

M 23 POWER, M 23 HYBRID

The classical M 23 Power connector is able to cover a large range of applications. This connector meets almost every challenge, because it can be used with 6-, 8- or 9-pole inserts or hybrid and the power data goes up to 28 A / 600 V.

- // High power transmission
- // Screw lock or TWILOCK / TWILOCK-S quick release fastener
- // Numerous housing types



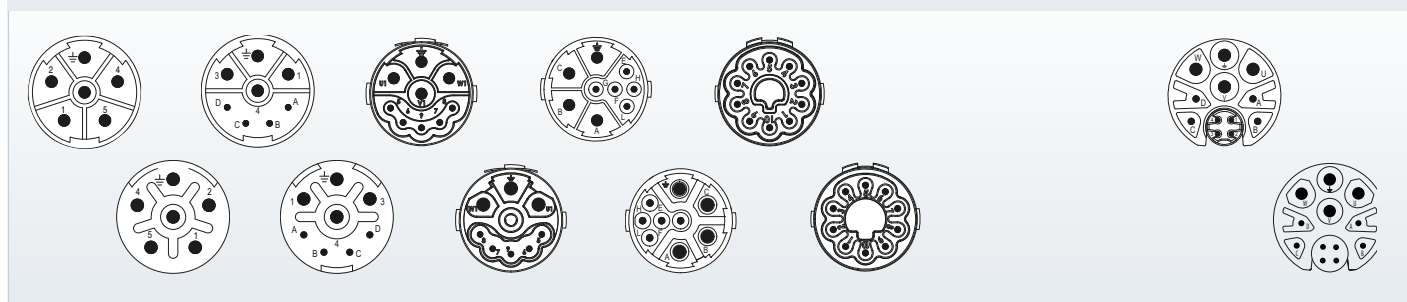
Housings

► 38



Inserts

► 43



Accessories

► 45



Mechanical Data	Materials and Technical Data
Housing	Copper-Zinc alloy Die Cast
Housing surface	Nickel plated blue passivated other surface upon request
Inserts (for contacts)	Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel and gold plated (0,25 µm)
Minimum mating cycles	> 1000*
Seals / O-Rings	Buna-N standard optional Viton® (FKM / FPM) (Viton is a registered trademark of DuPont)
Temperature range	-40 °C – 125 °C (-40 °F – 257 °F)
Type of contacts	Crimp
Protection	IP 67 / IP 69K per EN 60 529 (connected), NEMA 4x
Cable diameter range	7 – 17 mm (.28 – .67")

* HUMMEL to HUMMEL connector

Electrical Data						
Number of positions	5 + PE	4 + 3 + PE		5 + 3 + PE		10
Number of contacts	6	4	4	5	4	10
Contact-Ø [mm]	2	1	2	1	2	1
Nominal current ¹⁾ [A]	28	8	28	10	28	10
Nominal voltage ²⁾ [V~] degree of pollution 3 ³⁾	600	300	600	250	600	160
Test voltage (Breakdown voltage) ⁴⁾ [V~]	4000	2500	4000	2500	4000	2500
Insulation resistance [Ω]	> 10 ¹³	> 10 ¹³		> 10 ¹³		> 10 ¹³
Max. contact resistance [mΩ]	3	3		3		3
Number of positions	4 + 4 + 3 + PE (Hybrid)					
	Ethernet	Signal		Power		
Number of contacts	4	4		4		
Contact-Ø [mm]	0,26	1		0,26		
AWG [mm ²]	0,075–0,44	0,14 – 1		0,075–0,44		
Nominal current ¹⁾ [A]	28	8		28		
Nominal voltage ²⁾ [V~] degree of pollution 3 ³⁾	600	300		600		
Test voltage (Breakdown voltage) ⁴⁾ [V~]	4000	2500		4000		
Insulation resistance [Ω]	> 10 ¹³	> 10 ¹⁰		> 10 ¹³		
Max. contact resistance [mΩ]	< 3	< 3		< 3		

¹⁾, ²⁾, ³⁾, ⁴⁾ See Technical Information page 14

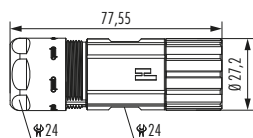
Housings

Straight Connector, Female Thread

Cable-Ø

Part Number

7 – 12 mm (.27 – .47")	7.550.500.000
11 – 17 mm (.43 – .67")	7.550.600.000



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▶ 45

Straight Connector, Female Thread TWILOCK / TWILOCK-S*

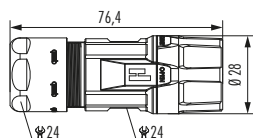
Cable-Ø

Part Number

7 – 12 mm (.24 – .47")	7.556.500.000
11 – 17 mm (.43 – .67")	7.556.600.000

* intermateable with Speedtec

7 – 12 mm (.24 – .47")	7.556.500.00S
11 – 17 mm (.43 – .67")	7.556.600.00S



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Straight Connector, Male Thread TWILOCK / TWILOCK-S*

