1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.1 Insulated cable lugs and connectors

The druseidt company delivers various kinds of insulated cable lugs and connectors acc. to DIN 46237, 46231, 46245 part 1-3 as well as usual in trade designs up to a cross-section range of 150 mm². The used insulating materials are PA heat resistant up to + 105° C, PC heat resistant up to + 100° C, PVC heat resistant up to + 70° C.

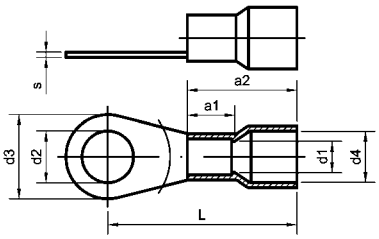
All cable lugs are manufactured out of copper with a high conductivity and will be hard soldered in the range of the connecting sleeve. The inner parts of the connecting sleeves are chamfered and raise the cohesion of the crimping. The easy entry insulation sleeves are free of halogen and enable an easy insertion of conductors. To protect cable connections against moisture, shrinkable designs with adhesive are offered too. The recommend crimping design is a so called oval crimping acc. to the adjoining examples.

Please notice, that the crimping operations will be done only with the right and suitable tools and die-sets.

Recommend crimping:
Oval-crimping

Insulated cable lugs 0,5-6 mm²

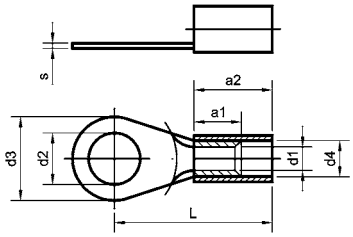
Ringtype in acc. with DIN 46237
with flared insulation sleeve
Material: Cu-HTP, tinned and soldered
Insulation sleeve: PA, free of halogen



Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a_1	a_2	s	weight kg/ ‰ pcs.	crimping-tools/page no.		
01006.01.02	0,5-1	2,5	1,6	2,7	6	4,1	16,5	5,5	11	0,80	0,60		12430, 12408 page no.156; 12425 page no. 157	12858, 05160/61/62 page no. 153	12600/N, 12601, 05180 page no. 152
01007.01.02		3		3,2	6		17				0,60				
01008.01.02		3,5		3,7	6		17				0,55				
01010.01.02		4		4,3	8		18				0,70				
01012.01.02		5		5,3	10		19				0,90				
01013.01.02		6		6,4	11		21				0,80				
01015.01.02		8		8,4	11,6		21,6				1,30				
01016.01.02	1,5-2,5	3	2,3	3,2	6	4,5	17	5,5	11	0,80	0,65				
01017.01.02		3,5		3,7	6		17				0,65				
01020.01.02		4		4,3	8		18				0,80				
01022.01.02		5		5,3	10		20				0,90				
01024.01.02		6		6,4	11		22				1,10				
01025.01.02		8		8,4	14		23				1,30				
01026.01.02		10		10,5	14		25				1,60				
01028.01.02	4-6	4	3,6	4,3	8	6,5	21	6,0	13	1,00	1,40				
01029.01.02		5		5,3	10		22				1,60				
01030.01.02		6		6,4	11		23				1,70				
01031.01.02		8		8,4	14		26				2,20				
01032.01.02		10		10,5	18		28				2,90				

Insulated cable lugs, 0,1-6 mm²

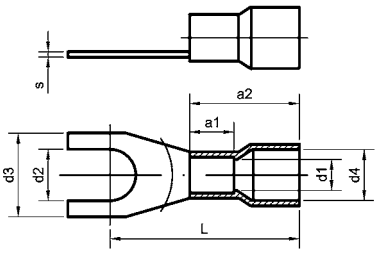
Ringtype, in special design
not in acc. with DIN Material: Cu-HTP,
tinned and soldered
Insulation sleeve: PVC or PA



Part-No. PVC	Part-No. PA	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a_1	a_2	s	weight kg / ‰ pcs.	crimping-tools/page no.		
-	**01000.01**	0,1-0,5	2	1	2,2	5	2	14	4	8	0,5	0,23	05103 page no. 152 05160/05162 page no. 153		
-	**01001.01**		3		3,2	5		14				0,20			
-	**01002.01**		4		4,3	7		16				0,26			
-	**01003.01**		5		5,3	8		15				0,28			
01005	**01005.01**	0,5-1	2	1,6	2,2	6	3,2	16	5	10	0,8	0,55		12430, 12408 page no. 156 12425 page no. 157	12858, 05160/61/62 page no. 153	12600/N, 12601, 05180 page no. 152
01009	**01009.01**		4		4,3	7		16				0,70				
01011	**01011.01**		5		5,3	8		17				0,90				
01014	**01014.01**		6		6,5	12		22				1,30				
01018	**01018.01**	1,5-2,5	3,5	2,3	3,7	6,8	4,3	17	5	11	0,8	0,65				
01019	**01019.01**		4		4,3	6,8		17				0,80				
01021	**01021.01**		5		5,3	8		18				0,90				
01023	**01023.01**		6		6,5	10		20				1,10				
01027	**01027.01**		12		13,0	18		26				1,50				
01033	**01033.01**	4-6	12	3,6	13,0	18	6,4	27	6	12	1	3,10			

Insulated cable lugs 0,1-16 mm²

Forktype with flared insulation sleeve
Material: Cu-HCP, tinned and soldered
Insulation sleeve: PA, free of halogen

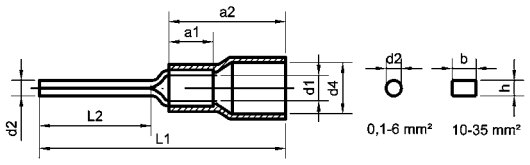


Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a_1	a_2	s	weight kg/‰ pcs.	crimping-tools/page no.
01040.01*	0,1-0,5	3	1	3,2	5	2	14	4	8	0,5	0,20	05103, 05160
01041.01.02	0,5-1	3	1,6	3,2	6	4,1	17	5	10,5	0,8	0,60	12425 page no. 157 / 12430, 12408 page no. 156 / 12858, 05160/61/62 page no. 153 / 12600/N, 12601, 05180 page no. 152
01042.01.02		3,5		3,7	6,4		17				0,60	
01044.01.02		4		4,3	6,4		17				0,70	
01045.01.02		5		5,3	10		19				0,90	
01046.01.02		6		6,4	11		21				0,80	
01048.01.02	1,5-2,5	3	2,3	3,2	6	4,5	17	5	11,5	0,8	0,60	
01050.01.02		3,5		3,7	6		17				0,65	
01051.01.02		4		4,3	6,4		17,3				0,80	
01053.01.02		5		5,3	10		20				0,90	
01054.01.02		6		6,4	11		22				1,10	
01055.01.02	4-6	4	3,6	4,3	8	6,5	21	6	12,5	1	1,40	
01056.01.02		5		5,3	10		22				1,60	
01057.01.02		6		6,4	11		23				1,70	
01058.01.02		8		8,4	14		26				2,20	
01059.01.02		10		10,5	18		28				2,80	
10021.01.02	10	5	4,5	5,3	10,5	8	23,8	8	16	1	2,30	12602 page no. 152 / 12655 page no. 163 / 30460 page no. 165 / 31460 page no. 167 / 12930/33 page no. 169
01060.01.02		6		6,5	11		24,4				2,40	
01062.01.02	16	6	5,8	6,5	11	10,9	32,1	10	20	1	3,80	
01063.01.02		8		8,4	14		34,1				5,00	

* Design without flared insulation sleeve

Insulated Pin connectors 0,1-35 mm²

DIN 46231 and special design
with and without flared insulation sleeve
Material: Cu-HCP, tinned and soldered
Insulation sleeve: PVC or PA free of halogen

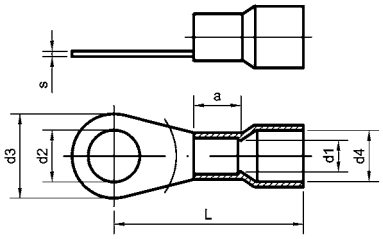


Part-No. PVC	Part-No. PA	cross-section mm²	DIN-type	dimensions mm d_1	d_2	b	h	d_4	a_1	a_2	L_1	L_2	weight kg/‰ Stck	crimping-tools/page no.
-	**01070.01**	0,1 - 0,5	-	1	1,4	-	-	2	4	8	18	8	0,30	05103, 05160
-	**01071.01.02***	0,5-1	1	1,6	1,9	-	-	4,1	5	11	22,5	10	0,70	12600/N, 12601, 05180 page no. 152
01072	**01072.01**		-			-	-	3,2		10,5	20	8	0,65	
01073	**01073.01**		-			-	-	3,2			17	5	0,60	12858, 05160/61/62 page no. 153
-	**01074.01.02***	1,5-2,5	2,5	2,3	1,9	-	-	4,5	5,5	11	23,5	10	0,75	
01076	**01076.01**		-			-	-	5,1	5	11,5	28	15	0,90	12430, 12408 page no. 156
-	**01077.01.02***	4-6	6	3,6	2,7	-	-	6,5	6	12,5	26,5	11	1,70	12425 page no. 157
-	**01078.01.02***	10	-	4,5	-	4,3	2,4	7,7	8	20	34	12	2,55	12602 page no. 152 / 12655 page no. 163 / 30460 page no. 165 / 31460 page no. 167 / 12930/33 page no. 169
-	**01079.01.02***	16	-	5,8	-	5,6	2,5	9	10	24,2	40,7	13,5	4,30	
-	**01092.01.02***	25	-	7	-	6,9	2,5	12,4	13,5	24,8	44	16	6,85	
-	**01094.01.02***	35	-	8,4	-	8,1	3,2	14	16	27,8	52,5	20	12,20	

* Design with flared insulation sleeve

Insulated cable lugs 10-150 mm²

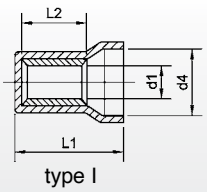
Ringtype, with flared insulation sleeve
Material: Cu-ETP, tinned and soldered
Insulation sleeve: PA, free of halogen



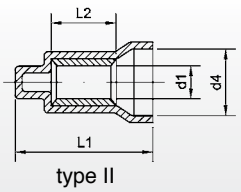
Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	s	weight kg/‰ pcs.	crimping-tools/page no.
01461.01.02	10	5	4,5	5,3	10	8	24,5	8	1,1	2,30	12602 page no. 152 / 12655 page no. 163 / 30460 page no. 165;12930/33 page no.169 / 31460 page no. 167
01462.01.02		6		6,5	11		25,5			2,45	
01463.01.02		8		8,4	14		28,5			2,95	
01464.01.02		10		10,5	18		29,5			3,50	
01466.01.02	16	5	5,8	5,3	11	10,5	31,5	10	1,2	4,00	
01467.01.02		6		6,5	11		31,5			3,80	
01468.01.02		8		8,4	14		33,5			4,25	
01469.01.02		10		10,5	18		35,5			5,00	
01471.01.02	25	5	7,5	5,3	12	13	38	11	1,5	7,00	
01472.01.02		6		6,5	12		38			7,00	
01473.01.02		8		8,4	16		38			7,60	
01474.01.02		10		10,5	18		39			7,80	
01475.01.02		12		13	22		44			9,70	
01476.01.02	35	6	9	6,5	15	14,5	41	12	1,6	9,70	
01477.01.02		8		8,4	16		41			9,70	
01478.01.02		10		10,5	18		42			10,00	
01479.01.02		12		13	22		46			11,70	
01494.01.02	50	6	11	6,5	18	16,5	47,5	16	1,8	17,55	
01480.01.02		8		8,4	18		47,5			17,10	
01481.01.02		10		10,5	18		47,5			16,50	
01482.01.02		12		13	22		49,5			18,00	
01483.01.02	70	6	13	6,5	22	18,7	51	18	2	26,30	
01484.01.02		8		8,4	22		51			26,30	
01485.01.02		10		10,5	22		51			25,50	
01486.01.02		12		13	22		51			24,70	
01487.01.02		16		17	28		55			27,70	
01495.01.02	95	8	15	8,4	24	21,7	57,5	20	2,5	41,10	
01488.01.02		10		10,5	24		57,5			41,70	
01489.01.02		12		13	24		57,5			39,40	
01490.01.02		16		17	28		59,5			39,40	
01496.01.02	120	8	16,5	8,4	24	24,2	62	22	3	57,70	
01491.01.02		10		10,5	24		62			56,70	
01492.01.02		12		13	24		62			53,30	
01493.01.02		16		17	28		66			64,10	
01497.01.02	150	10	19	10,5	30	27,2	70	24	3,2	82,90	
01498.01.02		12		13	30		70			78,30	
01499.01.02		16		17	30		70			80,10	

Insulated closed end terminals 1,5-6 mm²

Material: Cu-ETP, tinned
Insulation sleeve: PA, free of halogen



type I

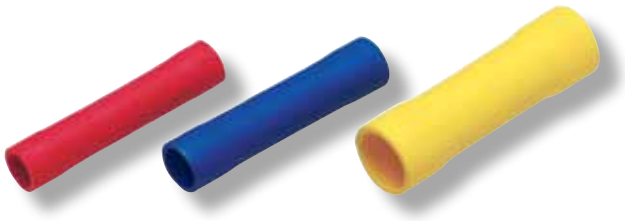


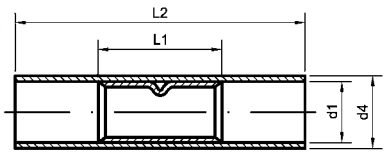
type II

Best-Nr.	cross-section mm²	type	dimensions mm d_1	d_4	L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
01088.01	1,5-2,5	I	2,3	7,5	21	7	0,60	12600/N, 12601, 05180 page no. 152 / 12858/05160/61/62 page no. 153 / 12430, 12408, 12425 page no. 156/57
01090.01	1,5-2,5		2,3	5,2	16		0,50	
01091.01	4-6		3,6	7,5	18		1,42	
01089.01	4-6	II	3,6	7,5	18	7	0,90	

Insulated butt connectors 0,1-6 mm²

Material: Cu-ETP tinned
Insulation sleeve: PVC or PA, free of halogen

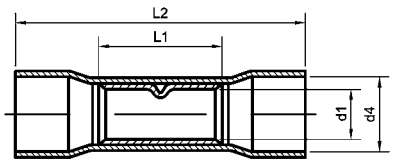




Part-No. PVC	Part-No. PA	cross-section mm²	dimensions mm d_1	d_4	L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
-	**10022.01**	0,1-0,5	1,2	2	12	20	0,30	05103, 05160 S. 152/153
01080	**01080.01**	0,5-1,0	1,6	3,2	15	25	0,90	12600/N, 12601, 05180 page no. 152
01081	**01081.01**	1,5-2,5	2,3	4	15	25	1,15	12858/05160/61/62 page no. 153
01082	**01082.01**	4-6	3,6	5,8	15	27	2,50	12430, 12408, 12425 page no. 156/57

Insulated butt connectors 0,5-6 mm²

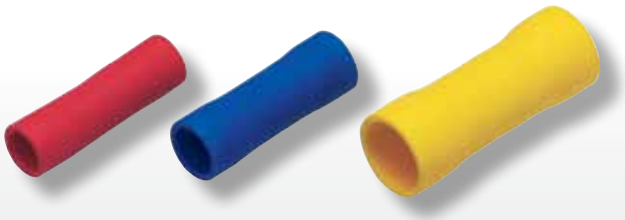
with flared insulation sleeve
Material: Cu-ETP tinned
Insulation sleeve: PC, free of halogen

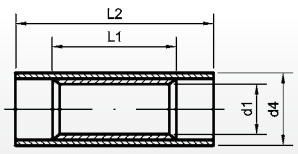


Part-No.	cross-section mm²	dimensions mm d_1	d_4	L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
01080.02	0,5-1,0	1,6	4,1	15	25	1,10	12600/N, 12601, 05180 page no. 152
01081.02	1,5-2,5	2,3	4,5	15	26	1,20	12858/05160/61/62 page no. 153
01082.02	4-6	3,6	6,4	15	27	2,60	12430, 12408, 12425 page no. 156/57

Insulated parallel-connectors 0,1-6 mm²

Material: Cu-ETP, tinned
Insulation sleeve: PVC or PA, free of halogen

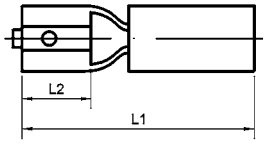




Part-No. PVC	Part-No. PA	cross-section mm²	dimensions mm d_1	d_4	L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
-	**10024.01**	0,1-0,5	1,2	2,0	5	13	0,15	05103, 05160 S. 152/153
01083	**01083.01**	0,5-1,0	1,6	3,2	7	17	0,40	12600/N, 12601, 05180 page no. 152
01084	**01084.01**	1,5-2,5	2,3	4,6	7	17	0,50	12858/05160/61/62 page no. 153
01085	**01085.01**	4-6	3,6	6,4	7	21	0,90	12430, 12408, 12425 page no. 156/57

Insulated receptacles 0,5-6 mm²

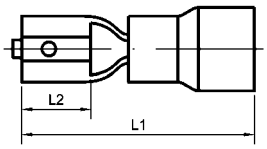
in acc. with DIN 46245 part 1-3 and special design
with add. metallic insulation enclosure
Material: brass, tinned
Insulation sleeve: PVC



Part-No.	cross-section mm²	tab-width mm	tab-thickness mm	DIN-size	dimensions mm L_1	dimensions mm L_2	weight kg/‰ pcs.	crimping-tools/page no.
01100	0,5-1,0	2,8	0,5	A 2,8 - 1	17,5	8	0,33	12600/N, 12601, 05180 page no. 152 12858, 05160/61/62 page no. 153 12430, 12408 page no. 156 12425 page no. 157
01101			0,8	B 2,8 - 1			0,33	
01102	0,5-1,0	4,8	0,5	-	18	6	0,50	
01103	1,5-2,5			-			0,48	
01104	0,5-1,0	4,8	0,8	4,8 - 1			0,50	
01105	1,5-2,5			4,8 - 2,5			0,48	
01106	0,5-1,0	6,3	0,8	6,3 - 1	22	7,4	0,82	
01107	1,5-2,5			6,3 - 2,5			0,92	
01108	4-6			6,3 - 6			0,98	
01109	0,5-1,0	7,7	0,8	-	25	9,5	1,07	
01110	1,5-2,5			-			1,16	
01111	4-6	9,5	1,2	-	27	12	1,50	

Insulated receptacles 0,5-6 mm²

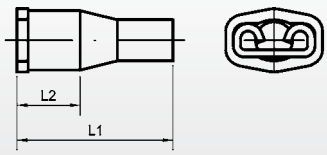
in acc. with DIN 46245 part 1-3
with flared insulation sleeve without metallic insulation enclosure
Material: brass, tinned
Insulation sleeve: PC, free of halogen



Part-No.	cross-section mm²	tab-width mm	DIN-size	tab-thickness mm	dimensions mm L_1	dimensions mm L_2	weight kg/‰ pcs.	crimping-tools/page no.
30024	0,5-1,0	2,8	A 2,8 - 1	0,5	18,6	8	0,60	12600/N, 12601, 05180 page no. 152 12858, 05160/61/62 page no. 153 12430, 12408 page no. 156 12425 page no. 157
30025			B 2,8 - 1	0,8			0,60	
30026	0,5-1,0	6,3	6,3 - 1	0,8	20	7,4	0,96	
30028	1,5-2,5		6,3 - 2,5				1,06	
30029	4-6		6,3 - 6		24		1,83	

Fully insulated receptacles 0,5-2,5 mm²

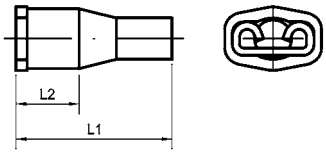
with add. metallic insulation enclosure
Material: brass, tinned
Insulation sleeve: PVC



Part-No.	cross-section mm²	tab-width mm	tab-thickness mm	dimensions mm L_1	dimensions mm L_2	weight kg/‰ pcs.	crimping-tools/page no.
30001	0,5-1,0	6,3	0,8	21	7,4	0,82	pages no. 152, 153, 156, 157
30002	1,5-2,5					0,91	

Fully insulated receptacles 0,5-6 mm²

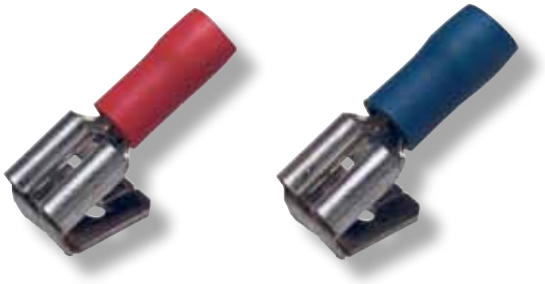
without metallic insulation enclosure
Material: brass, tinned
Insulation sleeve: PA or PC, free of halogen

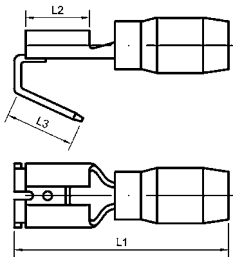


Part-No.	cross-section mm²	tab-width mm	tab-thickness mm	dimensions mm L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
30003	0,5 - 1,0	2,8	0,5	19,3	8	1,10	12600/N, 12601, 05180 page no. 152 12858, 05160/61/62 page no. 153 12430, 12408 page no. 156 12425 page no. 157
30010			0,8			1,10	
30011	0,5 - 1,0	4,8	0,5	20,2	6	1,15	
30013	1,5 - 2,5					1,20	
30012	0,5 - 1,0		0,8			1,15	
30014	1,5 - 2,5					1,20	
30018	0,5 - 1,0	6,3	0,8	21	7,4	1,23	
30020	1,5 - 2,5					1,32	
30022	4 - 6			26		2,15	

Insulated multiple tabs 0,5-2,5 mm²

with add. metallic insulation enclosure
Material: brass, tinned
Insulation sleeve: PVC

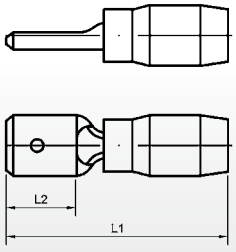




Part-No.	cross-section mm²	tab-width mm	tab-thickness mm	dimensions mm L_1	L_2	L_3	weight kg/‰ pcs.	crimping-tools/page no.
01117	0,5 - 1,0	6,3	0,8	22	7,5	8	1,12	pages no. 152, 153, 156, 157
01118	1,5 - 2,5						1,12	

Insulated tabs 0,5-6 mm²

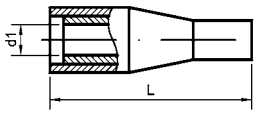
with add. metallic insulation enclosure
Material: brass, tinned
Insulation sleeve: PVC



Part-No.	cross-section mm²	tab-width mm	tab-thickness mm	dimensions mm L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
01120	0,5 - 1,0	2,8	0,8	14,6	5,5	0,24	pages no. 152, 153, 156, 157
01122	0,5 - 1,0	6,3	0,8	22	8	0,58	
01123	1,5 - 2,5					0,66	
01124	4 - 6					0,77	

Insulated female bullets 0,5-6 mm²

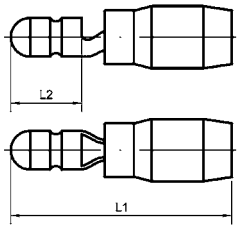
Material: bronze, tinned
Insulation sleeve: PVC



Part-No.	cross-section mm²	dimensions mm d₁	dimensions mm L	weight kg/‰ pcs.	crimping-tools/page no.
01130	0,5 -1,0	4	22	0,56	12600/N, 12601, 05180 page no. 152 12858/05160/61/62 page no. 153 12430, 12408, 12425 page no. 156/57
10005	1,5 - 2,5			1,20	
01131	1,5 - 2,5	5	22	1,20	
01133	4 - 6			1,24	

Insulated male bullets 0,5-6 mm²

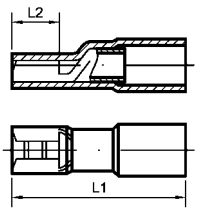
Material: brass, tinned
Insulation sleeve: PVC



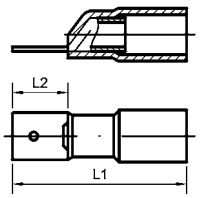
Part-No.	cross-section mm²	pin - Ø mm	dimensions mm L_1	dimensions mm L_2	weight kg/‰ pcs.	crimping-tools/page no.
01140	0,5 - 1,0	4	22	9	0,60	12600/N, 12601, 05180 page no. 152 12858/05160/61/62 page no. 153 12430, 12408, 12425 page no. 156/57
10015	1,5 - 2,5				1,50	
01141	1,5 - 2,5	5	22	9	0,75	
01142	4 - 6				0,89	

Insulated receptacles and tabs 0,5-6 mm²

shrinkable, with adhesive
Material: brass, tinned
Insulation sleeve: Polyolefin, free of halogen



type I / receptacle



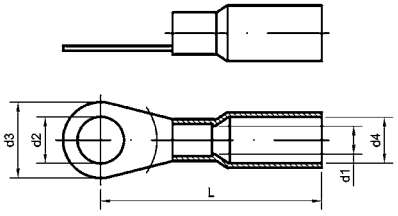
type II / tab

Part-No.	cross-section mm²	type	tab-width mm	tab-thickness mm	dimensions mm L_1	dimensions mm L_2	weight kg/‰ pcs.	crimping-tools/page no.
11020	0,5 - 1,0	I	6,3	0,8	27	8	1,2	12601 page no. 152
11021	1,5 - 2,5						1,3	
11022	4 - 6						2,0	
11040	0,5 - 1,0	II	6,3	0,8	27	8,3	1,0	
11041	1,5 - 2,5						1,2	
11042	4 - 6						2,0	

Suitable to ensure waterproof connections. Shrink-ratio: 3:1, Shrinktemperature: > + 90° C, operating temperature: -55° C up to + 95° C.

Insulated cable lugs 0,5-6 mm² Ringtype,

shrinkable with adhesive
Material: Cu-ETP, tinned

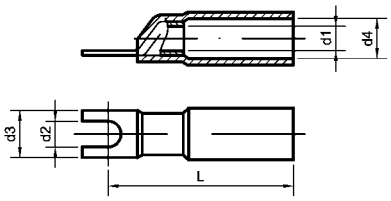


Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	weight kg/‰ pcs.	crimping-tools/page no.
01172	0,5 - 1,0	4	1,6	4,3	9	4,8	23,8	0,9	12601 page no. 152
01173		5		5,3	9		23,8	0,8	
01174		6		6,4	11,4		29	1,2	
01175		8		8,4	11,4		29	1,0	
01176		10		10,5	13,8		31,6	1,1	
01179	1,5 - 2,5	4	2,3	4,3	9,4	5,5	25,6	1,1	
01180		5		5,3	9,4		25,6	1,1	
01181		6		6,4	11,8		29,2	1,2	
01182		8		8,4	11,8		29,2	1,2	
01183		10		10,5	13,7		31,6	1,3	
01186	4 - 6	4	3,6	4,3	9,4	7	29,1	2,0	
01187		5		5,3	9,4		29,1	1,9	
01188		6		6,4	11,2		34,8	2,5	
01189		8		8,4	14,9		34,8	2,5	
01190		10		10,5	14,9		34,8	2,4	

Suitable to ensure waterproof connections. Shrink-ratio: 3:1, Shrinktemperature: > + 90° C, operating temperature: - 55° C up to + 95° C.
Insulation sleeve: Polyolefin, free of halogen

Insulated cable lugs 0,5-6 mm² Forktype,

shrinkable with adhesive
Material: Cu-ETP, tinned

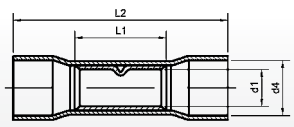


Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	weight kg/‰ pcs.	crimping-tools/page no.
11000	0,5 - 1,0	4	1,6	4,3	6,4	4,8	23	0,8	12601 page no. 152
11001		5		5,3	9,5		24,2	0,9	
11004	1,5 - 2,5	4	2,3	4,3	6,4	5,5	23,5	0,9	
11005		5		5,3	9,4		25,6	1,1	
11008	4 - 6	4	3,6	4,3	9,5	7	27,5	2,0	
11009		5		5,3	9,5		27,5	2,1	

Suitable to ensure waterproof connections. Shrink-ratio: 3:1, Shrinktemperature:> + 90° C, operating temperature: - 55° C up to + 95° C.
Insulation sleeve: Polyolefin, free of halogen

Insulated butt-connectors 0,1-6 mm²

shrinkable with adhesive
Material: Cu-ETP, tinned

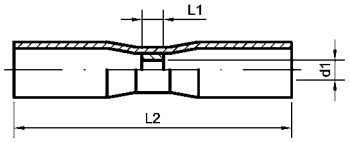


Part-No.	cross-section mm²	dimensions mm d_1	d_4	L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
01094	0,1 - 0,3	1	3,2	11	25	0,5	12601 page no. 152
01095	0,5 - 1,0	1,6	4,8	15	37	1,2	
01096	1,5 - 2,5	2,3	5,5	15	37	1,5	
01097	4 - 6	3,6	7	15	41	2,9	

Suitable to ensure waterproof connections. Shrink-ratio: 3:1, Shrinktemperature:> + 90° C, operating temperature: -55° C up to + 95° C.
Insulation sleeve: Polyolefin, free of halogen

Solder splices 0,3-6 mm²

shrinkable with adhesive
to ensure airtight and waterproof cable connections



Part-No.	cross-section mm²	dimensions mm d_1	L_1	L_2	operating temperature	weight kg/ ‰ Stck
01194	0,3 - 0,8	1,7	2,0	26	- 55° C bis + 95° C	0,22
01195	0,8 - 2,0	2,7	3,4	42		0,66
01196	2 - 4	4,5	4,0	42		0,76
01197	4 - 6	6	4,5	42		1,36

Solder splices with heat shrinkable tubing and adhesive. Suitable to ensure airtight and waterproof cable connections. The articles offer a combination out of solder and shrinkable connector and are outstandingly suitable to repair faulty cables in the field of the electro- and electronic industrie .The reliable protection against moisture and environmentals prevent a corrosion and guarantee connections with an optimal electrical resistance. By using components under vibration a break of the cable caused through corrosion are excluded. So the solder splices offer tremendous advantages compared with usual repairing of damaged cables by using electrical tapes etc.
By heating the solder splices you get the cable connection and the shrinking of the insulation tube with the adhesive in one handling operation. Caused by this one step process it is possible to reduce the repair costs. The pull out strength of the connection is 2,5 times higher compared with a pressed design.

Technical Data

Shrink ratio:	3:1	Melting temp. solder alloy:	+ 126° C up to + 145° C
Shrink temperature:	> + 120° C	Dielectric strength of the insulation:	15 kV/mm

Solder splice mounting-set

Part-No.	content
01198	50 pcs. solder splices 0,3-0,8 mm²/01194 25 pcs. ” 0,8-2,0 mm²/01195 20 pcs. ” 1,5-2,5 mm²/01196 10 pcs. ” 2,0-4,0 mm²/01197 1 pcs. soldering-iron (butane-gas) with reflector
01199	Butane-fuel, 250 ml canister

Assortment boxes out of varnished steel sheet

Part-No.	dimensions mm	description
01316	245 x 160 x 45	Box without content without carry-grip with 6 little and 1 tool-partition
01317	350 x 160 x 35	Box without content with carry-grip, 7 little and 1 tool partition
01318	350 x 160 x 35	Box without content with carry-grip, 12 little and 1 tool-partition
01319	375 x 235 x 55	Box without content with carry-grip, 19 little and 1 tool-partition

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.2 Uninsulated cable lugs and connectors

druseidt cable lugs and connectors acc. to the described chapter 1.2 are manufactured acc. to DIN 46234, DIN 46230 and DIN 46341 design A + B as well as usual in trade designs. They are applicable for stranded, fine stranded and also extremely fine stranded conductors. The cable lugs can be delivered in ring-type, fork-type, pin-type, as well as flag type design.

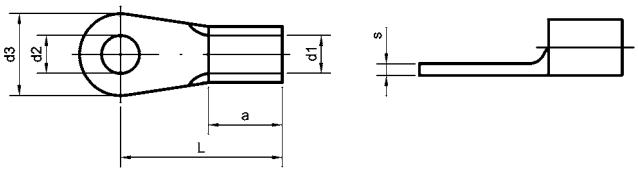
The connectors as parallel – but also as butt connectors. All terminals are manufactured out of copper with the highest conductivity. They are punched and the connecting sleeves are hard soldered. The tin plated surface offers a protection against oxidation and environmental influences . The crimping procedure should be done by a so called indent-crimping process acc. to the adjoining examples. Please pay attention to the fact that the indentor crimps the connectors only on the soldered seamed side of the crimping sleeves. In the cross-section range of 10 mm² or bigger it is necessary that the used tool left a visible cross-section stamping on the crimping sleeve. Also when working with multi-range tools the stamping has to mark the right range of the conductor cross-section on the crimping sleeve too.

Please notice that the crimpings will be done only with the right and suitable tools and die-sets.

Crimping design:
Indent-crimping

Cable lugs 0,1-35 mm²

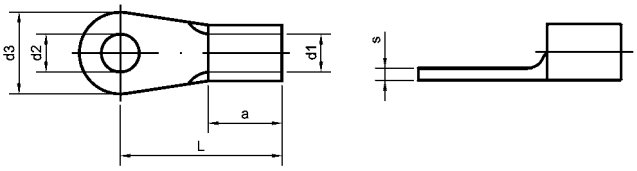
DIN 46234 and special design
Material: Cu-HCP, tinned



Part-No.	cross-section mm²	drilling M	DIN size	dimensions mm d_1	d_2	d_3	L	a	s	weight kg/‰ pcs.	crimping-tools/page no.
01340	0,1 - 0,5	2	2 - 0,5	1	2,2	5	10	4	0,5	0,21	
01341		3	3 - 0,5		3,2	5	10			0,19	
01342		4	4 - 0,5		4,3	6,5	12			0,24	
01343		5	5 - 0,5		5,3	8	11			0,24	
01345	0,5 - 1	2	-	1,6	2,2	6	11	5	0,8	0,59	
01346		2,5	2,5 - 1		2,7	6	11	5		0,58	
01347		3	3 - 1		3,2	6	11	5		0,56	
01349		3,5	3,5 - 1		3,7	6	11	5		0,55	
01351		4	-		4,3	6,5	8	4		0,42	
01352		4	-		4,3	7	11	5		0,58	
01353		4	4 - 1		4,3	8	12	5		0,70	
01354		5	-		5,3	8	12	5		0,65	
01355		5	5 - 1		5,3	10	13	5		0,90	
01356		6	-		6,5	10	13	5		0,85	
01357		6	-		6,5	12	17	5		1,10	
01358		8	-		8,4	12	17	5		1,00	
01359	1,5 - 2,5	3	3 - 2,5	2,3	3,2	6	11	5	0,8	0,63	
01360		3,5	3,5 - 2,5		3,7	6	11			0,62	
01362		4	-		4,3	6,8	11			0,63	
01363		4	4 - 2,5		4,3	8	12			0,78	
01364		5	-		5,3	8	12			0,70	
01365		5	5 - 2,5		5,3	10	14			0,90	
01366		6	-		6,5	10	14			0,85	
01367		6	6 - 2,5		6,5	11	16			1,06	
01368		8	8 - 2,5		8,4	14	17			1,30	
01369		10	-		10,5	18	20			2,00	
01370		12	-		13	18	20			1,70	
01371	4 - 6	4	4 - 6	3,6	4,3	8	14	6	1,0	1,40	
01372		5	5 - 6		5,3	10	15			1,60	
01373		6	6 - 6		6,5	11	16			1,70	
01374		8	8 - 6		8,4	14	19			2,20	
01375		10	10 - 6		10,5	18	21			2,80	
01376		12	-		13	18	21			2,50	
01377	10	4	-	4,5	4,3	10	16	8	1,1	2,30	
01378		5	5 - 10		5,3	10	16			2,25	
01379		6	6 - 10		6,5	11	17			2,40	
01380		8	8 - 10		8,4	14	20			2,90	
01381		10	10 - 10		10,5	18	21			3,40	
01382		12	12 - 10		13	22	23			4,20	
01383	16	5	5 - 16	5,8	5,3	11	20	10	1,2	3,90	
01384		6	6 - 16		6,5	11	20			3,80	
01385		8	8 - 16		8,4	14	22			4,30	
01386		10	10 - 16		10,5	18	24			5,00	
01387		12	12 - 16		13	22	26			6,00	
01388	25	5	5 - 25	7,5	5,3	12	25	11	1,5	7,00	
01389		6	6 - 25		6,5	12	25			6,90	
01390		8	8 - 25		8,4	16	25			7,50	
01391		10	10 - 25		10,5	18	26			8,00	
01392		12	12 - 25		13	22	31			9,20	
10080		16	16 - 25		17	28	35			12,50	
01393	35	6	6 - 35	9	6,5	15	26	12	1,6	10,10	
01394		8	8 - 35		8,4	16	26			9,80	
01395		10	10 - 35		10,5	18	27			10,00	
01396		12	12 - 35		13	22	31			12,60	
10085		16	16 - 35		17	28	36			14,70	

Werkzeuge mit auswechselbaren Einsätzen page no. 165 - 193
05126 page no. 153
12650 page no. 162; 12655 page no. 163
30445 page no. 158
12645/N page no. 158; 12858, 05160 page no. 153
05103 S. 158
05182 page no. 158; 12430, 12408, 12425 pages no. 156/157; 30446 ab 1,5 mm² page no. 158

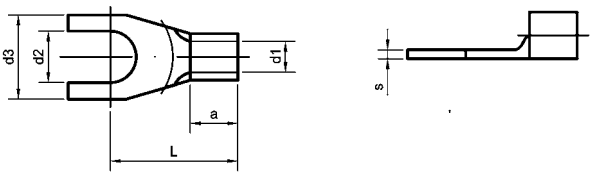
Cable lugs DIN 46234 50-240 mm²



Part-No.	cross-section mm²	drilling M	DIN size	dimensions mm d1	d2	d3	L	a	s	weight kg/‰ pcs.	crimping-tools/page no.
10090	50	6	6 - 50	11	6,5	18	34	16	1,8	17,00	12965/S, 12968 page no. 171; 13551/25, 13551/42,13537 page no. 181; 12485, 12486, 12487 page no. 192; 12837 page no. 193; 31460 page no. 167; 14240/41 page no. 175; 13552 page no. 179; 12836 page no. 192; 12748 page no. 177; 14242 page no. 175; 12930, 12933 page no. 169; 30460 page no. 165;
01397		8	8 - 50		8,4	18	34			16,50	
01398		10	10 - 50		10,5	18	34			16,00	
01399		12	12 - 50		13	22	36			18,00	
01400		16	16 - 50		17	28	40			21,00	
10091	70	6	-	13	6,5	22	38	18	2	26,00	
01401		8	8 - 70		8,4	22	38			26,00	
01402		10	10 - 70		10,5	22	38			25,00	
01403		12	12 - 70		13	22	38			24,00	
01404		16	16 - 70		17	28	42			27,00	
10092	95	8	8 - 95	15	8,4	24	42	20	2,5	41,00	
01405		10	10 - 95		10,5	24	42			41,00	
01406		12	12 - 95		13	24	42			39,00	
01407		16	16 - 95		17	28	44			41,00	
10093	120	8	8 - 120	17	8,4	24	44	22	3	56,00	
01408		10	10 - 120		10,5	24	44			56,00	
01409		12	12 - 120		13	24	44			54,00	
01410		16	16 - 120		17	28	48			58,00	
10095	150	10	10 - 150	19	10,5	30	50	24	3,2	77,00	
01411		12	12 - 150		13	30	50			76,00	
01412		16	16 - 150		17	30	50			75,00	
10097	185	10	-	21	10,5	36	50	28	3,5	147,00	
01413		12	12 - 185		13	36	50			147,00	
01414		16	16 - 185		17	36	50			143,00	
01416	240	12	12 - 240	23,5	13	38	56	32	4	235,00	
01417		16	16 - 240		17	38	56			234,00	

Cable lugs 0,1-16 mm²

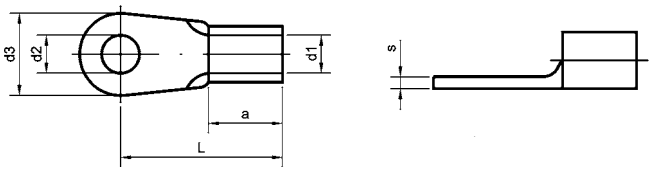
Fork-Type,
Material: Cu-HCP tinned



Part-No.	cross-section mm²	drilling M	dimensions mm d1	d2	d3	L	a	s	weight kg/‰ pcs.	crimping-tools/page no.
01430	0,1 - 0,5	3	1	3,2	5	10	4	0,5	0,21	05103 page no. 158
01431	0,5 - 1,0	3	1,6	3,2	6	11	5	0,8	0,56	30445 page no. 158; 12645/N page no. 158; 12858, 05160 page no. 153; 05182 page no. 158; 12430, 12408, 12425 pages no. 156/157; 30446 ab 1,5 mm² page no. 158
01432		3		3,2	6,5	8	4		0,56	
01433		3,5		3,7	6	11	5		0,56	
01434		3,5		3,7	6,5	8	4		0,70	
01435		4		4,3	6,8	11	5		0,70	
01436		4		4,3	8	12	5		0,70	
01437		5		5,3	10	13	5		0,90	
01438		6		6,5	12	17	5		0,76	
01439	1,5 - 2,5	3	2,3	3,2	6	11	5	0,8	0,63	
01440		3,5		3,7	6,8	11			0,63	
01441		4		4,3	6,8	11			0,78	
01442		4		4,3	8	12			0,78	
01443		5		5,3	10	14			0,90	
01444		6		6,5	11	16			1,06	
01445	4 - 6	4	3,6	4,3	8	14	6	1,0	1,40	Werkzeuge mit auswechselbaren Einsätzen ab page no. 162; 05126 page no. 158
01446		5		5,3	10	15			1,60	
01447		6		6,5	11	16			1,70	
01448		8		8,4	14	19			2,20	
01449	10	5	4,5	5,3	10	16	8	1,1	3,90	
01450		6		6,5	11	17			3,80	
01452	16	6	5,8	6,5	11	20	10	1,2	3,80	
01453		8		8,4	14	22			5,00	

Cable lugs 10-300 mm²

Material: Cu-HCP, tinned

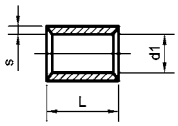


Part-No.	cross-section mm²	size	dimensions mm d_1	d_2	d_3	a	L	s	weight kg/‰ pcs.	crimping-tools/page no.
01501	10	6 x 4,3	4,3	6,4	11	10	21	1	2,52	on request
01502		8 x 4,3		8,4	15		24		3,18	
01503		10 x 4,3		10,5	19		26		4,10	
01504		12 x 4,3		13	22		28		4,50	
01506	16	6 x 5,4	5,4	6,4	11	11,5	24	1	3,46	
01507		8 x 5,4		8,4	15		27		4,20	
01508		10 x 5,4		10,5	19		29		4,90	
01509		12 x 5,4		13	22		31		5,50	
01510	25	6 x 6,8	6,8	6,4	13	13,5	27	1,2	5,91	
01511		8 x 6,8		8,4	15		30		6,50	
01512		10 x 6,8		10,5	19		32		7,50	
01513		12 x 6,8		13	22		35		8,40	
01516	35	8 x 8,2	8,2	8,4	15	16	33	1,5	10,64	
01517		10 x 8,2		10,5	19		35		11,70	
01518		12 x 8,2		13	22		38		13,50	
01521	50	8 x 9,5	9,5	8,4	17	19	36	1,8	16,89	
01522		10 x 9,5		10,5	19		38		17,50	
01523		12 x 9,5		13	22		41		18,90	
01525	70	8 x 11,2	11,2	8,4	21	24	44	2	27,70	
01526		10 x 11,2		10,5	21		44		27,50	
01527		12 x 11,2		13	22		47		29,60	
01528		16 x 11,2		17	28		50		33,10	
01530	95	10 x 13,5	13,5	10,5	21	24	44	2,5	39,20	
01531		12 x 13,5		13	22		47		40,70	
01533	120	12 x 15	15	13	24	29	53	3	63,10	
01534		16 x 15		17	28		55		65,30	
01536	150	12 x 16,5	16,5	13	28	29	55	3,5	84,50	
01537		16 x 16,5		17	28		55		83,20	
01538	185	12 x 18,5	18,5	13	28	34	61	4	116,80	
01539		16 x 18,5		17	28		61		114,40	
01540	240	12 x 21	21	13	30	40	68	5	189,00	
01541		16 x 21		17	30		68		186,00	
01542	300	12 x 23,5	23,5	13	30	40	68	5	200,40	
01543		16 x 23,5		17	30		68		200,40	

Parallel connectors 0,5-150 mm²

DIN 46341 part 1, design A

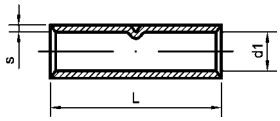
Material: Cu-HCP, tinned



Part-No.	cross-section mm²	DIN size	dimensions mm d_1	L	s	weight kg/‰ pcs.	crimping-tools/page no.
01760	0,5 - 1,0	A - 1	1,6	7	0,8	0,40	crimping-tools page no. 153, 156, 157, 158, 162, 163, 165, 167, 169, 171, 175, 179, 181, 192, 193
01761	1,5 - 2,5	A - 2,5	2,3	7	0,8	0,50	
01762	4 - 6	A - 6	3,6	7	1	0,90	
01763	10	A - 10	4,6	9	1,1	1,64	
01764	16	A - 16	5,9	11	1,2	2,52	
01765	25	A - 25	7,7	14	1,5	5,17	
01766	35	A - 35	9,2	16	1,6	7,22	
01767	50	A - 50	11,2	19	1,8	12,56	
01768	70	A - 70	13,5	19	2	16,56	
01769	95	A - 95	15	20	2,5	24,43	
01770	120	A - 120	16,7	22	3	37,70	
01771	150	A - 150	19	26	3,2	50,24	

Butt connectors 0,5-150 mm²

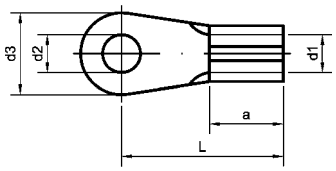
DIN 46341 part 1, design B
Material: Cu-HCP, tinned



Part-No.	cross-section mm²	DIN size	dimensions mm d1	L	s	weight kg/‰ pcs.	crimping-tools/page no.
01740	0,5-1,0	B - 1	1,6	15	0,8	0,90	crimping-tools page no. 153, 156, 157, 158, 162, 163, 165, 167, 169, 171, 175, 179, 181, 192, 193
01741	1,5-2,5	B - 2,5	2,3	15	0,8	1,10	
01742	4-6	B - 6	3,6	15	1	2,60	
01743	10	B - 10	4,6	21	1,1	3,64	
01744	16	B - 16	5,9	26	1,2	6,14	
01745	25	B - 25	7,7	29	1,5	11,33	
01746	35	B - 35	9,2	32	1,6	15,34	
01747	50	B - 50	11,2	38	1,8	24,44	
01748	70	B - 70	13,5	42	2	37,36	
01749	95	B - 95	15	48	2,5	60,80	
01750	120	B - 120	16,7	52	3	86,68	
01751	150	B - 150	19	56	3,2	112,50	

Solder tags 0,5-95 mm²

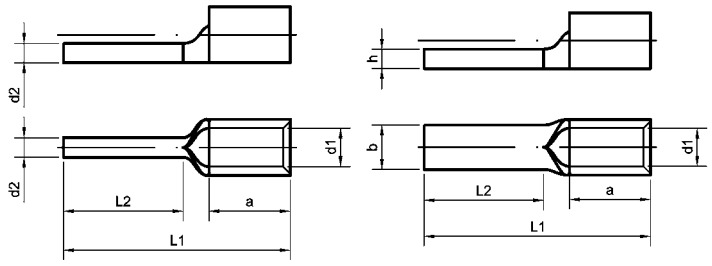
DIN 46211 design A and special design
Material: brass, tinned



Part-No.	cross-section mm²	drilling M	DIN size	dimensions mm d1	d2	d3	a	L	weight kg/‰ pcs.
03331	0,5-1,0	3	3 x 1,4	1,4	3,2	6	3,5	10	0,25
03332		4	4 x 1,4		4,3	8		11,5	0,32
03333		5	5 x 1,4		5,3	10		13	0,42
03336	1,5-2,5	4	4 x 2,3	2,3	4,3	8	6	14,5	0,90
03337		5	5 x 2,3		5,3	10		16	1,10
03338		6	6 x 2,3		6,5	11		17	1,14
03339		8	8 x 2,3		8,4	15		20	1,65
03341	4-6	5	5 x 3,4	3,4	5,3	10	8	18	1,80
03342		6	6 x 3,4		6,5	11		19	1,90
03343		8	8 x 3,4		8,4	15		23	2,70
03344		10	10 x 3,4		10,5	19		24	3,30
03346	10	5	5 x 4,3	4,3	5,3	10	10	19	3,00
03347		6	6 x 4,3		6,5	11		21	3,10
03348		8	8 x 4,3		8,4	15		24	4,00
03349		10	10 x 4,3		10,5	19		26	4,90
03351	16	6	6 x 5,4	5,4	6,5	11	11,5	24	5,10
03352		8	8 x 5,4		8,4	15		27	6,10
03353		10	10 x 5,4		10,5	19		29	7,30
03354		12	12 x 5,4		13	22		31	8,50
03355	25	6	6 x 6,8	6,8	6,5	13	13,5	27	9,00
03356		8	8 x 6,8		8,4	15		30	10,00
03357		10	10 x 6,8		10,5	19		32	11,10
03358		12	12 x 6,8		13	22		35	12,50
03360	35	8	8 x 8,2	8,2	8,4	15	16	33	14,50
03361		10	10 x 8,2		10,5	19		35	15,70
03362		12	12 x 8,2		13	22		38	17,40
03365	50	8	8 x 9,5	9,5	8,4	17	19	36	23,60
03366		10	10 x 9,5		10,5	19		38	24,50
03367		12	12 x 9,5		13	22		41	26,70
03369	70	10	10 x 11,2	11,2	10,5	21	24	44	42,50
03370		12	12 x 11,2		13	22		47	43,50
03372	95	10	10 x 13,5	13,5	10,5	21	24	44	54,40
03373		12	12 x 13,5		13	22		47	55,40

Pin connectors 0,5-95 mm²

DIN 46230 and special design
Material: Cu-ETP, tinned

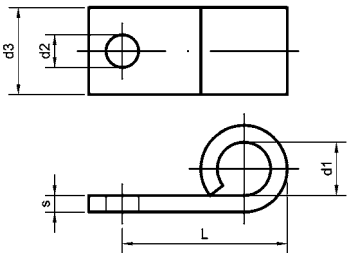


01779-01783 01784-01792

Part-No.	cross-section mm²	DIN size	dimensions d_1	d_2	b	h	a	L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
01779	0,1-0,5	A 0,5	1	1,4	-	-	4	14	8	0,20	crimping-tools page no. 153, 156, 157, 158, 162, 163, 165, 167, 169, 171, 175, 179, 181, 192, 193
01780	0,5-1,0	A 1	1,6	1,9	-	-	5	17	10	0,60	
01781	1,5-2,5	-	2,3	1,9	-	-	5	13,5	5	0,54	
01782	1,5-2,5	A 2,5	2,3	1,9	-	-	5	17	10	0,65	
01783	4-6	A 6	3,6	2,7	-	-	6	20	11	1,61	
01784	10	-	4,5	-	4,3	2,4	10	24,5	11	2,63	
01785	10	B 10	4,5	-	4,5	2	8	22	12	2,60	
01786	16	-	5,4	-	5,5	2	11,5	29,5	15	3,89	
01787	16	B 16	5,8	-	5,5	2,6	10	26	13	4,40	
01788	25	-	6,7	-	6,8	2,4	13,5	33,5	15	6,30	
01789	35	-	8,4	-	8	3,2	16	40,5	20	11,70	
01790	50	-	9,5	-	9,5	3,6	19	45	20	17,87	
01791	70	-	11,2	-	11	4	24	55	23	29,20	
01792	95	-	13,5	-	12,5	5	24	55	23	42,90	

Flag type cable lugs 10-150 mm²

Material : Cu-ETP, tinned and soldered



Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	L	s	weight kg/% pcs.	crimping-tools/page no.
10118	10	5	5	5,3	10,5	20	1,2	0,45	on request
01553		6		6,5	10,5	17		0,41	
01554		8		8,4	17	17		0,34	
01555	16	6	5,5	6,5	16	19	1,2	0,75	
01556		8		8,4	16	19		0,72	
01557		10		10,5	21	20		1,00	
01558		12		13	21	20		0,95	
01559	25	6	7	6,5	18	21	1,5	1,15	
01560		8		8,4	18	23		1,20	
10120		10		10,5	24	23		1,94	
01561	35	8	8,5	8,4	20	23	1,7	1,56	
01562		10		10,5	20	26		1,70	
01563		12		13	20	26		1,62	
01564	50	8	10	8,4	23	30	2	2,82	
01565		10		10,5	23	30		2,64	
10125		12		13	23	28		2,40	
01566	70	8	12	8,4	26	32	2,5	4,00	
01567		10		10,5	26	32		3,60	
01568		12		13	26	33		3,40	
01569	95	12	13,5	13	27	36	2,5	5,25	
01570	120	12	15	13	27	40	3	7,20	
01571	150	12	17	13	30	40	3,2	8,40	
01572		16		17	30	40		8,35	

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.3 Uninsulated tubular cable lugs and connectors, druseidt standard design

druseidt delivers tubular cable lugs and connectors made out of copper in different tube dimensions. So the following described standard design, made out of copper tube HCP resp. ETP acc. to DIN 13600, are delivered since decades. The surface of all terminals are tin plated and protect them against environmental influences and corrosion.

