

M 23 FAST ETHERNET PoE

This connector is able to transfer data up to Gigabit range. The M 23 Fast Ethernet PoE is robust, safe and compact. It is designed for use in rough industrial environments.

- // Hybrid connectors for single cable solution
- // Four Twinax-Inserts for data transfer
- // Five separate shieldings prevent cross talk
- // Highest density within M 23 housing



Product overview

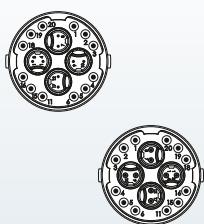
Housings

► 66



Inserts

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Accessories

► 69



Mechanical Data	Materials and Technical Data
Housing	Copper-Zinc alloy Die Cast
Housing surface	Nickel plated
Inserts (for contacts)	PBT UL-94 V0, PA6
Contacts	Brass Alloy
Contact surface at point of contact	Nickel and gold plated (0,25 µm)
Minimum mating cycles	> 1000
Seals / O-Rings	Perbunan NBR (Standard)
Temperature range	-40 °C – 125 °C (-40 °F – 257 °F)
Type of contacts	Crimp, dip-solder (PCB)
Protection	IP 67 per EN 60 529 (connected), NEMA 4x
Cable diameter range	11 – 17 mm (.43" – .67")

Electrical Data		
Number of positions	20 (4 x 2 + 12)	
Number of contacts	4 x 2	12
Contact-Ø [mm]	0,6	1
AWG [mm ²]	0,08 – 0,34	0,14 – 1 / 1,5
Nominal current ¹⁾ [A]	2	8*
Nominal voltage ²⁾ [V~] degree of protection 3 ⁴⁾	60	160
Test voltage (Breakdown voltage) ³⁾ [V~]	500	1500
Insulation resistance [Ω]	> 10 ⁶	> 10 ⁶
Max. contact resistance [mΩ]	3	3
Impedance [Ω] (at 100MHz)	100	–

¹⁾, ²⁾, ³⁾, ⁴⁾ See Technical Information page 18 // * for single contacts even 10 A possible

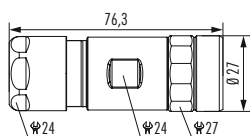
Housings

Straight Female Connector

Cable-Ø

Part Number

11-17 mm7.108.600.000

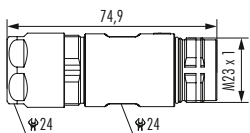


Straight Connector, Male Thread

Cable-Ø

Part Number

11-17 mm7.208.600.000

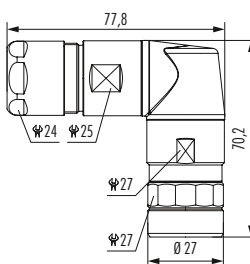


Right Angle Connector, Female Thread, rotatable

Cable-Ø

Part Number

11-17 mm7.308.600.000

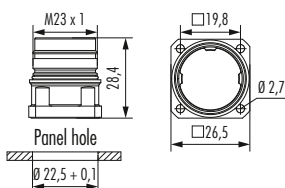


Panel Connector, Male Thread, Front Mounting

Type

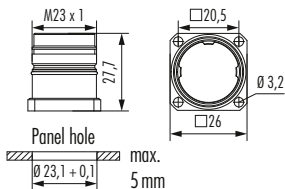
Part Number

4 x holes Ø 2,7 mm (.11")7.408.000.000
Flange 26 x 26 mm



Housing without inserts and contacts

Panel Connector, Rear Mounting

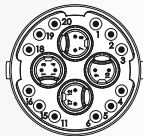
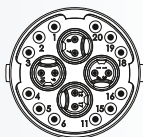


Type	Part Number
4 x holes $\varnothing 3,2$ mm (.13") Flange 26 x 26 mm	7.468.000.000

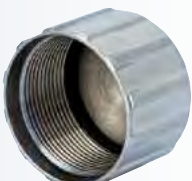




Inserts / Pinouts / Contacts

Inserts (4 x 2) + 12		Type	Part Number	Part Number
	Insert pin mating view		Pins	Sockets
		Insert without contacts	7.003.920.101	7.003.920.102
		Insert with dip solder contacts.....	7.001.920.107	7.001.920.108
	Insert socket mating view		Required Contacts	
		8 x 0,6	7.010.980.641	7.010.980.602
		12 x 1	7.010.901.045	7.010.901.002
			7.010.901.049	7.010.901.012
				7.010.901.022
				7.010.901.046

