

SIT rubber V-Belts drives

Power transmission is key part of an automatic machine, in terms of efficiency, reliability and durability. Only using quality components can such goals be obtained.

SIT S.p.A. belt drives, thanks to the innovative construction features, the respect of the international standards and continuous development, are the ideal, versatile and economic solution for machine design and manufacturing.

SIT, has been producing power transmission solutions for over five decades, and can offer one of the widest range of products in the market that will permit you to find the most efficient and compact solution at the best quality/price ratio.

When synchronization is not required, V-belts make an excellent cost effective, quiet and efficient means of transmitting power. However not all V-belts perform the same. Depending on your application and your objectives, some V-belts will be better at getting you closer to your end goal.

The resources of research and development which back a SIT belt are also supported by a philosophy of marketing which aims to give the customer the right belt for the drive. Apart from the benefits of:

- high power capacity belts
- reliable performance
- consistent quality
- economic benefits

Attention to details such as standardisation give further evidence of the SIT commitment to its customer.

As a result SIT can claim that its V and Wedge belts are compatible with appropriate standards published by ISO, RMA, BSI, DIN, AFNOR and others.

Research

SIT has carried on a great deal of research, in all belting with the viewpoint of the user of the system (belt and pulleys) in mind, and for that reason has not confined the work to the testing of one or two particular aspects of the problem. The user obviously desires a drive that will carry the load with the least possible attention, and one that will operate satisfactorily for a long enough period to give the lowest possible cost per unit of service. We have observed that the action of a belt under actual service conditions is the only means of measuring its value. We, therefore, built testing machines upon which belts could be run for long periods, under conditions exactly as in service, with the additional equipment necessary to measure the speed, slip, tensions, power, etc. We find that one of the vital factors, in satisfactory belt service, is freedom from frequent adjustment of tension. One of our standard tests, therefore, determines how long a belt will run without take-up adjustment. These actual service tests are supplemented by dynamometer tests and also by a large number of tests of the ability of belts to withstand flexing over various sizes of pulleys, and under various tensions and speed conditions.

Classical V-Belts

Are the most widely used V-Belts. Used more out of habit and convenience than design, these belts can transmit power at the lowest installation cost. However they occupy more space and the drives weigh more than Narrow V-Belts drive. Also, Classical V-Belts are usually less efficient than Narrow V-Belts. But their versatility and wide range of sizes and types make them an attractive option.

Narrow V-Belts

Narrow V-Belts cross section offer higher power capacity for any pulley size. This allow the use of smaller belts or fewer belts to transmit the load, an important advantage if your target is to maximize power transmission efficiency by reducing drive weight and size.

Raw-Edge V-Belt Construction vs. Envelope Construction

Unlike conventional fabric covered V-Belts, raw edge belts have no cover. Raw-edge V belts, thanks to the higher coefficient of friction, have higher load capacity and efficiency. Cogs, on the inner surface of the belts, increase air flow to enhance cooler running. They also increase flexibility allowing the belts to operate with smaller pulley than traditional envelope (wrapped) belts.

SIT has a complete offering of cogged, raw-edge belts in narrow and classical type.

Profile families

V-BELTS (ISO)	CL	CTX	CLSP	CSX
V-BELTS (RMA)			CW(E)	CW(MC)

Performance index



Rated power →

Each family of belts will be characterized by the Performance Index. This index is a fast and intuitive visual parameter to understand the performance level of the belts family. Complete technical information about belts performance are include in the Power Rating table.

Precision Matched System

Controlling the elongation is the key to matchless performance. Since all materials will elongate in performance, the secret to reliable matchless performance isn't to eliminate elongation, but to control it so it is minimal, predictable and uniform.

SIT V-belts respect the Precision Matched that, thanks to the control and the strict respect of the length tolerance, permit an installation of a set of V-Belts on the same drive avoiding any matching problem.

Tolerances obtained by the Precision Matched are tighter compared to what is prescribed by the ISO 4184.

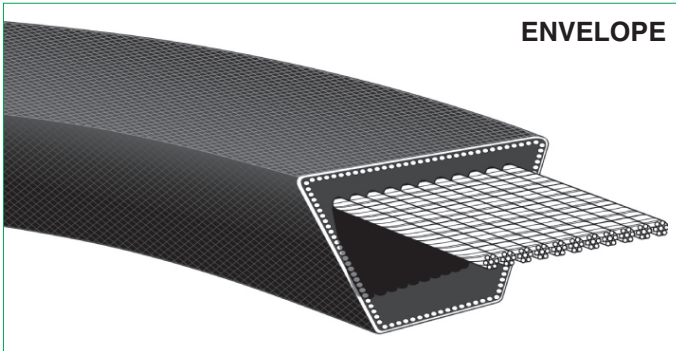


SIT EXCELITE® ES (ISO) - CL



Performance index

Z - A - B - C - D



ENVELOPE

APPLICATIONS

- Compressors
- Industrial fans
- Textile machines
- Woodworking machines
- Construction equipment
- Mills
- Mixers

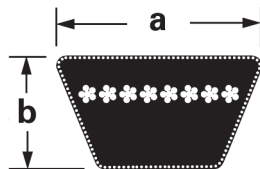
SIT EXCELITE® ES belts are manufactured in accordance with ISO 4184 and DIN 2215.

Due to the special insulation filler and the treatment of the tensile members, we are able to achieve a strong adhesion between cords and rubber base.

For this reason EXCELITE® ES belts can be used in a wide range of industrial and agricultural applications and guarantee high reliability and long lifetime.

Belt dimensions

Section	a [mm]	b [mm]
Z	10	6
A	13	8
B	16	11
C	22	14
D	32	20



KEY FEATURES & BENEFITS

- Good oil resistance
- Temperature: -40/+70 °C
- Static conductive (ISO 1813)
- Constant length (ISO specification)
- Precision Matched

BELT MATERIAL

- Tensile members: Polyester
- Compound: fiber loaded rubber
- Wrapping cover: fabric

Precision Matched

Length tolerances obtained by the Precision Matched System are tighter compared to that prescribed by ISO 4184



V-BELTS - CL

SIT have a complete stock of pulleys for all belts.

Available sizes

EXCELITE® ES - Z	
Part number	Inside length (Li) [mm]
CLZ16	410
CLZ17	430
CLZ18	460
CLZ19	480
CLZ20	510
CLZ21	530
CLZ21-1/2	545
CLZ22	560
CLZ23	585
CLZ23-3/4	605
CLZ24	610
CLZ25	635
CLZ25-1/2	650
CLZ26	660
CLZ26-1/2	670
CLZ27	685
CLZ27-1/2	700
CLZ28	710
CLZ28-1/2	725
CLZ29	735
CLZ29-1/2	750
CLZ30	760
CLZ30-1/2	775
CLZ30-3/4	780
CLZ31	790
CLZ32	815
CLZ32-1/2	825
CLZ33	840
CLZ34	865
CLZ34-1/2	875
CLZ35	890
CLZ35-1/2	900
CLZ36	915
CLZ37	945
CLZ38	965
CLZ38-1/2	975
CLZ39	990
CLZ40	1016
CLZ40-1/2	1030
CLZ41	1040
CLZ41-1/2	1050
CLZ42	1070
CLZ43	1090
CLZ44	1120
CLZ45	1145
CLZ45-1/2	1155
CLZ46	1170
CLZ47	1194
CLZ48	1225
CLZ49	1245
CLZ50	1270
CLZ51	1300
CLZ52	1320
CLZ53	1345
CLZ54	1371
CLZ55	1400
CLZ56	1422
CLZ57	1450
CLZ58	1475
CLZ59	1500
CLZ59-1/2	1515
CLZ60	1524
CLZ61	1550

EXCELITE® ES - Z	
Part number	Inside length (Li) [mm]
CLZ62	1575
CLZ64	1626
CLZ65	1651
CLZ66	1675
CLZ68	1725
CLZ69	1750
CLZ70	1775
CLZ71	1803
CLZ72	1830
CLZ76	1930
CLZ78	1975
CLZ79	2000
CLZ82	2095

EXCELITE® ES - A	
Part number	Inside length (Li) [mm]
CLA15	382
CLA16	407
CLA18	457
CLA19	480
CLA20	508
CLA21	535
CLA22	560
CLA23	587
CLA23-1/2	600
CLA24	610
CLA25	630
CLA26	660
CLA26-1/2	680
CLA27	686
CLA28	710
CLA29	730
CLA30	767
CLA31	787
CLA31-1/2	800
CLA32	813
CLA33	838
CLA34	860
CLA35	889
CLA36	914
CLA36-1/2	925
CLA37	940
CLA38	965
CLA39	992
CLA39-1/2	1000
CLA40	1016
CLA40-1/2	1030
CLA41	1041
CLA42	1067
CLA43	1100
CLA44	1120
CLA45	1143
CLA46	1168
CLA47	1200
CLA47-1/2	1210
CLA48	1220
CLA49	1250
CLA50	1270
CLA51	1300
CLA52	1320
CLA53	1346
CLA54	1372
CLA55	1400
CLA56	1422
CLA57	1450
CLA58	1475
CLA59	1500
CLA60	1525
CLA61	1550
CLA62	1575
CLA63	1600
CLA64	1625
CLA65	1650
CLA66	1676
CLA67	1700
CLA68	1725
CLA69	1750
CLA70	1775
CLA71	1800

EXCELITE® ES - A	
Part number	Inside length (Li) [mm]
CLA72	1825
CLA73	1854
CLA74	1880
CLA75	1900
CLA76	1930
CLA77	1956
CLA78	1980
CLA79	2000
CLA80	2032
CLA81	2060
CLA82	2083
CLA83	2100
CLA84	2134
CLA85	2160
CLA86	2187
CLA87	2210
CLA88	2240
CLA89	2261
CLA90	2286
CLA91	2311
CLA92	2337
CLA93	2360
CLA94	2388
CLA95	2413
CLA96	2438
CLA97	2464
CLA98	2500
CLA99	2520
CLA100	2540
CLA102	2591
CLA103	2620
CLA104	2650
CLA105	2667
CLA107	2725
CLA108	2743
CLA109	2770
CLA110	2800
CLA112	2845
CLA113	2870
CLA114	2896
CLA115	2920
CLA116	2946
CLA117	2970
CLA118	3000
CLA120	3048
CLA124	3150
CLA128	3250
CLA136	3454
CLA144	3658
CLA173	4394
CLA177	4500
CLA210	5334

EXCELITE® ES - B

Part number	Inside length (Li) [mm]
CLB23	585
CLB24	615
CLB25	630
CLB26	655
CLB27	686
CLB28	710
CLB29	737
CLB30	760
CLB31	787
CLB32	810
CLB33	840
CLB34	865
CLB35	889
CLB35-1/2	905
CLB36	917
CLB37	940
CLB38	965
CLB38-1/2	975
CLB39	990
CLB39-1/2	1000
CLB40	1016
CLB41	1040
CLB42	1067
CLB43	1090
CLB43-1/4	1100
CLB44	1120
CLB45	1150
CLB46	1175
CLB47	1200
CLB47-1/4	1205
CLB48	1225
CLB49	1250
CLB50	1270
CLB51	1300
CLB52	1320
CLB53	1350
CLB54	1372
CLB55	1400
CLB56	1422
CLB57	1450
CLB58	1473
CLB59	1500
CLB60	1525
CLB61	1550
CLB62	1575
CLB63	1600
CLB64	1625
CLB65	1650
CLB66	1676
CLB67	1700
CLB68	1725
CLB69	1750
CLB70	1775
CLB71	1800
CLB72	1829
CLB73	1850
CLB74	1880
CLB75	1900
CLB76	1930
CLB77	1950
CLB78	1981
CLB79	2000
CLB80	2032

EXCELITE® ES - B

Part number	Inside length (Li) [mm]
CLB81	2060
CLB82	2083
CLB83	2100
CLB84	2134
CLB85	2160
CLB86	2185
CLB87	2210
CLB88	2240
CLB89	2261
CLB90	2286
CLB91	2300
CLB92	2337
CLB93	2360
CLB94	2388
CLB95	2413
CLB96	2438
CLB97	2465
CLB98	2500
CLB99	2515
CLB100	2540
CLB101	2565
CLB102	2600
CLB103	2616
CLB104	2650
CLB105	2667
CLB106	2700
CLB107	2718
CLB108	2750
CLB109	2760
CLB110	2800
CLB112	2845
CLB112-1/2	2857
CLB114	2900
CLB115	2921
CLB116	2950
CLB117	2972
CLB118	3000
CLB120	3048
CLB124	3150
CLB126	3200
CLB127	3227
CLB128	3250
CLB130	3302
CLB131	3327
CLB132	3350
CLB133	3378
CLB134	3404
CLB135	3429
CLB136	3450
CLB138	3505
CLB140	3550
CLB142	3600
CLB144	3658
CLB146	3700
CLB147	3737
CLB148	3750
CLB150	3810
CLB151	3850
CLB152	3861
CLB154	3912
CLB156	3962
CLB157	3988
CLB158	4000

EXCELITE® ES - B

Part number	Inside length (Li) [mm]
CLB162	4115
CLB165	4200
CLB173	4394
CLB180	4572
CLB195	4953
CLB204	5182
CLB208	5300
CLB210	5334
CLB221	5610
CLB223	5650
CLB240	6096
CLB270	6850
CLB300	7620

EXCELITE® ES - C

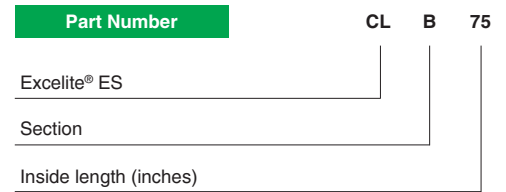
Part number	Inside length (Li) [mm]
CLC43	1090
CLC45	1150
CLC46	1168
CLC47	1200
CLC48	1215
CLC49	1250
CLC50	1270
CLC51	1295
CLC52	1320
CLC53	1350
CLC54	1375
CLC55	1400
CLC56	1425
CLC57	1450
CLC58	1475
CLC59	1500
CLC60	1524
CLC61	1550
CLC62	1574
CLC63	1600
CLC65	1650
CLC66	1676
CLC67	1700
CLC68	1727
CLC69	1750
CLC70	1778
CLC72	1829
CLC73	1854
CLC74	1880
CLC75	1900
CLC76	1930
CLC78	1981
CLC79	2000
CLC80	2032
CLC81	2062
CLC82	2080
CLC83	2108
CLC84	2134
CLC85	2159
CLC87	2210
CLC88	2240
CLC89	2261
CLC90	2286
CLC91	2300
CLC92	2337
CLC93	2360
CLC95	2413
CLC96	2438
CLC97	2464
CLC98	2500
CLC99	2525
CLC100	2540
CLC101	2560
CLC102	2591
CLC103	2615
CLC104	2642
CLC105	2667
CLC106	2692
CLC108	2750
CLC109	2770
CLC110	2800
CLC112	2845
CLC112-1/2	2858

EXCELITE® ES - C

Part number	Inside length (Li) [mm]
CLC114	2896
CLC115	2921
CLC116	2950
CLC118	3000
CLC120	3048
CLC124	3150
CLC125	3175
CLC126	3200
CLC128	3250
CLC130	3302
CLC132	3350
CLC134	3404
CLC136	3450
CLC138	3505
CLC140	3550
CLC142	3607
CLC144	3658
CLC147	3734
CLC148	3750
CLC150	3810
CLC152	3860
CLC153	3900
CLC154	3912
CLC158	4000
CLC160	4064
CLC162	4115
CLC166	4216
CLC173	4394
CLC180	4572
CLC187	4750
CLC190	4826
CLC195	4953
CLC210	5334
CLC220	5600
CLC225	5715
CLC240	6096
CLC248	6300
CLC270	6850
CLC330	8382

EXCELITE® ES - D

Part number	Inside length (Li) [mm]
CLD104	2650
CLD118	3000
CLD120	3048
CLD144	3658
CLD167	4250
CLD195	4953
CLD354	9000





SIT EXCELITE® ES - Narrow (ISO) - CLSP



Performance index

SPZ - SPA - SPB - SPC



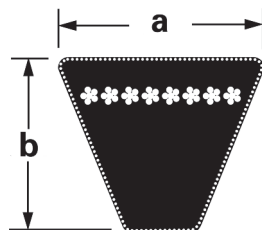
SIT EXCELITE® ES - Narrow V-Belts are manufactured in accordance with ISO 4184 and DIN 7753.

Our high performance narrow v-belts have been specially designed for heavy-duty applications to deliver up to 50% more power than classical v-belts. This enables these belts to be used in many kinds of industrial or agricultural fields such as compressor, fans, pumps and other heavy-duty equipment.

