

**OPERATING DISTANCE** 

10 mm

# **INDUCTIVE SENSOR WELD-IMMUNE** DW-Ax-70x-M18-6xx

68

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ASIC 

69K

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

O IO-Link

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

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LISTED

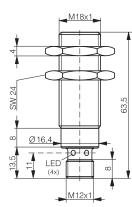
US



HOUSING

**M18** 





DW-AS-70x-M18-6xx

SW24		
	<u>_M1</u>	

DW-AV-70x-M18-6xx

DETECTION DATA		INTERFACE			
Rated operating distance (S <sub>n</sub> )	10 mm	Indicator LED, yellow	Sensing state ( $0 \le s \le S_r$ )		
Assured operating distance (S <sub>a</sub> )	$\leq$ (0.81 x S <sub>n</sub> ) mm	IO-Link	$\checkmark$		
Repeat accuracy	$\leq$ 0.5 mm	MTTF (@40°C)	1028 у		
Hysteresis	3% S <sub>r</sub> ≤ Hyst ≤ 15% S <sub>r</sub>				
Temperature drift	$\leq$ 10% S <sub>r</sub>				
Standard target	30 x 30 x 1 mm <sup>3</sup> , FE360				

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

# **ELECTRICAL DATA**

Supply voltage range (U <sub>B</sub> )	1030 VDC	Mounting	Embeddable
Residual ripple	$\leq$ 20% U <sub>B</sub>	Housing material	V2A / 1.4305 / AISI 303 (+ coating)
Output current	≤ 200 mA	Sensing face material	V2A / 1.4305 / AISI 303 (+ coating)
Output voltage drop	$\leq$ 2.0 VDC	Max tightening torque	50 Nm
Power consumption (no-load)	$\leq$ 10 mA	Ambient operating temperature	-25+85°C1
Residual current	≤ 0.1 mA	Enclosure rating	IP68 / IP69K
Switching frequency	≤ 15 Hz	Weight (cable/connector)	see page 2
Short-circuit protection	$\checkmark$	Shock and vibration	IEC 60947-5-2 / 7.4
Voltage reversal protection	$\checkmark$		
Cable length max.	≤ 300 m		

MECHANICAL DATA

<sup>1</sup>Maximum temperature according to UL: 70°C.

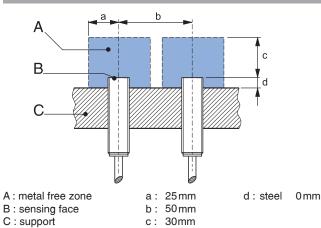
Note: all data measured according to IEC 60947-5-2 standard with  $\rm U_{B}=20\ldots30VDC,\,T_{A}=23^{\circ}C\pm5^{\circ}C.$ 

CORRECTION FA	CTORS FOI	R TARGET OF							
Steel FE 360	1	Copper	0.85	Aluminum	1	Brass	1.3	Stainless Steel V2A 1/2 mm	0.4 / 0.8
CORRECTION FA	CTORS FOI	R EMBEDDABI	E MOUNT	ING IN SUPPO	ORT OF				

Steel FE 360 0.7 Aluminum 0.7 Brass 0.55 Stainless Steel V2A	0.65

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**

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
Baudrate Minimum cycle time	COM2 (38.4 kBaud) 10.4 ms



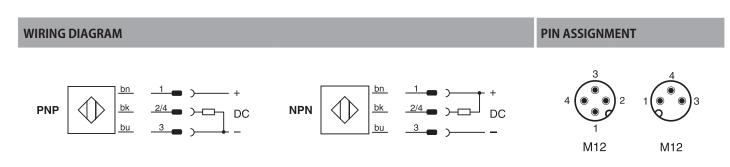
IODD files may be downloaded from

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	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-547	DW-AS-703-M18-673	PNP	M12 4-pin	-	Normally open (NO)	53 g
320-420-763	DW-AV-701-M18-692	NPN	PUR, 0.2m + M12 3-pin	-	Normally open (NO)	66 g
330-320-169	DW-AV-703-M18-695	PNP	PUR, 0.2m + M12 3-pin	-	Normally open (NO) / IO-Link	66 g
COATED						
Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-782	DW-AS-703-M18-697	PNP	M12 4-pin	-	Normally open (NO)	53 g
320-420-780	DW-AV-701-M18-696	NPN	PUR, 0.2m + M12 3-pin	-	Normally open (NO)	66 g
330-320-170	DW-AV-703-M18-696	PNP	PUR, 0.2m + M12 3-pin	_	Normally open (NO) / IO-Link	66 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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