



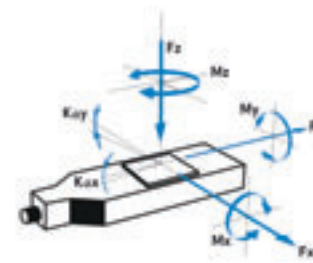
FACTS

Load characteristics	$F_x(N)$	$F_y(N)$	$F_z(N)$	$M_x(Nm)$	$M_y(Nm)$	$M_z(Nm)$	$k_{ax}(\mu rad/Nm)$	$k_{ay}(\mu rad/Nm)$
FV	10	3	10	0.4	0.6	0.4	80	30
HV	10	3	10	0.4	0.6	0.4	80	30
UHV	10	3	10	0.4	0.6	0.4	80	30



KEY FEATURES

- Vacuum up to 10-9 hPa
- Travel range up to 52 mm (2")
- Uni-directional repeatability down to 0.1 μm
- Maximum speed 2.5 mm/sec
- Load capacity up to 1 kg
- Integrated limit switches
- Option: linear scale



used for the positioning of laser diodes and optical components. Driven by a 2-phase stepper vacuum motor using high resolution micro-stepping, the gearless stage utilizes re-circulating ball bearings and a ground re-circulating ball screw. As a result, a high stiffness, accuracy and smoothness of motion is achieved. The micro stage is equipped with two limit switches. For higher positioning accuracy and repeatability of 0.1 μm , the MTS-65 Vacuum micro stage is offered with a linear scale. Using a special mounting kit, the MTS-65 Vacuum stages can be assembled as XY or XYZ- modules.

The MTS-65 Vacuum micro stage was developed for industrial application with limited space conditions and is typically

TECHNICAL DATA

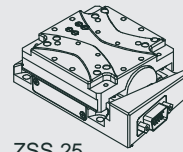
Travel range (mm)	13	26	52
Straightness / Flatness (μm)	± 1	± 2	± 3
Pitch (μrad)	± 40	± 60	± 80
Yaw (μrad)	± 40	± 40	± 40
Weight (kg)	0.4	0.6	0.8

Vacuum type	FV	HV	UHV	UHV
Linear scale				UHV
Speed max. (mm/sec)	2.5	1	1	
Resolution calculated (μm)	5 (FS)	5 (FS)	5 (FS)	0.05
Resolution typical (μm)	0.1	0.1	0.1	0.05
Bi-directional Repeatability (μm)	± 5	± 5	± 5	± 0.2
Uni-directional Repeatability (μm)	0.2	0.2	0.2	0.1
Nominal Current (A)	1.2	1.2	1.2	

Accuracy	on request
Velocity range (mm/sec)	0.001 ... 3
Material	Aluminum or Stainless steel, suitable for vacuum

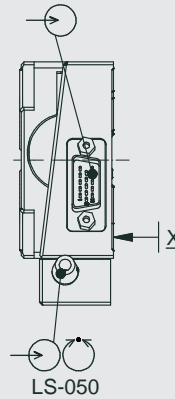
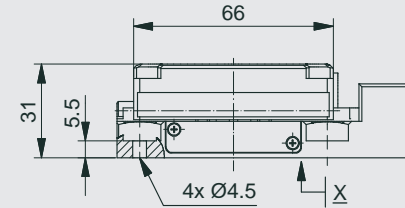
Vacuum Note: FS = full step, RE = rotary encoder
More info: Detailed information concerning motors and encoders, see appendix.

Travel (mm)	13	26	52
A	38,5	45	62
B	62	75	105
C	99,5	112,5	147,5

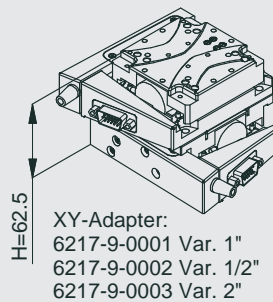
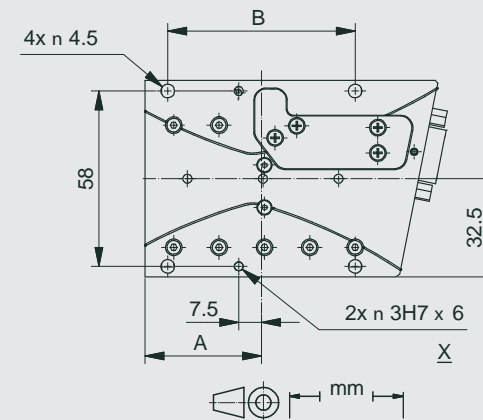
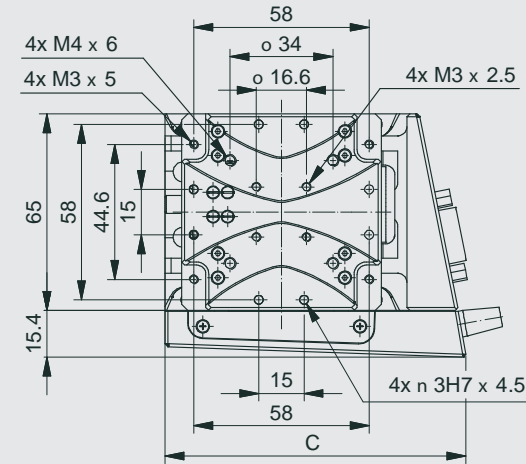


ZSS 25

drawings for the corresponding vacuum class must be requested separately.
The installed motor types are:
ZSS 25.200.1.2-E for FV
VSS 25.200.1.2-E for HV & UHVG



LS-050



XY-Adapter:
6217-9-0001 Var. 1"
6217-9-0002 Var. 1/2"
6217-9-0003 Var. 2"

Order No.	6217-V-			0	0
FV		1			
HV		2			
UHVG		3			
13 mm (1/2")		1			
26 mm (1")		2			
52 mm (2")		3			
open loop		0			
closed loop		1			

APPLICATIONS

CONTROLLERS

ROBOTICS

LINEAR STAGES

ROTATION STAGES

PIEZO STAGES

ACCESSORIES

APPENDIX

UPM-160

HPS-170

LS-270

LS-180

LS-120

LS-110

PLS-85

LS-65

MTS-65

MTS-70

VT-80

LS-40

MCS

NPE-200

UPL-120

ES-100

ES-82

MA-35

MP-20

MP-20 B

MP-15