Material with exact dimension (diameter/thickness) and the manufacturing of correct fitted connectors guarantee an optimal and safety processability of all druseidt cable lugs. The crimping procedure should be done by a so called WM-crimping. This crimping design enables an intensive compressing to the center of the conductor, also when working with fine stranded cables.

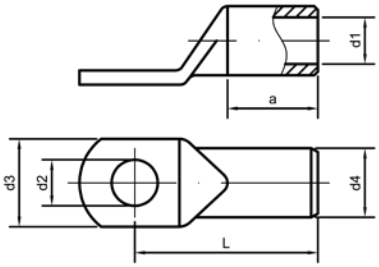
The number of the crimping procedures depends on the crimping width resp. the cross-section and the length of the connector sleeve. More detailed information are given on the catalogue page 202. druseidt tubular cable lugs and connectors are suitable for application up to a temperature of + 120° C (cf DIN 46234 too).

Please notice that the crimping procedures will be done only with the right tools suitable for druseidt tubular cable lugs and connectors in standard design.

Crimping design:
WM-crimping

Tubular cable lugs 0,75-50 mm²

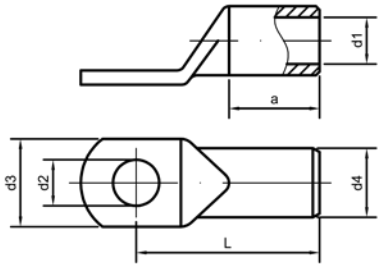
druseidt standard design,
Material: Cu-HCP DIN EN 13600
Surface: tinned



Part-No. without inspection hole	Part-No. with inspection hole	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
01580	-	0,75	3	1,4	3,2	6,5	3	12,5	6	0,71	30445 0,75-10 mm², 30446 1,5-16 mm² page no. 158; 12375, 12376 page no. 159; 12655 page no. 163; 12377 page no. 159; 30460 page no. 165; 31460 page no. 167; 12930, 12933 page no. 169; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12725 page no. 184; 12728 page no. 186; 12836, 12485-87 page no. 192; 12837 page no. 193
01581	-		4		4,3	8,5		14		0,80	
01582	-		5		5,3	10		15		1,00	
01583	-	1,5	3	1,9	3,2	6,5	3,9	14	6	1,18	
01584	-		4		4,3	8,5		15		1,34	
01585	-		5		5,3	10		16		1,45	
01586	-		6		6,4	11		18		1,69	
01588	-	2,5	4	2,4	4,3	8,5	4,4	15	6,5	1,57	
01589	-		5		5,3	10		16		1,72	
01590	-		6		6,4	11		18		1,92	
01591	-		8		8,4	13		20		2,20	
01592	-	4	4	3	4,3	8,5	5	17	8	2,20	
01593	-		5		5,3	10		18		2,40	
01594	-		6		6,4	11		20		2,60	
01595	-		8		8,4	14		22		3,00	
01596	-	6	4	3,7	4,3	8,5	5,5	17,5	8	2,40	
01597	-		5		5,3	10		19		2,60	
01598	-		6		6,4	11		21		2,80	
01599	-		8		8,4	14		23		3,00	
10129	**10156**	10	4	4,3	4,3	10	6,7	19,5	10	4,10	
01600	**01680**		5		5,3	10		20,5		4,30	
01601	**01681**		6		6,4	11		22,5		4,80	
01602	**01682**		8		8,4	15		25		5,30	
01603	**01683**		10		10,5	18		27,5		5,70	
01604	**01684**		12		13	19		28,5		5,80	
01605	**01685**	16	5	5,4	5,3	12	7,8	22,5	11	5,70	
01606	**01686**		6		6,4	12		24,5		6,40	
01607	**01687**		8		8,4	15		26,5		6,70	
01608	**01688**		10		10,5	18		29		7,20	
01609	**01689**		12		13	20		30		7,20	
10130	-	25	5	6,9	5,3	14	9,4	25	13	8,70	
01610	**01690**		6		6,4	14		27		9,50	
01611	**01691**		8		8,4	15		29		10,10	
01612	**01692**		10		10,5	18		31,5		10,90	
01613	**01693**		12		13	20		32,5		10,80	
10132	**10158**		14		15	22		34,5		11,60	
10133	**10159**	35	5	8,3	5,3	16,5	11,3	32,5	16	16,00	
01614	**01694**		6		6,4	16,5		32,5		16,00	
01615	**01695**		8		8,4	16,5		33		16,20	
01616	**01696**		10		10,5	18		35,5		18,00	
01617	**01697**		12		13	20		36,5		17,00	
10134	**10160**		14		15	22		39		18,70	
10135	**10162**		16		17	26		41,5		19,70	
10140	**10163**	50	6	9,6	6,4	19	13,1	36	18	23,50	
01618	**01698**		8		8,4	19		37		24,10	
01619	**01699**		10		10,5	20		39		25,30	
01620	**01700**		12		13	23		40,5		26,10	
10136	**10164**		14		15	25		42,5		27,90	
01621	**01701**		16		17	27		45,5		29,40	
10137	**10165**		20		21	28		50		35,70	

Tubular cable lugs 70-630 mm²

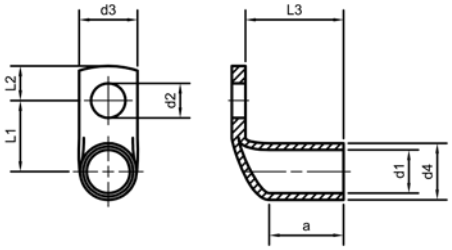
druseidt standard design,
Material: Cu-HCP DIN EN 13600
Surface: tinned



Part-No. without inspection hole	Part-No. with inspection hole	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
10138	**10166**	70	6	11,5	6,4	22,5	15,3	41	21	34,60	12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12836, 12485-87 page no. 192; 12837 page no. 193; 31460 page no. 167; 12930, 12933 page no. 169; 12728 page no. 186; 12377 page no. 159; 30460 page no. 165; 12725 page no. 184
01622	**01702**		8		8,4	22,5		41		34,60	
01623	**01703**		10		10,5	22,5		42,5		36,30	
01624	**01704**		12		13	23		43,5		36,40	
10139	**10167**		14		15	26		46		39,30	
01625	**01705**		16		17	28		48,5		40,20	
10141	**10168**		20		21	29		53		42,10	
10143	**10169**	95	6	13,5	6,4	25	17,5	46	23	47,10	
01626	**01706**		8		8,4	25		45,5		47,60	
01627	**01707**		10		10,5	25		47		48,20	
01628	**01708**		12		13	26		47		48,20	
10144	**10170**		14		15	26		49		51,60	
01629	**01709**		16		17	28		50		51,50	
10146	**10171**		20		21	31		54,5		56,60	
10147	**10172**	120	8	15,5	8,4	29	20	50,5	26	66,00	
01630	**01710**		10		10,5	29		53		71,30	
01631	**01711**		12		13	29		52,5		71,40	
10148	**10173**		14		15	29		53,5		72,40	
01632	**01712**		16		17	29		55		73,10	
01633	**01713**		20		21	35		60		78,10	
01634	**01714**	150	10	16,8	10,5	31	21,3	56,5	29	83,40	
01635	**01715**		12		13	31		56		81,80	
10149	**10174**		14		15	31		57		83,30	
01636	**01716**		16		17	31		58		85,00	
01637	**01717**		20		21	35		63		88,40	
10145	**10175**	185	10	19	10,5	35	24	59	30	106,10	
01638	**01718**		12		13	35		58,5		106,10	
10151	**10176**		14		15	35		61		107,20	
01639	**01719**		16		17	35		63		108,60	
01640	**01720**		20		21	35		66		113,30	
10152	**10177**	240	10	21	10,5	38	26	67	35	129,70	
01641	**01721**		12		13	38		67		130,20	
10153	**10178**		14		15	38		69		133,60	
01642	**01722**		16		17	38		69,5		138,40	
01643	**01723**		20		21	38		71		139,50	
01644	**01724**	300	12	24	13	44	30	82	42	217,20	
10154	**10190**		14		15	44		84		221,90	
01645	**01725**		16		17	44		85		219,40	
01646	**01726**		20		21	44		85		229,20	
10155	-	400	10	27,5	10,5	49	33,5	92	47	279,00	on request
10150	-		12		13	49		92		279,00	
01647	-		16		17	49		92		279,00	
01648	-		20		21	49		92		281,90	
01649	-	500	16	31	17	55,5	38	113	70	493,80	
01650	-		20		21	55,5		113		485,60	
01651	-	630	16	34	17	60	41	115	70	513,50	
01652	-		20		21	60		115		506,00	

Tubular cable lugs 0,75-150 mm² druseidt standard design Angle type 90°

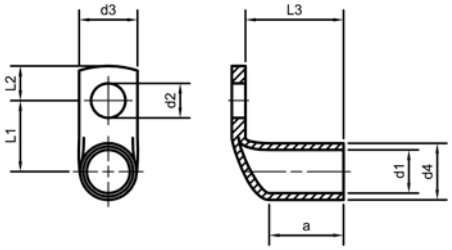
Material: Cu-HCP DIN EN 13600 Surface: tinned



Part-No. without inspection hole	Part-No. with inspection hole	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	a	weight kg/‰ pcs.	crimping-tools/page no.
10400	-	0,5-0,75	3	1,4	3,2	6,5	3	7,5	4	9,5	5	0,90	30445 0,75-10 mm², 30446 1,5-16 mm² page no. 158
10402	-		4		4,3	8,5		8,5	5			1,00	
10404	-		5		5,3	10		9,5	5,5			1,00	
10406	-	1-1,5	3	1,9	3,2	6,5	3,9	8	4	9,5	5	1,60	
10408	-		4		4,3	8,5		9	5			1,60	
10410	-		5		5,3	10		10	5,5			1,60	
10412	-		6		6,4	11		12	7,5			1,60	
10414	-	2,5	4	2,4	4,3	8,5	4,4	9,2	5	9,5	5,5	1,83	
10416	-		5		5,3	10		10,2	5,5			1,84	
10418	-		6		6,4	11		12,2	7,5			2,20	
10420	-		8		8,4	14		14,2	10			2,30	
10422	-	4	4	3	4,3	8,5	5	9,5	5	10,5	7	2,50	
10424	-		5		5,3	10		10,5	5,5			2,41	
10426	-		6		6,4	11		12,5	7,5			2,90	
10428	-		8		8,4	14		14,5	10	11,5		3,00	
10430	-	6	4	3,7	4,3	8,5	5,5	9,8	5	10,5	7	2,70	12376 page no. 159
10432	-		5		5,3	10		10,8	5,5			2,52	
10434	-		6		6,4	11		12,8	7,5			2,82	
10436	-		8		8,4	14		14,8	10			3,40	
10438	**10838**	10	5	4,3	5,3	10	6,7	11,4	5,5	15	9	4,90	12375 page no. 159; 12655 page no. 163
01800	**01850**		6		6,4	11		13,4	7,5			5,30	
01801	**01851**		8		8,4	15		15,4	10			5,40	
01802	**01852**		10		10,5	18		17,4	12			6,30	
01803	**01853**		12		13	20		18,4	13			5,61	
10440	**10840**	16	5	5,4	5,3	11	7,8	11,9	5,5	16,5	10	6,55	
01804	**01854**		6		6,4	11,5		13,9	7,5			6,96	
01805	**01855**		8		8,4	15		15,9	10			8,20	
01806	**01856**		10		10,5	18		17,9	12			8,20	
01807	**01857**		12		13	20		18,9	13			7,78	
01808	**01858**	25	6	6,9	6,4	14	9,4	14,7	7,5	21	12	11,27	12377 page no. 159; 30460 page no. 165; 12725 page no. 184
01809	**01859**		8		8,4	15		16,7	10			12,15	
01810	**01860**		10		10,5	18		18,7	12			11,84	
01811	**01861**		12		13	20		19,7	13			12,40	
01812	**01862**	35	6	8,3	6,4	16,5	11,3	16,2	7,5	21	15	17,64	31460 page no. 167; 12930, 12933 page no. 169; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12728 page no. 186; 12836, 12485-87 page no. 192; 12837 page no. 193
01813	**01863**		8		8,4	16,5		18,2	10			17,26	
01814	**01864**		10		10,5	18		20,2	12			18,00	
01815	**01865**		12		13	20		21,2	13			18,00	
10441	**10841**	50	6	9,6	6,4	19	13,1	17,1	7,5	26	17	26,28	
01816	**01866**		8		8,4	19		19,1	10			26,70	
01817	**01867**		10		10,5	20		21,1	12			29,90	
01818	**01868**		12		13	23		23,5	13			30,00	
10442	**10842**		16		17	27		25,1	16			30,00	
01819	**01869**	70	8	11,5	8,4	22	15,3	20,2	10	23,9	20	36,56	
01820	**01870**		10		10,5	22		22,2	12			38,38	
01821	**01871**		12		13	23		23,2	13			38,30	
10443	**10843**		16		17	27		26,2	16			39,46	
01822	**01872**	95	8	13,5	8,4	25	17,5	21,3	10	28	22	48,69	
01823	**01873**		10		10,5	25		23,3	12			52,70	
01824	**01874**		12		13	25		24,3	13			50,63	
10444	**10844**		16		17	28		27,3	16			52,51	
01825	**01875**	120	10	15,5	10,5	29	20	25	12	32	25	74,00	
01826	**01876**		12		13	29		26	13			73,25	
01827	**01877**		16		17	29		28,5	16			72,95	
01828	**01878**	150	10	16,8	10,5	31	21,3	25,7	12	34	28	80,70	
01829	**01879**		12		13	31		26,7	13			82,90	
01830	**01880**		16		17	31		29,7	16			85,00	
10445	**10845**		20		21	35		33,7	19			88,90	

Tubular cable lugs 185-300 mm² druseidt standard design Angle type 90°

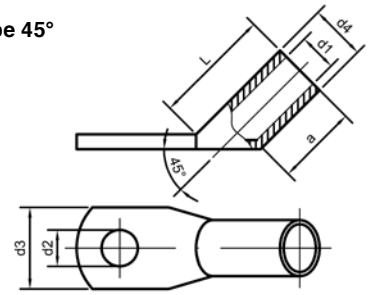
Material: Cu-HCP DIN EN 13600 Surface: tinned



Part-No. without inspection hole	Part-No. with inspection hole	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	a	weight kg/‰ pcs.	crimping-tools/page no.
10446	**10846**	185	10	19	10,5	35	24	27	12	34,8	29	99,00	31460 page no. 167; 12930, 12933 page no. 169; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12728 page no. 186; 12836, 12485-87 page no. 192; 12837 page no. 193
01831	**01881**		12		13	35		28	13			101,40	
01832	**01882**		16		17	35		31	16			111,50	
01833	**01883**		20		21	35		35	19			115,80	
01834	**01884**	240	12	21	13	38	26	29	13	43	34	126,85	
01835	**01885**		16		17	38		32	16			134,55	
01836	**01886**		20		21	38		36	19			140,25	
01838	**01888**	300	12	24	13	43	30	31	13	51	41	198,20	
01840	**01890**		16		17	43		34	16			209,00	
01842	**01892**		20		21	43		38	19			218,10	

Tubular cable lugs 10-240 mm² druseidt standard design Angle type 45°

Material: Cu-HCP DIN EN 13600 Surface: tinned

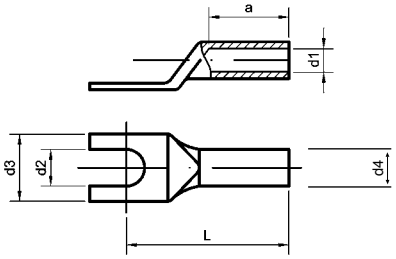


Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
10438/S-45	10	5	4,3	5,3	10	6,7	15	9	4,90	31460 page no. 167; 12930, 12933 page no. 169; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12728 page no. 186; 12836, 12485-87 page no. 192; 12837 page no. 193; 12377 page no. 159; 30460 page no. 165; 12725 page no. 184; 12376 page no. 159; 12375 page no. 159; 12655 page no. 163; 30446 page no. 158
01800/S-45		6		6,4	11				5,40	
01801/S-45		8		8,4	15				5,90	
01804/S-45	16	6	5,4	6,4	11,5	7,8	16,5	10	6,90	
01805/S-45		8		8,4	15				7,08	
01806/S-45		10		10,5	18				8,20	
01808/S-45	25	6	6,9	6,4	14	9,4	20	12	10,44	
01809/S-45		8		8,4	15				11,30	
01810/S-45		10		10,5	18				11,97	
01811/S-45		12		13	20				12,17	
01812/S-45	35	6	8,3	6,4	16,5	11,3	24,5	15	18,09	
01813/S-45		8		8,4	16,5				18,75	
01814/S-45		10		10,5	18				19,51	
01815/S-45		12		13	20				19,73	
01816/S-45	50	8	9,6	8,4	19	13,1	28,5	17	28,50	
01817/S-45		10		10,5	20				32,70	
01818/S-45		12		13	23				34,14	
01819/S-45	70	8	11,5	8,4	22	15,3	33	20	40,24	
01820/S-45		10		10,5	22				42,96	
01821/S-45		12		13	23				42,48	
01822/S-45	95	8	13,5	8,4	25	17,5	38	22	53,80	
01823/S-45		10		10,5	25				56,80	
01824/S-45		12		13	25				57,40	
01825/S-45	120	10	15,5	10,5	29	20	43,5	25	83,25	
01826/S-45		12		13	29				81,50	
01827/S-45		16		17	29				85,92	
01828/S-45	150	10	16,8	10,5	31	21,3	47,5	28	98,70	
01829/S-45		12		13	31				96,80	
01830/S-45		16		17	31				101,20	
01831/S-45	185	12	19	10,5	35	24	51	29	122,90	
01832/S-45		16		13	35				119,60	
01833/S-45		20		17	35				139,90	
01834/S-45	240	12	21	10,5	38	26	61	34	155,80	
01835/S-45		16		13	38				165,10	
01836/S-45		20		17	38				170,40	

Tubular cable lugs 0,5-16 mm²

druseidt standard design, Forktype

Material: Cu-ETP resp. HCP DIN EN 13600 Surface: tinned



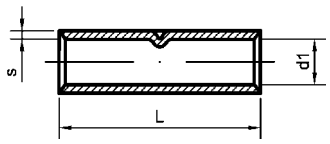
Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
02100	0,5-0,75	3	1,4	3,2	6,5	3	12,5	6	0,70	30445 page no. 158
02101		4		4,3	8,5		14		0,70	
02102		5		5,3	10		15		0,75	
02105	1,0-1,5	4	1,9	4,3	8,5	3,9	15	6	1,17	30446 page no. 158
02106		5		5,3	10		16		1,30	
02107		6		6,4	11		18		1,39	
02110	2,5	4	2,4	4,3	8,5	4,4	15	6,5	1,48	
02111		5		5,3	10		16		1,55	
02112		6		6,4	11		18		1,63	
02113		8		8,4	13		20		1,91	
02115	4	4	3	4,3	8,5	5	17	8	1,81	
02116		5		5,3	10		18		2,06	
02117		6		6,4	11		20		2,16	
02118		8		8,4	14		22		2,31	
02121	6	4	3,7	4,3	8,5	5,5	17,5	8	2,07	12655 page no. 163
02122		5		5,3	10		19		2,25	
02123		6		6,4	11		21		2,49	
02124		8		8,4	14		23		2,58	
02127	10	5	4,3	5,3	10	6,7	20,5	10	3,96	30460 page no. 165; 31460 page no. 167; 12930, 12933 page no. 169; 12725 page no. 184 12728 page no. 186
02128		6		6,4	11		22,5		4,17	
02129		8		8,4	15		25		4,57	
02132	16	5	5,4	5,3	12	7,8	22,5	11	5,25	
02133		6		6,4	12		24,5		5,56	
02134		8		8,4	15		26,5		6,00	
02137	16f	5	6	5,3	14	9	25,5	13	8,24	
02138		6		6,4	14		27		8,60	
02139		8		8,4	15		29,5		9,37	

Butt connectors 0,5-630 mm²

druseidt standard design

Material: Cu-ETP resp. HCP DIN EN 13600

Surface: tinned



Part-No.	cross-section mm²	dimensions mm d_1	L	s	weight kg/‰ pcs.	crimping-tools/page no.
13686	0,5-0,75	1,4	15	0,8	0,80	page no. 158-160 163-193
13687	1,0-1,5	1,9	15	1	1,20	
13688	2,5	2,4	16	1	1,50	
13689	4	3	19	1	2,10	
13690	6	3,7	19	0,9	2,20	
13691	10	4,3	30	1,2	5,52	
13692	16	5,4	35	1,2	8,00	
13693	25	6,9	40	1,25	11,74	
13694	35	8,3	45	1,5	19,12	
13695	50	9,6	50	1,75	27,00	
13696	70	11,5	55	1,9	39,00	
13697	95	13,5	60	2	50,00	
13698	120	15,5	65	2,25	71,90	
13699	150	16,8	70	2,25	86,50	
01752	185	19	75	2,5	116,25	
01753	240	21	85	2,5	142,20	
01754	300	24	100	3	224,00	
01755	400	27,5	100	3	261,70	
01756	500	31	140	3,5	473,00	
01757	630	34	160	3,5	617,50	

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

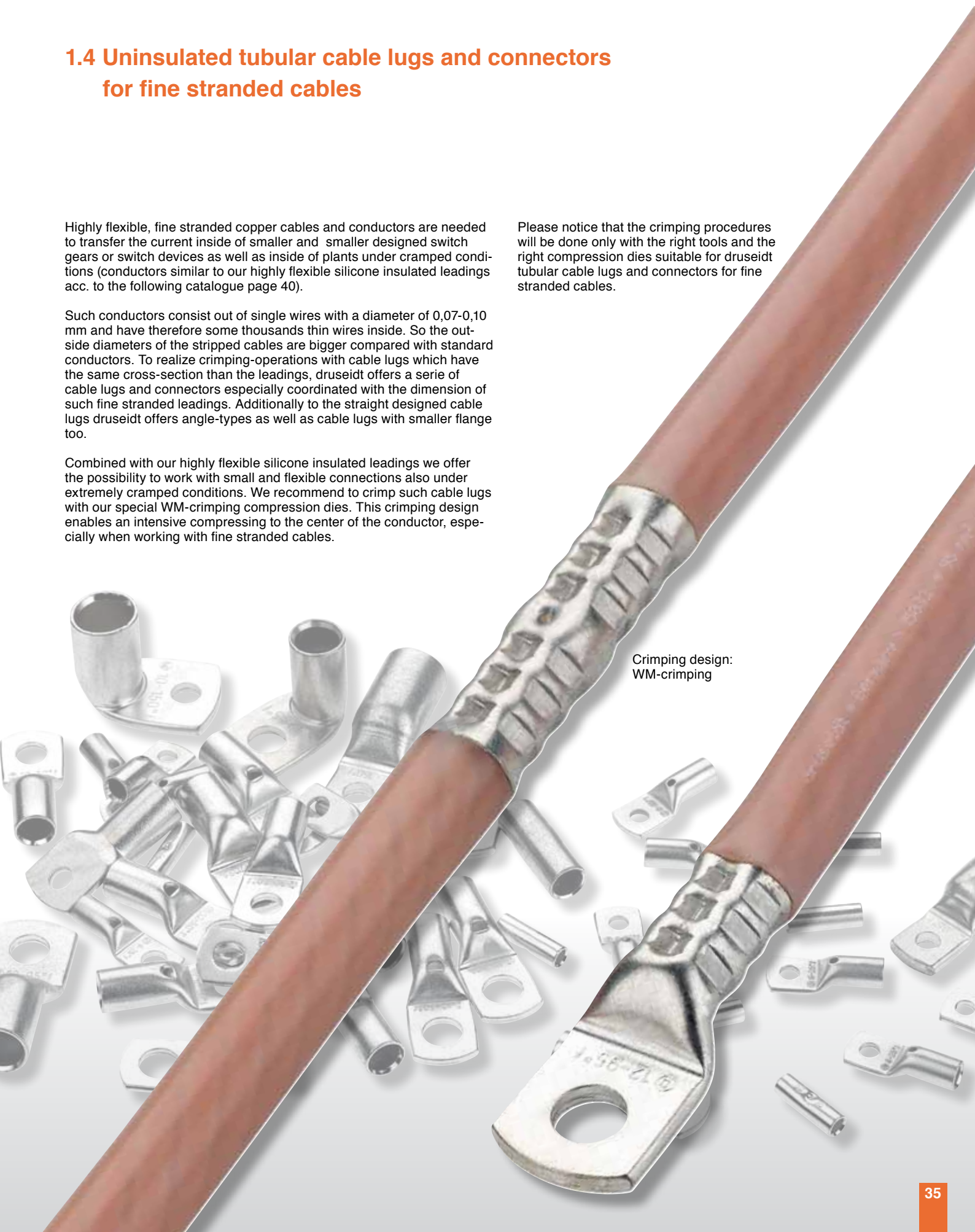
1.4 Uninsulated tubular cable lugs and connectors for fine stranded cables

Highly flexible, fine stranded copper cables and conductors are needed to transfer the current inside of smaller and smaller designed switch gears or switch devices as well as inside of plants under cramped conditions (conductors similar to our highly flexible silicone insulated leadings acc. to the following catalogue page 40).

Such conductors consist out of single wires with a diameter of 0,07-0,10 mm and have therefore some thousands thin wires inside. So the outside diameters of the stripped cables are bigger compared with standard conductors. To realize crimping-operations with cable lugs which have the same cross-section than the leadings, druseidt offers a serie of cable lugs and connectors especially coordinated with the dimension of such fine stranded leadings. Additionally to the straight designed cable lugs druseidt offers angle-types as well as cable lugs with smaller flange too.

Combined with our highly flexible silicone insulated leadings we offer the possibility to work with small and flexible connections also under extremely cramped conditions. We recommend to crimp such cable lugs with our special WM-crimping compression dies. This crimping design enables an intensive compressing to the center of the conductor, especially when working with fine stranded cables.

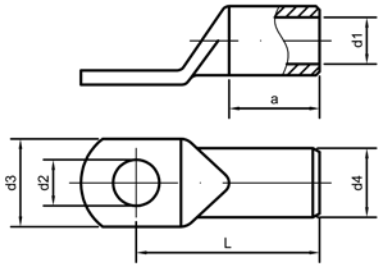
Please notice that the crimping procedures will be done only with the right tools and the right compression dies suitable for druseidt tubular cable lugs and connectors for fine stranded cables.



Crimping design:
WM-crimping

Tubular cable lugs 10f-240f mm²
for fine stranded cables

Material: Cu-HCP DIN EN 13600
Surface: tinned

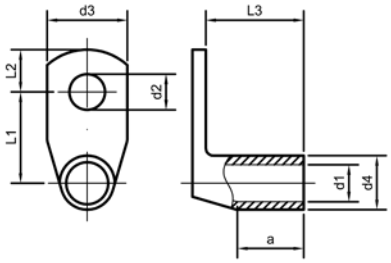


Part-No. without inspection hole	Part-No. with inspection hole	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
13650	**13650/S**	10f	5	5	5,3	12	8	23	12	7,00	12930, 12933, page no. 169; 12728 page no. 186
13651	**13651/S**		6		6,4	12		25		7,60	12766 page no. 170; 12965S/, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no.181; 12836, 12485-87 page no. 192; 12837 page no. 193
13652	**13652/S**		8		8,4	15		28		8,90	
13653	**13653/S**		10		10,5	18		31		9,70	
13654	**13654/S**		12		13	20		32		10,00	
10700	**10700/S**	16f	5	6	5,3	14	9	25,5	13	9,40	
13655	**13655/S**		6		6,4	14		27		10,10	
13656	**13656/S**		8		8,4	15		29,5		11,20	
13657	**13657/S**		10		10,5	18		32		11,20	
13658	**13658/S**		12		13	20		33		11,80	
13659	**13659/S**	25f	6	7,7	6,4	16	10,7	32	16	14,70	
13660	**13660/S**		8		8,4	16		34		14,30	
13661	**13661/S**		10		10,5	18		35		15,30	
13662	**13662/S**		12		13	20		36		16,10	
10702	**10702/S**	35f	6	9,2	6,4	18	12,4	36	18	20,70	
13663	**13663/S**		8		8,4	18		36		20,70	
13664	**13664/S**		10		10,5	18		38		21,40	
13665	**13665/S**		12		13	23		40		22,20	
13666	**13666/S**		16		17	28		45		22,10	
10704	**10704/S**	50f	6	11,2	6,4	22	14,8	42	21	32,00	
13667	**13667/S**		8		8,4	22		42		32,20	
13668	**13668/S**		10		10,5	22		43		33,10	
13669	**13669/S**		12		13	23		44		33,60	
13670	**13670/S**		16		17	28		48,5		36,50	
13671	**13671/S**	70f	8	13,5	8,4	25	17,5	45,5	23	48,00	
13672	**13672/S**		10		10,5	25		47		48,40	
13673	**13673/S**		12		13	26		47		48,40	
13674	**13674/S**		16		17	28		50		50,50	
10706	**10706/S**		20		21	31		54,5		55,20	
10707	**10707/S**	95f	8	15,5	8,4	29	20	50,5	26	65,60	
13675	**13675/S**		10		10,5	29		53		71,50	
13676	**13676/S**		12		13	29		52,5		69,80	
13677	**13677/S**		16		17	29		55		71,90	
13678	**13678/S**		20		21	35		60		76,10	
13679	**13679/S**	120f	10	16,8	10,5	31	21,3	56,5	29	80,70	
13680	**13680/S**		12		13	31		56		80,70	
13681	**13681/S**		16		17	31		58		83,60	
13682	**13682/S**		20		21	35		63		87,50	
10708	**10708/S**	150f	10	19	10,5	35	24	59	30	104,00	
13683	**13683/S**		12		13	35		58,5		107,00	
13684	**13684/S**		16		17	35		63		111,10	
13685	**13685/S**		20		21	35		66		119,60	
10710	**10710/S**	185f	10	21	10,5	38	26	67	29	135,90	
10711	**10711/S**		12		13	38		67		121,50	
10712	**10712/S**		16		17	38		69,5		129,80	
10713	**10713/S**		20		21	38		71		134,50	
10714	**10714/S**	240f	12	24	13	35	30	44	30	212,60	
10715	**10715/S**		16		17	35		44		219,40	
10716	**13716/S**		20		21	35		44		222,00	

31460 page no. 167
30460 page no. 165; 12725 page no. 184
12374 page no. 160

Tubular cable lugs 10f-240f mm²
Angle type 90° for fine stranded cables

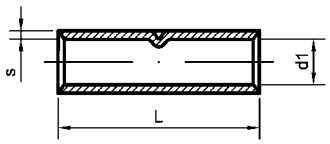
Material: Cu-HCP DIN EN 13600
Surface: tinned



Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	a	weight kg/‰ pcs.	crimping-tools/page no.
03410	10f	5	5	5,3	12	8	12	5,5	17	11	8,60	12930, 12933, page no. 169; 12728 page no. 186; 12766 page no. 170; 12965S/, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no.181; 12836, 12485-87 page no. 192; 12837 page no. 193; 31460 page no. 167; 30460 page no. 165; 12725 page no. 184; 12374 page no. 160
03412		6		6,4	13		14	7,5			8,70	
03414		8		8,4	15		16	10			9,40	
03416		10		10,5	18		18	12			9,70	
03418		12		13	20		19	13			9,80	
03420	16f	5	6	5,3	15	9	12,5	5,5	17	12	9,40	
03422		6		6,4	15		14,5	7,5			10,50	
03424		8		8,4	15		16,5	10			11,80	
03426		10		10,5	18		18,5	12			12,50	
03428		12		13	20		19,5	13			14,30	
03430	25f	6	7,7	6,4	16	10,7	15,9	7,5	20,8	15	15,50	
03432		8		8,4	16		17,9	10			18,00	
03434		10		10,5	18		19,9	12			18,80	
03436		12		13	20		20,9	13			16,90	
03440	35f	6	9,2	6,4	18	12,4	16,7	7,5	21,5	17	19,70	
03442		8		8,4	18		18,7	10			22,00	
03444		10		10,5	18,5		20,7	12			23,40	
03446		12		13	23		21,7	13			22,30	
03448		16		17	28		24,7	16			22,50	
03450	50f	6	11,2	6,4	22	14,8	17,9	7,5	24,5	20	29,00	
03452		8		8,4	22		19,9	10			31,50	
03454		10		10,5	22		21,9	12			33,00	
03456		12		13	23		22,9	13			33,80	
03458		16		17	28		25,9	16			35,70	
03460	70f	8	13,5	8,4	25	17,5	21,3	10	28	22	45,30	
03462		10		10,5	25		23,3	12			48,20	
03464		12		13	25		24,3	13			50,63	
03466		16		17	28		27,3	16			51,00	
03468		20		21	31		31,3	19			54,00	
03470	95f	10	15,5	10,5	29	20	25	12	32	25	75,00	
03472		12		13	29		26	13			72,20	
03474		16		17	29		28,5	16			75,00	
03476		20		21	35		32,5	19			77,00	
03480	120f	10	16,8	10,5	31	21,3	25,7	12	34	28	78,60	
03482		12		13	31		26,7	13			80,20	
03484		16		17	31		29,7	16			83,30	
03486		20		21	35		33,7	19			86,10	
03490	150f	10	19	10,5	35	24	27	12	34,8	29	100,60	
03492		12		13	35		28	13			107,00	
03494		16		17	35		31	16			110,40	
03496		20		21	35		35	19			119,60	
03497	185f	12	21	13	38	26	29	13	43	34	126,90	
03498		16		17	38		32	16			134,60	
03499		20		21	38		36	19			140,20	
03500	240f	12	24	13	43	30	31	13	51	41	199,20	
03501		16		17	43		34	16			209,00	
03502		20		21	43		38	19			218,10	

Butt connectors 10f-240f mm²
for fine stranded cables

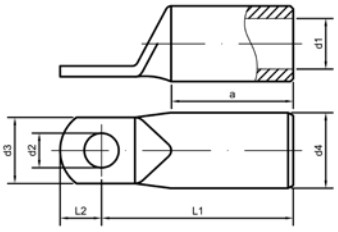
Material: Cu-HCP DIN EN 13600
Surface: tinned



Part-No.	cross-section mm²	dimensions mm d1	L	s	weight kg/‰/pcs.	crimping-tools/page no.
03800	10 f	5	30	1,5	8,30	crimping-tools pages no. 160-193
03801	16 f	6	35	1,5	11,00	
03802	25 f	7,7	40	1,5	15,00	
03803	35 f	9,2	45	1,6	21,80	
03804	50 f	11,2	50	1,8	32,40	
03805	70 f	13,5	60	2	51,00	
03806	95 f	15,5	65	2,25	74,90	
03807	120 f	16,8	65	2,25	84,40	
03808	150 f	19	70	2,5	105,60	
03809	185 f	21	85	2,5	140,10	
03810	240 f	24	100	3	227,30	

Tubular cable lugs 35f-240f mm²
with narrow flange for fine stranded cables

Material: Cu-HCP DIN EN 13600
Surface: tinned

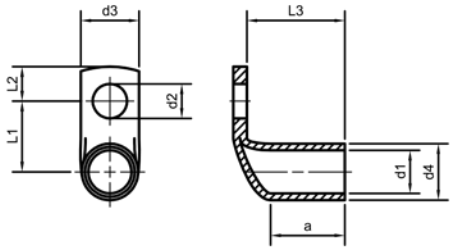


Part-No.	cross-section mm²	drilling M	dimensions mm d1	d2	d3	d4	L1	L2	a	weight kg/‰ pcs.	crimping-tools/page no.
10850	35f	6	9,2	6,4	15	12,4	35	7,5	18	17,70	12930, 12933 page no. 169; 12728 page no. 186; 12766 page no. 170; 12965S/, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no.181; 12836, 12485-87 page no. 192; 12837 page no. 193; 31460 page no. 167; 30460 page no. 165; 12725 page no. 184; 12374 page no. 160
10852	50f	6	11,0	6,4	15	14,8	38,5	7,5	21	26,90	
10853		8		8,4	17		41	10		30,00	
10854		10		10,5	19		45,5	12		33,10	
10855		12		13	19		46,5	13		33,10	
10856	70f	6	13,4	6,4	18	17,5	47,5	7,5	23	45,10	
10857		8		8,4	18		48	10		47,00	
10858		10		10,5	19		50	12		47,40	
10859		12		13	22		51	13		46,30	
10861	95f	6	14,9	6,4	19	20	50	7,5	26	59,50	
10862		8		8,4	19		51	10		62,90	
10863		10		10,5	19		53,5	12		65,40	
10864		12		13	22		55	13		65,50	
10866	120f	6	16,3	6,4	19	21,3	53	7,5	29	68,40	
10867		8		8,4	19		55	10		71,10	
10868		10		10,5	19		57	12		73,40	
10869		12		13	22		58	13		76,30	
10871	150f	6	18,7	6,4	26	24	56	7,5	30	85,70	
10872		8		8,4	26		58	10		91,80	
10873		10		10,5	26		60	12		97,30	
10874		12		13	26		59,5	13		93,90	
10875		16		17	26		62,5	16		105,00	
10876	185f	10	21	10,5	30	26	65	12	35	117,20	
10877		12		13	30		65	13		112,70	
10878		16		17	30		68	16		117,60	
10880	240f	10	23,5	10,5	30	30	76	12	42	185,90	
10881		12		13	30		79	13		200,80	
10882		16		17	30		81	16		202,30	

The dimensions of the cable lugs are coordinated with the dimensions of our fine stranded ropes and silicone insulated leadings. In conjunction with such leadings it is possible to realize connetions also under cramped conditions. Cable lugs with narrow flange for normal stranded cables are described on page 44.

Tubular cable lugs 35f-240f mm²
with narrow flange for fine stranded cables

Angle type 90°
Material: Cu-HCP DIN EN 13600
Surface: tinned



Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	a	weight kg/‰/pcs.	crimping-tools/page no.
03960	35f	6	9,2	6,4	15	12,4	16,7	7,5	21,5	17	18,00	
03961	50f	6	11	6,4	15	14,8	17,9	7,5	24,5	20	26,00	
03962		8		8,4	17		19,9	10			29,00	
03963		10		10,5	19		21,9	12			30,00	
03964	70f	6	13,4	6,4	18	17,5	20	7,5	31	22	43,00	
03965		8		8,4	18		22	10			45,00	
03966		10		10,5	19		24	12			48,00	
03967		12		13	22		27	13			48,00	
03968	95f	6	14,9	6,4	19	20	21	7,5	34	25	64,00	
03969		8		8,4	19		23	10			67,00	
03970		10		10,5	19		25	12			70,00	
03971		12		13	22		26	13			69,00	
03972	120f	6	16,3	6,4	19	21,3	21,7	7,5	37	28	73,00	
03973		8		8,4	19		23,7	10			77,00	
03974		10		10,5	19		25,7	12			79,00	
03975		12		13	22		26,7	13			78,00	
03976	150f	6	18,7	6,4	26	24	23	7,5	37,5	29	92,00	
03977		8		8,4	26		25	10			98,00	
03978		10		10,5	26		27	12			99,60	
03979		12		13	26		28	13			102,00	
03980		16		17	26		31	16			105,00	
03981	185f	10	21	10,5	30	26	28	12	43	34	119,00	
03982		12		13	30		29	13			119,00	
03983		16		17	30		32	16			123,00	
03984	240f	10	23,5	10,5	30	30	30	12	50	41	186,00	
03985		12		13	30		31	13			187,00	
03986		16		17	30		34	16			192,00	

crimping-tools pages no. 160-193

The dimensions of the cable lugs are coordinated with the dimensions of our fine stranded ropes and silicone insulated leadings. In conjunction with such leadings it is possible to realize connetions also under cramped conditions.

In comparison cable lugs with narrow flange with cable lugs in standard- or Euro-type design

The use of cable lugs with a narrow flange realize connections and an installation also into smaller places. In combination with our highly flexible silicone insulated leadings according to the following page 40 they offer excellent solutions for high current connections inside of small switch gears or similar application.

Single insulated silicone copper cables 1,8/3 kV

highly flexible, free of halogen, self-extinguishing and UL-approved

- **Highest flexibility for high current transfer**
- **Crimped with our cable lugs with smaller flange acc. to the catalogue pages 38 + 39 well suited for installation works under cramped conditions**
- **Caused by the reinforced thickness of the insulating material rugged und suitable for a voltage of 1,8/3 kV**
- **Free of halogen and self-extinguishing**
- **UL-approved**
- **Temperature resistant continuously – 50 °C up to + 180 °C shortly up to + 250 °C up to + 300 °C**
- **Testing voltage 10 kV**
- **Dielectric strength 20 kV/mm**
- **Short circuit resistance SIR + 350 °C**
- **Good UV- and ozone stability**
- **Delivery in rings, on plastic spools or wooden drums**

Part-No.	cross-section mm²	diameter and number of wires	outer-Ø ca.	wall thickness ca.	current-load in dependence of the conductor heat in °Celsius 45°	80°	90°	100°	130°
15014	4,0	1036x0,07	4,80	1,1	30A	50A	55A	60A	70A
15016	6,0	1568x0,07	5,60	1,1	40A	65A	70A	78A	90A
15020	10,0	2562x0,07	8,50	2,0	50A	90A	98A	107A	120A
15022	16,0	4116x0,07	10,00	2,0	70A	125A	132A	143A	160A
15024	25,0	3234x0,07	12,00	2,3	95A	160A	176A	187A	215A
15026	35,0	4508x0,10	13,80	2,5	115A	200A	218A	230A	260A
15028	50,0	6468x0,10	15,50	2,5	145A	245A	276A	287A	325A
15030	70,0	8967x0,10	18,00	2,5	175A	305A	347A	352A	400A
15032	95,0	12201x0,10	20,00	2,5	215A	370A	416A	425A	485A
15034	120,0	15435x0,10	21,50	2,5	245A	425A	488A	495A	560A
15036	150,0	19404x0,10	23,50	2,5	285A	490A	566A	575A	640A
15038	185,0	23580x0,10	26,00	2,5	320A	555A	644A	655A	730A
15040	240,0	30600x0,10	28,50	2,5	380A	650A	775A	790A	855A

Remark: All information about current load are approximate values in consideration of the cables heat (for single laying of air cooled cables and ambient temperature + 30° C). The values by a conductor heat of + 90° C are in accordance with VDE 0298 part 4 table 15. By changing the ambient temperature or the kind of laying reducing factors are to be considered. Nature colours is standard but on request it is also possible to manufacture cables with colours like black, red, blue, yellow/green etc. or with reduced insulation thickness and other operating voltages. Minimum quantity on request. The outside diameter of our highly flexible copper conductors are manufactured in coordination with cable lugs acc. to DIN 46234, DIN 46341 and druseidt tubular cable lugs for fine stranded cables.

