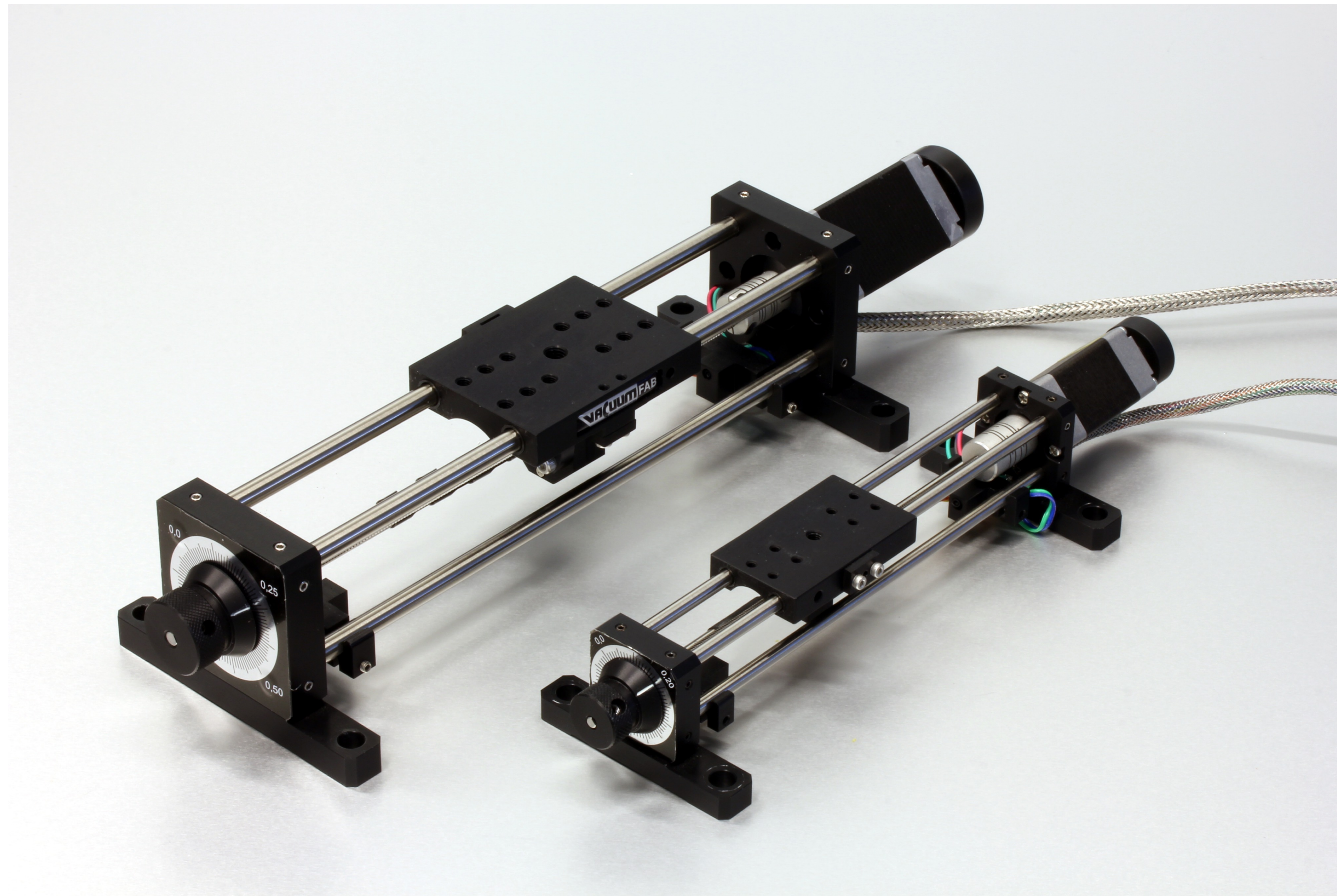


RodRail Series



Motorized linear stage

- Narrow profile and light weight
- Clean design lubricant free
- Maintenance free and reliable
- XYZ gantry, multi axes assemblies
- Stroke from 1,5 to 450mm
- Turnable, contactless ends of run
- Stepper motor with lead screw
- Extreme environment version available

