

ANEXO A

**TABLAS Y FIGURAS DE CATÁLOGO MARTIN SPROCKET AND
GEAR (2004) PARA SELECCIÓN DE IMPULSORES DE BANDA**

[ANEXO A-1]

V-BELT DRIVES

TABLE 5 — SERVICE FACTORS

THE CORRECT SERVICE FACTOR IS DETERMINED BY:

1. The extent and frequency of peak loads.
2. The number of operating hours per year, broken down into average hours per day of continuous service.
3. The proper service category (intermittent, normal or continuous). Select the one that most closely approximates your application conditions.

INTERMITTENT SERVICE — SERVICE FACTOR 1.0 TO 1.5

- a Light Duty — Not more than 6 hours per day.
- b Never exceeding rated load.

NORMAL SERVICE — SERVICE FACTOR 1.1 TO 1.6

- a Daily service 6 to 16 hours per day.
- b Where occasional starting or peak load does not exceed 200% of the full load.

CONTINUOUS SERVICE — SERVICE FACTOR 1.2 TO 1.8

- a Where starting or peak load is in excess of 200% of the full load or where starting or peak loads and overloads occur frequently.
- b Continuous service 16 to 24 hours per day.

TYPICAL SERVICE FACTORS

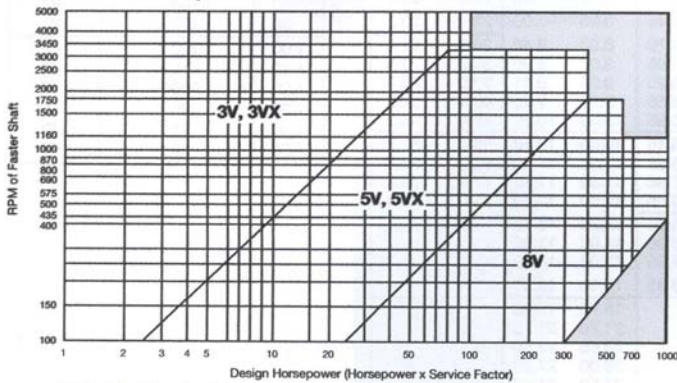
DRIVEN MACHINE TYPES	DRIVER TYPES					
Driven machine types noted below are representative samples only. Select a category most closely approximating your application from those listed below. IF IDLERS ARE USED, ADD THE FOLLOWING TO THE SERVICE FACTOR. Idler on slack side (inside) None Idler on slack side (outside) 0.1 Idler on tight side (inside) 0.1 Idler on tight side (outside) 0.2	ELECTRIC MOTORS:			ELECTRIC MOTORS:		
	INTERMITTENT SERVICE	NORMAL SERVICE	CONTINUOUS SERVICE	INTERMITTENT SERVICE	NORMAL SERVICE	CONTINUOUS SERVICE
Agitators for Liquids Blowers and Exhausters Centrifugal Pumps and Compressors Fans up to 10 HP Light Duty Conveyors	1.0	1.1	1.2	1.1	1.2	1.3
Belt Conveyors For Sand, Grain, etc. Dough Mixers Fans Over 10 HP Generators Line Shafts Laundry Machinery Machine Tools Punches-Presses-Shears Printing Machinery Positive Displacement Rotary Pumps Revolving and Vibrating Screens	1.1	1.2	1.3	1.2	1.3	1.4
Brick Machinery Bucket Elevators Exciters Piston Compressors Conveyors (Drag-Pan-Screw) Hammer Mills Paper Mill Beaters Piston Pumps Positive Displacement Blowers Pulverizers Saw Mill and Woodworking Machinery Textile Machinery	1.2	1.3	1.4	1.4	1.5	1.6
Crushers (Gyratory-Jaw-Roll) Mills (Ball-Rod-Tube) Hoists Rubber Calenders-Extruders-Mills	1.3	1.4	1.5	1.5	1.6	1.8
Chokable Equipment	2.0	2.0	2.0	2.0	2.0	2.0

FOR A GOOD COMMERCIAL DRIVE SELECTION, USE CONTINUOUS SERVICE FACTOR

[ANEXO A-2]

V-BELT DRIVE

TABLE 6 — Hi-Cap Cross Section Selection Chart



Shaded area refer to factory.

