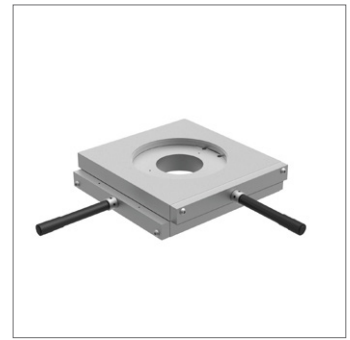
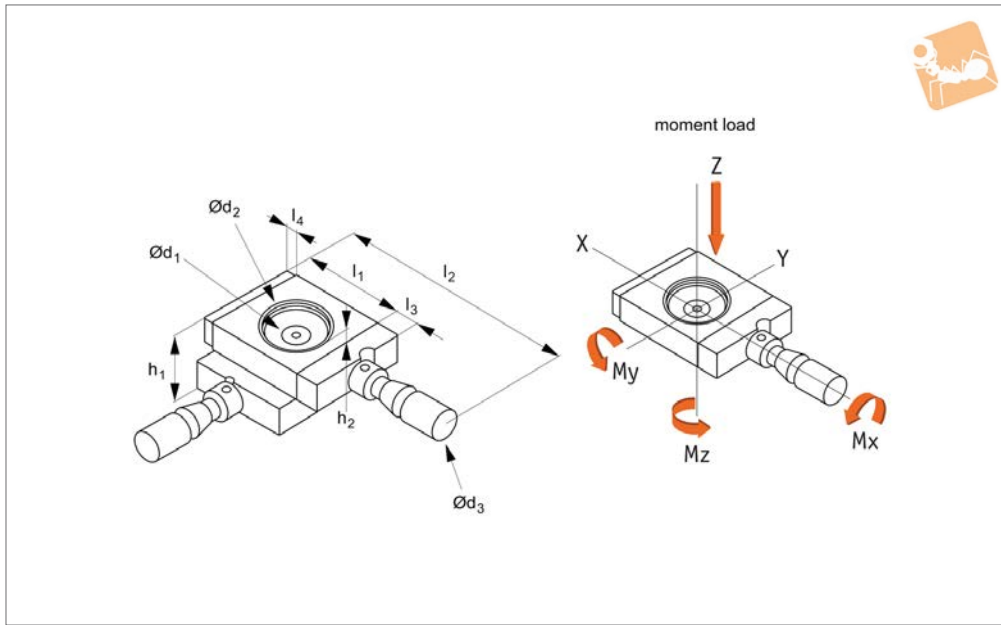




XY stages with through hole cross roller

Manual Positioning Stages



L3179

MANUAL POSITIONING STAGES

Material

Cast iron body (ENGJL-250), with hardened cross roller linear rail set.

Technical Notes

Suitable for horizontal applications requiring smooth movement, long life and high load capacity. Low height profile. The

stage has a through hole.

No backlash due to pull back spring, each micrometer has a locking device.

Coefficient of friction 0,003.

Micrometer pitch =1,0 apart from 20mm stroke = 0,5.

Tips

Micrometer pitch 1,0mm except first two sizes = 0,5mm.

For scientific and medical applications.




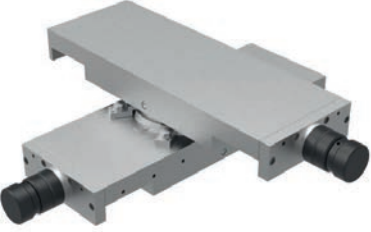
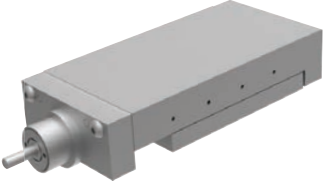
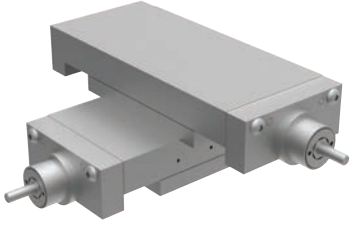
Important Notes

3D CAD models available.

