

Spindle Position Displays

Hollow shaft max. $\varnothing 25$ mm, manual format alignment with actual value correction

Display LCD two lines, interface RS485

N 141



N 141 with cable output

Features

- Electronic spindle position display
- Absolute multiturn measuring system
- Display: LCD backlit, two lines
- Actual value and target display
- Hollow shaft $\varnothing 20$ mm / $\varnothing 25$ mm
- Interface RS485
- Resolution: 2304 steps/revolution ± 4096 revolutions
- Button for display running value/tool radius

Technical data - electrical ratings

Voltage supply	24 VDC ± 10 %
Current consumption	≤ 30 mA
Display	LCD, 7-segment display, 2-lines, backlit
Measuring principle	Absolute multiturn measuring system
Measuring range	-999,99...+9999,99 mm -99.999...+999.999 inch
Steps per turn	2304
Number of turns	4096 / 12 bit
Spindle pitch	≤ 23 mm
Interface	RS485 (ASCII protocol)
Data memory	Parameter buffer: EEPROM Current value buffer: >10 years by integrated 3 V lithium battery
Programmable parameters	Display position horizontal/vertical Measuring unit mm/inch Counting direction Spindle pitch Spindle tolerance Positioning direction Direction arrows Tolerance window Round up/down
Standard DIN EN 61010-1	Protection class II Overvoltage category II Pollution degree 2
Emitted interference	DIN EN 61000-6-3
Interference immunity	DIN EN 61000-6-2
Approval	UL/cUL

Technical data - mechanical design

Hollow shaft	$\varnothing 20$ mm, $\varnothing 25$ mm
Operating speed	≤ 600 rpm (short-term)
Protection DIN EN 60529	IP 65
Operating temperature	-10...+50 °C
Storing temperature	-20...+70 °C
Relative humidity	80 % non-condensing
Torque support	Torque pin provided at housing
E-connection	- Cable output (30 cm) with male/female connector M16, 5-pin
Operation / keypad	Membrane with one key
Housing type	Surface-mount with hollow shaft
Dimensions W x H x L	56 x 100 x 62.5 mm
Mounting	Surface-mount with hollow shaft
Weight approx.	200 g
Material	Polycarbonate black, UL 94V-0

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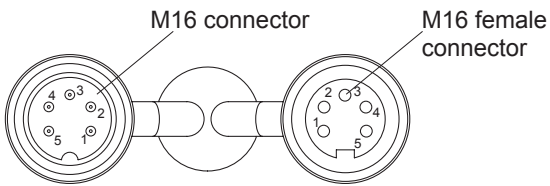
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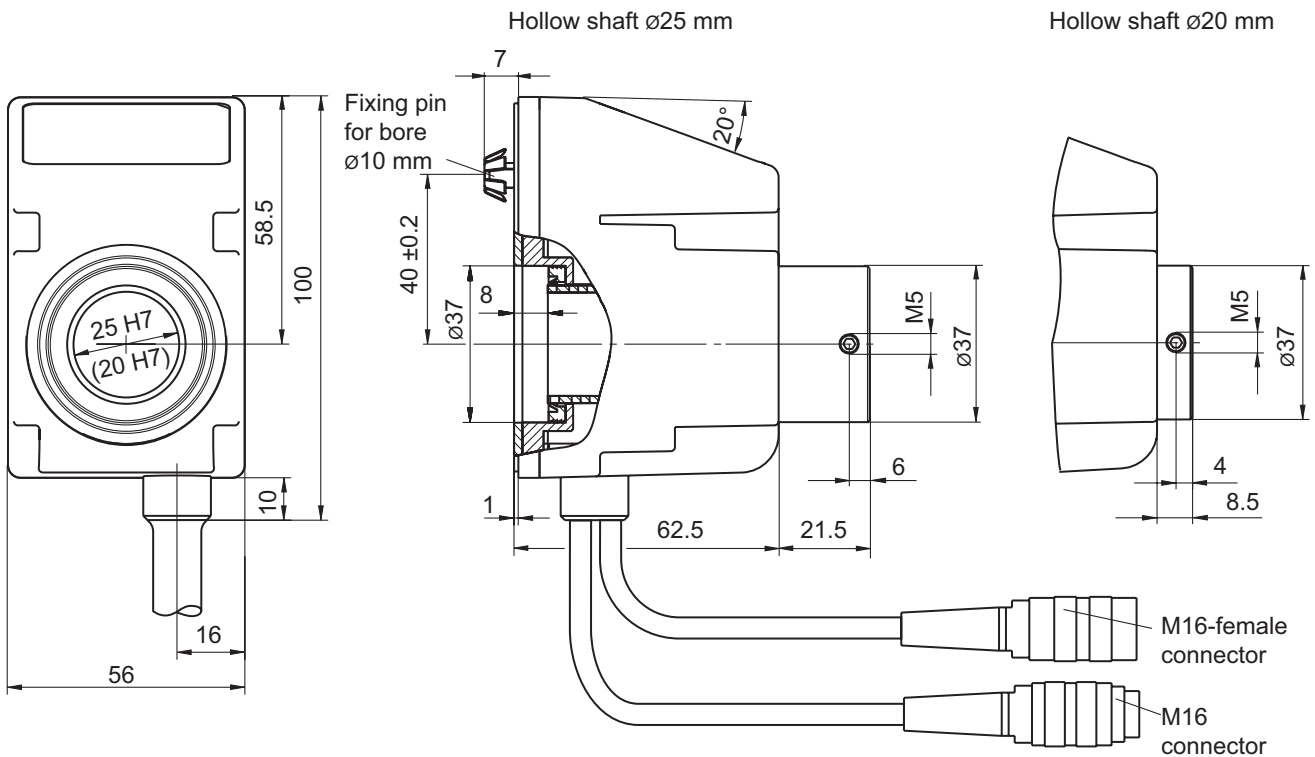
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Terminal assignment

Connector	Assignment
Pin 1	Sensor supply +24 V
Pin 2	Sensor supply 0 V
Pin 3	-
Pin 4	Tx/Rx+, RS485
Pin 5	Tx/Rx-, RS485



Dimensions



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