

OPERATING DISTANCE

3 mm

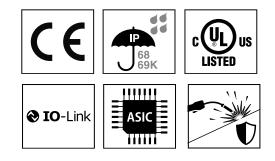
HOUSING

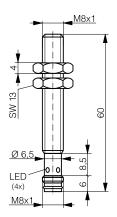
M8

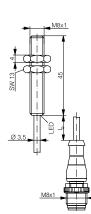
INDUCTIVE SENSOR WELD-IMMUNE DW-Ax-70x-M8-6xx

✓ Anti-spatter coating ✓ Magnetic-field immunity: medium frequency \leq 15 kA 50 Hz fields \leq 40 mT

- ✓ Robust full-metal sensor, impact resistant
- \checkmark Long operating distance
- Factor 1 on Fe and Al \checkmark







DW-AS-70x-M8-6x3

DW-AV-703-M8-692

DETECTION DATA		INTERFACE	
Rated operating distance (S _n)	3 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	≤ 0.15 mm	MTTF (@40°C)	1017 y
Hysteresis	$3\% S_r \le Hyst \le 15\% S_r$		
Temperature drift	\leq 10% S _r		
Standard target	9 x 9 x 1 mm ³ , FE360		
Note: $0.9S_n \le S_r \le 1.1S_n$.			

ELECTRICAL DATA

Supply voltage range (U _B)
Residual ripple
Output current

Output current	\leq 200 mA
Output voltage drop	\leq 2.0 VDC
Power consumption (no-load)	\leq 10 mA
Residual current	\leq 0.1 mA
Switching frequency	\leq 15 Hz
Short-circuit protection	\checkmark
Voltage reversal protection	\checkmark
Cable length max.	\leq 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	8 Nm
Ambient operating temperature	-25+85°C1
Enclosure rating	IP68 / IP69K
Weight (cable/connector)	see page 2
Shock and vibration	IEC 60947-5-2

¹Maximum temperature according to UL: 70°C.

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

10...30 VDC $\leq 20\% U_{B}$

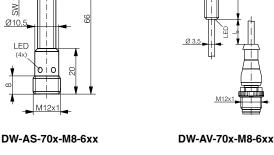
DETE

M8x1

SW 13

Ø10

LED (4x)





MOUNTING

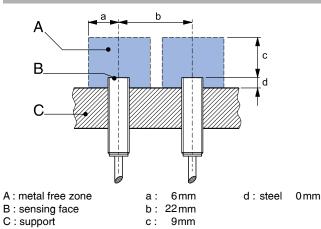
Embeddable

CORRECTION FA	CTORS FOI	R TARGET OF							
Steel FE 360	1	Copper	1	Aluminum	1	Brass	1.3	Stainless Steel V2A 1/2 mm	0.4 / 0.7
CORRECTION FA	CTORS FOI	R EMBEDDABI	E MOUNT	ING IN SUPPO	ORT OF				

Steel FE 360	0.9	Aluminum	0.9	Brass	0.75	Stainless Steel V2A	0.8

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



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.

WIRING DIAGRAMPIN ASSIGNMENTPNP $1 \\ bk \\ bu \\ 3 \\ control bc \\ contro$

AVAILABLE TYPES

UNCOATED									
Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight			
330-320-159	DW-AS-703-M8-694	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	17 g			
320-420-777	DW-AV-701-M8-695	NPN	PUR, 0.2 m + M12 3-pin	-	Normally open (NO)	23 g			
330-320-154	DW-AV-703-M8-695	PNP	PUR, 0.2 m + M12 3-pin	-	Normally open (NO) / IO-Link	23 g			
330-320-147	DW-AS-703-M8-673	PNP	M8 3-pin	-	Normally open (NO) / IO-Link	15 g			
330-320-188	DW-AV-703-M8-692	PNP	PUR, 0.2 m + M8 3-pin	-	Normally open (NO) / IO-Link	23 g			

COATED

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
330-320-160	DW-AS-703-M8-697	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	17 g
320-420-778	DW-AV-701-M8-696	NPN	PUR, 0.2 m + M12 3-pin	-	Normally open (NO)	23 g
330-320-164	DW-AV-703-M8-696	PNP	PUR, 0.2 m + M12 3-pin	-	Normally open (NO) / IO-Link	23 g
330-320-180	DW-AS-703-M8-693	PNP	M8 3-pin	-	Normally open (NO) / IO-Link	15 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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CONTRINEX AG Industrial Electronics

Route du Pâqui 3-P.O. Box - CH 1720 Corminboeuf - Switzerland - Tel: +4126 460 46 46 Fax: +41 26 460 46 40 - Internet: www.contrinex.com - E-mail: info@contrinex.com

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