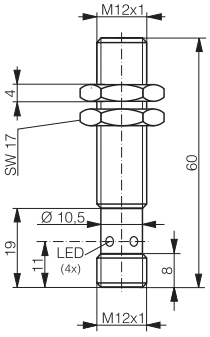
CONTRINEX

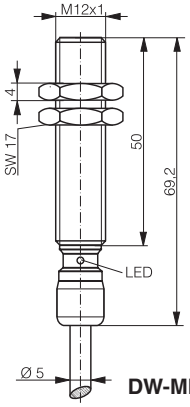
INDUCTIVE SENSOR
MARITIME
DW-Mx-703-M12

HOUSING	OPERATING DISTANCE	MOUNTING
M12	6 mm	Embeddable

- ✓ Maritime approved: DNVGL-CG-0339: 2016
- ✓ One-piece stainless-steel housing (IP 68 / IP 69K)
- ✓ Extremely robust
- ✓ Sea-water resistant
- ✓ Factor 1 on steel and aluminum



DW-MS-703-M12



DW-MD-703-M12

DETECTION DATA

Rated operating distance (S_n)	6 mm
Assured operating distance (S_a)	≤ (0.81 x S_n) mm
Repeat accuracy	0.2 mm
Hysteresis	≤ 15% S_r
Temperature drift	≤ 10% S_r
Standard target	18 x 18 x 1 mm, FE 360

INTERFACE

Indicator LED, yellow	Sensing state ($0 \leq s \leq 0.8\ S_r$)
Indicator LED, yellow, blinking	Sensing state ($0.8\ S_r < s \leq S_r$)
IO-Link	✓

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

Supply voltage range (U_B)	10...30 VDC
Residual ripple	≤ 20% U_B
Output current	≤ 200 mA
Output voltage drop	≤ 2,0 V at 200 mA
Power consumption (no-load)	≤ 10 mA
Residual current	≤ 0.1 mA
Switching frequency	≤ 600 Hz
Short-circuit protection	✓
Voltage reversal protection	✓
Cable length max.	300 m

MECHANICAL DATA

Mounting	Embeddable
Housing material	Stain. steel V4A (1.4404 / AISI 316L)
Sensing face material	Stain. steel V4A (1.4404 / AISI 316L)
Operating pressure	80 bar max.
Ambient temperature operation	-25 ... +85 °C
Enclosure rating	IP68, IP69K
Weight (cable/connector)	85 g / 24 g
Shock and vibration	IEC 60947-5-2 / 7.4

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

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CORRECTION FACTORS

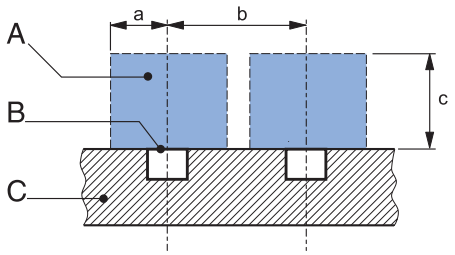
Steel FE 360	**1.0**	Copper	**0.8**	Aluminum	**1.0**	Brass	**1.3**	Stainless S. V4A 1 / 2 mm	**0.4 / 0.8**

CORRECTION FACTORS FOR EMBEDDABLE MOUNTING IN SUPPORT OF

Steel FE 360	**0.7**	Copper	**-**	Aluminum	**1.15**	Brass	**1.05**	Stainless S. V4A	**0.8**

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
B : sensing face
C : support

a : 12 mm
b : 50 mm
c : 18 mm

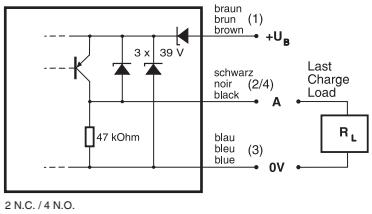
Note: additional installation information can be found in the glossary of the Contrinex General Catalog.

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

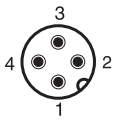
WIRING DIAGRAM

PNP



$R_L > 150\ \Omega$

PIN ASSIGNMENT



S12

AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 4
320 420 750	DW-MS-703-M12	PNP	connector S12	Normally open (NO) / IO-Link
320 420 751	DW-MD-703-M12	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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