

Spindle position displays

Hollow shaft max. $\varnothing 14$ mm, with infrared interface

Format alignment by power tool, interface RS485

N 153



N 153 with cable output

Features

- Infrared interface for format alignment by power tool
- Two keys for format alignment touch by touch
- Hollow shaft max. $\varnothing 14$ mm
- Resolution: 1440 steps/revolution ± 4096 revolutions
- Display: LCD backlit, two lines
- Absolute multiturn measuring system
- Actual value and target display
- Interface RS485
- LED status display

Technical data - electrical ratings

Voltage supply	24 VDC ± 10 %
Current consumption	≤ 40 mA
Display	LCD, 7-segment display, 2-lines, backlit
Measuring principle	Absolute multiturn measuring system
Measuring range	-99.99...+999.99 mm -9.999...+99.999 inch
Steps per turn	1440
Number of turns	4096 / 12 bit
Spindle pitch	≤ 14 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 Spindle pitch Counting direction Spindle tolerance Positioning direction Direction arrows Tolerance window Round up/down
Motive positioning	Two softkeys for format alignment Connected to power tool by infrared interface
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	$\varnothing 14$ mm hollow shaft
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
Connection	- Male/female connector M8, 4-pin - Cable output (30/15 cm) with male/female connector M8, 4-pin
Operation / keypad	Membrane with two keys
Housing type	Surface-mount with hollow shaft
Dimensions W x H x L	37 x 75 x 45 mm
Mounting	Surface-mount with hollow shaft
Weight approx.	120 g
Material	Polyamide black, UL 94V-0

Spindle position displays

**Hollow shaft max. \varnothing 14 mm, with infrared interface
Format alignment by power tool, interface RS485**

N 153