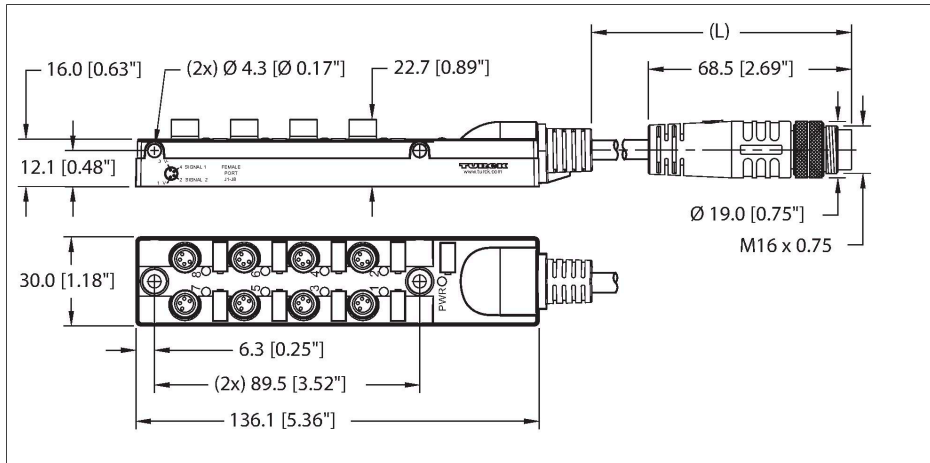


# TB-8M8M-4-6-BSM19/S90

## Passive Actuator/Sensor Junction Box, 8 Ports – Extension Cable



### Technical data

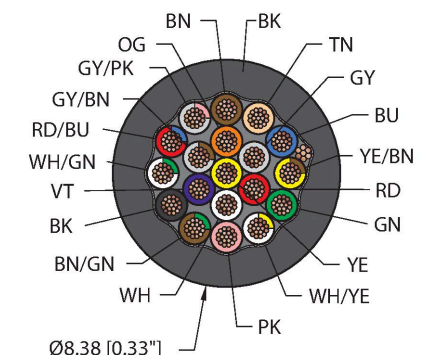
|                                 |                                                    |
|---------------------------------|----------------------------------------------------|
| Type                            | TB-8M8M-4-6-BSM19/S90                              |
| ID                              | UX15731                                            |
| Distributed I/O                 | Junction box, 8 -port, With integral homerun cable |
| Housing                         | Plastic, PA6-GF30, Black                           |
| I/O Port                        | Female, M8 × 1                                     |
| Design specification            | Acc. to IEC 61076-2-104                            |
| Number of contacts              | 4                                                  |
| 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               | Male, M16 × 0.75 with cable, Side exit             |
| Connector B                     | Straight                                           |
| Number of contacts              | 19                                                 |
| Contacts                        | Brass, CuSn, Gold-plated                           |
| Contact carriers                | Plastic, TPU, Black                                |
| Connector body                  | Plastic, TPU, Black                                |
| Coupling nut                    | Brass, CuZn, Nickel-plated                         |

### Features



- Housing material: Nylon
- Housing color: Black
- Fully encapsulated
- Protection class: IEC: IP67
- RoHS compliant
- CE compliant
- I/O port: 4-pin
- General Purpose Cable
- Black TPU jacket, shielded, 19X22 AWG
- -40 Cold Bend Rating
- Flame Ratings: UL 1685 FT4, UL1061, CSA FT4

