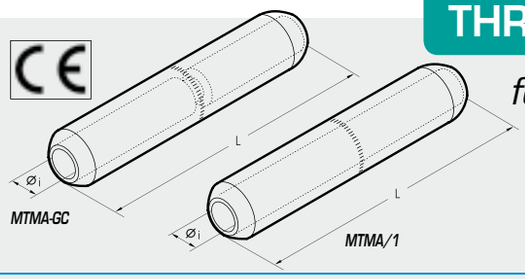


AA-M series terminals are made from aluminum of a purity equal to or greater than 99,5%.
They are designed to accept a variety of conductor forms especially low stranded compacted conductors.
Non circular conductors may require pre-rounding prior to introduction to the terminal.
Barrels are capped and filled with grease so as to avoid oxidation of the aluminum.
Appropriate crimping tools and dies are shown in details on page 201, 203.

Conductor Size AWG	Ø Stud in.	Ref.	Dimensions in.						Quantity Box/Bag	Hydraulic Tools				
			Øi	B	M	N	L	d		HT 131-UC RHU 131-C B 131-UC	HT120 HT131-C RHC 131	ECW-H3D	RHU 230-630	
6	5/16"	**AA 16-M 8**	0.22	0.83	0.51	0.43	3.03	0.33	*60/3*					
4	5/16"	**AA 25-M 8**	0.26	0.83	0.51	0.43	3.03	0.33	*60/3*					
2	5/16"	**AA 35-M 8**	0.31	0.91	0.51	0.43	3.05	0.33	*60/3*					
	3/8"	**AA 35-M 10**	0.31	0.91	0.51	0.43	3.05	0.41	*60/3*					
1/0	1/2"	**AA 50-M 12**	0.35	1.02	0.63	0.55	3.58	0.52	*60/3*					
	9/16"	**AA 50-M 14**	0.35	1.02	0.71	0.63	3.74	0.59	*60/3*					
2/0	1/2"	**AA 70-M 12**	0.43	1.06	0.63	0.55	3.58	0.52	*45/3*					
	9/16"	**AA 70-M 14**	0.43	1.06	0.71	0.63	3.74	0.59	*45/3*					
3/0	1/2"	**AA 95-M 12**	0.49	1.06	0.63	0.55	3.58	0.52	*45/3*					
	9/16"	**AA 95-M 14**	0.49	1.06	0.71	0.63	3.74	0.59	*45/3*					
250 MCM	1/2"	**AA 120-M 12**	0.54	1.38	0.63	0.55	4.53	0.52	*30/3*					
	9/16"	**AA 120-M 14**	0.54	1.38	0.71	0.63	4.68	0.59	*30/3*					
300 MCM	1/2"	**AA 150-M 12**	0.61	1.34	0.63	0.55	4.53	0.52	*30/3*					
	9/16"	**AA 150-M 14**	0.61	1.34	0.71	0.63	4.68	0.59	*30/3*					
350 MCM	1/2"	**AA 185-M 12**	0.67	1.65	0.79	0.55	4.80	0.52	*18/3*					
	9/16"	**AA 185-M 14**	0.67	1.65	0.87	0.63	4.96	0.59	*18/3*					
500 MCM	1/2"	**AA 240-M 12**	0.77	1.73	0.79	0.55	4.80	0.52	*15/3*					
	9/16"	**AA 240-M 14**	0.77	1.73	0.87	0.63	4.96	0.59	*15/3*					
600 MCM	1/2"	**AA 300-34-M 12**	0.89	1.85	0.87	0.55	5.12	0.52	*15/3*					
	9/16"	**AA 300-34 M 14**	0.89	1.85	0.87	0.63	5.20	0.59	*15/3*					
	5/8"	**AA 300-34 M 16**	0.89	1.85	0.87	0.67	5.20	0.67	*15/3*					
	5/8"	**AA 300-M 16**	0.92	1.93	0.75	0.67	6.77	0.67	*12/3*					
800 MCM	5/8"	**AA 400-M 16**	1.02	2.20	0.75	0.67	6.77	0.67	*12/3*					
1000 MCM	5/8"	**AA 500-40 M 16**	1.15	2.24	0.87	0.75	7.00	0.67	*12/3*					
1250 MCM	5/8"	**AA 630-M 16**	1.28	2.80	0.87	0.75	7.00	0.67	*9/3*					

THROUGH CONNECTORS

for aluminum conductors



MTMA-GC
MTMA/1

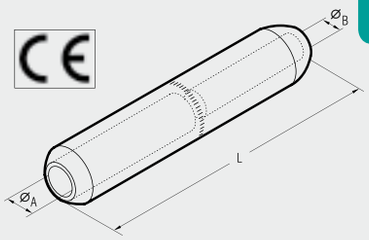
MTMA-GC series through connectors are made from aluminum of a purity equal to or greater than 99,5%. They feature a solid stop which creates a barrier between the two sides of conductors to be joined.
Barrels are capped and filled with grease so as to avoid oxidation of the connector.
MTMA/1 series through connectors are unblocked and are suitable for joining cables of the same type.
Appropriate crimping tools and dies are shown in details on page 202-203.

Conductor Size AWG	Ref.	Ref.*	Dimensions in. Øi	Dimensions in. L	Quantity Box/Bag	Hydraulic Tools			
8	MTMA 10-GC		0.17	3.56	60/3	HT 131-UC / RHU 131-C / B 131-UC			
6	MTMA 16-GC	MTMA 16/1	0.22	3.56	60/3				
4	MTMA 25-GC	MTMA 25/1	0.26	3.56	60/3				
2	MTMA 35-GC	MTMA 35/1	0.31	3.56	60/3				
	MTMA 35-20-GC		0.31	4.19	30/3				
1/0	MTMA 50-GC	MTMA 50/1	0.35	4.19	30/3				
2/0	MTMA 70-GC	MTMA 70/1	0.43	4.19	30/3				
3/0	MTMA 95-GC		0.49	4.37	30/3				
		MTMA 95/1	0.49	4.19	30/3				
250 MCM	MTMA 120-GC	MTMA 120/1	0.54	5.24	30/3				
300 MCM	MTMA 150-GC		0.61	5.31	30/3				
		MTMA 150/1	0.61	5.26	30/3				
350 MCM	MTMA 185-GC	MTMA 185/1	0.67	5.65	15/3				
500 MCM	MTMA 240-GC	MTMA 240/1	0.77	5.65	15/3				
600 MCM	MTMAD 300-GC		0.89	5.69	15/3		HT120 HT131C RHC 131	ECW-H3D	
		MTMAD 300/1	0.89	5.31	15/3				
	MTMA 300-GC		0.92	8.58	15/3				RHU 230-630
800 MCM		MTMA 400/1	1.02	8.58	15/3				
1000 MCM	MTMA 500-GC		1.15	8.60	15/3				
1000 MCM		MTMA 500-40/1	1.15	8.58	12/3				
1250 MCM		MTMA 630/1	1.28	8.60	12/3				

** Without oil stop*

REDUCER THROUGH CONNECTORS

for aluminum or copper conductors



MTMA-GC

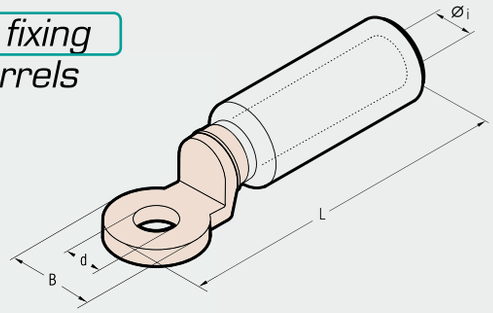
MTMA-GC series reducer through connectors are manufactured to the same specification as MTMA-GC series through connectors.
Appropriate crimping tools and dies are shown in details on page 202-203.

Conductor Size AWG Side A Al	Side B Al/Cu	Ref.	Dimensions in. ØA	Dimensions in. ØB	Dimensions in. L	Quantity Box/Bag	Hydraulic Tools			
6	8	MTMA 16-10-GC	0.22	0.17	3.56	60/3	HT 131-UC / RHU 131-C / B 131-UC			
4	8	MTMA 25-10-GC	0.25	0.17	3.56	60/3				
	6	MTMA 25-16-GC	0.25	0.22	3.56	60/3				
1/0	4	MTMA 50-25-GC	0.35	0.26	4.19	30/3				
	2	MTMA 50-35-GC	0.35	0.31	4.19	30/3				
2/0	2	MTMA 70-35-GC	0.43	0.31	4.19	30/3				
	1/0	MTMA 70-50-GC	0.43	0.35	4.19	30/3				
3/0	1/0	MTMA 95-50-GC	0.49	0.35	4.31	30/3				
	2/0	MTMA 95-70-GC	0.49	0.43	4.19	30/3				
250 MCM	2/0	MTMA 120-70-GC	0.54	0.43	5.24	30/3				
	3/0	MTMA 120-95-GC	0.54	0.49	5.24	30/3				
300 MCM	2/0	MTMA 150-70-GC	0.61	0.43	5.24	30/3				
	3/0	MTMA 150-95-GC	0.61	0.49	5.29	30/3				
	250 MCM	MTMA 150-120-GC	0.61	0.54	5.24	30/3				
350 MCM	250 MCM	MTMA 185-120-GC	0.67	0.54	5.65	15/3				
	300 MCM	MTMA 185-150-GC	0.67	0.61	5.65	15/3				
500 MCM	300 MCM	MTMA 240-150-GC	0.77	0.61	5.65	15/3				
	350 MCM	MTMA 240-185-GC	0.77	0.67	5.65	15/3				
600 MCM	3/0	MTMAD 300-95-GC	0.89	0.49	5.69	15/3		HT120 HT131-C RHC 131	ECW-H3D	
	300 MCM	MTMAD 300-150-GC	0.89	0.61	5.69	15/3				
	350 MCM	MTMAD 300-185-GC	0.89	0.67	5.69	15/3				
	500 MCM	MTMAD 300-240-GC	0.89	0.77	5.69	15/3				
800 MCM	500 MCM	MTMA 400-240-GC	1.02	0.77	8.58	15/3				RHU 230-630
	600 MCM	MTMA 400-300-GC	1.02	0.92	8.58	15/3				
1000 MCM	600 MCM	MTMA 500-300-GC	1.15	0.92	8.58	12/3				
	800 MCM	MTMA 500-400-GC	1.15	1.02	8.58	12/3				

BIMETALLIC CONNECTORS

CAA-M

copper palm fixing
aluminum barrels



The barrel of series CAA-M connectors are made from aluminum of a purity equal to or greater than 99,5%.
The barrel is friction welded to the palm thus achieving the best possible transition between the copper palm and aluminum barrel.
Barrels are capped and filled with grease so as to avoid oxidation of the aluminum.
Appropriate crimping tools and dies are shown in details on page 201, 203.

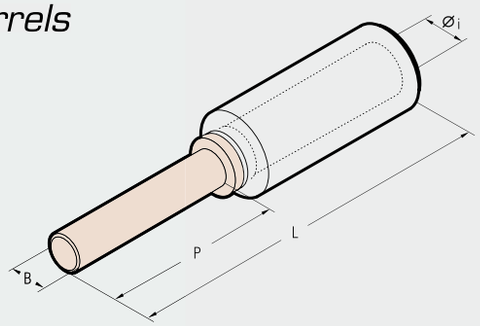
Conductor Size AWG	Ø Stud in.	Ref.	Dimensions in. Øi	B	L	d	Quantity Box/Bag	Hydraulic Tools					
8	1/2"	**CAA 10-M 12**	0.17	0.94	3.43	0.51	*90/3*	HT 131-UC	RHU 131-C	B 131-UC			
6	1/2"	**CAA 16-M 12**	0.22	0.94	3.43	0.51	*90/3*						
4	1/2"	**CAA 25-M 12**	0.26	0.94	3.43	0.51	*90/3*						
2	1/2"	**CAA 35-M 12**	0.31	0.94	3.43	0.51	*90/3*						
	1/2"	**CAA 35-20-M 12**	0.31	0.94	3.43	0.51	*60/3*						
1/0	1/2"	**CAA 50-M 12**	0.35	0.94	3.43	0.51	*60/3*						
2/0	1/2"	**CAA 70-M 12**	0.43	0.94	3.43	0.51	*60/3*						
3/0	1/2"	**CAA 95-M 12**	0.49	0.94	3.43	0.51	*60/3*						
250 MCM	1/2"	**CAA 120-M 12**	0.54	1.22	4.37	0.51	*30/3*						
300 MCM	1/2"	**CAA 150-M 12**	0.61	1.22	4.37	0.51	*30/3*						
350 MCM	1/2"	**CAA 185-M 12**	0.67	1.38	4.57	0.51	*24/3*						
500 MCM	1/2"	**CAA 240-M 12**	0.77	1.38	4.57	0.51	*18/3*						
600 MCM	1/2"	**CAA 300-34 M 12**	0.89	1.38	4.72	0.51	*15/3*	HT120 HT131-C RHC 131	ECW-H3D				
	5/8"	**CAA 300-34 M 16**	0.89	1.38	4.72	0.67	*15/3*						
	5/8"	**CAA 300-M 16**	0.92	1.38	6.00	0.65	*12/3*			RHU 230-630			
800 MCM	5/8"	**CAA 400-M 16**	1.02	1.38	6.00	0.65	*12/3*						
1000 MCM	5/8"	**CAA 500-M 16 TNBD**	1.15	1.38	6.00	0.65	*12/3*						
1250 MCM	5/16"	**CAA 630-4 M 8**	1.28	2.36	7.56	4 x 0.35*	*9/3*						

** n° 4 holes with 30 mm as distance between axes*

BIMETALLIC CONNECTORS

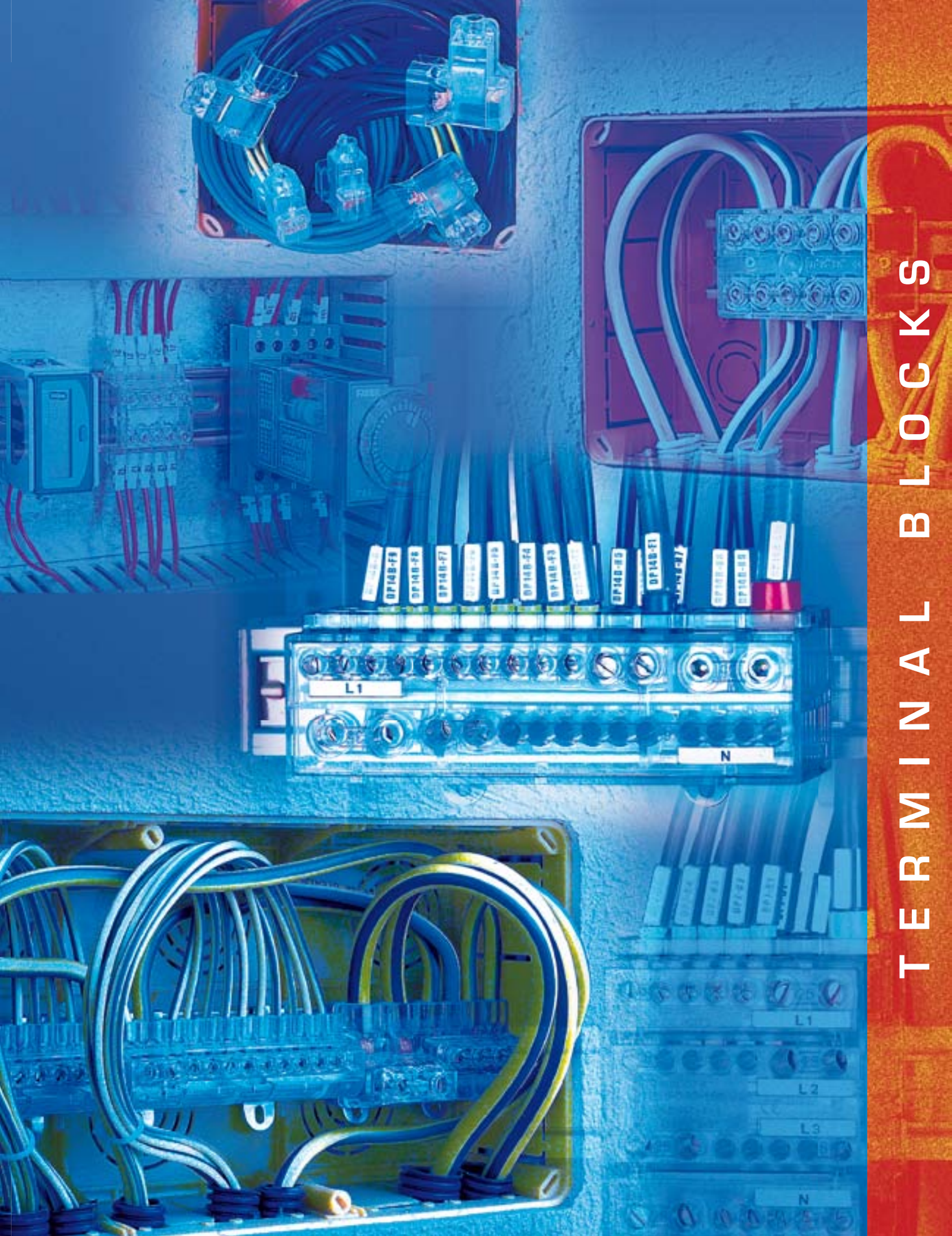
MTA-C

copper pin
aluminum barrels



The barrel of series MTA-C connectors are made from aluminum of a purity equal to or greater than 99,5%.
The barrel is friction welded to the pin thus achieving the best possible transition between the copper pin and aluminum barrel.
Barrels are capped and filled with grease so as to avoid oxidation of the aluminum.
Appropriate crimping tools and dies are shown in details on page 201, 203.

Conductor Size AWG	Ref.	Dimensions in. Øi	B	P	L	Quantity Box/Bag	Hydraulic Tools
6	**MTA 16-C**	0.22	0.31	1.18	3.23	*90/3*	HT 131-UC RHU 131-C B 131-UC
4	**MTA 25-C**	0.26	0.31	1.18	3.23	*90/3*	
2	**MTA 35-C**	0.31	0.31	1.18	3.23	*90/3*	
1/0	**MTA 50-C**	0.35	0.47	1.77	3.82	*60/3*	
2/0	**MTA 70-C**	0.43	0.47	1.77	3.82	*60/3*	
3/0	**MTA 95-C**	0.49	0.47	1.77	3.82	*60/3*	
250 MCM	**MTA 120-C**	0.54	0.55	2.17	4.92	*30/3*	
300 MCM	**MTA 150-C**	0.61	0.55	2.17	4.92	*30/3*	
350 MCM	**MTA 185-C**	0.67	0.55	2.17	4.92	*24/3*	
500 MCM	**MTA 240-C**	0.77	0.55	2.17	4.92	*24/3*	



TERMINAL BLOCKS

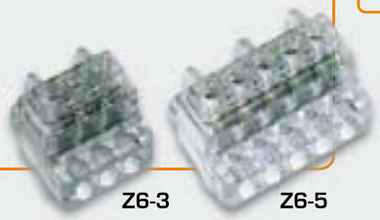
SINGLE POLE TERMINAL BLOCKS

type ZETApiù®

Z6

indirect clamping

nominal section 10 AWG



Z6-3 Z6-5

Z6-6 Z6-10

The "Z...D" version has been designed for mounting on DIN rails

3, 5, 6 and 10 way, single pole terminal blocks for conductor section 17 to 10 AWG.
Self contained and robust, they are quick and easy to install for both industrial and domestic use.
The indirect clamping of the "ZETApiù" terminal blocks guarantees a low and stable contact resistance.
Indirect clamping eliminates damage to the conductor strands.
The easy-entry receptacles also grant a fast and reliable insertion of the cable.

Ref.	No. of Ways	Connecting Capacity AWG	Nominal Voltage V	Maximum Operating Temperature °F	Insulation Specification	Self Extinguishing Specification	Dimensions L x W x H in.	Weight lbs.	*Quantity Box*
Z6-3	3	*(3 way)* 17÷10	450	185.0	IP 20	V-0 (UL 94)	0.91x0.91xh1.08	0.03	*30*
Z6-3D							0.91x1.57xh1.44	0.04	*10*
Z6-5	5	*(5 way)* 17÷10	450	185.0	IP 20	V-0 (UL 94)	1.38x0.91xh1.08	0.05	*20*
Z6-5D							1.38x1.57xh1.44	0.06	*10*
Z6-6	6	*(6 way)* 17÷10	450	185.0	IP 20	V-0 (UL 94)	0.91x1.69xh1.12	0.06	*15*
Z6-6D							0.91x2.09xh1.30	0.07	*10*
Z6-10	10	*(10 way)* 17÷10	450	185.0	IP 20	V-0 (UL 94)	1.38x1.69xh1.12	0.09	*10*
Z6-10D							1.38x2.09xh1.30	0.10	*15*

D= Version with clamp for DIN rail

Technical features:

- ***Self-extinguishing polycarbonate body***
- ***Tempered steel clamps***
- ***Electrolytically tin plated copper connection plate***

SINGLE POLE TERMINAL BLOCKS

type ZETApiù®

Z16

indirect clamping

nominal section 6 AWG

Z16-3 Z16-4

Z16-5N

Z16-8

Z16-12

3, 4, 5, 8 and 12 way, single pole terminal blocks.
Ideal for use as an equipotential bonding connector for both industrial and domestic use.

Ref.	No. of Ways	Connecting Capacity AWG	Nominal Voltage V	Maximum Operating Temperature °F	Insulation Specification	Self Extinguishing Specification	Dimensions L x W x H in.	Weight lbs	*Quantity Box*
Z16-3	3	6	450	185.0	IP 20	V-0 (UL 94)	1.50x1.23xh1.50	0.11	*20*
Z16-3D							1.50x1.97xh1.73	0.12	*15*
Z16-4	4	6	450	185.0	IP 20	V-0 (UL 94)	1.06x2.13xh1.46	0.11	*15*
Z16-4D							1.06x2.28xh1.69	0.12	*10*
Z16-5N	5	6	450	185.0	IP 20	V-0 (UL 94)	2.40x1.24xh1.50	0.14	*10*
Z16-5ND							2.40x1.97xh1.73	0.15	*4*
Z16-8	8 (2÷6)	*(2 way)* 6 + *(6 way)* 10	450	185.0	IP 20	V-0 (UL 94)	1.40x1.97xh1.44	0.11	*15*
Z16-8D							1.40x2.24xh1.65	0.12	*10*
Z16-12	12 (2÷10)	*(2 way)* 6 + *(10 way)* 10	450	185.0	IP 20	V-0 (UL 94)	4.11x1.28xh1.44	0.25	*8*
Z16-12D							4.11x1.97xh1.65	0.28	*5*

D= Version with clamp for DIN rail

type ZETApiù®

SINGLE POLE TERMINAL BLOCKS

indirect clamping

nominal section 2 AWG

Z35

Z35-3

Z35-4

Z35-6

Ref.	No. of Ways	Connecting Capacity AWG	Nominal Voltage V	Maximum Operating Temperature °F	Insulation Specification	Self Extinguishing Specification	Dimensions L x W x H in.	Weight lbs.	*Quantity Box*
Z35-3	3	2	450	185.0	IP 20	V-0 (UL 94)	2.09x1.91xh1.65	0.24	*10*
Z35-3D							2.09x1.97xh1.89	0.25	*5*
Z35-4	4	2	450	185.0	IP 20	V-0 (UL 94)	1.46x3.35xh1.65	0.28	*5*
Z35-4D							1.46x3.35xh1.89	0.29	*5*
Z35-6	6 (2+4)	*(2 way)* 2 + *(4 way)* 6	450	185.0	IP 20	V-0 (UL 94)	3.27x1.61xh1.69	0.29	*8*
Z35-6D							3.27x1.93xh2.05	0.31	*5*

D= Version with clamp for DIN rail

3, 4 and 6 way, single pole terminal blocks.
Ideal for use as an equipotential bonding connector for both industrial and domestic use.

type ZETApiù®

SINGLE POLE TERMINAL BLOCKS

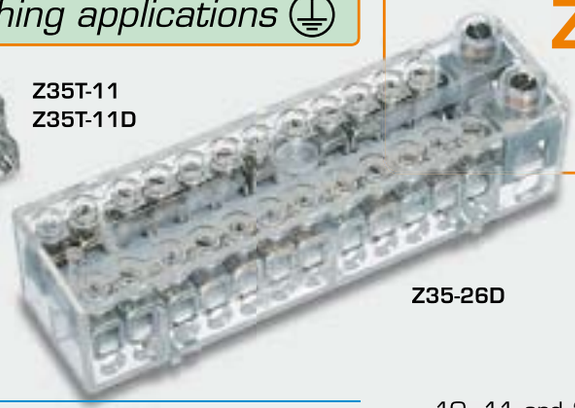
indirect clamping

for earthing applications ⏚

Z35
Z50

Z35T-11
Z35T-11D

Z50-10D



Z35-26D

Ref.	No. of Ways	Connecting Capacity AWG	Maximum Operating Temperature °F	Self Extinguishing Specification	Dimensions L x W x H in.	Weight lbs.	*Quantity*
Z35T-11	11 (1+10)	*(1 way)* 2 + *(10 way)* 10	185.0	V-0 (UL 94)	2.28x1.69xh1.65	0.15	*10*
Z35T-11D					2.28x2.09xh1.85	0.17	
Z35-26D	26 (2+24)	*(2 way)* 2 + *(24 way)* 8	185.0	V-0 (UL 94)	5.94x2.05xh1.89	0.84	*4*
Z50-10D	10 (2+8)	*(2 way)* 1/0 + *(8 way)* 4	185.0	V-0 (UL 94)	3.05x2.17xh1.93	0.71	*6*

D= Version with clamp for DIN rail

10, 11 and 26 way, single pole terminal blocks.
Ideal for use as an equipotential bonding connector for both industrial and domestic use.

CONNECTING CAPACITY OF TERMINAL BLOCKS

TERMINAL BLOCKS TYPE "ZETApiù"

TYPE	NOMINAL SECTION AWG	No. OF WAYS X NOMINAL SECTION AWG	CONNECTING CAPACITY OF EACH WAY* No. of Conductors x Section	MARKINGS
Z6-3 Z6-3D	10	3 x 10	1 x 10 R/F 1 x 12 R/F 1÷2 x 14 R/F 1÷2 x 16 R/F 1÷4 x 17 R/F	CE, 6 sqmm 450 V T 85°C
Z6-5 Z6-5D	10	5 x 10		
Z6-6 Z6-6D	10	6 x 10		CE, 6 sqmm 450 V T 85°C
Z6-10 Z6-10D	10	10 x 10		
Z16-3 Z16-3D	6	3 x 6	1 x 6 R/F 1 x 8 R/F 1÷2 x 10 R/F 1÷3 x 12 R/F 1÷4 x 14 R/F 1÷8 x 16 R/F	CE, 16 sqmm 450 V T 85°C
Z16-4 Z16-4D	6	4 x 6	1 x 6 F 1 x 8 F 1÷2 x 10 F 1÷3 x 12 F 1÷4 x 14 F 1÷8 x 16 F	CE, 16 sqmm 450 V T 85°C
Z16-5N Z16-5ND	6	5 x 6	1 x 6 R/F 1 x 8 R/F 1÷2 x 10 R/F 1÷3 x 12 R/F 1÷4 x 14 R/F 1÷8 x 16 R/F	CE, 16 sqmm 450 V T 85°C
Z16-8 Z16-8D	6 - 10	2 x 6	1 x 6 R/F 1 x 8 R/F 1÷2 x 10 R/F 1÷3 x 12 R/F 1÷4 x 14 R/F 1÷8 x 16 R/F	CE, 16÷6 sqmm 450 V T 85°C
		6 x 10	1 x 10 R/F 1 x 12 R/F 1÷2 x 14 R/F 1÷2 x 16 R/F 1÷4 x 17 R/F	
Z16-12 Z16-12D	6 - 10	2 x 6	1 x 6 F 1 x 8 F 1÷2 x 10 F 1÷3 x 12 F 1÷4 x 14 F	CE, 16÷6 sqmm 450 V T 85°C
		10 x 10	1 x 10 F 1 x 12 F 1÷2 x 14 F 1÷2 x 16 F 1÷4 x 17 F	

**Various cable sizes may be connected to the terminal block provided that the sum of cable sections is less than the nominal section.*

R = Rigid cable F = Flexible cable

CONNECTING CAPACITY OF TERMINAL BLOCKS

TERMINAL BLOCKS TYPE "ZETApiù"

TYPE	NOMINAL SECTION AWG	No. OF WAYS X NOMINAL SECTION AWG	CONNECTING CAPACITY OF EACH WAY* No. of Conductors x Section	MARKINGS
Z35-3 Z35-3D	2	3 x 2	1 x 2 R/F 1 x 4 R/F 1÷2 x 6 R/F 1÷3 x 8 R/F 1÷5 x 10 R/F	CE, 35 sqmm 450 V T 85°C
Z35-4 Z35-4D	2	4 x 2	1 x 2 F 1 x 4 F 1÷2 x 6 F 1÷3 x 8 F 1÷6 x 10 F	CE, 35 sqmm 450 V T 85°C
Z35-6 Z35-6D	2 - 6	2 x 2	1 x 2 R/F 1 x 4 R/F 1÷2 x 6 R/F 1÷3 x 8 R/F 1÷6 x 10 F	CE, 35÷16 sqmm 450 V T 85°C, LR, RINA
		4 x 6	1 x 6 R/F 1 x 8 R/F 1÷2 x 10 R/F 1÷3 x 12 R/F 1÷5 x 14 F	
Z35T-11 Z35T-11D	2 - 10	1 x 2	1 x 2 R/F 1 x 4 R/F 1 x 6 R/F 1 x 8 R/F	CE, 35÷6 sqmm T 85°C
		10 x 10	1 x 10 R/F 1 x 12 R/F 1÷2 x 14 R/F 1÷2 x 16 R/F 1÷4 x 17 R/F	
Z35-26D	2 - 8	2 x 2	1 x 2 R/F 1 x 4 R/F 1÷2 x 6 R/F 1÷3 x 8 R/F 1÷6 x 10 R/F	CE, 35÷10 sqmm T 85°C, LR, RINA
		24 x 8	1 x 8 R/F 1 x 10 R/F 1÷2 x 12 R/F 1÷4 x 14 R/F	
Z50-10D	1/0 - 4	2 x 1/0	1 x 1/0 R/F 1 x 2 R/F 1÷2 x 4 R/F 1÷4 x 6 R/F	CE, ** 50÷25 sqmm T 85°C
		8 x 4	1 x 4 R/F 1÷2 x 6 R/F 1÷3 x 8 R/F 1÷6 x 10 R/F 1÷9 x 12 R/F	

*Various cable sizes may be connected to the terminal block provided that the sum of cable sections is less than the nominal section.

R = Rigid cable F = Flexible cable

MARKINGS:

CE

Istituto italiano del Marchio di Qualità type approval

Lloyd's Register of Shipping type approval

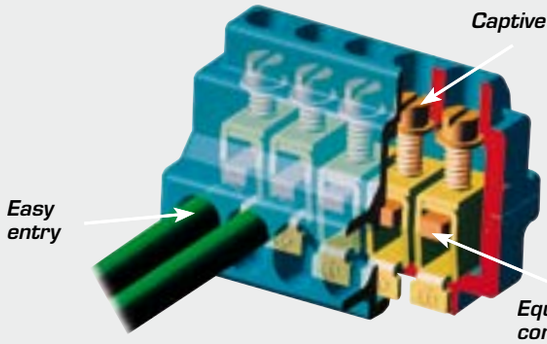
Registro Italiano Navale type approval

** EN 60947-7-1: 2002

CONFORM TO:

Directives 2006/95/CE

EN 60998-1: 2004 and
EN 60998-2-1: 2004 Norms



POWER DISTRIBUTION BLOCK

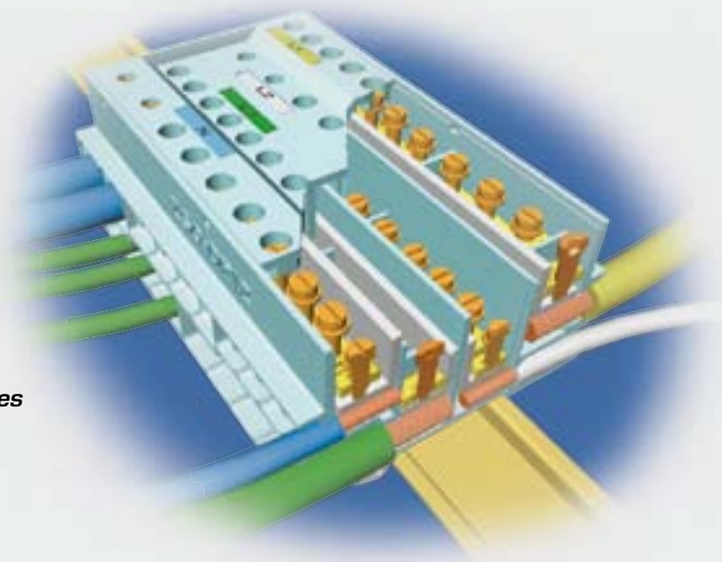
type ZETAblock®

Z-DP

indirect clamping

100, 125 and 160A, 2–4 pole distribution blocks with 7, 14 and 12 ways per pole respectively.
Accepting a wide cable CSA range (17 - 1/0 AWG) and of compact size, ZETAblocks are ideal for control cabinets and distribution panels.
The lateral arrangement of terminals on upper and lower faces (Z35-DP14B one face only), simplifies connection and promotes tidy, homogeneous cable routing to assist subsequent wiring operations.
Easy entry apertures provide quick, effective cable insertion while the indirect clamping feature eliminates damage to cable strands and assures a low, stable contact resistance.

Ref.	No. of poles	No. of Ways per pole	Nominal CSA for each pole AWG	Maximum operating voltage Ui	Impulse voltage Uimp	Maximum operating current In	Allowable short duration fault current Icw	Maximum allowed peak fault current Ipk	Self Extinguishing Specification	Dimensions L x W x H in.	Weight lbs.	Qty
Z 25-DP7-100	4	7 (2+5)	*(2 way)* 4 + *(5 way)* 10	800 V	8 kV	100 A	3 kA	18 kA	V-0 (UL 94)	2.75x3.31xh1.77	0.13	*2*
Z 35-DP14-125	4	14 (2+2+10)	*(2 way)* 2 + *(2 way)* 6 + *(10 way)* 10	800 V	8 kV	125 A	4,2 kA	18 kA	V-0 (UL 94)	5.39x3.27xh1.81	1.54	*1*
Z 35-DP14B-125	2	14 (2+2+10)	*(2 way)* 2 + *(2 way)* 6 + *(10 way)* 10	800 V	8 kV	125 A	4,2 kA	18 kA	V-0 (UL 94)	5.39x1.73xh1.81	0.79	*2*
Z 50-DP12-160	4	12 (2+4+6)	*(2 way)* 1/0 + *(4 way)* 4 + *(6 way)* 6	800 V	8 kV	160 A	6 kA	18 kA	V-0 (UL 94)	5.91x3.31xh1.89	1.72	*1*



Technical features:

- ***Self extinguishing antishock polycarbonate body***
- ***Tempered steel captive clamping screws and plates***
- ***Electrolyticaly tin plated copper connection plate***

type ZETA*block*®

POWER DISTRIBUTION BLOCK

indirect clamping

Z-DP

CONNECTING CAPACITY OF POWER DISTRIBUTION BLOCK

POWER DISTRIBUTION BLOCK TYPE "ZETA*block*"

TYPE	NOMINAL SECTION AWG	No. OF WAYS x NOMINAL SECTION AWG	CONNECTING CAPACITY OF EACH WAY No. of Conductors x Section	MARKINGS
Z25-DP7-100	4 - 10	2 x 4	1 x 4 F 1 x 6 F 1÷2 x 8 F	CE 25÷6 sqmm
		5 x 10	1 x 10 F 1 x 12 F 1÷2 x 14 F 1÷2 x 16 F 1÷4 x 17 F	
Z35-DP14-125 Z35-DP14B-125	2 - 6 - 10	2 x 2	1 x 2 F 1 x 4 F 1÷2 x 6 F 1÷3 x 8 F	CE 35÷16÷6 sqmm
		2 x 6	1 x 6 F 1 x 8 F 1÷2 x 10 F 1÷3 x 12 F 1÷4 x 14 F	
		10 x 10	1 x 10 F 1 x 12 F 1÷2 x 14 F 1÷2 x 16 F 1÷4 x 17 F	
Z50-DP12-160	1/0 - 4 - 6	2 x 1/0	1 x 1/0 F 1 x 2 F 1÷2 x 4 F	CE 50÷25÷16 sqmm
		4 x 4	1 x 4 F 1 x 6 F 1÷2 x 8 F	
		6 x 6	1 x 6 F 1 x 8 F 1÷2 x 10 F	

F = Flexible cable

MARKINGS:

CE

Istituto italiano del Marchio di Qualità type approval

CONFORM TO:

Directives 2006/95/CE

EN 60947-7-1: 2002 Norms

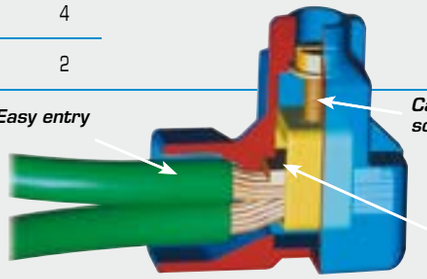
ONE WAY "ZETAmini" TYPE TERMINAL BLOCKS

Z-1

indirect clamping

type ZETAmini®

Ref.	Connecting Capacity AWG	Nominal Voltage V	Maximum Operating Temperature °F	Insulation Specification	Self Extinguishing Specification	Dimensions L x W x H in.	Weight lbs	*Quantity Box/Bag*
Z2.5-1	22	450	185.0	IP 20	V-0 (UL 94)	0.02x0.04xh0.05	0.01	*500/25*
Z6-1	10					0.03x0.06xh0.06	0.01	*250/25*
Z10-1	8					0.03x0.07xh0.07	0.02	*100/10*
Z16-1	6					0.04x0.07xh0.08	0.03	*100/10*
Z25-1	4					0.05x0.09xh0.10	0.06	*50/10*
Z35-1	2					0.06x0.10xh0.11	0.08	*40/10*



Technical features:

- ***Self-extinguishing polycarbonate body***
- ***Electrolytically zinc plated, tempered steel clamp and screw***
- ***Electrolytically tin plated steel connection plate***

One way, single pole terminal blocks for conductors sections from AWG 22 to 2. Self contained and robust, they are ideal for the fast and safe installation for industrial and domestic applications.

The indirect clamping of the "ZETAmini" terminal blocks guarantees a low and stable contact resistance.

The easy-entry receptacle also grants a fast and reliable insertion of the cable.

CONNECTING CAPACITY OF TERMINAL BLOCKS TYPE "ZETAmini"

TERMINAL BLOCKS TYPE "ZETAmini"

TYPE	NOMINAL SECTION	CONNECTING CAPACITY * No. of Conductors x Section		MARKING
Z2.5-1	22	2 x 22 *R/F* 2÷3 x 16 *R/F* 2÷5 x 17 *R/F*	2÷6 x 18 *R/F* 2÷10 x 20 *R/F* 2÷18 x Ø 21÷19 AWG communication type wire	CE, 2.5 sqmm 450 V T 85°C IP 20
Z6-1	10	2 x 10 *R/F* 2÷3 x 12 *R/F* 2÷4 x 22 *R/F* 2÷6 x 16 *R/F* 2÷6 x 17 *R/F*	2÷10 x 18 *R/F* 2÷12 x 20 *R/F* (1 x 10 *F*) + (4 x 16 *F*) (1 x 10 *F*) + (2 x 22 *F*)	CE, 6 sqmm 450 V T 85°C IP 20
Z10-1	8	2 x 8 *R/F* 2÷3 x 10 *R/F* 2÷5 x 12 *R/F* 2÷8 x 22 *R/F*	2÷12 x 16 *R/F* 2÷20 x 17 *R/F* 2÷25 x 18 *R/F*	CE, 10 sqmm 450 V T 85°C IP 20
		(1 x 10 *F*) + (1 x 12 *F*) + (2 x 22 *F*) + (3 x 16 *F*)		
Z16-1	6	2 x 6 *R/F* 2÷3 x 8 *R/F* 2÷5 x 10 *R/F*	2÷8 x 12 *R/F* 2÷12 x 22 *R/F* 2÷18 x 16 *R/F*	CE, 16 sqmm 450 V T 85°C IP 20
Z25-1	4	2 x 4 *R/F* 2÷3 x 6 *R/F* 2÷4 x 8 *R/F*	2÷8 x 10 *R/F* 2÷11 x 12 *R/F* 4÷16 x 22 *R/F*	CE, 25 sqmm 450 V T 85°C IP 20
Z35-1	2	2 x 2 *R/F* 2÷3 x 4 *R/F* 2÷4 x 6 *R/F* 2÷7 x 8 *R/F*	2÷11 x 10 *R/F* 4÷17 x 12 *R/F* 5÷28 x 22 *R/F*	CE, 35 sqmm 450 V T 85°C IP 20

**Various cable sizes may be connected to the terminal block provided that the sum of cable sections is less than twice the nominal section.*

R = Rigid cable F = Flexible cable

MARKINGS:

- *Lloyd's Register of Shipping type approval*
- *Registro Italiano Navale type approval*
- CE
- *Istituto italiano del Marchio di Qualità type approval*

CONFORM TO:

Directives 2006/95/CE

EN 60998-1: 2004 and EN 60998-2-1: 2004 Norms

CABLE GLANDS AND ACCESSORIES

MAXIblock® CABLE GLANDS

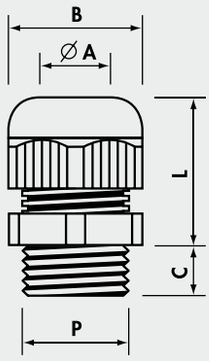
1900

Polyamide PA6.6

File no. E220310

File no. E220310

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey,
RAL 9005 black, RAL 7001 dark grey



MAXIblock® *standard*

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	*Quantity*
1900.M12	M12X1.5	12.5	3.5- 7	15	8	18-22	100
1900.M16	M16X1.5	16.5	5 -10	19	8	22-27	100
1900.M20	M20X1.5	20.5	7 -13	25	9	24-30	100
1900.M25	M25X1.5	25.5	10 -17	30	10	28-39	50
1900.M32	M32X1.5	32.5	13 -21	36	10	33-44	25
1900.M40	M40X1.5	40.5	19 -28	46	10	36-45	15
1900.M50	M50X1.5	50.5	27 -35	55	12	43-52	10
1900.M63	M63X1.5	63.5	34 -45	66	12	45-55	5

Add to Ref: N for Black, G for Dark Grey

MAXIblock® *reduced cable entry*

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	*Quantity*
1910.M12	M12X1.5	12.5	**2- 5**	15	8	18-22	100
1910.M16	M16X1.5	16.5	**3- 7**	19	8	22-27	100
1910.M20	M20X1.5	20.5	**5-10**	25	9	24-30	100
1910.M25	M25X1.5	25.5	**7-13**	30	10	28-39	50
1910.M32	M32X1.5	32.5	**8-14**	36	10	33-44	25
1910.M40	M40X1.5	40.5	**15-23**	46	10	36-45	15
1910.M50	M50X1.5	50.5	**21-29**	55	12	43-52	10
1910.M63	M63X1.5	63.5	**27-39**	66	12	45-55	5

Add to Ref: N for Black, G for Dark Grey

MAXIblock® *extended thread*

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	*Quantity*
1901.M12	M12X1.5	12.5	3.5- 7	15	**15**	18-22	100
1901.M16	M16X1.5	16.5	5 -10	19	**15**	22-27	100
1901.M20	M20X1.5	20.5	7 -13	25	**15**	24-30	50
1901.M25	M25X1.5	25.5	10 -17	30	**15**	30-41	50
1901.M32	M32X1.5	32.5	13 -21	36	**15**	33-44	25
1901.M40	M40X1.5	40.5	19 -28	46	**18**	36-45	15
1901.M50	M50X1.5	50.5	27 -35	55	**18**	43-52	10
1901.M63	M63X1.5	63.5	34 -45	66	**18**	45-55	5

Add to Ref: N for Black, G for Dark Grey

Technical data pages 221 to 223

MAXIblock® CABLE GLANDS

Polyamide PA6.6

1900

MAXIblock® *standard*

Pg thread DIN 40 430

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1900.07	Pg 7	12.5	3.5- 7	15	8	18-22	100
1900.09	Pg 9	15.5	5 - 8	19	8	22-26	100
1900.11	Pg11	19	5 -10	22	8	23-28	100
1900.13	Pg13.5	20.5	7 -12	24	9	24-29	100
1900.16	Pg16	22.5	10 -14	27	10	26-31	50
1900.21	Pg21	29	13 -18	33	12	30-35	50
1900.29	Pg29	37	18 -25	42	12	33-39	25
1900.36	Pg36	47	20 -32	53	14	42-49	10
1900.42	Pg42	54	28 -38	60	14	42-50	5
1900.48	Pg48	60	37 -45	66	15	45-55	5

Add to Ref: N for Black, G for Dark Grey

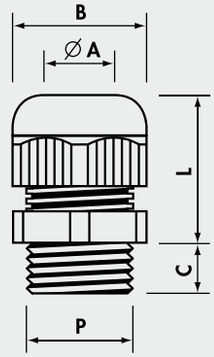
Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey.
RAL 9005 black, RAL 7001 dark grey

MAXIblock® *reduced cable entry*

Pg thread DIN 40 430

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1910.07	Pg 7	12.5	**2- 5**	15	8	18-22	100
1910.09	Pg 9	15.5	**2- 6**	19	8	22-26	100
1910.11	Pg11	19	**4- 7**	22	8	23-28	100
1910.13	Pg13.5	20.5	**5-10**	24	9	24-29	100
1910.16	Pg16	22.5	**6-12**	27	10	26-31	50
1910.21	Pg21	29	**9-15**	33	12	30-35	50
1910.29	Pg29	37	**12-20**	42	12	33-39	25
1910.36	Pg36	47	**18-26**	53	14	42-49	10
1910.42	Pg42	54	**25-31**	60	14	42-50	5
1910.48	Pg48	60	**27-39**	66	15	45-55	5

Add to Ref: N for Black



MAXIblock® *extended thread*

Pg thread DIN 40 430

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1901.07	Pg 7	12.5	3.5- 7	15	**15**	18-22	100
1901.09	Pg 9	15.5	5 - 8	19	**15**	22-26	100
1901.11	Pg11	19	5 -10	22	**15**	23-28	100
1901.13	Pg13.5	20.5	7 -12	24	**15**	24-29	100
1901.16	Pg16	22.5	10 -14	27	**15**	26-31	50
1901.21	Pg21	29	13 -18	33	**15**	30-35	50
1901.29	Pg29	37	18 -25	42	**15**	33-39	25
1901.36	Pg36	47	20 -32	53	**18**	42-49	10
1901.42	Pg42	54	28 -38	60	**18**	42-50	5
1901.48	Pg48	60	37 -45	66	**18**	45-55	5

Add to Ref: N for Black

Technical data pages 221 to 223

MAXIblock® CABLE GLANDS

Polyamide PA6.6

1900/X

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey,

MAXIblock® standard factory fitted with locknuts with collar

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

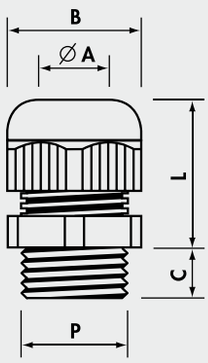
Ref.	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1900.M12/X	M12X1.5	12.5	3.5- 7	15	8	18-22	100/10
1900.M16/X	M16X1.5	16.5	5 -10	19	8	22-27	100/10
1900.M20/X	M20X1.5	20.5	7 -13	25	9	24-30	50/10
1900.M25/X	M25X1.5	25.5	10 -17	30	10	28-39	30/10
1900.M32/X	M32X1.5	32.5	13 -21	36	10	33-44	20/10
1900.M40/X	M40X1.5	40.5	19 -28	46	10	36-45	10/5
1900.M50/X	M50X1.5	50.5	27 -35	55	12	43-52	10/5
1900.M63/X	M63X1.5	63.5	34 -45	66	12	45-55	5/5

Pg thread DIN 40 430

Ref.	P	Fixing Hole (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity Box/Bag
1900.07/X	Pg 7	12.5	3.5- 7	15	8	18-22	100/10
1900.09/X	Pg 9	15.5	5 - 8	19	8	22-26	100/10
1900.11/X	Pg11	19	5 -10	22	8	23-28	100/10
1900.13/X	Pg13.5	20.5	7 -12	24	9	24-29	50/10
1900.16/X	Pg16	22.5	10 -14	27	10	26-31	30/10
1900.21/X	Pg21	29	13 -18	33	12	30-35	20/10
1900.29/X	Pg29	37	18 -25	42	12	33-39	20/10
1900.36/X	Pg36	47	20 -32	53	14	42-49	10/5
1900.42/X	Pg42	54	28 -38	60	14	42-50	5/5
1900.48/X	Pg48	60	37 -45	66	15	45-55	5/5

1900

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey,
RAL 9005 black



MAXIblock® standard

BSP thread ISO 228/1

Ref. Grey	P Light	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
1900.14	G1/4"	13.5	3- 6.5	15	8	18-22	100
1900.38	G3/8"	17	4- 8	19	8	22-26	100
1900.12	G1/2"	21.5	7-12	24	10	24-29	100
1900.34	G3/4"	27	13-18	33	12	30-35	50

Add to Ref: N for Black

MAXIblock® specials

Pg thread DIN 40 430

Ref. Grey	P Light	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
○ ***1920.09**	Pg 9	15.5	5- 8	19	8	22-26	100
○ ***1921.09**	Pg 9	15.5	5- 8	19	15	22-26	100
△ **1902.13N**	Pg13.5	20.5	7-12	24	10	24-29	100
○ **1920.36**	Pg36	47	20-32	53	14	42-49	25
○ **1921.36**	Pg36	47	20-32	53	18	42-49	25

* Add to Ref: N for Black △ Add to Ref: N for Black ○ PVC blind sealing ring

spiralblock® CABLE GLANDS

Polyamide PA6.6

1500

File no. E220310

File no. E220310

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: NEOPRENE® 50 sh A
Protection: IP 68
Colour: RAL 7035 light grey,
RAL 9005 black

spiralblock® standard

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L (mm)	Quantity
1500.M12	M12X1.5	12.5	3.5- 7	15	8	57	100
1500.M16	M16X1.5	16.5	5 -10	19	8	79	50
1500.M20	M20X1.5	20.5	7 -13	25	9	90	25
1500.M25	M25X1.5	25.5	10 -17	30	10	120	20
1500.M32	M32X1.5	32.5	13 -21	36	10	140	10

Add to Ref: N for Black

spiralblock® standard

Pg thread DIN 40 430

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L (mm)	Quantity
1500.07	Pg 7	12.5	3.5- 7	15	8	57	100
1500.09	Pg 9	15.5	5 - 8	19	8	68	100
1500.11	Pg11	19	5 -10	22	8	80	50
1500.13	Pg13.5	20.5	7 -12	24	10	90	50
1500.16	Pg16	22.5	10 -14	27	10	100	25
1500.21	Pg21	29	13 -18	33	12	112	20

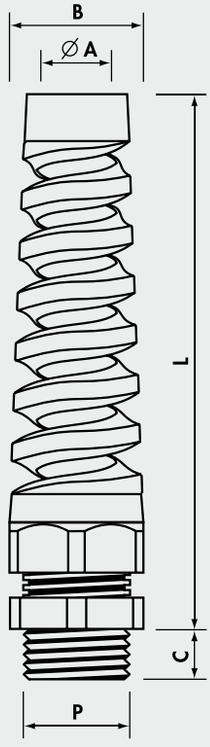
Add to Ref: N for Black

spiralblock® standard

BSP thread ISO 228/1

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L (mm)	Quantity
1500.14	G1/4"	13.5	3- 6.5	15	8	57	100
1500.38	G3/8"	17	4- 8	19	9	68	100
1500.12	G1/2"	21.5	7-12	24	10	90	50
1500.34	G3/4"	27	13-18	33	12	112	20

Add to Ref: N for Black



Technical data pages 221 to 223

MAXIblock® ATEX CABLE GLANDS

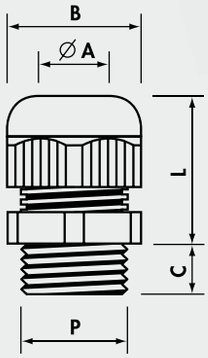
4900

Polyamide PA6.6

CE 0051 Ex II 2 G D

Certificate No IMQ ATEX 028X

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Safety level: Ex e IIC/Ex tb IIIC
according to
EN 60079-0 : 2009
EN 60079-7 : 2007
EN 60079-31 : 2009
Areas of utilisation: 1 & 2, 21 & 22
Temperature range:
–20°C to +75°C (continuous)
Sealing ring: NEOPRENE®
Protection: IP 65
Colour: RAL 7035 light grey



Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
4900.M12	M12X1,5	12,5	3,5- 6,5	15	8	18-22	100
4900.M16	M16X1,5	16,5	6,5-10	19	8	22-27	100
4900.M20	M20X1,5	20,5	9 -13	25	9	24-30	100
4900.M25	M25X1,5	25,5	11 -17	30	10	28-39	50
4900.M32	M32X1,5	32,5	16 -21	36	10	33-44	25
4900.M40	M40X1,5	40,5	21 -28	46	10	36-45	15
4900.M50	M50X1,5	50,5	27 -35	55	12	43-52	10
4900.M63	M63X1,5	63,5	35 -42	66	12	45-55	5

extended thread

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
4901.M12	M12X1,5	12,5	3,5- 6,5	15	**15**	18-22	100
4901.M16	M16X1,5	16,5	6,5-10	19	**15**	22-27	100
4901.M20	M20X1,5	20,5	9 -13	25	**15**	24-30	50
4901.M25	M25X1,5	25,5	11 -17	30	**15**	30-41	50
4901.M32	M32X1,5	32,5	16 -21	36	**15**	33-44	25
4901.M40	M40X1,5	40,5	21 -28	46	**18**	36-45	15
4901.M50	M50X1,5	50,5	27 -35	55	**18**	43-52	10
4901.M63	M63X1,5	63,5	35 -42	66	**18**	45-55	5

Pg thread DIN 40 430

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
4900.07	Pg 7	12,5	3,5- 6,5	15	8	18-22	100
4900.09	Pg 9	15,5	6,5- 8	19	8	22-26	100
4900.11	Pg11	19	8 -10	22	8	23-28	100
4900.13	Pg13,5	20,5	9 -12	24	9	24-29	100
4900.16	Pg16	22,5	10 -14	27	10	26-31	50
4900.21	Pg21	29	14 -18	33	12	30-35	50
4900.29	Pg29	37	18 -22	42	12	33-39	25
4900.36	Pg36	47	22 -32	53	14	42-49	10
4900.42	Pg42	54	28 -38	60	14	42-50	5
4900.48	Pg48	60	38 -45	66	15	45-55	5

extended thread

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L min-max (mm)	Quantity
4901.07	Pg 7	12,5	3,5- 6,5	15	**15**	18-22	100
4901.09	Pg 9	15,5	6,5- 8	19	**15**	22-26	100
4901.11	Pg11	19	8 -10	22	**15**	23-28	100
4901.13	Pg13,5	20,5	9 -12	24	**15**	24-29	100
4901.16	Pg16	22,5	10 -14	27	**15**	26-31	50
4901.21	Pg21	29	14 -18	33	**15**	30-35	50
4901.29	Pg29	37	18 -22	42	**15**	33-39	25
4901.36	Pg36	47	22 -32	53	**18**	42-49	10
4901.42	Pg42	54	28 -38	60	**18**	42-50	5
4901.48	Pg48	60	38 -45	66	**18**	45-55	5

Technical data pages 221 to 223

COMPRESSION CABLE GLANDS

Polyamide PA6

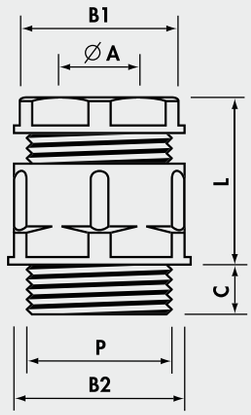
1700
1400

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner (mm)	B2 Spanner (mm)	C (mm)	L min-max (mm)	*Quantity* *Box/Bag*
1709	Pg 7	12.5	5.5- 7	15	16	8	16-20	300/100
* **1700**	Pg 9	15.5	6.5- 8.5	17	20	8	19-22	200/100
* **1701**	Pg11	19	8 -10	19	22	8	21-25	100/100
* **1702**	Pg13.5	20.5	8 -11	21	24	9	22-26	100/100
1703	Pg16	22.5	11 -14	23	27	10	24-33	50/50
1704	Pg21	29	14.5-18	30	33	11	25-32	50/25
1705	Pg29	37	19 -26	40	42	11	27-32	20/10
1706	Pg36	47	30 -34	50	53	14	33-42	10/10
1707	Pg42	54	30 -38	55	60	13	37-48	10/5
1708	Pg48	60	38 -44	60	65	14.5	37-48	5/5

***Add to Ref: N for Black**

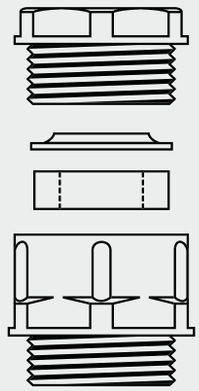
Material: POLYAMIDE PA6
self-extinguishing class V0 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Sealing ring: PVC 50 sh A
Protection: IP 54
Colour: RAL 7035 light grey,
RAL 9005 black



BSP thread ISO 228/1

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner (mm)	B2 Spanner (mm)	C (mm)	L min-max (mm)	*Quantity* *Box/Bag*
1400	G1/4"	13.5	5.5- 7	15	16	8	16-20	300/100
* **1401**	G3/8"	17	6.5- 8.5	17	20	8	19-22	200/100
* **1401B**	G3/8"	17	8 -10	19	22	8	18-24	100/100
* **1401C**	G3/8"	17	10 -12	22	24	9	22-26	100/100
* **1402**	G1/2"	21.5	8 -11	21	24	9	22-26	100/100
1403	G5/8"	23.5	11 -14	23	27	10	24-33	50/50
1404	G3/4"	27	14.5-18	30	33	11	25-32	50/25
1405	G1"	34	17 -22	34	38	11.5	27-35	20/10
1407	G1"1/2	48	30 -34	50	53	14	33-42	10/10
1408	G2"	60	38 -44	60	65	14.5	37-48	5/5

***Add to Ref: N for Black**



Metric thread M 1.5 pitch CEI EN 60423

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner (mm)	B2 Spanner (mm)	C (mm)	L min-max (mm)	*Quantity*
1730M20	M20X1.5	20.5	8-11	21	24	9	22-26	100

Add to Ref: N for Black

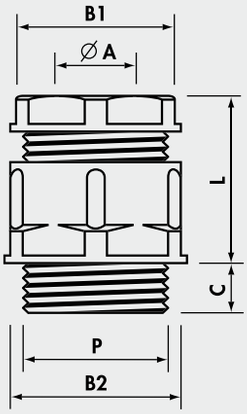
Technical data pages 221 to 223

COMPRESSION CABLE GLANDS

1700T

Polyamide PA6

Material: POLYAMIDE PA6
self-extinguishing class V0 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Protection: IP 54
Colour: RAL 7035 light grey,
RAL 9005 black



Compression cable glands

special Internal blanking disc: PVC 50 sh

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner (mm)	B2 Spanner (mm)	C (mm)	L min-max (mm)	*Quantity Box/Bag*
* **1700T**	Pg 9	15,5	6,5- 8,5	17	20	8	19-22	200/100
* **1701T**	Pg11	19	8 -10	19	22	8	21-25	100/100
* **1702T**	Pg13,5	20,5	8 -11	21	24	9	22-26	100/100

*Add to Ref: N for Black

Compression cable gland - reduced cable entry

Sealing ring: CHLOROPRENE, concentric, multi-sector

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref Light Grey	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner (mm)	B2 Spanner (mm)	C (mm)	L min-max (mm)	*Quantity*
1702CONC	Pg13.5	20.5	**5.5-13**	21	24	9	22-26	100

Add to Ref: N for Black

POLYSTYRENE CABLE GLANDS

Polystyrene PS

1700P

Cable Glands

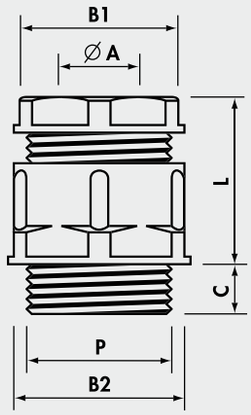
Sealing ring: PVC 50 sh A - Protection: IP 54