TABLE 7 — Conventional Cross Section Selection Chart

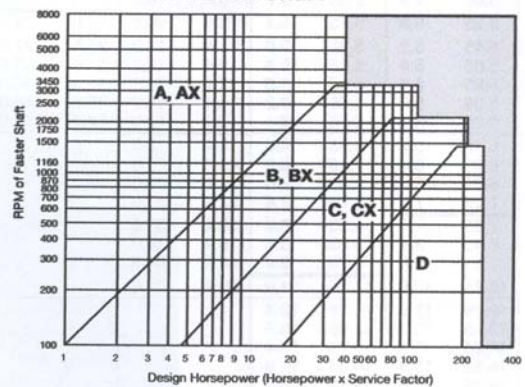


TABLE 8 — Minimum Recommended Sheave Diameters For Electric Motors

MOTOR HORSE-POWER	MOTOR RPM					
	575	695	870	1160	1750	3450
.50	2.50	2.50	2.50	—	—	—
.75	3.00	2.50	2.50	2.50	—	—
1.00	3.00	3.00	2.50	2.50	2.25	—
1.50	3.00	3.00	3.00	2.50	2.50	2.25
2.00	3.75	3.00	3.00	2.50	2.50	2.50
3.00	4.50	3.75	3.00	3.00	2.50	2.50
5.00	4.50	4.50	3.75	3.00	3.00	2.50
7.50	4.25	4.50	4.50	3.75	3.00	3.00
10.00	6.00	5.25	4.50	4.50	3.75	3.00
15.00	6.75	6.00	5.25	4.50	4.50	3.75
20.00	8.25	6.75	6.00	5.25	4.50	4.50
25.00	9.00	8.25	6.75	6.00	4.50	4.50★
★30.00	10.00	9.00	6.75	6.75	5.25	—
40.00	10.00	10.00	8.25	6.75	6.00	—
50.00	11.00	10.00	9.00	8.25	6.75	—
60.00	12.00	11.00	10.00	9.00	7.50	—
75.00	14.00	13.00	10.00	10.00	9.00	—
100.00	18.00	15.00	13.00	13.00	10.00	—
125.00	20.00	18.00	15.00	13.00	11.00	—
150.00	22.00	20.00	18.00	13.00	—	—
200.00	22.00	22.00	22.00	—	—	—
250.00	22.00	22.00	—	—	—	—
300.00	27.00	27.00	—	—	—	—

NON-STOCK DRIVE SELECTION PROCEDURE

STEP 1. Determine Design Horsepower

- A. Refer to Table 5, "Typical Service Factors." Locate the type of driven equipment and extend to the type of driver.

Example: Service factor is 1.3

- B. Check the list of additions for effect of idlers or other drive conditions under notes of Table 5 and correct the service factor, if applicable.

Example: No additional factor

- C. Multiply the horsepower requirement of your drive by the corrected service factor.

Example: $75 \times 1.3 = 97.5$ Design HP

STEP 2. Choose the Belt Cross Section

- A. Refer to Table 6 "Hi-Cap Wedge Cross Section Selection Chart", or to Table 7, "Conventional Cross Section Selection Chart." Locate the design horsepower along the horizontal axis. Read up to the intersection with the RPM of the faster shaft. The point at which the lines intersect indicates the recommended belt section. Example: For 97.5 design horsepower and 1160 RPM, 5V section belts are recommended. (The decision to use Hi-Cap Wedge belts was arbitrary, conventional belts could also have been used.)

