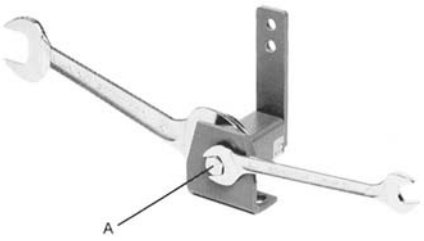
Tensioners

Mounting Instructions

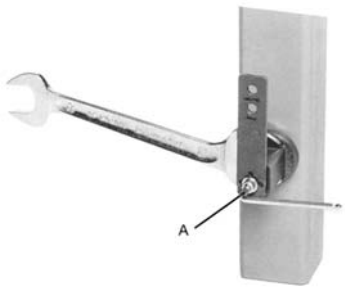
The tension pressure F is infinitely variable

Size of element	Angle of pretension 10° normal F in N	normal s in mm	hard F in N	hard s in mm	Angle of pretension 20° normal F in N	normal s in mm	hard F in N	hard s in mm	Angle of pretension 30° normal F in N	normal s in mm	hard F in N	hard s in mm
Size 0	**15**	**14**	20	10	**40**	**28**	53	20	**80**	**40**	106	30
Size 1	**25**	**17**	31	14	**65**	**34**	81	27	**135**	**50**	168	40
Size 2	**75**	**17**	93	14	**180**	**34**	225	27	**350**	**50**	437	40
Size 3	**150**	**22**	195	17	**380**	**44**	494	34	**800**	**65**	1040	50
Size 4	**290**	**30**	362	24	**730**	**60**	912	47	**1500**	**87**	1875	70
Size 5	**500**	**39**	625	31	**1300**	**78**	1625	61	**2600**	**112**	3250	90
Size 6	**600**	**43**	750	34	**1700**	**86**	2125	68	**4000**	**125**	5000	100

s = arm movement

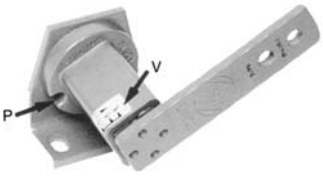


Standard Tensioners
Bolt "A" is slightly tightened, the tensioning housing held with a position and turned in the required wrench. The bolt "A" is then tightened applying to the suitable torque M_A.

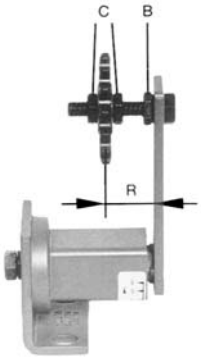


Tensioner with Front Mounting
For applications on "blind" frame structures. The adjustment of the tension is made as described for standard, but final fixation with hexagonal key front bolt.

Central Fixing
The tensioning elements are fitted centrally on a sufficiently strong, flat part of the machine. If a direct mounting is not possible, we recommend to use the support **type WS.**
Support WS on demand.



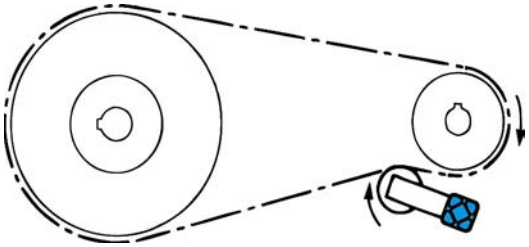
Positioning, Angle Torsion Scale
The angle torsion scale "V" on the tensioner housing always shows the pretensioning angle. The positioning notch "P" on the housing flange allows easy readjustment of the pretensioning level when a corresponding mark is set up on the support or the machine part.



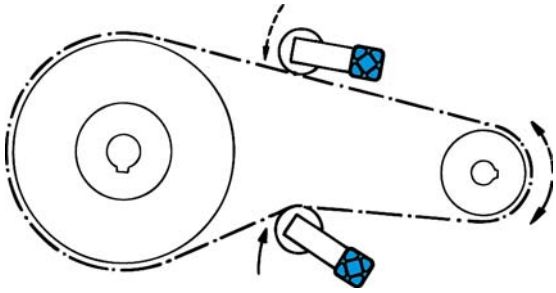
Chain Track
The chain tension sprocket, as well as the chain rider, is held between 2 nuts "C". The chain track can be set exactly by adjusting within the range R (see catalog pages).
Locknut "B" is always tight.

