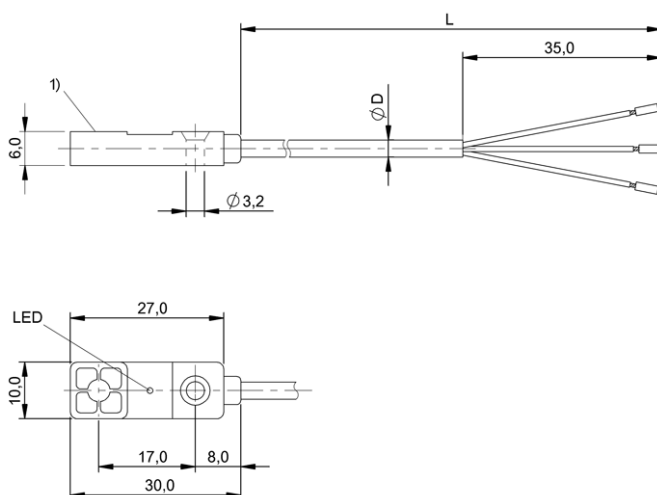


**BAW R03KC-UAE40B-BP03**  
Inductive Distance Sensors

Working range 1...4 mm  
Output signal 0...10 V



**Electrical data:**

|                                                         |           |
|---------------------------------------------------------|-----------|
| Connection                                              | cable     |
| Rated operational voltage DC                            | 24 V      |
| Rated insulation voltage (Ui)                           | 75 DC     |
| Electrical type                                         | DC        |
| No-load supply current I <sub>o</sub> at I <sub>e</sub> | 15 mA     |
| Supply voltage ripple                                   | 10 %      |
| Switching element function                              | 0...10 V  |
| Supply voltage max. (U <sub>b</sub> )                   | 26,4 V    |
| Supply voltage min. (U <sub>b</sub> )                   | 21,6 V    |
| Output voltage s <sub>i</sub> max                       | 10 V      |
| Output voltage s <sub>i</sub> min                       | 0 V       |
| Cutoff frequency (-3dB output amplitude)                | 1000 Hz   |
| Load resistance min (R <sub>L</sub> )                   | 5000 Ohm  |
| Output voltage at s <sub>e</sub>                        | 5 V       |
| Slope U                                                 | 3,30 V/mm |
| Linear range max (s <sub>i</sub> )                      | 4 mm      |
| Linear range min (s <sub>i</sub> )                      | 1 mm      |

**General data:**

|                             |           |
|-----------------------------|-----------|
| Supply voltage indicator    | no        |
| Degree of protection IP     | IP 67     |
| Polarity reversal resistant | no        |
| Protected against reversal  | no        |
| Approval                    | CE, cULus |

**Mechanical data:**

|                                            |                 |
|--------------------------------------------|-----------------|
| Ambient temperature max (T <sub>a</sub> )  | 70 °C           |
| Ambient temperature min (T <sub>a</sub> )  | 0 °C            |
| Sensing face material                      | PA 6            |
| Housing material                           | PA 6            |
| Repeatability                              | 3 %             |
| Cable diameter D                           | 3 mm            |
| Working area max (s <sub>a</sub> )         | 4 mm            |
| Working area min (s <sub>a</sub> )         | 1 mm            |
| Time delay before available max            | 0,5 ms          |
| Measurement velocity                       | 20 m/s          |
| Opt. working temperature max.              | 60 °C           |
| Opt. working temperature min.              | 10 °C           |
| Temperature coefficient max.               | 7,0 µm/K        |
| Temperature coefficient min.               | 1,0 µm/K        |
| Temperature coefficient typ.               | 5,0 µm/K        |
| Repeat accuracy                            | ±35,0 µm        |
| Adjustment indicator                       | yes             |
| Midpoint of linear range (s <sub>e</sub> ) | 2,5 mm          |
| Cable length                               | 3 m             |
| Mounting                                   | flush mountable |

**Wiring:**