Table 9 — Stock Sheave Diameters

[ANEXO A-3]

A		B		C		D		3V		5V		8V	
Outside Diam.	Pitch Diam.	Outside Diam.	Pitch Diam.	Outside Diam.	Pitch Diam.	Outside Diam.	Pitch Diam.	Outside Diam.	Pitch Diam.	Outside Diam.	Pitch Diam.	Outside Diam.	Pitch Diam.
3.25	3.0	3.75	3.4	5.4	5.0	12.6	12.0	2.20	2.15	4.40	4.30	12.5	12.3
3.45	3.2	3.95	3.6	5.9	5.5	13.6	13.0	2.35	2.30	4.65	4.55	13.2	13.0
3.65	3.4	4.15	3.8	6.4	6.0	14.1	13.5	2.50	2.45	4.90	4.80	14.0	13.8
3.85	3.6	4.35	4.0	7.4	7.0	14.6	14.0	2.65	2.60	5.20	5.10	15.0	14.8
4.05	3.8	4.55	4.2	7.9	7.5	15.1	14.5	2.80	2.75	5.50	5.40	16.0	15.8
4.25	4.0	4.75	4.4	8.4	8.0	15.6	15.0	3.00	2.95	5.90	5.80	17.0	16.8
4.45	4.2	4.95	4.6	8.9	8.5	16.1	15.5	3.15	3.10	6.30	6.20	18.0	17.8
4.65	4.4	5.15	4.8	9.4	9.0	16.6	16.0	3.35	3.30	6.70	6.60	19.0	18.8
4.85	4.6	5.35	5.0	9.9	9.5	18.6	18.0	3.65	3.60	7.10	7.00	20.0	19.8
5.05	4.8	5.55	5.2	10.4	10.0	20.6	20.0	4.12	4.07	7.50	7.40	21.2	21.0
5.25	5.0	5.75	5.4	10.9	10.5	22.6	22.0	4.50	4.45	8.00	7.90	22.4	22.2
5.45	5.2	5.95	5.6	11.4	11.0	27.6	27.0	4.75	4.70	8.50	8.40	24.8	24.6
5.65	5.4	6.15	5.8	12.4	12.0	33.6	33.0	5.00	4.95	9.00	8.90	30.0	29.8
5.85	5.6	6.35	6.0	13.4	13.0	40.6	40.0	5.30	5.25	9.25	9.15	35.5	35.3
6.05	5.8	6.55	6.2	14.4	14.0	48.6	48.0	5.60	5.55	9.75	9.65	40.0	39.8
6.25	6.0	6.75	6.4	16.4	16.0	58.6	58.0	6.00	5.95	10.30	10.20	44.5	44.3
6.45	6.2	6.95	6.6	18.4	18.0			6.50	6.45	10.90	10.80	53.0	52.8
6.65	6.4	7.15	6.8	20.4	20.0			6.90	6.85	11.30	11.20	63.0	62.8
6.85	6.6	7.35	7.0	24.4	24.0			8.00	7.95	11.80	11.70	71.0	70.8
7.25	7.0	7.75	7.4	27.4	27.0			10.60	10.55	12.50	12.40	95.0	94.8
7.85	7.6	8.35	8.0	30.4	30.0			14.00	13.95	13.20	13.10		
8.45	8.2	8.95	8.6	36.4	36.0			19.00	18.95	14.00	13.90		
9.25	9.0	9.75	9.4	44.4	44.0			25.00	24.95	15.00	14.90		
10.85	10.6	11.35	11.0	50.4	50.0			33.50	33.45	16.00	15.90		
12.25	12.0	12.75	12.4							18.70	18.60		
13.45	13.2	13.95	13.6							21.20	21.10		
15.25	15.0	15.75	15.4							23.60	23.50		
15.85	15.6	16.35	16.0							28.00	27.90		
18.25	18.0	18.75	18.4							31.50	31.40		
19.85	19.6	20.35	20.0							37.50	37.40		
24.85	24.6	25.35	25.0							50.00	49.90		
29.85	29.6	30.35	30.0										
37.85	37.6	38.35	38.0										

Sizes shown above bold lines are normally recommended for driver sheaves.

