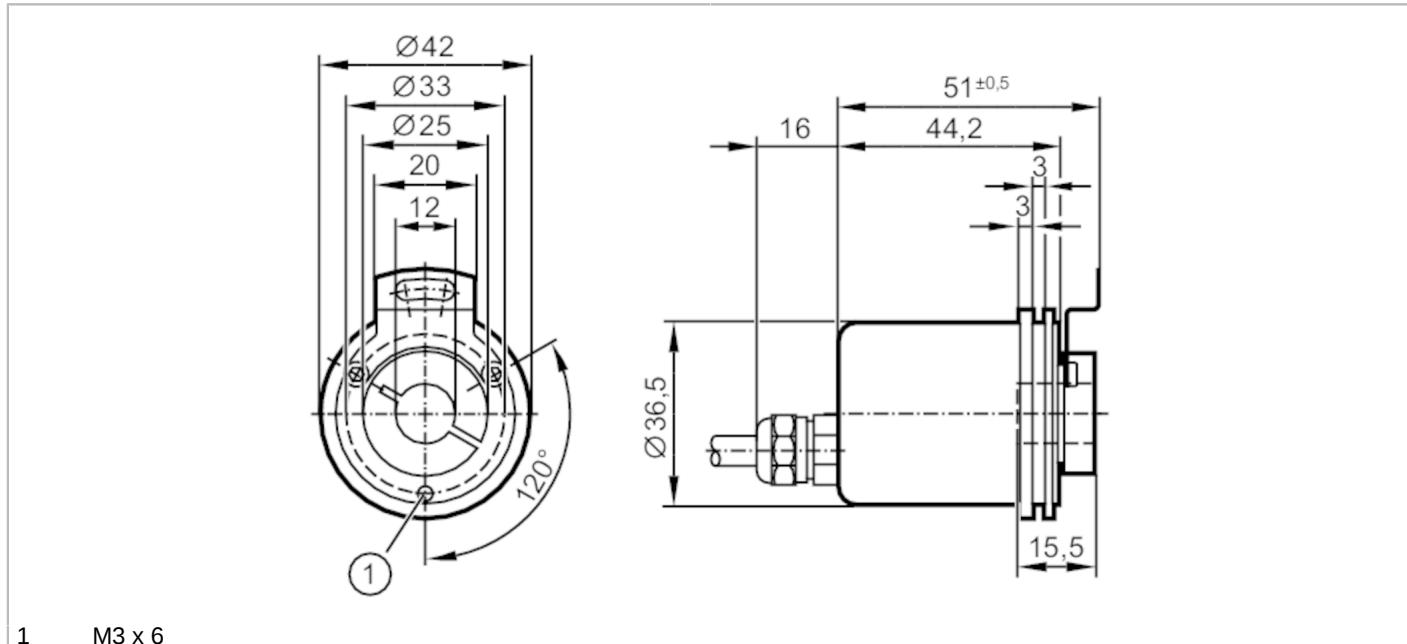


RM8003



Absolute multiturn encoder with hollow shaft

RMS4096-S24/L2U



1 M3 x 6



Product characteristics

Resolution	4096 resolution; 4096 revolutions; 24 bit
Communication interface	SSI data interface
Shaft design	hollow shaft open to one side
Shaft diameter [mm]	12

Application

Function principle	absolute
Revolution type	multiturn

Electrical data

Operating voltage [V]	4.5..30 DC
Current consumption [mA]	< 30

Inputs

Inputs	reversal of direction of rotation; reset to zero
--------	--

Outputs

Code	Gray code; (increasing code values when turned clockwise (seen on the shaft))
Code signal	Clock input; TTL-compatible signals; clock and clock (inv.) from drivers to RS 422; data output; synchronous serial; TTL-compatible signals, data, and data (inv.)

Measuring/setting range

Resolution	4096 resolution; 4096 revolutions; 24 bit
------------	---

Interfaces

Communication interface	SSI data interface
-------------------------	--------------------

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)

RM8003



Absolute multiturn encoder with hollow shaft

RMS4096-S24/L2U

Tests / approvals				
Shock resistance		< 300 g (6 ms)		
Vibration resistance		30 g (10...1000 Hz)		
MTTF [years]		350		
Mechanical data				
Weight [g]		336.5		
Dimensions [mm]		Ø 36.5 / L = 67		
Materials		flange: aluminium; housing: steel powder-coated		
Max. revolution, mechanical [U/min]		12000		
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		
Remarks				
Remarks	Wires/pins not connected (n.c.) must not be used.			
Electrical connection				
Cable: 2 m, PUR; Maximum cable length: 100 m; axial				
white	sensor 0 V			
brown	sensor Ub			
green	clock			
yellow	clock (inv.)			
grey	data			
pink	data (inv.)			
blue	reset to zero			
red	reversal of direction of rotation			
screen	housing			
Diagrams and graphs				
Pulse diagram				
1	clock			
2	data			