



MEM/MEM-V Single & Multi-turn Absolute Encoders



- SSI serial output
- Different configurations available
- Metal case
- Series MEM single & multiturn 30 μ s typical monoflop time
- Series MEM-V singleturn 16 μ s typical monoflop time
- High resolution, Binary or Gray code

Mechanical versions

MEM520/MEM520V	MEM540/MEM540V	MEM510/MEM510V	MEM530/MEM530V
Ø 58 mm round flange Servo coupling Ø 50 mm centering mask Shaft Ø 6, 8, 9.52 or 10 mm	Ø 58 mm round flange Servo coupling Ø 36 mm centering mask 3 M4 holes 120° on Ø 48 mm	Ø 58 mm round flange Servo coupling Ø 31.75 mm centering mask Shaft Ø 6, 8, 9.52 or 10 mm	Flange type RE0444 Shaft Ø 11 mm Aluminium case
MEM410/MEM410V	MEM430/MEM430V	MEM620/MEM620V	MEM650/MEM650
Hollow shaft for motor shaft coupling – hole Ø 8, 10, 12, 14 or 15 mm	Hollow shaft for motor shaft coupling – hole Ø 8, 10, 14 or 15mm Antirotational elastic support	63.5x63.5 square flange Ø 31.75 mm centering mask Shaft Ø 6, 8, 9.52 or 10 mm	63.5x63.5 square flange Ø 50 mm centering mask Shaft Ø 6, 8, 9.52 or 10 mm

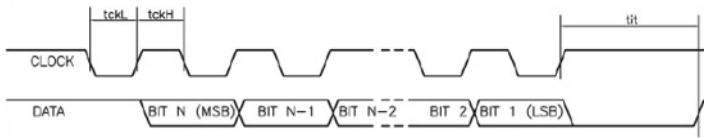
Mechanical & Environmental Specifications

TYPE MEM/MEM-V	520/510/540	620/650	530	410/430
Weight	400 g ca.		500 g ca.	450 g ca.
Materials: case shaft	aluminium stainless steel			
Shaft/Joint hole diameter	6, 8, 9.52 or 10 mm		11 mm	hole Ø 8, 10, 12, 14, 15 mm
Revolutions/minute	6000			
Starting torque	≤ 0.8 Ncm			
Inertia	≤ 25 g cm ²			
Max. load	80 N axial / 1000 N radial			
Shock resistance (11 ms)	50 G			
Vibrations resistance (10÷2000 Hz)	100 m/sec ²			
Protection degree	IP64, optional IP65 (version K)			
Operating temperature	-30 ÷ +70°C			
Storage temperature	-30 ÷ +85°C			

Electrical & Operating Specifications

Resolution	5 ÷ 13 bit (32÷8192 info/rev.)
Steps/revolution	2÷15 bit (4÷32768)
Code	Binary or Gray
Output signals	SSI serial (RS422)
Supply voltage	5 ÷ 28 Vdc Protection against polarity reversal
Power consumption	1.2 W
I max parallel outputs	50 mA
SSI Clock max. frequency	1 MHz
Accuracy	$\pm 1/2$ LSB
Interference immunity	EN61000-6-2
Emitted interference	EN61000-6-4
Connections	axial or radial cable 1 m lg or axial/radial 12-pin Connei connector

■ SSI Interface Signals



MSB: Most Significant Bit

LSB: Less Significant Bit

tckL: 0.5 μ s min.

tckH: 0.5 μ s max

Encoder MEM = tit: 30 μ s typical

Encoder MEM-V = tit 16 μ s typical

(tit: when the tit time lag expires the encoder considers the interrogation ended)

■ Input & Output signals

SSI SERIAL OUTPUT

SIGNALS	CABLE COLOURS	12-PIN CONNECTOR
Clock+	Brown	PIN 1
Clock-	White	PIN 2
Data+	Green	PIN 3
Data-	Yellow	PIN 4
Reset	Pink	PIN 5
0V	Blue	PIN 12
+Vdc	Red	PIN 11

■ PNP Count reset input

Applying a high logic level to this input (5÷28 Vdc) resets the position data.

The output code is increasing with shaft rotating clockwise (shaft side sight).