These narrow profile linear translation stages are designed with a light weight stainless steel cage body, a preloaded lead-crew drive, a stepper motor and two freely settable end of run switches; this solution matches value and price providing micron scale repeatability and long stroke at an affordable price. The lubricant free material choice makes them extremely clean and reliable. RodRails are suitable for both laboratory and industrial environment. Multi-axes assemblies can be done with simple and pre-aligned interfaces for XY, gantry or XYZ configurations. A manual knob with scale allows to move manually the stage while the motor is off. Optional double carrier load and moment capacity (eg. for multi-axes assemblies).

The same technology is available in eXtreme version for HV and UHV and Cryo.
See RodRail eXtreme datasheet.



RR-Micro

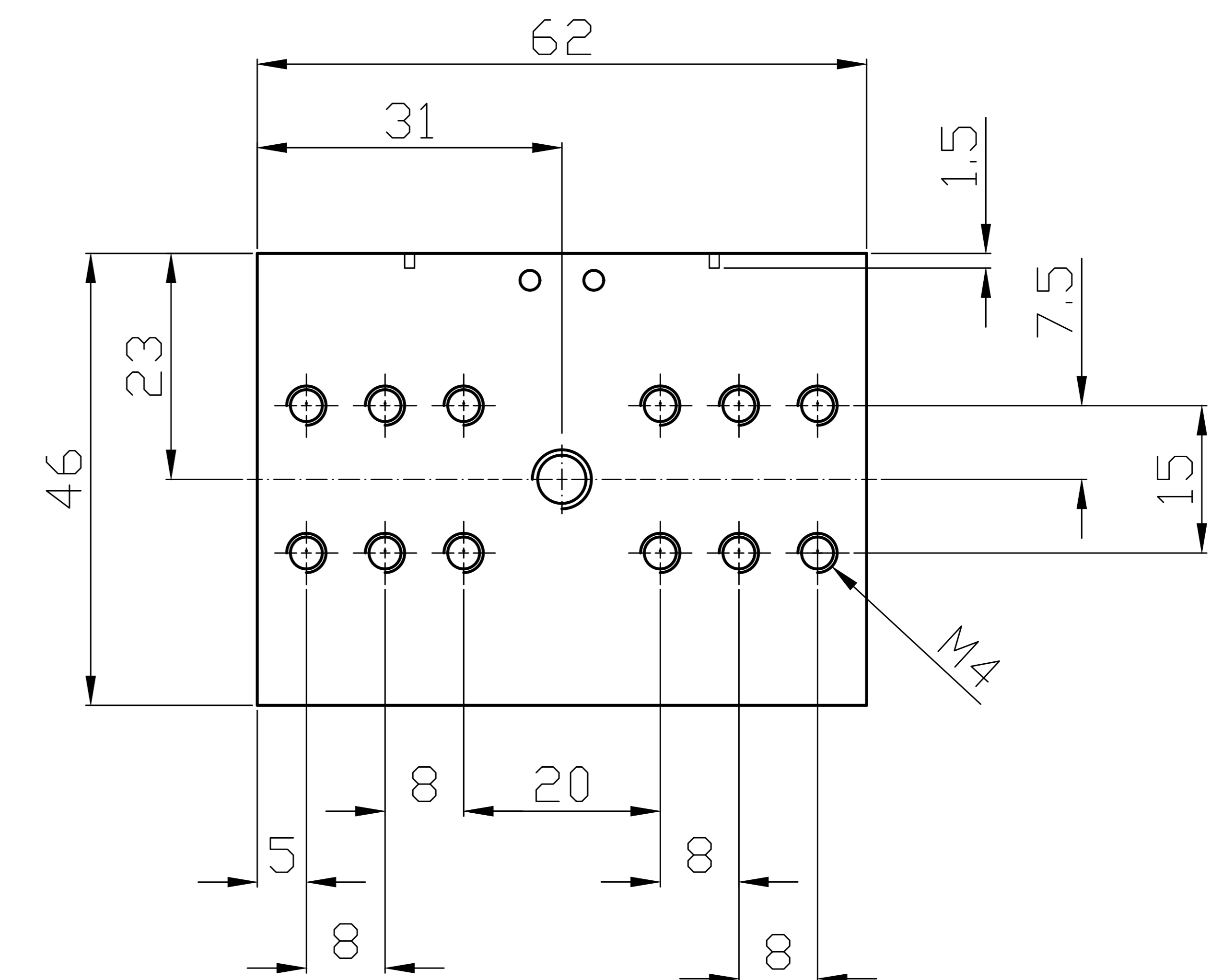
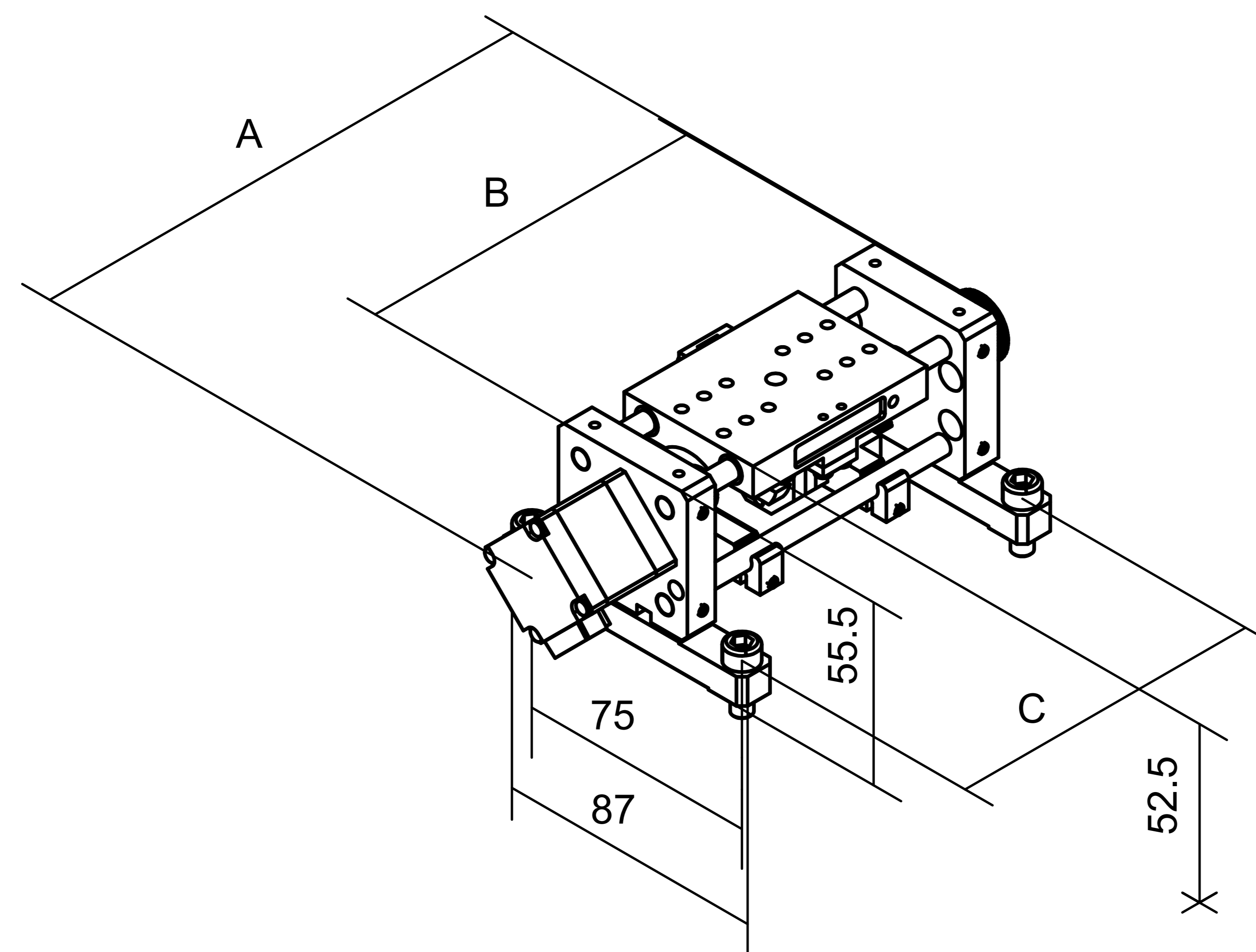
RodRail Micro series

