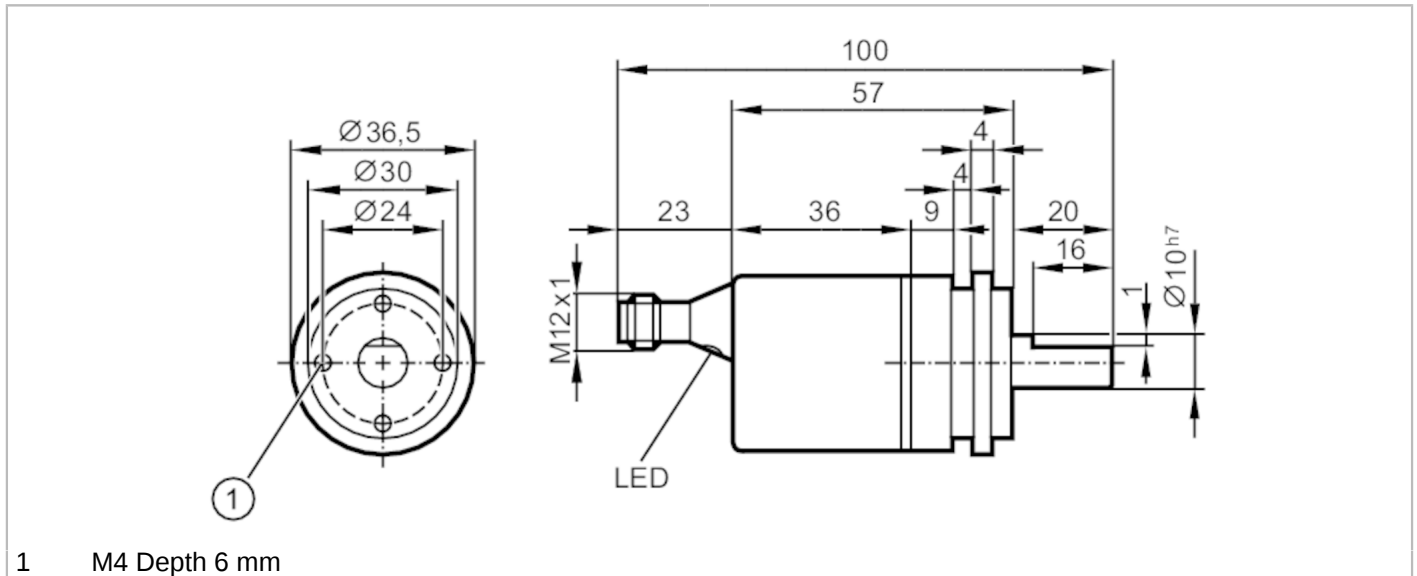# RM9001

Absolute multiturn encoder with solid shaft

RMS0024-C24UST

1   M4 Depth 6 mm

Product characteristics	
Resolution	4096 steps; 4096 revolutions; 24 bit
Communication interface	CAN
Shaft design	solid shaft
Shaft diameter [mm]	10

Application	
Function principle	absolute
Revolution type	multiturn

Electrical data	
Operating voltage [V]	9...30 DC; ("supply class 2" to cULus)
Current consumption [mA]	< 100; ((10 V DC) ; ≤ 50 (24 V DC))
Protection class	III
Reverse polarity protection	yes

Outputs	
Short-circuit protection	yes
Code	binary

Measuring/setting range	
Resolution	4096 steps; 4096 revolutions; 24 bit

Accuracy / deviations	
Accuracy [°]	0.08

Software / programming	
Parameter setting options	CAN parameter; scaling; preset; Baud rate; direction of rotation; Node ID

Interfaces	
Communication interface	CAN

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CAN	
Protocol	CANopen
Factory settings	Baud rate: 125 k
	node ID: 32
Version	DSP - 406 V3.1; DS 301 V4.02; DS 306 V2.0

Operating conditions		
Ambient temperature	[°C]	-40...85
Protection		IP 68; IP 69K

Tests / approvals			
Shock resistance			200 g (11 ms)
Vibration resistance			30 g (10...1000 Hz)
MTTF	[years]	240	

Mechanical data		
Weight	[g]	233
Dimensions	[mm]	Ø 36.5 / L = 100
Materials		flange: aluminium; housing cap: steel scratch-resistant cathodic dip coating
Max. revolution, mechanical [U/min]		6000
Max. starting torque	[Nm]	5
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]	180
Max. shaft load radial (at the shaft end)	[N]	180
Fixing flange		synchro-flange

Displays / operating elements		
Display	Preoperational Mode	LED, green
	Operational Mode	LED, green flashing
	error message	LED, red flashing

Electrical connection	
1	CAN_GND
2	VBBc
3	GND (PE)
4	CAN_High
5	CAN_Low

Connector: 1 x M12, axial

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