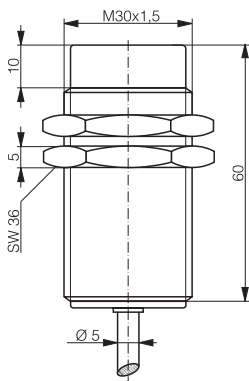
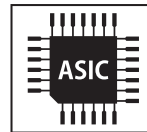
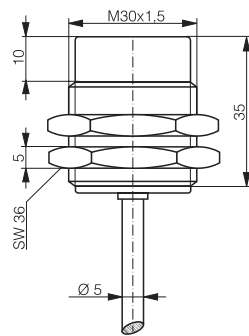


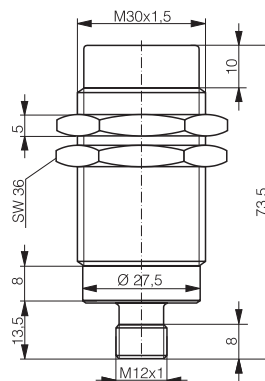
HOUSING	OPERATING DISTANCE	MOUNTING	✓ Long sensing range ✓ Outstanding accuracy and temperature stability ✓ Resolution in μm range	✓ Exceptional price-performance ratio ✓ Current or voltage output ✓ IP67
M30	40 mm	Non-embeddable		



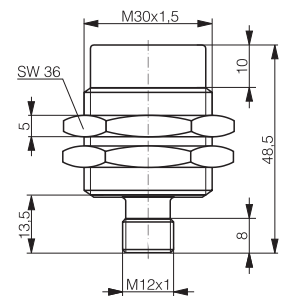
DW-AD-519-M30-390



DW-AD-519-M30-320



DW-AS-519-M30-390



DW-AS-519-M30-320

DETECTION DATA		INTERFACE	
Sensing distance (S_d)	40 mm	IO-Link	✗
Repeat accuracy (IEC 60947-5-2)	± 0.35 mm	MTTF (@40°C)	546 y
Static resolution* (@0.67· S_d)	≤ 1.42 μm		
Dynamic resolution* (@0.67· S_d)	≤ 5.5 μm		
Temperature drift of S_d	$\leq 5\%$ (0... +70°C) $\leq 10\%$ (-25... 0°C)		
Standard target	120 x 120 x 1 mm ³ , FE360		

*Static resolution is measured when the target is moving at 20 Hz. Dynamic resolution when the target is moving at 1 kHz.

ELECTRICAL DATA		MECHANICAL DATA	
Supply voltage range (U_B)	15...30 VDC	Mounting	Non-embeddable
Residual ripple	$\leq 20\%$ U_B	Housing material	Chrome-plated brass
Power consumption (no-load)	≤ 12 mA	Sensing face material	PBTP
Max. load at voltage output	≤ 15 mA	Max tightening torque	70 Nm
Max. load at current output	0.4k Ω ($U_B=15\text{V}$) / 1k Ω ($U_B=30\text{V}$)	Ambient operating temperature	-25...+70°C
Bandwidth	100 Hz	Enclosure rating	IP67
Time delay before availability	20 ms	Weight (cable / connector)	see page 2
Recovery time	10 ms	Shock and vibration	IEC 60947-5-2 / 7.4
Short-circuit protection	✓		
Voltage reversal protection	✓		
Cable length max.	≤ 300 m		

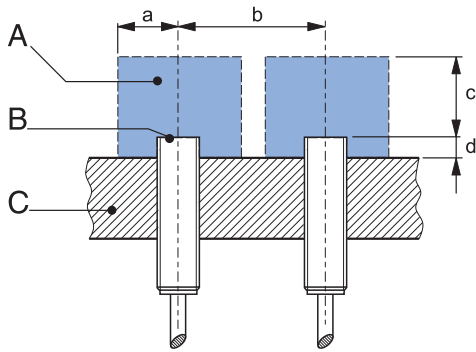
Note: all data measured according to IEC 60947-5-2 standard with $U_B=20 \dots 30\text{VDC}$, $T_A=23^\circ\text{C} \pm 5^\circ\text{C}$.

CORRECTION FACTORS

Steel FE 360	1	Copper	0.4	Aluminum	0.44	Brass	0.49	Stainless S. V2A 1 / 2 mm	0.76
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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



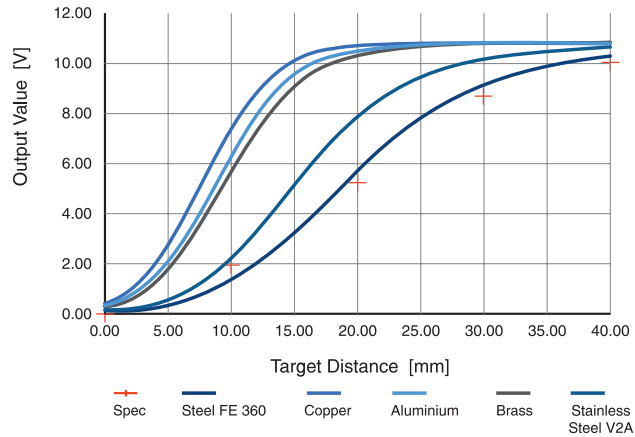
A : metal free zone
B : sensing face
C : support

a : 55 mm
b : 150 mm
c : 120 mm

d : steel 35 mm
alu 25 mm
brass 25 mm
stainless steel 20 mm

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

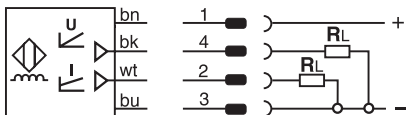
RESPONSE DIAGRAM



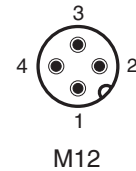
Output voltage	s = 0 mm	0 V / -0.0 +0.4 V
	s = $S_d/2$ mm	+5.2 V \pm 0.4 V
	s = S_d mm	+10.0 V \pm 0.4 V
	s > S_d mm	+10 ... 12 V \pm 0.4 V

Output current	s = 0 mm	4 mA \pm 0.8 mA
	s = $S_d/2$ mm	12.3 mA \pm 0.8 mA
	s = S_d mm	20 mA \pm 0.8 mA
	s > S_d mm	+20 ... 23 mA \pm 0.8 mA

WIRING DIAGRAM



PIN ASSIGNMENT



AVAILABLE TYPES

Part number	Part reference	Connection	Output on pin 2 / wh	Output on pin 4 / bk	Weight
330-020-434	DW-AD-519-M30-320	PUR, 2 m, 4 wire	4...20 mA	0...10 V	190 g
330-020-435	DW-AD-519-M30-390	PUR, 2 m, 4 wire	4...20 mA	0...10 V	215 g
330-020-460	DW-AS-519-M30-320	M12 4-pin	4...20 mA	0...10 V	135 g
330-020-461	DW-AS-519-M30-390	M12 4-pin	4...20 mA	0...10 V	155 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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