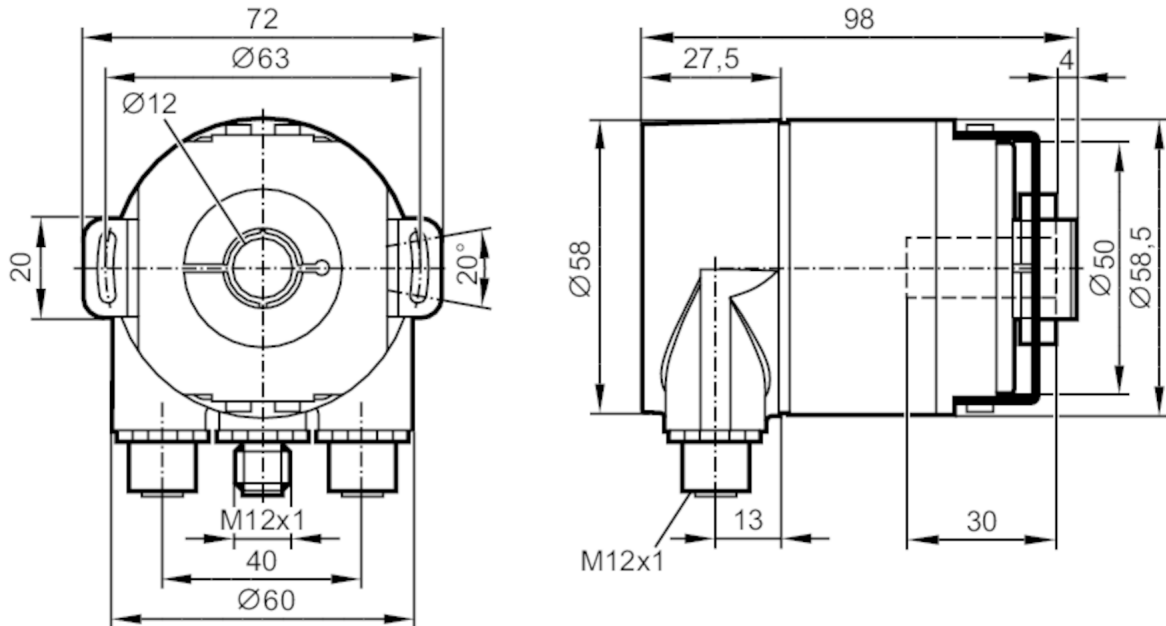


RM3010



Absolute multiturn encoder with hollow shaft

RMO12BRU41312bPRN



Product characteristics

Resolution	8192 steps; 4096 revolutions; 25 bit
Communication interface	ProfiNet-IO; PROFINET encoder profile V4.2
Shaft design	hollow shaft open to one side
Shaft diameter [mm]	12

Application

Function principle	absolute
Revolution type	multiturn

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	100; ((24 V))
Reverse polarity protection		yes

Outputs

Short-circuit protection	yes
Code	binary

Measuring/setting range

Resolution	8192 steps; 4096 revolutions; 25 bit
------------	--------------------------------------

Accuracy / deviations

14 - 16 Bits		
Accuracy	[°]	0.0439
<13 Bits		
Accuracy	[°]	0.022



Absolute multiturn encoder with hollow shaft

RMO12BRU41312bPRN

Software / programming		
Parameter setting options		resolution per revolution; total resolution; direction of rotation; preset value; provision of a speed value; IP address; MRP; MRPD; rotational axis
Addressing		Software
Interfaces		
Communication interface		ProfiNet-IO; PROFINET encoder profile V4.2
Operating conditions		
Ambient temperature	[°C]	-40...85
Storage temperature	[°C]	-40...85
Max. relative air humidity	[%]	98; (condensation not permissible)
Protection		IP 67; (on the housing: IP 67; on the shaft: IP 67)
Tests / approvals		
Shock resistance		DIN EN 60068-2-27100 g (6 ms) / half-sine
Continuous shock resistance		DIN EN 60068-2-2910 g (16 ms) / half-sine
Vibration resistance		DIN EN 60068-2-620 g (20...1000 Hz)
MTTF [years]		95
Mechanical data		
Weight [g]		601
Housing		cylindrical
Dimensions [mm]		Ø 58.5 / L = 98
Materials		aluminium; clamping ring: brass
Max. revolution, mechanical [U/min]		3000
Shaft design		hollow shaft open to one side
Shaft diameter [mm]		12
Shaft material		steel (1.4104)
Max. shaft load axial (at the shaft end) [N]		40
Max. shaft load radial (at the shaft end) [N]		110
Fixing flange		Stator coupling
Remarks		
Pack quantity		1 pcs.
Electrical connection - Ethernet		
Connector: 1 x M12; coding: D		
		
1	Tx +	
2	Rx +	
3	Tx -	
4	Rx -	



1	Tx +
2	Rx +
3	Tx -
4	Rx -

RM3010



Absolute multiturn encoder with hollow shaft

RM012BRU41312bPRN

Electrical connection - power supply

Connector: 1 x M12; coding: A



1	10...30 V DC
2	not used
3	GND 0 V
4	not used