RP6412

Incremental encoder with hollow shaft

RP-2500-I24/N15

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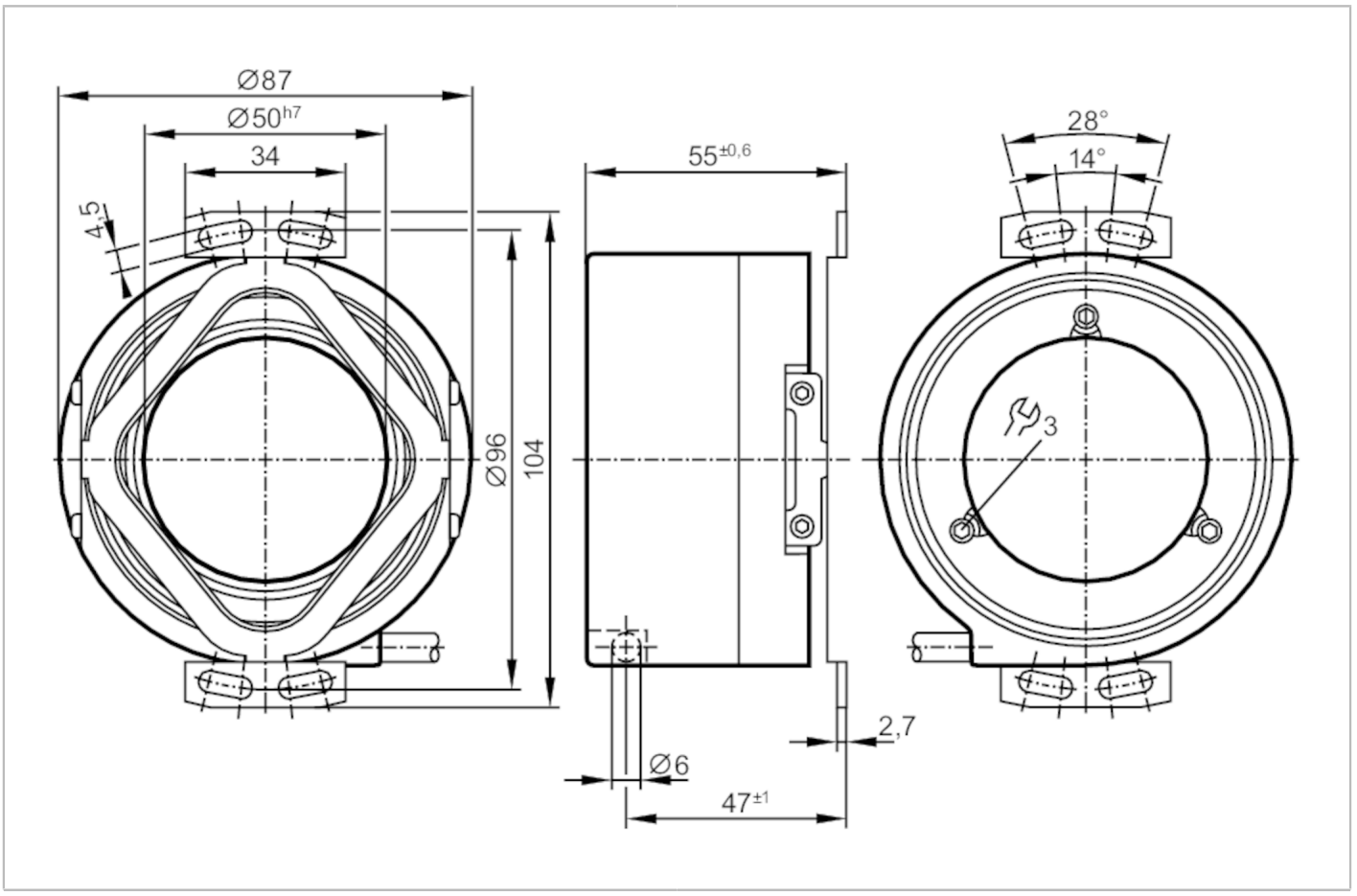

Product characteristics		
Resolution		2500 resolution
Shaft design		continuous hollow shaft
Shaft diameter	[mm]	50
Application		
Function principle		incremental
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 150
Outputs		
Electrical design		HTL
Max. current load per output	[mA]	50
Switching frequency	[kHz]	300
Short-circuit protection		yes
Type of short-circuit protection		< 60 s
Phase difference A and B	[°]	90

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Measuring/setting range		
Resolution		2500 resolution
Operating conditions		
Ambient temperature	[°C]	-30...65
Note on ambient temperature		higher temperature upon request for the diagram see the installation instructions
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]	1300
Dimensions	[mm]	Ø 87 / L = 55
Materials		aluminium
Max. revolution, mechanical	[U/min]	4000
Max. starting torque	[Nm]	20
Reference temperature torque	[°C]	20
Shaft design		continuous hollow shaft
Shaft diameter	[mm]	50
Shaft fit		H7
Shaft material		steel (1.4104)
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	10...30V sensor
white	0V sensor
brown/green	10...30V (Up)
white/green	0V (Un)
lilac	failure inverted
screen	housing

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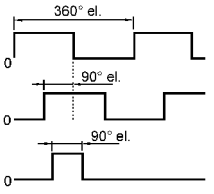
Diagrams and graphs

Pulse diagram



Output A

Output B

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