

MB490 - SERIES



HEAVY DUTY INCREMENTAL ENCODER Ø 60 MM

Encoder with adapter flange for redundancy

- Front end shaft: 15 or 16 mm semi hollow shaft
- Back end solid shaft: standard seize 15 mm
- 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
- Front end solid shaft seize option: 12-25mm
- Front end shaft semi hollow shaft seize option: 12mm to max 16mm
- Back end solid shaft seize option: 10 to max 17 mm



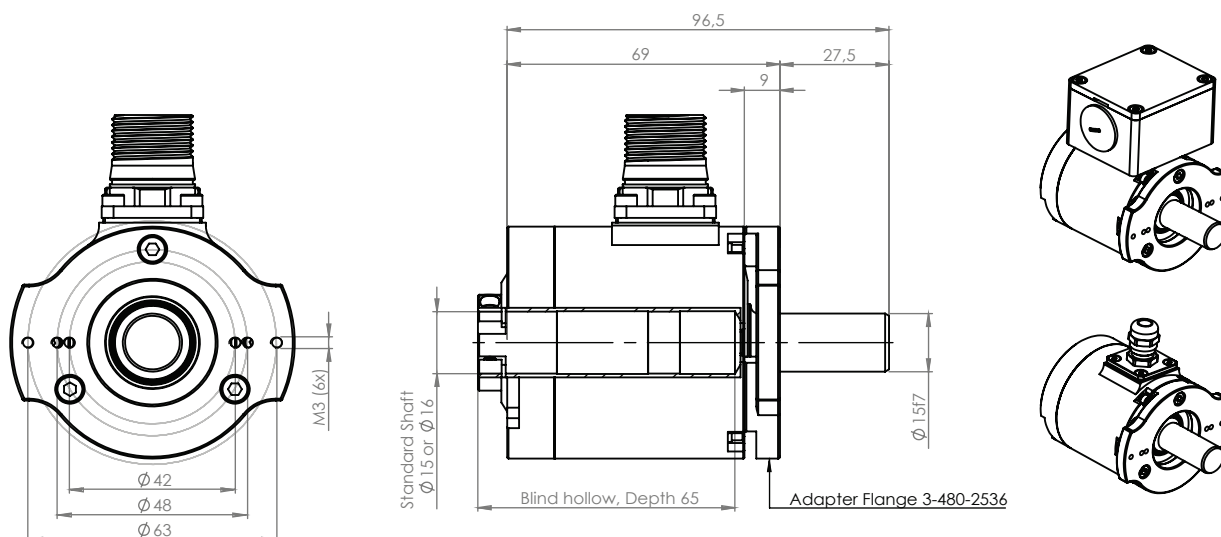
*Flexible and durable
encoder for demanding
applications*



File E342441



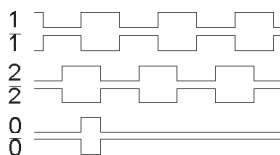
Conforms to european EMC directive
89/336/EEC standards:
EN61000-6-4 emission in industrial environments
EN61000-6-2 immunity in industrial environments

**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 viewec
from hollow shaft en

**SIGNAL ACCURACY**

Dividing error max	$\pm 50 \text{ el}^\circ$
Channel separation	$90 \pm 25 \text{ el}^\circ$
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

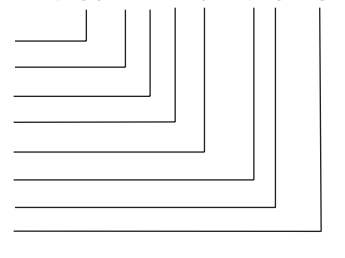
SHAFT TYPE

B = Semi hollow Shaft S = Solid Shaft

ORDERING CODE

Model
Material (Aluminium)
Connection type
Electrical option
Pulserate 1024
Shaft type
Shaft diameter 1
Shaft diameter 2
Special customization

MB490- A A -H1024-B16 - 15- S*



Shaft diameter to be specified for redundant option

To be specified upon customization

emeta
encoders

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