

Update : 12/10/2015



Non contractual photo

## 1 - Description

- The TMP ER 25-500-50 translation stage is driven by a step by step motor.
- It generates an irreversible translation motion through a precision screw.
- The translation stage got a linear guidance without recirculation at crossed roller bearings which perform a soft and accurate motion.
- Geometry and characteristic can be adapted upon customer's request.

## 2 - Applications

Accurate positioning of optical and captors.

## 3 -Technical Specifications

### Motorization :

Stepper motor, bipolar 400 steps/revolution:

|            |              |
|------------|--------------|
| Voltage    | 24V          |
| Current    | 0.35 A/phase |
| Resistance | 3 G/phase    |
| Inductance | 1.8 mH/phase |

### Connector technology :

Standard delivery with 1m cable and SUBD 25 point plugs connector (pinout details page 2)

### Limit switches :

2 optical sensors (commutation 5V)

FDC - : NO

FDC + : NF

**Technical specifications:**

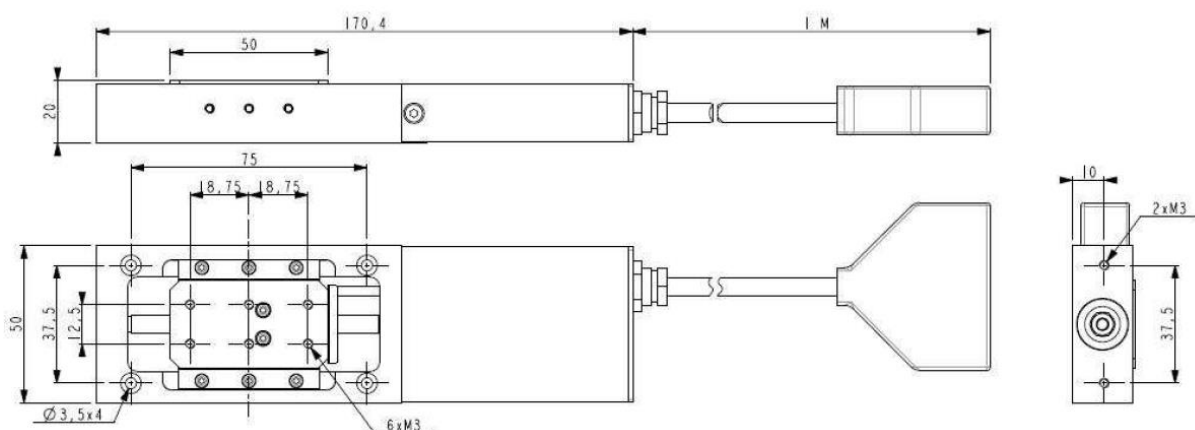
|                                          |           |
|------------------------------------------|-----------|
| Travel range                             | 25 mm     |
| Unidirectional repeatability             | <1 µm RMS |
| Mounting resolution                      | 100 nm/pm |
| Minimum, control increment               | 5 s       |
| Control frequency                        | ≤ 1000Hz  |
| Loading capacity<br>(vertically centred) | 50 N      |

**Option : Incremental encoder**

10 steps / motor's turn

**Used under high vacuum atmosphere**

TMP ER 25-1000-50 is compatible in use in high vacuum atmosphere (10<sup>-6</sup> mbar). Service factor must be limited at 50% in this use configuration.

**Use temperature :** 19 to 23°C**Mass :** ± 900g**4 - Dimensions****5 - Pinouts Connector**

| N° Pin | Designation               | N° Pin | Designation               |
|--------|---------------------------|--------|---------------------------|
| 1      | Phase A+                  | 19     | Encodeur A                |
| 2      |                           | 20     | Encodeur B                |
| 3      |                           | 21     | Supply 5V                 |
| 4      | Phase A-                  | 22     | 0V (common with pin N°16) |
| 5      |                           | 23     | Encodeur A (option)       |
| 6      | Phase B+                  | 24     | Encodeur B (option)       |
| 7      |                           | 25     | Index                     |
| 8      | Phase B-                  |        |                           |
| 14     |                           |        |                           |
| 15     | Earth                     |        |                           |
| 16     | 0V (common with pin N°22) |        |                           |
| 17     | FDC + (usually closed)    |        |                           |
| 18     | FDC - (usually open)      |        |                           |

**Nota:** These data are provided, for information, subject to modifications as a result of technical improvements.



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