

## MTS – Reading system with square-wave output

- MTS magnetic sensor of small overall dimensions. Resolutions up to 0.5  $\mu\text{m}$  programmable (**Pr**) via serial line.
- Zero references in required positions (with MP200Z only).
- Magnetic body sensor made of die-cast metallic material.
- Fixing of magnetic sensor by threaded holes M4 which can also be considered as through holes for M3 screws.
- Wide alignment tolerances.
- Protected against inversion of power supply polarity and short circuit on output ports.

### MTS P

Pole pitch 1+1 mm

Pr

<b>Pole pitch</b>	1+1 mm
<b>Available resolutions</b>	10 - 5 - 1 - 0.5 $\mu\text{m}$
<b>Accuracy</b>	$\pm 10 \mu\text{m}$
<b>Sensor - magnetic band gap</b>	0.1 $\div$ 0.5 (with band <b>MP100</b> )
<b>Reference signal</b>	at constant pitch of 1 mm ( <b>C</b> )
<b>Repeatability</b>	$\pm 1$ increment
<b>Output</b>	LINE DRIVER / PUSH-PULL
<b>Power supply</b>	5 $\div$ 28 Vdc $\pm$ 5%
<b>Max. frequency</b>	300 kHz
<b>Max. speed</b>	0.6 m/s ( <b>MTS P05</b> ) – 1.2 m/s ( <b>MTS P1</b> )
<b>Protection class</b>	IP 67
<b>Electrical protections</b>	inversion of polarity and short circuit



### MTS M

Pole pitch 2+2 mm

Pr

<b>Pole pitch</b>	2+2 mm
<b>Available resolutions</b>	1000 - 500 - 100 - 50 - 25 - 10 - 5 - 1 $\mu\text{m}$
<b>Accuracy</b>	$\pm 15 \mu\text{m}$
<b>Sensor - magnetic band gap</b>	0.3 $\div$ 1.5 (with band <b>MP200</b> ) 0.35 $\div$ 0.9 (with band <b>MP200Z</b> )
<b>Reference signal</b>	at constant pitch of 2 mm ( <b>C</b> ) external ( <b>E</b> ) positioned on the magnetic band ( <b>Z</b> )
<b>Repeatability</b>	$\pm 1$ increment
<b>Output</b>	LINE DRIVER / PUSH-PULL
<b>Power supply</b>	5 $\div$ 28 Vdc $\pm$ 5%
<b>Max. frequency</b>	300 kHz
<b>Max. speed</b>	1.2 m/s ( <b>MTS M1</b> ) – 12 m/s ( <b>MTS M10</b> )
<b>Protection class</b>	IP 67
<b>Electrical protections</b>	inversion of polarity and short circuit

### MTS H

Pole pitch 5+5 mm

Pr

<b>Pole pitch</b>	5+5 mm
<b>Available resolutions</b>	100 - 50 - 25 - 10 - 5 $\mu\text{m}$
<b>Accuracy</b>	$\pm 40 \mu\text{m}$
<b>Sensor - magnetic band gap</b>	0.3 $\div$ 3.5 (with band <b>MP500</b> )
<b>Reference signal</b>	at constant pitch of 5 mm ( <b>C</b> ) external ( <b>E</b> )
<b>Repeatability</b>	$\pm 1$ increment
<b>Output</b>	LINE DRIVER / PUSH-PULL
<b>Power supply</b>	5 $\div$ 28 Vdc $\pm$ 5%
<b>Max. frequency</b>	300 kHz
<b>Max. speed</b>	6 m/s ( <b>MTS H5</b> ) – 12 m/s ( <b>MTS H10</b> )
<b>Protection class</b>	IP 67
<b>Electrical protections</b>	inversion of polarity and short circuit



Sensors, magnetic bands and covers are wrapped in a functional package which protects them during transport.