Due to the transversal polychloroplene layer and to the special treated polyester cords, higher dynamic loads, flexibility and low stretch are guaranteed.

Belt dimensions

Section	a [mm]	b [mm]
SPZ	10	8
SPA	13	10
SPB	16	13
SPC	22	18



Precision Matched

Length tolerances obtained by the Precision Matched System are tighter compared to that prescribed by ISO 4184

APPLICATIONS

EXCELITE® ES - narrow belts for compact, high power drives and high shock loading. For designing compact, heavy-duty drives where space limitation is a factor.

- Compressors
- Industrial fans
- Textile machines
- Woodworking machines
- Construction equipment
- Mills
- Mixers

KEY FEATURES & BENEFITS

- Good ozone and sunlight resistance
- Good oil resistance
- Temperature: -40/+70 °C
- Static conductive (ISO 1813)
- Constant length (ISO specification)
- Raw edge construction up to 3000 mm
- Good resistance to dust and against other external agents
- Precision Matched

BELT MATERIAL

- Tensile members: Polyester
- Compound rubber: fiber loaded rubber
- Wrapping cover: heavy-duty industrial fabric (high abrasion resistance)



V-BELTS - CLSP

SIT have a complete stock of pulleys for all belts.

Available sizes

EXCELITE® ES - SPZ

Part number	Datum length (Ld) [mm]
CLSPZ487	487
CLSPZ562	562
CLSPZ612	612
CLSPZ630	630
CLSPZ637	637
CLSPZ662	662
CLSPZ670	670
CLSPZ687	687
CLSPZ722	722
CLSPZ737	737
CLSPZ750	750
CLSPZ762	762
CLSPZ772	772
CLSPZ787	787
CLSPZ800	800
CLSPZ812	812
CLSPZ825	825
CLSPZ837	837
CLSPZ850	850
CLSPZ862	862
CLSPZ875	875
CLSPZ887	887
CLSPZ900	900
CLSPZ912	912
CLSPZ925	925
CLSPZ937	937
CLSPZ950	950
CLSPZ962	962
CLSPZ987	987
CLSPZ1000	1000
CLSPZ1012	1012
CLSPZ1024	1024
CLSPZ1037	1037
CLSPZ1047	1047
CLSPZ1060	1060
CLSPZ1077	1077
CLSPZ1087	1087
CLSPZ1112	1112
CLSPZ1120	1120
CLSPZ1137	1137
CLSPZ1162	1162
CLSPZ1180	1180
CLSPZ1187	1187
CLSPZ1202	1202
CLSPZ1212	1212
CLSPZ1237	1237
CLSPZ1250	1250
CLSPZ1262	1262
CLSPZ1287	1287
CLSPZ1312	1312
CLSPZ1320	1320
CLSPZ1337	1337
CLSPZ1347	1347
CLSPZ1362	1362
CLSPZ1387	1387
CLSPZ1400	1400
CLSPZ1412	1412
CLSPZ1437	1437
CLSPZ1462	1462
CLSPZ1487	1487
CLSPZ1500	1500
CLSPZ1512	1512
CLSPZ1537	1537

EXCELITE® ES - SPZ

Part number	Datum length (Ld) [mm]
CLSPZ1562	1562
CLSPZ1587	1587
CLSPZ1600	1600
CLSPZ1612	1612
CLSPZ1637	1637
CLSPZ1650	1650
CLSPZ1662	1662
CLSPZ1687	1687
CLSPZ1700	1700
CLSPZ1737	1737
CLSPZ1762	1762
CLSPZ1787	1787
CLSPZ1800	1800
CLSPZ1812	1812
CLSPZ1837	1837
CLSPZ1850	1850
CLSPZ1862	1862
CLSPZ1887	1887
CLSPZ1900	1900
CLSPZ1937	1937
CLSPZ1987	1987
CLSPZ2000	2000
CLSPZ2030	2030
CLSPZ2037	2037
CLSPZ2060	2060
CLSPZ2087	2087
CLSPZ2120	2120
CLSPZ2137	2137
CLSPZ2160	2160
CLSPZ2187	2187
CLSPZ2240	2240
CLSPZ2280	2280
CLSPZ2287	2287
CLSPZ2300	2300
CLSPZ2360	2360
CLSPZ2410	2410
CLSPZ2450	2450
CLSPZ2500	2500
CLSPZ2650	2650
CLSPZ2800	2800
CLSPZ3000	3000
CLSPZ3150	3150
CLSPZ3350	3350

EXCELITE® ES - SPA

Part number	Datum length (Ld) [mm]
CLSPA732	732
CLSPA757	757
CLSPA782	782
CLSPA800	800
CLSPA807	807
CLSPA832	832
CLSPA850	850
CLSPA857	857
CLSPA882	882
CLSPA900	900
CLSPA907	907
CLSPA932	932
CLSPA950	950
CLSPA957	957
CLSPA982	982
CLSPA1000	1000
CLSPA1007	1007
CLSPA1032	1032
CLSPA1060	1060
CLSPA1082	1082
CLSPA1107	1107
CLSPA1120	1120
CLSPA1132	1132
CLSPA1157	1157
CLSPA1180	1180
CLSPA1207	1207
CLSPA1232	1232
CLSPA1250	1250
CLSPA1257	1257
CLSPA1272	1272
CLSPA1282	1282
CLSPA1307	1307
CLSPA1320	1320
CLSPA1332	1332
CLSPA1357	1357
CLSPA1382	1382
CLSPA1400	1400
CLSPA1407	1407
CLSPA1432	1432
CLSPA1457	1457
CLSPA1482	1482
CLSPA1500	1500
CLSPA1507	1507
CLSPA1532	1532
CLSPA1557	1557
CLSPA1582	1582
CLSPA1600	1600
CLSPA1607	1607
CLSPA1632	1632
CLSPA1657	1657
CLSPA1682	1682
CLSPA1700	1700
CLSPA1707	1707
CLSPA1732	1732
CLSPA1757	1757
CLSPA1782	1782
CLSPA1800	1800
CLSPA1807	1807
CLSPA1832	1832
CLSPA1857	1857
CLSPA1882	1882
CLSPA1900	1900
CLSPA1907	1907

EXCELITE® ES - SPA

Part number	Datum length (Ld) [mm]
CLSPA1932	1932
CLSPA1957	1957
CLSPA1982	1982
CLSPA2000	2000
CLSPA2032	2032
CLSPA2057	2057
CLSPA2082	2082
CLSPA2120	2120
CLSPA2132	2132
CLSPA2182	2182
CLSPA2207	2207
CLSPA2232	2232
CLSPA2240	2240
CLSPA2282	2282
CLSPA2300	2300
CLSPA2307	2307
CLSPA2332	2332
CLSPA2360	2360
CLSPA2382	2382
CLSPA2432	2432
CLSPA2482	2482
CLSPA2500	2500
CLSPA2532	2532
CLSPA2582	2582
CLSPA2607	2607
CLSPA2632	2632
CLSPA2650	2650
CLSPA2682	2682
CLSPA2732	2732
CLSPA2782	2782
CLSPA2800	2800
CLSPA2832	2832
CLSPA2847	2847
CLSPA2882	2882
CLSPA2932	2932
CLSPA2982	2982
CLSPA3000	3000
CLSPA3082	3082
CLSPA3150	3150
CLSPA3182	3182
CLSPA3250	3250
CLSPA3350	3350
CLSPA3382	3382
CLSPA3450	3450
CLSPA3550	3550
CLSPA3750	3750
CLSPA3850	3850
CLSPA4000	4000
CLSPA4500	4500

EXCELITE® ES - SPB

Part number	Datum length (Ld) [mm]
CLSPB1175	1175
CLSPB1200	1200
CLSPB1250	1250
CLSPB1320	1320
CLSPB1375	1375
CLSPB1400	1400
CLSPB1450	1450
CLSPB1475	1475
CLSPB1500	1500
CLSPB1545	1545
CLSPB1575	1575
CLSPB1600	1600
CLSPB1625	1625
CLSPB1650	1650
CLSPB1675	1675
CLSPB1700	1700
CLSPB1725	1725
CLSPB1750	1750
CLSPB1775	1775
CLSPB1800	1800
CLSPB1850	1850
CLSPB1875	1875
CLSPB1900	1900
CLSPB1925	1925
CLSPB1950	1950
CLSPB1975	1975
CLSPB2000	2000
CLSPB2020	2020
CLSPB2050	2050
CLSPB2075	2075
CLSPB2100	2100
CLSPB2120	2120
CLSPB2150	2150
CLSPB2175	2175
CLSPB2180	2180
CLSPB2210	2210
CLSPB2240	2240
CLSPB2280	2280
CLSPB2300	2300
CLSPB2325	2325
CLSPB2360	2360
CLSPB2400	2400
CLSPB2425	2425
CLSPB2430	2430
CLSPB2475	2475
CLSPB2500	2500
CLSPB2530	2530
CLSPB2550	2550
CLSPB2575	2575
CLSPB2600	2600
CLSPB2650	2650
CLSPB2680	2680
CLSPB2725	2725
CLSPB2750	2750
CLSPB2775	2775
CLSPB2800	2800
CLSPB2840	2840
CLSPB2850	2850
CLSPB2900	2900
CLSPB2990	2990
CLSPB3000	3000
CLSPB3150	3150
CLSPB3170	3170

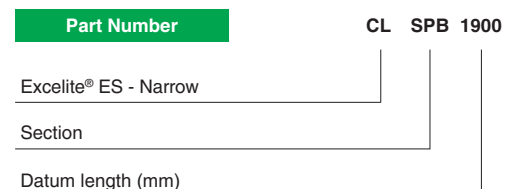
EXCELITE® ES - SPB

Part number	Datum length (Ld) [mm]
CLSPB3250	3250
CLSPB3270	3270
CLSPB3350	3350
CLSPB3450	3450
CLSPB3500	3500
CLSPB3550	3550
CLSPB3650	3650
CLSPB3750	3750
CLSPB3800	3800
CLSPB4000	4000
CLSPB4250	4250
CLSPB4500	4500
CLSPB4750	4750
CLSPB5000	5000
CLSPB5300	5300
CLSPB5600	5600
CLSPB6000	6000
CLSPB6300	6300
CLSPB6700	6700
CLSPB7100	7100
CLSPB7500	7500
CLSPB8000	8000

EXCELITE® ES - SPC

Part number	Datum length (Ld) [mm]
CLSPC2000	2000
CLSPC2120	2120
CLSPC2240	2240
CLSPC2360	2360
CLSPC2500	2500
CLSPC2650	2650
CLSPC2800	2800
CLSPC3000	3000
CLSPC3150	3150
CLSPC3350	3350
CLSPC3550	3550
CLSPC3750	3750
CLSPC4000	4000
CLSPC4250	4250
CLSPC4400	4400
CLSPC4500	4500
CLSPC4750	4750
CLSPC5000	5000
CLSPC5300	5300
CLSPC5600	5600
CLSPC6000	6000
CLSPC6300	6300
CLSPC6700	6700
CLSPC7100	7100
CLSPC7500	7500
CLSPC8000	8000
CLSPC8500	8500
CLSPC9000	9000
CLSPC9500	9500

V-BELTS - CLSP

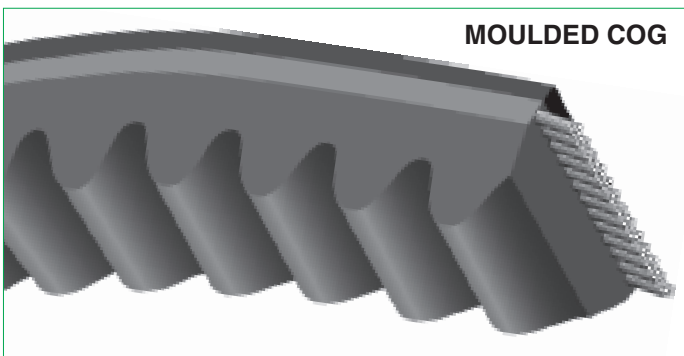


SIT TORQUE-FLEX® - Classical - CTX



Performance index

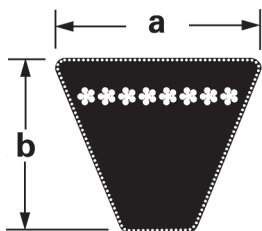
ZX - AX - BX - CX



TORQUE-FLEX® - CLASSICAL high performance belts are manufactured in accordance with European standards **ISO 4184** and **DIN 7753**.

Belt dimensions

Section	a [mm]	b [mm]
ZX	10	6
AX	13	8
BX	17	11
CX	22	14



Matchmaker® System

Belt length [mm]	Tolerance [mm]
up to 1399	+/- 2
1400 ÷ 2799	+/- 3
over 2800	+/- 5

APPLICATIONS

Designed for operating at high speeds over small diameter pulleys and short center distances. Also for use in multiple v-belt drives where high shock load and heavy-duty loads are encountered.

- Compressors
- Industrial fans
- Textile machinery
- Woodworking machinery
- Construction equipment

KEY FEATURES & BENEFITS

- Up to 40% greater power than classical wrapped belt
- Good oil resistance
- Temperature: -20/+70 °C
- Static conductive (ISO 1813)
- Matchmaker® System
- Guaranteed dimensional stability
- Higher flexibility

BELT MATERIAL

- Tensile members: High resistance polyester
- Compound: Hyprene



Available sizes

TORQUE-FLEX® - ZX		
Part number	Inside length (Li) [mm]	Datum length (Ld) [mm]
CTZX14-3/4	375	395
CTZX15-1/4	385	405
CTZX15-3/4	400	420
CTZX16-3/4	425	445
CTZX17-1/2	445	465
CTZX18	455	475
CTZX19	480	500
CTZX19-1/4	490	510
CTZX19-1/2	500	520
CTZX20	510	530
CTZX20-1/2	525	545
CTZX21	535	555
CTZX21-1/4	540	560
CTZX21-1/2	545	565
CTZX21-7/8	556	580
CTZX22	565	585
CTZX22-1/4	570	590
CTZX22-1/2	575	595
CTZX23	590	610
CTZX23-3/4	605	625
CTZX24	615	635
CTZX24-3/4	630	650
CTZX25	640	660
CTZX25-1/2	650	670
CTZX26	665	685
CTZX26-1/4	670	690
CTZX26-3/4	680	700
CTZX27	690	710
CTZX27-1/2	699	720
CTZX28	715	735
CTZX28-1/4	720	740
CTZX28-1/2	725	745
CTZX28-3/4	730	750
CTZX29	740	760
CTZX29-1/4	745	765
CTZX29-1/2	755	775
CTZX30	760	780
CTZX30-1/2	780	800
CTZX31	790	810
CTZX31-1/2	805	825
CTZX31-3/4	810	830
CTZX32	815	835
CTZX32-1/4	820	840
CTZX32-1/2	826	845
CTZX32-3/4	835	855
CTZX33	845	865
CTZX33-1/2	855	875
CTZX34-1/2	875	895
CTZX34-5/8	880	900
CTZX34-3/4	885	905
CTZX35	895	915
CTZX35-1/4	900	920
CTZX35-3/4	910	930
CTZX36	925	945
CTZX36-1/2	930	950
CTZX36-3/4	940	960
CTZX37	945	965
CTZX37-1/2	950	975
CTZX37-3/4	960	980
CTZX37-7/8	965	985
CTZX38	970	990
CTZX38-1/2	980	1000
CTZX39	990	1010
CTZX39-1/2	1005	1025

TORQUE-FLEX® - ZX		
Part number	Inside length (Li) [mm]	Datum length (Ld) [mm]
CTZX40	1020	1040
CTZX40-1/2	1030	1050
CTZX41	1040	1060
CTZX41-1/2	1055	1075
CTZX41-3/4	1060	1080
CTZX42	1065	1085
CTZX42-1/2	1080	1100
CTZX43	1090	1110
CTZX43-1/2	1105	1125
CTZX44	1115	1135
CTZX44-1/2	1130	1150
CTZX45	1140	1160
CTZX45-1/4	1150	1170
CTZX46	1175	1195
CTZX46-1/2	1185	1205
CTZX47	1200	1220
CTZX47-1/4	1205	1225
CTZX47-1/2	1210	1230
CTZX48	1225	1245
CTZX48-1/2	1235	1255
CTZX49	1250	1270
CTZX49-1/2	1260	1280
CTZX50	1275	1295
CTZX50-1/2	1290	1310
CTZX51	1300	1320
CTZX52	1320	1340
CTZX52-3/4	1340	1360
CTZX53	1350	1370
CTZX53-1/2	1365	1385
CTZX54	1375	1395
CTZX54-1/2	1390	1410
CTZX55	1400	1420
CTZX56	1430	1450
CTZX57	1450	1470
CTZX57-1/2	1465	1485
CTZX58-1/4	1475	1500
CTZX59	1500	1520
CTZX59-1/4	1505	1525
CTZX60	1530	1550
CTZX61	1550	1570
CTZX62	1580	1600
CTZX63	1600	1620
CTZX64	1630	1650
CTZX65	1650	1670
CTZX66	1680	1700
CTZX67	1700	1720
CTZX68	1730	1750
CTZX69	1750	1770
CTZX71	1800	1820
CTZX73	1850	1870
CTZX75	1900	1920
CTZX78	1975	2000
CTZX79	2000	2020
CTZX83-1/2	2120	2140
CTZX88	2240	2260
CTZX93	2360	2380
CTZX98-1/2	2500	2520

