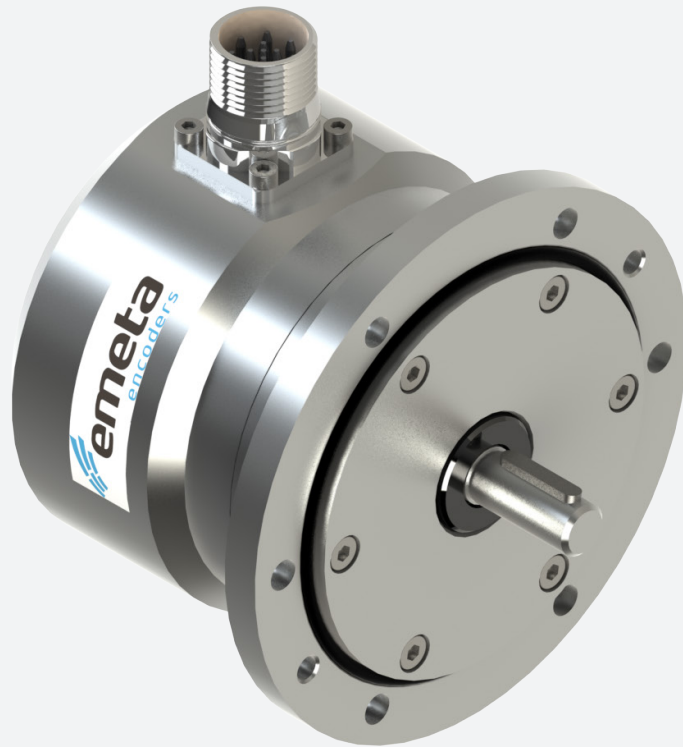


MA410 - SERIES



HEAVY DUTY INCREMENTAL ENCODER Ø 115 MM

Encoder with EURO-flange B10 in stainless steel AISI 316

- Offshore and salt water firm
- Ø 115 mm, stainless steel AISI 316
- Ø 11 mm shaft with key, stainless steel 1.4057
- Enlarged sturdy bearings
- Max resolution 2 048 ppr
- Short circuit and reversed polarity proof
- Dust and splash proof IP67
- Standard
 - 5-30 Vdc power supply
 - 300 kHz
 - 2 square wave signals & marker pulse, inverted signals and SENSE lines

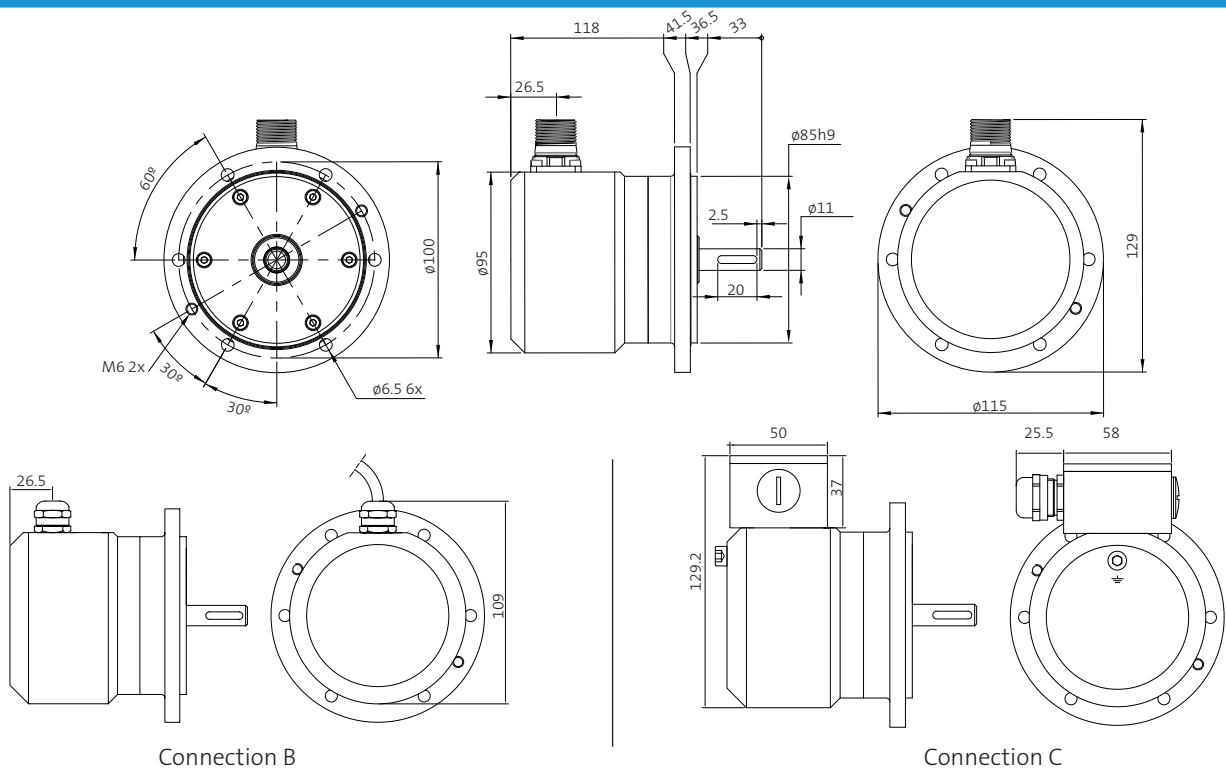


*Flexible and durable
encoder for demanding
applications*



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

INCREMENTAL ENCODER MODEL MA410

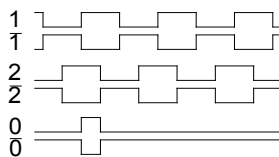


ELECTRICAL SPECIFICATION

Electronic option	T (TTL)	H (HTL)
Supply voltage	5 Vdc	5–30 Vdc (SELV)
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

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° .. + 80°C

MECHANICAL SPECIFICATION

Housing	Stainless steel AISI 316
Shaft	Stainless steel 1.4057
Sealing	IP67 dust and splash proof
Bearings	Permanently greased
Bearing load at	1 000 rpm
Radial	<350 N
Axial	<250 N
Max rpm	3 000 (8 000)
Vibration	20g 20-2000 Hz
Shock	200g at 11 ms
Weight	3,6 kg

CONNECTIONS

A	Radial 12-pin M23 Male Connector, CCW
B	Radial cable, 5m length
C	Terminal box with cable gland for $\phi 6$ - $\phi 12$ mm

FUNCTION

Signal	A (Pin)	B (Color)	C (Terminal)
1	5	Yellow	4
2	8	Green	6
0	3	Brown	8
1 inv	6	Black	5
2 inv	1	White	7
0 inv	4	Violet	9
+V	12	Red	1
0V	10	Blue	2
+V sense	2	-	-
0V sense	11	-	-
Gnd	Chassis	Screen	Chassis

ORDERING CODE

Model	MA410 - SA - H1024
Material	
Connection	
A = 12 pin M23	
B = Cable 5m	
C = Terminal box	
Electronic option	
T = TTL	
H = HTL	
Pulse rate max 2500	



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