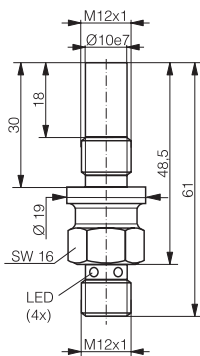
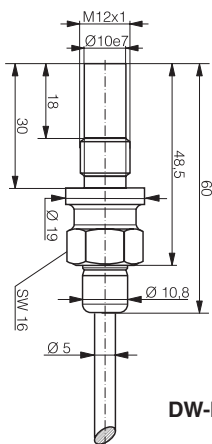


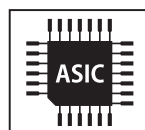
HOUSING	OPERATING DISTANCE	MOUNTING	<ul style="list-style-type: none"> <li>✓ Maritime approved: up to 800 bar</li> <li>✓ DNVGL-CG-0339: 2016</li> <li>✓ 500 bar high-pressure resistant (peak pressures)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Extremely robust</li> <li>✓ Sea-water resistant</li> <li>✓ Factor 1 on Fe &amp; Al</li> </ul>
M12	1,5 mm	Embeddable		



DW-MS-703-P12G



DW-MD-703-P12G



DETECTION DATA		INTERFACE	
Rated operating distance ( $S_n$ )	1,5 mm	Indicator LED, yellow	Sensing state ( $0 \leq s \leq 0.8 S_r$ )
Assured operating distance ( $S_a$ )	$\leq (0.81 \times S_n)$ mm	Indicator LED, yellow, blinking	Sensing state ( $0.8 S_r < s \leq S_r$ )
Repeat accuracy	$\leq 5\% S_r$ ( $U_B = 20 \dots 30$ VDC, $T_A = 23 \text{ °C} \pm 5 \text{ °C}$ )	IO-Link	✓
Hysteresis	$\leq 15\% S_r$		
Temperature drift	$\leq 10\%$		
Standard target	10 x 10 x 1 mm, FE 360		

Notes:  $0.9S_n \leq S_r \leq 1.1S_n$ . / Further information on sensing ranges provided in the Contrinex catalog available on Contrinex homepage.

ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range ( $U_B$ )	10...30 VDC	Mounting	Embeddable
Residual ripple	$\leq 20\% U_B$	Housing material	Stain. steel V4A (1.4404 / AISI 316L)
Output current	$\leq 200$ mA	Sensing face material	Stain. steel V4A (1.4404 / AISI 316L)
Output voltage drop	$\leq 2,0$ V at 200 mA	Operating pressure	500 bar max. (100 bar max. on cable side)
Power consumption (no-load)	$\leq 10$ mA	Ambient temperature operation	-25 ... +85 °C
Residual current	$\leq 0.1$ mA	Enclosure rating	IP68, IP69K
Switching frequency	$\leq 850$ Hz	Weight (cable/connector)	108 g / 40 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  $U_B = 20 \dots 30$  VDC,  $T_A = 23 \text{ °C} \pm 5 \text{ °C}$ .

## CORRECTION FACTORS

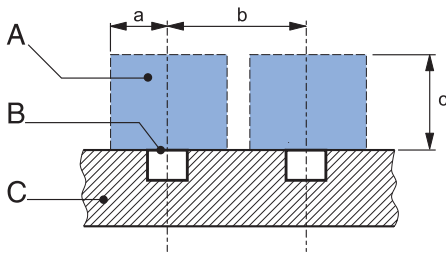
Steel FE 360	1.0	Copper	0.8	Aluminum	1.0	Brass	1.5	Stainless S. V2A 1 / 2 mm	0 / 0
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## CORRECTION FACTORS FOR EMBEDDABLE MOUNTING IN SUPPORT OF

Steel FE 360	1.0	Copper	-	Aluminum	0.6	Brass	0.7	Stainless S. V2A	0.8
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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 CONDITIONS



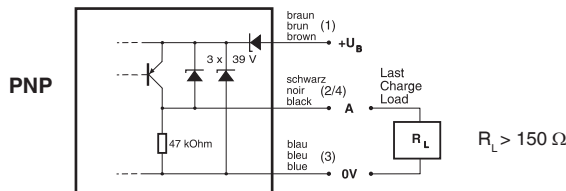
A : metal free zone	a : 5 mm
B : sensing face	b : 30 mm
C : support	c : 5 mm

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

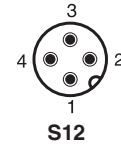
## IO-LINK FUNCTIONALITIES

IO-Link version	1.0
SIO mode	Supported
Process data	Detection 80% $S_r$ & 100% $S_r$
Baudrate	COM2 (38.4 kBaud)
Special functions	NO/NC selection, output timing, event flags

## WIRING DIAGRAM



## PIN ASSIGNMENT



## AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 4
320 420 748	DW-MS-703-P12G	PNP	connector S12	Normally open (NO) / IO-Link
320 420 749	DW-MD-703-P12G	PNP	cable 2 m PUR	Normally open (NO) / IO-Link

### Notes:

- Part reference may include additional suffix to indicate a revision version or special version. Further information is available on request.
- Temperature expansion due to ambient temperature changes needs to be considered for mounting fixtures and targets.

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