




Linear Actuator



In accordance with Nexen's established policy of constant product improvement, the specifications contained in this manual are subject to change without notice. Technical data listed in this manual are based on the latest information available at the time of printing and are also subject to change without notice.

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| | | |
|---|---|---|
|  | <div data-bbox="623 558 919 611"> DANGER</div> <p>Read this manual carefully before installation and operation. Follow Nexen's instructions and integrate this unit into your system with care. This unit should be installed, operated and maintained by qualified personnel ONLY. Improper installation can damage your system, cause injury or death. Comply with all applicable codes.</p> |  |
|---|---|---|

This document is the original, non-translated, version.

Conformity Declaration: In accordance with Appendix II B of CE Machinery Directive (2006/42/EC):

A Declaration of Incorporation of Partly Completed Machinery evaluation for the applicable EU directives was carried out for this product in accordance with the Machinery Directive. The declaration of incorporation is set out in writing in a separate document and can be requested if required.

This machinery is incomplete and must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the applicable provisions of the Directive.

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ISO 9001 Certified

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INTRODUCTION


Nexen's Linear Actuators provide the thrust required to move an unwind stand, a wind up roll, or convert an existing hydraulically actuated web guiding mechanism to electrical actuation.

To ensure optimum response and accuracy, roll stands should be mounted on linear ball bearings. Sliding ways and wheel track systems have higher coefficients of friction requiring greater break away thrust, preventing accurate, minute corrections.

SPECIFICATIONS

| PRODUCT NUMBER | MANUFACTURER'S NUMBER | SPEED INCHES [mm] (per second) | THRUST POUNDS [Kg] | STROKE INCHES [mm] |
|----------------|-----------------------|--------------------------------|--------------------|--------------------|
| 912658 | LA30.1-5.9-24 | 0.5 [13] | 660 [300] | 6 [150] |

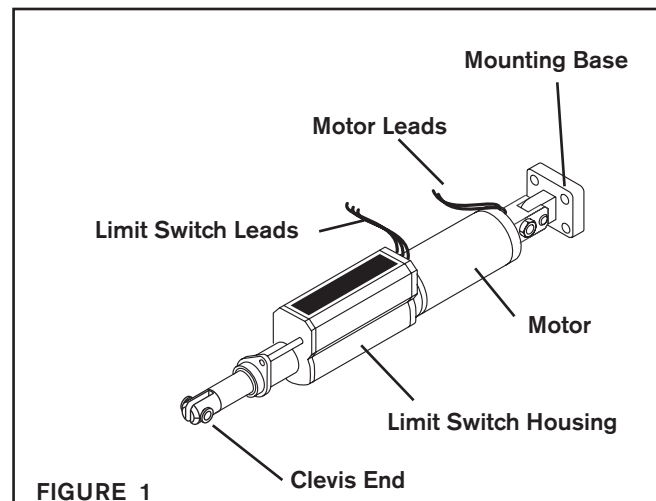
INSTALLATION



CAUTION

The Linear Actuator is designed for axial (thrust) loads only. Radial (side) loads are not permitted.

1. When mounting to a moveable roll stand, attach the Mounting Base bracket to a fixed member of the roll stand (See Figure 1).
2. Connect the Clevis End to the moveable member of the roll stand (See Figure 1).
3. For attachment to existing web guiding mechanisms, mount the Base of the Linear Actuator to a fixed base and the Clevis End to moveable member (See Figure 1).



ELECTRICAL CONNECTIONS

NOTE

Use 18 AWG shielded wire when making the electrical connections between the Linear Actuator Limit Switches and the Web Guide Amplifier. Connect the shield of this wire to the indicated shield terminal of the Web Guide Amplifier.



1. Connect the motor leads (either red and black wire leads or spade connectors, depending on Linear Actuator Model) of the Linear Actuator to the output terminals of the Web Guide Amplifier.
2. Connect the Limit Switch leads to the Limit Switch terminals of the Web Guide Amplifier as follows:

Red lead to Extension.
Black lead to Retraction.
Green lead to Common.

NOTE

If the Linear Actuator moves in the wrong direction, reverse the wire lead connections.

