Inductive Sensor
with Analog Output

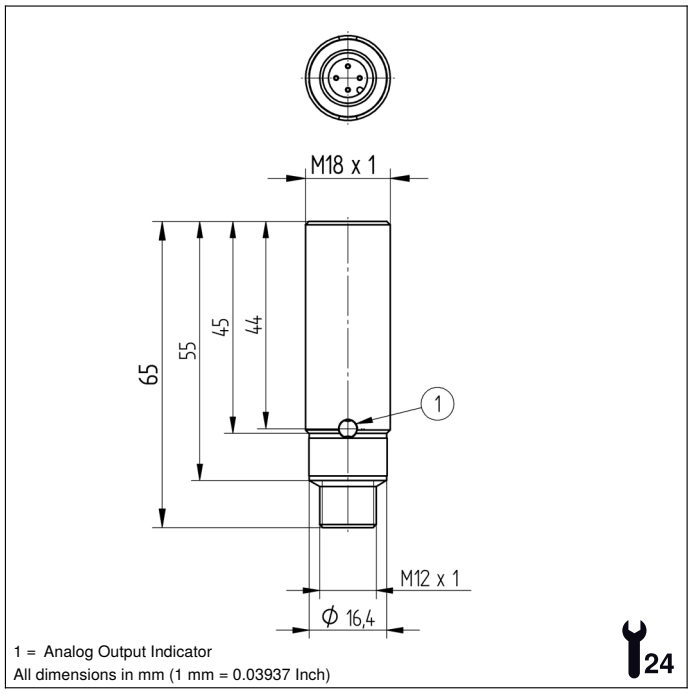
IW045CM65MG3
Part Number

Technical Data

Inductive Data	
Working Range	1,5...4,5 mm
Measuring Distance	3 mm
Measuring Range	3 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,2/1,2/1,2
Mounting	Flush
Mounting A/B/C/D in mm	0/18/13,5/0
Standard Target FE360, thickness 1 mm	18 × 18 mm
Linearity	< 1 %
Resolution	1 µm
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (Ub = 24 V)	< 30 mA
Cut-Off Frequency	900 Hz
Temperature Drift (-10 °C < Tu ≤ 50 °C)	5 µm/K
Temperature Drift (50 °C < Tu ≤ 70 °C)	6 µm/K
Temperature Range	-10...70 °C
Analog Output	0...10 V
Load Current Voltage Output	< 1 mA
Resistant to Magnetic Fields	yes
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Brass, nickel-plated
Sensing face	Plastic, PBT
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
Stock Type	●
Packaging unit	1 Piece
Analog Output	●
Connection Diagram No.	
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	150

Complementary Products

Analog Evaluation Unit AW02
IO-Link converter



1 = Analog Output Indicator
All dimensions in mm (1 mm = 0.03937 Inch)

Legend					
+	Supply Voltage +	PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)
–	Supply Voltage 0 V	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENA	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	ENB	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W–	Ground for the Trigger Input	AMAX	Digital output MAX
V̄	Contamination/Error Output (NC)	O	Analog Output	AOK	Digital output OK
E	Input (analog or digital)	O–	Ground for the Analog Output	SY In	Synchronization In
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT
R	Reset 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	Rx+/–	Ethernet Receive Path	GN	Green
PoE	ower 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
BI_D+/–	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN0 RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow

Mounting