

The M23 Hybrid Circular Connector

The New Sealcon **M23 Hybrid** is the compact all-in-one solution for the transmission of power, Industrial Ethernet (IE) and signals. The new line of connectors combines the data transmission according to CAT.5e with a high power processing (up to 28 A and 630 V). Data transfer of up to 500 Mbits/s are no problem due to the separate shielding potentials.



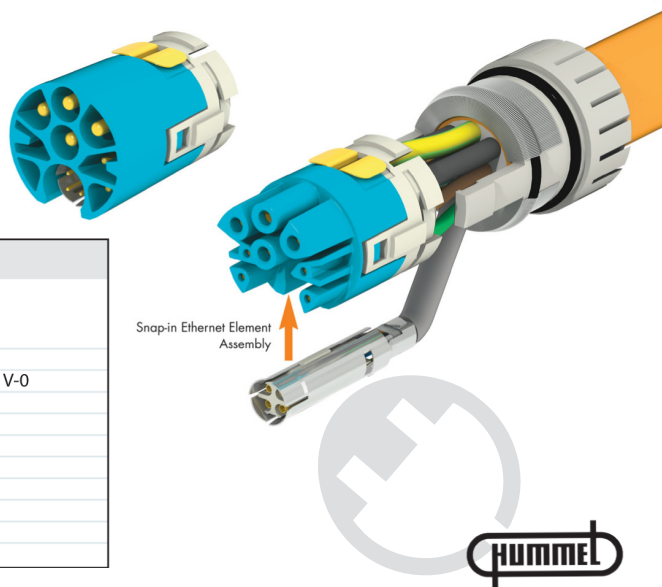
The New **M23 hybrid** connector is designed for the automation industry. There, manifold new applications will emerge, because the era of Industry 4.0 is marked by increased networking, intelligent controllers and communication between machine and product. Spacesaving, lower storage costs and lower maintenance costs lead to more and more single cable solutions with hybrid connectors. Where today two and sometimes even three connectors are installed there will be, in future, just one hybrid connector.

The **M23 Hybrid** is vibration resistant and guaranteed leak-proof at IP67 / IP69K. Besides the standard materials, die cast and brass, the new connectors are also available in stainless steel (AISI 316L).

Modularity is a major characteristic of the Sealcon product range. The new hybrid connector can also be seamlessly integrated and can be used in all housing types in the M23 power line. This line is available with the classic screw connection or with the TWILOCK quick connection technology. With one click the connection system locks from "open" to "close". As a result connections in inaccessible places becomes child's play. The outer threads are compatible to screw and TWILOCK connections. Thus a gradual system phase over is possible. In the TWILOCK-S variant the connector even fits on to the Speedtec connecting system.

Electrical Data

Number of Positions	4 + 4 + 3 + PE		
	Power	Signal	Ethernet
Number of contacts	4	4	4
Contacts Ø [mm]	2	1	0.6
AWG [mm²]	0.5 - 4	0.14 - 1	0.08 - 0.34
Nominal Current ¹⁾ [A]	28	8	2
Nominal Voltage ²⁾ [V~] degree of protection 3 ⁴⁾	630	300	60
Test voltage (Breakdown voltage) ³⁾ [V~]	4000	2500	500
Insulation Resistance [MΩ]	>10 ¹³	>10 ¹⁰	>10 ⁹
Max. contact resistance [mΩ]	< 3	< 3	< 3



Mechanical Data

Housing	Copper-Zinc alloy Die Cast
Housing Surface	Nickel Plated (other surfaces available upon request)
Inserts (for contacts)	Thermoplastic Polyamide PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel and gold plated (0,25µm Au)
Minimum mating cycles	> 1000
Seals / O-Rings	Perbunan NBR (Standard), (Viton) FPM
Temperature Range	-40°C - 125°C
Type of Contacts	Crimp, dip-solder, (PCB)
Protection	IP 67 / IP 69K per EN 60 529 (connected)
Cable diameter range	3 - 17 mm, multi holes seals on request

Materials and Technical Data

Copper-Zinc alloy	Die Cast
Nickel Plated (other surfaces available upon request)	Thermoplastic Polyamide PA 6 (Nylon 6/6), PBT Fire protection class V-0
Brass Alloy	Nickel and gold plated (0,25µm Au)
> 1000	Perbunan NBR (Standard), (Viton) FPM
-40°C - 125°C	Crimp, dip-solder, (PCB)
IP 67 / IP 69K per EN 60 529 (connected)	3 - 17 mm, multi holes seals on request