

INDUCTIVE SENSOR **EXTREME**DW-Ax-70x-M12-303

HOUSING	OPERATING DISTANCE	MOUNTING	✓ One-piece housing in stainless steel V2A	✓ Extremely robust✓ Water resistant
M12	2 mm	Embeddable	✓ Long operating distance✓ Factor 1 on Fe and Al	✓ IP68/IP69K✓ IO-Link v1.1





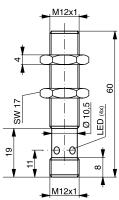


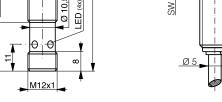












DW-AS-70x-M12-303

Note: $0.9S_n \le S_r \le 1.1S_n$.

DW-AD-70x-M12-303

LED

DETECTION DATA		INTERFACE		
Rated operating distance (S _n)	2 mm	Indicator LED, yellow	Sensing state (0 \leq s \leq 0.8 S _r)	
Assured operating distance (S _a)	\leq (0.81 x S _n) mm	Indicator LED, yellow, blinking	Sensing state (0.8 $S_r < s \le S_r$)	
Repeat accuracy	≤ 0.2 mm	IO-Link	\checkmark	
Hysteresis	3% S _r ≤ Hyst ≤ 15% S _r	MTTF (@40°C)	1017 y	
Temperature drift	≤ 10% S _r			
Standard target	12 x 12 x 1 mm³, FE360			

ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U _B)	1030 VDC	Mounting	Embeddable
Residual ripple	≤ 20% U _B	Housing material	V2A / 1.4305 / AISI 303
Output current	≤ 200 mA	Sensing face material	V2A / 1.4305 / AISI 303
Output voltage drop	≤ 2.0 VDC	Max tightening torque	20 Nm
Power consumption (no-load)	≤ 10 mA	Ambient operating temperature	-25+85°C¹
Residual current	≤ 0.1 mA	Enclosure rating	IP68 / IP69K
Switching frequency	≤ 900 Hz	Weight (cable/connector)	see page 2
Short-circuit protection	✓	Shock and vibration	IEC 60947-5-2 / 7.4
Voltage reversal protection	✓		
Cable length max.	≤ 300 m		

¹Maximum temperature according to UL: 70°C.

Note: all data measured according to IEC 60947-5-2 standard with $\rm U_B=20\dots30VDC,\,T_A=23^{\circ}C\pm5^{\circ}C.$

CORRECTION FACTORS FOR TARGET OF

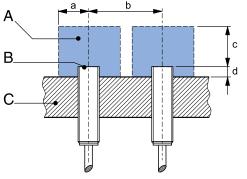
Steel FE 360 1 Copper 0.9 Aluminum 1 Brass 1.4 Stainless Steel V2A 1/2 mm 0 / 0.4

CORRECTION FACTORS FOR EMBEDDABLE MOUNTING IN SUPPORT OF

Steel FE 360 0.9 Aluminum 0.9 Brass 0.9 Stainless Steel V2A 0.9

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

b: 20mm c: 6mm

6mm d: steel 0mm

IO-LINK FUNCTIONALITIES

IO-Link version	1.1	
SIO mode	Supported	
Process data	7-bit input	
Baudrate	COM2 (38.4 kBaud)	
Minimum cycle time	10.4 ms	
ISDU	Not supported	



 ${\sf IODD}$ files may be downloaded from

www.contrinex.com/product-range/inductive-sensors/.

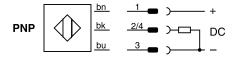
Select the product name to display the product page with corresponding downloads.

Alternatively, just click/scan the QR code on the left.

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 / bk	Weight
330-320-063	DW-AS-703-M12-303	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	25 g
320-420-419	DW-AS-701-M12-303	NPN	M12 4-pin	-	Normally open (NO)	25 g
330-320-062	DW-AD-703-M12-303	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	89 g
320-420-415	DW-AD-701-M12-303	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	89 g

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

Operators of the products we supply are responsible for compliance with measures for the protection of persons. The use of our equipment in applications where the safety of persons might be at risk is only authorized if the operator observes and implements separate, appropriate and necessary measures for the protection of persons and machines. Terms of delivery and rights to change design reserved.