Table 11 — Arc Correction Factor "G"

D-d C	Approximate Arc of Contact on Small Sheave	Factor "G"
.00	180	1.00
.10	174	.99
.20	169	.97
.30	163	.96
.40	157	.94
.50	151	.93
.60	145	.91
.70	139	.89
.80	133	.87
.90	127	.85
1.00	120	.82
1.10	113	.80
1.20	106	.77
1.30	99	.73
1.40	91	.70
1.50	83	.65

V-BELT DRIVES

Table 10 — Effective Outside Belt Length and Correction Factors

A			B			C			D			3V			5V			8V		
Belt No.	Eff. Length	Corr. Factor	Belt No.	Eff. Length	Corr. Factor	Belt No.	Eff. Length	Corr. Factor	Belt No.	Eff. Length	Corr. Factor	Belt No.	Eff. Length	Corr. Factor	Belt No.	Eff. Length	Corr. Factor	Belt No.	Eff. Length	Corr. Factor
A 26	28.1	0.81	B 35	37.9	0.81	C 51	55.2	0.80	D 120	125.2	.86	3VX250	25.0	0.83	5VX 500	50.0	0.85	8V1000	100.0	0.87
A 31	33.1	0.84	B 38	40.9	0.83	C 60	64.2	0.82	D 128	133.2	0.87	3VX 265	26.5	0.84	5VX 530	53.0	0.86	8V1060	106.0	0.88
A 35	37.1	0.87	B 42	44.9	0.85	C 68	72.2	0.85	D 144	149.2	0.90	3VX 280	28.0	0.85	5VX 560	56.0	0.87	8V1120	112.0	0.88
A 38	40.1	0.88	B 46	48.9	0.87	C 75	79.2	0.87	D 158	163.2	0.92	3VX 300	30.0	0.86	5VX 600	60.0	0.88	8V1180	118.0	0.89
A 42	44.1	0.90	B 51	53.9	0.89	C 81	85.2	0.89	D 173	178.2	0.93	3VX 315	31.5	0.87	5VX 630	63.0	0.89	8V1250	125.0	0.90
A 46	48.1	0.92	B 55	57.9	0.90	C 85	89.2	0.90	D 180	185.2	0.94	3VX 335	33.5	0.88	5VX 670	67.0	0.90	8V1320	132.0	0.91
A 51	53.1	0.94	B 60	62.9	0.92	C 90	94.2	0.91	D 195	200.2	0.96	3VX 355	35.5	0.89	5VX 710	71.0	0.91	8V1400	140.0	0.92
A 55	55.1	0.96	B 68	70.9	0.95	C 96	100.2	0.92	D 210	212.7	0.96	3VX 375	37.5	0.90	5VX 750	75.0	0.92	8V1500	150.0	0.93
A 60	62.1	0.98	B 75	77.9	0.97	C 105	109.2	0.94	D 240	242.7	1.00	3VX 400	40.0	0.92	5VX 800	80.0	0.93	8V1600	160.0	0.94
A 68	70.1	1.00	B 81	83.9	0.98	C 112	116.2	0.95	D 270	272.7	1.03	3VX 425	42.5	0.93	5VX 850	85.0	0.94	8V1700	170.0	0.95
A 75	77.1	1.02	B 85	87.9	0.99	C 120	124.2	0.97	D 300	302.7	1.05	3VX 450	45.0	0.94	5VX 900	90.0	0.95	8V1800	180.0	0.95
A 80	82.1	1.04	B 90	92.9	1.00	C 128	132.2	0.98	D 330	332.7	1.07	3VX 475	47.5	0.95	5VX 950	95.0	0.96	8V1900	190.0	0.96
