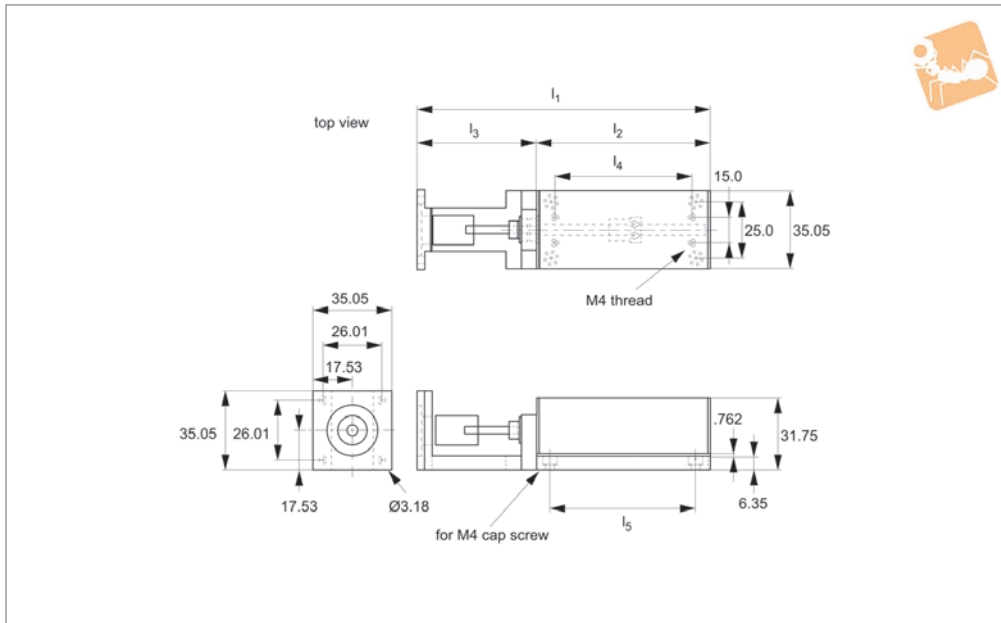




Lead Screw Driven Stages

size 1 light duty, prepared for motor

Manual Positioning Stages



L3141

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 3µ/25mm, repeatability 3µ.

Tips

Supplied without motor. We can quote to supply motors or can also supply with a handwheel 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.

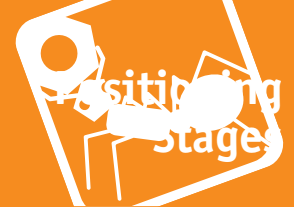
-EHP = end-of-travel and home switches, PNP.

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

| Order No. | Type | Travel | l_1 | l_2 | l_3 | l_4 | l_5 | Moment M_x Nm max. | Moment M_y Nm max. | Moment M_z Nm max. | Lead screw pitch | Load kg max. |
|--------------|--------|--------|-------|-------|-------|-------|-------|----------------------------|----------------------------|----------------------------|------------------|--------------------|
| L3141.025B-X | Ball | 25 | 103.4 | 50.8 | 52.6 | 35 | 37 | 0.6 | 0.6 | 0.7 | 0.5 | 3.6 |
| L3141.050B-X | Ball | 50 | 128.8 | 76.2 | 52.6 | 60 | 60 | 0.8 | 1.3 | 1.4 | 0.5 | 4.5 |
| L3141.075B-X | Ball | 75 | 154.2 | 101.6 | 52.6 | 85 | 85 | 1.0 | 2.2 | 2.3 | 0.5 | 6.8 |
| L3141.100B-X | Ball | 100 | 211.3 | 152.4 | 58.9 | 135 | 100 | 1.4 | 5.5 | 5.8 | 0.5 | 9.1 |
| L3141.025R-X | Roller | 25 | 103.4 | 50.8 | 52.6 | 35 | 37 | 5.5 | 6.6 | 7.0 | 0.5 | 6.8 |
| L3141.050R-X | Roller | 50 | 128.8 | 76.2 | 52.6 | 60 | 60 | 6.3 | 9.5 | 10.0 | 0.5 | 9.1 |
| L3141.075R-X | Roller | 75 | 154.2 | 101.6 | 52.6 | 85 | 85 | 7.3 | 15.6 | 16.3 | 0.5 | 13.6 |
| L3141.100R-X | Roller | 100 | 211.3 | 152.4 | 58.9 | 135 | 100 | 12.8 | 46.7 | 49.1 | 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 ₁ | LS ₂ |
|---|-----------|-----------------|-----------------|
| L3141 Lead screw driven stage - Size 1 | L3141.025 | 50,8 | 38,1 |
| | L3141.050 | 76,2 | 63,5 |
| | L3141.075 | 101,6 | 88,9 |
| | L3141.110 | 152,4 | 139,7 |
| L3142 Lead screw driven stage - Size 2 | 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 |
| L3143 Lead screw driven stage - Size 3 | 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 |