RP1010

Incremental encoder with hollow shaft

RP-1024-I05/N10

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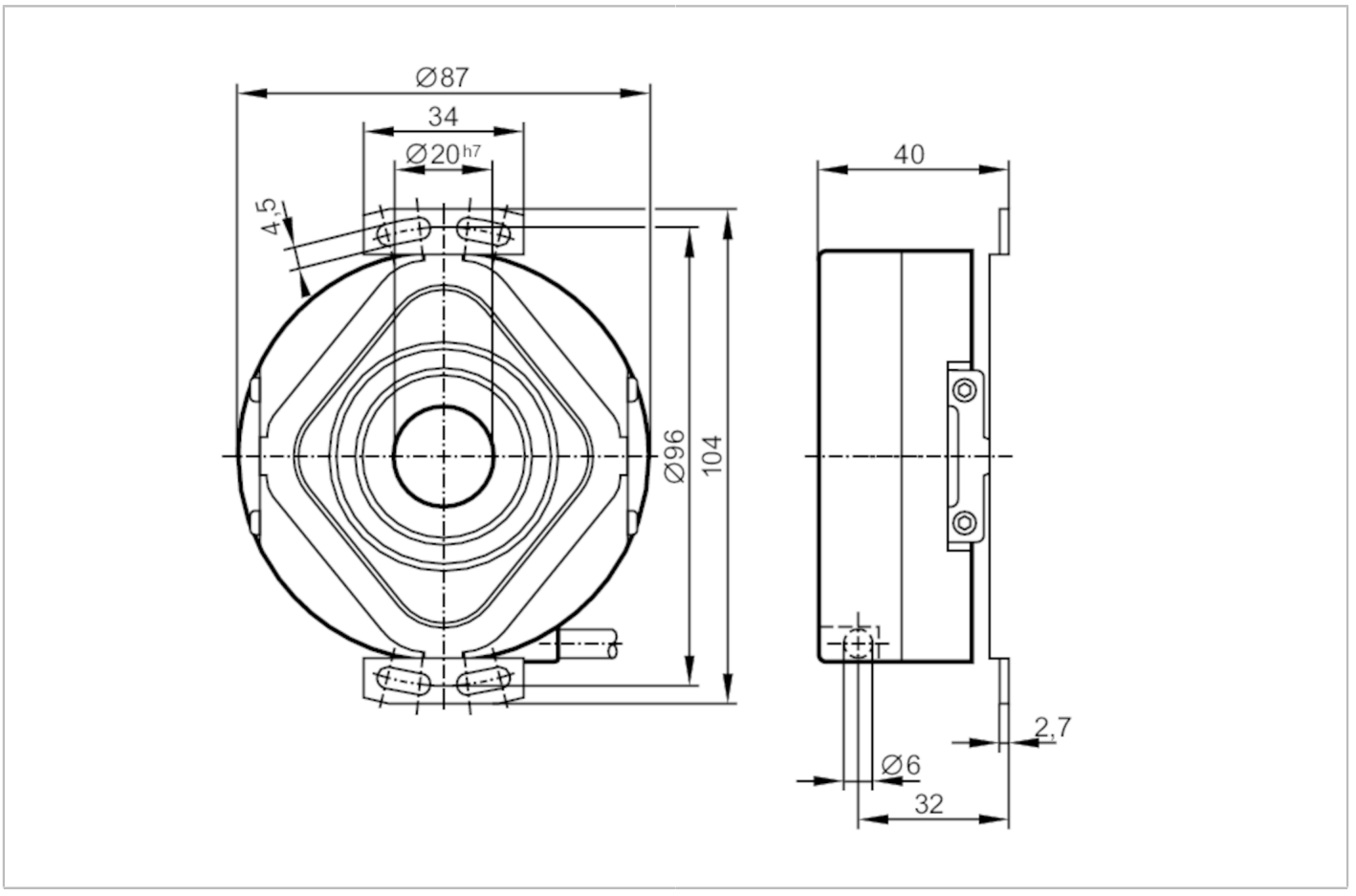

Product characteristics		
Resolution		1024 resolution
Shaft design		continuous hollow shaft
Shaft diameter	[mm]	20
Application		
Function principle		incremental
Electrical data		
Operating voltage tolerance	[%]	10
Operating voltage	[V]	5 DC
Current consumption	[mA]	< 150
Outputs		
Electrical design		TTL
Max. current load per output	[mA]	20
Switching frequency	[kHz]	300
Phase difference A and B	[°]	90
Measuring/setting range		
Resolution		1024 resolution

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Operating conditions		
Ambient temperature	[°C]	-30...60
Note on ambient temperature		higher temperature upon request for the diagram see the installation instructions
Storage temperature	[°C]	-30...100
Max. relative air humidity	[%]	75; (briefly: 95 %; condensation not permissible)
Protection		IP 64

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

Mechanical data		
Weight	[g]	956.3
Dimensions	[mm]	Ø 87 / L = 40
Materials		aluminium
Max. revolution, mechanical	[U/min]	6000
Max. starting torque	[Nm]	15
Reference temperature torque	[°C]	20
Shaft design		continuous hollow shaft
Shaft diameter	[mm]	20
Shaft fit		H7
Shaft material		steel (1.4104)
Installation depth of shaft	[mm]	> 46
Max. axial shaft misalignment	[mm]	1,5; (Only to compensate for installation tolerances and thermal expansion.; No dynamic movement allowed.)

Electrical connection

Cable: 1 m, PUR; radial

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

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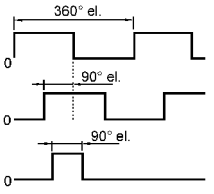
Diagrams and graphs

Pulse diagram



Output A

Output B

0 index