

# Amphenol®



## Max-M12 Connector

Amphenol Industrial Products Group introduces our ruggedized M12 high speed data connector, the Max-M12. High speed data transmission connection systems have traditionally been implemented into commercial applications with little regard to high vibration, high temperature and overall harsh environment demands. With the increased implementation of these high speed Datalink connection systems into more heavy duty / harsh environment surroundings, the need for a more robust and ruggedized connection system has surfaced.

Based on the IEC 61076-2-101 and SAE J 2839 standards the Max-M12 connection system makes it the perfect solution for the ultra rugged applications that sometimes exist in markets dealing with Heavy Equipment, Rail & Mass Transit, Process Control, Factory Automation, etc.

### Features:

- HDM 12 Versions Available
  - Plastic or Metal (for shielding)
  - 90° right angle and straight connector offerings
  - 3, 4, and 5 way circuit patterns
  - A, B, D & P polarity codes – based on IEC 61076-2-101
  - Terminals for solder to wire or pins for PCB applications
- Available as stand-alone connectors & cable assemblies (standard and overmolded)
- Terminals capable of being terminated to:
  - 0.8 mm<sup>2</sup> (18 AWG) or 0.5 mm<sup>2</sup> (20 AWG) conductors as defined by SAE J1128 and 0.75 mm<sup>2</sup> and 0.50 mm<sup>2</sup> conductors as defined by ISO 6722
- 444 N (100 LBF) pull force on cable
- Backward compatible with IEC 61076-2-101 (M12)
- More resistant to terminal damage
- Extreme environmental testing based on J2839 requirements
  - High pressure wash down
- Provisions for overall cable shield or drain wire to the connector plug housing
- RoHS compliant

[www.amphenol-industrial.com](http://www.amphenol-industrial.com)



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SPECIFICATION		
Operating Voltage	5 pin - 60V AC/DC 3 & 4 pin - 250V AC/DC	IEC 60664
Current Rating	4A MAX.	IEC 60512 TEST 5B
Temperature Rating	-55°C - +125°C -55°C - +150°C (with Viton Seals)	SAE J2839, 4 . 2 . 3 . 13
Dielectric Withstanding Voltage	1000V	IEC 60512, TEST 4A
Insulation Resistance	>20 Megohms	SAE J2839, 4 . 2 . 3 . 3
Rated Impulse Voltage	1500V	IEC 60664-1
Contact Resistance	<10 mΩ	IEC 60512
Vibration, Sine	10 - 2000 Hz, 20g, <1 us	SAE J2839, 4 . 2 . 3 . 15
Shock, Half Sine	10 CYCLES, 50g, 11ms, <1 us	SAE J2839, 4 . 2 . 3 . 16
Temperature Life	1000H AT 125°C + 3°C	SAE J2839, 4 . 2 . 3 . 7
Durability	100 CYCLES MIN.	SAE J2839, 4 . 2 . 3 . 11
Salt Fog	240H	SAE J2839, 4 . 2 . 3 . 12
Protection Class	IP67 or Above	IEC 60529
Wire Gauge	0.5 mm <sup>2</sup> (20AWG) or 0.8 mm <sup>2</sup> (18AWG)/ 0.75 mm <sup>2</sup>	SAE J1128 / ISO 6722
Cable OD.	ø 12.7 MAX.	
Recommended Torque	M12 THREAD, 0.8 - 1.0 Nm	
Connector Retention	444 N MIN	SAE J2839, 4 . 2 . 3 . 20
Contact Retention	110 N MIN	SAE J2839, 4 . 2 . 3 . 18
Panel Thickness	1-6 mm	
Shell Plating	Nickel	

HOW TO ORDER																				
1      2      3      4      5      6      7      8      9      10      11 <b>HDM12 + P + M + 05 + D + 1 + ST + M + V + H + P</b>																				
1	2		3		4		5		6		7		8		9		10		11	
HDM12	P		M		05		D		1		ST		M		V		H		P	
Product Line	Shell Line		Gender		Insert Arrangement		Coding		Contact Finish		Backshell		Backshell Material		Seal		Voltage Rating		Contact Style	
HDM12	P	Plug	M	Male	03	3 Pole	A	A-Coding	1	Gold	ST	Straight	M	Metal	V	Viton Rubber Seal	H	240V AC/DC	PR	PC Tail Contacts Right Angle
	R	Receptacle	F	Female	04	4 Pole	B	B-Coding	2	Silver	RA	Right Angle	P	Plastic		Omit for Standard Rubber Seal		Omit for Standard 60V AC/DC	PS	PC Tail Contacts Straight
					05	5 Pole	D	D-Coding	4	Nickel	XX	No Backshell		Omit for no Backshell						Omit for Solder Contacts
							P	P-Coding												

**Example Order:** HDM12, Receptacle, Female, 4 Pole, A-Coding, Silver, Straight, Metal, Standard Rubber Seal, 240V AC/DC, Straight PC Tail Contacts: **HDM12 R F 04 A 2 ST M H PS**

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For further information on your individual application requirements, contact: Amphenol Corporation

North America:  
Amphenol Industrial Operations  
180 N. Freepoint Drive, Plant 4  
Nogales, AZ 85621  
Tel: (888) 364-9011  
Fax: (520) 285-5134

Europe:  
Amphenol Industrial Operations Europe  
Via Barbaiana 5  
1-20020 Lainate (MI) Italy  
Tel: +39 02 93254.204  
Fax: +39 02 93254.444

Middle East:  
Amphenol Middle East Enterprises FZE  
Office C-37 PO Box 21107  
Ajman Free Zone, UAE  
Tel: +9 716-7422494  
Fax: +9 716-7422941

Asia:  
Amphenol Technology (Zhuhai) Co., Ltd.  
No. 63 Xing Han Road, San Zao Town  
Jin Wan District, Zhuhai City, China 519040  
Tel: +86 756-3989760  
Fax: +86 756-3989768

Email: tech@amphenol-aio.com

Email: info@amphenol-aio.com

Email: jhussain@amphenol-industrial.com

Email: enquiry@amphenol-aio.com



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.