

## MB480 - SERIES



### HEAVY DUTY INCREMENTAL ENCODER Ø 60 MM

- 10-16 mm semi hollow shaft
- 10-16 mm full trough hollow shaft
- 1:10 conical. Max 17 mm conical shaft
- 10-25 mm solid shaft
- Enlarged ceramic, non conductive, sturdy bearings
- Short circuit and reversed polarity proof
- Dust and waterproof IP67
  
- Standard      7-35Vdc or 5Vdc Power Supply  
                     2 Square Wave Signals, 300kHz  
                     Marker Pulse, Inverted Signals
  
- Option         Customization upon request



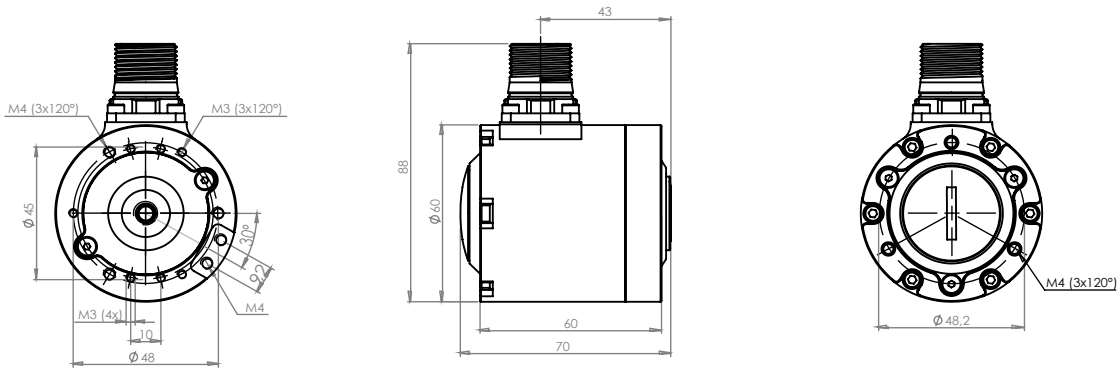
*Flexible and durable  
encoder for demanding  
applications*



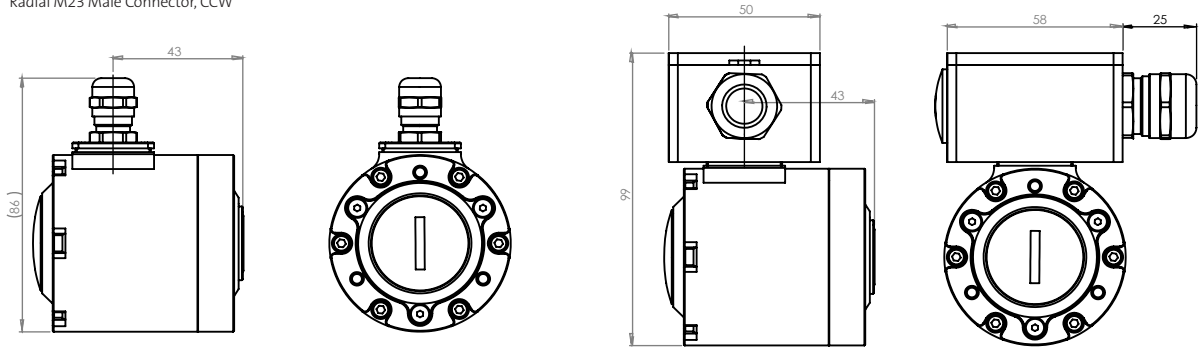
File E342441



Conforms to european EMC directive  
89/336/EEC standards:  
EN61000-6-4 emission in industrial environments  
EN61000-6-2 immunity in industrial environments