Stroke	A	B	C
25	160	111	100
50	185	136	125
75	210	161	150
100	235	186	175
125	260	211	200
150	285	236	225
175	310	261	250
200	335	286	275
225	360	311	300
250	385	336	325
275	410	361	350
300	435	386	375
325	460	411	400
350	485	436	425
375	510	461	450
400	535	486	475
425	560	511	500
450	585	536	525

Stage code matrix			
	size	carrier N.	stroke (mm)
RR	Micro	1 or 2	25
	Nano
	▶ eg. RR-Micro-200 = RodRail micro with 200mm stroke ▶ eg. RR-Nano-2-150 = RodRail nano with 150 mm stroke and two carriers for double load capacity note that the effective stroke is = 150mm - 50mm - x (distance set between carriers)		

MAIN SPECIFICATIONS

- 1 mm pitch lead-screw
- preloaded nut
- 200 step/revolution
- 1 um unidir-repeatability
- 2 freely adjustable ends of run
- 10 N load capacity per carrier
- 20 mm s/max speed
- double carrier for higher load
- XY and XYZ mounting option



RR-Nano

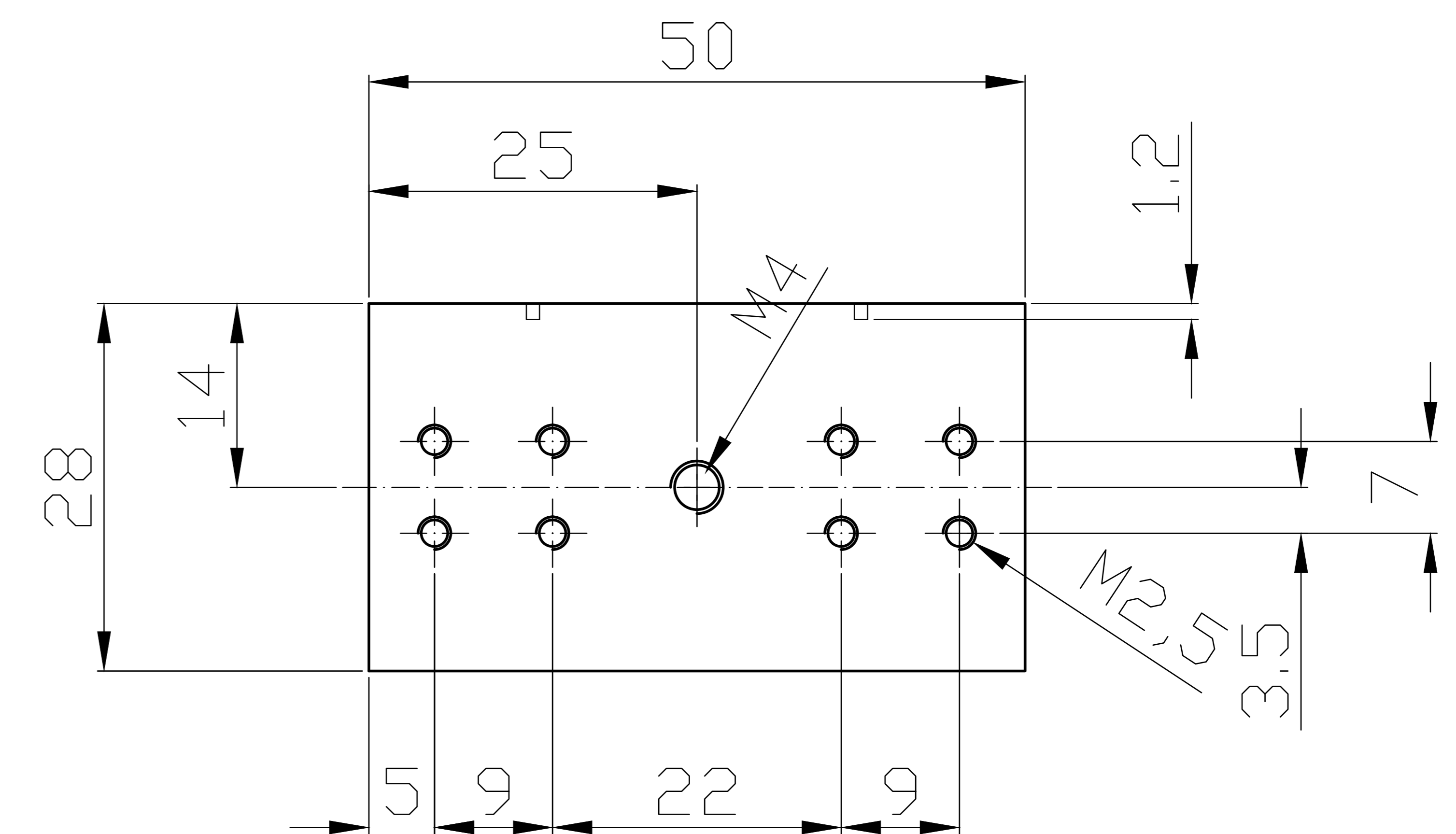
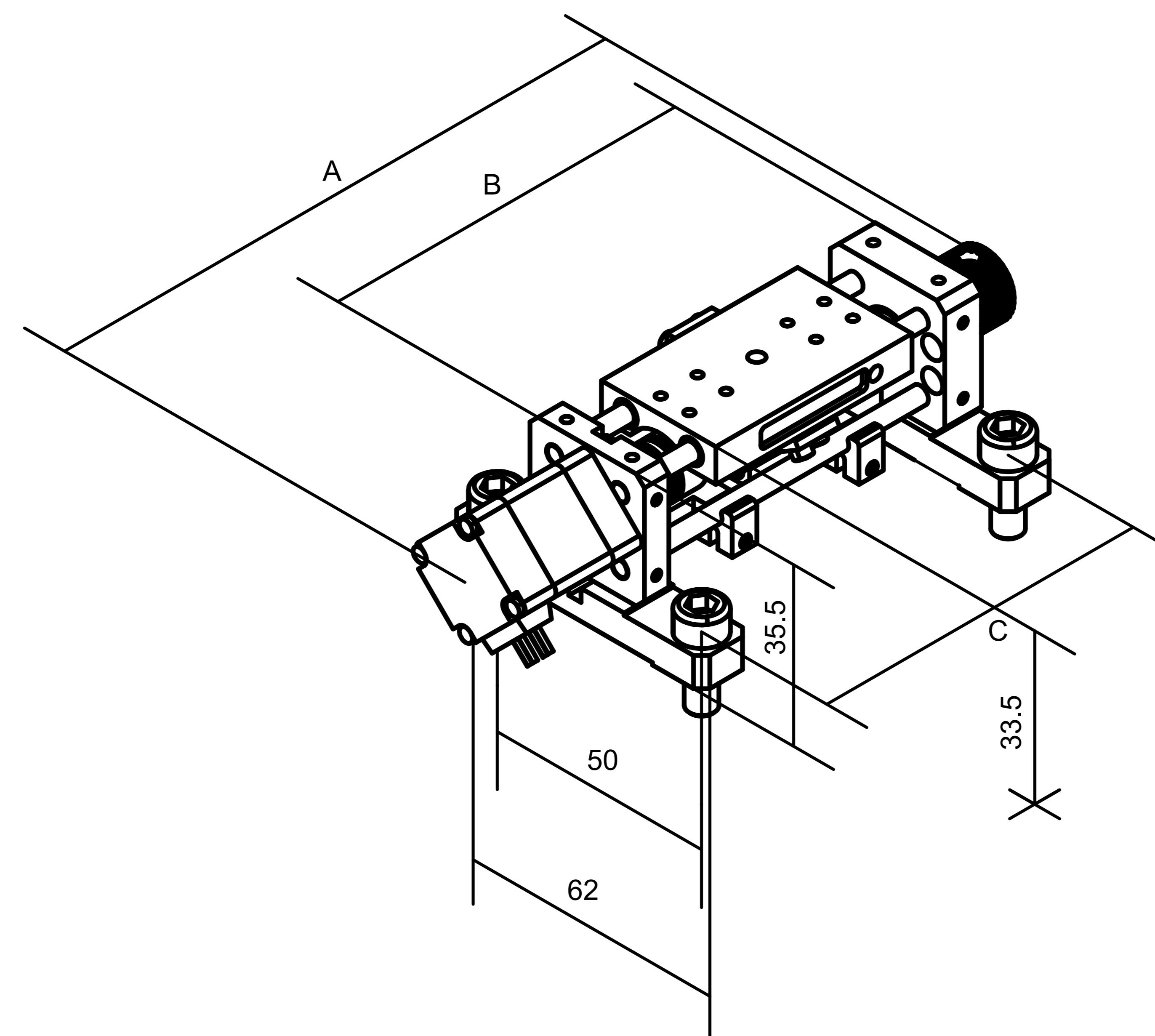
RodRail Nano series

