

Installation & Operation of Wedge & V-Belt Drives

INSTALLATION (Cont.)

TENSIONING

Place the belts around the pulley with a snug fit, then rotate the pulleys 4-5 revolutions in order to seat the belts into the grooves of the pulley. Set the appropriate tension value of 1,25 stated in the "Tensioning Forces" table opposite (use a belt tension indicator device supplied by belt manufacturers). Run the drive under load for 20-30 minutes, stop the drive, check the tension, reset the basic value (not 1,25) if necessary. On a properly designed drive for the application there should be no need for any further attention during the life of the drive.

Cogged ran edge belts should be tensioned to the 1,25 values given in the opposite table.

The setting tensions opposite are designed to cover a wide range of drives. A precise setting force for individual applications can be calculated. Please consult your belt manufacture for assistance.

For short centre distance drives where the deflection of the belt is too small to measure accurately it is recommended that both deflection and applied force be doubled.

TENSIONING PULLEYS

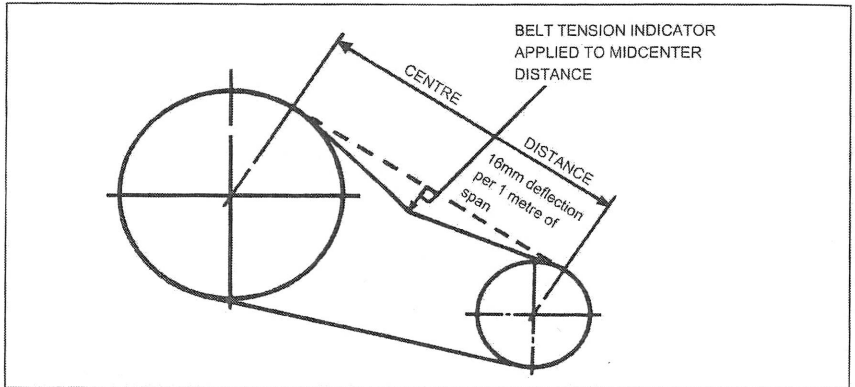
If tensioning (jockey) pulleys are to be used on Wedge-Belt drives, they must be fitted with a grooved pulley bearing on the inside of the drive, preferably on the slack side. The pulley should be positioned as close as possible to the large pulley. Flat tensioning pulleys, bearing on the outside of the drive are permissible only with V and not with Wedge-Belts. They should be positioned within one third of the center distance from the small pulley.

The tensioning pulley must be at least the same diameter as the pulley of the drive.

TENSIONING PULLEYS (Cont.)

Tensioning pulley movement can only be determined by laying out the drive to scale. It must allow for passing the belts over the outside diameter on one of the pulleys on installation and should also allow for belt stretch.

The modern V-Drive is a highly efficient method of transmitting power - but optimum performance will not be achieved unless the correct tensioning procedures are carried out.



Belt Section	Force required to deflect belt 16mm per metre of span				
	Small Pulley Diameter (mm)	Basic setting forces		1,25 x setting forces	
		Newton (N)	Kilograms (kgf)	Newton (N)	Kilograms (kgf)
SPZ	56 to 71	16	1,6	20	2,0
	75 to 90	18	1,8	22	2,2
	95 to 125	20	2,0	25	2,5
	over 125	22	2,2	28	2,8
SPA	80 to 100	22	2,2	28	2,8
	106 to 140	30	3,0	38	3,9
	150 to 200	36	3,7	45	4,6
	over 200	40	4,0	50	5,1
SPB	112 to 160	40	4,0	50	5,1
	170 to 224	50	5,1	62	6,3
	236 to 355	62	6,3	77	7,9
	over 355	65	6,6	81	8,3
SPC	224 to 250	70	7,1	87	8,9
	265 to 355	92	9,4	115	12
	over 375	115	12	144	15
8V	335 & above	150	15	190	19
Z	56 to 100	5 to 7,5	0,5 to 0,8	—	—
A (& HA banded)	80 to 140	10 to 15	1,0 to 1,5	—	—
B	125 to 200	20 to 30	2,0 to 3,1	—	—
C	200 to 400	40 to 60	4,1 to 6,1	—	—
D	355 to 600	70 to 105	7,1 to 10,7	—	—

NOTE: TROUBLE SHOOTING & MAINTENANCE

PLEASE REFER TO *Martin's* PUBLICATION ON "MAINTENANCE & TROUBLE SHOOTING".