RN1024

Absolute singleturn encoder with solid shaft

RN-4096-G05/L1B





Product characteristics				
Resolution		4096 resolution; 4096 steps; 12 bit		
Shaft design		solid shaft		
Shaft diameter	[mm]	10		
	[]	10		
Electrical data				
Operating voltage tolerance	[%]	10		
Operating voltage	[V]	5 DC		
Current consumption	[mA]	< 250		
Max. revolution electrical [[U/min]	3000		
Outputs				
Electrical design		TTL		
Max. current load per output	[mA]	20		
Code		Gray code; (increasing code values when turned clockwise (seen on the shaft))		
Measuring/setting range				
Resolution		4096 resolution; 4096 steps; 12 bit		
Operating conditions				
Ambient temperature	[°C]	-2070		
Storage temperature	[°C]	-30100		
Max. relative air humidity	[%]	98		
Protection		IP 66		
Tests / approvals				
Shock resistance		100 g (6 ms)		

RN1024

Absolute singleturn encoder with solid shaft





Vibration resistance		10 g (552000 Hz)
Mechanical data		
Dimensions	[mm]	Ø 58 / L = 52
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

Electrical connection

shaft end)

Cable: 1 m, PUR; Maximum cable length: 100 m; axial

[N]

brown +5V yellow/brown +5V sensor white 0V

Max. shaft load radial (at the

white/yellow OV sensor green release A inverted yellow release B inverted

brown/green bit 12 (MSB) white/green bit 11 red/blue bit 10 bit 9 grey/pink lilac bit 8 black bit 7 red bit 6 blue bit 5 bit 4 pink bit 3 grey grey/brown bit 2

white/pink bit 1 (LSB 4096)

Screen housing

Diagrams and graphs

Pulse diagram



20

release A inverted release B inverted tracks 1...8

tracks 9...12