

SEALCON

M12 Power Circular Connectors

Our Service makes the difference!



Compact & Powerful!



Committed To Excellence!

M12 goes Power

A major milestone in an age of miniaturization we present the “NEW” M12 Power Connector!

This circular connector opens the door to entirely new applications and capabilities! Its high power transmission, compact design and the large temperature range are extraordinary features. The electro-mechanical features of this compact power connector are convincing!

- Power transmission to 16 A and 630 V
- Protection IP 67 and IP 69K
- Cable diameter up to 11 mm (0.43")
- Temperature range to 125 degree Celsius
- EMI (EMC) Shielding in standard version
- K, L, S, T Coding (4 & 5 positions)
- Robust metal housing
- Compact designs
- Optional stainless steel



...Same performance
....more compact!

Materials and Technical Data

Housing	Copper-Zinc alloy / Die Cast INOX AISI 316 L TPU (Molded versions)
Housing surface	Nickel plated Black chrome-plated
Inserts (for contacts)	PBT Fire protection class V-0
Contacts	Copper alloy
Contact surface at point of contact	Gold plated
Minimum mating cycles	> 100
Seals / O-Rings	FKM / NBR
Temperature range	-40°C – 125°C (-40°F – 257°F)
Type of contacts	Crimp, screw
Protection	IP 67 / IP 69K
Cable diameter range	3 – 11 mm (.08 – .43")

Electrical Data

Coding	S (Screw)	T (Screw)	K (Crimp)	L (Crimp)
Colors	black	dark grey	blue	grey
Number of positions	4 (3 + PE)	4	5 (4 + PE)	5 (4 + PE)
(mm²) AWG	(0,5 – 1,5) AWG 20 – 16	(0,5 – 1,5) AWG 20 – 16	(0,75 – 2,5) AWG 18 – 14	(0,75 – 2,5) AWG 18 – 14
Nominal current [A]	16	16	16	16
Nominal voltage [V~] degree of protection 3	630	63	630	63
Test voltage (Breakdown voltage) [V~]	6000	1500	6000	1500
Insulation resistance [MΩ]	> 10 ⁶	> 10 ⁶	> 10 ⁶	> 10 ⁶
Max. contact resistance [mΩ]	< 3	< 3	< 3	< 3

Technical Information

Nominal Current: Allowable current (Amp), that can be transmitted by each contact continuously and simultaneously.

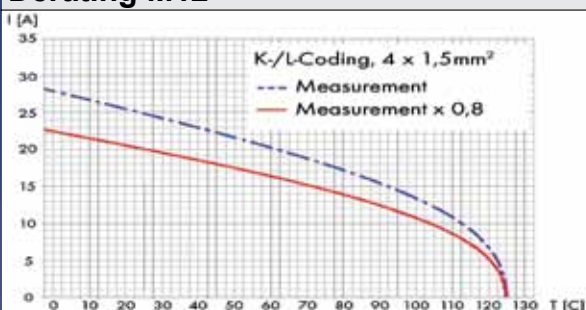
Nominal Voltage: Allowable voltage (Volt), that can be applied to each contact continuously and simultaneously.

Test Voltage: Voltage which, under certain conditions, a connector can be exposed to without breakdown.

Degree of Protection: Potential dirt accumulation of a disconnected connector in a certain environment.

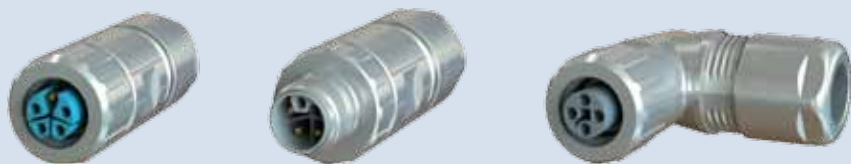
Don't connect or disconnect HUMMEL Connectors under load.