TORQUE-FLEX® - AX		
Part number	Inside length (Li) [mm]	Datum length (Ld) [mm]
CTAX16	407	440
CTAX17	435	465
CTAX18	457	490
CTAX19	480	510
CTAX20	508	540
CTAX20-1/4	515	545
CTAX21	535	570
CTAX22	560	590
CTAX22-3/4	575	605
CTAX23	590	620
CTAX23-1/2	600	630
CTAX24	610	640
CTAX25	630	660
CTAX25-1/2	650	680
CTAX26	660	690
CTAX26-1/2	670	700
CTAX27	686	720
CTAX27-1/2	700	730
CTAX28	710	740
CTAX28-1/2	725	755
CTAX29	730	760
CTAX29-1/2	750	780
CTAX30	767	790
CTAX30-1/2	775	800
CTAX30-3/4	780	810
CTAX31	790	820
CTAX31-1/2	800	830
CTAX32	813	840
CTAX32-1/2	825	850
CTAX33	841	870
CTAX33-1/2	850	880
CTAX34	860	890
CTAX34-1/4	875	905
CTAX35	889	920
CTAX35-1/2	900	930
CTAX36	914	940
CTAX36-1/4	920	950
CTAX36-1/2	930	960
CTAX37	940	970
CTAX37-1/2	950	980
CTAX38	965	990
CTAX38-1/2	975	1005
CTAX39	1000	1020
CTAX40	1016	1050
CTAX40-1/2	1030	1060
CTAX41	1041	1070
CTAX41-1/2	1050	1080
CTAX42	1060	1090
CTAX42-1/2	1075	1100
CTAX43	1100	1130
CTAX44	1120	1150
CTAX45	1143	1175
CTAX45-1/4	1150	1180
CTAX46	1168	1200
CTAX46-1/2	1180	1210
CTAX47	1200	1230
CTAX48	1220	1250
CTAX48-1/4	1225	1255
CTAX49	1250	1280
CTAX50	1270	1300
CTAX50-1/2	1290	1310
CTAX51	1300	1330
CTAX52	1320	1360
CTAX53	1350	1380

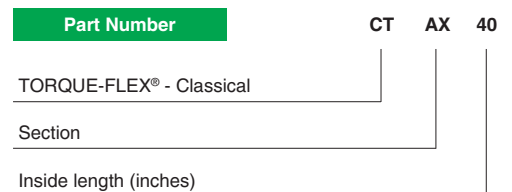
TORQUE-FLEX® - AX		
Part number	Inside length (Li) [mm]	Datum length (Ld) [mm]
CTAX54	1375	1410
CTAX55	1400	1430
CTAX56	1422	1460
CTAX57	1450	1480
CTAX58	1475	1510
CTAX59	1500	1530
CTAX60	1520	1550
CTAX61	1550	1580
CTAX62	1575	1610
CTAX63	1600	1630
CTAX63-1/2	1610	1640
CTAX64	1625	1660
CTAX65	1650	1690
CTAX66	1676	1710
CTAX67	1700	1740
CTAX67-1/2	1715	1750
CTAX68	1725	1760
CTAX69	1750	1780
CTAX70	1775	1810
CTAX71	1800	1840
CTAX72	1825	1860
CTAX73	1854	1890
CTAX74	1880	1920
CTAX75	1900	1940
CTAX76	1930	1960
CTAX77	1956	1990
CTAX78	1980	2010
CTAX79	2000	2050
CTAX80	2032	2070
CTAX81	2060	2090
CTAX82	2083	2120
CTAX83	2100	2140
CTAX83-1/2	2120	2150
CTAX84	2134	2170
CTAX84-1/2	2146	2180
CTAX85	2160	2200
CTAX86	2190	2220
CTAX87	2210	2240
CTAX88	2240	2270
CTAX89	2261	2300
CTAX90	2286	2320
CTAX91	2311	2340
CTAX92	2337	2370
CTAX93	2360	2400
CTAX94	2388	2420
CTAX95	2413	2450
CTAX96	2438	2480
CTAX97	2464	2500
CTAX98	2500	2520
CTAX99	2520	2550
CTAX100	2540	2570
CTAX101	2565	2600
CTAX102	2591	2630
CTAX103	2616	2650
CTAX104	2650	2680
CTAX105	2667	2700
CTAX107	2725	2750
CTAX108	2743	2790
CTAX110	2800	2830
CTAX112	2845	2880
CTAX113	2870	2910
CTAX114	2896	2930
CTAX116	2946	2980
CTAX118	3000	3030

TORQUE-FLEX® - BX		
Part number	Inside length (Li) [mm]	Datum length (Ld) [mm]
CTBX22-1/2	570	610
CTBX23	585	625
CTBX24	615	655
CTBX25	630	670
CTBX25-1/2	648	690
CTBX26-1/2	670	710
CTBX27	686	725
CTBX28	710	750
CTBX28-1/2	725	765
CTBX29-1/2	750	790
CTBX30	760	800
CTBX30-1/2	775	815
CTBX31	790	830
CTBX31-1/2	800	840
CTBX32	810	850
CTBX32-1/4	820	860
CTBX32-1/2	825	865
CTBX33	840	880
CTBX33-1/2	850	890
CTBX33-3/4	860	900
CTBX34-1/2	875	910
CTBX35	889	930
CTBX35-1/2	900	940
CTBX35-3/4	910	950
CTBX36-1/4	925	960
CTBX36-1/2	930	970
CTBX37	940	980
CTBX37-1/2	950	990
CTBX38	965	1000
CTBX38-1/2	975	1015
CTBX39	990	1030
CTBX39-1/2	1006	1040
CTBX40	1016	1060
CTBX40-1/2	1030	1070
CTBX41	1040	1080
CTBX41-1/2	1050	1090
CTBX42	1060	1100
CTBX42-1/2	1075	1115
CTBX43	1090	1130
CTBX43-1/4	1100	1140
CTBX44	1120	1160
CTBX45	1150	1180
CTBX46	1175	1210
CTBX46-1/2	1180	1220
CTBX47	1200	1240
CTBX48	1220	1260
CTBX49	1250	1290
CTBX50	1275	1310
CTBX51	1300	1340
CTBX52	1320	1360
CTBX52-1/2	1335	1370
CTBX53	1350	1390
CTBX53-1/2	1359	1400
CTBX54	1372	1410
CTBX55	1400	1440
CTBX56	1422	1460
CTBX57	1450	1490
CTBX58	1473	1510
CTBX59	1500	1540
CTBX60	1525	1560
CTBX61	1550	1590
CTBX62	1570	1610
CTBX63	1600	1640
CTBX63-1/2	1620	1660

TORQUE-FLEX® - BX		
Part number	Inside length (Li) [mm]	Datum length (Ld) [mm]
CTBX64	1625	1670
CTBX65	1660	1690
CTBX66	1676	1720
CTBX67	1700	1740
CTBX68	1725	1760
CTBX69	1750	1790
CTBX69-1/2	1761	1800
CTBX70	1775	1820
CTBX71	1800	1850
CTBX72	1829	1870
CTBX73	1850	1900
CTBX74	1880	1920
CTBX75	1900	1950
CTBX76	1930	1970
CTBX77	1950	2000
CTBX78	1981	2020
CTBX79	2000	2050
CTBX80	2032	2070
CTBX81	2060	2100
CTBX82	2083	2130
CTBX83	2100	2150
CTBX83-1/2	2120	2160
CTBX84	2134	2180
CTBX85	2160	2200
CTBX86	2200	2230
CTBX87	2210	2250
CTBX88	2240	2280
CTBX89	2261	2300
CTBX90	2286	2330
CTBX91	2300	2350
CTBX92	2337	2380
CTBX93	2360	2400
CTBX94	2388	2430
CTBX95	2413	2450
CTBX96	2438	2480
CTBX97	2465	2500
CTBX98	2500	2530
CTBX99	2515	2560
CTBX100	2540	2580
CTBX101	2565	2610
CTBX102	2600	2630
CTBX103	2616	2660
CTBX104	2650	2680
CTBX105	2667	2700
CTBX106	2700	2730
CTBX107	2718	2760
CTBX108	2750	2790
CTBX109	2770	2810
CTBX110	2800	2840
CTBX111	2825	2865
CTBX111-1/2	2830	2870
CTBX112	2845	2890
CTBX113	2870	2910
CTBX114	2900	2940
CTBX115	2921	2960
CTBX116	2950	2990
CTBX118	3000	3040

TORQUE-FLEX® - ZX		
Part number	Inside length (Li) [mm]	Datum length (Ld) [mm]
CTCX42	1060	1120
CTCX43	1090	1150
CTCX45	1150	1210
CTCX46-1/2	1180	1240
CTCX47	1200	1260
CTCX48	1215	1275
CTCX49	1250	1300
CTCX50	1275	1330
CTCX50-3/4	1300	1350
CTCX51	1295	1355
CTCX52	1320	1380
CTCX53	1350	1410
CTCX54	1375	1430
CTCX55	1400	1450
CTCX56	1425	1480
CTCX57	1450	1510
CTCX58	1475	1530
CTCX59	1500	1560
CTCX60	1524	1580
CTCX61	1550	1610
CTCX62	1574	1630
CTCX63	1600	1650
CTCX65	1650	1700
CTCX66	1676	1730
CTCX67	1700	1760
CTCX68	1727	1780
CTCX69	1750	1810
CTCX70	1778	1830
CTCX71	1800	1860
CTCX72	1829	1880
CTCX73	1854	1910
CTCX74-1/2	1900	1950
CTCX76	1930	1990
CTCX76-1/2	1950	2010
CTCX77	1960	2015
CTCX78	1981	2040
CTCX79	2000	2060
CTCX80	2032	2090
CTCX81	2060	2110
CTCX82	2083	2140
CTCX83	2115	2170
CTCX83-1/2	2120	2180
CTCX84	2135	2190
CTCX84-1/2	2140	2200
CTCX85	2170	2220
CTCX86	2184	2240
CTCX87	2210	2270
CTCX88	2240	2300
CTCX89	2261	2320
CTCX90	2286	2340
CTCX91	2300	2360
CTCX92	2327	2400
CTCX93	2360	2420
CTCX94	2388	2450
CTCX96	2438	2490
CTCX96-1/2	2450	2510
CTCX97	2464	2520
CTCX98	2480	2540
CTCX98-1/2	2500	2560
CTCX99	2525	2570
CTCX100	2540	2600
CTCX101	2560	2620
CTCX102	2591	2650

TORQUE-FLEX® - ZX		
Part number	Inside length (Li) [mm]	Datum length (Ld) [mm]
CTCX103	2616	2670
CTCX104	2642	2700
CTCX105	2667	2720
CTCX106	2692	2750
CTCX108	2750	2800
CTCX110	2800	2850
CTCX111	2819	2880
CTCX112	2845	2900
CTCX114	2896	2950
CTCX115-1/2	2940	3000
CTCX116	2950	3010
CTCX118	3000	3050



Power rating

TORQUE-FLEX® CLASSICAL ZX

		Rated power [kW]													
rpm - faster shaft	Pitch Ø [mm]	50	53	56	60	63	67	71	75	80	85	90	95	100	105
		100	0,05	0,06	0,06	0,07	0,08	0,08	0,09	0,10	0,10	0,11	0,12	0,13	0,14
200	0,08	0,09	0,10	0,11	0,13	0,16	0,18	0,21	0,22	0,26	0,28	0,30	0,33	0,33	
300	0,12	0,13	0,15	0,16	0,18	0,21	0,24	0,28	0,31	0,36	0,39	0,43	0,46	0,49	
400	0,16	0,18	0,20	0,22	0,24	0,27	0,31	0,36	0,40	0,45	0,50	0,55	0,59	0,64	
500	0,20	0,21	0,25	0,27	0,29	0,31	0,36	0,43	0,48	0,54	0,61	0,66	0,71	0,82	
600	0,22	0,25	0,29	0,33	0,34	0,36	0,42	0,50	0,56	0,63	0,71	0,76	0,83	1,00	
700	0,24	0,28	0,33	0,37	0,38	0,40	0,48	0,56	0,66	0,71	0,80	0,87	0,94	1,06	
800	0,27	0,31	0,37	0,41	0,43	0,45	0,53	0,63	0,76	0,79	0,88	0,97	1,05	1,12	
900	0,30	0,34	0,39	0,43	0,46	0,49	0,58	0,65	0,80	0,87	0,97	1,07	1,18	1,25	
1000	0,33	0,37	0,41	0,45	0,49	0,53	0,64	0,67	0,83	0,95	1,06	1,16	1,28	1,38	
1100	0,35	0,39	0,43	0,48	0,52	0,57	0,68	0,73	0,90	1,03	1,15	1,26	1,39	1,49	
1200	0,37	0,41	0,45	0,50	0,55	0,60	0,73	0,79	0,97	1,11	1,23	1,35	0,15	1,57	
1300	0,39	0,43	0,48	0,53	0,58	0,64	0,77	0,87	1,04	1,18	1,31	1,43	1,59	1,68	
1400	0,41	0,46	0,51	0,56	0,61	0,67	0,81	0,95	1,10	1,25	1,39	1,52	1,67	1,79	
1500	0,45	0,50	0,55	0,61	0,65	0,70	0,84	1,00	1,14	1,32	1,46	1,60	1,76	1,91	
1600	0,50	0,55	0,60	0,66	0,70	0,73	0,87	1,05	1,18	1,38	1,53	1,68	1,85	2,02	
1700	0,51	0,57	0,63	0,69	0,72	0,76	0,91	1,08	1,25	1,44	1,60	1,77	1,94	2,11	
1800	0,53	0,60	0,66	0,73	0,76	0,79	0,96	1,12	1,33	1,50	1,68	1,85	2,03	2,19	
1900	0,54	0,61	0,67	0,75	0,77	0,80	1,01	1,17	1,39	1,53	1,75	1,94	2,12	2,27	
2000	0,54	0,61	0,68	0,76	0,79	0,81	1,05	1,23	1,44	1,57	1,81	2,02	2,20	2,35	
2100	0,56	0,63	0,71	0,80	0,82	0,85	1,08	1,27	1,49	1,66	1,87	2,09	2,28	2,45	
2200	0,58	0,66	0,74	8,30	0,86	0,88	1,10	1,31	1,54	1,74	1,93	2,15	2,35	2,54	
2300	0,59	0,68	0,75	8,40	0,87	0,91	1,11	1,35	1,56	1,79	2,00	2,22	2,41	2,62	
2400	0,61	0,69	0,77	0,85	0,89	0,93	1,12	1,39	1,57	1,84	2,06	2,28	2,46	2,70	
2500	0,63	0,72	0,81	0,90	0,93	0,96	1,17	1,42	1,63	1,89	2,12	2,32	2,54	2,78	
2600	0,66	0,75	0,85	0,95	0,96	0,98	1,23	1,46	1,70	1,95	2,18	2,35	2,62	2,85	
2700	0,66	0,75	0,85	0,95	0,97	0,99	1,25	1,50	1,75	1,99	2,23	2,43	2,68	2,92	
2800	0,67	0,75	0,85	0,95	0,98	1,01	1,27	1,54	1,79	2,04	2,28	2,51	2,74	2,99	
2900	0,67	0,75	0,85	0,96	0,99	1,03	1,30	1,56	1,83	2,08	2,32	2,56	2,81	3,05	
3000	0,67	0,75	0,85	0,96	1,01	1,06	1,33	1,57	1,87	2,12	2,36	2,62	2,87	3,11	
3100	0,67	0,75	0,83	0,91	0,99	1,07	1,34	1,61	1,91	2,17	2,41	2,67	2,92	3,16	
3200	0,67	0,75	0,83	0,91	1,00	1,09	1,36	1,64	1,95	2,21	2,47	2,71	2,97	3,21	
3300	0,66	0,75	0,83	0,91	1,00	1,09	1,38	1,67	1,96	2,22	2,50	2,75	3,01	3,26	
3400	0,66	0,75	0,83	0,91	1,01	1,10	1,40	1,70	1,98	2,24	2,53	2,80	3,06	3,31	
3500	0,64	0,73	0,82	0,91	1,01	1,11	1,42	1,72	2,07	2,30	2,55	2,86	3,10	3,33	
3600	0,62	0,71	0,81	0,91	1,02	1,12	1,44	1,74	2,16	2,32	2,57	2,92	3,14	3,36	
3700	0,60	0,70	0,81	0,91	1,02	1,13	1,44	1,76	2,16	2,33	2,62	2,93	3,14	3,59	
3800	0,56	0,68	0,80	0,91	1,03	1,14	1,45	1,79	2,16	2,35	2,68	2,95	3,14	3,59	
3900	0,56	0,68	0,80	0,91	1,03	1,15	1,47	1,81	2,16	2,39	2,70	2,96	3,20	3,59	
4000	0,56	0,68	0,80	0,91	1,04	1,16	1,50	1,82	2,16	2,43	2,72	2,97	3,27	3,70	
4100	0,56	0,68	0,80	0,91	1,04	1,16	1,51	1,83	2,16	2,45	2,74	3,00	3,29	3,70	
4200	0,56	0,68	0,80	0,91	1,04	1,16	1,52	1,84	2,16	2,47	2,76	3,03	3,31	3,57	
4300	0,55	0,68	0,81	0,91	1,04	1,16	1,52	1,85	2,16	2,49	2,78	3,05	3,31	3,57	
4400	0,53	0,65	0,78	0,91	1,04	1,16	1,52	1,86	2,18	2,50	2,79	3,07	3,32	3,47	
4500	0,53	0,65	0,77	0,88	1,02	1,16	1,52	1,86	2,18	2,50	2,81	3,07	3,33	3,47	
4600	0,53	0,63	0,73	0,83	1,00	1,16	1,53	1,87	2,18	2,51	2,82	3,08	3,34	3,47	
4700	0,52	0,62	0,73	0,83	1,00	1,16	1,53	1,87	2,18	2,51	2,81	3,08	3,34	3,47	
4800	0,50	0,61	0,72	0,83	1,00	1,16	1,53	1,87	2,18	2,52	2,80	3,08	3,34	3,47	
4900	0,50	0,60	0,71	0,82	0,99	1,16	1,53	1,87	2,18	2,52	2,80	3,08	3,34	3,47	
5000	0,50	0,60	0,71	0,82	0,99	1,16	1,53	1,87	2,18	2,52	2,80	3,08	3,34	3,47	

