RU6113

Incremental encoder with solid shaft

RU-6000-I24/K R

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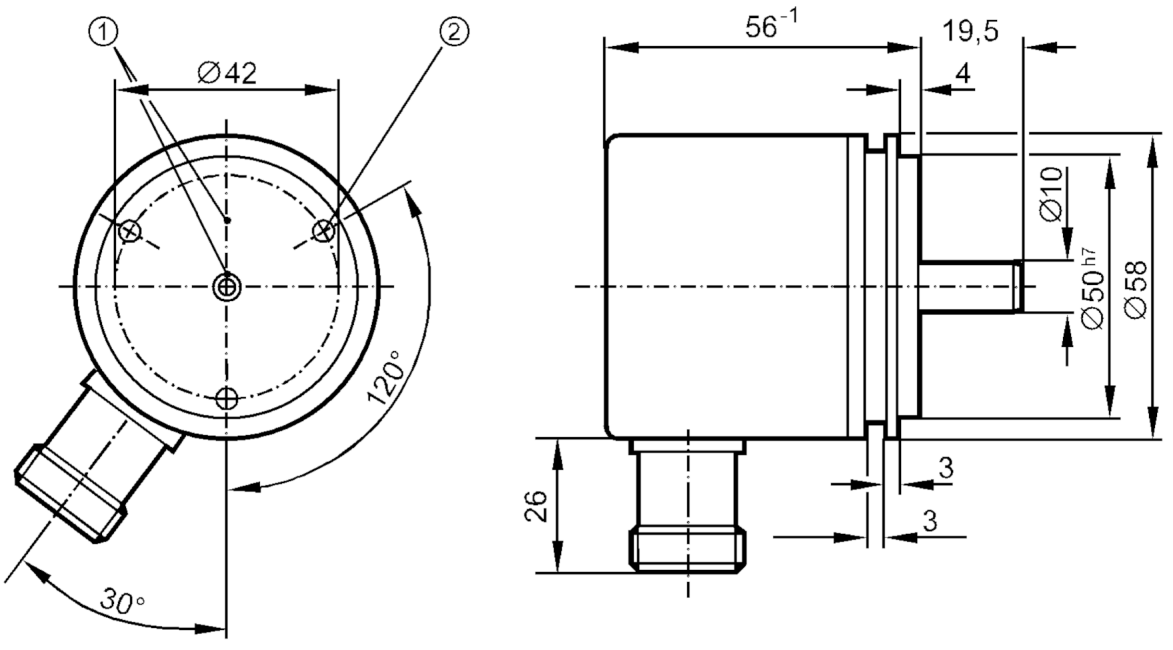

1 reference mark
2 M4 Depth 5 mm

Product characteristics		
Resolution		6000 resolution
Shaft design		solid shaft
Shaft diameter	[mm]	10
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		6000 resolution
Operating conditions		
Ambient temperature	[°C]	-30...85
Storage temperature	[°C]	-30...100

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Max. relative air humidity	[%]	98
Protection		IP 64

Tests / approvals

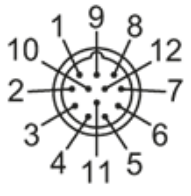
Shock resistance		100 g (6 ms)
Vibration resistance		15 g (55...2000 Hz)

Mechanical data

Weight	[g]	423.2
Dimensions	[mm]	Ø 58 / L = 75.5
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]	10
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

Connector: 1 x M23 (ifm 1001.4), radial



1	B inverted
2	L+ sensor
3	0 index
4	0 index inverted
5	A
6	A inverted
screen	housing
7	failure inverted
8	B
9	n.c.
10	0V (Un)
11	0V sensor
12	L+

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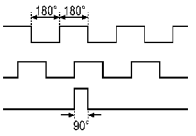
Diagrams and graphs

Pulse diagram



direction of rotation clockwise (looking at the shaft)