Contacts	Type	Crimp Range	Part Number
	Crimp pin 0,6 mm, machined	0,08 – 0,34 mm ²	7.010.980.641
	Crimp socket 0,6 mm, machined.....	0,08 – 0,34 mm ²	7.010.980.602
	Crimp pin 1 mm, machined	0,14 – 1 mm ²	7.010.901.049
		0,75 – 1,5 mm ²	7.010.901.045
	Crimp socket 1 mm, machined.....	0,08 – 0,56 mm ²	7.010.901.012
		0,34 – 1 mm ²	7.010.901.002
		0,75 – 1,5 mm ²	7.010.901.022
		1 – 1,75 mm ²	7.010.901.046

Accessories	Type	Part Number
	Plastic protective cap for connectors	
	with male thread7.000.900.101	
	with female thread7.000.900.102	
	Brass protective cap for connectors with female thread7.010.900.183	
	Brass protective cap with chain for connectors with female thread	
	Length 70 mm7.010.950.783	
	Length 100 mm7.010.951.083	
	Brass protective cap for connectors with male thread7.010.908.102	
	Conduit adaptor	
	Poleon DN 127.010.900.205	
	Poleon DN 147.010.900.207	
	Poleon DN 177.010.900.209	
	Adaptor flange for Straight Connectors7.010.900.128	
	Adaptor flange for moulded connectors7.010.900.139	
	Multi-Bus adapter wired through I:I (excentric)	
	Multi-Bus I, Female Thread, Sockets 17pole	
	Multi-Bus II, Male Thread, Pins7.010.900.143	
	Multi-Bus I, Female Thread, Pins, 17pole	
	Multi-Bus II, Male Thread, Sockets7.010.900.144	



Accessories

Accessories	Type	Part Number
	Control Cabinet adapter for Multibus II – AIDA	
	Rear Mounting, central locking	7.010.900.145
	I/O adapter module to scan or feed signals	
	Rear Mounting, central locking	7.010.900.146
	Manual Crimp tool for EMC sleeves M 23 Fast Ethernet	7.000.900.906
	Manual Crimp tool for turned contacts M 23 Fast Ethernet	7.000.900.907
		►108



Crimp Tool Settings for HUMMEL Crimp Contacts (Crimp Tool 7.000.900.907)