Additional power based on drive ratio

TORQUE-FLEX® CLASSICAL ZX

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
200		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
300		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,01	0,01
400		0,00	0,00	0,00	0,00	0,00	0,00	0,01	0,01	0,01	0,01
500		0,00	0,00	0,00	0,00	0,00	0,01	0,01	0,01	0,01	0,01
600		0,00	0,00	0,00	0,00	0,01	0,01	0,01	0,01	0,02	0,02
700		0,00	0,00	0,00	0,01	0,01	0,01	0,01	0,02	0,02	0,02
800		0,00	0,00	0,00	0,01	0,01	0,01	0,02	0,02	0,02	0,03
900		0,00	0,00	0,00	0,01	0,01	0,02	0,02	0,02	0,03	0,03
1000		0,00	0,00	0,00	0,01	0,01	0,02	0,02	0,03	0,03	0,03
1100		0,00	0,00	0,00	0,01	0,01	0,02	0,02	0,03	0,03	0,04
1200		0,00	0,00	0,01	0,01	0,02	0,02	0,03	0,03	0,04	0,04
1300		0,00	0,00	0,01	0,01	0,02	0,02	0,03	0,03	0,04	0,04
1400		0,00	0,00	0,01	0,01	0,02	0,03	0,03	0,04	0,04	0,05
1500		0,00	0,00	0,01	0,02	0,02	0,03	0,03	0,04	0,05	0,05
1600		0,00	0,00	0,01	0,02	0,02	0,03	0,04	0,04	0,05	0,06
1700		0,00	0,00	0,01	0,02	0,03	0,03	0,04	0,05	0,05	0,06
1800		0,00	0,00	0,01	0,02	0,03	0,04	0,04	0,05	0,06	0,06
1900		0,00	0,00	0,01	0,02	0,03	0,04	0,05	0,05	0,06	0,07
2000		0,00	0,00	0,01	0,02	0,03	0,04	0,05	0,06	0,06	0,07
2100		0,00	0,00	0,01	0,02	0,03	0,04	0,05	0,06	0,07	0,08
2200		0,00	0,00	0,01	0,03	0,03	0,05	0,05	0,06	0,07	0,08
2300		0,00	0,00	0,02	0,03	0,04	0,05	0,06	0,07	0,07	0,08
2400		0,00	0,00	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,09
2500		0,00	0,00	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,09
2600		0,00	0,00	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,09
2700		0,00	0,00	0,02	0,03	0,04	0,06	0,07	0,08	0,09	0,10
2800		0,00	0,01	0,02	0,03	0,05	0,06	0,07	0,08	0,09	0,10
2900		0,00	0,01	0,02	0,03	0,05	0,06	0,07	0,08	0,09	0,11
3000		0,00	0,01	0,02	0,04	0,05	0,06	0,07	0,09	0,10	0,11
3100		0,00	0,01	0,02	0,04	0,05	0,07	0,08	0,09	0,10	0,11
3200		0,00	0,01	0,02	0,04	0,05	0,07	0,08	0,09	0,11	0,12
3300		0,00	0,01	0,02	0,04	0,05	0,07	0,08	0,09	0,11	0,12
3400		0,00	0,01	0,03	0,04	0,06	0,07	0,09	0,10	0,11	0,12
3500		0,00	0,01	0,03	0,04	0,06	0,08	0,09	0,10	0,12	0,13
3600		0,00	0,01	0,03	0,04	0,06	0,08	0,09	0,10	0,12	0,13
3700		0,00	0,01	0,03	0,05	0,06	0,08	0,09	0,11	0,12	0,14
3800		0,00	0,01	0,03	0,05	0,06	0,08	0,10	0,11	0,13	0,14
3900		0,00	0,01	0,03	0,05	0,06	0,08	0,10	0,11	0,13	0,14
4000		0,00	0,01	0,03	0,05	0,07	0,09	0,10	0,11	0,13	0,15
4100		0,00	0,01	0,03	0,05	0,07	0,09	0,10	0,12	0,14	0,15
4200		0,00	0,01	0,03	0,05	0,07	0,09	0,11	0,12	0,14	0,16
4300		0,00	0,01	0,03	0,05	0,07	0,09	0,11	0,12	0,14	0,16
4400		0,00	0,01	0,03	0,06	0,07	0,10	0,11	0,13	0,15	0,16
4500		0,00	0,01	0,04	0,06	0,08	0,10	0,11	0,13	0,15	0,17
4600		0,00	0,01	0,04	0,06	0,08	0,10	0,12	0,13	0,15	0,17
4700		0,00	0,01	0,04	0,06	0,08	0,10	0,12	0,14	0,16	0,17
4800		0,00	0,01	0,04	0,06	0,08	0,10	0,12	0,14	0,16	0,18
4900		0,00	0,01	0,04	0,06	0,08	0,11	0,12	0,14	0,16	0,18
5000		0,00	0,01	0,04	0,06	0,08	0,11	0,13	0,14	0,17	0,19

Additional power based on drive ratio

TORQUE-FLEX® CLASSICAL AX

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,00	0,00	0,01	0,01	0,01	0,02	0,02	0,02	0,02
200		0,00	0,00	0,01	0,02	0,02	0,03	0,04	0,04	0,05	0,05
300		0,00	0,00	0,01	0,03	0,04	0,05	0,06	0,07	0,07	0,08
400		0,00	0,00	0,02	0,04	0,05	0,07	0,08	0,09	0,10	0,10
500		0,00	0,01	0,03	0,05	0,07	0,08	0,10	0,11	0,12	0,13
600		0,00	0,01	0,03	0,06	0,08	0,10	0,12	0,14	0,15	0,16
700		0,00	0,01	0,04	0,07	0,10	0,12	0,14	0,16	0,17	0,19
800		0,00	0,01	0,04	0,08	0,11	0,14	0,16	0,18	0,20	0,21
900		0,00	0,02	0,05	0,09	0,13	0,15	0,18	0,21	0,22	0,24
1000		0,00	0,02	0,06	0,10	0,14	0,17	0,20	0,23	0,25	0,27
1100		0,00	0,02	0,06	0,11	0,16	0,19	0,22	0,25	0,27	0,30
1200		0,00	0,02	0,07	0,12	0,17	0,21	0,24	0,28	0,30	0,32
1300		0,00	0,02	0,08	0,13	0,19	0,23	0,26	0,30	0,33	0,35
1400		0,00	0,03	0,08	0,15	0,20	0,24	0,29	0,32	0,35	0,38
1500		0,00	0,03	0,09	0,16	0,21	0,26	0,31	0,35	0,38	0,41
1600		0,00	0,03	0,09	0,17	0,23	0,28	0,33	0,37	0,40	0,43
1700		0,00	0,03	0,10	0,18	0,24	0,30	0,35	0,39	0,43	0,46
1800		0,00	0,04	0,11	0,19	0,26	0,31	0,37	0,42	0,45	0,49
1900		0,00	0,04	0,11	0,20	0,27	0,33	0,39	0,44	0,48	0,51
2000		0,00	0,04	0,12	0,21	0,29	0,35	0,41	0,46	0,50	0,54
2100		0,00	0,04	0,12	0,22	0,30	0,37	0,43	0,49	0,53	0,57
2200		0,00	0,04	0,13	0,23	0,32	0,38	0,45	0,51	0,55	0,60
2300		0,00	0,05	0,14	0,24	0,33	0,40	0,47	0,53	0,58	0,62
2400		0,00	0,05	0,14	0,25	0,35	0,42	0,49	0,56	0,61	0,65
2500		0,00	0,05	0,15	0,26	0,36	0,44	0,51	0,58	0,63	0,68
2600		0,00	0,05	0,16	0,27	0,38	0,46	0,53	0,60	0,66	0,71
2700		0,00	0,05	0,16	0,29	0,39	0,47	0,56	0,63	0,68	0,73
2800		0,00	0,06	0,17	0,30	0,40	0,49	0,58	0,65	0,71	0,76
2900		0,00	0,06	0,17	0,31	0,42	0,51	0,60	0,67	0,73	0,79
3000		0,00	0,06	0,18	0,32	0,43	0,53	0,62	0,70	0,76	0,82
3100		0,00	0,07	0,19	0,33	0,45	0,54	0,64	0,72	0,78	0,84
3200		0,00	0,07	0,19	0,34	0,46	0,56	0,66	0,74	0,81	0,87
3300		0,00	0,07	0,20	0,35	0,48	0,58	0,68	0,77	0,83	0,90
3400		0,00	0,07	0,21	0,36	0,49	0,60	0,70	0,79	0,86	0,92
3500		0,00	0,07	0,21	0,37	0,51	0,62	0,72	0,81	0,89	0,95
3600		0,00	0,08	0,22	0,38	0,52	0,63	0,74	0,84	0,91	0,98
3700		0,00	0,08	0,22	0,39	0,54	0,65	0,75	0,86	0,94	1,01
3800		0,00	0,08	0,23	0,40	0,55	0,67	0,78	0,88	0,96	1,03
3900		0,00	0,08	0,24	0,41	0,57	0,69	0,80	0,91	0,99	1,06
4000		0,00	0,09	0,24	0,42	0,58	0,70	0,83	0,93	1,01	1,09
4100		0,00	0,09	0,25	0,44	0,59	0,72	0,85	0,95	1,04	1,12
4200		0,00	0,09	0,25	0,45	0,61	0,74	0,87	0,98	1,06	1,14
4300		0,00	0,09	0,26	0,46	0,62	0,76	0,89	1,00	1,09	1,17
4400		0,00	0,09	0,27	0,47	0,64	0,77	0,91	1,02	1,11	1,20
4500		0,00	0,10	0,27	0,48	0,65	0,79	0,93	1,05	1,14	1,23
4600		0,00	0,10	0,28	0,49	0,67	0,81	0,95	1,07	1,17	1,25
4700		0,00	0,10	0,29	0,5	0,68	0,83	0,97	1,09	1,19	1,28
4800		0,00	0,10	0,29	0,51	0,70	0,85	0,99	1,12	1,22	1,31
4900		0,00	0,11	0,30	0,52	0,71	0,86	1,01	1,14	1,24	1,33
5000		0,00	0,11	0,30	0,53	0,73	0,88	1,03	1,16	1,27	1,36

Additional power based on drive ratio

TORQUE-FLEX® CLASSICAL BX

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,00	0,01	0,02	0,3	0,03	0,04	0,04	0,05	0,05
200		0,00	0,00	0,02	0,04	0,06	0,07	0,08	0,09	0,10	0,11
300		0,00	0,01	0,03	0,06	0,9	0,11	0,13	0,14	0,16	0,17
400		0,00	0,01	0,05	0,09	0,12	0,14	0,17	0,19	0,21	0,23
500		0,00	0,02	0,06	0,11	0,15	0,18	0,21	0,24	0,26	0,28
600		0,00	0,02	0,07	0,13	0,18	0,22	0,26	0,29	0,32	0,34
700		0,00	0,03	0,09	0,15	0,21	0,26	0,30	0,34	0,37	0,40
800		0,00	0,03	0,10	0,18	0,24	0,29	0,35	0,39	0,42	0,46
900		0,00	0,04	0,11	0,20	0,27	0,33	0,39	0,44	0,48	0,51
1000		0,00	0,04	0,13	0,22	0,30	0,37	0,43	0,49	0,53	0,57
1100		0,00	0,05	0,14	0,24	0,33	0,41	0,48	0,54	0,59	0,63
1200		0,00	0,05	0,15	0,27	0,37	0,44	0,52	0,59	0,64	0,69
1300		0,00	0,06	0,16	0,29	0,40	0,48	0,56	0,64	0,69	0,74
1400		0,00	0,06	0,18	0,31	0,43	0,52	0,61	0,49	0,75	0,80
1500		0,00	0,07	0,19	0,33	0,46	0,56	0,65	0,73	0,80	0,86
1600		0,00	0,07	0,20	0,36	0,49	0,59	0,70	0,78	0,85	0,92
1700		0,00	0,08	0,22	0,38	0,52	0,63	0,74	0,83	0,91	0,98
1800		0,00	0,08	0,23	0,40	0,55	0,67	0,78	0,88	0,96	1,03
1900		0,00	0,09	0,24	0,43	0,58	0,71	0,83	0,93	1,02	1,09
2000		0,00	0,09	0,26	0,45	0,61	0,74	0,87	0,98	1,07	1,15
2100		0,00	0,10	0,27	0,47	0,64	0,78	0,91	1,03	1,12	1,21
2200		0,00	0,10	0,28	0,49	0,67	0,82	0,96	1,08	1,18	1,26
2300		0,00	0,10	0,30	0,52	0,70	0,85	1,00	1,13	1,23	1,32
2400		0,00	0,11	0,31	0,54	0,74	0,89	1,05	1,18	1,28	1,38
2500		0,00	0,11	0,32	0,56	0,77	0,93	1,09	1,23	1,34	1,44
2600		0,00	0,12	0,33	0,58	0,80	0,97	1,13	1,28	1,39	1,49
2700		0,00	0,12	0,35	0,61	0,83	1,00	1,18	1,33	1,44	1,55
2800		0,00	0,13	0,36	0,63	0,86	1,04	1,22	1,38	1,50	1,61
2900		0,00	0,13	0,37	0,65	0,89	1,08	1,26	1,42	1,55	1,67
3000		0,00	0,14	0,39	0,67	0,92	1,12	1,31	1,47	1,61	1,72
3100		0,00	0,14	0,40	0,70	0,95	1,15	1,35	1,52	1,66	1,78
3200		0,00	0,15	0,41	0,72	0,98	1,19	1,40	1,57	1,71	1,84
3300		0,00	0,15	0,43	0,74	1,01	1,23	1,44	1,62	1,77	1,90
3400		0,00	0,16	0,44	0,77	1,04	1,27	1,48	1,67	1,82	1,96
3500		0,00	0,16	0,45	0,79	1,07	1,30	1,53	1,72	1,87	2,01
3600		0,00	0,17	0,46	0,81	1,11	1,34	1,57	1,77	1,93	2,07
3700		0,00	0,17	0,48	0,83	1,14	1,38	1,62	1,82	1,98	2,13
3800		0,00	0,18	0,49	0,86	1,17	1,42	1,66	1,87	2,04	2,19
3900		0,00	0,18	0,50	0,88	1,20	1,45	1,70	1,92	2,09	2,24
4000		0,00	0,19	0,52	0,90	1,23	1,49	1,75	1,97	2,14	2,30
4100		0,00	0,19	0,53	0,92	1,26	1,53	1,79	2,02	2,20	2,36
4200		0,00	0,20	0,54	0,95	1,29	1,57	1,83	2,07	2,25	2,42
4300		0,00	0,20	0,56	0,97	1,32	1,60	1,88	2,11	2,30	2,47
4400		0,00	0,20	0,57	0,99	1,35	1,64	1,92	2,16	2,36	2,53
4500		0,00	0,21	0,58	1,01	1,38	1,68	1,97	2,21	2,41	2,59
4600		0,00	0,21	0,60	1,04	1,41	1,71	2,01	2,26	2,46	2,65
4700		0,00	0,22	0,61	1,06	1,45	1,75	2,05	2,31	2,52	2,70
4800		0,00	0,22	0,62	1,08	1,48	1,79	2,10	2,36	2,57	2,76
4900		0,00	0,23	0,63	1,11	1,51	1,83	2,14	2,41	2,63	2,82
5000		0,00	0,23	0,65	1,13	1,54	1,86	2,18	2,46	2,68	2,88

