RN6043

Absolute singleturn encoder with solid shaft

RN-1024-G24/N1A





Product characteristics		
Resolution		1024 resolution; 1024 steps; 10 bit
Communication interface		parallel
Shaft design		solid shaft
Shaft diameter	[mm]	6
Electrical data		
Operating voltage	[V]	1030 DC
Current consumption	[mA]	< 150
Max. revolution electrical	[U/min]	6000
Outputs		
Electrical design		HTL
Max. current load per outpu	ut [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		1024 resolution; 1024 steps; 10 bit
Interfaces		
Communication interface		parallel
Operating conditions		
Ambient temperature	[°C]	-2085
Storage temperature	[°C]	-30100

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Max. relative air humidity	[%]	98
Protection		IP 65
Tests / approvals		
Shock resistance		100 g (6 ms)
Vibration resistance		10 g (552000 Hz)
Mechanical data		
Dimensions	[mm]	Ø 58 / L = 61
Material		aluminum
Max. revolution, mechanical [U/min]		10000
Max. starting torque	[Nm]	1
Reference temperature torque	[°C]	20
Shaft design		solid shaft
Shaft diameter	[mm]	6
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; Maximum cable length: 100 m; radial

brown 10...30V yellow/brown 10...30V sensor

white 0V white/yellow 0V sensor

green release A inverted 5...30V yellow release B inverted 5...30V white/grey bit 10 (MSB) inverted

brown/green bit 10 (MSB) white/green bit 9 red/blue bit 8

bit 7 grey/pink lilac bit 6 black bit 5 red bit 4 blue bit 3 pink bit 2 grey bit 1 screen housing

Diagrams and graphs

Pulse diagram



release A inverted release B inverted tracks 3...10

tracks 1...2