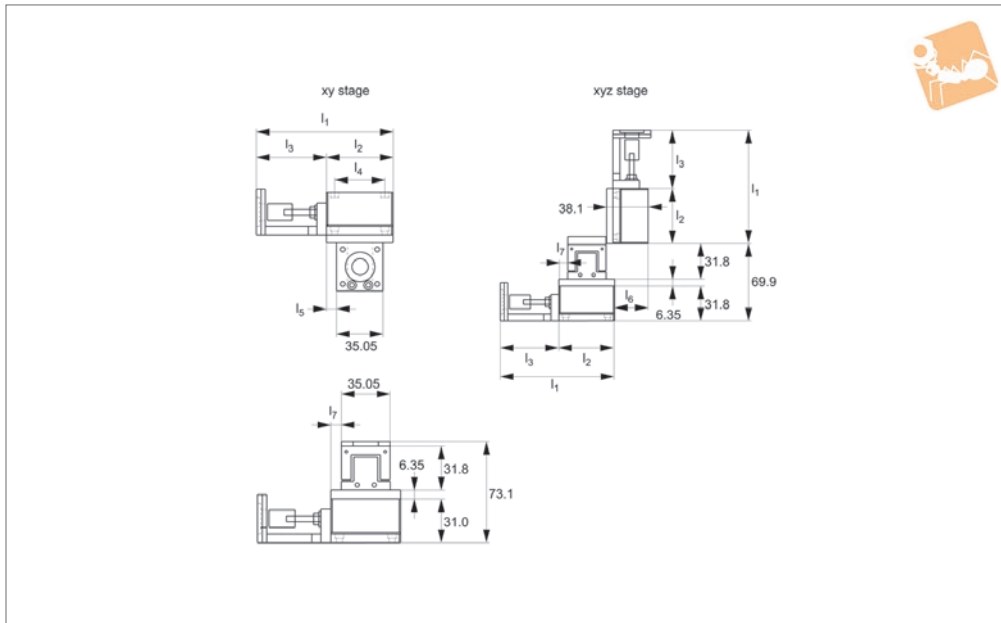
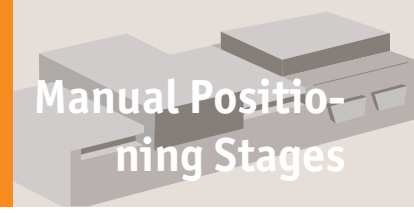




# Lead Screw Driven XY & XYZ Stages

size 1 light duty, prepared for motor

## Manual Positioning Stages



**L3141.XY**

MANUAL POSITIONING STAGES

### Material

Black anodised aluminium. Hardened cross roller or ball slides, lead screw with anti-backlash nut.

### Technical Notes

Driven by lead screw 4.3mm diameter 0.5mm pitch lead with anti-backlash nut and zero backlash flexible coupling for 5mm motor shaft. Cross roller versions are heavier duty.

Ready to accept Nema 14 motor. Max. 1200 rpm.

Accuracy  $3\mu/25\text{mm}$ , repeatability  $3\mu$ .

### Tips

For other fixing and mounting hole dimensions refer to the X stage layout. Supplied without motor. We can quote to supply motors or can also supply with a hand-wheel for manual operation.

Available in XY and XYZ combinations.

### Important Notes

We can also offer end or travel and/or home position switches, normally open or normally closed, with 3 metre cables.

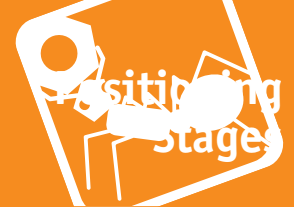
-EHP = end-of-travel and home switches, PNP.

-EHN = end-of-travel and home switches, NPN.

