

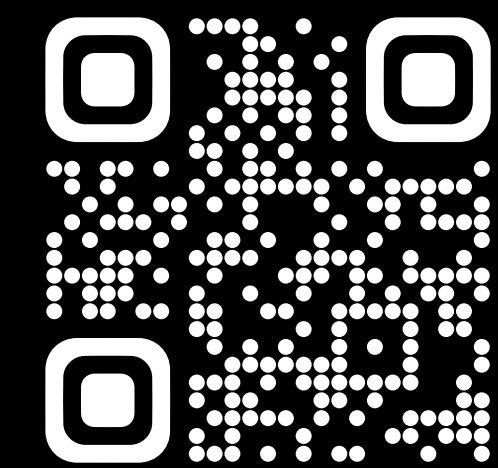


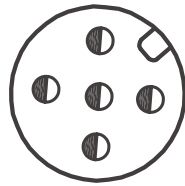
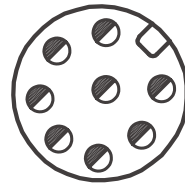
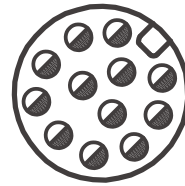
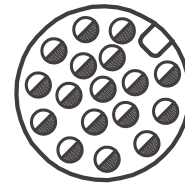
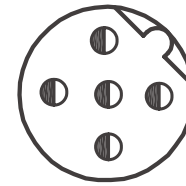
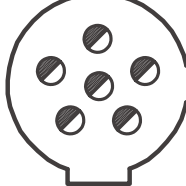
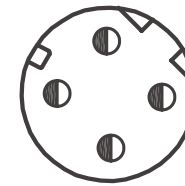
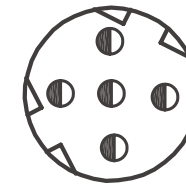
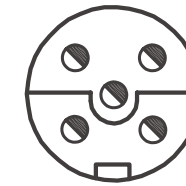
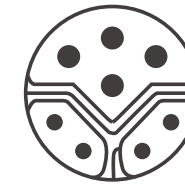
Amphenol LTW®

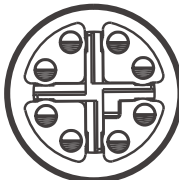
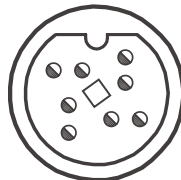
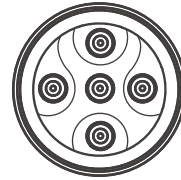
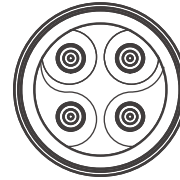
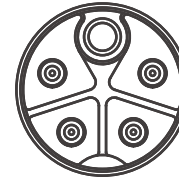
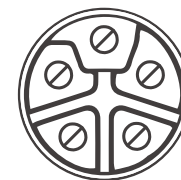
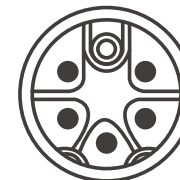
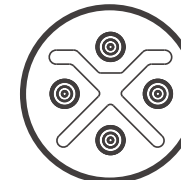