A 85	87.1	1.05	B 97	99.9	1.02	C 144	148.2	1.00	D 360	362.7	1.09	3VX 500	50.0	0.96	5VX 1000	100.0	0.96	8V2000	200.0	0.97
A 90	92.1	1.06	B 105	107.9	1.04	C 158	162.2	1.02	D 390	392.7	1.11	3VX 530	53.0	0.97	5VX 1060	106.0	0.97	8V2120	212.0	0.98
A 96	98.1	1.08	B 112	114.9	1.05	C 173	172.2	1.04	D 420	422.7	1.12	3VX 560	56.0	0.98	5VX 1120	112.0	0.98	8V2240	224.0	0.98
A 105	107.1	1.10	B 120	122.9	1.07	C 180	184.2	1.05	D 480	482.7	1.16	3VX 600	60.0	0.99	5VX 1180	118.0	0.99	8V2360	236.0	0.99
A 112	114.1	1.11	B 128	130.9	1.08	C 195	199.2	1.07	D 540	542.7	1.18	3VX 630	63.0	1.00	5VX 1250	125.0	1.00	8V2500	250.0	1.00
A 120	122.1	1.13	B 144	146.9	1.11	C 210	212.2	1.08	D 600	602.7	1.20	3VX 670	67.0	1.01	5VX 1320	132.0	1.01	8V2650	265.0	1.01
A 128	130.1	1.14	B 158	160.9	1.13	C 240	242.2	1.11				3VX 710	71.0	1.02	5VX 1400	140.0	1.02	8V2800	280.0	1.00
			B 173	175.9	1.15	C 270	272.2	1.14				3VX 750	75.0	1.03	5VX 1500	150.0	1.03	8V3000	300.0	1.00
			B 180	182.9	1.16	C 300	302.2	1.16				3VX 800	80.0	1.04	5VX 1600	160.0	1.04	8V3150	315.0	1.03
			B 195	197.9	1.18	C 330	332.2	1.19				3VX 850	85.0	1.05	5VX 1700	170.0	1.05	8V3350	335.0	1.04
			B 210	211.4	1.19	C 360	362.2	1.21				3VX 900	90.0	1.07	5VX 1800	180.0	1.06	8V3550	355.0	1.05
			B 240	241.4	1.22	C 390	392.2	1.23				3VX 950	95.0	1.08	5VX 1900	190.0	1.07	8V3750	375.0	1.06
			B 270	271.4	1.25	C 420	422.2	1.24				3VX 1000	100.0	1.09	5VX 2000	200.0	1.08	8V4000	400.0	1.07
			B 300	301.4	1.27							3VX 1060	106.0	1.10	5V 2120	212.0	1.08	8V4250	425.0	1.08
												3VX 1120	112.0	1.11	5V 2240	224.0	1.09	8V4500	450.0	1.09
												3VX 1180	118.0	1.12	5V 2360	236.0	1.10	8V4750	475.0	1.10
												3VX 1250	125.0	1.13	5V 2500	250.0	1.11	8V5000	500.0	1.11
												3VX 1320	132.0	1.15	5V 2650	265.0	1.12			
												3VX 1400	140.0	1.16	5V 2800	280.0	1.13			
															5V 3000	300.0	1.14			
															5V 3150	315.0	1.15			
															5V 3350	335.0	1.16			
															5V 3550	355.0	1.17			

[ANEXO A-4]