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.5 Uninsulated tubular cable lugs and connectors, druseidt EURO-design

Caused by the fact that the German DIN-standardization for cable lugs and connectors cannot cover the whole range of electrical leadings and cables on the market, with their various kinds of conductor constructions and strandings, it is not possible to create an official standard for all designs.

Therefore different designs acc. to the specifications of the cable lug manufacturers have been established on the market. To activate as much as possible customers, druseidt offers, additionally to his approved cable lugs in standard design, a new so called Euro-design with changed tube dimension in the cross-section range of 6-120 mm². So it is possible to cover an additional section of cable lugs circulating in the market. Now customers, owning only tools for connectors acc. to the Euro-design, can buy the cable lugs by our company without making any changes in their tool assortment.

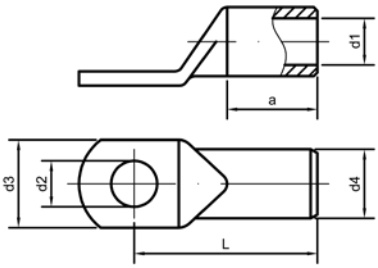
Cable lugs and connectors in Euro-design are deliverable in straight as well as different angled - or designs with narrow flange. We recommend to compress cable lugs in Euro-design with a WM-crimping. Suitable tools and compression die-sets especially for connectors acc. to the Euro-design, are described on the catalogue pages 159 ff.

Please notice, that the crimping procedures will be done only with the right tools in combination with the right compression dies suitable for cable lugs and connectors in Euro-design.

Crimping design:
WM-crimping

Tubular cable lugs 0,5-50 mm²
druseidt Euro-Series

Material: Cu-HCP DIN EN 13600
Surface: tinned

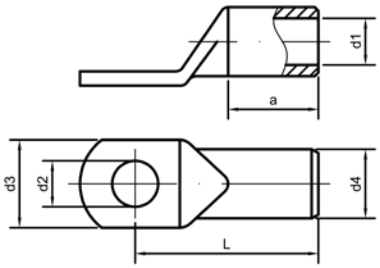


Part-No. without inspection hole	Part-No. with inspection hole	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
01580	-	0,5 - 0,75	3	1,4	3,2	6,5	3	12,5	6	0,71	30446 0,75-10 mm², 30446 1,5-16 mm²
01581	-		4		4,3	8,5		14		0,80	
01582	-		5		5,3	10		15		1,00	
01583	-	1 - 1,5	3	1,9	3,2	6,5	3,9	14	6	1,20	
01584	-		4		4,3	8,5		15		1,40	
01585	-		5		5,3	10		16		1,50	
01586	-		6		6,4	11		18		1,70	
01588	-	2,5	4	2,4	4,3	8,5	4,4	15	6,5	1,57	
01589	-		5		5,3	10		16		1,72	
01590	-		6		6,4	11		18		1,92	
01591	-		8		8,4	13		20		2,20	
01592	-	4	4	3	4,3	8,5	5	17	8	2,20	
01593	-		5		5,3	10		18		2,40	
01594	-		6		6,4	11		20		2,60	
01595	-		8		8,4	14		22		3,00	
03196	**03196/S**	6	4	3,5	4,3	10	6,5	19	9	4,60	12372/50, 12372 page no. 159; 12655 page no. 163
03197	**03197/S**		5		5,3	10		20		4,70	
03198	**03198/S**		6		6,4	11		21,5		5,40	
03199	**03199/S**		8		8,4	15		24		5,90	
03200	**03200/S**		10		10,5	18		26		6,40	
03201	**03201/S**		12		13	19		27,5		6,40	
03202	**03202/S**	10	4	4,5	4,3	12	7	20	10	4,30	12373 page no. 159; 30460 page no. 165; 31460 page no. 167; 12930, 12933 page no. 169; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no.179; 13551/25, 13551/42, 13537 page no. 181; 12725 page no. 184; 12728 page no. 186; 12836, 12485-87 page no. 192; 12837 page no. 193
03203	**03203/S**		5		5,3	12		21		4,90	
03204	**03204/S**		6		6,4	12		22,5		5,10	
03205	**03205/S**		8		8,4	15		25		5,80	
03206	**03206/S**		10		10,5	18		27		6,30	
03207	**03207/S**		12		13	20		28,5		6,30	
03208	**03208/S**	16	4	5,5	4,3	12	8,5	24	13	8,20	
03209	**03209/S**		5		5,3	12		25		8,80	
03210	**03210/S**		6		6,4	12		26,5		9,60	
03211	**03211/S**		8		8,4	15		29		10,30	
03212	**03212/S**		10		10,5	18		31		11,00	
03213	**03213/S**		12		13	19		32		10,80	
03214	**03214/S**	25	5	7	5,3	15	10	33,5	15	13,50	
03215	**03215/S**		6		6,4	15		31,5		13,10	
03216	**03216/S**		8		8,4	16		33		12,90	
03217	**03217/S**		10		10,5	18		34,5		14,60	
03218	**03218/S**		12		13	20		36		15,50	
03219	**03219/S**		14		15	22		39		16,60	
03220	**03220/S**		16		17	24		42		16,00	
03221	**03221/S**	35	6	8,5	6,4	17	12	33	17	20,70	
03222	**03222/S**		8		8,4	17		34		21,80	
03223	**03223/S**		10		10,5	20		36,5		21,90	
03224	**03224/S**		12		13	22		37,5		23,30	
03225	**03225/S**		14		15	23		40		24,40	
03226	**03226/S**		16		17	28		44		26,00	
03227	**03227/S**	50	6	10	6,4	20	14	37	19	30,10	
03228	**03228/S**		8		8,4	20		39		30,40	
03229	**03229/S**		10		10,5	20		40,5		31,30	
03230	**03230/S**		12		13	23		42		31,30	
03231	**03231/S**		14		15	23		44		35,10	
03232	**03232/S**		16		17	27		46		35,50	
03233	**03233/S**		20		21	30,5		52,5		38,90	

The dimensions of the Euro-series and the druseidt standard design according to catalogue page 30 are in the cross section range of 0,5-4 mm² identically constructed.

Tubular cable lugs 70-630 mm²
druseidt Euro-Series

Material: Cu-HCP DIN EN 13600
Surface: tinned

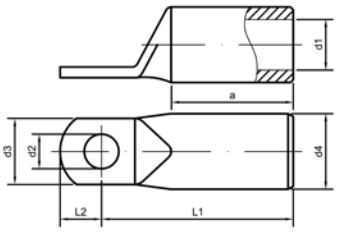


Part-No. without inspection hole	Part-No. with inspection hole	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
03234	**03234/S**	70	6	12	6,4	24	16,5	40,5	21	41,10	12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12836, 12485-87 page no. 192; 12837 page no. 193 / 31460 page no. 167; 12930, 12933 page no. 169; 12728 page no. 186 / 12373 page no. 159; 30460 page no. 165; 12725 page no. 184
03235	**03235/S**		8		8,4	24		42,5		44,60	
03236	**03236/S**		10		10,5	24		43,5		46,40	
03237	**03237/S**		12		13	24		45		46,40	
03238	**03238/S**		14		15	25		46		49,10	
03239	**03239/S**		16		17	28		48,5		49,60	
03240	**03240/S**		20		21	29		52		51,80	
03241	**03241/S**	95	6	13,5	6,4	26	18	43	23	49,50	
03242	**03242/S**		8		8,4	26		46		53,60	
03243	**03243/S**		10		10,5	26		47		55,10	
03244	**03244/S**		12		13	26		48		53,50	
03245	**03245/S**		14		15	26		51,5		58,90	
03246	**03246/S**		16		17	28		51		59,70	
03247	**03247/S**		20		21	30		55		61,30	
03248	**03248/S**	120	8	15	8,4	29	20	49,5	26	68,80	
03249	**03249/S**		10		10,5	29		52		74,20	
03250	**03250/S**		12		13	29		51,5		78,40	
03251	**03251/S**		14		15	30		53		79,90	
03252	**03252/S**		16		17	30		55		80,70	
03253	**03253/S**		20		21	35		60		89,00	
03254	**03254/S**	150	8	16,8	8,4	31	21,3	55,5	29	78,90	
01634	**01714**		10		10,5	31		56,5		81,90	
01635	**01715**		12		13	31		56		80,70	
10149	**10174**		14		15	31		57		80,00	
01636	**01716**		16		17	31		58		83,60	
01637	**01717**		20		21	35		63		87,50	
10145	**10175**	185	10	19	10,5	35	24	59	30	106,10	
01638	**01718**		12		13	35		58,5		106,00	
10151	**10176**		14		15	35		61		107,20	
01639	**01719**		16		17	35		63		108,60	
01640	**01720**		20		21	35		66		113,30	
10152	**10177**	240	10	21	10,5	38	26	67	35	129,70	
01641	**01721**		12		13	38		67		130,20	
10153	**10178**		14		15	38		69		133,60	
01642	**01722**		16		17	38		69,5		138,40	
01643	**01723**		20		21	38		71		138,00	
01644	**01724**	300	12	24	13	44	30	82	42	217,20	
10154	**10190**		14		15	44		84		221,90	
01645	**01725**		16		17	44		85		219,40	
01646	**01726**		20		21	44		85		229,20	
10155	-	400	10	27,5	10,5	49	33,5	92	47	279,00	on request
10150	-		12		13	49		92		279,00	
01647	-		16		17	49		92		279,00	
01648	-		20		21	49		92		281,90	
01649	-	500	16	31	17	55,5	38	113	70	493,80	
01650	-		20		21	55,5		113		485,60	
01651	-	630	16	34	17	60	41	115	70	513,50	
01652	-		20		21	60		115		506,00	

The dimensions of the Euro-Series and the druseidt standard design according to catalogue page 31 are in the cross section range of 150-630 mm² identically constructed.

Tubular cable lugs 35-300 mm² with narrow flange druseidt Euro-Series

Material: Cu-HCP DIN EN 13600
Surface: tinned

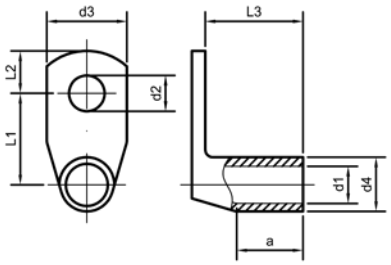


Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	a	weight kg/‰ pcs.	crimping-tools/page no.
03900	35	6	8,5	6,4	15	12	33	7,5	17	18,00	12372/50 S. 159 12655 S. 163
03901		8		8,4	15		35	10		21,60	
03902	50	6	10	6,4	15	14	37	7,5	19	27,30	12372 page no. 159
03903		8		8,4	17		39	10		28,30	
03904		10		10,5	17		41	12		29,90	
03905	70	6	11,8	6,4	17	16,5	41	7,5	21	40,60	12373 page no. 159; 30460 page no.165; 12725 page no. 184
03906		8		8,4	17		43	10		43,00	
03907		10		10,5	17		45	12		44,00	
03908		12		13	19		46	13		44,80	
03909	95	6	13,5	6,4	19	18	43	7,5	23	46,70	31460 page no. 167; 12930, 12933 page no. 169; 12728 page no. 186
03910		8		8,4	19		45	10		49,00	
03911		10		10,5	19		47	12		51,00	
03912		12		13	19		48	13		52,00	
03913	120	6	14,7	6,4	20	20	49	7,5	26	64,30	12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12836, 12485-87 page no. 192; 12837 page no. 193
03914		8		8,4	20		51	10		67,30	
03915		10		10,5	20		53	12		67,00	
03916		12		13	20		54	13		73,40	
03917	150	6	16,3	6,4	19	21,3	53	7,5	29	70,10	
03918		8		8,4	19		55	10		73,10	
03919		10		10,5	19		56	12		76,30	
03920		12		13	22		59	13		76,30	
03921	185	10	18,7	10,5	26	24	60	12	30	104,70	
03922		12		13	26		59,5	13		103,60	
03923		16		17	26		64	16		111,40	
03924	240	10	21	10,5	30	26	65	12	35	119,50	
03925		12		13	30		65	13		121,90	
03926		16		17	30		68	16		122,60	
03927	300	10	23,5	10,5	30	30	76	12	42	196,60	
03928		12		13	30		79	13		200,80	
03929		16		17	30		81	16		206,00	

Designs with inspection hole or 90° angled on request.

Tubular cable lugs 0,5-35 mm²
Angle type 90°
druseidt Euro-Series

Material: Cu-HCP DIN EN 13600
Surface: tinned

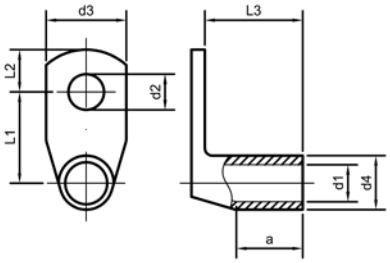


Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	a	weight kg/‰ pcs.	crimping-tools/page no.
10400	0,5-0,75	3	1,4	3,2	6,5	3	7,5	4	9,5	5	0,90	30445 0,75-10 mm², 30446 1,5-16 mm² page no. 158
10402		4		4,3	8,5		8,5	5			1,00	
10404		5		5,3	10		9,5	5,5			1,00	
10406	1-1,5	3	1,9	3,2	6,5	3,9	8	4	9,5	5	1,60	
10408		4		4,3	8,5		9	5			1,60	
10410		5		5,3	10		10	5,5			1,60	
10412		6		6,4	11		12	7,5			1,60	
10414	2,5	4	2,4	4,3	8,5	4,4	9,2	5	9,5	5,5	1,83	
10416		5		5,3	10		10,2	5,5			1,84	
10418		6		6,4	11		12,2	7,5			2,20	
10420		8		8,4	14		14,2	10			2,30	
10422	4	4	3	4,3	8,5	5	9,5	5	10,5	7	2,50	
10424		5		5,3	10		10,5	5,5			2,41	
10426		6		6,4	11		12,5	7,5			2,90	
10428		8		8,4	14		14,5	10			3,00	
03815	6	4	3,5	4,3	10	6,5	10,3	5	13,5	8	6,00	12372/50, 12372 page no. 159; 12655 page no. 163
03816		5		5,3	11		11,2	5,5			5,60	
03817		6		6,4	11		13,3	7,5			6,20	
03818		8		8,4	15		15,3	10			6,40	
03819		10		10,5	18		17,2	12			6,80	
03820		12		13	20		18,2	13			6,60	
03821	10	5	4,5	5,3	12	7	11,5	5,5	15	9	5,40	12373 page no. 159; 30460 page no. 165; 31460 page no. 167; 12930, 12933 page no. 169; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 12537 page no. 181; 12725 page no. 184; 12728 page no. 186; 12836, 12485-87 page no. 192; 12837 page no. 193
03822		6		6,4	12		12,5	7,5			5,90	
03823		8		8,4	15		15,5	10			6,70	
03824		10		10,5	18		17,5	12			7,00	
03825		12		13	20		18,5	13			7,00	
03826	16	5	5,5	5,3	12	8,5	13	5,5	21	12	10,70	
03827		6		6,4	12		14,3	7,5			11,50	
03828		8		8,4	15		16,3	10			12,00	
03829		10		10,5	18		18,3	12			12,30	
03830		12		13	20		19,3	13			12,30	
03831	25	6	7	6,4	15	10	15,5	7,5	18	14	13,50	
03832		8		8,4	16		17,5	10			14,30	
03833		10		10,5	18		19,5	12			16,80	
03834		12		13	20		20,5	13			15,10	
03835		14		15	22		22,5	15			16,90	
03836	35	6	8,5	6,4	17	12	16,5	7,5	19,5	16	21,00	
03837		8		8,4	17		18,5	10			23,10	
03838		10		10,5	20		20,5	12			23,60	
03839		12		13	22		21,5	13			23,70	
03840		14		15	23		23,5	15			24,80	
03841		16		17	28		24,5	16			24,80	

The dimensions of the Euro-Series and the druseidt standard design according to catalogue page 32 are in the cross section range of 0,5-4 mm² identically constructed.

Tubular cable lugs 50-300 mm²
Angle type 90°
druseidt Euro-Series

Material: Cu-HCP DIN EN 13600
Surface: tinned

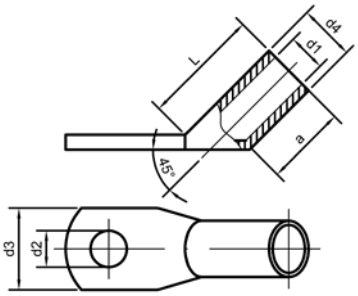


Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	a	weight kg/‰ pcs.	crimping-tools/page no.
03842	50	6	10	6,4	20	14	17,5	7,5	21,5	18	30,00	12372/50 page no. 159; 12655 page no. 163
03843		8		8,4	20		19,5	10			32,20	
03844		10		10,5	20		21,5	12			33,20	
03845		12		13	23		22,5	13			32,80	
03846		14		15	23		24,5	15			33,70	
03847		16		17	27		28,5	16			36,30	
03848		20		21	30		32,5	19			38,90	
03849	70	6	12	6,4	24	16,5	18,8	7,5	26	20	44,10	12372 page no. 159
03850		8		8,4	24		20,8	10			49,20	
03851		10		10,5	24		22,8	12			50,60	
03852		12		13	24		23,8	13			48,70	
03853		14		15	25		25,8	15			48,40	
03854		16		17	28		26,8	16			51,10	
03855		20		21	29		30,8	19			52,60	
03856	95	8	13,5	8,4	26	18	21,5	10	26,4	22	53,30	12373 page no. 159; 30460 page no. 165; 12725 page no. 184
03857		10		10,5	26		23,5	12			55,90	
03858		12		13	26		24,5	13			55,30	
03859		14		15	26		26,5	15			58,90	
03860		16		17	28		27,5	16			60,00	
03861	120	8	15	8,4	29	20	22,5	10	32	25	76,30	31460 page no. 167; 12930, 12933 page no. 169; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12728 page no. 186; 12836, 12485-87 page no. 192; 12837 page no. 193
03862		10		10,5	29		24,5	12			80,70	
03863		12		13	29		25,5	13			80,10	
03864		16		17	30		28,5	16			84,60	
03865	150	8	16,8	8,4	31	21,3	25,7	10	34	28	80,30	
03866		10		10,5	31		25,7	12			80,70	
03867		12		13	31		26,7	13			82,90	
03868		16		17	31		29,7	16			85,00	
03869		20		21	35		33,7	19			88,90	
03870	185	10	19	10,5	35	24	27	12	42	29	114,10	
03871		12		13	35		28	13			120,40	
03872		16		17	35		31	16			124,80	
03873		20		21	35		35	19			127,00	
03874	240	10	21	10,5	38	26	28	12	44	34	133,20	
03875		12		13	38		29	13			132,80	
03876		16		17	38		32	16			137,80	
03877		20		21	38		36	19			141,50	
01838	300	12	24	13	43	30	31	13	51	41	199,20	
01840		16		17	43		34	16			209,00	
01842		20		21	43		38	19			218,10	

The dimensions of the Euro-Series and the druseidt standard design according to catalogue page 33 are in the cross section range of 300 mm² identically constructed.

Tubular cable lugs 10-300 mm²
Angle type 45°
druseidt Euro-Series

Material: Cu-HCP DIN EN 13600
Surface: tinned

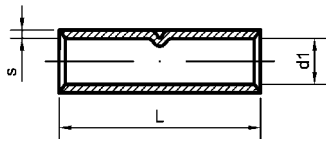


Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
03821/S-45	10	5	4,5	5,3	12	7	13,5	9	5,50	12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12836, 12485-87 page no. 192; 12837 page no. 193 / 31460 page no. 167; 12930, 12933 page no. 169; 12728 page no. 186 / 12373 page no. 159; 30460 page no. 165; 12725 page no. 184 / 12372 page no. 159 / 12372/50 page no. 159; 12655 page no. 163 / 30446 page no. 158 / 30445 S. 158
03822/S-45		6		6,4	12		13,5		5,80	
03823/S-45		8		8,4	15		13,8		6,50	
03824/S-45		10		10,5	18		13,8		6,60	
03826/S-45	16	5	5,5	5,3	12	8,5	17,5	12	9,50	
03827/S-45		6		6,4	12		17,5		10,20	
03828/S-45		8		8,4	15		17,7		11,70	
03829/S-45		10		10,5	18		18		11,70	
03831/S-45	25	6	7	6,4	15	10	20,7	14	13,90	
03832/S-45		8		8,4	16		20,9		15,10	
03833/S-45		10		10,5	18		21,1		16,60	
03834/S-45		12		13	20		21,2		17,00	
03836/S-45	35	6	8,5	6,4	17	12	24,2	16	21,70	
03837/S-45		8		8,4	17		24,2		22,30	
03838/S-45		10		10,5	20		24,5		23,40	
03839/S-45		12		13	22		24,7		24,00	
03842/S-45	50	6	10	6,4	20	14	27,7	18	29,40	
03843/S-45		8		8,4	20		27,7		33,40	
03844/S-45		10		10,5	20		27,7		36,50	
03845/S-45		12		13	23		28,1		36,50	
03850/S-45	70	8	12	8,4	24	16,5	31,9	20	49,00	
03851/S-45		10		10,5	24		33		52,30	
03852/S-45		12		13	24		31,9		51,70	
03856/S-45	95	8	13,5	8,4	26	18	35,5	22	63,20	
03857/S-45		10		10,5	26		35		62,00	
03858/S-45		12		13	26		35,5		62,00	
03859/S-45		16		17	28		35,5		68,00	
03861/S-45	120	8	15	8,4	29	20	40,1	25	78,00	
03862/S-45		10		10,5	29		40,1		89,00	
03863/S-45		12		13	29		40,1		89,10	
03864/S-45		16		17	30		40,2		93,10	
03865/S-45	150	8	16,8	8,4	31	21,3	47,5	28	102,00	
03866/S-45		10		10,5	31		47,5		98,00	
03867/S-45		12		13	31		47,5		96,80	
03868/S-45		16		17	31		47,5		101,20	
03869/S-45		20		21	35		48,2		101,20	
01831/S-45	185	12	19	13	35	24	51	29	122,90	
01832/S-45		16		17	35		51		119,60	
01833/S-45		20		21	35		51		139,90	
01834/S-45	240	12	21	13	38	26	61	34	154,60	
01835/S-45		16		17	38		61		165,10	
01836/S-45		20		21	38		61		170,40	
03880/S-45	300	16	24	17	43	30	69	41	256,80	
03881/S-45		20		21	43				273,00	

The dimensions of the Euro-Series and the druseidt standard design according to catalogue page 33 are in the cross section range of 185 and 240 mm² identically constructed.

Butt connectors
druseidt Euro-Series

Material: Cu-HCP or ETP DIN EN 13600
Surface: tinned

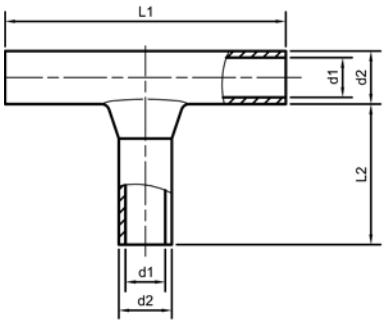


Part-No.	cross-section mm²	dimensions mm d_1	L	s	weight kg/‰ pcs.	crimping-tools/page no.
13686	0,5-0,75	1,4	15	0,8	0,80	pages no. 158-160 163-193
13687	1-1,5	1,9	15	1	1,20	
13688	2,5	2,4	16	1	1,50	
13689	4	3	19	1	2,10	
03165	6	3,5	25	1,5	5,10	
03166	10	4,5	30	1,25	6,00	
03167	16	5,5	35	1,5	10,00	
03168	25	7	40	1,5	14,10	
03169	35	8,5	45	1,75	21,60	
03170	50	10	50	2	33,20	
03171	70	12	55	2,25	49,10	
03172	95	13,5	60	2,25	60,90	
03173	120	15	65	2,5	78,80	
13699	150	16,8	70	2,25	86,50	
01752	185	19	75	2,5	116,25	
01753	240	21	85	2,5	142,20	
01754	300	24	100	3	224,00	
01755	400	27,5	100	3	261,70	
01756	500	31	140	3,5	473,00	
01757	630	34	160	3,5	617,50	

The dimensions of the Euro-Series and the druseidt standard design according to catalogue page 34 are in the cross section range of 0,5 -4 mm² and 150-630 mm² identically constructed.

Tubular T-connectors 1-300 mm²
druseidt Euro-Series

Material: Cu-HCP or ETP DIN EN 13600
Surface: tinned



Part-No.	cross-section mm²	dimensions mm d_1	d_2	L_1	L_2	weight kg/‰ pcs.	crimping-tools/page no.
03941	1-1,5	1,9	3,9	30	6	3,60	30445 bis 10 mm² 30446 bis 16 mm page no. 158
03942	2,5	2,4	4,4	30	16	4,50	
03943	4	3	5	35	16,5	5,70	
03944	6	3,5	6,5	35	17	10,80	12372 page no. 159
03945	10	4,5	7	45	25	14,00	12373/50 page no. 159; 12655 page no. 163
03946	16	5,5	8,5	50	26	23,00	12373 S. 159; 30460 S. 167; 12725 S. 184
03947	25	7	10	50	27	24,00	12930, 12933 page no. 169; 12728 page no. 186
03948	35	8,5	12	60	31	45,00	
03949	50	10	14	72	35	72,00	14240/42 page no. 175; 12748 page no. 177
03950	70	12	16,5	77	37	103,50	
03951	95	13,5	18	88	45	127,00	
03952	120	15	20	106	53	178,00	
03953	150	16,8	21,3	120	58	234,20	
03954	185	19	24	110	42	256,20	
03955	240	21	26	135	55	339,40	
03956	300	24	30	140	55	477,00	

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.6 Tubular compression lugs and connectors as well as reduction sleeves an H-shaped connectors

Such tubular cable lugs and connectors out of copper are manufactured acc. to DIN 46235 and DIN 46267 part 1. We deliver a tin-plated as well as an uncoated design. Basically all terminals are applicable for crimping stranded or fine stranded conductors. Caused by the relative long designed connecting sleeve they are often used for crimping stranded copper conductors acc. to DIN 48201 part 1 or similar.

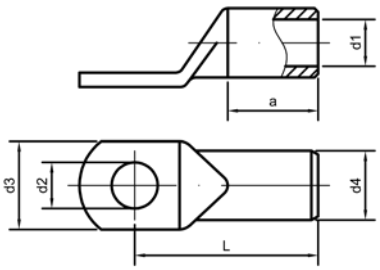
All cable lugs and connectors are equipped with a graven code number and lines, which shows the necessary numbers of crimping procedures. The right crimping design is a hexagonal crimping executed with suitable tools which dies have the same code-number like the cable connectors. To realize a crimping of conductors with a different cross-section range we deliver reduction sleeves, which can be used for non tension connections. To realize a branch off conductors with the same cross-section range of 70-120 mm² we deliver H-shaped connecting clamps and on request C-shaped branch off clamps too.

Please notice, that the crimping procedure will be done only with the right tools in combination with the right compression dies suitable for the described tubular compression connectors.

Crimping design:
Hexagonal-crimping

Tubular cable lugs 6-240 mm²
DIN 46235 and special design

Material: Cu-HCP DIN EN 13600
Surface: tinned or uncoated

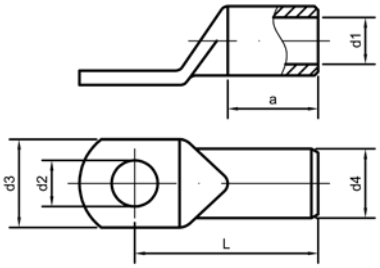


Part-No. tinned	Part-No. uncoated	cross-section mm²	drilling M	index-no.	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
01917	**01917 bl**	6	5	5	3,7	5,3	8,5	5,5	24	10	3,10	12766 page no. 170; 12740/41 page no. 175; 13552 page no. 179; 12836 page no. 192; 31460 page no. 167; 12930, 12933 page no. 169; 12965/S, 12968 page no. 171; 12748 page no. 177; 13551/25, 13551/42, 13537 page no. 181; 12728 page no. 186 (bis 185 mm²);12485-87, 12837 page no. 193; 05256 page no. 193; 12371 page no. 160; 30460 page no. 166; 12725 page no. 184; 12370 page no. 160; 05256 page no. 193; 12370/50 page no. 160; 12655 page no. 163
01918	**01918 bl**		6			6,4	9		24		3,40	
10300	**10300 bl**		8			8,4	13		26		3,50	
01919	**01919 bl**	10	5	6	4,4	5,3	10	6	27	10	3,50	
01920	**01920 bl**		6			6,4	10		27		3,70	
01921	**01921 bl**		8			8,4	13		28		3,80	
10302	**10302 bl**		10			10,5	15		29		3,80	
10304	**10304 bl**	16	5	8	5,5	5,3	13	8,5	36	20	12,20	
01922	**01922 bl**		6			6,4	13		36		12,70	
01923	**01923 bl**		8			8,4	13		37		13,00	
01924	**01924 bl**		10			10,5	16,5		38		13,40	
01925	**01925 bl**		12			13	19		40		13,60	
01926	**01926 bl**	25	6	10	7	6,4	14	10	39	20	16,20	
01927	**01927 bl**		8			8,4	17		39		17,30	
01928	**01928 bl**		10			10,5	17		40,5		17,70	
01929	**01929 bl**		12			13	18		40,5		17,30	
10306	**10306 bl**	35	6	12	8,2	6,4	17,5	12,5	42,5	20	31,60	
01930	**01930 bl**		8			8,4	18		42		31,90	
01931	**01931 bl**		10			10,5	20		42,5		31,20	
01932	**01932 bl**		12			13	21		44		31,70	
10308	**10308 bl**		16			17	28		47		31,40	
10310	**10310 bl**	50	6	14	9,8	6,4	20	14,5	52	28	45,90	
01933	**01933 bl**		8			8,4	20		52		49,50	
01934	**01934 bl**		10			10,5	22		52		48,10	
01935	**01935 bl**		12			13	24		52		47,20	
01936	**01936 bl**		16			17	28		55,5		50,00	
13285	**13285 bl**	70	8	16	11,3	8,4	24	16,5	56	28	65,40	
01937	**01937 bl**		10			10,5	24		56		65,90	
01938	**01938 bl**		12			13	24		56,5		60,10	
01939	**01939 bl**		16			17	29		57		64,10	
10312	**10312 bl**	95	8	18	13,5	8,4	28	19	65	35	93,60	
01940	**01940 bl**		10			10,5	28		65,5		95,50	
01941	**01941 bl**		12			13	28		65,5		94,50	
01942	**01942 bl**		16			17	30		65,5		94,40	
10314	**10314 bl**		20			21	33		71		98,60	
10316	**10316 bl**	120	8	20	15,5	8,4	31	21	70	35	113,50	
13286	**13286 bl**		10			10,5	31		70		114,00	
01943	**01943 bl**		12			13	31		70,5		114,70	
01944	**01944 bl**		16			17	31,5		70		111,50	
01945	**01945 bl**		20			21	36		72		115,10	
13287	**13287 bl**	150	10	22	17	10,5	34	23,5	79	35	164,10	
01946	**01946 bl**		12			13	34		78,5		165,30	
01947	**01947 bl**		16			17	34		78		163,50	
01948	**01948 bl**		20			21	38		78		159,80	
13288	**13288 bl**	185	10	25	19	10,5	37	25,5	83	40	185,00	
01949	**01949 bl**		12			13	37		82,5		189,60	
01950	**01950 bl**		16			17	37		82		187,80	
01951	**01951 bl**		20			21	40		83		189,00	
10318	**10318 bl**	240	10	28	21,5	10,5	42	29	92	40	271,00	
01952	**01952 bl**		12			13	42,5		92		266,50	
01953	**01953 bl**		16			17	42,5		92		274,50	
01954	**01954 bl**		20			21	45		92		268,00	

The tin plated design is standard in our stock.

Tubular cable lugs 300-1000 mm²
DIN 46235 and special design

Material: Cu-HCP DIN EN 13600
Surface: tinned or uncoated

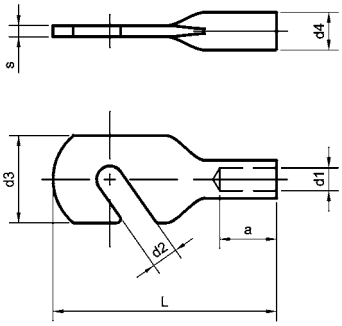


Part-No. tinned	Part-No. uncoated	cross-section mm²	drilling M	index-no.	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
10320	**10320 bl**	300	12	32	24,5	13	48,5	32	104	50	336,50	pages no. 170-193; 05256, 12491 page no. 193
01955	**01955 bl**		16			17	48,5		100		337,20	
01956	**01956 bl**		20			21	48,5		100		344,60	
01957	**01957 bl**	400	12	38	27,5	13	55	38,5	117	70	717,00	
01958	**01958 bl**		16			17	55		117		702,80	
01959	**01959 bl**		20			21	55		117		706,00	
01960	**01960 bl**	500	12	42	31	13	60	42	130	70	869,20	
01961	**01961 bl**		16			17	60		130		892,70	
01962	**01962 bl**		20			21	60		130		881,40	
01963	**01963 bl**	625	20	44	34,5	21	63	44	135	80	820,50	
02002	**02002 bl**	800	16	52	40	17	75	52	165	100	1430,00	
02004	**02004 bl**		20			21	75		165		1455,50	
02006	**02006 bl**	1000	20	58	44	21	83	58	167	100	1890,00	

The tin plated design is standard in our stock.

Cable lugs 10-150 mm²
hooked design, longitudinally sealed

Material: Cu-ETP DIN EN 13601
Surface: tinned or uncoated

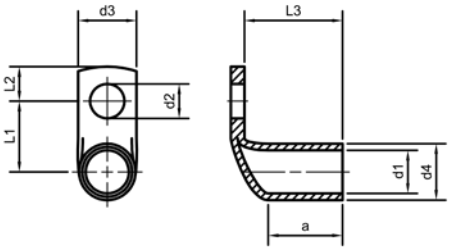


Part-No. uncoated	Part-No. tinned	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	s	weight kg/% pcs.	crimping-tools/page no.
10210	**10210 vz**	10	6	5	7	22	10	55	15	3	3,90	on request
10211	**10211 vz**	16	8	6	9	22,5	10	60	15	3	4,20	
10212	**10212 vz**	25	8	8	9	25	12	60	15	3	6,10	
10213	**10213 vz**		10		11			65			6,60	
10212/35	**10212/35 vz**	35	8	9	9	25	12	60	15	3	6,10	
10213/35	**10213/35 vz**		10		11			65			6,60	
10214	**10214 vz**	50	10	11	11	30	15	70	20	3	11,00	
10215	**10215 vz**		12		13			75			11,80	
10216	**10216 vz**	70	10	13	11	35	18	80	22	4	18,10	
10217	**10217 vz**		12		13			85			19,20	
10218	**10218 vz**	95	12	15	13	40	20	90	25	5	25,20	
10219	**10219 vz**		16		17			95			26,60	
10220	**10220 vz**	120	12	17	13	40	25	100	25	7	43,70	
10221	**10221 vz**		16		17			110			48,10	
10222	**10222 vz**	150	12	19	13	40	25	100	25	7	43,70	
10223	**10223 vz**		16		17			110			48,10	

This cable lugs in hooked design offer a quick and safe connecting of our binding posts acc. to catalogue pages 116 and 117, 10210 for 63 A, 10211/10212/10213/35 for 100 A, 10217/10218 for 200 A and 10221/10223 for 400 A.

Tubular cable lugs 10-300 mm²
Angle type 90°

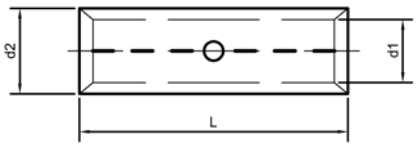
Dimensions of the tube in acc. with DIN 46235
Material: Cu-HCP DIN EN 13600
Suface: tinned or uncoated



Part-No. tinned	Part-No. uncoated	cross-section mm²	drilling M	index-no.	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	a	weight kg/‰ pcs.	crimping-tools/page no.
13124	**13124 bl**	10	6	6	4,4	6,4	10	6	13	7,7	14	10	3,50	12766 page no. 170; 12965/S, 12968; page no. 171; 14240/41 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12836, 12458-87 page no. 192; 12837, 05256 page no. 193 / 31460 page no. 167; 12930, 12933 page no. 169; 12728 page no. 186 (bis 185 mm²) / 12371 page no. 160; 30460 page no. 166; 12725 page no. 184 / 12370 page no. 160 / 12370/50 page no. 160; 12655 page no. 163
13126	**13126 bl**		8			8,4	13		15	10			3,70	
13128	**13128 bl**	16	6	8	5,5	6,4	13	8,5	14,3	9	23	20	12,70	
13130	**13130 bl**		8			8,4	13		16,3	11,5	23		13,00	
13132	**13132 bl**		10			10,5	16,5		18,3	13,5	24		14,10	
13134	**13134 bl**		12			13	19		19,3	14,5	24		13,80	
13136	**13136 bl**	25	6	10	7	6,4	15	10	15,5	9	23,8	20	16,80	
13138	**13138 bl**		8			8,4	16		17,5	11,5			17,60	
13140	**13140 bl**		10			10,5	16		19,5	13,5			18,40	
13142	**13142 bl**		12			13	19		20,5	14,5			17,20	
13143	**13143 bl**	35	6	12	8,2	6,4	17	12,5	16,8	9	23,8	20	27,40	
13144	**13144 bl**		8			8,4	17		18,8	11,5			30,40	
13146	**13146 bl**		10			10,5	19		20,8	13,5			31,20	
13148	**13148 bl**		12			13	21		21,8	14,5			32,60	
13150	**13150 bl**	50	8	14	9,8	8,4	20	14,5	19,8	11,5	33	28	46,20	
13152	**13152 bl**		10			10,5	22		21,8	13,5	32		48,20	
13154	**13154 bl**		12			13	24		22,8	14,5	32		48,30	
13156	**13156 bl**		16			17	27		25,8	17,5	32		50,60	
13157	**13157 bl**	70	8	16	11,3	8,4	24	16,5	20,8	11,5	34	28	59,30	
13158	**13158 bl**		10			10,5	24		22,8	13,5			65,10	
13160	**13160 bl**		12			13	24		23,8	14,5			65,60	
13162	**13162 bl**		16			17	29		26,8	17,5			63,10	
13163	**13163 bl**	95	8	18	13,5	8,4	28	19	22	10	42	35	85,00	
13164	**13164 bl**		10			10,5	28		24	13,5			93,70	
13166	**13166 bl**		12			13	28		25	14,5			94,90	
13168	**13168 bl**		16			17	32		28	17,5			96,70	
13170	**13170 bl**	120	10	20	15,5	10,5	32	21	25,5	13,5	42	35	108,40	
13172	**13172 bl**		12			13	32		32	14,5			110,00	
13174	**13174 bl**		16			17	32		29,5	17,5			111,60	
13176	**13176 bl**		20			21	38		33,5	20,5			123,90	
13177	**13177 bl**	150	10	22	17	10,5	34	23,5	26,8	13,5	42	35	141,60	
13178	**13178 bl**		12			13	34		27,8	14,5			144,10	
13180	**13180 bl**		16			17	34		30,8	17,5			148,30	
13182	**13182 bl**		20			21	34		34,8	20,5			155,10	
13184	**13184 bl**	185	10	25	19	10,5	37	25,5	27,8	13,5	48	40	168,10	
13186	**13186 bl**		12			13	37		28,8	14,5			172,90	
13188	**13188 bl**		16			17	37		31,8	17,5			171,80	
13190	**13190 bl**		20			21	40		35,8	20,5			202,00	
13192	**13192 bl**	240	12	28	21,5	13	42	29	30,5	14,5	52	40	226,10	
13194	**13194 bl**		16			17	42		33,5	17,5			244,60	
13195	**13195 bl**		20			21	42		37,5	20,5			255,90	
13196	**13196 bl**	300	12	32	24,5	13	48,5	32	32	14,5	60	50	290,80	
13197	**13197 bl**		16			17	48,5		35	17,5			305,10	
13198	**13198 bl**		20			21	48,5		39	20,5			386,00	

Compression lugs 6-1000 mm²
DIN 46267 part 1

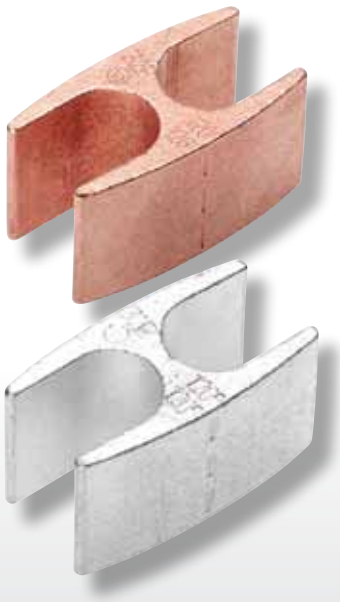
for non tension connections
Material: Cu-HCP DIN EN 13600
Surface: tinned

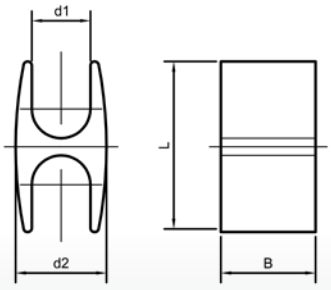


Part-No.	cross-section mm²	index-no.	dimensions mm d_1	d_2	L	weight kg/‰ pcs.	crimping-tools/page no.
01964	6	5	3,7	5,5	30	3,50	pages no. 160-193
01965	10	6	4,4	6	30	3,50	
01966	16	8	5,5	8,5	50	15,30	
01967	25	10	7	10	50	18,60	
01968	35	12	8,2	12,5	50	32,30	
01969	50	14	9,8	14,5	56	44,90	
01970	70	16	11,3	16,5	56	56,40	
01971	95	18	13,5	19	70	89,80	
01972	120	20	15,5	21	70	102,70	
01973	150	22	17	23,5	80	150,30	
01974	185	25	19	25,5	85	167,80	
01975	240	28	21,5	29	90	232,00	
01976	300	32	24,5	32	100	295,00	
01977	400	38	27,5	38,5	150	767,00	
01978	500	42	31	42	160	920,80	
01979	625	44	34,5	44	160	868,20	
01988	800	52	40	52	200	1525,00	
01999	1000	58	44	58	200	1970,00	

Compression connectors in H-shaped design

for copper conductors acc. to DIN 48201
Material: Cu-ETP DIN EN 13601
Surface: tinned or uncoated

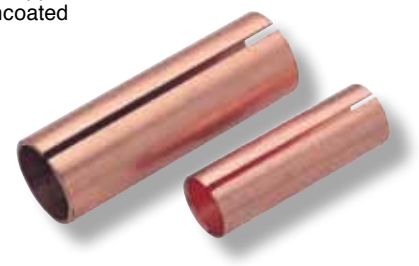


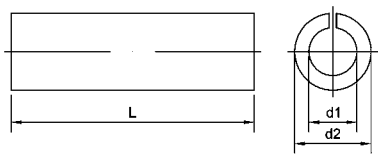


Part-No. uncoated	Part-No. tinned	cross-section mm² prime conductor	cross-section mm² branch conductor	dimensions mm d_1	d_2	L	B	weight kg/‰ pcs.	crimping-tools/page no.
03990	**03990/vz**	70	70	10,8	17	34	28	62,20	pages no. 171, 181, 192, 193
03991	**03991/vz**	95	95	13	22	40	30	97,60	
03992	**03992/vz**	120	120	15,5	24	45	25	102,40	

Reduction sleeves

for non tension connectors
acc. to DIN 46267 part 1 and similar
Material: E-copper
Surface: uncoated



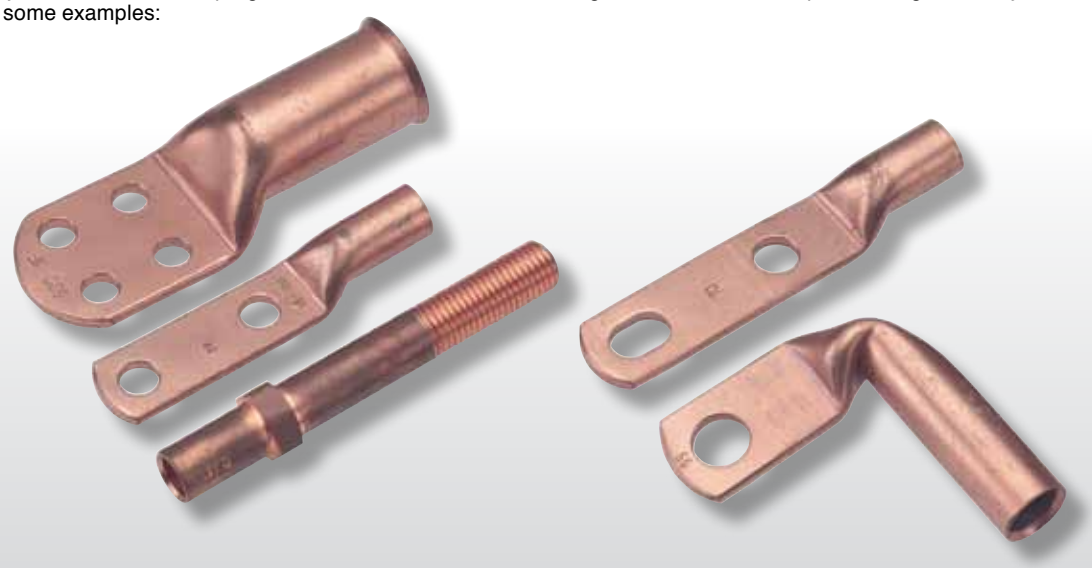


Part-No.	reduction from cross-section mm²	reduction to cross-section mm²	dimensions mm d_1	dimensions mm d_2	dimensions mm L	weight kg/% pcs.	crimping-tools/page no.
02150	25	10	4,6	6,6	25	0,50	pages no. 160-193
02151		16	5,5			0,35	
02152	35	10	4,5	8	25	0,85	
02153		16	5,5			0,70	
02154		25	7			0,50	
02155	50	16	5,5	9,5	33	1,40	
02156		25	7			1,15	
02157		35	8,5			0,60	
02158	70	25	7	11	33	1,90	
02159		35	8,5			1,40	
02160		50	10			0,80	
02161	95	35	8,5	13	45	3,40	
02162		50	10			2,60	
02163		70	11,5			1,60	
02164	120	50	10	15	45	4,30	
02165		70	11,5			3,30	
02166		95	13,5			1,80	
02167	150	70	11,5	16,5	53	5,70	
02168		95	13,5			3,90	
02169		120	15,5			1,80	
02170	185	95	13,5	18,5	53	6,50	
02171		120	15,5			4,40	
02172		150	17			2,70	
02173	240	120	15,5	21	55	8,40	
02174		150	17			6,60	
02175		185	19			4,00	
02176	300	150	17	24	58	12,30	
02177		185	19			9,60	
02178		240	21,5			5,60	
02179	400	185	19	27	80	21,80	
02180		240	21,5			15,50	
02181		300	24,5			8,80	

By reduction of more than two cross-section-ranges we recommend to work with hydraulic tools with wide die sets acc. to our catalogue pages 200 or 201.

