



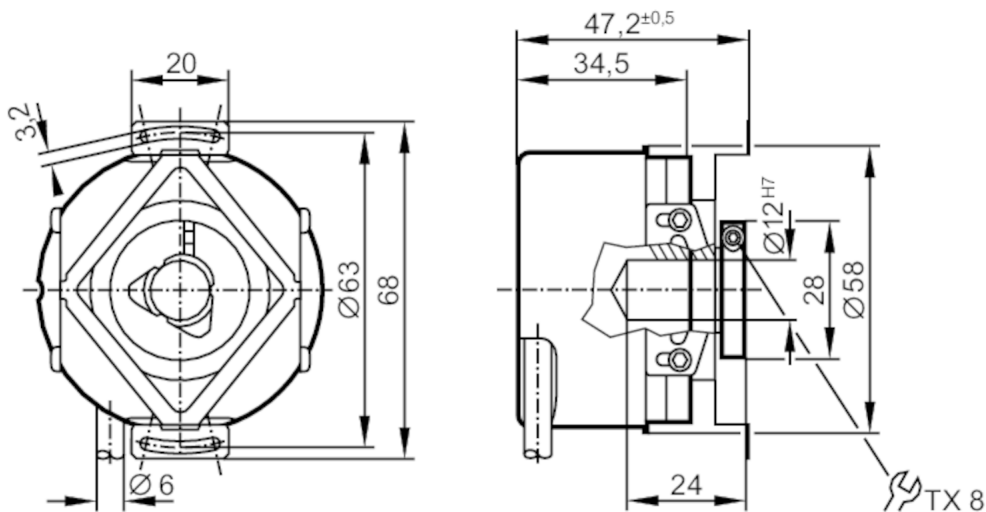
Incremental encoder with hollow shaft

RO-5000-I24/N1U

phase-out article

Alternative articles: ROP521 + E12402

When selecting an alternative article and accessories please note that technical data may differ!



Product characteristics

Resolution	5000 resolution
Shaft design	hollow shaft open to one side
Shaft diameter [mm]	12

Application

Function principle	incremental
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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	5000 resolution
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Operating conditions

Ambient temperature [°C]	-40...100
Max. relative air humidity [%]	98
Protection	IP 64; (on the housing: IP 67; on the shaft: IP 64)



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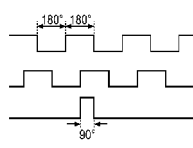
RO-5000-I24/N1U

Tests / approvals		
Shock resistance		200 g
Vibration resistance		30 g
MTTF	[years]	190

Mechanical data		
Weight	[g]	444.4
Dimensions	[mm]	Ø 58 / L = 35.5
Materials		aluminium
Max. revolution, mechanical	[U/min]	12000
Max. starting torque	[Nm]	1
Reference temperature torque	[°C]	20
Shaft design		hollow shaft open to one side
Shaft diameter	[mm]	12
Shaft fit		H7
Shaft material		stainless steel
Installation depth of shaft	[mm]	10
Max. axial shaft misalignment	[mm]	1; (max. radial shaft alignment: ± 0,05 mm)

Electrical connection	
Cable: 1 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)
screen	housing
lilac	failure inverted

Diagrams and graphs	
Pulse diagram	 direction of rotation clockwise (looking at the shaft)