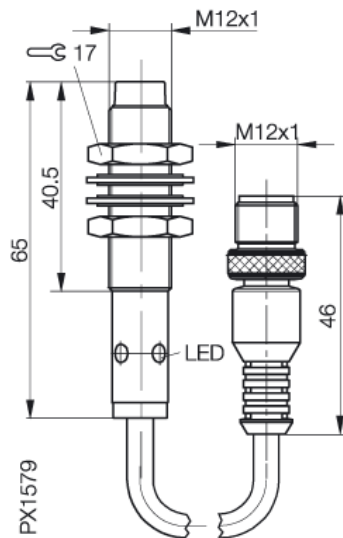


**BAW M12MF2-UAC40F-BP01,5-GS04**  
Inductive Distance Sensors

1...4 mm  
0...10 V



**Electrical data:**

|                                                         |                      |
|---------------------------------------------------------|----------------------|
| Connection                                              | cable with connector |
| Rated operational voltage DC                            | 24 V                 |
| Rated insulation voltage (Ui)                           | 250 AC               |
| Electrical type                                         | DC                   |
| No-load supply current I <sub>o</sub> at I <sub>e</sub> | 10 mA                |
| Supply voltage ripple                                   | 15 %                 |
| Switching element function                              | 0...10 V             |
| Supply voltage max. (U <sub>b</sub> )                   | 30 V                 |
| Supply voltage min. (U <sub>b</sub> )                   | 15 V                 |
| Output voltage s <sub>I</sub> max                       | 10 V                 |
| Output voltage s <sub>I</sub> min                       | 0 V                  |
| Cutoff frequency (-3dB output amplitude)                | 500 Hz               |
| Load resistance min (R <sub>L</sub> )                   | 2000 Ohm             |
| Output voltage at se                                    | 5 V                  |
| Temperature compensation                                | no                   |
| Linear range max (s <sub>I</sub> )                      | 4 mm                 |
| Linear range min (s <sub>I</sub> )                      | 1 mm                 |
| Non-linearity                                           | ±90 µm               |
| Output signal                                           | 0...10 V             |

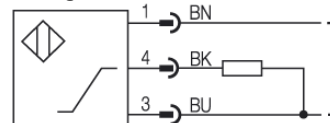
**General data:**

|                             |         |
|-----------------------------|---------|
| Supply voltage indicator    | no      |
| Degree of protection IP     | IP 67   |
| Insulation class            | 2       |
| Recommended connector       | BKS-_19 |
| Polarity reversal resistant | yes     |
| Protected against reversal  | yes     |

**Mechanical data:**

|                                           |                     |
|-------------------------------------------|---------------------|
| Midpoint of linear range (se)             | 2,5 mm              |
| Cable code designation                    | LifY-Y-11Y-0        |
| Cable length                              | 1,5 m               |
| Connection type                           | M12x1-S04           |
| Mounting                                  | non flush mountable |
| Surface treatment                         | nickel plated       |
| Ambient temperature max (T <sub>a</sub> ) | 70 °C               |
| Ambient temperature min (T <sub>a</sub> ) | -10 °C              |
| Sensing face material                     | PBTP                |
| Housing material                          | CuZn                |
| Cable sheath material                     | PUR                 |
| Repeatability                             | 3 %                 |
| Cable diameter D                          | 5,1 mm              |
| Working area max (s <sub>a</sub> )        | 4 mm                |
| Working area min (s <sub>a</sub> )        | 1 mm                |
| Time delay before available max           | 1 ms                |
| Measurement velocity                      | 20 m/s              |
| Opt. working temperature max.             | 50 °C               |
| Opt. working temperature min.             | 10 °C               |
| Temperature coefficient max.              | 4,0 µm/K            |
| Temperature coefficient min.              | -2,0 µm/K           |
| Temperature coefficient typ.              | 0,0 µm/K            |
| Repeat accuracy                           | ±10,0 µm            |
| Adjustment indicator                      | yes                 |
| Working range                             | 1...4 mm            |

**Wiring:**



**Pinout:**