Derating M12



Straight & Elbow Connectors - Female/Male Threads

Page 6



Panel Mount Connectors - Female/Male Threads

Page 6



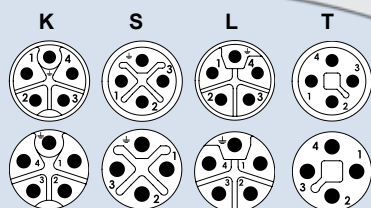
Molded Cordsets - Straight & Elbow - Female/Male Threads

Page 7



Inserts Configurations

Page 8



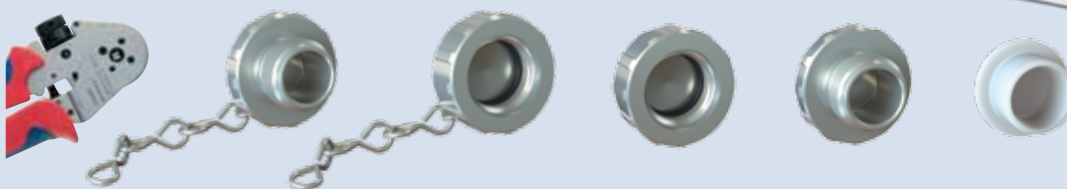
Contacts - Pins & Sockets

Page 8



Accessories

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Technical Data Page 3

Benefits Page 5

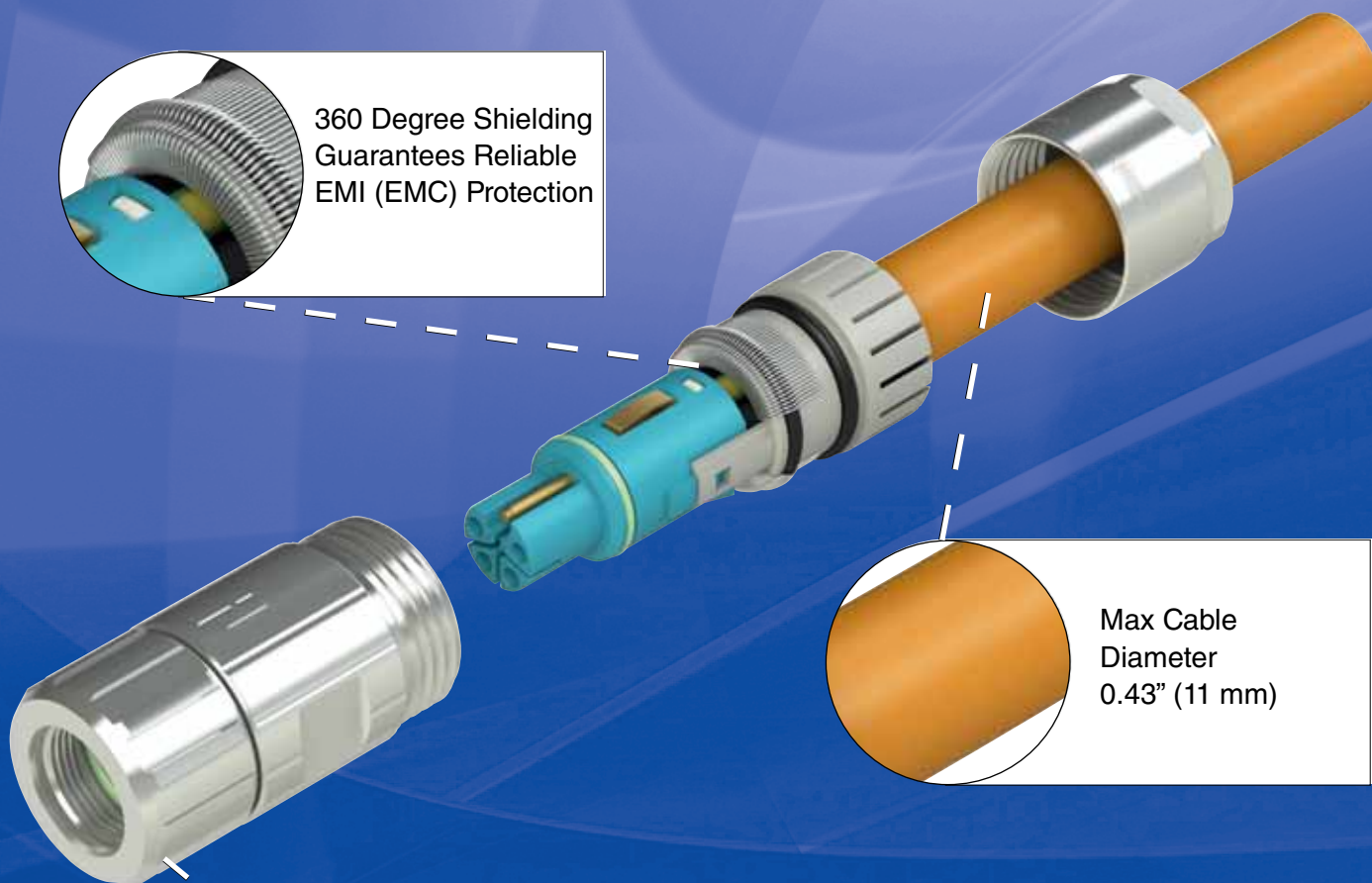
Assembly Instructions Page 9-10

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Circular Connectors - M12 Power Benefits at a Glance

