



Incremental encoder with solid shaft

RV-1000-I05/P1

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- 1 reference mark
- 2 M3 Depth 5 mm



Product characteristics

Resolution	1000 resolution
Shaft design	solid shaft
Shaft diameter [mm]	10

Application

Function principle	incremental
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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	1000 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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Tests / approvals

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

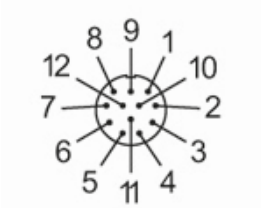
Mechanical data

Weight	[g]	469
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]	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

Cable: 1 m, PUR; axial

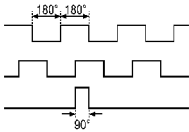
Connector: 1 x M23 (ifm 1001.1)



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|--------|------------------|
| 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 | not used |
| 10 | 0V (Un) |
| 11 | 0V sensor |
| 12 | L+ |

Diagrams and graphs

Pulse diagram



direction of rotation clockwise (looking at the shaft)