

API 12.562 LPC Tension Base Assembly

The LPC can be fitted with a tension base to convert the LPC for use in in-line tension applications. The LPC can be used as a tension load cell with the base fitted and can carry all or part of a suspended load. As such it is necessary that the LPC has not been considered as a fail-safe device. The LPC is a precision measuring device, not a structural member and provision must be made for the event that unforeseen loading or circumstances cause a failure.

For best results the Base must be carefully fitted.

Check the contents of the package. There should be a base with a larger central hole threaded through and with a ring of blind tapped holes near the rim. The base should be the same diameter as the load cell. There should also be high tensile bolts provided in accordance with the table below.

1. Inspect and prepare the base. The mating surface of the tension base and the load cell must be perfectly flat. Check for any small indentations that may have occurred during handling and if necessary remove any burrs by stoning flat. Ensure the blind tapped holes are clear of any debris.
2. Assemble the LPC onto the base. Wipe both mating surfaces clean and align the holes in the LPC with those in the base. Check that the bolts are clean and dry and insert the bolts supplied and tighten by hand. Use only the bolts specified as these have been selected to carry the required load.
3. Tighten the bolts in sequence to approximately 10% ~ 20% of recommended torque to seat the components. Continue to tighten the bolts in sequence to the specified torque.

<i>Model</i>	<i>Capacity</i>	<i>Bolts</i>	<i>Quantity</i>	<i>Grade</i>	<i>Torque (N-m)</i>	<i>Torque (ft-lb)</i>
LPC1T	1 tonne	1/4 inch UNF	8	9 (FX180, F911,L9)	10	7.5
LPC2.5T	2.5 tonne	1/4 inch UNF	8	9 (FX180, F911,L9)	10	7.5
LPC5T	5 tonne	1/4 inch UNF	8	9 (FX180, F911,L9)	10	7.5
LPC10T	10 tonne	3/8 inch UNF	12	9 (FX180, F911,L9)	50	37.5
LPC25T	25 tonne	3/8 inch UNF	12	9 (FX180, F911,L9)	50	37.5
LPC50T	50 tonne	1/2 inch UNF	16	9 (FX180, F911,L9)	100	75
LPC100T	100 tonne	5/8 inch UNF	16	9 (FX180, F911,L9)	250	190

Bolt Identification.

The following are head markings for common Grade 9 bolts, the bolts shipped with the tension base should be marked as one of these.