Cable connectors in special design

Additionally to our standardized program we are able to deliver cable lugs and connectors in special design acc. to your drawings or wishes.
Following some examples:



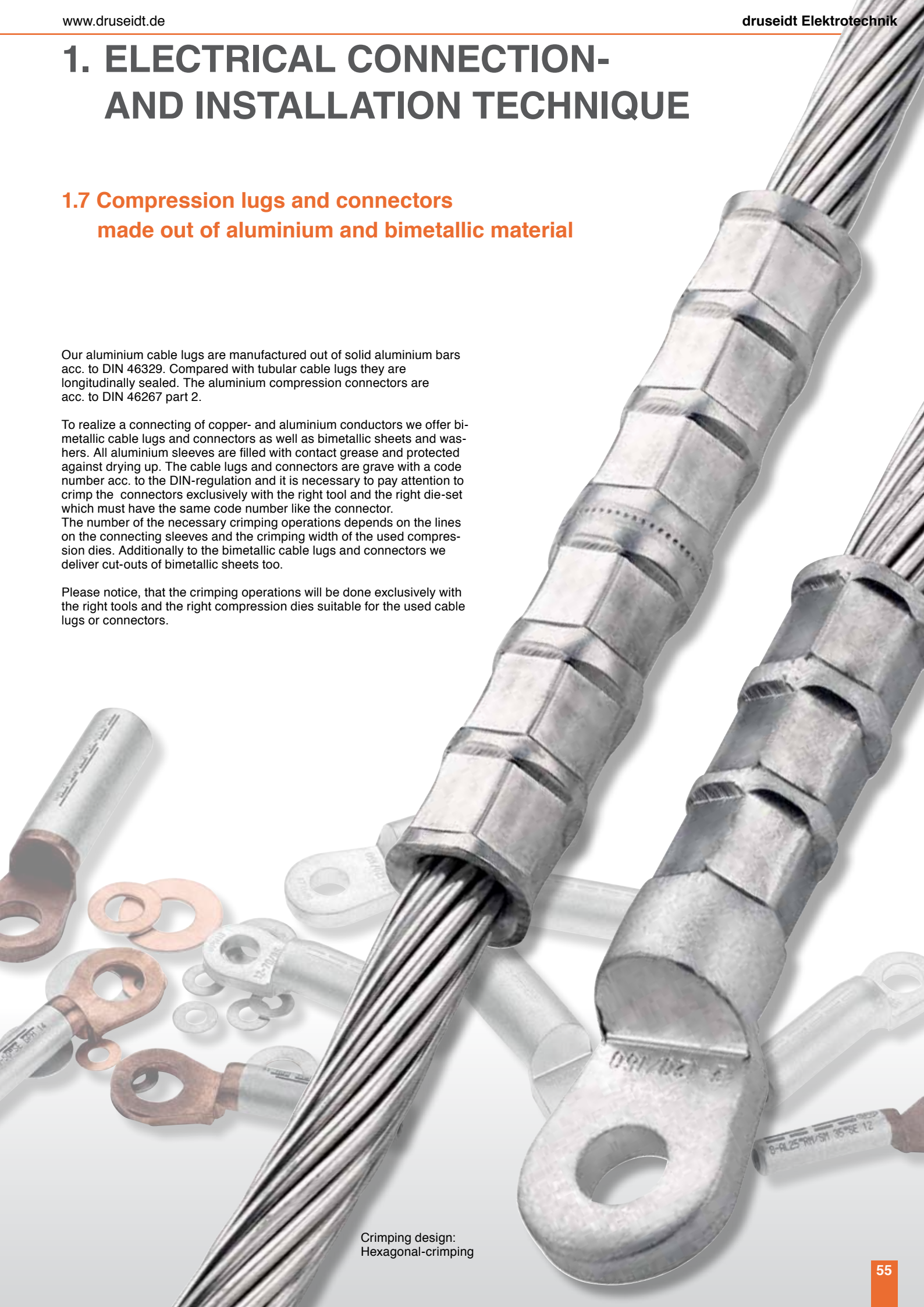
1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.7 Compression lugs and connectors made out of aluminium and bimetallic material

Our aluminium cable lugs are manufactured out of solid aluminium bars acc. to DIN 46329. Compared with tubular cable lugs they are longitudinally sealed. The aluminium compression connectors are acc. to DIN 46267 part 2.

To realize a connecting of copper- and aluminium conductors we offer bimetallic cable lugs and connectors as well as bimetallic sheets and washers. All aluminium sleeves are filled with contact grease and protected against drying up. The cable lugs and connectors are grave with a code number acc. to the DIN-regulation and it is necessary to pay attention to crimp the connectors exclusively with the right tool and the right die-set which must have the same code number like the connector.
The number of the necessary crimping operations depends on the lines on the connecting sleeves and the crimping width of the used compression dies. Additionally to the bimetallic cable lugs and connectors we deliver cut-outs of bimetallic sheets too.

Please notice, that the crimping operations will be done exclusively with the right tools and the right compression dies suitable for the used cable lugs or connectors.



Crimping design:
Hexagonal-crimping

Al-cable lugs 16-500 mm²

longitudinally sealed acc. to DIN 46329

Material: Al 99,5

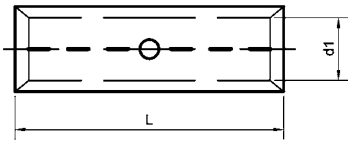
Surface: uncoated

Part-No.	cross-section mm² rm/sm	cross-section mm² se	drilling M	index-no.	dimensions mm d_1	d_2	d_3	L	a	weight kg/% pcs.	crimping-tools/page no.
40010	16	25	8	12	5,4	8,5	20	50	30	1,4	05256 page no. 193; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240-42 page no. 175; 12748 page no.177; 13552 page no. 179; 13551/25, 13552/42, 13573 page no. 181; 12485-87, 12836 page no. 192; 12837 page no. 193; 31460 page no. 167; 12728 page no. 186; 12930, 12933 page no. 169; 30460 page no. 165; 12725 page no. 184; 12655 page no. 163; 12491 page no. 193
40011			10			10,5				1,3	
40014	25	35	8	12	6,8	8,5	20	50	30	1,5	
40015			10			10,5	25			1,4	
40016			12			13	25			1,4	
40019	35	50	8	14	8	8,5	25	62	42	2,6	
40020			10			10,5				2,4	
40021			12			13				2,3	
40024	50	70	8	16	9,8	8,5	25	62	42	2,5	
40025			10			10,5				2,4	
40026			12			13				2,3	
40029	70	95	8	18	11,2	8,5	25	72	52	3,6	
40030			10			10,5				3,5	
40031			12			13				3,3	
40034	95	120	10	22	13,2	10,5	25	75	56	7,4	
40035			12			13				7,0	
40036			16			17	30	80		6,7	
40039	120	150	10	22	14,7	10,5	30	80	56	7,0	
40040			12			13				6,8	
40041			16			17				6,5	
40044	150	185	10	25	16,3	10,5	30	90	60	8,8	
40045			12			13				8,4	
40046			16			17				9,3	
40049	185	240	10	28	18,3	10,5	30	91	60	11,1	
40050			12			13				11,0	
40051			16			17				11,0	
40054	240	300	12	32	21	13	38	103	70	15,9	
40055			16			17				15,5	
40056			20			21				15,2	
40059	300	–	12	34	23,3	13	38	103	70	17,6	
40060			16			17				17,4	
40061			20			21				17,4	
40064	400	–	12	38	26	13	38	116	73	36,0	
40065			16			17				34,0	
40066			20			21				35,5	
40069	500	–	12	44	29	13	44	122	79	40,5	
40070			16			17				40,3	

Suitable for aluminium conductors acc. to DIN 48201 and aluminium cable conductors acc. to DIN VDE 0295. Sector shaped conductors must be rounded with special dies. All cable lugs are filled with contact grease and sealed in plastic. On request it is possible to deliver all dimensions in a tin plated design.

Al-compression lugs 16-1000 mm²
DIN 46267 part 2

for non tension connections 1-10 kV
Material: Al 99,5
Surface: uncoated

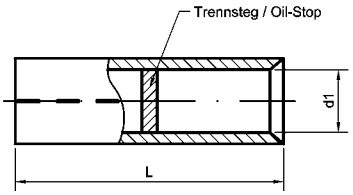


Part-No.	cross-section mm² rm/sm	se	index-no.	dimensions mm d_1	L	weight kg/% pcs.	crimping-tools/page no.
02070	16	25	10	5,4	55	1,3	pages no. 163-193
02071	25	35	12	6,8	70	1,6	
02072	35	50	14	8	85	2,6	
02073	50	70	16	9,8	85	3,2	
02074	70	95	18	11,2	105	5,3	
02075	95	120	22	13,2	105	7,6	
02076	120	150	22	14,7	105	7,8	
02077	150	185	25	16,3	125	10,7	
02078	185	240	28	18,3	125	14,3	
02079	240	300	32	21	145	20,3	
02080	300	-	34	23,3	145	22,2	
10240	400	-	38	26	210	48,2	
10241	500	-	44	29	210	56,0	
10242	625	-	52	35	330	122,7	
10243	800	-	58	40	350	129,0	
10244	1000	-	60	44	350	142,0	

Suitable for aluminium and Al-alloy conductors acc. to DIN 48201 and aluminium cable conductors acc. to DIN VDE 0295. Sector shaped conductors must be rounded with special dies. All connectors are filled with contact grease and sealed in plastic.

Al-compression lugs 16-300 mm²
with oil-stop

for non tension connections 1-10 kV
Material: Al 99,5
Surface: uncoated

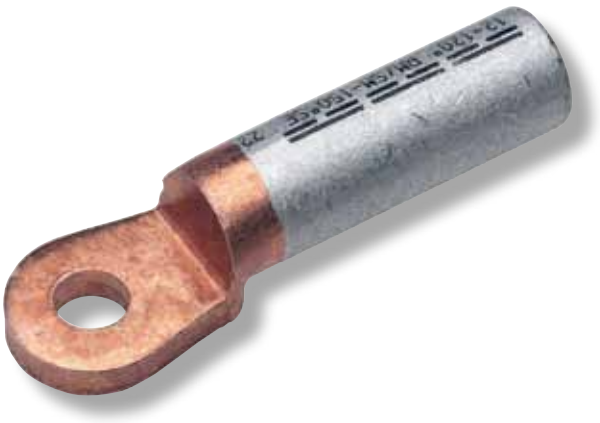


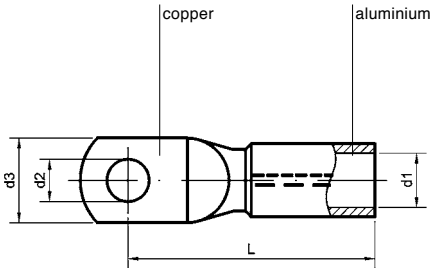
Part-No.	cross-section mm² rm/sm	se	index-no.	dimensions mm d_1	L	weight kg/% pcs.	crimping-tools/page no.
10250	16	25	12	5,4	75	1,5	pages no. 163-193
10251	25	35	12	6,8	75	1,8	
10252	35	50	14	8	90	3,0	
10253	50	70	16	9,8	90	3,8	
10254	70	95	18	11,2	110	5,7	
10255	95	120	22	13,2	110	8,9	
10256	120	150	22	14,7	110	8,6	
10257	150	185	25	16,3	130	11,2	
10258	185	240	28	18,3	130	16,4	
10259	240	300	32	21	150	20,8	
10260	300	-	34	23,3	155	27,5	

Suitable for aluminium cables acc. to DIN VDE 0295. Sector shaped conductors must be rounded with special dies. All conductors are filled with contact grease and sealed in plastic. On request it is possible to deliver cross-sections up to 1000 mm².

Bimetallic cable lugs 16-300 mm²

longitudinally sealed with solid copper palm
Material: barrel Al 99,5, palm Cu-HCP
Surface: uncoated



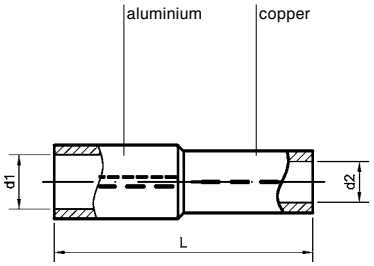


Part-No.	cross-section mm² rm/sm	cross-section mm² se	drilling M	index-no.	dimensions mm d_1	dimensions mm d_2	dimensions mm d_3	dimensions mm L	weight kg/% pcs.	crimping-tools/page no.
40100	16	25	8	12	5,4	8,5	25	63,5	2,8	12766 page no. 170; 12965/S, 12968 page no. 171; 14240-42 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12485-87, 12836 page no. 192; 05256, 12837 page no. 193; 31460 page no. 167; 12728 page no. 186; 12930, 12933 page no. 169; 30460 page no. 165; 12725 page no. 184; 12655 page no. 163; 12491 page no. 193
40101			10			10,5			2,6	
40102			12			13			2,5	
40106	25	35	8	12	6,8	8,5	25	63,5	3,0	
40107			10			10,5			2,8	
40108			12			13			2,8	
40112	35	50	8	14	8	8,5	25	74,5	5,2	
40113			10			10,5			4,8	
40114			12			13			4,6	
40115			16			17	30	79	5,0	
40119	50	70	8	16	9,8	8,5	25	75,5	5,0	
40120			10			10,5			4,8	
40121			12			13			4,8	
40122			16			17	30	80	5,5	
40126	70	95	8	18	11,2	8,5	25	83,5	7,0	
40127			10			10,5			7,0	
40128			12			13			6,5	
40129			16			17	30	88	6,5	
40134	95	120	10	22	13,2	10,5			14,8	
40135			12			13			14,0	
40136			16			17	30	91	14,4	
40142	120	150	12	22	14,7	13			13,6	
40143			16			17			13,4	
40149	150	185	12	25	16,3	13			17,6	
40150			16			17			16,8	
40151			20			21	38	109	18,6	
40155	185	240	10	28	18,3	10,5	30	107	22,2	
40156			12			13			22,0	
40157			16			17			20,2	
40158			20			21	38	111	22,4	
40162	240	300	10	32	21	10,5	38	120	32,0	
40163			12			13			31,8	
40164			16			17			31,0	
40165			20			21			32,4	
40169	300	–	12	34	23,3	13			33,7	
40170			16			17			32,9	
40171			20			21			32,0	

Suitable for aluminium conductors acc. to DIN 48201 and aluminium cable conductors acc. to DIN VDE 0295. Sector shaped conductors must be rounded. All cable lugs are filled with contact grease and sealed in plastic.

Bimetallic compression lugs 25-300 mm²

for non tension connections 1-10 kV
Material: Al 99,5 Cu-HCP
Surface: uncoated



Part-No.	cross-section mm² Al rm/sm	Al se	Cu rm/sm	index-no. Al	Cu	dimensions mm d_1	d_2	L	weight kg/% pcs.	crimping-tools/page no.
40201	25	35	10	12	6	6,8	4,5	72	1,4	12766 page no. 170; 12965/S, 12968 page no. 171; 14240-40 page no. 175; 12748 page no. 177; 13552 page no. 179; 13551/25, 13551/42, 13537 page no. 181; 12485-87, 12936 page no. 192; 05256, 12837 page no. 193; 31460 page no. 167; 12728 page no.186; 12930, 12933 page no. 169; 30460 page no. 165; 12725 page no. 184; 12655 page no. 163; 12491 page no. 193
40202			16		8		5,5		1,7	
40203			25		10		7		1,9	
40204			35		12		8,2		3,5	
40208	35	50	16	14	8	8	5,5	80	2,5	
40209			25		10		7		2,7	
40210			35		12		8,2		3,3	
40211			50		14		10		3,5	
40215	50	70	16	16	8	9,8	5,5	82	2,9	
40216			25		10		7		3,2	
40217			35		12		8,2		3,8	
40218			50		14		10		4,6	
40222	70	95	50	18	14	11,2	10	94	5,7	
40223			70		16		11,5		7,3	
40224			95		18		13,5	101	9,4	
40228	95	120	50	22	14	13,2	10	99	8,1	
40229			70		16		11,5		8,2	
40230			95		18		13,5	105	10,4	
40231			120		20		15,5	105	11,6	
40235	120	150	70	22	16	14,7	11,5	98	8,5	
40236			95		18		13,5	106	11,0	
40237			120		20		15,5	106	11,9	
40241	150	185	70	25	16	16,3	11,5	113	10,4	
40242			95		18		13,5	117	12,7	
40243			120		20		15,5	117	13,9	
40244			150		22		17	123	16,7	
40248	185	240	95	28	18	18,3	13,5	119	14,5	
40249			120		20		15,5	119	15,9	
40250			150		22		17	125	19,6	
40251			185		25		19	127	21,0	
40255	240	300	95	32	18	21	13,5	126	19,0	
40256			120		20		15,5	126	20,5	
40257			150		22		17	132	23,3	
40258			185		25		19	134	25,5	
40259			240		28		21,5	140	30,1	
40261	300	–	120	34	20	23,3	15,5	136	27,8	
40262			150		22		17	136	31,1	
40263			185		25		19	138	32,7	
40264			240		28		21,5	144	37,5	
40265			300		32		24,5	150	41,7	

Suitable for aluminium and copper conductors acc. to DIN 48201 or Al- and copper-cable conductors acc. to DIN VDE 0295. Sector shaped conductors must be rounded. The Al-part is filled with contact grease and the connectors are sealed in plastic.

Bimetallic sheets and washers

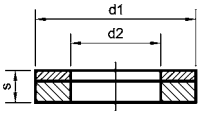
Bimetallic elements consist of copper plated aluminium sheets. Since the connection area of both metals is in the middle, it is kept away from air and humidity. This material enables a secure contact and a corrosion protected connection between copper and aluminium.

Besides bimetallic sheets and spacers we can also supply cut-outs with and without holes especially for your specific application.

Bimetallic sheets

Part-No.	length mm	width mm	thickness mm	weight kg/Platte
02670	2000	500	1	4,70
02671			1,5	7,00
02672			2	9,35

Bimetallic washers



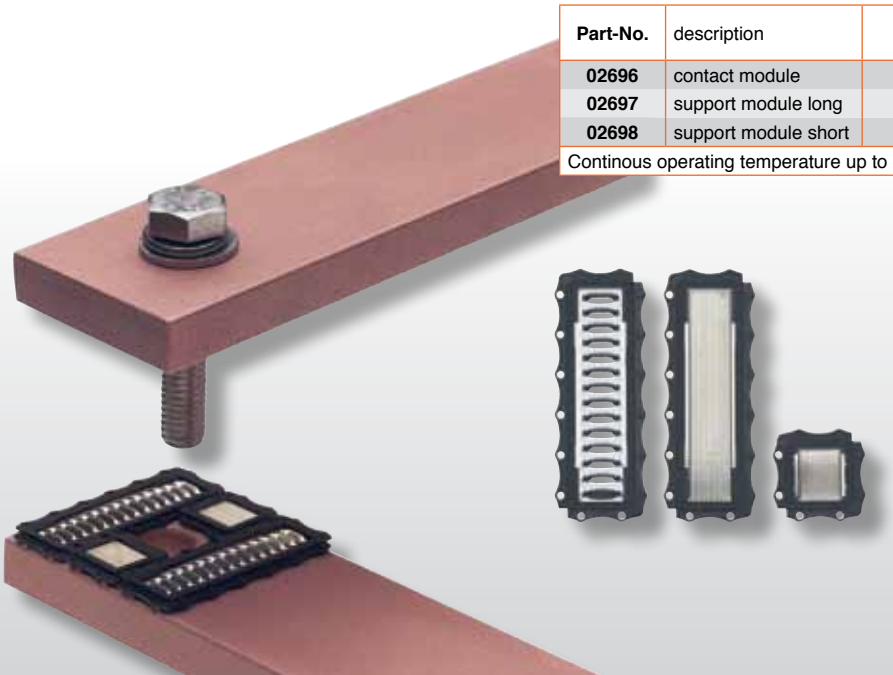
Part-No.	drilling M	dimensions mm d_1	d_2	s	weight kg/% pcs.
13295	3	8	3,5	1	0,02
13296	4	10	4,5	1	0,03
13297	5	12	5,5	1	0,05
02675	6	15	6,5	1	0,07
02676	8	18	8,5	1	0,09
02677	10	22	10,5	1,5	0,18
02678	12	25	13	2	0,68
02679	12	28	13	2	0,44
02680	16	35	17	2	0,66

Seal-contact-modules for high current transmission

Seal-contacts are constructed for high-current transmission with bus-bars and sheets (copper/copper, Alu/copper or Alu/Alu) in indoor as well as outdoor-installations. It is possible to connect uncoated, unmachined and uncleanded bus-bars or sheets also in corrosive atmospheres (e.g. sulphur dioxide, salt laden air, chlorine etc.). The modules are suitable for bolted joints in bus-bars according to DIN. By using these elements the high current transmission is made in hermetically sealed chambers, so that no oxidation or corrosion is possible.

So you get low loss over a long time of use. The torsion springlouver of the multilam permits the contact force as well as the electrical performance of the bus bar joint to remain constant even when the compression force drops to 50 % of its initial value. The torsion springlouver of the multilam get through the oxydlayer of the bus bar, so that a cleaning or coating of the contact areas is not necessary. So screw connections with low loss and without any servicing over a long time of use is guaranteed.

Part-No.	description	rated current	length mm	width mm	thickness mm
02696	contact module	800 A	40	13,33	1,4
02697	support module long	-	40	13,33	1,4
02698	support module short	-	13,33	13,33	1,4
Continous operating temperature up to + 100° C, short circuit current 1 s = 20 kA.					



1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.8 Cable lugs and connectors in special design

To offer also cable lugs and connectors for ambitious application in matters of chemical and heat resistiveness too, druseidt delivers serial produced cable lugs consisting out of stainless steel or nickel material. Main application are in the range of electrical furnaces, steel-melting-plants, foundries, heating elements, anywhere where high temperatures are existent or due to the existence of chemical stress a working with copper- or aluminium connectors is not possible. Especially our cable lugs consisting out of stainless steel A4 offer a good resistance against oxidation, seawater, acids or cleaning materials. They are well suited also for application under highest hygiene requirements inside of the food- and medical production ranges. Even for chemical application where neither connectors consisting out of stainless-steel or consisting out of nickel are not resistant enough we manufacture in special design cable lugs consisting out of titan.

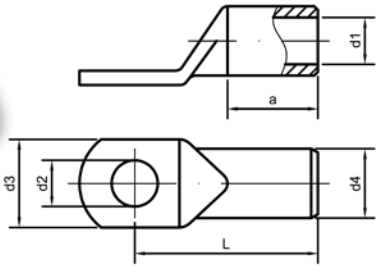
We recommend to crimp nickel- as well as stainless-steel connectors with an indent-crimping design. So we offer for the crimping of stainless steel lugs special compression dies. To make cable connections without crimping the conductors, we offer screwable cable lugs acc. to catalogue page 64.

Please notice, that the crimping operations will be done only with the right tools and suitable compression dies.

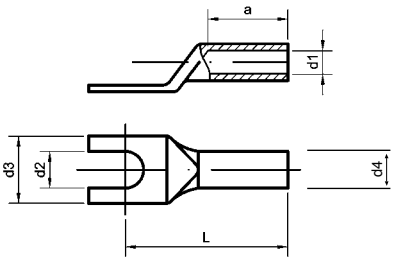
Crimping design:
Indent-crimping

Nickel cable lugs 0,5-16 mm²

Ring- and fork type
Material: Nickel tube, temperature stability up to ca. + 500° C



type I

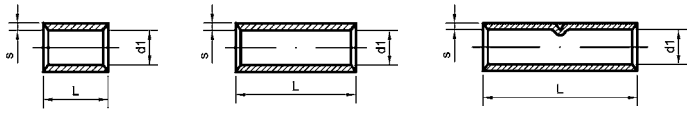


type II

Best-Nr. type I	Best-Nr. type II	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/ ‰ pcs.	crimping-tools/page no.
13254	**-**	0,5-1,0	3	1,6	3,2	6,5	3,2	12,5	6	0,73	12655 page no. 163; 30446 page no. 158; 30445 page no. 158
13255	**13265**		4		4,3	7		13,5		0,84	
13256	**13266**		5		5,3	7,5		14,5		0,90	
13257	**13267**	1,5-2,5	4	2,3	4,3	7	3,9	14	6	1,14	
13258	**13268**		5		5,3	8,5		15,5		1,23	
13259	**13269**		6		6,4	9,5		17		1,33	
13260	**13270**	4-6	4	3,6	4,3	9,4	5,6	18	8	2,57	
13261	**13271**		5		5,3	10		18,5		2,66	
13262	**13272**		6		6,4	10,5		19,5		2,90	
13262/8	**-**		8		8,4	12,5		22		3,19	
13263	**13273**	10	5	4,5	5,3	10,8	6,5	20,5	10	3,40	
13264	**13274**		6		6,4	11,5		22,5		3,70	
13264/8	**13274/8**		8		8,4	13,3		25		4,20	
13414	**13417**	16	5	5,5	5,3	12,8	7,5	22,5	11	4,40	
13415	**13418**		6		6,4	13,6		24,5		4,80	
13416	**13419**		8		8,4	15,7		26,5		5,40	

Nickel connectors 0,5-16 mm²

Material: Nickel tube, temperature stability up to ca. + 500° C



type I

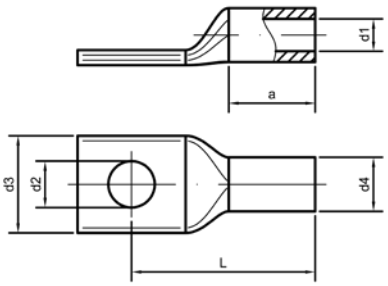
type II

type III

Part-No.	cross-section mm²	type	dimensions mm d_1	L	s	weight kg/ ‰ pcs.	crimping-tools/page no.
Parallel connectors							30445 page no. 158; 30446 page no. 158
01980	0,5-1,0	I	1,6	7	0,8	0,40	
01981	1,5-2,5		2,3		0,8	0,50	
01982	4-6		3,6		1,0	0,90	
Butt connectors without wire stop							
01985	0,5-1,0	II	1,6	15	0,8	0,85	
01986	1,5-2,5		2,3		0,8	1,10	
01987	4-6		3,6		1,0	1,90	
Butt connectors with wire stop							
13275/15	0,5-1,0	III	1,6	15	0,8	0,82	
13275				25	0,8	1,35	
13276/15	1,5-2,5	III	2,3	15	0,8	1,04	
13276				25	0,8	1,70	
13277/15	4-6	III	3,6	15	1,0	1,92	
13277				25	1,0	3,25	12650, 12655 pages no. 162/163
13278	10	III	4,5	25	1,0	3,80	
13279	16		5,5	30	1,0	5,40	

Tubular cable lugs 1,5-95 mm² out of stainless steel

Material: stainless steel 1.4571 (V4A)
Temperature stability up to ca. + 400° C



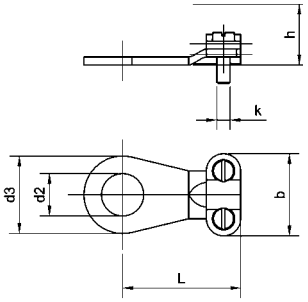
Part-No.	cross-section mm²	drilling M	dimensions mm d_1	d_2	d_3	d_4	L	a	weight kg/‰ pcs.	crimping-tools/page no.
10905	1,5 - 2,5	4	3	4,3	9	5	22,5	8	2,70	12930, 12933 page no. 169; 14240/42 page no. 175; 12748 page no. 177; 12728 page no. 186
10906		5		5,3	9		21,5		2,60	
10907		6		6,4	10		20		2,50	
10910	4 - 6	4	4	4,3	9	6	23,5	9	3,30	
10911		5		5,3	9		22,5		3,40	
10912		6		6,4	10		21		3,30	
10915	10	5	5	5,3	12	8	29	10	8,10	12965/S, 12968 page no. 171; 13551/25, 13551/42, 13537 page no. 181; 12485-87 page no. 192; 12837 page no. 193
10916		6		6,4	12		27,5		8,00	
10917		8		8,4	13		25		7,60	
10920	16	5	6	5,3	12	8	36	16	7,30	
10921		6		6,4	12		34,5		7,20	
10922		8		8,4	13		32		7,00	
10925	25	6	7	6,4	14	10	33,5	15	12,60	
10926		8		8,4	16		31		12,50	
10930	35	6	9	6,4	18	12	39,5	17	18,60	
10931		8		8,4	18		37		18,10	
10932		10		10,5	20		36		17,90	
10936	50	8	10	8,4	21	14	43	19	31,00	
10937		10		10,5	21		42		30,70	
10938		12		13	23		40		29,50	
10940	70	8	12	8,4	24	16	53	21	44,60	
10941		10		10,5	24		52		43,70	
10942		12		13	24		50		42,40	
10943		16		17	28		47		41,70	
10945	95	8	14	8,4	26	18	58	25	56,00	
10946		10		10,5	26		57		55,00	
10947		12		13	26		55		53,60	
10948		16		17	28		52		51,90	

Cable lugs out of titanium

In cases where the chemical stability of our stainless steel or nickel connectors are insufficient we manufacture on request also cable lugs out of titanium material.

Punched cable lugs 6-35 mm²

Material: Cu-ETP
Surface: uncoated

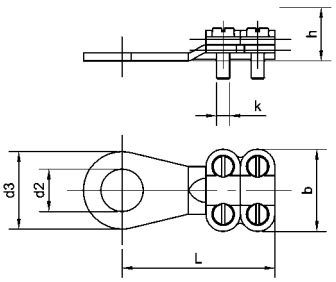


Part-No. with steel screws	Part-No. with bronze screws	cross-section mm²	drilling M	dimensions mm d_2	d_3	b	h	L	k	weight kg/%pcs.
02250	**02270**	6-10	6	6,5	15	18	10	23	M4	1,20
02251	**02271**	16	6	6,5	15	20,5	14	27	M5	1,90
02252	**02272**	16	8	8,5	15	20,5	14	27	M5	1,90
02253	**02273**	25	8	8,5	15	25	16	30	M5	2,90
02254	**02274**	35	8	8,5	18,5	24	19	25,5	M5	3,51

Tin plated designs on request.

Punched cable lugs 25-240 mm²

Material: Cu-ETP
Surface: uncoated



Part-No. with steel screws	Part-No. with bronze screws	cross-section mm²	drilling M	dimensions mm d2	d3	b	h	L	k	weight kg/%pcs.
02255	**02275**	25	8	8,5	18,5	22,5	16	36	M5	4,10
02256	**02276**		10	10,5	19,5	22,5	16	37	M5	4,10
02257	**02277**	35	8	8,5	18,5	24	16	38,5	M5	4,40
02258	**02278**		10	10,5	21,5	24	16	42	M5	4,40
02259	**02279**		12	13	21,5	24	16	42	M5	4,40
02260	**02280**	50	10	10,5	19	28	19	46	M6	7,00
02261	**02281**		12	13	21	28	19	47	M6	7,00
02262	**02282**	70	10	10,5	23,5	31	19	51	M6	10,00
02263	**02283**		12	13	23,5	31	19	51	M6	10,00
02264	**02284**	95	10	10,5	24	34	25	57	M6	12,00
02265	**02285**		12	13	24	34	25	57	M6	12,00
02266		120	12	13	29	39	27	60	M7	17,40
10452	**10453**	150	16	17	30	42	29	61,5	M8	20,00
02267	**02287**	185 - 240	16	17	34	48,5	32	68,5	M8	27,00

Tin plated designs on request.

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.9 Cable end sleeves

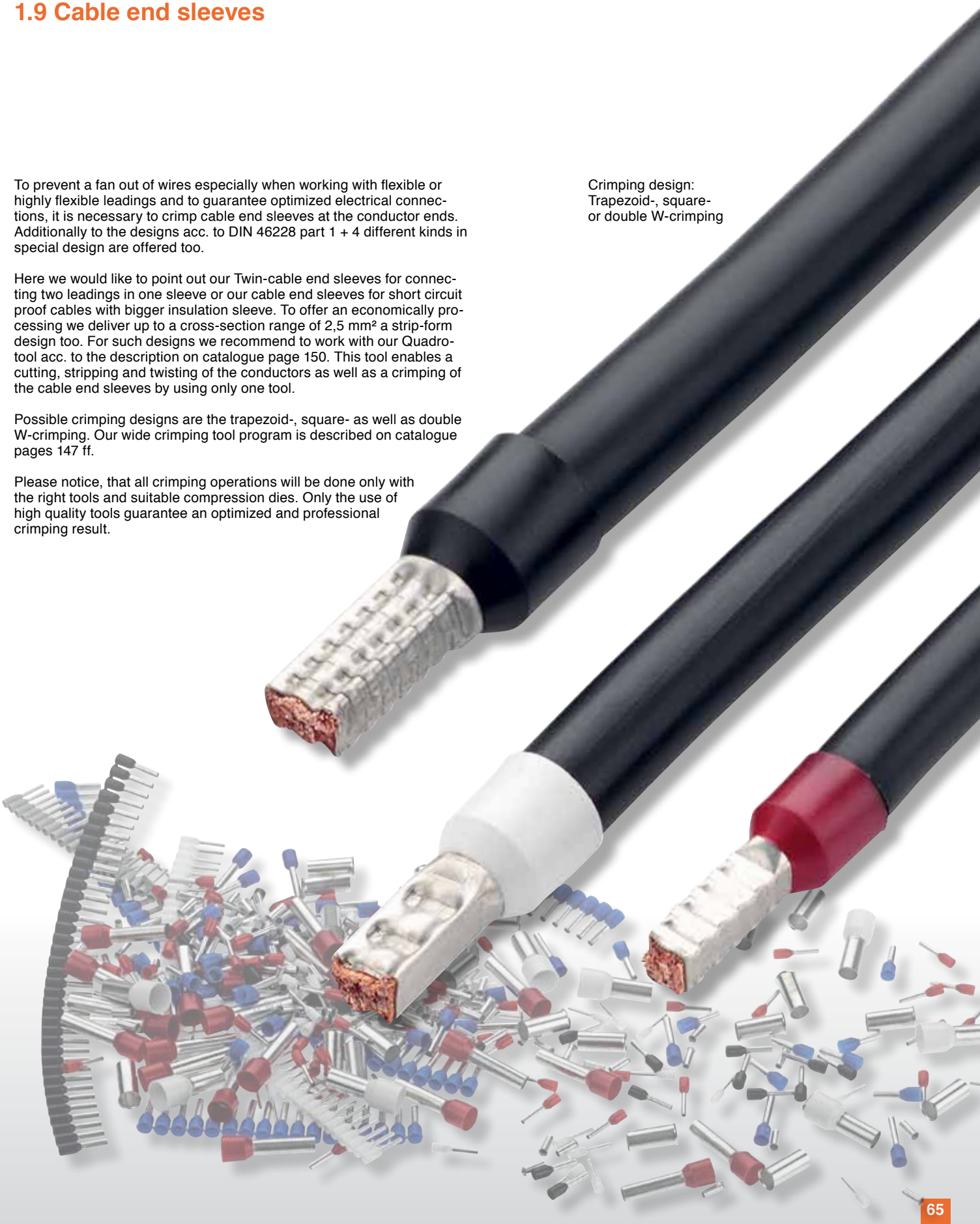
To prevent a fan out of wires especially when working with flexible or highly flexible leadings and to guarantee optimized electrical connections, it is necessary to crimp cable end sleeves at the conductor ends. Additionally to the designs acc. to DIN 46228 part 1 + 4 different kinds in special design are offered too.

Here we would like to point out our Twin-cable end sleeves for connecting two leadings in one sleeve or our cable end sleeves for short circuit proof cables with bigger insulation sleeve. To offer an economically processing we deliver up to a cross-section range of 2,5 mm² a strip-form design too. For such designs we recommend to work with our Quadro-tool acc. to the description on catalogue page 150. This tool enables a cutting, stripping and twisting of the conductors as well as a crimping of the cable end sleeves by using only one tool.

Possible crimping designs are the trapezoid-, square- as well as double W-crimping. Our wide crimping tool program is described on catalogue pages 147 ff.

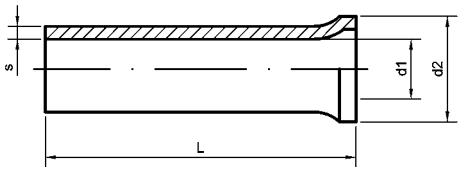
Please notice, that all crimping operations will be done only with the right tools and suitable compression dies. Only the use of high quality tools guarantee an optimized and professional crimping result.

Crimping design:
Trapezoid-, square- or double W-crimping



Cable end sleeves 0,25-25 mm²

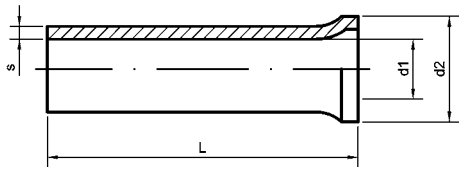
in acc. with DIN 46228 page 1
and special design
Material: copper acc. to DIN 13600
Surface: tinned



Part-No.	cross-section mm²	size	dimensions mm d_1	d_2	L	s	weight kg/‰ pcs.	crimping-tools/page no.
01206	0,25	5 - 0,25	0,75	1,7	5	0,15	0,02	Weitere Werkzeugsysteme mit Wechseleinsätzen finden Sie auf den pages no. 165 ff 12637 page no. 148 12430, 12408, 12425, pages no. 156/157; 05160 page no. 153; 12655 ab 6 mm² page no. 164; 05184 ab 10 mm² page no. 150 05144 ab 0,08 mm², 12641 ab 2,5 mm² page no. 149; 05125, 12858 ab 0,5 mm² pages no. 148/153; 05122 ab 0,75 mm² page no. 148 12640 ab 0,08 mm² page no. 149 12646 ab 0,14 mm², 05140 ab 0,25 mm² page no. 149; 05124 ab 0,5 mm² page no. 148 12648 page no. 150
01207		7 - 0,25			7		0,03	
01208	0,34	5 - 0,34	0,85	1,8	5	0,15	0,02	
01209		7 - 0,34			7		0,03	
01210	0,5	6 - 0,5	1	2,1	6	0,15	0,03	
13199		8 - 0,5			8		0,04	
13200		10 - 0,5			10		0,05	
01211	0,75	6 - 0,75	1,2	2,3	6	0,15	0,04	
01212		8 - 0,75			8		0,05	
13201		10 - 0,75			10		0,06	
13600		15 - 0,75			15		0,09	
01213	1	6 - 1	1,4	2,5	6	0,15	0,05	
13601		8 - 1			8		0,06	
01214		10 - 1			10		0,07	
13602		12 - 1			12		0,08	
13603		15 - 1			15		0,11	
01215	1,5	7 - 1,5	1,7	2,8	7	0,15	0,06	
01216		10 - 1,5			10		0,09	
01217		12 - 1,5			12		0,10	
13604		15 - 1,5			15		0,13	
13202		18 - 1,5			18		0,15	
13605		20 - 1,5			20		0,17	
01218	2,5	7 - 2,5	2,2	3,4	7	0,15	0,08	
13203		10 - 2,5			10		0,11	
01219		12 - 2,5			12		0,13	
13607		15 - 2,5			15		0,17	
13204		18 - 2,5			18		0,20	
13608		20 - 2,5			20		0,22	
01220	4	9 - 4	2,8	4	9	0,2	0,16	
01221		12 - 4			12		0,21	
13205		15 - 4			15		0,27	
13206		18 - 4			18		0,32	
13609		20 - 4			20		0,35	
01222	6	10 - 6	3,5	4,7	10	0,2	0,23	
01223		12 - 6			12		0,27	
01224		15 - 6			15		0,34	
13207		18 - 6			18		0,41	
13610		20 - 6			20		0,45	
13611		25 - 6			25		0,58	
01225	10	12 - 10	4,5	5,8	12	0,2	0,33	
01226		15 - 10			15		0,41	
01227		18 - 10			18		0,48	
13612		20 - 10			20		0,55	
13613		25 - 10			25		0,68	
01228	16	12 - 16	5,8	7,5	12	0,2	0,43	
01229		15 - 16			15		0,53	
01230		18 - 16			18		0,63	
13208		25 - 16			25		0,87	
13209		32 - 16			32		1,11	
01231	25	15 - 25	7,3	9,5	15	0,2	0,79	
01232		18 - 25			18		0,94	
13614		20 - 25			20		1,04	
13615		25 - 25			25		1,30	
13616		28 - 25			28		1,45	

Cable end sleeves 35-185 mm²

in acc. with DIN 46228 page 1
and special design
Material: copper acc. to DIN 13600
Surface: tinned



Part-No.	cross-section mm²	size	dimensions mm d_1	d_2	L	s	weight kg/‰ pcs.	crimping-tools/page no.
01233	35	15 - 35	8,3	11	15	0,2	0,76	12649, 05184 page no. 150; 05160 page no. 153; 12430, 12408, 12425 pages no. 156/157; 12655 pages no. 163/164; 30460 pages no. 165/166; 12930, 12933 page no. 169; 12748 pages no. 176/177; 12740/42 pages no. 174/175; 31460 pages no. 167/168; 12766 page no. 170; 12965/S, 12968 page no. 171; 14240/41 pages no. 174/175; 13552 pages no. 178/179; 13551/25, 13551/42, 13537 pages no. 180/181; 12836, 12485, 12486, 12487 page no. 192; 12837 page no. 193
01234		18 - 35			18		0,90	
01235		22 - 35			22		1,10	
01236		25 - 35			25		1,24	
01237		30 - 35			30		1,49	
01238		32 - 35			32		1,58	
13617	50	18 - 50	10,5	13	18	0,3	1,69	
13618		22 - 50			22		2,05	
13619		25 - 50			25		2,32	
13620		30 - 50			30		2,77	
13621		32 - 50			32		2,95	
13622	70	22 - 70	12,7	15	22	0,4	3,31	
13623		25 - 70			25		3,75	
13624		30 - 70			30		4,18	
13625		32 - 70			32		4,78	
13626	95	25 - 95	14,7	17	25	0,4	4,32	
13627		30 - 95			30		5,17	
13628		32 - 95			32		5,51	
13629		34 - 95			34		5,84	
13630	120	30 - 120	16,7	19	30	0,5	7,35	
13631		32 - 120			32		7,83	
13632		34 - 120			34		8,31	
13633		38 - 120			38		9,28	
13634		40 - 120			40		9,76	
13635	150	32 - 150	18,7	21	32	0,5	8,75	
13636		34 - 150			34		9,28	
13637		38 - 150			38		10,36	
13638		40 - 150			40		10,89	
13639	185	32 - 185	20,2	23,5	32	0,6	11,38	
13640		40 - 185			40		14,17	

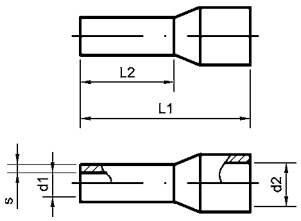
Assortment boxes

filled with uninsulated cable end sleeves
in acc. with DIN 46228 page 1

Part-No.	content			Part-No.	content			Part-No.	content	Part-No.	content
01300	500 St.	6 - 0,5	# 01210	**01301**	100 pcs.	9 - 4	# 01220	**01302**	unfilled with 5 partition	**01303**	unfilled with 4 partition
	500 St.	6 - 0,75	# 01211		100 pcs.	10 - 6	# 01222				
	500 St.	6 - 1	# 01213		50 pcs.	18 - 10	# 01227				
	300 St.	7 - 1,5	# 01215		25 pcs.	18 - 16	# 01230				
	200 St.	7 - 2,5	# 01218								

Insulated cable end sleeves 0,14-150 mm²

Colour: usual in trade design
Material: copper acc. to DIN EN 13600
Surface: tinned
Insulation sleeve: PP

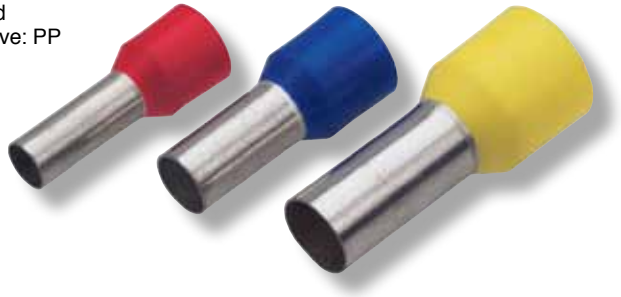


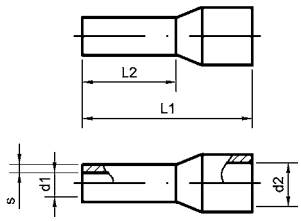
Part-No.	colour	Part-No.	colour	cross-section mm²	size	dimensions mm L_1	L_2	d_1	d_2	s	weight kg/‰ pcs.	crimping-tools/page no.
55993	brown	**56038**	grey	0,14	6 - 0,14	10	6	0,7	1,6	0,15	0,047	12646 ab 0,14 mm², 05140 ab 0,25 mm² page no. 149; 05124 ab 0,5 mm² page no. 148
55994		**56039**			8 - 0,14	12	8				0,055	
55995	violet	**56040**	light blue	0,25	6 - 0,25	10	6	0,75	1,8	0,15	0,047	
55996		**56041**			8 - 0,25	12	8				0,057	
55997	pink	**56042**	turquise	0,34	6 - 0,34	10	6	0,8	2	0,15	0,047	
55998		**56043**			8 - 0,34	12	8				0,055	
55999	white	**56044**	orange	0,5	6 - 0,5	12	6	1	2,6	0,15	0,063	
56000		**56045**			8 - 0,5	14	8				0,075	
56000/1		**56046**			10 - 0,5	16	10				0,085	
56001/1	blue	**56047**	white	0,75	6 - 0,75	12	6	1,2	2,8	0,15	0,077	
56001		**56048**			8 - 0,75	14	8				0,089	
56001/2		**56049**			10 - 0,75	16	10				0,100	
56001/3		**56050**			12 - 0,75	18	12				0,110	
56002/1	red	**56051**	yellow	1	6 - 1	12	6	1,4	3	0,15	0,084	05144 ab 0,08 mm², 12641 ab 2,5 mm² page no. 149; 05125, 12858 ab 0,5 mm² pages no. 148/153; 05122 ab 0,75 mm² page no. 148
56002		**56052**			8 - 1	14	8				0,100	
56002/2		**56053**			10 - 1	16	10				0,110	
56002/3		**56054**			12 - 1	18	12				0,125	
56003	black	**56055**	red	1,5	8 - 1,5	14	8	1,7	3,5	0,15	0,115	
56003/1		**56056**			10 - 1,5	16	10				0,130	
56003/2		**56056/1**			12 - 1,5	18	12				0,150	
56004		**56057**			18 - 1,5	24	18				0,200	
56006	grey	**56058**	blue	2,5	8 - 2,5	14	8	2,2	4,2	0,15	0,160	12640 ab 0,08 mm² page no. 149
56006/1		**56059**			12 - 2,5	18	12				0,200	
56007		**56060**			18 - 2,5	24	18				0,265	
56008	orange	**56061**	grey	4	10 - 4	17	10	2,8	4,8	0,2	0,270	
56008/1		**56062**			12 - 4	20	12				0,300	
56009		**56063**			18 - 4	26	18				0,440	
56010	green	**56064**	black	6	12 - 6	20	12	3,5	6,3	0,2	0,430	
56011		**56065**			18 - 6	26	18				0,550	
56012	brown	**56066**	white	10	12 - 10	22	12	4,5	7,6	0,2	0,560	12430, 12408, 12425 pages no. 156/157; 05160 page no. 153; 12655 ab 6 mm² pages no. 163/164; 05184 ab 10 mm² page no. 150
56013		**56067**			18 - 10	28	18				0,730	
56014	white	**56068**	green	16	12 - 16	24	12	5,8	8,8	0,2	0,820	
56015		**56069**			18 - 16	28	18				1,000	
56016	black	**56070**	brown	25	16 - 25	30	16	7,3	11,2	0,2	1,400	12648 page no. 150
56016/1		**56070/1**			18 - 25	30	18				1,420	
56017		**56071**			22 - 25	36	22				1,650	
56018	red	**56072**	beige	35	16 - 35	30	16	8,3	12,7	0,2	1,620	30460, 12930, 12933, 12740/41, 12748 pages no. 165 ff
56018/1		**56072/1**			18 - 35	30	18				1,700	
56019		**56073**			25 - 35	39	25				2,140	
56020	blue	**56074**	olive	50	20 - 50	36	20	10,3	15	0,3	2,990	12649 page no. 150
56021		**56075**			25 - 50	40	25				3,520	
-	-	**56076**	yellow	70	20 - 70	37	20	13,5	16	0,4	5,800	Werkzeuge mit Wechseleinsätzen ab page no. 167 ff
-	-	**56077**	red	95	25 - 95	44	25	14,5	18	0,4	6,880	
-	-	**56078**	blue	120	27 -120	48	27	16,5	20	0,45	9,360	
-	-	**56079**	yellow	150	32 -150	58	32	19,5	28	0,5	13,450	

