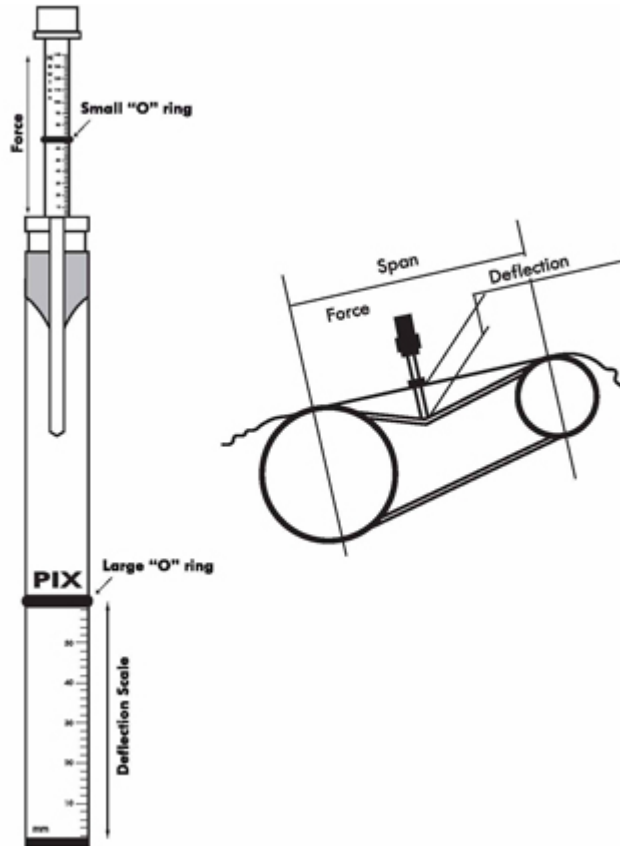


PIX MANUAL TENSION TESTER

STANDARDS:



General guidelines for tension measurement of V-belts)

Proper belt tension is vital to the operation of drive and the life of V-belts. To ensure optimum V-belt drive operation, it is recommended to check the tension in the belts by measuring the deflection force value (N) with the help of a tension measuring device.

The belt tension in most drives can be checked with adequate reliability by means of PIX V-belts Tension Tester.

Tension Measurement Procedure

Measure the span length of the belt in mm (Ref.sketch)

Tie a string / thread on the two pulleys along the length of belts and mark centre of the span on the belt.

Calculate 1.5% of the span (say 'x') for the belt length less than 1000mm & 1% of the span for belt length more than 1000mm. Adjust lower ring on the Tension Tester on mm scale to coincide \hat{x} mm with the lower side of the ring. Adjust lower side of the upper ring at 0.00 N.

Place Tension Tester at the centre of the span of the belt. Apply force with the help of Tension Tester perpendicular to the span till the lower surface of the ring touches the string.

Read the deflection force value (N) on the Newton scale by taking reading at the lower side of the upper ring.

Compare the deflection force value (N) with the values given in the following table 1 on page 38. The deflection force value (N) should lie between the minimum values given in the table.

Deflection force less than minimum recommended value in the range indicates an under tensioned drive & deflection force higher than maximum recommended value indicates an over-tensioned drive.