

▶ MEM40 CANopen ENCODER PROFILE

- Complying with standards **CiA DS 301** "Application Layer and Communication Profile" and **DS 406** "Device Profile for Encoders"
- **CiA DS 305** Layer Setting Services and protocols
- Class C2

MEM40B



MEM41B



SETTABLE PARAMETERS

- Steps/revolution
- Revolutions number
- Preset
- Rotation direction

STATE INDICATORS

- 3 signalling LEDs for:
  - Supply
  - Data
  - Error

DIAGNOSTIC FUNCTION

- Position or parameter error
- Battery alarm
- Temperature alarm

Node and baud rate selection by **LSS protocol** or **dip-switches**



**CAN (Controller Area Network)** is a fast data transmission system suitable for applications in the field of industrial automation.

Through the **CAN bus** actuators and sensors, even from different manufacturers, can communicate effectively.

**CANopen** fieldbus ensures:

- **Data rate** of 1 MBaud with network expansion up to 40
- **Real Time** operation
- **Data consistency across the network**
- **Broadcasting, Multicasting**

ELECTRICAL & OPERATING SPECIFICATIONS

• Operating principle	Magnetic
• Resolution/revolution	8192 steps/rev – 13 bit
• Revolutions no.	65536/16 bit
• Initializing time	< 1 s
• Data memory	>30 years power off
• Fieldbus	CANopen
• Supply	10 ÷ 30 Vdc Protection against polarity reversal
• Power consumption	2 W
• Accuracy	± 0.2°
• Connection	M12 5 5 pin radial connector
• Interference immunity	EN 61000-6-2
• Emitted interference	EN61000-6-4

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

	MEM40B	MEM41B
• Materials: housing shaft	Aluminium	Stainless steel
• Weight	100 g ca.	
• Shaft/hollow shaft Ø	10 mm	10 mm
• Revolutions/minute	6000	
• Starting torque	≤0,2 Ncm	
• Inertia	≤5 g cm <sup>2</sup>	
• Max load	10 N axial/20 N radial	
• Vibrations resistance (10÷2000 Hz)	10 G	
• Shock (11 ms)	30 G	
• Protection degree	IP65	IP65
• Operating temperature	-10 ÷ 80°C	
• Stacking temperature	-20 ÷ 80°C	

▶ ORDERING INFORMATION

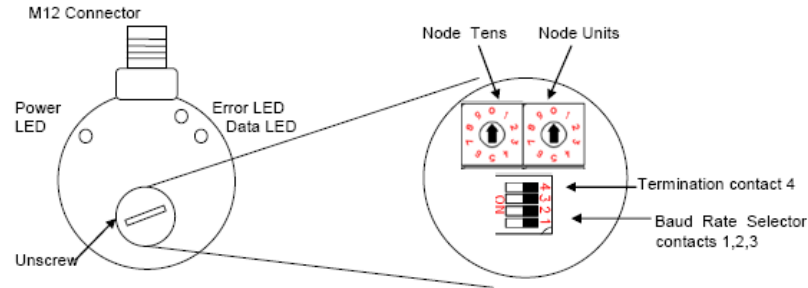
Select:

<b>Type</b>	MEM40B solid shaft	<b>MEM40B</b>
	MEM41B blind hollow shaft	•
<b>Bus</b>	CANopen	<b>CAN</b>
		•
<b>No. of Turns</b>	Multiturn	<b>M</b>
		•
<b>Shaft Ø/ Hollow shaft Ø</b>	10mm	<b>10</b>

▶ PROGRAMMING & SETTING

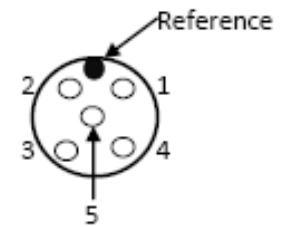
The **node ID** (user address) can be set via LSS in object 2101H or by using the **dip-switches** of the encoder.

The **baud rate** can be defined/modified in object 2100H or by means of contacts 1, 2 and 3 of the encoder **DIP switch**.



▶ CONNECTIONS

PIN No.	Name	Description
1	Shield	Shield connection
2	+V	Supply 10-30 Vdc positive pole
3	0V	0 V supply 10-30 Vdc
4	CAN-H	CAN bus high signal
5	CAN-L	CAN bus low signal

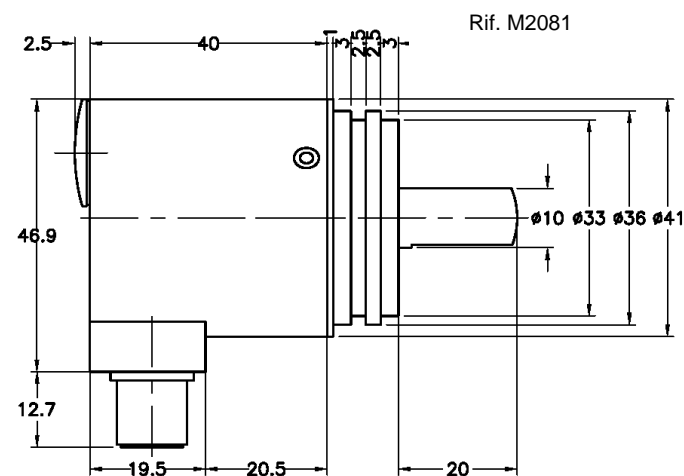
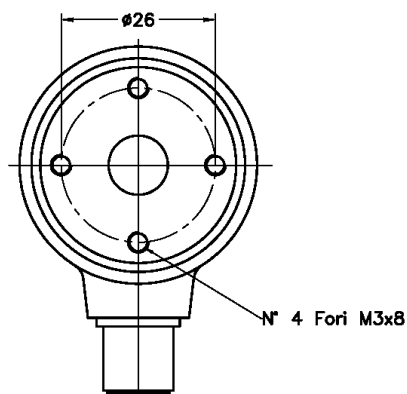


M12 plug connector  
Insertion side view

**Inserting the termination resistor**

When the encoder is connected to one end of the bus, the bus must be properly terminated by a resistor. The resistor can be inserted by means of the dip-switch contact 4.

Type MEM40B



Type MEM41B

