RB6012

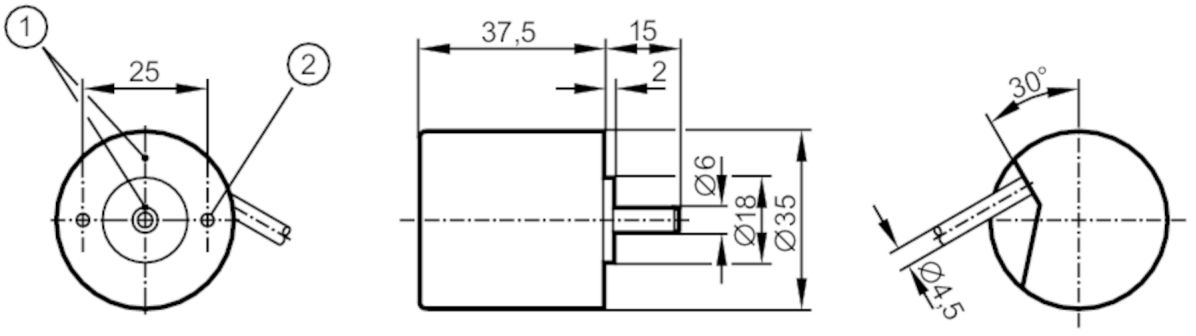
Incremental encoder with solid shaft

RB-0250-I24/L2

phase-out article

Alternative articles: RB3500

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



1 reference mark
2 M3 Depth 5 mm

Product characteristics		
Resolution		250 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]	160
Type of short-circuit protection		< 60 s
Phase difference A and B	[°]	90
Measuring/setting range		
Resolution		250 resolution
Operating conditions		
Ambient temperature	[°C]	-40...70
Note on ambient temperature		for firmly laid cable
Max. relative air humidity	[%]	75; (briefly: 95 %)
Protection		IP 64

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Tests / approvals		
Shock resistance		100 g (6 ms)
Vibration resistance		10 g (55...2000 Hz)
MTTF	[years]	190

Mechanical data		
Weight	[g]	261.4
Dimensions	[mm]	Ø 35 / L = 52.5
Materials		aluminium
Max. revolution, mechanical	[U/min]	10000
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]	5
Max. shaft load radial (at the shaft end)	[N]	10

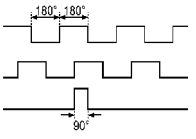
Electrical connection

Cable: 2 m, PUR; radial, can also be used axially

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

Diagrams and graphs

Pulse diagram



direction of rotation clockwise (looking at the shaft)