LIMIT SWITCH ADJUSTMENT

| | |
|---|--|
|  |  CAUTION |
| | <p>Limit Switches must be adjusted to interrupt Linear Actuator movement before contact is made with a physical obstruction or stop. Failure to do so will damage both Linear Actuator and the Web Guide Amplifier.</p> <p>If there is no physical obstruction to travel, the Limit Switches may be left in their factory set positions.</p> |

1. Set the Web Guide Amplifier Power Switch to **ON** and the Mode Switch to **MANUAL**.
2. Remove the Rubber Sealing Strip from the Limit Switch Housing (See Figure 2).
3. Press the Manual Push Buttons on the front panel of the Web Guide Amplifier to extend the Linear Actuator until the maximum extension position is reached.
4. Use a screwdriver to loosen the Clamping Screw on the Extension Limit Switch (See Figure 3).
5. Depending on the type of Web Guide Amplifier being used, slide the Extension Limit Switch toward the Retraction Switch until the End of Travel LED comes on or the End of Travel Relay Contacts close (See Figure 3).
6. Tighten the Clamping Screw on the Extension Limit Switch (See Figure 3).
7. Press the Manual Push Buttons until the Linear Actuator is retracted to the desired minimum extension position.
8. Use a screwdriver to loosen the Clamping Screw on the Retraction Limit Switch (See Figure 3).
9. Depending on the type of Web Guide Amplifier being used, slide the Retraction Limit Switch toward the Extension Limit Switch until the End of Travel LED comes on or the End of Travel Relay Contacts close (See Figure 3).
10. Tighten the Clamping Screw on the Retraction Limit Switch (See Figure 3).
11. Replace the Rubber Sealing Strip in the Limit Switch Housing (See Figure 3).

Remove Rubber Sealing Strip from Limit Switch Housing.

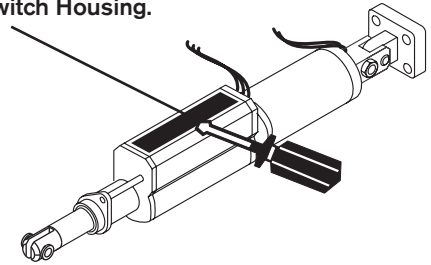


FIGURE 2

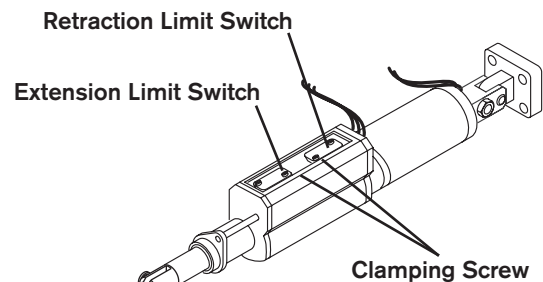


FIGURE 3

MAINTENANCE

The only maintenance required for Nexen's Linear Actuator is the application of a few drops of light machine oil on the actuating tube as necessitated by the working environment (See Figure 4).