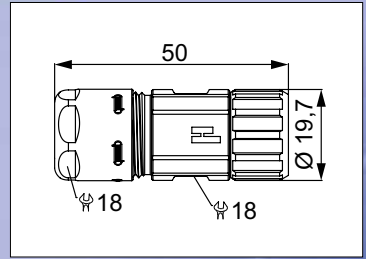
- Power Transmission to 16 A and 630 V
- Temperature rating to 257°F (125°C)
- Cable assembly and braid shielding in a single operation
- Field attachable and molded options
- Internationally proven quality - Conforms to Global Norm IEC 60112-2
- Unique protection against cable twisting



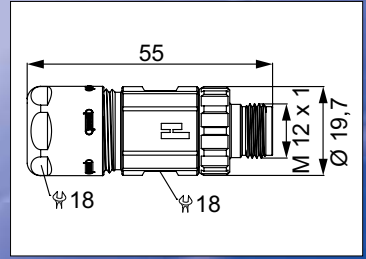
Circular Connectors - M12 Power Straight, Elbow & Panel Housing



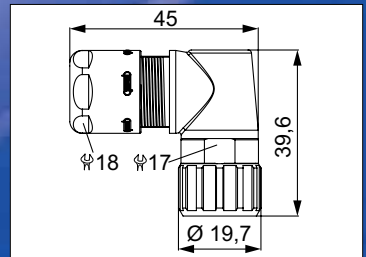
Straight Connector, Female Thread			
Size	Part Number	Cable Ø	Coding
M12	SA7127K10300000	.12 – .24" (3 – 6 mm)	K, L (for 5 contact positions)
M12	SA7127K10400000	.20 – .35" (5 – 9 mm)	K, L (for 5 contact positions)
M12	SA7127K10500000	.31 – .43" (8 – 11 mm)	K, L (for 5 contact positions)
M12	SA7127S10300000	.12 – .24" (3 – 6 mm)	S, T (for 4 contact positions)
M12	SA7127S10400000	.20 – .35" (5 – 9 mm)	S, T (for 4 contact positions)
M12	SA7127S10500000	.31 – .43" (8 – 11 mm)	S, T (for 4 contact positions)



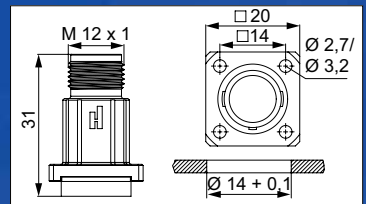
Straight Connector, Male Thread			
Size	Part Number	Cable Ø	Coding
M12	SA7127K20300000	.12 – .24" (3 – 6 mm)	K, L (for 5 contact positions)
M12	SA7127K20400000	.20 – .35" (5 – 9 mm)	K, L (for 5 contact positions)
M12	SA7127K20500000	.31 – .43" (8 – 11 mm)	K, L (for 5 contact positions)
M12	SA7127S20300000	.12 – .24" (3 – 6 mm)	S, T (for 4 contact positions)
M12	SA7127S20400000	.20 – .35" (5 – 9 mm)	S, T (for 4 contact positions)
M12	SA7127S20500000	.31 – .43" (8 – 11 mm)	S, T (for 4 contact positions)



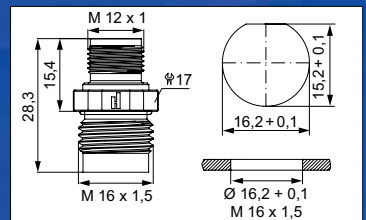
Right Angle Elbow Connector, Female Thread			
Size	Part Number	Cable Ø	Coding
M12	SA7127K30300000	.12 – .24" (3 – 6 mm)	K, L (for 5 contact positions)
M12	SA7127K30400000	.20 – .35" (5 – 9 mm)	K, L (for 5 contact positions)
M12	SA7127K30500000	.31 – .43" (8 – 11 mm)	K, L (for 5 contact positions)
M12	SA7127S30300000	.12 – .24" (3 – 6 mm)	S, T (for 4 contact positions)
M12	SA7127S30400000	.20 – .35" (5 – 9 mm)	S, T (for 4 contact positions)
M12	SA7127S30500000	.31 – .43" (8 – 11 mm)	S, T (for 4 contact positions)



