

M12 Circular Connector

Part Number :

M12-03-A-S-3-S

Client Order no.:

Item no. :

Order no. :

Consignment no. :

Offer no. :

Project :

Remarks :



Basic Information

Connector Series:	M12 Field Wireable Connector
Connector Gender:	Female
Orientation:	Straight
Connector Coding:	A Coded
Number of Contacts:	3 Socket

Materials and Plating

Shell Material:	Brass, Plastic (for shell base)
Shell Plating:	Nickel-plated, None (for shell base)
Insulation Material:	Polyamide 66 GF25
Contact Material:	CuZn
Contact Plating:	Au

Electrical Performance

Rated Voltage:	250V
Rated Current:	4A
Insulation Resistance:	$\geq 100 \text{ M}\Omega$
Contact Resistance:	$< 10 \text{ m}\Omega$
Standard:	IEC 61076-2-101
Shielding Performance:	Unshielded

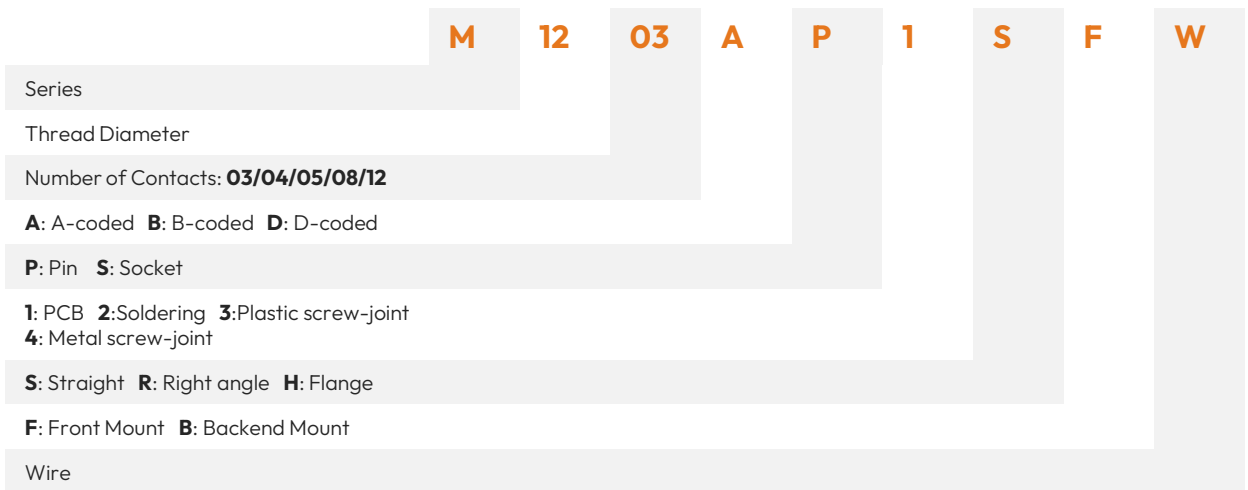
Mechanical Performance

Coupling method:	Threaded Coupling
Threaded Size:	M12x1
Mount Method	Cable Type
Mount Feature	Not Applicable
Contact Termination	Screw Joint
Cable Od	4-6mm, 6-8mm
Thread Aperture	PG7, PG9
Durability	≥500 cycles
Wire Gauge	0.14/0.25/0.34/0.5mm ² /(26/24/22/20AWG)

Environmental Performance

Temperature Range:	-25°C to 85°C
Ip Rating:	IP67

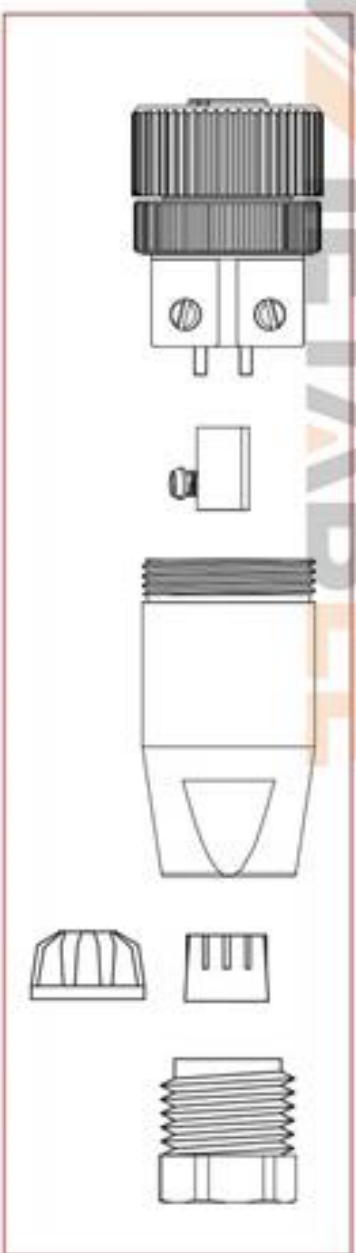
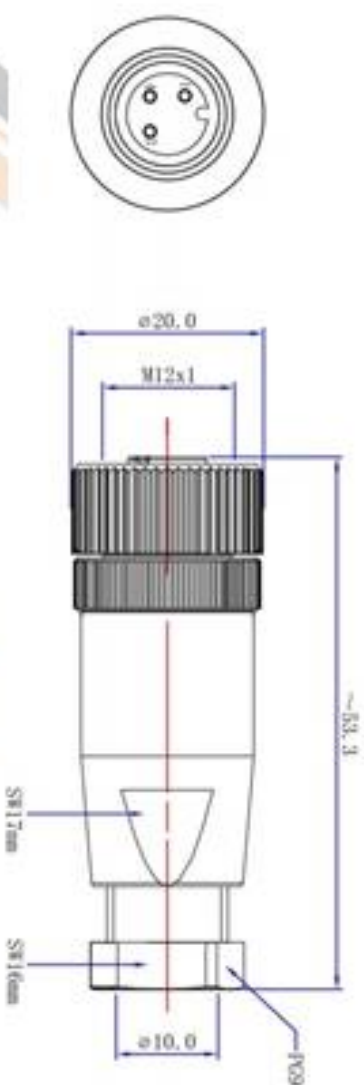
M12 Connector Part Number Breakout



