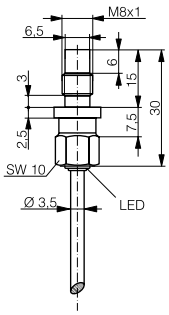
CONTRINEX

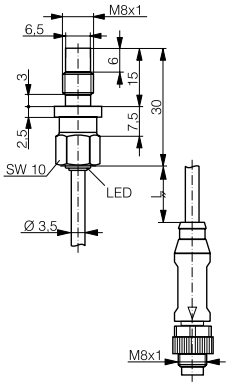
INDUCTIVE SENSOR
HIGH PRESSURE
DW-Ax-50x-P8

HOUSING	OPERATING DISTANCE	MOUNTING
M8	1.5 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-P8



DW-AV-50x-P8-276/-282

DETECTION DATA

Rated operating distance (S_n)	1.5 mm
Assured operating distance (S_a)	≤ (0.81 x S_n) mm (-25 ... +70 °C)
Repeat accuracy	≤ 0.075 mm
Hysteresis	3% S_r ≤ Hyst ≤ 15% S_r
Temperature drift	≤ 10 % (-25 ... +70°C) ≤ 15 % (+70 ... +100°C)
Standard target	6.5 x 6.5 x 1 mm³, FE360

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

INTERFACE

Indicator LED, yellow	Sensing state ($0 \leq s \leq 0.8\ S_r$)
Indicator LED, yellow, blinking	Sensing state ($0.8\ S_r < s \leq S_r$)
IO-Link	✓
MTTF (@40°C)	1073 y

ELECTRICAL DATA

Supply voltage range (U_B)	10...30 VDC
Residual ripple	≤ 20% U_B
Output current	≤ 200 mA
Output voltage drop	≤ 2.0 VDC
Power consumption (no-load)	≤ 10 mA
Residual current	≤ 0.1 mA
Switching frequency	≤ 800 Hz
Short-circuit protection	✓
Voltage reversal protection	✓
Cable length max.	≤ 300 m

MECHANICAL DATA

Operating pressure	≤ 500 bar
Peak pressure	≤ 1000 bar
Vacuum down to	10^{-8} Torr
Mounting	Embeddable
Housing material	Stainless-steel V4A (DIN 1.4404/AISI 316 L)
Sensing face material	ZrO_2
Max tightening torque	12 Nm
Ambient operating temperature	-25...+100°C[1]
Enclosure rating	IP68
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…30VDC, T_A= 23°C ± 5°C.

[1]Maximum temperature according to UL: 70°C.

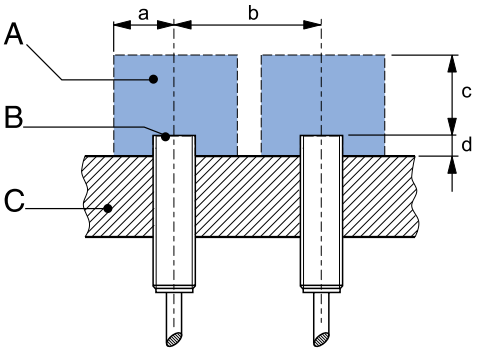
CONTRINEX AG Industrial Electronics
Route du Pâquis 5 – P.O. Box – CH 1720 Corminboeuf – Switzerland – **Tel:** +41 26 460 46 46
Fax: +41 26 460 46 40 – **Internet:** www.contrinex.com – **E-mail:** info@contrinex.com

CORRECTION FACTORS

Steel FE 360	**1**	Copper	**0.22**	Aluminum	**0.26**	Brass	**0.39**	Stainless S. V2A 1 / 2 mm	**0.66**

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

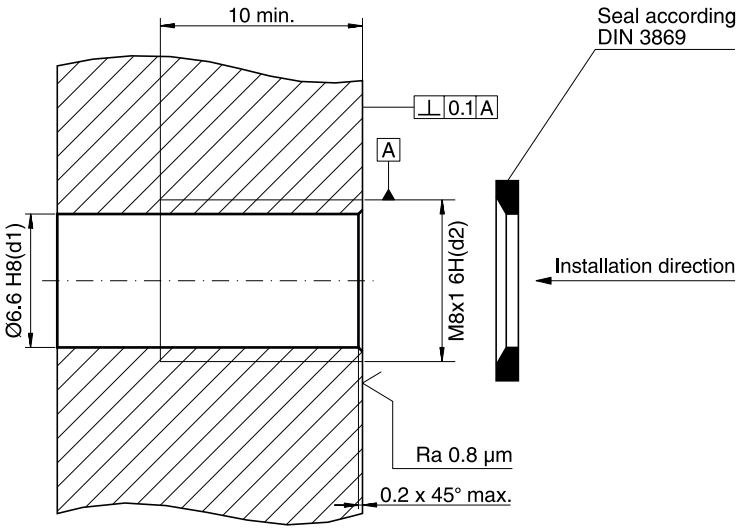


A : metal free zone
B : sensing face
C : support

a : 6 mm
b : 14 mm
c : 4.5 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

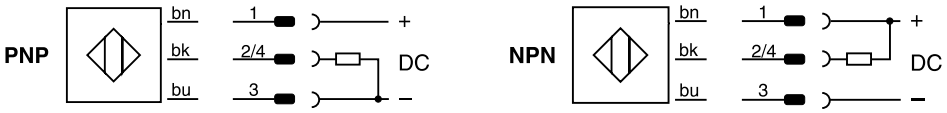
IODD files may be downloaded from

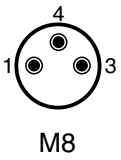
www.contrinex.com/product-range/inductive-sensors/.

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

Alternatively, just click/scan the QR code on the left.

WIRING DIAGRAM





AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
330-020-099	DW-AD-503-P8	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	40 g
330-020-100	DW-AD-504-P8	PNP	PUR, 2 m, 3 wire	-	Normally close (NC)	40 g
330-020-101	DW-AD-501-P8	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	40 g
330-020-102	DW-AD-502-P8	NPN	PUR, 2 m, 3 wire	-	Normally close (NC)	40 g
330-020-476	DW-AV-501-P8-276	NPN	PUR, 0.2 m + M8 3-pin	-	Normally open (NO)	40 g
330-020-483	DW-AV-503-P8-282	PNP	PUR, 0.5 m + M8 3-pin	-	Normally open (NO)	40 g

Note: part reference may include additional suffix to indicate a revision version or special version. Further information is available on request.

CONTRINEX AG Industrial Electronics

Route du Pâquis 5 – P.O. Box – CH 1720 Corminboeuf – Switzerland – **Tel:** +41 26 460 46 46
Fax: +41 26 460 46 40 – **Internet:** www.contrinex.com – **E-mail:** info@contrinex.com