

# Spindle position displays

Hollow shaft max.  $\varnothing 25$  mm, manual format alignment

Display LCD two lines, interface RS485

N 140



N 140 with cable output

## Features

- Manual format alignment
- Hollow shaft  $\varnothing 20$  mm /  $\varnothing 25$  mm
- Resolution: 2304 steps/revolution  $\pm 4096$  revolutions
- Display: LCD backlit, two lines
- Absolute multiturn measuring system
- Actual value and target display
- Interface RS485

## Technical data - electrical ratings

Voltage supply	24 VDC $\pm 10$ %
Current consumption	$\leq 30$ 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	$\leq 23$ 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 approval / E63076

## Technical data - mechanical design

Shaft	$\varnothing 20$ mm hollow shaft $\varnothing 25$ mm hollow shaft
Operating speed	$\leq 600$ rpm (short-term)
Protection DIN EN 60529	IP 65 (housing), IP 40 (connector)
Operating temperature	-10...+50 °C
Storing temperature	-20...+70 °C
Relative humidity	80 % non-condensing
Torque support	Torque pin provided at housing
Connection	- Cable output (30 cm) with male/female connector M16, 5-pin
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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