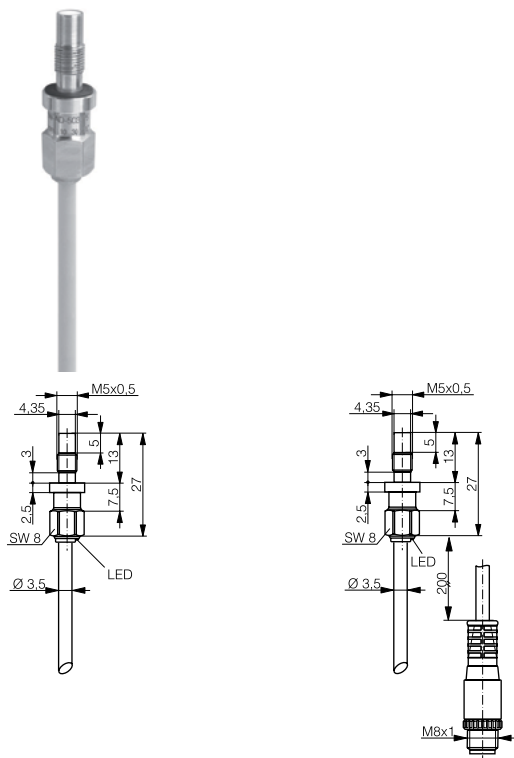




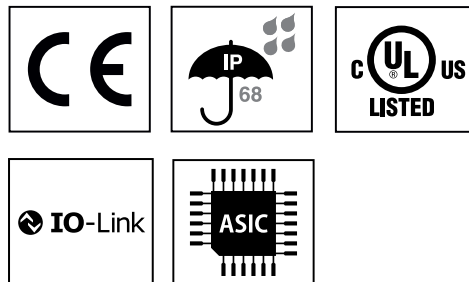
INDUCTIVE SENSOR HIGH PRESSURE DW-Ax-50x-P5

HOUSING	OPERATING DISTANCE	MOUNTING		
M5	1 mm	Embeddable	✓ Resistant up to 500 bar ✓ Exceptionally long life ✓ Long operating distance ✓ Large temperature range	✓ Peaks ≤ 1000 bar ✓ Ceramic sensing face ✓ Gas tight, IP68 ✓ IO-Link v1.1



DW-AD-50x-P5

DW-AV-50x-P5-276



DETECTION DATA		INTERFACE	
Rated operating distance (S_n)	1 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 (-25 ... +70 °C)	Indicator LED, yellow, blinking	Sensing state ($0.8 S_r < s \leq S_r$)
Repeat accuracy	≤ 0.05 mm	IO-Link	✓
Hysteresis	$3\% S_r \leq \text{Hyst} \leq 15\% S_r$	MTTF (@40°C)	1032 y
Temperature drift	$\leq 10\%$ (-25 ... +70°C) $\leq 15\%$ (+70 ... +100°C)		
Standard target	4.5 x 4.5 x 1 mm ³ , FE360		

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

ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U_B)	10...30 VDC	Operating pressure	≤ 500 bar
Residual ripple	$\leq 20\% U_B$	Peak pressure	≤ 1000 bar
Output current	≤ 200 mA	Vacuum down to	10^{-8} Torr
Output voltage drop	≤ 2.0 VDC	Mounting	Embeddable
Power consumption (no-load)	≤ 10 mA	Housing material	Stainless-steel DIN 2.4711 (Phynox)
Residual current	≤ 0.1 mA	Sensing face material	ZrO ₂
Switching frequency	≤ 1000 Hz	Max tightening torque	3 Nm
Short-circuit protection	✓	Ambient operating temperature	-25...+100°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, $T_A = 23^\circ\text{C} \pm 5^\circ\text{C}$.

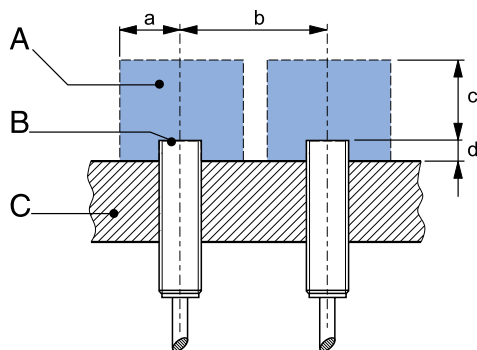
¹Maximum temperature according to UL: 70°C.

CORRECTION FACTORS

Steel FE 360	1	Copper	0	Aluminum	0	Brass	0	Stainless S. V2A 1 / 2 mm	0.4
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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 : 4 mm d : steel 0 mm
 B : sensing face b : 10 mm
 C : support c : 3 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



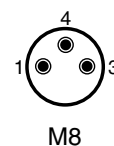
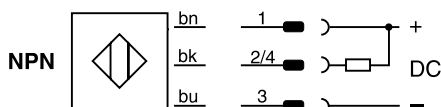
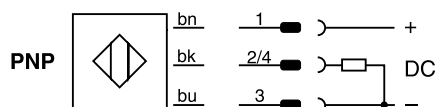
IO-Link files may be downloaded from

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



PIN ASSIGNMENT

AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
330-020-023	DW-AD-501-P5	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	35 g
330-020-024	DW-AD-502-P5	NPN	PUR, 2 m, 3 wire	-	Normally close (NC)	35 g
330-020-025	DW-AD-503-P5	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	35 g
330-020-026	DW-AD-504-P5	PNP	PUR, 2 m, 3 wire	-	Normally close (NC)	35 g
330-020-027	DW-AV-501-P5-276	NPN	PUR, 0.2 m + M8 3-pin	-	Normally open (NO)	22 g
330-020-028	DW-AV-502-P5-276	NPN	PUR, 0.2 m + M8 3-pin	-	Normally close (NC)	22 g
330-020-029	DW-AV-503-P5-276	PNP	PUR, 0.2 m + M8 3-pin	-	Normally open (NO) / IO-Link	22 g
330-020-030	DW-AV-504-P5-276	PNP	PUR, 0.2 m + M8 3-pin	-	Normally close (NC)	22 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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