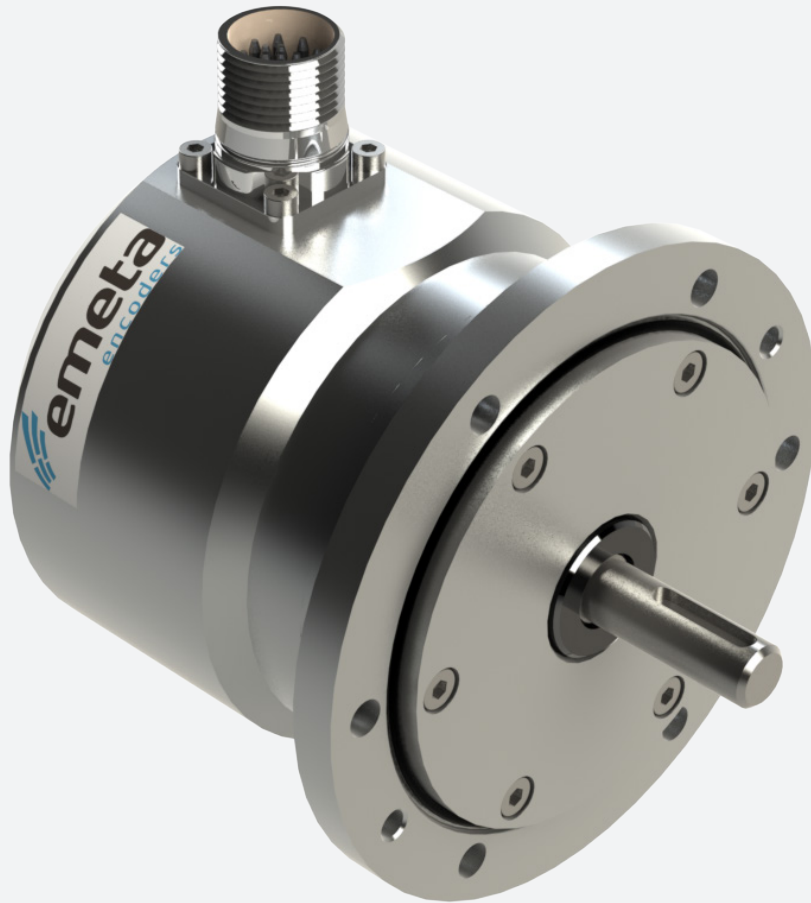


## MA431 - SERIES



### HEAVY DUTY ABSOLUTE ENCODER Ø 115 MM, SINGLE OR MULTITURN

*Encoder with EURO-flange B10 in stainless steel AISI 316*

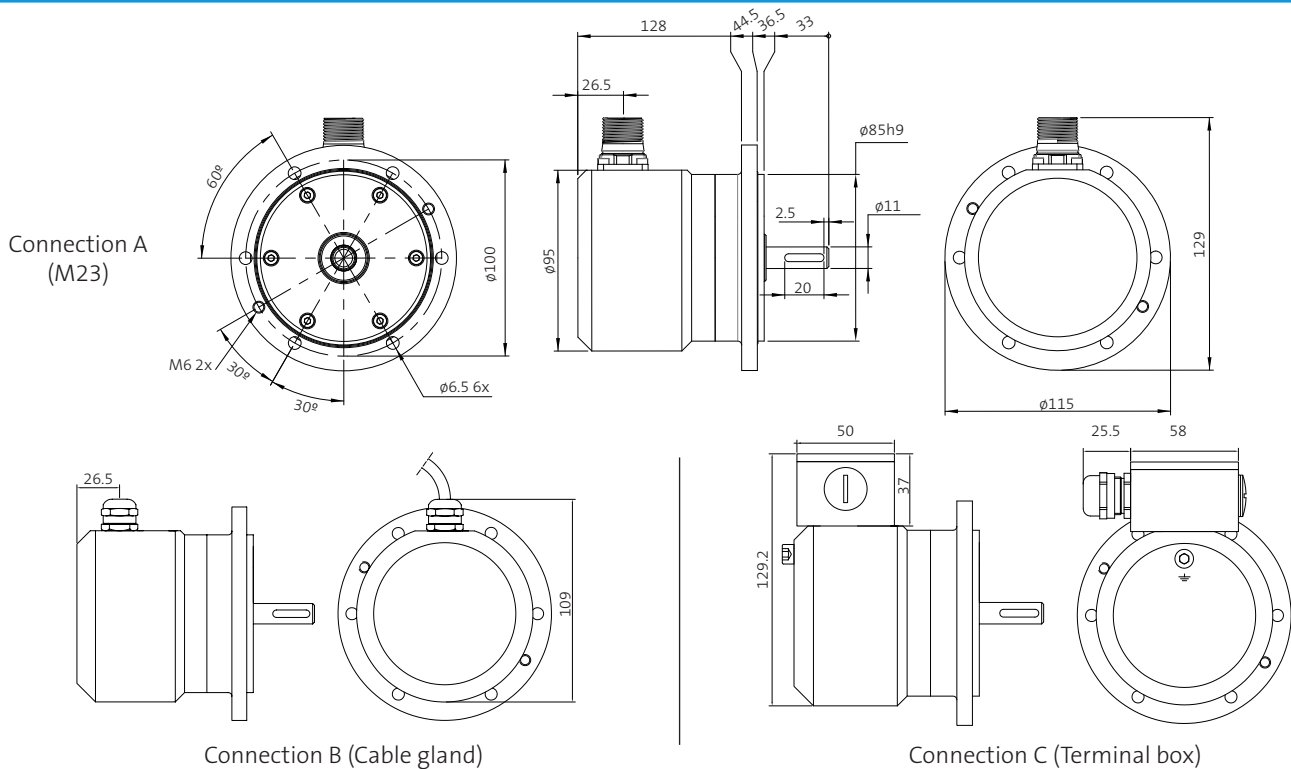
- CANopen, DS406
- Offshore and salt water firm
- Ø 115 mm, B10 stainless steel AISI 316
- Ø 11 mm shaft with key way, stainless steel 1.4057
- Enlarged sturdy bearings
- Short circuit and reversed polarity proof
- Dust & splash proof IP67
- High resolution up to 25 bit



*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



## ELECTRICAL SPECIFICATIONS

Supply Voltage	10–30 Vdc (EN50178)
Interface	CANopen (DS-406)
Resolution Singleturn	16 bit
Revolutions Multiturn	14 bit
Multiturn Technology	Mechanical Gear
Singleturn Accuracy	±½ LSB (up to 12 bit)
Interface Cycle Time	> 1 ms
Power Consumption	Max. 2,5 W
Start up Time	< 250 ms

## MECHANICAL SPECIFICATIONS

Housing	Stainless steel AISI 316
Shaft	Stainless steel 1.4057
Encapsulation	IP67
Operating temperature	-30°C to +70°C
Bearings	Permanently greased