"Z"-Arrangement
If chain tension sprockets/chain riders or tensioning rollers are mounted on the outside of the lever, the spacing "Z" should be as little as possible. The max. tension F must not then exceed 50% = approx. 20° of pretension.

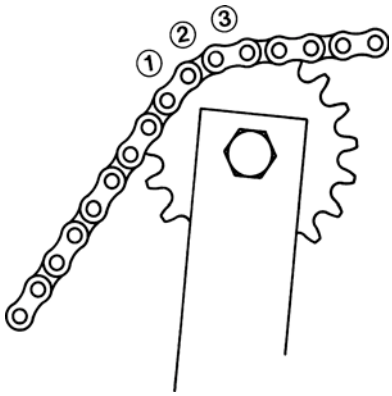
Mounting Instructions



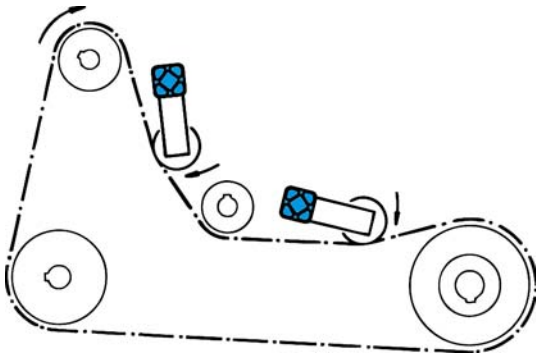
Normal Positioning
The tensioning elements are always positioned on the slack side of the chain. They should be fitted as close as possible to the big wheel and guide the chain from the outer side. **The ideal position of the tensioning arm is nearly parallel to the chain drive.**



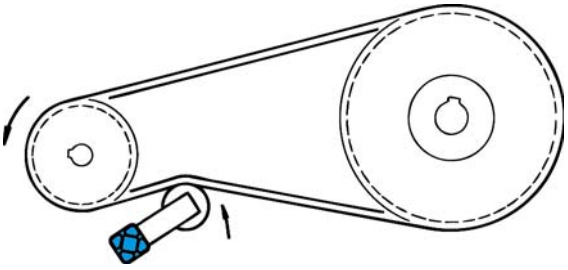
Reversible Chain Drives
The tensioning elements must be placed on both sides of the chain strand. Due to the reversible function there results a much higher pressure on the load side than on the slack side of the chain strand. We therefore advise to use oversized tensioning elements and a pretension angle of max 15°.



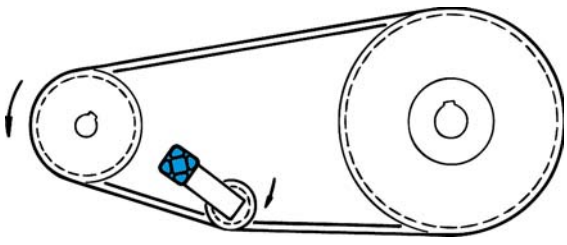
Chain Engagement
At least 3 teeth of the sprocket wheel must engage into the roller chain when tensioning the chain for the first time. The minimum number of engaged sprocket teeth between the tensioning wheel and chain strand is 3.



Mounting
The chain tensioner must be adjusted in the axial and angular direction. The tensioning arm should be nearly in parallel position to the chain and in the direction of the chain's drive. In case the chain drives are extremely long it is possible to fit several chain tensioners in order to obtain better tensioning and compensation.



V-belt Tensioner – Outer Roller
Please refer to the instructions of the belt manufacturer for further information on the belt structure when mounting our belt tensioning elements with flat rollers on the back of the belt. Inner or outer tension rollers must be positioned as far away as possible from the next V-belt pulley the belt is guided to.



V-belt Tensioner – Inner grooved Pulleys
V-belt pulleys can be mounted as inner rollers at any position on the slack side of the V-belt (For drives with long axial distances and a high level of vibration we recommend to use pulleys with deep grooves).