V-BELT DRIVES

RPM of Faster Shaft	Sheave Pitch Diameter (in inches)													
	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6
1160	1.29	1.55	1.81	2.06	2.32	2.57	2.82	3.06	3.31	3.55	3.80	4.04	4.28	4.51
1750	1.67	2.04	2.41	2.77	3.13	3.48	3.83	4.18	4.52	4.86	5.20	5.53	5.86	6.18
3500	2.24	2.87	3.48	4.08	4.66	5.22	5.77	6.30	6.82	7.32	7.80	8.26	8.71	9.13
50	0.11	0.13	0.14	0.16	0.17	0.19	0.20	0.21	0.23	0.24	0.26	0.27	0.29	0.30
100	0.20	0.23	0.26	0.28	0.31	0.34	0.37	0.39	0.42	0.45	0.48	0.50	0.53	0.56
500	0.71	0.83	0.95	1.07	1.20	1.31	1.43	1.55	1.67	1.79	1.90	2.02	2.14	2.25
600	0.81	0.96	1.10	1.24	1.38	1.52	1.66	1.80	1.94	2.08	2.22	2.35	2.49	2.63
700	0.91	1.08	1.24	1.40	1.57	1.73	1.89	2.05	2.21	2.36	2.52	2.68	2.83	2.99
800	1.00	1.19	1.37	1.56	1.74	1.92	2.10	2.28	2.46	2.64	2.81	2.99	3.16	3.34
900	1.09	1.29	1.50	1.70	1.91	2.11	2.31	2.51	2.71	2.90	3.10	3.29	3.49	3.68
1000	1.17	1.40	1.62	1.85	2.07	2.29	2.51	2.73	2.94	3.16	3.37	3.59	3.80	4.01
1100	1.25	1.50	1.74	1.98	2.23	2.47	2.70	2.94	3.17	3.41	3.64	3.87	4.10	4.33
1200	1.32	1.59	1.85	2.12	2.38	2.63	2.89	3.15	3.40	3.65	3.90	4.15	4.39	4.64
1300	1.39	1.68	1.96	2.24	2.52	2.80	3.07	3.35	3.62	3.89	4.15	4.42	4.68	4.94
1400	1.46	1.77	2.07	2.37	2.66	2.96	3.25	3.54	3.83	4.11	4.40	4.68	4.96	5.23
1500	1.53	1.85	2.17	2.49	2.80	3.11	3.42	3.73	4.03	4.34	4.63	4.93	5.22	5.52
1600	1.59	1.93	2.27	2.60	2.93	3.26	3.59	3.91	4.23	4.55	4.86	5.18	5.48	5.79
1700	1.65	2.01	2.36	2.71	3.06	3.41	3.75	4.09	4.43	4.76	5.09	5.41	5.74	6.05
1800	1.70	2.08	2.45	2.82	3.19	3.55	3.91	4.26	4.61	4.96	5.30	5.64	5.98	6.31
1900	1.75	2.15	2.54	2.93	3.31	3.69	4.06	4.43	4.79	5.16	5.51	5.87	6.21	6.56
2000	1.80	2.22	2.62	3.03	3.42	3.82	4.21	4.59	4.97	5.34	5.71	6.08	6.44	6.80
2100	1.85	2.28	2.70	3.12	3.53	3.94	4.35	4.74	5.14	5.53	5.91	6.29	6.66	7.03
2200	1.90	2.34	2.78	3.21	3.64	4.07	4.48	4.89	5.30	5.70	6.10	6.48	6.87	7.24
2300	1.94	2.40	2.85	3.30	3.75	4.18	4.61	5.04	5.46	5.87	6.27	6.67	7.07	7.45
2400	1.98	2.45	2.92	3.39	3.85	4.30	4.74	5.18	5.61	6.03	6.45	6.86	7.26	7.65
2600	2.05	2.56	3.06	3.55	4.03	4.51	4.98	5.44	5.89	6.33	6.77	7.19	7.61	8.02
2800	2.11	2.65	3.17	3.69	4.20	4.70	5.19	5.67	6.14	6.60	7.06	7.50	7.93	8.35
3000	2.16	2.72	3.28	3.82	4.35	4.87	5.39	5.88	6.37	6.85	7.31	7.76	8.20	8.63
3200	2.20	2.79	3.37	3.93	4.49	5.03	5.56	6.07	6.57	7.06	7.53	7.99	8.44	8.87
3400	2.23	2.84	3.45	4.03	4.60	5.16	5.71	6.23	6.75	7.24	7.72	8.18	8.63	9.06
3600	2.25	2.89	3.51	4.11	4.70	5.28	5.83	6.37	6.89	7.39	7.87	8.33	8.78	9.20
3800	2.26	2.92	3.56	4.18	4.78	5.37	5.93	6.48	7.00	7.50	7.98	8.44	8.88	9.29
4000	2.25	2.93	3.59	4.23	4.84	5.44	6.01	6.56	7.08	7.58	8.06	8.51	8.93	9.32
4200	2.24	2.94	3.61	4.26	4.89	5.49	6.06	6.61	7.13	7.63	8.09	8.52	8.93	9.30
4400	2.22	2.93	3.61	4.27	4.91	5.51	6.09	6.63	7.15	7.63	8.08	8.50	8.88	9.22
4600	2.18	2.91	3.60	4.27	4.91	5.51	6.08	6.62	7.13	7.60	8.03	8.42	8.77	9.09
4800	2.13	2.87	3.57	4.25	4.88	5.49	6.05	6.58	7.07	7.52	7.93	8.29	8.61	8.89
5000	2.07	2.82	3.53	4.20	4.84	5.44	5.99	6.51	6.98	7.40	7.78	8.11	8.39	8.62