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Light Grey	P	Fixing Hole ∅ (mm)	∅ A min-max (mm)	B1 Spanner (mm)	B2 Spanner (mm)	C (mm)	L min-max (mm)	*Quantity* *Box/Bag*
1700P	Pg9	15.5	7 - 8.5	17	20	8	19-22	200/100
* **1701P**	Pg11	19	8 -10	19	22	8	21-25	100/100
* **1702P**	Pg13.5	20.5	8 -11	21	24	9	22-26	100/100
1703P	Pg16	22.5	11 -14	24	27	10	24-33	50/50
1704P	Pg21	29	14.5-18	30	33	11	25-32	50/25

*Add to Ref: N for Black

Material: POLYSTYRENE PS
Temperature range:
–20°C to +60°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black



MAXIbrass® CABLE GLANDS

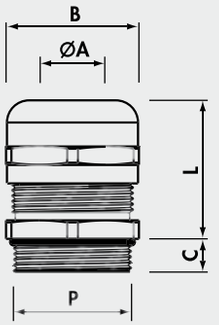
2900

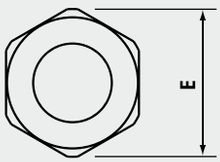
Nickel Plated Brass

File no. E220310

File no. E220310

Material:
NICKEL PLATED BRASS
(CuZn 40 Pb 3)
Sealing-ring: NEOPRENE®
Cable grip insert:
POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A
(factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)





MAXIbrass® standard

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2900.M12N	M12X1.5	12.5	3 - 7	16	18	6.5	16-20	100
2900.M16N	M16X1.5	16.5	4.5-10	20	23	7.0	20-25	100
2900.M20N	M20X1.5	20.5	7 -13	24	27	8.0	20-27	50
2900.M25N	M25X1.5	25.5	10 -17	29	32	8.0	24-30	50
2900.M32N	M32X1.5	32.5	11 -21	36	40	9.0	27-34	25
2900.M40N	M40X1.5	40.5	19 -28	45	50	9.0	34-42	10
2900.M50N	M50X1.5	50.5	26 -35	54	60	10.0	35-43	8
2900.M63N	M63X1.5	63.5	34 -45	67	74	15.0	40-52	5

MAXIbrass® reduced cable entry

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2910.M12N	M12X1.5	12.5	**1 - 5**	16	18	6.5	16-20	100
2910.M16N	M16X1.5	16.5	**2.5- 7**	20	23	7.0	20-25	100
2910.M20N	M20X1.5	20.5	**5 -10**	24	27	8.0	20-27	50
2910.M25N	M25X1.5	25.5	**6 -13**	29	32	8.0	24-30	50
2910.M32N	M32X1.5	32.5	**7 -14**	36	40	9.0	27-34	25
2910.M40N	M40X1.5	40.5	**13 -23**	45	50	9.0	34-42	10
2910.M50N	M50X1.5	50.5	**20 -29**	54	60	10.0	35-43	8
2910.M63N	M63X1.5	63.5	**27 -39**	67	74	15.0	40-52	5

Technical data pages 221 to 223

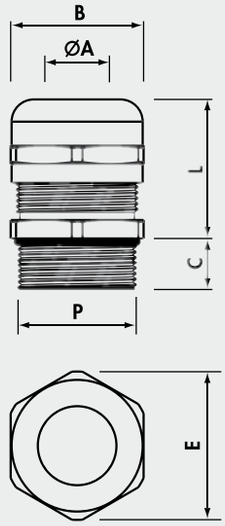
File no. E220310

File no. E220310

MAXIbrass® extended thread

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

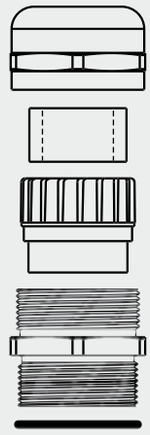
Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2901.M12N	M12X1.5	12.5	3 - 7	16	18	**12**	16-20	100
2901.M16N	M16X1.5	16.5	4.5-10	20	23	**12**	20-25	100
2901.M20N	M20X1.5	20.5	7 -13	24	27	**12**	20-27	50
2901.M25N	M25X1.5	25.5	10 -17	29	32	**12**	24-30	50
2901.M32N	M32X1.5	32.5	11 -21	36	40	**15**	27-34	25
2901.M40N	M40X1.5	40.5	19 -28	45	50	**15**	34-42	10
2901.M50N	M50X1.5	50.5	26 -35	54	60	**15**	35-43	8



MAXIbrass® extended thread and reduced cable entry

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2911.M12N	M12X1.5	12.5	**1 - 5**	16	18	**12**	16-20	100
2911.M16N	M16X1.5	16.5	**2.5- 7**	20	23	**12**	20-25	100
2911.M20N	M20X1.5	20.5	**5 -10**	24	27	**12**	20-27	50
2911.M25N	M25X1.5	25.5	**6 -13**	29	32	**12**	24-30	50
2911.M32N	M32X1.5	32.5	**7 -14**	36	40	**15**	27-34	25
2911.M40N	M40X1.5	40.5	**13 -23**	45	50	**15**	34-42	10
2911.M50N	M50X1.5	50.5	**20 -29**	54	60	**15**	35-43	8



Technical data pages 221 to 223

MAXIbrass® CABLE GLANDS

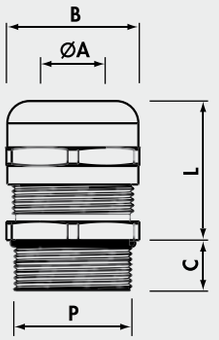
2900

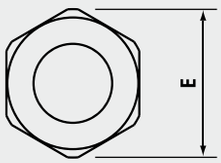
Nickel Plated Brass

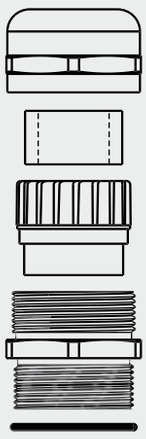
File no. E220310

File no. E220310

Material:
NICKEL PLATED BRASS
(CuZn 40 Pb 3)
Sealing-ring: NEOPRENE®
Cable grip insert:
POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A
(factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)







MAXIbrass® *standard*

Pg thread DIN 40 430

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	*Quantity*
2900.07N	Pg 7	12.5	3 - 7	16	18	5.0	16-20	100
2900.09N	Pg 9	15.5	4 - 8	17	19	6.0	17-23	100
2900.11N	Pg11	19.0	4.5-10	20	23	6.0	20-25	100
2900.13N	Pg13.5	20.5	5 -12	22	25	6.5	20-26	50
2900.16N	Pg16	22.5	7 -13	24	27	6.5	20-27	50
2900.21N	Pg21	29.0	10 -17	30	33	7.0	24-30	50
2900.29N	Pg29	37.0	17 -25	40	45	8.0	30-37	25
2900.36N	Pg36	47.0	20 -32	50	55	8.0	38-48	10
2900.42N	Pg42	54.0	28 -38	57	63	10.0	39-48	5
2900.48N	Pg48	60.0	34 -45	67	74	15.0	40-52	5

MAXIbrass® *reduced cable entry*

Pg thread DIN 40 430

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	*Quantity*
2910.07N	Pg 7	12.5	**1 - 5**	16	18	5.0	16-20	100
2910.09N	Pg 9	15.5	**2 - 6**	17	19	6.0	17-23	100
2910.11N	Pg11	19.0	**2.5- 7**	20	23	6.0	20-25	100
2910.13N	Pg13.5	20.5	**4 -10**	22	25	6.5	20-26	50
2910.16N	Pg16	22.5	**5 -10**	24	27	6.5	20-27	50
2910.21N	Pg21	29.0	**6 -13**	30	33	7.0	24-30	50
2910.29N	Pg29	37.0	**11 -20**	40	45	8.0	30-37	25
2910.36N	Pg36	47.0	**18 -26**	50	55	8.0	38-48	10
2910.42N	Pg42	54.0	**24 -31**	57	63	10.0	39-48	5
2910.48N	Pg48	60.0	**27 -39**	67	74	15.0	40-52	5

Technical data pages 221 to 223

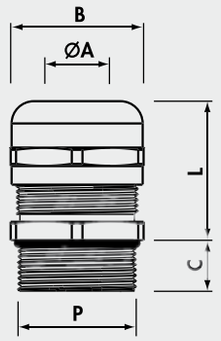
File no. E220310

File no. E220310

MAXIbrass® extended thread

Pg thread DIN 40 430

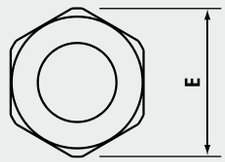
Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2901.07N	Pg 7	12.5	3 - 7	16	18	**12**	16-20	100
2901.09N	Pg 9	15.5	4 - 8	17	19	**12**	17-23	100
2901.11N	Pg11	19.0	4.5-10	20	23	**12**	20-25	100
2901.13N	Pg13.5	20.5	5 -12	22	25	**12**	20-26	50
2901.16N	Pg16	22.5	7 -13	24	27	**12**	20-27	50
2901.21N	Pg21	29.0	10 -17	30	33	**12**	24-30	50
2901.29N	Pg29	37.0	17 -25	40	45	**15**	30-37	25
2901.36N	Pg36	47.0	20 -32	50	55	**15**	38-48	10
2901.42N	Pg42	54.0	28 -38	57	63	**15**	39-48	5

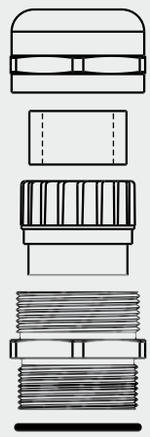


MAXIbrass® extended thread and reduced cable entry

Pg thread DIN 40 430

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
2911.07N	Pg 7	12.5	**1 - 5**	16	18	**12**	16-20	100
2911.09N	Pg 9	15.5	**2 - 6**	17	19	**12**	17-23	100
2911.11N	Pg11	19.0	**2.5- 7**	20	23	**12**	20-25	100
2911.13N	Pg13.5	20.5	**4 -10**	22	25	**12**	20-26	50
2911.16N	Pg16	22.5	**5 -10**	24	27	**12**	20-27	50
2911.21N	Pg21	29.0	**6 -13**	30	33	**12**	24-30	50
2911.29N	Pg29	37.0	**11 -20**	40	45	**15**	30-37	25
2911.36N	Pg36	47.0	**18 -26**	50	55	**15**	38-48	10
2911.42N	Pg42	54.0	**24 -31**	57	63	**15**	39-48	5





Technical data pages 221 to 223

MAXIbrass® ATEX CABLE GLANDS

5900

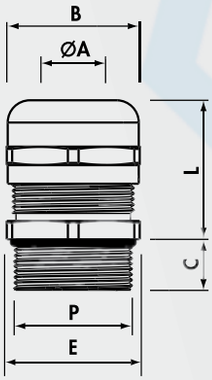
Nickel Plated Brass

CE 0051 Ex II 2 G D

Certificate No IMQ ATEX 028X

Temperature range: -25°C to +75°C (continuous)
Protection: IP 65

Material: NICKEL PLATED BRASS
Sealing-ring: NEOPRENE®
Cable grip insert: POLYAMIDE PA6.6
O-Ring: NITRILE 70 sh A (factory fitted)
Safety level: Ex e IIC/Ex tb IIIC
according to
EN 60079-0 : 2009
EN 60079-7 : 2007
EN 60079-31 : 2009
Areas of utilisation: 1 & 2, 21 & 22



Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
5900.M12N	M12X1,5	12,5	3 - 6,5	16	18	6,5	16-20	100
5900.M16N	M16X1,5	16,5	6,5-10	20	23	7,0	20-25	100
5900.M20N	M20X1,5	20,5	10 -13	24	27	8,0	20-27	50
5900.M25N	M25X1,5	25,5	11 -17	29	32	8,0	24-30	50
5900.M32N	M32X1,5	32,5	14 -21	36	40	9,0	27-34	25
5900.M40N	M40X1,5	40,5	21 -27	45	50	9,0	34-42	10
5900.M50N	M50X1,5	50,5	26 -35	54	60	10,0	35-43	8
5900.M63N	M63X1,5	63,5	35 -42	67	74	15,0	40-52	5

extended thread

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity
5901.M12N	M12X1,5	12,5	3 - 6,5	16	18	**12**	16-20	100
5901.M16N	M16X1,5	16,5	6,5-10	20	23	**12**	20-25	100
5901.M20N	M20X1,5	20,5	10 -13	24	27	**12**	20-27	50
5901.M25N	M25X1,5	25,5	11 -17	29	32	**12**	24-30	50
5901.M32N	M32X1,5	32,5	14 -21	36	40	**15**	27-34	25
5901.M40N	M40X1,5	40,5	21 -27	45	50	**15**	34-42	10
5901.M50N	M50X1,5	50,5	26 -35	54	60	**15**	35-43	8

EMC CABLE GLANDS

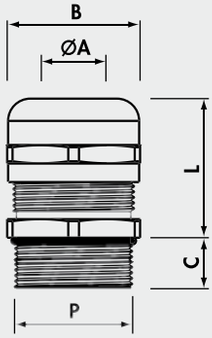
20M3

Nickel Plated Brass

Protection: IP 68, 5 bar
Temperature range:
-30°C to +120°C (continuous)

CE

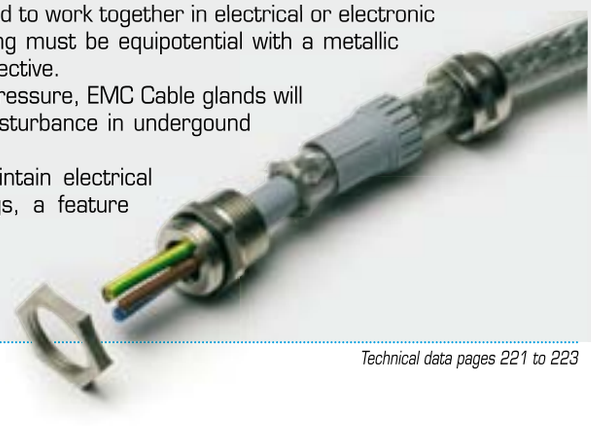
Material: NICKEL PLATED BRASS
(CuZn 40 Pb 3)
Sealing-ring: Cloroprene (CR)
Cable grip insert: PA 6
O-Ring: (NBR) (factory fitted)



Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B Spanner (mm)	C (mm)	L (mm)	Quantity Box/Bag
20M3M1261N	M12X1,5	12,5	3 - 6,5	14	5	22	300/100
20M3M1661N	M16X1,5	16,5	5,5-10	17	5,5	24,5	200/100
20M3M2061N	M20X1,5	20,5	8 -13	22	6	27	100/50
20M3M2561N	M25X1,5	25,5	11 -18	30	7	31	50/25
20M3M3261N	M32X1,5	32,5	15 -21	34	8	33	30/10
20M3M4061N	M40X1,5	40,5	19 -27	44	8	40	20/10
20M3M5061N	M50X1,5	50,5	26 -35	55	9	48	10/5
20M3M6361N	M63X1,5	63,5	39 -48	66	10	50	5/5

EMC Cable glands and locknuts are designed to work together in electrical or electronic applications where a metallic cable shielding must be equipotential with a metallic enclosure, in accordance with the EMC directive.
Offering IP68 ingress protection at 5 bar pressure, EMC Cable glands will maintain shielding from electromagnetic disturbance in undergound applications.
EMC locknuts have serrated teeth to maintain electrical contact through paint or surface coatings, a feature which also enhances vibration resistance.



Technical data pages 221 to 223

COMPRESSION CABLE GLANDS

Brass

2003
2002
2001

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	*Quantity Box/Bag*
2003M1221N	M12X1,5	12,5	4- 6	13	14	5	13-16	500/100
2003M1621N	M16X1,5	16,5	8-10	15	17	5	14-17	200/100
2003M2021N	M20X1,5	20,5	10-12	20	22	6	16-19	150/50
2003M2521N	M25X1,5	25,5	17-19	28	30	7	19-23	50/50
2003M3221N	M32X1,5	32,5	26-28	37	39	8	21-25	100/50
2003M4021N	M40X1,5	40,5	33-35	47	50	8	24-30	20/20
2003M5021N	M50X1,5	50,5	39-41	54	57	9	28-34	10/5
2003M6321N	M63X1,5	63,5	43-45	60	66/68	10	30-36	10/5

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Nickel Plated Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	*Quantity Box/Bag*
200200721N	Pg 7	12,5	5- 7	13	14	5	13-16	400/100
200200921N	Pg 9	15,5	8-10	15	17	6	14-17	300/100
200201121N	Pg11	19	8-10	18	20	6	14-18	200/50
200201321N	Pg13,5	20,5	10-12	20	22	6,5	16-19	100/50
200201621N	Pg16	22,5	12-14	22	24	6,5	17-20	50/50
200202121N	Pg21	29	17-19	28	30	7	19-23	50/50
200202921N	Pg29	37	26-28	37	40	8	21-25	15/15
200203621N	Pg36	47	33-35	47	50	9	24-30	10/10
200204221N	Pg42	54	39-41	54	57	10	28-34	10/10
200204821N	Pg48	60	43-45	60	64	10	30-36	10/10

BSP thread ISO 228/1

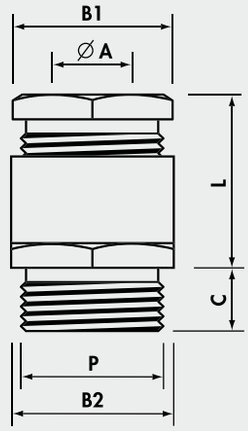
Ref. Brass	P	Fixing Hole Ø (mm)	Ø A min-max (mm)	B1 Spanner Head (mm)	B2 Spanner Body (mm)	C (mm)	L min-max (mm)	*Quantity Box/Bag*
200101441	G1/4"	13,5	5,5- 7	13	15	6,5	14-17	400/100
207101441	G1/4"	13,5	5,5- 7	13	Ø15	6,5	14-17	400/100
200103841	G3/8"	17	6,5- 8,5	17	19	7,5	15-19	200/100
200101241	G1/2"	21,5	8 -11	21	23	8	17-23	100/100
200105841	G5/8"	23,5	11 -14	23	25	8,5	20-24	100/50
200103441	G3/4"	27	14,5-17,5	27	29	9	20-26	50/50
200110041	G1"	34	18 -22	34	36	10	23-28	25/25
200111841	G1"1/8	38	21 -26	38	40	10,5	23-28	25/25
200111441	G1"1/4	42	28 -32	42	45	11,5	25-31	20/20
200111241	G1"1/2	48	32 -36	48	50	11,5	28-35	20/20
200120041	G2"	60	38 -42	60	64	13,5	31-37	10/10
• **200121221***	G2"1/2	76	44 -57	80	80	20	32-37	5/5
• **200130021**	G3"	89	67 -69	95	95	20	42-52	5/5

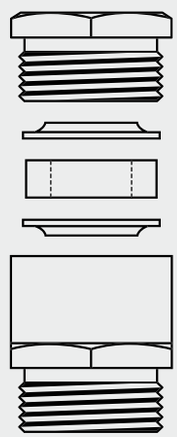
Add to Ref: N for NICKEL PLATED BRASS

• Sealing ring: CLOROPRENE

*** Concentric sealing ring**

Material: Metric & Pg threads
NICKEL PLATED BRASS
(CuZn 40 Pb 3)
BSP thread - PLAIN BRASS
Protection: IP 54
Sealing ring:
Metric thread - RUBBER 55sh A
Pg thread - RUBBER 55 sh A
BSP thread - PVC 50 sh A





Technical data pages 221 to 223

MAXI*inox* CABLE GLANDS

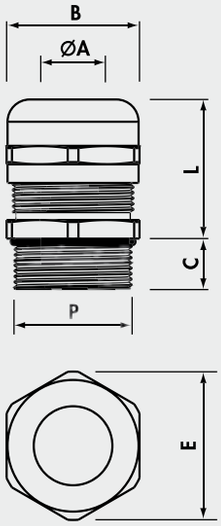
7900
7900A

Stainless Steel 303 (X8 CrNiS 18-9)

Stainless Steel 316L (X2 CrNiMo 17-12-2)

CE

Material:
STAINLESS STEEL 303/316L
Sealing-ring: NEOPRENE®
Cable grip insert:
POLIAMMIDE PA6.6
O-Ring: NITRILE 70 sh A
(factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)



MAXI*inox* *Stainless Steel AISI 303*

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Stainless Steel AISI 303	P	Fixing Hole	Ø A min-max	B Spanner	E	C	L min-max	Quantity Box/Bag
		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	
7900.M12	M12X1,5	12,5	3 - 7	16	18	6,5	16-20	90/30
7900.M16	M16X1,5	16,5	4,5-10	20	23	7,0	20-25	120/30
7900.M20	M20X1,5	20,5	7 -13	24	27	8,0	20-27	75/25
7900.M25	M25X1,5	25,5	10 -17	29	32	8,0	24-30	40/20
7900.M32	M32X1,5	32,5	11 -21	36	40	9,0	27-34	15
7900.M40	M40X1,5	40,5	19 -28	45	50	9,0	34-42	15
7900.M50	M50X1,5	50,5	26 -35	54	60	10,0	35-43	10
7900.M63	M63X1,5	63,5	34 -45	67	74	15,0	40-52	5

MAXI*inox* *Stainless Steel AISI 316L*

Metric thread M 1.5 pitch CEI EN 60423 CEI EN 50262

Stainless Steel AISI 316L	P	Fixing Hole	Ø A min-max	B Spanner	E	C	L min-max	Quantity Box/Bag
		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	
7900A.M12	M12X1,5	12,5	3 - 7	16	18	6,5	16-20	60/20
7900A.M16	M16X1,5	16,5	4,5-10	20	23	7,0	20-25	80/20
7900A.M20	M20X1,5	20,5	7 -13	24	27	8,0	20-27	60/20
7900A.M25	M25X1,5	25,5	10 -17	29	32	8,0	24-30	30/15
7900A.M32	M32X1,5	32,5	11 -21	36	40	9,0	27-34	12
7900A.M40	M40X1,5	40,5	19 -28	45	50	9,0	34-42	10
7900A.M50	M50X1,5	50,5	26 -35	54	60	10,0	35-43	7
7900A.M63	M63X1,5	63,5	34 -45	67	74	15,0	40-52	5

MAXI*inox* CABLE GLANDS

Stainless Steel 303 (X8 CrNiS 18-9)

Stainless Steel 316L (X2 CrNiMo 17-12-2)

7900
7900A

MAXI*inox* *Stainless Steel AISI 303*

Pg thread DIN 40 430

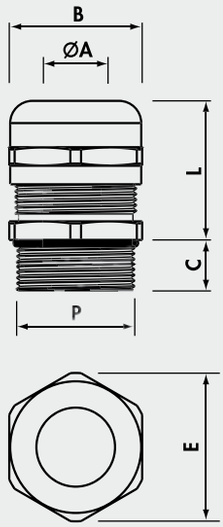
Stainless Steel AISI 303	P	Fixing Hole (mm)	∅A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity *Box/Bag*
7900.07	Pg 7	12,5	3 - 7	16	18	5,0	16-20	90/30
7900.09	Pg 9	15,5	4 - 8	17	19	6,0	17-23	90/30
7900.11	Pg11	19,0	4,5-10	20	23	6,0	20-25	60/30
7900.13	Pg13,5	20,5	5 -12	22	25	6,5	20-26	90/30
7900.16	Pg16	22,5	7 -13	24	27	6,5	20-27	60/30
7900.21	Pg21	29,0	10 -17	30	33	7,0	24-30	40/20
7900.29	Pg29	37,0	17 -25	40	45	8,0	30-37	30/15
7900.36	Pg36	47,0	20 -32	50	55	8,0	38-48	10
7900.42	Pg42	54,0	28 -38	57	63	10,0	36-46	5
7900.48	Pg48	60,0	34 -45	67	74	15,0	40-52	5

MAXI*inox* *Stainless Steel AISI 316L*

Pg thread DIN 40 430

Stainless Steel AISI 316L	P	Fixing Hole (mm)	∅A min-max (mm)	B Spanner (mm)	E (mm)	C (mm)	L min-max (mm)	Quantity *Box/Bag*
7900A.07	Pg 7	12,5	3 - 7	16	18	5,0	16-20	60/20
7900A.09	Pg 9	15,5	4 - 8	17	19	6,0	17-23	60/20
7900A.11	Pg11	19,0	4,5-10	20	23	6,0	20-25	100/20
7900A.13	Pg13,5	20,5	5 -12	22	25	6,5	20-26	100/20
7900A.16	Pg16	22,5	7 -13	24	27	6,5	20-27	40/20
7900A.21	Pg21	29,0	10 -17	30	33	7,0	24-30	60/15
7900A.29	Pg29	37,0	17 -25	40	45	8,0	30-37	20/10
7900A.36	Pg36	47,0	20 -32	50	55	8,0	38-48	7
7900A.42	Pg42	54,0	28 -38	57	63	10,0	36-46	5
7900A.48	Pg48	60,0	34 -45	67	74	15,0	40-52	5

Material:
STAINLESS STEEL 303/316L
Sealing-ring: NEOPRENE®
Cable grip insert:
POLIAMMIDE PA6.6
O-Ring: NITRILE 70 sh A
(factory fitted)
Protection: IP 68
Temperature range:
-25°C to +100°C (continuous)

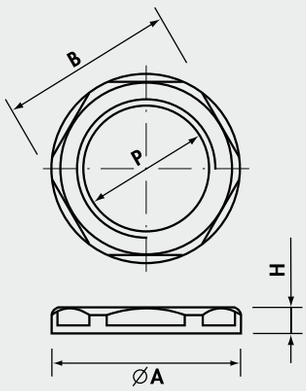


LOCKNUTS WITH COLLAR

Polyamide PA6 or PA6.6

1143
1142
1141

Material: POLYAMIDE PA6 or 6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black,
RAL 7001 dark grey



Metric thread M 1.5 pitch CEI EN 60423

Ref. Light Grey	P	Ø A (mm)	B Spanner (mm)	H (mm)	*Quantity Box/Bag*
1143M12	M12X1,5	18,5	17	5	1.000/100
1143M16	M16X1,5	24	22	5	600/100
1143M20	M20X1,5	29	27	6	400/100
1143M25	M25X1,5	35,5	32	6	300/100
1143M32	M32X1,5	45	41	7	150/50
1143M40	M40X1,5	55	50	7	30
1143M50	M50X1,5	65	60	8	30
1143M63	M63X1,5	82	75	8	15

Add to Ref: N for Black, G for Dark Grey

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Light Grey	P	Ø A (mm)	B Spanner (mm)	H (mm)	*Quantity Box/Bag*
1142007	Pg 7	21	19	5	100
1142009	Pg 9	24	22	5	700/100
1142011	Pg11	26	24	5	500/100
1142013	Pg13,5	29	27	6	400/100
1142016	Pg16	33	30	6	300/100
1142021	Pg21	39	36	7	200/50
1142029	Pg29	50	46	7	50
1142036	Pg36	66	60	8	30
1142042	Pg42	73	65	8	25
1142048	Pg48	78	70	8	20

Add to Ref: N for Black, G for Dark Grey

BSP thread ISO 228/1

Ref. Light Grey	P	Ø A (mm)	B Spanner (mm)	H (mm)	*Quantity Box/Bag*
1141012	G1/2"	29	27	6	400/100
1141112	G1"1/2	66	60	8	30
1141200	G2"	78	70	8	20

Add to Ref: N for Black

LOCKNUTS WITHOUT COLLAR

Polyamide PA6 or PA6.6

1112
1710
1410

Material:
POLYAMIDE PA6 or 6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black

Metric thread M 1.5 pitch CEI EN 60423

Ref. Light Grey	P	B Spanner (mm)	H (mm)	*Quantity* *Box/Bag*
1112	M12X1,5	17	5	1.000/100
1116	M16X1,5	22	5	700/100
1120	M20X1,5	27	6	400/100
1125	M25X1,5	32	6	100
1132	M32X1,5	41	7	150/50
1140	M40X1,5	50	7	30
1150	M50X1,5	60	8	30
1163	M63X1,5	75	8	15

Add to Ref: N for Black

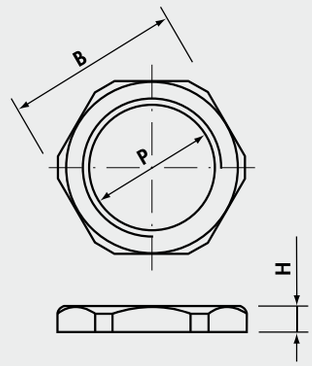
Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Light Grey	P	B Spanner (mm)	H (mm)	*Quantity* *Box/Bag*
* **1719E17**	Pg 7	17	5	1.000/100
1719	Pg 7	19	5	100
1710	Pg 9	22	5	700/100
1711	Pg11	24	5	500/100
1712	Pg13,5	27	6	400/100
1713	Pg16	30	6	300/100
△*1714E34	Pg21	34	7	200/100
1714	Pg21	36	7	200/100
1715	Pg29	46	7,5	100/50

Add to Ref: N for Black

△ **Light Grey only**

* **Not DIN 46 320**



BSP thread ISO 228/1

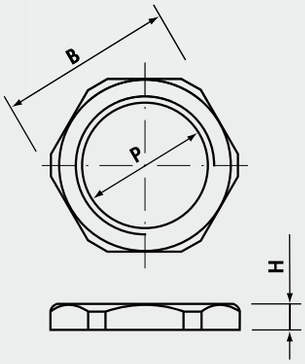
Ref. Light Grey	P	B Spanner (mm)	H (mm)	*Quantity* *Box/Bag*
1410	G1/4"	19	5	800/100
1411	G3/8"	23	6	600/100
1412	G1/2"	27	6	400/100
1413	G5/8"	30	6	100
1414	G3/4"	34	7	200/100
1415	G1"	40	7	50

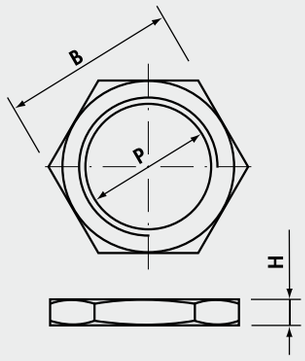
Add to Ref: N for Black

LOCKNUTS

2033
2032
2031

Brass





Metric thread M 1.5 pitch CEI EN 60423

Ref. Nickel Plated Brass	P	B Spanner (mm)	H (mm)	*Quantity Box/Bag*
2033M12N	M12X1,5	16	2,8	2.000/100
2033M16N	M16X1,5	19	2,8	1.000/100
2033M20N	M20X1,5	24	3	600/100
2033M25N	M25X1,5	30	4,0	500/100
2033M32N	M32X1,5	36	4	250/25
2033M40N	M40X1,5	45	5,0	150/10
2033M50N	M50X1,5	60	5	100/10
2033M63N	M63X1,5	70	5,5	50/5

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Nickel Plated Brass	P	B Spanner (mm)	H (mm)	*Quantity Box/Bag*
2032007N	Pg 7	16	2,8	1.500/100
2032009N	Pg 9	18	2,8	1.500/100
2032011N	Pg11	21	3	1.000/100
2032013N	Pg13,5	23	3	1.000/100
2032016N	Pg16	26	3	600/100
2032021N	Pg21	32	3,5	500/100
2032029N	Pg29	41	4	300/100
2032036N	Pg36	51	5	100/10
2032042N	Pg42	60	5	50/10
2032048N	Pg48	64	5,5	50/10

BSP thread ISO 228/1

Ref. Plain Brass	P	B Spanner (mm)	H (mm)	*Quantity Box/Bag*
2031014	G1/4"	16	3	2.400/100
2031038	G3/8"	19	3	2.000/100
2031012	G1/2"	24	3,5	1.000/100
2031058	G5/8"	26	4	500/50
2031034	G3/4"	30	4	500/50
2031100	G1"	37	4	250/25
2031118	G1"1/8	41	4,5	100/25
2031114	G1"1/4	45	4,5	200/20
2031112	G1"1/2	52	5,5	100/20
2031200	G2"	64	7	50/10
2031212	G2"1/2	80	7	20/5
2031300	G3"	95	8	20/5

Add to Ref: N for NICKEL PLATED BRASS

EMC LOCKNUTS

Nickel Plated Brass

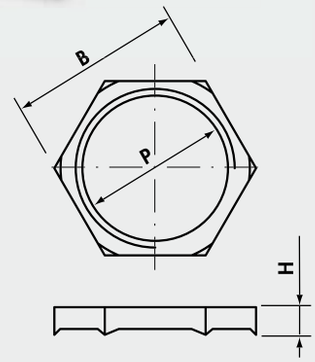
20N3

EMC Locknuts

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)

Metric thread M 1.5 pitch CEI EN 60423

Ref. Nickel Plated Brass	P	B Spanner (mm)	H (mm)	*Quantity* *Box/Bag*
20N3M12N	M12X1,5	15	4,1	1000/100
20N3M16N	M16X1,5	19	4,2	1000/100
20N3M20N	M20X1,5	24	4,2	500/100
20N3M25N	M25X1,5	30	4,8	400/100
20N3M32N	M32X1,5	36	5,4	200/100
20N3M40N	M40X1,5	46	6,2	100/50
20N3M50N	M50X1,5	60	7	50/50
20N3M63N	M63X1,5	70	7	50/25



MAXI*inox* LOCKNUTS

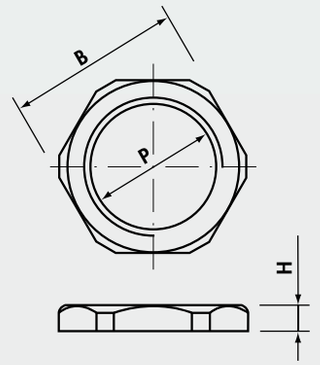
Stainless Steel 303 (X8 CrNiS 18-9)

Stainless Steel 316L (X2 CrNiMo 17-12-2)

7032
7033

Metric thread M 1.5 pitch CEI EN 60423

Stainless Steel AISI 303	Stainless Steel AISI 316L	P	B Spanner (mm)	H (mm)	AISI 303 *Quantity* *Box/Bag*	AISI 316L *Quantity* *Box/Bag*
7033M12	**7033AM12**	M12X1,5	16	2,8	450/30	300/20
7033M16	**7033AM16**	M16X1,5	20	2,8	450/30	300/20
7033M20	**7033AM20**	M20X1,5	24	3,5	250/25	200/20
7033M25	**7033AM25**	M25X1,5	29	4	160/20	120/15
7033M32	**7033AM32**	M32X1,5	36	4	105/15	84/12
7033M40	**7033AM40**	M40X1,5	45	5	60/15	40/10
7033M50	**7033AM50**	M50X1,5	57	5	40/10	28/7
7033M63	**7033AM63**	M63X1,5	70	5,5	32/8	20/5



Pg thread DIN 40 430 - Dimensions DIN 46 320

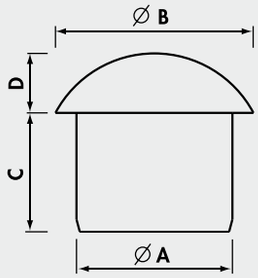
Stainless Steel AISI 303	Stainless Steel AISI 316L	P	B Spanner (mm)	H (mm)	AISI 303 *Quantity* *Box/Bag*	AISI 316L *Quantity* *Box/Bag*
7032007	**7032A007**	Pg 7	16	2,8	450/30	300/20
7032009	**7032A009**	Pg 9	20	2,8	450/30	300/20
7032011	**7032A011**	Pg11	22	3	300/30	200/20
7032013	**7032A013**	Pg13,5	22	3	300/30	200/20
7032016	**7032A016**	Pg16	27	3	240/30	160/20
7032021	**7032A021**	Pg21	32	3,5	160/20	150/15
7032029	**7032A029**	Pg29	41	4	60/15	40/10
7032036	**7032A036**	Pg36	50	5	40/10	28/7
7032042	**7032A042**	Pg42	60	5	40/10	20/5
7032048	**7032A048**	Pg48	64	5,5	32/8	20/5

INTERNAL PLUGS FOR CABLE GLANDS

TCP

Polyamide PA6.6

Material: POLYAMIDE PA6.6
self-extinguishing class V2 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 9005 black
Application:
Blanking the cable entry of **MAXIblock**®, **MAXI***brass*® and **MAXI***inox* cable glands and maintaining IP 68.



Plugs

Ref.	Suitable for **MAXIblock**®	Suitable for **MAXI***brass*® **MAXI***inox*	∅ A (mm)	∅ B (mm)	C (mm)	D (mm)	*Quantity Box/Bag*
TCP5	M12R + Pg7R	M12R	4,5	8,5	10,8	4,5	3.000/100
TCP10	Pg9R	Pg9R	6	12	12	4,5	2.000/100
TCP12	M12 + Pg7 M16R + Pg11R	M12 + Pg7 M16R + Pg11R	6,8	12	12	4,5	1.000/100
TCP15	Pg9	Pg9	8	11	11,5	5	1.500/100
TCP18	M16 + Pg11	M16 + Pg11	9,5	12,5	13	5	1.500/100
TCP20	M20R Pg13,5 + Pg13,5R Pg16R	M20R Pg13 + Pg13,5R Pg16R	10	15	14	6	800/100
TCP25	M20 + Pg16	M20 + Pg16	12,5	17	15	8	400/100
TCP30	M25R + M32R Pg21R	M25R + M32R Pg21R	12,5	22,5	18	9	300/100
TCP35	M25 + Pg21	M25 + Pg21	16	19,5	18	8	300/100
TCP40	M32	M32	19	22,5	19	9	150/50
TCP45	M40R + Pg29 + Pg36R	M40R + Pg29	22	30	20	10	100/50
TCP50	M40 + M50R + Pg42R	M40 + M50R	27,5	38	25	12	50/25
TCP55	Pg36	Pg36	31,5	36,5	23,5	12	50/25
TCP60	M50	M50	34,5	40	23,5	12	50/25
TCP65	M63R + Pg42 + Pg48R	M63R + Pg42	37,5	48	26,5	12	30/15
TCP70	M63 + Pg48	M63 + Pg48	43	48	26,5	12	30/15

R: reduced cable entry

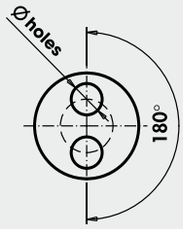
36 TGM

Material: NEOPRENE® 70 sh A
Temperature range:
–40°C to +130°C
Protection: IP 68
Colour: black
Application:
IP68 sealing of multiple cables entering MAXIblock®, MAXIbrass® or MAXIinox cable glands.

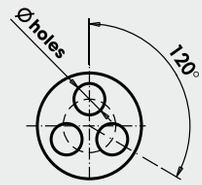
Multi-entry seals

Ref.	Suitable for MAXIblock®	Suitable for MAXIbrass® MAXIinox®	n° entries	Ø Dia entry (mm)	Quantity Box/Bag
36A3M1623	M16 + Pg11	M16 + Pg11	2	3	1.500/100
36A3M1624	M16 + Pg11	M16 + Pg11	2	4	1.000/100
36A3M16322	M16 + Pg11	M16 + Pg11	3	2,2	1.500/100
36A3M2025	M20 + Pg13,5	M20 + Pg13,5 + Pg16	2	5	500/100
36A3M2034	M20 + Pg13,5	M20 + Pg13,5 + Pg16	3	4	500/100
36A3M20356	M20 + Pg13,5	M20 + Pg13,5 + Pg16	3	5,6	500/100
36A3M2526	M25	M25 + Pg21	2	6	300/50
36A3M2536	M25	M25 + Pg21	3	6	300/50
36A3M2537	M25	M25 + Pg21	3	7	300/50
36A3M2545	M25	M25 + Pg21	4	5	300/50
36A3M2546	M25	M25 + Pg21	4	6	300/50
36A3M2554	M25	M25 + Pg21	5	4	300/50
36A3M3228	M32	M32	2	8	150/50
36A3M3239	M32	M32	3	9	150/50
36A3M32465	M32	M32	4	6,5	150/50
36A3M3248	M32	M32	4	8	150/50
36A3M4078	M40	M40	7	8	100/100
36A3M40106	M40	M40	10	6	100/100
36A3M5088	M50 + Pg36	M50 + Pg36	8	8	50/50
36C201629	Pg16	-	2	3+9	400/50

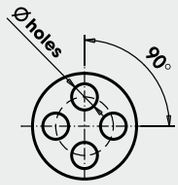
2 ENTRIES



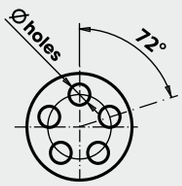
3 ENTRIES



4 ENTRIES



5 ENTRIES

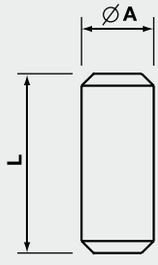


Material: POLYAMIDE PA6.6
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 7035 light grey

Application:
Plugging unused entries in multi-entry seals and maintaining IP68.

Multi-entry seal plugs

Ref.	Suitable for Seal	Ø A (mm)	L (mm)	Quantity Box/Bag
TGM38	36A3M1623	3	10	5.000/100
TGM48	36A3M1624 + 36A3M2034 + 36A3M2554	4	8	5.000/100
TGM58	36A3M2025	5	8	5.000/100
TGM513	36A3M2545	5	13	2.500/50
TGM613	36A3M2526 + 36A3M2536 + 36A3M40106	6	13	2.000/50
TGM713	36A3M2537	7	13	2.000/50
TGM817	36A3M3248 + 36A3M5088 + 36A3M4078	8	17	100



ENTRY THREAD ADAPTERS

2093
2043
20A4

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)

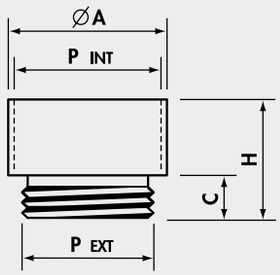


Fig. 1

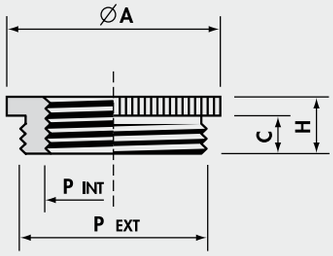


Fig. 2

Nickel Plated Brass

Entry thread enlargers

Metric thread M 1.5 pitch CEI EN 60423

Ref.	P EXT	P INT	∅ A (mm)	C (mm)	H (mm)	*Quantity Box/Bag*
20931216N	M12X1.5	M16X1.5	18	5	15.5	500/100
20931620N	M16X1.5	M20X1.5	22	5	17.5	300/100
20932025N	M20X1.5	M25X1.5	27	6	20	150/50
20932532N	M25X1.5	M32X1.5	34	7	22.5	100/50
20932540N	M25X1.5	M40X1.5	42	7	23.5	50/50
20933240N	M32X1.5	M40X1.5	42	8	24.5	50/50
20933250N	M32X1.5	M50X1.5	52	8	27.5	25/25
20934050N	M40X1.5	M50X1.5	52	8	27.5	25/25
20935063N	M50X1.5	M63X1.5	66	9	31	20/10

Entry thread reducers

Metric thread M 1.5 pitch CEI EN 60423

Ref.	P EXT	P INT	∅ A (mm)	C (mm)	H (mm)	*Quantity Box/Bag*
20431612N	M16X1.5	M12X1.5	18	5	7.5	1,000/100
20432012N	M20X1.5	M12X1.5	22	6	9	600/100
20432016N	M20X1.5	M16X1.5	22	6	9	500/100
20432512N	M25X1.5	M12X1.5	27	7	10	300/50
20432516N	M25X1.5	M16X1.5	27	7	10	300/50
20432520N	M25X1.5	M20X1.5	27	7	10	300/100
20433220N	M32X1.5	M20X1.5	34	8	11	100/25
20433225N	M32X1.5	M25X1.5	34	8	11	200/50
20434025N	M40X1.5	M25X1.5	43	8	11.5	100/25
20434032N	M40X1.5	M32X1.5	43	8	11.5	100/25
20435032N	M50X1.5	M32X1.5	53	9	12.5	50/10
20435040N	M50X1.5	M40X1.5	53	9	12.5	50/25
20436340N	M63X1.5	M40X1.5	66	10	14	30/10
20436350N	M63X1.5	M50X1.5	66	10	14	30/10

Entry thread converters - Metric to Pg

Ref.	P EXT	P INT	Fig.	∅ A (mm)	C (mm)	H (mm)	*Quantity Box/Bag*
20A42011N	M20X1.5	Pg11	1	22	6.5	17.5	300/100
20A42016N	M20X1.5	Pg16	1	24	6.5	20	200/50
20A42513N	M25X1.5	Pg13.5	2	27	7	10	300/50
20A42516N	M25X1.5	Pg16	2	27	7	10	300/50
20A43216N	M32X1.5	Pg16	2	36	8	11.5	100/25
20A43221N	M32X1.5	Pg21	2	36	8	11.5	100/25

Entry thread converters - Pg to Metric

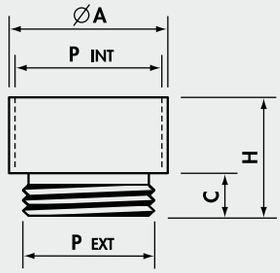
20A40916N	Pg 9	M16X1.5	1	20	6	15	400/100
20A41120N	Pg11	M20X1.5	1	22	6	16	300/100
20A41320N	Pg13.5	M20X1.5	1	24	6.5	16.5	200/50
20A41620N	Pg16	M20X1.5	2	24	6.5	9.5	50/50
20A42120N	Pg21	M20X1.5	2	30	7	10	100/100
20A42125N	Pg21	M25X1.5	2	30	7	10	100/100
20A42925N	Pg29	M25X1.5	2	39	8	11.5	50/50

ENTRY THREAD ADAPTERS

Nickel Plated Brass

1800 2042

Material: NICKEL PLATED BRASS (CuZn 40 Pb 3)



Entry thread enlargers

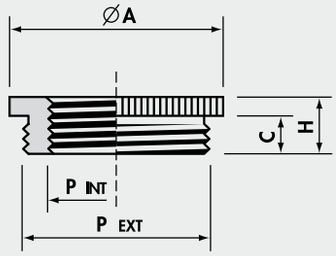
Pg thread DIN 40 430 - Dimensions DIN 46 320-K

Ref.	P EXT	P INT	∅A (mm)	C (mm)	H (mm)	*Quantity Box/Bag*
180709	Pg 7	Pg 9	17	5	15	600/100
180911	Pg 9	Pg11	20	6	16.5	500/100
180913	Pg 9	Pg13.5	22	6	17.5	300/100
181113	Pg11	Pg13.5	22	6	17.5	300/100
181116	Pg11	Pg16	24	6	18.5	100/50
181316	Pg13.5	Pg16	24	6.5	19	200/50
181321	Pg13.5	Pg21	30	6.5	21	150/50
181621	Pg16	Pg21	30	6.5	21	100/25
182129	Pg21	Pg29	39	7	23	75/25
182936	Pg29	Pg36	50	8	27.5	30/10
183642	Pg36	Pg42	57	9	31	20/10
184248	Pg42	Pg48	64	10	33	20/10

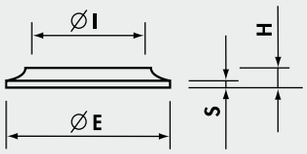
Entry thread reducers

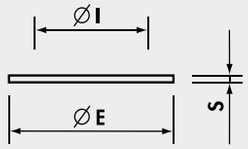
Pg thread DIN 40 430 - Dimensions DIN 46 320-H

Ref.	P EXT	P INT	∅A (mm)	C (mm)	H (mm)	*Quantity Box/Bag*
20420907N	Pg 9	Pg 7	17	6	8.5	800/100
20421107N	Pg11	Pg 7	20	6	8.5	600/100
20421109N	Pg11	Pg 9	20	6	8.5	600/100
20421307N	Pg13.5	Pg 7	22	6.5	9	600/100
20421309N	Pg13.5	Pg 9	22	6.5	9	600/100
20421311N	Pg13.5	Pg11	22	6.5	9	600/100
20421607N	Pg16	Pg 7	24	6.5	9.5	300/50
20421609N	Pg16	Pg 9	24	6.5	9.5	400/100
20421611N	Pg16	Pg11	24	6.5	9.5	400/100
20421613N	Pg16	Pg13.5	24	6.5	9.5	400/100
20422111N	Pg21	Pg11	30	7	10	200/50
20422113N	Pg21	Pg13.5	30	7	10	200/50
20422116N	Pg21	Pg16	30	7	10	200/50
20422916N	Pg29	Pg16	39	8	11.5	100/25
20422921N	Pg29	Pg21	39	8	11.5	100/25
20423621N	Pg36	Pg21	50	9	12.5	50/25
20423629N	Pg36	Pg29	50	9	12.5	50/25
20424229N	Pg42	Pg29	57	10	14	50/25
20424236N	Pg42	Pg36	57	10	14	50/25
20424836N	Pg48	Pg36	64	10	14	50/25
20424842N	Pg48	Pg42	64	10	14	50/25



6010





Compression washers

Material: Zinc plated STEEL UNI 5961/84

Ref.	Fits thread	Ø E (mm)	Ø I (mm)	H (mm)	S (mm)	*Quantity Box/Bag*
6010.14	G1/4"	11	8	1.1	0.5	15,000/1,000
6010.38	G3/8"	14.5	10	1.8	0.5	5,000/1,000
6010.12	Pg13.5 + G1/2"	18	14	1.5	0.5	4,000/1,000
6010.58	Pg16 + G5/8"	20	15.5	2	0.5	3,000/1,000
6010.34	G3/4"	24	18.5	2	0.5	2,500/500
6010.01	G1"	30	24.5	2	0.5	1,500/500
6010.114	G1"1/4	38	33.5	2	0.5	1,000/500
6010.11	Pg11	17	12	1.9	0.5	5,000/1,000
6010.21	Pg21	26.5	20	2.3	0.5	2,000/500
6010.29	Pg29 + G1"1/8	35	26.5	2	0.5	1,000/500
6010.36	Pg36 + G1"1/2	45	38	-	0.8	750/250
6010.42	Pg42	51	42.5	2.3	0.5	500/250
6010.48	Pg48 + G2"	56	47.5	3	0.5	400/100

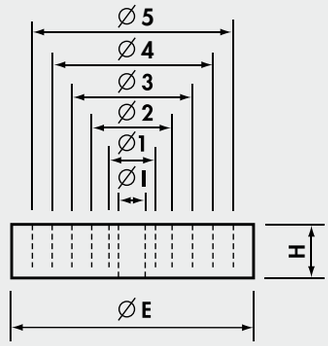
1880
1890

Concentric sealing rings

Material: BUTADIENE-NITRILE NBR with concentric perforations

Ref.	Suitable only for Cable Glands IP54 (1700.., 2001.., 2002.., 2003..)	Ø E (mm)	Ø 5 (mm)	Ø 4 (mm)	Ø 3 (mm)	Ø 2 (mm)	Ø 1 (mm)	Ø I (mm)	H (mm)	*Quantity* Box/Bag
1880	Pg9 + M16	13,3	–	–	–	10	7,5	5	5,5	1.500/100
1881	Pg11	16,5	–	–	–	12,5	10	7,5	6	1.000/100
1882	Pg13,5 + M20 + G1/2"	18,3	–	–	–	12,5	10	7,5	6	800/100
1883	Pg16 + G5/8"	20,4	–	–	15	12,5	10	7,5	7	600/100
1884	Pg21 + M25	26,0	–	–	19	16	13	10	8	300/100
1884A	Pg21 + M25	26,0	–	–	20,5	18	15	10,5	8	300/100
***1885**	Pg29 + M32 + G1"1/8	34,7	–	–	27	24	21	18	9,5	150/50
1886	Pg36 + G1"1/2 + M40	44,7	–	–	33	30	27	24	12	100/50
***1887**	Pg42 + M50	51,7	–	–	39	36	33	30	14	50/25
1888/5	Pg48 + G2" + M63	57,0	45	41	37	33	29	24	14	75/25
***1888**	Pg48 + G2" + M63	57,0	–	–	45	42	39	36	14	75/25

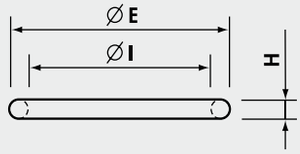
*material: Rubber NR



O-rings

Material: Butadiene-Nitrile 70 sh

Ref.	Fits thread	Ø E (mm)	Ø I (mm)	H (mm)	*Quantity* Box/Bag
1889	M12	12,81	9,25	1,78	5.000/1.000
1890	Pg7 + G1/4"	14,38	10,82	1,78	5.000/1.000
1890A	M16 + Pg9 + G3/8"	15,98	12,42	1,78	5.000/1.000
1891	Pg11	19,16	15,60	1,78	5.000/1.000
1891A	M20	20,73	17,17	1,78	5.000/1.000
1892	Pg13,5 + G1/2"	22,33	18,77	1,78	5.000/1.000
1892A	Pg16 + G5/8"	23,91	20,35	1,78	5.000/1.000
1892B	M25	25,51	21,95	1,78	3.000/500
1893	Pg21	28,68	25,12	1,78	3.000/500
1893A	M32	30,00	26,00	2,00	2.000/500
1925.3	G3/4"	30,31	25,07	2,62	500
1894	G1"	35,06	29,82	2,62	2.000/500
1895	M40 + Pg29 + G1"1/8	39,84	34,60	2,62	1.000/500
1896	G1"1/4	43,01	37,77	2,62	1.000/500
1897	Pg36 + G1"1/2	49,36	44,12	2,62	800/100
1898	Pg42 + G1"3/4	55,71	50,47	2,62	800/100
1899	Pg48 + G2"	62,06	56,82	2,62	100
1899A	G2"1/2	76,50	69,44	3,53	100/1
1899B	G3"	92,60	81,92	5,34	100/1

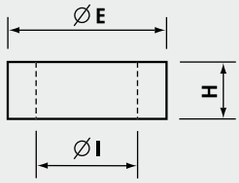


SPARES SEALING RINGS

PVC 50 sh A

341
342
343
344

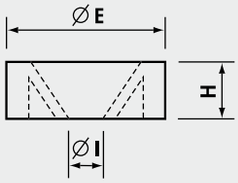
Material: PVC 50 sh A



Cylindrical sealing rings

Colour: red

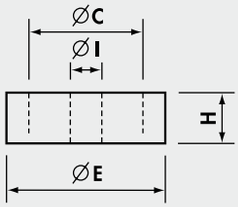
Ref.	Suitable only for Cable Glands IP54 (1700.., 2001.., 2002.., 2003..)	C (mm)	Ø E (mm)	Ø I (mm)	H (mm)	Quantity Box/Bag
3411014	G1/4"	–	10,9	6,7	6	1.500/100
3411038	G3/8" + M16	–	14,5	8,5	6	1.000/100
3411012	Pg13,5 + G1/2" + M20	–	18	11	7,5	500/100
3412016	Pg16 + G5/8"	–	20	14	7,5	300/100
3422016	Pg16 + G5/8"	–	20	10	7,5	300/100
3411034	G3/4"	–	23,5	17,5	8	300/100
3411100	G1"	–	29	22	10	200/100
3412011	Pg11	–	16,5	10	7	1.000/100
3412021	Pg21 + M25	–	26	18	8,5	300/100
3422021	Pg21 + M25	–	26	13	8,5	250/50
3412029	Pg29 + G1"1/8 + M32	–	35	26	10	200/100



Membrane sealing rings

Colour: red

Ref.	Suitable only for Cable Glands IP54 (1700.., 2001.., 2002.., 2003..)	C (mm)	Ø E (mm)	Ø I (mm)	H (mm)	Quantity Box/Bag
3431038	G3/8"	–	15	6	6	1.000/100
3431100	G1"	–	29	15	9,5	200/100



Double sealing rings

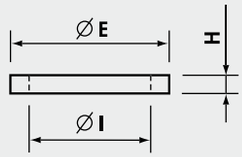
Colour: red

Ref.	Suitable only for Cable Glands IP54 (1700.., 2001.., 2002.., 2003..)	C (mm)	Ø E (mm)	Ø I (mm)	H (mm)	Quantity Box/Bag
3441012	G1/2" + Pg13,5 + M20	13	18,5	8	6,5	500/100
3441034	G3/4"	17	23	12,5	8,5	300/100

357 FD

Material: BUTADIENE-NITRILE NBR 70 sh A
Temperature range: -20°C to +70°C
Colour: grey

Ref.	Fits thread	Ø E (mm)	Ø I (mm)	H (mm)	*Quantity* *Box/Bag*
3572007	Pg7	16,5	11,5	1	4.000/100
3572011	Pg11	23	17,5	1	2.500/100
35720131	Pg13,5 + M20X1,5 + G1/2"	27,5	20,5	1,4	1.000/100
3572013	Pg13,5	30	20,5	2,2	1.000/100
3572016	Pg16	29	23	2	1.000/100
3572021	Pg21	33,5	27	3	500/100
3573M16	M16X1,5	20,5	16,3	1	3.000/100
3573M20	M20X1,5 + Pg13,5 + G1/2"	25,5	20,5	1	4.000/100
3573M25	M25X1,5	30,5	25,5	1	2.000/100
3573M32	M32X1,5	40,5	32,5	1	1.500/100



Material: NEOPRENE® 80 sh A
Temperature range: -25°C to +100°C
Colour: black

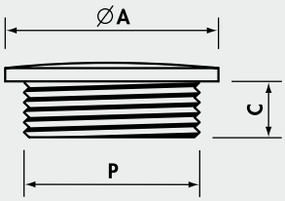
Ref.	Fits thread	Ø E (mm)	Ø I (mm)	H (mm)	*Quantity* *Box/Bag*
FD M12	M12	16	10	1,2	2.500/50
FD 7	Pg7 + G1/4"	17	11,3	1,2	3.000/50
FD 9	Pg9 + M16 + G3/8"	20	13,9	1,2	2.000/50
FD 11	Pg11	23	17,1	1,2	2.000/50
FD M20	M20	24	18	1,2	2.000/50
FD 13,5	Pg13,5 + G1/2"	25	19	1,2	2.500/50
FD 16	Pg16 + G5/8"	27	21	1,2	1.500/50
FD M25	M25	31	23	1,2	1.000/20
FD 21	Pg21 + G3/4"	34,5	27	1,5	1.000/25
FD M32	M32 + G1"	40	30	1,5	600/20
FD 29	Pg29 + G1"1/8"	45	35,2	1,5	500/25
FD M40	M40 + G1"1/4	48	38	1,5	500/20
FD 36	Pg36 + G1"1/2"	56	45,2	1,5	250/25
FD M50	M50	55	47,5	1,0	10
FD 42	Pg42 + G1"3/4"	62	52	1,0	10
FD 48	Pg48 + G2"	68	58	1,0	10
FD M63	M63	68	60,5	1,0	500/5

ENTRY PLUGS

Polyamide PA6

1053
1052

Material: POLYAMIDE PA6
reinforced with fibreglass
self-extinguishing class V0 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Protection: IP 54
Colour: RAL 7035 light grey,
RAL 9005 black



Metric thread M 1.5 pitch CEI EN 60423

Ref. Light Grey	P	∅ A (mm)	C (mm)	*Quantity Box/Bag*
1053M12	M12X1,5	15	6	1.000/100
1053M16	M16X1,5	20	6	100
1053M20	M20X1,5	25	7	100
1053M25	M25X1,5	30	7	100
1053M32	M32X1,5	37	9	50
1053M40	M40X1,5	47	9	30
1053M50	M50X1,5	58	10	20
1053M63	M63X1,5	72	12	10

Add to Ref: N for Black

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Light Grey	P	∅ A (mm)	C (mm)	*Quantity Box/Bag*
1052007	Pg 7	15	6	1.000/100
1052009	Pg 9	19	6	500/100
1052011	Pg11	22	7	100
1052013	Pg13.5	25	7	100
1052016	Pg16	27	7	100
1052021	Pg21	33	9	100/50
1052029	Pg29	44	9	50
1052036	Pg36	55	10	20
1052042	Pg42	62	10	10
1052048	Pg48	69	12	10

Add to Ref: N for Black

Polystyrene PS

1253
1840

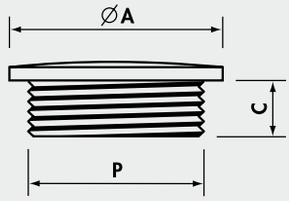
Protection: IP 54

Material: POLYSTYRENE PS
Temperature range:
–20°C to +60°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black

Metric thread M 1.5 pitch CEI EN 60423

Ref. Light Grey	P	∅ A (mm)	C (mm)	*Quantity*
1253M12	M12X1.5	15	6	100
1253M16	M16X1.5	20	6	100
1253M20	M20X1.5	25	7	100
1253M25	M25X1.5	30	7	100
1253M32	M32X1.5	37	9	50
1253M40	M40X1.5	47	9	30
1253M50	M50X1.5	58	10	20
1253M63	M63X1.5	72	12	10

Add to Ref: N for Black



Pg thread DIN 40 430 - Dimensions DIN 46 320

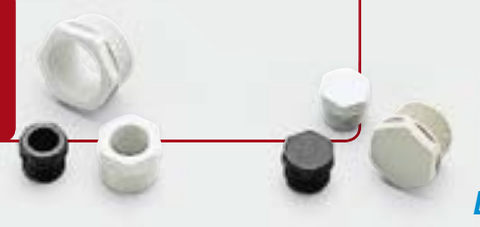
Ref. Light Grey	P	∅ A (mm)	C (mm)	*Quantity Box/Bag*
1840	Pg 7	15	6	100
1841	Pg 9	19	6	500/100
1842	Pg11	22	7	100
1843	Pg13.5	25	7	100
1844	Pg16	27	7	100
1845	Pg21	33	9	50
1846	Pg29	44	9	100/50
1847	Pg36	55	10	20
1848	Pg42	62	10	10
1849	Pg48	69	12	10

Add to Ref: N for Black

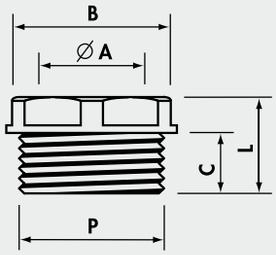
ENTRY BUSHES

1700

Polyamide PA6



Material: POLYAMIDE PA6
self-extinguishing class V0 (UL 94)
Temperature range:
–20°C to +90°C (continuous)
Colour: RAL 7035 light grey,
RAL 9005 black



Entry bushes

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Light Grey	P	∅A (mm)	B Spanner (mm)	C (mm)	L (mm)	*Quantity Box/Bag*
* **1700.2**	Pg 9	10	16	9	14	600/100
* **1701.2**	Pg11	11.5	19	10	15	300/100
* **1702.2**	Pg13.5	13.5	21	11	16.5	300/100
1703.2	Pg16	16	23	12.5	18.5	200/100
1704.2	Pg21	22	30	12	17.5	100/50
1705.2	Pg29	27	40	15	22	50/50

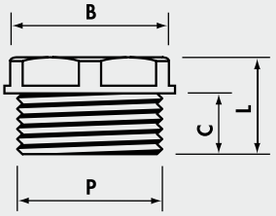
BSP thread ISO 228/1

* **1830**	G1/4"	8.5	15	8.5	13.5	800/100
* **1831**	G3/8"	11.5	17	9	14	300/100
* **1832**	G1/2"	13	21	11	16.5	300/100

Metric thread M 1.5 pitch CEI EN 60423

△**1835G**	M16X1.5	11.5	17	9	14	100/100
* **1836**	M20X1.5	13.5	21	11	16.5	300/100

* Add to Ref: N for Black
△ Dark Grey only



Blind entry bushes

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Light Grey	P	∅A (mm)	B Spanner (mm)	C (mm)	L (mm)	*Quantity Box/Bag*
* **1702.5**	Pg13.5	–	21	11	17	300/100
1703.5	Pg16	–	23	12.5	18.5	200/100

BSP thread ISO 228/1

* **1861**	G3/8"	–	17	9	14	600/100
* **1862**	G1/2"	–	21	11	16.5	200/100

Metric thread M 1.5 pitch CEI EN 60423

* **1866**	M20X1.5	–	21	11	17	100

*Add to Ref: N for Black

ENTRY PLUGS AND BUSHES

Brass

2053
2052
2021

Material: Entry plugs - NICKEL PLATED BRASS (CuZn 40 Pb 3)
Entry bushes - PLAIN BRASS
Protection: Entry plugs - IP 54

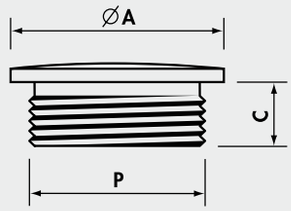
Entry plugs

Metric thread M 1.5 pitch CEI EN 60423

Ref. Nickel Plated Brass	P	∅ A (mm)	C (mm)	*Quantity Box/Bag*
2053M12N	M12X1.5	14	5	1,500/100
2053M16N	M16X1.5	18	5	1,000/100
2053M20N	M20X1.5	22	6.5	500/100
2053M25N	M25X1.5	28	7	200/100
2053M32N	M32X1.5	35	8	150/50
2053M40N	M40X1.5	44	8.5	100/50
2053M50N	M50X1.5	54	9	50/25
2053M63N	M63X1.5	67	10	25/25

Pg thread DIN 40 430 - Dimensions DIN 46 320

Ref. Nickel Plated Brass	P	∅ A (mm)	C (mm)	*Quantity Box/Bag*
2052007N	Pg 7	14	5	1,500/100
2052009N	Pg 9	17	6	1,000/100
2052011N	Pg11	20	6	500/100
2052013N	Pg13.5	22	6.5	500/100
2052016N	Pg16	24	6.5	500/100
2052021N	Pg21	30	7	200/50
2052029N	Pg29	39	8	100/25
2052036N	Pg36	50	9	50/50
2052042N	Pg42	57	10	25/25
2052048N	Pg48	64	10	25/25

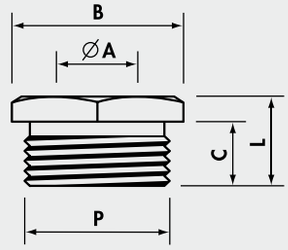


Entry bushes

BSP thread ISO 228/1

Ref. Brass	P	∅ A (mm)	B Spanner (mm)	C (mm)	L (mm)	*Quantity Box/Bag*
2021014	G1/4"	10	13	6	8.5	1,000/100
2021038	G3/8"	12	17	7.5	10.5	800/100
2021012	G1/2"	16	21	9.5	13	400/100
2021058	G5/8"	18	23	10	13.5	250/50
2021034	G3/4"	21	27	10	14	200/50
2021100	G1"	26.5	34	11	15.5	100/50
2021118	G1"1/8	31	38	12	16.5	100/25
2021114	G1"1/4	35	42	13	18	50/25
2021112	G1"1/2	41.5	48	13	18.5	50/25
2021200	G2"	51.5	60	13.5	19.5	25/25

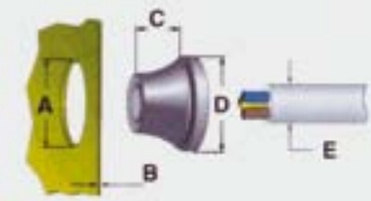
Add to Ref: N for NICKEL PLATED BRASS



RUTASEAL GROMMETS

RS

Material: EPDM
halogen-free and chemical resistant
Temperature range: –40°C to +110°C
Protection: IP 67
Colour: RAL 7001 light grey
Application:
IP67 sealing of cables and conduits in Metric and Pg threaded entries through material thickness 0.5-4 mm



Fits Metric thread

Ref.	Fits Threaded Entry	Dimensions A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Quantity Box/Bag
RS0407.M12	M12	12.5	0.5 - 2	5.6	20.0	4 - 7	2,000/50
RS0509.M16	M16	16.5	1 - 4	11.0	21.0	5 - 9	2,000/50
RS0813.M20	M20/Pg13.5	20.5	1 - 4	13.4	25.5	8 - 12	3,000/50
RS1117.M25	M25	25.5	1 - 4	15.3	30.5	11 - 16	2,000/50
RS1520.M32	M32	32.5	1 - 4	18.6	38.5	15 - 20	1,000/25
RS1928.M40	M40	40.5	1 - 4	21.7	48.5	19 - 28	600/25
RS2735.M50	M50	50.5	1 - 4	25.0	60.5	27 - 35	250/10

Fits Pg thread

Ref.	Fits Threaded Entry	Dimensions A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Quantity Box/Bag
RS0305.07	Pg 7	12.5	0.5 - 2	5.4	20.0	3 - 5	2,000/50
RS0507.09	Pg 9	16.0	1 - 4	10.3	21.0	5 - 7	2,000/50
RS0710.11	Pg11	19.0	1 - 4	12.7	24.0	7 - 10	3,000/50
RS1014.16	Pg16	23.0	1 - 4	14.7	28.0	10 - 14	2,000/50
RS1420.21	Pg21	29.0	1 - 4	17.6	35.0	14 - 20	1,000/25
RS2026.29	Pg29	38.0	1 - 4	20.0	46.0	20 - 26	600/25
RS2635.36	Pg36	48.0	1 - 4	23.9	58.0	26 - 35	250/10

CABLE & CONDUIT ACCESSORIES

3600

modular retaining clips - ABS

Application: Fix SICURclip base to surface using dia. 5 - 6 mm screw (Ref. Fig. A).
Insert cable, tubing or flexible conduit.
Fit adjustable cover and press to secure.
Modular SICURclips of the same or different size may easily be joined together.

