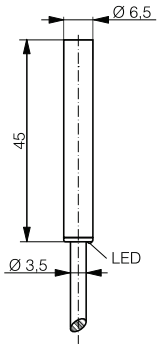
CONTRINEX

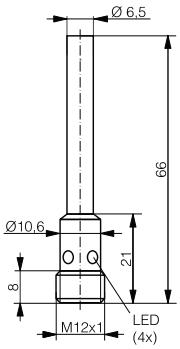
INDUCTIVE SENSOR
BASIC
DW-Ax-50x-065

HOUSING	OPERATING DISTANCE	MOUNTING
Ø 6.5	3 mm	Quasi-embeddable

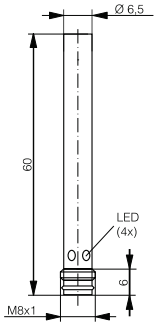
- ✓ Long operating distance
- ✓ Exceptional price-performance ratio
- ✓ Excellent accuracy
- ✓ IP 67
- ✓ IO-Link v1.1



DW-AD-50x-065



DW-AS-50x-065



DW-AS-50x-065-001

DETECTION DATA

Rated operating distance (S_n)	3 mm
Assured operating distance (S_a)	≤ (0.81 x S_n) mm
Repeat accuracy	≤ 0.15 mm
Hysteresis	3% S_r ≤ Hyst ≤ 15% S_r
Temperature drift	≤ 10% S_r
Standard target	9 x 9 x 1mm³, FE360

Note: 0.9S_n ≤ S_r ≤ 1.1S_n.

INTERFACE

Indicator LED, yellow	Sensing state (0 ≤ s ≤ 0.8 S_r)
Indicator LED, yellow, blinking	Sensing state (0.8 S_r < s ≤ 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	≤ 1000 Hz
Short-circuit protection	✓
Voltage reversal protection	✓
Cable length max.	≤ 300 m

MECHANICAL DATA

Mounting	Quasi-embeddable
Housing material	Chrome-plated brass
Sensing face material	PBTP
Max tightening torque	0.3 Nm (with M5 screw)
Ambient operating temperature	-25...+70°C[1]
Enclosure rating	IP 67
Weight (cable / connector)	see page 2
Shock and vibration	IEC 60947-5-2 / 7.4

[1]Maximum 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 °C ± 5 °C.

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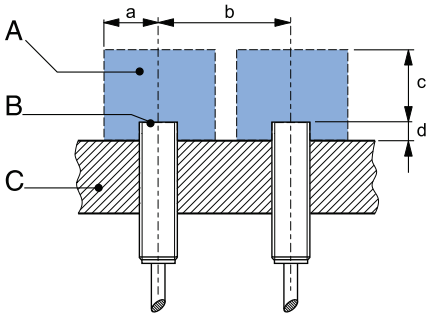
CORRECTION FACTORS

Steel FE 360	**1**	Copper	**0.18**	Aluminum	**0.26**	Brass	**0.35**	Stainless S. V2A 1 / 2 mm	**0.67**

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 : 16 mm
c : 9 mm

d : steel 1 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

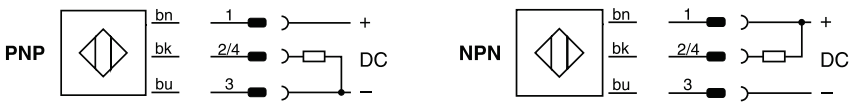
IODD files may be downloaded from

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

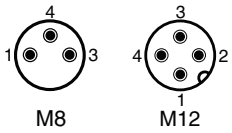
Select the product name to display the product page with corresponding downloads.

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

WIRING DIAGRAM



PIN ASSIGNMENT



AVAILABLE TYPES

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
330-020-323	DW-AD-501-065	NPN	PVC, 2 m, 3 wire	-	Normally open (NO)	36 g
330-020-324	DW-AD-502-065	NPN	PVC, 2 m, 3 wire	-	Normally close (NC)	34 g
330-020-325	DW-AD-503-065	PNP	PVC, 2 m, 3 wire	-	Normally open (NO) / IO-Link	33 g
330-020-329	DW-AD-504-065	PNP	PVC, 2 m, 3 wire	-	Normally close (NC)	34 g
330-020-330	DW-AS-501-065	NPN	M12 4-pin	-	Normally open (NO)	10 g
330-020-331	DW-AS-501-065-001	NPN	M8 3-pin	-	Normally open (NO)	5 g
330-020-332	DW-AS-502-065	NPN	M12 4-pin	Normally close (NC)	-	6 g
330-020-333	DW-AS-502-065-001	NPN	M8 3-pin	-	Normally close (NC)	5 g
330-020-334	DW-AS-503-065	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	10 g
330-020-335	DW-AS-503-065-001	PNP	M8 3-pin	-	Normally open (NO) / IO-Link	5 g
330-020-336	DW-AS-504-065	PNP	M12 4-pin	Normally close (NC)	-	6 g
330-020-337	DW-AS-504-065-001	PNP	M8 3-pin	-	Normally close (NC)	5 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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