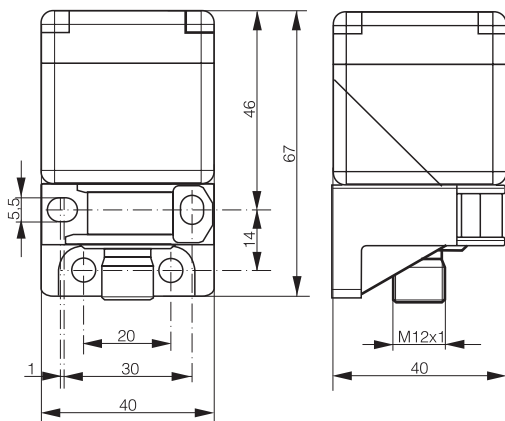




# INDUCTIVE SENSOR BASIC DW-AS-63x-C44

| HOUSING    | OPERATING DISTANCE | MOUNTING       | ✓ Highly flexible sensor solution<br>✓ IP 68 + IP 69K<br>✓ Active face mountable in 5 directions | ✓ Long operating distances<br>✓ Easy click-and-lock mounting<br>✓ IO-Link |
|------------|--------------------|----------------|--|---|
| 40 x 40 mm | 40 mm              | Non-embeddable |  |   |



| DETECTION DATA                       |                                | INTERFACE                  |                                       |
|--------------------------------------|--------------------------------|----------------------------|---------------------------------------|
| Rated operating distance ( $S_n$ )   | 40 mm                          | Indicator LED, yellow (2x) | Sensing state ( $0 \leq S \leq S_n$ ) |
| Assured operating distance ( $S_a$ ) | $\leq (0.81 \times S_n)$ mm    | Indicator LED, green (2x)  | Power supply state                    |
| Repeat accuracy                      | 1.5 mm                         | IO-Link                    | ✓                                     |
| Hysteresis                           | $\leq 15\% S_n$                | MTTF                       | 1899 a                                |
| Temperature drift                    | $\leq 10\% S_n$                |                            |                                       |
| Standard target                      | 120 mm x 120 mm x 1 mm, FE 360 |                            |                                       |

| ELECTRICAL DATA                |                 | MECHANICAL DATA               |                     |
|--------------------------------|-----------------|-------------------------------|---------------------|
| Supply voltage range ( $U_B$ ) | 10...30 VDC     | Mounting                      | Non-embeddable      |
| Residual ripple                | $\leq 10\% U_B$ | Housing material              | PA GF               |
| Output current                 | $\leq 200$ mA   | Sensing face material         | PA GF               |
| Output voltage drop            | $\leq 2.5$ V    | Max tightening torque         | 2.5 Nm              |
| Power consumption (no-load)    | $\leq 30$ mA    | Ambient temperature operation | -25 ... +85 °C      |
| Residual current               | $\leq 0.01$ mA  | Enclosure rating              | IP68, IP69K         |
| Switching frequency            | $\leq 100$ Hz   | Weight (incl. bracket)        | 130 g               |
| Short-circuit protection       | ✓               | Shock and vibration           | IEC 60947-5-2 / 7.4 |
| Voltage reversal protection    | ✓               |                               |                     |
| Cable length max.              | 300 m           |                               |                     |

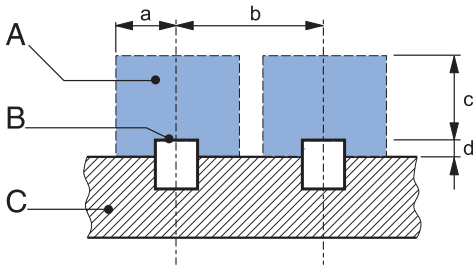
Note: all data measured according to IEC 60947-5-2 standard with  $U_B=20...30$ VDC,  $T_A=23$  °C  $\pm$  5 °C.

## CORRECTION FACTORS

|              |     |        |      |          |      |       |      |                     |      |
|--------------|-----|--------|------|----------|------|-------|------|---------------------|------|
| Steel FE 360 | 1.0 | Copper | 0.10 | Aluminum | 0.20 | Brass | 0.25 | Stainless steel V2A | 0.85 |
|--------------|-----|--------|------|----------|------|-------|------|---------------------|------|

Note: the operating distance of the sensor must be multiplied by the correction factor of the material. For example, the operating distance on Aluminum is  $S_{n,Al} = S_n \times CF_{Al}$ . In case of embeddable mounting, the distance is multiplied by the additional correction factor of the support, thus  $S_{n,Al} = S_n \times CF_{Al} \times CF_{emb,Al}$ .

## INSTALLATION CONDITION



A : metal free zone  
B : sensing face  
C : support

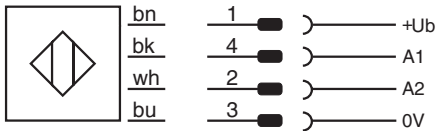
a : 80 mm  
b : 150 mm  
c : 90 mm  
d : 40 mm

## IO-LINK FUNCTIONALITIES

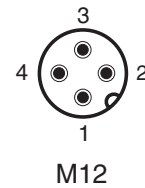
|                   |   |
|-------------------|---|
| IO-Link version   | 1.0   |
| SIO mode          | Supported   |
| Process data      | Detection 80% $S_r$ & 100% $S_r$  |
| Baudrate          | COM2 (38.4 kBaud)   |
| Special functions | Output timing, event flags, detection counter, actual and maximum sensor temperature, installation monitoring |

Note: additional installation information can be found in the glossary of the Contrinex General Catalog.

## WIRING DIAGRAM



## PIN ASSIGNMENT



## AVAILABLE TYPES

| Part number | Part reference | Polarity | Connection          | Output on pin 2      | Output on pin 4              |
|-------------|----------------|----------|---------------------|----------------------|------------------------------|
| 320 820 416 | DW-AS-63A-C44  | PNP      | Connector M12 4-pin | Normally closed (NC) | Normally open (NO) / IO-Link |
| 320 820 407 | DW-AS-63B-C44  | NPN      | Connector M12 4-pin | Normally closed (NC) | Normally open (NO)           |

Note: part reference may include additional suffix to indicate a revision version or special version. Further information is available on request.

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