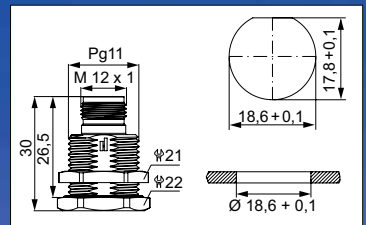
Panel Connector, w/ Flange		
Size	Part Number	Coding
M12	SA7127K40000000	K, L (for 5 contact positions)
M12	SA7127S40000000	S, T (for 4 contact positions)



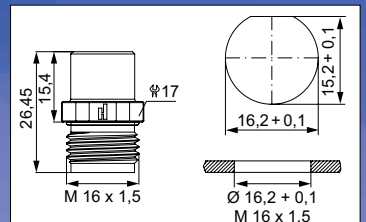
Panel Connector, Front Mount, Single Hole (M16)		
Size	Part Number	Coding
M12	SA7127K42000000	K, L (for 5 contact positions)
M12	SA7127S42000000	S, T (for 4 contact positions)



Panel Connector, Rear Mount, Single Hole (PG 11)		
Size	Part Number	Coding
M12	SA7127K50000000	K, L (for 5 contact positions)
M12	SA7127S50000000	S, T (for 4 contact positions)



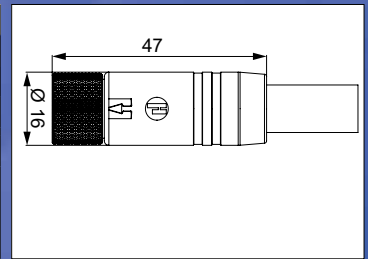
Panel Connector, Front Mount, Single Hole, Female Thread		
Size	Part Number	Coding
M12	SA7127K44000000	K, L (for 5 contact positions)
M12	SA7127S44000000	S, T (for 4 contact positions)



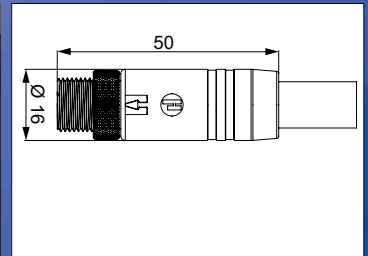
Circular Connectors - M12 Power Molded Cordsets / Accessories



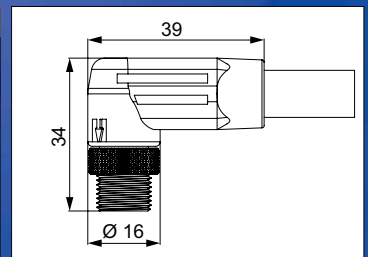
Straight Connector, Female Thread			
Size	Cable Construction	Cable Jacket Options	Coding
M12	4G1,5	PUR or PVC	K, L, S, T
M12	4G1,5	Shielded / Unshielded	S, T
M12	5G0,75 / 5G1,5 / 5G2,5	Shielded / Unshielded	K, L



Straight Connector, Male Thread			
Size	Cable Construction	Cable Jacket Options	Coding
M12	4G1,5	PUR or PVC	K, L, S, T
M12	4G1,5	Shielded / Unshielded	S, T
M12	5G0,75 / 5G1,5 / 5G2,5	Shielded / Unshielded	K, L



Right Angle Elbow Connector, Female Thread			
Size	Cable Construction	Cable Jacket Options	Coding
M12	4G1,5	PUR or PVC	K, L, S, T
M12	4G1,5	Shielded / Unshielded	S, T
M12	5G0,75 / 5G1,5 / 5G2,5	Shielded / Unshielded	K, L



Plastic Protective Cap	
Part Number	Type
SA7127000980161	for connectors with Male Threads
SA7127000980162	for connectors with Female Threads



Crimp Tool for Manual Crimping	
Part Number	Type
S7000900904	for machined crimp contacts Signal connections M12, M16, and M23



Brass Protective Cap	
Part Number	Type
SA7127010900163	for connectors with Male Threads



Brass Protective Cap	
Part Number	Type
SA7127000900162	for connectors with Female Threads



