

Alternative article: RM8002

When selecting an alternative article and accessories please note that technical data may differ!

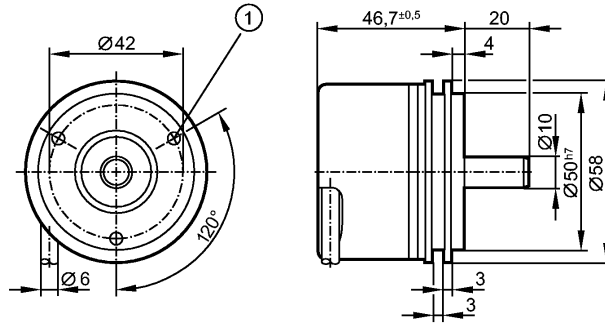
**efector 400**

RM6104



RM-8192-S24/N1B

Encoders



M4 5 mm deep



Product characteristics

Multiturn solid shaft encoder

SSI data interface

Cable

4096 revolutions

Resolution 8192

Electrical data

Operating voltage [V]

4.75...30 DC

Current consumption [mA]

< 200

Code

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

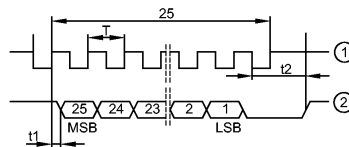
Code signal

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

8192 steps / 25 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 10, steel (1.4104)

Vibration resistance

30 g (55...2000 Hz)

Shock resistance

100 g (6 ms)

**RM6104 - Multiturn solid shaft encoder - eclass: 27270590 / 27-27-05-90**

Housing materials	aluminum	
Weight [kg]	0.458	
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	
<b>Wiring</b>		
blue:	Sensor (Up)	white/green: 0 V
black:	reversal of direction of rotation	(Un) screen: housing
red:	n.c.	blue/black: B+
white:	Sensor 0 V	red/black: B-
green:	reset to zero	grey: data
brown:	n.c.	green/black: A+
brown/green:	4.75...30 V (Up)	yellow/black: A-
lilac:	clock	pink: data
yellow:	clock (inv.)	(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	

ifm efector, inc. • 1100 Atwater Drive • Malvern • PA 19355 — We reserve the right to make technical alterations without prior notice. — US — RM6104 — 04.03.2016

Alternative article: RM8002

When selecting an alternative article and accessories please note that technical data may differ!