Power rating

TORQUE-FLEX® CLASSICAL CX

		Rated power [kW]																	
rpm - faster shaft	Pitch Ø [mm]	160	170	180	190	200	212	224	236	250	265	280	315	355	400	425	450	500	560
		100	0,92	1,02	1,13	1,23	1,33	1,45	1,57	1,69	1,83	1,98	2,13	2,47	2,85	3,29	3,52	3,76	4,23
200	1,67	1,86	2,05	2,25	2,44	2,67	2,89	3,12	3,38	3,66	3,94	4,58	5,31	6,12	6,57	7,01	7,89	8,93	
300	2,34	2,62	2,90	3,18	3,46	3,89	4,12	4,44	4,82	5,23	5,63	6,56	7,60	8,76	9,40	10,03	11,29	12,77	
400	2,98	3,34	3,70	4,06	4,42	4,85	5,27	5,70	6,19	6,71	7,23	8,42	9,77	11,26	12,08	12,89	14,48	16,36	
500	3,57	4,02	4,46	4,90	5,34	5,86	6,38	6,89	7,49	8,12	8,75	10,21	11,84	13,63	14,62	15,58	17,49	19,71	
600	4,14	4,66	5,18	5,70	6,21	6,83	7,44	8,04	8,74	9,48	10,22	11,91	13,80	15,88	17,01	18,13	20,30	22,81	
700	4,68	5,28	5,88	6,47	7,06	7,76	8,45	9,14	9,94	10,78	11,62	13,54	15,68	18,01	19,27	20,51	22,91	25,65	
800	5,20	5,87	6,54	7,20	7,86	8,65	9,43	10,20	11,09	12,03	12,96	15,09	17,45	20,01	21,38	22,73	25,30	28,20	
900	5,69	6,44	7,18	7,91	8,64	9,51	10,36	11,21	12,19	13,22	14,24	16,56	19,12	21,88	23,34	24,77	27,47	30,44	
1000	6,16	6,98	7,79	8,59	9,39	10,33	11,26	12,18	13,24	14,36	15,46	17,96	20,69	23,60	25,14	26,62	29,38	32,35	
1100	6,62	7,50	8,38	9,24	10,10	11,12	12,12	13,11	14,25	15,44	16,62	19,28	22,16	25,18	26,76	28,27	31,03	-	
1200	7,05	8,00	8,94	9,87	10,79	11,87	12,94	13,99	15,20	16,47	17,71	20,50	23,50	26,61	28,21	29,71	-	-	
1300	7,47	8,48	9,48	10,47	11,44	12,59	13,72	14,84	16,11	17,44	18,74	21,65	24,73	27,87	29,45	30,92	-	-	
1400	7,86	8,93	9,99	11,04	12,06	13,27	14,46	15,63	16,96	18,35	19,70	22,69	25,83	28,95	-	-	-	-	
1500	8,24	9,37	10,48	11,58	12,65	13,92	15,16	16,38	17,76	19,20	20,59	23,65	26,79	-	-	-	-	-	
1600	8,59	9,78	10,94	12,09	13,21	14,53	15,82	17,08	18,51	19,98	21,40	24,50	27,62	-	-	-	-	-	
1700	8,93	10,17	11,38	12,57	13,74	15,11	16,44	17,73	19,19	20,70	22,14	25,24	-	-	-	-	-	-	
1800	9,24	10,53	11,79	13,02	14,23	15,64	17,01	18,33	19,82	21,35	23,80	25,87	-	-	-	-	-	-	
1900	9,54	10,87	12,17	13,45	14,69	16,13	17,53	18,88	20,39	21,92	23,37	-	-	-	-	-	-	-	
2000	9,81	11,19	12,53	13,84	15,11	16,58	18,01	19,37	20,89	22,42	23,85	-	-	-	-	-	-	-	
2100	10,07	11,48	12,86	14,20	15,49	16,99	18,43	19,80	21,32	22,84	-	-	-	-	-	-	-	-	
2200	10,30	11,75	13,16	14,52	15,84	17,36	18,81	20,18	21,69	23,18	-	-	-	-	-	-	-	-	
2300	10,51	11,99	13,43	14,81	16,15	17,68	19,13	20,50	21,98	-	-	-	-	-	-	-	-	-	
2400	10,70	12,21	13,67	15,07	16,41	17,95	19,39	20,75	-	-	-	-	-	-	-	-	-	-	
2500	10,86	12,40	13,87	15,29	16,64	18,17	19,61	-	-	-	-	-	-	-	-	-	-	-	
2600	11,00	12,56	14,05	15,47	16,82	18,35	19,76	-	-	-	-	-	-	-	-	-	-	-	
2700	11,12	12,69	14,19	15,62	16,96	18,47	-	-	-	-	-	-	-	-	-	-	-	-	
2800	11,21	12,79	14,30	15,72	17,06	-	-	-	-	-	-	-	-	-	-	-	-	-	
2900	11,28	12,87	14,37	15,79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3000	11,32	12,91	14,41	15,81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3100	11,33	12,93	14,42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3200	11,32	12,91	14,38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3300	11,28	12,86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3400	11,21	12,77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3500	11,11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3600	10,98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Additional power based on drive ratio

TORQUE-FLEX® CLASSICAL CX

Additional power [kW]										
rpm - faster shaft	Drive ratio									
	1.00 1.01	1.02 1.05	1.06 1.11	1.12 1.18	1.19 1.26	1.27 1.38	1.39 1.57	1.58 1.94	1.95 3.38	oltre 3.39
100	0,00	0,01	0,02	0,05	0,07	8,00	0,09	0,11	0,12	0,13
200	0,00	0,02	0,05	0,10	0,14	0,16	0,19	0,22	0,24	0,26
300	0,00	0,03	0,08	0,15	0,21	0,25	0,29	0,33	0,36	0,39
400	0,00	0,04	0,11	0,20	0,28	0,33	0,39	0,44	0,48	0,52
500	0,00	0,05	0,14	0,25	0,35	0,42	0,49	0,55	0,60	0,65
600	0,00	0,06	0,17	0,30	0,42	0,50	0,59	0,67	0,73	0,78
700	0,00	0,07	0,20	0,36	0,49	0,59	0,69	0,78	0,85	0,91
800	0,00	0,09	0,23	0,41	0,56	0,61	0,79	0,89	0,97	1,04
900	0,00	0,09	0,26	0,46	0,63	0,76	0,89	1,00	1,09	1,17
1000	0,00	0,10	0,29	0,51	0,70	0,84	0,99	1,11	1,21	1,31
1100	0,00	0,11	0,32	0,56	0,77	0,93	1,09	1,23	1,34	1,44
1200	0,00	0,13	0,35	0,61	0,84	1,01	1,19	1,34	1,46	1,57
1300	0,00	0,14	0,38	0,66	0,91	1,10	1,29	1,45	1,58	1,70
1400	0,00	0,15	0,41	0,72	0,98	1,18	1,39	1,56	1,70	1,83
1500	0,00	0,16	0,44	0,77	1,05	1,27	1,49	1,67	1,82	1,96
1600	0,00	0,17	0,47	0,82	1,12	1,35	1,59	1,79	1,95	2,09
1700	0,00	0,18	0,50	0,87	1,19	1,44	1,69	1,90	2,07	2,22
1800	0,00	0,19	0,53	0,92	1,26	1,52	1,79	2,01	2,19	2,35
1900	0,00	0,20	0,56	0,97	1,33	1,61	1,89	2,12	2,31	2,48
2000	0,00	0,21	0,59	1,03	1,40	1,69	1,99	2,23	2,43	2,62
2100	0,00	0,22	0,62	1,08	1,47	1,78	2,08	2,35	2,56	2,75
2200	0,00	0,23	0,65	1,13	1,54	1,86	2,18	2,46	2,68	2,88
2300	0,00	0,24	0,68	1,18	1,61	1,95	2,28	2,57	2,80	3,01
2400	0,00	0,26	0,71	1,23	1,68	2,03	2,38	2,68	2,92	3,14
2500	0,00	0,27	0,74	1,28	1,75	2,12	2,48	2,79	3,04	3,27
2600	0,00	0,28	0,77	1,33	1,82	2,20	2,58	2,91	3,17	3,40
2700	0,00	0,29	0,80	1,39	1,89	2,29	2,68	3,02	3,29	3,53
2800	0,00	0,30	0,83	1,44	1,96	2,37	2,78	3,13	3,41	3,66
2900	0,00	0,31	0,85	1,49	2,03	2,46	2,88	3,24	3,53	3,79
3000	0,00	0,32	0,88	1,54	2,10	2,54	2,98	3,35	3,65	3,93
3100	0,00	0,33	0,91	1,59	2,17	2,63	3,08	3,47	3,78	4,06
3200	0,00	0,34	0,94	1,64	2,24	2,71	3,18	3,58	3,90	4,19
3300	0,00	0,35	0,97	1,69	2,31	2,80	3,28	3,69	4,02	4,32
3400	0,00	0,36	1,00	1,75	2,38	2,88	3,38	3,80	4,14	4,45
3500	0,00	0,37	1,03	1,80	2,45	2,97	3,48	3,91	4,26	4,48
3600	0,00	0,39	1,06	1,85	2,52	3,05	3,58	4,03	4,39	4,71

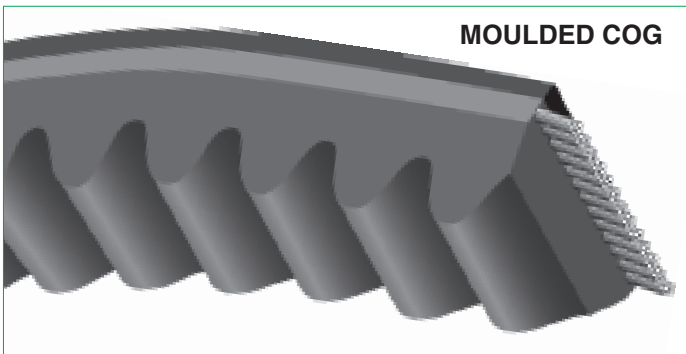


SIT TORQUE-FLEX® - Narrow "XP" (ISO) - CSX



Performance index

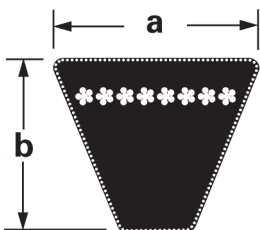
XPZ - XPA - XPB - XPC



TORQUE-FLEX® - Narrow "XP" high performance belts are manufactured in accordance with European standards **ISO 4184, DIN 7753**. The belt structure guarantees high transmittable power while the moulded cog profile provides higher flexibility with small diameters pulleys.

Belt dimensions

Section	a [mm]	b [mm]
XPZ	10	8
XPA	13	10
XPB	16	13
XPC	22	18



Matchmaker® System

Belt length [mm]	Tolerance [mm]
up to 1399	+/- 2
1400 ÷ 2799	+/- 3
over 2800	+/- 5

APPLICATIONS

Narrow profile belts for compact, high power drives and high shock loading on short centers and small diameters. For designing compact, heavy-duty drives where space limitation is a factor.

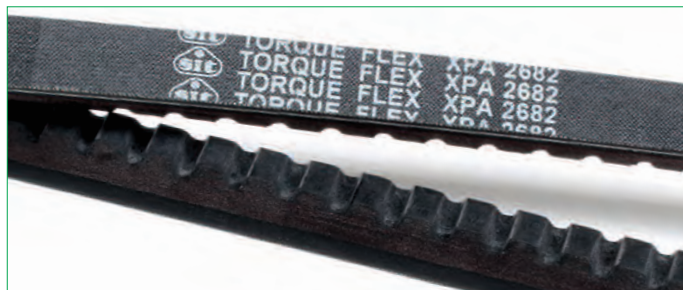
- Compressors
- Industrial fans
- Textile machineries
- Woodworking machineries
- Construction equipment
- Mills
- Mixers

KEY FEATURES & BENEFITS

- Good oil resistance
- Temperature: -20/+70 °C
- Static conductive (ISO 1813)
- Matchmaker® System
- Raw edge construction up to 3000 mm

BELT MATERIAL

- Tensile members: high resistance polyester
- Compound: Hyprene



SIT have a complete stock of pulleys for all belts.

Available sizes

TORQUE-FLEX® - XPZ

Part number	Datum length (Ld) [mm]
CSXPZ512	512
CSXPZ560	560
CSXPZ562	562
CSXPZ587	587
CSXPZ600	600
CSXPZ612	612
CSXPZ615	615
CSXPZ630	630
CSXPZ637	637
CSXPZ646	646
CSXPZ662	662
CSXPZ670	670
CSXPZ687	687
CSXPZ700	700
CSXPZ710	710
CSXPZ722	722
CSXPZ737	737
CSXPZ750	750
CSXPZ762	762
CSXPZ772	772
CSXPZ787	787
CSXPZ800	800
CSXPZ812	812
CSXPZ825	825
CSXPZ837	837
CSXPZ850	850
CSXPZ862	862
CSXPZ875	875
CSXPZ887	887
CSXPZ900	900
CSXPZ912	912
CSXPZ925	925
CSXPZ937	937
CSXPZ950	950
CSXPZ957	957
CSXPZ962	962
CSXPZ987	987
CSXPZ1000	1000
CSXPZ1010	1010
CSXPZ1012	1012
CSXPZ1024	1024
CSXPZ1037	1037
CSXPZ1047	1047
CSXPZ1060	1060
CSXPZ1077	1077
CSXPZ1080	1080
CSXPZ1087	1087
CSXPZ1112	1112
CSXPZ1120	1120
CSXPZ1137	1137
CSXPZ1140	1140
CSXPZ1150	1150
CSXPZ1162	1162
CSXPZ1180	1180
CSXPZ1187	1187
CSXPZ1200	1200
CSXPZ1202	1202
CSXPZ1212	1212
CSXPZ1237	1237
CSXPZ1250	1250
CSXPZ1262	1262
CSXPZ1270	1270
CSXPZ1287	1287

TORQUE-FLEX® - XPZ

Part number	Datum length (Ld) [mm]
CSXPZ1312	1312
CSXPZ1320	1320
CSXPZ1337	1337
CSXPZ1340	1340
CSXPZ1362	1362
CSXPZ1387	1387
CSXPZ1400	1400
CSXPZ1412	1412
CSXPZ1415	1415
CSXPZ1420	1420
CSXPZ1437	1437
CSXPZ1462	1462
CSXPZ1470	1470
CSXPZ1487	1487
CSXPZ1490	1490
CSXPZ1500	1500
CSXPZ1512	1512
CSXPZ1520	1520
CSXPZ1537	1537
CSXPZ1560	1560
CSXPZ1562	1562
CSXPZ1587	1587
CSXPZ1600	1600
CSXPZ1612	1612
CSXPZ1637	1637
CSXPZ1650	1650
CSXPZ1662	1662
CSXPZ1700	1700
CSXPZ1737	1737
CSXPZ1750	1750
CSXPZ1762	1762
CSXPZ1800	1800
CSXPZ1837	1837
CSXPZ1850	1850
CSXPZ1900	1900
CSXPZ1950	1950
CSXPZ1987	1987
CSXPZ2000	2000
CSXPZ2037	2037
CSXPZ2060	2060
CSXPZ2120	2120
CSXPZ2150	2150
CSXPZ2160	2160
CSXPZ2187	*2187
CSXPZ2240	2240
CSXPZ2287	2287
CSXPZ2360	2360
CSXPZ2410	2410
CSXPZ2500	2500
CSXPZ2540	2540
CSXPZ2580	2580
CSXPZ2650	2650
CSXPZ2800	2800
CSXPZ2840	2840
CSXPZ2900	2900
CSXPZ3000	3000

