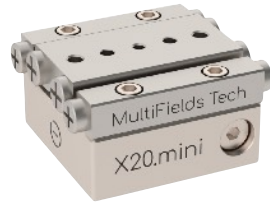


Linear Stage·mini– X20.mini (Close loop)

Room Temperature Piezoelectric Motion Solution

Ultra compact, with high resolution optical linear encoder inside.



X20.mini

Features

- Very Quiet, 20 kHz drive frequency
- Compact Design, 20 × 20 mm × 12 mm
- High Precision Optical Encoder, 2nm
- Mini Step Size, ~ 10 nm
- Controller compatible with rotary and tilting stage
- Support Options, non-magnetic (.NM), high vacuum (.HV) & ultra- high vacuum (.UHV)

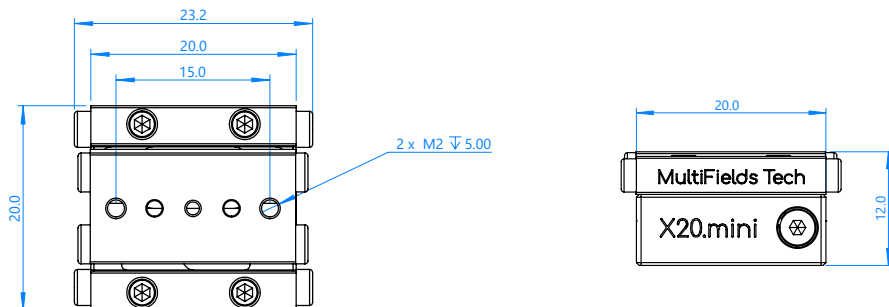
Optional models

.HV ~ 1e-7 mbar high vacuum
.UHV ~ 2e-11 mbar ultra high vacuum

.NM ~ non-magnetic

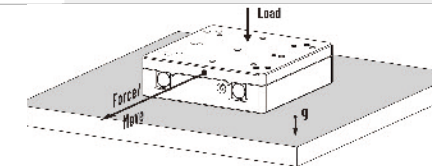
- X20.mini
- X20.mini.HV
- X20.mini.UHV
- X20.mini.NM
- X20.mini.HV.NM
- X20.mini.UHV.NM

2D·Drawings



X20.mini Series – Specification

Optional Versions ⇨		X20.mini
Special version available ⇨		.NM, non-magnetic; .HV, high vacuum compatible; .UHV, ultra-high vacuum compatible;
1	Dimension	20 × 20 mm × 12 mm
2	Main Material	Standard .HV & .UHV, Stainless steel; .NM, Ti
3	Mass	30 g
4	Travel Range	10 mm
5	Drive Frequency	Max. 20 kHz (very quiet)
6	Open loop motion resolution	0.1 nm
7	Cable & Connectors	Shielded cable, D-Sub15 (default) kapton, PEEK D-Sub15 for UHV
Motion parameters for recommended installation I		
7	Max. Velocity	~ 10 mm/s
8	Minimum step size (close loop)	10 nm
9	Dynamic Force	1.5 N
10	Holding Force	3 N
11	Pitch / Yaw	0.3 mrad
12	Load	300 g
Motion parameters for recommended installation II		
13	Load	100 g
14	Holding Force	1.5 N
Sensor		
15	Sensor Type	Optical Encoder
16	Sensor Range	10 mm
17	Sensor Resolution	2 nm



Horizontal mounting.I