

#### **FEATURES**

- Rugged industrial standard encoder
- Housing cap die cast aluminum, with particularly ecofriendly powder coating
- Protection to IP67, shaft sealed to IP65
- Maximum mechanical and electrical safety
- Full connection protection with 10 VDC up to 30 VDC

# **RS PRO Rotary Encoders**

RS Stock No.: 2061297



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.

# **Rotary Encoders**



#### **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**

Encoder Technology	incremental quadrature, magnetic	
Pulses Per Revolution	500 ppr	
Connection Type	Flange connector M23, 12- pin (clockwise)	
Mounting Type	Clamping Flange	

#### **Electrical Specifications**

Supply Voltage	5 - 30 VDC
Current Rating	typ. 70 mA
Output Signal Type	HTL inverted / Push-Pull
Switching Frequency	Max. 200 kHz
Channels	ABN
Load	Max. 40mA / channel
Signal level mA	at 20 mA
Signal level H>	H > Vcc - 2.5 VDC
Signal level L<	L < 2.5 VDC
Reverse Polarity Protection	Yes
Short-Circuit Proof	Yes
Phase Shift	90° ± max. phase error 7,5% of a period duration
Duty Cycle	≤5000 PPR: 50 % max. ±7 %
Reference Signal	Zero pulse, width 90° ±7,5% of a period duration



## **Mechanical Specifications**

Overall Height	89.2 mm
Overall Width	58 mm
Overall Depth	72 mm
Dimensions	89,2 x 58 x 72
Weight	approx. 250 g
Bearing Type	2 Precision Ball Bearings

Housing	
Flange	Clamping Flange
Flange Diameter	58mm
Flange Material	Aluminum
Housing Cap	Die-Cast Aluminum, Powder Coated
Maximum Operating Speed	8000 rpm

Shafts	
Shaft Type	Ø10 x 20 mm Shaft
Material	Stainless Steel
Diameter	10 mm
Length	20 mm
Starting Torque	approx. 1 Ncm at ambient temperature
Max. Permissible Shaft Loading Radial	220N
Max. Permissible Shaft Loading Axial	120N

## **Operation Environment Specifications**

Maximum Operating Temperature	+85°C
Minimum Operating Temperature	-40°C
Storage Temperature Range	-30°C to +85°C
Vibration	50m/s <sup>2</sup> (10-2000 Hz)
Shock	1000m/s <sup>2</sup> (6 ms)



# **Protection Category**

IP Rating	IP65

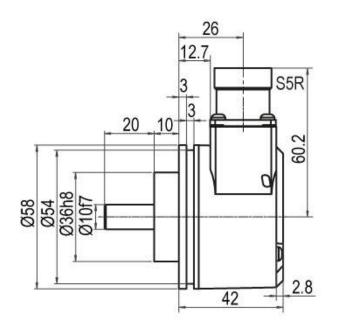
## Classification

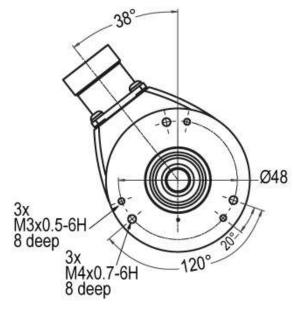
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## **Approvals**

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







Assignments

	12-pin
connector drawing	
GND / SENS-	10 / 11
(+) Vcc / SENS+	12 / 2
A	5
В	8
N	3
A inv.	6
B inv.	1
N inv.	4
n. c.	7, 9
Shield	-