TORQUE-FLEX® - XPA

Part number	Datum length (Ld) [mm]
CSXPA732	732
CSXPA750	750
CSXPA757	757
CSXPA775	775
CSXPA782	782
CSXPA800	800
CSXPA807	807
CSXPA832	832
CSXPA850	850
CSXPA857	857
CSXPA882	882
CSXPA900	900
CSXPA907	907
CSXPA912	912
CSXPA925	925
CSXPA932	932
CSXPA940	940
CSXPA950	950
CSXPA957	957
CSXPA969	969
CSXPA982	982
CSXPA1000	1000
CSXPA1007	1007
CSXPA1032	1032
CSXPA1055	1055
CSXPA1060	1060
CSXPA1082	1082
CSXPA1107	1107
CSXPA1120	1120
CSXPA1132	1132
CSXPA1150	1150
CSXPA1157	1157
CSXPA1180	1180
CSXPA1190	1190
CSXPA1200	1200
CSXPA1207	1207
CSXPA1220	1220
CSXPA1232	1232
CSXPA1250	1250
CSXPA1257	1257
CSXPA1272	1272
CSXPA1282	1282
CSXPA1300	1300
CSXPA1307	1307
CSXPA1320	1320
CSXPA1332	1332
CSXPA1357	1357
CSXPA1367	1367
CSXPA1382	1382
CSXPA1400	1400
CSXPA1415	1415
CSXPA1420	1420
CSXPA1432	1432
CSXPA1450	1450
CSXPA1457	1457
CSXPA1482	1482
CSXPA1490	1490
CSXPA1500	1500
CSXPA1532	1532
CSXPA1550	1550
CSXPA1557	1557
CSXPA1582	1582
CSXPA1600	1600

TORQUE-FLEX® - XPA

Part number	Datum length (Ld) [mm]
CSXPA1607	1607
CSXPA1632	1632
CSXPA1650	1650
CSXPA1657	1657
CSXPA1700	1700
CSXPA1732	1732
CSXPA1750	1750
CSXPA1757	1757
CSXPA1800	1800
CSXPA1820	1820
CSXPA1832	1832
CSXPA1850	1850
CSXPA1857	1857
CSXPA1882	1882
CSXPA1900	1900
CSXPA1957	1957
CSXPA1982	1982
CSXPA2000	2000
CSXPA2032	2032
CSXPA2057	2057
CSXPA2082	2082
CSXPA2120	2120
CSXPA2160	2160
CSXPA2182	2182
CSXPA2207	2207
CSXPA2240	2240
CSXPA2282	2282
CSXPA2300	2300
CSXPA2360	2360
CSXPA2432	2432
CSXPA2482	2482
CSXPA2500	2500
CSXPA2532	2532
CSXPA2582	2582
CSXPA2607	2607
CSXPA2632	2632
CSXPA2650	2650
CSXPA2682	2682
CSXPA2732	2732
CSXPA2782	2782
CSXPA2800	2800
CSXPA2832	2832
CSXPA2882	2882
CSXPA2932	2932
CSXPA3000	3000

TORQUE-FLEX® - XPB

Part number	Datum length (Ld) [mm]
CSXPB1060	1060
CSXPB1250	1250
CSXPB1260	1260
CSXPB1270	1270
CSXPB1280	1280
CSXPB1320	1320
CSXPB1340	1340
CSXPB1375	1375
CSXPB1400	1400
CSXPB1410	1410
CSXPB1450	1450
CSXPB1465	1465
CSXPB1500	1500
CSXPB1510	1510
CSXPB1525	1525
CSXPB1550	1550
CSXPB1560	1560
CSXPB1590	1590
CSXPB1600	1600
CSXPB1650	1650
CSXPB1690	1690
CSXPB1700	1700
CSXPB1720	1720
CSXPB1750	1750
CSXPB1800	1800
CSXPB1850	1850
CSXPB1900	1900
CSXPB1950	1950
CSXPB2000	2000
CSXPB2020	2020
CSXPB2060	2060
CSXPB2080	2080
CSXPB2120	2120
CSXPB2150	2150
CSXPB2180	2180
CSXPB2240	2240
CSXPB2280	2280
CSXPB2300	2300
CSXPB2360	2360
CSXPB2400	2400
CSXPB2410	2410
CSXPB2430	2430
CSXPB2500	2500
CSXPB2530	2530
CSXPB2580	2580
CSXPB2600	2600
CSXPB2650	2650
CSXPB2680	2680
CSXPB2700	2700
CSXPB2800	2800
CSXPB2840	2840
CSXPB2900	2900
CSXPB2990	2990
CSXPB3000	3000

TORQUE-FLEX® - XPC

Part number	Datum length (Ld) [mm]
CSXPC1700	1700
CSXPC2000	2000
CSXPC2120	2120
CSXPC2240	2240
CSXPC2360	2360
CSXPC2500	2500
CSXPC2650	2650
CSXPC2800	2800
CSXPC3000	3000

Part Number

CS XPB 1900

TORQUE-FLEX® - Narrow "XP"

Section

Datum length (mm)

Additional power based on drive ratio

TORQUE-FLEX® - NARROW XPZ

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,00	0,00	0,01	0,01	0,01	0,02	0,01	0,01	0,02
200		0,00	0,00	0,01	0,01	0,02	0,02	0,02	0,03	0,03	0,03
300		0,00	0,00	0,01	0,02	0,03	0,03	0,04	0,04	0,05	0,05
400		0,00	0,01	0,01	0,03	0,03	0,04	0,05	0,06	0,06	0,06
500		0,00	0,01	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,08
600		0,00	0,01	0,02	0,04	0,05	0,06	0,08	0,09	0,09	0,10
700		0,00	0,01	0,03	0,04	0,06	0,07	0,09	0,10	0,11	0,12
800		0,00	0,01	0,03	0,05	0,07	0,09	0,10	0,12	0,13	0,13
900		0,00	0,01	0,03	0,06	0,08	0,10	0,12	0,13	0,14	0,15
1000		0,00	0,01	0,04	0,06	0,09	0,11	0,13	0,15	0,16	0,17
1100		0,00	0,01	0,04	0,07	0,10	0,12	0,14	0,16	0,17	0,19
1200		0,00	0,02	0,04	0,08	0,11	0,13	0,16	0,18	0,19	0,20
1300		0,00	0,02	0,05	0,08	0,12	0,14	0,17	0,19	0,21	0,22
1400		0,00	0,02	0,05	0,09	0,13	0,15	0,18	0,21	0,22	0,24
1500		0,00	0,02	0,06	0,10	0,14	0,17	0,20	0,22	0,24	0,25
1600		0,00	0,02	0,06	0,11	0,15	0,18	0,21	0,24	0,26	0,27
1700		0,00	0,02	0,06	0,11	0,15	0,19	0,22	0,25	0,27	0,29
1800		0,00	0,02	0,07	0,12	0,16	0,20	0,24	0,27	0,29	0,31
1900		0,00	0,03	0,07	0,13	0,17	0,21	0,25	0,28	0,31	0,32
2000		0,00	0,03	0,07	0,13	0,18	0,22	0,26	0,30	0,32	0,34
2100		0,00	0,03	0,08	0,14	0,19	0,23	0,28	0,31	0,34	0,36
2200		0,00	0,03	0,08	0,15	0,20	0,25	0,29	0,33	0,35	0,38
2300		0,00	0,03	0,09	0,15	0,21	0,26	0,30	0,34	0,37	0,39
2400		0,00	0,03	0,09	0,16	0,22	0,27	0,32	0,36	0,39	0,41
2500		0,00	0,03	0,09	0,17	0,23	0,28	0,33	0,37	0,40	0,43
2600		0,00	0,04	0,10	0,17	0,24	0,29	0,34	0,39	0,42	0,45
2700		0,00	0,04	0,10	0,18	0,25	0,30	0,36	0,40	0,44	0,46
2800		0,00	0,04	0,11	0,19	0,26	0,31	0,37	0,42	0,45	0,48
2900		0,00	0,04	0,11	0,20	0,27	0,33	0,38	0,43	0,47	0,50
3000		0,00	0,04	0,11	0,20	0,28	0,34	0,40	0,45	0,49	0,51
3100		0,00	0,04	0,12	0,21	0,29	0,35	0,41	0,46	0,50	0,53
3200		0,00	0,04	0,12	0,22	0,30	0,36	0,42	0,48	0,52	0,55
3300		0,00	0,04	0,13	0,22	0,31	0,37	0,44	0,49	0,53	0,57
3400		0,00	0,05	0,13	0,23	0,31	0,38	0,45	0,51	0,55	0,58
3500		0,00	0,05	0,13	0,24	0,32	0,39	0,46	0,52	0,57	0,60
3600		0,00	0,05	0,14	0,24	0,33	0,41	0,48	0,54	0,58	0,62
3700		0,00	0,05	0,14	0,25	0,34	0,42	0,49	0,55	0,60	0,64
3800		0,00	0,05	0,15	0,26	0,35	0,43	0,50	0,57	0,62	0,65
3900		0,00	0,05	0,15	0,26	0,36	0,44	0,52	0,58	0,63	0,67
4000		0,00	0,05	0,15	0,27	0,37	0,45	0,53	0,60	0,65	0,69
4100		0,00	0,06	0,16	0,28	0,38	0,46	0,54	0,61	0,67	0,71
4200		0,00	0,06	0,16	0,29	0,39	0,47	0,56	0,63	0,68	0,72
4300		0,00	0,06	0,17	0,29	0,40	0,48	0,57	0,64	0,70	0,74
4400		0,00	0,06	0,17	0,30	0,41	0,50	0,58	0,66	0,71	0,76
4500		0,00	0,06	0,17	0,31	0,42	0,51	0,60	0,67	0,73	0,77
4600		0,00	0,06	0,18	0,31	0,43	0,52	0,61	0,69	0,75	0,79
4700		0,00	0,06	0,18	0,32	0,44	0,53	0,62	0,70	0,76	0,81
4800		0,00	0,06	0,19	0,33	0,45	0,54	0,64	0,72	0,78	0,83
4900		0,00	0,07	0,19	0,33	0,46	0,55	0,65	0,73	0,80	0,84
5000		0,00	0,07	0,19	0,34	0,47	0,56	0,66	0,75	0,81	0,86

Additional power based on drive ratio

TORQUE-FLEX® - NARROW XPA

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,00	0,01	0,02	0,02	0,03	0,03	0,04	0,04	0,04
200		0,00	0,01	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,08
300		0,00	0,01	0,03	0,05	0,07	0,08	0,10	0,11	0,12	0,13
400		0,00	0,01	0,04	0,07	0,09	0,11	0,13	0,15	0,16	0,17
500		0,00	0,02	0,05	0,08	0,11	0,14	0,16	0,18	0,20	0,21
600		0,00	0,02	0,06	0,10	0,14	0,17	0,20	0,22	0,24	0,26
700		0,00	0,02	0,07	0,12	0,16	0,20	0,23	0,26	0,28	0,30
800		0,00	0,03	0,08	0,13	0,18	0,22	0,26	0,30	0,32	0,34
900		0,00	0,03	0,09	0,15	0,21	0,25	0,30	0,33	0,37	0,39
1000		0,00	0,03	0,10	0,17	0,23	0,28	0,33	0,37	0,41	0,43
1100		0,00	0,04	0,11	0,19	0,25	0,31	0,36	0,41	0,45	0,47
1200		0,00	0,04	0,12	0,20	0,28	0,34	0,40	0,45	0,49	0,52
1300		0,00	0,04	0,13	0,22	0,30	0,37	0,43	0,49	0,53	0,56
1400		0,00	0,05	0,14	0,24	0,33	0,40	0,46	0,52	0,57	0,60
1500		0,00	0,05	0,15	0,26	0,35	0,42	0,50	0,56	0,61	0,65
1600		0,00	0,06	0,16	0,27	0,37	0,45	0,53	0,60	0,65	0,69
1700		0,00	0,06	0,17	0,29	0,40	0,48	0,57	0,64	0,69	0,74
1800		0,00	0,06	0,18	0,31	0,42	0,51	0,60	0,67	0,74	0,78
1900		0,00	0,07	0,19	0,32	0,44	0,54	0,63	0,71	0,78	0,82
2000		0,00	0,07	0,20	0,34	0,47	0,57	0,67	0,75	0,82	0,87
2100		0,00	0,07	0,21	0,36	0,49	0,60	0,70	0,79	0,86	0,91
2200		0,00	0,08	0,22	0,38	0,51	0,63	0,73	0,83	0,90	0,95
2300		0,00	0,08	0,23	0,39	0,54	0,65	0,77	0,86	0,94	1,00
2400		0,00	0,08	0,24	0,41	0,56	0,68	0,80	0,90	0,98	1,04
2500		0,00	0,09	0,25	0,43	0,59	0,71	0,83	0,94	1,02	1,08
2600		0,00	0,09	0,26	0,45	0,61	0,74	0,87	0,98	1,06	1,13
2700		0,00	0,09	0,27	0,46	0,63	0,77	0,90	1,01	1,11	1,17
2800		0,00	0,10	0,28	0,48	0,66	0,80	0,93	1,05	1,15	1,21
2900		0,00	0,10	0,29	0,50	0,68	0,83	0,97	1,09	1,19	1,26
3000		0,00	0,10	0,30	0,52	0,70	0,85	1,00	1,13	1,23	1,30
3100		0,00	0,11	0,31	0,53	0,73	0,88	1,03	1,17	1,27	1,35
3200		0,00	0,11	0,32	0,55	0,75	0,91	1,07	1,20	1,31	1,39
3300		0,00	0,12	0,33	0,57	0,77	0,94	1,10	1,24	1,35	1,43
3400		0,00	0,12	0,34	0,59	0,80	0,97	1,14	1,28	1,39	1,48
3500		0,00	0,12	0,35	0,60	0,82	1,00	1,17	1,32	1,43	1,52
3600		0,00	0,13	0,36	0,62	0,85	1,03	1,20	1,35	1,48	1,56
3700		0,00	0,13	0,37	0,64	0,87	1,05	1,24	1,39	1,52	1,61
3800		0,00	0,13	0,38	0,65	0,89	1,08	1,27	1,43	1,56	1,65
3900		0,00	0,14	0,39	0,67	0,92	1,11	1,30	1,47	1,60	1,69
4000		0,00	0,14	0,40	0,69	0,94	1,14	1,34	1,51	1,64	1,74
4100		0,00	0,14	0,41	0,71	0,96	1,17	1,37	1,54	1,68	1,78
4200		0,00	0,15	0,42	0,72	0,99	1,20	1,40	1,58	1,72	1,82
4300		0,00	0,15	0,43	0,74	1,01	1,23	1,44	1,62	1,76	1,87
4400		0,00	0,16	0,44	0,76	1,03	1,26	1,47	1,66	1,80	1,91
4500		0,00	0,16	0,45	0,78	1,06	1,28	1,50	1,69	1,85	1,96
4600		0,00	0,16	0,46	0,79	1,08	1,31	1,54	1,73	1,89	2,00
4700		0,00	0,17	0,47	0,81	1,11	1,34	1,57	1,77	1,93	2,04
4800		0,00	0,17	0,48	0,83	1,13	1,37	1,61	1,81	1,97	2,09
4900		0,00	0,17	0,49	0,85	1,15	1,40	1,64	1,84	2,01	2,13
5000		0,00	0,18	0,50	0,86	1,18	1,43	1,67	1,88	2,05	2,17

