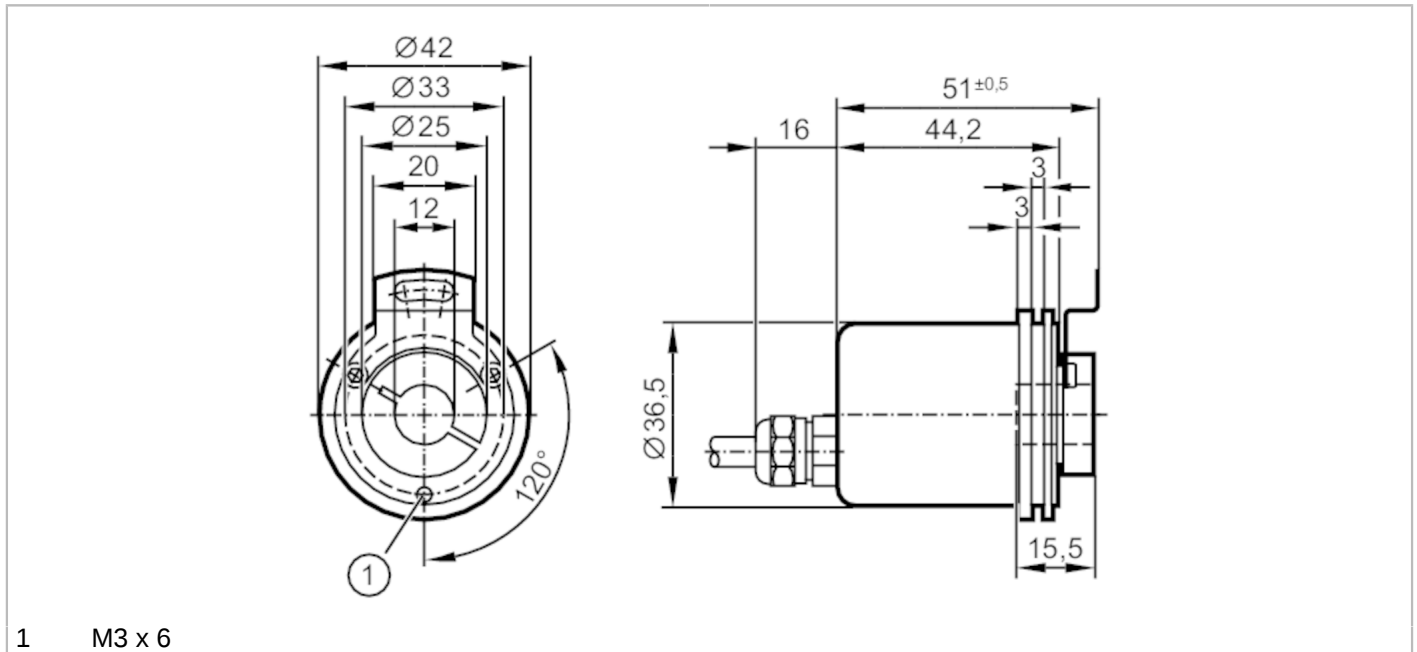


RM8003



Absolute multiturn encoder with solid 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 solid shaft

RMS4096-S24/L2U

Tests / approvals		
Shock resistance		< 300 g (6 ms)
Vibration resistance		30 g (10...1000 Hz)
MTTF	[years]	381
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
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	

RM8003

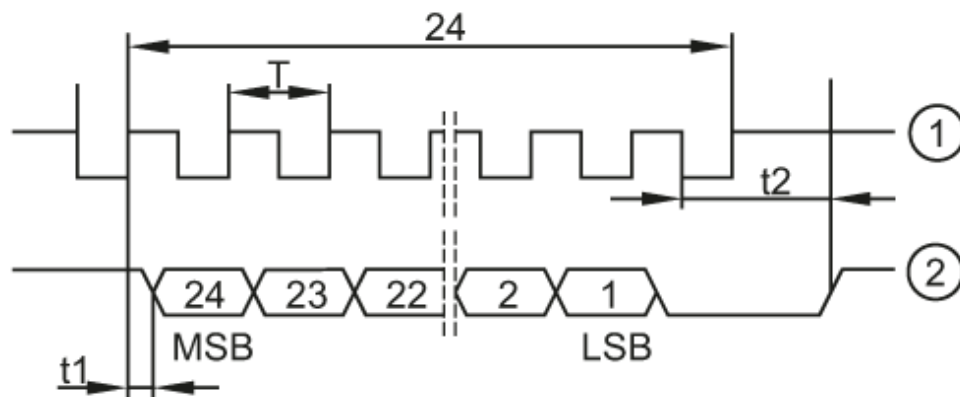


Absolute multiturn encoder with solid shaft

RMS4096-S24/L2U

Diagrams and graphs

Pulse diagram



- 1 clock
- 2 data