www.emetaencoders.com

MG553 - SERIES

BEARINGLESS INCREMENTAL ENCODER Ø 30 MM

Encoder with synchro flange

- High ingress protection class IP68
- Non-contact measuring principle
- No wearing parts and long useable life
- Small dimensions

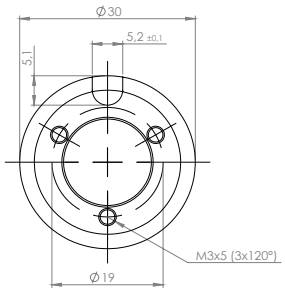
Standard:	7-35Vdc Power Supply, 100 kHz 2 Square Wave Signals up to 1024 ppr Marker pulse with LED indication
Options:	Inverted signals and Marker pulse Customization upon request

emeta encoders

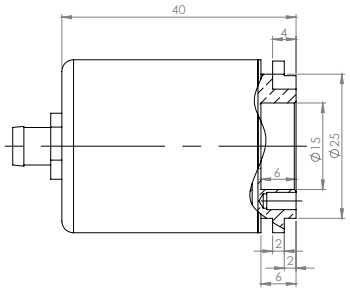
Flexible and durable encoder for demanding applications

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

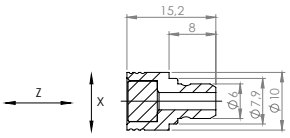
INCREMENTAL BEARINGLESS ENCODER MODEL MG553



PICK-UP UNIT (STATIONARY)

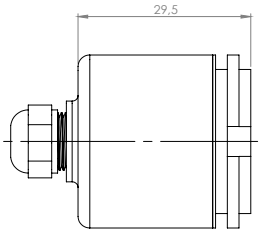


MAGNETIC CARRIER UNIT (ROTATING)



MOUNTING TOLERANCES

Z = 1 ±0,5 mm
X = 0 ±2,5 mm

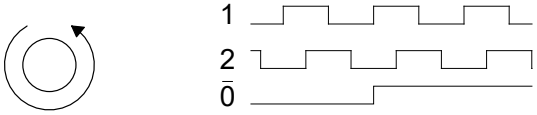


ELECTRICAL SPECIFICATION, STANDARD

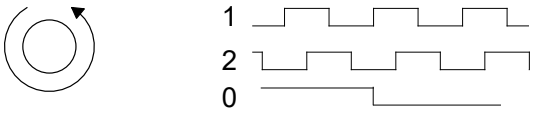
Power supply	Vcc 7–35 Vdc
Current consumption	Max 40 mA, without load
Output circuit	Line driver
Low level output volt	Max <0,5 V at 20 mA load and 20°C
High level output volt	Min >Vcc-2V at 20mA load and 20°C
Short circuit protected	Yes (thermal)
Polarity protected	Yes
Transient protected	Yes
Max load	70 mA

OUTPUT SIGNALS, MG553N (0inv-PULSE = 180º MECHANICAL)

CCW rotation seen from shaft end



OUTPUT SIGNALS, MG553P (0-PULSE = 180º MECHANICAL)



SIGNAL ACCURACY

Resolution	1 to 1024 ppr
Max frequency	100 kHz
Operating temperature	-40° to +70°C

MECHANICAL SPECIFICATION

Housing material	Aluminum, electrically conductive for increased interference protection
Encapsulation class	IP68 (IEC 60529)
Max. rotational speed	9000 rpm
Vibration	50g 20-2000 Hz (IEC 60068-2-6)
Chock	200g at 11 ms (IEC 60068-2-27)
Weight	Approx. 30 g (without cable)

CONNECTION

1xU	Axial cable, 5x0,25 PUR, free cable length
35	Axial 5-pin M8 connector

FUNCTION

Model	MG553N - Pin		MG553P - Pin	
1	Green	3	Green	3
2	Yellow	4	Yellow	4
0	*NC*	*NC*	Gray	5
0 invert	Gray	5	*NC*	*NC*
+V	Brown	1	Brown	1
0V	White	*2*	White	*2*

ORDERING CODE

MG553N 6 17 1 X

Model
Shaft ø6 mm
Pulserate (1-1024)
Connection
X= meter cable

NC = Not Connected

Rev. 2020-02-07, Specifications in this datasheet is subject to change without prior notice.

emeta encoders

Skogsvägen 1, SE-645 34 Strängnäs, Sweden
Tel: +46 152 33 11 90. Fax: +46 152 33 11 91
E-mail: info@emeta.se
www.emetaencoders.com