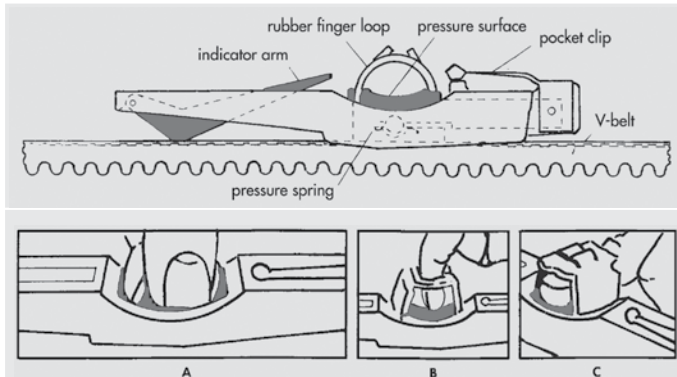


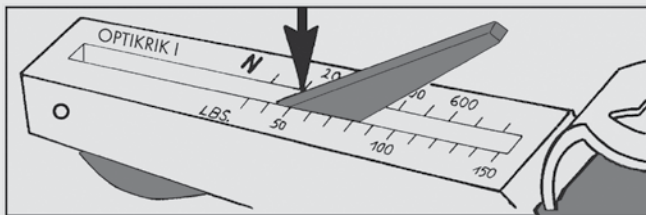


This simplified tensioning method should be used for installation and maintenance tensioning of the belt when the important technical data is unavailable and the optimum tension cannot be calculated. This method requires only knowledge of the small pulley diameter and the belt section and construction. The gauges themselves may be used to set tensions also when the technical data is known and the optimum tension can be calculated.

## TENSIONING GAUGES – INSTRUCTIONS FOR USE



1. Select the gauge appropriate to the belt section and construction being tensioned. See notes below the simplified tensioning table.
2. Figure 2 shows three ways to hold the gauges so that pressure is applied to the black pad only.
3. Position the gauge on one of the belts on the drive in the middle of an accessible span length. Take care to ensure that the gauge is only in contact with one of the belts, and that the indicator is pushed down into the gauge body. Align the gauge so that its body is parallel with the sides of the belt.
4. Push slowly and firmly on the black pad. When a CLICK is heard and/or felt, stop immediately and remove the gauge carefully to avoid disturbing the indicator arm.



5. Read the gauge to judge the tension as follows.
6. Turn the gauge sideways to ascertain the exact point where the top surface of the black indicator crosses the scale.
7. Mark this point mentally or with a thumbnail and turn the gauge to read the scale.
8. Check the tension found against the simplified tensioning table. Tighten or slacken the belt, if necessary.

### Simplified Tensioning Table

To use this table belt construction (standard wrapped or S-TX raw edge, molded cogged), and the diameter of the smallest pulley on the drive should be known. Note also that the belt tension is higher or lower depending on whether the belt is on first installation or whether it is being re-tensioned.

#### Example

- |  |        |
|--|--------|
| 1. V-Belt section                        | 3V     |
| 2. Smallest pulley diameter on drive     | 3.15"  |
| 3. Static tension – initial installation | 55 lbs |
| 4. Static tension – re-tension           | 45 lbs |

BELT SECTION	DIAMETER OF THE SMALLEST PULLEY (INCH)	STATIC TENSION (LBS)			
		STANDARD (WRAPPED)		SUPER X-POWER M=5 SUPER TX M=5	
		INSTALL TENSION	RE-TENSION	INSTALL TENSION	RE-TENSION
<b>SPZ</b>	≤ 2.80	45	35	55	45
<b>3V</b>	> 2.80 ≤ 3.65	55	45	70	55
<b>XPZ</b>	> 3.65 ≤ 5.00	80	55	90	70
<b>3VX</b>	> 5.00 *				
<b>SPA</b>	≤ 3.95	80	55	90	70
<b>XPA</b>	> 3.95 ≤ 5.50	90	70	110	90
	> 5.50 ≤ 8.00	110	90	135	100
	> 8.00 *				
<b>SPB</b>	≤ 6.30	150	110	160	120
<b>5V</b>	> 6.30 ≤ 9.00	160	120	190	150
<b>XPB</b>	> 9.00 ≤ 14.00	200	160	220	180
<b>5VX</b>	> 14.00 *				
<b>SPC</b>	≤ 9.75	220	180	310	250
<b>XPC</b>	> 9.75 ≤ 14.00	310	250	360	270
	> 14.00 ≤ 21.20	400	310	450	350
	> 21.20 *				
<b>Z/10</b>	≤ 2.20	20	15	25	20
<b>ZX/X10</b>	> 2.20 ≤ 2.80	25	20	30	25
	> 2.80 ≤ 3.95	30	25	35	30
	> 3.95 *				
<b>A/13</b>	≤ 3.15	35	25	45	35
<b>AX/X13</b>	> 3.15 ≤ 4.12	45	35	55	45
	> 4.12 ≤ 5.20	70	55	90	70
	> 5.20 *				
<b>B/17</b>	≤ 4.90	70	55	100	80
<b>BX/X17</b>	> 4.90 ≤ 6.30	90	70	110	90
	> 6.30 ≤ 8.00	110	90	135	100
	> 8.00 *				
<b>C/22</b>	≤ 8.00	160	110	180	140
<b>CX/X22</b>	> 8.00 ≤ 9.75	180	140	200	160
	> 9.75 ≤ 14.00	200	160	220	180
	> 14.00 *				

\* Tension values for these sheaves must be calculated.

#### Tension gauges:

Optikrik 0	Range: 15 – 35 lbs
Optikrik I	Range: 30 – 150 lbs
Optikrik II	Range: 100 – 300 lbs
Optikrik III	Range: 300 – 700 lbs

The static tension values shown are calculated for maximum power transmission capability per belt and should be applied only when accurate drive data is not available.

#### Calculation Limitations

Wedge belts	belt speed v = 985 to 8265 feet/min
Classical belts	belt speed v = 985 to 5905 feet/min