

Minimum Sheave and Drum-Groove Dimensions*

		Groove Radius	Groove Radius	Groove Radius	Groove Radius
Nominal Rope Diameter	Nominal Rope Diameter	New	New	Worn	Worn
1 inches	2 mm	3 inches	4 mm	5 inches	6 mm
1/4	6.4	.135	3.43	.129	3.28
5/16	8.0	.167	4.24	.160	4.06
3/8	9.5	.201	5.11	.190	4.83
7/16	11	.234	5.94	.220	5.59
1/2	13	.271	6.88	.256	6.50
9/16	14.5	.303	7.70	.288	7.32
5/8	16	.334	8.48	.320	8.13
3/4	19	.401	10.19	.380	9.65
7/8	22	.468	11.89	.440	11.18
1	26	.543	13.79	.513	13.03
1-1/8	29	.605	15.37	.577	14.66
1-1/4	32	.669	16.99	.639	16.23
1-3/8	35	.736	18.69	.699	17.75
1-1/2	38	.803	20.40	.759	19.28
1-5/8	42	.876	22.25	.833	21.16
1-3/4	45	.939	23.85	.897	22.78
1-7/8	48	1.003	25.48	.959	24.36
2	52	1.085	27.56	1.025	26.04
2-1/8	54	1.137	28.88	1.079	27.41
2-1/4	58	1.210	30.73	1.153	29.29
2-3/8	60	1.271	32.28	1.199	30.45
2-1/2	64	1.338	33.99	1.279	32.49
2-5/8	67	1.404	35.66	1.339	34.01
2-3/4	71	1.481	37.62	1.409	35.79
2-7/8	74	1.544	39.22	1.473	37.41
3	77	1.607	40.82	1.538	39.07
3-1/8	80	1.664	42.27	1.598	40.59
3-1/4	83	1.731	43.97	1.658	42.11
3-3/8	87	1.807	45.90	1.730	43.94
3-1/2	90	1.869	47.47	1.794	45.57
3-3/4	96	1.997	50.72	1.918	48.72
4	103	2.139	54.33	2.050	52.07
4-1/4	109	2.264	57.51	2.178	55.32
4-1/2	115	2.396	60.86	2.298	58.37
4-3/4	122	2.534	64.36	2.434	61.82
5	128	2.663	67.64	2.557	64.95
5-1/4	135	2.804	71.22	2.691	68.35
5-1/2	141	2.929	74.40	2.817	71.55
5-3/4	148	3.074	78.08	2.947	74.85
6	154	3.198	81.23	3.075	78.11

* Values given are applicable to grooves in sheaves and drums; they are not generally suitable for pitch design since this may involve other factors.

Further, the dimensions do not apply to traction-type elevators; in this circumstance, drum-and sheave-groove tolerances should conform to the elevator manufacturer's specifications.