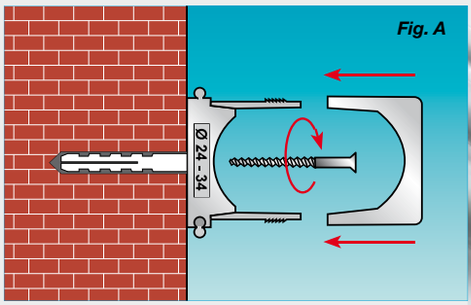
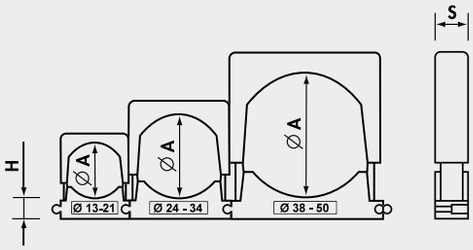


Fig. A

Material: ABS self-extinguishing class V0 (UL94) UV stabilised
Glow wire resistance: 750° C (CEI EN 60695-2-1)
Temperature range:
–20°C to +80°C (continuous)
Colour: RAL 7035 light grey

SICURclips *for cable, tubing & fexible conduit*



Ref.	Ø A min-max (mm)	H (mm)	S (mm)	Quantity
3601	13-21	8.5	16	100
3602	24-34	8.5	16	50
3603	38-50	8.5	16	25

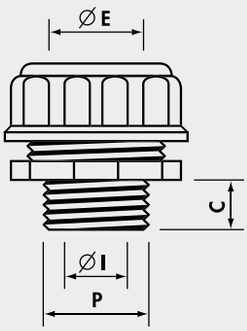
CONDUIT FITTINGS

1740

Polyamide PA6

Colour: RAL 7035 grey
For all conduits with metal protection: rigid, flexible, spiral, corrugated, etc.
High level of resistance: the action of sun, moisture or salinity does not affect the products, which are also impervious to fumes, acids, solvents and oils.
Suits outside diameters 13 - 40 mm .

Material: POLYAMIDE PA6
self-extinguishing class V0 (UL 94)
Temperature range:
–20°C to +90°C (continuous)



Pg thread DIN 40 430

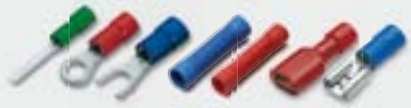
Ref. Light Grey	P	Fixing Hole Ø (mm)	Ø E min-max (mm)	Ø I (mm)	C (mm)	Quantity *Box/Bag*
1740	Pg 9	15.5	13-15	9	9	100
* **1741**	Pg11	19	14-16.5	13	10	100
1742	Pg13.5	20.5	16-19	15	10	50
1743	Pg16	22.5	20-22	17	11	50/25
1744	Pg21	29	23-25.5	21	11	50/25
1745	Pg21	29	25-28.5	21	11	25
1746	Pg29	37	30-33	30	13	20/10
1747	Pg36	47	37-42	36	15	10

For nominal conduit diameters 16-20-25-32-40 mm

*Add to Ref: N for Black (RAL 9005)

MECHANICAL AND PNEUMATIC TOOLS

HP 1



Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HP 1**	Crimp style:
	Crimping range:	PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 24 to 13 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.13 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HP 3

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HP 3**	Crimp style:
	Crimping range:	PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 23 to 10 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.14 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HNN 3

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HNN 3**	Crimp style:
	Crimping range:	PA6.6 insulated terminals and connectors for conductor sizes 16 to 8 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.08 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HNN 4

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HNN 4**	Crimp style:
	Crimping range:	PA6.6 insulated terminals and connectors for conductor sizes 8 to 6 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.08 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HPH 1

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HPH 1**	Crimp style:
	Crimping range:	Through connectors PE HD insulated, heat shrinkable. for conductor sizes 20 to 10 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.13 lbs
	Package Dimensions:	9.4 x 3.2 x 1.0 in.

HNKE 4

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HNKE 4**	Crimp style:
	Crimping range:	End sleeves for conductor sizes 20 to 12 AWG
	Dimensions:	
	Length (closed handles)	9.3 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.14 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HNKE 16

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HNKE 16**	Crimp style:
	**Crimping range:**	End sleeves for conductor sizes 12 to 6 AWG
	Dimensions:	
	Length (closed handles)	9.3 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.08 lbs
	Package Dimensions:	9.4 x 3.2 x 1.0 in.

HNKE 50

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HNKE 50**	Crimp style:
	**Crimping range:**	End sleeves for conductor sizes 3 - 2 - 1/0 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.30 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HN 1

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HN 1**	Crimp style:
	Crimping range:	Uninsulated terminals and connectors for conductor sizes 22 to 8 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.06 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HN 5

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HN 5**	Crimp style:
	Crimping range:	Uninsulated terminals and connectors for conductor sizes 8 to 6 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.08 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HN-A25

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HN-A25**	Crimp style: ⬡
	Crimping range:	Uninsulated terminals and connectors A-M, L-M and L-P series for conductor sizes 8 to 4 AWG
	Dimensions:	
	Length (closed handles)	9.0 in.
	Width (closed handles)	3.1 in.
	Height	0.7 in.
	Weight:	1.10 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HN-D25

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HN-D25**	Crimp style: ⬡
	Crimping range:	Cu tube lugs DR (DIN 46235) and through connectors DSV (DIN 46267) for conductor sizes 8 to 4 AWG
	Dimensions:	
	Length (closed handles)	9.0 in.
	Width (closed handles)	3.1 in.
	Height	0.7 in.
	Weight:	1.10 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HF 1

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HF 1**	Crimp style:
	Crimping range:	Open barrel brass terminals for conductors sizes 20 to 12 AWG (not BN-FAB/FAR type)
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.12 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HF 2

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HF 2**	Crimp style:
	Crimping range:	Open barrel brass terminals for conductors sizes 28 to 16 AWG
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.09 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HX 1

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HX 1**	Crimp style: ⬡
	**Crimping range:**	Coaxial connectors type RG58, RG59, RG62 and RG 71
	Dimensions:	
	Length (closed handles)	9.2 in.
	Width (closed handles)	2.8 in.
	Height	0.7 in.
	Weight:	1.06 lbs
	Package dimensions:	9.4 x 3.2 x 1.0 in.

HN-CS4

Specific positioner for Cembre CS4 connectors

Manual tool, compact and easy to use, equipped with:

- treated steel crimp jaws with high mechanical properties.
- factory-set ratchet for crimping control (automatic handle opening upon completion of crimping operation).
- Emergency release lever which, if necessary, opens the crimp jaws before their complete closure.
- Ergonomically designed non-slip moulded plastic grips.

Technical features:	**Crimpstar® HN-CS4**	Crimp style: ⬭
	**Crimping range:**	Cembre CS4 connectors for conductors sizes 14 - 12 - 10 AWG
	Dimensions:	
	Length (closed handles)	9.1 in.
	Width (closed handles)	3.1 in.
	Height	1.8 in.
	Weight:	1.43 lbs
	Package dimensions:	9.0 x 3.3 x 2.0 in.

MECHANICAL TOOLS nd® RANGE

ND#1

A brand new generation of tools, with a unique mechanism to reduce operator effort.
Small and compact, with ergonomically designed handles for ease of operation.

High quality materials combined with advanced design and manufacturing technology, produce a reliable tool with a guaranteed consistent, crimping operation.

Technical features:

ND#1	**Crimp style:**
Crimping range:	Insulated and uninsulated end sleeves for conductors sizes 22 to 15 AWG
Dimensions:	
Length (closed handles)	7.5 in.
Width (closed handles)	2.8 in.
Height	0.8 in.
Weight:	1.04 lbs

ND#2

Technical features:

ND#2	**Crimp style:**
Crimping range:	Insulated and uninsulated end sleeves for conductors sizes 17 to 10 AWG
Dimensions:	
Length (closed handles)	7.5 in.
Width (closed handles)	2.8 in.
Height	0.8 in.
Weight:	1.04 lbs

ND#3

Technical features:

ND#3	**Crimp style:**
Crimping range:	Insulated and uninsulated end sleeves for conductors sizes 10 to 5 AWG
Dimensions:	
Length (closed handles)	7.5 in.
Width (closed handles)	2.8 in.
Height	0.8 in.
Weight:	1.04 lbs

ND#4

Technical features:

ND#4	**Crimp style:**
Crimping range:	Insulated and uninsulated end sleeves for conductors sizes 20 to 11 AWG
Dimensions:	
Length (closed handles)	7.5 in.
Width (closed handles)	2.8 in.
Height	0.8 in.
Weight:	1.04 lbs

Package Dimensions:	7.7 x 3.0 x 0.8 in.

MECHANICAL TOOLS ZKE RANGE

Crimp style: ◇

ZKE 6-F

Tool for crimping end sleeves
20 to 10 AWG
front insertion

Crimp style: □

ZKE 610

Single aperture, ratchet controlled tool
for crimping end sleeves,
28 to 7 AWG
side insertion

Crimp style: ⌵

ZKE 2

For end sleeves
20 to 6 AWG

MECHANICAL TOOLS HP4 RANGE

HP4-R

Professional manual mechanical tool with ratchet mechanism that prevents the handles from opening again before reaching the ratchet.
Equipped with a positioning device to reduce the operator's effort and facilitate proper crimping of the conductor. According to the different thicknesses of the conductor insulation, the crimping on the insulation can be carried out by adjusting the jaws through three different settings:
1) strong, 2) medium, 3) light.
The tool is particularly easy to use thanks to its shape and handle coating.
At the end of the crimping the outer surface of the conductor is automatically stamped with the following crimping code:
one point for red conductor sizes from 23 to 15 AWG.

Construction features:

- Special treated and externally protected steel body, ratchet and handles.
- Handle coating in soft red PVC plastic.

Technical features:	HP4-R	Crimp style:
Crimping range:		PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 23 to 15 AWG
Dimensions:		
Length (closed handles)		10.4 in.
Width (closed handles)		3.1 in.
Weight:		1.1 lbs
Package dimensions:		13.0 x 4.3 x 2.0 AWG

HP4-B

Professional manual mechanical tool with ratchet mechanism that prevents the handles from opening again before reaching the ratchet.
Equipped with a positioning device to reduce the operator's effort and facilitate proper crimping of the conductor. According to the different thicknesses of the conductor insulation, the crimping on the insulation can be carried out by adjusting the jaws through three different settings:
1) strong, 2) medium, 3) light.
The tool is particularly easy to use thanks to its shape and handle coating.
At the end of the crimping the outer surface of the conductor is automatically stamped with the following crimping code:
two points for blue conductor sizes from 15 to 13 AWG

Construction features:

- Special treated and externally protected steel body, ratchet and handles.
- Handle coating in soft blue PVC plastic.

Technical features:	HP4-B	Crimp style:
Crimping range:		PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 15 to 13 AWG
Dimensions:		
Length (closed handles)		10.4 in.
Width (closed handles)		3.1 in.
Weight:		1.1 lbs
Package dimensions:		13.0 x 4.3 x 2.0 AWG

MECHANICAL TOOLS HP4 RANGE

HP4-G

Construction features:

- Special treated and externally protected steel body, ratchet and handles.
- Handle coating in soft yellow PVC plastic.

Professional manual mechanical tool with ratchet mechanism that prevents the handles from opening again before reaching the ratchet.
Equipped with a positioning device to reduce the operator's effort and facilitate proper crimping of the conductor. According to the different thicknesses of the conductor insulation, the crimping on the insulation can be carried out by adjusting the jaws through three different settings:
1) strong, 2) medium, 3) light.
The tool is particularly easy to use thanks to its shape and handle coating.
At the end of the crimping the outer surface of the conductor is automatically stamped with the following crimping code:
three points for yellow conductor sizes from 11 to 10 AWG

Technical features:	**HP4-G**	Crimp style:
	Crimping range:	PVC, PC and PA6.6 insulated terminals and connectors for conductor sizes 11 to 10 AWG
	Dimensions:	
	Length (closed handles)	12.6 in.
	Width (closed handles)	4.1 in.
	Weight:	1.8 lbs
	Package dimensions:	13.0 x 4.3 x 2.0 AWG

HP4-C10

Professional manual mechanical tool with ratchet mechanism that prevents the handles from opening again before reaching the ratchet.
The tool is particularly easy to use thanks to its shape and handle coating.

Construction features:

- Specially treated and externally protected steel body, ratchet and handles.
- Handle coating in soft yellow PVC.

Technical features:	**HP4-C10**	Crimp style:
	Crimping range:	For sleeve connectors type C6-C6 and C10-C10
	Dimensions:	
	Length (closed handles)	12.8 in.
	Width (closed handles)	4.1 in.
	Weight:	1.6 lbs
	Package dimensions:	13.0 x 4.3 x 2.0 AWG

MECHANICAL TOOL HWE1

WITH INTERCHANGEABLE DIES

New

HWE1

A robust and reliable tool designed to optimise the installers time and effort.
A single tool body with a range of interchangeable dies allows a quick and simple transfer from one cable/connector combination to another, across a range of applications.

Technical features

- Length: 9.45 in.
- Weight: 1.3 lbs.
- Automatic opening of handles following completion of the crimping operation
- Dull Nickel finish
- Anti-slip handle grips

Rapid insertion/extraction of dies without using other tools

Also available:

HWE1 KIT
comprising:
- **HWE1** Manual mechanical tool
- **WF16** die
- **IT6** die
- all contained in a sturdy plastic case with extra compartments for interchangeable dies

INTERCHANGEABLE DIES TO ORDER SEPARATELY

INSULATED AND UNINSULATED END SLEEVES

WF16
Size 20 ÷ 6 AWG

INSULATED CONNECTORS RED, BLUE AND YELLOW

IT6
Size 20 ÷ 10 AWG

PHOTOVOLTAIC CONNECTORS (MULTI-CONTACT)

MC3
Size 12 ÷ 10 AWG

MC4
Size 12 ÷ 10 AWG

INSULATED AND UNINSULATED END SLEEVES

WF6
Size 20 ÷ 10 AWG

WF35
Size 6 ÷ 2 AWG

UNINSULATED CABLE LUGS

NIT10
Size 20 ÷ 8 AWG

OPEN BARREL BRASS CONNECTORS

OB2.5P
Size 20 and 14 AWG

SUB-D 075
Size 30 and 18 AWG

SUB-D 050
Size 28 and 20 AWG

COAXIAL CONNECTORS

C59
RG58,RG59, RG62

See page 113 for **HB 11** cable stripper

MECHANICAL TOOL IDT

WITH MODULAR INTERCHANGEABLE DIES

New

DIES FOR PHOTOVOLTAIC CONNECTORS

MC3 Multi-Contact | MC4 Multi-Contact | Tyco Solarlok

See page 113 for **HB 11** cable stripper

IDT

A robust and reliable tool designed to optimise the installers time and effort.

A single tool body with a range of interchangeable dies allows a quick and simple transfer from one cable/connector combination to another, across a wide range of applications.

Modular dies may be inserted/extracted without using any tools and are connected in pairs for speed and convenience.

Technical features

- Length: 9.21 in.
- Weight: 1.0 lbs.
- Automatic opening of handles following completion of the crimping operation
- Colour: black

To assist correct die selection, the type of connector is illustrated on each die.

Each die also carries an illustration of the steps in each crimping process, to assist in achieving the best result.

INTERCHANGEABLE DIES TO ORDER SEPARATELY

INSULATED TERMINALS RED, BLUE, YELLOW AND GREEN

4300-3129	4300-3128
Size 20 ÷ 14 AWG (Red - Blue)	Size 12 ÷ 10 AWG (Yellow) Size 26 ÷ 21 AWG (Green)

CONNECTORS WITH HEAT SHRINKABLE INSULATION

4300-3258	4300-3262
Size 20 ÷ 14 AWG (Red - Blue)	Size 12 ÷ 10 AWG (Yellow) Size 22 ÷ 18 AWG (Green)

UNINSULATED CONNECTORS

4300-3137	4300-3241
Size 18 ÷ 14 AWG	Size 12 ÷ 8 AWG

CONTACTS FOR MULTI POLAR CONNECTORS (eg. ILME, HTS, CONTACT)

4300-3147	4300-3148
Size 26 ÷ 12 AWG	Size 10 ÷ 8 AWG

INSULATED AND UNINSULATED END SLEEVES

4300-3127	4300-3153	4300-3154
Size 22 ÷ 8 AWG	Size 6 ÷ 4 AWG	Size 2 ÷ 1/0 AWG

OPEN BARREL CONNECTORS

4300-3146
Size 20 ÷ 10 AWG

BNC/TNC CONNECTORS FOR COAXIAL CABLES

4300-3136	4300-3140
RG 58, 59, 62, 71	RG 174, 179

TV - SATELLITE RECEIVER CONNECTORS

4300-3138
RG 6, 59

PHONE CONNECTORS

4300-3144	4300-3132
RJ 45 (LARGE)	RJ 11 (SMALL)

PHOTOVOLTAIC CONNECTORS (MULTI-CONTACT)

4300-3540	4300-3539	4300-3541
MC3 Size 14 - 12/10 AWG	MC4 Size 14 - 12/10 AWG	Tyco Solarlok Size 14 - 12/10 AWG

VALSTAR R3 IDT
To order separately - sturdy plastic case designed to store an IDT tool and up to 10 modular dies.

Modular die storage housings are easily combined for convenient transportation

IDT tool pack

Modular die pack

TN 70SEY

Professional manual mechanical tool suitable for crimping A-M Cu lugs and non-insulated L-M and L-P connectors.
Heat treated steel crimp jaws.
Easily adjustable die positioning by knurled screw and reference vernier scale.
Handles made from anti-slip plastic with hilt.

Technical features:	TN 70SEY	Crimp style:
	Crimping range:	Uninsulated terminals and connectors for conductor sizes 10 to 2/0 AWG
	Dimensions:	
	Length (closed handles)	17.7 in.
	Width (closed handles)	5.0 in.
	Weight:	4.4 lbs

TNN 70

Professional manual mechanical tool suitable for the crimping of wire terminals and PA 6.6 insulated connectors.
Heat treated steel crimp jaws.
Easily adjustable die positioning by knurled screw and reference vernier scale.
Handles made from anti-slip plastic with hilt.

Technical features:	TNN 70	Crimp style:
	Crimping range:	Polyamide PA6.6 insulated terminals and connectors for conductor sizes 8 to 2/0 AWG
	Dimensions:	
	Length (closed handles)	17.7 in.
	Width (closed handles)	5.0 in.
	Weight:	4.4 lbs

TN 120SEY

Professional manual mechanical tool suitable for crimping A-M Cu lugs and non-insulated L-M and L-P connectors.
Heat treated steel crimp jaws.
Easily adjustable die positioning by knurled screw and reference vernier scale.
Handles made from anti-slip plastic with hilt.

Technical features:	**TN 120SEY**	Crimp style:
	**Crimping range:**	Uninsulated terminals and connectors for conductor sizes 8 to 300 AWG
	Dimensions:	
	Length (closed handles)	27.5 in.
	Width (closed handles)	6.7 in.
	Weight:	6.6 lbs

TNN 120

Professional manual mechanical tool suitable for the crimping of wire terminals and PA 6.6 insulated connectors.
Heat treated steel crimp jaws.
Easily adjustable die positioning by knurled screw and reference vernier scale.
Handles made from anti-slip plastic with hilt.

Technical features:	**TNN 120**	Crimp style:
	**Crimping range:**	Polyamide PA6.6 insulated terminals and connectors for conductor sizes 8 to 300 AWG
	Dimensions:	
	Length (closed handles)	27.5 in.
	Width (closed handles)	6.7 in.
	Weight:	6.6 lbs

TND 6-70

Mechanical tools equipped with rotating dies with hexagonal imprint compliant with **DIN 480863** suitable to crimp copper lugs according to **DIN 46235** and through connectors according to **DIN 46267 T.1** (refer to page 28-29), Particularly sturdy and easy to handle.

Technical features:	**TND 6-70**	Crimp style:
Crimping range:	Uninsulated terminals and connectors according to **DIN 46235** and **DIN 46267 T.1** for conductor sizes 10 to 2/0 AWG	
Dimensions:		
Length (closed handles)	20.3 in.	
Width (closed handles)	5.2 in.	
Weight:	4.4 lbs	

TND 10-120

Mechanical tools equipped with rotating dies with hexagonal imprint compliant with **DIN 480863** suitable to crimp copper lugs according to **DIN 46235** and through connectors according to **DIN 46267 T.1** (refer to page 28-29), Particularly sturdy and easy to handle.

Technical features:	**TND 10-120**	Crimp style:
Crimping range:	Uninsulated terminals and connectors according to **DIN 46235** and **DIN 46267 T.1** for conductor sizes 8 to 250 AWG	
Dimensions:		
Length (closed handles)	26.2 in.	
Width (closed handles)	6.4 in.	
Weight:	8.1 lbs	

CABLE CUTTERS

KT

KT 1
Hand operated tool
for cutting cables
up to a maximum Ø 5/8 in.

KT 2
Hand operated tool
for cutting cables
up to a maximum Ø 1 in.

KT 5
Hand operated tool
for cutting cables
up to max section 3 AWG

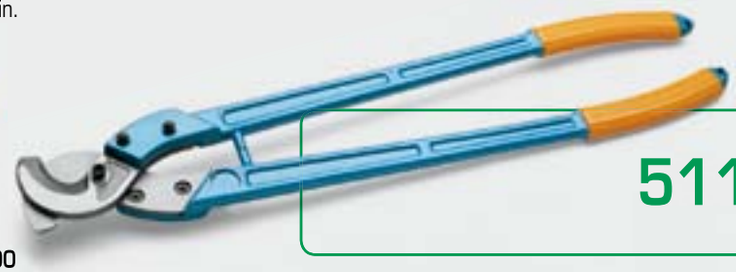
KT 3
For cutting cables
Ø max 1 1/4 in. (600 MCM)
Weight: 1.3 lbs.
Length: 10.04 in.

KT 4
For cutting cables
Ø max 2 in. (1000 MCM)
Weight: 1.96 lbs.
Length: 12.2 in.

Hand operated ratchet cable
cutter for stranded and flexible
copper and aluminum cables

511

5116660250
For cutting cables up to 500 MCM
Weight: 3.31 lbs.
Length: 23.62 in.



5116660500
For cutting cables up to 1000 MCM
Weight: 6.62 lbs.
Length: 31.5 in.

WIRE STRIPPERS

HB 6

Wire strippers,
including stripping die for PVC
insulated cables from 34 to 8 AWG

Interchangeable stripping dies available upon request:

4320-0864, flat blade
suitable for:
PVC from 34 to 8 AWG

4320-0866, rounded blades
suitable for:
PVC from 10 to 5 AWG

4320-0865, 'V' blades
suitable for:
PTFE from 28 to 12 AWG

HB 11

For photovoltaics insulated cables
14 to 10 AWG
stripping length 0.33 in.

SCISSORS

SC 1

Electricians scissors
with high carbon steel
blades and satin
finished Nylon handles.

SC 3X

Multi-purpose scissors
with high hardness blades (56
HRC) and anti slide serrations.
The moulded plastic handles com-
bine a rigid structure with a softer
material for finger comfort.

CABLE STRIPPING TOOLS

HB 13UE

Universal cable stripping tool for external sleeves of Low/Medium Voltage cables Ø 12,7 to 63,5 mm and primary insulator in XLPE max Ø 38,1 mm

HB 12N

For vulcanised extruded semiconductor

HB12N cable stripping tool removes the semiconductor layer by being manually rotated around the cable while lateral advancement is achieved automatically. Safe and convenient, it can be used on conductors Ø 0.71 to 2.36 in.

- Sturdy frame in anodised Aluminium alloy and Steel.
- Special Steel blade with precise cutting depth regulation.
- Stripping operation can start at any point along the conductor.
- Bearing mounted rollers provide smooth cutting action.
- With "REVERSE" function, which allows the removal of semiconductor up to 0.27 mm thick from the sheath of the cable.
- Double speed for each direction.

The **HB 12N** kit includes:
- HB 12N cable stripping tool
- sturdy plastic case

HB 2 HB40-U

Wire stripper, for circular cables
HB 2 Ø 3/16 to 1 1/8 in.
HB 40-U Ø 3/4 to 1 9/16 in.

HB 10

Insulated knife has an interchangeable straight blade and plastic blade protector that folds into the handle.
Ergonomic handle made of anti shock plastic material

HB 9

Insulated knife, with curved blade and protective cover. Suitable for insulation and screen removal, equipped with blade guide to avoid damage to strands. Handle is made of a bi-component plastic material.

HAND TOOL FOR CONDUIT

KTS 1632

Cuts and seals flexibles plastic conduit in a single operation.
Lightweight and easy to operate.
Suitable for flexible conduits from Ø 0.63 to Ø 1.26 in.

Length: 9.05 in.
Width: 2.28 in.
Thickness: 1.26 in.
Weight: 0.71 lbs.

PC 1

Plastic pipe cutting tool.
Cutting capacity:
from Ø 0.23 to Ø 1.65 in.

Body: die-cast Aluminum alloy
Blade material: hardened Carbon Steel

FRAME-TYPE HOLE PUNCHING TOOL FOR CABLE TRUNKING

MT-FC48N

Table denotes the punch/die set reference, for each hole size. Suitable for punching holes in mild steel, fibreglass or plastic material, up to 0.08 in. thick.

Hole dimensions					Maximum thickness of mild steel (in.)	Code
Nominal Ø (mm)	Ø (inch)	Pg	ISO	Inch		
15,5	.610	Pg9	-	-		RD 15.5 SS-FC
16,2	.638	-	ISO-16	-		RD 16.2 SS-FC
17,5	.689	-	-	-		RD 17.5 SS-FC
18,8	.740	Pg11	-	-		RD 18.8 SS-FC
19,1	.752	-	-	-		RD 19.1 SS
20,5	.807	Pg 13,5	ISO-20	-		RD 20.5 SS
22,6	.890	Pg16	-	-		RD 22.6 SS
23,8	.937	-	-	5/8"		RD 23.8 SS
25,4	1.000	-	ISO-25	-		RD 25.4 SS
27,0	1.063	-	-	3/4"		RD 27.0 SS
28,5	1.122	Pg21	-	-		RD 28.5 SS
30,5	1.201	-	-	7/8"		RD 30.5 SS
28,5	1.122	Pg 21	-	-	0.08	RD 28.5 SS-19
30,5	1.201	-	-	7/8"		RD 30.5 SS-19
31,8	1.252	-	-	-		RD 31.8 SS
32,5	1.279	-	ISO-32	-		RD 32.5 SS
34,6	1.362	-	-	-		RD 34.6 SS
37,2	1.464	Pg29	-	-		RD 37.2 SS
38,1	1.500	-	-	-		RD 38.1 SS
40,5	1.594	-	ISO-40	-		RD 40.5 SS-FC
41,3	1.626	-	-	-		RD 41.3 SS-FC
42,5	1.673	-	-	1"1/4"		RD 42.5 SS-FC
43,2	1.701	-	-	-		RD 43.2 SS-FC
44,5	1.752	-	-	-		RD 44.5 SS-FC
47,2	1.858	Pg36	-	-		RD 47.2 SS-FC

New

VAL P30
Supplied in a robust plastic case.

Lightweight and easy to operate, designed for punching holes up to 1.858 in. diameter in the side wall of trunking without the need for pre drilling.

Max centre of hole to edge of trunking: 2.11 in.

Length: 9.9 in.
Width: 8.8 in.
Thickness: 2.6 in.
Weight: 7.23 lbs.

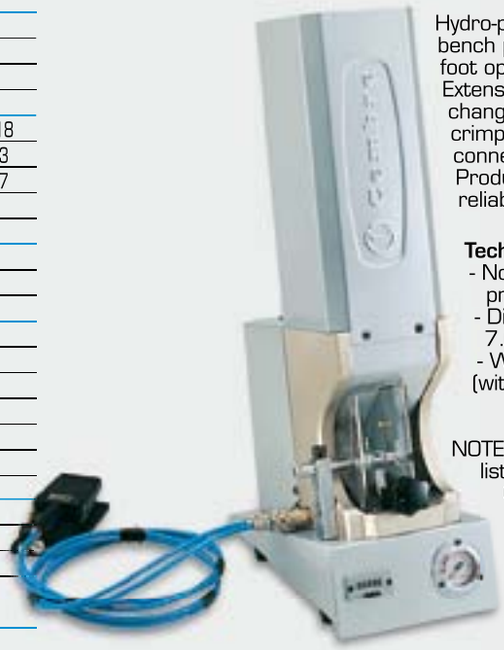
BENCH PRESS TOOLS

PNB-1

INTERCHANGEABLE DIES (to be ordered separately)

Die Set	Guard*	Type of connector		Conductor Size AWG
PV-1	PU-1	*Insulated connectors*	*green*	24÷20
PR-1			*red*	23÷15
PB-1			*blue*	15÷13
PG-1			*yellow*	11÷10
KE 0,75-1	PK-1	*End Sleeves*	*KE, PK...*	22 - 20 - 18
KE 2,5-1				17- 15 -13
KE 10-1				11 - 10 - 7
MTT 16-50	ME-1			5
MTT 25-50				3
N1-1	PU-1	A 03-M	S 1.5-..	23 - 15
		A 06-M	S 2.5-..	15 - 13
		A 1-M	S 6-..	11 - 10
MY 2-50	ME-1	*Bare color code copper lugs*	*C8*	8
MY 3-50			*C6*	6
MY 4-50			*C4*	4
MY 5-50			*C3*	3
MY 6-50			*C2*	2
MY 7-50			*C1*	1
MY 10-50			*C1/0*	1/0
MN 2RF-50	MN RF-1	*Nylon insulated lugs*	*ANE2-M*	7
MN 3RF-50			*ANE3-M*	5
MN 5RF-50			*ANE5-M*	3
MN 7RF-50			*ANE7-M* *ANE9-M*	2

** Supplied as standard with the machine*



Hydro-pneumatic, production bench press, controlled by a foot operated pedal.
Extensive range of inter-changeable dies available for crimping a wide variety of connectors.
Producing a consistent and reliable crimped connection

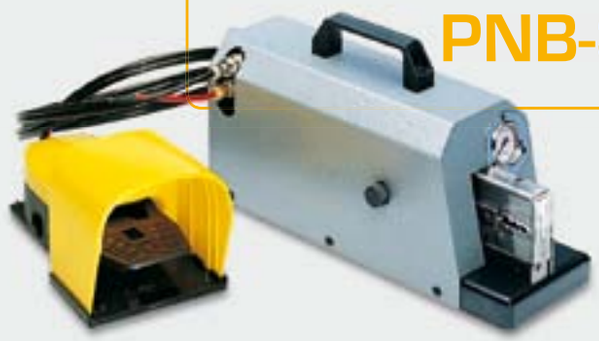
Technical details:
- Nominal operating pressure: 100 psi
- Dimensions LxDxH: 7.09x12.6x27.56 in.
- Weight: 50.72 lbs. (without dies)

NOTE: for applications not listed, please contact Cembre.

PNB-3

Type	Connector Type	Conductor Size AWG
PNB-3P*	*Insulated connectors red, blue and yellow*	23÷10
PNB-3PD	*Insulated terminals and butt connectors - frontal insertion*	23÷10
PNB-3N1	*Uninsulated terminals*	23÷7
PNB-3N5	*Uninsulated terminals*	7÷5
PNB-3NN3	*Nylon insulated terminals*	15÷7
PNB-3NN4	*Nylon insulated terminals*	7÷5
PNB-3F/M	*Bullet connectors*	20÷13

** A positioner for the correct location of Polycarbonate fully insulated push-ons is available on request*



Technical details:
- Normal operating pressure: 87÷100 psi
- Dimensions LxDxH: 5.12x14.57x7.68 in.
- Weight: 22.71 lbs

Pneumatic bench press operated by foot pedal for crimping terminals and connectors 23 to 5 AWG.

PNB-4KE

Tool	Connector Type	Conductor Size AWG
PNB-4KE	*End Sleeves type PK.. and type KE*	22÷7

Technical details:
- Nominal operating pressure: 87 psi
- Dimensions LxDxH: 4.72x6.3x11.81in.
- Weight: 13.23 lbs

Pneumatic bench press, controlled by a foot operated pedal. Supplied with a multi-aperture die suitable for crimping insulated and uninsulated end sleeves from 22 to 7 AWG. Compacted and efficient. Easy to operate, producing a secure and reliable crimped connection.

PNB-6KE
PNB-7KE

Hand held - PNB series

Technical details:

PNB-6KE

Crimping Range	24 ÷ 14 AWG / 0,25 ÷ 2,5 sqmm
Weight	0.88 lbs.
Dimensions	Ø 1.7 x 7.9 in.
Spiral hose length	78.7 in.

PNB-7KE

Crimping Range	12 ÷ 8 AWG / 4 ÷ 10 sqmm
Weight	0.88 lbs.
Dimensions	Ø 1.7 x 7.9 in.
Spiral hose length	78.7 in.

PNB-6KE and **PNB-7KE** hand tools facilitate the rapid crimping of insulated end sleeves while avoiding the operator discomfort associated with ordinary manual tools.
Lightweight and easy to use, these tools are ideal for panel building applications and component assembly.

Both tools are designed to be maintenance-free and need no routine calibration.
A 58-87 psi air supply is required for connection via the quick coupler fitted to the hose supplied with the tool.

PNEUMATIC CRIMPING TOOLS

Bench mounted tools with foot pedal - PNB series

PNB-6KE-T
PNB-7KE-T

New

CE

Technical details:

	PNB-6KE-T
Crimping Range	24 ÷ 14 AWG / 0,25 ÷ 2,5 sqmm
Weight	2.2 lbs.
Dimensions	Ø 5.5 x 7.9 x 2.7 in.
Inclusive of spiral hose, foot pedal and bench mount with storage	

	PNB-7KE-T
Crimping Range	12 ÷ 8 AWG / 4 ÷ 10 sqmm
Weight	2.2 lbs.
Dimensions	Ø 5.5 x 7.9 x 2.7 in.
Inclusive of spiral hose, foot pedal and bench mount with storage	

PNB-6KE-T and **PNB-7KE-T** have bench mounts with storage and are foot pedal operated to allow operators to have both hands free when assembling cable harnesses.

Both tools are designed to be maintenance-free and need no routine calibration.
A 58-87 psi air supply is required for connection via the quick coupler fitted to the hose supplied with the tool.

BENCH PRESS

ELB-3Y

for polycarbonate insulated chain connectors

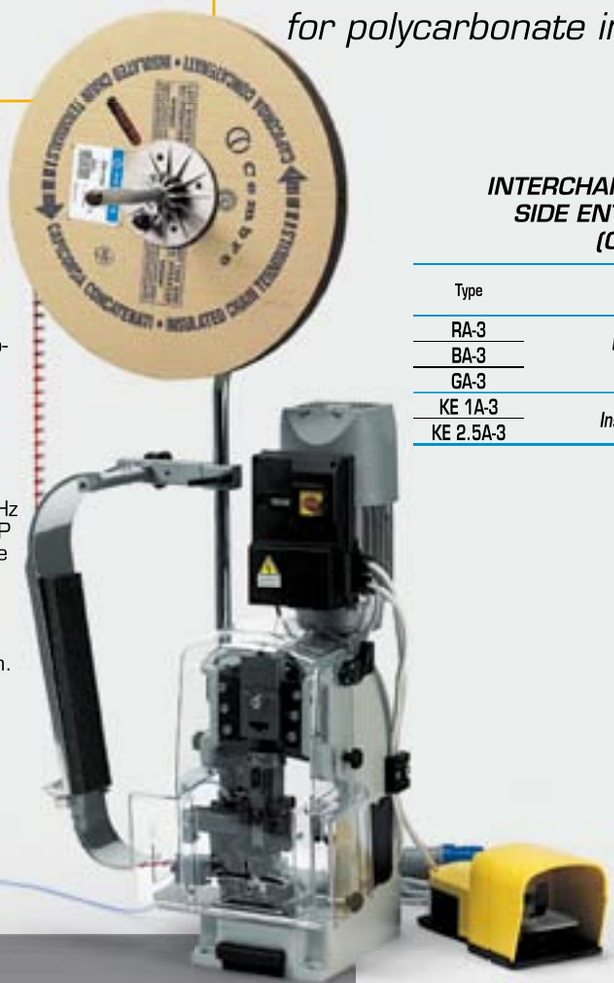
Electro-pneumatic, production bench press, controlled by a foot operated pedal.
Producing a consistent and reliable crimped connection.
Interchangeable application heads available to suit the complete range of polycarbonate insulated connectors.

Technical Details:

Motor:
- Supply Voltage 110V / 60 Hz
- Power 0.55 kW / 0.75 HP
- Speed 2,800 turns/minute

Air supply: 90 psi (6 bar)

Dimensions
LxDxH: 7.09x9.84x24.41 in.
Weight: 88.2 lbs
(without applicator heads)



INTERCHANGEABLE APPLICATOR HEADS, SIDE ENTRY WITH PNEUMATIC FEED (ORDER AS REQUIRED)

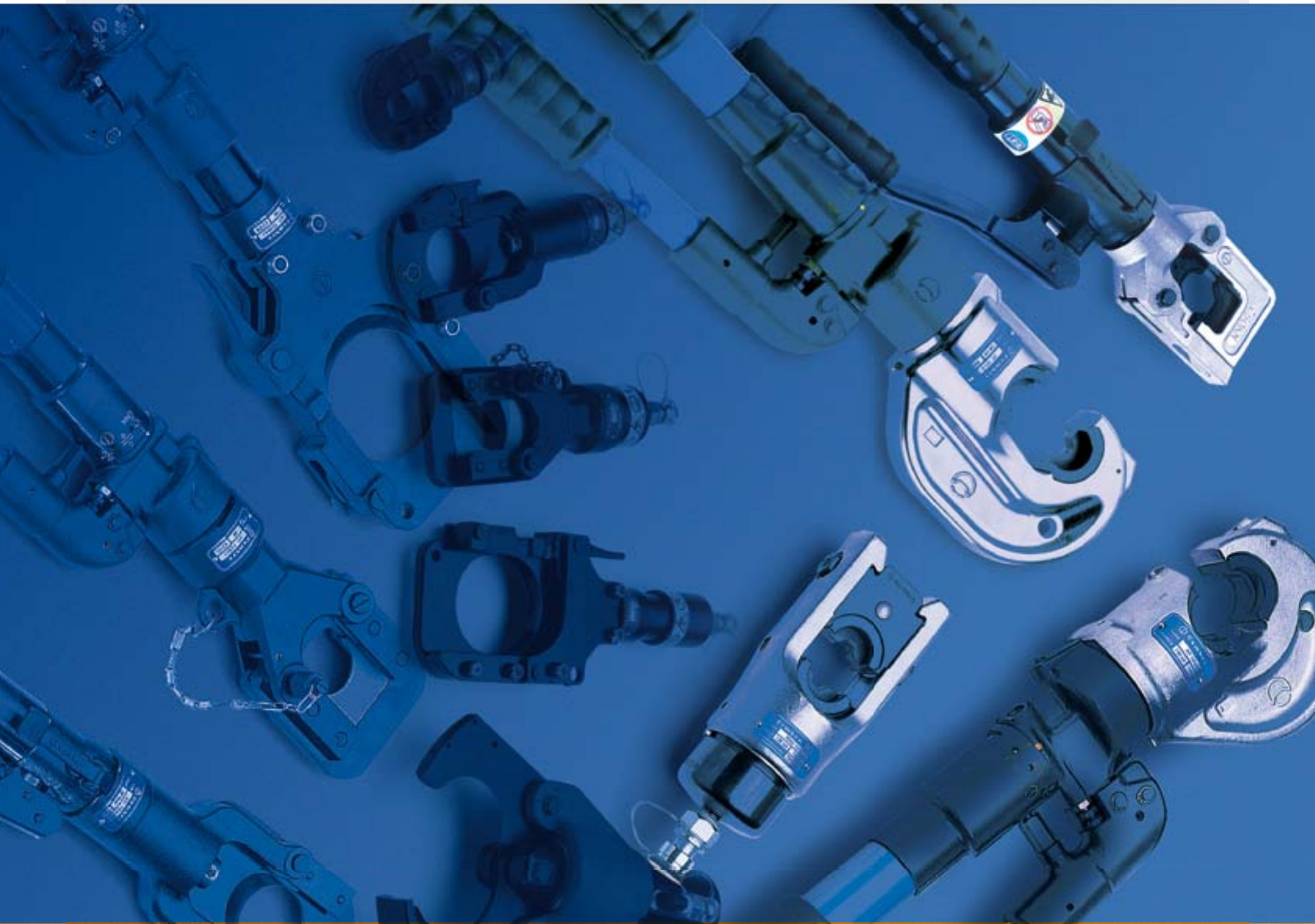
Type	Connectors		Conductor Size AWG
RA-3	*Polycarbonate insulated chain terminals*	*red*	23÷15
BA-3		*blue*	15÷13
GA-3		*yellow*	11÷10
KE 1A-3	*Insulated chain end sleeves*		20÷17
KE 2.5A-3			17÷13

File no. E125401
File no. E212000

HALOGEN FREE

OPERATING TEMPERATURE UP TO 239°F

ACCORDING TO DIN 46 228/4 STANDARD



HYDRAULIC CRIMPING TOOLS AND CUTTERS

HYDRAULIC CRIMPING TOOL

HT 45

general features

Crimping force tons	Dimensions in.		Weight lbs.
	length	*width*	
6	13.6	5.1	4.4

Lightweight and compact, this tool is ideal for the compression of connectors on over head lines and other general applications.

Having the benefit of spring loaded handles, the dies can be advanced using only one hand; therefore leaving the other hand free to position the connector.

For ease of operation and comfort of the operator, the tool head can be fully rotated through 180 degrees.

The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and a pressure releasing system can easily be operated at any stage of the compression.

MAIN APPLICATIONS - max size AWG		
L.V. lugs and splices	"C" sleeve connectors	H.V. lugs and splices
300 MCM	2	2/0

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P1*	17.52x11.42xh3.74	2.6	❊	—

**Suitable for storage of the tool and 20 sets of dies.*

HYDRAULIC CRIMPING TOOL

HT 51

general features

Crimping force tons	Dimensions in.		Weight lbs.
	length	*width*	
6	15	5	5.9

Two stage hydraulic tool, lightweight, compact and ideal for working in confined spaces.

HT 51 develops a crimping force of 6 tons for installing electrical connectors on copper cables up to 500 MCM.
Spring loaded handles allow the operator to advance the dies with one hand, leaving the other free to position the connector.

For ease of operation and comfort of the operator, the tool head rotates 180 degrees.

The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and a pressure releasing system can easily be operated at any stage of the compression.

MAIN APPLICATIONS - max size AWG			
Copper lugs and splices	Insulated terminals	End sleeves	"C" sleeve Connectors
500 MCM	250 MCM	250 MCM	2/0

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P1*	17.52x11.42xh3.74	2.6	❊	—

** Suitable for storage of the tool and 20 sets of dies.*

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

HYDRAULIC CRIMPING TOOL

HT 51L

general features

Crimping force tons	Dimensions in.		Weight lbs.
	length	*width*	
6	16	5.1	6.2

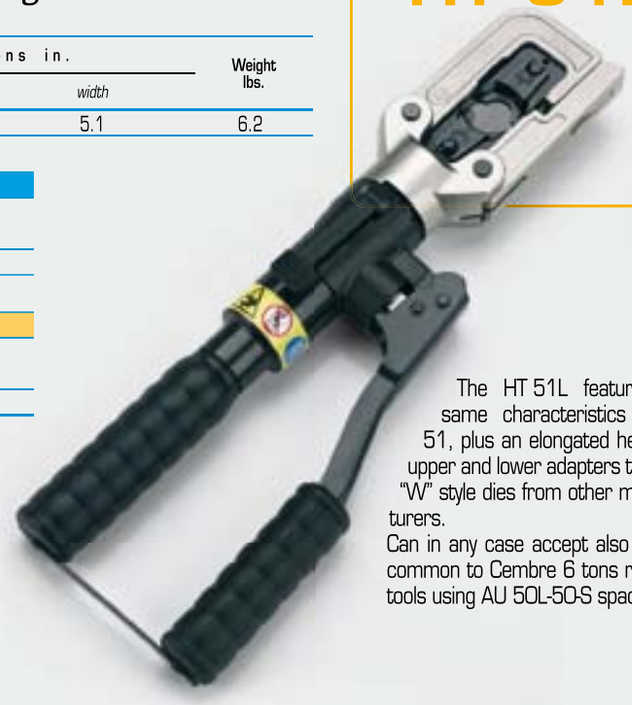
MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Aluminum lugs and splices	H Taps	"C" sleeve Connectors
500 MCM	up to 300 MCM	up to 4/0–4/0	2/0

STORAGE

Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P1*	17.52x11.42xh3.74	2.6	❊	—

** Suitable for storage of the tool and 20 sets of dies.*



The HT 51L features the same characteristics of HT 51, plus an elongated head and upper and lower adapters to insert "W" style dies from other manufacturers.
Can in any case accept also all dies common to Cembre 6 tons range of tools using AU 50L-50-S spacer.

lower adapters to insert "W" style dies from other manufacturer

HYDRAULIC PRESSHEADS

RH 50

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
6	10,000	7.7	3	3.5

MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Insulated terminals	End sleeves	"C" sleeve Connectors
500 MCM	250 MCM	250 MCM	2/0

STORAGE

Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P1*	17.52x11.42xh3.74	2.6	❊	—
Canvas bag 007	13.78x4.13	0.3	—	❊

** Suitable for storage of the tool and 20 sets of dies.*

Hydraulic presshead complete with a 3/8" NPT male automatic coupler to be connected to a hydraulic pump developing a maximum pressure of 10,000 psi, (see pages 168-172). The RH 50 head uses the same dies as the HT 51.

RHM 50

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
6	10,000	8.3	2.8	3.5

MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Insulated terminals	End sleeves
500 MCM	250 MCM	250 MCM

STORAGE (same as RH 50)

Hydraulic presshead complete with a 3/8" NPT male automatic coupler to be connected to a hydraulic pump developing a maximum pressure of 10,000 psi, (see pages 168-172). The RHM 50 head uses the same dies as the HT 51.

Particularly suitable for high volume bench crimping.

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

HYDRAULIC CRIMPING TOOL

HT 120

general features

Crimping force tons	Dimensions in.		Weight lbs.
	length	*width*	
13.5	19.2	5.4	12.6

This lightweight and self contained tool will accept the semi-circular slotted dies, common to most 12 tons tools (U dies).
It is particularly suitable for installing crimp type electrical connectors for overhead line applications.
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and a pressure release system can easily be operated at any stage of the compression.

MAIN APPLICATIONS - max size MCM	
Copper lugs and splices	"C" sleeve connectors
800/400	350

STORAGE				
Type	Dimensions in.	Weight kg	Supplied with the tool	Purchase separately
VAL P3*	24.41x14.96xh5.31	5.5	❇	—

**Suitable for storage of the tool and 14 sets of dies*

Die release system, protected from accidental operation

HT 120 features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.

Pressure release trigger, which can be operated at any stage of the compression.

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

HYDRAULIC CRIMPING TOOL

HT 131-C

general features

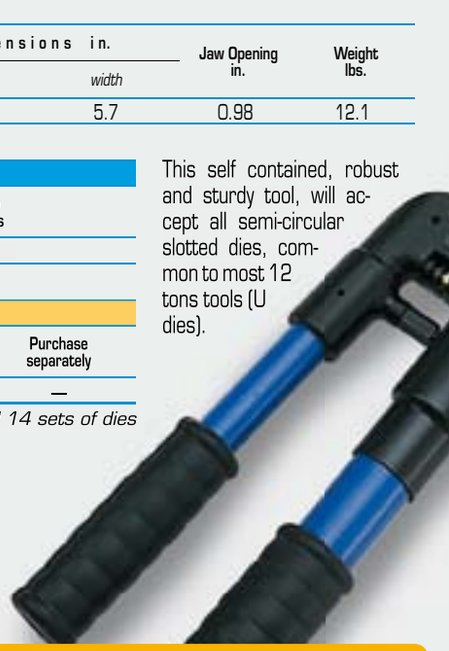
Crimping force tons	Dimensions in.		Jaw Opening in.	Weight lbs.
	length	*width*		
14.6	18.6	5.7	0.98	12.1

MAIN APPLICATIONS - max size MCM	
Copper lugs and splices	"C" sleeve connectors
800/400	350

STORAGE				
Type	Dimensions in.	Weight kg	Supplied with the tool	Purchase separately
VAL P3*	24.41x14.96xh5.31	5.5	❊	—

**Suitable for storage of the tool and 14 sets of dies*

This self contained, robust and sturdy tool, will accept all semi-circular slotted dies, common to most 12 tons tools (U dies).



The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping. For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees. The built-in safety valve will bypass the oil supply when the maximum pressure is reached, and the pressure release system can easily be operated at any stage of compression.

RHC 131-KV version also available for electrical utilities

HYDRAULIC PRESSHEAD

RHC 131

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Jaw Opening in.	Weight lbs.
		length	*width*		
14.6	10,000	9.13	4.88	0.98	8.4

MAIN APPLICATIONS - max size MCM	
Copper lugs and splices	"C" sleeve connectors
800/400	350

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P26*	17.52x11.42xh4.53	2,6	—	❊

**Suitable for storage of the head and 14 sets of dies*

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172). This new design with improved mechanical features, is suitable for installing the same range of connectors as HT 131-C.

HYDRAULIC PRESSHEAD

RHM 132

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
14.6	10,000	8.50	3.15	6.8

MAIN APPLICATIONS - max size MCM
Copper lugs
800

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P26*	17.52x11.42xh4.53	2.6	—	❊

**Suitable for storage of the head and 14 sets of dies*

Particularly suitable for high volume bench crimping.

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172).

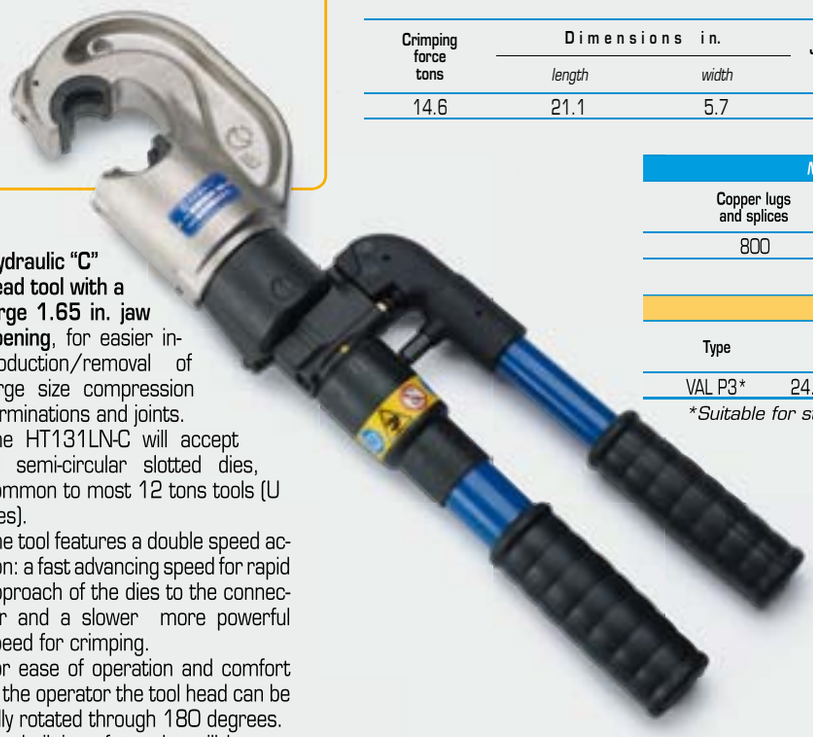
These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

HYDRAULIC CRIMPING TOOL

HT 131LN-C

general features

Crimping force tons	Dimensions in.		Jaw Opening in.	Weight lbs.
	length	*width*		
14.6	21.1	5.7	1.65	15.4



MAIN APPLICATIONS - max size MCM		
Copper lugs and splices	Aluminum lugs and splices	"C" sleeve connectors
800	up to 750	350

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P3*	24.41x14.96xh5.31	5.5	❊	—

**Suitable for storage of the tool and 14 sets of dies*

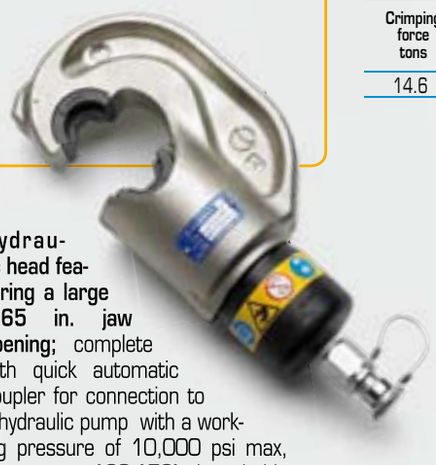
Hydraulic "C" head tool with a large 1.65 in. jaw opening, for easier introduction/removal of large size compression terminations and joints.
The HT131LN-C will accept all semi-circular slotted dies, common to most 12 tons tools (U dies).
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
The built-in safety valve will by-pass the oil supply when the maximum pressure is reached, and the pressure release system can easily be operated at any stage of compression.

