

INDUCTIVE SENSOR WELD-IMMUNE DW-Ax-70x-M18-6xx

HOUSING	OPERATING DISTANCE	MOUNTING	✓ Anti-spatter coating✓ Magnetic-field immunity:	✓ Robust full-metal sensor, impact resistan	
M18	10 mm	Embeddable	medium frequency \leq 15 kA 50 Hz fields \leq 40 mT	✓ Long operating distance✓ Factor 1 on Fe and Al	





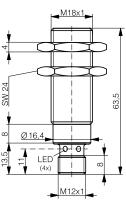


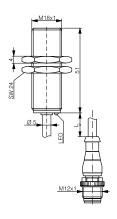
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DW-AS-70x-M18-6xx

DW-AV-70x-M18-6xx

DETECTION DATA		INTERFACE		
Rated operating distance (S _n)	10 mm	Indicator LED, yellow	Sensing state $(0 \le s \le S_r)$	
Assured operating distance (S _a)	\leq (0.81 x S _n) mm	IO-Link	×	
Repeat accuracy	≤ 0.5 mm	MTTF (@40°C)	1028 y	
Hysteresis	3% S _r ≤ Hyst ≤ 15% S _r			
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	≤ 20% U _B	Housing material	V2A / 1.4305 / AISI 303 (+ coating)	
Output current	≤ 200 mA	Sensing face material	V2A / 1.4305 / AISI 303 (+ coating)	
Output voltage drop	≤ 2.0 VDC	Max tightening torque	50 Nm	
Power consumption (no-load)	≤ 10 mA	Ambient operating temperature	-25+85°C¹	
Residual current	≤ 0.1 mA	Enclosure rating	IP68 / IP69K	
Switching frequency	≤ 15 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 $\rm U_8=20\dots30VDC,\,T_A=23^{\circ}C\pm5^{\circ}C.$

CORRECTION FACTORS FOR TARGET OF

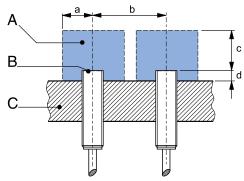
Steel FE 360 1 Copper 0.85 Aluminum 1 Brass 1.3 Stainless Steel V2A 1/2 mm 0.4 / 0.8

CORRECTION FACTORS FOR EMBEDDABLE MOUNTING IN SUPPORT OF

Steel FE 360 0.7 Aluminum 0.7 Brass 0.55 Stainless Steel V2A 0.65

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: 25 mm b: 50 mm c: 30 mm d: steel 0mm

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

WIRING DIAGRAM PIN ASSIGNMENT



AVAILABLE TYPES

LINCOATED

UNCOALLD						
Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-547	DW-AS-703-M18-673	PNP	M12 4-pin	-	Normally open (NO)	53 g
320-420-763	DW-AV-701-M18-692	NPN	PUR, 0.2m + M12 4-pin	-	Normally open (NO)	66 g

COATED						
Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-782	DW-AS-703-M18-697	PNP	M12 4-pin	-	Normally open (NO)	53 g
320-420-780	DW-AV-701-M18-696	NPN	PUR, 0.2m + M12 4-pin	-	Normally open (NO)	66 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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