RIM SPEEDS EXCEED 6500 FEET PER MINUTE.

[ANEXO A-4]
(CONTINUACIÓN)

V-BELT DRIVES

Sheave Pitch Diameter (in inches)						"Add-On" HP for Speed Ratio										RPM of Faster Shaft
5.8	6.0	6.2	6.4	6.6	7.0	1.02- 1.04	1.05- 1.08	1.09- 1.12	1.13- 1.18	1.19- 1.24	1.25- 1.34	1.35- 1.51	1.52- 1.99	2.00 & Up		
4.75	4.99	5.22	5.45	5.68	6.13	0.03	0.07	0.11	0.14	0.18	0.21	0.24	0.27	0.30	1160	
6.51	6.83	7.14	7.45	7.76	8.36	0.04	0.10	0.16	0.21	0.27	0.32	0.37	0.41	0.46	1750	
9.54	9.92	10.29	10.63	10.95	11.53	0.09	0.20	0.33	0.43	0.55	0.63	0.73	0.83	0.92	3500	
0.32	0.33	0.34	0.36	0.37	0.40	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	50	
0.58	0.61	0.64	0.66	0.69	0.74	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	100	
2.37	2.48	2.59	2.71	2.82	3.04	0.01	0.03	0.05	0.06	0.08	0.09	0.10	0.12	0.13	500	
2.76	2.89	3.03	3.16	3.29	3.56	0.01	0.03	0.06	0.07	0.09	0.11	0.13	0.14	0.16	600	
3.14	3.29	3.45	3.60	3.75	4.05	0.02	0.04	0.07	0.09	0.11	0.13	0.15	0.17	0.18	700	
3.51	3.68	3.85	4.02	4.19	4.53	0.02	0.05	0.07	0.10	0.13	0.15	0.17	0.19	0.21	800	
3.87	4.06	4.25	4.44	4.62	5.00	0.02	0.05	0.08	0.11	0.14	0.16	0.19	0.21	0.24	900	
4.22	4.42	4.63	4.84	5.04	5.44	0.02	0.06	0.09	0.12	0.16	0.18	0.21	0.24	0.26	1000	
4.55	4.78	5.00	5.22	5.44	5.88	0.03	0.06	0.10	0.14	0.17	0.20	0.23	0.26	0.29	1100	
4.88	5.12	5.36	5.60	5.83	6.30	0.03	0.07	0.11	0.15	0.19	0.22	0.25	0.28	0.31	1200	
5.20	5.45	5.71	5.96	6.21	6.71	0.03	0.07	0.12	0.16	0.20	0.24	0.27	0.31	0.34	1300	
5.51	5.78	6.05	6.31	6.58	7.10	0.03	0.08	0.13	0.17	0.22	0.25	0.29	0.33	0.37	1400	
5.80	6.09	6.37	6.65	6.93	7.48	0.04	0.09	0.14	0.18	0.23	0.27	0.31	0.35	0.39	1500	
6.09	6.39	6.69	6.98	7.27	7.84	0.04	0.09	0.15	0.20	0.25	0.29	0.34	0.38	0.42	1600	