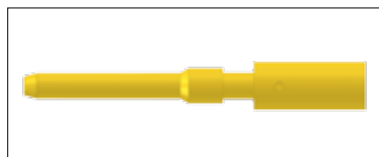
Brass Protective Cap with Chain	
Part Number	Type
SA7127010950704	for connectors with Male Threads Length 70 mm



Brass Protective Cap with Chain	
Part Number	Type
SA7127010950705	for connectors with Female Threads Length 70 mm

Crimp Tool Settings for Crimp Tool (Crimp Tool S7000900904)					
Part Number	Crimp Contact	Cross Section (mm ²)	AWG	Crimp Tool Setting	Locator Setting
SA7127010901531	Crimp pin 1.5 mm	1.5	16	1.35	P1
SA7127010901541	Crimp pin 1.5 mm	2.5	14	1.50	P1
SA7127010901532	Crimp socket 1.5 mm	1.5	16	1.35	P2
SA7127010901542	Crimp socket 1.5 mm	2.5	14	1.50	P2
SA7127010911531	Crimp pin 1.5 mm PE	1.5	16	1.35	P3
SA7127010911541	Crimp pin 1.5 mm PE	2.5	14	1.50	P3
SA7127010911532	Crimp socket 1.5 mm PE	1.5	16	1.35	P4
SA7127010911542	Crimp socket 1.5 mm PE	2.5	14	1.50	P4

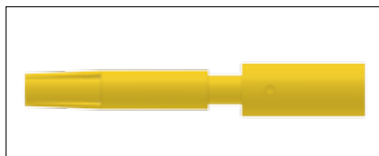
Contacts



Contacts - Pin

* Upon Request

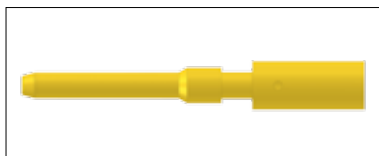
Part Number	Crimp Range	AWG	Type
SA7127010901521*	0.75 mm ²	18	Crimp pin 1.5 mm, machined
SA7127010901531	1.50 mm ²	16	Crimp pin 1.5 mm, machined
SA7127010901541	2.50 mm ²	14	Crimp pin 1.5 mm, machined



Contacts - Socket

* Upon Request

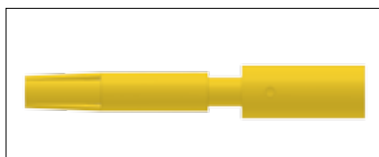
Part Number	Crimp Range	AWG	Type
SA7127010901522*	0.75 mm ²	18	Crimp socket 1.5 mm, machined
SA7127010901532	1.50 mm ²	16	Crimp socket 1.5 mm, machined
SA7127010901542	2.50 mm ²	14	Crimp socket 1.5 mm, machined



Contacts - Pin

* Upon Request

Part Number	Crimp Range	AWG	Type
SA7127010911521*	0.75 mm ²	18	Crimp pin 1.5 mm, machined PE
SA7127010911531	1.50 mm ²	16	Crimp pin 1.5 mm, machined PE
SA7127010911541	2.50 mm ²	14	Crimp pin 1.5 mm, machined PE

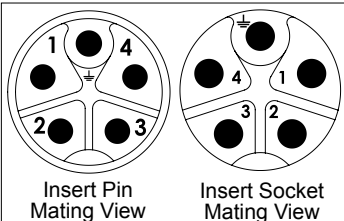


Contacts - Socket

Part Number	Crimp Range	AWG	Type
SA7127010911522*	0.75 mm ²	18	Crimp socket 1.5 mm, machined PE
SA7127010911532	1.50 mm ²	16	Crimp socket 1.5 mm, machined PE
SA7127010911542	2.50 mm ²	14	Crimp socket 1.5 mm, machined PE

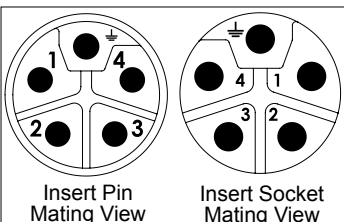
* Upon Request

Inserts



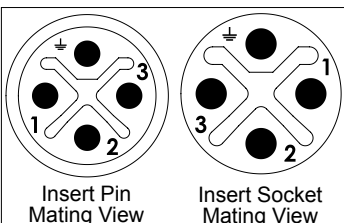
Inserts K (Crimp)