Order No.	Stroke	d ₁	d ₂	d ₃	l ₁	h ₁	h ₂	l ₂	l ₃	l ₄	Load kN max.	Moment M _x Nm max.	Moment M _y Nm max.	Moment M _z Nm max.	Weight kg
L3179.075-020	20	20	55	20	75	40	3	186	14	6	0.37	26	7.1	7.5	1.3
L3179.100-020	20	50	80	20	100	40	3	211	14	6	0.64	44	13	15	2.0
L3179.150-045	45	50	105	20	150	50	3	303	16	8	0.74	64	18	22	6.3
L3179.200-045	45	75	130	20	200	50	3	355	16	8	1.23	190	62	63	13.0
L3179.300-095	95	100	205	24	300	70	3	543	20	10	3.22	1140	186	192	32.0



Heavy duty linear stages

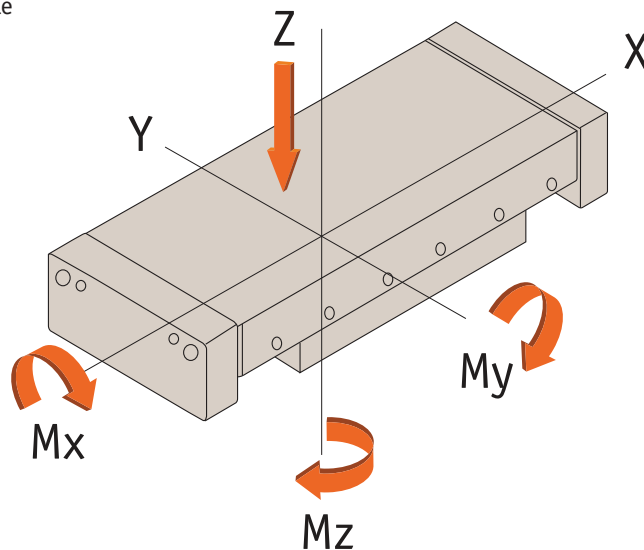
<p style="text-align: center;">Plain stages</p> 	<p style="text-align: center;">Lead screw & handle</p> 	<p style="text-align: center;">Lead screw & knob</p> 
<p style="text-align: center;">XYθ stage</p> 	<p style="text-align: center;">Motorised stage</p> 	<p style="text-align: center;">XY stage</p> 

Available with the following sliding elements:

- Cross roller: For medium loads, low friction.
- Dovetail: Less expensive, higher friction, higher loads.
- Needle roller: Highest loads, low friction, more expensive.

Moment loads

All loads shown in tables are based upon an evenly distributed load with slide in centre position. All loads apply to a single slide.

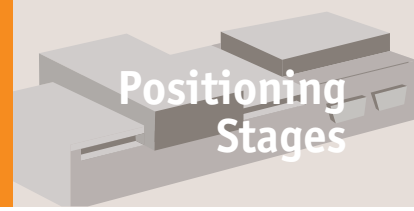





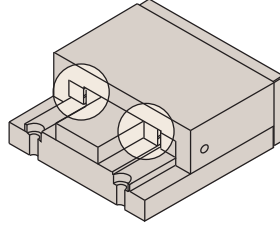
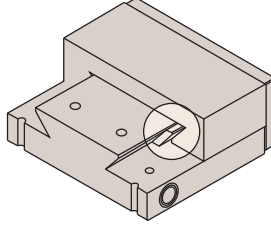
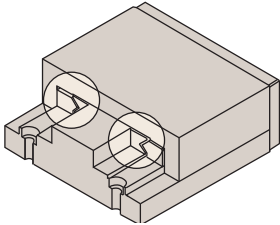
Precision Linear Stages