Insulated cable end sleeves 0,5-50 mm²

in acc. with DIN 46228 page 4

Material: copper acc. to DIN EN 13600
Surface: tinned
Insulation sleeve: PP

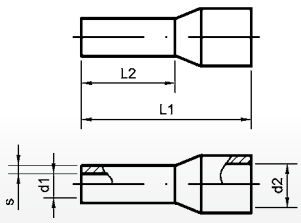




Part-No.	colour	cross-section mm²	size	dimensions mm L1	L2	d1	d2	s	weight kg/‰ pcs.	crimping-tools/page no.
55999	white	0,5	6 - 0,5	12	6	1	2,6	0,15	0,063	12646 ab 0,14 mm², 05140 ab 0,25 mm² page no. 149; 05124 ab 0,5 mm² page no. 148; 05144 ab 0,08 mm², 12641 ab 2,5 mm² page no. 149; 05125, 12858 ab 0,5 mm² pages no. 148/153; 05122 ab 0,75 mm² page no. 148; 12430, 12408, 12425 pages no. 156/157, 05160 page no. 153; 12655 ab 6 mm² pages no. 163/164; 05184 ab 10 mm² page no. 150; 12648 page no. 150; 12649 page no. 150; Werkzeuge mit Wechseleinsätzen ab page no. 165 ff
56000			8 - 0,5	14	8				0,075	
56000/1			10 - 0,5	16	10				0,085	
56080	grey	0,75	6 - 0,75	12	6	1,2	2,8	0,15	0,077	
56081			8 - 0,75	14	8				0,085	
56082			10 - 0,75	16	10				0,100	
56083			12 - 0,75	18	12				0,110	
56002/1	red	1	6 - 1	12	6	1,4	3	0,15	0,084	
56002			8 - 1	14	8				0,100	
56002/2			10 - 1	16	10				0,110	
56002/3			12 - 1	18	12				0,125	
56003	black	1,5	8 - 1,5	14	8	1,7	3,5	0,15	0,115	
56003/1			10 - 1,5	16	10				0,130	
56003/2			12 - 1,5	18	12				0,150	
56004			18 - 1,5	24	18				0,200	
56058	blue	2,5	8 - 2,5	14	8	2,2	4,2	0,15	0,160	
56059			12 - 2,5	18	12				0,200	
56060			18 - 2,5	24	18				0,265	
56061	grey	4	10 - 4	17	10	2,8	4,8	0,2	0,270	
56062			12 - 4	20	12				0,300	
56063			18 - 4	26	18				0,440	
56084	yellow	6	12 - 6	20	12	3,5	6,3	0,2	0,430	
56085			18 - 6	26	18				0,550	
56086	red	10	12 - 10	22	12	4,5	7,6	0,2	0,560	
56087			18 - 10	28	18				0,730	
56088	blue	16	12 - 16	24	12	5,8	8,8	0,2	0,820	
56089			18 - 16	28	18				1,000	
56090	yellow	25	16 - 25	30	16	7,3	11,2	0,2	1,400	
56090/1			18 - 25	30	18				1,420	
56091			22 - 25	36	22				1,650	
56018	red	35	16 - 35	30	16	8,3	12,7	0,2	1,620	
56018/1			18 - 35	30	18				1,700	
56019			25 - 35	39	25				2,140	
56020	blue	50	20 - 50	36	20	10,3	15	0,3	2,990	
56021			25 - 50	40	25				3,520	

Insulated cable end sleeves 0,5-2,5 mm²

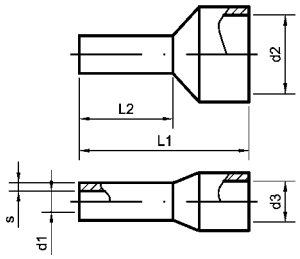
in strip form



usual in trade design Part-No.	colour	Part-No.	colour	design DIN 46228 Best-Nr.	colour	cross-section mm²	dimensions mm L_1	L_2	d_1	d_2	s	crimping-tools/page no.
56000 str	weiß	**56045 str**	orange	**56000 str**	weiß	0,5	14	8	1	2,6	0,15	12510/12512 page no. 150
56001 str	blue	**56048 str**	white	**56081 str**	grau	0,75	14	8	1,2	2,8	0,15	
56002 str	red	**56052 str**	yellow	**56002 str**	red	1	14	8	1,4	3	0,15	
56003 str	black	**56055 str**	red	**56003 str**	black	1,5	14	8	1,7	3,5	0,15	
56006 str	grau	**56058 str**	blue	**56058 str**	blue	2,5	14	8	2,3	4,2	0,15	

Insulated twin cable end sleeves with rectangular insulation sleeve for two cables 0,5-16 mm²

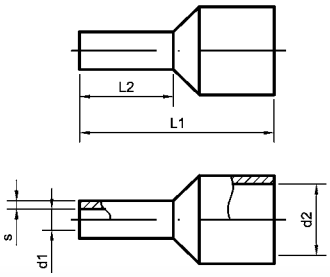
Material: copper acc. to DIN EN 13600
Surface: tinned
Insulation sleeve: PP



Part-No.	colour	cross-section mm²	dimensions mm L_1	L_2	d_1	d_2	d_3	s	weight kg/‰ pcs.	crimping-tools/page no.
57000	white	2 x 0,5	15	8	1,5	4,9	2,5	0,15	0,12	12640, 12646, 05140 page no. 149; 05144 page no. 149
57001	grey	2 x 0,75	15	8	1,8	5,2	2,6	0,15	0,14	
57002			19	10					0,15	
57003	red	2 x 1	16	8	2	5,8	3,2	0,15	0,16	
57004			17	10					0,18	
57005	black	2 x 1,5	16	8	2,3	6,5	3,6	0,15	0,19	
57006			20	12					0,23	
57007	blue	2 x 2,5	18	10	2,9	7,5	4,3	0,15	0,33	
57008			21	13					0,38	
57009	grey	2 x 4	23	12	3,8	9	5,2	0,2	0,52	12766 p. 170; 13552 p. 178; 14240/41 p.174/175
57010	yellow	2 x 6	26	14	4,9	10	7,2	0,2	0,72	
57011	red	2 x 10	26	14	6,5	13	7,2	0,2	0,92	12641, 12647 page no. 149
57012	blue	2 x 16	30	14	8,3	18	9,5	0,2	1,34	12649 p. 150

Insulated cable end sleeves 1,5-16 mm² for short circuit proof cables with thick insulation

Material: copper acc. to DIN EN 13600
Surface: tinned
Insulation sleeve: PP with flaring insulation part



Part-No.	colour	cross-section mm²	size	dimensions mm L_1	L_2	d_1	d_2	s	weight kg/‰ pcs.	crimping-tools/page no.
58000	black	1,5	8 - 1,5	17,5	8	1,8	5,9	0,15	0,25	pages no. 148, 149, 150, 153
58002			10 - 1,5	19,5	10				0,27	
58004	blue	2,5	8 - 2,5	17,5	8	2,3	7,8	0,15	0,28	
58006			12 - 2,5	21,5	12				0,31	
58008	green	4	10 - 4	19,5	10	2,9	7,8	0,2	0,4	
58010	yellow	6	12 - 6	23	12	3,6	8,3	0,2	0,55	
58012	red	10	12 - 10	24	12	4,6	9,8	0,2	0,69	
58014	blue	16	12 - 16	25,5	12	6	12,0	0,2	0,96	

Assortment-boxes 0,5-2,5 mm²

filled with insulated cable end sleeves
in acc. with DIN 46228 page 4 and special design

Part-No.	content				Part-No.	content				Part-No.	content			
01305	50 pcs.	8 - 0,5	white	# 56000	**01307**	50 pcs.	8 - 0,5	orange	# 56045	**01309**	50 pcs.	8 - 0,5	white	# 56000
	100 pcs.	8 - 0,75	blue	# 56001		100 pcs.	8 - 0,75	white	# 56048		100 pcs.	8 - 0,75	grey	# 56081
	100 pcs.	8 - 1	red	# 56002		100 pcs.	8 - 1	yellow	# 56052		100 pcs.	8 - 1	red	# 56002
	100 pcs.	8 - 1,5	black	# 56003		100 Stck	8 - 1,5	red	# 56055		100 pcs.	8 - 1,5	black	# 56003
	50 pcs.	8 - 2,5	grey	# 56006		50 pcs.	8 - 2,5	blue	# 56058		50 pcs.	8 - 2,5	blue	# 56058

Assortment-boxes 4-16 mm²

filled with insulated cable end sleeves
in acc. with DIN 46228 page 4 and special design

Part-No.	content				Part-No.	content				Part-No.	content			
01306	50 pcs.	10 - 4	orange	# 56008	**01308**	50 pcs.	10 - 4	grey	# 56061	**01310**	50 pcs.	10 - 4	grey	# 56061
	20 pcs.	12 - 6	green	# 56010		20 pcs.	12 - 6	black	# 56064		50 pcs.	12 - 6	yellow	# 56084
	20 pcs.	12 - 10	brown	# 56012		20 pcs.	12 - 10	white	# 56066		20 pcs.	12 - 10	red	# 56086
	10 pcs.	12 - 16	white	# 56014		10 pcs.	12 - 16	green	# 56068		10 pcs.	12 - 16	blue	# 56088

Assortment-boxes 0,5-6 mm²

filled with twin cable end sleeves for double cable connection

Part-No.	content				Part-No.	content				Part-No.	content			
01311	50 pcs.	2 - 0,5	white	# 57000	**01312**	50 pcs.	2 - 0,75	grey	# 57001	**01313**	30 pcs.	2 - 1,5	black	# 57005
	50 pcs.	2 - 0,75	grey	# 57001		50 pcs.	2 - 1	red	# 57003		30 pcs.	2 - 2,5	blue	# 57007
	50 pcs.	2 - 1	red	# 57003		50 pcs.	2 - 1,5	black	# 57005		20 pcs.	2 - 4	grey	# 57009
	50 pcs.	2 - 1,5	black	# 57005		50 pcs.	2 - 2,5	blue	# 57007		10 pcs.	2 - 6	yellow	# 57010

Assortment-boxes

filled with uninsulated cable end sleeves DIN 46228 page 1
with and without crimping tools

10480 10483

10485 10488

Part-No.	dimensions mm	description	content	
10480	245 x 160 x 45	steel sheet varnished assortment box with 6 little,	1000 x 0,75 - 6	01211
		1 tool partition and following content:	1000 x 1,00 - 6	01213
			1000 x 1,50 - 7	01215
			500 x 2,50 - 7	01218
			500 x 4,00 - 9	01220
			500 x 6,00 - 12	01223
			1 x crimping tool	05122
10481	245 x 160 x 45	ditto, but with square crimping tool 05124	1 x square crimping tool	05124
10482	245 x 160 x 45	ditto, but without tool	without tool	
10483	245 x 160 x 45	steel sheet varnished assortment box with 6 little,	1000 x 0,50 - 6	01210
		1 tool partition and following content:	1000 x 0,75 - 6	01211
			1000 x 1,00 - 6	01213
			500 x 1,50 - 7	01215
			500 x 2,50 - 7	01218
			500 x 2,50 - 12	01219
			1 x crimping tool	12637
10484	245 x 160 x 45	ditto, but without tool	without tool	

Part-No.	dimensions mm	description	content	
10485	350 x 160 x 35	steel sheet varnished assortment box with 7 little,	1000 x 0,75 - 6	01211
		1 tool partition and following content:	1000 x 1,00 - 6	01213
			1000 x 1,50 - 7	01215
			500 x 2,50 - 7	01218
			500 x 4,00 - 9	01220
			500 x 6,00 - 12	01223
			500 x 10,00 - 12	01225
			1 x crimping tool	05122
10486	350 x 160 x 35	ditto, but with square crimping tool 12640	1 x square crimping tool	12640
10487	350 x 160 x 35	ditto, but without tool	without tool	
10488	350 x 160 x 35	steel sheet varnished assortment box with 12 little,	1000 x 0,75 - 6	01211
		1 tool partition and following content:	1000 x 1,00 - 6	01213
			1000 x 1,50 - 7	01215
			500 x 1,50 - 10	01216
			500 x 2,50 - 7	01218
			500 x 2,50 - 12	01219
			500 x 4,00 - 9	01220
			250 x 6,00 - 12	01223
			100 x 10,00 - 12	01225
			100 x 10,00 - 18	01227
			100 x 16,00 - 12	01228
			100 x 16,00 - 18	01230
			1 x crimping tool	05122
10490	350 x 160 x 35	ditto, but without tool	without tool	

Assortment-boxes

filled with insulated cable end sleeves DIN 46228 page 4
and Twin design
with and without crimping tool

10491 10494

10496 10499

Part-No.	dimensions mm	description	content	
10491	245 x 160 x 45	steel sheet varnished assortment box with 6 little,	300 x 0,75 - 8	56081
		1 tool partition and following content:	300 x 1,00 - 8	56002
			300 x 1,50 - 8	56003
			200 x 2,50 - 8	56058
			200 x 4,00 - 10	56061
			100 x 6,00 - 12	56084
			1 x crimping tool	05122
10492	245 x 160 x 45	ditto, but with square crimping tool 05124	1 x square crimping tool	05124
10493	245 x 160 x 45	ditto, but without tool	without tool	
10494	245 x 160 x 45	steel sheet varnished assortment box with 6 little,	200 x 2 x 0,50 - 8	57000
		1 tool partition and following content:	200 x 2 x 0,75 - 8	57001
			200 x 2 x 1,00 - 8	57003
			200 x 2 x 1,50 - 8	57005
			200 x 2 x 2,50 - 10	57007
			200 x 2 x 4,00 - 12	57009
			1 x crimping tool	12646
10495	245 x 160 x 45	ditto, but without tool	without tool	

Part-No.	dimensions mm	description	content	
10496	350 x 160 x 35	steel sheet varnished assortment box with 7 little,	300 x 0,75 - 8	56081
		1 tool partition and following content:	300 x 1,00 - 8	56002
			300 x 1,50 - 8	56003
			200 x 2,50 - 8	56058
			200 x 4,00 - 10	56061
			100 x 6,00 - 12	56084
			50 x 10,00 - 12	56086
			1 x crimping tool	05122
10497	350 x 160 x 35	ditto, but with square crimping tool 12640	1 x square crimping tool	12640
10498	350 x 160 x 35	ditto, but without tool	without tool	
10499	350 x 160 x 35	steel sheet varnished assortment box with 12 little,	100 x 0,75 - 8	56081
		1 tool partition and following content:	100 x 1,00 - 8	56002
			100 x 1,50 - 8	56003
			100 x 1,50 - 10	56003/1
			100 x 2,50 - 8	56058
			100 x 2,50 - 12	56059
			100 x 4,00 - 10	56061
			50 x 6,00 - 12	56084
			50 x 10,00 - 12	56086
			50 x 10,00 - 18	56087
			50 x 16,00 - 12	56088
			50 x 16,00 - 18	56089
			1 x crimping tool	05122
10500	350 x 160 x 35	ditto, but without tool	without tool	

Assortment-boxes with crimping tool and insulated cable end sleeves

Part-No.	dimensions mm	description	content		
05145	235 x 185 x 47	Insulated cable end sleeves in usual trade design	100 x	8 - 0,5	white	56000
		in a plastic suitcase with 5 little and 1 tool partition	100 x	8 - 0,75	blue	56001
		and a handy crimping tool in a cross section range 0,25-6 mm²	100 x	8 - 1	red	56002
		with square crimping	100 x	8 - 1,5	black	56003
			100 x	8 - 2,5	grey	56006
			1 x	crimping tool		05141
05146	235 x 185 x 47	Insulated cable end sleeves in usual trade design	100 x	8 - 0,5	orange	56045
		in a plastic suitcase with 5 little and 1 tool partition	100 x	8 - 0,75	white	56048
		and a handy crimping tool in a cross section range 0,25-6 mm²	100 x	8 - 1	yellow	56052
		with square crimping	100 x	8 - 1,5	red	56055
			100 x	8 - 2,5	black	56058
			1 x	crimping tool		05141
05147	235 x 185 x 47	Insulated cable end sleeves in usual trade design	100 x	8 - 0,5	white	56000
		in a plastic suitcase with 5 little and 1 tool partition	100 x	8 - 0,75	grey	56081
		and a handy crimping tool in a cross section range 0,25-6 mm²	100 x	8 - 1	red	56002
		with square crimping	100 x	8 - 1,5	black	56003
			100 x	8 - 2,5	blue	56058
			1 x	crimping tool		05141
05148	235 x 185 x 47	Insulated cable end sleeves in usual trade design	100 x	8 - 0,5	white	56000
		in a plastic suitcase with 5 little and 1 tool partition	100 x	8 - 1,5	black	56003
		and a handy crimping tool in a cross section range 0,25-6 mm²	100 x	8 - 2,5	grey	56006
		with square crimping	50 x	10 - 4	orange	56008
			40 x	12 - 6	green	56010
			1 x	crimping tool		05141
05149	235 x 185 x 47	Insulated cable end sleeves in usual trade design	100 x	8 - 0,5	orange	56045
		in a plastic suitcase with 5 little and 1 tool partition	100 x	8 - 1,5	red	56055
		and a handy crimping tool in a cross section range 0,25-6 mm²	100 x	8 - 2,5	blue	56058
		with square crimping	50 x	10 - 4	grau	56061
			40 x	12 - 6	black	56064
			1 x	crimping tool		05141
05150	235 x 185 x 47	Insulated cable end sleeves in usual trade design	100 x	8 - 0,5	white	56000
		in a plastic suitcase with 5 little and 1 tool partition	100 x	8 - 1,5	black	56003
		and a handy crimping tool in a cross section range 0,25-6 mm²	100 x	8 - 2,5	blue	56058
		with square crimping	50 x	10 - 4	grey	56051
			40 x	12 - 6	yellow	56084
			1 x	crimping tool		05141
05151	235 x 185 x 47	Insulated cable end sleeves in usual trade design	100 x	2 x 0,5	white	57000
		in a plastic suitcase with 5 little and 1 tool partition	100 x	2 x 0,75	grey	57001
		and a handy crimping tool in a cross section range 0,25-6 mm²	100 x	2 x 1	red	57003
		with square crimping	75 x	2 x 1,5	black	57005
			50 x	2 x 2,5	blue	57007
			1 x	crimping tool		05141

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.10 Crimp- and plug connectors as well as insulating sleeves and terminal blocks

Function of crimp- and plug connectors is to realize an electrical connection which can be separated and reconstituted again. Also in this product field druseidt offers a wide range of DIN-certified as well as products in special design. Such products are complemented by the delivering of different terminal blocks, insulating sleeves and housings.

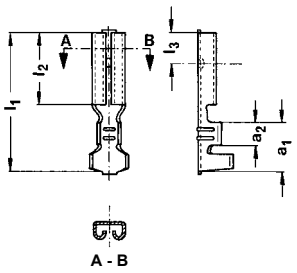
The uninsulated tabs and receptacles consisting out of brass are suitable for the following temperature range: uncoated up to + 90° C, tin-plated up to + 100° C, silver-plated up to + 110° C, connectors consisting out of nickel-plated steel up to + 250° C. The crimping operations are carried out with special dies for uninsulated open barrel terminals which realize the contact and insulation crimping in one step. To guarantee a perfect and corrosion resistant crimp-connection it is important to pay attention of the right tool selecting. Recommended crimping tools as well as detailed technical information are contained on catalogue pages 154-157 resp. inside of the technical appendix.

Please notice, that all crimping operations will be done only with the right tools resp. suitable compression dies.

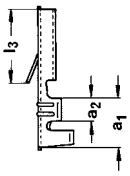
Crimping design:
Double crimp
for open barrel terminals

Receptacles 2,8 mm

Material: brass
Surface: uncoated or tinned



A - B

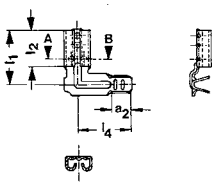


04347 vz with tabs

Part-No. uncoated	Part-No. tinned	cross-section mm²	tab-thickness mm	DIN-size	dimensions mm L_1	L_2	L_3	a_1	a_2	locking point	weight kg/‰ pcs.	crimping-tools/page no.
design DIN 46247 part 1												pages no. 153, 155-157
-	**04351 vz**	0,1 - 0,25	0,8	-	14	6,3	3,3	5	2	x	0,20	
04360	**04360 vz**	0,5 - 1	0,5	A 2,8-1				5,5	2,5	x	0,23	
04361	**04361 vz**	0,5 - 1	0,8	B 2,8-1				5,5	2,5	x	0,23	
design DIN 46330 part 2 design A												
-	**04356 vz**	0,5 - 1	0,5	-	12,5	5	3,3	5	2,8	x	0,25	
-	**04358 vz**	0,5 - 1	0,8	A 2,8-1				5,5	2,5	x	0,25	
design DIN 46340 part 1 with tabs												
-	**04347 vz**	0,5 - 1	0,5	A 2,8-1	14	6,3	5,6	5,5	2,5	-	0,24	

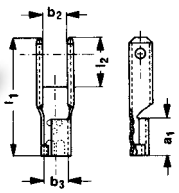
Tab connectors 2,8 mm

Material: brass
Surface: tinned

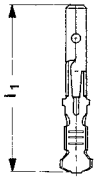


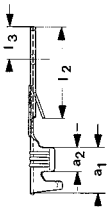
A - B

04245 vz



04300 vz



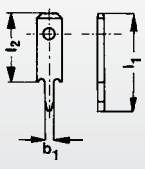


04305 vz

Part-No. tinned	cross-section mm²	tab-thickness mm	dimensions mm L_1	L_2	L_3	L_4	a_1	a_2	b_2	b_3	weight kg/‰ pcs.	crimping-tools/page no.
Flat tab receptacles in flag type design												pages no. 153, 155-157
04245 vz	0,5 - 1	0,5	9,35	5	-	7,2	-	2,5	-	-	0,27	
Multiple tabs												
04300 vz	-	0,8	16	6,7	-	-	5	-	3,2	3,1	0,56	
Flat tab connector with additional tab to engage in housings												
04305 vz	0,5 - 1	0,8	22,5	12,7	2,2	-	6	3,2	-	-	0,42	

Tabs 2,8 mm

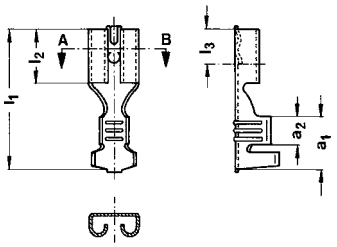
for soldering into PC-boards
Material: brass
Surface: tinned



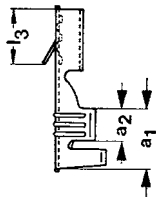
Part-No. tinned	tab-thickness mm	dimensions mm b_1	L_1	L_2	weight kg/‰ pcs.
04428 vz	0,8	0,9	10,5	6,5	0,14

Receptacles 4,8 mm

Material: brass
Surface: uncoated or tinned



A - B

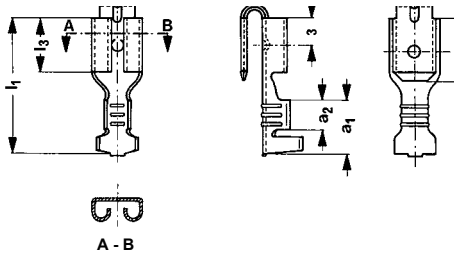


04296 vz with add. tab to engage in housings

Part-No. uncoated	Part-No. tinned	cross-section mm²	tab-thickness mm	DIN-size	dimensions mm L_1	L_2	L_3	a_1	a_2	locking point	weight kg/‰ pcs.	crimping-tools/page no.
design DIN 46247 part 2												pages no. 153, 155-157
04285	**04285 vz**	0,5 - 1	0,5	-	15,6	6	3,8	6	3,4	x	0,50	
04287	**04287 vz**		0,8	4,8 - 1						x	0,50	
-	**04292 vz**	1,5 - 2,5	0,8	4,8 - 2,5						x	0,54	
design with tabs to engage in housings												
-	**04296 vz**	0,5 - 1	0,8	-	15,8	6	5,5	6	3,4	-	0,50	

Multiple receptacles 4,8 mm

Material: brass
Surface: tinned



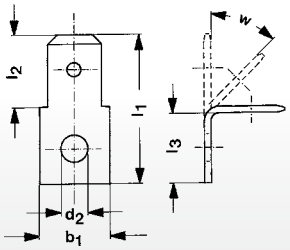
A - B

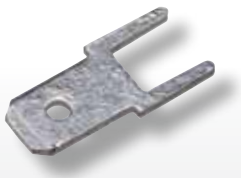
Part-No. tinned	cross-section mm²	tab-thickness mm	dimensions mm L1	L2	L3	a1	a2	locking point	weight kg/‰ pcs.	crimping-tools/page no.
11720 vz	0,5 - 1	0,8	15,6	7	6	6	3,4	x	0,68	pages no. 153, 155-157
11725 vz	1,5 - 2,5	0,8	15,6	7	6	6	3,4	x	0,70	

Tabs 4,8 mm

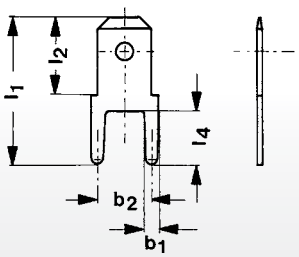
Material: brass
Surface: tinned

04332 vz





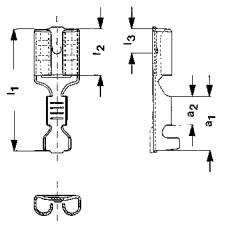
04340 vz



Part-No. tinned	tab-thickness mm	dimensions mm b_1	b_2	d_2	L_1	L_2	L_3	L_4	w	weight kg/‰ pcs.
for screwing										
04332 vz	0,8	6,5	-	4,3	17,5	7	7,5	-	45°	0,60
for soldering into PC-boards										
04340 vz	0,8	1,2	5	-	13,5	7	-	5	-	0,38

Receptacles 6,3 mm

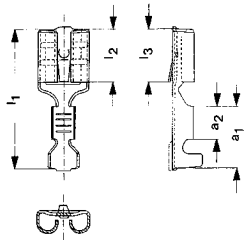
DIN 46247 part 3 with locking point
Material: brass or steel
Surface: uncoated ,tinned or nickel plated



Part-No. brass uncoated	Part-No. brass tinned	Part-No. steel nickel plated	cross-section mm²	tab-thickness mm	DIN-size	dimensions mm L_1	L_2	L_3	a_1	a_2	weight kg/‰ pcs.	crimping-tools/page no.
04870	**04870 vz**	**04872**	0,5 - 1	0,8	6,3 - 1	19,2	7,4	4	8,5	4,5	0,75	pages no. 153, 155-157
04875	**04875 vz**	**04877**	0,75 - 1,5		-						0,89	
04878	**04878 vz**	**04880**	1,5 - 2,5		6,3 - 2,5						0,92	
04883	**04883 vz**	**04885**	4 - 6		6,3 - 6						0,98	

Receptacles 6,3 mm

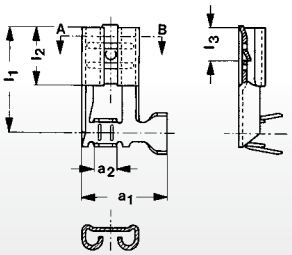
DIN 46340 part 3 with tabs to engage into housings
Material: brass
Surface: uncoated or tinned



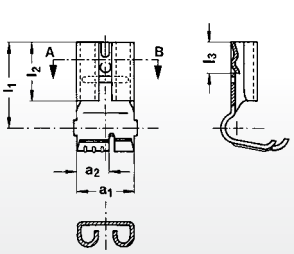
Part-No. uncoated	Part-No. tinned	cross-section mm²	tab-thickness mm	DIN-size	dimensions mm L_1	L_2	L_3	a_1	a_2	weight kg/‰ pcs.	crimping-tools/page no.
04886	**04886 vz**	0,5 - 1	0,8	A 6,3 - 1	19,2	7,4	7	8,5	4,5	0,70	pages no. 153, 155-157
04888	**04888 vz**	1,5 - 2,5		A 6,3 - 2,5						0,78	
04890	**04890 vz**	4 - 6		A 6,3 - 6						0,88	
04892	**04892 vz**	0,5 - 1	0,8	B 6,3 - 1	19,2	7,4	7	8,5	4,5	0,70	
04894	**04894 vz**	1,5 - 2,5		B 6,3 - 2,5						0,78	
04896	**04896 vz**	4 - 6		B 6,3 - 6						0,88	
DIN type B Part-No. 04892-96 with additional locking point											

Receptacles 6,3 mm

DIN 46346 part 3 design A + B
Flag type
Material: brass
Surface: uncoated or tinned



A - B
04945/47

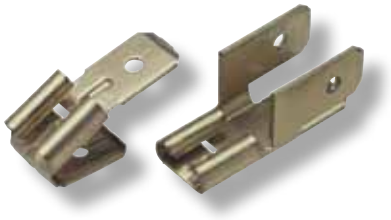


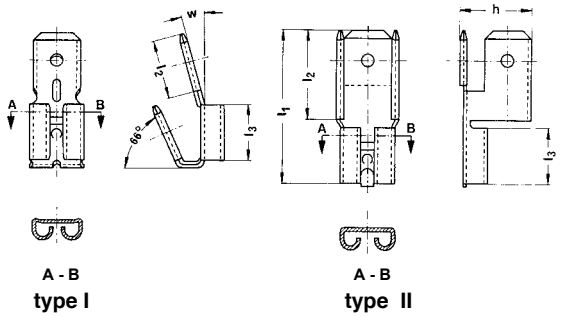
A - B
04940

Part-No. uncoated	Part-No. tinned	cross-section mm²	tab-thickness mm	DIN-size	dimensions mm L_1	L_2	L_3	a_1	a_2	locking point	weight kg/‰ pcs.	crimping-tools/page no.
04945	**04945 vz**	0,5 - 1	0,8	A 6,3 - 1	12,5	7,4	4	11	3,5	x	0,81	30480 page no. 155
04947	**04947 vz**	1,5 - 2,5		A 6,3 - 2,5	13,85					x	0,84	on request
04940	**04940 vz**	0,5 - 1,5	0,8	B 6,3 - 1,5	11	7,4	4	7,5	4	x	0,84	30481 page no. 155

Multiple tabs 6,3 mm

Dimensions in the tab sector DIN 46244 part 1
Material: brass
Surface: uncoated or tinned



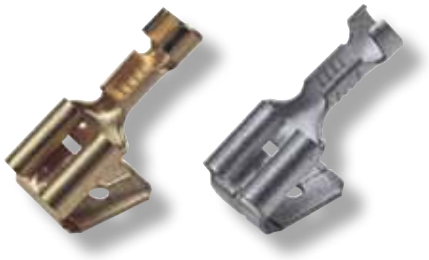


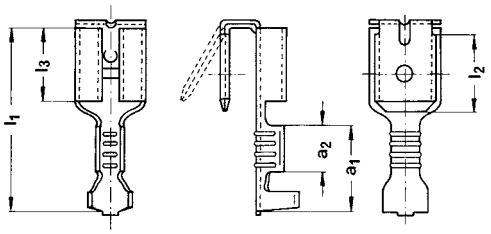
Part-No. uncoated	Part-No. tinned	type	tab-thickness mm	dimensions mm L1	L2	L3	h	w	locking point	weight kg/‰ pcs.
04585*	**04585 vz***	I	0,8	-	8	7,5	-	15°	-	1,14
04588	**-**	II		20,5	12	7,4	9,6	-	x	1,85

Part.-No. 04585/04585 vz = design in accordance with DIN 46347

Multiple tabs 6,3 mm

DIN 46345 part 1
Material: brass
Surface: uncoated or tinned

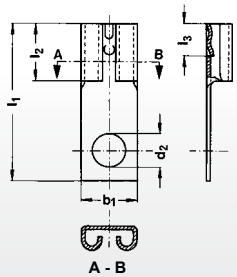




Part-No. uncoated	Part-No. tinned	cross-section mm²	tab-thickness mm	DIN-size	dimensions mm L_1	L_2	L_3	a_1	a_2	w	weight kg/‰ pcs.	crimping-tools/page no.
04605	**04605 vz**	0,5 - 1	0,8	6,3 - 1	20	8	7,4	8,8	4,7	30°	1,12	pages no. 153, 155-157
04607	**04607 vz**	1,5 - 2,5		6,3 - 2,5							1,14	

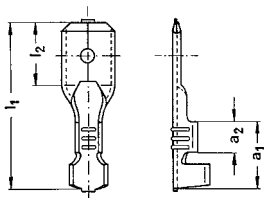
Receptacles 6,3 mm

Material: brass
Surface: tinned



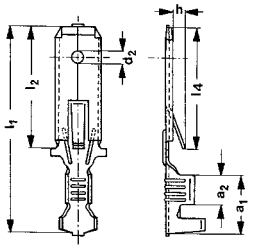
Part-No.	tab-thickness mm	dimensions mm d_2	L_1	L_2	L_3	L_4	b_1	locking point	weight kg/‰ pcs.
04980 vz	0,8	3,1	20,5	7,5	4	-	7,5	x	0,84
04982 vz		4,3						x	0,83

Tabs 6,3 mm
DIN 46248 part 3, design A
Material: brass
Surface: tinned



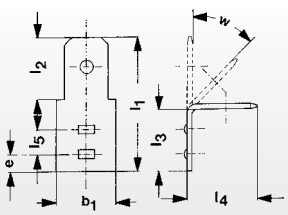
Part-No.	cross-section mm²	tab-thickness mm	DIN-size	dimensions mm L_1	L_2	a_1	a_2	weight kg/‰ pcs.	crimping-tools/page no.
04790 vz	0,5 - 1	0,8	A 6,3 - 1	20	8,8	8,5	4,6	0,58	pages no. 153, 155-157
04792 vz	1,5 - 2,5		A 6,3 - 2,5					0,66	

Tabs 6,3 mm
with tabs to engage into housings
Material: brass
Surface: tinned



Part-No.	cross-section mm²	tab-thickness mm	dimensions mm d_2	L_1	L_2	L_4	a_1	a_2	h	weight kg/‰ pcs.	crimping-tools/page no.
04801 vz	0,5 - 1	0,8	-	28	16	15,5	8,2	4	2,6	0,83	pages no. 153, 155-157
04802 vz	1,5 - 2,5		1,65							0,92	
04804 vz	4 - 6		1,65							1,01	

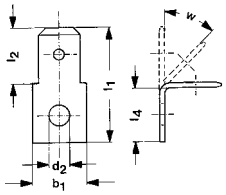
Tabs 6,3 mm
for welding connection
Dimensions in the tab sector DIN 46244 part 1
Material: steel
Surface: nickel plated



Part-No.	tab-thickness mm	dimensions mm L_1	L_2	L_3	L_4	L_5	b_1	b_2	e	h	w	weight kg/‰ pcs.
04538	0,8	19	8	9,5	9,5	3,5	8	6	2,5	-	45°	0,89
04540				7,7	10,3					-	90°	0,89

Tabs 6,3 mm

Dimensions in the tab sector DIN 46244 part 1
Material: brass
Surface: uncoated or tinned

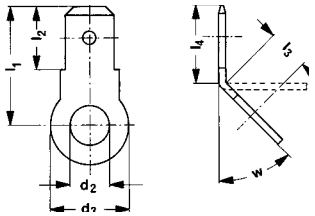


Part-No. uncoated	Part-No. tinned	type	tab-thickness mm	dimensions mm d_2	L_1	L_2	L_4	b_1	w	weight kg/‰ pcs.
-	**04686***	I	0,8	-	19	8	-	8	-	0,91
-	**04630 vz****			4,3			-		-	0,86
-	**04632 vz**			5,3			-		-	0,80
-	**04637 vz**	II	0,8	3,2	19	8	8	8	45°	0,85
-	**04645 vz**			4,1			8			0,85
-	**04651 vz****			4,3			8,5			0,85
04660	**04660 vz**			5,3			8			0,80

* Part-No. 04686 = material steel nickel plated
** Part-No. 04630 vz und 04651 vz = design nach DIN 46342 Teil 1 design A+B

Tabs 6,3 mm

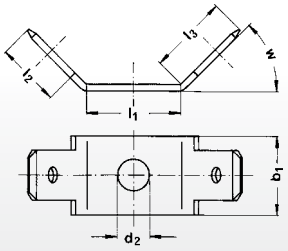
Dimensions in the tab sector DIN 46244 part 1
Material: brass
Surface: tinned



Part-No.	tab-thickness mm	dimensions mm d_2	d_3	L_1	L_2	L_3	L_4	w	weight kg/‰ pcs.
04707 vz	0,8	6,3	17	18,5	8	8,5	10	45°	1,70
04710 vz		8,4							1,58
04711 vz		10,5							1,33

Tabs 6,3 mm

Dimensions in the tab sector DIN 46244 part 1
Material: brass or steel
Surface: tinned or nickel plated

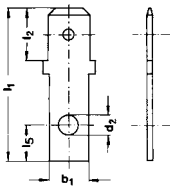


Part-No.	tab-thickness mm	dimensions mm d_2	L_1	L_2	L_3	L_4	b_1	w	weight kg/‰ pcs.
04515 vz	0,8	4,3	12	8	9,95	-	10	45°	1,60
04518 vz		5,2				-			1,53
11915*	0,8	4,2	12	8	9,95	8	10	45°	1,49

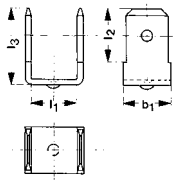
* Part-No. 11915 = material steel nickel plated

Tabs 6,3 mm

Dimensions in the tab sector DIN 46244 part 1
Material: brass or steel
Surface: tinned or nickel plated



type I



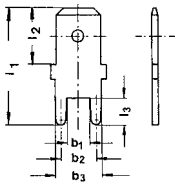
type II

Part-No. tinned	type	tab-thickness mm	dimensions mm d_2	L_1	L_2	L_3	L_5	b_1	weight kg/‰ pcs.
04850 vz	I	0,8	3,1	23,2	8	5,5	5,5	6	0,92
04527*	II		-	7,2	8	11,5	-	7	1,30

* Part-No. 04527 material steel nickel plated

Tabs 6,3 mm

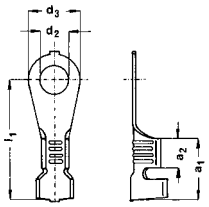
for soldering into PC boards
Dimensions in the tab sector DIN 46244 part 1
Material: brass S
urface: tinned



Part-No. tinned	tab-thickness mm	dimensions mm L_1	L_2	L_3	b_1	b_2	b_3	weight kg/‰ pcs.
04721 vz	0,8	16,5	8	4	3,5	5	6,4	0,65

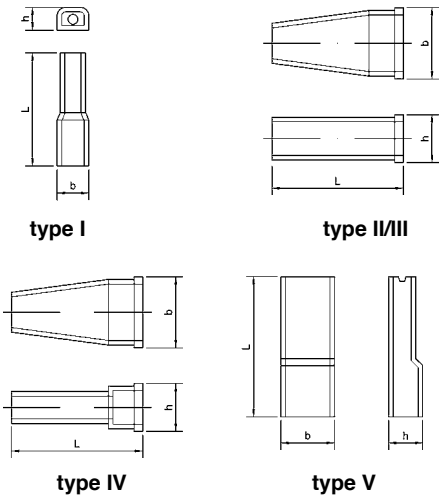
Ring terminals 0,5-6 mm²

in acc. with DIN 46225 design A
Material: brass
Surface: uncoated or tinned



Part-No. uncoated	Part-No. tinned	cross-section mm²	DIN Größe	dimensions mm a_1	a_2	d_2	d_3	L_1	weight kg/ ‰ pcs.	crimping-tools/page no.
04058	**04058 vz**	0,5 - 1	A4 - 1	9	4,5	4,3	8	17	0,73	on request
04060	**04060 vz**		A5 - 1			5,3	9,5	17,5	0,73	
04063	**04063 vz**		A6 - 1			6,5	12	22	1,00	
04070	**04070 vz**	1,5 - 2,5	A4 - 2,5	9	4,5	4,3	8	18,3	0,85	
04072	**04072 vz**		A5 - 2,5			5,3	9,5	17,5	0,87	
04074	**04074 vz**		A6 - 2,5			6,5	12	22	1,10	
-	**04076 vz**		A8 - 2,5			8,4	14	21	1,15	
-	**04080 vz**	4 - 6	A4 - 6	11	4,5	4,3	8	21,3	1,70	
-	**04083 vz**		A5 - 6			5,3	9,5	20,5	2,15	
-	**04085 vz**		A6 - 6			6,5	12	25	2,10	

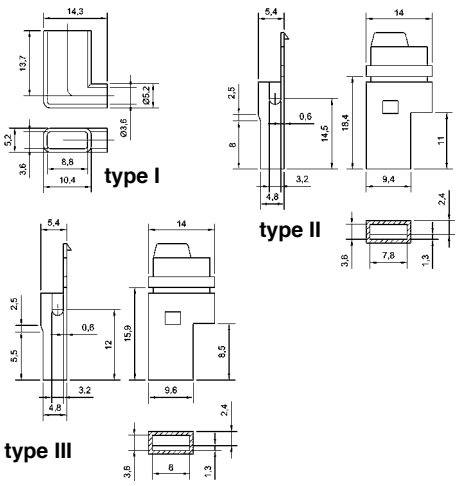
Insulating sleeves 2,8/4,8/6,3 mm
for tabs and receptacles



Part-No.	type	application	cable-Ø max. mm	dimensions mm L	b	h	material
03696	I	receptacles 2,8 mm	2,5	19,5	5,5	3,5	PE
03697			2,8				soft PVC
03699	II	receptacles 4,8 mm	3,2	21	8	4,5	PE
03703	III	receptacles 6,3 mm	3,2	25	9,5	5	PE
03707	IV	tabs 6,3 mm	3,2	23	12,5	8,5	PE
03708	V	receptacles 6,3 mm	3,6	24	9,3	8	PA

Nature colour is standard. Other colours on request. By using a combination of type III and IV you get a fully insulated connection consisting of receptacle and tab. Part-No. 03708 suitable for application after crimping.

Insulation sleeves 6,3 mm
for flag type receptacles



Part-No.	type	application	cable-Ø max. mm	material	colour
03709	I	receptacles flag type 6,3 mm	3,6	soft PVC	black
03710	II		3,2	PE	nature
03711	III		3,2	PE	nature

By using part-no. 03710/03711 it´s possible to mount them after crimping.

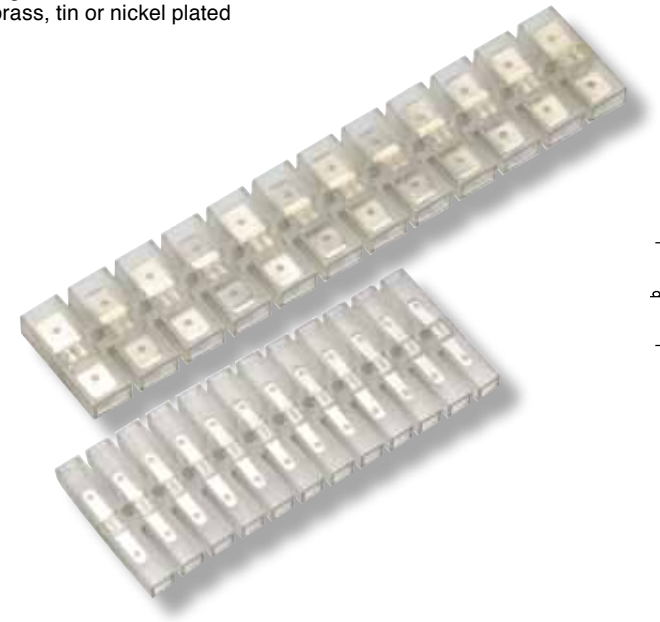
Housings/Couplings
for tabs and receptacles 6,3 mm
Material: PA nature, self-extinguishing to UL 94, V-2

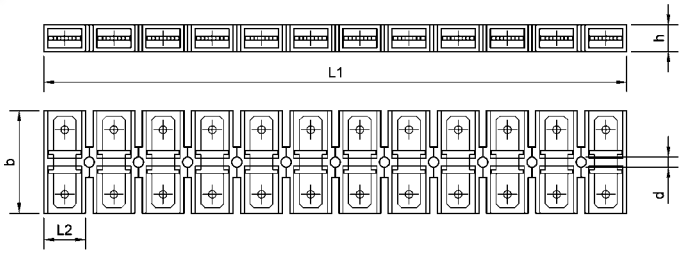
Part-No.	pole-no.	application	rated voltage	length mm	width mm	height mm	weight kg/% pcs.
03715	2	tab part	400 V	13	15,2	32	0,25
03716	2	receptacle part		19	13	19	0,17
03717	4	tab part	400 V	28	17	32	0,38
03718	4	receptacle part		35,8	15,5	24	0,40
03719	6	tab part	400 V	48	19	32	0,65
03720	6	receptacle part		48	17,5	24	0,56
03721	8	tab part	400 V	49	25	32	0,74
03722	8	receptacle part		37,5	16,2	24	0,57

Rated voltage in accordance with DIN VDE 0110 pollution degree 2. Tabs and receptacles are arrested by their index lobes. The form of the case makes it impossible to plug the two halves together incorrectly. The pole identifiers are located on the plug openings for the metal parts.

Tab-connectors

Moulding: PVC/PA
Tabs: brass, tin or nickel plated



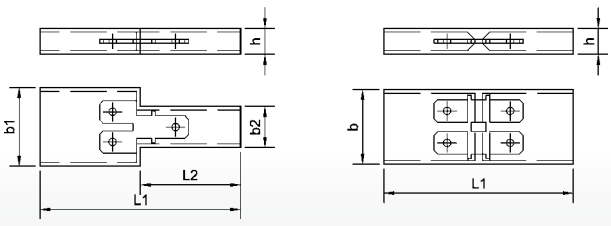


Part-No.	tab connection mm	pole-no.	material	dimensions mm b	h	L_1	L_2	d	weight kg/% pcs.
03750	2,8 x 0,8	1	PVC	35	5,5	7,5	-	2,8	0,20
03751		12				88	7,5		1,60
03752	4,8 x 0,8	1	PVC	28	7	12	-	3,2	0,25
03753		12				142	12		2,80
03754	6,3 x 0,8	1	PVC	28	7	12	-	3,2	0,30
03755		12				142	12		3,20
03756	2 x 2,8 x 0,8/	1	PA	46	7,5	10	-	3,1	0,25
03757	1 x 6,3 x 0,8	12				147,5	12,5		2,85

By using connectors 03750/51 and 03756/57 the receptacles are fully insulated. Part-No. 03756/57 offer the possibility to use 4 receptacles 2,8 x 0,8 mm or 2 receptacles 6,3 x 0,8 mm on each pole. It´s possible to cut the 12-pole connectors. Rated current 2,8 mm = 6 A, 4,8 mm = 16 A, 6,3 mm = 25 A. Rated Voltage 03750/51 = 250 V with insulating base acc. to DIN EN 60664-1, pollution degree 2. 03752-57 = 400 V with insulating base acc. to DIN EN 60664-1, pollution degree 3.

