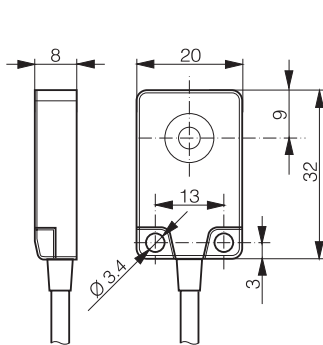
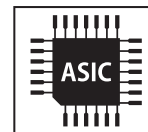
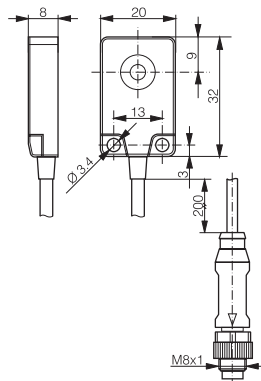


INDUCTIVE SENSOR EXTREME DW-Ax-70x-C23

HOUSING	OPERATING DISTANCE	MOUNTING		
32 x 20 (C23)	7 mm	Embeddable	<ul style="list-style-type: none"> ✓ One-piece housing in stainless steel V4A ✓ Long operating distance ✓ Factor 1 on Fe and Al 	<ul style="list-style-type: none"> ✓ Extremely robust ✓ Corrosion resistant ✓ IP68, IP69K ✓ IO-Link v1.1



DW-AD-70x-C23



DW-AV-70x-C23-276

DETECTION DATA		INTERFACE	
Rated operating distance (S_n)	7 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	≤ 0.3 mm	IO-Link	✓
Hysteresis	$3\% S_r \leq \text{Hyst} \leq 15\% S_r$	MTTF (@40°C)	1028 y
Temperature drift	$\leq 10\% S_r$		
Standard target	21 x 21 x 1 mm ³ , FE360		

Note: $0.9S_n \leq S_a \leq 1.1S_n$.

ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U_B)	10...30 VDC	Mounting	Embeddable
Residual ripple	$\leq 20\% U_B$	Housing material	V4A / 1.4435 / AISI 316L
Output current	≤ 200 mA	Sensing face material	V4A / 1.4435 / AISI 316L
Output voltage drop	≤ 2.0 VDC	Max tightening torque	2 Nm (for M3 screw)
Power consumption (no-load)	≤ 10 mA	Ambient operating temperature	-25...+85°C ¹
Residual current	≤ 0.1 mA	Enclosure rating	IP68 / IP69K
Switching frequency	≤ 180 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 $U_B=20 \dots 30$ VDC, $T_A=23^\circ\text{C} \pm 5^\circ\text{C}$.

CORRECTION FACTORS FOR TARGET OF

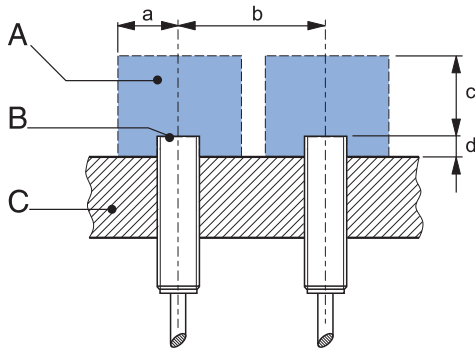
Steel FE 360	1	Copper	0.8	Aluminum	1	Brass	1.2	Stainless Steel V2A 1/2 mm	0.5 / 0.85
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CORRECTION FACTORS FOR EMBEDDABLE MOUNTING IN SUPPORT OF

Steel FE 360	0.9	Aluminum	0.95	Brass	1	Stainless Steel V2A	1.1
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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
B : sensing face
C : support

a : 21 mm
b : 60 mm
c : 21 mm

d : steel 0 mm

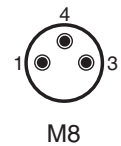
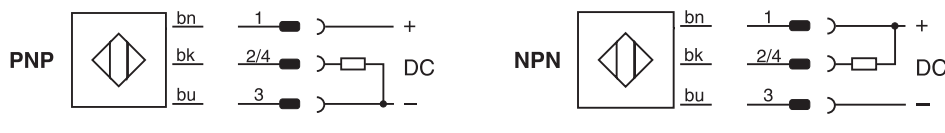
Note: additional installation information can be found in the glossary of the Contrinex General Catalog.

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

WIRING DIAGRAM

PIN ASSIGNMENT



AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-704	DW-AD-701-C23	NPN	PVC, 2 m, 3 wire	-	Normally open (NO)	50 g
320-420-714	DW-AD-702-C23	NPN	PVC, 2 m, 3 wire	Normally close (NC)	-	50 g
330-320-097	DW-AD-703-C23	PNP	PVC, 2 m, 3 wire	-	Normally open (NO) / IO-Link	50 g
320-420-730	DW-AD-704-C23	PNP	PVC, 2 m, 3 wire	Normally close (NC)	-	50 g
320-420-706	DW-AV-701-C23-276	NPN	PVC, 0.2 m + M8 3-pin	-	Normally open (NO)	24 g
320-420-731	DW-AV-702-C23-276	NPN	PVC, 0.2 m + M8 3-pin	-	Normally close (NC)	24 g
330-320-098	DW-AV-703-C23-276	PNP	PVC, 0.2 m + M8 3-pin	-	Normally open (NO) / IO-Link	24 g
320-420-732	DW-AV-704-C23-276	PNP	PVC, 0.2 m + M8 3-pin	-	Normally close (NC)	24 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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