### Cable cross section



### Contact assignment

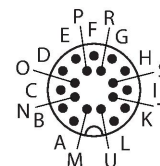
## Technical data

|                                                                                                                                                                                      |                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Seal                                                                                                                                                                                 | Plastic                                                                                          |
| Mechanical life                                                                                                                                                                      | > 100 Mating cycles                                                                              |
| Pollution degree                                                                                                                                                                     | 3                                                                                                |
| Protection class (When coupled)                                                                                                                                                      | IP67                                                                                             |
| <b>Cable data</b>                                                                                                                                                                    |                                                                                                  |
| Cable ID                                                                                                                                                                             | RF50996                                                                                          |
| Total number of conductors                                                                                                                                                           | 19                                                                                               |
| Cable diameter                                                                                                                                                                       | Ø 8.38 mm                                                                                        |
| Length (L)                                                                                                                                                                           | 6 m, (+50mm or 4% of length/-0.0, Whichever is greater)                                          |
| Cable jacket                                                                                                                                                                         | TPU, Black                                                                                       |
| Shielding                                                                                                                                                                            | Aluminum/polyester (IN), 24 AWG, TC (Tinned Copper)                                              |
| Conductor diameter                                                                                                                                                                   | 0.048 "                                                                                          |
| Conductor material                                                                                                                                                                   | TC (tinned copper)                                                                               |
| Conductor insulation material                                                                                                                                                        | PVC                                                                                              |
| Conductor size                                                                                                                                                                       | 19 x 22 AWG [Similar to 0.34 mm²]                                                                |
| Number of strands x O.D.                                                                                                                                                             | 19 x 0.0058 "                                                                                    |
| Conductor colors                                                                                                                                                                     | YE, GY, RD, WH, VT, GY/BN, OG, BN, TN, BU, YE/BN, GN, WH/YE, PK, BN/ GN, BK, WH/GN, RD/BU, GY/PK |
| <b>Electrical properties at +20 °C</b>                                                                                                                                               |                                                                                                  |
| Rated voltage                                                                                                                                                                        | 30 VDC                                                                                           |
| Current                                                                                                                                                                              | 2 A per signal contact, total current 6 A                                                        |
| <b>Mechanical and chemical properties</b>                                                                                                                                            |                                                                                                  |
| Bending radius (static)                                                                                                                                                              | ≥ 5 x Ø                                                                                          |
| Bending radius (dynamic)                                                                                                                                                             | ≥ 15 x Ø                                                                                         |
| UL cold bend rating                                                                                                                                                                  | -40 °C                                                                                           |
| Ambient temperature range (static)                                                                                                                                                   | -40...+85 °C                                                                                     |
| Ambient temperature range (dynamic)                                                                                                                                                  | -40...+85 °C                                                                                     |
| Temperature range (installation)                                                                                                                                                     | -20...+85 °C                                                                                     |
| <b>Approval</b>                                                                                                                                                                      |                                                                                                  |
| Approvals                                                                                                                                                                            | CE<br>UKCA<br>RoHS                                                                               |
| <b>Note</b>                                                                                                                                                                          |                                                                                                  |
| - 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. |                                                                                                  |

I/O Connector



Homerun connector



## Technical data

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

### 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         | 9        | Labels                                |

### Accessories

| Ident-No. | Part Number                          | Description                                                                     |
|-----------|--------------------------------------|---------------------------------------------------------------------------------|
| U0915-70  | BKM 19-996-5/S90                     | Connection cordset, female, M16, 19-pin, straight, 5m * (homerun)               |
| U2-07160  | BK 19-0                              | Field-wireable, female, M16, 19-pin, straight,(6-8mm)                           |
| A1050     | KS 5/10 (10/LABELS)                  | Labels                                                                          |
| U0136-00  | PSG 4M-2                             | Cordset, male, M8 x 1, 4-pin, straight, 2m * (I/O port)                         |
| U99-11408 | PSW 4M-2                             | Cordset, male, M8 x 1, 4-pin, right-angle, 2m * (I/O port)                      |
| U6427     | PSGM-CC (8/BAG)                      | Dust cap, male, M8 x 1, Plastic, (8/BAG)                                        |
| A900154   | TORQUE-WRENCH-SET-M12&M8-LEGACY      | Torque wrench set, Torque driver, torque setting tool, M12 fitting, M8 fitting. |
| A900102   | PICOBX ADAPTOR PLATE, 8 PORT (1PACK) | Allows new picobox to utilize the previous version mounting hole locations.     |

\* Other lengths available on request

Circuit Diagram

