RN6045

Absolute singleturn encoder with solid shaft

RN-4096-G24/J B

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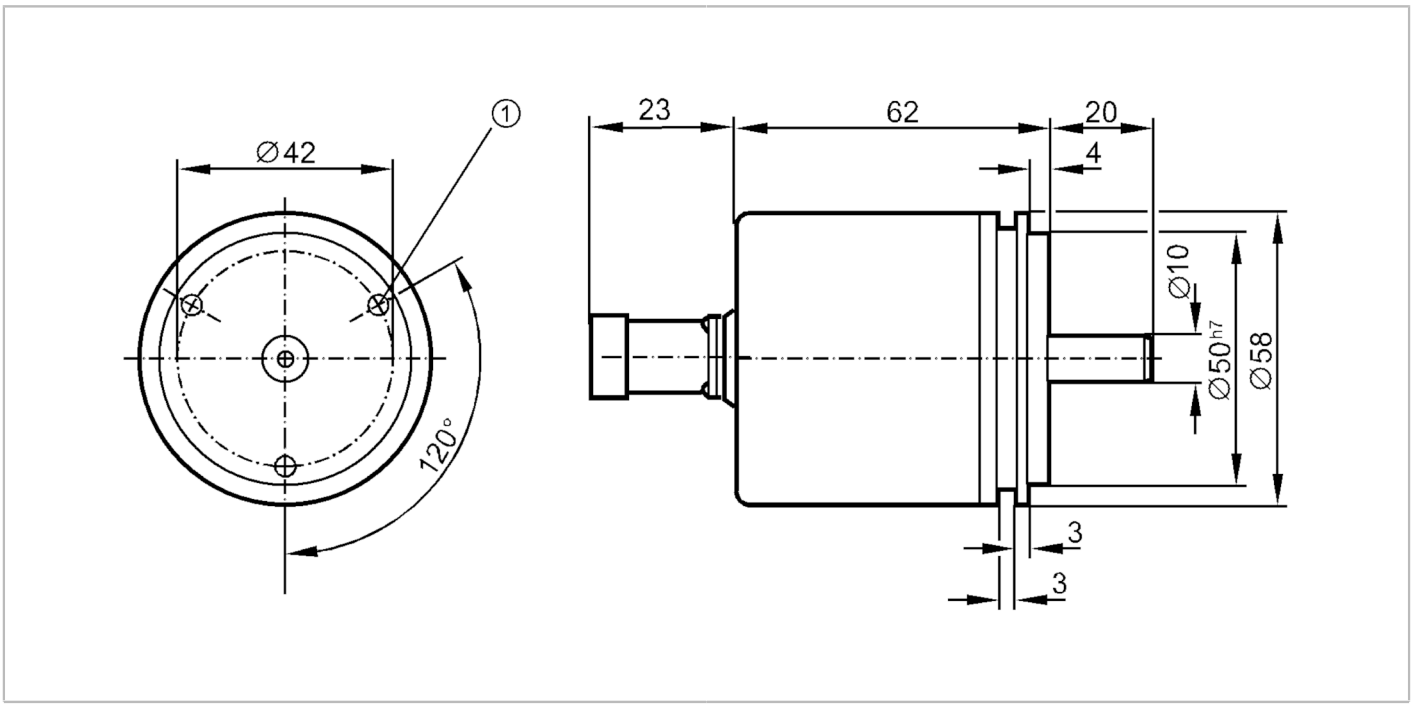

CE

Product characteristics		
Resolution		4096 resolution; 4096 steps; 12 bit
Communication interface		parallel
Shaft design		solid shaft
Shaft diameter	[mm]	10
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 150
Max. revolution electrical	[U/min]	6000
Outputs		
Electrical design		HTL
Max. current load per output	[mA]	20
Type of short-circuit protection		< 60 s
Code		Gray code; (increasing code values when turned clockwise (seen on the shaft))
Measuring/setting range		
Resolution		4096 resolution; 4096 steps; 12 bit
Interfaces		
Communication interface		parallel
Operating conditions		
Ambient temperature	[°C]	-20...85
Storage temperature	[°C]	-30...100
Max. relative air humidity	[%]	98

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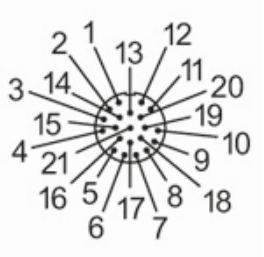
Protection		IP 65
Tests / approvals		
Shock resistance		100 g (6 ms)
Vibration resistance		10 g (55...2000 Hz)
Mechanical data		
Dimensions	[mm]	Ø 58 / L = 105
Materials		aluminium
Max. revolution, mechanical	[U/min]	10000
Max. starting torque	[Nm]	1
Reference temperature torque	[°C]	20
Shaft design		solid shaft
Shaft diameter	[mm]	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

Electrical connection

Connector: 1 x M23 (ifm 1001.8), axial; Maximum cable length: 100 m



1	0V Un
2	Ub
3	release A inverted
4	release B inverted
5	bit 3
6	bit 4
7	bit 5
8	bit 6
9	bit 7
10	bit 8
11	bit 9
12	bit 10
13	bit 11
14	bit 12
15	0V sensor
16	Ub sensor
17	bit 10 inverted
18	bit 2
19	bit 1

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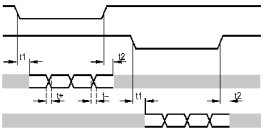
Diagrams and graphs

Pulse diagram



release A inverted

release B inverted

tracks 3...10

tracks 1...2