



MEM-BUS PROFIBUS ENCODER PROFILE

- Encoder Profile Profibus DP standard EN 501701 Vol. 2
- Application Class 1– 2
- Supported functions: parameters entering, preset, scaling

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

MEM-Bus	620/520/540	410/450
• Materials: case shaft	Aluminium Stainless steel	
• Weight	500 g ca.	
• Shaft/joint hole Ø	6, 8, 10 mm	8, 10, 12, 14, 15 mm
• Revolutions/minute	6000	
• Starting torque	≤0.8 Ncm	
• Inertia	≤25 g cm ²	
• Max load	80 N axial/100 N radial	
• Vibrations resistance (10÷2000 Hz)	100 m/sec ²	
• Shock (11 ms)	50 G	
• Protection degree	IP65 optional IP67	IP65
• Operating temperature	-30 ÷ 70°C	
• Stacking temperature	-30 ÷ 85°C	

ELECTRICAL & OPERATING SPECIFICATIONS

• Operating principle	Magnetic
• Resolution/revolution	8192 steps/rev – 13 bit
• Revolutions no. (multiturn)	65536/16 bit
• Initializing time	< 1 s
• Data memory	>21 years power off
• Fieldbus	Profibus, CANopen
• Supply	5 ÷ 28 Vdc Protection against polarity reversal
• Power consumption	2 W
• Accuracy	± ½ LSB
• Connection	3 cableglands or 2 cableglands
• Interference immunity	EN 61000-6-2
• Emitted interference	EN61000-6-4

CONNECTIONS

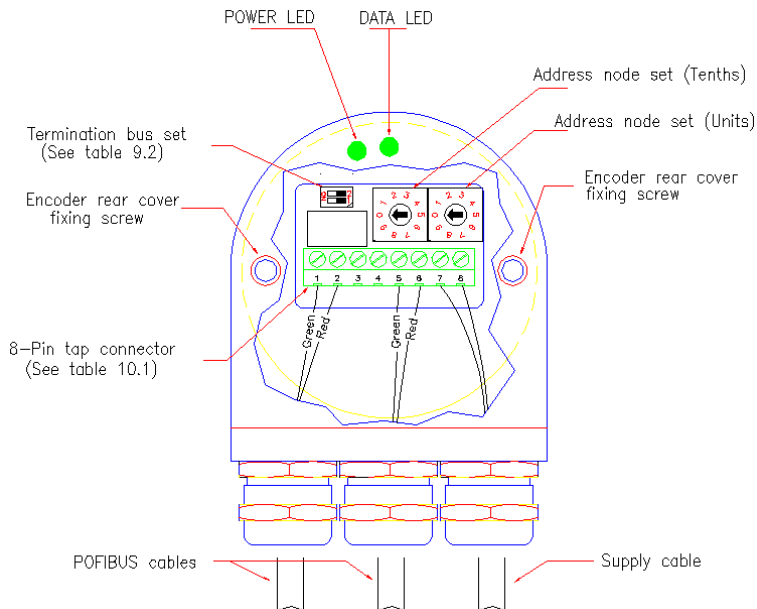


TABLE 9.2
DIP SWITCH SET (Termination enable/disable)
Contacts 1 and 2 = ON : Termination enable
Contacts 1 and 2 = OFF : Termination disable

The bus and supply cables must be connected to the 8-pin tap connector as shown in the Picture 9.1 and in the TABLE 10.1.

The pins mentioned with the same indication in the table 10.1 are common inside the encoder.

8-PIN CONNECTOR

PIN N.	NAME	DESCRIPTION
1	A	PROFIBUS A SIGNAL
2	B	PROFIBUS B SIGNAL
3	+V	+ 5/28 Vdc SUPPLY
4	GND	EARTH SUPPLY
5	A	PROFIBUS A SIGNAL
6	B	PROFIBUS B SIGNAL
7	+V	+ 5/28 Vdc SUPPLY
8	GND	EARTH SUPPLY

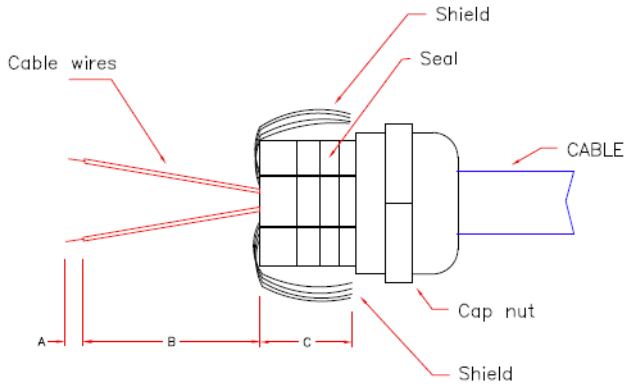
Table 10.1

Picture 9.1

The following procedure is recommended to connect the cables to the encoder:

- Unfasten and remove the encoder rear cover
- Arrange the cables as shown in the Picture 6.1 and fasten them in the relevant nuts in the cover
- Unplug and wire the 8-pin tap connector

SHIELDING



A: 6 mm approx.
B: 35 mm approx.
C: 11 mm approx.

As the encoder is not always connected to a defined earth potential depending on its mounting position, the encoder flange should always be additionally connected to earth potential.

The encoder should always be connected to a shielded conductor. If possible the cable shield should be placed at both ends. Ensure that no equalizing currents are discharged via the encoder.

The Picture 10.1 shows the correct way a cable should be connected to the encoder.