Tab-connectors

Moulding: PVC
Tabs: brass, nickel coated



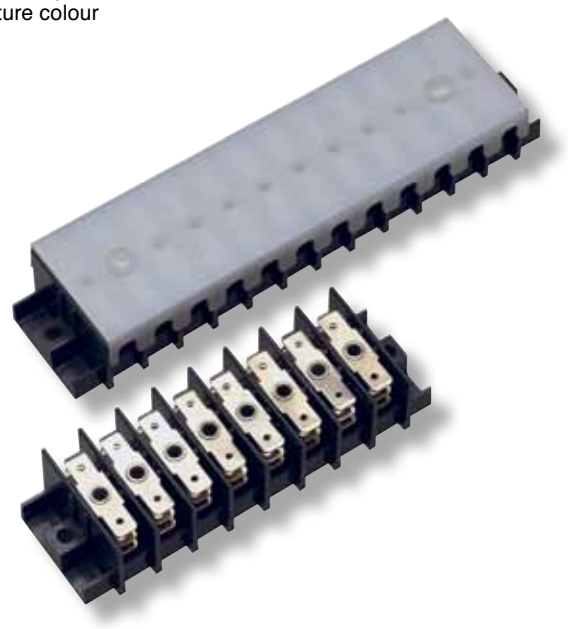
03764 **03765**

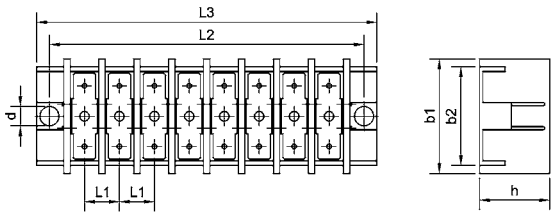
Part-No.	tab connection mm	pole-no.	cable cross-section	dimensions mm b_1	b_2	h	L_1	L_2	weight kg/% Stck
03764	1/2 x 6,3 x 0,8	1	up to 6 mm²	21	12	7,5	54	27	0,60
03765	2 x 6,3 x 0,8	1	up to 6 mm²	20	-	7	51	-	0,65

By using this parts the receptacles are fully insulated. Rated voltage 400 V acc. to DIN EN 60664-1, pollution degree 2.

Multi-point tab-connectors

Moulding: PC, self extinguishing to UL 94, V-0
Tabs: brass, nickel plated
Cover: PA nature colour



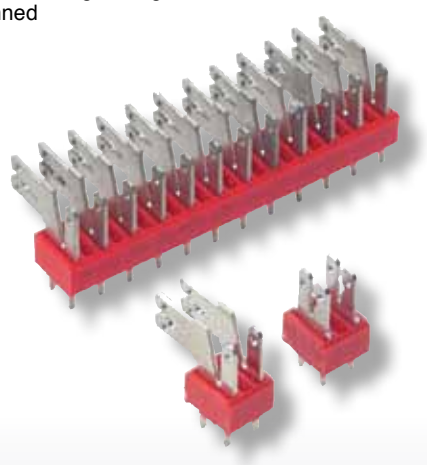


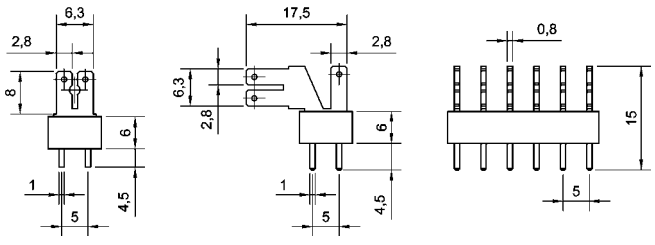
Part-No. tab connector	Part-No. cover	tab connection	pole-no.	dimensions mm b_1	b_2	d	h	L_1	L_2	L_3	weight kg/% pcs.
03785	**03775**	3 x 6,3 x 0,8	3	36	31	4,5	22	11	44	52	3,07
03786	**03776**		4						55	63	4,06
03787	**03777**		5						66	74	5,06
03788	**03778**		6						77	85	6,05
03789	**03779**		8						99	107	8,03
03790	**03780**		10						121	129	10,01
03791	**03781**		12						143	151	11,94
03783	securing pins for covers										

Standard design 1 pole with 6 tabs 6,3 x 0,8 mm in parallel arrangement, other designs or pole numbers on request: Rated voltage by pollution degree 2 over voltage category III = 200 V Rated current max. 25 A

Tab connectors 2,8 / 6,3 x 0,8 mm

for soldering into PC-boards
Moulding: PA, self extinguishing to UL 94, V-0
Tabs: brass, tinned





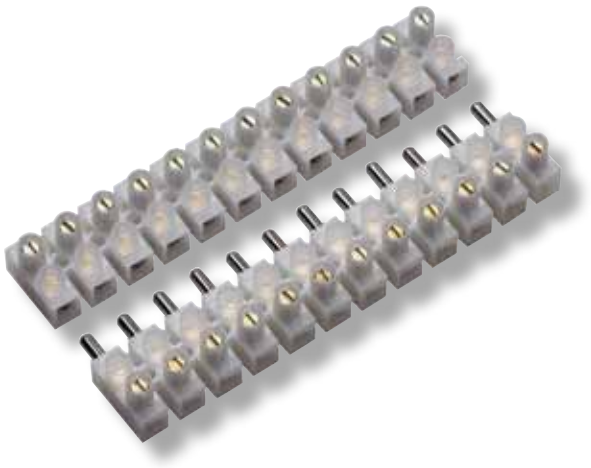
type I **type II**

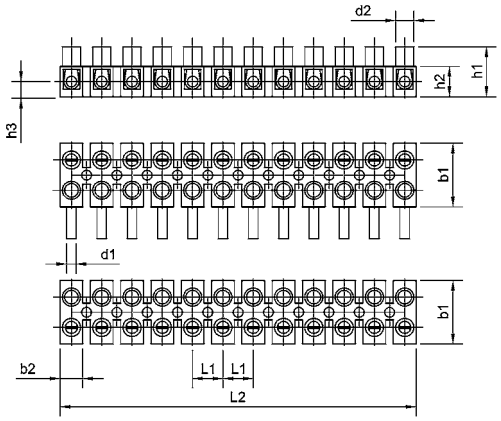
Part-No.	type	pole-no.	rated voltage	length mm	width mm	weight kg/% pcs.
13435	I	2	320/630 V	8,5	9,5	0,15
13436		6		28,5		0,50
13437		12		58,5		0,95
13438	II	2	320/630 V	8,5	9,5	0,22
13439		6		28,5		0,65
13440		12		58,5		1,30

Type I each pole suitable for 2 pcs. uninsulated tabs 2,8 x 0,8 mm or 1 pcs. 6 x 0,8 mm. Type II each pole 1 pcs. uninsulated tabs 2,8 x 0,8 mm and 2 pcs. 2,8 x 0,8 mm or 1 pcs. 6,3 x 0,8 mm. Rated voltage 320 V by pollution degree 2/3 and overvoltage category III, resp. 630 V by pollution degree 2 and overvoltage category II.
On request we deliver tab connectors with other pole-no. or with screen 7,5 or 10 mm.

Plug-in terminal strips with wire protection

Moulding: PA, self-extinguishing to UL 94, V-2
Terminal body: brass, nickel coated
Wire protector: Sn-bronze-tinned
Screws: zinc plated steel, blue passivated



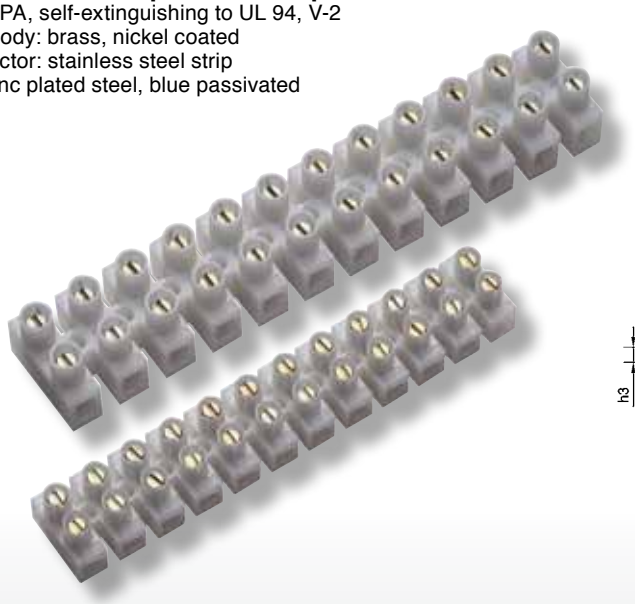


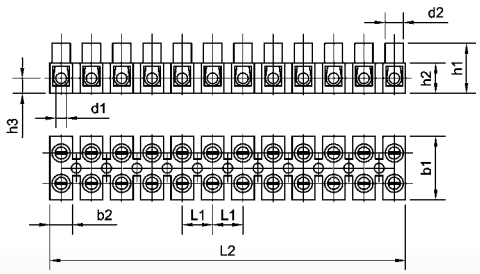
Part-No. plug	Part-No. socket	cross-section range mm²	pole-no.	rated-current	dimensions mm b_1	b_2	h_1	h_2	h_3	d_1	d_2	L_1	L_2	weight kg/% pcs. plug	socket
11990	**11995**	bis 2,5	2	6 A	16	7,25	12	7	3	2,8	5	8	15	0,50	0,40
11991	**11996**		3										23	0,70	0,50
11992	**11997**		4										31	0,90	0,70
11993	**11998**		6										47	1,40	1,10
11994	**11999**		12										94	2,70	2,10

Low profile design. Ideal for installations in which simple closing and opening of circuits is necessary (however without voltage applied). It´s possible to cut the connectors or to deliver different pole no. on request. Rated voltage 160 V by pollution degree 2/3 and overvoltage category III resp. 320 V by pollution degree 2 and overvoltage category II.

Socket terminal strips with wire protection

Moulding: PA, self-extinguishing to UL 94, V-2
Terminal body: brass, nickel coated
Wire protector: stainless steel strip
Screws: zinc plated steel, blue passivated





Part-No.	cross-section range mm²	pole-no.	rated-current	dimensions mm b_1	b_2	h_1	h_2	h_3	d_1	d_2	L_1	L_2	weight kg/% pcs.
12002	bis 2,5	1	17,5 A	16	6	12	7	3	2,8	5	-	7	0,20
12004		12									8	94	2,10
12010	bis 4	1	24 A	21	6,5	16	9,7	4,9	3,4	6	-	8	0,30
12011		12									10	117	3,60
12012	bis 6	1	32 A	22	8	18,5	11,2	5,4	4,1	6,8	-	9	0,40
12013		12									11,5	135	5,20

It´s possible to cut the 12-pole connectors. On request it is possible to deliver connectors with different pole-no. or designs without wire protection. Rated voltage for the different designs on request.

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.11 Universal conductor terminals, earth- and neutral bars as well as insulators

In this chapter of the catalogue some universal conductor terminals and accessories for switch-box- and plant builders are described. Druseidt delivers clamps for screwless mounting of leadings, supple- and bus-bars as well as different kinds of earthing-bars resp. earthing material or insulators.

More electrical installation material such as machined bus- and supple-bars, bus-bar supports or flexible braided connectors, are listed in our further special catalogues or in the internet under www.druseidt.de

We offer a wide range of electrical accessories for switching cabinets and similar application. Please ask for our special catalogues.

Joint clamps 2,5-35 mm²

Material: brass
Surface: uncoated

Part-No.	cross-section mm²	size	connecting thread	weight kg/% pcs.
02580	2,5 - 25	M5-25	M5	4,40
02581		M6-25	M6	4,30
02578	4 - 35	M8-35	M8	7,15

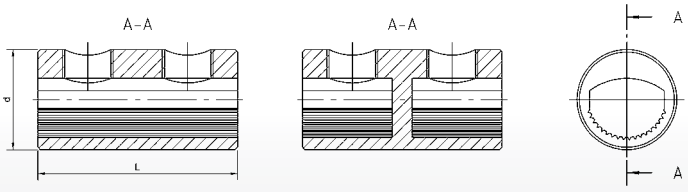
Joint clamps 6-300 mm²

Material: brass
Surface: uncoated

Part-No.	cross-section mm²	size	connecting thread	weight kg/% pcs.
02583	6 - 70	M10	M10	18,90
02589	10 - 95	M10-47	M10	33,50
02584		M12	M12	32,90
02587	16 - 150	M12–52	M12	43,10
02585		M16	M16	42,20
02588	16 - 300	M16-60	M16	56,40
02586		M20	M20	55,80

Screwing connectors 0,6/1 kV

with tin plated brass shear off heads bolts
Material: high strength aluminium alloy, tinned



03576 **03575**

Part-No.	cross-sectional area mm² aluminium rm	sm	re	se	copper rm	sm	re	dimensions mm L	d	screws	weight kg/% pcs.
03575	25-120	50-120	25-120	25-150	25- 70	25- 95	16-35	70	26,5	M16 x 1	11,70
03576	150-300	150-300	150-300	150-300	150-185	150-185	-	110	38	M22 x 1,5	44,20

Part-No. 03575 with separator.

Universal conductor terminals 1,5-120 mm²
with captive screws

Part-No.	type	cross-section mm²	current load max.	compartment B x H mm	weight kg/% pcs.
10545	I	1,5 - 16	180 A	7,5 x 7,5	2,1
10546		4 - 35	270 A	10,5 x 11	4,6
10547		16 - 70	400 A	14 x 14	7,1
10548		16 - 120	440 A	17 x 15	10,8
10549	II	1,5 - 16	180 A	7,5 x 7,5	2,3
10550		4 - 35	270 A	10,5 x 11	4,7
10551		16 - 70	400 A	14 x 14	7,4
10552		16 - 120	440 A	17 x 15	11,0

Type I: For bus bar-thickness 5 mm **Type II:** For bus bar-thickness 10 mm

This universal conductor terminals are suitable for connecting copper conductors to bus bars with thickness 5 or 10 mm without drilling.

Brace Terminals

Part-No.	type	for use with cross-section mm²	for use with supple-bars mm	for use with massive-bars mm	current load max.	compartment B x H	weight kg/% pcs.
10565	I	95 - 185	-	-	500 A	30 x 25 mm	23,7
10566		150 - 300	-	-	600 A	32 x 25 mm	37,1
10568	II	-	5x24x1 bis 10x24x1	30 x 25	750 A	30 x 25 mm	25,0
10569		-	5x24x1 bis 10x32x1	32 x 25	800 A	32 x 25 mm	37,1
10571	III	150 - 300	-	-	630 A	30 x 25 mm	33,6
10572		-	5x24x1 bis 10x24x1	30 x 25	630 A	30 x 25 mm	39,6

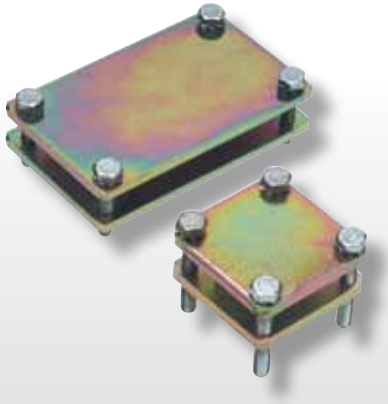
Type I: For connecting round conductors with bus bars 20 x 5 up to 30 x 10 mm without drilling.

Type II: For connecting insulated supple bars and solid bars with bus bars 20 x 5 up to 30 x 10 mm without drilling.

Type III: For switch gear connection with latch 30 mm width and drilling M12 and round- or flat connectors.

The jaw type terminals enable the bus bar to be gripped completely and conductors to be connected without drilling. By using aluminium connectors the connection is not maintenance free and must be inspected from time to time.

Bus bar connectors
Material: St37K, zinc- and chrome plated



Part-No.	dimensions mm compartment L x B	dimensions mm external dimensions L_1 x B_1	screws	weight kg/% pcs.
02220	18 x 18	35 x 39	M 6 x 25	11,00
02221	33 x 33	50 x 50	M 6 x 40	22,00
02222	35 x 53	57 x 75	M 6 x 30	29,00
02223	41 x 41	60 x 60	M 6 x 50	32,00
02224	42 x 64	60 x 85	M 6 x 30	36,00
02225	53 x 53	75 x 75	M 6 x 50	50,00
02226	42 x 82	63 x 103	M 6 x 30	45,00
02227	64 x 64	80 x 80	M 6 x 50	54,00
02228	82 x 82	120 x 120	M 10 x 50	139,00
02229	102 x 102	140 x 140	M 12 x 80	320,00

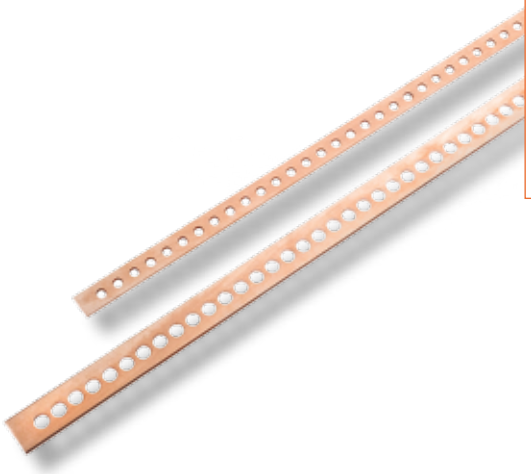
Bus bar connectors for connecting bus bars and supple bars.

Earth and neutral bus bars

We manufacture and deliver earth and neutral bus bars consisting out of copper or brass with coated as well as uncoated surfaces.

Our standardized delivery program is completed by the manufacturing of designs according to clients wishes or drawings. We deliver up to a length of ca. 4 m with special hole pattern, threads or special coatings.

Punched E-copper bars in customized design



We manufacture punched E-copper bars with and without screw threads beginning in a width from 15 mm and a thickness of 3 mm with coated or uncoated surface. We deliver bars coordinated with your application whether with round or slot holes, or with a hole combination of round and slot holes in different dimensions. Additionally to the delivery of mass produced articles we deliver individual items shortly and to a favourable price.

Earth and neutral bus bars

with and without screws
Length: 1000 mm
Material: brass

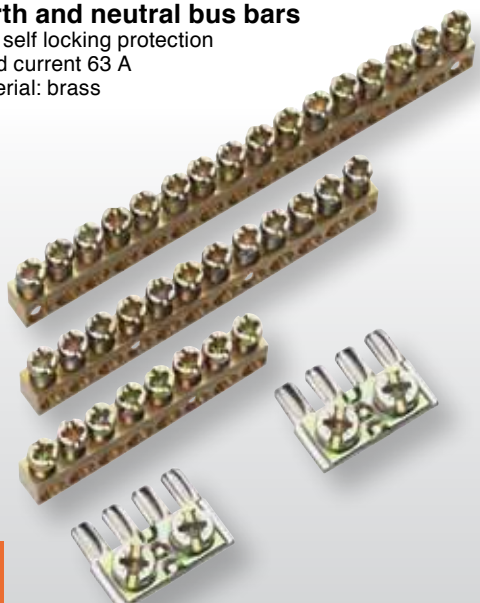
Part-No.				dimensions mm B x S	connections	distance hole to hole	weight kg/% pcs.
type I	type II	type III	type IV				
02700	**02715**	**02730**	**02745**	10 x 2	62 x M 5	16	14,0
02701	**02716**	**02731**	**02746**		90 x M 5	11	12,0
02702	**02717**	**02732**	**02747**	12 x 3	83 x M 4	12	26,0
02703	**02718**	**02733**	**02748**		64 x M 5	15,5	29,0
02704	**02719**	**02734**	**02749**		58 x M 6	17	27,0
02705	**02720**	**02735**	**02750**	15 x 3	105 x M 4	9,5	36,0
02706	**02721**	**02736**	**02751**		86 x M 5	11,5	35,0
02707	**02722**	**02737**	**02752**		50 x M 5	20	37,0
02708	**02723**	**02738**	**02753**		50 x M 6	20	36,0
02709	**02724**	**02739**	**02754**	15 x 4	42 x M 8	24	45,0
02710	**02725**	**02740**	**02755**	25 x 5	31 x M10	34	98,0

Type I = bus bar brass uncoated, without screws
Type II = bus bar brass nickel uncoated, without screws
Type III = bus bar brass uncoated, with screws
Type IV = bus bar brass nickel coated, with screws

Steel-screws DIN 84 not mounted are standard. On request it is possible to deliver a mounted design or with screws made out of brass.

Earth and neutral bus bars

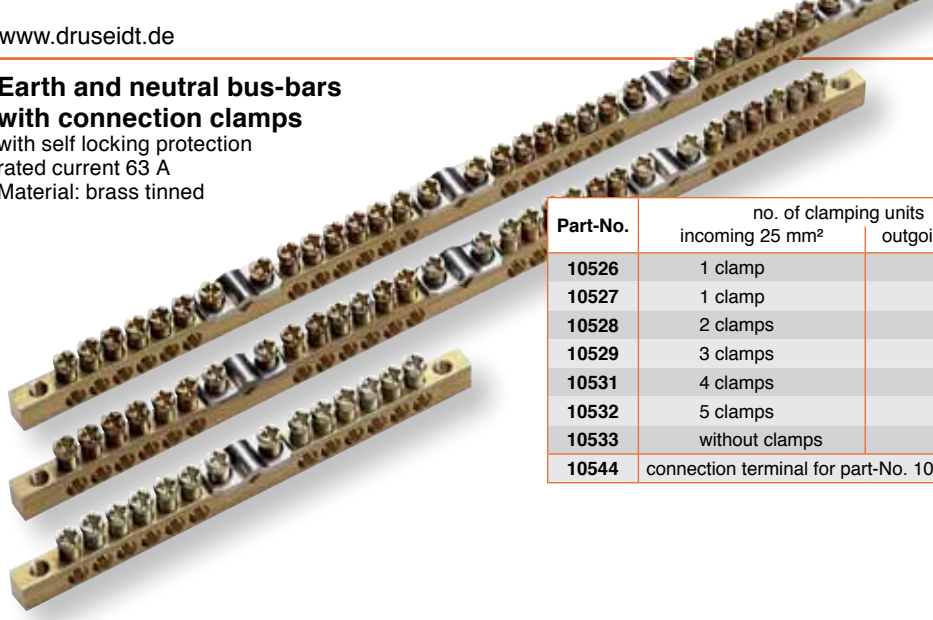
with self locking protection
rated current 63 A
Material: brass



Part-No.	cross-section mm²	no. of clamping units	dimensions mm height	width	length	weight kg/% pcs.
10535	10	8	9	6,5	51,5	2,5
10536		12			77,5	3,7
10537		16			103,5	5,8
10538		24			155,0	8,1
10539		151			1000,0	43,0
10541	35	Connection terminal for Part-No. 10535-10539				0,3

Earth and neutral bus-bars with connection clamps

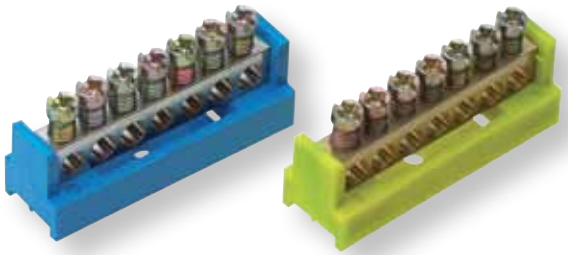
with self locking protection
rated current 63 A
Material: brass tinned



Part-No.	no. of clamping units incoming 25 mm²	outgoing 10 mm²	dimensions mm height	width	length	weight kg/% pcs.
10526	1 clamp	6	9	6,5	61,5	2,8
10527	1 clamp	12	9	6,5	124,0	6,1
10528	2 clamps	18	9	6,5	186,5	9,4
10529	3 clamps	24	9	6,5	249,0	12,9
10531	4 clamps	30	9	6,5	311,5	16,4
10532	5 clamps	36	9	6,5	374,0	19,4
10533	without clamps	96	9	6,5	1000,0	48,0
10544	connection terminal for part-No. 10533					0,3

Insulated earth and neutral terminals

rated current 63 A



Part-No.	cross-section mm²	Klemmstellen	colour	weight kg/% pcs.
For flat bars 12 x 2 mm				
10555	10	7	blue (neutral)	2,8
10556			yellow/green (earth wire)	
For click bars				
10557	10	7	blue (neutral)	2,8
10558			yellow/green (earth wire)	

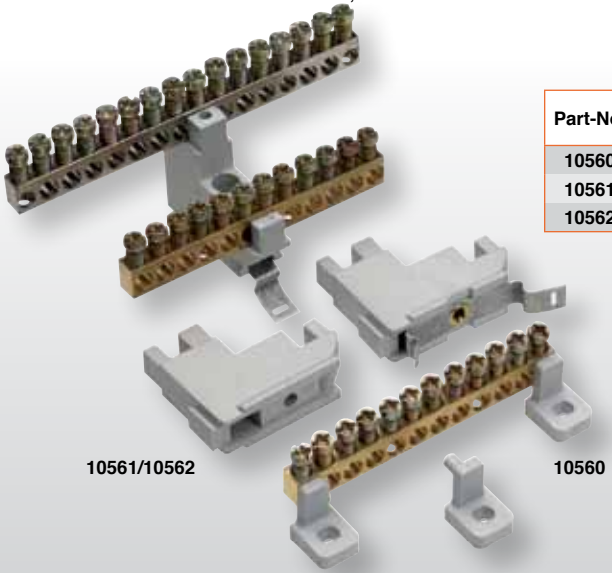
Terminal supports

for earth and neutral bus-bars

Part-No.	description		weight kg/% pcs.
02763	Terminal support with movable socket top for bars from 6 x 6 up to 10 x 2 or 15 x 4 mm.	Measurement voltage: 500 V AC (VDE 0110 Gr. C).	1,6

Terminal supports

for earth and neutral bus-bars 9 x 6,5 mm



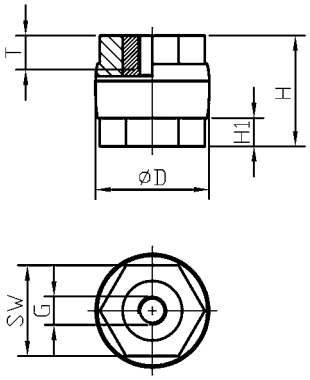
10561/10562 **10560**

Part-No.	mounting	weight kg/% pcs.
10560	screw connection	0,1
10561	screw connection	0,7
10562	snap connection	0,8

Standoff insulators
made out of polyester resin material

in doubled hexagonal design
with threaded steel inserts
for indoor application

The supports described here are made of a glass fibre reinforced unsaturated polyester resin. The special characteristic is a doubled hexagonal design. So a hexagonal area is fixed at the top as well as at the bottom of the insulator. Therefore it is quick and easy to install or remove the insulators even under cramped conditions. This keeps installation costs down to a minimum.



Part-No.	dimensions mm D	H	G	SW	T	H_1	PS/kV	BWS/kV	F/kN	Z/kN	weight kg/% pcs.
03068 S	30	30	M 6	24	8	9,5	5	0,75	3	6	5,70
03069 S			M 8								5,40
03070 S	30	40	M 6		10	10	5	1,00	4	8	7,30
03071 S	35	30	M 6	30	8	10	5	0,75	4	7	6,50
03072 S			M 8						5	8	6,10
03073 S	40	40	M 8	32	12	10,5	5	1,00	6	11	13,00
03074 S			M 10		11						12,10
03075 S			M 12		10						11,20
03080 S	40	50	M 8	32	12	10,5	10	1,50	5		16,50
13080 S			M 10		15					11	16,50
03081 S			M 12		13				7		13,80
13081 S	40	60	M 8	32	12	11	10	1,50	4		16,90
13082 S			M 10		15					11	17,60
03078 S	50	40	M 10	41	11	13	5	1,00	8		16,50
03079 S			M 12		10				10	13	16,50
13083 S	50	50	M 12	41	13	13,5	10	1,50	8		20,00
03084 S	50	60	M 10		15				6	13	24,10
03085 S			M 12		18				7		24,70
13084 S	60	60	M 12	50	18	18,5	10	1,50	9	15	32,30
13085 S			M 16		17				12	17	32,80

F = rated load on upper insulator edge
Z = tensile force
PS = testing voltage
BWS = operating voltage

Technical data of the material

Density	DIN 53479	1,75 g/cm³
Flexural Resistance	DIN 53452/ISO R 178	120 N/mm²
Impact Resistance	DIN 53455/ISO R 527	70 N/mm²
Impact Value	DIN 53453/ISO R 179	45 KJ/m²
Long Term/Operational Temperature	VDE 0304, Teil 21/IEC 216	+ 130° C
Rod Behaviour	VDE 0304, Teil 3	Stufe BH 2 ≤ 10
Behaviour in case of fire	UL 94	V-0
Surface Resistance	DIN 53482	10^{13} Ω
Throughout Resistance Dielectric	DIN 53482	10^{14} Ω . cm
Loss Factor	DIN 53483	< 0,02 tan /50 Hz
Deposit Tracking	DIN IEC 112/VDE 0303 Teil 1	CT 600
Water Absorption	DIN 53495	< 50 mg/1 d
Colour	-	brown

The values in the table have been determined with our own standards based on DIN 53451 and combined with the standards for the respective materials for test purposes.

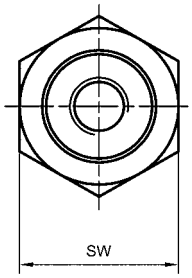
Standoff insulators
made out of polyester resin material

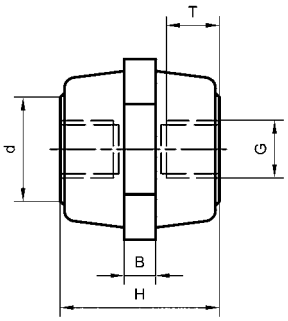
with spanner flat
for indoor application

Standoff insulators manufactures out of a glass fibre reinforced unsaturated polyester resin (UPE). The characteristic of the material is in accordance with DIN Typee 803. The compound is free of halogen with an excellent behaviour in case of fire (UL 94 V-0) and a very good strength of shape.

Technical data of the material

Strength of shape	DIN 53462	> 200° C
Behaviour in case of fire	UL 94	Class V-0
Density	DIN 53479	1,80 cm³
Special throughout resistance	DIN 53482	10^{13} Ohm
Dielectric strength	DIN 53481	15 kV/mm
Deposit tracking	IEC 112	CTI 600
Inserts	steel zinc coated	
Colour	brown	
Temperature range	- 40° C up to +130° C	





Part-No.	dimensions mm H	SW	G	T	d	B	Md/Nm	F/kN	Z/kN	D/kN	BWS/kV	PWS/kV	weight kg/% pcs.
06135	18	15	M 4	6	11	-	3	1,0	2	12	1,0	5	0,70
06138	20	20	M 5	7	14	5	5	1,3	3	20			1,20
06139	25	25	M 5	7	16	6	15	1,5	3	20	1,0	10	2,40
06140			M 6	8			15	1,5	5	35			2,40
06143	30	30	M 6	8	20	6	20	2,5	6	45	1,0	15	3,80
06144			M 8	9			40	3,0	12	60			5,40
06147	35	30	M 6	8	20	6	20	2,0	6	45	1,0	15	4,50
06148			M 8	9			40	3,5	12	60			6,00
06149			M10	9			50	4,0	16	75			7,00
06150	35	40	M 8	9	28	8	40	4,0	14	70	1,0	15	6,40
06151			M10	14			50	4,5	16	80			7,00
06152	40	30	M 6	8	20	6	20	1,5	6	45	2,0	20	5,00
06153			M 8	9			40	3,0	12	60			6,60
06156	40	40	M 8	9	28	8	50	5,0	14	90	2,0	20	10,00
06157			M10	14			90	8,0	20	100			12,20
06158			M12	14			100	10,0	22	120			13,50
06161	40	50	M10	14	32	8	120	12,5	23	140	2,0	20	16,00
06162			M12	14			200	12,5	28	180			17,00
06165	50	40	M 8	9	28	8	50	5,0	14	90	3,0	25	12,00
06166			M10	14			90	5,0	20	100			14,00
06167			M12	18			100	6,0	22	120			16,00
06170	50	50	M10	14	32	10	120	10,0	23	140	3,0	25	20,00
06171			M12	18			200	10,0	28	180			21,50
06174	60	40	M 8	9	28	8	50	4,0	14	90	3,0	25	14,00
06175			M10	14			90	6,0	20	100			16,00
06176			M12	18			120	6,0	20	100			18,00
06178	60	50	M10	14	32	10	120	9,0	23	140	3,0	25	23,00
06179			M12	18			200	11,0	28	180			25,00
06182	60	60	M12	18	40	10	200	12,0	28	220	3,0	25	33,00
06183			M16	20			300	15,0	32	240			35,00
06184			M20	20			300	16,0	37	240			38,60
06185	80	60	M10	14	40	12	200	11,0	32	220	3,0	25	41,00
06186			M12	18			300	15,0	37	240			43,00
06187			M16	20			300	15,0	37	240			45,00

Part No. 06135 Cylindrical design without spanner flat

SW = wrench size
Md = torque
F = rated load limit on upper insulator edge
Z = tensile force
D = compressive force
BWS = operating voltage (AC)
PWS = testing voltage (AC)

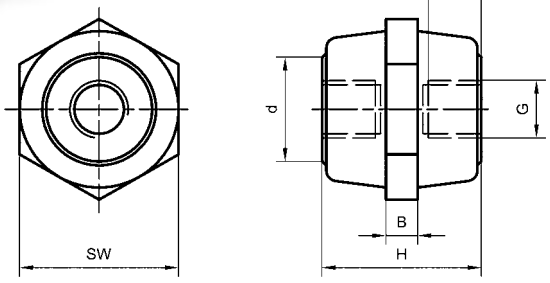
Standoff insulators made out of Polyamide

with spanner flat for indoor applications

Standoff insulators manufactured out of reinforced, flame protected and heat stabilized Polyamide. The compound is free of halogen and Phosphor. The material can be converted efficiently and is characterized by his excellent values for tensile strength (Z) and the rated load limit on the upper insulator edge (F). The differences to the design made out of glass fibre reinforced unsaturated polyester resin are basically in the values for the behaviour in case of fire (class V2 to V-0) and the temperature range - 25° C up to + 120° C to - 40° C up to + 130° C.

technical data

Behaviour in case of fire	UL 94	Class V2
Density	ISO 1183	1,45 cm³
Special throughout resistance	IEC 60093	10^{10} Ohm
Dielectric strength	IEC 60243-1	25 kV/mm
Deposit tracking	IEC 60112	CTI 550
Colour	nature	
Inserts	steel zinc coated	
Temperature range	- 25° C bis +120° C	



Part-No.	dimensions mm H	SW	G	T	d	B	Md/Nm	F/kN	Z/kN	D/kN	BWS/kV	PWS/kV	weight kg/% pcs.
06100	18	15	M 4	6	11	-	3,3	1,0	2	12	1,0	5	0,60
06102	25	25	M 5	7	16	6	15	2,0	3,0	20	1,0	10	2,00
06103			M 6	8			15	2,0	5,0	35			2,00
06105	30	30	M 6	8	20	6	20	3,0	6,0	45	1,0	15	3,00
06106			M 8	9			40	4,0	12,0	60			5,00
06109	35	30	M 6	8	20	6	20	5,0	6,0	45	1,0	15	5,00
06110			M 8	9			40	5,0	12,0	60			6,00
06111			M10	9			50	5,0	16,0	75			6,00
06112	35	40	M 8	9	28	8	40	4,0	14,0	70	1,0	15	6,50
06113			M10	14			50	4,5	16,0	80			6,70
06114	40	30	M 6	8	20	6	20	1,5	6,0	45	2,0	20	7,40
06114/8			M 8	9			40	5,0	12,0	60			7,80
06115	40	40	M 8	9	28	8	50	7,0	14,0	90	2,0	20	8,00
06116			M10	14			95	10,0	28,0	100			10,00
06117			M12	18			105	12,0	30,0	120			10,00
06120	50	40	M 8	9	28	8	50	5,0	14,0	90	3,0	25	10,00
06121			M10	14			90	5,0	20,0	100			12,00
06122			M12	16			100	6,0	22,0	120			14,00
06125	50	50	M10	14	32	10	120	10,0	23,0	140	3,0	25	18,00
06126			M12	18			200	10,0	28,0	180			19,50
06129	60	40	M 8	9	28	8	50	4,0	14,0	90	3,0	25	12,00
06130			M10	14			90	6,0	20,0	100			14,00
06131			M12	18			120	6,0	20,0	100			14,80

Part-No. 06100 Cylindrical design without spanner flat

SW = wrench size
Md = torque
F = rated load limit on upper insulator edge
Z = tensile force
D = compressive force
BWS = operating voltage (AC)
PWS = testing voltage (AC)

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.12 High current plugs and sockets

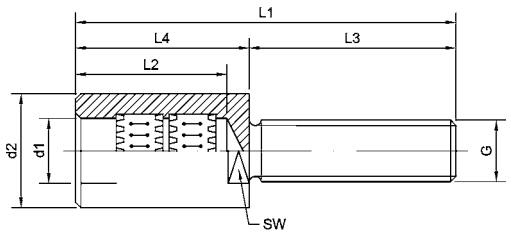
For ambitious application in the field of high current transfer druseidt offers different possibilities for pluggable solutions. Pluggable high current connectors are dividable electrical connecting elements. When using such elements it is not allowed to make the insertion/withdrawal operation under load or voltage. All insertion/withdrawal operations must be done in the no load state. The current transfer take place by a beryllium disc, which allows to transfer relative high current by working with smaller components.

Additionally to the described components in standard design we deliver and construct various kinds of customized solutions, coordinated with the individual application. Our engineering department would be glad to support your efforts in finding optimized solutions also for application in the range of some thousand amps.

Solderless crimped pluggable connections

Sockets 35-1500 A

with thread connection
Material: brass silver plated

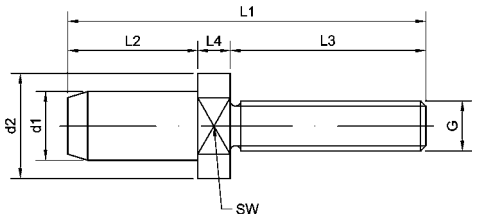


Part-No.	rated-current	dimensions mm								weight kg/% pcs.
		d_1	d_2	L_1	L_2	L_3	L_4	Sw	G	
23810	35 A	2	5,5	36	16,5	16	20	4	M 3	0,40
23811	40 A	3	6	40	16,5	20	20	5	M 4	0,50
23812	65 A	4	7	50	19,5	25	25	6	M 5	0,90
23813	70 A	5	8,5	50	19,5	25	25	7	M 5	1,10
23814	100 A	6	10	53	19,5	28	25	8	M 6	1,50
23815	130 A	8	14	78	34	36	42	11	M 8	4,70
23816	200 A	10	16	84	34	42	42	13	M10	6,60
23817	230 A	12	18	90	34	48	42	13	M12	8,70
23818	300 A	14	20	98	38	50	48	17	M14	12,10
23819	350 A	16	22	106	38	58	48	19	M16	16,00
23820	400 A	18	25	110	42	58	52	22	M16	19,30
23821	500 A	20	28	122	42	70	52	24	M18	26,50
23822	700 A	25	38	149	62	74	75	32	M20	58,80
23823	900 A	30	42	156	62	81	75	36	M24 x 2	72,60
23824	1200 A	35	48	165	62	90	75	41	M30 x 2	105,70
23825	1500 A	40	52	180	62	105	75	46	M36 x 3	140,00

Sockets without snap-in lock. Suitable to screw into cable lugs, bus-bars, contact blocks or as socket to built into insulated housings for the slide-in rack technology. The amperages were measured at + 20° C ambient temperature and an end temperature of max. + 80° C.

Plugs 35-1500 A

with threat connection
Material: brass silver plated

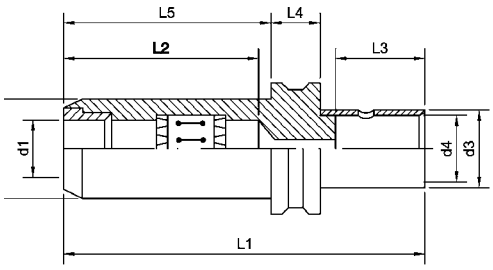


Part-No.	rated-current	dimensions mm								weight kg/% pcs.
		d_1	d_2	L_1	L_2	L_3	L_4	Sw	G	
23830	35 A	2	-	35,5	16,5	16	3	4	M3	0,20
23831	40 A	3	-	40	16,5	20	3,5	5	M4	0,30
23832	65 A	4	-	48,5	19,5	25	4	6	M5	0,60
23833	70 A	5	-	48,5	19,5	25	4	7	M5	0,80
23834	100 A	6	-	51,5	19,5	28	4	8	M6	1,20
23835	130 A	8	-	75	34	36	5	11	M8	3,00
23836	200 A	10	-	81	34	42	5	13	M10	5,00
23837	230 A	12	18	87	34	48	5	13	M12	7,70
23838	300 A	14	20	95	38	50	7	17	M14	11,80
23839	350 A	16	22	103	38	58	7	19	M16	16,60
23840	400 A	18	25	107	42	58	7	22	M16	19,90
23841	500 A	20	28	119	42	70	7	24	M18	26,50
23842	700 A	25	38	145	62	74	9	32	M20	49,60
23843	900 A	30	42	152	62	81	9	36	M24 x 2	73,00
23844	1200 A	35	48	162	62	90	10	41	M30 x 2	112,60
23845	1500 A	40	52	178	62	105	11	46	M36 x 3	162,30

Plugs without snap-in lock. Suitable to screw into cable lugs, bus-bars, contact-blocks or as plug built into insulated housings for the slide-in rack technology. The amperages were measured at + 20° C ambient temperature and an end temperature of max. + 80° C.

Sockets 80-300 A

with snap-in lock and crimp connection
Material: brass, silver plated

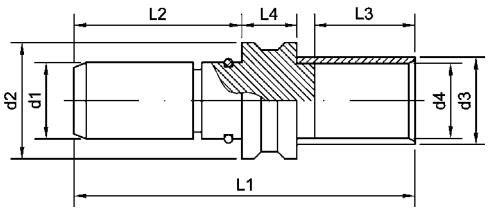


Part-No.	cross-section mm²	rated-current	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	L_4	L_5	weight kg/% pcs.
23850	10	80 A	6	12	8	5	48,5	23	14	-	28	2,60
23851	16	100 A	6	12	9	6	48,5	23	14	-	28	2,60
23852	25	130 A	6	12	11	8	54,5	23	16	-	28	2,60
23853	25	130 A	10	16	11	8	76	43	15	12	45	8,30
23854	35	150 A	10	16	13	9	81	43	20	12	45	8,40
23855	50	180 A	10	16	14,5	11	88	43	27	12	45	8,90
23856	50	190 A	14	21	14,5	11	93	43	27	17	45	14,50
23857	70	240 A	14	21	17	13	93	43	27	17	45	14,90
23858	95	280 A	14	21	20	15	95	43	29	17	45	16,30
23859	120	300 A	14	21	22	17	96	43	30	17	45	16,80

Sockets with snap-in lock which lock automatically when connected. Plugs are inserted only so far that the ring snap-in. To release the connection, lightly turn and push-in plug, then pull-out. Crimp connection for flexible/highly flexible copper cables. The amperages were measured at + 20° C ambient temperature and an end temperature of max. + 80° C.

Plugs 80-300 A

with snap-in lock and crimp connection
Material: brass, silver plated

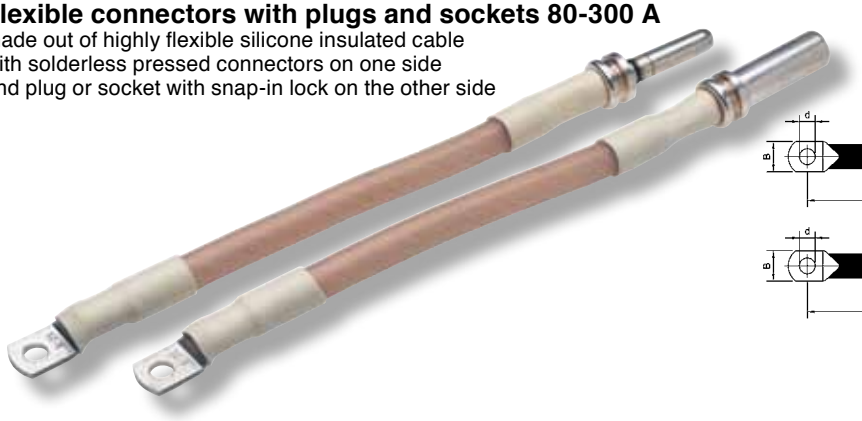


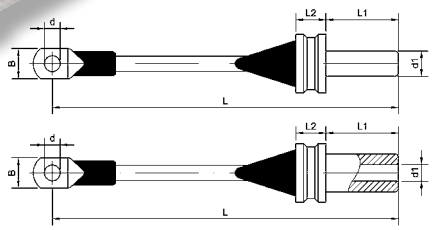
Part-No.	cross-section mm²	rated-current	dimensions mm d_1	d_2	d_3	d_4	L_1	L_2	L_3	L_4	weight kg/% pcs.
23870	10	80 A	6	9	8	5	45	22	14	7	1,20
23871	16	100 A	6	9	9	6	45	22	14	7	1,30
23872	25	130 A	6	9	11	9	51	22	20	7	1,60
23873	25	130 A	10	20,5	11	8	73,5	42,5	16	12	6,60
23874	35	150 A	10	20,5	13	9	78,5	42,5	21	12	7,30
23875	50	180 A	10	20,5	14,5	11	85,5	42,5	28	12	7,40
23876	50	190 A	14	25	14,5	11	91	43	27	17	13,30
23877	70	240 A	14	25	17	13	91	43	27	17	13,80
23878	95	280 A	14	25	20	15	93	43	29	17	15,00
23879	120	300 A	14	25	22	17	94	43	30	17	15,80

Plugs are suitable for all sockets with snap-in lock Part-No. 23850-59. Plugs are inserted only so far that the ring snaps-in. To release the connection, lightly turn and push-in plug, than pull out. Crimp connection for flexible/highly flexible copper cables. The amperages were measured at + 20° C ambient temperature and an end temperature of max. + 80° C.

Flexible connectors with plugs and sockets 80-300 A

made out of highly flexible silicone insulated cable
with solderless pressed connectors on one side
and plug or socket with snap-in lock on the other side



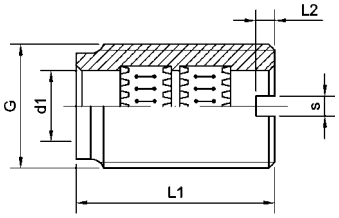


Part-No. type A	Part-No. type B	cross-section mm²	rated-current	dimensions mm d_1	d	B	L	L_1	L_2
16320	**16325**	10	80 A	6	6,5	11	depending on customers requirements	22	7
16330	**16335**	16	100 A	6	8,5	15		22	7
16331	**16336**	25	130 A	6	8,5	16		22	7
16340	**16345**	25	130 A	10	8,5	16		42,5	12
16350	**16355**	35	150 A	10	8,5	17		42,5	12
16351	**16356**	50	180 A	10	10,5	22		42,5	12
16360	**16365**	50	190 A	14	10,5	22		43	17
16370	**16375**	70	240 A	14	10,5	25		43	17
16380	**16385**	95	280 A	14	13	29		43	17
16390	**16395**	120	300 A	14	13	31		43	17

Type A: one side tubular cable lug and plug at the other side
Type B: one side tubular cable lug and socket at the other side
Cable: free of halogen, flame retardant with stabilized insulation (oper.temp. + 180° C). Technical datas on catalogue page 40.