Power rating

TORQUE-FLEX® - NARROW XPB

		Rated power [kW]																	
rpm - faster shaft	Pitch Ø [mm]	112	118	125	132	140	150	160	170	180	190	200	212	224	236	250	280	315	355
		100	0,55	0,61	0,68	0,74	0,82	0,91	1,01	1,10	1,19	1,29	1,38	1,49	1,60	1,71	1,84	2,11	2,43
200	1,02	1,13	1,26	1,39	1,53	1,71	1,90	2,08	2,25	2,43	2,61	2,82	3,04	3,25	3,49	4,02	4,62	5,31	
300	1,46	1,62	1,81	2,00	2,21	2,47	2,74	3,00	3,26	3,52	3,78	4,09	4,40	4,71	5,07	5,83	6,71	7,71	
400	1,88	2,09	2,33	2,58	2,86	3,20	3,55	3,89	4,23	4,57	4,91	5,32	5,72	6,13	6,59	7,59	8,74	10,04	
500	2,28	2,54	2,84	3,14	3,48	3,91	4,33	4,76	5,18	5,60	6,01	6,51	7,01	7,50	8,08	9,30	10,71	12,30	
600	2,66	2,97	3,33	3,69	4,09	4,60	5,10	5,60	6,10	6,60	7,09	7,68	8,27	8,85	9,53	10,97	12,63	14,50	
700	3,04	3,39	3,81	4,22	4,69	5,27	5,85	6,43	7,00	7,57	8,14	8,82	9,49	10,16	10,94	12,60	14,50	16,64	
800	3,41	3,81	4,28	4,74	5,27	5,93	6,58	7,24	7,88	8,53	9,17	9,94	10,70	11,45	12,33	14,19	16,32	18,72	
900	3,76	4,21	4,73	5,25	5,84	6,58	7,30	8,03	8,75	9,47	10,18	11,03	11,87	12,71	13,69	15,74	18,10	20,74	
1000	4,11	4,61	5,18	5,75	6,40	7,21	8,01	8,81	9,60	10,39	11,17	12,10	13,03	13,95	15,01	17,26	19,83	22,69	
1100	4,45	4,99	5,62	6,24	6,95	7,83	8,70	9,57	10,43	11,29	12,14	13,15	14,16	15,16	16,31	18,74	21,51	24,59	
1200	4,79	5,37	6,05	6,72	7,49	8,44	9,38	10,32	11,25	12,18	13,09	14,18	15,27	16,34	17,58	20,18	23,14	26,41	
1300	5,11	5,74	6,47	7,20	8,02	9,04	10,05	11,06	12,06	13,05	14,03	15,19	16,35	17,49	18,81	21,59	24,72	28,17	
1400	5,44	6,11	6,89	7,66	8,54	9,63	10,71	11,78	12,84	13,90	14,94	16,18	17,41	18,62	20,02	22,95	26,25	29,85	
1500	5,75	6,46	7,29	8,12	9,05	10,21	11,35	12,49	13,62	14,73	15,84	17,15	18,44	19,72	21,20	24,27	27,72	-	
1600	6,06	6,81	7,69	8,56	9,55	10,77	11,99	13,19	14,37	15,55	16,71	18,09	19,45	20,80	22,34	25,55	29,13	-	
1700	6,36	7,16	8,08	9,00	10,04	11,33	12,61	13,87	15,12	16,35	17,57	19,02	20,44	21,84	23,45	26,78	30,48	-	
1800	6,66	7,50	8,47	9,43	10,53	11,88	13,22	14,54	15,84	17,13	18,41	19,91	21,40	22,85	24,52	27,97	31,77	-	
1900	6,95	7,83	8,84	9,85	11,00	12,41	13,81	15,19	16,55	17,90	19,22	20,79	22,33	23,84	25,56	29,11	-	-	
2000	7,23	8,15	9,21	10,27	11,46	12,94	14,40	15,83	17,25	18,64	20,02	21,64	23,23	24,74	26,56	30,20	-	-	
2100	7,51	8,47	9,58	10,68	11,92	13,45	14,97	16,46	17,93	19,37	20,79	22,47	24,11	25,71	27,53	-	-	-	
2200	7,78	8,78	9,93	11,07	12,36	13,96	15,52	17,07	18,59	20,08	21,55	23,27	24,95	26,59	28,45	-	-	-	
2300	8,05	9,08	10,28	11,46	12,80	14,45	16,07	17,66	19,23	20,77	22,28	24,04	25,77	27,44	-	-	-	-	
2400	8,31	9,38	10,62	11,84	13,23	14,93	16,60	18,24	19,86	21,44	22,98	24,79	26,55	28,26	-	-	-	-	
2500	8,56	9,67	10,95	12,22	13,64	15,40	17,12	18,81	20,46	22,08	23,66	25,51	27,30	-	-	-	-	-	
2600	8,81	9,96	11,28	12,58	14,05	15,86	17,63	19,36	21,05	22,71	24,32	26,21	-	-	-	-	-	-	
2700	9,06	10,24	11,60	12,94	14,45	16,30	18,12	19,89	21,62	23,31	24,96	26,87	-	-	-	-	-	-	
2800	9,29	10,51	11,90	13,28	14,83	16,74	18,59	20,41	22,18	23,89	25,57	-	-	-	-	-	-	-	
2900	9,52	10,77	12,21	13,62	15,21	17,16	19,06	20,91	22,71	24,45	-	-	-	-	-	-	-	-	
3000	9,75	11,03	12,50	13,95	15,58	17,57	19,50	21,39	23,22	24,99	-	-	-	-	-	-	-	-	
3100	9,97	11,28	12,79	14,27	15,93	17,96	19,94	21,85	23,71	-	-	-	-	-	-	-	-	-	
3200	10,18	11,52	13,06	14,58	16,28	18,34	20,35	22,30	-	-	-	-	-	-	-	-	-	-	
3300	10,38	11,76	13,33	14,88	16,61	18,71	20,75	22,73	-	-	-	-	-	-	-	-	-	-	
3400	10,58	11,99	13,59	15,17	16,93	19,07	21,14	-	-	-	-	-	-	-	-	-	-	-	
3500	10,78	12,21	13,84	15,45	17,24	19,41	21,51	-	-	-	-	-	-	-	-	-	-	-	
3600	10,96	12,42	14,09	15,72	17,54	19,74	-	-	-	-	-	-	-	-	-	-	-	-	
3700	11,14	12,63	14,32	15,98	17,82	20,05	-	-	-	-	-	-	-	-	-	-	-	-	
3800	11,31	12,82	14,55	16,23	18,10	20,35	-	-	-	-	-	-	-	-	-	-	-	-	
3900	11,48	13,01	14,76	16,47	18,36	-	-	-	-	-	-	-	-	-	-	-	-	-	
4000	11,64	13,19	14,97	16,70	18,61	-	-	-	-	-	-	-	-	-	-	-	-	-	
4100	11,79	13,37	15,17	16,91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4200	11,93	13,53	15,35	17,12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4300	12,07	13,69	15,53	17,31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4400	12,20	13,84	15,70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4500	12,32	13,98	15,86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4600	12,43	14,11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4700	12,54	14,23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4800	12,64	14,35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4900	12,73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5000	12,81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Additional power based on drive ratio

TORQUE-FLEX® - NARROW XPB

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,01	0,02	0,03	0,05	0,06	0,07	0,07	0,08	0,09
200		0,00	0,01	0,04	0,07	0,09	0,11	0,13	0,15	0,16	0,17
300		0,00	0,02	0,06	0,10	0,14	0,17	0,20	0,22	0,24	0,26
400		0,00	0,03	0,08	0,14	0,19	0,23	0,27	0,30	0,33	0,35
500		0,00	0,04	0,10	0,17	0,23	0,28	0,33	0,38	0,41	0,44
600		0,00	0,04	0,12	0,21	0,28	0,34	0,40	0,45	0,49	0,52
700		0,00	0,05	0,14	0,24	0,33	0,40	0,47	0,53	0,58	0,61
800		0,00	0,06	0,16	0,28	0,38	0,46	0,54	0,61	0,66	0,70
900		0,00	0,06	0,18	0,31	0,43	0,52	0,61	0,68	0,74	0,79
1000		0,00	0,07	0,20	0,35	0,47	0,57	0,67	0,76	0,83	0,88
1100		0,00	0,08	0,22	0,38	0,52	0,63	0,74	0,84	0,91	0,96
1200		0,00	0,09	0,24	0,42	0,57	0,69	0,81	0,91	0,99	1,05
1300		0,00	0,09	0,26	0,45	0,62	0,75	0,88	0,99	1,08	1,14
1400		0,00	0,10	0,28	0,49	0,66	0,81	0,95	1,06	1,16	1,23
1500		0,00	0,11	0,30	0,52	0,71	0,86	1,01	1,14	1,24	1,32
1600		0,00	0,11	0,32	0,56	0,76	0,92	1,08	1,22	1,33	1,41
1700		0,00	0,12	0,34	0,59	0,81	0,98	1,15	1,29	1,41	1,49
1800		0,00	0,13	0,36	0,63	0,86	1,04	1,22	1,37	1,49	1,58
1900		0,00	0,14	0,38	0,66	0,90	1,10	1,29	1,45	1,58	1,67
2000		0,00	0,14	0,40	0,70	0,95	1,15	1,35	1,52	1,66	1,76
2100		0,00	0,15	0,42	0,73	1,00	1,21	1,42	1,60	1,74	1,85
2200		0,00	0,16	0,44	0,77	1,05	1,27	1,49	1,68	1,83	1,93
2300		0,00	0,17	0,46	0,80	1,10	1,33	1,56	1,75	1,91	2,02
2400		0,00	0,17	0,48	0,84	1,14	1,39	1,62	1,83	1,99	2,11
2500		0,00	0,18	0,50	0,87	1,19	1,44	1,69	1,91	2,08	2,20
2600		0,00	0,19	0,52	0,91	1,24	1,50	1,76	1,98	2,16	2,29
2700		0,00	0,19	0,54	0,94	1,29	1,56	1,83	2,06	2,24	2,38
2800		0,00	0,20	0,56	0,98	1,33	1,62	1,90	2,13	2,33	2,46
2900		0,00	0,21	0,58	1,01	1,38	1,68	1,96	2,21	2,41	2,55
3000		0,00	0,22	0,60	1,05	1,43	1,73	2,03	2,29	2,49	2,64
3100		0,00	0,22	0,62	1,08	1,48	1,79	2,10	2,36	2,58	2,73
3200		0,00	0,23	0,64	1,12	1,53	1,85	2,17	2,44	2,66	2,82
3300		0,00	0,24	0,66	1,15	1,57	1,91	2,24	2,52	2,74	2,90
3400		0,00	0,25	0,68	1,19	1,62	1,97	2,30	2,59	2,83	2,99
3500		0,00	0,25	0,70	1,22	1,67	2,02	2,37	2,67	2,91	3,08
3600		0,00	0,26	0,72	1,26	1,72	2,08	2,44	2,75	2,99	3,17
3700		0,00	0,27	0,74	1,30	1,76	2,14	2,51	2,82	3,08	3,26
3800		0,00	0,28	0,76	1,33	1,81	2,20	2,58	2,90	3,16	3,35
3900		0,00	0,28	0,78	1,37	1,86	2,26	2,64	2,98	3,24	3,43
4000		0,00	0,29	0,80	1,40	1,91	2,31	2,71	3,05	3,32	3,52
4100		0,00	0,30	0,82	1,44	1,96	2,37	2,78	3,13	3,41	3,61
4200		0,00	0,31	0,84	1,47	2,00	2,43	2,85	3,20	3,49	3,70
4300		0,00	0,31	0,87	1,51	2,05	2,49	2,91	3,28	3,57	3,79
4400		0,00	0,32	0,89	1,54	2,10	2,55	2,98	3,36	3,66	3,87
4500		0,00	0,33	0,91	1,58	2,15	2,60	3,05	3,43	3,74	3,96
4600		0,00	0,34	0,93	1,61	2,20	2,66	3,12	3,51	3,82	4,05
4700		0,00	0,34	0,95	1,65	2,24	2,72	3,19	3,59	3,91	4,14
4800		0,00	0,35	0,97	1,68	2,29	2,78	3,25	3,66	3,99	4,23
4900		0,00	0,36	0,99	1,72	2,34	2,84	3,32	3,74	4,07	4,32
5000		0,00	0,36	1,01	1,75	2,39	2,89	3,39	3,82	4,16	4,40

Power rating

TORQUE-FLEX® - NARROW XPC

Rated power [kW]											
rpm - faster shaft Pitch Ø [mm]	224	236	250	265	280	315	355	400	450	500	560
100	2,08	2,29	2,54	2,80	3,06	3,67	4,36	5,13	5,98	6,83	7,84
200	3,90	4,31	4,78	5,29	5,79	6,97	8,30	9,79	11,43	13,06	15,01
300	5,62	6,22	6,91	7,66	8,40	10,12	12,07	14,25	16,65	19,03	21,86
400	7,27	8,05	8,96	9,94	10,91	13,16	15,71	18,55	21,68	24,77	28,44
500	8,86	9,83	10,95	12,15	13,34	16,11	19,24	22,72	26,54	30,30	34,75
600	10,40	11,55	12,88	14,30	15,71	18,97	22,66	26,75	31,22	35,62	40,78
700	11,90	13,22	14,75	16,38	18,00	21,75	25,98	30,65	35,73	40,70	46,50
800	13,35	14,84	16,57	18,41	20,24	24,45	29,18	34,40	40,05	45,54	51,90
900	14,77	16,42	18,34	20,38	22,40	27,06	32,28	38,00	44,16	50,11	56,94
1000	16,14	17,95	20,05	22,28	24,50	29,58	35,25	41,44	48,06	54,40	61,59
1100	17,46	19,43	21,71	24,13	26,52	32,01	38,10	44,71	51,73	58,37	-
1200	18,75	20,87	23,32	25,91	28,48	34,34	40,82	47,80	55,14	-	-
1300	19,99	22,25	24,86	27,63	30,36	36,57	43,40	50,70	-	-	-
1400	21,18	23,58	26,35	29,28	32,15	38,69	45,83	53,39	-	-	-
1500	22,33	24,86	27,78	30,85	33,87	40,70	48,10	-	-	-	-
1600	23,43	26,09	29,14	32,35	35,50	42,59	50,21	-	-	-	-
1700	24,47	27,25	30,44	33,78	37,04	44,36	-	-	-	-	-
1800	25,47	28,36	31,66	35,12	38,49	46,00	-	-	-	-	-
1900	26,41	29,40	32,82	36,38	39,84	-	-	-	-	-	-
2000	27,30	30,39	33,90	37,55	41,09	-	-	-	-	-	-
2100	28,13	31,30	34,90	38,63	-	-	-	-	-	-	-
2200	28,90	32,15	35,82	-	-	-	-	-	-	-	-
2300	29,61	32,93	-	-	-	-	-	-	-	-	-
2400	30,26	33,66	-	-	-	-	-	-	-	-	-
2500	30,84	-	-	-	-	-	-	-	-	-	-

Additional power based on drive ratio

TORQUE-FLEX® - NARROW XPC

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,02	0,05	0,09	0,13	0,15	0,18	0,20	0,34	0,23
200		0,00	0,04	0,11	0,19	0,25	0,31	0,36	0,40	0,68	0,46
300		0,00	0,06	0,16	0,28	0,38	0,46	0,54	0,60	1,02	0,70
400		0,00	0,08	0,21	0,37	0,50	0,61	0,72	0,81	1,36	0,93
500		0,00	0,10	0,27	0,46	0,63	0,76	0,89	1,01	1,69	1,16
600		0,00	0,12	0,32	0,56	0,76	0,92	1,07	1,21	2,03	1,39
700		0,00	0,14	0,37	0,65	0,88	1,07	1,25	1,41	2,37	1,63
800		0,00	0,16	0,42	0,74	1,01	1,22	1,43	1,61	2,71	1,86
900		0,00	0,18	0,48	0,83	1,13	1,37	1,61	1,81	3,05	2,09
1000		0,00	0,19	0,53	0,93	1,26	1,53	1,79	2,01	3,39	2,32
1100		0,00	0,21	0,58	1,02	1,39	1,68	1,97	2,21	3,73	2,56
1200		0,00	0,23	0,64	1,11	1,51	1,83	2,15	2,42	4,07	2,79
1300		0,00	0,25	0,69	1,20	1,64	1,99	2,33	2,62	4,40	3,02
1400		0,00	0,27	0,74	1,30	1,76	2,14	2,50	2,82	4,74	3,25
1500		0,00	0,29	0,80	1,39	1,89	2,29	2,68	3,02	5,08	3,48
1600		0,00	0,31	0,85	1,48	2,02	2,44	2,86	3,22	5,42	3,72
1700		0,00	0,33	0,90	1,57	2,14	2,60	3,04	3,42	5,76	3,95
1800		0,00	0,35	0,96	1,67	2,27	2,75	3,22	3,62	6,10	4,18
1900		0,00	0,37	1,01	1,76	2,39	2,90	3,40	3,83	6,44	4,41
2000		0,00	0,39	1,06	1,85	2,52	3,05	3,58	4,03	6,78	4,65
2100		0,00	0,41	1,12	1,94	2,65	3,21	3,76	4,23	7,12	4,88
2200		0,00	0,43	1,17	2,04	2,77	3,36	3,94	4,43	7,45	5,11
2300		0,00	0,45	1,22	2,13	2,90	3,51	4,11	4,63	7,79	5,34
2400		0,00	0,47	1,27	2,22	3,02	3,67	4,29	4,83	8,13	5,58
2500		0,00	0,49	1,33	2,31	3,15	3,82	4,47	5,03	8,47	5,81



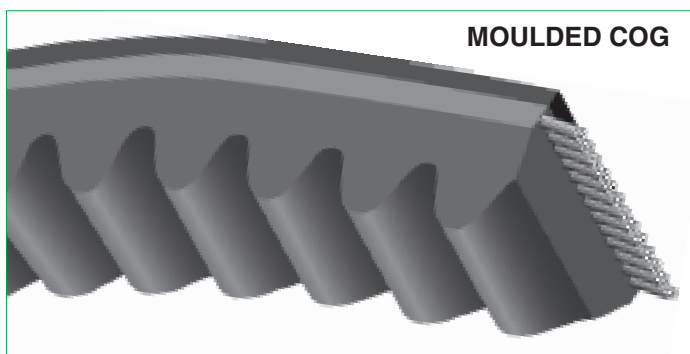
SIT WEDGE - Narrow (RMA) - CW

E  Performance index
 MC  Performance index

3V - 5V - 8V
 3VX - 5VX - 8VX



ENVELOPE



MOULDED COG

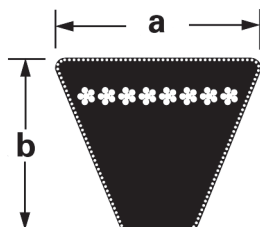
SIT - WEDGE belts are manufactured in accordance with American standards **RMA and MPTA**.

