

Inductive Sensor with Full-Metal Housing

IB040DE65UD3

Part Number



- IP68/IP69K
- Pressure resistant
- Stainless steel housing

The inductive sensors with full-metal housing are suitable for harsh ambient conditions thanks to the 316L stainless steel housing. In addition, the sensors are ATEX-certified, which means that they can also be used in potentially explosive areas. The sensors with full-metal housing impress with their easy installation and reliable switching behavior.

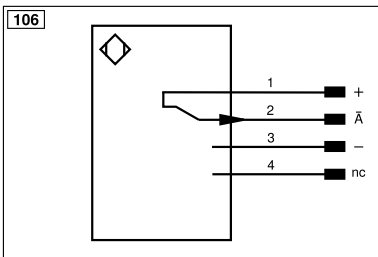
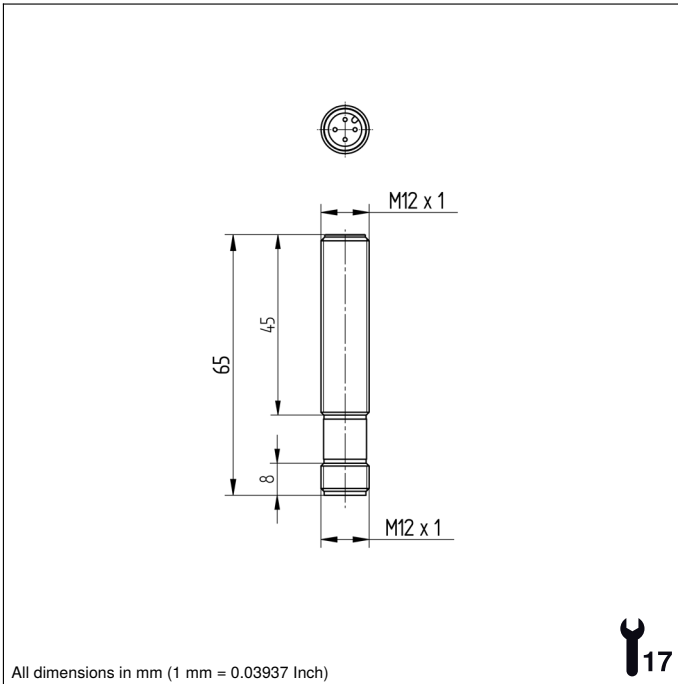
Technical Data

Inductive Data	
Switching Distance	4 mm
Correction Factors Stainless Steel V2A/CuZn/Al	0,82/0,35/0,32
Mounting	Flush
Mounting A/B/C/D in mm	0/8/12/0
Mounting A/B/C/D (V2A) in mm	0/8/12/0
Switching Hysteresis	< 15 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 15 mA
Switching Frequency	500 Hz
Temperature Drift	< 10 %
Temperature Range	-25...80 °C
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	400 mA
Residual Current Switching Output	< 100 µA
Short Circuit Protection	yes
Reverse Polarity and Overload Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Stainless steel, V4A
Full Encapsulation	yes
Degree of Protection	IP68/IP69K
Connection	M12 × 1; 4-pin
Pressure Resistance Sensor Area	60 bar
Ex II 3G Ex nA IIC T5 Gc X	yes
Ex II 3D Ex tc IIIC T90 °C Dc IP6X X	yes
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	2065,66 a
Packaging unit	1 Piece
PNP NC	●
Connection Diagram No.	106
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	170

Housing: Stainless Steel V4A 1.4404, 316L

Complementary Products

Circlip Z0007
PNP-NPN Converter BG2V1P-N-2M



Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENb	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
V̄	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	Amv	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	±	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
BL_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
ENo RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)		

Mounting