HYDRAULIC PRESSHEAD

RHC 131LN

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Jaw Opening in.	Weight lbs
		length	*width*		
14.6	10,000	11.7	4.8	1.7	11.9



MAIN APPLICATIONS - max size MCM		
Copper lugs and splices	Aluminum lugs and splices	"C" sleeve connectors
800	up to 750	350

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P26*	17.52x11.42xh4.5	2.6	—	❊

**Suitable for storage of the head and 14 sets of dies*

Hydraulic head featuring a large 1.65 in. jaw opening; complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172). Is suitable for installing the same range of connectors as HT 131LN-C.

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

HYDRAULIC CRIMPING TOOL

HT 51-KV
HT 51L-KV

general features

HT 51-KV			
Crimping force tons	Dimensions in.		Weight lbs.
	length	*width*	
6	15.2	5	6

HT 51-KV MAIN APPLICATIONS - max size AWG			
Copper lugs and splices	Insulated terminals	End sleeves	"C" sleeve Connectors
500 MCM	250 MCM	250 MCM	2/0

HT 51L-KV			
Crimping force tons	Dimensions in.		Weight lbs.
	length	*width*	
6	16.2	5.1	6.3

HT 51L-KV MAIN APPLICATIONS - max size AWG			
Copper lugs and splices	Aluminum lugs and splices	H Taps	"C" sleeve Connectors
500 MCM	up to 300 MCM	up to 4/0–4/0	2/0

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P1*	17.52x11.42xh3.74	2.6	❇	—

** Suitable for storage of the tool and 20 sets of dies.*

"KV" version tools are fully protected with plastic material and are suitable for safe operation in proximity of accidentally live cables.
HT 51-KV and HT 51L-KV features the same characteristics of HT 51 and HT 51L.

HYDRAULIC CRIMPING TOOL

HT 120-KV

general features

Crimping force tons	Dimensions in.		Weight lbs.
	length	*width*	
13.5	19.4	5.43	12.8

MAIN APPLICATIONS - max size MCM	
Copper lugs and splices	"C" sleeve connectors
800/400	350

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P3*	24.41x14.96xh5.31	5.5	❇	—

** Suitable for storage of the tool and 20 sets of dies.*

"KV" version tools are fully protected with plastic material and are suitable for safe operation in proximity of accidentally live cables.
HT 120-KV feature the same characteristics of HT 120.

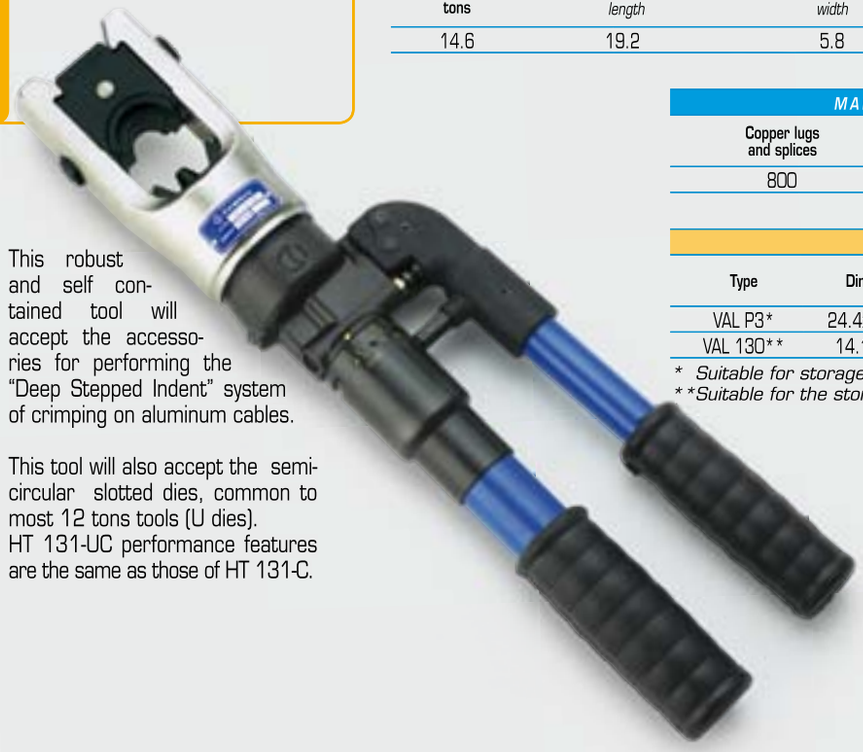
These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

HYDRAULIC CRIMPING TOOL

HT 131-UC

general features

Crimping force tons	Dimensions in.		Weight lbs
	length	*width*	
14.6	19.2	5.8	11.9



This robust and self contained tool will accept the accessories for performing the "Deep Stepped Indent" system of crimping on aluminum cables.

This tool will also accept the semi-circular slotted dies, common to most 12 tons tools (U dies).
HT 131-UC performance features are the same as those of HT 131-C.

MAIN APPLICATIONS - max size MCM		
Copper lugs and splices	"C" sleeve connectors	Alu lugs and splices
800	350	600

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P3*	24.4x14.96xh5.3	5.5	❊	—
VAL 130**	14.17x11xh1,9	6.6	—	❊

** Suitable for storage of the tool and 14 sets of semi-circular slotted dies*
***Suitable for the storage of accessories for crimping aluminum connectors*

HYDRAULIC PRESSHEAD

RHU 131-C

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
14.6	10,000	9.6	3.5	8.1

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172).

RHU 131-C is suitable for installing the same range of connectors as HT 131-UC.

MAIN APPLICATIONS - max size MCM		
Copper lugs and splices	"C" sleeve connectors	Alu lugs and splices
800	350	600

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P26*	17.52x11.42xh4.53	2.65	—	❊
VAL 130**	14.17x11xh1.89	6.62	—	❊
VAL 130-U***	17.72x12xh3.15	11	—	❊

** Suitable for storage of the head and 14 sets of dies*
*** Suitable for the storage of accessories for crimping aluminum connectors*
****Suitable for storage of the head, semi-circular slotted dies and dies for crimping aluminum connectors*

VAL 130

VAL 130-U

VAL P26

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

HYDRAULIC PRESSHEAD

ECW-H3D

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
25.8	10,000	12.4	4.7	12.1

MAIN APPLICATION - max size MCM			
L.V. lugs and splices	Insulated terminals	"C" sleeve connectors	H.V. lugs and splices
1250	600	500	1250

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL ECW-H3D*	13.6x12xh3.5	9.2	—	❊

** Suitable for storage of the head and 10 sets of dies*

DIE SELECTOR CHART		
Copper Conductor (MCM)		DIE SET
low stranded	*multi stranded*	
1000		ME 100-3D ○
1250	1000	ME 120-3D ○

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172)
Adaptor type **AU230-130D** is available as an optional extra enabling the head to utilise the semi-circular slotted dies which are common to most 12 tons tools (U dies).
Also available is a series of dies for the compression of DIN electrical connectors, and a die for cutting copper, aluminum, aldrey, aluminum-steel and steel conductors.

HYDRAULIC PRESSHEAD

RHU 520

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Weight lbs.
		length	*width*	
58.4	10,000	12	7.9	39.6

MAIN APPLICATION - max size MCM	
L.V. lugs and splices	H.V. overhead lines
2000	1250

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL 520*	15.1x9.1xh5.7	7.0	—	❊
VAL MAT 520**	19.7x12.2xh2.68	11.2	—	❊

** Suitable for storage of the head*
*** Suitable for storage of 10 sets of dies*

DIE	
Cembre Dies	Index
M10SH-520	10 SH
M14SH-520	14 SH
M16SH-520	16 SH
M30AH-520	30 AH
M38AH-520	38 AH

DIE SELECTOR CHART		
Copper Conductor (MCM)		DIE SET
low stranded	*multi stranded*	
1000		ME 100-520 ○
1250	1000	ME 120-520 ○
1500	1250	ME 160-520 ○
2000	1500	ME 200-520 ○

VAL MAT 520

VAL 520

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172).
Adaptor type **AU520-130C** is available as an optional extra enabling the head to utilise the semi-circular slotted dies which are common to most 12 tons tools (U dies).

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

HYDRAULIC PRESSHEAD

RHU 600

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Weight lbs	Weight with support lbs.
		length	*width*		
67	10,000	17.6	9.5	41.8	49.3

MAIN APPLICATION - max size MCM
Aluminum and Copper
2156

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL 600*	18.9x9.2xh10.2	18.9	❇	—

**Suitable for storage of the head*

VAL 600

Hydraulic presshead complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172).

HYDRAULIC PRESSHEAD

RHU 1000

general features

Crimping force tons	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
123	10,000	16.3	10.9	111,5

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL 1000*	13.1x9.6x17.1	26.5	❊	—

**Suitable for storage of the head*

New

Operable from single or double acting hydraulic power source

Lifting eye; screwed into the base of the cylinder, allows easy transportation of the head in aerial operation.

RHU 1000 is a 123 ton hydraulic presshead for full tension, transmission and substation connections, complete with quick automatic coupler for connection to hydraulic pumps with a working pressure of 10,000 psi max, (see pages 168-172).

The standard version must be operated by a single acting pump; possibility to convert from single to double acting by substitution of the breather valve with a female quick coupling.
RHU1000 will accept all semi-circular slotted dies common to most 100 ton heads as the Alcoa ones.
The die cap is removable for an easy connector positioning; the upper part of the cap automatically rotates during the die changing process to present the correct positioning of the die. Lifting eye included.

Insertion of the upper die:

After substitution of the dies, insert the die cap into the head.

Pull the pin.

The upper part of the cap automatically rotates...

...to the correct position.

HYDRAULIC CUTTING TOOL

INDUSTRIAL APPLICATION

HT-TC051

general features

Max cutting Ø in.	Dimensions in.		Weight lbs.
	length	*width*	
up to 2	19.5	5.1	9.6

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
Canvas Bag 010	21.4x6.3	0.3	❊	—

Hand operated hydraulic tool specifically designed to cut copper, aluminum and telecommunications cables having a max overall diameter up to 2 inches. The tool features a double speed action.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The head can be easily opened to allow the cutting of running cables.
The head can rotate by 90 degrees, to enable the operator to work in the most comfortable position.

HT-TC051 features an automatic safety valve to by-pass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

Not suitable for cutting steel reinforced conductors

HYDRAULIC CUTTING HEAD

INDUSTRIAL APPLICATION

TC 050

general features

CE

Max cutting Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs.
		length	*width*	
up to 2	10,000	12.8	4.4	7

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
Canvas bag 011	14.2x5.4	0.3	❊	—

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172).
TC050 features the same cutting capability as HT-TC051.

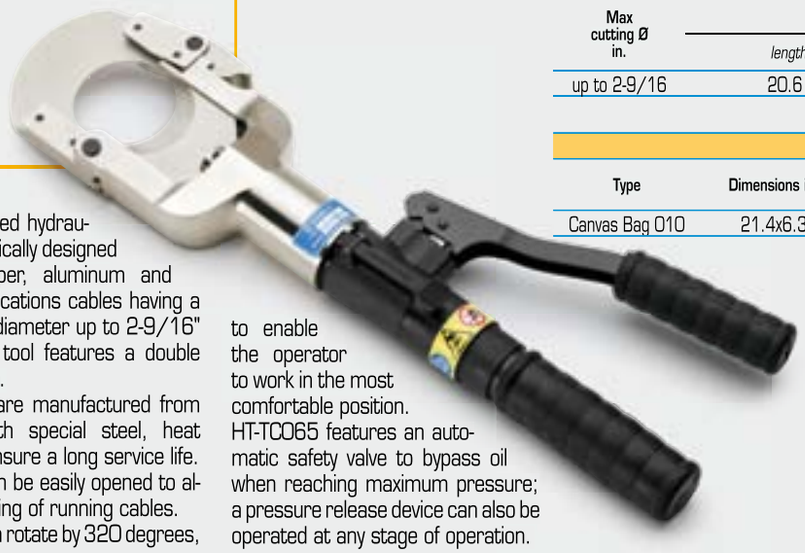
Not suitable for cutting steel reinforced conductors

HYDRAULIC CUTTING TOOL

INDUSTRIAL APPLICATION

HT-TC065

general features



Max cutting Ø in.	Dimensions in.		Weight lbs.
	length	*width*	
up to 2-9/16	20.6	5.1	11.6

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
Canvas Bag 010	21.4x6.3	0.3	❊	—

Hand operated hydraulic tool specifically designed to cut copper, aluminum and telecommunications cables having a max overall diameter up to 2-9/16" inches. The tool features a double speed action.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The head can be easily opened to allow the cutting of running cables.
The head can rotate by 320 degrees, to enable the operator to work in the most comfortable position.
HT-TC065 features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

Not suitable for cutting steel reinforced conductors

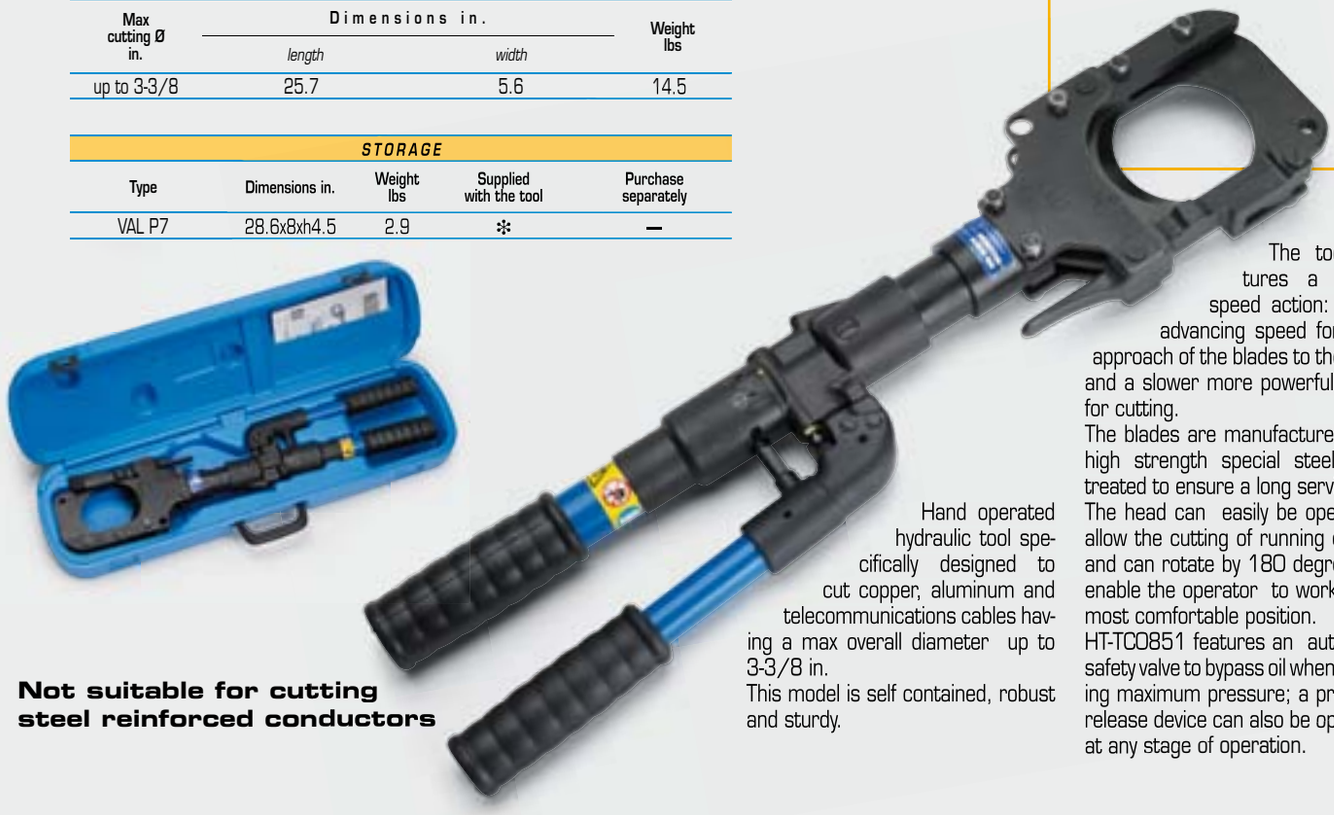
HYDRAULIC CUTTING TOOL

INDUSTRIAL APPLICATION
HT-TC0851

general features

Max cutting Ø in.	Dimensions in.		Weight lbs
	length	*width*	
up to 3-3/8	25.7	5.6	14.5

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P7	28.6x8xh4.5	2.9	❊	—



Hand operated hydraulic tool specifically designed to cut copper, aluminum and telecommunications cables having a max overall diameter up to 3-3/8 in.
This model is self contained, robust and sturdy.

The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The head can easily be opened to allow the cutting of running cables, and can rotate by 180 degrees, to enable the operator to work in the most comfortable position.
HT-TC0851 features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

Not suitable for cutting steel reinforced conductors

HYDRAULIC CUTTING HEAD

INDUSTRIAL APPLICATION
TC 085

general features

Max cutting Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
up to 3-3/8	10,000	16.1	5.3	10.8

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL TC 085	18.3x6.1xh2.6	5.3	❊	—

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172)

TC085 features the same cutting capability as HT-TC0851.

Not suitable for cutting steel reinforced conductors

INDUSTRIAL APPLICATION

TC 096

HYDRAULIC CUTTING HEAD

general features

Max cutting Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
up to 3-3/4	10,000	15.6	9.8	17.4

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL 096	17.7x10.4xh5.7	15.0	❇	—

TC 096 is a hydraulic cutting head specifically designed for cutting copper and aluminum cables having overall diameter up to 3-3/4".
The blades are manufactured from high strength special steel, heat treated to ensure a long service life, and the shape of the blades provides a "clean" cutting of the cable.

This head is fitted with a male automatic coupler to be connected to a hydraulic pump developing a maximum pressure of 10,000 psi (see pages 168-172).

Handle designed for ease of operation

Not suitable for cutting steel reinforced conductors

INDUSTRIAL APPLICATION

TC 120

HYDRAULIC CUTTING HEAD

general features

Max cutting Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
up to 4-3/4	10,000	21.1	6.9	20.1

STORAGE				
Type	Dimensions in	Weight lbs	Supplied with the tool	Purchase separately
VAL TC 120	23.2x8.2xh3.3	10.8	❇	—

TC 120 is a hydraulic cutting head specifically designed for cutting copper, aluminum and telephone cables having overall diameter up to 4-3/4".
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The shape of the blades provides a "clean" cut and the head can be easily opened to allow cutting of running cables.
This head is fitted with a male automatic coupler to be connected to a hydraulic pump developing a maximum pressure of 10,000 psi (see pages 168-172).

Handle designed for ease of operation

TC 120 cutting capacity - a few examples:	
Cable type	*3x300 MCM steel armoured Ø 3.2 in.*
	2000 MCM Cu - EPR rubber insulated; Ø 3.35 in.
	2000 MCM Cu - EPR rubber insulated + lead sheath; Ø 3.62 in.
	2000 MCM Cu - EPR rubber insulated + lead sheath + PE sheath; Ø 3.94 in.
	350-400 MCM EPR rubber insulated

Opening head, to allow cutting of running cables

Not suitable for cutting steel reinforced conductors

HYDRAULIC CUTTING TOOL

general features

OVERHEAD LINE APPLICATION

HT-TC026Y

Max cutting Ø in.	Dimensions in.		Weight lbs
	length	*width*	
up to 1	15.5	5.1	7.7

STORAGE				
Type	Dimensions in	Weight lbs	Supplied with the tool	Purchase separately
Canvas bag 001	16.9x6.1	0.33	❊	—

Hand operated hydraulic tool specifically designed to cut copper, aldrey, aluminum, aluminum-steel cables, steel ropes having a max overall diameter of 1", guy wire up to 7/8" and steel ground rod up to 5/8".
The tool features a double speed action.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The head can rotate by 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow the cutting of running cables.
HT-TC026Y features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

CUTTING CAPACITY			
	MATERIAL	TENSILE STRENGHT (lbs./sq.in.)	MAX CUTTING DIAMETER (in) HT-TC026Y TC 025 B-TC026YA
ROPES & CONDUCTORS	COPPER	≤ 59,450	1
	ALUMINUM	≤ 29,000	1
	ALMELEC	≤ 49,300	1
	STEEL	≤ 261,000	*FEW INDICATIVE EXAMPLES:* 7 x 0.118 = Ø out. 0.354 19 x 0.083 = Ø out. 0.413 19 x 0.091 = Ø out. 0.453
	MULTI STRANDS STEEL (STRANDS Q.TY ≥ 200)	≤ 261,000	0.709
	ACSR	≤ 261,000	1 *FEW INDICATIVE EXAMPLES:* 26 x 0.098 + 7 x 0.077 : Ø out. = 0.624 26 x 0.120 + 7 x 0.094 : Ø out. = 0.763 26 x 0.142 + 7 x 0.110 : Ø out. = 0.897
RODS	STEEL	≤ 87,000	0.511
		≤ 60,900	0.629
	COPPER	≤ 43,000	0.787
		≤ 36,250	0.905
	ALUMINUM	≤ 23,200	1

Ideal for EHS guy wire up to 7/8" and ground rod up to 5/8"

HYDRAULIC CUTTING HEAD

CE

general features

OVERHEAD LINE APPLICATION

TC 025

Max cutting Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
up to 1	10,000	8.4	3.4	4.4

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
Canvas bag 007	13.78x4.13	0.29	❊	—

TC 025 hydraulic cutting head is specifically designed to cut copper, aldrey, aluminum and aluminum-steel cables having a max overall diameter of 1".

This head is fitted with a male automatic coupler to be connected to a hydraulic pump developing a maximum pressure of 10,000 psi (see pages 168-172)

HYDRAULIC CUTTING TOOL

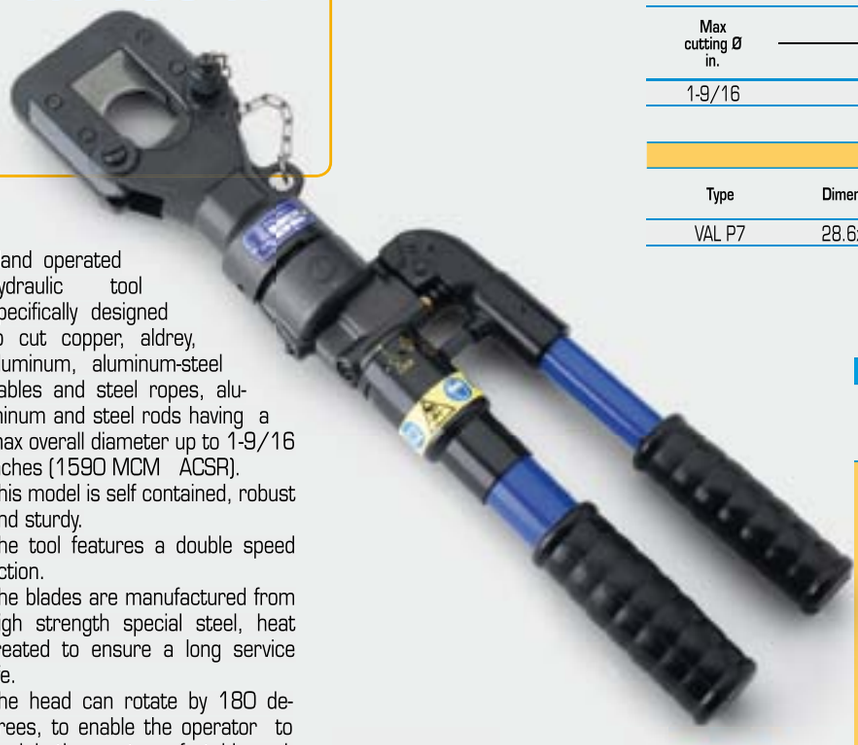
OVERHEAD LINE APPLICATION

HT-TC041

general features

Max cutting Ø in.	Dimensions in.		Weight lbs.
	length	*width*	
1-9/16	21.6	5.6	12.8

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P7	28.6x8xh4.5	2.9	❊	—



Hand operated hydraulic tool specifically designed to cut copper, aldrey, aluminum, aluminum-steel cables and steel ropes, aluminum and steel rods having a max overall diameter up to 1-9/16 inches (1590 MCM ACSR).
This model is self contained, robust and sturdy.
The tool features a double speed action.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The head can rotate by 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.

HT-TC041 features an automatic safety valve to bypass oil when reaching maximum pressure; a pressure release device can also be operated at any stage of operation.

Ideal for EHS guy wire

CUTTING CAPACITY			
	MATERIAL	TENSILE STRENGHT (lbs./sq.in.)	MAX CUTTING DIAMETER (in) HT-TC 041 TC 04 B-TC 04A
ROPES & CONDUCTORS	COPPER	≤ 59,450	1-9/16"
	ALUMINUM	≤ 29,000	1-9/16"
	ALMELEC	≤ 49,300	1-9/16"
	STEEL	≤ 261,000	*FEW INDICATIVE EXAMPLE:* 7 x 0.118 = Ø out. 0.354 19 x 0.083 = Ø out. 0.413 19 x 0.091 = Ø out. 0.453
	MULTI STRANDS STEEL (STRANDS Q.TY ≥ 200)	≤ 261,000	0.709
	ACSR	≤ 261,000	1-9/16" *FEW INDICATIVE EXAMPLE:* 26 x 0.098 + 7 x 0.077 : Ø out. = 0.624 26 x 0.120 + 7 x 0.094 : Ø out. = 0.763 26 x 0.142 + 7 x 0.110 : Ø out. = 0.897 54 x 0.138 + 19 x 0.082 : Ø out. = 1.240 54 x 0.172 + 19 x 0.103 : Ø out. = 1.543
RODS	STEEL	≤ 87,000	0.709
		≤ 60,900	0.787
	COPPER	≤ 43,000	1.181
		≤ 36,250	1.260
	ALUMINUM	≤ 23,200	1-9/16"

HYDRAULIC CUTTING HEAD

OVERHEAD LINE APPLICATION

TC 04

general features

CE

Max cutting Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
1-9/16	10,000	12.2	3.9	8.8

STORAGE				
Type	Dimensions in	Weight lbs	Supplied with the tool	Purchase separately
VAL 04	13.8x4.9xh2.7	4.4	❊	—

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172)
TC04 has the same cutting capability as HT-TC041.

Ideal for EHS guy wire

HYDRAULIC CUTTING TOOL

general features

OVERHEAD LINE APPLICATION

HT-TC051Y

Max cutting Ø in.	Dimensions in.		Weight lbs.
	length	*width*	
up to 2	23.7	5.1	10.3

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
Canvas Bag 010	21.4x6.3	0.33	❊	—

Hand operated hydraulic tool specifically designed to cut copper, aluminum, aluminum-steel cables (ACSR) having a max overall diameter of 2".
The HT-TC051Y is provided with a two stage hydraulic system, which advances the blades quickly to the cable. This proven system saves operator time and effort.
The HT-TC051Y is provided with an automatic safety valve to bypass oil when reaching max pressure.
This means safety to the operator and protection to the blades.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The shape of the blades provides a "clean" cut.
The head can be opened to allow cutting of running cables and ropes.
The head rotates 90 degrees allowing the operator to perform the cut in the most comfortable position.
The tool is supplied complete with canvas bag 010 for protection and storage when not in use.

For ACSR only,
not suitable for cutting guy wire and ground rod.

HYDRAULIC CUTTING HEAD

general features

OVERHEAD LINE APPLICATION

TC 050Y

Max cutting Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs.
		length	*width*	
up to 2	10,000	13	4.4	7.3

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
Canvas bag 011	14.2x5.4	0.3	❊	—

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172)

TC 050Y features the same cutting capability as HT-TC051Y.

For ACSR only,
not suitable for cutting guy wire and ground rod.

HYDRAULIC CUTTING TOOL

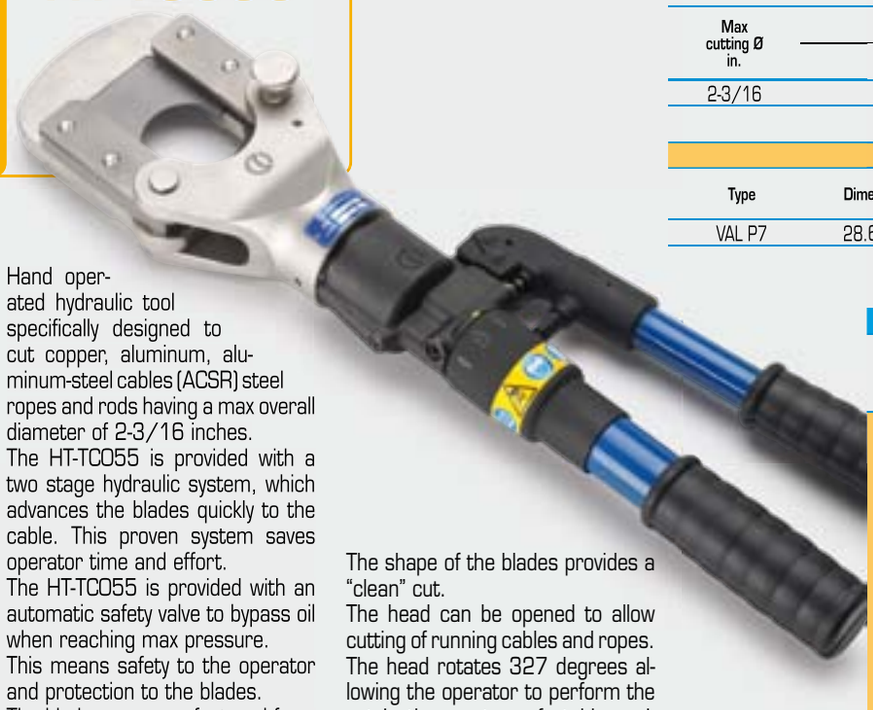
OVERHEAD LINE APPLICATION

HT-TC055

general features

Max cutting Ø in.	Dimensions in.		Weight lbs
	length	*width*	
2-3/16	23.4	5.6	18.1

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P7	28.6x8xh4.5	2.9	❇	—



Hand operated hydraulic tool specifically designed to cut copper, aluminum, aluminum-steel cables (ACSR) steel ropes and rods having a max overall diameter of 2-3/16 inches.
The HT-TC055 is provided with a two stage hydraulic system, which advances the blades quickly to the cable. This proven system saves operator time and effort.
The HT-TC055 is provided with an automatic safety valve to bypass oil when reaching max pressure.
This means safety to the operator and protection to the blades.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.

The shape of the blades provides a "clean" cut.
The head can be opened to allow cutting of running cables and ropes.
The head rotates 327 degrees allowing the operator to perform the cut in the most comfortable position. The tool is supplied complete with plastic case VAL P7 for protection and storage when not in use.

Ideal for 795 MCM ACSR Drake and EHS guy wire

CUTTING CAPACITY			
	MATERIAL	TENSILE STRENGHT (lbs./sq.in.)	MAX CUTTING DIAMETER (in.) HT-TC055 TC055 B-TC055
ROPES & CONDUCTORS	COPPER	≤ 59,450	2-3/16"
	ALUMINUM	≤ 29,000	2-3/16"
	ALMELEC	≤ 49,300	2-3/16"
	STEEL	≤ 261,000	*FEW INDICATIVE EXAMPLE:* 7 x 0.118 = Ø out. 0.354 19 x 0.083 = Ø out. 0.413 19 x 0.091 = Ø out. 0.453
	MULTI STRANDS STEEL (STRANDS Q.TY ≥ 200)	≤ 261,000	0.866
	ACSR	≤ 261,000	1.968 *FEW INDICATIVE EXAMPLE:* 26 x 0.098 + 7 x 0.077 : Ø out. = 0.624 26 x 0.120 + 7 x 0.094 : Ø out. = 0.763 26 x 0.142 + 7 x 0.110 : Ø out. = 0.897 26 x 0.175 + 7 x 0.136 : Ø out. = 1.108 54 x 0.138 + 19 x 0.082 : Ø out. = 1.240 54 x 0.172 + 19 x 0.103 : Ø out. = 1.543 83 x 0.181 + 16 x 0.110 : Ø est. = 1.968
	GUY WIRE (GW15-9/16-188)	Extra high strenght grade	7 x 0.188 : Ø est. = 0.562 in.
RODS	STEEL	≤ 87,000	0.787
		≤ 60,900	0.866
	COPPER	≤ 43,000	1.338
		≤ 36,250	1.515
	ALUMINUM	≤ 23,200	1.968

HYDRAULIC CUTTING HEAD

OVERHEAD LINE APPLICATION

TC 055

general features

CE

Max cutting Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs
		length	*width*	
2-3/16	10,000	14.0	5.27	14.5

STORAGE				
Type	Dimensions in	Weight lbs	Supplied with the tool	Purchase separately
VAL TC055	15.1x9.1xh5.7	8.1	❇	—

Hydraulic cutting head complete with quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max, (see pages 168-172)
TC055 has the same cutting capability as HT-TC055.

Ideal for 795 MCM ACSR Drake and EHS guy wire

Frame-type hole punching head RH-FC48N

general features

Type	Max piercing Ø in.	Max centre of hole to edge of trunking in.	Max operating pressure psi	Dimensions in		Weight lbs
				length	*width*	
RH-FC 48N	1.858	2.11	10,000	10.2	5.8	8.16

Storage type	Dimensions in.	Weight lbs
VAL P30*	12.4x11.8xh3.7	2

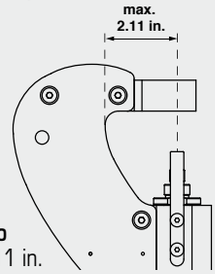
**Supplied with the head*

Hole Dimensions					Maximum thickness of mild steel (in.)	Code
Nominal		Pg	ISO	Inch		
Ø (mm)	Ø (inch)					
15,5	**.610**	Pg9	-	-		**RD 15.5 SS-FC**
16,2	**.638**	-	ISO-16	-		**RD 16.2 SS-FC**
17,5	**.689**	-	-	-		**RD 17.5 SS-FC**
18,8	**.740**	Pg11	-	-		**RD 18.8 SS-FC**
19,1	**.752**	-	-	-		**RD 19.1 SS**
20,5	**.807**	Pg 13,5	ISO-20	-		**RD 20.5 SS**
22,6	**.890**	Pg16	-	-		**RD 22.6 SS**
23,8	**.937**	-	-	5/8"		**RD 23.8 SS**
25,4	**1.000**	-	ISO-25	-		**RD 25.4 SS**
27,0	**1.063**	-	-	3/4"		**RD 27.0 SS**
28,5	**1.122**	Pg21	-	-		**RD 28.5 SS**
30,5	**1.201**	-	-	7/8"	0.08	**RD 30.5 SS**
31,8	**1.252**	-	-	-		**RD 31.8 SS**
32,5	**1.279**	-	ISO-32	-		**RD 32.5 SS**
34,6	**1.362**	-	-	-		**RD 34.6 SS**
37,2	**1.464**	Pg29	-	-		**RD 37.2 SS**
38,1	**1.500**	-	-	-		**RD 38.1 SS**
40,5	**1.594**	-	ISO-40	-		**RD 40.5 SS-FC**
41,3	**1.626**	-	-	-		**RD 41.3 SS-FC**
42,5	**1.673**	-	-	1"1/4"		**RD 42.5 SS-FC**
43,2	**1.701**	-	-	-		**RD 43.2 SS-FC**
44,5	**1.752**	-	-	-		**RD 44.5 SS-FC**
47,2	**1.858**	Pg36	-	-		**RD 47.2 SS-FC**

Table denoting the punch/die set reference, for each hole size. Suitable for punching holes in mild steel, fiberglass or plastic material, up to 0.08 in thick.

VAL P30
Supplied in a robust plastic case.

Hydraulic piercing head complete with automatic quick coupler, designed for punching holes from 0.61 up to 1.858 in. diameter in the side wall of trunking without the need for pre drilling.
For operation the head must be joined to a hydraulic pump developing a pressure of 10,000 psi (see page 168-172).



Max centre of hole to edge of trunking: 2.11 in.

Piercing heads RHT

general features

Type	Max piercing Ø in.	Max hole distance from bar edge (in.)	Max operating pressure psi	Dimensions in.		Weight lbs
				length	*width*	
RHT 160	0.75	1.2	10,000	9.4	6	14.3
RHT 160-60N	0.75	2.3	10,000	9.4	7.1	20.3

Storage type	Dimensions in.	Weight lbs
VAL 160*	11.1x7.09xh3.94	5.1

**Supplied with the head*

Available accessories (to be ordered separately):							
Piercing Ø in	**0.25**	**0.33**	**0.41**	**0.51**	**0.59**	**0.67**	**0.75**
Set die - indentor	RT 6.5	RT 8.5	RT 10.5	RT 13	RT 15	RT 17	RT 19

Hydraulic piercing head complete with automatic quick coupler, for piercing holes of various diameters in copper, aluminum and steel bars with max. thickness of 0.39 inches (see Tab.)

This compact and handy tool is widely used for transformer room connections, control switch boards and power plants.

For operation the head must be joined to a hydraulic pump developing a pressure of 10,000 psi (see pages 168-172).

MAX. THICKNESS							
Hole diameter (in.)	0.25	0.33	0.41	0.51	0.59	0.67	0.75
Max thickness strep in copper	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Max thickness strep in steel	0.39	0.39	0.39	0.35	0.31	0.27	0.24
Punch die/set	**RT 6.5**	**RT 8.5**	**RT 10.5**	**RT 13**	**RT 15**	**RT 17**	**RT 19**

SPECIAL TOOLS

Puller-type hole punching head RH-FL75

general features

New

Max punching Ø in.	Max operating pressure psi	Dimensions in.		Weight lbs.
		length	*width*	
4.724	10,000	6.4	4.2	4.2

Storage type	Dimensions in.	Weight lbs.
VAL P29*	17.6x11.3xh4.1	3.1

**Supplied with the head*

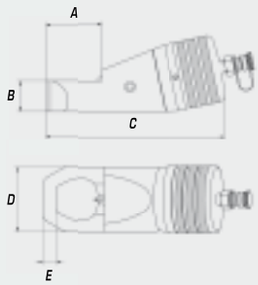
Hydraulic head, for hole punching stainless steel, soft steel, fibreglass and plastic sheet materials up to 0.14 in. thickness. Compact and lightweight, easy to handle in confined spaces due to a rotating 90deg quick automatic coupler for connection to a hydraulic pump with a working pressure of 10,000 psi max (see page 168-172).
Supplied with Pullers TD-11, TD-19 and spiral bit Ø 0.45 in.
For the punch-die selection chart see page 166.

Nut splitting heads RHTD

general features

DIMENSIONS in.:

	RHTD 3241	RHTD 1724	RHTD 3241T
A	2.6	1.59	3.03
B	1.42	0.98	1.61
C	8.19	5.93	8.74
D	2.97	2.13	2.97
E	0.63	0.3	0.85



RHTD 1724

Suitable for splitting nuts in.	Max operating pressure psi	Weight lbs.
5/8" (M 10) ÷ 1-1/16" (M 18)	10,000	3.9

RHTD 3241

Suitable for splitting nuts in.	Max operating pressure psi	Weight lbs.
1-1/16" (M 18) ÷ 1-5/8" (M 27)	10,000	10.1

RHTD 3241T

Suitable for splitting square and hexagonal nuts or fastening bushes in.	Max operating pressure psi	Weight lbs.
1-1/16" (M 18) ÷ 1-5/8" (M 27)	10,000	10.8

Storage type	Dimensions in.	Weight lbs.
VAL P4*	12.4x11.8xh3.74	2.05

**Supplied with the head*

Hydraulic nut splitting head complete with automatic quick coupler.
For operating the head must be joined to a hydraulic pump developing a pressure of 10,000 psi (see page 168-172).

ACCESSORIES

Flexible hoses

High pressure flexible hoses for joining hydraulic heads to pumps.
In addition to the standard versions listed below alternative hose lengths are available, upon request:

TF 300-Q 38 FM
10 ft length flexible hose fitted with an automatic female quick coupler and a male quick coupler.

TF 600-Q 38 FM
20 ft length flexible hose fitted with an automatic female quick coupler and a 3/8" NPT male threaded bush.

TF 300-Q 38 F
10 ft length flexible hose equipped with automatic female quick coupler at one end and male threading at the other end.

Quick couplers

Q 38-M

Q 38-M
Male automatic coupler for hydraulic heads.

Q 38-F

Q 38-F
Female automatic coupler for hydraulic pumps and flexible hoses.

Q 38-MS

Q 38-MS
Male automatic coupler for flexible hoses.

RB 38-M

RB 38-M
Screw type male (Ball Type) quick coupler 3/8"

RB 38-F

RB 38-F
Screw type female (Ball Type) quick coupler 3/8"

CRIMPING FORCE GAUGES FOR HYDRAULIC TOOLS

MPC 2

Crimping force gauge MPC 2

The MPC2 device, complete with test die set, to measure the maximum force developed by Cembre tools:
HT 131-C, HT 131LN-C, HT 120, HT 120-KV, RHC 131, RHC 131-KV, RHC 131LN, B 131-CA, B 131-CA-KV, B 131LN-CA, B 131LN-CA-KV, B 135-CA, B 135-CA-KV, B 135LN-CA, B 135LN-CA-KV.

MPC 4

Crimping force gauge MPC 4

The MPC4 device, complete with test die set, to measure the maximum force developed by Cembre tools:
ECW-H3D, RHU240-3D-850.

MPC 7

Crimping force gauge MPC 7

The MPC7 device, complete with test die set, to measure the maximum force developed by Cembre tools:
HT45, HT 51, HT 51-KV, HT 51L, HT 51L-KV, RH 50, HT 61, RH 61, B15Y (use adaptor available separately), B 35-45A, B 35-50A, B 46, B 51A, B 51A-KV, B 51LA, B 51LA-KV, B 54-Y.., B 55-Y.., B 55-Y..-KV, B 62.

PRESSURE TEST DEVICE FOR HYDRAULIC PUMPS AND TOOLS

MPC 1

Pressure checking device MPC 1

The MPC1 device, complete with test adapter set, is used to measure the maximum oil pressure on all Cembre tools.

FORCE/PRESSURE TEST APPLICATION CHART

For Hydraulic Pumps and Tools	*For Hydraulic Tools*		
MPC 1	***MPC 2***	***MPC 4***	***MPC 7***
P0 7000	*HT 131-C*	*ECW-H3D*	*HT 45*
CPP-0	*HT 131LN-C*	*RHU 240-3D-850*	*HT 51, HT 51-KV, HT 51L, HT 51L-KV*
CPE-1	*HT 120, HT 120-KV*		*HT 61*
B70M-P24	*RHC 131, RHC 131-KV*		*B15Y (use adaptor available separately)*
HT 45	*RHC 131LN*		*B35-45A*
HT 51, HT 51-KV, HT 51L, HT 51L-KV	*B 131-CA, B131-CA-KV*		*B35-50A*
HT 61	*B 131LN-CA, B 131LN-CA-KV*		*B 46*
HT 81-U	*B 135-CA, B 135-CA-KV*		*B 51A, B51A-KV, B51LA, B51LA-KV*
HT 131-C	*B 135LN-CA, B 135LN-CA-KV*		*B 54-Y..*
HT 131LN-C			*B 55-Y.., B55-Y..-KV*
HT 131-UC			*B 62*
HT-TC026			*RH 50*
HT-TC051			*RH 61*
HT-TC055			
HT-TC065			
HT-TC041			
HT-TC0851			

CORDLESS HYDRAULIC TOOLS

14.4 V CORDLESS TOOL FEATURES

- *Cordless tooling can be operated with one hand.*
- *Balanced tool for greater control.*
- *Head rotates for ease of operation in confined spaces.*
- *Complete with a display which, after every operation, indicates the residual battery power.*
- *The tools are fitted with a maximum pressure valve to indicate a correct crimping operation or the full extent of the blade travel.*
- *Extremely quiet in operation with very little vibration.*
- *Durable moulded body offering high resistance to wear and damage in all operating conditions.*
- *The plastic or steel carrying case can accomodate the tool and all the accessories.*
- *The B 51A, B 51LA, B 55-YC, B 131LN-CA will accept die sets common to the Cembre 6 and 14.6 tons tooling range.*
- *All cordless tools are available with a 12 V DC car battery charger.*
- ***Common features only for 14.4 V Cordless hydraulic crimping tools:***

DOUBLE ACTION SPEED

double speed action: a fast advancing speed for a rapid approaching and a slower more powerful speed for crimping or cutting.

14.4V 3.0Ah Ni-MH

new more powerful Ni-MH battery 14.4V - 3.0Ah (+50% energy); less memory effect, better environmental compatibility.

SUPPLIED WITH

1. **CB 1430H**, 14.4 V 3.0 Ah Ni-MH high power battery (2 pcs.).
2. **CFC 120YN**, AC charger (100-120V). (INPUT 110 V/50-60 Hz; OUTPUT 7.2-18 V DC)
3. Shoulder strap.

AVAILABLE ON REQUEST

4. **BPS 110.14Y**, network power supply.
   Main features: INPUT 110V~ 50-60Hz; OUTPUT 14,4V⎓ thermal and short circuit protection.
   Current supply: up to 5A extended use; 20A for 50 s; 30A for 8 s.
5. **ESC 600** cable for connection to a 12V DC external power supply/vehicle battery length 20 ft. (suitable only for those tools provided with 12V DC socket).
6. **CFC 12-24ICN,** 12V car battery charger. (INPUT 12-24 V DC; OUTPUT 7.2-18 V DC)

9.6 V CORDLESS TOOL FEATURES

- *Cordless tooling can be operated with one hand.*
- *Balanced tool for greater control.*
- *Head rotates for ease of operation in confined spaces.*
- *Complete with a display which, after every operation, indicates the residual battery power.*
- *The tools are fitted with a maximum pressure valve to indicate a correct crimping operation or the full extent of the blade travel.*
- *Extremely quiet in operation with very little vibration.*
- *Durable moulded body offering high resistance to wear and damage in all operating conditions.*
- *The plastic or steel carrying case can accomodate the tool and all the accessories.*
- *All cordless tools are avaible with a 12 V DC car battery charger.*

interchangeable crimping jaws

9.6V 2.0Ah Ni-MH

interchangeable die sets

9.6V 3.0Ah Ni-MH

Sculptured body for optimum comfort

SUPPLIED WITH

1. **CB 9620H**, 9.6 V 2.0 Ah Ni-MH high power battery (for B15Y, 2 pcs.).
2. **CB 9630H**, 9.6 V 3.0 Ah Ni-MH high power battery (for B54Y, 2 pcs.).
3. **CFC 120YN**, AC charger (100-120V). (INPUT 110 V/50-60 Hz; OUTPUT 7.2-18 V DC)
4. **Adaptor CBA 96-144.**

AVAILABLE ON REQUEST

5. **CFC 12-24ICN,** 12V car battery charger. (INPUT 12-24 V DC; OUTPUT 7.2-18 V DC)
6. **BPS 110.96Y**, network power supply.
   Main features:
   INPUT 110V~ 50-60Hz; OUTPUT 9.6V⎓ thermal and short circuit protection.
   Current supply:
   up to 8A extended use; 25A for 50 s; 30A for 8 s.

9.6 V CORDLESS HYDRAULIC CRIMPING TOOL

B 15Y

general features

9.6V 2.0Ah Ni-MH

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
1.7	12.6	4.6	2.6	9.6 V 2.0 Ah	3.7

MAIN APPLICATIONS - max size AWG		
Copper lugs and splices	Insulated terminals	End sleeves
22 - 6	22 - 6	22 - 2

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P22	18.3x12.4xh4.6	3.3	❊	—

The tool is supplied as:

- *Basic tool with battery and wrist strap*
- *Spare battery*
- *Battery adapter*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

Available also:

B 15-IC, with 12V car battery charger.

B15Y-WS, with wire stop and connector positioner

B15Y-WS, head detail

Head rotates by 340° for ease of operation

Sculptured body for optimum comfort

Durable moulded body offering high resistance to wear and damage in all operating conditions

Can be operated with one hand.
Balanced for greater control.
Head rotates by 340° for ease of operation in confined spaces.
The tool is fitted with a maximum pressure valve.
Extremely quiet, minimal vibration.

Durable moulded body offering high resistance to wear and damage in all operating conditions.
Ni-MH battery; powerful, better environmental compatibility.
Battery condition displayed after every crimping operation and after any battery insertion to show the residual battery power.
Supplied in a robust plastic case to accommodate the tool and all the accessories. Two batteries and AC charger (110V) included.
Many different interchangeable crimping dies available.

CRIMPING DIES AVAILABLE		
Cond. Size (AWG)	Connector type	DIE SET
22 ÷ 6	A... ; L...-M ; L...-P ; S... ; RN... ; BN... ; GN...	MA03/3-15
16 ÷ 8	A... ; L...-M ; L...-P	ME03/2-15
8 ÷ 6	A...; 2A... ; L...-M ; L...-P	ME2/3-15
12 ÷ 8	T... (NF C 20130 style) ; L...-T	MS4/10-15
8 ÷ 6	T... (NF C 20130 style) ; L...-T	MS10/16-15
8 ÷ 6	HR... ; HSV...	MH10/16-15
10 ÷ 6	DR... (DIN 46235 style) ; DSV... (DIN 46267 T1 style)	MK5/8-15
8 ÷ 6	ANE... ; AN... ; IN... ; EN...	NN4-15
22 ÷ 10	R... ; B... ; G... ; PL... ; NL...	RBG-15
22 ÷ 10	R... ; B... ; G... (not suffix P, RF/BF-BF)	RBY-15 with positioner
22 ÷ 12	PKE ; PKC ; PKD ; PKT ; KE	KE4-15
12 ÷ 6	PKE ; PKC ; PKD ; PKT ; KE	KE16-15
6 ÷ 2	PKE ; PKC ; PKD ; PKT ; KE	KE35-15

CRIMPS FOR CHARGE				
Terminal	Conductor (AWG)	Die Set		Approx. No of crimps
Cembre insulated terminals	10, fine str	RBG -15	⬭	400
Cembre Copper tube crimping lugs	8, fine str	MA 03/2-15	◡	285
	8, low str	ME 03/2-15	⬡	320

Battery condition display

Interchangeable die sets

Switch ergonomically designed

Automatic slot-in battery

9.6 V CORDLESS HYDRAULIC CRIMPING TOOL

B 35-45A

general features

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
4	13.4	4.2	2.6	9.6 V 2.0 Ah	4.6

9.6V 2.0Ah Ni-MH

MAIN APPLICATIONS - max size AWG	
L.V. lugs and splices	"C" sleeve connectors
300 MCM	#1

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P22	18.3x12.4xh4.6	3.3	❇	—

Can be operated with one hand.
Balanced for greater control.
Head rotates 180° for ease of operation in confined spaces.
Fitted with a maximum pressure valve.
Extremely quiet, minimal vibration.
Durable moulded body offering high resistance to wear and damage in all operating conditions.
Ni-MH battery; powerful, better environmental compatibility.
Battery condition displayed after every crimping operation and after any battery insertion to show the residual battery power.
Supplied in a robust plastic case to accommodate the tool and all the accessories.
Two batteries and AC charger (110V) included.
B35-45A accepts many of the dies common to 45 kN Cembre crimping tools. B35-45A specific dies avaiable for crimping 3/0-250 AWG and 250-300 MCM.
Application field as shown in the table above. For further details please refer to tables of page 194-204.

The tool is supplied as:

- *Basic tool with battery and wrist strap*
- *Spare battery*
- *Battery adapter*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

Available also:

B 35-45-IC, with 12V car battery charger.

CRIMPS FOR CHARGE			
Terminal	Conductor Size AWG	Die Set	Approx. No of crimps
A10-M	2 - 1/0 Cu	ME10	**264**

Wide-opening head, ideal for derivations from running conductors

Motor ventilation

Head rotates 180° for ease of operation

Pressure release button

Sculptured body for optimum comfort

Cembre

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

9.6 V CORDLESS HYDRAULIC CRIMPING TOOL

B 35-50A

general features

9.6V 2.0Ah Ni-MH

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
4	14.6	4.2	2.6	9.6 V 2.0 Ah	5.3

MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Insulated copper lugs	End sleeves	"C" sleeve Connectors
300 MCM	1/0	3/0	#1

STORAGE

Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P22	18.3x12.4xh4.6	3.3	❊	—

The tool is supplied as:

- *Basic tool with battery and wrist strap*
- *Spare battery*
- *Battery adapter*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

Available also:

B 35-50-IC, with 12V car battery charger.

CRIMPS FOR CHARGE

Terminal	Conductor Size AWG	Die Set	Approx. No of crimps
C4/0	4/0	MY19-50	**248**

Head rotates 180° for ease of operation

Sculptured body for optimum comfort

Durable moulded body offering high resistance to wear and damage in all operating conditions

Can be operated with one hand.
Balanced for greater control.
Head rotates 180° for ease of operation in confined spaces.
Fitted with a maximum pressure valve.
Extremely quiet, minimal vibration.
Durable moulded body offering high resistance to wear and damage in all operating conditions.
Ni-MH battery; powerful, better environmental compatibility.
Battery condition displayed after every crimping operation and after any battery insertion to show the residual battery power.
Supplied in a robust plastic case to accommodate the tool and all the accessories.
Two batteries and AC charger (110V) included.
Many different interchangeable crimping dies available.
B35-50A accepts many of the dies common to 50 kN Cembre crimping tools. B35-50A specific dies avaiable for crimping 3/0-250 AWG and 250-300 MCM.
Application field as shown in the table above. For further details please refer to tables of page 194-204.

Wide-opening head, ideal for derivations from running conductors

Ergonomically designed operating switch

Battery condition display

Automatic slot-in battery

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

9.6 V CORDLESS HYDRAULIC CRIMPING TOOL

B 54-YD6

general features

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
6	17.7	4.7	2.6	9.6 V 3.0 Ah	6.4

9.6V 3.0Ah Ni-MH

The professional tool ideal for OH lines and residential service applications.

Stick tool shape for better handling.
Can be operated with one hand.
Balanced for greater control.
Jaws rotate by 180° for ease of operation in confined spaces.
The tool is fitted with a maximum pressure valve.
Extremely quiet, minimal vibration.
Durable moulded body offering high resistance to wear and damage in all operating conditions. Ni-MH battery; powerful, better environmental compatibility. Supplied in a robust vynil bag to accommodate the tool and all the accessories. Two batteries and AC charger (110V) included.
Same charger of all our tools.
Battery condition display built in tool.

MAIN APPLICATIONS - max size AWG		
Copper lugs and splices	Aluminum lugs and splices	Aluminum H taps
300 MCM	4/0	4/0 - 4/0

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VYNIL BAG 025	21.9 x 8.3	1.54	❊	—

The tool is supplied as:

- *Basic tool with battery and wrist strap*
- *Spare battery*
- *Battery adapter*
- *AC charger (110V)*
- *Vynil bag, suitable for storing the tool and accessories*

Available also:

B 54-YD6P, with plastic carrying case
B 54-YD6-IC, with 12V car battery charger
B 54-YD6P-IC, with plastic carrying case and 12V car battery charger

CRIMPS FOR CHARGE			
Terminal	Conductor	Die Set	Approx. No of crimps
YHD-400	Al 4/0-4/0	Index D3	**140**

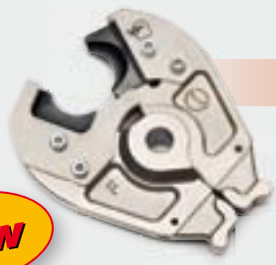
INTERCHANGEABLE CRIMPING JAWS			
CAT. No	GROOVES	CRIMPING DIE COMPATIBILITY	
CDD6	"D3" TO ACCEPT ALL "W" STYLE CRIMPING DIES + "BG" FIXED GROOVE	**FCI Burndy**	W, X Series
		Green lee	KD6 Series
		Ilsco	ND Series
CDD6-8	"D3" TO ACCEPT ALL "W" STYLE CRIMPING DIES + "O" FIXED GROOVE	**Huskie**	HT-58 Series
		Panduit	CD-2001 series
CDK	GROOVE TO ACCEPT ALL "O" STYLE KEARNEY CRIMPING DIES; ADAPTER TO ACCEPT ALL "W" STYLE CRIMPING DIES AVAILABLE UPON REQUEST	**FCI Burndy**	W, X Series
		Green lee	KD6 Series
		Ilsco	ND Series
		Huskie	HT-58 Series
		Panduit	CD-2001 Series
		Kearney	O Series
		Blackburn	6 tons
CMB1	**Cutting dies for:** one-time disposable lock hasps; 4AWG Alumoweld; ACSR 4/0		
CMB2	**Cutting dies for:** # 8 Copperweld; 4/0 Cu.; 336 MCM Aluminium; 477 MCM ACSR (Str. 26/7)		
CMB3	**Cutting dies for:** 1/4" Guy Wire ; 5/16" Guy Wire		

CDD6 jaws

With "D3" groove to accept all "W" style crimping dies + "BG" fixed groove.

CMB1 jaws

Cutting dies for: one-time disposable lock hasps, 4AWG Alumoweld; ACSR 4/0



New

CMB2 jaws

Cutting dies for:
- # 8 Copperweld
- 4/0 Cu.
- 336 MCM Aluminium
- 477 MCM ACSR (Str. 26/7)

New

CMB3 jaws

Cutting dies for:
- 1/4" Guy Wire
- 5/16" Guy Wire

Jaws rotate by 180°

Detail of the pin for the quick jaws change

Canvas Bag 013
Sturdy canvas bag, suitable for storing the jaws

9.6 V CORDLESS HYDRAULIC CRIMPING TOOL

B 54-YD6-8

general features

9.6V 3.0Ah Ni-MH

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
6	17.7	4.7	2.6	9.6 V 3.0 Ah	6.4

MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Aluminum lugs and splices	Aluminum H taps
300 MCM	4/0	4/0 - 4/0

STORAGE

Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VYNIL BAG 025	21.9 x 8.3	1.54	❊	—

The tool is supplied as:

- *Basic tool with battery and wrist strap*
- *Spare battery*
- *Battery adapter*
- *AC charger (110V)*
- *Vynil bag, suitable for storing the tool and accessories*

CDD6-8 jaws

With "D3" groove to accept all "W" style crimping dies + "O" fixed groove.

9.6 V stick battery crimping tool, having the same characteristics of B 54-YD6

Available also:

B 54-YD6-8P, with plastic carrying case
B 54-YD6-8-IC, with 12V car battery charger
B 54-YD6-8P-IC, with plastic carrying case and 12V car battery charger

9.6 V CORDLESS HYDRAULIC CRIMPING TOOL

B 54-YK

general features

9.6V 3.0Ah Ni-MH

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
6	17.7	4.7	2.6	9.6 V 3.0 Ah	6.4

MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Aluminum lugs and splices	Aluminum H taps
300 MCM	4/0	4/0 - 4/0

STORAGE

Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VYNIL BAG 025	21.9 x 8.3	1.54	❊	—

The tool is supplied with:

- *Basic tool with battery and wrist strap*
- *Spare battery*
- *Battery adapter*
- *AC charger (110V)*
- *Vynil bag, suitable for storing the tool and accessories*

CDK jaws

With groove to accept all "O" style Kearny crimping dies; adapter to accept all "W" style crimping dies available upon request.

9.6 V stick battery crimping tool, having the same characteristics of B 54-YD6.

Available also:

B 54-YK-IC, with 12V car battery charger

B 51A

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
6	11.7	11.9	3.7	14.4 V 3.0 Ah	8.5

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

14.4 V cordless hydraulic crimping tool, lightweight and balanced for single hand operation.
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
The crimping head can rotate through 180° for ease of operation.
The B 51A will accept die sets common to the Cembre 6 tons tooling range. Fitted with a maximum hydraulic pressure valve.
Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration. Ergonomically designed with a sculptured body for operator comfort.

MAIN APPLICATIONS - max size AWG			
Copper lugs and splices	Insulated terminals	End sleeves	"C" sleeve Connectors
500 MCM	250 MCM	250 MCM	2/0

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P5	21.4x16.22xh5.12	6.0	❊	—

The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing 21 die sets*

Available also:

B 51-IC, with 12V car battery charger.

Head rotates through 180°

Balanced tool for greater control

Motor ventilation

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

B 51LA
B 51LA-KV

general features

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
6	12.8	12.1	3.7	14.4 V 3.0 Ah	9.2

MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Aluminum lugs and splices	H Taps	"C" sleeve Connectors
500 MCM	up to 300 MCM	up to 4/0–4/0	2/0

STORAGE

Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9	21.38x16.22xh5.12	4.6	❊	—

14.4 V cordless hydraulic crimping tool, lightweight and balanced for single hand operation.
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.

The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

B 51LA is suitable for use with "W" dies.