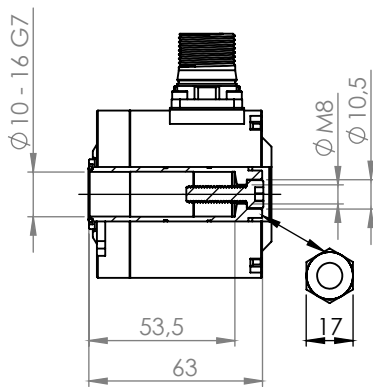


Connection A Radial M23 Male Connector, CCW

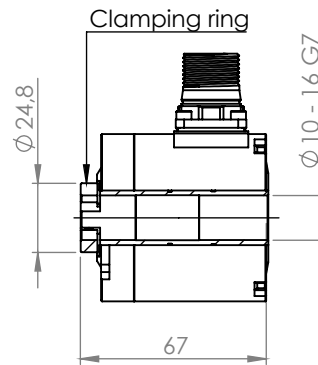


Connection B Radial cable, 5m 8x0,25 TP/PUR with screen

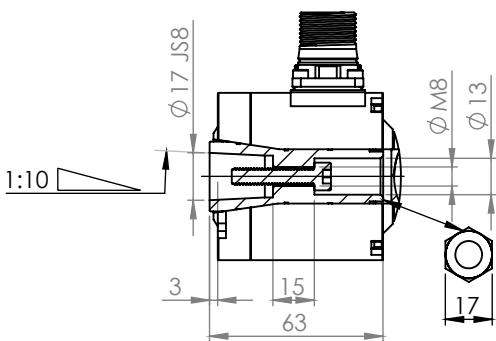
Connection C Terminal box with cable gland for  $\phi 6$ - $\phi 12$ mm



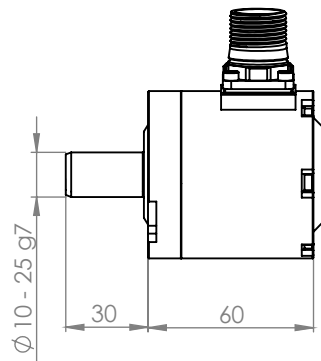
Shaft type H  
Semi hollow shaft



Shaft type T  
Through hollow shaft



Shaft type C  
Conical hollow shaft



Shaft type S  
Solid shaft

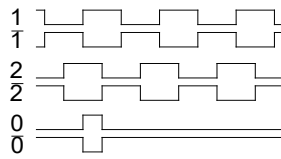
Rev.4 2020-12-16. Specifications in this datasheet is subject to change without prior notice.

## ELECTRICAL SPECIFICATION, STANDARD

Electronic option	H (HTL)	or	T (TTL)
Supply voltage	7-35 Vdc(SELV)	or	5Vdc
Current consumption	Max 40 mA without load		
Output circuit	Linedriver RS422A compatible		
Low level output volt.	Max <0,5 V at 20 mA load and 20°C		
High level output volt.	Min >Vcc-1V at 20mA load and 20°C		
Short circuit protected	Yes		
Polarity protected	Yes		
Transient protected	Yes		
Max load	70 mA		

## OUTPUT SIGNALS, STANDARD

CCW rotation viewed from shaft end



## SIGNAL ACCURACY

Dividing error max	± 50 el°
Channel separation	90 ± 25 el°
Max frequency	300 kHz
Operating temperature	-40° to +80°C

## MECHANICAL SPECIFICATION

Housing	Aluminum, electrically conductive for increased interference protection	
Sealing	IP67 dust and waterproof	
Bearings	Ceramic, non conductive	
Bearing load at	1 000 rpm:	
Radial	600 N	Gives 50 000 hrs
Axial	275 N	bearing life
Max rpm	9 000 rpm	
Vibration	20 g 22-2000 Hz	
Chock	100 g at 11 ms	
Weight	approx. 610 g. (without cable)	

Accredited testing according to standard:

IEC 60068-2-6	2008	Sine
IEC 60068-2-27	2008	Shock

## CONNECTIONS

A	Radial M23 Male Connector, CCW
B	Radial cable, 5m 8x0,25 TP/PUR with screen
C	Terminal box with cable gland for ø6-ø12mm

## FUNCTIONS

	A	B	C
1	5	Yellow	4
2	8	Green	6
0	3	Brown	8
1 inv.	6	Grey	5
2 inv.	1	White	7
0 inv.	4	Pink	9
+V	12	Red	1
0 V	10	Blue	2
+V sense	2	-	-
0V sense	11	-	-
Gnd	Chassi	Screen	Chassi

## SHAFT TYPE

H = Semi hollow Shaft	T = Through hollow Shaft
C = Conical hollow Shaft	S = Solid Shaft

## ACCESSORIES

Adapter flange MB480	ordering code: 3-480-2536
Stator coupling R55 Center encoder	ordering code: 3-480-2533
Stator coupling R70 Center encoder	ordering code: 3-480-2534
Stator coupling 3-221-1121	ordering code: 3-221-1121
Stator coupling 3-300-2029	ordering code: 3-300-2029

For more information regarding above accessories refer to separate corresponding data sheet.

## ORDERING CODE

Model	MB480- A A -H1024-H16
Material (Aluminium)	
Connection type	
Electrical option	
Pulserate 1024	
Shaft type	
Shaft diameter	