

# 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 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 (U <sub>b</sub> = 24 V)	< 30 mA
Cut-Off Frequency	900 Hz
Temperature Drift (-10 °C < T <sub>u</sub> ≤ 50 °C)	5 %
Temperature Drift (50 °C < T <sub>u</sub> ≤ 70 °C)	10 %
Temperature Range	-10...70 °C
Analog Output	0...10 V
Current Load Voltage Output	< 1 mA
Resistant to Magnetic Fields	yes
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

#### Mechanical Data

Housing Material	CuZn, nickel-plated
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin

Analog Output



Connection Diagram No.

510

Suitable Connection Technology No.

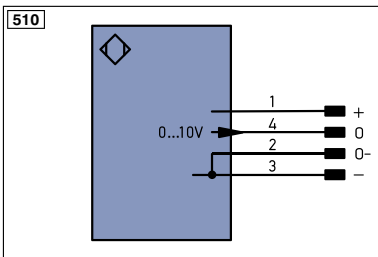
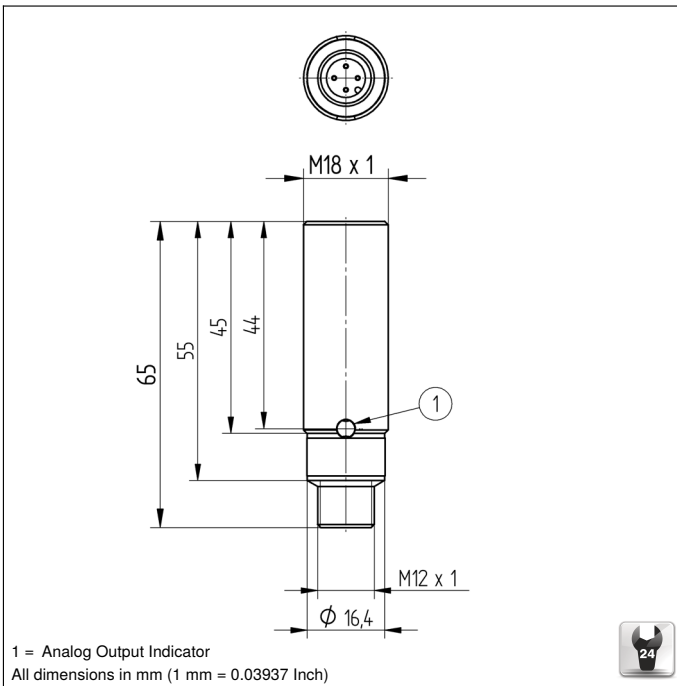
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Suitable Mounting Technology No.

150

### Complementary Products

Analog Evaluation Unit AW02



Legend					
+	Supply Voltage +	PT	Platinum measuring resistor	ENa	Encoder A
-	Supply Voltage 0 V	nc	not connected	ENb	Encoder B
~	Supply Voltage (AC Voltage)	U	Test Input	AMin	Digital output MIN
A	Switching Output (NO)	Ü	Test Input inverted	AMax	Digital output MAX
Ā	Switching Output (NC)	W	Trigger Input	Aok	Digital output OK
V	Contamination/Error Output (NO)	O	Analog Output	SY In	Synchronization In
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY OUT	Synchronization OUT
E	Input (analog or digital)	BZ	Block Discharge	Out	Brightness output
T	Teach Input	AWV	Valve Output		
Z	Time Delay (activation)	a	Valve Control Output +		<b>Wire Colors according to DIN IEC 757</b>
S	Shielding	b	Valve Control Output 0 V	BK	Black
RxD	Interface Receive Path	SY	Synchronization	BN	Brown
TxD	Interface Send Path	E+	Receiver-Line	RD	Red
RDY	Ready	S+	Emitter-Line	OG	Orange
GND	Ground	±	Grounding	YE	Yellow
CL	Clock	SrR	Switching Distance Reduction	GN	Green
E/A	Output/Input programmable	Rx+/-	Ethernet Receive Path	BU	Blue
	IO-Link	Tx+/-	Ethernet Send Path	VT	Violet
PoE	Power over Ethernet	Ea	Interfaces-Bus A(+)/B(-)	GY	Grey
IN	Safety Input	La	Emitted Light disengageable	WH	White
OSSD	Safety Output	Mag	Magnet activation	PK	Pink
Signal	Signal Output	RES	Input confirmation	GNYE	Green Yellow
M	Maintenance	EDM	Contactur Monitoring		

## Mounting

