

OPERATING DISTANCE

16 mm

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

 ✓ 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



HOUSING

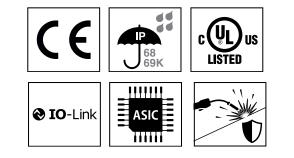
M30

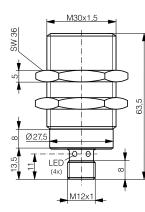


DW-AV-70x-M30-6xx

MOUNTING

Embeddable





DW-AS-70x-M30-6xx

DETECTION DATA

Rated operating distance (S _n)	16 mm	Indicator LED, yellow	Sensing state ($0 \le s \le S_r$)
Assured operating distance (S _a)	\leq (0.81 x S _n) mm	IO-Link	\checkmark
Repeat accuracy	≤ 0.8 mm	MTTF (@40°C)	1028 y
Hysteresis	$3\% S_r \le Hyst \le 15\% S_r$		
Temperature drift	\leq 10% S _r		
Standard target	48 x 48 x 1 mm ³ , FE360		
Note: 0.95 < 5 < 1.15			

INTERFACE

MECHANICAL DATA

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

ELECTRICAL DATA

		-
1030 VDC	Mounting	Embeddable
\leq 20% U _B	Housing material	V2A / 1.4305 / AISI 303 (+ coating)
≤ 200 mA	Sensing face material	V2A / 1.4305 / AISI 303 (+ coating)
\leq 2.0 VDC	Max tightening torque	150 Nm
≤ 10 mA	Ambient operating temperature	-25+85°C1
≤ 0.1 mA	Enclosure rating	IP68 / IP69K
≤ 15 Hz	Weight (cable/connector)	see page 2
\checkmark	Cable minimum bendind radius	moving: 15 x D; Fixed: 10 x D
\checkmark	Shock and vibration	IEC 60947-5-2
≤ 300 m		
	$\leq 20\% U_{B}$ $\leq 200 \text{ mA}$ $\leq 2.0 \text{ VDC}$ $\leq 10 \text{ mA}$ $\leq 0.1 \text{ mA}$ $\leq 15 \text{ Hz}$ \checkmark	$\leq 20\% U_B$ Housing material $\leq 200 \text{ mA}$ Sensing face material $\leq 2.0 \text{ VDC}$ Max tightening torque $\leq 10 \text{ mA}$ Ambient operating temperature $\leq 0.1 \text{ mA}$ Enclosure rating $\leq 15 \text{ Hz}$ Weight (cable/connector) \checkmark Cable minimum bendind radius \checkmark Shock and vibration

¹Maximum temperature according to UL: 70°C.

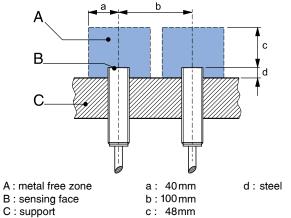
Note: all data measured according to IEC 60947-5-2 standard with $\rm U_{B}=20\ldots30VDC,\,T_{A}=23^{\circ}C\pm5^{\circ}C.$

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 $S_{n,AI} = S_n \times CF_{AI}$. In case of embeddable mounting, the distance is multiplied by the additional correction factor of the support, thus $S_{n,AI} = S_n \times CF_{AI} \times CF_{emb,AI}$.

INSTALLATION CONDITIONS





0mm

O-Link version 1.1

IO-LINK FUNCTIONALITIES

1.1
Supported
7-bit input
COM2 (38.4 kBaud)
10.4 ms
Not supported



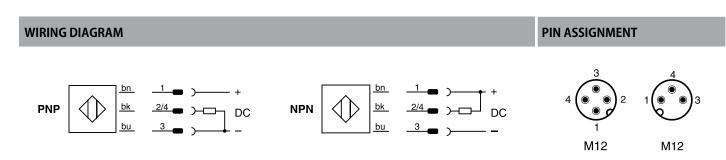
IODD files may be downloaded from

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.

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



AVAILABLE TYPES

UNCOATED									
Part number	Part reference	Old ref.	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight		
330-320-148	DW-AS-703-M30-673	-	PNP	M12 4-pin	-	Normally open (NO)	137 g		
320-420-784	DW-AV-701-M30-673	xxx-695	NPN	PUR, 0.2m + M12 3-pin	-	Normally open (NO)	151 g		
330-320-167	DW-AV-703-M30-673	xxx-695	PNP	PUR, 0.2m + M12 3-pin	-	Normally open (NO) / IO-Link	151 g		
330-320-209	DW-AS-701-M30-673	-	NPN	M12 4-pin	-	Normally open (NO)	137 g		

COATED

Part number	Part reference	Old ref.	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-785	DW-AV-701-M30-693	xxx-696	NPN	PUR, 0.2m + M12 3-pin	-	Normally open (NO)	151 g
330-320-168	DW-AV-703-M30-693	xxx-696	PNP	PUR, 0.2m + M12 3-pin	-	Normally open (NO) / IO-Link	151 g
330-320-158	DW-AS-703-M30-693	-	PNP	M12 4-pin	-	Normally open (NO)	137 g
330-320-210	DW-AS-701-M30-693	-	NPN	M12 4-pin	-	Normally open (NO)	137 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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