

MA503 - SERIES



HEAVY DUTY INCREMENTAL ENCODER Ø 30 MM

Encoder with synchroflange and 2 mountingholes M3

- Ø 30 mm
- 4 mm solid shaft without face or 6 mm with face
- Enlarged sturdy bearings
- Short circuit and reversed polarity proof
- Dust and splash proof up to IP67
- Standard: 7-35V power supply, 100KHz
2 square wave signals
- Options: Marker pulse, and/or inverted signals
5V power supply, 300 KHz
5-30V power supply, 300 KHz
Customization upon request

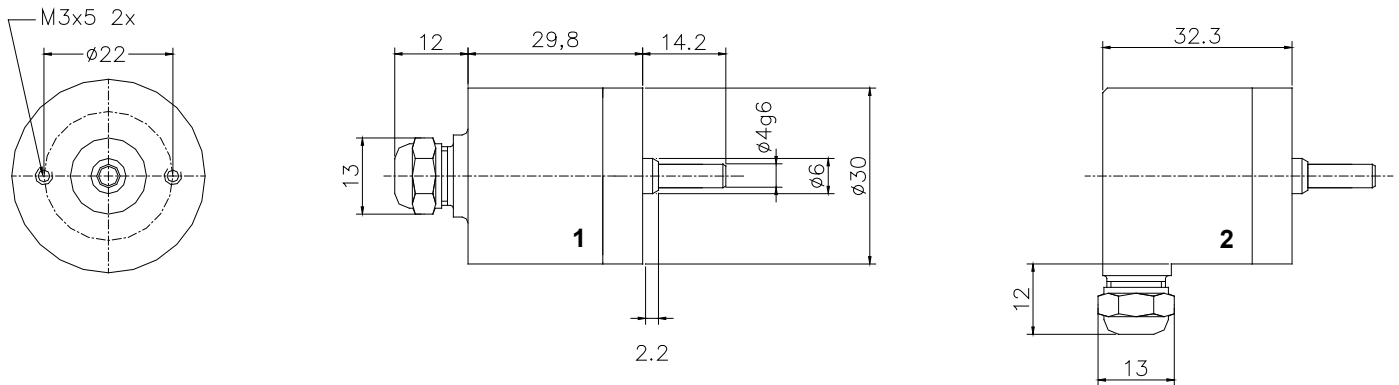


*Flexible and durable
encoder for demanding
applications*



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

INKREMENTELL GIVARE MODELL MA503

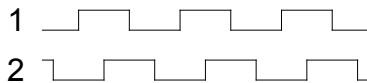
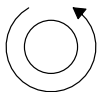


ELECRICAL SPECIFICATION, STANDARD

Power supply	Vcc 7–35 V
Current consumption	Max 40 mA, without load
Output circuit	HTL
Low level output volt	Max <0,5 V at 20 mA load and 20°C
High level output volt	Min >Vcc-2V 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 seen from shaft end



SIGNAL ACCURACY

Dividing error max	±50 el°
Channel separation	90 ±25 el°
Max frequency	100 KHz
Operating temperature	-40° till +80°C

MECHANICAL SPECIFICATION

Housing	Aluminum, electrically conductive for increased interference protection
Sealing	IP67 dust and splash proof (IP66 at shaft outlet)
Bearings	Permanently greased
Bearing load at 1 000 rpm:	
Radial	30 N Gives 50 000 hrs
Axial	30 N bearing life
Max rpm	3 000 (12 000)
Vibration	20g 20-2000 Hz
Chock	200g vid 11 ms
Weight	ca: 60 gr (without cable)

CONNECTIONS

- | | |
|----------------------------------|------------------------------|
| 1. Axial cable, 1 m | 15. Axial cable with screen |
| 2. Radial cable, 1 m | 25. Radial cable with screen |
| 5. Special cable | |
| 9. Axial 4-pin M8 male connector | |

FUNCTION

	Cable 1-2	15-25	Cable M8
1	Green	Green	Blue
2	Yellow	Yellow	Black
+V	Red	Brown	Brown
0V	Blue	White	White
Gnd		Screen	

MATING CABLES FOR M8 CONNECTOR

- M8SR2, Snap Straight 2m 4x0,25 PUR/PUR
- M8SR5, Snap Straight 5m 4x0,25 PUR/PUR
- M8SV2, Snap Angled 2m 4x0,25 PUR/PUR
- M8SV5, Snap Angled 5m 4x0,25 PUR/PUR

ORDERING CODE

Modell	MA503	4	100	1	X
Shaft 4 or 6 mm					
Pulse rate 1-1 250					
Connection					
X= meter cable					