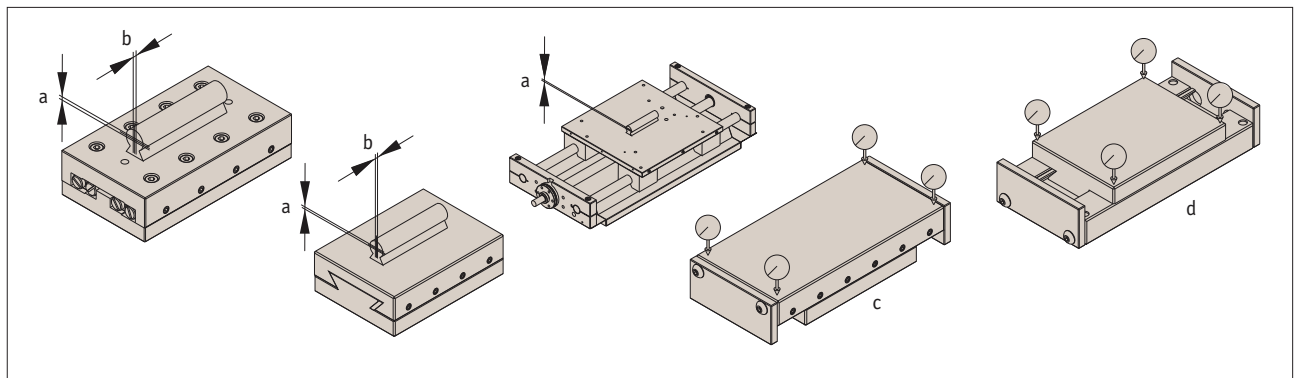
Overview

Positioning Stages



MANUAL POSITIONING STAGES

	• Crossed roller	• Dovetail	• Needle roller
			
Width	30-300mm	30-400mm	100-400mm
Stroke	12-950mm	10-600mm	50-800mm
Load capacity	29 kN	33 kN	59 kN
Max speed	20 m/min	15 m/min	20 m/min
Coefficient of friction	0,003	0,1	0,003



Straightness of travel (μ)		Stroke up to	Slide type	Slide length up to	Parallelism (μ)	
a	b				c	d
2	3	50	Cross roller & Needle roller	100	12	10
3	4	100	Cross roller & Needle roller	200	18	15
5	6	200	Cross roller & Needle roller	300	21	18
6	8	300	Cross roller & Needle roller	400	25	22
8	10	400	Cross roller & Needle roller	600	32	30
10	14	500	Cross roller & Needle roller	800	45	40
12	17	600	Cross roller & Needle roller	1000	60	50
15	20	700	Cross roller & Needle roller	1210	80	60
18	25	800	Cross roller & Needle roller			
3	5	50	Dovetail	100	15	12
5	8	100	Dovetail	200	22	18
8	12	200	Dovetail	300	28	25
10	15	300	Dovetail	400	35	30
14	20	400	Dovetail	600	50	40
18	25	500	Dovetail	800	60	50
20	30	600	Dovetail	1000	80	65
20	30	600	Dovetail	1210	100	80

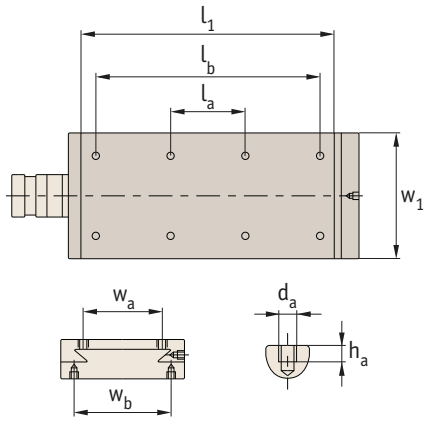
Height tolerance for roller and dovetail slides
 $\pm 0,01$ mm. DIN 7168 medium is the dimensional variations of the sliders. Closer tolerances upon request.

Rectangularity of XY-tables
 $\pm 0,005$ mm per 100mm slide length

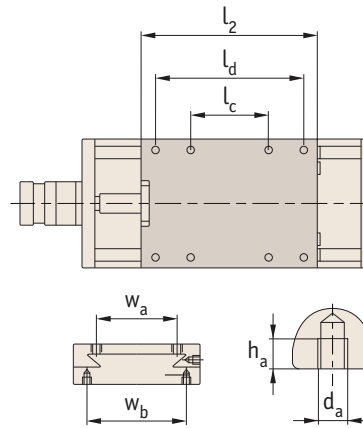
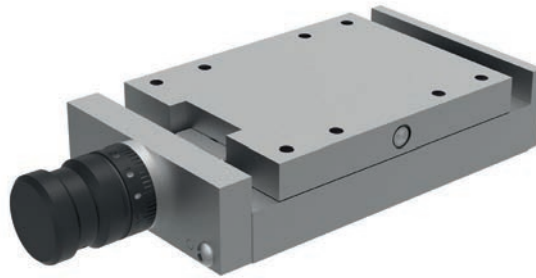
ov-precision-linear-stages-overview-rmh - Updated - 01-03-2023



