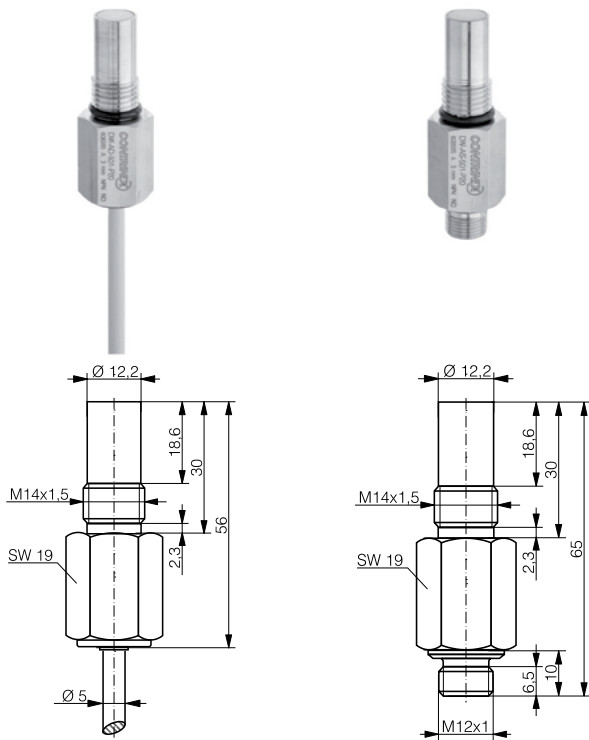
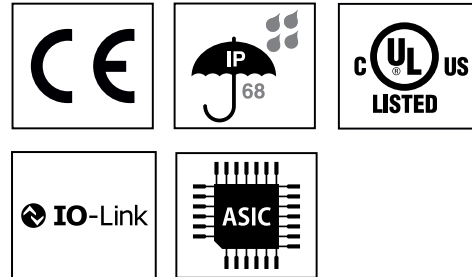


HOUSING	OPERATING DISTANCE	MOUNTING	✓ Resistant up to 500 bar	✓ Peaks ≤ 1000 bar
M14	3 mm	Embeddable	✓ Exceptionally long life	✓ Ceramic sensing face
			✓ Long operating distance	✓ Gas tight, IP68
			✓ Large temperature range	✓ IO-Link v1.1



DW-AD-50x-P20

DW-AS-50x-P20



DETECTION DATA		INTERFACE	
Rated operating distance (S_n)	3 mm	Indicator LED, yellow	✗
Assured operating distance (S_a)	≤ (0.81 x S_n) mm (-25 ... +70°C)	Indicator LED, yellow, blinking	✗
Repeat accuracy	≤ 0.1 mm	IO-Link	✓
Hysteresis	3% S_r ≤ Hyst ≤ 15% S_r	MTTF (@40°C)	981 y
Temperature drift	≤ 10 % (-25 ... +70°C) ≤ 15 % (+70 ... +100°C)		
Standard target	12 x 12 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	≤ 500 bar
Residual ripple	≤ 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 1.4435 / AISI 316 L
Residual current	≤ 0.1 mA	Sensing face material	ZrO ₂
Switching frequency	≤ 500 Hz	Max tightening torque	70 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

¹Maximum temperature according to UL: 70°C.

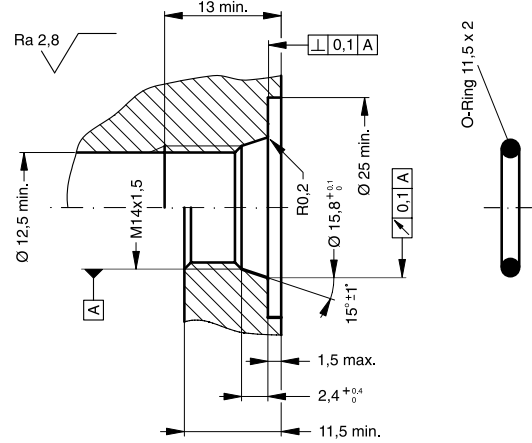
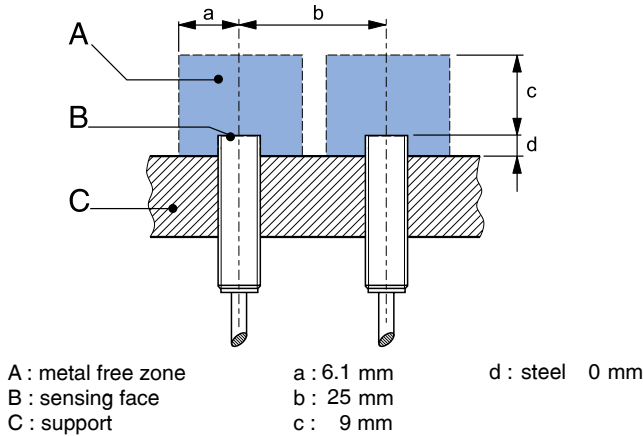
Note: all data measured according to IEC 60947-5-2 standard with $U_b=20...30VDC$, $T_A=23 \pm 5 \text{ }^\circ\text{C}$.

CORRECTION FACTORS

Steel FE 360	1	Copper	0	Aluminum	0	Brass	0.15	Stainless S. V2A 1 / 2 mm	0.85
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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



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

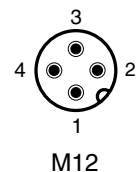
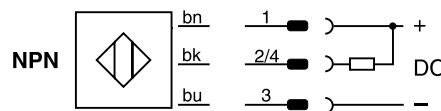
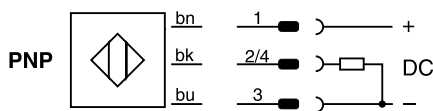
www.contrinex.com/product-range/inductive-sensors/.

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

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

WIRING DIAGRAM

PIN ASSIGNMENT



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AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
330-020-302	DW-AD-501-P20	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	120 g
330-020-303	DW-AD-502-P20	NPN	PUR, 2 m, 3 wire	-	Normally close (NC)	120 g
330-020-304	DW-AD-503-P20	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	120 g
330-020-305	DW-AD-503-P20-295	PNP	PUR, 5 m, 3 wire	-	Normally open (NO) / IO-Link	215 g
330-020-306	DW-AD-503-P20-298	PNP	PUR, 10 m, 3 wire	-	Normally open (NO) / IO-Link	380 g
330-020-307	DW-AD-504-P20	PNP	PUR, 2 m, 3 wire	-	Normally close (NC)	120 g
330-020-308	DW-AS-501-P20	NPN	M12 4-pin	-	Normally open (NO)	70 g
330-020-310	DW-AS-502-P20	NPN	M12 4-pin	Normally close (NC)	-	70 g
330-020-311	DW-AS-503-P20	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	70 g
330-020-313	DW-AS-504-P20	PNP	M12 4-pin	Normally close (NC)	-	70 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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