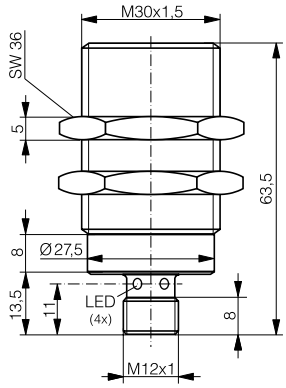
CONTRINEX

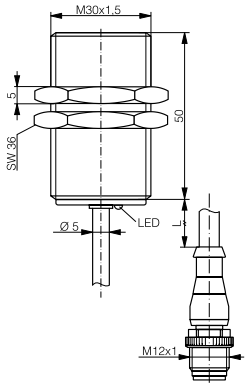
INDUCTIVE SENSOR
WELD-IMMUNE
DW-Ax-70x-M30-6xx

HOUSING	OPERATING DISTANCE	MOUNTING
M30	16 mm	Embeddable

- ✓ Anti-spatter coating
- ✓ Magnetic-field immunity: medium frequency ≤ 15 kA 50 Hz fields ≤ 40 mT
- ✓ Robust full-metal sensor, impact resistant
- ✓ Long operating distance
- ✓ Factor 1 on Fe and Al



DW-AS-70x-M30-6xx



DW-AV-70x-M30-6xx

DETECTION DATA	
Rated operating distance (S_n)	16 mm
Assured operating distance (S_a)	≤ (0.81 x S_n) mm
Repeat accuracy	≤ 0.8 mm
Hysteresis	3% S_r ≤ Hyst ≤ 15% S_r
Temperature drift	≤ 10% S_r
Standard target	48 x 48 x 1 mm³, FE360

INTERFACE	
Indicator LED, yellow	Sensing state (0 ≤ s ≤ S_r)
IO-Link	✓
MTTF (@40°C)	1028 y

Note: 0.9S_n ≤ S_r ≤ 1.1S_n.

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	≤ 15 Hz
Short-circuit protection	✓
Voltage reversal protection	✓
Cable length max.	≤ 300 m

MECHANICAL DATA	
Mounting	Embeddable
Housing material	V2A / 1.4305 / AISI 303 (+ coating)
Sensing face material	V2A / 1.4305 / AISI 303 (+ coating)
Max tightening torque	150 Nm
Ambient operating temperature	-25...+85°C[1]
Enclosure rating	IP68 / IP69K
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 FOR TARGET OF

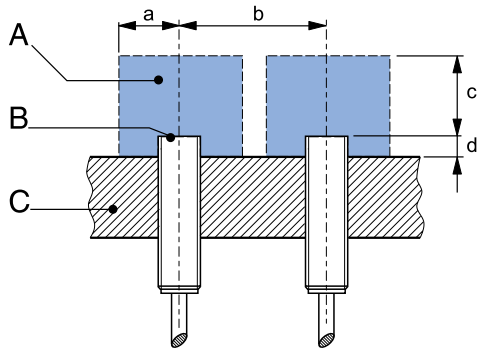
Steel FE 360	**1**	Copper	**0.8**	Aluminum	**1**	Brass	**1.3**	Stainless Steel V2A 1/2 mm	**0.4 / 0.8**

CORRECTION FACTORS FOR EMBEDDABLE MOUNTING IN SUPPORT OF

Steel FE 360	**0.75**	Aluminum	**0.55**	Brass	**0.55**	Stainless Steel V2A	**1.4**

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 : 40 mm
b : 100 mm
c : 48 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

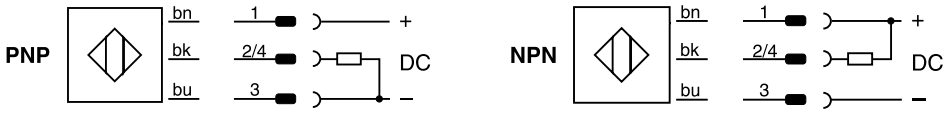
IODD files may be downloaded from

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

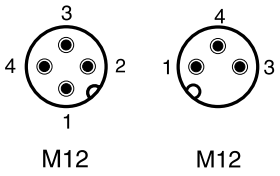
Select the product name to display the product page with corresponding downloads.

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

WIRING DIAGRAM



PIN ASSIGNMENT



AVAILABLE TYPES

UNCOATED

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-747	DW-AS-703-M30-673	PNP	M12 4-pin	-	Normally open (NO)	137 g
320-420-784	DW-AV-701-M30-695	NPN	PUR, 0.2m + M12 3-pin	-	Normally open (NO)	151 g
330-320-167	DW-AV-703-M30-695	PNP	PUR, 0.2m + M12 3-pin	-	Normally open (NO) / IO-Link	151 g

COATED

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-783	DW-AS-703-M30-697	PNP	M12 4-pin	-	Normally open (NO)	137 g
320-420-785	DW-AV-701-M30-696	NPN	PUR, 0.2m + M12 3-pin	-	Normally open (NO)	151 g
330-320-168	DW-AV-703-M30-696	PNP	PUR, 0.2m + M12 3-pin	-	Normally open (NO) / IO-Link	151 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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