Carriage - Standard holes



Base - Standard holes



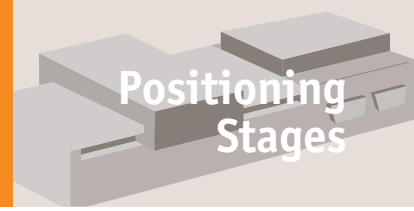
Carriage							Base					
w ₁	l ₁	l _a	l _b	h _a	d _a	w _a	l ₂	l _c	l _d	w _b	d _a	h _a
50	76	36	-	4	4xM4	24	50	20	-	37	4xM4	4
50	102	62	-	4	4xM4	24	76	36	-	37	4xM4	4
50	152	112	-	4	4xM4	24	101	61	-	37	4xM4	4
75	102	62	-	5	4xM5	34	76	36	-	56	4xM5	5
75	127	87	-	5	4xM5	34	101	61	-	56	4xM5	5
75	152	112	-	5	4xM5	34	101	61	-	56	4xM5	5
100	152	112	-	6	4xM6	52	126	86	-	74	4xM6	8
100	203	163	-	6	4xM6	52	152	112	-	74	4xM6	8
100	254	214	-	6	4xM6	52	203	163	-	74	4xM6	8
100	305	90	265	6	8xM6	52	228	188	-	74	8xM6	8
150	203	163	-	6	4xM8	95	152	112	-	120	4xM8	12
150	305	90	265	6	8xM8	95	203	163	-	120	8xM8	12
150	406	240	366	6	8xM8	95	304	90	264	120	8xM8	12
150	406	240	366	6	8xM8	95	253	213	-	120	8xM8	12
200	457	240	417	8	8xM10	120	304	90	264	155	8xM10	8
200	610	190	570	8	8xM10	120	406	190	366	155	8xM10	8
300	410	190	370	15	8xM10	200	308	90	268	255	8xM10	15
300	610	190	570	15	8xM12	200	408	190	368	255	8xM12	15
300	710	290	670	15	8xM12	200	408	190	368	255	8xM12	15
300	910	290	870	15	8xM12	200	508	290	468	255	8xM12	15
300	1010	490	970	15	8xM12	200	508	290	468	255	8xM12	15
300	1210	490	1170	15	8xM12	200	608	190	568	255	8xM12	15