Part Number	Type
SA7127K03941101	Crimp insert, pins, 4 + PE without contacts Required contacts: 4 x pins, 1 x socket PE
SA7127K03941102	Crimp insert, sockets, 4 + PE without contacts Required contacts: 4 x sockets, 1 x pin PE



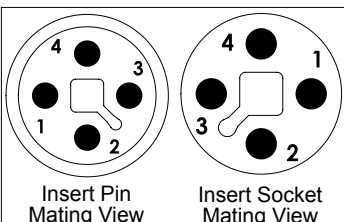
Inserts L (Crimp)

Part Number	Type
SA7127L03941101	Crimp insert, pins, 4 + PE without contacts Required contacts: 4 x pins, 1 x socket PE
SA7127L03941102	Crimp insert, sockets, 4 + PE without contacts Required contacts: 4 x sockets, 1 x pin PE



Inserts S (Screw)

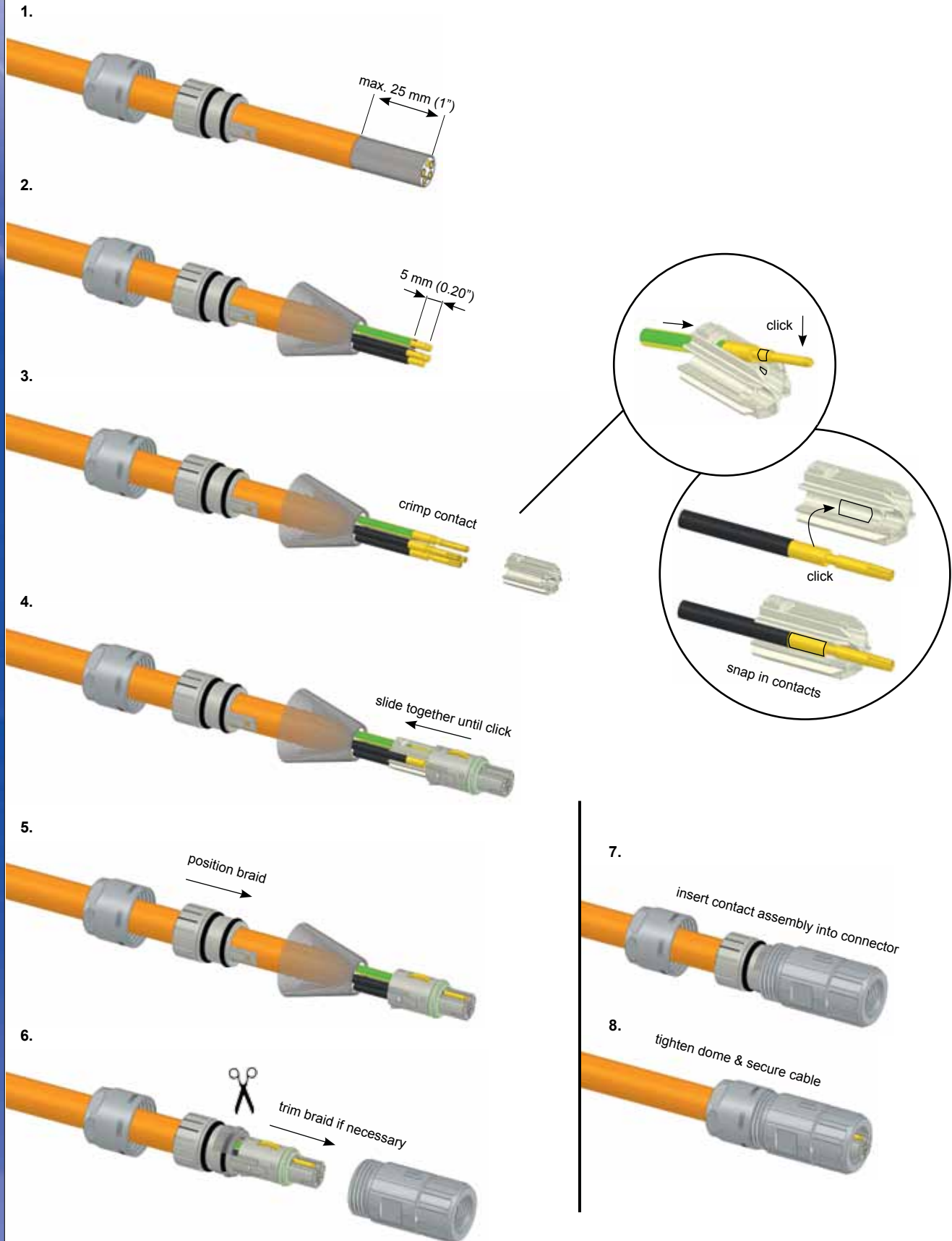
Part Number	Type
SA7127S05931101	Crimp pin 3 + PE contacts with screw termination
SA7127S05931102	Crimp socket 3 + PE contacts with screw termination



