

## Sheave and Drum Ratios

Construction*	Suggested D/d Ratio**	Minimum D/d Ratio**
6 x 7	72	42
19 x 7 or 18 x 7 Rotation Resistant	51	34
6 x 19 S	51	34
6 x 25 B Flattened Strand	45	30
6 x 27 H Flattened Strand	45	30
6 x 30G Flattened Strand	45	30
6 x 21 FW	45	30
6 x 26 WS	45	30
6 x 25 FW	39	26
6 x 31 WS	39	26
6 x 37 SFW	39	26
6 x 36 WS	35	23
6 x 43 FWS	35	23
6 x 41 WS	32	21
6 x 41 SFW	32	21
6 X 49 SWS	32	21
6 X 43 FW (2 op)	28	18
6 x 46 SFW	28	18
6 x 46 WS	28	18
8 x 19 S	41	27
8 x 25 FW	32	21
6 x 42 Tiller	21	14

\* WS - Warrington Seale  
 FWS - Filler Wire Seale  
 SFW - Seale Filler Wire  
 SWS - Seale Warrington Seale  
 S - Seale  
 FW - Filler Wire

\*\*D=tread diameter of sheave  
 d= nominal diameter of rope

To find any tread diameter from this table, the diameter for the rope construction to be used is multiplied by its nominal diameter (d). For example, the minimum sheave tread diameter for a 1/2" 6 x 21 FW rope would be 1/2" (nominal diameter) x 30 (minimum ratio) or 15".

**NOTE:** These values are for reasonable service. Other values are permitted by various standards such as ANSI, API, PCSA, HMI, CMAA, etc. Smaller values affect rope life.