Sockets 65-5000 A

with external thread



Part-No.	rated-current	dimensions mm d_1	G	L_1	L_2	s	starting torque Nm max.	BE-lams pcs.	weight kg/% pcs.
23890	65 A	4	M 8 x 0,75	19,5	1,5	1,5	2,5	1	0,50
23891	70 A	5	M 10 x 1	19,5	2	1,5	5	1	0,70
23892	100 A	6	M 12 x 1	19,5	2,5	2	10	1	1,10
23893	130 A	8	M 14 x 1	34	2,5	2,5	13	1	2,10
23894	200 A	10	M 18 x 1	34	2,5	3,5	22	1	3,90
23895	230 A	12	M 20 x 1	34	3,5	3,5	30	1	4,30
23896	300 A	14	M 22 x 1	38	4	4	35	1	5,70
23897	350 A	16	M 24 x 1	38	4	4	35	1	6,30
23898	400 A	18	M 28 x 1	42	4	4	55	1	10,50
23899	500 A	20	M 30 x 1	42	5	5	65	1	11,40
23900	700 A	25	M 42 x 1,5	62	5	5	150	2	39,40
23901	900 A	30	M 48 x 1,5	62	5	5	200	2	48,60
23902	1200 A	35	M 50 x 1,5	62	5	5	220	2	42,70
23903	1500 A	40	M 55 x 1,5	62	6	6	275	2	47,20
23904	1800 A	45	M 60 x 2	62	6	6	430	2	50,20
23905	2000 A	50	M 65 x 2	62	8	7	500	2	55,80
23906	3000 A	60	M 80 x 2	86	8	8	750	3	135,70
23907	3700 A	70	M 90 x 2	86	8	8	1000	3	154,60
23908	4200 A	80	M100 x 2	86	8	8	1500	3	170,20
23909	4500 A	90	M110 x 2	86	8	8	2000	3	187,30
23910	5000 A	100	M120 x 2	86	8	8	2500	3	209,40

The sockets are suitable to screw directly into bus-bars, contact blocks, housings etc. They are slotted at one end suitable for the appropriate mounting tool. The sockets must be screwed against a fix stop or screwed into bus-bars with 2 nuts and washers. The amperages were measured at + 20° C ambient temperature and an end temperature of max. + 80° C.

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.13 Battery clips, battery clamps and earthing tapes

druseidt delivers an assortment of different battery clips and clamps acc. to the DIN-regulation as well as in special design. The delivery of components is added by the customized manufacturing of earthing tapes, jump-loads and cable sets. We deliver also braided copper tapes or round stranded copper cables on rolls or on spools directly from our stock in Remscheid.

If you have interest in such material please be so kind and order our special catalogue no. 2, which informs you about our product range flexible connectors, leadings and ready assembled flexible high current components.

Jump-loads deliverable in normal or startsafe design

Battery clips 40 A
with insulated handles
Material: steel sheet, nickel coated

Part-No. black	Part-No. red	current load	cable connection	length mm	weight kg/% pcs.
13345	**13346**	40 A	solder-connection	80	2,5
10345	**10346**		crimp-connection		
10347	**10348**		tab-connection		

Part-No. 13345/46 standardized design for solder-connection.
Part-No. 10345/46 design for crimping with tab-connection 6,3 x 0,8 mm.
Cable cross-section max 4 mm².

Fully insulated battery clips 40 A
Material: steel sheet, yellow zinc coated

Part-No. black	Part-No. red	current load	cable connection	length mm	weight kg/% pcs.
10350	**10351**	40 A	solder-connection	80	2,5
10352	**10353**		crimp-connection		
10354	**10355**		tab-connection		

Part-No. 10350/51 standardized design for solder-connection.
Part-No. 10352/53 design for crimping or with tab-connection 6,3 x 0,8 mm.
Cable cross-section max 4 mm².

Battery clips 80-600 A
with insulated handles
Material: steel sheet, zinc coated

Part-No. black	Part-No. red	current load	max. cable cross-section mm²	length mm	weight kg/% pcs.
13347	**13348**	80 A	10	125	6,0
03147	**03148**	100 A	16	160	10,5
13349	**13350**	200 A	25	160	16,0
13351	**13352**	600 A	35	160	22,5

Cable connection crimpable or with cable lug M4 (80 A) or M6 (100-600 A).
600 A design design pole with braided copper tape.

Fully insulated batter 80-600 A
Material: steel sheet, zinc coated

Part-No. black	Part-No. red	current load	max. cable cross-section mm²	length mm	weight kg/% pcs.
10356	**10357**	80 A	10	125	6,0
13800	**13801**	100 A	16	160	10,5
13802	**13803**	200 A	25	160	16,0
13804	**13805**	600 A	35	160	22,5

Cable connection crimpable or with cable lug M4 (80 A) or M6 (100-600 A).
600 A design design pole with braided copper tape.

Battery clips 750-1000 A

with insulated handles
Material: brass casting, zinc coated 800/1000 A, uncoated 750/900 A

Part-No. black	Part-No. red	current load	max. cable cross-section mm²	length mm	weight kg/% pcs.
13332	**13333**	750 A	50	180	36,00
13353	**13354**	800 A		150	31,00
13336	**13337**	900 A		165	31,00
13355	**13356**	1000 A		150	32,00

900/1000 A design pole connection with braides copper tape.
Cable connection with cable lug M6 or without cable lug (750 A design) with contact bolt.

Fully insulated battery clips 750-1000 A

Material: brass casting
Surface: uncoated

Part-No. black	Part-No. red	current load	max. cable cross-section mm²	length mm	weight kg/% pcs.
13806	**13807**	750 A	50	180	36,00
13812	**13813**	800 A		150	31,00
13816	**13817**	900 A		165	31,00
13808	**13809**	1000 A		150	32,00

900/1000 A design pole connection with braides copper tape.
Cable connection with cable lug M6 or without cable lug (750 A design) with contact bolt.

Fully insulated battery clips 1000 A

with bended tip
Material: brass casting
Surface: uncoated

Part-No. black	Part-No. red	current load	max. cable cross-section mm²	length mm	weight kg/% pcs.
13810	**13811**	1000 A	50	165	35,00

Pole connection with braided copper tape. Cable connection with cable lug M6.
Design with bended tip for working under cramped conditions.

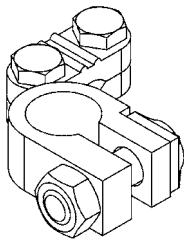
Jump-Loads 16-50 mm²

Normal- and startsafe design
with fully insulated battery clips

Part-No.	type	cross-section	length	battery clips design
13780	I	16 mm²	2 x 3,0 m	100 A / 13800/01
13782		25 mm²	2 x 3,5 m	300 A / 13820/03
13784		35 mm²	2 x 4,5 m	500 A / 13805/05/S
13786		35 mm²	2 x 5,0 m	900 A / 13816/17
13788		50 mm²	2 x 5,0 m	900 A / 13816/17
13790	II	16 mm²	2 x 3,0 m	100 A / 13800/01
13792		25 mm²	2 x 3,5 m	300 A / 13802/03
13794		35 mm²	2 x 4,5 m	500 A / 13804/05/S

Jump-loads type I = Standard design.
Jump-loads type II = Startsafe-design equipped with an additionally circuit to protect electronical parts in the car.

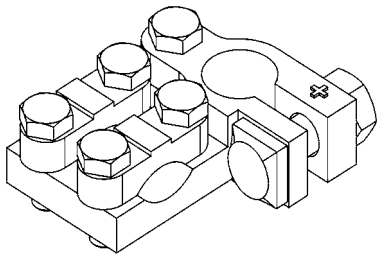
Battery clamps according to DIN 72331



Part-No.	DIN-size	cross-section mm²	design	material	fixing screw	weight kg/‰ pcs.
03088	A	12 - 70	left +	brass tinned	M8	100,00
03089	B		right -			100,00
03090	C	12 - 70	right +	brass tinned	M8	100,00
03092	D		left -			100,00
03095*	E	50 - 120	links +	brass tinned	M8	150,00
03094	F		right -			150,00
03091*	G	50 - 120	right +	brass tinned	M8	150,00
03093	H		left -			150,00

*Design with add. lighting cable connection.

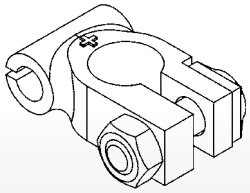
Battery double clamps



Part-No.	cross-section mm²	design	material	fixing screw	weight kg/‰ Stck
03097	12 - 120	left -	brass tinned	M8	180,00
03100*		right +			180,00

*Design with add. lighting cable connection.

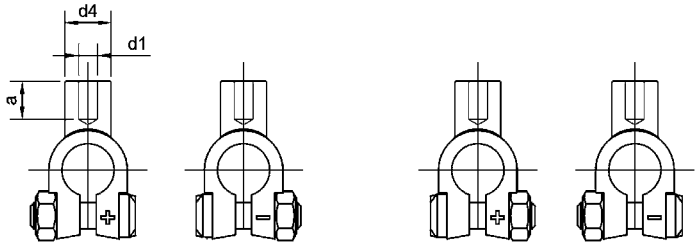
Battery clamps according ton DIN 72332



Part-No. + Pole	Part-No. - Pole	cross-section mm²	connecting-Ø mm	material	fixing screw	weight kg/‰ pcs.
03108	**03116**	16	5,6	brass tinned	M8	80,00
03109	**03117**	25	6,8			80,00
03110	**03118**	35	8,3			80,00
03111	**03119**	50	9,7			80,00
03112	**03120**	70	11,6			80,00
03113	**03121**	95	13,0			80,00
03114	**03122**	120	15,0			80,00

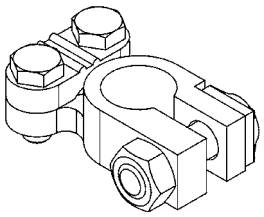
Compression battery clamps

Material: brass, tin plated



Part-No. type I	Part-No. type II	cross-section mm²	design	dimensions mm d_1	dimensions mm d_4	dimensions mm a	weight kg/‰ pcs.	crimping-tools/page no.
10585/6	**10685/6**	16	+ Pole	6,0	15	16	80,00	on request
10585/7.3	**10685/7.3**	25	+ Pole	7,3	15	16	80,00	
10585	**10685**	35	+ Pole	8,5	15	16	80,00	
10586	**10686**	50	+ Pole	10,3	15	20	80,00	
10586/13	**10686/13**	70	+ Pole	13,0	20	20	100,00	
10587/14	**10687/14**	95	+ Pole	14,0	20	24	110,00	
10587	**10687**	120	+ Pole	15,0	20	24	110,00	
10595/6	**10695/6**	16	- Pole	6,0	15	16	80,00	
10595/7.3	**10695/7.3**	25	- Pole	7,3	15	16	80,00	
10595	**10695**	35	- Pole	8,5	15	16	80,00	
10596	**10696**	50	- Pole	10,3	15	20	80,00	
10596/13	**10696/13**	70	- Pole	13,0	20	20	100,00	
10597/14	**10697/14**	95	- Pole	14,0	20	24	110,00	
10597	**10697**	120	- Pole	15,0	20	24	110,00	
All types with fixing screw M8.								

Battery clamps



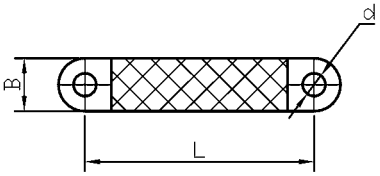
Part-No.	cross-section mm²	design	material	fixing screw	weight kg/‰ pcs.
10600	12 - 70	+ Pole	brass tinned	M8	68,00
10601	12 - 70	- Pole		M8	68,00

Battery clips 25-50 A

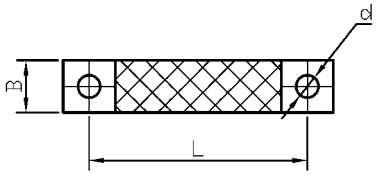
Material: steel sheet, zinc coated

Part-No. + Pole	Part-No. - Pole	current load	length mm	weight kg/% pcs.
03136 +	**03136 -**	25 A	75	1,8
03137 +	**03137 -**	50 A	105	3,8
With screw M4 for cable connection with or without cable lug.				

Earthing tapes
similar to DIN 72333 Part 3 design A and B



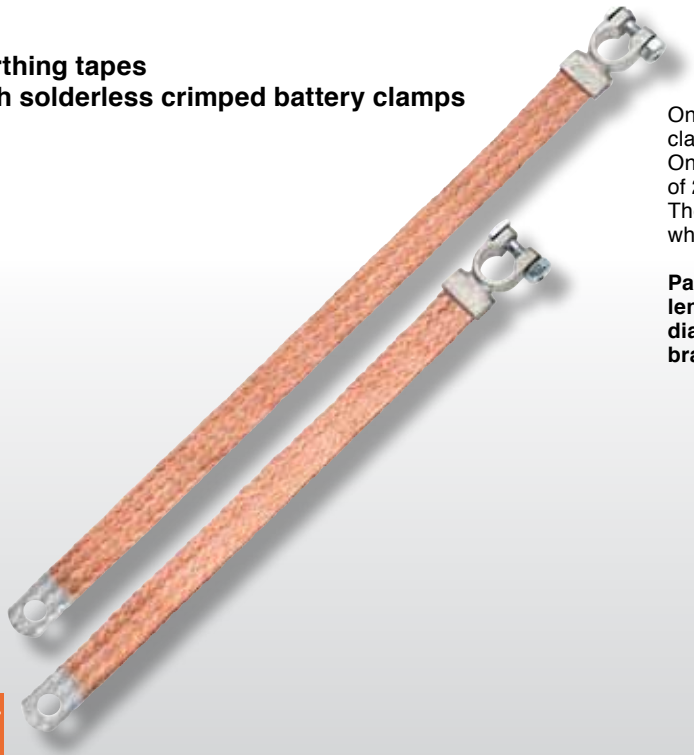
design A1 contact areas tinned
design A2 contact areas with brass-tapes and additionally tinned



Form B1 contact areas tinned
Form B2 contact areas with brass-tapes and additionally tinned

Part-No.		cross-section mm²	dimensions mm B	d	L
15280/A1	**15280/A2**	4	8	Individually according to custumers sppecification	Individually according to custumers sppecification
15281/A1	**15281/A2**	6	10		
15282/A1	**15282/A2**	8	12		
15283/A1	**15283/A2**	10	14		
15284/A1	**15284/A2**	14	18		
15285/A1	**15285/A2**	16	20		
15286/A1	**15286/A2**	21	22		
15287/A1	**15287/A2**	25	22		
15288/A1	**15288/A2**	35	25		
15289/A1	**15289/A2**	50	33		
15290/A1	**15290/A2**	70	35		
15280/B1	**15280/B2**	4	8		
15281/B1	**15281/B2**	6	10		
15282/B1	**15282/B2**	8	12		
15283/B1	**15283/B2**	10	14		
15284/B1	**15284/B2**	14	18		
15285/B1	**15285/B2**	16	20		
15286/B1	**15286/B2**	21	22		
15287/B1	**15287/B2**	25	22		
15288/B1	**15288/B2**	35	25		
15289/B1	**15289/B2**	50	33		
15290/B1	**15290/B2**	70	35		

Earthing tapes
with solderless crimped battery clamps



On request we deliver also earthing tapes wit solderless crimped battery clamp on one side. The end of the other side can be tinned and punched. One of the standard designs are earthing tapes in a cross section range of 21 mm² with a clamp on one side and a hole M10 at the other side. The length can be manufactured according to clients wishes. Therefore when placing an order please specify:

Part-No.
length
diameter of the holes
braid uncoated or tinned

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.14 Connectors and accessories for test bay and switch board application as well as cable ties

Additionally to our wide range of products in the field of electrical connection and installation technique, druseidt delivers a selection of accessories for test bay- and switch board application as well as cable ties. The user get so the chance to buy a lot of products by only one supplier.

To facilitate the assignment of test accessories to the appropriate application, standard IEC/EN 61010-031 has established a number of categories which define where they can be used in the power supply network and to lay down appropriate requirements for each category. In standard EN 61010-031 there are four different test categories, abbreviated “CAT”. As a general rule, the higher the CAT-rating, the higher the safety requirement that applies to the product. One exception is CAT I because this test category includes also measuring objects with higher voltage e. g. battery operated devices inside of cars.

MEASUREMENT CATEGORIES ACCORDING TO IEC/EN 61010-031

CAT I
Applies to test objects that are not connected to the mains. Here we have no complete specific overvoltages, which are not regulated through the rules of insulation coordination. To define requirements for such application it is necessary to know the value of the possible overvoltage. In CAT I you find all test objects that cannot be assigned to CAT II to CAT IV

CAT II
Applies to measurements on equipment that is connected to the mains or supplied from the mains without constituting a part of the mains installation (e. g. electrical equipment between consumer load and power outlet inside of electrical devices like household appliance etc.)

CAT III
Applies to measurements inside the house or building installation (e. g. fixed installations at houses, contactors, protection equipment, switches, power outlets etc.)

CAT IV
Applies to measurements at the supply source of the installation input side. (e. g. secondary side of MV-transformers, electricity meter, connections to overhead lines etc.)

Highly flexible connecting leads 1 mm²

with gold plated brass multilam plugs 4 mm Ø
Material of the leading: PVC
Operating temperature: -10° C up to + 70° C

Part-No. black	red	blue	yellow/green	type	flexible length	dimensions plug mm L	Ø sleeve	rated current	rated voltage
24211	**24220**	**24230**	**24240**	LK-410-L	250 mm	55	9	19 A	30 V AC/60 V DC
24212	**24221**	**24231**	**24241**		500 mm				
24213	**24222**	**24232**	**24242**		750 mm				
24214	**24223**	**24233**	**24243**		1000 mm				
24215	**24224**	**24234**	**24244**		1500 mm				
24216	**24225**	**24235**	**24245**		2000 mm				

On request we deliver leadings with different colours or equipped with silicone insulation too.

Highly flexible connecting leads 2,5 mm²

with stackable gold plated brass multilam plugs 4 mm Ø
Material of the leading: PVC
Operating temperature: -10° C up to + 70° C

24250-24283

24000-24028

Part-No. black	red	blue	yellow/green	type	flexible length	dimensions plug mm L	B	H	rated current	rated voltage
24000	**24008**	**24016**	**24024**	LK-425-A	250 mm	47	8	15	32 A	30 V AC/60 V DC
24001	**24009**	**24017**	**24025**		500 mm					
24001/1	**24009/1**	**24017/1**	**24025/1**		750 mm					
24002	**24010**	**24018**	**24026**		1000 mm					
24003	**24011**	**24019**	**24027**		1500 mm					
24004	**24012**	**24020**	**24028**		2000 mm					
24250	**24260**	**24270**	**24280**	XZG 425	500 mm	59	14	15	32 A	600 V, CAT II
24251	**24261**	**24271**	**24281**		1000 mm					
24252	**24262**	**24272**	**24282**		1500 mm					
24253	**24263**	**24273**	**24283**		2000 mm					

Type LK 425-A with stackable standard multilam plug 4 mm Ø on both ends
Type XZG 425 with stackable multilam plug on both ends with protective collar and retractable sleeve to prevent accidental touching. Suitable for connecting electrical apparatus not yet equipped with safety sockets. On request we deliver leadings with different colours or equipped with silicone insulation too.

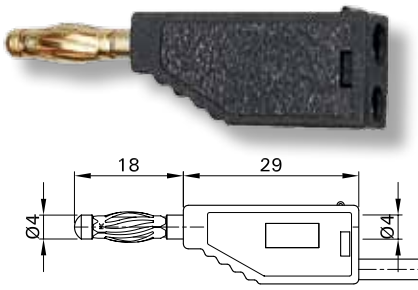
Highly flexible connecting leads 2,5 mm²

with stackable gold plated multilam plugs 4 mm Ø
Material on the leading: PVC
Operating temperature: - 10° C up to + 70° C

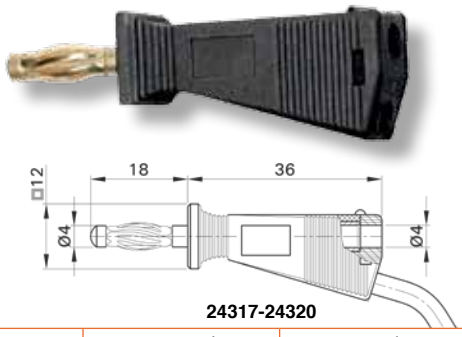
Part-No. black	red	blue	yellow/green	type	flexible length	dimensions plug mm L	B	H	rated current	rated voltage
24070	**24078**	**24086**	**24094**	SLK 425-E	250 mm	56,3	9,5	17,7	32 A	600 V CAT III /
24071	**24079**	**24087**	**24095**		500 mm					1000 V CAT II
24071/1	**24079/1**	**24087/1**	**24095/1**		750 mm					
24072	**24080**	**24088**	**24096**		1000 mm					
24073	**24081**	**24089**	**24097**		1500 mm					
24074	**24082**	**24090**	**24098**		2000 mm					

With stackable 4 mm Ø multilam plugs with rigid insulating sleeve on both ends. On request we deliver leadings with different colours or equipped with silicone insulation too.

Stackable gold plated plugs 4 mm Ø
with spring-loaded multilam



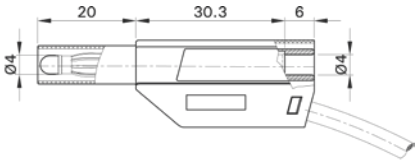
24301-24316



24317-24320

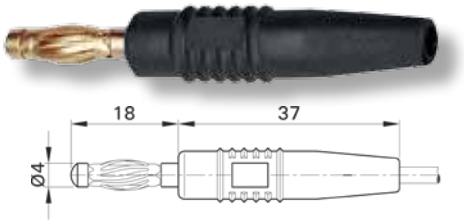
Part-No. black	red	blue	yellow/green	type	connection method	cross-section mm²	rated current	rated voltage
24301	**24302**	**24303**	**24304**	SLS 410	soldering	1,0	19 A	30 V AC/60 V DC
24305	**24306**	**24307**	**24308**	SLS 415	soldering	1,5	24 A	30 V AC/60 V DC
24309	**24310**	**24311**	**24312**	SLS 425-A	soldering	2,5	32 A	30 V AC/60 V DC
24313	**24314**	**24315**	**24316**	SLS 425-AM	screwing	2,5	32 A	30 V AC/60 V DC
24317	**24318**	**24319**	**24320**	SLS 425	soldering	2,5	32 A	30 V AC/60 V DC
Plugs with other colours as in the table on request.								

Stackable gold plated plugs 4 mm Ø
with spring-loaded multilam and rigid insulating sleeve

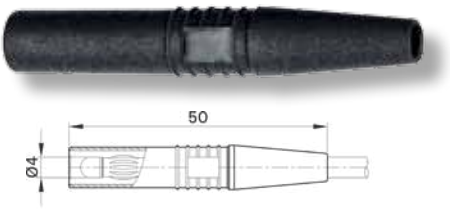


Part-No. black	red	blue	yellow/green	type	connection method	cross-section mm²	rated current	rated voltage
24321	**24322**	**24323**	**24324**	SLS 425-SE/M	screwing	2,5	32 A	1000 V/CAT II
24325	**24326**	**24327**	**24328**	SLS 425-SE/Q	soldering	2,5	32 A	1000 V/CAT II

In-line gold plated plugs 4 mm Ø



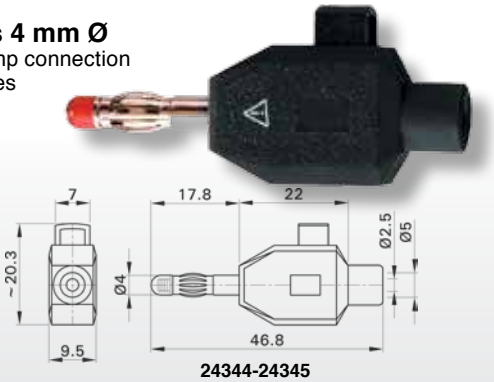
24330-24338



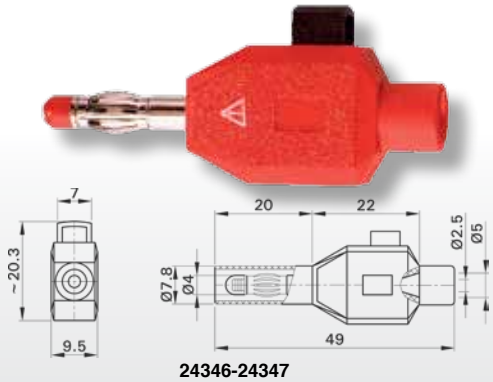
24340-24342

Part-No. black	red	blue	type	connection method	cross-section mm²	rated current	rated voltage
24330	**24331**	**24332**	SLS 410-L	soldering	1,0	19 A	30 V AC/60 V DC
24333	**24334**	**24335**	SLS 415-L	soldering	1,5	24 A	30 V AC/60 V DC
24336	**24337**	**24338**	SLS 425-L	soldering	2,5	32 A	30 V AC/60 V DC
24340	**24341**	**24342**	SLS 425-SL	soldering	2,5	32 A	1000 V/CAT II
Plugs with spring-loaded multilam Part-No. 24340-42 in-line plug with rigid insulating sleeve .							

Clip-on plugs 4 mm Ø
suitable for a clamp connection
with stranded wires



24344-24345

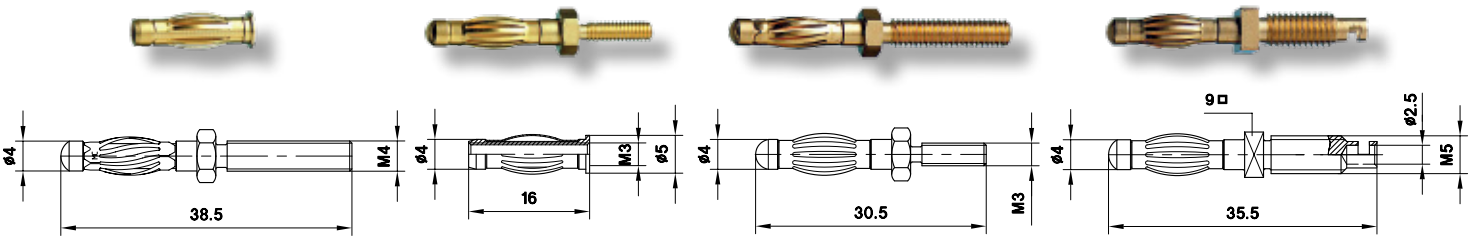


24346-24347

Part-No. black	red	type	connection method	cross-section mm²	rated current	rated voltage
24344	**24345**	KL S4	clamping	bis 2,5	10 A	30 V AV/60 V DC
24346	**24347**	SKL S4	clamping	Bis 2,5	10 A	600 V/CAT II
Please notice that during the installation of the clip-on plugs, the terminal must not be connected to the supply.						

Uninsulated multilam plugs 4 mm Ø

Material: brass

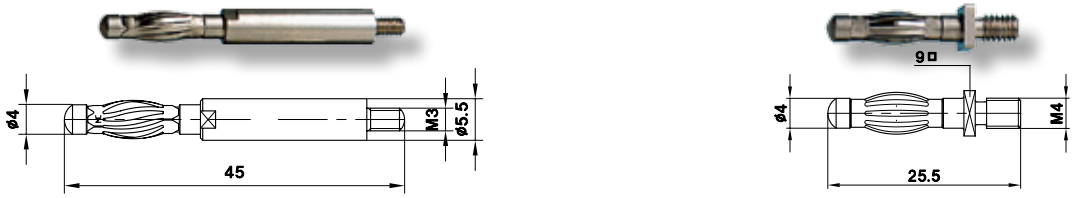


24350 24351 24352 24353

Part-No.	type	surface	connecting	extraction force	highest temperature limit	rated current	resistance mΩ
24350	SA 404	gold plated	M3	ca. 8 N	+ 150° C	50 A	0,3
24351	SA 405	gold plated	M3	ca. 5 N	+ 150° C	50 A	0,3
24352	SA 400	gold plated	M4	ca. 10 N	+ 150° C	50 A	0,2
24353	SA 401	gold plated	M5/solder	ca. 5 N	+ 150° C	50 A	0,3

Uninsulated multilam plugs 4 mm Ø

Material: brass

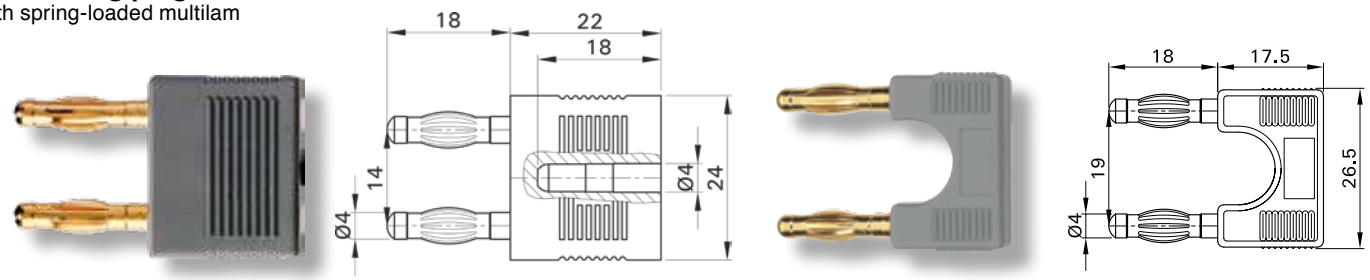


24355 **24356**

Part-No.	type	surface	connecting	extraction force	highest temperature limit	rated current	resistance mΩ
24355	SA 484	nickel plated	M3	ca. 10 N	+ 150° C	50 A	0,4
24356	SA 486	nickel plated	M4	ca. 5 N	+ 150° C	50 A	0,8

Connecting plugs 4 mm Ø

with spring-loaded multilam



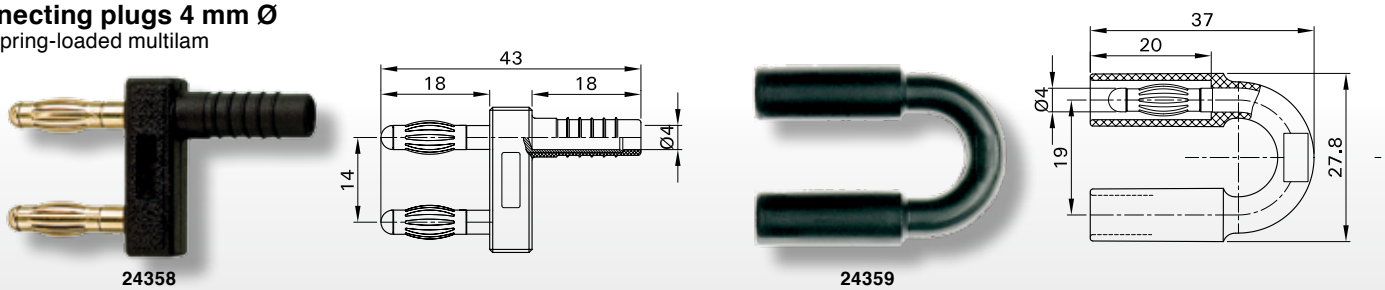
24058/24059 **24060**

Part-No.	type	colour	surface	inserting distance	rated current	rated voltage
24058	KS4-14 L/N	grey	nickel plated	14 mm	32 A	30 V AC/60 V DC
24059	KS4-14 L/A	grey	gold plated	14 mm	32 A	30 V AC/60 V DC
24060	KS4-19 L	grey	gold plated	19 mm	32 A	30 V AC/60 V DC

Part-No. 24058-59 with rigid socket 4 mm Ø in insulator for tap connection at rear.
Part-No. 24060 made of brass, one piece design.

Connecting plugs 4 mm Ø

with spring-loaded multilam

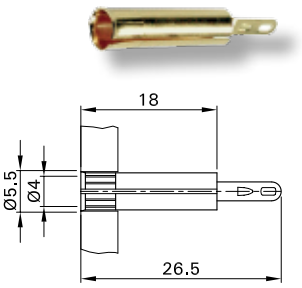


24358 **24359**

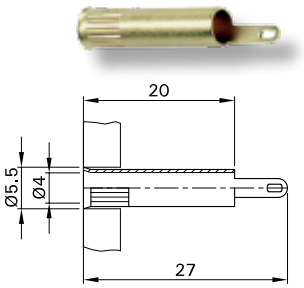
Part-No.	type	colour	surface	inserting distance	rated current	rated voltage
24358	KS4-14 LA/A	black	gold plated	14 mm	32 A	30 V AC/60 V DC
24359	SKS4-19 L	black	gold plated	19 mm	32 A	1000 V/CAT II

Part-No. 24358 designed to ensure vibration-proof-contacts. Ideal for instance in the automative field for test drives and servicing Rigid socket 4 mm Ø in insulator accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeve
Part-No. 24359 plug with spring-loaded multilam and rigid insulating sleeve

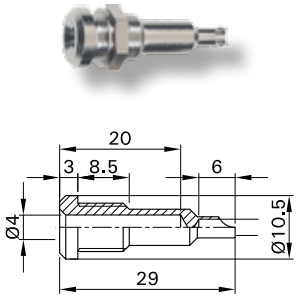
Unisulated sockets 4 mm Ø



24053



24054



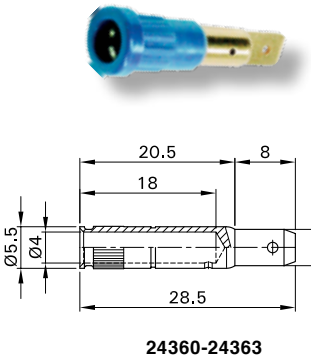
24055/24056

Part-No.	type	surface	connection method	necessary drilling-Ø	rated current	rated voltage
24053	LB 4	gold plated	soldering	4,8 mm	25 A	30 V AC/60 V DC
24054	LB 4 A	gold plated	soldering	4,8 mm	25 A	30 V AC/60 V DC
24055	LB 4 R	nickel plated	soldering	8,3 mm	40 A	30 V AC/60 V DC
24056	LB 4 R/A	gold plated	soldering	8,3 mm	40 A	30 V AC/60 V DC

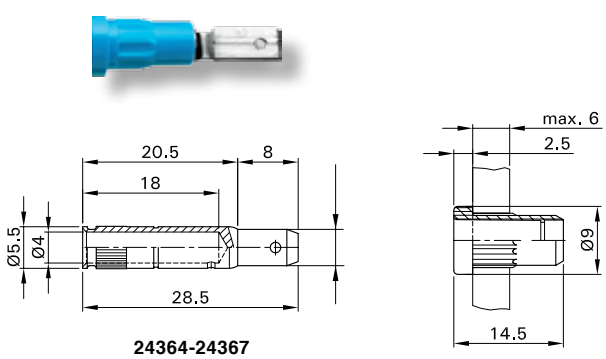
Part-No. 24053 made out of rolled brass sheet.
Part-No. 24054 made out of punched brass tubing.
Part-No. 24055-56 machined brass. The sockets can be screw-mounted in predrilled panels.

Insulated press-in sockets 4 mm Ø

with flat connecting tab 4,8 x 0,8 mm



24360-24363



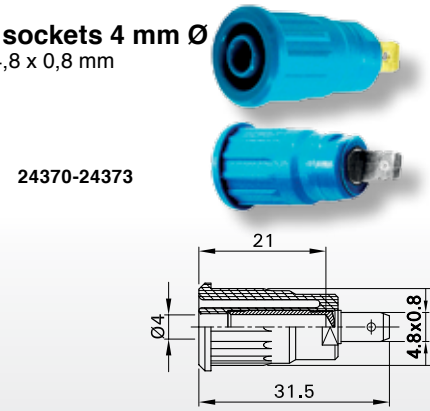
24364-24367

Part-No. black	red	blue	yellow/green	type	surface	necessary drilling-Ø	rated current	rated voltage
24360	**24361**	**24362**	**24363**	EB 4	gold plated	6,8 mm	25 A	30 V AC/60 V DC
24364	**24365**	**24366**	**24367**	EB 4-B	nickel plated	6,8 mm	25 A	30 V AC/60 V DC

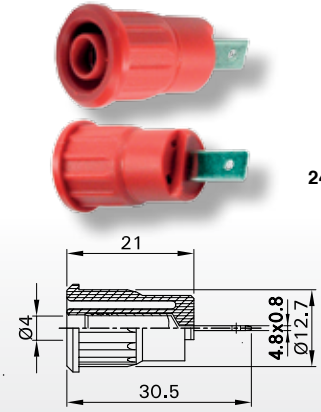
Part-No. 24360-63 machined brass.
Part-No. 24364-67 made out of brass sheet, punched and rolled. The socket is pressed into predrilled panels of plastic, metal etc. Flat connecting tab 4,8 x 0,8 mm can be bent to 90°, once only.

Insulated press-in sockets 4 mm Ø

with flat connecting tab 4,8 x 0,8 mm



24370-24373

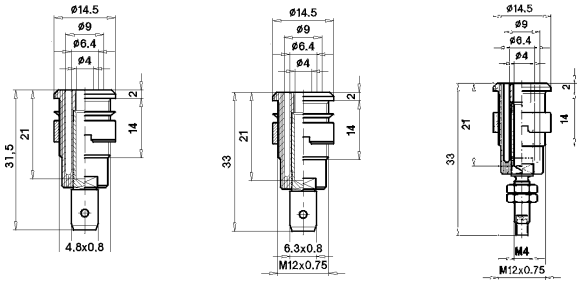


24374-24377

Part-No. black	red	blue	yellow/green	type	surface	necessary drilling-Ø	rated current	rated voltage
24370	**24371**	**24372**	**24373**	SEB4-F	gold plated	12,2 mm	24 A	1000 V/CAT III
24374	**24375**	**24376**	**24377**	SEB4-F/A	nickel plated	12,2 mm	24 A	1000 V/CAT III

Part-No. 24370-73 machined brass.
Part-No. 24374-77 made out of brass sheet punched. Socket accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeve. The socket is pressed into predrilled panels of metal, plastic etc.

Panel-mount sockets 4 mm Ø



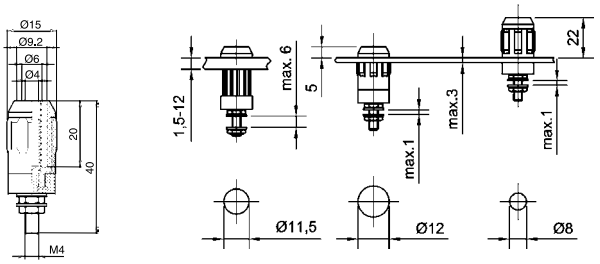
Part-No. black	red	blue	yellow/green	type	surface	necessary drilling-Ø	rated current	rated voltage
24400	**24401**	**24402**	**24403**	SLB 4-F	gold plated	12,2 mm	24 A	1000 V/CAT III
12303	**12304**	**12305**	**12306**	SLB4-F/N-X	nickel plated	12,2 mm	24 A	1000 V/CAT III
24404	**24405**	**24406**	**24407**	SLB4 4-F6,3	gold plated	12,2 mm	32 A	1000 V/CAT III
12307	**12308**	**12309**	**12314**	SLB4 4-F6,3/N-X	nickel plated	12,2 mm	32 A	1000 V/CAT III
24408	**24409**	**24410**	**24411**	SLB4-G	gold plated	12,2 mm	32 A	1000 V/CAT III
12315	**12316**	**12317**	**12322**	SBL4-G/N-X	nickel plated	12,2 mm	32 A	1000 V/CAT III

Special mounting tools

24110	SS 2	Twist stop spanner
24111	SS 425	Spanner for ring nuts with M12 thread

Delivery with ring nut M12 x 0,75 mm. Part-No. 24400-24411 additionally with washer.
Part-No. 24400-03/12303-06 tab connection 4,8 x 0,8 mm.
Part-No. 24404-07/12307-14 tab connection 6,3 x 0,8 mm.
Part-No. 24408-11/12315-22 connection threaded bolt M4 and soldering hole.
Part-No. 24110-11 devices for easy installation.
Part-No. 24110 is used to counter when tightening the nut with spanner Part-No. 24111.
Sockets with other colours as in the table on request.

Universal safety sockets 4 mm Ø



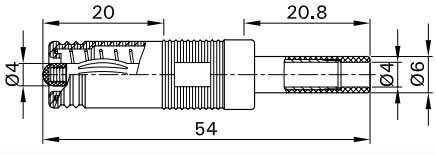
Part-No. black	red	blue	yellow/green	type	surface	necessary drilling-Ø	rated current	rated voltage
24105	**24106**	**24107**	**24108**	XUB-G	nickel plated	see drawing	20 A	see text

Accessory

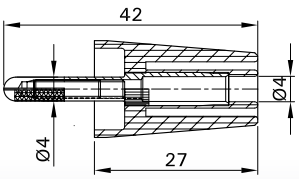
24415	24415 Protective cap to cover-up unplugged, unused sockets (Protection degree IP67)

Insulated rigid sockets accepting spring-loaded plugs 4 mm Ø with rigid insulation sleeve. The sockets are surface-mounted, assembled flush or pressed into predrilled panels of plastic, metal etc. Rated voltage when surface mounted 600 V, CAT II, when assembled flush or pressed in 1000 V, CAT II. Sockets with other colours as in the table on request.

Plug- and screw-clamping adapters 4 mm Ø



24165

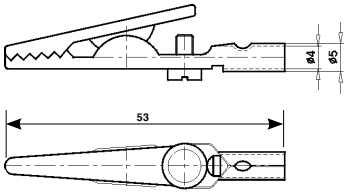


24167-24170

Part-No. black	red	blue	yellow/green	type	surface	rated current	rated voltage
Plug-adapter 4 mm Ø							
-	**24165**	-	-	A4/4-Z	nickel plated	25 A	30 V AC/60 V DC
Screw-clamping adapter 4 mm Ø							
24167	**24168**	**24169**	**24170**	A-SLK-4	gold plated	32 A	1000 V/CAT II

Part-No. 24165 Plug adapter with spring-loaded multilam and retractable sleeve to prevent accidental contact. Rigid socket 4 mm Ø in insulator accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeve.
Part-No. 24167-70 Adapter can be screw-mounted into 4 mm Ø sockets. The expandable 4 mm Ø plug of this adapter can be locked into the socket by tightening the grub screw. Assembled, the adapter offers complete touch-proof protection. Rigid socket Ø 4 mm in insulator accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeves. Please notice that the terminals must not be connected to the supply during installation of the adapters.

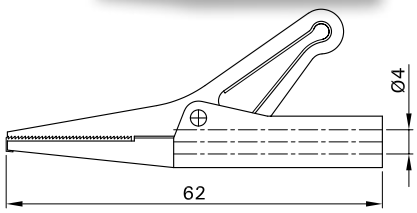
Uninsulated crocodile-clips with socket 4 mm Ø



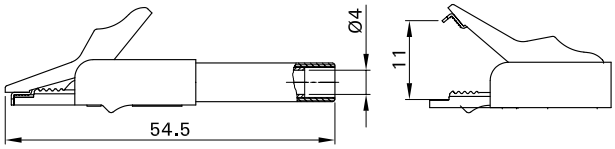
Part-No.	type	material	surface	max. clamping width	rated current	rated voltage
12105	AGK 20	steel	nickel plated	5 mm	10 A	30 V AC/60 V DC

Uninsulated test clip with 4 mm rigid socket. The connection is also possible with screw clamp or soldering.

Insulated crocodile-clips with socket 4 mm Ø



24065-24067

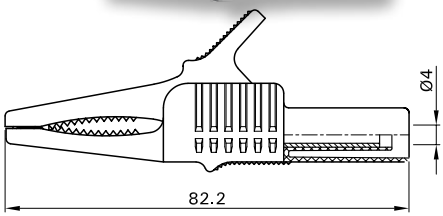


24112-24114

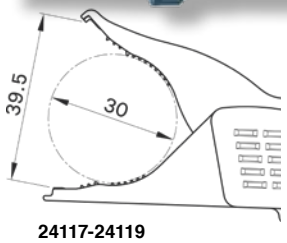
Part-No. black	red	blue	type	surface	max. clamping width	rated current	rated voltage
24065	**24066**	**24067**	A-PK4	nickel plated	12 mm	10 A	30 V AC/60 V DC
24112	**24113**	**24114**	SAGK4-K	Vernickelt	11 mm	15 A	300 V / CAT II

Part-No. 24065-67 Test clip with Ø 4 mm rigid socket and sharp toothed, pointed jaws. The upper jaw is insulated.
Part-No. 24112-14 small, slim crocodile clip with all-round-insulation and toothed jaws for wide grip with surface for fine wire. Rigid socket 4 mm Ø in insulator accepting spring-loaded 4 mm Ø plugs with rigid insulation sleeve.

Insulated crocodile-clips with socket 4 mm Ø



24121-24123



24117-24119

Part-No. black	red	blue	yellow/green	type	surface	max. clamping width	rated current	rated voltage
24121	**24122**	**24123**	**24124**	XKK-1001	nickel plated	20 mm	32 A	1000 V/CAT II
24117	**24118**	**24119**	**24120**	XDK-1033	nickel plated	30 mm	32 A	1000 V/CAT III

UL-listed crocodile-clips with all-round-insulation and toothed jaws for wide grip with surface for fine wire. Rigid socket 4 mm Ø in insulator accepting spring-loaded plugs 4 mm Ø with rigid insulation sleeve. Clips with other colours as in the table on request.

Safety test clips with socket 4 mm Ø

24125-24127

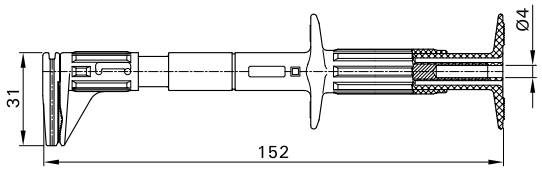
24130-24132

Part-No. black	red	blue	type	total length	max. clamping width	rated current	rated voltage
24125	**24126**	**24127**	SKPS-4	155 mm	ca. 5 mm	4 A	1000 V/CATIII
24130	**24131**	**24132**	Minigrip-XCI	130 mm	ca. 20 mm	16 A	1000 V/CATII

Part-No. 24125-27 with flexible shaft and spring wire grabber made out of stainless steel for a good contact to pins and wires in accessible places. Especially suitable for measuring voltages. The shaft is silicone insulated and guarantees good heat resistance and flexibility even at low temperatures.
Part-No. 24130-32 test clip with steel jaws, especially for connections to ground rails and thick cables. For increased safety when making connections, the jaws are insulated on the outside. Rigid socket 4 mm Ø in handle accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeve.

Flat connection clamps with socket 4 mm Ø

and adjustable stop

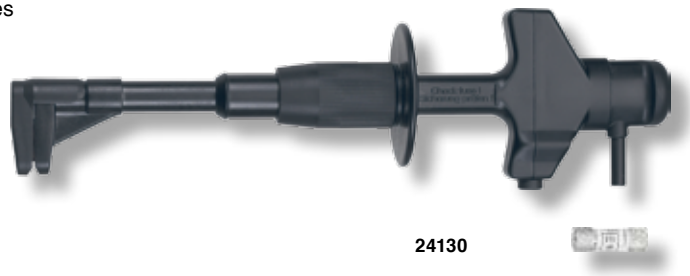


Part-No. black	Part-No. red	Part-No. blue	type	surface	total length	max. clamping width	rated current	rated voltage
24135	**24136**	**24137**	Grip F	nickel plated	152 mm	30 mm	5 A	600 V//CAT III

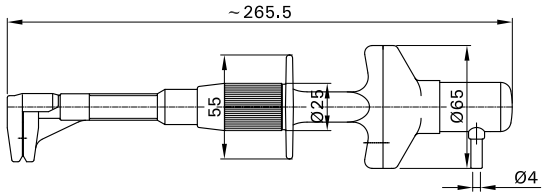
Flat test clip for making quick, sure contact in voltage measurements. With adjustable stop. Rigid socket 4 mm Ø in handle accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeve.