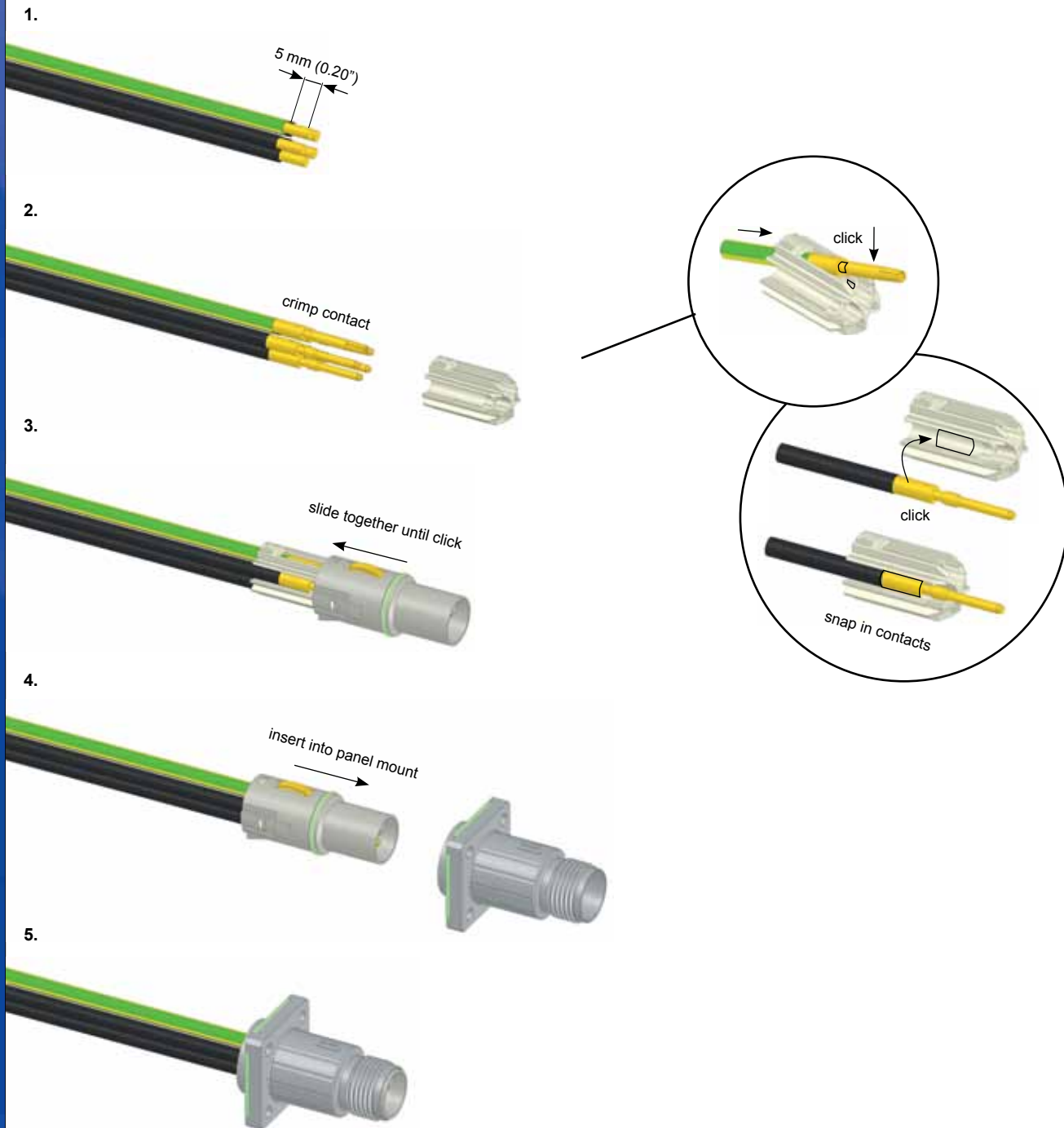
Inserts T (Screw)

