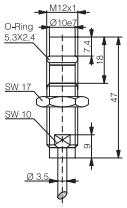
CONTRINEX

INDUCTIVE SENSOR
High pressure
DW-Ax-50x-P12

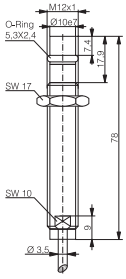
HOUSING	OPERATING DISTANCE	MOUNTING
M12	1.5 mm	Embeddable

- ✓ 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

CE · IP 68 · c UL us LISTED · IO-Link · ASIC



DW-AD-50x-P12-625



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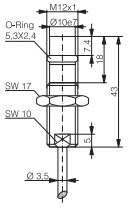

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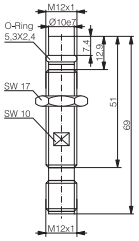

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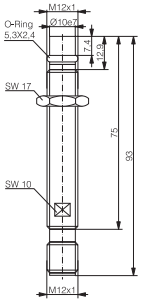

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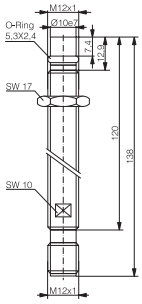

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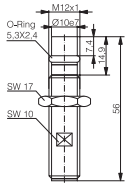

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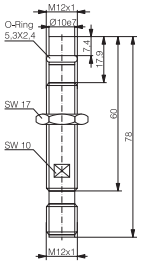

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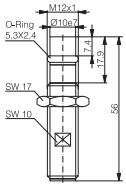

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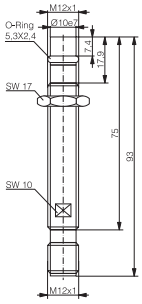

DW-AS-50x-P12-635

DETECTION DATA		INTERFACE	
Rated operating distance (S_n)	1.5 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)	949 y
Temperature drift	≤ 10 % (-25 ... +70 °C) ≤ 15 % (+70 ... +100°C)		
Standard target	10 x 10 x 1mm³, FE360		

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

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Fax: +41 26 460 46 40 - **Internet:** www.contrinex.com - **E-mail:** info@contrinex.com

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	≤ 600 Hz
Short-circuit protection	✓
Voltage reversal protection	✓
Cable length max.	≤ 300 m

MECHANICAL DATA

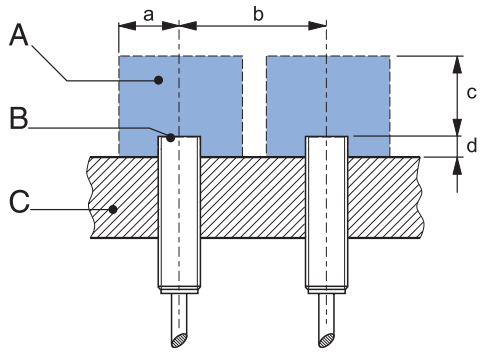
Operating pressure	≤ 500 bar
Peak pressure	≤ 1000 bar
Vacuum down to	10^{-8} Torr
Mounting	Embeddable
Housing material	Stainless-steel DIN 1.4305 / AISI 303
Sensing face material	ZrO_2
Max tightening torque	40 Nm
Ambient operating temperature	-25...+100°C
Enclosure rating	IP 68
Weight (cable / connector)	see page 3
Shock and vibration	IEC 60947-5-2 / 7.4

CORRECTION FACTORS

Steel FE 360	**1**	Copper	**0.12**	Aluminum	**0.2**	Brass	**0.34**	Stainless S. V2A 1 / 2 mm	**0.75**

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

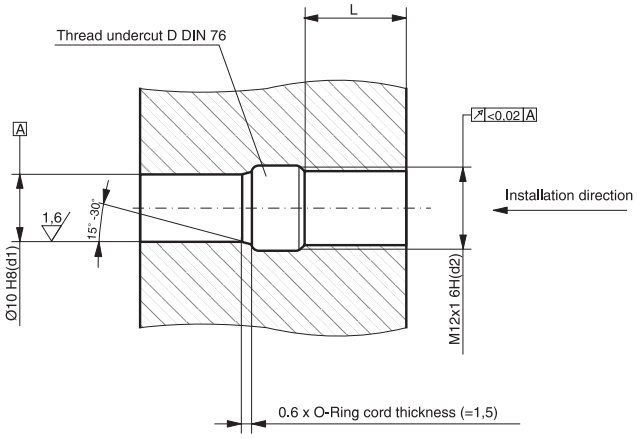


A : metal free zone
B : sensing face
C : support

a : 6 mm
b : 12 mm
c : 4.5 mm

d : steel 0 mm

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



L : recommended installation depth: L≥ 0.8 x d2

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

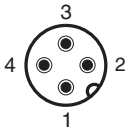
www.contrinex.com/product-range/inductive-sensors/.