MPronto-12

M12 Push-Pull Connectors

World's First truly backward compatible
to all female M12*1.0 sockets



MPronto-12 Scope			Signal								Hybrid	
			A Code				B Code	C Code	D Code	P Code	I Code	Y Code
Pin Assignment												
Number of Contacts			5	8	12	17	5	3-6	4	5	5	8
Male	Overmolded	Non-Shield	M12A-05BMMM-PL8XXX	M12A-08BMMM-PL8XXX	M12A-12BMMM-PL8XXX	M12A-17BMMM-PL8XXX	M12B-05BMMM-PL8XXX	M12C-06BMMM-PL8XXX	M12D-04BMMM-PL8XXX	M12P-05BMMM-PL8XXX	M12I-05BMMM-PL8XXX	M12Y-08BMMM-PL8XXX
		Shielded	MSAS-05BMMM-PL8XXX	MSAS-08BMMM-PL8XXX	MSAS-12BMMM-PL8XXX	MSAS-17BMMM-PL8XXX	MSBS-05BMMM-PL8XXX	MSCS-06BMMM-PL8XXX	MSDS-04BMMM-PL8XXX	MSPS-05BMMM-PL8XXX	MSIS-05BMMM-PL8XXX	MSYS-08BMMM-PL8XXX
	Field Serviceable / Installable	Crimp	MSAS-05BMMC-PL7001	MSAS-08BMMC-PL7001	-	-	MSBS-05BMMC-PL7001	MSCS-06BMMC-PL7001	MSDS-04BMMC-PL7001	MSPS-05BMMC-PL7001	MSIS-05BMMC-PL7001	MSYS-08BMMC-PL7001
		Screw	MSAS-05BMMB-PL7001	MSAS-08BMMB-PL7001	-	-	MSBS-05BMMB-PL7001	MSCS-06BMMB-PL7001	MSDS-04BMMB-PL7001	MSPS-05BMMB-PL7001	MSIS-05BMMB-PL7001	MSYS-08BMMB-PL7001
		IDC	MSAS-05BMMD-PL7001	MSAS-08BMMD-PL7001	-	-	MSBS-05BMMD-PL7001	MSCS-06BMMD-PL7001	MSDS-04BMMD-PL7001	MSPS-05BMMD-PL7001	MSIS-05BMMD-PL7001	MSYS-08BMMD-PL7001
Female	Overmolded	Non-Shield	M12A-05BFFM-PL8XXX	M12A-08BFFM-PL8XXX	M12A-12BFFM-PL8XXX	M12A-17BFFM-PL8XXX	M12B-05BFFM-PL8XXX	M12C-06BFFM-PL8XXX	M12D-04BFFM-PL8XXX	M12P-05BFFM-PL8XXX	M12I-05BFFM-PL8XXX	M12Y-08BFFM-PL8XXX
		Shielded	MSAS-05BFFM-PL8XXX	MSAS-08BFFM-PL8XXX	MSAS-12BFFM-PL8XXX	MSAS-17BFFM-PL8XXX	MSBS-05BFFM-PL8XXX	MSCS-06BFFM-PL8XXX	MSDS-04BFFM-PL8XXX	MSPS-05BFFM-PL8XXX	MSIS-05BFFM-PL8XXX	MSYS-08BFFM-PL8XXX
	Field Serviceable / Installable	Crimp	MSAS-05BFFC-PL7001	MSAS-08BFFC-PL7001	-	-	MSBS-05BFFC-PL7001	MSCS-06BFFC-PL7001	MSDS-04BFFC-PL7001	MSPS-05BFFC-PL7001	MSIS-05BFFC-PL7001	MSYS-08BFFC-PL7001
		Screw	MSAS-05BFFB-PL7001	MSAS-08BFFB-PL7001	-	-	MSBS-05BFFB-PL7001	MSCS-06BFFB-PL7001	MSDS-04BFFB-PL7001	MSPS-05BFFB-PL7001	MSIS-05BFFB-PL7001	MSYS-08BFFB-PL7001
		IDC	MSAS-05BFFD-PL7001	MSAS-08BFFD-PL7001	-	-	MSBS-05BFFD-PL7001	MSCS-06BFFD-PL7001	MSDS-04BFFD-PL7001	MSPS-05BFFD-PL7001	MSIS-05BFFD-PL7001	MSYS-08BFFD-PL7001

MPronto-12 Scope			Data		Power						
			X Code	H Code	E Code	F Code	K Code	L Code	M Code	S Code	T Code
Pin Assignment											
Number of Contacts			8	8	3-5	2-4	3-5	2-5	3-6	3-4	2-4
Male	Overmolded	Non-Shield	M12X-08BMMM-PL8XXX	M12H-08BMMM-PL8XXX	-	-	-	-	-	M12S-04BMMM-PL8XXX	M12T-04BMMM-PL8XXX
		Shielded	MSXS-08BMMM-PL8XXX	MSHS-08BMMM-PL8XXX	-	-	-	-	-	-	-
	Field Serviceable / Installable	Crimp	MSXS-08BMMC-PL7001	MSHS-08BMMC-PL7001	-	-	-	-	-	M12S-04BMMC-PL7001	M12T-04BMMC-PL7001
		Screw	MSXS-08BMMB-PL7001	MSHS-08BMMB-PL7001	-	-	-	-	-	-	-
		IDC	MSXS-08BMMD-PL7001	MSHS-08BMMD-PL7001	-	-	-	-	-	-	-
Female	Overmolded	Non-Shield	M12X-08BFFM-PL8XXX	M12H-08BFFM-PL8XXX	M12E-05BFDM-PL8XXX	M12F-04BFFM-PL8XXX	M12K-05BFDM-PL8XXX	M12L-05BFDM-PL8XXX	M12M-06BFDM-PL8XXX	M12S-04BFFM-PL8XXX	M12T-04BFFM-PL8XXX
		Shielded	MSXS-08BFFM-PL8XXX	MSHS-08BFFM-PL8XXX	MSES-05BFDM-PL8XXX	MSFS-04BFFM-PL8XXX	MSKS-05BFDM-PL8XXX	MSLS-05BFDM-PL8XXX	MSMS-06BFDM-PL8XXX	MSSS-04BFFM-PL8XXX	MSTS-04BFFM-PL8XXX
	Field Serviceable / Installable	Crimp	MSXS-08BFFC-PL7001	MSHS-08BFFC-PL7001	M12E-05BFDC-PL7001	M12F-04BFFC-PL7001	M12K-05BFDC-PL7001	M12L-05BFDC-PL7001	M12M-06BFDC-PL7001	M12S-04BFFC-PL7001	M12T-04BFFC-PL7001
		Screw	MSXS-08BFFB-PL7001	MSHS-08BFFB-PL7001	M12E-05BFDB-PL7001	M12F-04BFFB-PL7001	M12K-05BFDB-PL7001	M12L-05BFDB-PL7001	M12M-06BFDB-PL7001	M12S-04BFFB-PL7001	M12T-04BFFB-PL7001
		IDC	MSXS-08BFFD-PL7001	MSHS-08BFFD-PL7001	-	-	-	-	-	-	-



