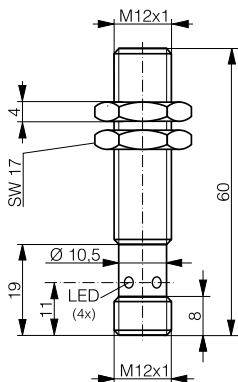
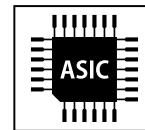
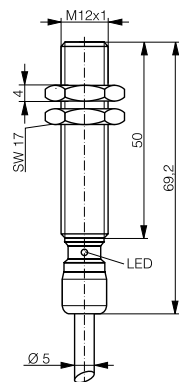


HOUSING	OPERATING DISTANCE	MOUNTING	✓ One-piece housing in stainless steel V4A	✓ IP68 and IP69K, Ecolab
M12	6 mm	Embeddable	✓ Robust and food-safe	✓ Long operating distance
			✓ Corrosion resistant	✓ Factor 1 on Fe and Al
				✓ IO-Link v1.1



DW-LS-70x-M12



DW-LD-70x-M12

DETECTION DATA		INTERFACE	
Rated operating distance (S_n)	6 mm	Indicator LED, yellow	Sensing state ($0 \leq s \leq 0.8 S_r$)
Assured operating distance (S_a)	$\leq (0.81 \times S_n)$ mm	Indicator LED, yellow, blinking	Sensing state ($0.8 S_r < s \leq S_r$)
Repeat accuracy	≤ 0.2 mm	IO-Link	✓
Hysteresis	$3\% S_r < \text{Hyst} \leq 15\% S_r$	MTTF (@40°C)	1017 y
Temperature drift	$\leq 10\% S_r$		
Standard target	18 x 18 x 1 mm ³ , FE360		

Note: $0.9S_n \leq S_a \leq 1.1S_n$.

ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U_B)	10...30 VDC	Mounting	Embeddable
Residual ripple	$\leq 20\% U_B$	Housing material	V4A / 1.4435 / AISI 316L
Output current	≤ 200 mA	Sensing face material	V4A / 1.4435 / AISI 316L
Output voltage drop	≤ 2.0 VDC	Max tightening torque	20 Nm
Power consumption (no-load)	≤ 10 mA	Ambient operating temperature	-25...+85°C ¹
Residual current	≤ 0.1 mA	Enclosure rating	IP68 / IP69K
Switching frequency	≤ 600 Hz	Weight (cable/connector)	see page 2
Short-circuit protection	✓	Shock and vibration	IEC 60947-5-2 / 7.4
Voltage reversal protection	✓		
Cable length max.	≤ 300 m		

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, $T_A=23^\circ\text{C} \pm 5^\circ\text{C}$.

CORRECTION FACTORS FOR TARGET OF

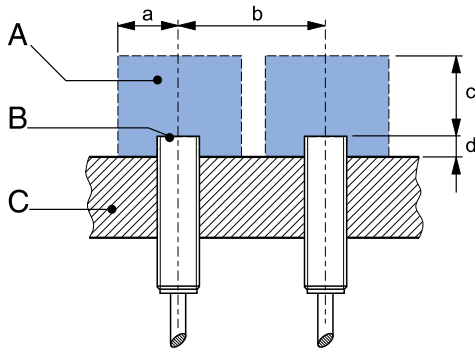
Steel FE 360	1	Copper	0.8	Aluminum	1	Brass	1.3	Stainless Steel V2A 1/2 mm	0.4 / 0.8
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CORRECTION FACTORS FOR EMBEDDABLE MOUNTING IN SUPPORT OF

Steel FE 360	0.7	Aluminum	1.15	Brass	1.05	Stainless Steel V2A	0.8
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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 a : 12 mm d : steel 0 mm
 B : sensing face b : 50 mm
 C : support c : 18 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



IO-Link files may be downloaded from

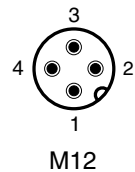
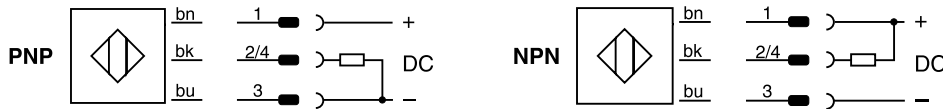
www.contrinex.com/product-range/inductive-sensors/.

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
320-420-260	DW-LS-701-M12	NPN	M12 4-pin	-	Normally open (NO)	25 g
320-420-299	DW-LS-702-M12	NPN	M12 4-pin	Normally close (NC)	-	25 g
330-320-022	DW-LS-703-M12	PNP	M12 4-pin	-	Normally open (NO) / IO-Link	25 g
320-420-262	DW-LS-704-M12	PNP	M12 4-pin	Normally close (NC)	-	25 g
320-420-275	DW-LD-701-M12	NPN	TPE-S, 2 m, 3 wire	-	Normally open (NO)	83 g
320-420-276	DW-LD-702-M12	NPN	TPE-S, 2 m, 3 wire	Normally close (NC)	-	83 g
330-320-029	DW-LD-703-M12	PNP	TPE-S, 2 m, 3 wire	-	Normally open (NO) / IO-Link	83 g
320-420-278	DW-LD-704-M12	PNP	TPE-S, 2 m, 3 wire	Normally close (NC)	-	83 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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