Flat connection clamps with socket 4 mm Ø

and HRC-fuses



24130



Part-No. black	Part-No. red	Part-No. blue	type	surface	total length	max. clamping width	rated current	rated voltage
24140	**24141**	**24142**	FMA 12-PF/BM	gold plated	266 mm	10 mm	2 A / 16 A / 20 A	600 V//CAT III
HRC-fuses								
24145	-	-	G2A-SV	fuserating 2 A		separating power 100 kA/500 V AC		
24146	-	-	G16A-SV	fuserating 16 A		separating power 100 kA/500 V AC		
24147	-	-	G20A-SV	fuserating 20 A		separating power 100 kA/500 V AC		

Flat contact clamp with integrated HRC fuse 10 x 38 mm for a fast and safe contact of flat conductor bars e.g. in low voltage installations. The HRC type fuses can safely break extremely high short-circuit-currents. The very low internal resistance permits the measurement of resistance and current. With rigid socket 4 mm Ø in handle accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeve. **The fuse is not supplied and you must order it separately.** Fuses with other current-ratings as in the table on request.

Test probes with socket 4 mm Ø

24150/51

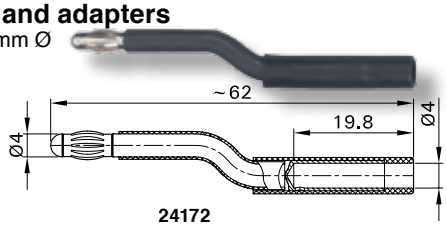
24155/56

24160/61

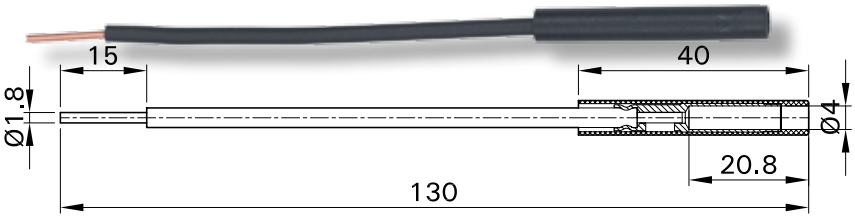
Part-No. black	Part-No. red	type	total length	tip length	rated current	rated voltage
24150	**24151**	SPP4-S	122 mm	9 mm	≤1 A	1000 V/CAT II
24155	**24156**	SPP4-L	140 mm	18 mm	32 A	1000 V/CAT II
24160	**24161**	SPP4-AR	108 mm	-	32 A	600 V/CAT II

Part-No. 24150/51 with tapered stainless steel rigid needle. Delivery with protection cover.
Part-No. 24155/56 Ø 4 mm test probe with spring-loaded multilam. Handle guard chamfered on both sides. Delivery with protection-cover.
Part-No. 24160/61 Ø 4 mm test probe with spring-loaded multilam. The insulating sleeve over the probe tip can be pushed back at the press of a bottom (Protection degree IP2X). All designs with rigid socket 4 mm Ø in insulator accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeves.

Test plugs and adapters
with socket 4 mm Ø



24172

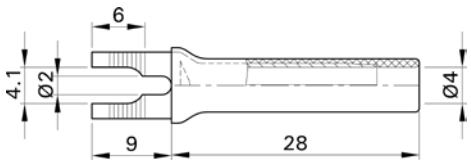


24173

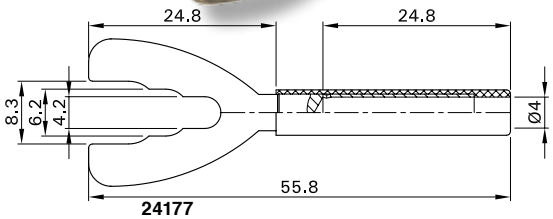
Part-No.	colour	type	material	surface	rated current	rated voltage
24172	black	A-SLK4-RG	Ms	nickel plated	25 A	30 V AC/60 V DC
24173	black	A-SLK4-R	Cu	nickel plated	32 A	1000 V/CAT II

Part-No. 24172 test plug with spring loaded multilam for connecting into rail mounted terminals with sockets 4 mm Ø. Rigid socket 4 mm Ø in insulator accepting spring-loaded plugs 4 mm Ø with rigid insulation sleeve.
Part-No. 24173 insulated flexible copper conductor, suitable for many types of screw clamp connections, e.g. rail mounted terminals. Rigid socket 4 mm Ø in insulator accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeves. Please notice that during installation of this adapter the terminal must not be connected to the supply.

Cable lug adapters
with socket 4 mm Ø



24176

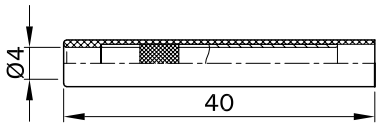


24177

Part-No. black	Part-No. red	Part-No. blue	type	material	surface	rated current	rated voltage
24175	**24176**	**24176/1**	B4-I/KS	Ms	nickel plated	20 A	1000 V/CAT II
24177	**24178**	**24179**	B4-I/K	Ms	gold plated	32 A	1000 V/CAT II

Cable lug adapters for permanent installation e. g. for connecting screw terminals. Rigid socket 4 mm Ø in insulator accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeves. Adapters Part-No. 24175-24176/1 the fork lug can be bent once to 90°. Please notice that during the installation of tis adapters the terminal must not be connected to the supply.

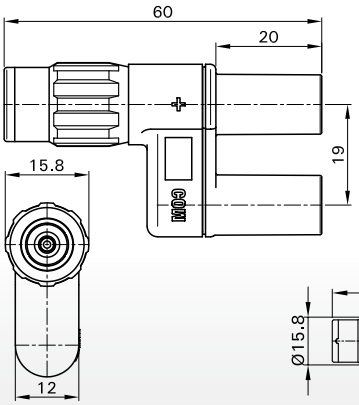
Insulated lead couplers



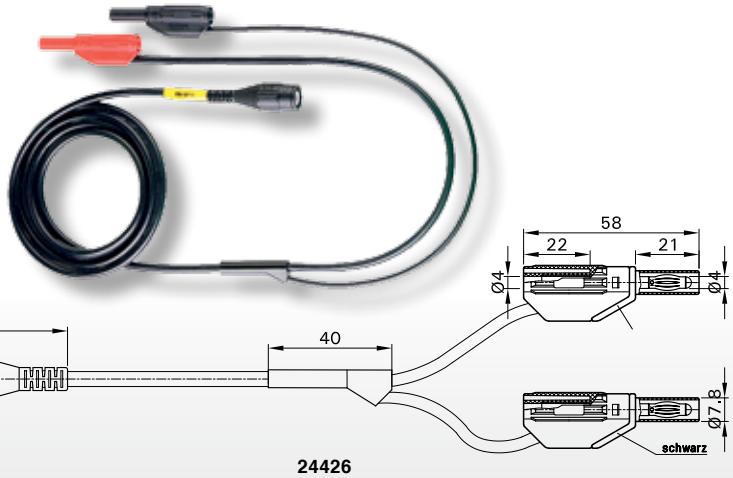
Part-No. black	Part-No. red	Part-No. blue	type	material	surface	rated current	rated voltage
24420	**24421**	**24422**	KK4/4	Ms	gold plated	32 A	1000 V/CAT II

Insulated lead coupler. Both ends suitable for accepting spring-loaded plugs 4 mm Ø with rigid insulating sleeve.

BNC-adapters resp. BNC adapter leads



24425



24426

Part-No.	type	length	design	rated voltage
24425	XM-BB/4	60 mm	Adapter with BNC-plug and 2 sockets 4 mm Ø	1000 V/CAT II/600 V/CAT III
24426	XLAM-446/SC	1600 mm	Adapter lead with BNC-plug and 2 plugs 4 mm Ø	600 V/CAT II/300 V/CAT III

Part-No. 24425 two pole touch-protected adapters with Ø 4 mm connectors linked to the BNC system. With BNC-plug and rigid sockets 4 mm Ø.
Part-No. 24426 highly flexible, fully shielded adapter-leads. One end with coaxial cable with touch protected BNC male connector, other end with stackable multilam plugs 4 mm Ø with rigid insulating sleeve, two-pole version.

Binding-posts 16-400 A

Technical information

The AC-flowing through binding posts, sockets and feed-throughs, will locally lead to a radial warming up of the sheet steel enclosure caused by eddy-currents. The following graph No. 1 shows the sheet cut-out dependent on the current intensity. It shows the temperature increase around the binding post by use of a sheet steel enclosure.

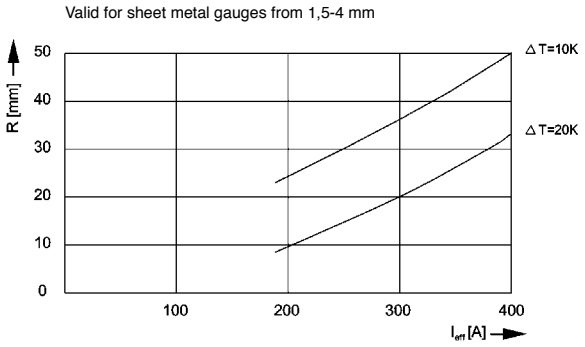
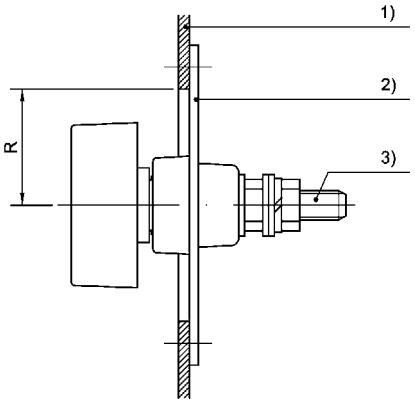


Diagram No. 1

Example:

Current rating $I_{eff.}$ = 400 A
Around the binding posts Δ T = 10 K are permissible, therefore a radius of 50 mm around the binding posts has to be out of antimagnetic materials. Therefore a mounting has to be done according to the sketch 2.
In this figure 1) is the sheet steel enclosure, 2) a antimagnetic material and 3) the binding post.



Sketch 2

Creepage

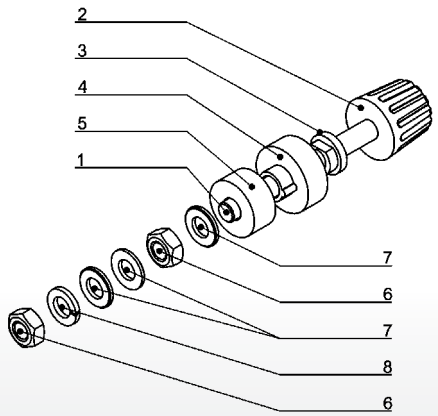
The permissible working voltage has to be determined acc. To VDE0110 part 1, IEC 1010 part 1, resp. IEC report 664, taking into consideration the insulating materials and the degree of pollution.

The creepage to be considered is

S_K = $S_{k\ max.}$ - S_G
S_K = creepage with conducting enclosure
$S_{K\ max}$ = creepage without enclosure
S_G = wall thickness of enclosure in mm

Delivery

All binding posts will be delivered partly assembled with unmounted insulating sockets/rings, nuts, washers and spring washers.



1-3 mounted (bolt with insulating- and flange nut)

4 Insulating socket with torsion protection

5 Insulating ring

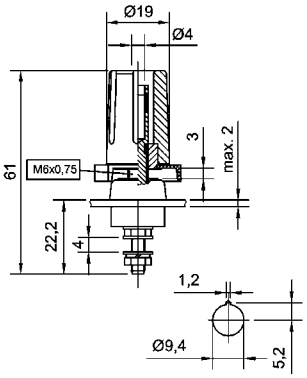
6 Nuts

7 Washers

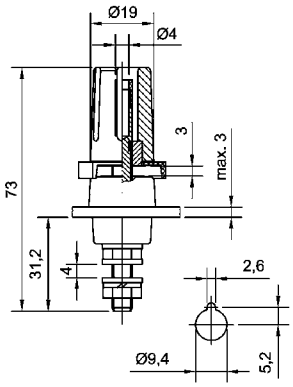
8 Spring washer

Protected binding posts 16-63 A

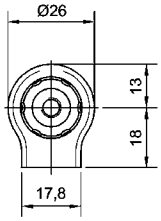
Material: brass/polycarbonate
Temperature stability: up to + 115° C



12270-12273



12274-12277



Part-No.	colour	current load	operating voltage	testing voltage	conducting wall thickness (S_G)	creep-distance S_K	tightening force
12270	black	16/32 A	1 kV	2,2 kV	2 mm	5,3 mm	1,2 Nm
12271	red						
12272	blue						
12273	yellow-green						
12274	black	32/63 A	1 kV	2,2 kV	3 mm	6,3 mm	3,0 Nm
12275	red						
12276	blue						
12277	yellow-green						

Protection against electric-shock hazards according to VDE 0100 part 410 and 723, VDE 0104, VDE 0110, VDE 0411 and VDE 0470 as well as IEC 664 and IEC 1010 is guaranteed:
- with lug connection after connecting without voltage, if suitable insulation armoured lugs are used
- with connection via 4 mm safety plug with fixed collar

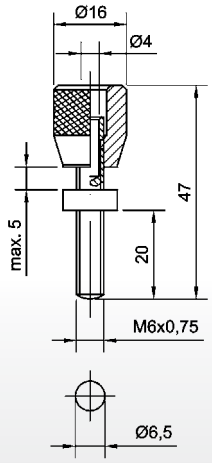
Technical data:

Insulation co-ordination:	4 kV/1
Design impact potential:	4 kV
Insulating material:	III a
Insulation resistance:	> 10^{10} Ω
Borehole for safety plug:	4 mm Ø

Rated-current in case of plug connection:
Part-No. 12270 up to 12273 16 A
Part-No. 12274 up to 12277 32 A

Grounding post 63 A

Material: brass



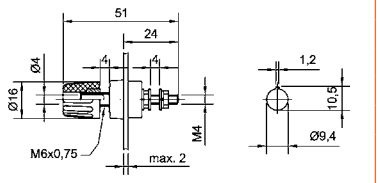
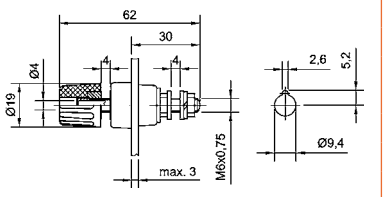
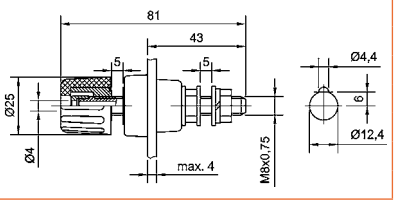
Best-Nr.	current load	plug drilling
05460	16/63 A	4 mm Ø
Rated current by plug connection 16 A		

Binding posts 32-100 A

Material: brass/polycarbonate

Technical data

Working voltage:	1 kV
Insulation co-ordination:	4 kV/1
Design impact potential:	4 kV
Testing voltage:	2,2 kV
Insulating material:	III a
Temperature stability max.:	+ 115° C
Insulation resistance:	> 10^{10} Ω
Borehole for safety plug:	4 mm Ø
Rated current by plug connection max.	16 A

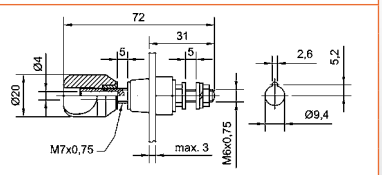
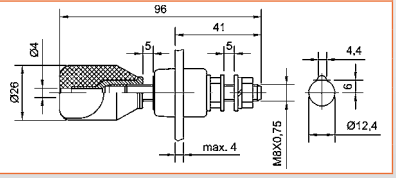
Part-No.	colour	current load	conducting wall thickness (S_G)	creep-distance $S_{K\ max.}$	tightening force	dimensions/boreholes mm
12279	black	32 A	2 mm	5,3 mm	1,2 Nm	
12280	red					
12281	blue					
12282	yellow					
12283	green					
12284	violet					
12286	yellow/green					
12287	black	63 A	3 mm	6,3 mm	3 Nm	
12288	red					
12289	blue					
12290	yellow					
12291	green					
12292	violet					
12294	yellow/green					
12295	black	100 A	4 mm	7,5 mm	6 Nm	
12296	red					
12297	blue					
12298	yellow					
12299	green					
12300	violet					
12302	yellow/green					

Binding posts 63-100 A

Material: brass/polycarbonate

Technical data

Working voltage:	1 kV
Insulation co-ordination:	4 kV/1
Design impact potential:	4 kV
Testing voltage:	2,2 kV
Insulating material:	III a
Temperature stability max.:	+ 115° C
Insulation resistance:	> 10^{10} Ω
Borehole for safety plug:	4 mm Ø
Rated current by plug connection max.	16 A

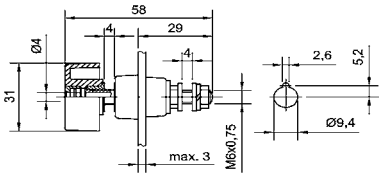
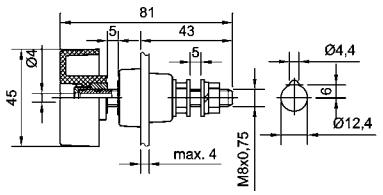
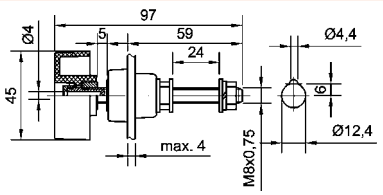
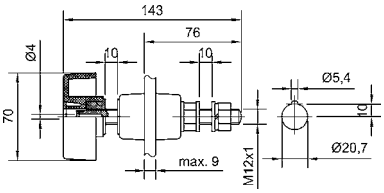
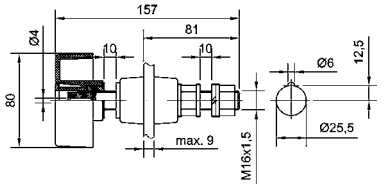
Part-No.	colour	current load	conducting wall thickness (S_G)	creep-distance $S_{K\ max.}$	tightening force	dimensions/boreholes mm
05500	black	63 A	3 mm	6,3 mm	3 Nm	
05501	red					
05502	blue					
05503	yellow					
05504	green					
05505	yellow/green					
05550	black	100 A	4 mm	7,8 mm	6 Nm	
05551	red					
05552	blue					
05553	yellow					
05554	green					
05555	yellow/green					

Binding posts with flat clamp 63-400 A

Material: brass or copper/polycarbonate

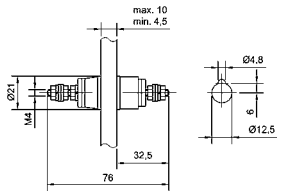
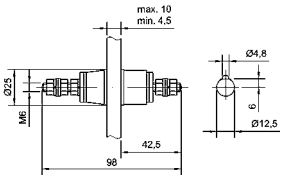
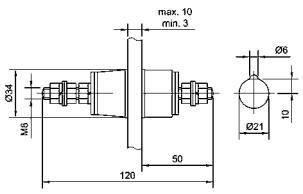
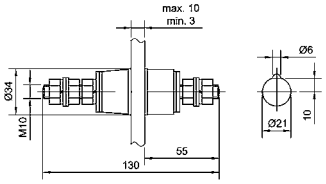
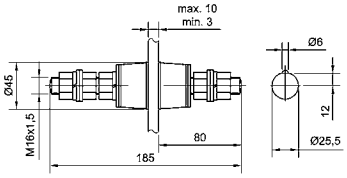
Technical data

Working voltage:	1 kV
Insulation co-ordination:	4 kV/1
Design impact potential:	4 kV
Testing voltage:	2,2 kV
Insulating material:	III a
Temperature stability max.	+ 115° C
Insulation resistance:	> 10^{10} Ω
Borehole for safety plug:	4 mm Ø
Rated current by plug connection max.	16 A

Part-No.	colour	current load	conducting wall thickness (S_G)	creep-distance $S_{K\ max.}$	tightening force	dimensions/boreholes mm
05490	black	63 A	3 mm	6,3 mm	3 Nm	
05491	red					
05492	blue					
05493	yellow					
05494	green					
05495	yellow/green					
05530	black	100 A	4 mm	7,8 mm	6 Nm	
05531	red					
05532	blue					
05533	yellow					
05534	green					
05535	yellow/green					
05540	black	100 A	4 mm	7,8 mm	6 Nm	
05541	red					
05542	blue					
05543	yellow					
05544	green					
05545	yellow/green					
05570	black	200 A	9 mm	18 mm	15,5 Nm	
05571	red					
05572	blue					
05573	yellow					
05574	green					
05575	yellow/green					
05580	black	400 A	9 mm	18 mm	30 Nm	
05581	red					
05582	blue					
05583	yellow					
05584	green					
05585	yellow/green					

Oiltightness lead-through bolts 16-400 A

Material: brass or copper/molded bakelite

Part-No.	colour	current load	conducting wall thickness (S_G)	creep-distance $S_{K\ max.}$	tightening force	dimensions/boreholes mm
05620	black	16 A	10 mm	16,5 mm	1,2 Nm	
05621	black	63 A	10 mm	15,5 mm	3 Nm	
05622	black	100 A	10 mm	17,5 mm	6 Nm	
05623	black	200 A	10 mm	17 mm	10 Nm	
05624	black	400 A	10 mm	18 mm	30 Nm	

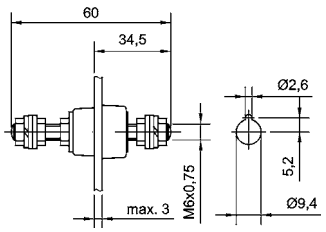
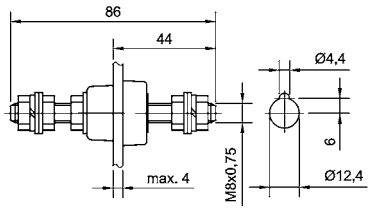
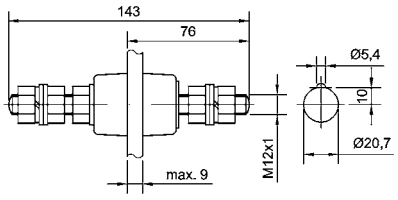
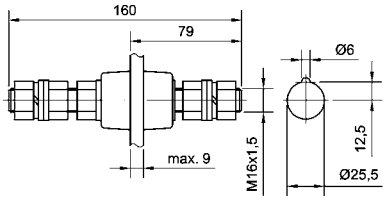
Our standard type of gasket rings made out of SIL C 4400 green are free of asbestos and suitable for smooth surfaces. For rough surfaces it is possible to deliver gasket rings made of nitrilbutadiene caoutchouc (Perbunan).
For proper installation, the flange washer fixed to the bolt has to be located inside the enclosure. In general, first lock the lead through bolt with the lower nut, leave a space and then make the electrical connection between the two remaining nuts.

Technical data

Working voltage:	1 kV
Insulation co-ordination:	5 kV/1
Design impact potential:	5 kV
Testing voltage:	3,2 kV
Insulating material:	II
Temperature stability:	bis + 100° C
Insulation resistance:	> 10^9 Ω

Lead-through bolts 63-400 A

for switch-board application
Material: brass or copper/polycarbonate

Part-No.	colour	current load	conducting wall thickness (S_G)	creep-distance $S_{K\ max.}$	tightening force	dimensions/boreholes mm
05626	black	63 A	3 mm	6,3 mm	3 Nm	
05626/1	red					
05626/2	blue					
05627	black	100 A	4 mm	7,8 mm	6 Nm	
05627/1	red					
05627/2	blue					
05628	black	200 A	9 mm	9 mm	15,5 Nm	
05628/1	red					
05628/2	blue					
05629	black	400 A	9 mm	18 mm	30 Nm	
05629/1	red					
05629/2	blue					

For proper installation, the flange washer fixed to the bolt has to be located inside the enclosure. In general, first lock the lead through bolt with the lower nut, leave a space and then make the electrical connection between the two remaining nuts.

Technical data

Working voltage:	1 kV
Insulation co-ordination:	4 kV/1
Design impact potential:	4 kV
Testing voltage:	2,2 kV
Insulating material:	III a
Temperature stability:	bis + 115° C
Insulation resistance:	> 10^9 Ω

Cable ties

Material: PA 6.6 self extinguishing
Operating temperature: - 40° C up to + 85° C

Part-No. natur	Part-No. black	bundle-Ø max. mm	length mm	width mm	tensile strength min. kg	packing pcs.
30039	**30039/s**	21	98	2,5	8,2	1000
30042	**30042/s**	32	135	2,6	8,2	
13230	**13230/s**	35	140	3,6	13	
30043	**30043/s**	40	160	2,6	8,2	
30044	**30044/s**	45	178	4,8	22	
13232	**13232/s**	50	200	3,6	13	
13231	**13231/s**	50	200	4,8	22	
30045	**30045/s**	68	250	4,8	22	100
30049	**30049/s**	79	290	4,8	22	
30050	**30050/s**	100	360	4,8	22	
13233	**13233/s**	100	365	7,8	55	
30051	**30051/s**	130	450	7,8	55	
30052	**30052/s**	158	540	7,8	55	
30053	**30053/s**	200	750	7,8	55	
30054	**30054/s**	233	780	9,0	77	

black colour = weather-proof design

Releasable cable ties

Material: PA 6.6 self extinguishing
Operating temperature: - 40° C up to + 85° C

Part-No.	bundle-Ø max. mm	length mm	width mm	tensile strength min. kg	packing pcs.
13228	50	200	4,8	22,2	1000
13229	76	300	4,8	22,2	1000

The same handling as normal cable ties, but easy to release. So a lowering of costs is possible.

Cable tie mounts

adhesive or screw mounts
Material: PA 6.6, self-extinguishing
Operating temperature: - 40° C up to + 85° C

Part-No.	length mm	width mm	height mm	cable tie width max. mm	mounting
13240	19	19	4,3	3,6	adhesive
13241	27	27	4,3	4,8	
13242	22,5	15	11	9	screwable
13243	27	27	8	4,8	

Adjustable cable tie tool

Part-No. 30056

Stabilized adjustable cable tie tool suitable for cable ties up to 4,8 mm width. Easy and safety handling. The tensile strength is adjustable and the value can be inspected through a little window in the tool grip. When cables are bundled at the required strength, the excess tie tail is automatically cropped. So it is possible to prevent injuries caused through a cable tie excess.

1. ELECTRICAL CONNECTION- AND INSTALLATION TECHNIQUE

1.15 Neoprene sleeves, insulation and shrinking tubes as well as copper paste and cleaning sprays

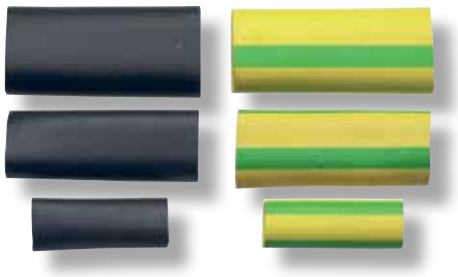
Often it is necessary to insulate electrical connections during or after the manufacturing process. Therefore druseidt offers additionally to the products of electrical connection technology, insulating material, too. Shrinking-, PVC- as well as silicone tubes delivered in rolls or on spools are standard.

Also neoprene insulation sleeves for an afterwards insulating of cable lugs acc. to catalogue page 122 are interesting products. For cleaning operations as well as optimizing of the current transfer we recommend to use our different sprays or our copper paste.

Mounting of neoprene sleeves by rubber sleeve expanders

Neoprene sleeves

Temperature stability: -30° C up to + 130° C

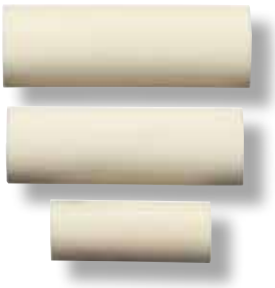


Part-No. black	Part-No. yellow-green	dimensions mm for cable Ø	cut length	inside-Ø	wall thickness
10025	**11025**	1,25 - 2	20	1,25	0,5
10026	**11026**	1,75 - 3,5	20	1,75	0,5
10027	**11027**	2,4 - 4,5	20	2,4	0,5
10028	**11028**	3 - 6	25	3	0,6
10029	**11029**	5 - 9	25	5	0,7
10030	**11030**	7,5 - 12	30	7,5	0,8
10031	**11031**	10 - 15	35	10	0,9
10032	**11032**	12 - 20	50	12	1,2
10033	**11033**	14 - 23	50	14	1,3
10034	**11034**	17 - 28	50	17	1,3

Additionally to the standardized colours in white, blue, green, yellow, orange, brown, red, violet, grey or pink colour deliverable.

Silicone sleeves

Nature colour, free of halogen
Temperature stability: - 80° C up to + 200°C



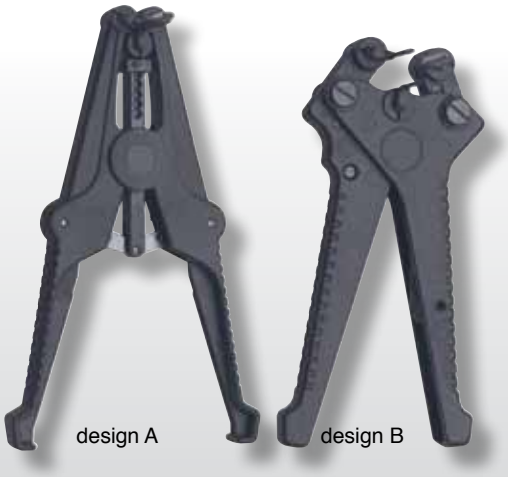
Part-No.	dimensions mm for cable Ø	cut length	inside-Ø	wall thickness
10045	1,25 - 1,8	20	1,25	0,5
10046	1,75 - 2,5	20	1,75	0,5
10047	2,5 - 3	20	2,5	0,6
10048	3 - 4	25	3	0,6
10049	5 - 7	25	5	0,7
10050	7,5 - 9	30	7,5	0,8
10051	10 - 13	35	10	1,0
10052	12 - 16	50	12	1,2
10053	14 - 19	50	14	1,3
10054	17 - 25	50	17	1,3

Lubricant for neoprene and silicone sleeves

Part-No. 10065	2 dl can with brush
For easier application of rubber sleeves. Special product which does not affect caoutchouc or elastomers and is kind to one´s skin.	

Rubber sleeve expanders

Ultra light weight in Plio-Carbox design



Part-No. design A	Part-No. design B	for max. cable-Ø	dimensions mm design A length	design A width	design B length	design B width
10061	**10071**	4,5	195	115	140	130
10062	**10072**	9	195	115	140	125
10063	**10073**	15	195	115	140	125
10064	**10074**	28	195	115	150	145

Heat shrinkable tubing

Material: irradiated cross-linked polyolefin
Colour: black

Construction and application

Extremely flexible thin walled heat shrinkable tubing. Flame retardant and self-extinguishing. Well suited as insulation material for cables, leadings or cable connectors. All tubing are marked with printed UL- and CSA-numbers and therefore well suited for export-orders which require a certificate about the UL/CSA-registration.

Part-No.	Technical data						
	before shrinking inside-Ø		after complete shrinking		cut length	specification	
	inch	mm	inside-Ø max. mm	thickness			
30061	3/64	1,2	0,6	0,40	300 m	Shrink-ratio:	2:1
30062	1/16	1,6	0,8	0,43	300 m	Temperature resistance:	-55° C up to +125° C
30063	3/32	2,4	1,2	0,51	150 m	Shrink temperature:	+90° C
30064	1/8	3,2	1,6	0,51	150 m	Self-extinguishing	
30065	3/16	4,8	2,4	0,51	60 m	Dielectric strength:	25 kV/mm
30066	1/4	6,4	3,2	0,64	60 m	Tensile strength:	10,3 MPa
30067	3/8	9,5	4,8	0,64	60 m	Breaking elasticity:	200 %
30068	1/2	12,7	6,4	0,64	60 m	Specification:	UL und CSA
30069	3/4	19,1	9,5	0,76	60 m	Standard colour:	black, other colours on request
30070	1	25,4	12,7	0,89	60 m		
30071	1 1/2	38,1	19,1	1,02	60 m		
30072	2	50,8	25,4	1,14	60 m		

Heat shrinkable tubing

Material: irradiated cross-linked polyolefin
Colour: transparent

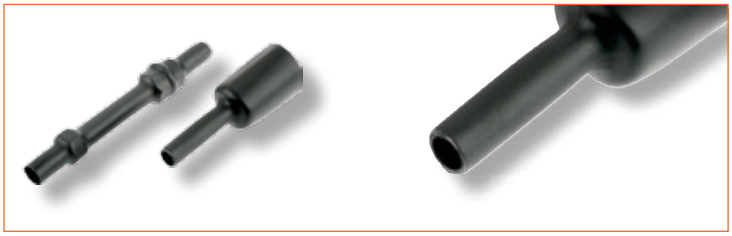
Construction and application

Flexible thin walled heat shrinkable tubing with a good mechanical and chemical stability. Don't tear also when shrinking the material about objects with sharp edges. The material offer so multifarious possibilities for application in the industry as well as military field. Suitable for the insulation of busbars, cables, connectors or other power leading parts.

Part-No.	Technical data						
	before shrinking inside-Ø		after complete shrinking		cut length	specification	
	inch	mm	inside-Ø max. mm	thickness			
30080	3/64	1,2	0,6	0,40	300 m	Shrink-ratio:	2:1
30081	1/16	1,6	0,8	0,43	300 m	Temperature resistance:	-55° C up to +135° C
30082	3/32	2,4	1,2	0,51	150 m	Shrink temperature:	+115° C
30083	1/8	3,2	1,6	0,51	150 m	Not self-extinguishing	
30084	3/16	4,8	2,4	0,51	60 m	Dielectric strength:	20 kV/mm
30085	1/4	6,4	3,2	0,64	60 m	Tensile strength:	10,3 MPa
30086	3/8	9,5	4,8	0,64	60 m	Breaking elasticity:	200 %
30087	1/2	12,7	6,4	0,64	60 m	Specification:	MIL und VG
30088	3/4	19,1	9,5	0,76	60 m	Standard colour:	transparent
30089	1	25,4	12,7	0,89	60 m		
30090	1 1/2	38,1	19,1	1,02	60 m		
30091	2	50,8	25,4	1,14	60 m		
30092	3	76,2	38,1	1,27	60 m		
30093	4	101,6	50,8	1,40	30 m		

Heat shrinkable tubing

Material: irradiated cross-linked polyolefin
Colour: black



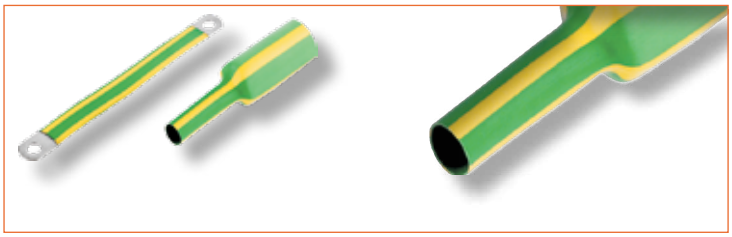
Construction and application

Flexible thin walled heat shrinkable tubing with a good mechanical and chemical stability. Don't tear also when shrinking the material about objects with sharp edges. Easy to mark by printing the outside of the tubing. Therefore multifarious applications are given e.g. insulation of busbars, cables, connectors etc.

Part-No.	Technical data						
	before shrinking inside-Ø		after complete shrinking			specification	
	inch	mm	inside-Ø max. mm	thickness	cut length		
30100	3/64	1,2	0,6	0,40	300 m	Shrink-ratio:	2:1
30101	1/16	1,6	0,8	0,43	300 m	Temperature resistance:	-55° C bis +135° C
30102	3/32	2,4	1,2	0,51	150 m	Shrink temperature:	+90° C
30103	1/8	3,2	1,6	0,51	150 m	Self-extinguishing	
30104	3/16	4,8	2,4	0,51	60 m	Dielectric strength:	20 kV/mm
30105	1/4	6,4	3,2	0,64	60 m	Tensile strength:	10,3 MPa
30106	3/8	9,5	4,8	0,64	60 m	Breaking elasticity:	200 %
30107	1/2	12,7	6,4	0,64	60 m	Specification:	MIL und UL
30108	3/4	19,1	9,5	0,76	60 m	Standard colour:	black, andere colourn auf Anfrage
30109	1	25,4	12,7	0,89	60 m		
30110	1 1/2	38,1	19,1	1,02	60 m		
30111	2	50,8	25,4	1,14	60 m		
30112	3	76,2	38,1	1,27	60 m		
30113	4	101,6	50,8	1,40	30 m		

Heat shrinkable tubing for earthing applications

Material: irradiated cross-linked polyolefin
Colour: yellow/green



Construction and application

Flexible thin walled heat shrinkable tubing, flame retardant and self-extinguishing. Well suited for a marking of earthing connections. Caused by the special production process (dual-colour-extrusion) it is guaranteed that the material either doesn't fade nor it is possible to rub off the colour.

Part-No.	Technical data						
	before shrinking inside-Ø		after complete shrinking			specification	
	inch	mm	inside-Ø max. mm	thickness	cut length		
30182	3/64	1,2	0,6	0,41	300 m	Shrink-ratio:	2:1
30183	1/16	1,6	0,8	0,43	300 m	Temperature resistance:	-55° C bis +135° C
30184	3/32	2,4	1,2	0,51	150 m	Shrink temperature:	+90° C
30185	1/8	3,2	1,6	0,69	150 m	Self-extinguishing	
30186	3/16	4,8	2,4	0,84	60 m	Dielectric strength:	20 kV/mm
30187	1/4	6,4	3,2	0,90	60 m	Tensile strength:	10,3 MPa
30188	3/8	9,5	4,8	1,00	60 m	Breaking elasticity:	100 %
30189	1/2	12,7	6,4	1,20	60 m	Specification:	MIL und UL
30190	3/4	19,1	9,5	1,40	60 m	Standard colour:	yellow/green
30191	1	25,4	12,7	1,80	60 m		
30192	1 1/2	38,1	19,1	2,40	60 m		
30193	2	50,8	25,4	2,40	60 m		

Heat shrinkable tubing

Material: irradiated cross-linked polyolefin
colour: black

Construction and application

Flexible thin walled heat shrinkable tubing with high shrink-ratio (4:1) and less longitudinal change (max. 5 %).
Well suited for repair works, because only 5 dimensions are needed to cover a wide diameter range.
Delivery in cut length of 0,9/1,2 m.

Part-No.	Technical data						
	before shrinking inside-Ø		after complete shrinking			specification	
	inch	mm	inside-Ø max. mm	thickness	cut length		
13060	1	25,4	6,6	1,52	1,2 m	Shrink-ratio:	4:1
13061	1 1/2	38,1	9,5	1,52	1,2 m	Temperature resistance:	-55° C bis +135° C
13062	2	50,8	12,7	1,52	1,2 m	Shrink temperature:	+90° C
13063	3	76,2	19,1	1,52	0,9 m	Not self-extinguishing	
13064	4	101,6	25,4	1,52	0,9 m	Dielectric strength:	20 kV/mm
						Tensile strength:	10,3 MPa
						Breaking elasticity:	200 %
						Specification:	UL und MIL
						Standard colour:	black

Heat shrinkable tubing

Material: irradiated cross-linked polyolefin
with and without adhesive
colour: black

Construction and application

Flexible medium walled heat shrinkable tubing as desired with or without adhesive. Well suited for protecting and insulating of components inside of low voltage or outdoor applications. The adhesive melts when shrinking the tube, so that the components are protected against moisture.
Delivery in cut length of 1,2 m.
Type A: without glue inside, **Type B:** with glue inside

Part-No.		Technical data					
		before shrinking inside-Ø	after complete shrinking			specification	
type A	type B	mm	inside-Ø max. mm	thickness	cut length		
13066	**13068**	10,2	3,8	1,5	1,2 m	Shrink-ratio:	ca. 3:1
30122	**15821**	19,0	5,6	2,0	1,2 m	Temperature resistance:	-55° C bis +125° C
15803	**15823**	28,0	9,5	2,0	1,2 m	Shrink temperature:	+120° C
15804	**13069**	33,0	10,2	2,0	1,2 m	Not self-extinguishing	
30128	**15824**	38,1	12,7	2,3	1,2 m	Dielectric strength:	20 kV/mm
30129	**15825**	44,0	14,0	2,3	1,2 m	Tensile strength:	14 MPa
15806	**15826**	52,1	18,2	2,3	1,2 m	Breaking elasticity:	300 %
15808	**15828**	70,0	25,5	2,3	1,2 m	Specification:	-
15809	**15829**	90,0	30,0	2,5	1,2 m	Standard colour:	black

Dual wall heat shrinkable tubing with adhesive

Colour: black

Construction and application

Flexible dual wall heat shrinkable tubing. Material of the outer wall polyolefin and polyamide for the inner wall. The adhesive melts when shrinking the tube, so that components are protected against moisture. Delivery in cut length of 1,2 m.

Part-No.	Technical data					
	before shrinking inside-Ø mm	after complete shrinking		cut length	specification	
		inside-Ø max. mm	wall thickness mm			
30195	3	1,0	1,00	1,2 m	Shrink-ratio:	3:1
30196	4,5	1,5	1,00	1,2 m	Temperature resistance:	-55° C bis +110° C
30197	6	2,0	1,00	1,2 m	Shrink temperature:	+120° C
30198	9	3,0	1,40	1,2 m	Self-extinguishing	
30199	12	4,0	1,75	1,2 m	Dielectric strength:	20 kV/mm
30200	19	6,0	2,25	1,2 m	Tensile strength:	16 MPa
30201	24	8,0	2,50	1,2 m	Breaking elasticity:	450 %
					Specification:	UL und MIL
					Standard colour:	black

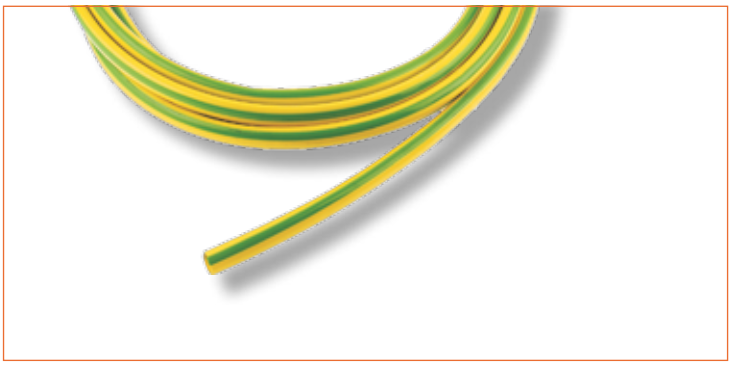
PVC insulating tubing

Colour: grey
Temperature resistance: -20° C up to +90° C

Part-No.	Technical data		
	inside-Ø	wall thickness ca. mm	quantity per spool
54140	5	0,6	200 m
54142	6	0,6	200 m
54144	7	0,7	200 m
54146	8	0,7	200 m
54148	9	0,7	200 m
54150	10	0,7	100 m
54154	12	0,8	100 m
54158	14	1,0	100 m
54162	16	1,0	100 m
54164	18	1,0	100 m
54166	22	1,2	50 m
54172	24	1,2	50 m
54176	26	1,2	50 m
54178	28	1,2	50 m
54182	30	1,0	25 m
54190	35	1,0	25 m
54192	40	1,0	25 m
54194	45	1,0	25 m
54195	50	1,0	25 m
54196	55	1,0	25 m
54198	60	1,0	25 m
54199	65	1,0	25 m
54200	70	1,0	25 m
54202	75	1,0	25 m
54204	80	1,0	25 m
54206	85	1,0	25 m
54208	90	1,0	25 m
54210	95	1,0	25 m
54211	100	1,0	25 m

PVC insulating tubing

Colour: yellow/green
Temperature resistance: -20° C up to -90° C



Part-No.	Technical data		
	inside-Ø	wall thickness ca. mm	quantity per spool
13095	2	0,4	50 m
13096	4	0,5	50 m
13097	6	0,6	25 m
13098	8	0,6	25 m
13099	10	0,7	25 m
13100	12	0,8	25 m
13101	14	0,8	25 m
13118	16	0,8	25 m
13119	20	0,8	25 m

Silicone insulating tubing

Colour: nature
Temperature resistance: -50° C up to +180° C

Part-No.	Technical data		
	inside-Ø	wall thickness ca. mm	quantity per spool
15890	2	0,4	100 m
15891	3	0,4	100 m
15892	4	0,5	100 m
15893	5	0,6	100 m
15894	6	0,6	100 m
15895	7	0,7	100 m
15896	8	0,7	50 m
15897	10	0,7	50 m
15898	12	0,8	50 m
13102	14	0,8	25 m
13103	18	1,0	25 m
13104	20	1,0	25 m
13105	22	1,0	25 m
13106	24	1,0	25 m
13107	26	1,0	25 m
13108	28	1,0	25 m
13109	30	1,0	25 m
13110	35	1,0	25 m
13111	40	1,0	25 m
13112	45	1,0	25 m
13113	50	1,0	25 m
13114	55	1,0	25 m
13115	60	1,0	25 m
13116	65	1,0	25 m
13117	70	1,0	25 m

High temperature copper mounting paste as well as protective, maintenance and cleaning sprays

Part-No.	Product name	Content	Description
Cleaners			
02776	Spray Contaclean	200 ml	Eliminates oxide and sulphide build up on metal contact surfaces of all types and builds a long lasting lubrication and corrosion protection.
11260		400 ml	
02778	Spray Wäsche	200 ml	Removes contamination and grease as well as oxide layers produced by Contaclean. Good wash and flow properties allow contamination to be simply rinsed away. A quick and sure way of removing grease and oil, wax and other contamination.
11262		400 ml	
02787	Spray Entfetter	200 ml	Guaranteed water and humidity displacement. Protective and lubricating sprays for ensuring the functionality of cable joins, adapters and is especially suitable for precious metals.
11264		400 ml	
Protectors and Lubricants			
02788	Spray Top-PIN	200 ml 400 ml	It offers good lubrication and protection against corrosion because of its synthetic properties. The film that spray leaves has very good gliding qualities and withstands heat up to +300° C.
02779	Spray Silikon	200 ml	High quality, thick insulating oil with a dielectric strength of 12 kV/mm. It will not dry out, is water repellent and is therefore suitable for use as a humidity buffer. It withstands temperatures from 50° C up to +200° C. The material is not poisonous and is a good allround lubricant.
11266		400 ml	
11268	Spray Sprühflon	200 ml	Fat free lubricating and parting compound based PTFE. It offers a low friction coefficient, is anti-adhesive with adhesive materials and can be used on all materials. It is stable when used with chemicals and is electrically insulated. Can be in temperatures from -100° C up to + 260° C.
11261	Spray Antikorr	400 ml	Penetrates dampness, displaces water and protects from corrosion even under the toughest environ-mental conditions. This material infiltrates the finest pores and cracks. The film left behind is practically invisible and normally must never be removed (painting is the exception).
Coatings			
11265	Spray Plastik	400 ml	High quality acrylic resin transparent lacquer for insulating and sealing. This covers surfaces with a glossy surface which resists acid, lye, alcohol, humidity and environmentally harmful elements. This material bonds to metal, plastic, wood, paper, glass, etc. It can be used under temperatures between -70° C and +120° C.
02774	Spray Isotemp	200 ml	Especially heat-, humidity and weather resistant silicone isolation lacquer. It is functional even in temperatures up to +500° C. This material is hard to burn (UL 94), has good bonding properties and is resilient. It links well at room temperature and is quick functioning.
Copper mounting-paste			
02770	copper paste	1 kg	Smooth, semi-symethetic mounting-paste with fine powder of pure copper. Not dropping, temperature range -30° C up to +1100° C. Suitable for connections and connection bolts which are exposed to and high temperatures and corrosion.