6.37	6.68	6.99	7.30	7.60	8.19	0.04	0.10	0.16	0.21	0.27	0.31	0.36	0.40	0.44	1700	
6.64	6.96	7.29	7.60	7.91	8.53	0.04	0.10	0.17	0.22	0.28	0.33	0.38	0.43	0.47	1800	
6.90	7.23	7.57	7.89	8.22	8.85	0.05	0.11	0.18	0.23	0.30	0.34	0.40	0.45	0.50	1900	
7.15	7.49	7.84	8.17	8.50	9.15	0.05	0.12	0.19	0.25	0.31	0.36	0.42	0.47	0.52	2000	
7.39	7.74	8.09	8.44	8.78	9.44	0.05	0.12	0.20	0.26	0.33	0.38	0.44	0.50	0.55	2100	
7.62	7.98	8.34	8.69	9.04	9.71	0.05	0.13	0.21	0.27	0.34	0.40	0.46	0.52	0.58	2200	
7.83	8.21	8.57	8.93	9.28	9.96	0.06	0.13	0.22	0.28	0.36	0.42	0.48	0.54	0.60	2300	
8.04	8.42	8.79	9.16	9.51	10.20	0.06	0.14	0.22	0.29	0.38	0.44	0.50	0.57	0.63	2400	
8.42	8.81	9.19	9.57	9.93	10.62	0.06	0.15	0.24	0.32	0.41	0.47	0.54	0.61	0.68	2600	
8.76	9.15	9.54	9.91	10.28	10.97	0.07	0.16	0.26	0.34	0.44	0.51	0.59	0.66	0.73	2800	
9.04	9.44	9.83	10.20	10.56	11.23	0.07	0.17	0.28	0.37	0.47	0.54	0.63	0.71	0.78	3000	
9.28	9.68	10.06	10.43	10.77	11.42	0.08	0.18	0.30	0.39	0.50	0.58	0.67	0.76	0.84	3200	
9.47	9.86	10.23	10.58	10.91	11.51	0.08	0.20	0.32	0.42	0.53	0.62	0.71	0.80	0.89	3400	
9.60	9.98	10.33	10.66	10.97	11.52	0.09	0.21	0.34	0.44	0.56	0.65	0.75	0.85	0.94	3600	
9.67	10.03	10.37	10.67	10.96	11.43	0.09	0.22	0.36	0.47	0.59	0.69	0.80	0.90	0.99	3800	
9.69	10.02	10.33	10.61	10.85	11.24	0.10	0.23	0.37	0.49	0.63	0.73	0.84	0.94	1.05	4000	
9.64	9.95	10.22	10.46	10.66	10.95	0.10	0.24	0.39	0.52	0.66	0.76	0.88	0.99	1.10	4200	
9.53	9.80	10.04	10.23	10.38	10.55	0.11	0.25	0.41	0.54	0.69	0.80	0.92	1.04	1.15	4400	
9.36	9.59	9.77	9.91	10.00	10.04	0.11	0.26	0.43	0.57	0.72	0.83	0.96	1.09	1.20	4600	
9.11	9.29	9.42	9.50	9.52	9.41	0.12	0.28	0.45	0.59	0.75	0.87	1.01	1.13	1.25	4800	
8.80	8.92	8.99	8.99	8.94	8.65	0.12	0.29	0.47	0.61	0.78	0.91	1.05	1.18	1.31	5000	