Part Number	Type
SA7127T05904101	Crimp pin 4-pole contacts with screw termination
SA7127T05904102	Crimp socket 4-pole contacts with screw termination

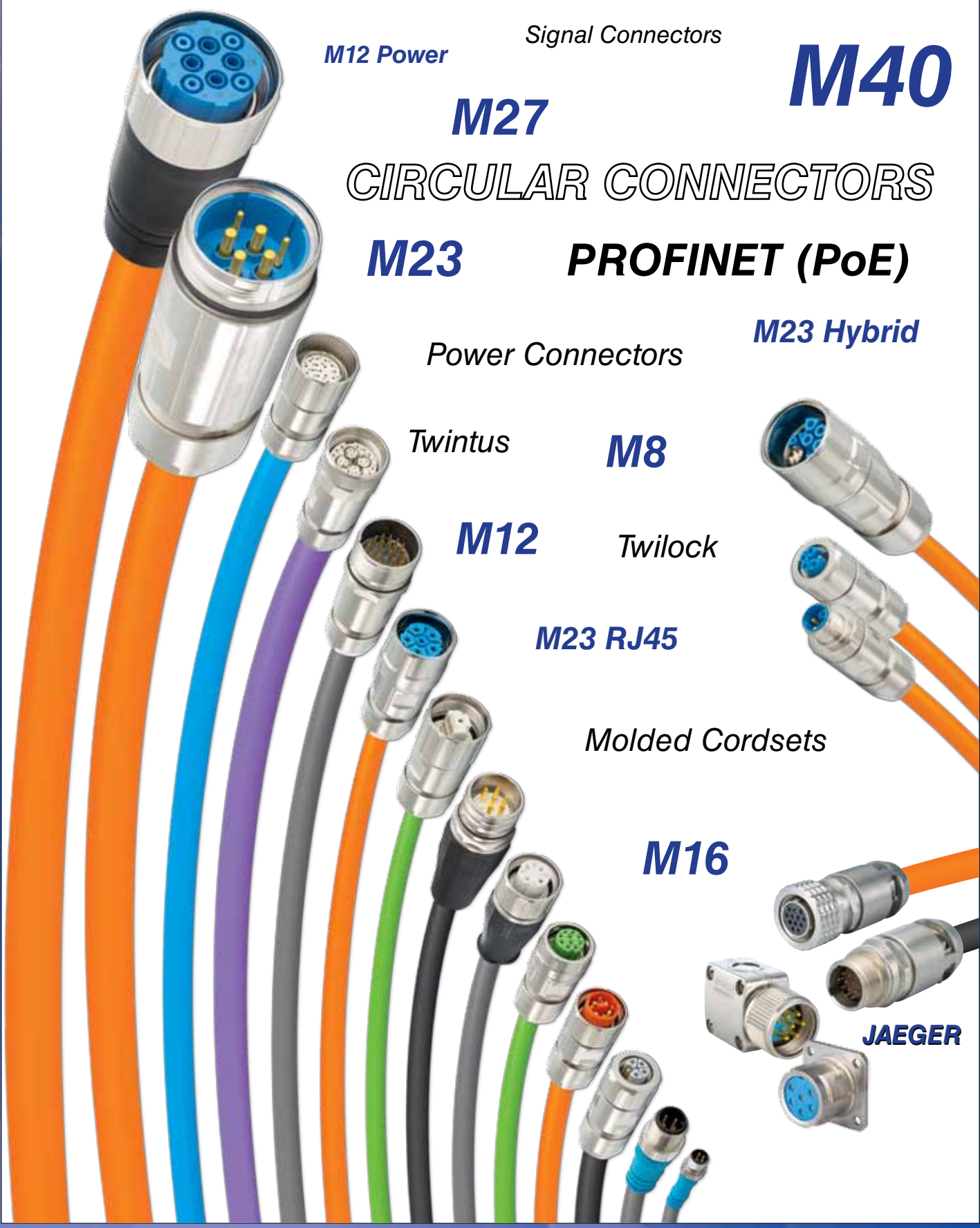
Straight Connector Female / Male Thread, K- / L-Coding (Crimp)



Panel Connector, K- / L-Coding (Crimp)



Circular Connector - Overview



M12 Power

Signal Connectors

M40

M27

CIRCULAR CONNECTORS

M23

PROFINET (PoE)

Power Connectors

M23 Hybrid

Twintus

M8

M12

Twilock

M23 RJ45

Molded Cordsets

M16

JAEGER



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