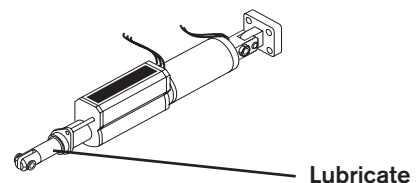


FIGURE 4

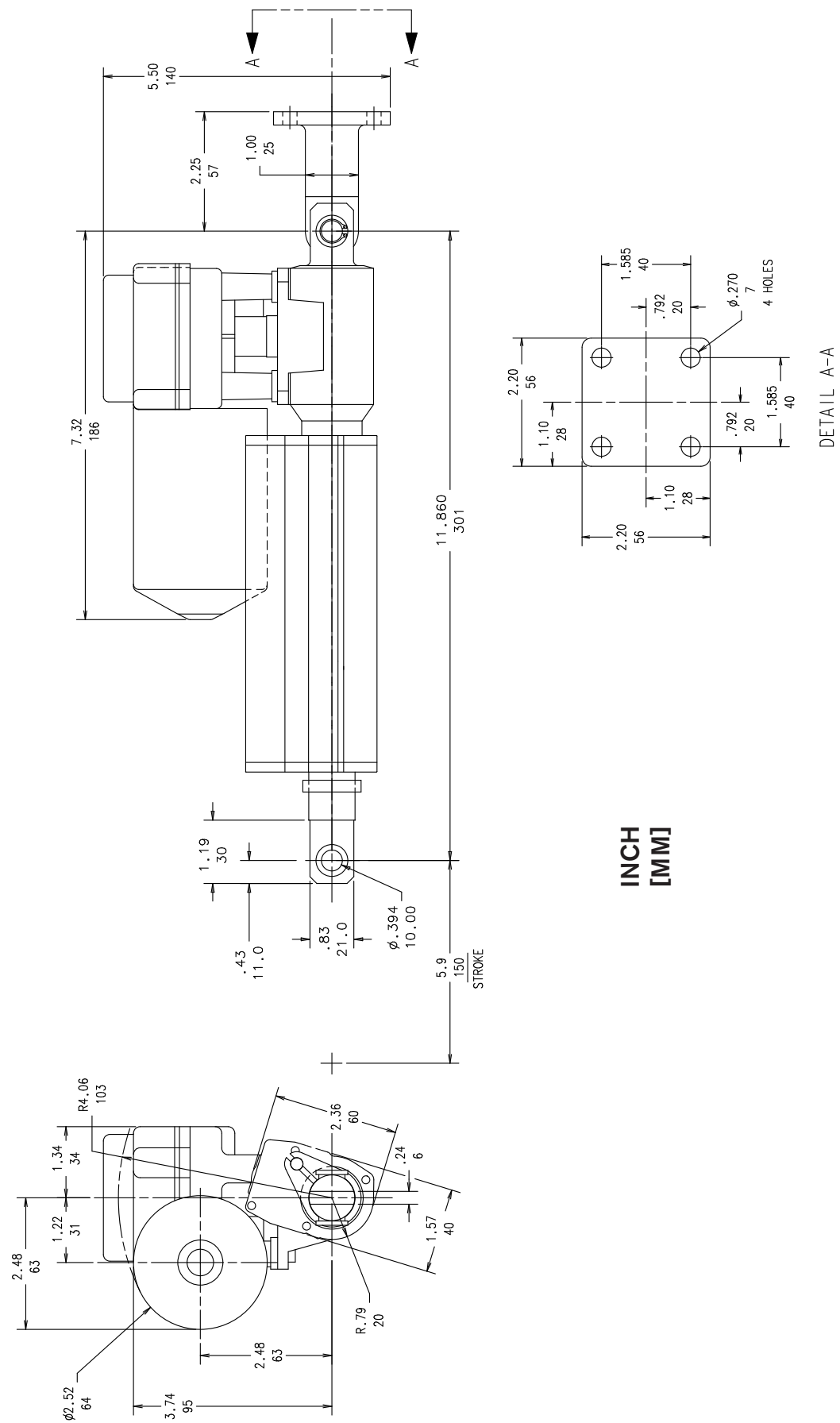


FIGURE 5

WARRANTY

Warranties

Nexen warrants that the Products will (a) be free from any defects in material or workmanship for a period of 12 months from the date of shipment, and (b) will meet and perform in accordance with the specifications in any engineering drawing specifically for the Product that is in Nexen's current product catalogue, or that is accessible at the Nexen website, or that is attached to this Quotation and that specifically refers to this Quotation by its number, subject in all cases to any limitations and exclusions set out in the drawing. NEXEN MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. This warranty applies only if: (a) the Product has been installed, used and maintained in accordance with any applicable Nexen installation or maintenance manual for the Product; (b) the alleged defect is not attributable to normal wear and tear; (c) the Product has not been altered, misused or used for purposes other than those for which it was intended; and (d) Buyer has given written notice of the alleged defect to Nexen, and delivered the allegedly defective Product to Nexen, within one year of the date of shipment.

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The exclusive remedy for the Buyer for any breach of any warranties provided in connection with this agreement will be, at the election of Nexen: (a) repair or replacement with new, serviceably used, or reconditioned parts or products; or (b) issuance of credit in the amount of the purchase price paid to Nexen by the Buyer for the Products.

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TO THE EXTENT PERMITTED BY LAW NEXEN SHALL HAVE NO LIABILITY TO BUYER OR ANY OTHER PERSON FOR INCIDENTAL DAMAGES, SPECIAL DAMAGES, CONSEQUENTIAL DAMAGES OR OTHER DAMAGES OF ANY KIND OR NATURE WHATSOEVER, WHETHER ARISING OUT OF BREACH OF WARRANTY OR OTHER BREACH OF CONTRACT, NEGLIGENCE OR OTHER TORT, OR OTHERWISE, EVEN IF NEXEN SHALL HAVE BEEN ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH POTENTIAL LOSS OR DAMAGE. For all of the purposes hereof, the term "consequential damages" shall include lost profits, penalties, delay damages, liquidated damages or other damages and liabilities which Buyer shall be obligated to pay or which Buyer may incur based upon, related to or arising out of its contracts with its customers or other third parties. In no event shall Nexen be liable for any amount of damages in excess of amounts paid by Buyer for Products or services as to which a breach of contract has been determined to exist. The parties expressly agree that the price for the Products and the services was determined in consideration of the limitation on damages set forth herein and such limitation has been specifically bargained for and constitutes an agreed allocation of risk which shall survive the determination of any court of competent jurisdiction that any remedy herein fails of its essential purpose.

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No action, regardless of form, arising out of any transaction to which these terms and conditions are applicable may be brought by the Buyer more than one year after the cause of action has accrued.

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