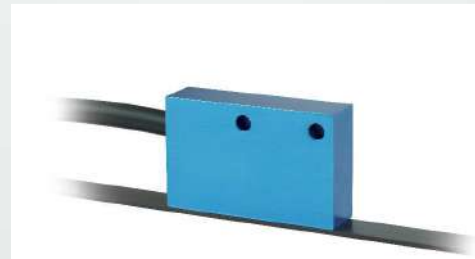


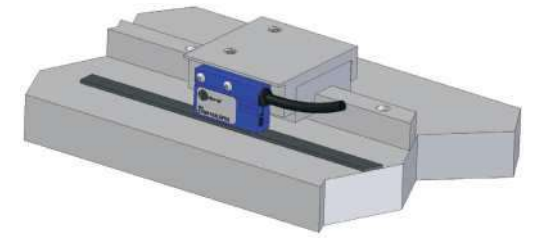
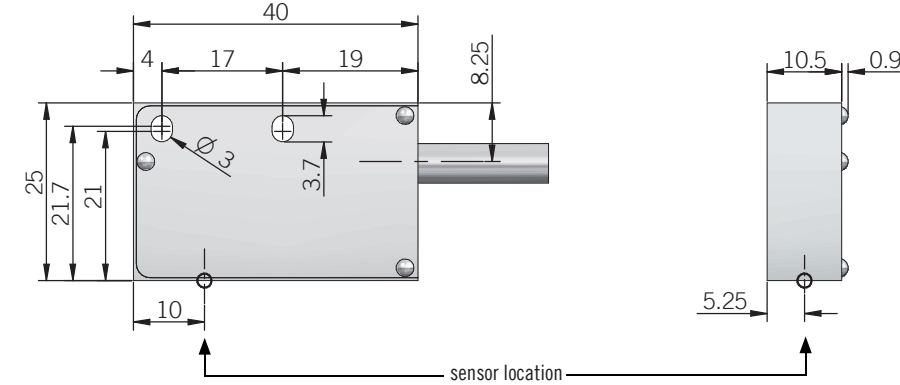
MAIN FEATURES

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.

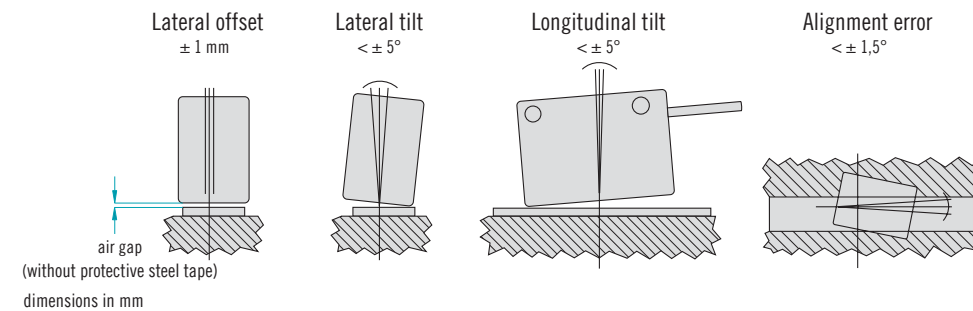
- Resolution up to 0,01 mm
- Power supply up to +30 V DC with several electrical interfaces available
- Up to 4 m/s travel speed
- IP 67 as protection grade
- Cable output, connectors available on cable end



ETMA 1 / 2 / 4 / 5 / 6



Mechanical tolerances



ORDERING CODE

ETMA	1	Z	5	L	S	PR3	.XXX
SERIES magnetic incremental linear sensor ETMA							
RESOLUTION							
0,1 mm 1							
0,04 mm 2							
0,2 mm 4							
0,5 mm 5							
1 mm 6							
ZERO PULSE							
without zero pulse S							
with zero pulse Z							
POWER SUPPLY							
(with L electrical interface) 5 V DC 5							
5 ... 28 V DC 5/28							
ELECTRICAL INTERFACE							
push-pull P							
line driver L							
power supply 5/28 V - output RS-422 RS							
ENCLOSURE RATING							
IP 67 S							
OUTPUT TYPE							
cable length 3m PR3							
preferred cable lengths 6 / 10 / 20 m, to be added after output type							
VARIANT							
custom version XXX							

ELECTRICAL SPECIFICATIONS

Resolution	1 = 0,1 mm (0,025 mm after quad eval) 2 = 0,04 mm (0,01 mm after quad eval) 4 = 0,2 mm (0,05 mm after quad eval) 5 = 0,5 mm (0,125 mm after quad eval) 6 = 1 mm (0,25 mm after quad eval)
Zero pulse	ETMA 1 / 4 / 5 = every 5 mm ETMA 2 / 6 = every 2 mm
Power supply¹	5 = 4,5 ... 5,5 V DC 5/28 = 4,5 ... 30 V DC (reverse polarity protection)
Current consumption without load	30 mA max
Max load current	20 mA / channel
Electrical interface²	push-pull / line driver HTL (AEIC-7272) line driver RS-422 (AELT-5000 or equivalent)
Linearity error (at +20°C / +68°F)	± 1/4 pulse with recommended airgap
Travel speed	4 m/s
Cable	shielded PUR 0,14 mm ² / AWG 26 for dynamic installation minimum bending radius > 60 mm
Electromagnetic compatibility	according to 2014/30/EU directive
RoHS	according to 2011/65/EU (01/09/2020) directive
UL / CSA	certificate n. E212495

¹ as measured at the transducer without cable influences

² for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section

³ measured on transducer housing

⁴ condensation allowed

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 ø 3 mm
Operating temperature^{3,4}	-20° ... +85°C (-4° ... +185°F)
Storage temperature⁴	-25° ... +70°C (-13° ... +158°F)
Air gap	ETMA 1 / 4 / 5 1 ... 2 mm (1,5 mm recommended) ETMA 2 / 6 0,1 ... 1 mm (0,3 mm recommended)
Weight	150 g (5,29 oz)

CONNECTIONS

Function	Cable P	Cable L / RS
+V DC	red	red
0 V	black	black
A+	green	green
A-	/	brown or grey
B+	yellow	yellow
B-	/	orange
Z+	blue	blue
Z-	/	white
≡	shield	shield