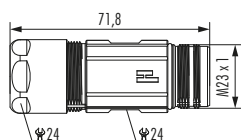
Cable-Ø

Part Number

7 – 12 mm (.27 – .47")	7.560.500.000
11 – 17 mm (.43 – .67")	7.560.600.000

* intermateable with Speedtec

7 – 12 mm (.27 – .47")	7.566.500.000S
11 – 17 mm (.43 – .67")	7.566.600.000S



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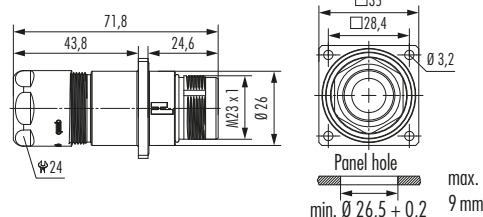
▶ 45

Panel Connector, Male Thread, with Strain Relief

Cable-Ø

Part Number

4 holes Ø 3,2 mm (.13"), front or rear mounting	
7 – 12 mm (.27 – .47")	7.683.500.000
11 – 17 mm (.43 – .67")	7.683.600.000



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Housing without inserts and contacts

Panel Connector, Female Thread, with Strain Relief

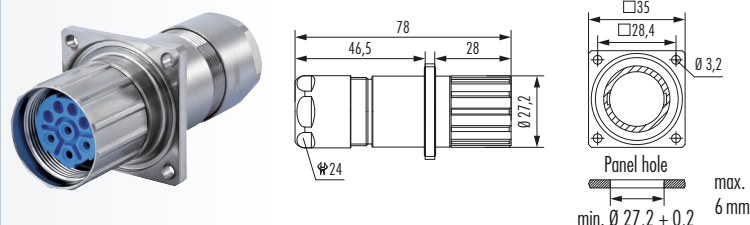
Cable-Ø

Part Number

4 holes Ø 3,2 mm (.13"), front or rear mounting

7 – 12 mm (.27 – .47")7.681.500.000

11 – 17 mm (.43 – .67")7.681.600.000



Panel Connector, Male Thread, with Strain Relief TWILOCK / TWILOCK-S*

Cable-Ø

Part Number

Single hole mounted, rear mounting, thread M 25 x 1,5

7 – 12 mm (.27 – .47")7.653.500.000

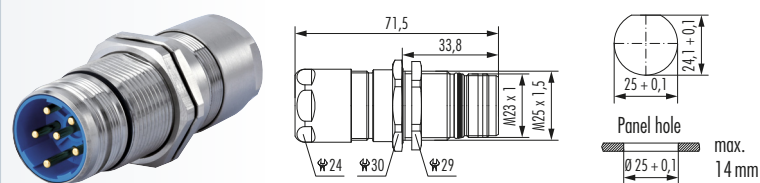
11 – 17 mm (.43 – .67")7.653.600.000

* intermateable with Speedtec

7 – 12 mm (.27 – .47")7.653.500.00S

11 – 17 mm (.43 – .67")7.653.600.00S

Including jam nut M 25 x 1,5



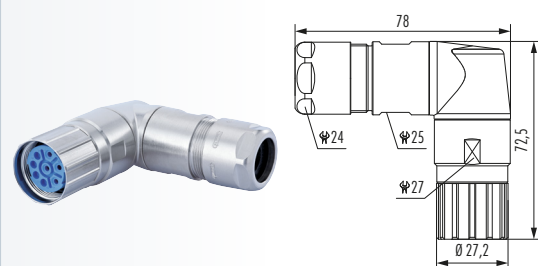
Right Angle Connector, Female Thread, rotatable

Cable-Ø

Part Number

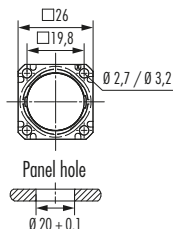
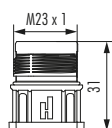
7 – 12 mm (.27 – .47")7.576.500.000

11 – 17 mm (.43 – .67")7.576.600.000



Housings

Panel Connectors, Male Thread, Front Mounting TWILOCK/TWILOCK-S*



Type	Part Number
4 holes Ø 3,2 mm (.13")	7.601.000.000
4 holes Ø 2,7 mm (.11")	7.605.000.000
* intermateable with Speedtec	
4 x holes 3,2 mm, Flange 25x25	7.601.000.005
4 x holes 3,2 mm, Flange 28x28	7.601.100.005



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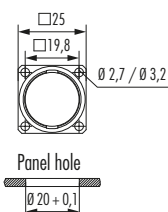
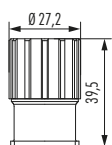