1	What's the durability? How many hours is the salt spray test?	A: The mating cycle is 500+, salt spray test 500 hours and the UV resistant 5 years according to UL746 f1.
2	Other vendors seem to have similar self-locking models?	A: Yes, but you need to buy a replacement mating pair. MPronto-12 does not require to replace the original mating pair.
3	What are the materials?	A: Plastic: UL-94V-0; Spring Lock: Stainless 301.
4	We are not in the IA market, can we change the cable to other specifications? Will it affect the specification reduction?	A: Yes, if the specifications focus on our Spring Lock, replacing the wire will not affect the product performance.
5	Are there any reliability tests that can be provided? Including environmental testing (weather resistance), mechanical, and electrical.	A: Please download the specificaion from the product page on the website.
6	What is the product substitutability? Can it be used with similar products from other competitors?	A: It is not compatible with the competitor's M12 Push Pull. It does not require replacing the receptacle connector which saves the cost of buying a pair and it's one of the advantages of MPronto-12 connector.
7	The common standard for M12 Push Pull proposed by Phoenix Contact, Harting and other manufacturers is IEC 61076-2-010/012. Can your products comply with this specification?	A: Currently, our MPronto-12 has no design for this set of standards. It is a company-patented design. We are introducing the MPronto-12 to the IEC Association and promoting the backward-compatible feature which does not need to be purchased in pairs.
8	How do we ensure it's well-mated and the retention of the mating?	A: There is audible feedback when plugging in, and the Spring Lock has a stop-back function to ensure proper compression of the seal and therefore waterproof function.
9	Will the waterproof function of MPronto-12 be affected if the receptacle screw-type connector is not replaced? If so, can it comply with IPxx?	A: Yes, IP68/IP69K. We have verified that it can achieve this waterproof level by interoperating with other vendor's board terminals.
10	This seems to save a lot of assembly time. Is this likely to become an industry standard in the future?	A: We are proactively promoting this MPronto-12 design to the IEC Association.
11	Does MPronto-12 apply to the receptacle nut thread regardless of PG9 or M16?	A: PG9/M16 refers to the thread specification for fixing the M12 connector on the panel. M12 is the thread specification for the mating interface. Our MPronto-12 is designed for the mating M12 * 1.0 thread specification.

12	Will the waterproofing fail when the cable swings?	A: No, in normal circumstances, it can still maintain the IP68/IP69K waterproof rating.
13	What is the price difference compared to the existing M series?	A: The price will be slightly higher than the standard M12 threaded version, but considering the convenience this product brings, it is well worth it. Push-Pull is very competitive against its competitors. You can compare prices on the online distributor's website.
14	What's the price difference with other competitors?	A: Since you don't need to purchase a pair at once, it's very price competitive.
15	How reliable and stable is the MPronto-12 connector when used in industrial equipment? Specifically, will the screw threads break or deform after mating, and what is the breaking point force of the connector?	A: It will not be easily broken as the destructive pulling force can be greater than 20Kg shown in the test report.
16	What structure does MPronto-12 use to achieve locking? Is the joint size tolerance and structural strength sufficient?	A: It use 15 clamping jaws instead of threads to lock with the female threads. Please refer to the Q15 reply for strength.
17	Can MPronto-12 be plugged into connectors from other manufacturers? Which manufacturers' connectors can be inter-mated with? What's the interconnection reliability test?	A: MPronto-12 can be interconnected with any IEC standard M12 version terminal, such as Phoenix Contact, Molex, TE Connectivity, Harting, etc., The reliability test report is in the specification available on the website.
18	Will MPronto-12 fail to function if something fall off and hits the connector?	A: The lateral damage thrust can reach 13Kg, as shown in the test report.
19	How do we confirm the MPronto-12 is well-mated with other connector? Can it add marking lines to help identify?	A: It does not need to be identified by the marked line, as the IEC socket insertion depth is not standardized. Each manufacturer has a different insertion depth, which may mislead users into thinking that the connector is either fully inserted or not. Full insertion ensures waterproof functionality.
20	What is the most strenuous vibration/shock test the MPronto-12 connector can endure?	A: Please download the specifcaiton from the product page on the website.
21	Can we add a marked color or an arrow on the nut?	A: The color of nut can be changed, we will handle it with customized products.
22	Are there NMEA 2000 certified products?	A: It is expected to be completed in Q2 2025 and the part number is HMC-050500-MM0-CPA01.