TSMW Series 3/5-Axis Integrated Manual Stages, 13 mm XYZ Travel

Model TSMW Series · waveqvanta.com/products/tsmw-series-3-5-axis-integrated-manual-stages

Compact integrated XYZ manual stages on linear ball guides, with 5-axis versions adding θy/θz adjustment.



TSMW series stages integrate X, Y and Z linear motion of 13 mm per axis in a compact unit, using precision linear ball guides, micrometer drives and spring return. The TSMW-XYZT-1 versions add ±5° adjustment about the Y and Z axes for five-axis positioning. Right-hand and left-hand (L suffix) operating versions are available.

Key features

- 13 mm travel on each of the X, Y and Z axes
- Precision linear ball guides with micrometer drive and spring return
- TSMW-XYZT-1 / -1L: additional θy and θz adjustment of ±5° (micrometer + screw drive)
- Compact integrated structure for up to five-axis adjustment
- Right-hand or left-hand operation (model name ending in L)
- 2.5 kg load capacity on all models

Specifications

Axes	XYZ (TSMW13-XYZ-1A/-1AL); XYZ θy θz (TSMW-XYZT-1/-1L)
X / Y / Z Travel	13 mm each
θy Range (TSMW-XYZT-1/-1L)	±5°
θz Range (TSMW-XYZT-1/-1L)	±5°
Guide Mechanism	Linear ball guide; plus rotation mechanism on XYZT versions
Drive Type	Micrometer; micrometer + screw on XYZT versions
Return	Spring return
Operating Hand	Right-hand (standard); left-hand (L suffix)
Load Capacity	2.5 kg
Weight	0.9 kg (XYZ); 1.35 kg (XYZT)

Model overview

Model	Axes	X / Y / Z (mm)	θy	θz	Guide	Drive	Hand	Load (kg)	Weight (kg)
TSMW13-XYZ-1A	XYZ	13 / 13 / 13	–	–	Linear ball guide	Micrometer	Right	2.5	0.9
TSMW13-XYZ-1AL	XYZ	13 / 13 / 13	–	–	Linear ball guide	Micrometer	Left	2.5	0.9
TSMW-XYZT-1	XYZ θy θz	13 / 13 / 13	±5°	±5°	Linear ball guide + rotation	Micrometer + screw	Right	2.5	1.35
TSMW-XYZT-1L	XYZ θy θz	13 / 13 / 13	±5°	±5°	Linear ball guide + rotation	Micrometer + screw	Left	2.5	1.35

Typical applications

- Multi-axis positioning of small optical components
- Fiber and beam coupling alignment
- Angular alignment of optics about Y and Z
- Laboratory optical setups