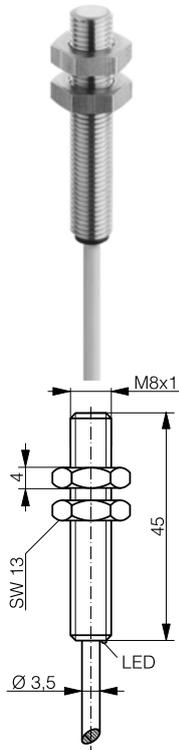
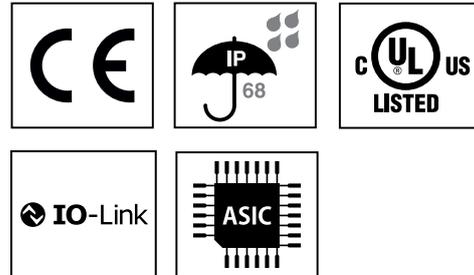


HOUSING	OPERATING DISTANCE	MOUNTING	✓ Resistant up to 20 bar	✓ Excellent accuracy
M8	2.5 mm	Embeddable	✓ Long operating distance	✓ Ceramic sensing face
			✓ Exceptional price-performance ratio	✓ Sealed device, IP68
				✓ IO-Link v1.1



DW-AD-50x-M8E



DETECTION DATA		INTERFACE	
Rated operating distance (S_n)	2.5 mm	Indicator LED, yellow	Sensing state ($0 \leq s \leq 0.8 S_n$)
Assured operating distance (S_a)	$\leq (0.81 \times S_n)$ mm	Indicator LED, yellow, blinking	Sensing state ($0.8 S_n < s \leq S_n$)
Repeat accuracy	≤ 0.125 mm	IO-Link	✓
Hysteresis	$3\% S_n \leq \text{Hyst} \leq 15\% S_n$	MTTF (@40°C)	1073 y
Temperature drift	$\leq 10\%$ (-25...+70°C)		
Standard target	8 x 8 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	Operating pressure	≤ 20 bar
Residual ripple	$\leq 20\%$ U_b	Peak pressure	N/A
Output current	≤ 200 mA	Vacuum down to	N/A
Output voltage drop	≤ 2.0 VDC	Mounting	Embeddable
Power consumption (no-load)	≤ 10 mA	Housing material	Stainless-steel V2A
Residual current	≤ 0.1 mA	Sensing face material	ZrO ₂
Switching frequency	≤ 1000 Hz	Max tightening torque	8 Nm
Short-circuit protection	✓	Ambient operating temperature	-25...+70°C ¹
Voltage reversal protection	✓	Enclosure rating	IP 68
Cable length max.	≤ 300 m	Weight (cable / connector)	see page 3
		Shock and vibration	IEC 60947-5-2 / 7.4

Note: all data measured according to IEC 60947-5-2 standard with $U_b=20 \dots 30$ VDC, $T_A=23^\circ\text{C} \pm 5^\circ\text{C}$.

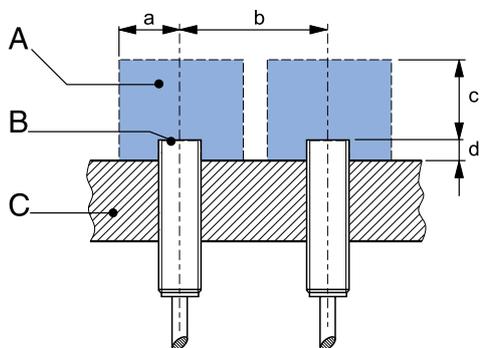
¹Maximum temperature according to UL: 70°C.

CORRECTION FACTORS

Steel FE 360	1	Copper	0.22	Aluminum	0.3	Brass	0.39	Stainless S. V2A 1 / 2 mm	0.79
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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	a : 6 mm	d : steel 0 mm
B : sensing face	b : 12 mm	
C : support	c : 7.5 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



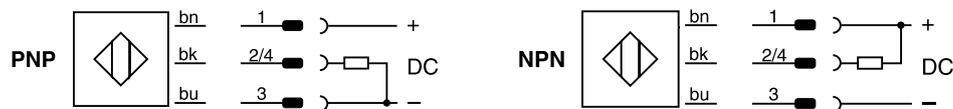
IO-Link files may be downloaded from

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.

WIRING DIAGRAM



AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
330-020-090	DW-AD-501-M8E	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	51 g
330-020-091	DW-AD-502-M8E	NPN	PUR, 2 m, 3 wire	-	Normally close (NC)	51 g
330-020-092	DW-AD-503-M8E	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	51 g
330-020-096	DW-AD-504-M8E	PNP	PUR, 2 m, 3 wire	-	Normally close (NC)	51 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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