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Panel Connector with knurled Nut, Front Mounting



Type	Part Number
4 holes Ø 3,2 mm (.13")	7.641.000.000
4 holes Ø 2,7 mm (.11")	7.645.000.000



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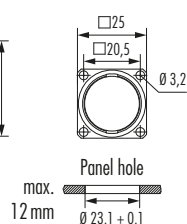
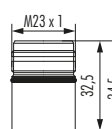


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Panel Connector, Male Thread, Rear Mounting



Type	Part Number
With anti-vibration O-Ring	
4 holes Ø 3,2 mm (.13")	7.661.000.000 ¹



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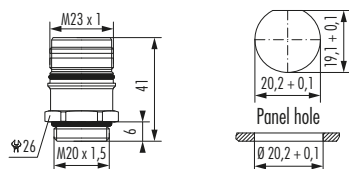


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Panel Connector, Male Thread, Single Hole Mounted



Type

Part Number

Front mounting

Thread M 20 x 1,57.621.000.000 ¹

Option: jam nut M 20 x 1,5



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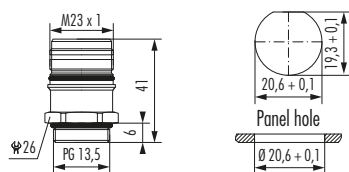


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Panel Connector, Male Thread, Single Hole Mounted



Type

Part Number

Front mounting

Thread PG 13,57.623.000.000 ¹

Option: jam nut PG 13,5



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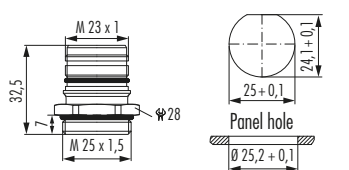
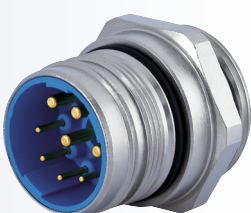


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Panel Connector, Male Thread, Single Hole Mounted



Type

Part Number

Front mounting

Thread M 25 x 1,57.626.000.000

Option: jam nut M 25 x 1,5



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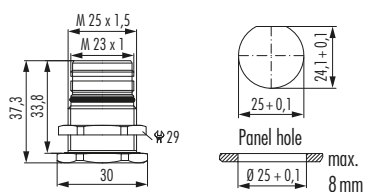


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Panel Connector, Male Thread, Single Hole Mounted



Type

Part Number

Rear mounting

Thread M 25 x 1,57.651.000.000

Including jam nut M 25 x 1,5



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Housing without inserts and contacts

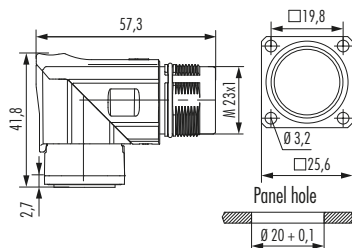
¹ No compatibility with TWILOCK, not for inserts 7.084.944.xxx / 7.084.909.xxx

Housings

Right Angle Panel Connector, Male Thread, rotatable TWILOCK/TWILOCK-S*

Type

Part Number



330° rotatable, single hole mounted

4 x holes 3,2 mm (.13")7.639.000.000¹

Flange 25 x 25 mm, blue passivated

4 x holes 3,2 mm (.13")7.639.000.010¹

Flange 25 x 25 mm, nickel plated

* intermateable with Speedtec

4 x holes 3,2 mm (.13")7.639.000.00S¹

Flange 25 x 25 mm, blue passivated



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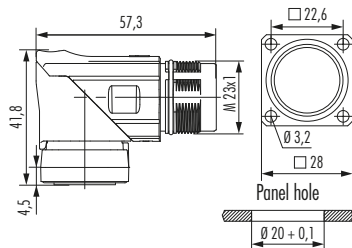


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Right Angle Panel Connector, Male Thread, rotatable TWILOCK/TWILOCK-S*

Type

Part Number



330° rotatable, single hole mounted

4 x holes 3,2 mm (.13")7.639.100.000¹

Flange 28 x 28 mm, blue passivated

4 x holes 3,2 mm (.13")7.639.100.010¹

Flange 28 x 28 mm, nickel plated

* intermateable with Speedtec

4 x holes 3,2 mm (.13")7.639.100.00S¹

Flange 28 x 28 mm, blue passivated



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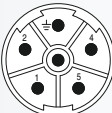
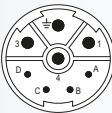
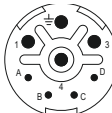
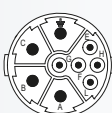
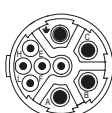
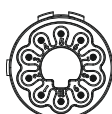


