

RPE3 ROTARY ENCODER

Features

A rotary position encoder with absolute 4-20mA current output, based on contactless magnetic sensors. Robustly built with two ball bearings. Suitable for speeds up to 7500rpm, with 10 bit accuracy.

- Absolute analog current output 4-20mA
- Wide supply voltage of 12-28VDC
- 8mm or 6.35mm diameter shaft
- Also available in absolute voltage output - RPE1 and incremental quadrature and absolute PWM output - RPE2

Typical applications:

- Long run cabling
- Valve angle sensor
- Lever angle sensor
- Industrial actuator position
- Motor speed sensor
- Gearbox speed sensor
- Robotics encoder
- Control position indicator
- Front panel switch
- CNC Machine tool position
- Rotary position sensing
- Handwheel / Jogwheel encoder



Technical Data

Electrical

Supply Voltage (VDD)	12VDC to 28VDC
Supply Current	21mA
Resolution	10 bit
Output	10 bit absolute analog current 4-20mA for 0-360° linearly increasing for clockwise rotation, decreasing for counter-clockwise rotation.
RoHS status	Compliant
Sampling rate	10.4k samples per second (ksps)

Mechanical

Operating speed	360° continuous rotation. Maximum speed 3000rpm with v-ring seal, 7500rpm without seal.
Shaft support	Dual 8mm ID ball bearings.
Construction material main body and shaft	Anodized Aluminium.
Ingress Protection	IP50 if v-ring seal is in place.
Mount	16mm flange with 3 x M3 holes 4mm thread on 22mm diameter. (screws supplied)
Weight	64g
Termination	Colour coded multicore cable Mil Spec MIL-W-27500, flying leads. ext.dia 3.2mm, int.dia 1.1mm. 580mm minimum length.

