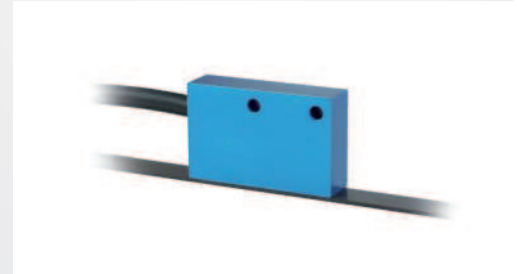


MAIN FEATURES

Incremental linear system based on magnetic principle without wear thanks to no-contact technology. Thanks to high IP rating ETMA is suitable for harsh environment applications such as marble and glass working machines, washing systems machines.

- 0,01 mm max resolution (after quad eval)
- Power supply up to +28 VDC with several electronic interfaces available
- Up to 4 m/s travel speed
- IP 67 as protection grade
- Cable output, connector available on cable end



ORDERING CODE

ETMA 1 Z 5 P S PR3 .XXX

SERIES
magnetic incremental linear sensor **ETMA**

RESOLUTION

0,1 mm **1**
0,04 mm **2**

ZERO PULSE

without zero pulse **S**
with zero pulse **Z**

POWER SUPPLY

(with L electronic interface) 5 V DC **5**
(with L or PC electronic interface) 8 ... 24 V DC **8/24**
5 ... 28 V DC **5/28**

ELECTRONIC INTERFACE

push-pull **P**
(AEIC-7272) protected push-pull **PC**
line driver **L**
power supply 5/28 V - output RS-422 **RS**

ENCLOSURE RATING

IP 67 **S**

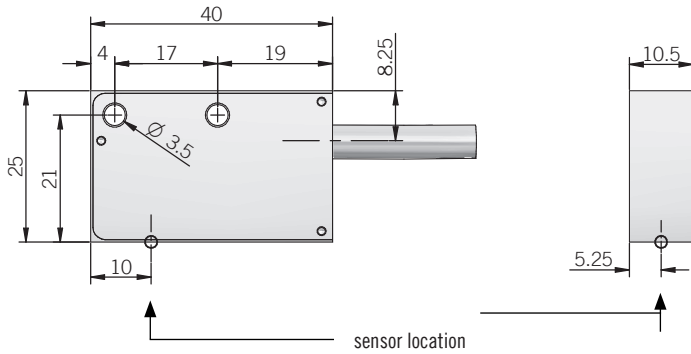
OUTPUT TYPE

cable length 3 m **PR3**
preferred cable length 3 / 6 / 10 / 20 m, others on request

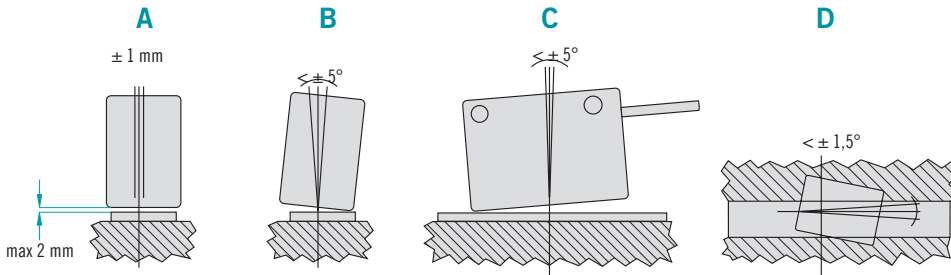
VARIANT

custom version **XXX**

ETMA 1 / 2



Mechanical tolerances

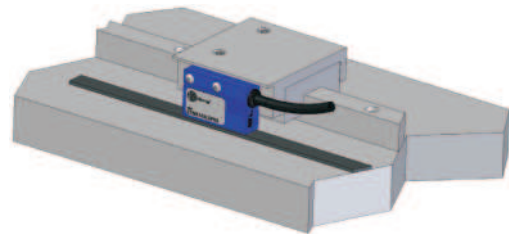


dimensions in mm

ELECTRICAL SPECIFICATIONS

Resolution	ETMA1 = 0,1 mm (0,025 mm after quad eval) ETMA2 = 0,04 mm (0,01 mm after quad eval)
Zero pulse	ETMA1 = every 5 mm ETMA2 = every 2 mm
Power supply	5 = 4,5 ... 5,5 V DC 5/28 = 4,75 ... 29,4 V DC 8/24 = 7,6 ... 25,2 V DC (reverse polarity protection)
Current consumption without load	30 mA max
Max load current	20 mA / channel
Output type *	push-pull line driver HTL / RS-422
Linearity error	$\pm 0,025$ mm (ETMA 1) $\pm 0,01$ mm (ETMA 2)
Travel speed	4 m/s
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

*output levels according to power supply, for further details please see under Technical basics section



MECHANICAL SPECIFICATIONS

Enclosure rating	IP 67 (IEC 60529)
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	20 G, 10 ... 2000 Hz (IEC 60068-2-6)
Housing material	anodized aluminium
Fixing	n. 2 holes ϕ 3,5 mm
Operating temperature	-10° ... +60°C (+14° ... +140°F)
Storage temperature	-25° ... +70°C (-13° ... +158°F)
Working distance from magnetic tape	ETMA 1 < 1,5mm with magnetic tape protection ETMA 1 < 2mm without cover ETMA 2 < 0,5mm with magnetic tape protection ETMA 2 < 1mm without cover
Weight	150 g (5,29 oz)

CONNECTIONS

Function	Cable output Push-pull	Cable output Line driver
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
Ch. Z	blue	blue
Ch. Z-	/	white
\equiv	shield	shield