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Contact Arrangement, Mating View		Number of Poles	Required Contacts
	crimp pin		crimp socket
		6 x crimp pins 2 mm.....	7.084.951.121
		6 x crimp sockets 2 mm.....	7.084.951.122
	crimp pin		crimp socket
		4 x crimp pins 1 mm, 4 x crimp pins 2 mm.....	7.084.943.121
		4 x crimp sockets 1 mm, 4 x crimp sockets 2 mm.....	7.084.943.122
	crimp pin		crimp socket
		5 x crimp pins 1 mm, 4 x crimp pins 2 mm.....	7.084.953.101
		5 x crimp sockets 1 mm, 4 x crimp sockets 2 mm.....	7.084.953.102
	crimp pin		crimp socket
		5 x crimp pins 1 mm, 4 x crimp pins 2 mm.....	7.084.909.101
		5 x crimp sockets 1 mm, 4 x crimp sockets 2 mm.....	7.084.909.102
	crimp pin		crimp socket
		10 x crimp pins 1 mm.....	7.084.910.101
		10 x crimp sockets 1 mm.....	7.084.910.102
	crimp pin		crimp socket
		Hybrid	
		4 x crimp pins 1 mm, 4 x crimp pins 2 mm, 4 x crimp pins 0,6 mm.....	7.084.944.101
		4 x crimp sockets 1 mm, 4 x crimp sockets 2 mm, 4 x crimp sockets 0,6 mm.....	7.084.944.102

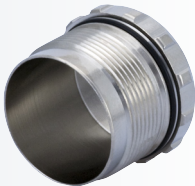


Contacts

Contacts	Type	Crimp Range	Part Number
	Crimp pin 0,6 mm, machined ¹	0,08 – 0,34 mm ² (AWG28 – AWG 22)	7.010.980.643
	Crimp socket 0,6 mm, machined ¹	0,08 – 0,34 mm ² (AWG28 – AWG 22)	7.010.980.602
	Crimp pin 1 mm, machined ²	0,14 – 1 mm ² (AWG 26 – 17)	7.010.941.001
	Crimp pin 1 mm, machined ²	0,75 – 1,5 mm ² (AWG 18 – 16)	7.010.941.021
	Crimp socket 1 mm, machined ²	0,14 – 1 mm ² (AWG 26 – 17)	7.010.941.002
	Crimp socket 1 mm, machined ²	0,75 – 1,5 mm ² (AWG 18 – 16)	7.010.941.022
	Crimp pin 2 mm, machined ²	0,75 – 2,5 mm ² (AWG 18 – 14)	7.010.942.001
	Crimp pin 2 mm, machined ²	2,5 – 4 mm ² (AWG 14 – 12)	7.010.942.011
	Crimp socket 2 mm, machined ²	0,75 – 2,5 mm ² (AWG 18 – 14)	7.010.942.002
	Crimp socket 2 mm, machined ²	2,5 – 4 mm ² (AWG 14 – 12)	7.010.942.012

¹ suitable crimp tool 7.000.900.909

² suitable crimp tool 7.000.900.901

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 thread	7.010.900.183 ¹
	Brass protective cap for connectors with male thread	7.010.900.102
	Brass protective cap with chain for connectors with female thread	
	Length 70 mm7.010.950.783 ¹	
	Length 100 mm7.010.951.083 ¹	
	Brass protective cap with chain for connectors with male thread	
	Length 70 mm7.010.950.702	
	Length 100 mm7.010.951.002	
	Crimp tool for manual crimping of machined crimp contacts for M 23 Power Connectors incl. Locator	7.000.900.901
	for M 23 Hybrid- /Power Connectors incl. Locator	7.000.900.909
	Locator for M 23 Power Connectors (separate)	7.010.900.118
	Locator for M 23 Hybrid- / Power Connectors (separate)	7.010.900.158
	Adaptor flange for Straight Connectors	7.010.900.128 ¹

¹ No compatibility with TWILOCK

Accessories

Accessories	Type	Part Number
	Adapter for Conduit Fittings	
	Poleon DN 12	7.010.900.205
	Poleon DN 14	7.010.900.207
	Poleon DN 17	7.010.900.209
	Positioner for Crimp Tool	
	DMC M22520	7.000.900.DMC
	Locator for Crimp Tool DMC M22520 with positioner	7.000.9DM.C06
	For HUMMEL Contact:	
	7.010.941.001, 7.010.942.001, 7.010.942.011	
	Locator for Crimp Tool DMC M22520 with positioner	7.000.9DM.C07
	Disassembly Tool	
	for crimp contacts	7.010.900.198
	Screw Tool, adjustable 0.5 – 1.7 Nm	7.010.900.190
	Tool Adapter for tightening or loosening	
	knurled nuts for M23	7.010.900.192
		
	Crimping machine	
	pneumatic crimping tool	on request