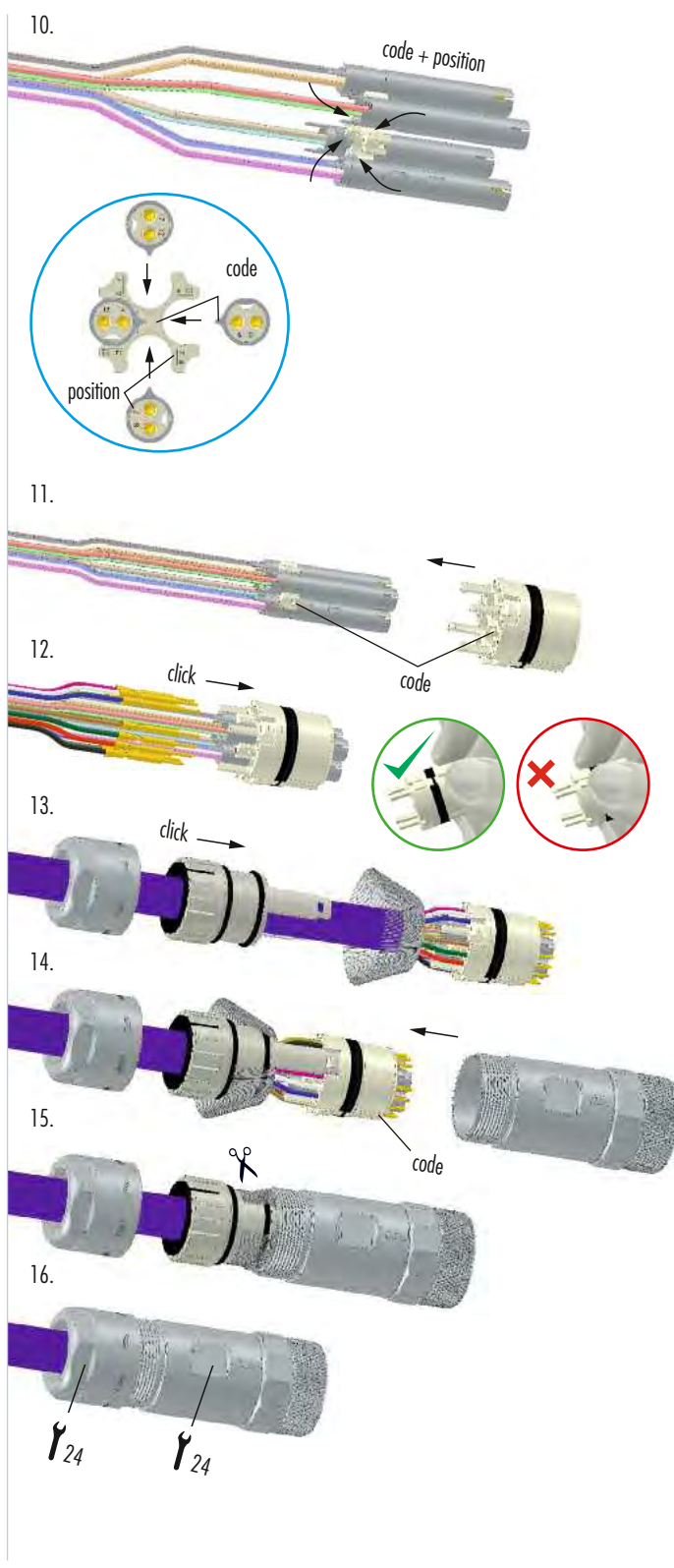
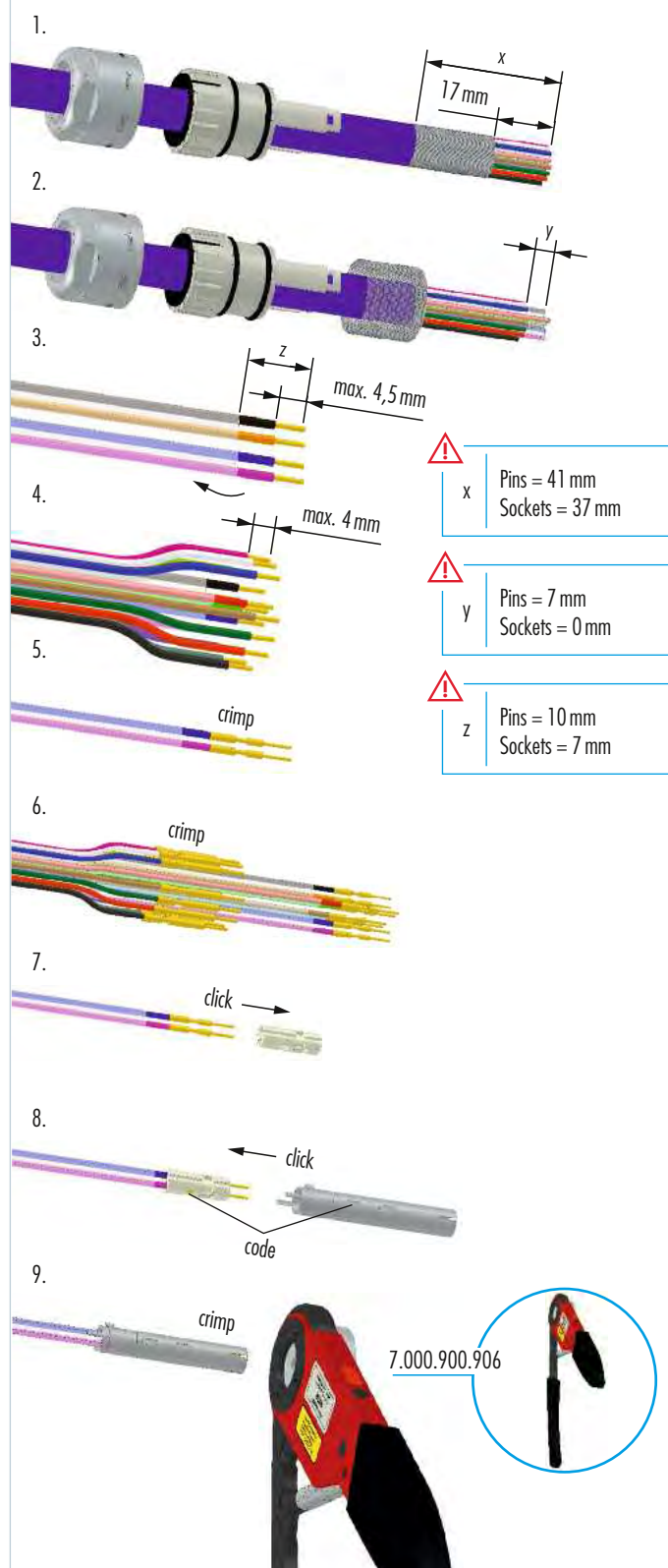
Part Number	Crimp Contact	Cross Section (mm ²)	AWG	Crimp Tool Setting mm	Locator Setting
7.010.980.641	Crimp pin 0,6 mm (0,08 – 0,34 mm ²)	0,08	AWG 28	0,57	B 1
		0,14	AWG 26	0,60	
		0,25	AWG 24	0,64	
		0,34	AWG 22	0,73	
7.010.980.602	Crimp socket 0,6 mm (0,08 – 0,34 mm ²)	0,08	AWG 28	0,57	B 2
		0,14	AWG 26	0,60	
		0,25	AWG 24	0,64	
		0,34	AWG 22	0,73	
7.010.901.049	Crimp pin 1 mm (0,14 – 1,0 mm ²)	0,14	AWG 26	0,70	B 3
		0,25	AWG 24	0,76	
		0,34	AWG 22	0,82	
		0,56	AWG 20	0,90	
		0,75	AWG 18	1,00	
		1,00	AWG 17	1,10	
7.010.901.045	Crimp pin 1 mm (0,75 – 1,5 mm ²)	0,75	AWG 18	0,80	B 5
		1,00	AWG 17	0,85	
		1,50	AWG 16	0,95	
7.010.901.012	Crimp socket 1 mm (0,08 – 0,56 mm ²)	0,08	AWG 28	0,75	B 4
		0,14	AWG 26	0,78	
		0,25	AWG 24	0,82	
		0,34	AWG 22	0,88	
		0,56	AWG 20	0,90	
7.010.901.002	Crimp socket 1 mm (0,34 – 1,0 mm ²)	0,34	AWG 22	0,77	B 4
		0,56	AWG 20	0,82	
		0,75	AWG 18	0,88	
		1,00	AWG 17	0,95	
7.010.901.022	Crimp socket 1 mm (0,75 – 1,5 mm ²)	0,75	AWG 18	0,80	B 4
		1,00	AWG 17	0,86	
		1,50	AWG 16	0,95	
7.010.901.046	Crimp socket 1 mm (1 – 1,75 mm ²)	1,00	AWG 17	0,85	B 6
		1,50	AWG 16	0,95	
		1,75	AWG 15	1,00	

