

Inductive analog sensor

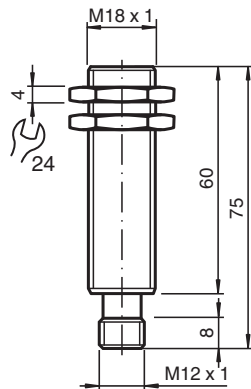
NBB5-18GM60-I3-V1



- Inductive analog
- Output 0 mA ... 20 mA
- Flush mounting



Dimensions



Technical Data

General specifications

Output type	Analog current output
Installation	flush
Output polarity	DC
Measurement range	1 ... 5 mm
Output type	3-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V DC typ. 20 V DC
Reverse polarity protection		yes
Repeat accuracy		0 ... 80 μ m
No-load supply current	I_0	≤ 12 mA

Analog output

Output type	0 ... 20 mA
Slope of output characteristic	5 mA / mm
Linearity error	$\leq \pm 5$ % of full-scale value
Load resistor	$\leq 1000 \Omega$ typ. 500 Ω

Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 303097_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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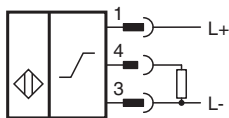
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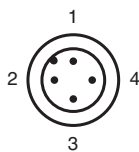
Technical Data

Rate of current rise	
0 ... 20 mA	max. 38.9 A/s
20 ... 0 mA	max. 13.9 A/s
Recovery time	1 ... 10 ms , typ. 5 ms
Adjustment tolerance zero point	≤ ± 5 % of full-scale value
Temperature drift	≤ ± 0.15 %/K of full-scale value
Residual ripple	± 125 µA
Compliance with standards and directives	
Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007 EN 60947-5-7:2003 IEC 60947-5-7:2003
Approvals and certificates	
UL approval	cULus Listed, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated ≤36 V
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications	
Connection type	Connector plug M12 x 1 , 4-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67

Connection



Connection Assignment

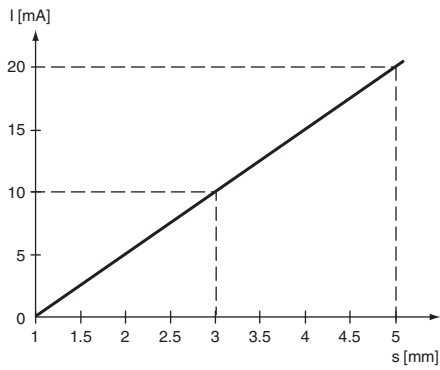


Wire colors in accordance with EN 60947-5-2

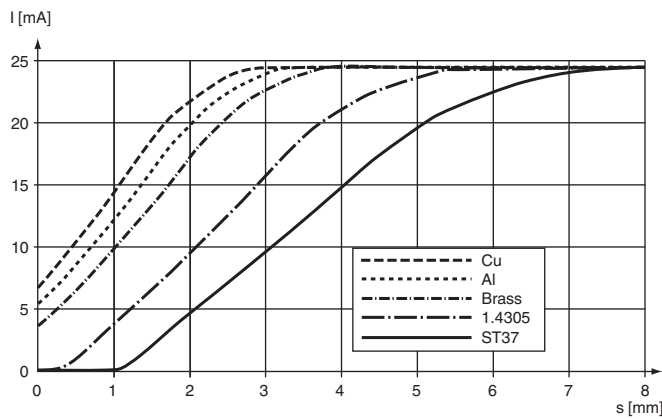
1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Characteristic Curve




Output characteristics



Reduction factor



Accessories

	BF 18	Mounting flange, 18 mm
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable

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