The B 51LA features the same characteristics of B 51, plus an elongared head and upper and lower adapters to insert "W" style dies from other manufacturer.
Can in any case accept also all dies common to Cembre 6 tons range of tools using AU 50L-50-S spacer.
The crimping head can rotate through 180° for ease of operation. The B 51A will accept die sets common to the Cembre 6 tons tooling range. Fitted with a maximum hydraulic pressure valve.
Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration. Ergonomically designed with a sculptured body for operator comfort.

B 51LA-KV version also available for electrical utilities

Available also:
B 51L-IC, with 12V car battery charger.

Switch protected against accidental operation

Automatic slot-in battery

Battery condition display

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

B 55-YB

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
6.4	14	11.9	3.7	14.4 V 3.0 Ah	11

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

MAIN APPLICATIONS - max size AWG			
Copper lugs and splices	Aluminum lugs and splices	H Taps	"C" sleeve Connectors
500 MCM	up to 300 MCM	up to 4/0-4/0	2/0

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9	21.38x16.22xh5.12	4.6	❄	–

14.4 V cordless hydraulic crimping tool, lightweight and balan-ced for single hand operation.
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
The crimping head can rotate through 180° for ease of operation.
The B 55-YB, with adapter AU55-K, will accept "O" dies and, with adapters AU55-K + AU55-B, will accept "W" dies.
Fitted with a maximum hydraulic pressure valve.
Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration.
Ergonomically designed with a sculptured body for operator comfort.

The tool is supplied as:
- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*
- *Canvas bag*

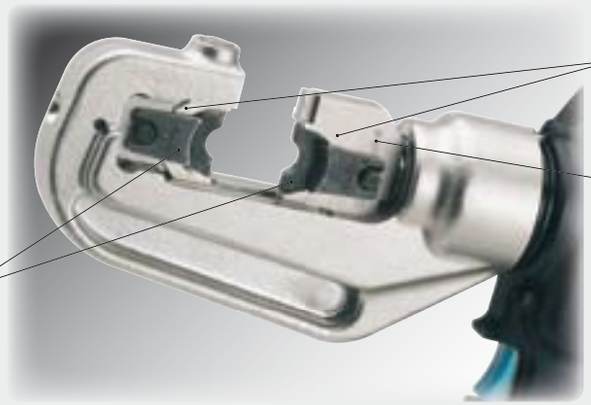
Available also:
B 55YB-IC, with 12V car battery charger.

CRIMPS FOR CHARGE				
Terminal	Conductor (AWG)	Die Set		Approx. No of crimps
Cembre Copper tube crimping lugs	8	ME2-50	⬡	**250**
	2-1/0	ME10-50	⬡	**230**
	250 MCM	ME24-50	⬡	**160**
	500 MCM	ME48-50	⬡	**120**

B 55-YB-KV version also available for electrical utilities

With adapter AU55-K for accepting "O" dies.

With adapters AU55-K + AU55-B for accepting "W" dies.



14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

B 55-YK

general features

Crimping force tons	Dimensions in. length	height	width	Battery Ni-MH	Weight lbs. (with battery)
6.4	14	11.9	3.7	14.4 V 3.0 Ah	11

MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Aluminum lugs and splices	H Taps	"C" sleeve Connectors
500 MCM	up to 300 MCM	up to 4/0-4/0	2/0

STORAGE

Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9	21.38x16.22xh5.12	4.6	❊	–

14.4 V cordless hydraulic crimping tool, having the same characteristics of B 55-YB.

The B 55-YK, with adapter AU55-K, will accept "O" dies.

With adapter AU55-K for accepting "O" dies.

"O" die

AU55-K adapter

The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*
- *Canvas bag*

Available upon request, the B 55-YK-KV plastic coated version

Available also:

B 55YK-IC, with 12V car battery charger.

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

B 55-YC

general features

Crimping force tons	Dimensions in. length	height	width	Battery Ni-MH	Weight lbs. (with battery)
6.4	14	11.9	3.7	14.4 V 3.0 Ah	11

MAIN APPLICATIONS - max size AWG

Copper lugs and splices	Insulated terminals	End sleeves	"C" sleeve Connectors
500 MCM	250 MCM	250 MCM	2/0

STORAGE

Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9*	21.38x16.22xh5.12	4.6	❊	–

14.4 V cordless hydraulic crimping tool, having the same characteristics of B 55-YB.

The B 55-YC, with adapter AU55-50, will accept "Cembre 6 ton" dies.

With adapter AU55-50 for accepting "Cembre 6 ton" dies.

"Cembre" die

AU55-50 adapter

The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*
- *Canvas bag*

Available upon request, the B 55-YC-KV plastic coated version

Available also:

B 55YC-IC, with 12V car battery charger.

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

B 135-CA

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

Crimping force tons	Dimensions in.			Jaw Opening in.	Battery	Weight lbs. (with battery)
	length	*height*	*width*			
14.6	14.2	11.9	3.7	0.98	14,4 V 3.0 Ah	14.7

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

MAIN APPLICATIONS - max size MCM	
Copper lugs and splices	"C" sleeve connectors
800/400	350

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9-C	21.4x16.2xh5.1	4.8	❊	—

14.4 V cordless hydraulic crimping tool, lightweight and balanced for single hand operation.
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
The crimping head can rotate through 180° for ease of operation.
The B135-CA will accept all semi-circular slotted dies, common to most 12 tons tools (U dies).
Fitted with a maximum hydraulic pressure valve.

Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration.
Ergonomically designed with a sculptured body for operator comfort.

The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and 8 sets of semi-circular slotted dies*

B 135-CA-KV
version also available for electrical utilities

Available also:

B 135-C-IC, with 12V car battery charger.

Battery condition display

Motor ventilation

Automatic slot-in battery

Switch protected against accidental operation

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

B 135LN-CA

general features

Crimping force tons	Dimensions in.			Jaw Opening in.	Battery	Weight lbs. (with battery)
	length	height	width			
14.6	16.7	11.9	3.7	1.65	14,4 V 3.0 Ah	17.9

MAIN APPLICATIONS - max size MCM		
Copper lugs and splices	Aluminum lugs and splices	"C" sleeve connectors
800	up to 750	350

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9-C	21.4x16.2xh5.1	4.8	❊	—

The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and 8 sets of semi-circular slotted dies*

B 135LN-CA-KV version also available for electrical utilities

14.4 V cordless hydraulic crimping tool, lightweight and balanced for single hand operation.
The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
The crimping head can rotate through 180° for ease of operation.

Featuring a large 1.65 in. jaw opening, for an easier introduction/removal of large size compression terminations and joints.

The B135LN-CA will accept all semi-cirular slotted dies, common to most 12 tons tools (U dies).

Fitted with a maximum hydraulic pressure valve.
Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration.
Ergonomically designed with a sculptured body for operator comfort.

Available also:

B 135LN-C-IC, with 12V car battery charger.

CRIMPS FOR CHARGE			
Terminal	Conductor (AWG)	Die Set	Approx. No of crimps
Cembre Copper tube crimping lugs	4	ME5-C ⬡	**90**
	250 MCM	ME24-C ⬡	**65**
	500 MCM	ME48-C ⬡	**50**

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

B 131-CA

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

Crimping force tons	Dimensions in.			Jaw Opening in.	Battery	Weight lbs. (with battery)
	length	*height*	*width*			
14.6	16.5	9.8	3.9	0.98	14,4 V 3.0 Ah	16.3

MAIN APPLICATIONS - max size MCM	
Copper lugs and splices	"C" sleeve connectors
800/400	350

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P19	21.3x16.2xh7.7	7.0	❊	—

The tool is supplied as:

- *Basic tool complete with battery and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing 14 sets of semi-circular slotted dies*

- 14.4 V cordless hydraulic crimping tool, lightweight and balanced for single hand operation. This tool will accept all semi-circular slotted dies, common to most 12 tons tools (U dies).
- The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
- For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
- The tool is powered by 14.4 V dc Ni-MH battery.
- A balanced tool for optimum control.
- Quiet in operation with very little vibration.
- Lightweight construction enables the operator to hold the tool in one hand and to position the connector with the other hand.
- The operating buttons, crimp/release, are mechanically interlocked, to prevent accidental operation of the tool.
- A microprocessor controls the tool operation and automatically cuts out the motor, on completion of the crimping operation, saving energy and extending battery life.
- The residual battery capacity is automatically displayed after every cycle.
- Fitted with an integral socket, for connection to a 12 V dc external power supply/vehicle battery.
- The tool is provided with a maximum pressure valve.

Available also:

B 131-C-IC, with 12V car battery charger.

B 131-CA-KV version also available for electrical utilities

Battery condition display and motor ventilation

Easy to operate with only one hand

Operating and pressure release buttons mechanically interlocked

Socket for 12÷14.4 V dc external power supply

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

B 131LN-CA

general features

Crimping force tons	Dimensions in.			Jaw Opening in.	Battery	Weight lbs. (with battery)
	length	*height*	*width*			
14.6	18.9	10	3.9	1.65	14,4 V 3.0 Ah	19.6

MAIN APPLICATIONS - max size MCM		
Copper lugs and splices	Aluminum lugs and splices	"C" sleeve connectors
800	up to 750	350

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P19	21.3x16.2xh7.7	7.0	❊	—

The tool is supplied as:
- *Basic tool complete with battery and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing 14 sets of semi-circular slotted dies*

- 14.4 V cordless hydraulic crimping tool, lightweight and balanced for single hand operation. **Featuring a large 1.65 in. jaw opening, for an easier introduction/removal of large size compression terminations and joints.** This tool will accept all semi-circular slotted dies, common to most 12 tons tools (U dies).
- The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
- For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
- The tool is powered by 14.4 V dc Ni-MH battery.
- A balanced tool for optimum control.
- Quiet in operation with very little vibration.

Available also: B 131LN-C-IC, with 12V car battery charger.

- Lightweight construction enables the operator to hold the tool in one hand and to position the connector with the other hand.
- The operating buttons, crimp/release, are mechanically interlocked, to prevent accidental operation of the tool.
- A microprocessor controls the tool operation and automatically cuts out the motor, on completion of the crimping operation, saving energy and extending battery life.
- The residual battery capacity is automatically displayed after every cycle.
- Fitted with an integral socket, for connection to a 12 V dc external power supply/vehicle battery.
- The tool is provided with a maximum pressure valve.

CRIMPS FOR CHARGE				
Terminal	Conductor (AWG)	Die Set		Approx. No of crimps
Cembre Copper tube crimping lugs	4	ME5-C	⬡	85
	250 MCM	ME24-C	⬡	60
	500 MCM	ME48-C	⬡	40

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

B 131LN-CA-KV

general features

Crimping force tons	Dimensions in.			Jaw Opening in.	Battery	Weight lbs. (with battery)
	length	*height*	*width*			
14.6	18.9	10	3.9	1.65	14,4 V 3.0 Ah	19.6

MAIN APPLICATIONS - max size MCM		
Copper lugs and splices	Aluminum lugs and splices	"C" sleeve connectors
800	up to 750	350

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P19	21.3x16.2xh7.7	7.0	❊	—

The tool is supplied as:
- *Basic tool complete with battery and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing 14 sets of semi-circular slotted dies*

Available also:

B 131LN-C-KV-IC, with 12V car battery charger.

Featuring a large 1.65 in. jaw opening, for an easier introduction/removal of large size compression terminations and joints.

The B131LN-CA-KV will accept all semi-cirular slotted dies, common to most 12 tons tools (U dies).

"KV" version of B131LN-CA tool is provided with additional coatings to protect the operator and tool against accidental brush contact with energised conductors.

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

B 150-A

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

general features

Crimping force tons	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
15.0	21.0	9.8	3.9	14.4 V 3.0 Ah	22.9

CONNECTOR RANGE	
COPPER	ALUMINUM
#8 AWG - 1500 MCM	#8 AWG - 1250 MCM

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL B150	22.3x16xh5.1	14,8	❊	—

The tool is supplied as:

- *Basic tool complete with battery and shoulder strap*
- *Spare battery*
- *AC charger (100-120V)*
- *Metal carrying case suitable for storing the tool and accessories*

- 14,4 V cordless hydraulic crimping tool able to crimp splices and lugs to 1250 MCM aluminum and 1500 MCM copper.
- This tool will accept directly all "P" dies commonly used in industry and, **with the AU150-C adapter, all the semi-circular slotted dies, common to most 12 tons tools (U dies)**.
- The tool features a double speed action: a fast advancing speed for rapid approach of the dies to the connector and a slower more powerful speed for crimping.
- For ease of operation and comfort of the operator the tool head can be fully rotated through 180 degrees.
- The tool is powered by 14.4 V dc Ni-MH battery.
- Quiet in operation with very little vibration.
- The operating buttons, crimp/release, are mechanically interlocked, to prevent accidental operation of the tool.
- A microprocessor controls the tool operation and automatically cuts out the motor, on completion of the crimping operation, saving energy and extending battery life.
- The residual battery capacity is automatically displayed after every cycle.
- Fitted with an integral socket, for connection to a 12 V dc external power supply/vehicle battery.
- The tool is provided with a maximum pressure valve.

Available also:

B 150-IC, with 12V car battery charger.

DIE SELECTOR CHART		
Copper Conductor (MCM)		DIE SET
low stranded	*multi stranded*	
1000		ME 100-P ☐
1250	1000	ME 120-P ☐

Openable head

High power battery

Battery condition display

Motor ventilation

Easy to operate with only one hand

Operating and pressure release buttons mechanically interlocked

Socket for 12÷14.4 V dc external power supply

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

14.4 V CORDLESS HYDRAULIC CRIMPING TOOL

The B 150 A with "P" dies.

The B 150 A with adapter AU150-C for accepting "U" dies.

These tools are supplied without dies. For die selection, please refer to chart on pages 194 ÷ 204

9.6 V CORDLESS HYDRAULIC CUTTING TOOL

OVERHEAD LINE APPLICATION

B35-TC025A

general features

Max cutting Ø in.	Dimensions in.			Battery	Weight lbs. (with battery)
	length	*height*	*width*		
up to 1	14.8	4.49	2.6	9,6 V 2.0 Ah	6.6

9.6V 2.0Ah Ni-MH

New

STORAGE				
Type	Dimensions mm	Weight kg	Supplied with the tool	Purchase separately
VAL P22	18.3x12.4xh4.57	3.3	❇	—

Can be operated with one hand. Balanced for greater control.
Head rotates 180° for ease of operation in confined spaces.
Fitted with a maximum pressure valve. Extremely quiet, minimal vibration. Durable moulded body offering high resistance to wear and damage in all operating conditions.
Ni-MH battery; powerful, better environmental compatibility.
Complete with a display which, after every operation, indicates the residual battery power. Supplied in a robust plastic case to accommodate the tool and all the accessories.
Two batteries and AC charger (110V) included.

The tool is supplied as:
- *Basic tool with battery and wrist strap*
- *Spare battery*
- *AC charger (110V)*
- *Battery adapter*
- *Plastic carrying case suitable for storing the tool and accessories*

CUTTING CAPACITY			
	MATERIAL	TENSILE STRENGHT (lbs./sq.in.)	MAX CUTTING DIAMETER (in.) HT-TC026Y TC 025 B-TC026YA
ROPES & CONDUCTORS	COPPER	≤ 59,450	1
	ALUMINUM	≤ 29,000	1
	ALMELEC	≤ 49,300	1
	STEEL	≤ 261,000	*FEW INDICATIVE EXAMPLES:* 19 x 0.083 = Ø out. 0.413 19 x 0.091 = Ø out. 0.453
	MULTI STRANDS STEEL (STRANDS Q.TY ≥ 200)	≤ 261,000	-
	ACSR	≤ 261,000	1 *FEW INDICATIVE EXAMPLES:* 26 x 0.098 + 7 x 0.077 : Ø out. = 0.624 26 x 0.120 + 7 x 0.094 : Ø out. = 0.763 26 x 0.142 + 7 x 0.110 : Ø out. = 0.897
RODS	STEEL	≤ 87,000	0.393
		≤ 60,900	-
	COPPER	≤ 43,000	-
		≤ 36,250	0.629
	ALUMINUM	≤ 23,200	1

Available also:
B-35-TC025-IC, with 12V car battery charger.

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

OVERHEAD LINE APPLICATION

B-TC026YA

general features

Max cutting Ø in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
up to 1	12.2	11.9	3.7	14.4 V 3.0 Ah	9.9

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

STORAGE				
Type	Dimensions in	Weight lbs	Supplied with the tool	Purchase separately
VAL P9	21.4x16.2xh5.1	4.8	❇	—

14.4 V cordless hydraulic cutting tool, lightweight and balanced for single hand operation.
Specifically designed to cut copper, aldrey, aluminum, aluminum-steel cables, steel ropes having a max overall diameter of 1", guy wire up to 7/8" and steel ground rod up to 5/8".
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.

Ideal for EHS guy wire

Available also:
B-TC026Y-IC, with 12V car battery charger.

The tool is supplied as:
- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

The blades are manufactured from high strength special steel, heat treated to ensure a long service life. The crimping head can rotate through 180° for ease of operation. Fitted with a maximum hydraulic pressure valve.
Complete with a display which, after every operation, indicates the residual battery power. Extremely quiet in operation, with very little vibration.
Ergonomically designed with a sculptured body for operator comfort.
For further details about the cutting capacity, please consult the table of page 135.

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

OVERHEAD LINE APPLICATION

B-TC0405A

Ideal for EHS guy wire

general features

Max cutting Ø in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
1-9/16	17.2	11.7	3.7	14,4 V 3.0 Ah	15.4

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL B-TC095	22.3x16xh5.1	14.8	❊	—

The tool is supplied as:

- *Basic tool with battery and shoulder strap*
- *Spare battery*
- *AC charger (110 V)*
- *Metal carrying case suitable for storing the tool and accessories*

14.4 V cordless hydraulic cutting tool specifically designed cut copper, aldrey, aluminum, aluminum-steel cables and steel ropes, aluminum and steel rods having a max overall diameter of 1.6 in. (1590 MCM ACSR). The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.
The head can rotate through 180 degrees, to enable the operator to work in the most comfortable position, and can easily be opened to allow cutting of running cables.
Fitted with a maximum hydraulic pressure valve.
Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration. Ergonomically designed with a sculptured body for operator comfort.
For further details about the cutting capacity, please consult the table of page 136.

Available also:
B-TC0405-IC, with 12V car battery charger.

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

OVERHEAD LINE APPLICATION

B-TC04A

Ideal for EHS guy wire

general features

Max cutting Ø in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
1-9/16	19.4	9.8	3.9	14.4 V 3.0 Ah	16.7

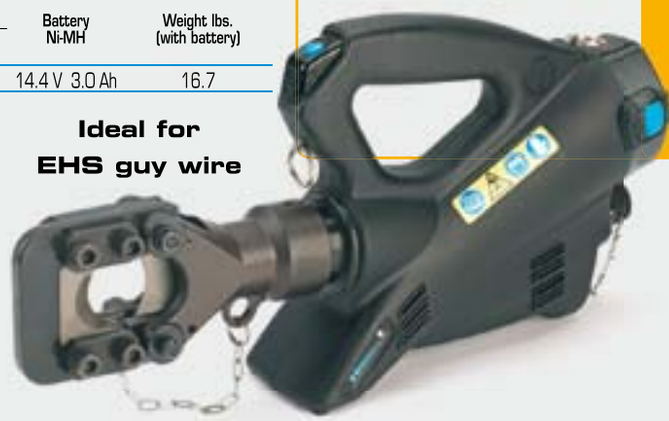
STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL BTC04	22.3x16xh5.1	14.8	❊	—

The tool is supplied as:

- *Basic tool with battery and shoulder strap*
- *Spare battery*
- *AC charger (110 V)*
- *Metal carrying case suitable for storing the tool and accessories*

- 14.4 V cordless hydraulic cutting tool specifically designed cut copper, aldrey, aluminum, aluminum-steel cables and steel ropes, aluminum and steel rods having a max overall diameter of 1.6 in. (1590 MCM ACSR)
- Lightweight and balanced for single hand operation.
- The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.
- For ease of operation and comfort of the operator the tool head can be rotated through 180 degrees.
- The tool is powered by 14.4 V dc Ni-MH battery.
- A balanced tool for optimum control.
- Quiet in operation with very little vibration.
- Lightweight construction enables the operator to hold the tool in one hand and to position the cable with the other hand.
- The operating buttons, cut/release, are mechanically interlocked, to prevent accidental operation of the tool.
- A microprocessor controls the tool operation and automatically cuts out the motor, on completion of the cutting operation, saving energy and extending battery life.
- The residual battery capacity is automatically displayed after every cycle.
- Fitted with an integral socket, for connection to a 12 V dc external power supply/vehicle battery.
- The tool is provided with a maximum pressure valve.

For further details about the cutting capacity, please consult the table of page 136.



Available also:
B-TC04-IC, with 12V car battery charger.

OVERHEAD LINE APPLICATION

B-TC051YA

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

general features

Max cutting Ø in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
up to 2	16.3	11.9	3.7	14.4 V 3.0 Ah	11.9

DOUBLE ACTION SPEED — 14.4V 3.0Ah Ni-MH

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9	21.4x16.2xh5.1	4.8	❊	—

The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

14.4 V cordless hydraulic cutting tool, lightweight and balanced for single hand operation.
Specifically designed to cut copper, aluminum, aluminum-steel cables (ACSR) having a max overall diameter of 2".
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The head can be easily opened to allow the cutting of running cables.
The head can rotate by 90 degrees, to enable the operator to work in the most comfortable position. Fitted with a maximum hydraulic pressure valve. Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration.
Ergonomically designed with a sculptured body for operator comfort.

For ACSR only, not suitable for cutting guy wire and ground rod.

Available also:

B-TC051Y-IC, with 12V car battery charger.

OVERHEAD LINE APPLICATION

B-TC055A

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

general features

Max cutting Ø in.	Dimensions in.			Battery	Weight lbs. (with battery)
	length	*height*	*width*		
2-3/16	19.0	11.7	3.7	14.4 V 3.0 Ah	20.7

DOUBLE ACTION SPEED — 14.4V 3.0Ah Ni-MH

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL B-TC095	22.3x16xh5.1	14.8	❊	—

The tool is supplied as:

- *Basic tool with battery and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Metal carrying case suitable for storing the tool and accessories*

14.4 V cordless hydraulic cutting tool, lightweight and balanced for single hand operation.
Specifically designed to cut copper, aluminum, aluminum-steel cables (ACSR) steel ropes and rods having a max overall diameter of 2-3/16".
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting. The blades are manufactured from high strength special steel, heat treated to ensure a long service life. The head can be easily opened to allow the cutting of running cables.

Ideal for 795 MCM ACSR Drake and EHS guy wire

The head can rotate through 327 degrees, to enable the operator to work in the most comfortable position. Fitted with a maximum hydraulic pressure valve. Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration. Ergonomically designed with a sculptured body for operator comfort.
For further details about the cutting capacity, please consult the table of page 138.

Available also:

B-TC055-IC, with 12V car battery charger.

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

INDUSTRIAL APPLICATION
B-TC051A

general features

Max cutting in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
up to 2	16.3	11.9	3.7	14.4 V 3.0 Ah	11.9

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9	21.4x16.2xh5.1	4.8	❊	—

The tool is supplied with:
- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

14.4 V cordless hydraulic cutting tool, lightweight and balanced for single hand operation.
Specifically designed to cut copper, aluminum and telecommunication cables having a max overall diameter of 2".
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.

Available also:
B-TC051-IC, with 12V car battery charger.

The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The head can be easily opened to allow the cutting of running cables.
The head can rotate by 90 degrees, to enable the operator to work in the most comfortable position.
Fitted with a maximum hydraulic pressure valve. Complete with a display which, after every operation, indicates the residual battery power. Extremely quiet in operation, with very little vibration. Ergonomically designed with a sculptured body for operator comfort.

Not suitable for cutting steel reinforced conductors

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

INDUSTRIAL APPLICATION
B-TC065A

general features

Max cutting in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
up to 2-9/16	17.5	11.9	3.7	14.4 V 3.0 Ah	14.1

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P9	21.4x16.2xh5.1	4.8	❊	—

The tool is supplied as:
- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

14.4 V cordless hydraulic cutting tool, lightweight and balanced for single hand operation.
Specifically designed to cut copper, aluminum and telecommunication cables having a max overall diameter of 2-9/16". The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.

Available also:
B-TC065-IC, with 12V car battery charger.

The head can be easily opened to allow the cutting of running cables.
The head can rotate by 335 degrees, to enable the operator to work in the most comfortable position. Fitted with a maximum hydraulic pressure valve. Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration. Ergonomically designed with a sculptured body for operator comfort.

Not suitable for cutting steel reinforced conductors

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

INDUSTRIAL APPLICATION

B-TC065-SCA

general features

Max cutting in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
up to 2-9/16	20.1	12.3	4.1	14.4 V 3.0 Ah	15.9

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

New

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL B-TC095	22.2x16.1xh5.2	14.7	❇	—

The tool is supplied as:

- *Basic tool with battery and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Metal carrying case suitable for storing the tool and accessories*

14.4 V cordless hydraulic cutting tool specifically designed to cut Copper, Aluminum and telecommunication cables having a max overall diameter of 2-9/16".
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting.
The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The open head and the "scissor" movement of the blades facilitate the cutting of running cables.
The head can rotate by 180 degrees, to enable the operator to work in the most comfortable position. Fitted with a maximum hydraulic pressure valve. Complete with a display which, after every operation, indicates the residual battery power. Extremely quiet in operation, with very little vibration.
Ergonomically designed with a sculptured body for operator comfort.

Available also:
B-TC065-SC-IC, with 12V car battery charger.

Not suitable for cutting steel reinforced conductors

14.4 V CORDLESS HYDRAULIC CUTTING TOOL

INDUSTRIAL APPLICATION

B-TC095A

general features

Max cutting in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
up to 3-3/4	20.7	12.0	3.7	14.4 V 3.0 Ah	16.2

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

STORAGE				
Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL B-TC095	22.2x16.1xh5.2	14.7	❇	—

The tool is supplied as:

- *Basic tool with battery and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Metal carrying case suitable for storing the tool and accessories*

14.4 V cordless hydraulic cutting tool specifically designed to cut Copper, Aluminum and telecommunication cables having a max overall diameter of 3-3/4".
The tool features a double speed action: a fast advancing speed for rapid approach of the blades to the cable and a slower more powerful speed for cutting. The blades are manufactured from high strength special steel, heat treated to ensure a long service life.
The head can be easily opened to allow the cutting of running cables.
The head can rotate by 335 degrees, to enable the operator to work in the most comfortable position. Fitted with a maximum hydraulic pressure valve. Complete with a display which, after every operation, indicates the residual battery power. Extremely quiet in operation, with very little vibration.
Ergonomically designed with a sculptured body for operator comfort.

Available also:
B-TC095-IC, with 12V car battery charger.

Not suitable for cutting steel reinforced conductors

14.4 V CORDLESS HYDRAULIC FRAME-TYPE HOLE PUNCHING TOOL

B-FC48NA

New

general features

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

Max hole punch Ø in.	Dimensions in.			Battery Ni-MH	Weight lbs. (with battery)
	length	*height*	*width*		
1.858	13.9	11.9	3.7	14.4 V 3.0 Ah	12.3

STORAGE

Type	Dimensions in.	Weight lbs	Supplied with the tool	Purchase separately
VAL P9	21.4x16.2xh5.1	4.8	❊	—

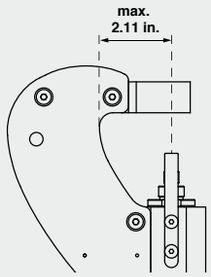
The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Plastic carrying case suitable for storing the tool and accessories*

14.4 V cordless hydraulic tool for punching holes from 0.61 up to 1.858 in. diameter in the side wall of trunking without the need for pre drilling.
Lightweight and balanced for single-hand operation.
The tool feature a double speed action: a fast advancing speed for rapid approach of the dies to the material and a slower more powerful speed for punching.
The punching head can rotate through 180° for ease of operation. Complete with a display which, after every operation, indicates the residual battery power.
Extremely quiet in operation, with very little vibration.
Ergonomically designed with a sculptured body for operator comfort.
Also available in the hand operated mechanical version MT-FC48N (see page 115).

Available also:

B-FC48N-IC, with 12V car battery charger.



Max centre of hole to edge of trunking: 2.11 in.

Table denoting the punch/die set reference, for each hole size. Suitable for punching holes in mild steel, fiberglass or plastic material, up to 0.08 in thick.

Hole Dimensions					Maximum thickness of mild steel (in.)	Code
Nominal Ø (mm)	Ø (inch)	Pg	ISO	Inch		
15,5	.610	Pg9	-	-		RD 15.5 SS-FC
16,2	.638	-	ISO-16	-		RD 16.2 SS-FC
17,5	.689	-	-	-		RD 17.5 SS-FC
18,8	.740	Pg11	-	-		RD 18.8 SS-FC
19,1	.752	-	-	-		RD 19.1 SS
20,5	.807	Pg 13,5	ISO-20	-		RD 20.5 SS
22,6	.890	Pg16	-	-		RD 22.6 SS
23,8	.937	-	-	5/8"		RD 23.8 SS
25,4	1.000	-	ISO-25	-		RD 25.4 SS
27,0	1.063	-	-	3/4"		RD 27.0 SS
28,5	1.122	Pg21	-	-		RD 28.5 SS
30,5	1.201	-	-	7/8"	0.08	RD 30.5 SS
31,8	1.252	-	-	-		RD 31.8 SS
32,5	1.279	-	ISO-32	-		RD 32.5 SS
34,6	1.362	-	-	-		RD 34.6 SS
37,2	1.464	Pg29	-	-		RD 37.2 SS
38,1	1.500	-	-	-		RD 38.1 SS
40,5	1.594	-	ISO-40	-		RD 40.5 SS-FC
41,3	1.626	-	-	-		RD 41.3 SS-FC
42,5	1.673	-	-	1"1/4"		RD 42.5 SS-FC
43,2	1.701	-	-	-		RD 43.2 SS-FC
44,5	1.752	-	-	-		RD 44.5 SS-FC
47,2	1.858	Pg36	-	-		RD 47.2 SS-FC

14.4 V CORDLESS HYDRAULIC PULLER-TYPE HOLE PUNCHING TOOL

B-FL75A

New

general features

Max punching Ø in.	Dimensions in.			Battery	Weight lbs. (with battery)
	length	*height*	*width*		
4.724	14.4	11.9	3.7	14,4 V 3.0 Ah	9.7

DOUBLE ACTION SPEED

14.4V 3.0Ah Ni-MH

STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL P27	24.4x14.2xh5.4	5.3	✳	—

The tool is supplied as:

- *Basic tool with battery, wrist strap and shoulder strap*
- *Spare battery*
- *AC charger (110V)*
- *Puller TD-11*
- *Puller TD-19*
- *Spiral bit Ø 0.45 in.*
- *Plastic carrying case suitable for storing the tool and accessories*

Cordless hydraulic tool, for hole punching stainless steel, soft steel, fibreglass and plastic sheet materials up to 0.14 in. thickness.
Lightweight and quiet this tool is vibration free and allows a complete punching operation requiring one hand only.
The tool features an automatic double speed action so to optimise the energy available: a fast advancing speed for rapid approach of the punch followed automatically by a slower speed for more powerful punching. The balanced punching head pivots 180deg through a full 360deg rotation for ease of use in confined spaces. Complete with display which, after every operation and battery insertion, indicates the residual battery power. Ergonomically designed with a sculptured body for operator comfort.

Available also:
B-FL75-IC, with 12V car battery charger.

PUNCHING ACCESSORIES AVAILABLE

ROUND PUNCH

Hole diameter					Material max thickness		Pilot hole Ø	Code			
Nominal		Pg	ISO	Inch	Stainless steel	Mild steel		KIT (Punch+die)	Punch	Die	Puller
Ø (mm)	Ø (inch)						(in.)				
15,5	.610	Pg9	-	-	0.1 in. (2.5 mm) Rm= 700 N/mm²	0.14 in. (3.5 mm) Rm= 510 N/mm²	0.45	**RD 15.5SS**	P-RD15,5SS	M-RD15,5SS	TD-11
16,2	.638	-	ISO-16	-				**RD 16.2SS**	P-RD16,2SS	M-RD16,2SS	
17,5	.689	-	-	-				**RD 17.5SS**	P-RD17,5SS	M-RD17,5SS	
18,8	.740	Pg11	-	-				**RD 18.8SS**	P-RD18,8SS	M-RD18,8SS	
19,1	.752	-	-	-				**RD 19.1SS**	P-RD19,1SS	M-RD19,1SS	
20,5	.807	Pg 13,5	ISO-20	-				**RD 20.5SS**	P-RD20,5SS	M-RD20,5SS	
22,6	.890	Pg16	-	-				**RD 22.6SS**	P-RD22,6SS	M-RD22,6SS	
23,8	.937	-	-	5/8"				**RD 23.8SS**	P-RD23,8SS	M-RD23,8SS	
25,4	1.000	-	ISO-25	-				**RD 25.4SS**	P-RD25,4SS	M-RD25,4SS	
27,0	1.063	-	-	3/4"				**RD 27.0SS**	P-RD27,0SS	M-RD27,0SS	
28,5	1.122	Pg21	-	-				**RD 28.5SS**	P-RD28,5SS	M-RD28,5SS	
30,5	1.201	-	-	7/8"				**RD 30.5SS**	P-RD30,5SS	M-RD30,5SS	
28,5	1.122	Pg 21	-	-			0.79	**RD 28.5SS-19**	P-RD28,5SS-19	M-RD28,5SS-19	TD-19
30,5	1.201	-	-	7/8"				**RD 30.5SS-19**	P-RD30,5SS-19	M-RD30,5SS-19	
31,8	1.252	-	-	-				**RD 31.8SS**	P-RD31,8SS	M-RD31,8SS	
32,5	1.279	-	ISO-32	-				**RD 32.5SS**	P-RD32,5SS	M-RD32,5SS	
34,6	1.362	-	-	-				**RD 34.6SS**	P-RD34,6SS	M-RD34,6SS	
37,2	1.464	Pg29	-	-				**RD 37.2SS**	P-RD37,2SS	M-RD37,2SS	
38,1	1.500	-	-	-				**RD 38.1SS**	P-RD38,1SS	M-RD38,1SS	
40,5	1.594	-	ISO-40	-				**RD 40.5SS**	P-RD40,5SS	M-RD40,5SS	
41,3	1.626	-	-	-				**RD 41.3SS**	P-RD41,3SS	M-RD41,3SS	
42,5	1.673	-	-	1"1/4"				**RD 42.5SS**	P-RD42,5SS	M-RD42,5SS	
43,2	1.701	-	-	-				**RD 43.2SS**	P-RD43,2SS	M-RD43,2SS	
44,5	1.752	-	-	-				**RD 44.5SS**	P-RD44,5SS	M-RD44,5SS	
47,2	1.858	Pg36	-	-				**RD 47.2SS**	P-RD47,2SS	M-RD47,2SS	
50,5	1.988	-	ISO-50	-				**RD 50.5SS**	P-RD50,5SS	M-RD50,5SS	
54,2	2.134	Pg42	-	1"3/4"				**RD 54.2SS**	P-RD54,2SS	M-RD54,2SS	
60,0	2.362	Pg48	-	2"				**RD 60.0SS**	P-RD60,0SS	M-RD60,0SS	
64,0	2.520	-	ISO-63	-				**RD 64.0SS**	P-RD64,0SS	M-RD64,0SS	
65,0	2.559	-	-	-				**RD 65.0SS**	P-RD65,0SS	M-RD65,0SS	
76,0	2.992	-	-	2"1/2"				**RD 76.0SS**	P-RD76,0SS	M-RD76,0SS	
80,5	3.169	-	-	-				**RD 80.5SS**	P-RD80,5SS	M-RD80,5SS	
120,0	4.724	-	-	-	1,5	2	29,0	**RD 120SS**	P-RD120SS	M-RD120SS	TD-28,5*

* Puller included in the kit

SQUARE PUNCH

Hole size		Material max thickness (in.)		Pilot hole Ø	Code
Nominal		Stainless steel	Mild steel		KIT (Punch+die + Puller)
(mm)	(inch)			(in.)	
21,0 x 21,0	.827 x .827	0.08	0.08	0.47	**RD 21X21**
46,0 x 46,0	1.811 x 1.811			0.89	**RD 46X46**
68,0 x 68,0	2.677 x 2.677	0.06			**RD 68X68**
92,0 x 92,0	3.622 x 3.622	0.04	0.06		**RD 92X92**
138,0 x 138,0	5.433 x 5.433			1.12	**RD 138X138**

RECTANGULAR PUNCH

Hole size		Material max thickness (in.)		Pilot hole Ø	Code
Nominal		Stainless steel	Mild steel		KIT (Punch+die + Puller)
(mm)	(inch)			(in.)	
18,0 x 46,0	.709 x 1.811	0.08	0.08	0.65	**RD 18X46**
22,0 x 46,0	.866 x 1.811				**RD 22X46**
36,0 x 46,0	1.417 x 1.811			0.89	**RD 36X46**
46,0 x 54,0	1.811 x 2.126				**RD 46X54**
46,0 x 72,0	1.811 x 2.835	0.06			**RD 46X72**
46,0 x 107,0	1,811 x 4.212				**RD 46X107**

Stainless steel = Rm= 700 N/mm² - **Mild steel** = Rm= 500 N/mm²

USE OF NON ORIGINAL CEMBRE PUNCHING ACCESSORIES

Code	Punch & Die	Pilot hole Ø in.
KIT TRD-9,4C (*)	KLAUKE, GREENLEE 3/8" - 24 UNF	Ø 0.38
KIT TRD-M11C (*)	IMB, BM, COSMEC (M11x1.5)	Ø 0.45
TD-M16C	IMB, BM, COSMEC (M16x1.5)	Ø 0.65 or KIT RD17.5SS

(*) The washer supplied with the KIT must be threaded onto the draw stud and positioned between the head and the die to allow the die to rest correctly.

Universal joint allows punching head to pivot 180deg over a full 360deg rotation.

HYDRAULIC PUMPS AND UNITS

PO 7000

New foot operated double speed pump, developing a maximum pressure of 10,000 psi.
The pump is supplied with 10FT long high pressure flexible hose complete with female self-lock quick coupler.
Pressure can be withdrawn at any time during operation by depressing the release lever.
A solid shaped stand gives the pump stability during operation.

Operating pressure psi	Dimensions in.			Weight lbs
	length	*width*	*height*	
10,000	26.8	7.9	6.4	21.6

Storage type	Dimensions in.	Weight lbs.
VAL P21*	32.3x16.9x11.4	14.8

**Supplied with the pump*

CPP-0

The CPP-0 air hydraulic power unit intensifies an air supply of 87-115 psi (6÷8 bar) to a power crimping or cutting force of up to 10,000 psi (700 bar) depending upon the input pressure.
The control pedal allows for advancing and pressure release at any stage of the operation.
The unit is provided with a 6.5 FT high pressure flexible hose, including a 3/8" NPT female self-lock quick coupler.

CE

Operating pressure psi	Dimensions in.			Weight lbs.
	length	*width*	*height*	
10,000	12.6	5.9	7.9	15

CPE-1-110

Operating pressure psi	Dimensions in.			Weight lbs.
	length	*width*	*height*	
10,000	14.6	8.8	18.8	46.2

Electrically driven hydraulic pump, powered by a 110-115V / 50-60Hz single-phase electrical motor.
The remote hand controller allows advancement and pressure release on completion of the crimping operation.
The mechanically actuated emergency button located on the pump body, allows the pressure release at any time also in case of power shortage.
This model is IP 55 rated.

The pump is supplied with:
- high pressure flexible hose with male and female automatic quick coupler
- remote hand controller
- external supply connection cable

Available as optional accessories:
- Remote foot controller **RCP-B70**.
- Transportation trolley **CS-CPE-1**
- Control handle integrated with 10 ft length flex hoses **ERCH-WH**

Technical details:
- **Oil in the reservoir**: 0.52 gallons
- **Power of motor**: 1,050 W
- **Delivery of oil**: 0.21 Gpm at no load

ERCH-WH

RCP-B70

CS-CPE-1

PORTABLE ELECTRO-HYDRAULIC PUMPS B70M-P24A RANGE

BATTERY OPERATED

Easily accessible oil top-up inlet

Remote electrical hand or foot controller connection (not KV version)

Remote pneumatic hand controller connection (KV version only)

24V dc external power supply socket with protective cap

24V 3.3Ah Ni-MH

Powerful 24V Ni-MH rechargeable battery

Battery residual power level display

Manual pressure release button

High pressure hose connects to automatic self-lock quick coupling with protective cap

Variously supplied with different versions:

B70M-P24A

Operating pressure psi	Dimensions in.			Weight lbs.
	length	*width*	*height*	
10,000	15.3	6.4	12.7	20.2*

**without accessories*

B70M-P24A

1. Portable electro-hydraulic pump, 24V dc battery for independent use, developing 10,000 psi pressure; equipped with an integral socket for connection to an external 24 V dc supply
2. **BH2433** Battery 24V dc 3.3Ah
3. **DC24** External battery charger
4. Shoulder strap
5. Canvas holdall for carrying accessories
6. 10 ft. flexible hose complete with male + female 3/8" NPT self-lock quick couplers
7. **ERCH** Remote control

B70M-P24A-CH

New

Operating pressure psi	Dimensions in.			Weight lbs.
	length	*width*	*height*	
10,000	15.3	6.4	12.7	20.2*

**without accessories*

B70M-P24A-CH

1. Portable electro-hydraulic pump, 24V dc battery for independent use, developing 10,000 psi pressure; equipped with an integral socket for connection to an external 24 V dc supply
2. **BH2433** Battery 24V dc 3.3Ah
3. **DC24** External battery charger
4. Shoulder strap
5. Canvas holdall for carrying accessories
9. **ERCH-WH** Remote hand controller integrated with 10 ft. length flexible hose complete with male + female 3/8" NPT self-lock quick couplers

B70M-P24A-KV

Operating pressure psi	Dimensions in.			Weight lbs.
	length	*width*	*height*	
10,000	15.3	6.4	12.7	20.2*

**without accessories*

B70M-P24A-KV

1. Portable electro-hydraulic pump, 24V dc battery for independent use. Equipped with high dielectric insulated oil and automatic "insulated" lock quick coupler to allow connection only with insulated hoses
2. **BH2433** Battery 24V dc 3.3Ah
3. **DC24** External battery charger
4. Shoulder strap
5. Canvas holdall for carrying accessories
8. **PRCH** Remote pneumatic hand controller

Insulated heads suitable for use with this pump are generally supplied complete with high pressure insulated hoses; if necessary the hose can be purchased separately.

ACCESSORIES FOR B70M-P24A

ESC 300CEE
CONNECTING CABLE
WITH 24V dc CEE TYPE PLUG
(for power from an external source, length 10 ft.)

ESC 600
CONNECTING CABLE WITH CROCODILE CLIPS
(for power from an external source, length 20 ft.)

BPS 110.24Y
network power supply
INPUT 110V ac 50-60Hz; OUTPUT 24V dc
thermal and short circuit protection.
Current supply*: up to 4A extended use;*
18A for 50 s; 25A for 8 s.

EPS 115-230.24
network power supply
SUPPLY IN: 110/240V ac autorange
50-60Hz; 700W
SUPPLY OUT: 24V dc; 30A max

TRS-B70
RUCKSACK
(for carrying the pump)

ERCH-WH
CONTROL HANDLE
FOR FLEX HOSES

SH-B70
HOOK
(for hanging the pump
from a ladder)

VAL-P18
Durable case for pump
and accessories.

RCP-B70
PORTABLE REMOTE
FOOT CONTROL

HYDRAULIC UNITS

Hydraulic units are obtained by combining the double stage hydraulic foot pump with the various hydraulic press heads featured on previous pages.

The use of the double stage pump considerably reduces operating time.

CP 1131

*(pump **PO 7000** + head **RHC 131**)*

Crimping force tons	Dimensions pump in.	Dimensions head in.	Weight lbs.
14.6	26.8x7.9xh6.4	232x4.9	30.0

MAIN APPLICATIONS - max size MCM

Copper lugs/splices	"C" sleeve connectors
800/400	350

Storage type	Dimensions in.	Weight lbs.
VAL P21*	32.3x16.9x11.4	14.8

**Supplied with the unit, suitable for storage of 24 semi-circular slotted dies*

CPU 1131-C

*(pump **PO 7000** + head **RHU 131-C**)*

Crimping force tons	Dimensions pump in.	Dimensions head in.	Weight lbs.
14.6	26.8x7.9xh6.4	9.65x3.5	29.7

MAIN APPLICATIONS - max size MCM

Copper lugs and splices	"C" sleeve connectors	Alu lugs and splices
800	350	600

Storage type	Dimensions in.	Weight lbs.
VAL P21*	32.3x16.9x11.4	14.8

**Supplied with the unit, suitable for storage of 24 semi-circular slotted dies and accessories for crimping aluminum connectors*

CPU 1230-3D

*(pump **PO 7000** + head **ECW-H3D**)*

Crimping force tons	Dimensions pump in.	Dimensions head in.	Weight lbs.
25.8	26.8x7.9xh6.4	12.4x4.7	33.7

MAIN APPLICATIONS - max size MCM

L.V. lugs and splices	Insulated terminals	"C" sleeve connectors	H.V. lugs and splices
1250	600	500	1250

Storage type	Dimensions mm	Weight lbs.
VAL P21*	32.3x16.9x11.4	14.8

**Supplied with the unit, suitable for storage of 24 semi-circular slotted dies and adaptors and dies specific for head ECW-H3D*

HYDRAULIC CUTTING UNITS

CP 1096

*(pump **PO 7000** + head **TC 096**)*

Max cutting Ø in.	Dimensions pump in.	Dimensions head in.	Weight lbs.
up to 3-3/4	26.8x7.9xh6.4	15.6x9.8	39.0

Storage type	Dimensions in.	Weight lbs.
VAL CP 096*	30.9x16.9xh6.9	30.8

**Supplied with the unit*

Units CP-W-KV

GS approval n. ET 12026

Meets the requirements of EN 50340 VDE 0682 part 661 and GS-ET-23

Hydraulic units provide protection against short circuit when cutting accidentally live L.V. / M.V. cables with nominal voltage up to 60 kV.

Unit Type	Max cutting Ø in.	Dimensions pump	Dimensions head	Weight lbs
CP 1086-W-1000-KV	3-11/32	26.8x7.9xh6.4	15.9x6.3	36.6
CP 1096-W-1000-KV	3-3/4	26.8x7.9xh6.4	16x9.6	41.9
CP 1120-W-1000-KV	4-23/32	26.8x7.9xh6.4	21.7x7.3	44.5

Storage case type	Dimensions in.	Weight lbs
VAL CP096-W*	30.9x16.9xh6.9	27.8

Supplied with the **unit*

Optional accessories:

- EK100 earth cable for the pump (3.3 ft length)
- EK500P earth cable for the head (16.4 ft length) with earth rod and canvas bag

EK 500P

EK 100

PORTABLE TWO CYCLE GAS ENGINE IMPACT WRENCH

GAS ENGINE
NR-11P

New

general features

HIGH TORQUE
1844 ft. lbs

Impact Unit Square driver Size	Dimensions in.			Two Cycle Gas Engine	Weight (dry) lbs.
	length	*height*	*width*		
1"	25.2	10.8	16.9	55 cc	41

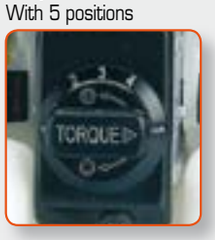
STORAGE				
Type	Dimensions in.	Weight lbs.	Supplied with the tool	Purchase separately
VAL NR*	29.4x17.9xh12.2	35.3	—	❊
VAL P20**	17.6x9.0xh4.1	2.9	—	❊

** Steel case for storage of NR11-P and VALP20 accessories box.*
***Plastic box for storage of sockets and accessories.*

Ideal for Railways, Construction sites, Oil and Mining Industries, Shipyards.

Protective shield
To protect tank and engine from accidental shocks

Torque selector
With 5 positions



Forward/Reverse selector
Smooth change

1 - Fuel Tank
This large tank has a 1.2l capacity for longer working time between refills. The gripping surfaces on the cap make it easy to remove/replace and the facility to add fuel in both vertical and horizontal positions avoids accidental spillage.

2 - Handlebar
Careful ergonomic design of the machine spreads the weight equally between left and right handles. The structure formed by the combination of the shaped handle bar and the protective shield minimise the risk of accidental mechanical shock to the fuel tank and engine.

3 - Control handle
Control buttons are specifically located to reduce the effects of working in awkward positions, eg wrist and shoulder discomfort, thereby optimising performance in both vertical and horizontal modes, while a Dead man device prevents accidental acceleration, for operator safety.
The control handle assembly is clamped to the handlebar via a steel rod for enhanced robustness.

4 - Gearbox
Brightened steel gears are immersed in a synthetic oil bath to prolong life and extend the range of permitted working temperatures. The gear change lever is adjacent to the accelerator control in order to avoid damage caused by changing gear while the engine is running. Smooth acceleration is provided by the centrifugal clutch.

5 - Impact mechanism
The innovative patented impact unit develops a high torque and has a larger impact surface than any other nut runner, so to extend the life of this essential component. Specialist, high spec grease minimises wear in this area and the special seal on the drive prevents the leakage of grease commonly seen on other impact wrenches.

6 - Engine
With a greater impact surface, the NR11P does not need higher rpm to develop 2500 Nm thus the engine is not conitnuously straining at maximum rpm, allowing maintenance intervals to be extended.

7 - Vibration
The handlebar is mounted on 4 vibration absorbing dampers so to reduce hand-arm vibration felt by operators.

8 - Easy-start
With its decompression button, primer and digital ignition coil, minimum time and effort are required to start NR11P.

Main Specification:

ENGINE	**Type**:	Two cycle, forced-air cooled, single cylinder
	Displacement:	55 cc
	Fuel tank capacity:	0.3 USA Gal
	Fuel mixture ratio:	Synthetic oil 1:50 2 cycle mineral oil 1:25
	Revolution (idle):	2800 rpm ± 200
	Revolution (loaded, impact):	7000 rpm
	Revolution (non loaded, max):	11500 rpm
IGNITION	**Type**:	Digital
	Spark plug type:	RAX 80 or equivalent
CARBURETTOR	**Type**:	Diaphragm
IMPACT UNIT	**Square driver size**:	1"
	Fastening torque range:	Full Throttle: 1844 ft. lbs
MANDREL SPEED	**No load**:	1300 rpm

Used of NR-11P on transmission tower.

PORTABLE ELECTRIC IMPACT WRENCH

ELECTRIC MOTOR
NR-13E-110

New

Fitted with **PRCD device**
(Portable Residual Current Device)

HIGH TORQUE
1844 ft. lbs

Technical Features:
- **Engine**: single phase electric motor
- **Supply voltage**: 110÷120 V / 50÷60 Hz
- **Power rating**: 2.8 kW
- **Weight**: 46.3 lbs

ACCESSORIES FOR IMPACT WRENCHES

OPTIONAL ACCESSORIES:

Ref.	Description
XT 100	1" x 4" (length) extension
SJ 1"	1" swivel joint
WL3-1/2 (9-1/2D)	3 1/2" Impact Socket, 1" Drive 9 1/2" depth
WL3-1/2 (4D)	3 1/2" Impact Socket, 1" Drive 4" depth
CLIP NR	Retaining circlip for fastening sockets to the mandrel.
VAL P20	Plastic box for storage of sockets and accessories.
VAL NR	Steel case for storage of NR11-P and VALP20 accessories box.

VAL NR

Standard and long impact sockets, extensions, swivelling shaft, adapters.

VAL P20

CLIP-NR

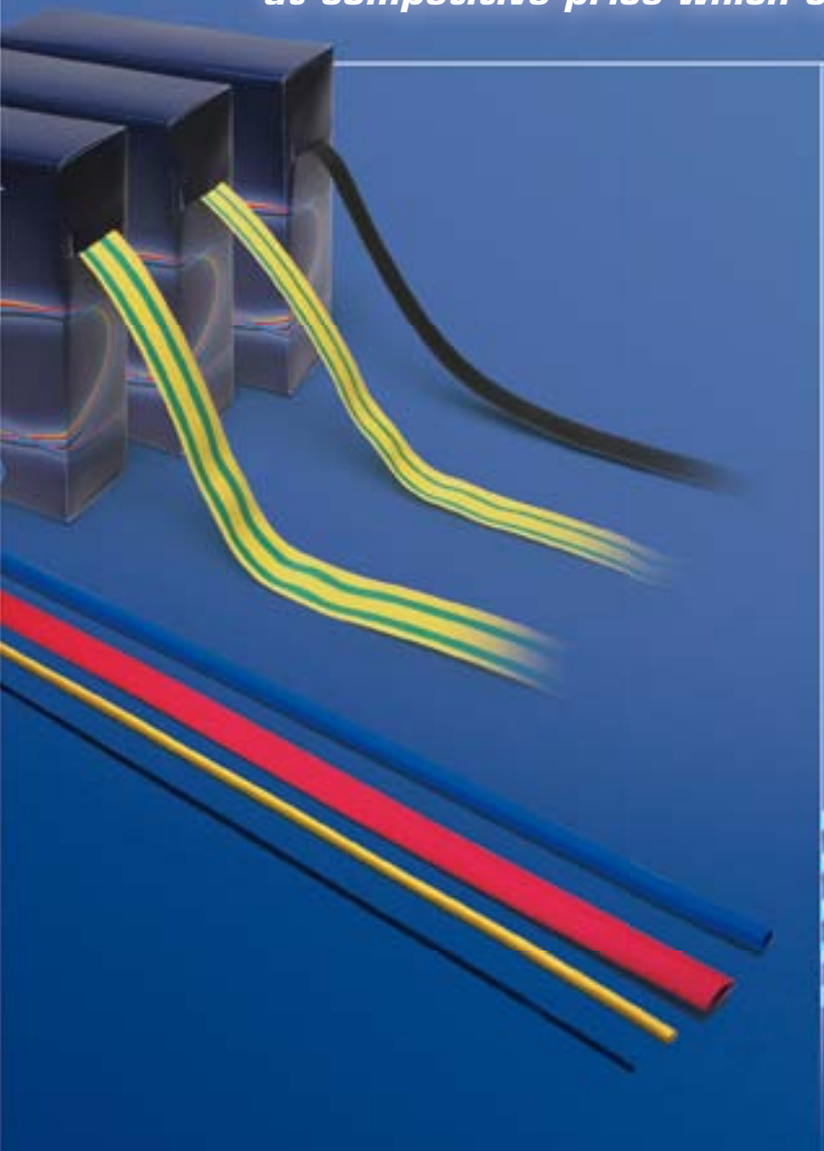
Retaining circlip for fastening sockets to the mandrel having an external diameter range: 1.85"÷2.24". 3 pieces supplied as standard.

CLIP-NR 57

Retaining circlip for fastening sockets to the mandrel having an external diameter range: 2.24"÷2.64". 1 piece supplied as standard.

MARKETLINE PRODUCTS

In this section of the catalogue you can find selected products at competitive price which complement our traditional range

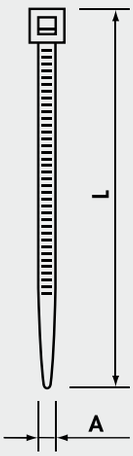


G

G series, PA6.6 Polyamide

HALOGEN FREE

Material: PA6.6 Polyamide
Self-extinguishing V2 (UL 94)
Humidity absorption:
2,5% (at 50% relative humidity)
Operating temperature:
From –40°C to +85°C (continuous)
From –40°C to +120°C (short periods)
Resistant to:
oils, bases, greases, oil products, chlorinated solvents.
Colour: Natural or Black (Ral 2005)



Black ties have higher UV resistance due to increased carbon black loading

Natural ties offer rapid installation due to the low friction coefficient of the material

Cable Ties in PA6.6

Type	L (in.)	A (in.)	Max. Bundle Ø (in.)	Min. Loop Tensile Strength (lbs)	Quantity	
G80X2.4	3.15	0.09	0.59	18	100	Minimum order: 1,000 pcs
G80X2.4N						
G80X2.4/M					1,000	
G80X2.4N/M						
G90X2.4	3.54		0.63		100	
G90X2.4N						
G100X2.5	3.94		0.87			
G100X2.5N						
G100X2.5/M					1,000	
G100X2.5N/M						
G120X2.5	4.72		1.18		100	
G120X2.5N						
G140X2.5	5.51	0.10	1.30			
G140X2.5N						
G140X2.5/M					1,000	
G140X2.5N/M					1,000	
G160X2.5	6.3		1.57		100	
G160X2.5N						
G160X2.5/M					1,000	
G160X2.5N/M						
G200X2.5	7.87		2.09		100	
G200X2.5N						
G200X2.5/M					1,000	
G200X2.5N/M						
G250X2.8	9.84	0.11	2.56	31	100	
G250X2.8N						
G300X2.8	11.81		2.99			
G300X2.8N						
G120X3.6	4.72	0.14	1.18	40		
G120X3.6N						
G140X3.6	5.51		1.30			
G140X3.6N						
G140X3.6/M					1,000	
G140X3.6N/M						
G150X3.6	5.91		1.38		100	
G150X3.6N						
G180X3.6	7.09		1.73			
G180X3.6N						
G200X3.6	7.87		2.09			
G200X3.6N						
G200X3.6/M					1,000	
G200X3.6N/M						
G250X3.6	9.84		2.56		100	
G250X3.6N						
G300X3.6	11.81		2.99			
G300X3.6N						
G300X3.6/M					1,000	
G300X3.6N/M						
G370X3.6	14.57		4.02		100	
G370X3.6N						
G120X4.8	4.72	0.19	0.94	50		
G120X4.8N						
G160X4.8	6.30		1.50			
G160X4.8N						
G190X4.8	7.48		1.81			
G190X4.8N						
G190X4.8/M					1,000	
G190X4.8N/M						
G200X4.8	7.87		1.97		100	
G200X4.8N						
G200X4.8/M					1,000	
G200X4.8N/M						
G250X4.8/M	9.84		2.36			
G250X4.8N/M						
G250X4.8					100	Minimum order: 100 pcs
G250X4.8N						
G280X4.8	11.02		2.76			
G280X4.8N						
G300X4.8	11.81		2.99			
G300X4.8N						
G370X4.8	14.57		4.02			
G370X4.8N						
G390X4.8	15.35		4.13			
G390X4.8N						
G430X4.8	16.93		4.33			
G430X4.8N						

Recommended tools are shown on page 192

HALOGEN FREE

CABLE TIES

G series, PA6.6 Polyamide

G

Cable Ties in PA6.6

Type	L (in.)	A (in.)	Max. Bundle Ø (in.)	Min. Loop Tensile Strength (lbs)	Quantity
G450X4.8	17.72	0.19	4.57	50	100
G450X4.8N					
G530X4.8	20.87		5.51		
G530X4.8N					
G150X7.6	5.91	0.30	1.30	120	
G150X7.6N					
G200X7.6	7.87		1.97		
G200X7.6N					
G250X7.6	9.84		2.56		
G250X7.6N					
G300X7.6	11.81		2.99		
G300X7.6N					
G370X7.6	14.57		4.02		
G370X7.6N					
G430X7.6	16.93		4.92		
G430X7.6N					
G530X7.6	20.87		5.51		
G530X7.6N					
G430X9.0	16.93	0.35	4.33	175	
G430X9.0N					
G530X9.0	20.87		5.51		
G530X9.0N					
G710X9.0	27.95		7.48		
G710X9.0N					
G780X9.0	30.71		8.98		
G780X9.0N					
G830X9.0	32.68		9.41		
G830X9.0N					
G920X9.0	36.22		10.35		
G920X9.0N					
G1020X9.0	40.16		11.61		
G1020X9.0N					
G1220X9.0	48.03		14.37		
G1220X9.0N					
G230X12.6	9.06	0.50	1.97	250	
G230X12.6N					
G380X12.6	14.96		4.17		
G380X12.6N					
G480X12.6	18.90		4.72		
G480X12.6N					
G580X12.6	22.83		5.98		
G580X12.6N					
G730X12.6	28.74		8.03		
G730X12.6N					
G880X12.6	34.65		9.76		
G880X12.6N					
G1030X12.6	40.55		11.61		
G1030X12.6N					

Minimum order: 100 pcs

Note: In Type, N = Black

Angled tongue to facilitate easy introduction into the buckle

Rounded corners for increased safety

HALOGEN FREE

CABLE TIES

G series, PA6.6 Polyamide, VO (UL94)

G VO

Cable Ties in PA6.6 - VO (UL94)

Type	L (in.)	A (in.)	Max. Bundle Ø (in.)	Min. Loop Tensile Strength (lbs)	Quantity	Minimum Qty
G90X2.4 VO	3.54	0.09	0.63	18	100	1000
G100X2.5/M VO	3.94	0.10	0.87		1,000	
G140X2.5/M VO	5.51		1.30		1,000	
G200X2.5/M VO	7.87		2.07		1,000	
G150X3.6 VO	5.90	0.14	1.38	40	100	
G200X4.8/M VO	7.87	0.19	1.97	50	1,000	100
G370X4.8 VO	14.57		4.01		100	
G430X4.8 VO	16.92		4.33		100	
G710X9.0 VO	27.95	0.35	7.48	175	100	

Features as G series ties except: self-extinguishing VO (UL 94)

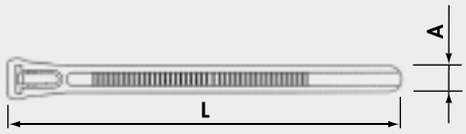
Recommended tools are shown on page 192

CABLE TIES

GR

GR series, PA6.6 Polyamide

HALOGEN FREE



Same features as G series.
Easy installation without tools.
Released by pressure on the tongue.
Suitable for temporary locking.

