

FEATURES

- Robust hollow bore (blind) encoder with small dimensions
- Full connection protection with 10 VDC up to 30 VDC

RS PRO Rotary Encoders

RS Stock No.: 2061285



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

Incremental encoders are used to easily measure speed, position, angles or length. The possible application ranges are lifts, cranes, cleaning machines, road marking, wind energy and much more. There they are used e.g. to optimize the process or to assure quality. But although easy applications with just a Display connected to do some measurements are possible.

General Specifications

Encoder Technology	incremental quadrature, optical
Pulses Per Revolution	500 ppr
Connection Type	cable
Mounting Type	Hollow Shaft

Electrical Specifications

Supply Voltage	10VDC to 30VDC
Current Rating	typ. 70mA
Output Signal Type	HTL / Push-Pull
Switching Frequency	Max. 200 kHz
Channels	ABN
Load	Max. 40mA / channel
Signal level mA	at 20 mA
Signal level H>	$H > V_{cc} - 10\% V_{cc}$
Signal level L<	$L < 2.5\text{ VDC}$
Circuit Protection	Yes
Reverse Polarity Protection	Yes
Short-Circuit Proof	No
Phase Shift	$90^\circ \pm \text{max. phase error } 7,5\% \text{ of a period duration}$
Duty Cycle	50 % max. $\pm 7\%$
Reference Signal	Zero pulse, width $90^\circ \pm 7,5\%$ of a period duration

Mechanical Specifications

Overall Height	75 mm
Overall Width	40 mm
Overall Depth	42 mm
Dimensions	64 x 40 x 32 (75 x 40 x 42 with torque support)
Weight	approx. 100 g
Bearing Type	2 precision ball bearings

Housing	
Flange	hollow shaft (blind-Bored)
Flange Diameter	40 mm
Flange Material	aluminium
Housing Cap	aluminium, Powder Coated
Torque Supports	incl. 1 torque support
Spring Plate Compensation	axial: ± 0.8 mm, radial: ± 0.2 mm
Maximum Operating Speed	12000 rpm up to max. protection rating +60 °C

Shafts	
Shaft Type	$\varnothing 6$ X 15 mm Shaft, Blind Hollow
Material	Stainless Steel
Diameter	6 mm
Length	15 mm
Starting Torque	Approx. 0.2 Ncm at Ambient Temperature
Fixing	Permanently Attached Clamping Ring
Max. Permissible Shaft Loading Radial	100N
Max. Permissible Shaft Loading Axial	50N

Operation Environment Specifications

Maximum Operating Temperature	+80 °C
Minimum Operating Temperature	-20°C
Storage Temperature Range	-30 °C up to +80 °C
Vibration	50m/s ² (10-2000 Hz)
Shock	1000m/s ² (6 ms)

Protection Category

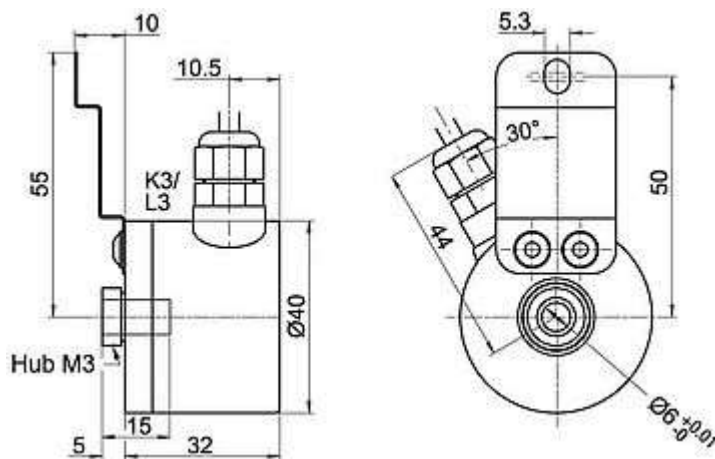
IP Rating	IP65
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Classification

eCI@ss 11.1	27270501
UNSPSC 22.0601	39121527

Approvals

Compliance/Certifications	CE / DIN EN 61000-4-2 / DIN EN 61000-4-4
Declarations	



Assignments

GND	WH
(+) Vcc	BN
A	GN
B	YE
N	GY
A inv.	-
B inv.	-
N inv.	-
Shield	flex