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



M12

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AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
330-020-174	DW-AD-503-P12-625	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	51 g
330-020-175	DW-AD-503-P12-627	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	65 g
330-020-176	DW-AD-503-P12-639	PNP	PUR, 2 m, 3 wire	-	Normally open (NO) / IO-Link	50 g
330-020-177	DW-AD-504-P12-625	PNP	PUR, 2 m, 3 wire	-	Normally close (NC)	51 g
330-020-178	DW-AD-504-P12-627	PNP	PUR, 2 m, 3 wire	-	Normally close (NC)	65 g
330-020-179	DW-AD-504-P12-639	PNP	PUR, 2 m, 3 wire	-	Normally close (NC)	50 g
330-020-180	DW-AD-501-P12-625	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	51 g
330-020-181	DW-AD-501-P12-627	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	65 g
330-020-182	DW-AD-501-P12-639	NPN	PUR, 2 m, 3 wire	-	Normally open (NO)	50 g
330-020-183	DW-AD-502-P12-625	NPN	PUR, 2 m, 3 wire	-	Normally close (NC)	51 g
330-020-184	DW-AD-502-P12-627	NPN	PUR, 2 m, 3 wire	-	Normally close (NC)	65 g
330-020-185	DW-AD-502-P12-639	NPN	PUR, 2 m, 3 wire	-	Normally close (NC)	50 g
330-020-194	DW-AS-503-P12	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	31 g
330-020-195	DW-AS-503-P12-621	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	42 g
330-020-196	DW-AS-503-P12-622	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	50 g
330-020-197	DW-AS-503-P12-624	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	27 g
330-020-198	DW-AS-503-P12-627	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	35 g
330-020-199	DW-AS-503-P12-630	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	27 g
330-020-200	DW-AS-503-P12-635	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	42 g
330-020-201	DW-AS-504-P12	PNP	M12 4-pin	Normally close (NC)	-	31 g
330-020-202	DW-AS-504-P12-621	PNP	M12 4-pin	Normally close (NC)	-	42 g
330-020-203	DW-AS-504-P12-622	PNP	M12 4-pin	Normally close (NC)	-	50 g
330-020-204	DW-AS-504-P12-624	PNP	M12 4-pin	Normally close (NC)	-	27 g
330-020-205	DW-AS-504-P12-627	PNP	M12 4-pin	Normally close (NC)	-	35 g
330-020-206	DW-AS-504-P12-630	PNP	M12 4-pin	Normally close (NC)	-	27 g
330-020-207	DW-AS-504-P12-635	PNP	M12 4-pin	Normally close (NC)	-	42 g
330-020-229	DW-AS-501-P12	NPN	M12 4-pin	-	Normally open (NO)	31 g
330-020-230	DW-AS-501-P12-621	NPN	M12 4-pin	-	Normally open (NO)	42 g
330-020-231	DW-AS-501-P12-622	NPN	M12 4-pin	-	Normally open (NO)	50 g
330-020-232	DW-AS-501-P12-624	NPN	M12 4-pin	-	Normally open (NO)	27 g
330-020-233	DW-AS-501-P12-627	NPN	M12 4-pin	-	Normally open (NO)	35 g
330-020-234	DW-AS-501-P12-630	NPN	M12 4-pin	-	Normally open (NO)	27 g
330-020-235	DW-AS-501-P12-635	NPN	M12 4-pin	-	Normally open (NO)	42 g
330-020-236	DW-AS-502-P12	NPN	M12 4-pin	Normally close (NC)	-	31 g
330-020-237	DW-AS-502-P12-621	NPN	M12 4-pin	Normally close (NC)	-	42 g
330-020-238	DW-AS-502-P12-622	NPN	M12 4-pin	Normally close (NC)	-	50 g
330-020-239	DW-AS-502-P12-624	NPN	M12 4-pin	Normally close (NC)	-	27 g
330-020-240	DW-AS-502-P12-627	NPN	M12 4-pin	Normally close (NC)	-	35 g
330-020-241	DW-AS-502-P12-630	NPN	M12 4-pin	Normally close (NC)	-	27 g
330-020-242	DW-AS-502-P12-635	NPN	M12 4-pin	Normally close (NC)	-	42 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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