RU1177

Incremental encoder with solid shaft

RU-0250-I05/P1

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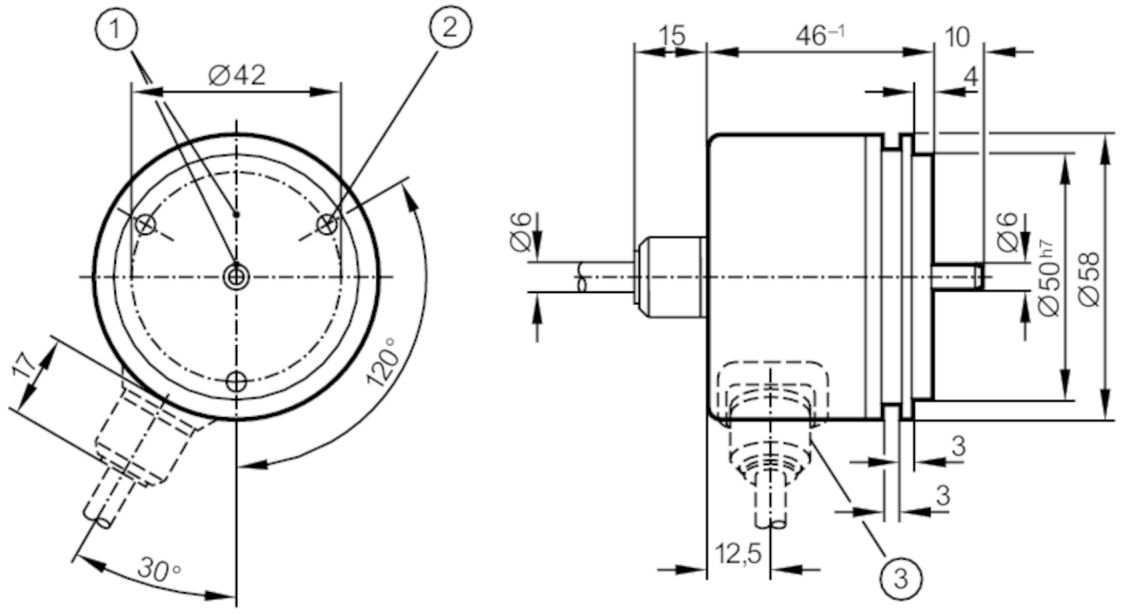

1 reference mark
2 M4 Depth 5 mm

CE

Product characteristics		
Resolution		250 resolution
Shaft design		solid shaft
Shaft diameter	[mm]	6
Electrical data		
Operating voltage tolerance	[%]	10
Operating voltage	[V]	5 DC
Current consumption	[mA]	150
Outputs		
Electrical design		TTL
Max. current load per output	[mA]	20
Switching frequency	[kHz]	300
Phase difference A and B	[°]	90
Measuring/setting range		
Resolution		250 resolution
Operating conditions		
Ambient temperature	[°C]	-20...100
Storage temperature	[°C]	-30...100
Max. relative air humidity	[%]	98
Protection		IP 64

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Tests / approvals		
Shock resistance		100 g (6 ms)
Vibration resistance		10 g (55...2000 Hz)

Mechanical data		
Dimensions	[mm]	Ø 58 / L = 46
Materials		aluminium
Max. revolution, mechanical	[U/min]	12000
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

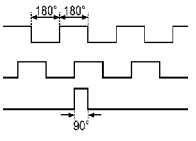
Cable: 1 m, PUR; axial

Connector: 1 x (ifm 1001.1)

pink (1)	B inverted
blue (2)	+5V sensor
red (3)	0 index
black (4)	0 index inverted
brown (5)	A
green (6)	A inverted
lilac (7)	failure inverted
grey (8)	B
pin 9	n.c.
white/green (10)	0V (Un)
white (11)	0V sensor
brown/green (12)	+5V (Up)
screen	housing

Diagrams and graphs

Pulse diagram



direction of rotation clockwise (looking at the shaft)