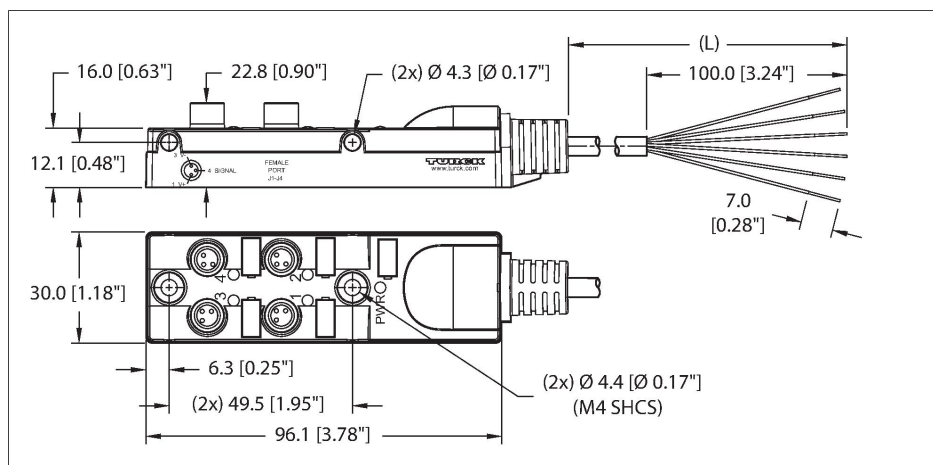


# TB-4M8M-3P2-0.5

Junction Box - Actuator/Sensor, 4-port – M8, 3 pole I/O port with cable homerun

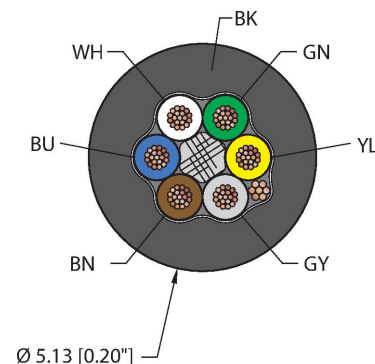


## Features



- Housing material: Nylon
- Housing color: Black
- Fully encapsulated
- Protection class: IP67, IP68, IP69, IP69K; NEMA 1, 3, 4, 6P, 12
- RoHS compliant
- CE compliant
- LED (PNP circuit)
- I/O port: 3-pin
- General Purpose Cable
- Black PVC jacket, shielded, 6X24 AWG
- -40 Cold Bend Rating
- Flame Ratings: UL1061, CSA FT1
- Cable length: 0.5 m

## Cable cross section



## Technical data

|                                 |                                                  |
|---------------------------------|--------------------------------------------------|
| Type                            | TB-4M8M-3P2-0.5                                  |
| ID no.                          | UX09200                                          |
| Distributed I/O                 | Junction box, 4, with integral homerun cable     |
| Housing                         | Plastic, PA 6 GF30, Black                        |
| Display operating voltage       | LED, green                                       |
| Display switching state         | LED, yellow                                      |
| Switching function              | PNP                                              |
| I/O Port                        | M8 x 1, Female                                   |
| Design specification            | Acc. to IEC 61076-2-104                          |
| Number of Pins                  | 3                                                |
| Contacts                        | Brass, CuZn, Gold-plated                         |
| Contact carriers                | Plastic, PA 4.6 GF30, Black                      |
| Connector seal                  | O-ring, Plastic, FKM/FPM                         |
| Housing material/finish         | Brass, CuZn, Nickel-plated                       |
| Mechanical life                 | > 100 Mating cycles                              |
| Pollution degree                | 3                                                |
| Protection class (When coupled) | IP67, IP68, IP69, IP69K<br>NEMA: 1, 3, 4, 6P, 12 |
| Homerun connector               | Side exit                                        |
| Cable data                      |                                                  |
| Cable ID                        | RF50845                                          |
| Total number of conductors      | 6                                                |

## Technical data

|                               |                                                          |
|-------------------------------|----------------------------------------------------------|
| Cable diameter                | Ø 5.13 mm                                                |
| Cable length (L)              | 0.5 m (+50mm or 4% of length/-0.0, Whichever is greater) |
| Cable jacket                  | PVC, Black                                               |
| Shield                        | Aluminum/polyester (IN)                                  |
| Cable drain                   | 26 AWG, TC (Tinned Copper)                               |
| Conductor diameter            | 0.044 "                                                  |
| Conductor material            | TC (tinned copper)                                       |
| Conductor insulation material | PVC                                                      |
| Conductor size                | 6 x 24 AWG [Similar to 0.25 mm²]                         |
| Number of strands x O.D.      | 19 x 36 AWG                                              |
| Conductor colors              | GN, YL, GY, BN, BU, WH                                   |

### Electrical properties at +20 °C

|               |                                           |
|---------------|-------------------------------------------|
| Rated voltage | 30 VDC                                    |
| Current       | 2 A per signal contact, total current 6 A |

### Mechanical and chemical properties

|                                     |                 |
|-------------------------------------|-----------------|
| Bending radius (static)             | ≥ 5 x Ø         |
| Bending radius (dynamic)            | ≥ 15 x Ø        |
| Cold bend rating                    | -40 °C          |
| Ambient temperature range (static)  | -40 °C...+85 °C |
| Ambient temperature range (dynamic) | -40 °C...+85 °C |
| Temperature range (installation)    | -20 °C...+85 °C |

### Approval

|           |            |
|-----------|------------|
| Approvals | CE<br>RoHS |
|-----------|------------|

### Note

- Flex ratings may be reduced if used in extreme temperatures, exposure to certain chemicals, operating above the rated cycle speed, or operating below the rated cable bend radius.

- We reserve the right to make technical alterations without prior notice.

## Contact assignment

I/O Connector



## Scope of delivery

| Device         | Quantity | Description                           |
|----------------|----------|---------------------------------------|
| Junction boxes | 1        | Passive actuator/sensor junction box  |
| PSGK-MC        | 2        | Closure caps for M8 female connectors |
| KS5/10         | 5        | Labels                                |

## Accessories

| Ident-No. | Part Number                          | Description                                                                     |
|-----------|--------------------------------------|---------------------------------------------------------------------------------|
| U5312-2   | RKC 8.6T-5                           | Connection cordset, female, M12, 8-pin, straight, 5m * (homerun)                |
| U5306-20  | WKC 8.6T-5                           | Connection cordset, female, M12, 8-pin, right-angle, 5m * (homerun)             |
| U0885-26  | B 8181-0                             | Field-wireable, female, M12, 8-pin, straight,(6-8mm)                            |
| U0885-25  | BS 8181-0                            | Field-wireable, male, M12, 8-pin, straight,(6-8mm)                              |
| A1050     | KS 5/10 (10/LABELS)                  | Labels                                                                          |
| U0135-6   | PSG 3M-2                             | Cordset, male, M8x1, 3-pin, straight, 2m * (I/O port)                           |
| U0136-4   | PSW 3M-2                             | Cordset, male, M8x1, 3-pin, right-angle, 2m * (I/O port)                        |
| U6427     | PSGM-CC (8/BAG)                      | Dust cap, male, M8x1, Plastic, (8/BAG)                                          |
| A900154   | TORQUE-WRENCH-SET-M12&M8-LEGACY      | Torque wrench set, Torque driver, torque setting tool, M12 fitting, M8 fitting. |
| A900101   | PICOBX ADAPTOR PLATE, 4 PORT (1PACK) | Allows new picobox to utilize the previous version mounting hole locations.     |

\* Other lengths available on request

## Circuit Diagram

