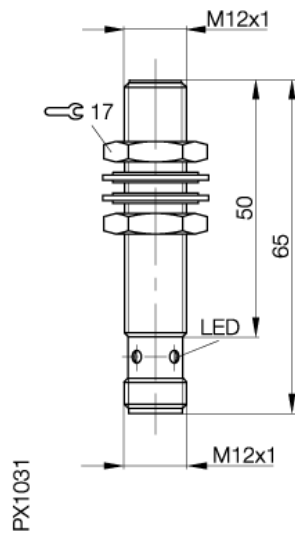


**BAW M12MI-UAC20B-S04G**  
Inductive Distance Sensors

0,5...2 mm  
0...10 V



**Electrical data:**

|                                                         |           |
|---------------------------------------------------------|-----------|
| Connection                                              | 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>l</sub> max                       | 10 V      |
| Output voltage s <sub>l</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>l</sub> )                      | 2 mm      |
| Linear range min (s <sub>l</sub> )                      | 0,5 mm    |
| Non-linearity                                           | ±45 µm    |
| Output signal                                           | 0...10 V  |

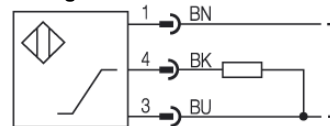
**General data:**

|                             |                 |
|-----------------------------|-----------------|
| Supply voltage indicator    | no              |
| Degree of protection IP     | IP 67           |
| Insulation class            | 2               |
| Recommended connector       | BKS-_19/BKS-_20 |
| Polarity reversal resistant | yes             |
| Protected against reversal  | yes             |

**Mechanical data:**

|                                           |                 |
|-------------------------------------------|-----------------|
| Midpoint of linear range (se)             | 1,25 mm         |
| Connection type                           | M12x1-S04       |
| Mounting                                  | 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                     | PA 12           |
| Housing material                          | CuZn            |
| Repeatability                             | 3 %             |
| Working area max (s <sub>a</sub> )        | 2 mm            |
| Working area min (s <sub>a</sub> )        | 0,5 mm          |
| Time delay before available max           | 0,5 ms          |
| Measurement velocity                      | 40 m/s          |
| Opt. working temperature max.             | 50 °C           |
| Opt. working temperature min.             | 10 °C           |
| Temperature coefficient max.              | -2,5 µm/K       |
| Temperature coefficient min.              | 1,5 µm/K        |
| Temperature coefficient typ.              | -0,5 µm/K       |
| Repeat accuracy                           | ±8,0 µm         |
| Adjustment indicator                      | yes             |
| Working range                             | 0,5...2 mm      |

**Wiring:**



**Pinout:**

