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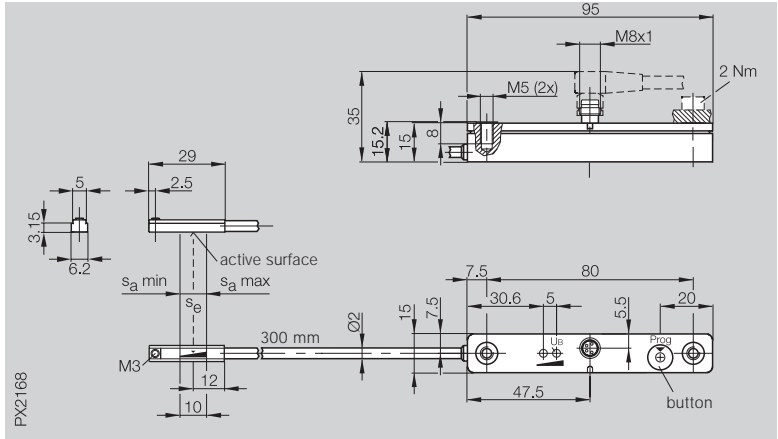
Magneto-inductive Position Sensor Micro-BIL
... analog position feedback for miniature grippers



Magneto-inductive Position Sensor

Micro-BIL for analog position sensing

Output signal U_a	voltage 0...10 V or
Output signal I_a	current 4...20 mA
Working range s_a	0...10 mm
Linear range s_l	0...10 mm



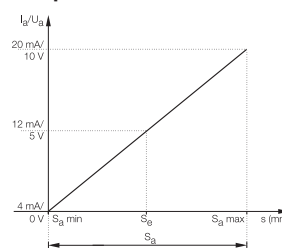
Ordering code	BIL ED0-B010P-02/30-S75
Field strength axial H_n	10 kA/m typical
-3dB width of axial field distribution, typical (axial field strength typ. - parallel to active surface)	2.5 mm
Rated operational voltage U_e	24 V DC
Supply voltage U_B	at U_a 15...30 V DC, at I_a 10...30 V DC
Ripple	$\leq 10\%$ of U_e
Rated insulation voltage U_i	75 V DC
Rated sensing distance s_e	5 mm
Load resistance R_L	at $U_a \geq 2\text{ k}\Omega$, at $I_a \leq 500\ \Omega$
No-load supply current I_0 at U_e	$\leq 30\text{ mA}$
Protected against polarity reversal	yes
Short circuit protected	yes
Ambient temperature range T_a	-10...+70 °C
Repeat accuracy R_{BWN}	$\leq \pm 30\ \mu\text{m}$
Non-linearity	$\leq \pm 0.3\text{ mm}$
Temperature coefficient TK	typical +1 $\mu\text{m/K}$
in the optimal range	min. -4 $\mu\text{m/K}$
from 10...+50 °C	max. +6 $\mu\text{m/K}$
Supply voltage indication	yes
Programming indication	yes
Degree of protection per IEC 60529	IP 65
Housing material	PA fiberglass reinforced
Connection	connector
Recommended connector	BKS-S 74/BKS-S 75



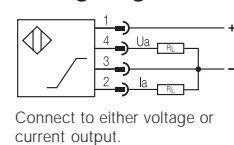
Micro-BIL is the solution for continuous position sensing on pneumatic miniature grippers with T-slot. The analog output signal allows you to sense end-of-travel and intermediate positions of gripper jaws absolutely and without contact.

To use the Micro-BIL a magnet is installed in the gripper. A button is provided for calibrating to various magnetic field strengths. The technical data refer to reference measurements. Different grippers with differing magnetic field strengths may affect the technical data.

Output curve



Wiring diagram



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