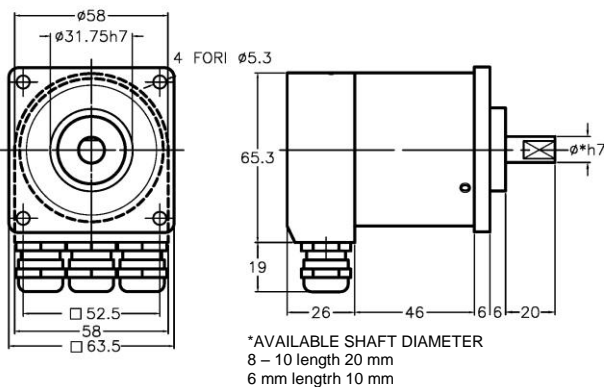
Bend the shield and place it all around the plastic cylinder containing the cable gland sealing gasket.

Insert the cylinder in the relevant cap nut and screw the metal cap.

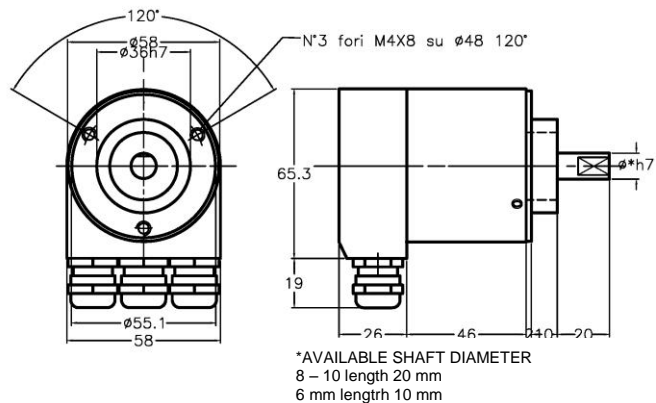
Picture10.1

DIMENSIONS

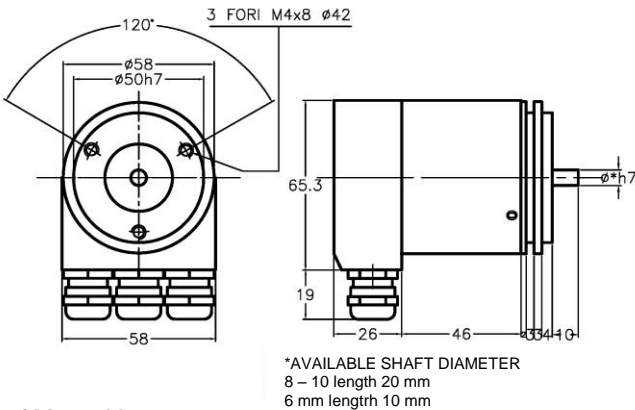
MEM620Bus



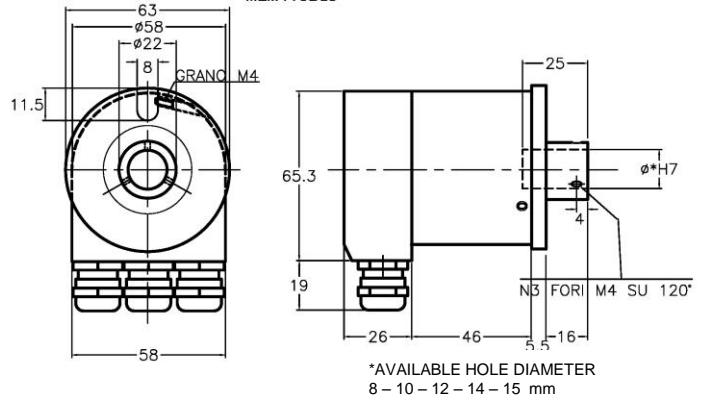
MEM540Bus



MEM520Bus

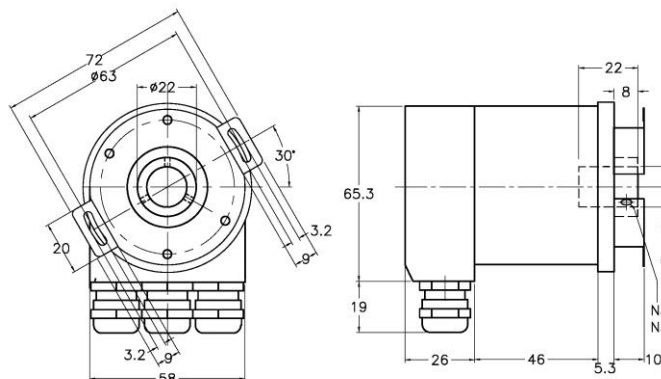


MEM410Bus



Ref M1395V

MEM450Bus



Ref M2048

REFERENCES

MANUALS, SOFTWARE & DIMENSIONAL DRAWINGS available at the address:

<https://www.elap.it/absolute-encoders/encoder-mem-bus-profibus/>

* FORO DISPONIBILE nei diametri
8mm-10mm-12mm-14mm-15mm
* AVAILABLE HOLE DIAMETERS
8mm-10mm-12mm-14mm-15mm

N3 FORI M4 SU 120°
N3 HOLES M4 ON 120°



ELAP VIA VITTORIO VENETO, 4 • I-20094 CORSICO (MI) • TEL. +39.02.4519561
FAX +39.02.45103406 • E-MAIL INFO@ELAP.IT • SITE WWW.ELAP.IT