These values are only guidelines and actual conductor cross sections depend on manufacturer tolerances.

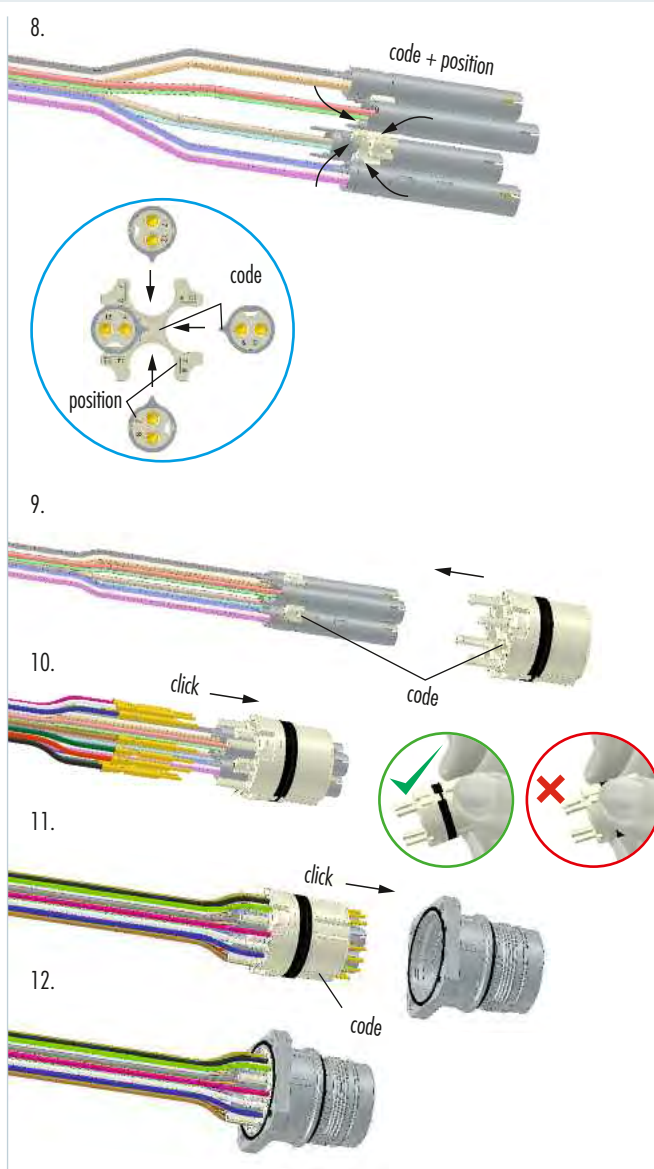
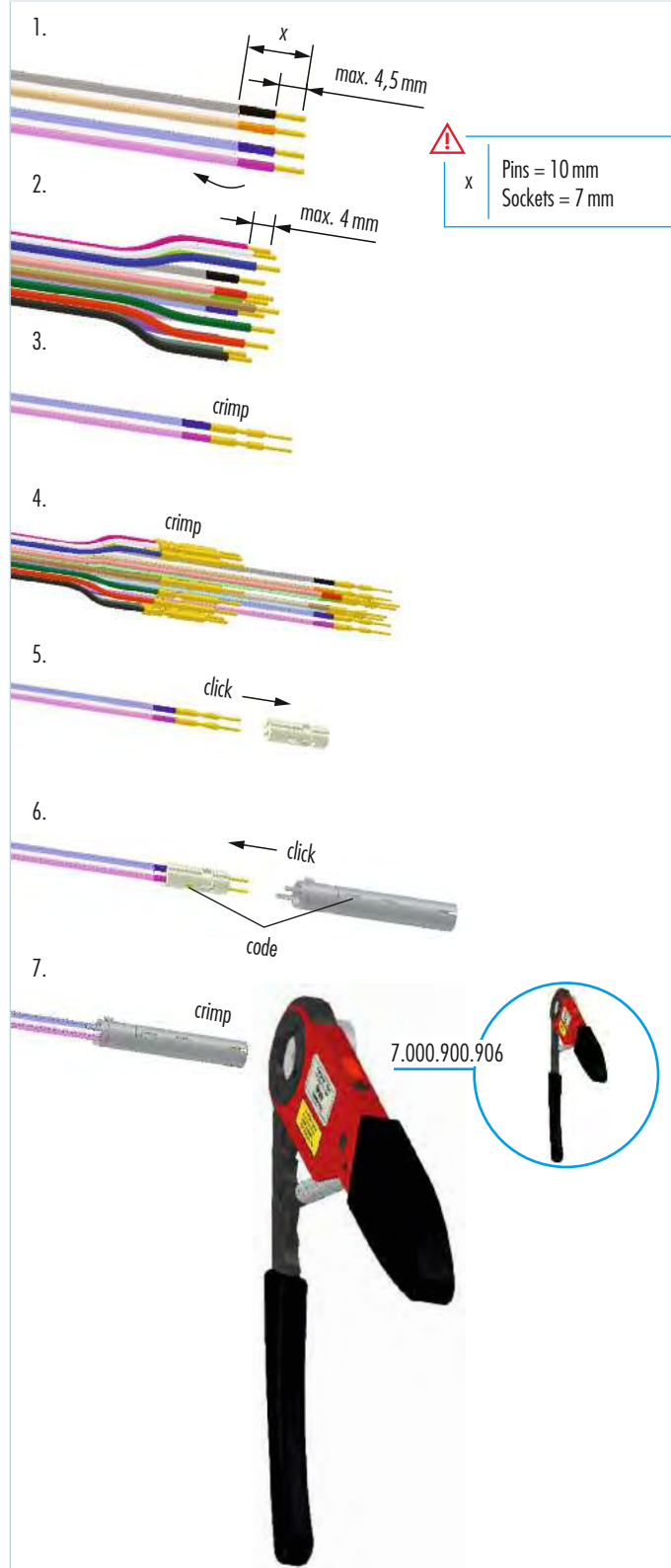


Assembly Instructions

Straight Connector Male / Female Thread



Panel Connector





Assembly Instructions

Right Angle Connector