Stroke	A	B	C
15	128	83	75
40	153	108	100
65	178	133	125
90	203	158	150
115	228	183	175
140	253	208	200
165	278	233	225
190	303	258	250
215	328	283	275
240	353	308	300
265	378	333	325
290	403	358	350
315	428	383	375
340	453	408	400
365	478	433	425
390	503	458	450
415	528	483	475
440	553	508	500

Stage code matrix			
	size	carrier N.	stroke (mm)
RR	Micro	1 or 2	25
	Nano
	<p>► eg. RR-Micro-200 = RodRail micro with 200mm stroke</p> <p>► eg. RR-Nano-2-150 = RodRail nano with 150 mm stroke and two carriers for double load capacity</p> <p>note that the effective stroke is = 150mm - 50mm - x (distance set between carriers)</p>		

MAIN SPECIFICATIONS

- 0.7 mm pitch lead-screw
- preloaded nut
- 200 step/revolution
- 1 um unidir-repeatability
- 2 freely adjustable ends of run
- 5 N load capacity per carrier
- 20 mm s/max speed
- double carrier for higher load
- XY and XYZ mounting option



Questionnaire

Fill in this questionnaire and mail it to ufficiovendite@vacuumfab.it to get our consultancy for the positioning system design, free of charges:

Name, surname:
Phone Number:

