

## FEATURES

- Rugged industrial standard encoder
- Housing cap die cast aluminum, with particularly eco-friendly powder coating
- Thru-Bore
- High protection class IP65, with oil seal
- High noise immunity
- Full connection protection with 10 VDC up to 30 VDC
- Maximum mechanical and electrical safety

## RS PRO Rotary Encoders

RS Stock No.: 2061284



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

<b>Encoder Technology</b>	incremental quadrature, optical
<b>Pulses Per Revolution</b>	5000 ppr
<b>Connection Type</b>	Cable
<b>Mounting Type</b>	Hollow Shaft ( through-bored )

## Electrical Specifications

<b>Supply Voltage</b>	10VDC to 30VDC
<b>Current Rating</b>	typ. 70mA
<b>Output Signal Type</b>	HTL inverted / Push-Pull
<b>Switching Frequency</b>	Max. 200 kHz
<b>Channels</b>	ABN
<b>Load</b>	Max. 40mA / channel
<b>Signal level mA</b>	at 20 mA
<b>Signal level H&gt;</b>	H > Vcc - 2.5 VDC
<b>Signal level L&lt;</b>	L < 2.5 VDC
<b>Reverse Polarity Protection</b>	Yes
<b>Short-Circuit Proof</b>	Yes
<b>Phase Shift</b>	90° ± max. phase error 7,5% of a period duration
<b>Duty Cycle</b>	50 % max. ±7 %
<b>Reference Signal</b>	Zero pulse, width 90° ±7,5% of a period duration

## Mechanical Specifications

<b>Overall Height</b>	84.5 mm
<b>Overall Width</b>	58 mm
<b>Overall Depth</b>	46.5 mm
<b>Dimensions</b>	84.5 x 58 x 46.5
<b>Weight</b>	approx. 220 g
<b>Bearing Type</b>	2 Precision Ball Bearings

<b>Housing</b>	
<b>Flange</b>	Hollow Shaft (Through-Bored)
<b>Flange Diameter</b>	58mm
<b>Flange Material</b>	Aluminium
<b>Housing Cap</b>	Die-Cast Aluminium, Powder Coated
<b>Torque Supports</b>	incl. 1 torque support
<b>Spring Plate Compensation</b>	axial: $\pm 0.8$ mm, radial: $\pm 0.2$ mm
<b>Maximum Operating Speed</b>	6000 rpm up to max. protection rating +60 °C

<b>Shafts</b>	
<b>Shaft Type</b>	$\varnothing 12$ x 44.5 mm Shaft, Hollow
<b>Material</b>	Stainless Steel
<b>Diameter</b>	12 mm
<b>Length</b>	44.5mm
<b>Starting Torque</b>	Approx. 2.2 Ncm at Ambient Temperature
<b>Fixing</b>	Permanently Attached Clamping Ring
<b>Max. Permissible Shaft Loading Radial</b>	80N
<b>Max. Permissible Shaft Loading Axial</b>	60N

## Operation Environment Specifications

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

## Protection Category

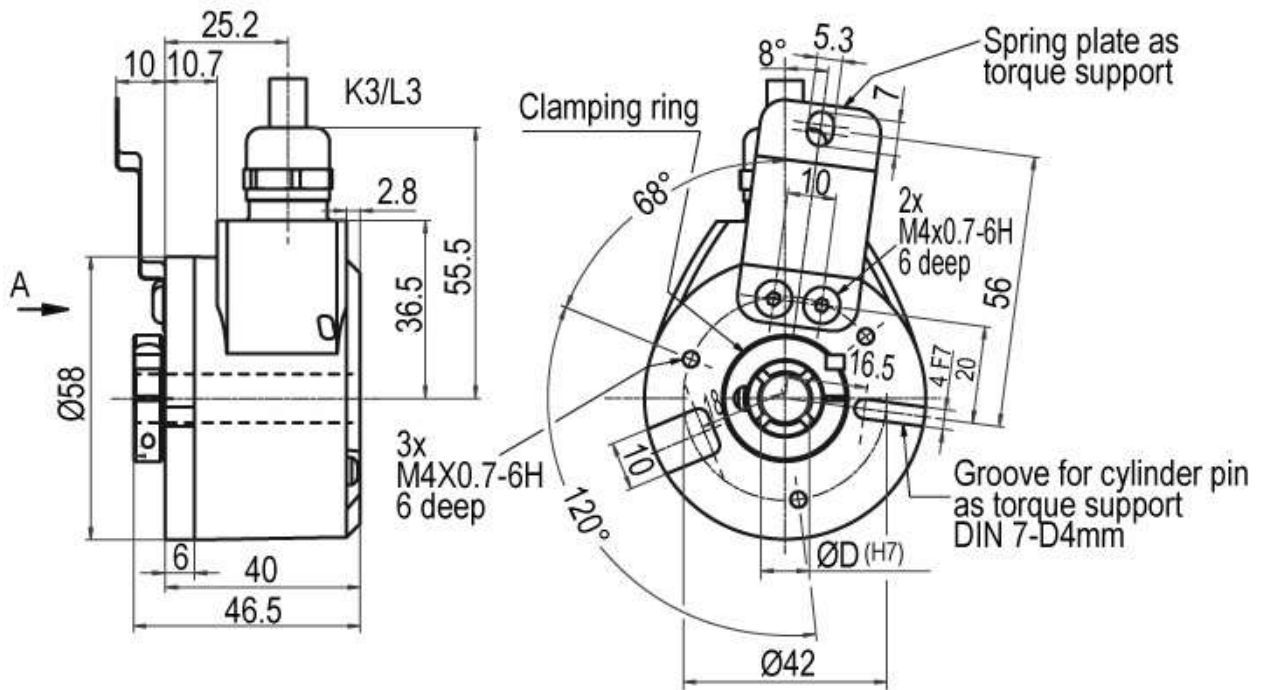
<b>IP Rating</b>	IP65
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## Classification

<b>eCl@ss 11.1</b>	<b>27270501</b>
<b>UNSPSC 22.0601</b>	<b>39121527</b>

## Approvals

<b>Compliance/Certifications</b>	CE / DIN EN 61000-4-2 / DIN EN 61000-4-4
<b>Declarations</b>	



### Assignments

<b>GND</b>	WH
<b>(+) Vcc</b>	BN
<b>A</b>	GN
<b>B</b>	YE
<b>N</b>	GY
<b>A inv.</b>	RD
<b>B inv.</b>	BK, (BU at ACA)
<b>N inv.</b>	VT
<b>Shield</b>	flex

