

M12 Circular Connector

Part Number :

M12-04-A-S-3-R

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:	Right Angle
Connector Coding:	A Coded
Number of Contacts:	4 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:	CuSn
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

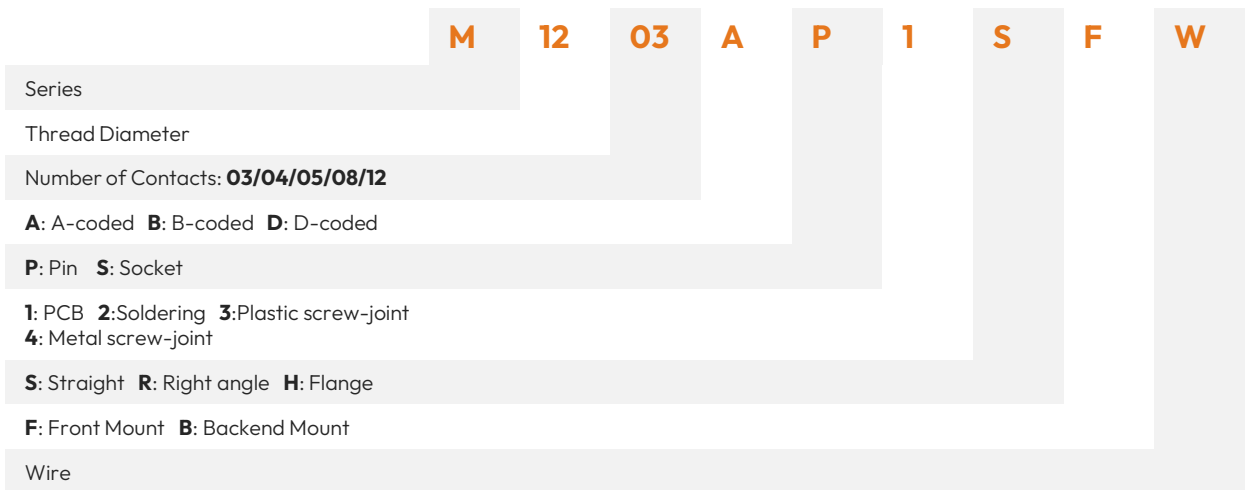
Mechanical Performance

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



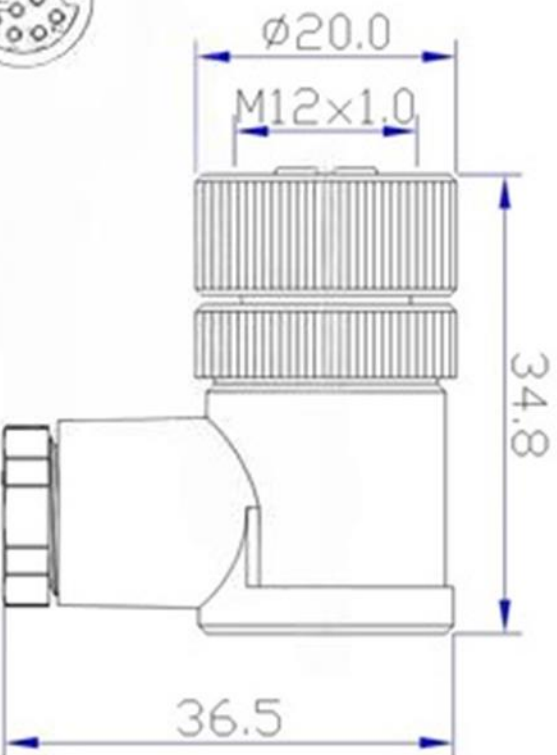
Learn more about this connector on [Metabee's M series connector catalog](#).



Product No.		M12-04-A-S-3-R	
ISSUE	DESCRIPTION	DRN	DATE
First	First Issue	GovIn	2018/11/30
			APPROVEN
			JIM KING



Pin Assignment



PERFORMANCE

1) MECHANICAL POLARIZATION METHOD: 0.15N MIN.
 CONTACT INSERTION FORCE: 0.9N/0.1N MAX.
 CONTACT WITHDRAWAL FORCE: 1.5N/0.1N MAX.
 WATERPROOF: IP69K (IN WATER 1mm DEPTH, 2min)

2) ELECTRICAL

CONTACT RESISTANCE: 10 MILLI OHM AT INITIAL CONDITION
 DELTA R IS WITH IN OHM MAX. AFTER EVALUATION TEST BASED ON 78-5102-0151-6

3) ENVIRONMENTAL TEMPERATURE RATING: -25°C TO 85°C

NOTE: FOR LOW TEMPERATURE LIMITS EXCLUDING CABLE PERFORMANCE NO DEW CONDITION FOR HIGH TEMPERATURE LIMITS INCLUDING TEMPERATURE RATING BY CURRENT

Technology parameter	3	4	5	8	12
NO. of contacts	3	4	5	8	12
Rated current (A)	4	4	4	2	1.5
Operation limit voltage (AC V rms)	250	250	250	60	30
Operation limit voltage (DC V rms)	250	250	250	60	30

-TOLERANCES-
 UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED TOLERANCES FOR MILLIMETERS ARE:
 0.5 - 3mm ± 0.10mm
 3 - 30mm ± 0.15mm
 30 - 120mm ± 0.20mm



PART DESCRIPTION: M12 A Code R/A FEMALE CONNECTORS

Appr: JIM KING P/N: 1 M12-04-A-S-3-R

Check:	Date	Scale	Unit	Type	Page
Draw:	2018.11.30	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		YE			
2	WH		WH		WH			
3	BU		BU		OG			
4	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.



CONTACT US

Phone: +86 159 2624 1606

E-mail: sales@metabeeai.com

Web: metabeeai.com & metabee.com

Address: Room 708, 7th Floor, Building 2, No. 489, Guanghuadong Third Road,
Qinyang District, Chengdu, Sichuan, China