Bearing load at	1 000 rpm
Radial	<350 N
Axial	<250 N
Max rpm	3 000 rpm
Vibration	10g 20-2000 Hz (EN60068-2-6)
Shock	100g at 6 ms (EN60068-2-27)
Weight	3,6 kg

## PROGRAMMABLE FUNCTIONS

Resolution, Preset, 2 limit switches, 8 CAMS, Baud rate, CAN-Identifier, Bootloader, Transmission modes: polled, cyclic, sync

## CONNECTION

	A	B	C
<b>Signal</b>	<b>Pin</b>	<b>Color</b>	<b>Pin</b>
<b>CAN Ground</b>	1	Green	2
<b>CAN High</b>	2	Yellow	3
<b>CAN Low</b>	3	Pink	4
<b>CAN Ground</b>	NA	NA	9
<b>CAN High</b>	NA	NA	8
<b>CAN Low</b>	NA	NA	7
<b>+V</b>	11	White	1
<b>0V</b>	12	Brown	10

## ORDERING KEY

Model - Material - Connection - Interface - Resolution

Model	MA431
Material	S Stainless Steel
Connection	A 16-pin M23 Male Connector CW B Radial Cable 5 meter length C Terminal box, for Ø6-Ø12mm cable
Interface	C CANopen
Resolution	
Multiturn	YY YY bit (00 indicates singleturn)
Singleturn	ZZ ZZ bit

## Sample ordering key

MA431-SA-C0012  
MA431-SB-C1213

CANopen, Singleturn  
CANopen, Multiturn, Radial cable 5m

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