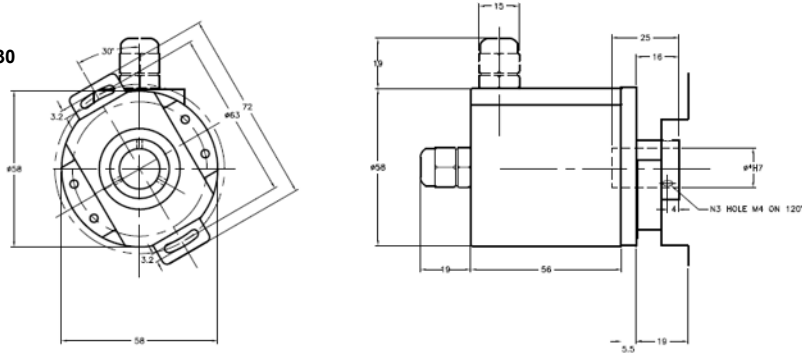
■ Ordering information

MEM520	-	13	15B	5/28	A	8	SSI
							OUTPUT SIGNALS SSI = SSI Serial PP = Push-pull parallel
							SHAFT DIAMETER/JOINT HOLE Shaft 6 – 8 – 9.52 – 10 mm -11 mm (MEM530) Joint 8 – 10 – 12- 14 – 15 mm
							Connections outlet A axial /R radial Standard: 12-pin connector cable 1 m lg.on request
							SUPPLY 5÷28 Vdc
							REVOLUTIONS NO. & CODE 00 single turn / 4÷15 bit B Binary code/ G Gray code
							RESOLUTION/REVOLUTION 5÷13 bit
							MECHANICAL PECULIARITIES (Optional Field) - = Standard version C = Cable Outlet K = Sealing O-ring
							TYPE MEM520 – MEM540 – MEM510 – MEM530 Round flange MEM520V – MEM540V – MEM510V – MEM530V Round flange MEM620 – MEM650 – MEM620V – MEM650V Square flange MEM410 – MEM430 – MEM410 – MEM410V Cable outlet

Variations admitted without notice

■ Dimensions

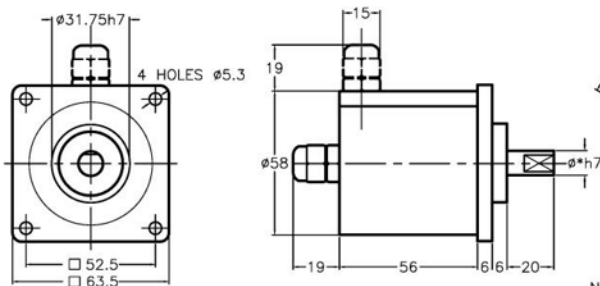
MEM430



* FORO DISPONIBILE NEI DIAMETRI/AVAILABLE HOLLOW SHAFT DIAMETER
8mm - 10mm - 12mm - 14mm - 15mm

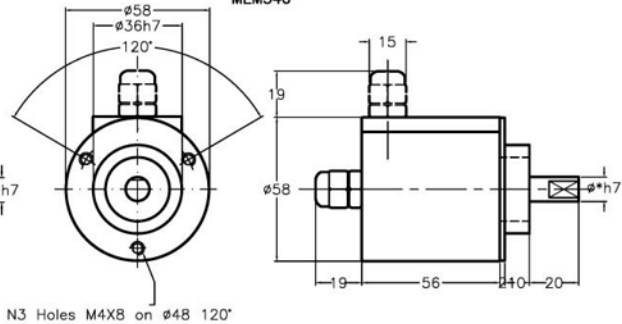
RIF. M1447

MEM620



* ALBERINO DISPONIBILE NEI DIAMETRI/AVAILABLE SHAFT DIAMETER
8mm - 10mm con sporgenza/lenght 20mm
6mm con sporgenza/lenght 10mm

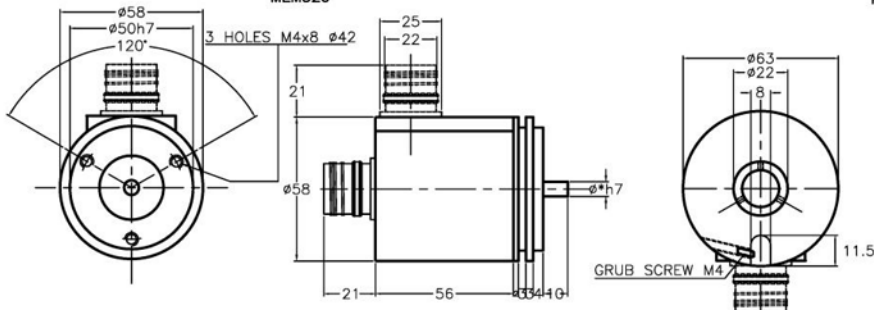
MEM540



N3 Holes M4X8 on 120°

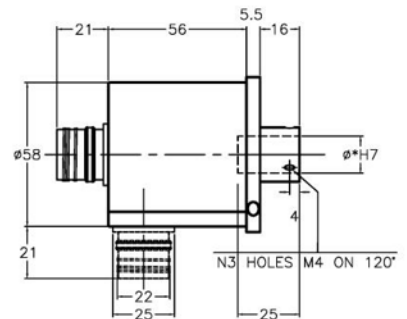
* ALBERINO DISPONIBILE NEI DIAMETRI/AVAILABLE SHAFT DIAMETER
8mm - 10mm con sporgenza/lenght 20mm
6mm con sporgenza/lenght 10mm

MEM520



* ALBERINO DISPONIBILE NEI DIAMETRI/AVAILABLE SHAFT DIAMETER
8mm - 10mm con sporgenza/lenght 20mm
6mm con sporgenza/lenght 10mm

MEM410



* FORO DISPONIBILE NEI DIAMETRI/AVAILABLE HOLE DIAMETER
8mm - 10mm - 12mm - 14mm - 15mm

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