

# Inductive Sensor with Full-Metal Housing

## IB040DE65UB3

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.

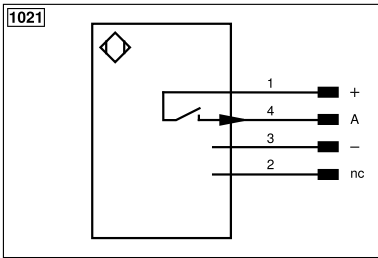
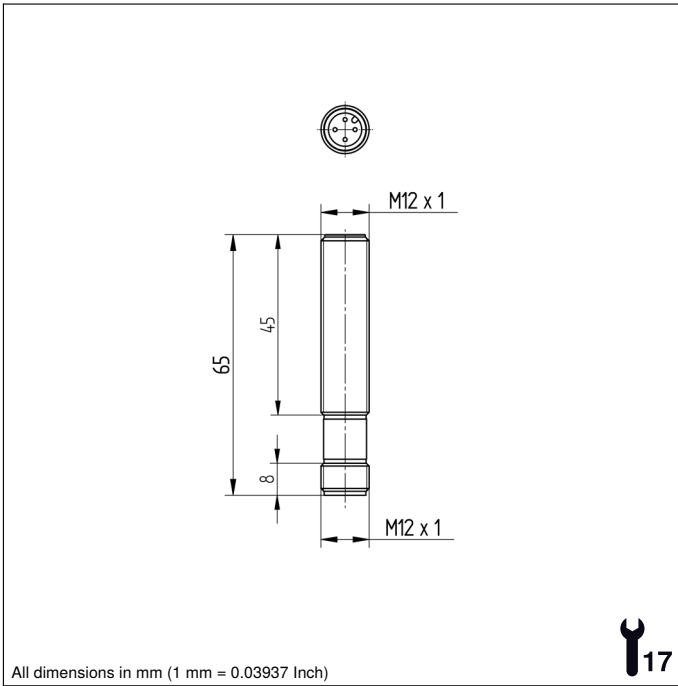
### Technical Data

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 <sub>b</sub> = 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)	2118,02 a
Stock Type	●
Packaging unit	1 Piece
PNP NO	●
Connection Diagram No.	1021
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
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contact Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
			ENBRs422 Encoder B/B̄ (TTL)
			ENA Encoder A
			ENB Encoder B
			AMIN Digital output MIN
			AMAX Digital output MAX
			AOK Digital output OK
			SY In Synchronization In
			SY OUT Synchronization OUT
			OLT Brightness output
			M Maintenance
			rsv Reserved
			Wire Colors according to DIN IEC 60757
			BK Black
			BN Brown
			RD Red
			OG Orange
			YE Yellow
			GN Green
			BU Blue
			VT Violet
			GY Grey
			WH White
			PK Pink
			GNYE Green/Yellow

## Mounting