Learn more about this connector on [Metabee's M series connector catalog](#).



Product NO.		M12-03-A-S-3-S		
REV	DESCRIPTION	ISSN	DATE	APPROVEN
A	FIRST ISSUE	GAVLN	2018/05/14	JTL KING



PERFORMANCE

1) MECHANICAL POLARIZING METHOD: 350N MIN.

CONTACT INSERTION FORCE: 110N/DIN MAX.

CONTACT WITHDRAWAL FORCE: 15N/DIN MAX.

WATERPROOF: IP68 IN WATER 1mm DEPTH, 24HR

2) ELECTRICAL

CURRENT RATING: 4.0A

VOLTAGE RATING: 250VDC

WITHSTANDING VOLTAGE: 1000VAC rms

INSULATION RESISTANCE: 1×10^9 OHMS at 500VDC

CONTACT RESISTANCE: 10 MILLI OHM AT INITIAL CONDITION DELTA T: 0.1S MILLI OHM MAX. AFTER EVALUATION TEST BASED ON: 78-5102-0151-B

3) ENVIRONMENTAL

TEMPERATURE RATING: -25°C TO 85°C

NOTE

FOR LOW TEMPERATURE LIMIT: EXCLUDING CABLE PERFORMANCE NO DEW CONDITION FOR HIGH TEMPERATURE LIMIT INCLUDING TEMPERATURE RISING BY CURRENT

-TOLERANCES-
UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSIONS FOR MILLIMETERS ARE:

0.5 - 3mm ± 0.25mm

3 - 10mm ± 0.25mm

10 - 150mm ± 0.35mm



PART DESCRIPTION: M12 3P PIGTAIL MOUNT WIRE SOLDER

App'd: JTL KING P/N: M12-03-A-S-3-S

Check: Date Scale Unit Type Page

Draw: Gavln 2018.05.14 Free MM Z 1/1



M12 Connector Pinout and Wiring Diagram

Pins	A	B	C	D	X	Y	S	T	K	L	M	
2												
3												
4												
5												
6												
8												
12												
17												

芯位 Pins	线芯颜色 Wire core color
2芯(Pins)	
1	BN
2	-
3	BU

芯位 Pins	线芯颜色 Wire core color
3芯(Pins)	
1	BN
2	-
3	BU
4	BK

芯位 Pins	线芯颜色 Wire core color				
4芯A编码(4 Pins A-Code)		4芯B编码(4 Pins B-Code)		4芯D编码(4 Pins D-Code)	
1	BN	BN	BN	YE	
2	WH	WH	WH	WH	
3	BU	BU	BU	OG	
4	BK	BK	BK	BU	

芯位 Pins	线芯颜色 Wire core color		
5芯A编码(5 Pins A-Code)		5芯B编码(5 Pins B-Code)	
1	BN	BN	
2	WH	WH	
3	BU	BU	
4	BK	BK	
5	GY	GY	

芯位 Pins	线芯颜色 Wire core color
12芯(Pins)	
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	OG
12	LTGN

芯位 Pins	线芯颜色 Wire core color
17芯(Pins)	
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	OG
12	LTGN
13	LTBU
14	BKWH
15	BNWH
16	RDWH
17	BUWH

芯位 Pins	线芯颜色 Wire core color
6芯(Pins)	
1	BN
2	WH
3	BU
4	BK
5	-
6	GY
7	RD

芯位 Pins	线芯颜色 Wire core color
8芯(Pins)	
1	WH
2	BN
3	GN
4	YE
5	GY
6	PK
7	BU
8	RD

The Ultimate Guide to M12 Connector Pinout, Color Code, and Wiring Diagram – MetabeeAI (PDF Format, 33 pages, 4.5MB)

Thanks!

Our team of passionate experts brings a wealth of experience to the table, ready to collaborate with you and unlock your full potential. By joining forces, we can create innovative solutions and achieve remarkable things.



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