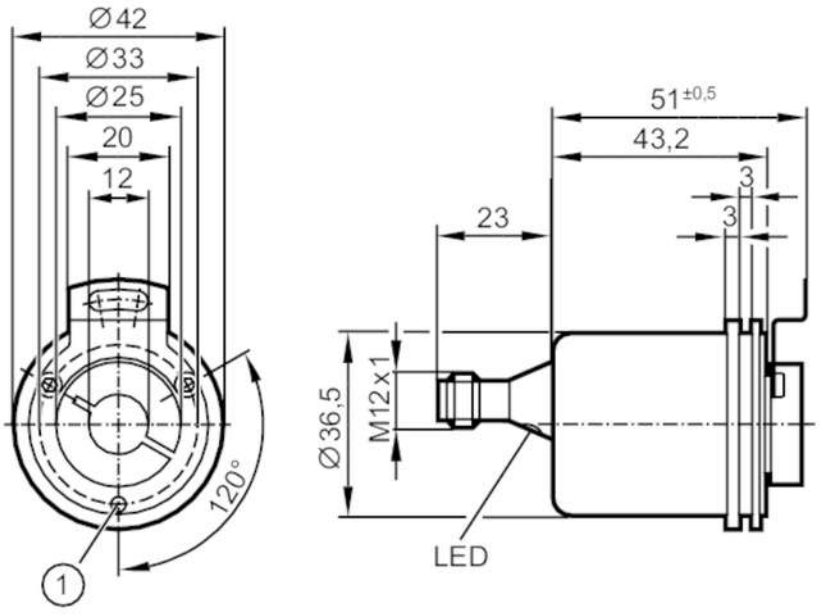
RM8004

Absolute multiturn encoder with hollow shaft

RMS0024-C24/USU



1 M3 x 6

Product characteristics		
Resolution		4096 steps; 4096 revolutions; 24 bit
Communication interface		CAN
Shaft design		hollow shaft open to one side
Shaft diameter	[mm]	12
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	[°]	0.25
Software / programming		
Parameter setting options		CAN parameter; scaling; preset; Baud rate; direction of rotation; Node ID

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Interfaces			
Communication interface		CAN	
CAN			
Protocol		CANopen	
Factory settings		Baud rate: 125 kBit/s	
		node ID: 32	
Version		DSP - 406 V3.1; DS 301 V4.02; DS 306 V2.0	
Operating conditions			
Ambient temperature	[°C]	-40...85	
Max. relative air humidity	[%]	98	
Protection		IP 65; (on the housing: IP 65; on the shaft: IP 64)	
Tests / approvals			
Shock resistance			< 300 g (6 ms)
Vibration resistance			30 g (10...1000 Hz)
MTTF	[years]	240	
Mechanical data			
Weight	[g]	235.5	
Dimensions	[mm]	Ø 36.5 / L = 74	
Materials		flange: aluminium; housing cap: steel powder-coated	
Max. revolution, mechanical	[U/min]	6000	
Max. starting torque	[Nm]	3	
Reference temperature torque	[°C]	25	
Shaft design		hollow shaft open to one side	
Shaft diameter	[mm]	12	
Shaft material		steel	
Max. shaft load axial (at the shaft end)	[N]	40	
Max. shaft load radial (at the shaft end)	[N]	110	
Fixing flange		Ø 36.5 mm	
Displays / operating elements			
Display		Preoperational Mode	LED, green
		Operational Mode	LED, green flashing
		error message	LED, red flashing

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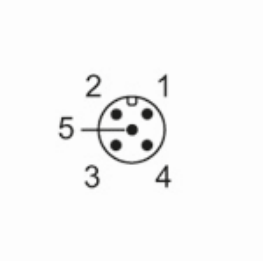
Electrical connection

Connector: 1 x M12, axial; coding: A



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