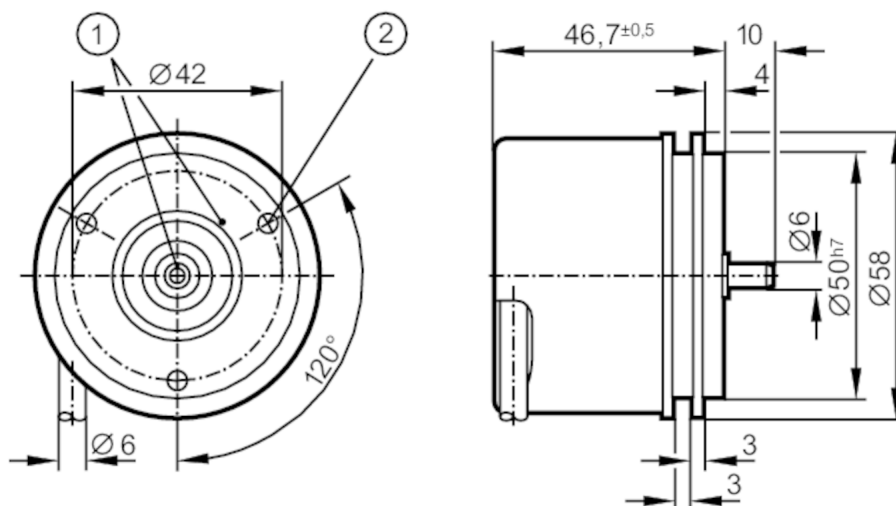# RU6025

Incremental encoder with solid shaft

RU-1024-I24/L2

phase-out article

Alternative articles: RUP500 + E12402 When selecting an alternative article and accessories please note that technical data may differ!

1   reference mark
2   M4 Depth 5 mm

Product characteristics		
Resolution		1024 resolution
Shaft design		solid shaft
Shaft diameter	[mm]	6

Application		
Function principle		incremental

Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 150

Outputs		
Electrical design		HTL
Max. current load per output	[mA]	50
Switching frequency	[kHz]	300
Type of short-circuit protection		< 60 s
Phase difference A and B	[°]	90

Measuring/setting range		
Resolution		1024 resolution

Operating conditions		
Ambient temperature	[°C]	-40...100
Note on ambient temperature		for firmly laid cable: -40 °C

RU6025

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Max. relative air humidity	[%]	98
Protection		IP 64; (on the housing: IP 67; on the shaft: IP 64)

Tests / approvals		
Shock resistance		200 g
Vibration resistance		30 g
MTTF	[ANN]	190
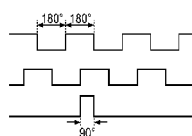
Mechanical data		
Weight	[g]	487.8
Dimensions	[mm]	Ø 58 / L = 46.7
Materials		aluminium
Max. revolution, mechanical [U/min]		16000
Max. starting torque	[Nm]	1
Reference temperature torque	[°C]	20
Shaft design		solid shaft
Shaft diameter	[mm]	6
Shaft material		steel (1.4104)
Max. shaft load axial (at the shaft end)	[N]	10
Max. shaft load radial (at the shaft end)	[N]	20
Fixing flange		synchro-flange

Electrical connection	

Cable: 2 m, PUR; Maximum cable length: 300 m; radial, can also be used axially

brown	A
green	A inverted
grey	B
pink	B inverted
red	0 index
black	0 index inverted
blue	L+ sensor
white	0V sensor
brown/green	L+ (Up)
white/green	0V (Un)
lilac	failure inverted
screen	housing

Diagrams and graphs	

Pulse diagram

direction of rotation clockwise (looking at the shaft)