

INDUCTIVE SENSOR **EXTREME**DW-Ax-70x-M30-303

HOUSING	OPERATING DISTANCE	MOUNTING	✓ One-piece housing in stainless steel V2A	✓ Extremely robust✓ Water resistant	
M30	10 mm	Embeddable	✓ Long operating distance✓ Factor 1 on Fe and Al	✓ IP68/IP69K✓ IO-Link v1.1	





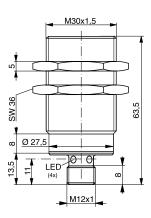


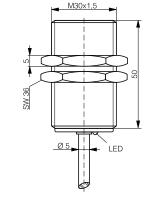












DW-AS-70x-M30-303

DW-AD-70x-M30-303

DETECTION DATA		INTERFACE		
Rated operating distance (S _n)	10 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	≤ 0.3 mm	IO-Link	\checkmark	
Hysteresis	3% S _r ≤ Hyst ≤ 15% S _r	MTTF (@40°C)	1028 y	
Temperature drift	≤ 10% S _r			
Standard target	30 x 30 x 1 mm ³ , FE360			

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

ELECTRICAL DATA		MECHANICAL DATA		
Supply voltage range (U _B)	1030 VDC	Mounting	Embeddable	
Residual ripple	\leq 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	150 Nm	
Power consumption (no-load)	≤ 10 mA	Ambient operating temperature	-25+85°C¹	
Residual current	≤ 0.1 mA	Enclosure rating	IP68 / IP69K	
Switching frequency	≤ 250 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

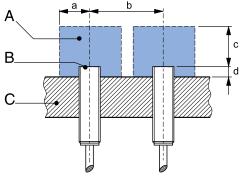
Steel FE 360 1 Copper 0.8 Aluminum 1 Brass 1.3 Stainless Steel V2A 1/2 mm 0.4 / 0.6

CORRECTION FACTORS FOR EMBEDDABLE MOUNTING IN SUPPORT OF

Steel FE 360 0.9 Aluminum 0.8 Brass 0.8 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: 60 mm c: 30 mm

a: 35 mm o

d: steel 0 mm

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



IODD files may be downloaded from

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

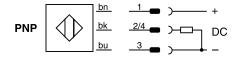
Select the product name to display the product page with corresponding downloads.

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



NPN | bh 2/4 | 2/4 | 1



AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-447	DW-AD-701-M30-303	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	190 g
330-320-069	DW-AD-703-M30-303	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	190 g
320-420-450	DW-AD-704-M30-303	PNP	PUR, 2 m, 3 wire	Normally close (NC)	-	190 g
320-420-451	DW-AS-701-M30-303	NPN	M12 4-pin	-	Normally open (NO)	137 g
330-320-070	DW-AS-703-M30-303	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	137 g

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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