

The M23 Hybrid Circular Connector

The Sealcon **M23 Hybrid** is the compact all-in-one solution connector for the transmission of power, Industrial Ethernet (IE) and signal. It's part of a line of connectors that combines data transmission (Cat5e) with high-power potential (up to 28 A and 630 V). Separate internal shielding components within the connector easily allow for data transfer up to 500 Mbps.



The **M23 Hybrid** connector was designed for the ever-evolving and technology-driven automation industry. It was designed to accommodate those modern electrical process requirements driven by Industry 4.0. The 3-in-1 hybrid connector satisfies automation factory needs to save space and reduce maintenance and storage costs. For most applications, this hybrid connector will essentially reduce cable/connector unit counts from two or three units to just one.

Mechanical Data	Materials and Technical 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 (0.25 µm)
Minimum mating cycles	> 1000 (Sealcon to Sealcon connector)
Seals/O-Rings	Buna-N (Black), Optional FKM (Green)
Temperature range	-40°F - 257°F (-40°C - 125°C)
Type of contacts	Crimp
Protection	IP67/IP69K per EN 60 529 (connected), NEMA 4x
Cable diameter range	.28" - .67" (7 - 17 mm)

The **M23 Hybrid** is an "EMI Ready" connector that withstands high vibrations and is guaranteed for waterproof IP67/IP69K ratings. Besides the standard materials, die cast and brass, these connectors are also available in stainless steel (AISI 316L).

Modularity stands as a defining feature across the Sealcon product range. The specialized hybrid insert can be easily assembled with any M23 Power housing type. The M23 Power product line is available with the classic threaded screw-coupler housing or the TWILOCK ¼-turn, "quick-connect" housing. The TWILOCK connector system locks from "open" to "close" in one click, allowing easier blind mating connections. The TWILOCK male threads are designed to mate successfully with both existing screw-couplers and TWILOCK female threads, ensuring a gradual system transition to TWILOCK.

Sealcon expands your compatibility with the TWILOCK-S "quick-connect" system, engineered to mate with several TE Connectivity/SpeedTec products. Plus, the new **Type 2 M23 Hybrid** connector includes a crucial fifth power contact, making it the ideal solution for DC and AC power requirements.

Electrical Data	Power	Signal	Ethernet
Number of positions/contacts Type 1	4	4	4
Number of positions/contacts Type 1	4	4	2
Number of positions/contacts Type 1	4	4	6
Number of positions/contacts Type 2	5	4	4
Contact-Ø [mm]	2	1	0.6 or 1.0/ 0.8 (type 2)
[mm²] AWG	0.75 - 4.0	0.14 - 1.5	0.08 - 1.0
Nominal current [A]	28	8	1.2 / 2
Nominal voltage [V~] degree of protection 3	600	300	30 / 60
Test voltage (Breakdown voltage) [V~]	4000	2500	500
Insulation resistance [MΩ]	>10 ¹³	>10 ¹⁰	>10 ⁶
Max. contact resistance [mΩ]	< 3	< 3	< 3
Hybrid Connector Ethernet Capabilities			5e