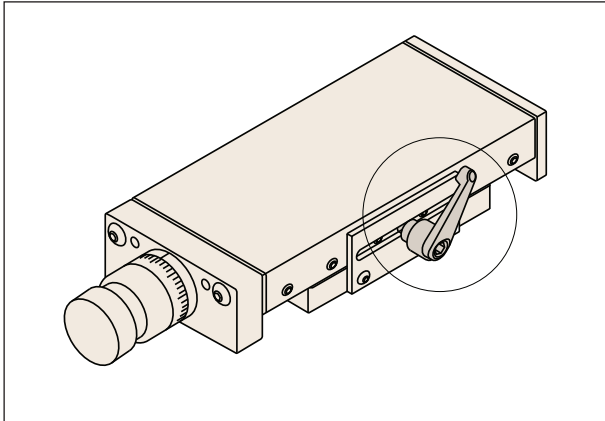
Positioning Stages

Medium - heavy duty accessories

Positioning Stages

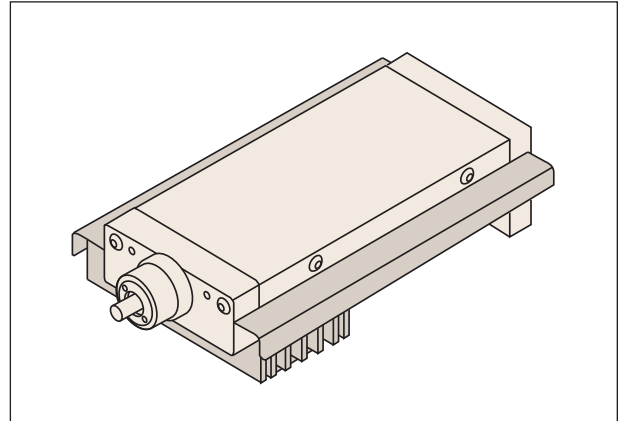


Locking device



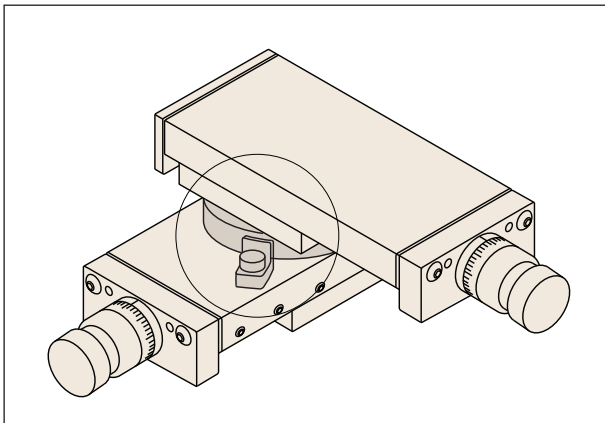
Either mounted on a side plate, a swivel rod or direct to slideway - dependent on stage type.

Bellows



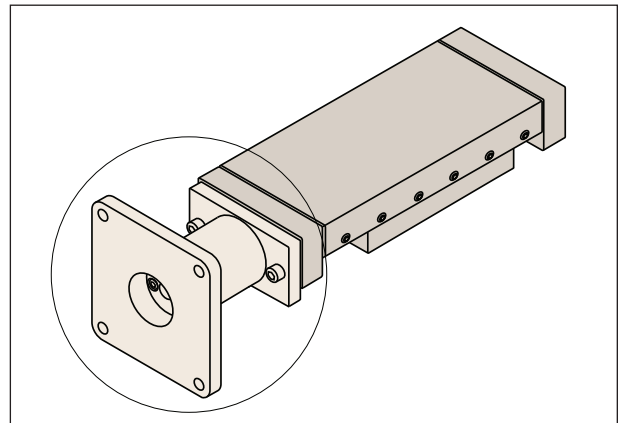
Recommended for general industrial applications. The installation of bellows affects the stroke, height and width of the slide. The bellows are made of PVC and can be used at temperatures up to 80° consult us for dimensions.

Swivelling plates



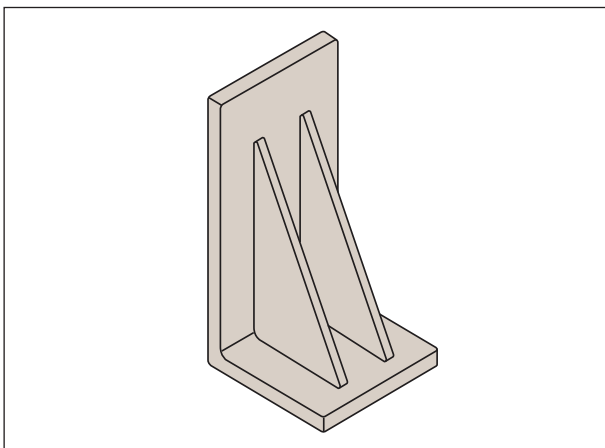
These can be rotated 360° in graduations of 10°. Graduations of 10° up to 90° clockwise and counter-clockwise.

Motor adaptors



For slides with a width greater than 75mm, a flanged motor adaptor with coupling can be provided. Please advise motor size.

Mounting brackets



From cast iron or on request aluminium.

MANUAL POSITIONING STAGES