Releasable cable ties in PA6.6

Type	L (in.)	A (in.)	Max. Bundle Ø (in.)	Min. Loop Tensile Strength (lbs)	Quantity
GR100X7.6N	3.94	0.30	0.79	50	100
GR120X7.6N	4.72		1.18		
GR150X7.6N	5.91		1.38		
GR200X7.6N	7.87		1.97		
GR250X7.6N	9.84		2.60		
GR300X7.6N	11.81		3.15		
GR370X7.6N	14.57		4.02		

GFH

GFH series, PA6.6 Polyamide

HALOGEN FREE

Same features as G series.
Quick and easy identification of bundled conductors.
Write on panel with Felt tip pen.

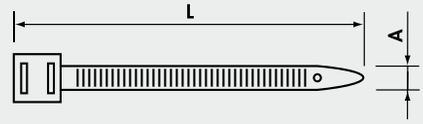
Markable cable ties in PA6.6

Type	L (in.)	A (in.)	Max. Bundle Ø (in.)	Min. Loop Tensile Strength (lbs)	Quantity
GFH100X2.5	3.94	0.10	0.71	17.8	100
GFHT112X2.5	4.41				

1600

1600 series, PA12 Polyamide

HALOGEN FREE



Material: PA12 Polyamide
Self-extinguishing HB (UL94)
Halogen free
Operating temperature:
From –45°C to + 85°C (continuous)
From –45°C to + 120°C (short periods)
Resistant to:
UV, salt atmosphere, oils, greases, oil products
Colour: Black

Cable Ties in PA12 Polyamide

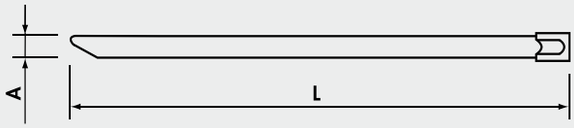
Type	Head Type	L (in.)	A (in.)	Min. Bundle Ø (in.)	Max. Bundle Ø (in.)	Min. Loop Tensile Strength (lbs)	Quantity
1618.90	single	7.10	0.35	0.59	1.77	77.2	100
1626.90	double	10.43	0.35	1.18	2.55	112.4	100
1636.90	double	14.17	0.35	1.18	3.66	112.4	100
1651.90	double	20.07	0.35	2.75	5.51	119.0	100
1676.90	double	29.92	0.35	2.75	8.66	119.0	100

Recommended tools are shown on page 192

CABLE TIES

in Stainless Steel AISI 304

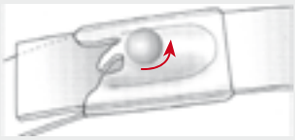
GX



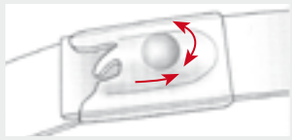
Cable Ties in Stainless Steel

Type	L (in.)	A (in.)	Max. Bundle Ø (in.)	Min. Loop Tensile Strength (lbs)	Quantity
GX200X4.5	7.87	0.18	1.97	101	100
GX300X4.5	11.81		2.99		
GX370X4.5	14.57		4.02		
GX520X4.5	20.47		6.14		
GX370X7.9	14.57	0.31	4.02	251	
GX680X7.9	26.77		8.15		
GX1020X7.9	40.16		12.3		

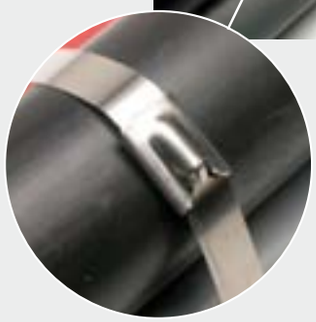
Material: Stainless Steel AISI 304
Unique ball locking mechanism that allows simple and rapid installation and secure locking.
Operating temperature:
From –80°C to +500°C
High tensile strength.
Non-flammability.
High resistance to acetic acid, alkalies, sulphuric acid, corrosion, etc.
In general very resistant to most hostile environments.



Insert the tongue into the buckle.
The internal locking ball rolls freely as the tie is tightened.



Once the correct tension is reached, use the specific tool to trim the tongue.
The ball then wedges into the buckle locking it tightly against both the top and bottom of the tie.



Recommended tools are shown on page 192

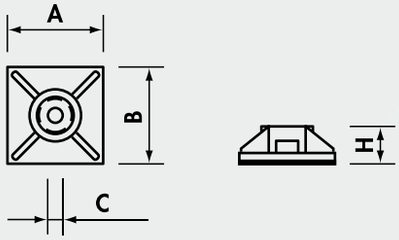
ACCESSORIES

AB CC SS

PA6.6 Polyamide

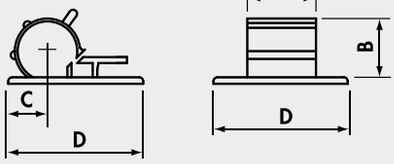
Material: PA6.6 Polyamide
Self-extinguishing V2 (UL 94)
Humidity absorption:
2,5% (at 50% relative humidity)
Operating temperature:
From –40°C to +85°C (continuous)
From –40°C to +120°C (short periods)

Resistant to:
oils, bases, greases, oil products, chlorinated solvents.
Colour: Natural



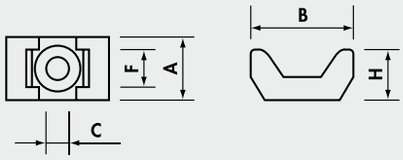
Self adhesive cable tie bases in PA6.6

Type	Max Tie (in.)	A (in.)	B (in.)	C (in.)	H (in.)	Fixing screw hole Ø (in.)	Quantity
AB 13	0.11	0.51	0.51	0.12	0.12	-	100
AB 19	0.14	0.75	0.75	0.16	0.17	0.12	100
AB 28	0.19	1.10	1.10	0.21	0.22	0.21	100



Self adhesive cable clips in PA6.6

Type	Cable Ø (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Quantity
CC 8.9	0.31 - 0.35	0.35	0.47	0.31	0.85	100
CC 9.12	0.35 - 0.47	0.47	0.59	0.32	0.85	100



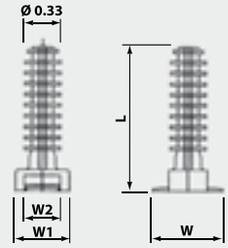
Cable tie saddle clamps in PA6.6

Type	Max Tie (in.)	A (in.)	B (in.)	C (in.)	F (in.)	H (in.)	Quantity
SS 4.8-3.7	0.19	0.37	0.59	0.14	0.20	0.28	100
SS 4.8-4.5	0.19	0.37	0.59	0.18	0.20	0.28	100
SS 9-4.5	0.35	0.63	0.87	0.18	0.36	0.38	100
SS 9-5	0.35	0.63	0.87	0.20	0.36	0.38	100
SS 9-6.4	0.35	0.63	0.87	0.25	0.36	0.38	100

ACCESSORIES

GH8

PA6.6 Polyamide



Same features as G series.
Push into Ø 0.31 in. hole.
Cable tie inserted through slot in head.

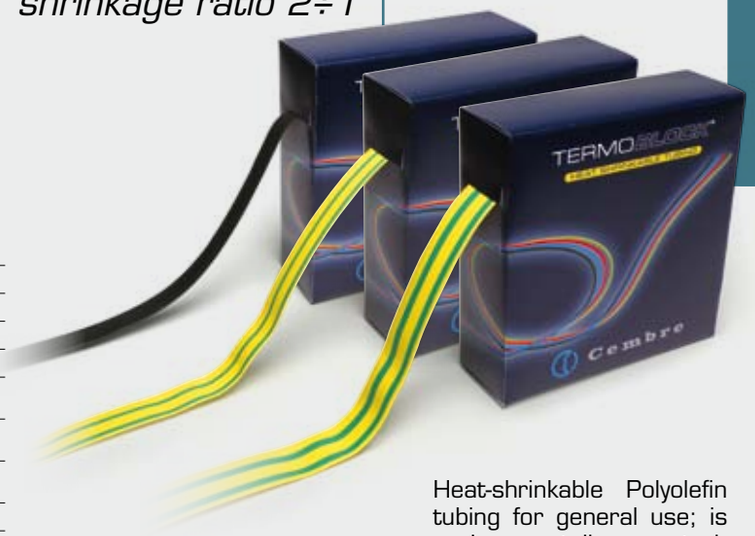
Stud fixing for cable ties in PA6.6

Type	W (in.)	W1 (in.)	W2 (in.)	L (in.)	Fixing hole Ø (in.)	Quantity
GH8	0.79	0.59	0.39	1.59	0.31	100

TERMOBLOCK HEAT-SHRINKABLE TUBING

TBS

flame-retardant Polyolefin
shrinkage ratio 2÷1



General characteristics:

- **Operating temperature**: -55°C + 125°C
- **Minimum shrinkage temperature**: 70°C
- **Temperature for complete shrinkage**: 110°C
- **RoHS compliant**
- **Colours**: Black, Red, Blue, Yellow/Green.
- **Packaging**: Roll in Dispenser Box

Technical Specifications:		
Property	**Test Method**	**Performance**
Traction resistance (MPa):	GB/T1040	≥10.4
Elongation at failure (%):	GB/T1040	≥200
Traction resistance after heat aging (MPa):	UL 224 158°Cx168hr	≥100
Heat resistance:	UL 224 (250°Cx4hr)	No failure
Low temperature flexibility:	UL 224 -30°Cx4hr	No failure
Dielectric strength (kv/mm):	GB/T1408	≥15
Insulation resistance:	600V UL 224	No perforation at 2500V
Volume resistance (Ω.cm):	GB/T1410	10^{14}
Corrosive action:	UL 224 158°Cx168hr	Not corrosive
Copper compatibility:	UL 224 158°Cx168hr	Not corrosive
Flammability:	UL 224	VW-1

Heat-shrinkable Polyolefin tubing for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.
Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

Ref.	Colour	Internal Ø in. before shrinking	Internal Ø in. after shrinking	Reel Length in.
TBS16x20BK	BLACK	0.06	0.03	787
TBS24x20BK	BLACK	0.09	0.05	787
TBS32x10BK	BLACK	0.13	0.06	394
TBS48x10BK	BLACK	0.19	0.09	394
TBS64x10BK	BLACK	0.25	0.13	394
TBS95x10BK	BLACK	0.37	0.19	394
TBS127x10BK	BLACK	0.50	0.25	394
TBS190x5BK	BLACK	0.75	0.37	197
TBS254x5BK	BLACK	1.00	0.50	197
TBS16x20RE	RED	0.06	0.03	787
TBS24x20RE	RED	0.09	0.05	787
TBS32x10RE	RED	0.13	0.06	394
TBS48x10RE	RED	0.19	0.09	394
TBS64x10RE	RED	0.25	0.13	394
TBS95x10RE	RED	0.37	0.19	394
TBS127x10RE	RED	0.50	0.25	394
TBS190x5RE	RED	0.75	0.37	197
TBS254x5RE	RED	1.00	0.50	197
TBS16x20BU	BLUE	0.06	0.03	787
TBS24x20BU	BLUE	0.09	0.05	787
TBS32x10BU	BLUE	0.13	0.06	394
TBS48x10BU	BLUE	0.19	0.09	394
TBS64x10BU	BLUE	0.25	0.13	394
TBS95x10BU	BLUE	0.37	0.19	394
TBS127x10BU	BLUE	0.50	0.25	394
TBS190x5BU	BLUE	0.75	0.37	197
TBS254x5BU	BLUE	1.00	0.50	197
TBS16x20Y/G	YELLOW/GREEN	0.06	0.03	787
TBS24x20Y/G	YELLOW/GREEN	0.09	0.05	787
TBS32x10Y/G	YELLOW/GREEN	0.13	0.06	394
TBS48x10Y/G	YELLOW/GREEN	0.19	0.09	394
TBS64x10Y/G	YELLOW/GREEN	0.25	0.13	394
TBS95x10Y/G	YELLOW/GREEN	0.37	0.19	394
TBS127x10Y/G	YELLOW/GREEN	0.50	0.25	394
TBS190x5Y/G	YELLOW/GREEN	0.75	0.37	197
TBS254x5Y/G	YELLOW/GREEN	1.00	0.50	197

TERMOSTRIP HEAT-SHRINKABLE TUBING

TSS

flame-retardant Polyolefin
shrinkage ratio 2÷1

Heat-shrinkable Polyolefin tubing strip for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.
Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

For general characteristics and technical specifications see page 183.

- **Colours**: Black, Red, White, Blue, Transparent, Yellow, Green, Grey, Brown, Yellow/Green.
- **Packaging**: Strips in Box

Ref.	Colour	Internal Ø in. before shrinking	Internal Ø in. after shrinking	Strip Length in.	Quantity *Strips per box*
TSS24BK	BLACK	0.09	0.05	48	30
TSS32BK	BLACK	0.13	0.06	48	30
TSS48BK	BLACK	0.19	0.09	48	30
TSS64BK	BLACK	0.25	0.13	48	30
TSS95BK	BLACK	0.37	0.19	48	20
TSS127BK	BLACK	0.50	0.25	48	15
TSS190BK	BLACK	0.75	0.37	48	10
TSS254BK	BLACK	1.00	0.50	48	6
TSS380BK	BLACK	1.50	0.75	48	4
TSS510BK	BLACK	2.01	1.00	48	2
TSS24RE	RED	0.09	0.05	48	30
TSS32RE	RED	0.13	0.06	48	30
TSS48RE	RED	0.19	0.09	48	30
TSS64RE	RED	0.25	0.13	48	30
TSS95RE	RED	0.37	0.19	48	20
TSS127RE	RED	0.50	0.25	48	15
TSS190RE	RED	0.75	0.37	48	10
TSS254RE	RED	1.00	0.50	48	6
TSS380RE	RED	1.50	0.75	48	4
TSS510RE	RED	2.01	1.00	48	2
TSS24WH	WHITE	0.09	0.05	48	30
TSS32WH	WHITE	0.13	0.06	48	30
TSS48WH	WHITE	0.19	0.09	48	30
TSS64WH	WHITE	0.25	0.13	48	30
TSS95WH	WHITE	0.37	0.19	48	20
TSS127WH	WHITE	0.50	0.25	48	15
TSS190WH	WHITE	0.75	0.37	48	10
TSS254WH	WHITE	1.00	0.50	48	6
TSS380WH	WHITE	1.50	0.75	48	4
TSS510WH	WHITE	2.01	1.00	48	2
TSS24BU	BLUE	0.09	0.05	48	30
TSS32BU	BLUE	0.13	0.06	48	30
TSS48BU	BLUE	0.19	0.09	48	30
TSS64BU	BLUE	0.25	0.13	48	30
TSS95BU	BLUE	0.37	0.19	48	20
TSS127BU	BLUE	0.50	0.25	48	15
TSS190BU	BLUE	0.75	0.37	48	10
TSS254BU	BLUE	1.00	0.50	48	6
TSS380BU	BLUE	1.50	0.75	48	4
TSS510BU	BLUE	2.01	1.00	48	2
TSS24TR	TRANSPARENT	0.09	0.05	48	30
TSS32TR	TRANSPARENT	0.13	0.06	48	30
TSS48TR	TRANSPARENT	0.19	0.09	48	30
TSS64TR	TRANSPARENT	0.25	0.13	48	30
TSS95TR	TRANSPARENT	0.37	0.19	48	20
TSS127TR	TRANSPARENT	0.50	0.25	48	15
TSS190TR	TRANSPARENT	0.75	0.37	48	10
TSS254TR	TRANSPARENT	1.00	0.50	48	6
TSS380TR	TRANSPARENT	1.50	0.75	48	4
TSS510TR	TRANSPARENT	2.01	1.00	48	2

TERMOSTRIP HEAT-SHRINKABLE TUBING

flame-retardant Polyolefin
shrinkage ratio 2÷1

TSS

Ref.	Colour	Internal Ø in. before shrinking	Internal Ø in. after shrinking	Strip Length in.	Quantity *Strips per box*
TSS24YE	YELLOW	0.09	0.05	48	30
TSS32YE	YELLOW	0.13	0.06	48	30
TSS48YE	YELLOW	0.19	0.09	48	30
TSS64YE	YELLOW	0.25	0.13	48	30
TSS95YE	YELLOW	0.37	0.19	48	20
TSS127YE	YELLOW	0.50	0.25	48	15
TSS190YE	YELLOW	0.75	0.37	48	10
TSS254YE	YELLOW	1.00	0.50	48	6
TSS380YE	YELLOW	1.50	0.75	48	4
TSS510YE	YELLOW	2.01	1.00	48	2
TSS24GN	GREEN	0.09	0.05	48	30
TSS32GN	GREEN	0.13	0.06	48	30
TSS48GN	GREEN	0.19	0.09	48	30
TSS64GN	GREEN	0.25	0.13	48	30
TSS95GN	GREEN	0.37	0.19	48	20
TSS127GN	GREEN	0.50	0.25	48	15
TSS190GN	GREEN	0.75	0.37	48	10
TSS254GN	GREEN	1.00	0.50	48	6
TSS380GN	GREEN	1.50	0.75	48	4
TSS510GN	GREEN	2.01	1.00	48	2
TSS24GY	GREY	0.09	0.05	48	30
TSS32GY	GREY	0.13	0.06	48	30
TSS48GY	GREY	0.19	0.09	48	30
TSS64GY	GREY	0.25	0.13	48	30
TSS95GY	GREY	0.37	0.19	48	20
TSS127GY	GREY	0.50	0.25	48	15
TSS190GY	GREY	0.75	0.37	48	10
TSS254GY	GREY	1.00	0.50	48	6
TSS380GY	GREY	1.50	0.75	48	4
TSS510GY	GREY	2.01	1.00	48	2
TSS24BR	BROWN	0.09	0.05	48	30
TSS32BR	BROWN	0.13	0.06	48	30
TSS48BR	BROWN	0.19	0.09	48	30
TSS64BR	BROWN	0.25	0.13	48	30
TSS95BR	BROWN	0.37	0.19	48	20
TSS127BR	BROWN	0.50	0.25	48	15
TSS190BR	BROWN	0.75	0.37	48	10
TSS254BR	BROWN	1.00	0.50	48	6
TSS380BR	BROWN	1.50	0.75	48	4
TSS510BR	BROWN	2.01	1.00	48	2
TSS32Y/G	YELLOW/GREEN	0.13	0.06	48	30
TSS48Y/G	YELLOW/GREEN	0.19	0.09	48	30
TSS64Y/G	YELLOW/GREEN	0.25	0.13	48	30
TSS95Y/G	YELLOW/GREEN	0.37	0.19	48	20
TSS127Y/G	YELLOW/GREEN	0.50	0.25	48	15
TSS190Y/G	YELLOW/GREEN	0.75	0.37	48	10
TSS254Y/G	YELLOW/GREEN	1.00	0.50	48	6
TSS380Y/G	YELLOW/GREEN	1.50	0.75	48	4

TERMOCOIL HEAT-SHRINKABLE TUBING

TCS

flame-retardant Polyolefin
shrinkage ratio 2÷1

Heat-shrinkable Polyolefin tubing coil for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.
Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

For general characteristics and technical specifications see page 183.

- **Colours**: Black, Red, White, Blue, Transparent, Yellow, Green, Yellow/Green.
- **Packaging**: Coil on Reel

Ref.	Colour	Internal Ø in. before shrinking	Internal Ø in. after shrinking	Coil Length in.
TCS12X200BK	BLACK	0.05	0.02	7.874
TCS16X200BK	BLACK	0.06	0.03	7.874
TCS24X200BK	BLACK	0.09	0.05	7.874
TCS32X200BK	BLACK	0.13	0.06	7.874
TCS48X100BK	BLACK	0.19	0.09	3.937
TCS64X100BK	BLACK	0.25	0.13	3.937
TCS95X100BK	BLACK	0.37	0.19	3.937
TCS127X100BK	BLACK	0.50	0.25	3.937
TCS160X100BK	BLACK	0.63	0.31	3.937
TCS190X100BK	BLACK	0.75	0.37	3.937
TCS254X50BK	BLACK	1.00	0.50	1.969
TCS320X50BK	BLACK	1.26	0.63	1.969
TCS381X50BK	BLACK	1.50	0.75	1.969
TCS508X25BK	BLACK	2.00	1.00	984
TCS762X25BK	BLACK	3.00	1.50	984
TCS1016X25BK	BLACK	4.00	2.00	984
TCS1260X25BK	BLACK	4.96	2.48	984
TCS1500X25BK	BLACK	5.91	2.95	984
TCS16X200RE	RED	0.06	0.03	7.874
TCS24X200RE	RED	0.09	0.05	7.874
TCS32X200RE	RED	0.13	0.06	7.874
TCS48X100RE	RED	0.19	0.09	3.937
TCS64X100RE	RED	0.25	0.13	3.937
TCS95X100RE	RED	0.37	0.19	3.937
TCS127X100RE	RED	0.50	0.25	3.937
TCS190X100RE	RED	0.75	0.37	3.937
TCS254X50RE	RED	1.00	0.50	1.969
TCS16X200WH	WHITE	0.06	0.03	7.874
TCS24X200WH	WHITE	0.09	0.05	7.874
TCS32X200WH	WHITE	0.13	0.06	7.874
TCS48X100WH	WHITE	0.19	0.09	3.937
TCS64X100WH	WHITE	0.25	0.13	3.937
TCS95X100WH	WHITE	0.37	0.19	3.937
TCS127X100WH	WHITE	0.50	0.25	3.937
TCS190X100WH	WHITE	0.75	0.37	3.937
TCS254X50WH	WHITE	1.00	0.50	1.969
TCS16X200BU	BLUE	0.06	0.03	7.874
TCS24X200BU	BLUE	0.09	0.05	7.874
TCS32X200BU	BLUE	0.13	0.06	7.874
TCS48X100BU	BLUE	0.19	0.09	3.937
TCS64X100BU	BLUE	0.25	0.13	3.937
TCS95X100BU	BLUE	0.37	0.19	3.937
TCS127X100BU	BLUE	0.50	0.25	3.937
TCS190X100BU	BLUE	0.75	0.37	3.937
TCS254X50BU	BLUE	1.00	0.50	1.969

TERMOCOIL HEAT-SHRINKABLE TUBING

flame-retardant Polyolefin
shrinkage ratio 2÷1

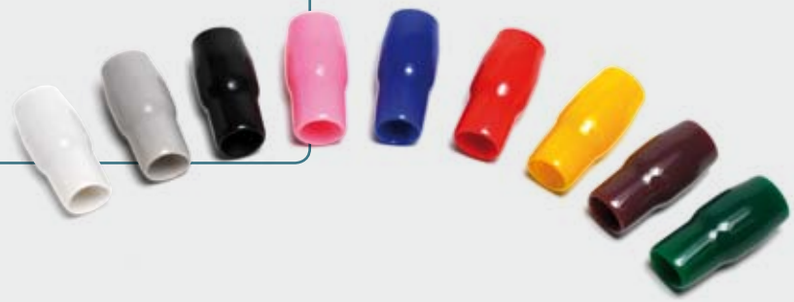
TCS

Ref.	Colour	Internal Ø in. before shrinking	Internal Ø in. after shrinking	Coil Length in.
TCS16X200YE	YELLOW	0.06	0.03	7.874
TCS24X200YE	YELLOW	0.09	0.05	7.874
TCS32X200YE	YELLOW	0.13	0.06	7.874
TCS48X100YE	YELLOW	0.19	0.09	3.937
TCS64X100YE	YELLOW	0.25	0.13	3.937
TCS95X100YE	YELLOW	0.37	0.19	3.937
TCS127X100YE	YELLOW	0.50	0.25	3.937
TCS190X100YE	YELLOW	0.75	0.37	3.937
TCS254X50YE	YELLOW	1.00	0.50	1.969
TCS16X200GN	GREEN	0.06	0.03	7.874
TCS24X200GN	GREEN	0.09	0.05	7.874
TCS32X200GN	GREEN	0.13	0.06	7.874
TCS48X100GN	GREEN	0.19	0.09	3.937
TCS64X100GN	GREEN	0.25	0.13	3.937
TCS95X100GN	GREEN	0.37	0.19	3.937
TCS127X100GN	GREEN	0.50	0.25	3.937
TCS190X100GN	GREEN	0.75	0.37	3.937
TCS254X50GN	GREEN	1.00	0.50	1.969
TCS32X200Y/G	YELLOW / GREEN	0.13	0.06	7.874
TCS48X100Y/G	YELLOW / GREEN	0.19	0.09	3.937
TCS64X100Y/G	YELLOW / GREEN	0.25	0.13	3.937
TCS95X100Y/G	YELLOW / GREEN	0.37	0.19	3.937
TCS127X100Y/G	YELLOW / GREEN	0.50	0.25	3.937
TCS190X100Y/G	YELLOW / GREEN	0.75	0.37	3.937
TCS254X50Y/G	YELLOW / GREEN	1.00	0.50	1.969
TCS381X50Y/G	YELLOW / GREEN	1.50	0.75	1.969
TCS508X25Y/G	YELLOW / GREEN	2.00	1.00	984

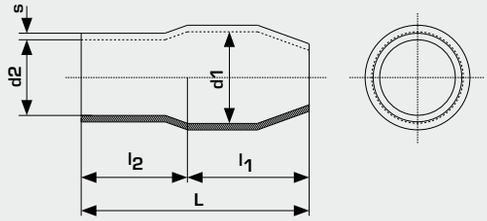
INSULATED COVERS ES SERIES

ES

For uninsulated connectors



Insulated covers in PVC for general use with Cembre A-M copper tube lugs characterised by environmental tolerance, flexibility, not inflammability & stable performance. Widely used for the insulation and protection of connections and electrical terminations.



General features:

- **Material**: PVC
- **Self extinguishing (UL94)**: V0
- **Working temperature**: 85 °C
- **Colours**: red, yellow, blue, green, black, grey, white, brown, pink.

Ref.	Connectors A-M *	d1 Ø	d2 Ø	l_1 ±0.04	l_2 ±0.04	L ± 0.08	s ± 0.008	Quantity	Minimum Order Qty
ES03-..	***A03***	0.13	0.12	0.28	0.31	0.59	0.024	100	3.000
ES06-..	***A06***	0.18	0.15	0.31	0.31	0.63	0.028	100	
ES1-..	***A1***	0.22	0.16	0.35	0.35	0.71	0.031	100	
ES2-..	***A2***	0.28	0.24	0.43	0.39	0.83	0.039	100	
ES3-..	***A3***	0.39	0.31	0.59	0.51	1.10	0.043	100	1.000
ES5-..	***A5***	0.47	0.37	0.59	0.55	1.14	0.047	100	
ES10-..	***A7. A9. A10***	0.55	0.46	0.67	0.67	1.34	0.055	100	
ES14-..	***A12. A14***	0.67	0.55	0.87	0.79	1.65	0.059	100	500
ES19-..	***A17. A19***	0.75	0.63	0.98	0.83	1.81	0.059	50	
ES24-..	***A20. A24***	0.87	0.71	1.22	0.94	2.17	0.067	50	200
ES30-..	***A29. A30***	0.94	0.79	1.26	1.10	2.36	0.071	50	
ES37-..	***A35. A37***	1.02	0.87	1.34	1.22	2.56	0.071	50	
ES40-..	***A40***	1.27	0.94	1.50	1.22	2.72	0.079	50	
ES48-..	***A48***	1.44	1.07	1.65	1.30	2.95	0.079	50	100
ES80-..	***A60. A80***	1.44	1.18	1.65	1.30	2.95	0.079	25	

Dimensions are in in.

Add the suffix corresponding to the selected colour to the reference:

***-BU** blue. **-GY** grey. **-BR** brown. **-BK** black. **-WH** white. **-RE** red. **-GN** green. **-YE** yellow. **-PK** pink*

** See A-M type copper tube lugs on pages 26-27, 34*

cast resin, low voltage through joints

SHELLS

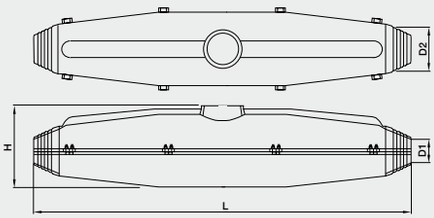
Manufactured from transparent synthetic material which allows a visual check of the connections before and after casting.
The halves of the shell are joined by snap closures which avoid further fixing or sealing.

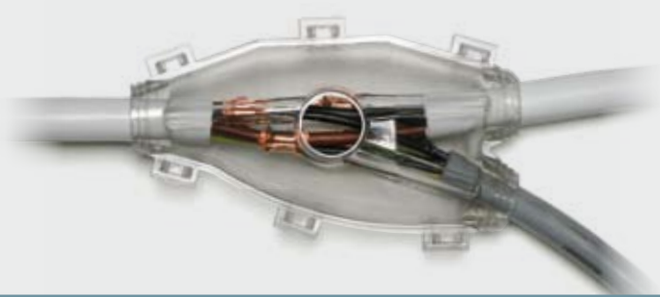
Shells are left on after casting to provide additional protection against mechanical abrasion, chemical agents and severe weather conditions.

STRAIGHT JOINTS

Type	Dimensions in. L	H	D1[1]	D2[1]	Cable Diameter in.	Indicative Cable Section [2] AWG
N11	7.87	1.97	0.31	1.02	0.31 - 0.98	4C x 16 ÷ 8
N12	10.2	2.64	0.63	1.26	0.63 - 1.22	4C x 8 ÷ 4
N13	14.2	2.95	0.83	1.50	2.95 - 1.42	4C x 2 ÷ 1/0
N14	15.7	3.94	1.02	1.61	3.94 - 1.54	4C x 1/0 ÷ 2/0
N15	20.9	5.12	1.38	2.20	5.12 - 2.13	4C x 3/0 ÷ 300 MCM
N16	27.6	5.90	1.85	2.91	5.90 - 2.83	4C x 350 MCM ÷ 600 MCM

[1] *Internal dimension of the shell*
[2] *Indicative cable sections are approximate and concern only harmonised, PVC or Rubber insulated cables at a working voltage of 0,6/1 kV*

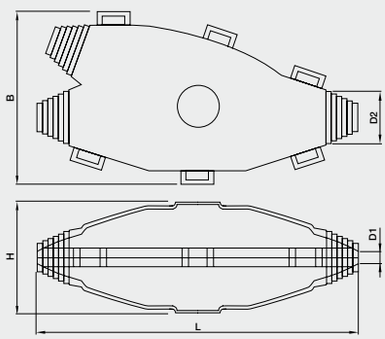




BRANCH JOINTS

Type	Dimensions in. L	H	B	D1[1]	D2[1]	Cable Diameter in.	Indicative Cable Section [2] AWG Run	Tap
NY00	5.90	1.85	2.76	0.43	0.79	0.43 - 0.79	4C x 16 ÷ 14	4C x 16
NY0	6.89	2.36	3.70	0.24	0.87	0.24 - 0.83	4C x 12 ÷ 8	4C x 12
NY1	8.86	2.95	4.33	0.35	1.02	0.35 - 0.94	4C x 10 ÷ 4	4C x 6

[1] *Internal dimension of the shell*
[2] *Indicative cable sections are approximate and concern only harmonised, PVC or Rubber insulated cables at a working voltage of 0,6/1 kV*



CAST RESIN JOINTS

N

cast resin, low voltage through joints

CAST RESIN TECHNOLOGY

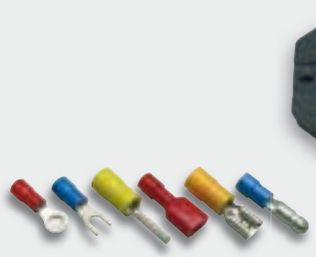
PUR-cast resin technology was introduced to seal and protect power, signal and telephone cable joints.
This new generation of two component cast resin has been developed for the most demanding environments and circumstances.

Cembre cast resin joints meet the requirements of EN50393 and DIN VDE 57291-2 (VDE0291).
Quick setting properties in humid or even cold conditions make it a fast and reliable solution.

No external measuring or mixing is required as this takes place within an Aluminium foil pouch, avoiding spillage and errors during installation.
Unmixed resin components have a 48 month shelf-life even in the most difficult storage conditions.

Shells are made of durable PET resulting in good hydrophobic properties and excellent impact resistance, while good adhesion to PVC and metals assures a watertight seal.

Technical characteristic	Test result	Requirement of DIN VDE 0291
Pot life @		
5°C	35 min	
23°C	20 min	product conforms ± 30%
35°C	15 min	
Reactant open cup flash point	> 200 °C	> 55
Tensile strength	≥ 8.0 Mpa	≥ 5.0
Hot aging	- 5 Shore A	- 7
Adhesive	> 1500 CP. S	-
Elongation at break	≥ 100%	≥ 50%
Gel time for 300 ml @	23 °C	
Pouch >1000 ml	26 min	product conforms ± 10%
Pouch <1000 ml	17 min	product conforms ± 10%
Max. reaction temp.	60 °C / 333 K	product conforms ± 10%
Total vol. variability when hardening	6 %	max. 6.5 %
Cast resin component open cup flash point	> 200 °C	> 100
Density	1.07 g / cm^3	-
Impact strength	> 10 kJ / m^2	> 10 kJ / m^2
Hardness	75 Shore A	min. 20 Shore D
Expansion coefficient in temp. range 20-50°C	5.9 x 10^{-4} K^{-1}	product conforms ± 15%
Thermal conductivity	0.2W x m^{-1} x K^{-1}	product conforms ± 20%
Flammability	Class II c	acc. to DIN VDE 0304, part 3
Water absorption 42 days@50°C	360 mg	max. 400 mg
Electrolytic corrosion	A1	-
Voltage test @		no breakdown @ test voltage
23°C	> 20 kV	> 20 kV
80°C	> 10 kV	> 20 kV
Dielectric dissipation factor @		
23°C and 50 Hz	0.08	max. 0.1
23°C and 1k Hz	0.05	-
Relative permittivity		
@ 23°C and 50 Hz	5	< 6
@ 23°C and 1k Hz	5.1	-
Tracking resistance	KA 3c	min KA 3c
After 28 days of immersion in 90°C water		
Tensile strength	8.2N/mm^2	≥ 65% of initial value
Elongation at break	60%	≥ 65% of initial value
Hardness	47 Shore	≥ 80% of initial value

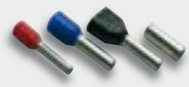


MLL 1

For crimping insulated terminals, 22 to 10 AWG

MLL 90

Single aperture, ratchet controlled tool for crimping female connectors, open barrel, flag type 17 to 14 AWG side insertion

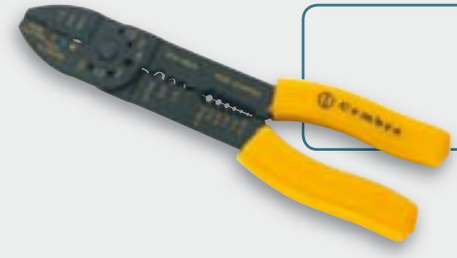


MLS 1

For crimping end sleeves 22 to 10 AWG

MLS 2

For crimping end sleeves 10 to 6 AWG



ZP2

For crimping insulated and uninsulated connectors, 23 to 10 AWG

MECHANICAL TOOLS MARKETline RANGE

HB 5

Wire stripper,
for PVC insulated cables
22 to 10 AWG

HB 7

A versatile tool for cutting,
crimping, and stripping.
Range: 24 to 10 AWG

HB 8

Wire stripper,
for PVC
insulated cables
24 to 10 AWG

CABLE TIE TOOLS

53130

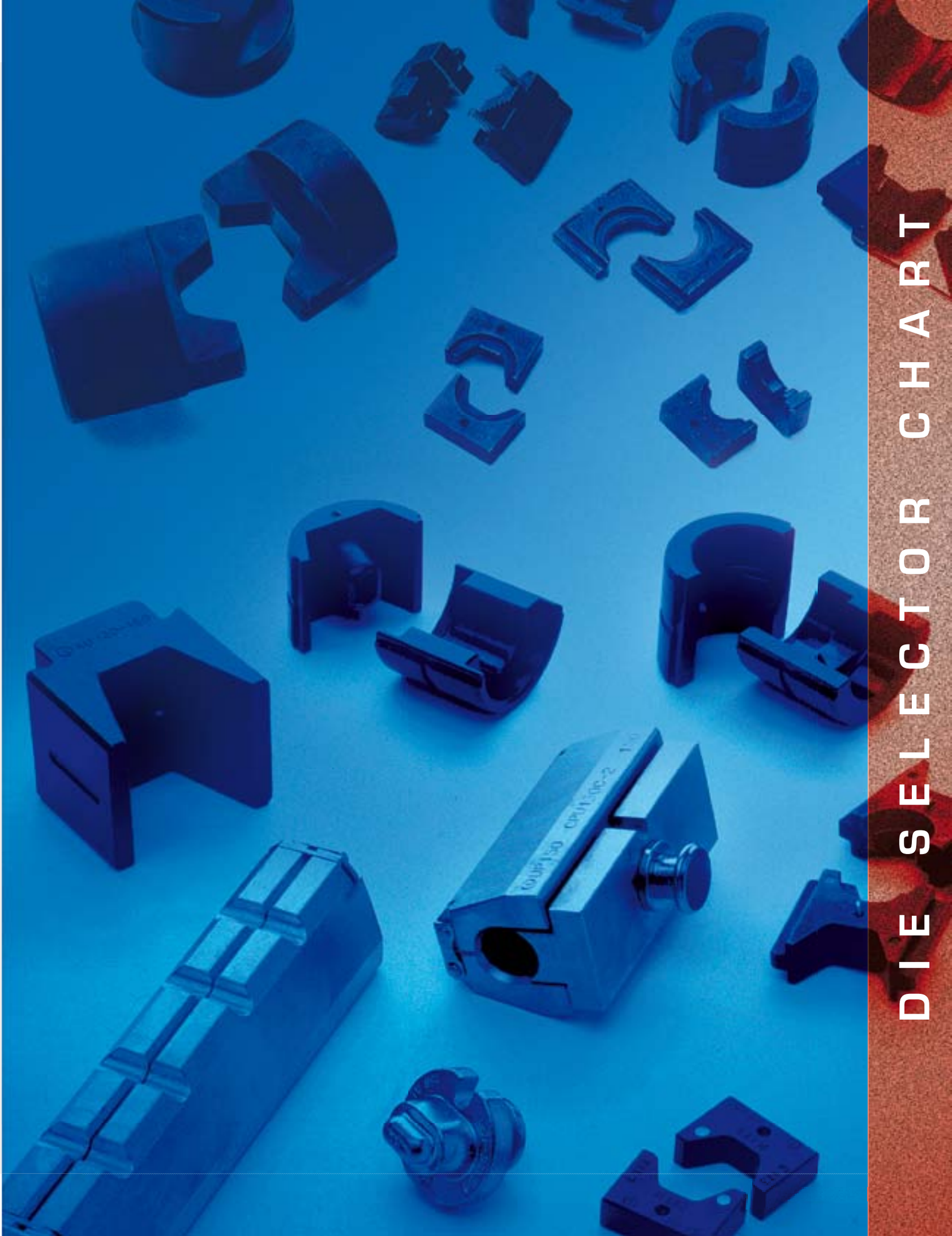
Type 5313022048
For plastic cable ties
For ties from 0.08 to 0.19 in.
Automatic cutting
Weight: 0,44 lbs.
Length: 6.5 in.

55270

Type
5527030079
For stainless steel cable ties
For ties width up to 0.31 in.
With cutting device
Weight: 1,2 lbs.
Length: 7.1 in.

55230

Type 5523036090
For plastic cable ties
For ties from 0.19 to 0.35 in.
Manual cutting
Weight: 0,66 lbs.
Length: 7.7 in.



DIE SELECTOR CHART

DIE SELECTOR CHART

HYDRAULIC TOOLS

APPLICATION	CONDUCTOR		CONNECTOR			B 15Y	B35-50A			HT 51 HT 51L RH 50 B 51LA B 51A B 55CY			B131LN-CA and similar tools for U dies			B 150A			ECW-H3D			RHU 520		
	Conductor Size AWG	Conductor Size Navy	TERMINAL		SPLICE	DIE SET	NEST	INDENTOR	DIE SET	NEST	INDENTOR	DIE SET	NEST	INDENTOR	DIE SET	NEST	INDENTOR	DIE SET	NEST	INDENTOR	DIE SET	NEST	INDENTOR	DIE SET
C..-.. 	8	23	C8-..	CL8-..	BSCL8	ME03/2-15 (1) ME2/3-15 (1) MA03/3-15 (Y)			MY 2-50 (1)			MY 2-50 (1)			MY 2-C (1)			Adaptor AU 150 C with die set MY..-C			Adaptor AU 230-130 D with die set MY..-C			Adaptor AU 520-130 C with die set MY..-C
	6		C6-..	CL6-..	BSCL6	ME2/3-15 (1) MA03/3-15 (Y)			MY 3-50 (1)			MY 3-50 (1)			MY 3-C (1)									
	4	40	C4-..	CL4-..	BSCL4				MY 4-50 (1)			MY 4-50 (1)			MY 4-C (1)									
	3	50	C3-..	CL3-..	BSCL3				MY 5-50 (1)			MY 5-50 (1)			MY 5-C (1)									
	2	60	C2-..	CL2-..	BSCL2				MY 6-50 (1)			MY 6-50 (1)			MY 6-C (1)									
CL..-.. 	1	75	C1-..	CL1-..	BSCL1				MY 7-50 (1)			MY 7-50 (1)			MY 7-C (1)									
	1/0	100	C1/0-..	CL1/0-..	BSCL1/0				MY 10-50 (2)			MY 10-50 (2)			MY 10-C (1)									
	2/0	125	C2/0-..	CL2/0-..	BSCL2/0				MY 14-50 (2)			MY 14-50 (2)			MY 14-C (1)									
	3/0	150	C3/0-..	CL3/0-..	BSCL3/0				MY 16-50 (2)			MY 16-50 (2)			MY 16-C (1)									
	4/0	200	C4/0-..	CL4/0-..	BSCL4/0				MY 19-50 (2)			MY 19-50 (2)			MY 19-C (1)									
CL..-.. 	250 MCM	250	C250-..	CL250-..	BSCL250				MY 24-50 (2)			MY 24-50 (2)			MY 24-C (1)									
	300 MCM	300	C300-..	CL300-..	BSCL300				MY 30L-50 (2)			MY 30-50 (2)			MY 30-C (1)									
	350 MCM	350	C350-..	CL350-..	BSCL350							MY 36-50 (2)			MY 36-C (1)									
	400 MCM	400	C400-..	CL400-..	BSCL400							MY 37-50 (2)			MY 37-C (1)									
BSCL.. 	500-MCM		C500-..	CL500-..	BSCL500							MY 48-50 (3)			MY 48-C (2)									
	600 MCM		C600-..	CL600-..	BSCL600										MY 60-C (2)									
	750 MCM		C750-..	CL750-..	BSCL750										MY 76-C (2)									

= Circular crimp = Hexagonal crimp = Indent crimp

N.B.: Number inside symbol indicates the number of crimps for C short barrel lugs only

DIE SELECTOR CHART

TAP-OF ON COPPER CONDUCTOR

C..-C..ST

C..-C..

APPLICATION	CONDUCTOR		CONNECTOR		HYDRAULIC TOOLS								
					B 35-45A	B 35-50A	HT 45-E	HT 51 HT 51L RH 50 B 51LA B 51A B 55CY	HT 81-U RHU 81	B131LN-CA and similar tools for U dies	B 150-A	ECW-H3D	RHU 520
	Conductor Size AWG		CONNECTOR	CONNECTOR	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET
	Run	*Tap*											
	#9 ÷ #13	#9 ÷ #15	C 6 - C 6 ST	C 6 - C 6	MC 6 (1)	MC 6-50 (1)	MC 6 (1)	MC 6-50 (1)	MC 6-50 (1)				
	#7	#7 ÷ #15	C 10 - C 10 ST	C 10 - C 10	MC 10 (1)	MC 10-50 (1)	MC 10 (1)	MC 10-50 (1)	MC 10-50 (1)	MC 10-C (1)	Adaptor	Adaptor	Adaptor
	#5	#5 ÷ #15	C 16 - C 16 ST	C 16 - C 16							AU 150-C	AU 230-130 D	AU 520-130 C
	#3 ÷ #5	#7 ÷ #15	C 25 - C 10 ST	C 25 - C 10	MC 25 (2)	MC 25-50 (2)	MC 25 (2)	MC 25-50 (2)	MC 25-50 (1)	MC 25-C (1)	with die set	with die set	with die set
	#3	#3 ÷ #5	C 25 - C 25 ST	C 25 - C 25							MC..-C	MC..-C	MC..-C
	#1 ÷ #2	#5 ÷ #15	C 35 - C 16 ST	C 35 - C 16									
	#1 ÷ #2	#1 ÷ #3	C 35 - C 35 ST	C 35 - C 35	MC 35 (2)	MC 35-50 (2)	MC 35 (2)	MC 35-50 (2)	MC 35-50 (1)	MC 35-C (1)			
	1/0	#3 ÷ #7											
	2/0	#3 ÷ #15	C 70 - C 25N ST	C 70 - C 25N									
	1/0	#3 ÷ #11	C 50 - C 25 ST	C 50 - C 25									
	*1/0	1/0 ÷ #2	C 50 - C 50 ST	C 50 - C 50									
	*2/0÷1/0	#1	C 70 - C 35 ST	C 70 - C 35				*MC 70-50 (3)	*MC 70-50 (3)	MC 70-C (3)		MC 70-3D (1)	
	*2/0÷1/0	2/0 ÷ #11	C 70 - C 70 ST	C 70 - C 70									
	4/0	#1	C 95 - C 35 ST	C 95 - C 35									
	4/0	2/0	C 95 - C 70 ST	C 95 - C 70						MC 95-C (3)		MC 95-3D (1)	
	4/0	4/0	C 95 - C 95 ST	C 95 - C 95									
	250 ÷ 4/0	250 ÷ #3	C 120 - C 120 ST	C 120 - C 120									
	300 MCM	250 ÷ #3	C 150 - C 120 ST	C 150 - C 120									
	300 MCM	300 MCM	C 150 - C 150 ST	C 150 - C 150						MC 185-C (3)		MC 185-3D (1)	
	350 MCM	4/0 ÷ #5	C 185 - C 95 ST	C 185 - C 95									
	350÷250 MCM	350÷250 MCM	C 185 - C 185 ST	C 185 - C 185								MC 240-3D (1)	
	500 ÷300	250 ÷ 2/0	C 240 - C 120 ST	C 240 - C 120									

(1) = Oval crimp

** When using die set type MC70-50, the conductors marked with a star must be annealed.*

DIE SELECTOR CHART

COPPER CONDUCTORS

APPLICATION	CONDUCTOR	CONNECTOR			HYDRAULIC TOOLS																												
					B 15Y	B 35-45A			B 35-50A			HT 45-E				HT 51 HT 51L RH 50 B 51LA B 51A B 55CY			HT 81-U RHU 81		B131LN-CA and similar tools for U dies			B150A	ECW-H3D			RHU 520		
	Conductor Size AWG	TERMINAL		SPLICE	DIE SET	NEST	INDEN-TOR	DIE SET	NEST	INDENTOR	DIE SET	NEST	INDENTOR	DIE SET		NEST	INDENTOR	DIE SET	DIE SET	DIE SET	NEST	INDENTOR	DIE SET	DIE SET	NEST	INDENTOR	DIE SET	NEST	INDENTOR	DIE SET
A..-M..	22 ÷ 14	A 03-M.. A 06-M..		L 03-M / L 03-P L 06-M / L 06-P	ME03/2-15 MA03/3-15																											
	12 ÷ 10	A 1-M.. A 1-L..		L 1-M L 1-P	ME03/2-15 MA03/3-15	MA 1	PA 1	ME 1 (1)	MA 1-50	PA 1-50	ME 1-50 (1)	MA 1	PA 1	ME 1 (1)		MA 1-50	PA 1-50	ME 1-50 (1)														
A..-P..	8	A 2-M.. A 2-L.. A 2-P12		L 2-M L 2-P	ME03/2-15 ME2/3-15 MA03/3-15	MA 2.3	PA 5	ME 2 (1)	MA 2.3-50	PA 5-50	ME 2-50 (1)	MA 2.3	PA 5	ME 2 (1)		MA 2.3-50	PA 5-50	ME 2-50 (1)	MA 3.5-U	ME 2.19-U (1)	MA 2-C	PA 10-C	ME 2-C (1)	Adaptor AU 150-C with die set ME..-C	Adaptor AU 230-130 D with die set MA..-C and indentor PA..-C	Adaptor AU 230-130 D with die set ME..-C	Adaptor AU 520-130 C with die set MA..-C and indentor PA..-C	Adaptor AU 520-130 C with die set ME..-C	
	6	A 3-M.. A 3-L.. A 3-P14	2A 3-M..	L 3-M L 3-P	ME2/3-15 MA03/3-15			ME 3 (1)			ME 3-50 (1)			ME 3 (1)				ME 3-50 (1)		ME 3.14-U (1)	MA 3-C		ME 3-C (1)								
	4	A 5-M.. A 5-L.. A 5-P16	2A 5-M..	L 5-M L 5-P		MA 5		ME 5 (1)	MA 5-50		ME 5-50 (1)	MA 5		ME 5 (1)		MA 5-50		ME 5-50 (1)		ME 5.7-U (1)	MA 5-C		ME 5-C (1)								
	2	A 7-M.. A 7-L.. A 7-P20	2A 7-M..	L 7-M L 7-P		MA 7	PA 10	ME 7 (1)	MA 7-50	PA 10-50	ME 7-50 (1)	MA 7	PA 10	ME 7 (1)		MA 7-50	PA 10-50	ME 7-50 (1)	MA 7.14-U		MA 7-C		ME 7-C (1)								
L..-M..	2-1/0	A 10-M.. A 10-L.. A 10-P25	2A 10-M..	L 10-M L 10-P		MA 10		ME 10 (2)	MA 10-50		ME 10-50 (2)	MA 10		ME 10 (2)		MA 10-50		ME 10-50 (2)	MA 10.19-U	ME 10.24-U (2)	MA 10-C		ME 10-C (1)								
	1/0-2/0	A 14-M.. A 14-L.. A 14-P30	2A 14-M..	L 14-M L 14-P				ME 14 (2)	MA 14-50	PA 19-50	ME 14-50 (2)			ME 14 (2)		MA 14-50	PA 19-50	ME 14-50 (2)	MA 7.14-U	ME 3.14-U (2)	MA 14-C	PA 24-C	ME 14-C (1)								
	2/0-3/0	A 19-M.. A 19-L..	2A 19-M..	L 19-M L 19-P				ME 19 (2)	MA 19-50		ME 19-50 (2)			ME 19 (2)		MA 19-50		ME 19-50 (2)	MA 10.19-U MA 19-U	ME 2.19-U (2)	MA 19-C		ME 19-C (1)								
L..-P..	3/0-250	A 24-M.. A 24-L..	2A 24-M..	L 24-M L 24-P				ME 24L (2)	MA 24-50	PA 24-50	ME 24L-50 (2)			ME 24 (2)		MA 24-50	PA 24-50	ME 24-50 (2)	MA 24-U	ME 10.24-U (2)	MA 24-C		ME 24-C (1)								
	250-300 MCM	A 30-M.. A 30-L..	2A 30-M..	L 30-M L 30-P				ME 30L (3)			ME 30L-50 (3)			ME 30 (3)				ME 30-50 (3)	MA 30.80-U	ME 30-U (2)	MA 30-C		ME 30-C (1)								
	300-350 MCM	A 37-M.. A 37-L.. A 37-4ESI	2A 37-M..	L 37-M L 37-P														ME 37-50 (3)	MA 37-U (2)	ME 37-U (2)	MA 37-C	PA 48-C	ME 37-C (1)								
2A..-M..	350-500 MCM	A 48-M.. A 48-L.. A 48-4ESI	2A 48-M..	L 48-M ▲ L 48-P ▲														ME 48-50 (3)	MA 48-U (3)	ME 48-U (3)	MA 48-C		ME 48-C (2)								
	500-600 MCM	A 60-M.. A 60-L.. A 60-4ESI	2A 60-M..	L 60-M ▲ L 60-P																	MA 60-C	PA 60-C	ME 60-C (3)								
	800 MCM	A 80-M.. A 80-4ESI	2A 80-M..	L 80-M ▲																			ME 80-C (3)		MA 80-3D	PA 100-3D	ME 80-3D (2)	MA 80-520	PA 120-520	ME 80-520 (2)
A..-4ESI	1000 MCM	A 100-M.. A 100-4ESI	2A 100-M..	L 100-M																					MA 100-3D		ME 100-3D (2)	MA 100-520		ME 100-520 (2)
	1250 MCM	A 120-M.. A 120-4ESI	2A 120-M..	L 120-M																					MA 120-3D	PA 120-3D	ME 120-3D (2)	MA 120-520		ME 120-520 (2)
	1500 MCM	A 160-M.. A 160-4ESI	2A 160-M..	L 160-M																								MA 160-520	PA 200-520	ME 160-520 (2)
	2000 MCM	A 200-M..	2A 200-M..	L 200-M																								MA 200-520		ME 200-520 (2)

EXTRA FLEXIBLE COPPER CONDUCTORS

	2	A 9-M..				MA 9	PA 10	ME 9 (1)	MA 9-50	PA 10-50	ME 9-50 (1)	MA 9	PA 10	ME 9 (1)		MA 9-50	PA 10-50	ME 9-50 (1)	MA 9.17-U	ME 9.20-U (1)	MA 9-C	PA 10-C	ME 9-C (1)	Adaptor AU 150-C with die set ME..-C	Adaptor AU 230-130 D with die set MA..-C and indentor PA..-C	Adaptor AU 230-130 D with die set ME..-C	Adaptor AU 520-130 C with die set MA..-C and indentor PA..-C	Adaptor AU 520-130 C with die set ME..-C	
	1/0	A 12-M..						ME 12 (2)	MA 12-50		ME 12-50 (2)			ME 12 (2)		MA 12-50		ME 12-50 (2)	MA 12.20-U	ME 12.17-U (2)	MA 12-C		ME 12-C (1)								
	2/0	A 17-M..						ME 17 (2)	MA 17-50	PA 19-50	ME 17-50 (2)			ME 17 (2)		MA 17-50	PA 19-50	ME 17-50 (2)	MA 9.17-U	ME 12.17-U (2)	MA 17-C	PA 24-C	ME 17-C (1)								
A..-M..	3/0	A 20-M..						ME 20 (2)	MA 20-50		ME 20-50 (2)			ME 20 (2)		MA 20-50		ME 20-50 (2)	MA 12.20-U	ME 9.20-U (2)	MA 20-C		ME 20-C (1)								
	250 MCM	A 29-M..						ME 29 (3)			ME 29-50 (3)			ME 29 (3)				ME 29-50 (3)	MA 29.80-U	ME 29-U (2)	MA 29-C		ME 29-C (1)								
	300 MCM	A 35-M..																ME 35-50 (3)	MA 35-U (2)	ME 35-U (2)	MA 35-C	PA 48-C	ME 35-C (1)								
	350 MCM	A 40-M..																ME 40-50 (3)	MA 40-U (2)	ME 40-U (3)	MA 40-C		ME 40-C (1)								

◯ = Hexagonal crimp *(use one size up with fine stranded conductors, E.G.: 3/0 fine stranded use A19-.. + ME 19 or A 20-.. + ME 20)* ⬭ = Indent crimp

▲ To be crimped with RHC 131L, HT 131L-C, B 131L-C, RHU 131-C, HT 131-UC and B 131-UC only

N.B.: *Number inside symbol indicates the number of crimps on A-M barrel*

DIE SELECTOR CHART

COPPER CONDUCTORS

EXTRA FLEXIBLE COPPER CONDUCTORS

APPLICATION	CONDUCTOR	TERMINAL							HYDRAULIC TOOLS											
									B 15Y	B 35-45A	B 35-50A	HT 45-E	HT 51 HT 51L RH 50 B 51LA B 51A B 55CY	B131LN-CA and similar tools for U dies			B150A	ECW-H3D	
	Conductor Size Flex AWG	TERMINAL							DIE SET		DIE SET		DIE SET	NEST	INDENTOR	DIE SET	DIE SET	NEST	INDENTOR
ANE..-M..	8	ANE 2-M..	ANE 2-P12	ANE 2-U..					NN4-15		MN 2 RF-50		MN 2 RF-50	MN 2-C	PN 7-C	MN 2 RF-C	Adaptor AU 150-C with die set MN..-C and indentor PN..-C or with die set MN..-RF-C and die set MN..F-C	Adaptor AU 230-130 D with die set MN..-C and indentor PN..-C or with die set MN..-RF-C and die set MN..F-C	
	6	ANE 3-M..	ANE 3-P14	ANE 3-U..							MN 3 RF-50		MN 3 RF-50	MN 3-C		MN 3 RF-C			
	4	ANE 5-M..	ANE 5-P16								MN 5 RF-50		MN 5 RF-50	MN 5-C		MN 5 RF-C			
	2	ANE 7-M..	ANE 7-P20								MN 7 RF-50		MN 7 RF-50	MN 7-C		MN 7 RF-C			
ANE..-P..	2-1/0	ANE 10-M..									MN 10 RF-50		MN 10 RF-50	MN 10-C	PN 14-C	MN 10 RF-C			
	1/0-2/0	ANE 14-M..											MN 14 RF-50	MN 14-C		MN 14 RF-C			
	2/0-3/0	ANE 19-M..											MN 19 RF-50	MN 19-C	PN 24-C	MN 19 RF-C			
	3/0-250	ANE 24-M..											MN 24 RF-50	MN 24-C		MN 24 RF-C			
	250-300 MCM	ANE 30-M..												MN 30-C	PN 37-C	MN 30 RF-C			
ANE..-U..																			
ANE..-M..	2	ANE 9-M..									MN 7 RF-50		MN 7 RF-50	MN 9-C	PN 14-C	MN 7 RF-C	Adaptor AU 150-C with die set MN..-C and indentor PN..-C or with die set MN..-RF-C and die set MN..F-C	Adaptor AU 230-130 D with die set MN..-C and indentor PN..-C or with die set MN..-RF-C and die set MN..F-C	
	1/0	ANE 12-M..									MN 12 F-50		MN 12 F-50	MN 12-C		MN 12 F-C			
	2/0	ANE 17-M..											MN 17 F-50	MN 17-C	PN 24-C	MN 17 F-C			
	3/0	ANE 20-M..											MN 20 F-50	MN 20-C		MN 20 F-C			
	250 MCM	ANE 29-M..												MN 29-C	PN 37-C	MN 29 F-C			
	300 MCM	ANE 35-M..												MN 35-C		MN 35 F-C			

COPPER CONDUCTORS

	Conductor Size Flex AWG	TERMINAL							DIE SET		DIE SET		DIE SET
PK ...	22 ÷ 12	PKD 506 ÷ PKD 418	PKE 508 ÷ PKE 418	PKC 508 ÷ PKC 418	KE 506 ÷ KE 412				KE 4-15				
	12 ÷ 6	PKD 410 ÷ PKD 1618	PKE 410 ÷ PKE 1618	PKC 410 ÷ PKC 1618	KE 410 ÷ KE 1616				KE 16-15				
KE ...	5	PKD 16..	PKE 16..	PKC 16..	KE 16..				KE 35-15		MTT 16-50		MTT 16-50
	3	PKD 25..	PKE 25..	PKC 25..	KE 25..						MTT 25-50		MTT 25-50
	2	PKD 35..		PKC 35..	KE 35..						MTT 35-50		MTT 35-50
	1/0	PKD 50..		PKC 50..							MTT 50-50		MTT 50-50
	2/0			PKC 70..							MTT 70-50		MTT 70-50
	3/0			PKC 95..							MTT 95-50		MTT 95-50
	250 MCM			PKC 120..									MTT 120-50

COPPER CONDUCTORS

	Conductor Size Flex AWG	TERMINAL							DIE SET	COMP. APERTURE		DIE SET		DIE SET
PKT ...	2 x 20	PKT 508 PKT 510							KE 4-15	1				
	2 x 18	PKT 7508 PKT 7512								1,5				
	2 x 17	PKT 108 PKT 112								2,5				
	2 x 16	PKT 1508 PKT 1512								2,5				
	2 x 14	PKT 2510 PKT 2512							KE 4-15 KE 16-15	4				
	2 x 12	PKT 412							KE 16-15	6				
	2 x 10	PKT 614								10				
	2 x 8÷7	PKT 1014							KE 16-15 KE 35-15	16		MTT 16-50		MTT 16-50
	2 x 6÷5	PKT 1614							KE 35-15	35		MTT 35-50		MTT 35-50