Order No.	Type	Travel	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$	$l_6$	$l_7$	Moment $M_x$ Nm max.	Moment $M_y$ Nm max.	Moment $M_z$ Nm max.	Lead screw pitch	Load kg max.
L3141.025B-XY	XY Ball	25	103,4	50,8	52,6	35	37	30,20	7,87	0,63	0,68	0,71	0,5	3,6
L3141.050B-XY	XY Ball	50	128,8	76,2	52,6	60	60	17,52	20,57	0,83	1,36	1,42	0,5	4,5
L3141.075B-XY	XY Ball	75	154,2	101,6	52,6	85	85	25,15	34,04	1,04	2,26	2,37	0,5	6,8
L3141.100B-XY	XY Ball	100	211,3	152,4	58,9	135	100	25,15	58,67	1,46	5,54	5,81	0,5	9,1
L3141.025R-XY	XY Roller	25	103,4	50,8	52,6	35	37	30,20	7,87	5,50	6,68	7,02	0,5	6,8
L3141.050R-XY	XY Roller	50	128,8	76,2	52,6	60	60	17,52	20,57	6,29	9,55	10,03	0,5	9,1
L3141.075R-XY	XY Roller	75	154,2	101,6	52,6	85	85	25,15	34,04	7,34	15,59	16,37	0,5	13,6
L3141.100R-XY	XY Roller	100	211,3	152,4	58,9	135	100	25,15	58,67	12,84	46,77	49,11	0,5	18,1
L3141.025B-XYZ	XYZ Ball	25	103,4	50,8	52,6	35	37	30,20	7,87	0,63	0,68	0,71	0,5	3,6
L3141.050B-XYZ	XYZ Ball	50	128,8	76,2	52,6	60	60	17,52	20,57	0,83	1,36	1,42	0,5	4,5
L3141.075B-XYZ	XYZ Ball	75	154,2	101,6	52,6	85	85	25,15	34,04	1,04	2,26	2,37	0,5	6,8
L3141.100B-XYZ	XYZ Ball	100	211,3	152,4	58,9	135	100	25,15	58,67	1,46	5,54	5,81	0,5	9,1
L3141.025R-XYZ	XYZ Roller	25	103,4	50,8	52,6	35	37	30,20	7,87	5,50	6,68	7,02	0,5	6,8
L3141.050R-XYZ	XYZ Roller	50	128,8	76,2	52,6	60	60	17,52	20,57	6,29	9,55	10,03	0,5	9,1
L3141.075R-XYZ	XYZ Roller	75	154,2	101,6	52,6	85	85	25,15	34,04	7,34	15,59	16,37	0,5	13,6
L3141.100R-XYZ	XYZ Roller	100	211,3	152,4	58,9	135	100	25,15	58,67	12,84	46,77	49,11	0,5	18,1

# Lead Screw Driven Stages

## End of travel and home switches



### Limit and position switches:

End of Travel and/or Home Position switches can be installed onto these linear stages – please see the drawings of the brackets that attach to the stages that result from this requirement.

The End of Travel switch kit comes with two switches mounted to the base at each end – there are two flags mounted to the carriage. These flags are adjustable for either the full range of travel or a limit amount.

The Home Position switch comes with one flag mounted to the base in the centre – with an adjustable flag mounted to the carriage, allowing the home position to be set at any point.

The switches are photoelectric sensors that operate on a supply voltage of 5 to 24V DC. The repeatability is 5 microns, the response time is 100 microseconds. The sensors are available in both NPN and PNP outputs.

Quick fitting hook up cable (3 metres) provided.

Part no.	Order no.	LS <sub>1</sub>	LS <sub>2</sub>
<b>L3141 Lead screw driven stage - Size 1</b> 	L3141.025	50,8	38,1
	L3141.050	76,2	63,5
	L3141.075	101,6	88,9
	L3141.110	152,4	139,7
<b>L3142 Lead screw driven stage - Size 2</b> 	L3142.025	57,2	41,3
	L3142.038	76,2	60,3
	L3142.050	88,9	73,0
	L3142.075	108,0	92,1
	L3142.100	152,4	136,5
<b>L3143 Lead screw driven stage - Size 3</b> 	L3143.025	76,2	60,3
	L3143.050	101,6	85,7
	L3143.075	127,0	111,1
	L3143.100	152,4	136,5
	L3143.150	228,6	212,7
	L3143.200	279,4	262,5
	L3143.250	330,2	314,3
	L3143.300	381,0	365,1