

Article discontinued as of 31.December 2016

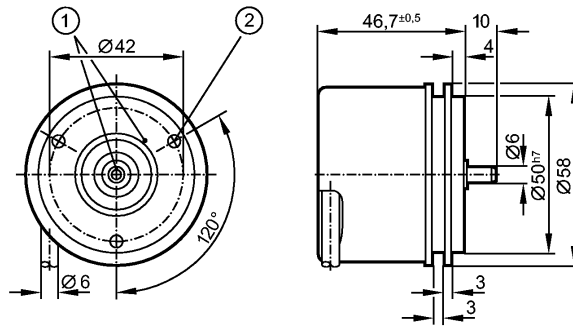
efector 400[®]

RM6001



RM-4096-S24/N1A

Encoders



1: reference mark

2: M4 5 mm deep



Product characteristics

Multiturn solid shaft encoder

SSI data interface

Cable

4096 revolutions

Resolution 4096

Electrical data

Operating voltage [V]

10...30 DC

Current consumption [mA]

< 200

Code

Gray code; increasing code values when turned clockwise (seen on the shaft)

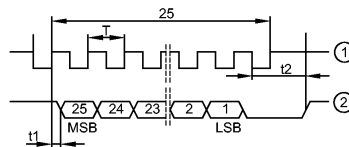
Code signal

Clock input: TTL compatible signals, clock and clock (inv.) from driver to RS 485

Data output: synchronous serial, TTL compatible signals data and data (inv.)

Incremental signals: 2 sinusoidal incremental signals (A and B) with 90° phase difference, 1 Vss 512 signal periods per revolution

Pulse diagram



1 clock
2 data

Inputs

Inputs

reversal of direction of rotation, reset to zero

Outputs

Output function

SSI data interface

Measuring / setting range

Encoders

Resolution

4096 steps / 24 bits

Mechanical data

Max. permissible rpm / mech. [1/min]

12000

Starting torque [Ncm]

< 1 (20 °C)

Max. shaft load (at the shaft end) [N]

axial 10; radial 20

Shaft, material [mm]

Ø 6, steel (1.4104)

Vibration resistance

30 g (55...2000 Hz)

Shock resistance

100 g (6 ms)

RM6001 - Multiturn solid shaft encoder - eclass: 27270590 / 27-27-05-90

Housing materials		aluminum
Weight	[kg]	0.48
Environment		
Max. relative air humidity	[%]	75 *)
Ambient temperature	[°C]	-40...85
Protection		IP 64
Tests / approvals		
MTTF	[Years]	46
Electrical connection		
Connection		PUR cable / 1 m; radial, can also be used axially
Max. cable length	[m]	100
Wiring		
blue:	Sensor (Up)	white/green: 0 V
black:	reversal of direction of rotation	(Un) screen: housing
		blue/black: B+
red:	n.c.	red/black: B-
white:	Sensor 0 V	grey: data
green:	reset to zero	green/black: A+
brown:	n.c.	yellow/black: A-
brown/green:	10...30 V (Up)	pink: data
lilac:	clock	(inv.)
yellow:	clock (inv.)	
Remarks		
Remarks		Wires/pins not connected (n.c.) must not be used! T = 1...10 µs / t1 ≤ 0.4 µs (without cable) / t2 = 17...20 µs (waiting time) *) for a short time 95%
Pack quantity	[piece]	1