= Hexagonal crimp = Indent crimp = Radial crimp = circular crimp = Trapezium crimp

DIE SELECTOR CHART

COPPER CONDUCTOR

APPLICATION	CONDUCTOR	CONNECTOR	HYDRAULIC TOOLS								
			B35-45	B35-50A	HT 45-E	HT 51 HT 51L RH 50 B 51LA B 51A B 55CY	HT 81-U RHU 81	B131LN-CA and similar tools for U dies	B 150-A	ECW-H3D	RHU 520
	Conductor Size AWG	CONNECTOR	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET
	4	2A 5S.15,3-M12	ME 5 + MK 18B	ME 5-50 + MK 18B-50	ME 5 + MK 18B	ME 5-50 + MK 18B-50		ME 5S.13,5-C	Adaptor AU 150-C with die set ME..-C + die set MK..-C	Adaptor AU 230-130 D with die set ME..-C + die set MK..-C	
	2	2A 7.12-M..		ME 7-50 + MK 15-50		ME 7-50 + MK 15-50		ME 7.12-C			
	2-1/0	2A 10.14-M12	ME 10 + MK 16B	ME 10-50 + MK 16B-50	ME 10 + MK 16B	ME 10-50 + MK 16B-50		ME 10.14-C			
	1/0-2/0	2A 14.14-M12	ME 14 + MK 18B	ME 14-50 + MK 18B-50	ME 14 + MK 18B	ME 14-50 + MK 18B-50		ME 14-C + MK17-C			
		2A 14.16-M12						ME 14.16-C			
	2/0-3/0	2A 19.19-M..		ME 19-50 + MK 21B-50		ME 19-50 + MK 21B-50		ME 19-C + MK 21-C			
	3/0-250	2A 24.21-M..		ME 24L-50 + MK 23-50		ME 24-50 + MK 23-50		ME 24-C + MK 23-C			
	250-300 MCM	2A 30.23-M12		ME 30L-50 + MK 28B-50		ME 30-50 + MK 28B-50		ME 30.23-C			
	500 MCM	2A 48.33-M12						ME 48-C + M 320-C			
	600 MCM	2A 60.29-M12						ME 60-C + MK 34-C			

H.V. COPPER CONDUCTORS

Conductor Size sqmm	SPLICE		TERMINALS								
							DIE SET		DIE SET	DIE SET	DIE SET
25 R	MT 25 - TD	MT 25 - GC	CA 25 - M..	CA 25 - 2M..	MT 25 - C..		MMT 25-50		MMT 25-50	MMT 25-U	MMT 25-C
35 RC/S ÷ 40 S	MT 40 S - TD	MT 40 S - GC	CA 40 S - M..	CA 40 S - 2M..	MT 40 S - C..		MMT 50-50		MMT 50-50	MMT 50-U	MMT 50-C
50 RC	MT 50 R - TD	MT 50 R - GC	CA 50 R - M..	CA 50 R - 2M..	MT 50 R - C..						
50 S	MT 50 S - TD	MT 50 S - GC	CA 50 S - M..	CA 50 S - 2M..	MT 50 S - C..						
63 S ÷ 70 S	MT 70 S - TD	MT 70 S - GC	CA 70 S - M..	CA 70 S - 2M..	MT 70 S - C..				MMT 95-50	MMT 95-U	MMT 95-C
80 S ÷ 95 RC	MT 95 R - TD	MT 95 R - GC	CA 95 R - M..	CA 95 R - 2M..	MT 95 R - C..						
95 S ÷ 100 S	MT 95 S - TD	MT 95 S - GC	CA 95 S - M..	CA 95 S - 2M..	MT 95 S - C..						
120 RC/S ÷ 150 RC	MT 150 R - TD	MT 150 R - GC	CA 150 R - M..	CA 150 R - 2M..	MT 150 R - C..				MMT 200-50	MMT 200-U	MMT 200-C
150 S ÷ 160 RC	MT 150 S - TD	MT 150 S - GC	CA 150 S - M..	CA 150 S - 2M..	MT 150 S - C..						
160 S ÷ 200 RC	MT 200 R - TD	MT 200 R - GC	CA 200 R - M..	CA 200 R - 2M..	MT 200 R - C..						
200 S ÷ 240 RC	MT 240 R - TD	MT 240 R - GC	CA 240 R - M..	CA 240 R - 2M..	MT 240 R - C..						MMT 315-C
240 S ÷ 315 RC	MT 315 R - TD	MT 315 R - GC	CA 315 R - M..	CA 315 R - 2M..	MT 315 R - C..						
315 S	MT 315 S - TD	MT 315 S - GC	CA 315 S - M..	CA 315 S - 2M..	MT 315 S - C..						
400 R	MT 400 - TD		2A 80 - M..	2A 80 - 2M..						ME 80 - 3D	ME 80 - 520
500 R	MT 500 - TD		2A 100 - M..	2A 100 - 2M..						ME 100 - 3D	ME 100 - 520
600 R ÷ 630 R	MT 630 - TD		2A 120 - M..	2A 120 - 2M..						ME 120 - 3D	ME 120 - 520

= Hexagonal crimp = Oval crimp = circular crimp

DIE SELECTOR CHART FOR DEEP STEPPED INDENTING WITH CONTAINING DIES

ALUMINUM CABLES

APPLICATIONS	CONDUCTOR	CONNECTORS			HYDRAULIC TOOLS HT 131-UC RHU 131-C B 131-UCA			
	Conductor Size AWG	LUGS			DIE HOLDER	DIE		INDENTOR
CAA..-M..	8	CAA 10 - M..			AU 130-150	MV 35	MUA 35	PS 130-35/E
	6	CAA 16 - M..	MTA 16 - C					
	4	CAA 25 - M..	MTA 25 - C					
	2	CAA 35 - M..	MTA 35 - C					
	1/0	CAA 50 - M..	MTA 50 - C			MV 95	MUA 95	PS 130-95/E
	2/0	CAA 70 - M..	MTA 70 - C..					
MTA..-C	3/0	CAA 95 - M..	MTA 95 - C..					
	250 MCM	CAA 120 - M..	MTA 120 - C..			MV 150	MUA 150	PS 130-150/E
	300 MCM	CAA 150 - M..	MTA 150 - C..					
	350 MCM	CAA 185 - M..	MTA 185 - C..		AU 130-240	MV 240	MUA 240	PS 130-240/E
	500 MCM	CAA 240 - M..	MTA 240 - C..			MUA 300-34		
	600 MCM	CAA 300 - 34 - M..						
	Conductor Size AWG	LUGS			DIE HOLDER	DIE		INDENTOR
	6	AA 16 - M..			AU 130-150	MUA 35		PS 130-35/E
	4	AA 25 - M..						
	2	AA 35 - M..						
	1/0	AA 50 - M..				MUA 95		PS 130-95/E
AA..-M..	2/0	AA 70 - M..						
	3/0	AA 95 - M..						
	250 MCM	AA 120 - M..				MUA 150		PS 130-150/E
	300 MCM	AA 150 - M..						
	350 MCM	AA 185 - M..			AU 130-240	MUA 240		PS 130-240/E
	500 MCM	AA 240 - M..						
	600 MCM	AA 300 - 34 - M..				MUA 300-34		

Indent crimp

DIE SELECTOR CHART FOR DEEP STEPPED INDENTING WITH CONTAINING DIES

ALUMINIUM CABLES


MTMA..-.GC

Conductor Size AWG	SPLICES	Conductor Size sqmm Al	Conductor Size sqmm Al/Cu	SPLICES	HYDRAULIC TOOLS HT 131-UC RHU 131-C B 131-UCA			
					DIE HOLDER	DIE		INDENTOR
8	MTMA 10-GC				AU 130-150	MVM 35	MUA 35	PS 130-35/E
6	MTMA 16-GC MTMA 16/1	16	10	MTMA 16-10 GC				
4	MTMA 25-GC MTMA 25/1	25	10	MTMA 25-10 GC				
		25	16	MTMA 25-16 GC				
2	MTMA 35-GC MTMA 35/1							
1/0	MTMA 50-GC MTMA 50/1	50	25	MTMA 50-25 GC		MVM 95	MUA 95	PS 130-95/E
		50	35	MTMA 50-35 GC				
2/0	MTMA 70-GC MTMA 70/1	70	35	MTMA 70-35 GC				
		70	50	MTMA 70-50 GC				
3/0	MTMA 95-GC MTMA 95/1	95	50	MTMA 95-50 GC				
		95	70	MTMA 95-70 GC				
250 MCM	MTMA 120-GC MTMA 120/1	120	70	MTMA 120-70 GC		MVM 150	MUA 150	PS 130-150/E
		120	95	MTMA 120-95 GC				
300 MCM	MTMA 150-GC MTMA 150/1	150	70	MTMA 150-70 GC				
		150	95	MTMA 150-95 GC				
		150	120	MTMA 150-120 GC				
350 MCM	MTMA 185-GC MTMA 185/1	185	120	MTMA 185-120 GC	AU 130-240	MVM 240	MUA 240	PS 130-240/E
		185	150	MTMA 185-150 GC				
500 MCM	MTMA 240-GC MTMA 240/1	240	150	MTMA 240-150 GC				
		240	185	MTMA 240-185 GC				
600 MCM	MTMAD 300-GC MTMAD 300/1	300	185	MTMAD 300-185 GC		MUA 300-34		
		300	240	MTMAD 300-240 GC				

PRE-ROUNDERS SELECTION

ALUMINUM CONDUCTOR SIZE AWG	PRE-ROUNDER	DIE-SUPPORT
3	UP 130-25	AC 130-P
2	UP 130-35	
1/0	UP 130-50	
2/0	UP 130-70	
3/0	UP 130-95	
250 MCM	UP 130-120	
300 MCM	UP 130-150	
350 MCM	UP 130-185	
500 MCM	UP 130-240	

DIES DESCRIPTION

1) AU 130-.. DIE-HOLDER
Used to house dies and pre-rounding.

2) UP 130-.. PRE-ROUNDERS
Used to round aluminum sectoral conductors in order to introduce them into circular connectors. Each pre-rounder is made of two parts: the upper part is housed in die-holder **AU 130-..** and the lower part is locked onto **AC 130-P.** die support.

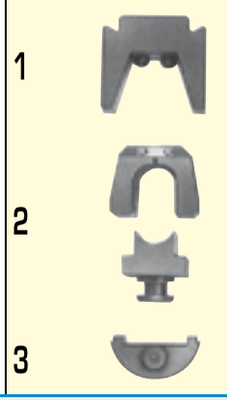
3) AC 130-P.. DIE SUPPORT
Houses lower part of pre-rounder **UP 130-..**

4) MUA... DIES
Containing dies.

5) PS 130-../E INDENTORS
Such indentors are specifically engineered for deep indentation of aluminum conductors.

DIES SEQUENCE

CONDUCTOR ROUNDING



CRIMPING

Indent crimp

DIE SELECTOR CHART

ALUMINIUM CABLES

APPLICATIONS	CONDUCTOR	CONNECTORS				HYDRAULIC TOOLS							
						B131LN-CA and similar tools for U dies	HT 131-UC RHU 131-C B 135-UCA B 131-UCA			ECW-H3D	RHU 230-630		
	Conductor Size AWG	LUGS				HEXAGONAL CRIMP	INDENT CRIMP			HEXAGONAL CRIMP	INDENT CRIMP		
						DIE SET	DIE HOLDER	DIE	INDENTOR	DIE SET	ADAPTOR	DIE	INDENTOR
CAA..-M..	600 MCM	CAA 300-34 - M..				MK34L-C	AU 130-240	MUA 300-34	PS 130-240/E	MK34-3D			
	600 MCM	CAA 300 - M16								MK38-3D	AU 230-630	MV 230-400 MC5E	PS 230-400 5E
	800 MCM	CAA 400 - M16											
	1000 MCM	CAA 500 - M16 TNBD											
	1250 MCM	CAA 630 - 4M8								MK46-3D		MV 230-630 MC6E	PS 230-630 6E
	Conductor Size AWG	LUGS				DIE SET	DIE HOLDER	DIE	INDENTOR	DIE SET	ADAPTOR	DIE	INDENTOR
AA..-M..	600 MCM	AA 300 - 34 - M..				MK34L-C	AU 130-240	MUA 300-34	PS 130-240/E	MK34-3D			
	600 MCM	AA 300 - M16								MK38-3D	AU 230-630	MUA 230-630-400	PS 230-400 5E
	800 MCM	AA 400 - M16											
	1000 MCM	AA 500 - 40 - M16											
	1250 MCM	AA 630 - M16								MK46-3D		MUA 230-630-630	PS 230-630 6E
	Conductor Size AWG	SPLICES	Conductor Size AWG Al	Conductor Size AWG Al/Cu	SPLICES	DIE SET	DIE HOLDER	DIE	INDENTOR	DIE SET	ADAPTOR	DIE	INDENTOR
	600 MCM	MTMAD 300/1	600 MCM	3/0	MTMAD 300-95-GC	MK34L-C	AU 130-240	MUA 300-34	PS 130-240/E	MK34-3D			
				300 MCM	MTMAD 300-150-GC								
		MTMAD 300-GC		350 MCM	MTMAD 300-185-GC								
				500 MCM	MTMAD 300-240-GC								
MTMA..	600 MCM	MTMA 300-GC								MK38-3D	AU 230-630	MVM 230-400 MJ5E	PS 230-400 5E
	800 MCM	MTMA 400/1	800 MCM	500 MCM	MTMA 400-240-GC								
				600 MCM	MTMA 400-300-GC								
	1000 MCM	MTMA 500-40/1											
	1000 MCM	MTMA 500-GC	1000 MCM	600 MCM	MTMA 500-300-GC					MK46-3D		MVM 230-630 MJ6E	PS 230-630 6E
				800 MCM	MTMA 500-400-GC								
	1250 MCM	MTMA 630/1											

Indent crimp Hexagonal crimp

DIE SELECTOR CHART

APPLICATIONS	CONDUCTOR	CONNECTORS		HYDRAULIC TOOLS								
				B 15Y	B 35-45A	B 35-50A	HT 45-E	HT 51 RH 50 RHM 50 B 51A	HT 81-U RHU 81 ◊	B131LN-CA and similar tools for U dies		ECW-H3D	
	Size AWG	LUGS	SPLICES	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE SET	DIE	INDENTOR	DIE	INDENTOR
DIN 46234  GM..	10÷8	Q10-..				MQ10-50 (1)		MQ10-50 (1)	MQ10-50 (1)	MQM10-C (1)	MQS16-C	Adaptor AU 230-130 D with die set MQ...	
	8÷6	Q16-..				MQ16-50 (1)		MQ16-50 (1)	MQ16-50 (1)	MQM16-C (1)			
	6÷4	Q25-..				MQ25-50 (1)		MQ25-50 (1)	MQ25-50 (1)	MQM25-C (1)	MQS-35-C		
	4÷2	Q35-..				MQ35-50 (2)		MQ35-50 (2)	MQ35-50 (2)	MQM35-C (1)			
	2÷1/0	Q50-..				MQ50-50 (2)		MQ50-50 (2)	MQ50-50 (2)	MQM50-C (1)	MQS70-C		
	1/0÷2/0	Q70-..				MQ70-50 (2)		MQ70-50 (2)	MQ70-50 (2)	MQM70-C (1)			
	2/0÷3/0	Q95-..								MQM95-C (1)	MQS150-C		
	3/0÷250	Q120-..								MQM120-C (1)			
	250÷300 MCM	Q150-..								MQM150-C (1)			
	300÷350 MCM	Q185-..								MQM185-C (1)	MQS240-C		
	350÷500 MCM	Q240-..								MQM240-C (1)			
DIN 46235 - 46267 T.1  DR..	10	DR6-..	DSV6	MK5/8-15 (1)	MK5 (1)	MK5-50 (1)	MK5 (1)	MK5-50 (1)	MK5-50 (1)	MK5-C (1)		Adaptor AU 230-130 D with die set MK..-C	
	8	DR10-..	DSV10		MK6 (1)	MK6-50 (1)	MK6 (1)	MK6-50 (1)	MK6-50 (1)	MK6-C (1)			
	6	DR16-..	DSV16		MK8 (2)	MK8-50 (2)	MK8 (2)	MK8-50 (2)	MK8-50 (2)	MK8-C (1)			
	4	DR25-..	DSV25		MK10 (2)	MK10-50 (2)	MK10 (2)	MK10-50 (2)	MK10-50 (2)	MK10-C (1)			
	2	DR35-..	DSV35		MK12 (2)	MK12-50 (2)	MK12 (2)	MK12-50 (2)	MK12-50 (2)	MK12-C (1)			
	1/0	DR50-..	DSV50		MK14 (3)	MK14-50 (3)	MK14 (3)	MK14-50 (3)	MK14-50 (3)	MK14-C (2)		MK14-3D (2)	
	2/0	DR70-..	DSV70		MK16 (3)	MK16-50 (3)	MK16 (3)	MK16-50 (3)	MK16-50 (3)	MK16-C (2)		MK16-3D (2)	
	3/0	DR95-..	DSV95		MK18 (4)	MK18-50 (4)	MK18 (4)	MK18-50 (4)	MK18-50 (4)	MK18-C (2)		MK18-3D (2)	
	250	DR120-..	DSV120		MK20 (4)	MK20-50 (4)	MK20 (4)	MK20-50 (4)	MK20-50 (4)	MK20-C (2)		MK20-3D (2)	
 DSV..	300 MCM	DR150-..	DSV150		MK22L (4)	MK22L-50 (4)	MK22L (4)	MK22-50 (4)	MK22-50 (4)	MK22-C (2)		MK22-3D (2)	
	350 MCM	DR185-..	DSV185					MK25-50 (5)	MK25-50 (5)	MK25-C (2)		MK25-3D (2)	
	500 MCM	DR240-..	DSV240					MK28-50 (5)	MK28-50 (5)	MK28-C (4)		MK28-3D (2)	
	600 MCM	DR300-..	DSV300							MK32-C (4)		MK32-3D (2)	
	800 MCM	DR400-..	DSV400									MK38-3D (3)	
	1000 MCM	DR500-..	DSV500									MK42-3D (3)	
	1250 MCM	DR625-..	DSV625									MK44-3D (3)	

(1) Hexagonal crimp (1) Indent crimp

NB: *for through connectors this is the number of crimps per conductor*

◊ Tools type HT 81-U and RHU 81 use the same dies of HT 51 but are equipped with spring type 6522051.


REGISTRO ITALIANO NAVALE
1861
UL
Lloyd's Register
TA
TYPE APPROVED
VDE
GS
geprüfte Sicherheit

APPENDIX

REFERENCE/CODE CROSS CHART

Ref.	Code
1052007	3005900
1052007N	3005901
1052009	3005903
1052009N	3005904
1052011	3005906
1052011N	3005907
1052013	3005909
1052013N	3005910
1052016	3005912
1052016N	3005913
1052021	3005915
1052021N	3005916
1052029	3005918
1052029N	3005919
1052036	3005921
1052036N	3005922
1052042	3005924
1052042N	3005925
1052048	3005927
1052048N	3005928
1053M12	3005958
1053M12N	3005959
1053M16	3005961
1053M16N	3005962
1053M20	3005964
1053M20N	3005965
1053M25	3005967
1053M25N	3005968
1053M32	3005970
1053M32N	3005971
1053M40	3005973
1053M40N	3005974
1053M50	3005976
1053M50N	3005977
1053M63	3005979
1053M63N	3005980
1112	3005715
1112N	3005716
1116	3005720
1116N	3005721
1120	3005725
1120N	3005726
1125	3005730
1125N	3005731
1132	3005735
1132N	3005736
1140	3005740
1140N	3005741
1141012	3005120
1141012N	3005121
1141112	3005155
1141112N	3005156
1141200	3005170
1141200N	3005171
1142007	3005010
1142007G	3005012
1142007N	3005011
1142009	3005015
1142009G	3005017
1142009N	3005016
1142011	3005020
1142011G	3005022
1142011N	3005021
1142013	3005025
1142013G	3005027
1142013N	3005026
1142016	3005030
1142016G	3005032
1142016N	3005031
1142021	3005035
1142021G	3005037
1142021N	3005036
1142029	3005040
1142029G	3005042
1142029N	3005041
1142036	3005045
1142036G	3005047
1142036N	3005046
1142042	3005050
1142042G	3005052
1142042N	3005051
1142048	3005055
1142048G	3005057
1142048N	3005056
1143M12	3005215
1143M12G	3005217

Ref.	Code
1143M12N	3005216
1143M16	3005220
1143M16G	3005222
1143M16N	3005221
1143M20	3005225
1143M20G	3005227
1143M20N	3005226
1143M25	3005230
1143M25G	3005232
1143M25N	3005231
1143M32	3005235
1143M32G	3005237
1143M32N	3005236
1143M40	3005240
1143M40G	3005242
1143M40N	3005241
1143M50	3005245
1143M50G	3005247
1143M50N	3005246
1143M63	3005250
1143M63G	3005252
1143M63N	3005251
1150	3005745
1150N	3005746
1163	3005750
1163N	3005751
1253M12	3006750
1253M12N	3006751
1253M16	3006755
1253M16N	3006756
1253M20	3006760
1253M20N	3006761
1253M25	3006765
1253M25N	3006766
1253M32	3006770
1253M32N	3006771
1253M40	3006775
1253M40N	3006776
1253M50	3006780
1253M50N	3006781
1253M63	3006785
1253M63N	3006786
1400	3003110
1401	3003114
1401B	3003116
1401BN	3003117
1401C	3003118
1401CN	3003119
1401N	3003115
1402	3003120
1402N	3003121
1403	3003125
1404	3003130
1405	3003135
1407	3003155
1408	3003170
1410	3005610
1410N	3005611
1411	3005615
1411N	3005616
1412	3005620
1412N	3005621
1413	3005625
1413N	3005626
1414	3005630
1414N	3005631
1415	3005635
1415N	3005636
1500.07	3002010
1500.07N	3002011
1500.09	3002015
1500.09N	3002016
1500.11	3002020
1500.11N	3002021
1500.12	3002120
1500.12N	3002121
1500.13	3002025
1500.13N	3002026
1500.14	3002110
1500.14N	3002111
1500.16	3002030
1500.16N	3002031
1500.21	3002035
1500.21N	3002036
1500.34	3002130
1500.34N	3002131

Ref.	Code
1500.38	3002115
1500.38N	3002116
1500.M12	3002205
1500.M12N	3002206
1500.M16	3002210
1500.M16N	3002211
1500.M20	3002215
1500.M20N	3002216
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BKF-F408	2053572
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BKF-FM608	2053692
BKF-M608	2053652
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C150-C150	2490690
C16-C16	2490110
C185-C185	2490745
C185-C95	2490710
C240-C120	2490760
C25-C10	2490150
C25-C25	2490190
C35-C16	2490230
C35-C35	2490270
C50-C25	2490350
C50-C50	2490390
C59	8420035
C6-C6	2490030
C70-C25N	2490310
C70-C35	2490430
C70-C70	2490470
C95-C35	2490510
C95-C70	2490550
C95-C95	2490590
C6-C6ST	2492030
C10-C10ST	2492070
C16-C16ST	2492110

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C25-C10ST	2492150
C25-C25ST	2492190
C35-C16ST	2492230
C35-C35ST	2492270
C70-C25NST	2492310
C50-C25ST	2492350
C50-C50ST	2492390
C70-C35ST	2492430
C70-C70ST	2492470
C95-C35ST	2492510
C95-C70ST	2492550
C95-C95ST	2492590
C120-C120ST	2492630
C150-C120ST	2492670
C150-C150ST	2492690
C185-C95ST	2492710
C240-C120ST	2492760
CA150R-2M14	2533010
CA150R-M12	2532810
CA150R-M14	2532850
CA150S-2M14	2533330
CA150S-M12	2533210
CA150S-M14	2533250
CA200R-2M14	2533570
CA200R-M14	2533530
CA240R-2M14	2533850
CA240R-M14	2533770
CA25-2M12	2530210
CA25-2M8	2530130
CA25-M10	2530050
CA25-M12	2530090
CA25-M8	2530010
CA315R-2M14	2534430
CA315R-M14	2534330
CA315S-2M14	2534610
CA315S-M14	2534530
CA40S-2M12	2530510
CA40S-M12	2530450
CA40S-M16	2530490
CA50R-2M12	2530870
CA50R-M12	2530790
CA50S-2M12	2531190
CA50S-M12	2531110
CA50S-M16	2531150
CA70-M12	2531870
CA70S-2M12	2531510
CA70S-M12	2531430
CA70S-M16	2531470
CA95R-2M14	2532230
CA95R-M12	2532150
CA95R-M14	2532190
CA95S-2M14	2532610
CA95S-M12	2532450
CA95S-M14	2532490
CA95S-M16	2532500
CAA10-M12	2760005
CAA120-M12	2760310
CAA150-M12	2760350
CAA16-M12	2760012
CAA185-M12	2760430
CAA240-M12	2760590
CAA25-M12	2760030
CAA300-M16	2760710
CAA300-34-M12	2760680
CAA300-34-M16	2760715
CAA35-M12	2760070
CAA35ADN	2762260
CAA400-M16	2760750
CAA50-M12	2760110
CAA500-M16-TNBD	2760852
CAA630-4M8	2760950
CAA70-M12	2760150
CAA95-M12	2760190
Canvas Bag 001	2593300
Canvas Bag 007	2593295
Canvas Bag 010	2593298
Canvas Bag 011	2593299
CB1430H	2598502
CB9620H	2598503
CB9630H	2598504
CBA96-144	2598508
CBP-F405	2076535
CBP-F408	2076540
CBP-F408P	2076543
CBP-F608	2076545
CBP-F608P	2076550
CBP-M3	2076310

Ref.	Code
CBP-M3.5	2076315
CBP-M3.5/1	2076320
CBP-M4	2076325
CBP-M5	2076335
CBP-M6	2076340
CBP-M6/1	2076345
CBP-M608	2076560
CBP-M7	2076350
CBP-M8	2076355
CBP-P10	2076455
CBP-P12	2076460
CBP-P8	2076450
CBP-PP12	2076480
CBP-PP12/25	2076490
CBP-U3	2076380
CBP-U3.5	2076385
CBP-U4	2076395
CBP-U4/1	2076400
CBP-U4/2	2076405
CBP-U4/3L	2076408
CBP-U5	2076410
CBP-U6	2076415
CC8.9	3041630
CC9.12	3041632
CDD6	2599940
CDD6-8	2599941
CDK	2599942
CFA2600	3031942
CFA300	3031900
CFA400	3031914
CFA600	3031928
CFAB600	3031970
CFAR600	3031956
CFC12-24ICN	2598492
CFC120YN	2598491
CGP-F608	2076845
CGP-F608P	2076850
CGP-M3	2076610
CGP-M3.5	2076615
CGP-M4	2076625
CGP-M5	2076635
CGP-M6	2076640
CGP-M6/1	2076645
CGP-M608	2076860
CGP-M7	2076650
CGP-M8	2076660
CGP-M8/1	2076665
CGP-P10	2076755
CGP-P12	2076760
CGP-P14	2076765
CGP-PP12	2076780
CGP-PP17	2076790
CGP-U3.5	2076685
CGP-U4	2076695
CGP-U5	2076710
CGP-U6	2076715
CL1/0-10	2396385
CL1/0-12	2396397
CL1/0-38	2396394
CL1/0-516	2396391
CL1/0-D14	2396360
CL1/0-D141	2396361
CL1/0-D38	2396370
CL1/0-DN	2396375
CL1/0IH-10	2396405
CL1/0IH-12	2396413
CL1/0IH-14	2396407
CL1/0IH-38	2396411
CL1/0IH-516	2396409
CL1/0IH-58	2396417
CL1/0IH-916	2396415
CL1-10	2396183
CL1-12	2396191
CL1-516	2396187
CL1-D14	2396160
CL1-D141	2396161
CL1-D38	2396170
CL1-DN	2396175
CL1IH-10	2396205
CL1IH-12	2396217
CL1IH-14	2396208
CL1IH-38	2396214
CL1IH-516	2396211
CL2/0-12	2396594
CL2/0-38	2396591
CL2/0-D14	2396560
CL2/0-D141	2396561

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CL2/0-D38	2396570
CL2/0-DN	2396575
CL2/0IH-12	2396611
CL2/0IH-14	2396605
CL2/0IH-34	2396617
CL2/0IH-38	2396609
CL2/0IH-516	2396607
CL2/0IH-58	2396615
CL2/0IH-916	2396613
CL2-10	2395985
CL2-12	2395997
CL2-14	2395988
CL250-12	2397204
CL250-D38	2397180
CL250-DN	2397185
CL250IH-12	2397229
CL250IH-14	2397220
CL250IH-34	2397238
CL250IH-38	2397226
CL250IH-516	2397223
CL250IH-58	2397235
CL250IH-916	2397232
CL2-516	2395991
CL2-D14	2395960
CL2-D141	2395961
CL2-D38	2395970
CL2-DN	2395975
CL2-DN38	2395971
CL2IH-10	2396005
CL2IH-12	2396017
CL2IH-14	2396008
CL2IH-38	2396014
CL2IH-516	2396011
CL3/0-12	2396794
CL3/0-D141	2396761
CL3/0-D38	2396770
CL3/0-DN	2396775
CL3/0IH-12	2396811
CL3/0IH-14	2396805
CL3/0IH-34	2396817
CL3/0IH-38	2396809
CL3/0IH-516	2396807
CL3/0IH-58	2396815
CL3/0IH-916	2396813
CL300-12	2397491
CL300-D38	2397470
CL300-DN	2397475
CL300IH-12	2397509
CL300IH-34	2397515
CL300IH-38	2397507
CL300IH-516	2397505
CL300IH-58	2397513
CL300IH-916	2397511
CL3-12	2395797
CL3-14	2395788
CL3-38	2395794
CL350-12	2397688
CL350-D141	2397661
CL350-D38	2397670
CL350-DN	2397675
CL350IH-12	2397708
CL350IH-34	2397717
CL350IH-38	2397705
CL350IH-58	2397714
CL350IH-916	2397711
CL3-516	2395791
CL3-D38	2395770
CL3-DN	2395775
CL3IH-10	2395805
CL3IH-12	2395817
CL3IH-14	2395808
CL3IH-38	2395814
CL3IH-516	2395811
CL4/0-12	2396994
CL4/0-38	2396991
CL4/0-D141	2396961
CL4/0-D38	2396970
CL4/0-DN	2396975
CL4/0-DN38	2396971
CL4/0IH-12	2397011
CL4/0IH-14	2397005
CL4/0IH-34	2397017
CL4/0IH-38	2397009
CL4/0IH-516	2397007
CL4/0IH-58	2397015
CL4/0IH-916	2397013
CL400-12	2397888

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CL400-58	2397894
CL400-D141	2397861
CL400-D38	2397870
CL400-DN	2397875
CL400IH-12	2397908
CL400IH-34	2397917
CL400IH-38	2397905
CL400IH-58	2397914
CL400IH-916	2397911
CL4-10	2395585
CL4-12	2395597
CL4-14	2395588
CL4-38	2395594
CL4-D14	2395560
CL4-D141	2395561
CL4-D38	2395570
CL4-DN	2395575
CL4IH-10	2395605
CL4IH-12	2395617
CL4IH-14	2395608
CL4IH-38	2395614
CL4IH-516	2395611
CL500-12	2398088
CL500-58	2398094
CL500-D141	2398061
CL500-D38	2398070
CL500-DN	2398075
CL500IH-12	2398108
CL500IH-34	2398117
CL500IH-38	2398105
CL500IH-58	2398114
CL500IH-916	2398111
CL600-12	2398285
CL600-58	2398291
CL600-D38	2398270
CL600-DN	2398275
CL600IH-12	2398305
CL600IH-34	2398314
CL600IH-58	2398311
CL600IH-916	2398308
CL6-10	2395385
CL6-12	2395397
CL6-14	2395388
CL6-D14	2395360
CL6-D141	2395361
CL6-D38	2395370
CL6-DN	2395375
CL6IH-10	2395405
CL6IH-12	2395417
CL6IH-14	2395408
CL6IH-38	2395414
CL6IH-516	2395411
CL750-12	2398485
CL750-58	2398488
CL750-D38	2398470
CL750-DN	2398475
CL750-DN38	2398471
CL750IH-12	2398505
CL750IH-34	2398511
CL750IH-58	2398508
CL8-10	2395183
CL8-14	2395186
CL8-38	2395192
CL8-D14	2395160
CL8-D141	2395161
CL8-D38	2395170
CL8IH-10	2395203
CL8IH-12	2395215
CL8IH-14	2395206
CL8IH-38	2395212
CL8IH-516	2395209
CLIP-NR	2874205
CLIP-NR57	2874206
CMA600	3031984
CMB1	2599943
CMB2	2599945
CP1086-W-1000-KV	2597905
CP1096	2597700
CP1096-W-1000-KV	2597695
CP1120-W-1000-KV	2597958
CP1131	2610120
CPKD108	2808582
CPKD1508	2808587
CPKD2508	2808592
CPKD508	2808573
CPKD7508	2808578
CPP-0	2592671

Ref.	Code
CPU1131-C	2610150
CPU1230-3D	2630200
CRP-F305	2076225
CRP-F308	2076230
CRP-F405	2076235
CRP-F405P	2076237
CRP-F408	2076240
CRP-F408P	2076242
CRP-F608	2076245
CRP-F608P	2076250
CRP-M3	2076010
CRP-M3.5	2076015
CRP-M3.5/1	2076020
CRP-M4	2076025
CRP-M4/3	2076030
CRP-M5	2076035
CRP-M6	2076040
CRP-M6/1	2076045
CRP-M608	2076260
CRP-M7	2076050
CRP-M8	2076055
CRP-P10	2076155
CRP-P12	2076160
CRP-P8	2076150
CRP-PP12	2076180
CRP-PP12/1	2076185
CRP-PP12/23	2076190
CRP-PP14	2076195
CRP-U3	2076080
CRP-U3.5	2076085
CRP-U3.5/2	2076090
CRP-U4	2076095
CRP-U4/1	2076100
CRP-U4/2	2076105
CRP-U5	2076110
CRP-U6	2076115
CRP-U6/1	2076120
CRP-U8	2076125
CS-CPE-1	2592748
DC24	2596100
DR6-5	2387910
DR6-6	2387920
DR6-8	2387930
DR10-5	2388000
DR10-6	2388005
DR10-8	2388010
DR10-10	2388015
DR16-5	2388025
DR16-6	2388030
DR16-8	2388040
DR16-10	2388050
DR16-12	2388060
DR25-6	2388110
DR25-8	2388120
DR25-10	2388130
DR25-12	2388140
DR25-16	2388160
DR35-6	2388210
DR35-8	2388220
DR35-10	2388230
DR35-12	2388240
DR35-16	2388246
DR50-6	2388250
DR50-8	2388255
DR50-10	2388260
DR50-12	2388270
DR50-14	2388280
DR50-16	2388290
DR70-8	2388320
DR70-10	2388330
DR70-12	2388340
DR70-14	2388350
DR70-16	2388360
DR70-20	2388380
DR95-8	2388390
DR95-10	2388395
DR95-12	2388400
DR95-14	2388410
DR95-16	2388420
DR95-20	2388430
DR120-8	2388450
DR120-10	2388460
DR120-12	2388470
DR120-16	2388490
DR120-20	2388500
DR150-10	2388530
DR150-12	2388540

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DR150-16	2388560
DR150-20	2388570
DR185-10	2388600
DR185-12	2388610
DR185-16	2388620
DR185-20	2388630
DR240-10	2388710
DR240-12	2388720
DR240-16	2388730
DR240-20	2388740
DR300-10	2388780
DR300-12	2388790
DR300-16	2388810
DR300-20	2388820
DR400-12	2388870
DR400-16	2388890
DR400-20	2388900
DR500-12	2388950
DR500-16	2388970
DR500-20	2388980
DR625-12	2389030
DR625-16	2389050
DR625-20	2389060
DSV6	2489010
DSV10	2489015
DSV16	2489020
DSV25	2489025
DSV35	2489030
DSV50	2489035
DSV70	2489040
DSV95	2489045
DSV120	2489050
DSV150	2489055
DSV185	2489060
DSV240	2489065
DSV300	2489070
DSV400	2489075
DSV500	2489080
DSV625	2489085
ECW-H3D	2630073
ELB-3Y	2598421
EPS115-230.24	2596091
ERCH	2596112
ERCH-WH	2596114
ES03-BU	2470410
ES06-BU	2470411
ES1-BU	2470412
ES2-BU	2470413
ES3-BU	2470414
ES5-BU	2470415
ES10-BU	2470416
ES14-BU	2470417
ES19-BU	2470418
ES24-BU	2470419
ES30-BU	2470420
ES37-BU	2470421
ES40-BU	2470422
ES48-BU	2470423
ES80-BU	2470424
ES03-GY	2470430
ES06-GY	2470431
ES1-GY	2470432
ES2-GY	2470433
ES3-GY	2470434
ES5-GY	2470435
ES10-GY	2470436
ES14-GY	2470437
ES19-GY	2470438
ES24-GY	2470439
ES30-GY	2470440
ES37-GY	2470441
ES40-GY	2470442
ES48-GY	2470443
ES80-GY	2470444
ES03-BR	2470450
ES06-BR	2470451
ES1-BR	2470452
ES2-BR	2470453
ES3-BR	2470454
ES5-BR	2470455
ES10-BR	2470456
ES14-BR	2470457
ES19-BR	2470458
ES24-BR	2470459
ES30-BR	2470460
ES37-BR	2470461
ES40-BR	2470462

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ES48-BR	2470463
ES80-BR	2470464
ES03-BK	2470470
ES06-BK	2470471
ES1-BK	2470472
ES2-BK	2470473
ES3-BK	2470474
ES5-BK	2470475
ES10-BK	2470476
ES14-BK	2470477
ES19-BK	2470478
ES24-BK	2470479
ES30-BK	2470480
ES37-BK	2470481
ES40-BK	2470482
ES48-BK	2470483
ES80-BK	2470484
ES03-WH	2470490
ES06-WH	2470491
ES1-WH	2470492
ES2-WH	2470493
ES3-WH	2470494
ES5-WH	2470495
ES10-WH	2470496
ES14-WH	2470497
ES19-WH	2470498
ES24-WH	2470499
ES30-WH	2470500
ES37-WH	2470501
ES40-WH	2470502
ES48-WH	2470503
ES80-WH	2470504
ES03-RE	2470510
ES06-RE	2470511
ES1-RE	2470512
ES2-RE	2470513
ES3-RE	2470514
ES5-RE	2470515
ES10-RE	2470516
ES14-RE	2470517
ES19-RE	2470518
ES24-RE	2470519
ES30-RE	2470520
ES37-RE	2470521
ES40-RE	2470522
ES48-RE	2470523
ES80-RE	2470524
ES03-GN	2470530
ES06-GN	2470531
ES1-GN	2470532
ES2-GN	2470533
ES3-GN	2470534
ES5-GN	2470535
ES10-GN	2470536
ES14-GN	2470537
ES19-GN	2470538
ES24-GN	2470539
ES30-GN	2470540
ES37-GN	2470541
ES40-GN	2470542
ES48-GN	2470543
ES80-GN	2470544
ES03-YE	2470550
ES06-YE	2470551
ES1-YE	2470552
ES2-YE	2470553
ES3-YE	2470554
ES5-YE	2470555
ES10-YE	2470556
ES14-YE	2470557
ES19-YE	2470558
ES24-YE	2470559
ES30-YE	2470560
ES37-YE	2470561
ES40-YE	2470562
ES48-YE	2470563
ES80-YE	2470564
ES03-PK	2470570
ES06-PK	2470571
ES1-PK	2470572
ES2-PK	2470573
ES3-PK	2470574
ES5-PK	2470575
ES10-PK	2470576
ES14-PK	2470577
ES19-PK	2470578
ES24-PK	2470579

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ES30-PK	2470580
ES37-PK	2470581
ES40-PK	2470582
ES48-PK	2470583
ES80-PK	2470584
ESC300CEE	2596110
ESC600	2599001
F1-15	2599865
FD11	3017354
FD13.5	3017356
FD16	3017358
FD21	3017360
FD29	3017362
FD36	3017364
FD42	3017366
FD48	3017368
FD7	3017350
FD9	3017352
FDM12	3017375
FDM20	3017377
FDM25	3017379
FDM32	3017381
FDM40	3017383
FDM50	3017385
FDM63	3017387
FL10-150	2510070
FL10-200	2510150
FL10-250	2510190
FL16-150	2510470
FL16-200	2510550
FL16-250	2510590
FL16-320	2510670
FL16-350	2510690
FL16-420	2510710
FL16-570	2510750
FL16-660	2510790
FL25-150	2510950
FL25-200	2511070
FL25-250	2511110
FL25-300	2511190
FL10-150ST	2518510
FL10-200ST	2518550
FL10-250ST	2518590
FL16-150ST	2518870
FL16-200ST	2518910
FL16-250ST	2518950
FL16-320ST	2518990
FL16-350ST	2519030
FL16-420ST	2519070
FL16-570ST	2519150
FL16-660ST	2519170
FL25-150ST	2519530
FL25-200ST	2519570
FL25-250ST	2519610
FL25-300ST	2519690
G80X2.4	3041700
G80X2.4N	3041701
G80X2.4/M	3041702
G80X2.4N/M	3041703
G90X2.4	3041705
G90X2.4N	3041706
G90X2.4 VO	3041709
G100X2.5	3041710
G100X2.5N	3041711
G100X2.5/M	3041712
G100X2.5/M VO	3041714
G100X2.5N/M	3041713
G120X2.5	3041715
G120X2.5N	3041716
G140X2.5	3041720
G140X2.5N	3041721
G140X2.5/M	3041722
G140X2.5/M VO	3041724
G140X2.5N/M	3041723
G160X2.5	3041725
G160X2.5N	3041726
G160X2.5/M	3041727
G160X2.5N/M	3041728
G200X2.5	3041730
G200X2.5N	3041731
G200X2.5/M	3041732
G200X2.5/M VO	3041734
G200X2.5N/M	3041733
G250X2.8	3041735
G250X2.8N	3041736
G300X2.8	3041740
G300X2.8N	3041741

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G120X3.6	3041745
G120X3.6N	3041746
G140X3.6	3041750
G140X3.6N	3041751
G140X3.6/M	3041753
G140X3.6N/M	3041752
G150X3.6	3041755
G150X3.6N	3041756
G150X3.6 VO	3041759
G180X3.6	3041760
G180X3.6N	3041761
G200X3.6	3041765
G200X3.6N	3041766
G200X3.6/M	3041767
G200X3.6N/M	3041768
G250X3.6	3041770
G250X3.6N	3041771
G300X3.6	3041775
G300X3.6N	3041776
G300X3.6/M	3041777
G300X3.6N/M	3041778
G370X3.6	3041780
G370X3.6N	3041781
G120X4.8	3041785
G120X4.8N	3041786
G160X4.8	3041790
G160X4.8N	3041791
G190X4.8	3041795
G190X4.8N	3041796
G190X4.8/M	3041797
G190X4.8N/M	3041798
G200X4.8	3041800
G200X4.8N	3041801
G200X4.8/M	3041802
G200X4.8/M VO	3041804
G200X4.8N/M	3041803
G250X4.8	3041805
G250X4.8N	3041806
G250X4.8/M	3041807
G250X4.8N/M	3041808
G280X4.8	3041810
G280X4.8N	3041811
G300X4.8	3041815
G300X4.8N	3041816
G370X4.8	3041820
G370X4.8 VO	3041824
G370X4.8N	3041821
G390X4.8	3041825
G390X4.8N	3041826
G430X4.8	3041830
G430X4.8 VO	3041834
G430X4.8N	3041831
G450X4.8	3041835
G450X4.8N	3041836
G530X4.8	3041840
G530X4.8N	3041841
G150X7.6	3041845
G150X7.6N	3041846
G200X7.6	3041850
G200X7.6N	3041851
G250X7.6	3041855
G250X7.6N	3041856
G300X7.6	3041860
G300X7.6N	3041861
G370X7.6	3041865
G370X7.6N	3041866
G430X7.6	3041870
G430X7.6N	3041871
G530X7.6	3041875
G530X7.6N	3041876
G430X9.0	3041880
G430X9.0N	3041881
G530X9.0	3041885
G530X9.0N	3041886
G710X9.0	3041890
G710X9.0N	3041891
G710X9.0 VO	3041894
G780X9.0	3041895
G780X9.0N	3041896
G830X9.0	3041900
G830X9.0N	3041901
G920X9.0	3041905
G920X9.0N	3041906
G1020X9.0	3041910
G1020X9.0N	3041911
G1220X9.0	3041915
G1220X9.0N	3041916

Ref.	Code
G230X12.6	3041920
G230X12.6N	3041921
G380X12.6	3041925
G380X12.6N	3041926
G480X12.6	3041930
G480X12.6N	3041931
G580X12.6	3041935
G580X12.6N	3041936
G730X12.6	3041940
G730X12.6N	3041941
G880X12.6	3041945
G880X12.6N	3041946
G1030X12.6	3041950
G1030X12.6N	3041951
GA-3	2598429
GFHT112X2.5	3042805
GFH100X2.5	3042810
GH8	3041550
GK-F608	2145500
GK-F608P	2145502
GKF-M608	2055672
GKY-M3.5	2145982
GKY-M4	2145985
GKY-M5	2145988
GKY-M6	2145991
GKY-M8	2145994
GKY-M10	2145997
GKY-M12	2146000
GKY-M14	2146003
GKY-M16	2146006
GKY-P14	2146040
GKY-PP12	2146045
GKY-PP17	2146047
GKY-PPL46	2146055
GKY-U3.5	2146020
GKY-U4	2146023
GKY-U5	2146026
GKY-U6	2146029
GKY-U8	2146032
GP-M10	2046645
GP-M10/1	2046646
GP-M12	2046650
GP-M14	2046655
GP-M16	2046660
GP-M3	2046610
GP-M3.5	2046615
GP-M4	2046620
GP-M5	2046625
GP-M6	2046630
GP-M6/1	2046631
GP-M7	2046635
GP-M8	2046640
GP-M8/1	2046641
GP-P10	2046715
GP-P12	2046720
GP-P14	2046725
GP-PP12	2046740
GP-PP17	2046750
GP-PPL46	2046755
GP-U10	2046865
GP-U10/1	2046866
GP-U12	2046870
GP-U14	2046875
GP-U16	2046880
GP-U3.5	2046825
GP-U4	2046830
GP-U5	2046845
GP-U6	2046855
GP-U8	2046860
GR100X7.6N	3042620
GR120X7.6N	3042625
GR150X7.6N	3042630
GR200X7.6N	3042635
GR250X7.6N	3042640
GR300X7.6N	3042645
GR370X7.6N	3042650
GX200X4.5	3042245
GX300X4.5	3042250
GX370X4.5	3042255
GX370X7.9	3042260
GX520X4.5	3042257
GX680X7.9	3042265
GX1020X7.9	3042270
HB2	2591308
HB40-U	8060035
HB5	2591318
HB6	2591285

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HB7	2591310
HB8	2591284
HB9	2591336
HB10	2591337
HB11	2591343
HB12N	2591345
HB13UE	2591347
HF1	2590900
HF2	2590905
HN1	2590300
HN5	2590291
HNA25	2590401
HNCS4	2590024
HND25	2590403
HNKE4	2590299
HNKE16	2590329
HNKE50	2590342
HNN3	2590296
HNN4	2590292
HP1	2590500
HP3	2590531
HP4-B	2590032
HP4-C10	2590040
HP4-G	2590033
HP4-R	2590031
HPH-1	2590029
HT-TC026Y	2591408
HT-TC041	2591426
HT-TC051Y	2591475
HT-TC055	2591445
HT-TC065	2591477
HT-TC0851	2591496
HT120	2610420
HT120-KV	2610430
HT131-C	2610416
HT131-UC	2610436
HT131LN-C	2610419
HT45-E	2650040
HT51	2670610
HT51-KV	2670611
HT51L	2670604
HT51L-KV	2670605
HT81-U	2600036
HWE-1	8420010
HX1	2590298
IDT	2590920
IT6	8420016
KE0.75-1	2591050
KE10-1	2591049
KE1016ST	2803150
KE106ST	2802310
KE110ST	2802390
KE1508ST	2802510
KE1510ST	2802550
KE16-15	2599861
KE1616ST	2803190
KE1A-3	2598430
KE2.5-1	2591048
KE2.5A-3	2598432
KE25012ST	2803450
KE25018ST	2803460
KE2508ST	2802670
KE2510ST	2802710
KE35-15	2599862
KE35012ST	2803470
KE35018ST	2803480
KE4-15	2599860
KE410ST	2802870
KE412ST	2802910
KE506ST	2802030
KE508ST	2802070
KE610ST	2802990
KE612ST	2803030
KE616ST	2803070
KE7506ST	2802110
KE7508ST	2802150
KIT HWE1	8420012
KIT TRD-9.4C	2685015
KIT TRD-M11C	2685016
KT1	2591319
KT2	2591320
KT3	2591275
KT4	2591277
KT5	2591279
KTS1632	2590700
L03-M	2480020
L03-P	2485010

Ref.	Code
L06-M	2480050
L06-P	2485040
L10-M	2480330
L10-P	2485270
L100-M	2480930
L120-M	2481010
L14-M	2480410
L14-P	2485350
L160-M	2481050
L19-M	2480490
L19-P	2485430
L1-M	2480090
L1-P	2485070
L200-M	2481090
L24-M	2480570
L24-P	2485510
L2-M	2480130
L2-P	2485100
L30-M	2480650
L30-P	2485590
L37-M	2480730
L37-P	2485670
L3-M	2480170
L3-P	2485130
L48-M	2480810
L48-P	2485680
L5-M	2480210
L5-P	2485160
L60-M	2480850
L60-P	2485690
L7-M	2480250
L7-P	2485190
L80-M	2480890
M108-520	2648752
M108-C	2611860
M108.215-U	2603723
M110-520	2648754
M113	2651130
M113-50	2675855
M113-C	2611870
M113.173-U	2603730
M118	2651150
M118-50	2675860
M118-C	2611910
M118.158-U	2603725
M140	2651170
M140-50	2675870
M140-C	2612010
M140.190-U	2603800
M145-520	2648770
M158	2651200
M158-50	2675880
M158-C	2612130
M160-520	2648771
M173	2651210
M173-50	2675890
M173-C	2612230
M173L-C	2612240
M190-50	2675900
M190-520	2648772
M190-C	2612330
M208-C	2612420
M208-U	2603780
M215-50	2675910
M215-520	2648773
M215-C	2612490
M220-520	2648774
M232-C	2612590
M255-520	2648776
M295-520	2648780
M320-C	2612990
M340-520	2648784
M440-520	2648840
M540-520	2648910
M70	2651090
M70-50	2675800
M70-C	2611590
M70.140-U	2603710
M75	2651100
M75-50	2675805
M75-C	2611650
M75.96-U	2603715
M96	2651110
M96-50	2675850
M96-C	2611800
MA03/3-15	2599870
MA1	2650110

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MA1-50	2675658
MA10	2650190
MA10-50	2675666
MA10-C	2610860
MA10.19-U	2600290
MA100-3D	2631790
MA100-520	2645690
MA12-50	2675668
MA12-C	2610870
MA12.20-U	2600310
MA120-3D	2631810
MA120-520	2645711
MA14-50	2675670
MA14-C	2610880
MA160-520	2645731
MA17-50	2675672
MA17-C	2610890
MA19-50	2675674
MA19-C	2610900
MA19-U	2600320
MA2-C	2610810
MA2.3	2650130
MA2.3-50	2675660
MA20-50	2675675
MA20-C	2610910
MA200-520	2645750
MA24-50	2675676
MA24-C	2610920
MA24-U	2600330
MA29-C	2610930
MA29.80-U	2600360
MA3-C	2610820
MA3.5-U	2600210
MA30-80-U	2600380
MA30-C	2610940
MA35-C	2610950
MA35-U	2600390
MA37-C	2610960
MA37-U	2600410
MA40-C	2610970
MA40-U	2600430
MA48-C	2610980
MA48-U	2600450
MA5	2650150
MA5-50	2675662
MA5-C	2610830
MA60-C	2610990
MA7	2650170
MA7-50	2675664
MA7-C	2610840
MA7.14-U	2600250
MA80-3D	2631770
MA80-520	2645671
MA9	2650180
MA9-50	2675665
MA9-C	2610850
MA9.17-U	2600270
MB2-80U	2604350
MB3-80U	2604400
MC0	2650490
MC0-U	2603510
MC02-U	2603550
MC10	2650530
MC10-50	2675610
MC10-C	2611100
MC10-U	2600610
MC185-3D	2632030
MC185-C	2611150
MC2	2650500
MC240-3D	2632035
MC25	2650550
MC25-50	2675620
MC25-C	2611110
MC25-U	2600650
MC3	8420018
MC35	2650570
MC35-50	2675630
MC35-C	2611120
MC35-U	2600690
MC4	8420019
MC6	2650510
MC6-50	2675605
MC6.25-U	2600630
MC70-3D	2632010
MC70-50	2675640
MC70-80U	2600720
MC70-C	2611130

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MC95-3D	2632020
MC95-80U	2600730
MC95-C	2611140
MCCC16-C	2617050
MCCC25-C	2617070
MCCC35-C	2617090
MCCC50-C	2617110
ME03/2-15	2599875
ME1	2652010
ME1-50	2676005
ME10	2652130
ME10-50	2676060
ME10-C	2614211
ME10.24-U	2604830
ME10.14-C	2614212
ME100-520	2648552
ME120-520	2648554
ME14.16-C	2614216
ME160-520	2648556
ME200-520	2648558
ME30.23-C	2614228
ME5S.15.3-C	2614206
ME7.12-C	2614208
ME80-520	2648550
ME100-3D	2634940
ME12	2652150
ME12-50	2676070
ME12-C	2614213
ME12.17-U	2604850
ME120-3D	2634950
ME14	2652170
ME14-50	2676080
ME14-C	2614215
ME17	2652190
ME17-50	2676090
ME17-C	2614217
ME19	2652210
ME19-50	2676100
ME19-C	2614219
ME2	2652030
ME2/3-15	2599876
ME2-50	2676010
ME2-C	2614201
ME2.19-U	2604750
ME20	2652230
ME20-50	2676110
ME20-C	2614221
ME200-520	2648558
ME24	2652250
ME24L	2652251
ME24-50	2676120
ME24L-50	2676121
ME24-C	2614223
ME29	2652260
ME29-50	2676130
ME29-C	2614225
ME29-U	2604870
ME3	2652050
ME3-50	2676020
ME3-C	2614203
ME3.14-U	2604770
ME30	2652270
ME30L	2652271
ME30-50	2676140
ME30L-50	2676141
ME30-C	2614227
ME30-U	2604890
ME35-50	2676150
ME35-C	2614229
ME35-U	2604910
ME37-50	2676160
ME37-C	2614231
ME37-U	2604930
ME40-50	2676165
ME40-C	2614233
ME40-U	2604950
ME48-50	2676170
ME48-C	2614235
ME48-U	2604970
ME5	2652070
ME5-50	2676030
ME5-C	2614205
ME5.7-U	2604790
ME60-C	2614237
ME7	2652090
ME7-50	2676040
ME7-C	2614207

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ME80-3D	2634930
ME80-C	2614239
ME80-520	2648550
ME9	2652110
ME9-50	2676050
ME9-C	2614209
ME9.20-U	2604810
MFB13-40	2598040
MFB50-63	2598045
MH10/16-15	2599886
MK17S-C	2614307
MK14-3D	2634781
MK16-3D	2634783
MK18-3D	2634785
MK20-3D	2634786
MK22-3D	2634787
MK25-3D	2634788
MK28-3D	2634790
MK32-3D	2634800
MK34-3D	2634810
MK38-3D	2634830
MK42-3D	2634850
MK44-3D	2634870
MK46-3D	2634880
MK5/8-15	2599890
MK5	2651575
MK6	2651580
MK8	2651610
MK10	2651640
MK12	2651670
MK14	2651700
MK16	2651730
MK16B	2651740
MK18	2651750
MK18B	2651760
MK20	2651770
MK5-50	2675360
MK6-50	2675370
MK8-50	2675390
MK10-50	2675410
MK12-50	2675430
MK14-50	2675450
MK15-50	2675460
MK16-50	2675470
MK16B-50	2675471
MK18-50	2675490
MK18B-50	2675491
MK20-50	2675510
MK21B-50	2675525
MK22-50	2675530
MK22L	2651791
MK22L-50	2675534
MK23-50	2675540
MK25-50	2675550
MK28-50	2675560
MK28B-50	2675561
MK28-60	2671460
MK6-C	2614250
MK8-C	2614260
MK10-C	2614270
MK12-C	2614280
MK14-C	2614290
MK16-C	2614300
MK17-C	2614305
MK18-C	2614310
MK20-C	2614320
MK21-C	2614325
MK22-C	2614330
MK23-C	2614335
MK25-C	2614340
MK28-C	2614350
MK32-C	2614360
MK34-C	2614370
MK34L-C	2614371
MLL1	2590802
MLL90	2590812
MLS1	2590805
MLS2	2590807
MMT200-50	2676388
MMT200-C	2611190
MMT200-U	2601170
MMT25-50	2676380
MMT25-C	2611160
MMT25-U	2601050
MMT315-C	2611200
MMT50-50	2676382
MMT50-C	2611170

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MMT50-U	2601090
MMT95-50	2676384
MMT95-C	2611180
MMT95-U	2601130
MN10-C	2610560
MN10RF-50	2676250
MN10RF-C	2610768
MN12-C	2610570
MN12F-50	2676260
MN12F-C	2610770
MN14-C	2610580
MN14RF-50	2676270
MN14RF-C	2610772
MN17-C	2610591
MN17F-50	2676280
MN17F-C	2610774
MN19-C	2610600
MN19RF-50	2676285
MN19RF-C	2610776
MN2-C	2610511
MN20-C	2610610
MN20F-50	2676290
MN20F-C	2610778
MN24-C	2610620
MN24RF-50	2676295
MN24RF-C	2610780
MN29-C	2610625
MN29F-C	2610782
MN2RF-50	2676210
MN2RF-C	2610760
MN3-C	2610520
MN30-C	2610630
MN30RF-C	2610784
MN35-C	2610635
MN35F-C	2610786
MN37-C	2610640
MN37RF-C	2610788
MN3RF-50	2676220
MN3RF-C	2610762
MN48-C	2610650
MN48RF-C	2610790
MN5-C	2610530
MN5RF-50	2676230
MN5RF-C	2610764
MN60-C	2610660
MN7-C	2610540
MN7RF-50	2676240
MN7RF-C	2610766
MN80-3D	2631450
MN9-C	2610551
MP608	3031810
MP608/45	3031815
MP608/90	3031820
MP608D	3031830
MPC1	2595201
MPC2	2595203
MPC4	2595208
MPC7	2595221
MQ10-50	2675010
MQ16-50	2675013
MQ25-50	2675016
MQ35-50	2675019
MQ50-50	2675021
MQ70-50	2675024
MQM10-C	2610661
MQM16-C	2610662
MQM25-C	2610663
MQM35-C	2610664
MQM50-C	2610665
MQM70-C	2610666
MQM95-C	2610667
MQM120-C	2610668
MQM150-C	2610669
MQM185-C	2610670
MQM240-C	2610671
MQS16-C	2610752
MQS35-C	2610753
MQS70-C	2610754
MQS150-C	2610755
MQS240-C	2610756
MS4/10-15	2599880
MS10/16-15	2599881
MT-FC48N	2685903
MT150R-C12	2545010
MT150R-C16	2545090
MT150R-GC	2541870
MT150R-TD	2540550

