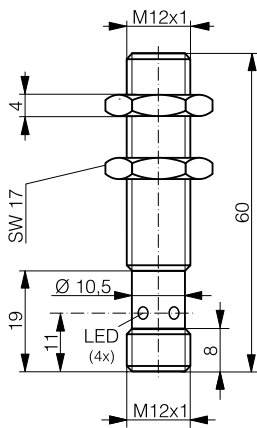
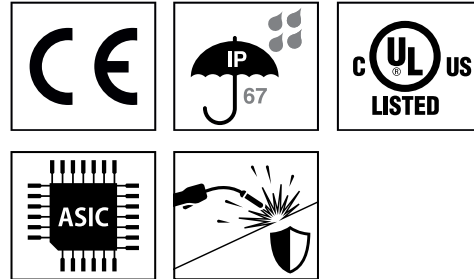


HOUSING	OPERATING DISTANCE	MOUNTING	✓ High performance anti-spatter coating	✓ Exceptional price-performance ratio
M12	4 mm	embeddable	✓ Magnetic field resistant in welding applications	✓ High repeatability



DW-AS-623-M12-69x



DETECTION DATA		INTERFACE	
Rated operating distance (S_n)	4 mm	Indicator LED, yellow	Sensing state ($0 \leq s \leq S_n$)
Assured operating distance (S_a)	$\leq (0.81 \times S_n)$ mm	IO-Link	No IO-Link
Repeat accuracy	≤ 0.2 mm	MTTF (@40°C)	1017 y
Hysteresis	$3\% S_r \leq \text{Hyst} \leq 15\% S_r$		
Temperature drift	$\leq 10\% S_r$		
Standard target	12 x 12 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	V2A / 1.4305 / AISI 303 (+ coating)
Output current	≤ 200 mA	Sensing face material	PEEK
Output voltage drop	≤ 2.0 VDC	Max tightening torque	10 Nm
Power consumption (no-load)	≤ 10 mA	Ambient operating temperature	-25 ... +70°C ¹
Residual current	≤ 0.1 mA	Enclosure rating	IP67
Switching frequency	≤ 15 Hz	Weight (cable / connector)	see page 2
Short-circuit protection	✓	Shock and vibration	IEC 60947-5-2
Voltage reversal protection	✓		
Cable length max.	≤ 300 m		

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

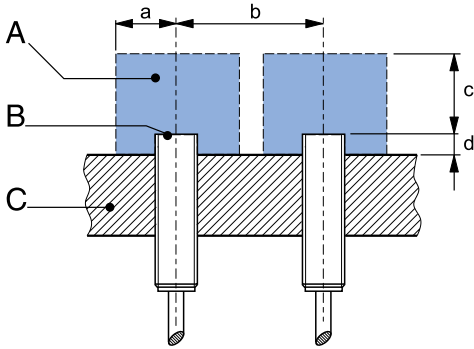
¹Maximum temperature according to UL: 70°C.

CORRECTION FACTORS

Steel FE 360	1	Copper	1.15	Aluminum	1.4	Brass	1.6	Stainless Steel V2A	0
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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

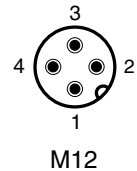
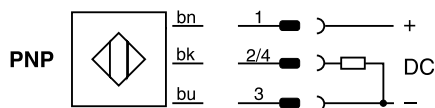


A : metal free zone	a : 10 mm
B : sensing face	b : 35 mm
C : support	c : 12 mm
	d : steel 0 mm

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

WIRING DIAGRAM

PIN ASSIGNMENT



AVAILABLE TYPES

UNCOATED

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-790	DW-AS-623-M12-694	PNP	M12 4-pin	–	Normally open (NO)	13.3 g

COATED

Part number	Part reference	Polarity	Connection	Output on pin 2	Output on pin 4 / bk	Weight
320-420-791	DW-AS-623-M12-697	PNP	M12 4-pin	–	Normally open (NO)	13.3 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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