

M12 Circular Connector

Part Number :

| 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: | D Coded |
| Number of Contacts: | 4 Socket |
| | |

Materials and Plating

| Shell Material: | Brass |
|----------------------|-------------------|
| Shell Plating: | Nickel-plated |
| Insulation Material: | Polyamide 66 GF25 |
| Contact Material: | CuSn |
| Contact Plating: | Αυ |

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 | Not Applicable |
| Thread Aperture | Not Applicable |
| Durability | ≥500 cycles |
| Wire Gauge | 0.14/0.25/0.34/0.5mm²/(26/24/22/20AWG) |
| | Environmental Performance |
| Town on these Denses | |

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

M12 Connector Part Number Breakout

| | М | 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 | | | | | 4 5 6 7 | | | | | |
| 12 | 2 10 10 10 9 8 11 5 6 7 | | | | | | | | | | |
| 17 | | | | | | |) E E | | | | |
| 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 线芯颜色 Pins Wire core color | | | | 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 | | |
|------------|----|----------|---|----|-------------------------|--|--|
| | | 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 | | | | | | | | | |
|-----------|---------|-----------------------|-------|-------------|-------|-------------------------|-----------------|--|--|
| | 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 | | 线芯颜色 Wire 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 | N | 线芯 Vire co | 颜色 pre color | | | |
| | 17芯(Pins) | | | | | |
| 1 | BN | | 1 | | | |
| 2 | 2 BU | | | | | |
| 3 | WH | | | | | |
| 4 | GN | | | | | |
| 5 | PK | 1 | | | | |
| 6 | YE | | | | | |
| 7 | BK | | | | | |
| 8 | GY | | | | | |
| 9 | RD | | | | | |
| 10 | VT | | | | | |
| 11 | 12 LTGN | | | | | |
| | | | | | | |
| 13 | LTBU | | | | | |
| 14 | BKWH | | | | | |
| 15 | BNWH | | | | | |
| 16 | 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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