

M12 Circular Connector

Part Number :

M12-04-B-S-3-S

| Client Order no.: | |
|-------------------|--|
| Order no. : | |
| Offer no. : | |
| Remarks : | |

Item no. : Consignment no. : Project :



| Basic Information | | | | | |
|--|----------|--|--|--|--|
| Connector Series: M12 Field Wireable Connector | | | | | |
| Connector Gender: | Female | | | | |
| Orientation: | Straight | | | | |
| Connector Coding: | B 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: | ≥100 MΩ |
| Contact Resistance: | < 10 mΩ |
| 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 | 0.14/0.25/0.34/0.5mm²/(26/24/22/20AWG) | | | |
| Environmental Performance | | | | |

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

M12 Connector Part Number Breakout

| | Μ | 12 | 03 | Α | Ρ | 1 | S | F | W |
|--|---|----|----|---|---|---|---|---|---|
| Series | | | | | | | | | |
| Thread Diameter | | | | | | | | | |
| Number of Contacts: 03/04/05/08/12 | | | | | | | | | |
| A: A-coded B: B-coded D: D-coded | | | | | | | | | |
| P: Pin S: Socket | | | | | | | | | |
| 1: PCB 2:Soldering 3:Plastic screw-joint 4: Metal screw-joint | | | | | | | | | |
| S: Straight R: Right angle H: Flange | | | | | | | | | |
| F: Front Mount B: Backend Mount | | | | | | | | | |
| Wire | | | | | | | | | |

Learn more about this connector on Metabee's M series connector catalog.



| Pins | A | В | С | D | Х | Y | S | Т | К | L | М |
|------------|--|------------|------------|------------------|---------------|------------|-------------|------------------|-------------------------|---------------|-------|
| 2 | 3 | | | | | | 1 3 | 3 • • • | 2003 | 2 | 2004 |
| 3 | | | 2 PE | | | | 1 PE | PE 1 | 2 PE | 2 PE | 2 0 4 |
| 4 | | | | | | | 1 PE 2 3 | | | PE 2 PE | |
| 5 | | | 4 PE | | | | | | | 1 PE 2 0 3 | |
| 6 | 3 4 6 7 | | | | | | | | | | |
| 8 | 3 4 5 6 7 | | | | | | | | | | |
| 12 | 2 10 10 10 9 8 11 5 6 7 | | | | | | | | | | |
| 17 | | | | | | |)EE | | | | |
| 芯位 Pins | 线芯颜 Wire core | 色 color | 芯位 Pins | 线芯意 Wire core | 页色 e color | 芯位 Pins | | w | 线芯颜色 lire core color | | |

M12 Connector Pinout and Wiring Diagram

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

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

| Pins | | | | え心願巴 re core coli | or | | |
|-----------|---------|-----------------------|-------|----------------------|-------|-------|-------------------|
| | 4芯A编码(4 | Pins A-Code) | 4芯B编码 | (4 Pins B-C | Code) | 4芯D编码 | (4 Pins D-Code) |
| 1 | BN | | BN | Į. | | YE | |
| 2 | WH | | WH | | | WH | |
| 3 | BU | | BU | | | OG | |
| 4 | BK | | BK | | | BU | |
| 芯 Pins | | 线芯颜色 Wire core col | or | 芯位 Pins | | | 芯颜色 core color |
| | | 12芯(Pins) | | | | 17 | 芯(Pins) |
| 1 | BN | | | 1 | В | N | |
| 2 | BU | | | 2 | В | U | |
| 3 | WH | | | 3 | M | /H | |

| 4 | GN | |
|----|------|---|
| 5 | PK | 1 |
| 6 | YE | |
| 7 | BK | |
| 8 | GY | |
| 9 | RD | |
| 10 | VT | |
| 11 | OG | |
| 12 | LTGN | |

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

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



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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