Ref.	Code
MT150S-C12	2545310
MT150S-C14-80	2546270
MT150S-C16	2545350
MT150S-GC	2541910
MT150S-TD	2540630
MT200R-C10	2545540
MT200R-C16	2545550
MT200R-GC	2542030
MT200R-TD	2540670
MT240R-C12	2545710
MT240R-C16	2545750
MT240R-GC	2542110
MT240R-TD	2540710
MT25-C8	2543030
MT25-GC	2541570
MT25-TD	2540150
MT315R-C16	2545950
MT315R-GC	2542150
MT315R-TD	2540750
MT315S-C16	2545990
MT315S-GC	2542290
MT315S-TD	2540790
MT400-TD	2540830
MT40S-C10	2543410
MT40S-C14-80	2546070
MT40S-C8	2543400
MT40S-GC	2541610
MT40S-TD	2540190
MT500-TD	2540870
MT50R-C10	2543650
MT50R-C8	2543610
MT50R-GC	2541690
MT50R-TD	2540270
MT50S-C10	2543850
MT50S-C14-80	2546110
MT50S-C8	2543810
MT50S-GC	2541650
MT50S-TD	2540230
MT630-TD	2540890
MT70S-C10	2544050
MT70S-GC	2541730
MT70S-TD	2540350
MT95R-C10	2544290
MT95R-C12	2544330
MT95R-GC	2541770
MT95R-TD	2540390
MT95S-C10	2544530
MT95S-C12	2544570
MT95S-C14-80	2546230
MT95S-GC	2541850
MT95S-TD	2540470
MTA16-C	2770001
MTA25-C	2770020
MTA35-C	2770030
MTA50-C	2770310
MTA70-C	2770550
MTA95-C	2770830
MTA120-C	2771510
MTA150-C	2771710
MTA185-C	2772150
MTA240-C	2773010
MTMA10-GC	2720025
MTMA120-70-GC	2721410
MTMA120-95-GC	2721450
MTMA120-GC	2720272
MTMA150-120-GC	2721630
MTMA150-70-GC	2721550
MTMA150-95-GC	2721590
MTMA150-GC	2720330
MTMA16-10-GC	2720560
MTMA16-GC	2720035
MTMA185-120-GC	2721900
MTMA185-150-GC	2721910
MTMA185-GC	2720360
MTMA240-GC	2720410
MTMA240-150-GC	2722050
MTMA240-185-GC	2722090
MTMA25-10-GC	2720575
MTMA25-16-GC	2720580
MTMA25-GC	2720090
MTMA300-GC	2720430
MTMA35-20-GC	2720135
MTMA35-GC	2720130
MTMA400-240-GC	2722245
MTMA400-300-GC	2722250
MTMA50-25-GC	2720650
MTMA50-35-GC	2720660

Ref.	Code
MTMA50-GC	2720152
MTMA500-GC	2720515
MTMA500-300-GC	2722260
MTMA500-400-GC	2722270
MTMA70-35-GC	2720940
MTMA70-50-GC	2720980
MTMA70-GC	2720195
MTMA95-50-GC	2721030
MTMA95-70-GC	2721070
MTMA95-GC	2720232
MTMA16/1	2720031
MTMA25/1	2720071
MTMA35/1	2720111
MTMA50/1	2720160
MTMA70/1	2720191
MTMA95/1	2720250
MTMA120/1	2720280
MTMA150/1	2720320
MTMA185/1	2720370
MTMA240/1	2720400
MTMAD300/1	2720460
MTMA400/1	2720475
MTMA500-40/1	2720509
MTMA630/1	2720530
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MTMAD300-185-GC	2722160
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MUT9998-C	2613090
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MUT9999-50	2676550
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MV230-630 MC6E	2680870
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MV95	2616160
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MVM230-400 MJ5E	2680910
MVM230-630 MJ6E	2680920
MVM240	2616320
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MY14-50	2677345
MY14-C	2613385
MY16-50	2677350
MY16-C	2613390
MY19-50	2677355
MY19-C	2613395
MY24-50	2677360
MY24L-50	2677362
MY24-C	2613400
MY2-50	2677310
MY2-C	2613350
MY30-50	2677365
MY30L-50	2677366
MY30-C	2613405
MY3-50	2677315
MY36-50	2677370
MY36-C	2613410
MY37-50	2677375
MY37-C	2613415
MY3-C	2613355
MY4-50	2677320
MY48-50	2677380
MY48-C	2613420
MY4-C	2613360
MY5-50	2677325
MY5-C	2613365
MY60-C	2613425
MY6-50	2677330
MY6-C	2613370
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PA120-3D	2631950
PA120-520	2645600
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PA200-520	2645610
PA24-50	2675696
PA24-C	2611020
PA48-C	2611030
PA5	2650250
PA5-50	2675682
PA60-C	2611040
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PG-1	2591047
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PKC7508	2809370
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PKE25022	2809240
PKE2508	2809130
PKE2512	2809135
PKE2518	2809140
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PKE410	2809152
PKE412	2809155
PKE418	2809160
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PKE612	2809170
PKE618	2809180
PKE7508	2809070
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PL06-P	2053860
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PM35A	2730510
PM54-25A	2730110
PM70-35A	2730190
PM70-50A	2730230
PM70A	2730590
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PN37-C	2610730
PN48-C	2610740
PN60-C	2610750
PN7-C	2610700
PN80-3D	2631460
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PNB-3N5	2591096
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PNB-3P1	2591084
PNB-3PD	2591091
PNB-4KE	2591251
PNB-6KE	2591260
PNB-6KE-T	2591262
PNB-7KE	2591268
PNB-7KE-T	2591270
PO7000	2595904
PR-1	2591045
PRCH	2696113
PS130-150/E	2616371
PS130-240/E	2616381
PS130-35/E	2616351
PS130-95/E	2616361
PS230-400 5E	2680186
PS230-630 6E	2680189
PV-1	2591044
Q10-5	2167010
Q10-6	2167015
Q10-8	2167020
Q10-10	2167025
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Q16-6	2167085
Q16-8	2167090
Q16-10	2167095

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Q35-10	2167240
Q35-12	2167245
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Q50-8	2167315
Q50-10	2167320
Q50-12	2167325
Q50-16	2167330
Q70-6	2167390
Q70-8	2167395
Q70-10	2167400
Q70-12	2167405
Q70-16	2167410
Q95-8	2167470
Q95-10	2167475
Q95-12	2167480
Q95-16	2167485
Q120-8	2167540
Q120-10	2167545
Q120-12	2167550
Q120-16	2167555
Q150-10	2167610
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Q150-16	2167620
Q185-10	2167680
Q185-12	2167685
Q185-16	2167690
Q240-10	2167750
Q240-12	2167755
Q240-16	2167760
Q38-F	2593861
Q38-M	2593859
Q38-MS	2593860
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RBY-15	2599852
RB 38M	8502020
RB 38F	8502021
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RD120SS	2685624
RD138X138	2685670
RD15.5SS	2685560
RD15.5SS-FC	2685550
RD16.2SS	2685562
RD16.2SS-FC	2685552
RD17.5SS	2685564
RD17.5SS-FC	2685554
RD18.8SS	2685566
RD18.8SS-FC	2685556
RD18X46	2685654
RD19.1SS	2685568
RD20.5SS	2685570
RD21X21	2685650
RD22.6SS	2685572
RD22X46	2685656
RD23.8SS	2685574
RD25.4SS	2685576
RD27SS	2685578
RD28.5SS	2685580
RD30.5SS	2685582
RD28.5SS-19	2685584
RD30.5SS-19	2685586
RD31.8SS	2685588
RD32.5SS	2685590
RD34.6SS	2685592
RD36X46	2685658
RD37.2SS	2685594
RD38.1SS	2685596
RD40.5SS	2685598
RD41.3SS	2685600
RD42.5SS	2685602
RD43.2SS	2685604
RD43.2SS-FC	2685630
RD44.5SS	2685606
RD44.5SS-FC	2685632
RD46X107	2685652
RD46X46	2685660
RD46X54	2685662

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RD47.2SS-FC	2685634
RD50.5SS	2685610
RD54.2SS	2685612
RD60SS	2685614
RD64SS	2685616
RD65SS	2685618
RD68X68	2685666
RD76SS	2685620
RD80.5SS	2685622
RD92X92	2685668
RH50	2670050
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RHC131LN	2619021
RH-FC48N	2592596
RH-FL75	2592597
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RHT160-60N	2592584
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RHTD3241	2682502
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RHU520	2640151
RHU600	2640250
RHU1000	2640810
RHU81	2600045
RKF-BF4	2051632
RKF-BM4	2051662
RKF-F305	2051562
RKF-F308	2051582
RKF-F405	2051602
RKF-F405P	2051607
RKF-F408	2051592
RKF-F408P	2051597
RKF-F608	2051612
RKF-F608P	2051622
RKF-FM608	2051692
RKF-M608	2051652
RKY-M3	2145684
RKY-M3.5	2145685
RKY-M3.5/1	2145687
RKY-M4	2145690
RKY-M5	2145699
RKY-M6/1	2145705
RKY-M8	2145711
RKY-M10	2145715
RKY-M12	2145718
RKY-P8	2145782
RKY-P10	2145783
RKY-P12	2145784
RKY-PP12	2145790
RKY-PP12/19	2145792
RKY-PP16/23	2145793
RKY-PPL30	2145795
RKY-PPL46	2145798
RKY-U3	2145730
RKY-U3.5	2145733
RKY-U4	2145736
RKY-U5	2145739
RKY-U6	2145742
RKY-U6/1	2145743
RKF-F608	2051612
RN-BS	2469710
RN-FA305	3031610
RN-FA405	3031615
RN-FA608	3031620
RN-MA305	3031710
RN-MA405	3031715
RN-MA608	3031720
RPF-110FD	2058470
RPF-110FIFD	2058480
RPF-111FD	2058450
RPF-111FIFD	2058460
RPF-187FD	2058510
RPF-187FIFD	2058520
RPF-188FD	2058490
RPF-188FIFD	2058500
RPF-250FD	2058530
RPF-250FIFD	2058540
RPF-250FIMD	2058560
RPF-250MD	2058550
RPF-250PD	2058570
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RPF-BM5/32	2058600
RP-M10	2046045

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RP-M12	2046050
RP-M2	2046005
RP-M3	2046010
RP-M3.5	2046015
RP-M3.5/1	2046016
RP-M4	2046020
RP-M4/3	2046023
RP-M5	2046025
RP-M6	2046030
RP-M6/1	2046031
RP-M7	2046035
RP-M8	2046040
RP-P10	2046115
RP-P12	2046120
RP-P8	2046110
RP-PP12	2046140
RP-PP12/1	2046145
RP-PP12/19	2046150
RP-PP12/23	2046155
RP-PP14	2046160
RP-PP16/23	2046165
RP-PPL30	2046180
RP-PPL46	2046185
RP-U10	2046265
RP-U12	2046270
RP-U3	2046210
RP-U3.5	2046215
RP-U3.5/2	2046217
RP-U4	2046230
RP-U4/1	2046231
RP-U4/2	2046240
RP-U5	2046245
RP-U5/1	2046246
RP-U6	2046255
RP-U6/1	2046256
RP-U8	2046260
RS0305.07	3008006
RS0407.M12	3008050
RS0507.09	3008008
RS0509.M16	3008052
RS0710.11	3008010
RS0813.M20	3008054
RS1014.16	3008012
RS1117.M25	3008056
RS1420.21	3008014
RS1520.M32	3008058
RS1928.M40	3008060
RS2026.29	3008016
RS2635.36	3008018
RS2735.M50	3008062
RT10.5	2592470
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RT17	2592530
RT19	2592530
RT6.5	2592430
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RV-BS	2058620
RVF-BL12	2058350
RVF-BL12-3/32	2058380
RVF-BL14	2058390
RVF-BL16-3/32	2058400
RVF-F10	2058230
RVF-F12	2058290
RVF-F14	2058250
RVF-F38	2058280
RVF-F4	2058160
RVF-F516	2058270
RVF-F6	2058190
RVF-F8	2058200
RVF-HBL30	2058420
RVF-HBL46	2058430
RVF-P10	2058330
RVF-P12	2058340
RVF-P8	2058320
RVF-R10	2058070
RVF-R12	2058130
RVF-R14	2058080
RVF-R38	2058120
RVF-R4	2058020
RVF-R516	2058110
RVF-R6	2058030
RVF-R8	2058050
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S1.5-M3	2160030
S1.5-M3.5	2160070
S1.5-M3.5/1	2160110

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S1.5-M5	2160190
S1.5-M6	2160230
S1.5-M6/1	2160270
S1.5-M7	2160310
S1.5-M8	2160350
S1.5-P10	2161190
S1.5-P12	2161230
S1.5-P8	2161150
S1.5-PP12	2161310
S1.5-PP12/1	2161330
S1.5-PP12/19	2161350
S1.5-PP14	2161360
S1.5-U10	2160950
S1.5-U12	2160990
S1.5-U3	2160630
S1.5-U3.5	2160670
S1.5-U3.5/2	2160682
S1.5-U4	2160710
S1.5-U4/1	2160730
S1.5-U4/2	2160750
S1.5-U5	2160790
S1.5-U5/1	2160800
S1.5-U6	2160830
S1.5-U6/1	2160870
S1.5-U8	2160910
S2.5-M10	2162170
S2.5-M12	2162210
S2.5-M3	2161810
S2.5-M3.5	2161850
S2.5-M3.5/1	2161890
S2.5-M4	2161930
S2.5-M5	2161970
S2.5-M6	2162010
S2.5-M6/1	2162050
S2.5-M7	2162090
S2.5-M8	2162130
S2.5-P10	2163050
S2.5-P12	2163090
S2.5-P8	2163010
S2.5-PP12	2163170
S2.5-PP12/25	2163210
S2.5-PP16/25	2163250
S2.5-U10	2162730
S2.5-U12	2162770
S2.5-U3	2162410
S2.5-U3.5	2162450
S2.5-U3.5/1	2162460
S2.5-U4	2162490
S2.5-U4/1	2162510
S2.5-U4/2	2162530
S2.5-U5	2162570
S2.5-U6	2162610
S2.5-U6/1	2162650
S2.5-U8	2162690
S6-M10	2163830
S6-M10/1	2163850
S6-M12	2163890
S6-M14	2163930
S6-M16	2163970
S6-M3	2163510
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S6-M4	2163590
S6-M5	2163630
S6-M6	2163670
S6-M6/1	2163710
S6-M7	2163750
S6-M8	2163790
S6-M8/1	2163800
S6-P10	2164710
S6-P12	2164750
S6-P14	2164790
S6-PP12	2164830
S6-PP17	2164870
S6-U10	2164370
S6-U10/1	2164390
S6-U12	2164430
S6-U14	2164470
S6-U16	2164510
S6-U3.5	2164170
S6-U4	2164210
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SC3X	2591264

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SS4.8-4.5	3041672
SS9-4.5	3041675
SS9-5	3041677
SS9-6.4	3041679
SUB-D050	8420033
SUB-D075	8420032
TBS16X20RE	2811035
TBS24X20RE	2811037
TBS32X10RE	2811039
TBS48X10RE	2811041
TBS64X10RE	2811043
TBS95X10RE	2811045
TBS127X10RE	2811047
TBS190X5RE	2811049
TBS254X5RE	2811051
TBS16X20BK	2811110
TBS24X20BK	2811112
TBS32X10BK	2811114
TBS48X10BK	2811116
TBS64X10BK	2811118
TBS95X10BK	2811120
TBS127X10BK	2811122
TBS190X5BK	2811124
TBS254X5BK	2811126
TBS16X20Y/G	2811160
TBS24X20Y/G	2811162
TBS32X10Y/G	2811164
TBS48X10Y/G	2811166
TBS64X10Y/G	2811168
TBS95X10Y/G	2811170
TBS127X10Y/G	2811172
TBS190X5Y/G	2811174
TBS254X5Y/G	2811176
TBS16X20BU	2811185
TBS24X20BU	2811187
TBS32X10BU	2811189
TBS48X10BU	2811191
TBS64X10BU	2811193
TBS95X10BU	2811195
TBS127X10BU	2811197
TBS190X5BU	2811199
TBS254X5BU	2811201
TC025	2591895
TC04	2591396
TC050Y	2597056
TC055	2591860
TC085	2597150
TC096	2597360
TC120	2597250
TCP10	3019220
TCP12	3019225
TCP15	3019230
TCP18	3019235
TCP20	3019240
TCP25	3019250
TCP30	3019260
TCP35	3019270
TCP40	3019280
TCP45	3019290
TCP5	3019210
TCP50	3019300
TCP55	3019305
TCP60	3019310
TCP65	3019315
TCP70	3019320
TCS12X200BK	2811312
TCS16X200BK	2811314
TCS24X200BK	2811316
TCS32X200BK	2811318
TCS48X100BK	2811320
TCS64X100BK	2811322
TCS95X100BK	2811324
TCS127X100BK	2811326
TCS160X100BK	2811328
TCS190X100BK	2811330
TCS254X50BK	2811332
TCS320X50BK	2811334
TCS381X50BK	2811336
TCS508X25BK	2811338
TCS762X25BK	2811340
TCS1016X25BK	2811342
TCS1260X25BK	2811344
TCS1500X25BK	2811346
TCS16X200YE	2811352

Ref.	Code
TCS24X200YE	2811354
TCS32X200YE	2811356
TCS48X100YE	2811358
TCS64X100YE	2811360
TCS95X100YE	2811362
TCS127X100YE	2811364
TCS190X100YE	2811366
TCS254X50YE	2811368
TCS16X200GN	2811390
TCS24X200GN	2811392
TCS32X200GN	2811394
TCS48X100GN	2811396
TCS64X100GN	2811398
TCS95X100GN	2811400
TCS127X100GN	2811402
TCS190X100GN	2811404
TCS254X50GN	2811406
TCS16X200BU	2811420
TCS24X200BU	2811422
TCS32X200BU	2811424
TCS48X100BU	2811426
TCS64X100BU	2811428
TCS95X100BU	2811430
TCS127X100BU	2811432
TCS190X100BU	2811434
TCS254X50BU	2811436
TCS16X200RE	2811450
TCS24X200RE	2811452
TCS32X200RE	2811454
TCS48X100RE	2811456
TCS64X100RE	2811458
TCS95X100RE	2811460
TCS127X100RE	2811462
TCS190X100RE	2811464
TCS254X50RE	2811466
TCS16X200WH	2811480
TCS24X200WH	2811482
TCS32X200WH	2811484
TCS48X100WH	2811486
TCS64X100WH	2811488
TCS95X100WH	2811490
TCS127X100WH	2811492
TCS190X100WH	2811494
TCS254X50WH	2811496
TCS32X200Y/G	2811515
TCS48X100Y/G	2811517
TCS64X100Y/G	2811519
TCS95X100Y/G	2811521
TCS127X100Y/G	2811523
TCS190X100Y/G	2811525
TCS254X50Y/G	2811527
TCS381X50Y/G	2811511
TCS508X25Y/G	2811513
TD-M16C	2685010
TF300-Q38F	2592862
TF300-Q38FM	2592863
TF600-Q38FM	2592981
TGM38	3016155
TGM48	3016157
TGM513	3016165
TGM58	3016159
TGM613	3016167
TGM713	3016169
TGM817	3016171
TN120SEY	2590282
TN70SEY	2590262
TND6-70	2590120
TND10-120	2590145
TNN120	2590290
TNN70	2590240
TRS-B70	2593280
TSS24BK	2811650
TSS32BK	2811652
TSS48BK	2811654
TSS64BK	2811656
TSS95BK	2811658
TSS127BK	2811660
TSS190BK	2811662
TSS254BK	2811664
TSS380BK	2811666
TSS510BK	2811668
TSS24RE	2811680
TSS32RE	2811682
TSS48RE	2811684
TSS64RE	2811686
TSS95RE	2811688
TSS127RE	2811690

Ref.	Code
TSS190RE	2811692
TSS254RE	2811694
TSS380RE	2811696
TSS510RE	2811698
TSS24WH	2811710
TSS32WH	2811712
TSS48WH	2811714
TSS64WH	2811716
TSS95WH	2811718
TSS127WH	2811720
TSS190WH	2811722
TSS254WH	2811724
TSS380WH	2811726
TSS510WH	2811728
TSS24BU	2811740
TSS32BU	2811742
TSS48BU	2811744
TSS64BU	2811746
TSS95BU	2811748
TSS127BU	2811750
TSS190BU	2811752
TSS254BU	2811754
TSS380BU	2811756
TSS510BU	2811758
TSS24TR	2811770
TSS32TR	2811772
TSS48TR	2811774
TSS64TR	2811776
TSS95TR	2811778
TSS127TR	2811780
TSS190TR	2811782
TSS254TR	2811784
TSS380TR	2811786
TSS510TR	2811788
TSS24YE	2811800
TSS32YE	2811802
TSS48YE	2811804
TSS64YE	2811806
TSS95YE	2811808
TSS127YE	2811810
TSS190YE	2811812
TSS254YE	2811814
TSS380YE	2811816
TSS510YE	2811818
TSS24GN	2811831
TSS32GN	2811833
TSS48GN	2811835
TSS64GN	2811837
TSS95GN	2811839
TSS127GN	2811841
TSS190GN	2811843
TSS254GN	2811845
TSS380GN	2811847
TSS510GN	2811849
TSS24GY	2811861
TSS32GY	2811863
TSS48GY	2811865
TSS64GY	2811867
TSS95GY	2811869
TSS127GY	2811871
TSS190GY	2811873
TSS254GY	2811875
TSS380GY	2811877
TSS510GY	2811879
TSS24BR	2811890
TSS32BR	2811892
TSS48BR	2811894
TSS64BR	2811896
TSS95BR	2811898
TSS127BR	2811900
TSS190BR	2811902
TSS254BR	2811904
TSS380BR	2811906
TSS510BR	2811908
TSS32Y/G	2811920
TSS48Y/G	2811922
TSS64Y/G	2811924
TSS95Y/G	2811926
TSS127Y/G	2811928
TSS190Y/G	2811930
TSS254Y/G	2811932
TSS380Y/G	2811934
UP130-120	2616520
UP130-150	2616530
UP130-185	2616550
UP130-240	2616560
UP130-50	2616470

Ref.	Code
UP130-70	2616490
UP130-95	2616500
VAL04	2593310
VAL096	2593669
VAL1000	2593426
VAL130	2610450
VAL130-U	2610451
VAL160	2593405
VAL22	2593370
VAL22-3	2593406
VAL22-C	2593402
VAL520	2593410
VAL600	2593425
VAL75	2600110
VALB-TC04	2593705
VALCP096	2593671
VALECW-H3D	2593421
VALMAT520	2593411
VALNR	2874150
VALP1	2590595
VALP1-N	2590600
VALP3	2590610
VALP4	2590612
VALP5	2590614
VALP7	2590616
VALP9	2590619
VALP9-C	2590609
VALP19	2590629
VALP20	2874155
VALP21	2874156
VALP22	2874157
VALP26	2590635
VALP27	2590638
VALP29	2590641
VALP30	2590642
VALSTAR ND2/PKC	2590565
VALSTAR ND2/PKD	2590567
VALSTAR ND2/PKE	2590566
VALSTAR V3-F	2590577
VALTC055	2593325
VALTC085	2593323
VALTC120	2593322
VP-M2	2048010
VP-M3	2048030
VP-M3.5	2048070
VP-M4	2048150
VP-M5	2048190
VP-M6	2048210
VP-P10	2049210
VP-PP12/19	2049370
VP-U3	2048630
VP-U3.5	2048670
VP-U4	2048710
VYNIL BAG 025	8502019
WF6	8420030
WF16	8420015
WF35	8420031
WL03-M	2469780
WL06-M	2469785
WL1-M	2469790
WL3-1/2(4D)	8502077
WL3-1/2(9-1/2D)	8502080
WT2-3D	2636970
XT100	2874440
YN-BS	2469730
YPF-250FD	2059800
YPF-250FIFD	2059810
YPF-250MD	2059820
YV-BS	2059850
YVF-BL12	2059740
YVF-BL17	2059750
YVF-F10	2059600
YVF-F12	2059650
YVF-F14	2059610
YVF-F38	2059630
YVF-F516	2059620
YVF-F58	2059670
YVF-F6	2059580
YVF-F8	2059590
YVF-F916	2059660
YVF-HBL46	2059780
YVF-P10	2059710
YVF-P12	2059720
YVF-P14	2059730
YVF-R10	2059450
YVF-R12	2059530
YVF-R14	2059460

Ref.	Code
YVF-R38	2059510
YVF-R4	2059420
YVF-R516	2059490
YVF-R58	2059550
YVF-R6	2059430
YVF-R8	2059440
YVF-R916	2059540
Z10-1	2845030
Z16-1	2845040
Z16-12	2844156
Z16-12D	2844157
Z16-3	2844115
Z16-3D	2844116
Z16-4	2844130
Z16-4D	2844131
Z16-5N	2844122
Z16-5ND	2844123
Z16-8	2844140
Z16-8D	2844141
Z25-1	2845050
Z25-DP7-100	2845180
Z2.5-1	2845010
Z35-1	2845060
Z35-26D	2844216
Z35-3	2844205
Z35-3D	2844206
Z35-4	2844201
Z35-4D	2844202
Z35-6	2844210
Z35-6D	2844211
Z35-DP14-125	2845210
Z35-DP14B-125	2845212
Z35T-11	2844220
Z35T-11D	2844221
Z50-10D	2844230
Z50-DP12-160	2845220
Z6-1	2845020
Z6-10	2844106
Z6-10D	2844107
Z6-3	2844080
Z6-3D	2844081
Z6-5	2844100
Z6-5D	2844101
Z6-6	2844108
Z6-6D	2844109
ZKE2	2590710
ZKE6-F	2590716
ZKE610	2590718
ZP2	2590760

COMPARISON OF AWG, MCM AND METRIC CONDUCTOR CROSS SECTIONS

AWG comparison to Metric		
AWG	Actual conductor csa mm^2	Comparable metric csa mm^2
27	0,10	
26	0,13	0,14
25	0,16	-
24	0,21	0,2
23	0,26	0,25
22	0,33	0,34
21	0,41	-
20	0,52	0,5
19	0,65	-
18	0,82	0,75
17	1,04	1
16	1,31	-
15	1,65	1,5
14	2,08	-
13	2,63	2,5
12	3,31	-
11	4,15	4
10	5,27	6
9	6,62	-
8	8,35	-
7	10,6	10
6	13,3	-
5	16,8	16
4	21,2	-
3	26,7	25
2	33,6	35
1	42,4	-
1/0	53,4	50
2/0	67,5	70
3/0	85,0	95
4/0	107,2	120

MCM comparison to Metric		
MCM	Actual conductor csa mm^2	Comparable metric csa mm^2
250	127	120
300	152	150
350	177	185
400	203	-
500	253	240
600	304	300
700	355	-
800	405	400
900	456	-
1000	507	500
1250	633	625
1500	760	800
1750	887	-
2000	1010	1000

MAXIMUM DIAMETERS OF CIRCULAR COPPER CONDUCTORS: SOLID, NON COMPACTED STRANDED AND FLEXIBLE

Cross sectional area [mm²]	Conductors in cables for fixed installations		Flexible conductors (Classes 5 and 6) Maximum diameter [mm]
	Solid (Class 1) Maximum diameter [mm]	Stranded (Class 2) Maximum diameter [mm]	
0,5	0,9	1,1	1,1
0,75	1,0	1,2	1,3
1	1,2	1,4	1,5
1,5	1,5	1,7	1,8
2,5	1,9	2,2	2,4
4	2,4	2,7	3,0
6	2,9	3,3	3,9
10	3,7	4,2	5,1
16	4,6	5,3	6,3
25 [a]	5,7	6,6	7,8
35 [a]	6,7	7,9	9,2
50 [a]	7,8	9,1	11,0
70 [a]	9,4	11,0	13,1
95 [a]	11,0	12,9	15,1
120 [a]	12,4	14,5	17,0
150 [a]	13,8	16,2	19,0
185	15,4	18,0	21,0
240	17,6	20,6	24,0
300	19,8	23,1	27,0
400	22,2	26,1	31,0
500	-	29,2	35,0
630	-	33,2	39,0
800	-	37,6	-
1000	-	42,2	-

NOTE The values given for flexible conductors represent both class 5 and class 6 conductors.

[a] Solid copper conductor shaving cross-sectional areas of 25 mm² and above are for particular types of cable, e.g. mineral insulated, and not for general purposes.

MINIMUM AND MAXIMUM DIAMETERS OF STRANDED COMPACTED CIRCULAR COPPER, ALUMINIUM AND ALUMINIUM ALLOY CONDUCTORS

Cross-sectional area [mm²]	Stranded compacted circular conductors (Class 2)	
	Minimum diameter [mm]	Maximum diameter [mm]
10	3,6	4,0
16	4,6	5,2
25	5,6	6,5
35	6,6	7,5
50	7,7	8,6
70	9,3	10,2
95	11,0	12,0
120	12,3	13,5
150	13,7	15,0
185	15,3	16,8
240	17,6	19,2
300	19,7	21,6
400	22,3	24,6
500	25,3	27,6
630	28,7	32,5

NOTES: - The dimensional limits of aluminium conductors with cross-sectional areas above 630 mm² are not given as the compaction technology is not generally estabilished.

- The values are given for compacted copper conductors in the size range 1,5 mm² to 6 mm².

MINIMUM AND MAXIMUM DIAMETERS OF CIRCULAR ALUMINIUM CONDUCTORS

Cross-sectional area [mm²]	Solid conductors (Class 1)	
	Minimum diameter [mm]	Maximum diameter [mm]
10	3,4	3,7
16	4,1	4,6
25	5,2	5,7
35	6,1	6,7
50	7,2	7,8
70	8,7	9,4
95	10,3	11,0
120	11,6	12,4
150	12,9	13,8
185	14,5	15,4
240	16,7	17,6
300	18,8	19,8
400	21,2	22,2
500	24,0	25,1
630	27,3	28,4
800	30,9	32,1
1000	34,8	36,0
1200	37,8	39,0

CLASS 1:

SOLID CONDUCTORS FOR SINGLE-CORE AND MULTICORE CABLES

Nominal cross-sectional [mm²]	Maximum resistance of conductor at 20 °C		
	Circular, annealed copper conductors		Aluminium and aluminium alloy conductors, circular or shaped [c] [ohm/km]
	Plain [ohm/km]	Metal [ohm/km]	
0,5	36	36,7	-
0,75	24,5	24,8	-
1	18,1	18,2	-
1,5	12,1	12,2	-
2,5	7,41	7,56	-
4	4,61	4,70	-
6	3,08	3,11	-
10	1,83	1,84	3,08 [a]
16	1,15	1,16	1,91 [a]
25	0,727 [b]	-	1,20 [a]
35	0,524 [b]	-	0,868 [a]
50	0,387 [b]	-	0,641
70	0,268 [b]	-	0,443
95	0,193 [b]	-	0,320 [d]
120	0,153 [b]	-	0,253 [d]
150	0,124 [b]	-	0,206 [d]
185	0,101 [b]	-	0,164 [d]
240	0,0775 [b]	-	0,125 [d]
300	0,0620 [b]	-	0,100 [d]
400	0,0465 [b]	-	0,0778
500	-	-	0,0605
630	-	-	0,0469
800	-	-	0,0367
1000	-	-	0,0291
1200	-	-	0,0247

[a] *Aluminium conductors 10 mm² to 35 mm² circular only*

[b] *Solid copper conductors having nominal cross-sectional area of 25 mm² and above are for particular types of cable, e.g. mineral insulated, and not for general purposes.*

[c] *For solid aluminium alloy conductors, having the same nominal cross-sectional area as an aluminium conductor, the resistance value given in the table should be multiplied by a factor of 1,162 unless otherwise agreed between the manufacturer and the purchaser.*

[d] *For single core cables, four sectoral shaped conductors may be assembled into a single circular conductor. The maximum resistance of the assembled conductor shall be 25% of that of the individual component conductors.*

CLASS 2:

STRANDED CONDUCTORS FOR SINGLE-CORE AND MULTI-CORE CABLES

Nominal cross-sectional area [mm²]	Minimum number of wires in the conductor						Maximum resistance of conductor at 20 °C		
	Circular		Circular compacted		Shaped		Annealed copper conductor		Aluminium or aluminium alloy conductor [c] [ohm/km]
	Cu	Al	Cu	Al	Cu	Al	Plain wires [ohm/km]	Metal-coated wires [ohm/km]	
0,5	7	-	-	-	-	-	36,0	36,7	-
0,75	7	-	-	-	-	-	24,5	24,8	-
1,0	7	-	-	-	-	-	18,1	18,2	-
1,5	7	-	6	-	-	-	12,1	12,2	-
2,5	7	-	6	-	-	-	7,41	7,56	-
4	7	-	6	-	-	-	4,61	4,70	-
6	7	-	6	-	-	-	3,08	3,11	-
10	7	7	6	6	-	-	1,83	1,84	3,08
16	7	7	6	6	-	-	1,15	1,16	1,91
25	7	7	6	6	6	6	0,727	0,734	1,20
35	7	7	6	6	6	6	0,524	0,529	0,868
50	19	19	6	6	6	6	0,387	0,391	0,641
70	19	19	12	12	12	12	0,268	0,270	0,443
95	19	19	15	15	15	15	0,193	0,195	0,320
120	37	37	18	15	18	15	0,153	0,154	0,253
150	37	37	18	15	18	15	0,124	0,126	0,206
185	37	37	30	30	30	30	0,0991	0,100	0,164
240	61	61	34	30	34	30	0,0754	0,0762	0,125
300	61	61	34	30	34	30	0,0601	0,0607	0,100
400	61	61	53	53	53	53	0,0470	0,0475	0,0778
500	61	61	53	53	53	53	0,0366	0,0369	0,0605
630	91	91	53	53	53	53	0,0283	0,0286	0,0469
800	91	91	53	53	-	-	0,0221	0,0224	0,0367
1000	91	91	53	53	-	-	0,0176	0,0177	0,0291
1200	[b]						0,0151	0,0151	0,0247
1400 [a]	[b]						0,0129	0,0129	0,0212
1600	[b]						0,0113	0,0113	0,0186
1800 [a]	[b]						0,0101	0,0101	0,0165
2000	[b]						0,0090	0,0090	0,0149
2500	[b]						0,0072	0,0072	0,0127

[a] *Non-preferred sizes. Other non-preferred sizes are recognized for some specialized applications but are not within the scope of this standard.*

[b] *The minimum number of wires for these sizes is not specified. These sizes may be constructed from 4, 5 or 6 equal segments (Milliken).*

[c] *For stranded aluminium alloy conductors having the same nominal cross-sectional area as an aluminium conductor the resistance value should be agreed between the manufacturer and the purchaser.*

CLASS 5:

FLEXIBLE COPPER CONDUCTORS FOR SINGLE-CORE AND MULTI-CORE CABLES

Nominal cross-sectional [mm²]	Maximum diameter of wires in conductor [mm]	Maximum resistance of conductor at 20 °C	
		Plain wires [ohm/km]	Metal-coated wires [ohm/km]
0,5	0,21	39,0	40,1
0,75	0,21	26,0	26,7
1,0	0,21	19,5	20,0
1,5	0,26	13,3	13,7
2,5	0,26	7,98	8,21
4	0,31	4,95	5,09
6	0,31	3,30	3,39
10	0,41	1,91	1,95
16	0,41	1,21	1,24
25	0,41	0,780	0,795
35	0,41	0,554	0,565
50	0,41	0,386	0,393
70	0,51	0,272	0,277
95	0,51	0,206	0,210
120	0,51	0,161	0,164
150	0,51	0,129	0,132
185	0,51	0,106	0,108
240	0,51	0,0801	0,0817
300	0,51	0,0641	0,0654
400	0,51	0,0486	0,0495
500	0,61	0,0384	0,0391
630	0,61	0,0287	0,0292

CLASS 6:

FLEXIBLE COPPER CONDUCTORS FOR SINGLE-CORE AND MULTI-CORE CABLES

Nominal cross-sectional [mm²]	Maximum diameter of wires in conductor [mm]	Maximum resistance of conductor at 20 °C	
		Plain wires [ohm/km]	Metal-coated wires [ohm/km]
0,5	0,16	39,0	40,1
0,75	0,16	26,0	26,7
1.0	0,16	19,5	20,0
1,5	0,16	13,3	13,7
2,5	0,16	7,98	8,21
4	0,16	4,95	5,09
6	0,21	3,30	3,39
10	0,21	1,91	1,95
16	0,21	1,21	1,24
25	0,21	0,780	0,795
35	0,21	0,554	0,565
50	0,31	0,386	0,393
70	0,31	0,272	0,277
95	0,31	0,206	0,210
120	0,31	0,161	0,164
150	0,31	0,129	0,132
185	0,41	0,106	0,108
240	0,41	0,0801	0,0817
300	0,41	0,0641	0,0654

SYSTEM OF DENOMINATION OF HARMONISED CABLES ACCORDING TO CENELEC HD 361

REFERENCE TO THE STANDARDS

- **H** Cable conforming to harmonised standards
- **A** Recognised national type of cable
- **N** Other type of national cable

RATED VOLTAGE

- **00** Less than 100 / 100 V
- **01** Above 100 / 100 V and less than 300 / 300 V
- **03** 300 / 300 V
- **05** 300 / 500 V
- **07** 450 / 750 V
- **1** 0,6 / 1 kV

INSULATION AND SHEATH MATERIAL

- **B** Ethylenpropylene rubber for working temperature of 60° C
- **N** Polychloroprene
- **N2** Polychloroprene for welding cables
- **Q** Polyurethane
- **R** Rubber
- **V** Common-quality PVC
- **V2** PVC for working temperatures of 90° C
- **V3** PVC for low temperature cables
- **V4** Reticulate PVC
- **V5** Oil-resistant PVC
- **Z** Polyolefine mixture

SCREENS

- **C** Concentric copper core
- **C4** Copper braid screen on multiple cores
- **C5** Copper braid screen on single cores
- **C7** Screen made of copper straps or ribbons

ARMOURS

- **Z2** Round steel strand armour
- **Z3** Steel strap armour
- **Z4** Steel ribbon armour
- **Z5** Steel strand braid

CONSTRUCTIVE FORM OF THE CABLE

- **H** Flat divisible cable with or without sheath
- **H2** Flat indivisible cable
- **H3** Flat cable with cores separated by a slat
- **H6** Flat cable with three or more cores
- **H7** Cable with double-layered insulation
- **H8** Extendable cord

CONDUCTOR FLEXIBILITY DEGREE

- **D** Flexible core for weldings cables
- **E** Very flexible core for welding cables
- **F** Flexible core for moving connections
- **H** Very flexible core for moving connections
- **K** Flexible core for fixed laying
- **R** Rigid round cord
- **U** Round rigid single strand

MAXIblock® - spiralblock®

Ref. Light Grey	Thread	COMPRESSION RANGE Ø min-max				IMPACT CATEGORY (*)	MARKING
		Nominal	UL 514B		EN 50262		
		[mm]	[mm]	[inches]	[mm]		
1900.M12	M12x1,5	3,5-7	3,5	0.14	3,5-7	1	USR-CNR / VDE
1900.M16	M16x1,5	5-10	7	0.28	7-10	1	USR-CNR / VDE
1900.M20	M20x1,5	7-13	13	0.51	7-13	3	USL-CNL / VDE
1900.M25	M25x1,5	10-17	17	0.67	10-17	3	USL-CNL / VDE
1900.M32	M32x1,5	13-21	15-21	0.60-0.83	13-21	3	USL-CNL / VDE
1900.M40	M40x1,5	19-28	21-28	0.83-1.10	19-28	3	USL-CNL / VDE
1900.M50	M50x1,5	27-35	27-34	1.06-1.34	27-35	3	USL-CNL / VDE
1900.M63	M63x1,5	34-45	35-45	1.38-1.77	34-45	3	USL-CNL / VDE
1910.M12	M12x1,5	2-5	2-5	0.08-0.20	2-5	1	USR-CNR / VDE
1910.M16	M16x1,5	3-7	4-7	0.16-0.28	4-7	1	USR-CNR / VDE
1910.M20	M20x1,5	5-10	5-10	0.20-0.40	5-10	3	USR-CNR / VDE
1910.M25	M25x1,5	7-13	7-13	0.28-0.51	7-13	3	USR-CNR / VDE
1910.M32	M32x1,5	8-14	8-14	0.31-0.55	8-14	3	USR-CNR / VDE
1910.M40	M40x1,5	15-23	15-23	0.59-0.91	15-23	3	USL-CNL / VDE
1910.M50	M50x1,5	21-29	21-29	0.83-1.14	21-29	3	USL-CNL / VDE
1910.M63	M63x1,5	27-39	28-39	1.1-1.54	27-39	3	USL-CNL / VDE
1901.M12	M12x1,5	3,5-7	3,5	0.14	3,5-7	1	USR-CNR / VDE
1901.M16	M16x1,5	5-10	7	0.28	7-10	1	USR-CNR / VDE
1901.M20	M20x1,5	7-13	13	0.51	7-13	3	USL-CNL / VDE
1901.M25	M25x1,5	10-17	17	0.67	10-17	3	USL-CNL / VDE
1901.M32	M32x1,5	13-21	15-21	0.60-0.83	13-21	3	USL-CNL / VDE
1901.M40	M40x1,5	19-28	21-28	0.83-1.10	19-28	3	USL-CNL / VDE
1901.M50	M50x1,5	27-35	27-34	1.06-1.34	27-35	3	USL-CNL / VDE
1901.M63	M63x1,5	34-45	35-45	1.38-1.77	34-45	3	USL-CNL / VDE
1500.M12	M12x1,5	3,5-7	3,5	0.14	3,5-7	1	USR-CNR / VDE
1500.M16	M16x1,5	5-10	7	0.28	7-10	1	USR-CNR / VDE
1500.M20	M20x1,5	7-13	13	0.51	7-13	3	USL-CNL / VDE
1500.M25	M25x1,5	10-17	17	0.67	10-17	3	USL-CNL / VDE
1500.M32	M32x1,5	13-21	15-21	0.60-0.83	13-21	3	USL-CNL / VDE
1940.M25	M25x1,5	13-18	13-18	0.51-0.71	-	-	USL-CNL
1540.M25	M25x1,5	13-18	13-18	0.51-0.71	-	-	USL-CNL

*Add to Ref: **N** for Black, **G** for Dark Grey*

MAXIblock® - spiralblock®

Ref. Light Grey	Thread	COMPRESSION RANGE Ø min-max			MARKING
		Nominal	UL 514B		
		[mm]	[mm]	[inches]	
1900.07	Pg 7	3,5-7	4.5-6.5	0.18-0.25	USR-CNR
1900.09	Pg 9	5-8	5.5-8	0.22-0.31	USR-CNR
1900.11	Pg 11	5-10	6.5-9.5	0.26-0.37	USR-CNR
1900.13	Pg 13,5	7-12	8-11.5	0.31-0.45	USL-CNL
1900.16	Pg 16	10-14	10.5-14	0.41-0.55	USL-CNL
1900.21	Pg 21	13-18	13-18	0.51-0.71	USL-CNL
1900.29	Pg 29	18-25	18.5-25	0.73-0.98	USL-CNL
1900.36	Pg 36	20-32	21.5-32	0.85-1.26	USL-CNL
1900.42	Pg 42	28-38	28-38	1.10-1.49	USL-CNL
1900.48	Pg 48	37-45	40-44	1.57-1.73	USL-CNL
1901.09	Pg 9	5-8	5.5-8	0.22-0.31	USR-CNR
1901.11	Pg 11	5-10	6.5-9.5	0.26-0.37	USR-CNR
1901.13	Pg 13,5	7-12	8-11.5	0.31-0.45	USL-CNL
1901.16	Pg 16	10-14	10.5-14	0.41-0.55	USL-CNL
1901.21	Pg 21	13-18	13-18	0.51-0.71	USL-CNL
1901.29	Pg 29	18-25	18.5-25	0.73-0.98	USL-CNL
1901.36	Pg 36	20-32	21.5-32	0.85-1.26	USL-CNL
1500.07	Pg 7	3,5-7	4.5-6.5	0.18-0.25	USR-CNR
1500.09	Pg 9	5-8	5.5-8	0.22-0.31	USR-CNR
1500.11	Pg 11	5-10	6.5-9.5	0.26-0.37	USR-CNR
1500.13	Pg 13,5	7-12	8-11.5	0.31-0.45	USL-CNL
1500.16	Pg 16	10-14	10.5-14	0.41-0.55	USL-CNL
1500.21	Pg 21	13-18	13-18	0.51-0.71	USL-CNL
1900.14	G1/4"	3-6,5	4.5-6.5	0.18-0.25	USR-CNR
1900.38	G3/8"	4-8	5.5-8	0.22-0.31	USR-CNR
1900.12	G1/2"	7-12	8-11.5	0.31-0.45	USL-CNL
1900.34	G3/4"	13-18	13-18	0.51-0.71	USL-CNL
1901.12	G1/2"	7-12	8-11.5	0.31-0.45	USL-CNL
1500.14	G1/4"	3-6,5	4.5-6.5	0.18-0.25	USR-CNR
1500.38	G3/8"	4-8	5.5-8	0.22-0.31	USR-CNR
1500.12	G1/2"	7-12	8-11.5	0.31-0.45	USL-CNL
1500.34	G3/4"	13-18	13-18	0.51-0.71	USL-CNL

*Add to Ref: **N** for Black, **G** for Dark Grey*

MAXIbrass®

Ref. Nickel Plated Brass	Thread	COMPRESSION RANGE Ø min-max				IMPACT CATEGORY (*)	MARKING
		Nominal	UL 514B		EN 50262		
		[mm]	[mm]	[inches]	[mm]		
2900.M12N	M12x1,5	3-7	3-7	0.12-0.28	3-7	5	USR-CNR / VDE
2900.M16N	M16x1,5	4,5-10	4,5-10	0.18-0.39	4,5-10	6	USL-CNL / VDE
2900.M20N	M20x1,5	7-13	8-13	0.31-0.51	7-13	6	USL-CNL / VDE
2900.M25N	M25x1,5	10-17	10-17	0.39-0.67	10-17	6	USL-CNL / VDE
2900.M32N	M32x1,5	11-21	11-21	0.43-0.83	11-21	6	USL-CNL / VDE
2900.M40N	M40x1,5	19-28	19-28	0.75-1.10	19-28	6	USL-CNL / VDE
2900.M50N	M50x1,5	26-35	27-35	1.06-1.38	26-35	6	USL-CNL / VDE
2900.M63N	M63x1,5	34-45	34-45	1.33-1.77	34-45	6	USL-CNL / VDE
2910.M12N	M12x1,5	1-5	2-5	0.08-0.20	1-5	5	USR-CNR / VDE
2910.M16N	M16x1,5	2,5-7	3,5-7	0.14-0.28	2,5-7	6	USR-CNR / VDE
2910.M20N	M20x1,5	5-10	5-10	0.20-0.39	5-10	6	USR-CNR / VDE
2910.M25N	M25x1,5	6-13	6-13	0.24-0.51	6-13	6	USR-CNR / VDE
2910.M32N	M32x1,5	7-14	7-14	0.28-0.55	7-14	6	USR-CNR / VDE
2910.M40N	M40x1,5	13-23	15-23	0.59-0.90	17-23	6	USL-CNL / VDE
2910.M50N	M50x1,5	20-29	20-29	0.79-1.14	22-29	6	USL-CNL / VDE
2910.M63N	M63x1,5	27-39	28-39	1.10-1.54	31-39	6	USL-CNL / VDE
2901.M12N	M12x1,5	3-7	3-7	0.12-0.28	3-7	5	USR-CNR/VDE
2901.M16N	M16x1,5	4,5-10	4,5-10	0.18-0.39	4,5-10	6	USL-CNL / VDE
2901.M20N	M20x1,5	7-13	8-13	0.31-0.51	7-13	6	USL-CNL / VDE
2901.M25N	M25x1,5	10-17	10-17	0.39-0.67	10-17	6	USL-CNL / VDE
2901.M32N	M32x1,5	11-21	11-21	0.43-0.83	11-21	6	USL-CNL / VDE
2901.M40N	M40x1,5	19-28	19-28	0.75-1.10	19-28	6	USL-CNL / VDE
2901.M50N	M50x1,5	26-35	27-35	1.06-1.38	26-35	6	USL-CNL / VDE
2911.M12N	M12x1,5	1-5	2-5	0.08-0.20	1-5	5	USR-CNR/VDE
2911.M16N	M16x1,5	2,5-7	3,5-7	0.14-0.28	2,5-7	6	USR-CNR / VDE
2911.M20N	M20x1,5	5-10	5-10	0.20-0.39	5-10	6	USR-CNR / VDE
2911.M25N	M25x1,5	6-13	6-13	0.24-0.51	6-13	6	USR-CNR / VDE
2911.M32N	M32x1,5	7-14	7-14	0.28-0.55	7-14	6	USR-CNR/VDE
2911.M40N	M40x1,5	13-23	15-23	0.59-0.90	13-23	6	USL-CNL / VDE
2911.M50N	M50x1,5	20-29	20-29	0.79-1.14	22-29	6	USL-CNL / VDE

VDE: *Licence nos 40008472, 40008474, 40008475 and 40008476*

USL-CNL: *UL LISTING file no E220310; control no 48SB valid in USA & Canada*

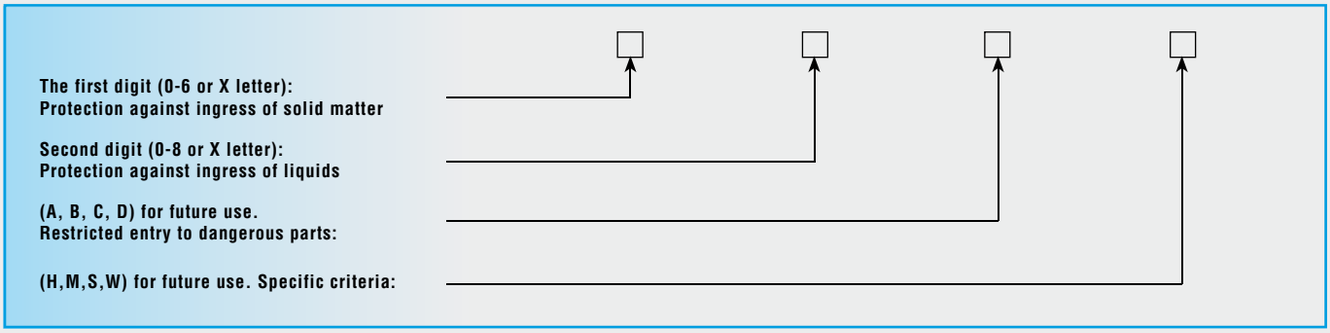
USR-CNR: *UL RECOGNITION file no E220310 valid in USA & Canada (with reduced tightening force)*

(*) *EN 50262 § 9.4*

MAXIbrass®

Ref. Nickel Plated Brass	Thread	COMPRESSION RANGE Ø min-max			MARKING
		Nominal	UL 514B		
		[mm]	[mm]	[inches]	
2900.07N	Pg 7	3-7	3-7	0.12-0.28	USR-CNR
2900.09N	Pg 9	4-8	4-8	0.16-0.31	USR-CNR
2900.11N	Pg 11	4,5-10	4,5-10	0.18-0.39	USR-CNR
2900.13N	Pg 13,5	5-12	9-12	0.35-0.47	USL-CNL
2900.16N	Pg 16	7-13	10-13	0.39-0.51	USL-CNL
2900.21N	Pg 21	10-17	12-17	0.47-0.67	USL-CNL
2900.29N	Pg 29	17-25	18-25	0.71-0.98	USL-CNL
2900.36N	Pg 36	20-32	22-32	0.86-1.26	USL-CNL
2900.42N	Pg 42	28-38	28-35	1.10-1.38	USL-CNL
2900.48N	Pg 48	34-45	34-45	1.33-1.77	USL-CNL
2910.07N	Pg 7	1-5	1-5	0.04-0.20	USR-CNR
2910.09N	Pg 9	2-6	3-6	0.12-0.24	USR-CNR
2910.11N	Pg 11	2,5-7	3,5-7	0.14-0.28	USR-CNR
2910.13N	Pg13,5	4-10	5,5-10	0.22-0.39	USR-CNR
2910.16N	Pg 16	5-10	6-10	0.24-0.39	USR-CNR
2910.21N	Pg 21	6-13	7-13	0.28-0.51	USR-CNR
2910.29N	Pg 29	11-20	12-20	0.47-0.79	USR-CNR
2910.36N	Pg 36	18-26	19-26	0.75-1.02	USL-CNL
2910.42N	Pg 42	24-31	24-31	0.94-1.22	USL-CNL
2910.48N	Pg 48	27-39	31-39	1.22-1.54	USL-CNL
2901.07N	Pg 7	3-7	3-7	0.12-0.28	USR-CNR
2901.09N	Pg 9	4-8	4-8	0.16-0.31	USR-CNR
2901.11N	Pg 11	4,5-10	4,5-10	0.18-0.39	USR-CNR
2901.13N	Pg13,5	5-12	9-12	0.35-0.47	USL-CNL
2901.16N	Pg 16	7-13	10-13	0.39-0.51	USL-CNL
2901.21N	Pg 21	10-17	12-17	0.47-0.67	USL-CNL
2901.29N	Pg 29	17-25	18-25	0.71-0.98	USL-CNL
2901.36N	Pg 36	20-32	22-32	0.86-1.26	USL-CNL
2901.42N	Pg 42	28-38	28-35	1.10-1.38	USL-CNL
2911.07N	Pg 7	1-5	1-5	0.04-0.20	USR-CNR
2911.09N	Pg 9	2-6	3-8	0.12-0.31	USR-CNR
2911.11N	Pg 11	2,5-7	3,5-7	0.14-0.28	USR-CNR
2911.13N	Pg13,5	4-10	5,5-10	0.22-0.39	USR-CNR
2911.16N	Pg 16	5-10	6-10	0.24-0.39	USR-CNR
2911.21N	Pg 21	6-13	7-13	0.28-0.51	USR-CNR
2911.29N	Pg29	11-20	12-20	0.47-0.79	USR-CNR
2911.36N	Pg36	18-26	19-26	0.75-1.02	USL-CNL
2911.42N	Pg42	24-31	24-31	0.94-1.22	USL-CNL

INGRESS PROTECTION (IP) RATING ACCORDING TO EN 60529 - CEI 70-1



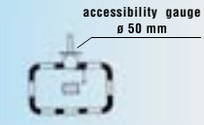
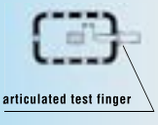
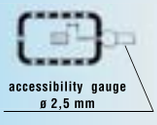
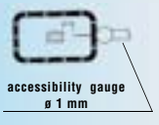
1st CHARACTERISTIC NUMBER:
PROTECTION AGAINST INGRESS OF SOLID MATTER

PROTECTION	0	1	2	3	4	5	6
Protection against ingress of solid matter caused by		solid bodies measuring over 50 mm	solid bodies measuring over 12,5 mm	solid bodies measuring over 2,5 mm	solid bodies measuring over 1 mm	powder in harmful quantities	Powder (completely protected)
Test method		 Accessibility gauge ø 50 mm	 Accessibility gauge ø 12,5 mm	 Accessibility gauge ø 2,5 mm	 Accessibility gauge ø 1 mm	 talcum powder	 talcum powder

2nd CHARACTERISTIC NUMBER:
PROTECTION AGAINST INGRESS OF LIQUIDS

PROTECTION	0	1	2	3	4	5	6	7	8
Protection against ingress of liquids caused by		Drops of water falling vertically	Vertical drops of water with inclination of casing up to 15°	Rain	Sprays of water	Jets of water	Powerful jets of water	Temporary Immersion	Permanent Immersion
Test method									Agreement between manufacturer and user but more severe than 7

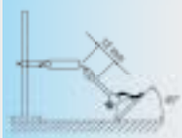
1st ADDITIONAL LETTER
RESTRICTED ENTRY TO DANGEROUS PARTS

RESTRICTED ENTRY	A	B	C	D
Restricted entry to dangerous parts caused by	back of hand	finger	tool	wire
Test method	 accessibility gauge ø 50 mm	 articulated test finger	 accessibility gauge ø 2,5 mm	 accessibility gauge ø 1 mm

2nd ADDITIONAL LETTER
MEANING OF THE SECOND ADDITINAL LETTER

SPECIFIC CRITERIA	H	M	S	W
Specific criteria	High voltage equipment	Tested against negative effects of water penetration, when the moveable parts of the equipment (e.g. wheels of a revolving machine) are moving	Tested against the negative effects of water penetration, when the moveable parts of the equipment (e.g. wheels of a revolving machine) are stationary	Suitable for use in environmental conditions as specified and equipped with additional measures of protection

FLAMMABILITY TEST FOR PRODUCTS AND MATERIALS

TYPE OF TEST	TEST EQUIPMENT	COMPLIANCE WITH STANDARDS	OBJECTIVE OF TEST	TEST RESULTS	TEST CONDITIONS		
					heat source	length of test	characteristic features
CHARACTERISTIC FEATURES		IEC 695-2-1 CEI 50-11 DIN VDE 0471-2-1	Check that abnormal heating produced by overcurrent and bad contacts does not compromise the safety of the insulating material. Lighting test. The wire is pressed against the sample using force and penetrates up to 7 mm.	Any sign of flame starting must stop within 30 sec. of removing the glowing wire TEST TEMPERATURE • 650° for materials which do not support parts under tension • 750° for materials which support parts under tension of moving sockets and plugs • 850° for materials which support parts under tension of fixed sockets and switches	Glow-wire 4 mm in diameter	Wire applied for 30 seconds	Flame extinction time
NEEDLE FLAME		IEC 695-2-1 CEI 50-11	Simulates the effect small flames have which may occur due to internal faults of products in order to judge the fire risk.	• the sample does not catch fire • the flame and incandescent particles do not spread the fire • combustion lasts less than 30 seconds	Bunsen burner flame	Flame applied for (Ta) 5, 10, 20, 30, 60, 120 sec. According to particular standards	The degree of severity: flame application time (Ta)
UL *(UNDERWRITER' LABORATORIES)*		UL 94	Measuring of time the sample continues to burn after the direct flame has been removed	• V0 if the sample burns for less than 5 sec. before going out. • V1 if it burns for less than 25 sec. • V2 if it burns for less than 25 sec. With incandescent drops • HB if it burns for more than 25 sec. (horizontal sample and burning speed less than 38 mm per minute) Comparable to ASTM D-635	Bunsen burner flame	Flame applied for 10 seconds twice following	Length of combustion

RECOMMENDED TORQUE SETTINGS FOR CABLE GLANDS

MAXIblock®, spiralblock®, MAXIbrass®, MAXIinox

to obtain IP68 ingress protection in accordance with EN 50262

Torque ratio values apply to mounting in a threaded entry and to use with a locknut

THREAD CABLE GLAND	CABLE GLAND	
	metallic	non-metallic
	torque ratio Nm	
M12 x 1,5	6	2,7
M16 x 1,5	6	5,0
M20 x 1,5	8	7,0
M25 x 1,5	8	7,5
M32 x 1,5	12	8,0
M40 x 1,5	18	8,0
M50 x 1,5	18	10,0
M63 x 1,5	18	10,0

MAXIblock®, spiralblock®, MAXIbrass®, MAXIinox

to obtain IP68 ingress protection in accordance with DIN VDE for Pg threads

Torque ratio values apply to mounting in a threaded entry and to use with a locknut

THREAD CABLE GLAND	CABLE GLAND torque ratio Nm		
	metallic	non-metallic series	
		1900	1910
Pg 7	6.25	2.5	2.5
Pg 9	6.25	3.75	3.75
Pg 11	6.25	3.75	3.75
Pg 13,5	6.25	3.75	3.75
Pg 16	7.5	5.0	5.0
Pg 21	10.0	7.5	7.5
Pg 29	10.0	7.5	7.5
Pg 36	18.0	7.5	7.5
Pg 42	18.0	7.5	10.0
Pg 48	18.0	7.5	10.0

MAXIblock®, spiralblock®

to obtain IP68 with reduced tightening force for GAS threads

Torque ratio values apply to mounting in a threaded entry and to use with a locknut

THREAD CABLE GLAND	CABLE GLAND non-metallic
	torque ratio Nm
G1/4"	4
G3/8"	5
G1/2"	6
G3/4"	10

DIE INDEX	DIE PART NUMBER			
				
	14.6 tons tools 131 serie	6 tons tools 51 serie	6 tons tools 45 serie	6 & 6.4 tons tools 54 & 55 series
161	MUT9999-C	MUT9999-50	MUT9999	MUT9999-W
162	MUT9998-C	MUT9998-50	MUT9998	MUT9998-W
163	MUT9997-C	MUT9997-50	MUT9997	MUT9997-W
164	MUT9996-C	MUT9996-50	MUT9996	MUT9996-W
166	MUT9995-C	MUT9995-50	MUT9995	MUT9995-W
167	MUT9958-C			MUT9958-W
168	MUT9974-C			
169	MUT9979-C			
170	MUT9973-C			
209	MUT9972-C			
239	MUT9993-C	MUT9993-50	MUT9993	MUT9993-W
242	MUT9967-C			
243	MUT9991-C	MUT9991-50	MUT9991	MUT9991-W
247				MUT9954-W
249	MUT9990-C	MUT9990-50	MUT9990	MUT9990-W
253	MUT9957-C			
255	MUT9962-C			
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327	MUT9961-C			
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654	MUT9975-C	MUT9975-50		
655	MUT9968-C			
658	MUT9988-C	MUT9988-50		
659	MUT9987-C	MUT9987-50	MUT9987	MUT9987-W
698	MUT9986-C	MUT9986-50	MUT9986	
699	MUT9985-C			
708	MUT9959-C			
756	MUT9964-C			
BG	MUT9984-C	MUT9984-50		MUT9984-W
C	MUT9983-C	MUT9983-50	MUT9983	MUT9983-W
D	MUT9978-C			
D3	MUT9981-C	MUT9981-50		
E	MUT9982-C	MUT9982-50		
F	MUT9960-C			
K840				MUT9942-W
N	MUT9955-C			
O	MUT9980-C	MUT9980-50		MUT9980-W

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It is not intended for use as an instruction manual.
Information concerning application and the correct operational use is provided by the specific manual delivered with the products.

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printing: IGB Group Brescia.

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Cod. 6260459