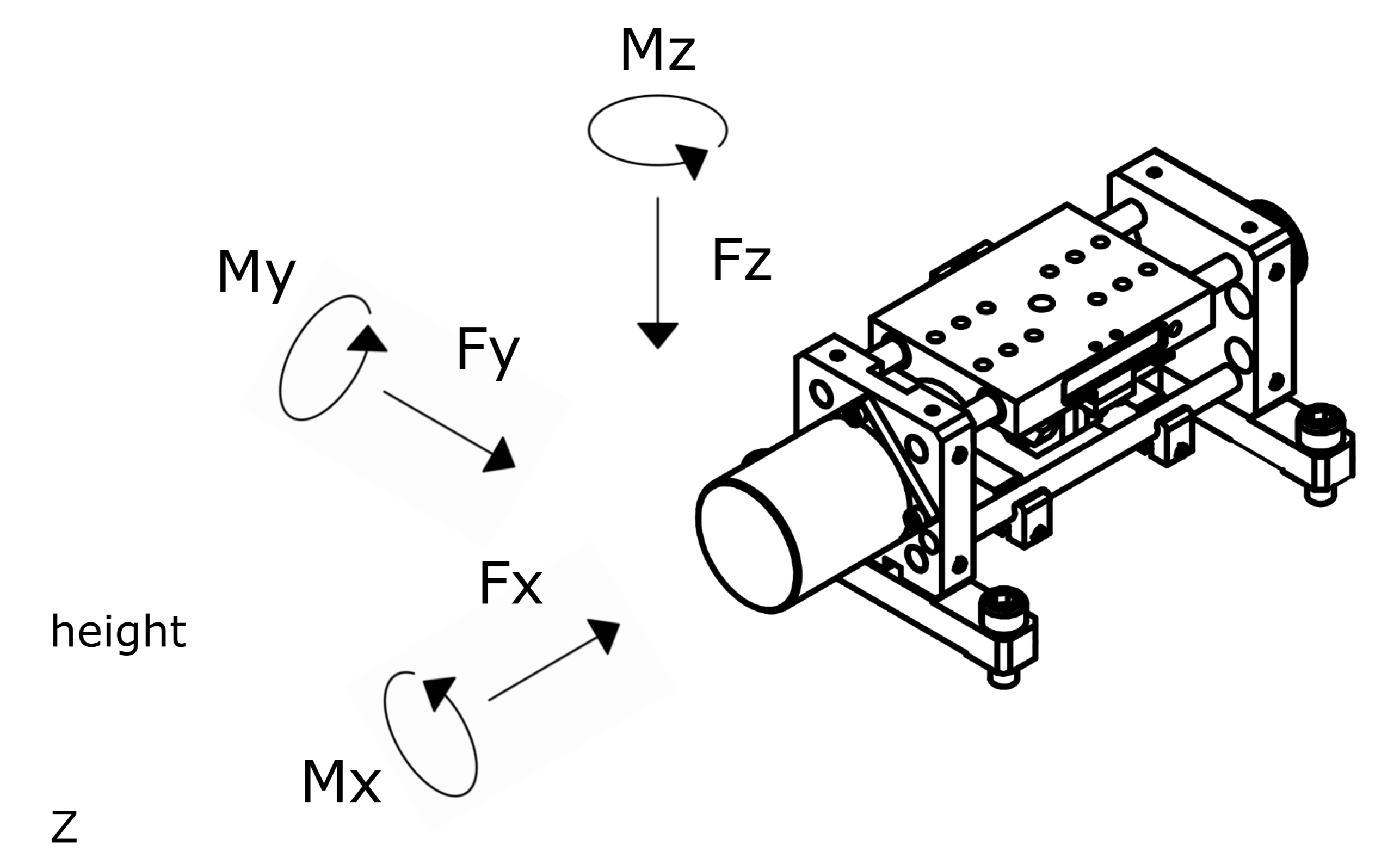
CUSTOMER'S REFERENCE

Institute/company:
Email:

WEIGHT/SPECIMEN INFORMATION

Dimensions (mm):
Shape: (description or better attach drawing)
Weight (g):
Center of gravity coordinates from the center of the carrier (mm):
Notes:

length	width
X	Y



POSITIONING REQUIREMENT

Travel range required (mm):
Positioning resolution required (μm):
Repeatability required (μm):
Applied force (N):
Applied Moment (Nm):
Speed required (mm/s):
Acceleration required (mm/s^2):
Duty Cycle:
Other degrees of freedom required: please specify and possibly add a sketch and a description f the application

<input type="checkbox"/> uni-directional	<input type="checkbox"/> bi-directional
Fx	Fy
Mx	My
	Fz
	Mz

WIRING REQUIREMENT

Cable lenght in air from the mechanics to the controller (m):

CONTROLLER REQUIREMENT

Motion control type:
Positioning application type:
Computer connection port:
Software compatibility:

<input type="checkbox"/> point to point	<input type="checkbox"/> linear interpolation	<input type="checkbox"/> contouring
<input type="checkbox"/> high resolution	<input type="checkbox"/> high repeatability	<input type="checkbox"/> other (specify)
<input type="checkbox"/> Ethernet	<input type="checkbox"/> USB	<input type="checkbox"/> EPICS
<input type="checkbox"/> DLL	<input type="checkbox"/> LabVIEW	<input type="checkbox"/> TANGO

Notes:

Date and signature: