

## FEATURES

- Very compact construction for use in harsh conditions
- Permissible bearing loads similar to "big encoders"
- Hall effect based signal generation

## RS PRO Rotary Encoders

RS Stock No.: 2061281



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 encoder 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, magnetic
<b>Pulses Per Revolution</b>	512 ppr
<b>Connection Type</b>	cable
<b>Mounting Type</b>	synchronous flange

## Electrical Specifications

<b>Supply Voltage</b>	5VDC to 30VDC
<b>Current Rating</b>	typ. 40mA
<b>Output Signal Type</b>	HTL / Push-Pull
<b>Switching Frequency</b>	max. 200 kHz
<b>Channels</b>	ABN
<b>Load</b>	Max. 30mA / channel
<b>Signal level mA</b>	at 20 mA
<b>Signal level H&gt;</b>	H > Vcc - 10 % Vcc
<b>Signal level L&lt;</b>	L < 2.5 VDC
<b>Circuit Protection</b>	no
<b>Reverse Polarity Protection</b>	no
<b>Short-Circuit Proof</b>	no
<b>Phase Shift</b>	90° ± max. phase error 7,5% of a period duration
<b>Duty Cycle</b>	512 PPR: 50 % max. +13 %
<b>Reference Signal</b>	Zero pulse, width 90° ±7,5% of a period duration

## Mechanical Specifications

<b>Overall Height</b>	30mm
<b>Overall Width</b>	30mm
<b>Overall Depth</b>	42mm
<b>Dimensions</b>	30 x 30 x 42
<b>Weight</b>	50g
<b>Bearing Type</b>	2 Precision Ball Bearings

Housing	
<b>Flange</b>	Synchro Flange
<b>Flange Diameter</b>	30mm
<b>Flange Material</b>	aluminium
<b>Housing Cap</b>	aluminium
<b>Maximum Operating Speed</b>	12000rpm

Shafts	
<b>Shaft Type</b>	6 x 12 mm Shaft, flattened shaft
<b>Material</b>	Stainless Steel
<b>Diameter</b>	6mm
<b>Length</b>	12mm
<b>Starting Torque</b>	Approx. 0.2 Ncm at Ambient Temperature
<b>Max. Permissible Shaft Loading Radial</b>	80N
<b>Max. Permissible Shaft Loading Axial</b>	50N

## Operation Environment Specifications

<b>Maximum Operating Temperature</b>	+80°C
<b>Minimum Operating Temperature</b>	-20°C
<b>Storage Temperature Range</b>	-20°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

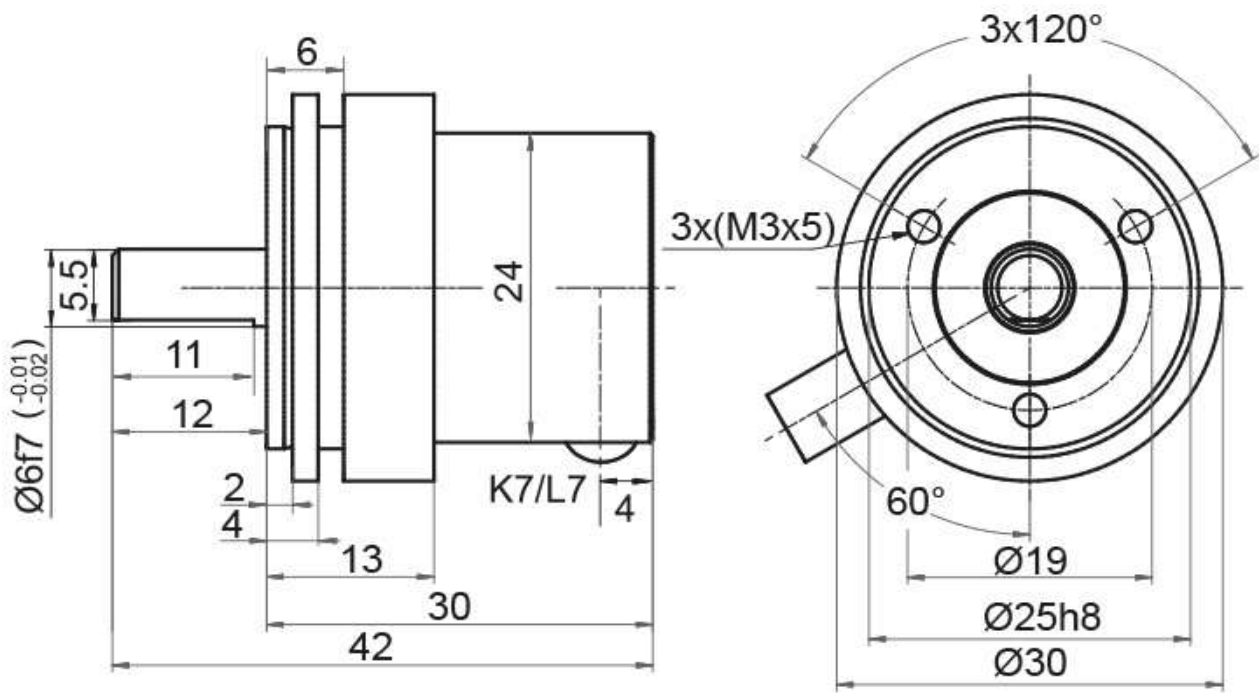
<b>IP Rating</b>	IP40
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## Classification

<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>	-
<b>B inv.</b>	-
<b>N inv.</b>	-
<b>Shield</b>	flex

