

## FEATURES

- Robust construction for industrial use
- Protection to IP67, shaft sealed to IP65
- High electrical immunity
- Full connection protection with 10 VDC up to 30 VDC
- Housing cap die cast aluminum, with particularly eco-friendly powder coating

## RS PRO Rotary Encoders

RS Stock No.: 2061282



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>	360 ppr
<b>Connection Type</b>	Cable
<b>Mounting Type</b>	Synchro Flange

## Electrical Specifications

<b>Supply Voltage</b>	5VDC to 30VDC
<b>Current Rating</b>	typ. 70 mA
<b>Output Signal Type</b>	HTL inverted / Push-Pull
<b>Switching Frequency</b>	max. 200 kHz
<b>Channels</b>	ABN
<b>Load</b>	Maximum 40mA / channel
<b>Signal level mA</b>	at 20 mA
<b>Signal level H&gt;</b>	$H > V_{cc} - 10\% V_{cc}$
<b>Signal level L&lt;</b>	$L < 2.5\text{ VDC}$
<b>Circuit Protection</b>	No
<b>Reverse Polarity Protection</b>	Yes
<b>Short-Circuit Proof</b>	No
<b>Phase Shift</b>	$90^\circ \pm \text{max. phase error } 7,5\% \text{ of a period duration}$
<b>Duty Cycle</b>	$\leq 5000\text{ PPR: } 50\% \text{ max. } \pm 7\%$
<b>Reference Signal</b>	Zero pulse, width $90^\circ \pm 7,5\%$ of a period duration

## Mechanical Specifications

<b>Overall Height</b>	55 mm
<b>Overall Width</b>	58 mm
<b>Overall Depth</b>	58 mm
<b>Dimensions</b>	55 x 58 x 58
<b>Weight</b>	approx. 230 g
<b>Bearing Type</b>	2 Precision Ball Bearings

<b>Housing</b>	
<b>Flange</b>	Synchro Flange
<b>Flange Diameter</b>	58 mm
<b>Flange Material</b>	Aluminum
<b>Housing Cap</b>	Die-Cast Aluminum, Powder Coated
<b>Maximum Operating Speed</b>	10000 rpm

<b>Shafts</b>	
<b>Shaft Type</b>	Ø 6 x 12 mm Shaft, flattened shaft
<b>Material</b>	Stainless Steel
<b>Diameter</b>	6 mm
<b>Length</b>	12 mm
<b>Starting Torque</b>	approx. 0.5 Ncm at ambient temperature
<b>Max. Permissible Shaft Loading Radial</b>	125N
<b>Max. Permissible Shaft Loading Axial</b>	70N

## 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

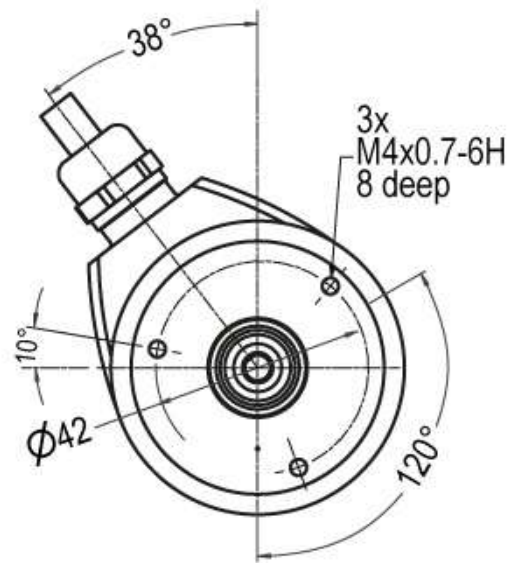
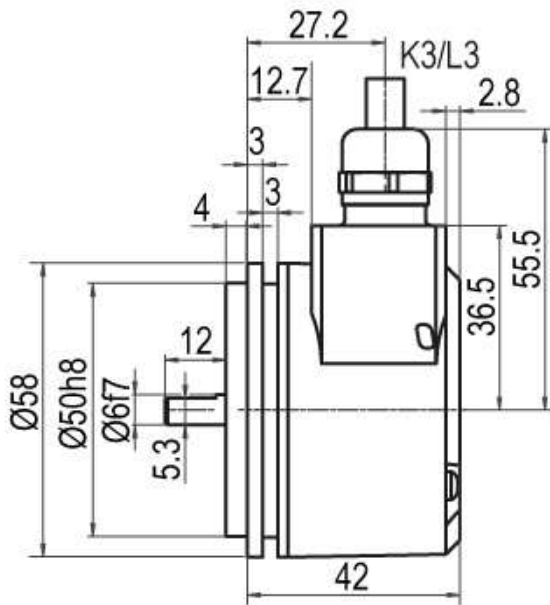
<b>IP Rating</b>	IP65
------------------	------

## Classification

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

## Approvals

<b>Compliance/Certifications</b>	
<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