SIT - WEDGE belts are available in two different ranges:

- **MC range (Raw Edge and Moulded Cog):** up to 2995 mm length
- **E range (Envelope):** over 2995 mm length

Matchmaker® System

Section	a [mm]	b [mm]
3V	10	8
5V	16	13
8V	25,4	23



Precision Matched

Belt length [mm]	Tolerance [mm]
up to 1399	+/- 2
1400 ÷ 2799	+/- 3
over 2800	+/- 5

APPLICATIONS

Narrow profile belts for compact, high power drives and high shock loading on short centers and small diameters. For designing compact, heavy-duty drives where space limitations is a factor.

- Compressors
- Industrial fans
- Textile machines
- Woodworking machines
- Construction equipment

KEY FEATURES & BENEFITS

- Good oil resistance
- Temperature: -20/+70 °C
- Static conductive (ISO 1813)
- Matchmaker® System
- Guaranteed dimensional stability
- Higher flexibility
- Reinforced tension member

BELT MATERIAL

- Tensile members: High resistance polyester
- Compound: Hyprene



V-BELTS - CW

SIT have a complete stock of pulleys for all belts.

Available sizes

3V	
Part number	Effective length (Le) [mm]
MOULDED COG	
3V250	635
3V265	675
3V280	710
3V300	760
3V315	800
3V335	850
3V355	900
3V375	955
3V400	1015
3V425	1080
3V450	1145
3V475	1205
3V500	1270
3V530	1345
3V560	1420
3V600	1525
3V630	1600
3V670	1700
3V710	1805
3V750	1905
3V800	2030
3V850	2160
3V900	2285
3V950	2415
3V1000	2540
3V1060	2690
3V1120	2845
3V1180	2995
ENVELOPE	
3V1250	3175
3V1320	3355
3V1400	3555
3V1500	3810

5V	
Part number	Effective length (Le) [mm]
MOULDED COG	
5V450	1140
5V470	1194
5V500	1270
5V510	1295
5V530	1345
5V540	1370
5V560	1420
5V570	1450
5V590	1500
5V600	1525
5V610	1550
5V630	1600
5V650	1651
5V660	1675
5V670	1700
5V680	1730
5V690	1750
5V710	1805
5V730	1855
5V740	1880
5V750	1905
5V780	1980
5V800	2030
5V830	2110
5V840	2135
5V850	2160
5V900	2285
5V930	2360
5V950	2415
5V960	2440
5V1000	2540
5V1030	2615
5V1060	2690
5V1080	2740
5V1120	2845
5V1150	2921
5V1180	2995
ENVELOPE	
5V1250	3175
5V1320	3355
5V1400	3555
5V1500	3810
5V1600	4065
5V1700	4320
5V1800	4570
5V1900	4825
5V2000	5080
5V2120	5385
5V2240	5690
5V2360	5995
5V2500	6350
5V2650	6730
5V2800	7110
5V3000	7620
5V3150	8000
5V3350	8515
5V3550	9015

8V	
Part number	Effective length (Le) [mm]
MOULDED COG	
8V1000	2540
8V1120	2845
8V1180	2995
ENVELOPE	
8V1250	3175
8V1320	3355
8V1400	3555
8V1500	3810
8V1600	4065
8V1800	4570
8V1900	4825
8V2000	5080
8V2120	5385
8V2240	5690
8V2360	5995
8V2500	6350
8V2800	7110
8V3000	7620
8V3150	8000
8V3550	9015
8V3750	9550
8V4000	10160
8V5000	12700

Part Number	CW	5V	1000
SIT WEDGE - Narrow			
Section			
Effective length x 10 (inches)			

Additional power based on drive ratio

WEDGE 3V (MC)

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,00	0,00	0,01	0,01	0,01	0,01	0,01	0,01	0,01
200		0,00	0,00	0,01	0,01	0,01	0,01	0,02	0,02	0,02	0,02
300		0,00	0,00	0,01	0,01	0,02	0,02	0,03	0,04	0,04	0,04
400		0,00	0,01	0,01	0,02	0,03	0,04	0,04	0,04	0,05	0,05
500		0,00	0,01	0,01	0,02	0,04	0,04	0,05	0,06	0,06	0,07
600		0,00	0,01	0,01	0,03	0,04	0,05	0,06	0,07	0,07	0,07
700		0,00	0,01	0,02	0,04	0,05	0,06	0,07	0,08	0,08	0,09
800		0,00	0,01	0,02	0,04	0,06	0,07	0,08	0,09	0,10	0,10
900		0,00	0,01	0,03	0,04	0,06	0,07	0,09	0,10	0,11	0,12
1000		0,00	0,01	0,03	0,05	0,07	0,08	0,10	0,11	0,12	0,13
1100		0,00	0,01	0,03	0,06	0,07	0,10	0,11	0,13	0,13	0,14
1200		0,00	0,01	0,04	0,06	0,08	0,10	0,12	0,13	0,15	0,15
1300		0,00	0,01	0,04	0,07	0,09	0,11	0,13	0,15	0,15	0,17
1400		0,00	0,01	0,04	0,07	0,10	0,12	0,14	0,15	0,17	0,18
1500		0,00	0,01	0,04	0,07	0,10	0,13	0,15	0,17	0,18	0,19
1600		0,00	0,01	0,04	0,08	0,11	0,13	0,15	0,18	0,19	0,21
1700		0,00	0,01	0,05	0,09	0,12	0,14	0,17	0,19	0,21	0,21
1800		0,00	0,02	0,05	0,09	0,13	0,15	0,18	0,20	0,21	0,23
1900		0,00	0,02	0,06	0,10	0,13	0,16	0,18	0,21	0,23	0,24
2000		0,00	0,02	0,06	0,10	0,14	0,17	0,20	0,22	0,24	0,26
2100		0,00	0,02	0,06	0,10	0,15	0,18	0,21	0,24	0,25	0,26
2200		0,00	0,02	0,07	0,11	0,15	0,18	0,21	0,24	0,26	0,28
2300		0,00	0,02	0,07	0,12	0,16	0,19	0,23	0,26	0,28	0,29
2400		0,00	0,02	0,07	0,13	0,17	0,20	0,24	0,26	0,29	0,31
2500		0,00	0,03	0,07	0,13	0,17	0,21	0,24	0,28	0,30	0,32
2600		0,00	0,03	0,07	0,13	0,18	0,22	0,26	0,29	0,32	0,33
2700		0,00	0,03	0,08	0,14	0,18	0,23	0,26	0,30	0,32	0,35
2800		0,00	0,03	0,08	0,14	0,19	0,24	0,27	0,31	0,34	0,36
2900		0,00	0,03	0,08	0,15	0,20	0,24	0,29	0,32	0,35	0,37
3000		0,00	0,03	0,09	0,15	0,21	0,25	0,29	0,33	0,36	0,38
3200		0,00	0,04	0,10	0,16	0,22	0,26	0,32	0,35	0,38	0,41
3400		0,00	0,04	0,10	0,17	0,24	0,29	0,33	0,38	0,41	0,43
3600		0,00	0,04	0,10	0,18	0,25	0,30	0,35	0,40	0,43	0,46
3800		0,00	0,04	0,11	0,19	0,26	0,32	0,38	0,42	0,46	0,49
4000		0,00	0,04	0,12	0,21	0,28	0,34	0,39	0,44	0,48	0,51
4200		0,00	0,04	0,13	0,21	0,29	0,35	0,41	0,46	0,51	0,54
4400		0,00	0,04	0,13	0,22	0,30	0,37	0,43	0,49	0,53	0,56
4600		0,00	0,05	0,13	0,24	0,32	0,38	0,45	0,51	0,55	0,59
4800		0,00	0,05	0,14	0,24	0,33	0,40	0,47	0,53	0,58	0,61
5000		0,00	0,05	0,15	0,26	0,35	0,42	0,49	0,55	0,60	0,64
5200		0,00	0,06	0,15	0,26	0,36	0,43	0,51	0,57	0,63	0,66
5400		0,00	0,06	0,15	0,27	0,38	0,46	0,53	0,60	0,65	0,69
5600		0,00	0,06	0,16	0,29	0,39	0,47	0,55	0,62	0,68	0,71
5800		0,00	0,06	0,17	0,29	0,40	0,49	0,57	0,64	0,70	0,74
6000		0,00	0,07	0,18	0,30	0,41	0,50	0,59	0,66	0,72	0,76
6200		0,00	0,07	0,18	0,32	0,43	0,52	0,61	0,68	0,75	0,79
6400		0,00	0,07	0,18	0,32	0,44	0,54	0,63	0,71	0,77	0,82
6600		0,00	0,07	0,19	0,34	0,46	0,55	0,65	0,73	0,79	0,85
6800		0,00	0,07	0,20	0,35	0,47	0,57	0,67	0,75	0,82	0,87
7000		0,00	0,07	0,21	0,35	0,49	0,59	0,68	0,77	0,85	0,89

Additional power based on drive ratio

WEDGE 3V (E)

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,00	0,00	0,01	0,01	0,01	0,01	0,01	0,01	0,01
200		0,00	0,00	0,01	0,01	0,01	0,02	0,02	0,03	0,03	0,03
300		0,00	0,01	0,01	0,02	0,03	0,03	0,04	0,04	0,04	0,04
400		0,00	0,01	0,01	0,02	0,04	0,04	0,05	0,05	0,06	0,07
500		0,00	0,01	0,01	0,03	0,04	0,05	0,06	0,07	0,07	0,08
600		0,00	0,01	0,02	0,04	0,05	0,07	0,07	0,08	0,09	0,10
700		0,00	0,01	0,02	0,04	0,06	0,07	0,09	0,10	0,10	0,11
800		0,00	0,01	0,03	0,05	0,07	0,08	0,10	0,11	0,12	0,13
900		0,00	0,01	0,03	0,06	0,08	0,10	0,11	0,13	0,13	0,14
1000		0,00	0,01	0,04	0,07	0,09	0,10	0,13	0,14	0,15	0,16
1100		0,00	0,01	0,04	0,07	0,10	0,12	0,13	0,15	0,16	0,18
1200		0,00	0,01	0,04	0,07	0,10	0,13	0,15	0,16	0,18	0,19
1300		0,00	0,01	0,04	0,08	0,11	0,13	0,16	0,18	0,19	0,21
1400		0,00	0,02	0,05	0,09	0,12	0,15	0,17	0,19	0,21	0,22
1500		0,00	0,02	0,05	0,10	0,13	0,15	0,18	0,21	0,23	0,24
1600		0,00	0,02	0,06	0,10	0,14	0,17	0,20	0,22	0,24	0,26
1700		0,00	0,02	0,06	0,11	0,15	0,18	0,21	0,24	0,26	0,27
1800		0,00	0,02	0,07	0,11	0,15	0,19	0,22	0,25	0,27	0,29
1900		0,00	0,02	0,07	0,12	0,16	0,20	0,24	0,26	0,29	0,30
2000		0,00	0,03	0,07	0,13	0,17	0,21	0,24	0,27	0,30	0,32
2100		0,00	0,03	0,07	0,13	0,18	0,22	0,26	0,29	0,32	0,33
2200		0,00	0,03	0,08	0,14	0,19	0,23	0,27	0,30	0,33	0,35
2300		0,00	0,03	0,08	0,15	0,20	0,24	0,28	0,32	0,35	0,37
2400		0,00	0,03	0,09	0,15	0,21	0,25	0,29	0,33	0,36	0,38
2500		0,00	0,04	0,09	0,15	0,21	0,26	0,31	0,35	0,38	0,40
2600		0,00	0,04	0,10	0,16	0,22	0,13	0,32	0,36	0,39	0,41
2700		0,00	0,04	0,10	0,17	0,24	0,28	0,33	0,38	0,40	0,43
2800		0,00	0,04	0,10	0,18	0,24	0,29	0,35	0,38	0,42	0,44
2900		0,00	0,04	0,10	0,18	0,25	0,30	0,35	0,40	0,43	0,46
3000		0,00	0,04	0,11	0,19	0,26	0,32	0,37	0,41	0,45	0,48
3200		0,00	0,04	0,12	0,20	0,27	0,33	0,39	0,44	0,48	0,51
3400		0,00	0,04	0,13	0,21	0,29	0,35	0,41	0,47	0,51	0,54
3600		0,00	0,05	0,13	0,23	0,31	0,38	0,44	0,49	0,54	0,57
3800		0,00	0,05	0,14	0,24	0,32	0,40	0,46	0,52	0,57	0,60
4000		0,00	0,05	0,15	0,25	0,35	0,42	0,49	0,55	0,60	0,63
4200		0,00	0,06	0,15	0,26	0,36	0,44	0,51	0,58	0,63	0,67
4400		0,00	0,06	0,16	0,28	0,38	0,46	0,54	0,60	0,66	0,70
4600		0,00	0,06	0,17	0,29	0,40	0,48	0,56	0,63	0,69	0,73
4800		0,00	0,07	0,18	0,30	0,41	0,50	0,59	0,66	0,72	0,76
5000		0,00	0,07	0,18	0,32	0,43	0,52	0,61	0,69	0,75	0,79
5200		0,00	0,07	0,19	0,33	0,45	0,54	0,63	0,71	0,78	0,82
5400		0,00	0,07	0,20	0,34	0,46	0,57	0,66	0,74	0,81	0,86
5600		0,00	0,07	0,21	0,35	0,49	0,59	0,68	0,77	0,84	0,89
5800		0,00	0,08	0,21	0,37	0,50	0,60	0,71	0,79	0,87	0,92
6000		0,00	0,08	0,22	0,38	0,51	0,63	0,74	0,82	0,90	0,96
6200		0,00	0,08	0,23	0,39	0,54	0,65	0,76	0,85	0,93	0,99
6400		0,00	0,09	0,24	0,40	0,55	0,67	0,78	0,88	0,96	1,01
6600		0,00	0,09	0,24	0,42	0,57	0,69	0,81	0,90	0,99	1,05
6800		0,00	0,09	0,25	0,43	0,59	0,71	0,83	0,93	1,02	1,08
7000		0,00	0,10	0,26	0,44	0,60	0,73	0,85	0,96	1,05	1,11

Additional power based on drive ratio

WEDGE 5V (MC)

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,01	0,01	0,03	0,04	0,04	0,05	0,06	0,06	0,07
200		0,00	0,01	0,03	0,05	0,07	0,09	0,10	0,11	0,13	0,13
300		0,00	0,01	0,04	0,08	0,10	0,13	0,15	0,17	0,18	0,19
400		0,00	0,02	0,06	0,10	0,14	0,17	0,20	0,23	0,24	0,26
500		0,00	0,03	0,07	0,13	0,18	0,21	0,25	0,28	0,31	0,32
600		0,00	0,03	0,09	0,15	0,21	0,26	0,30	0,34	0,37	0,39
700		0,00	0,04	0,10	0,18	0,24	0,30	0,35	0,40	0,43	0,46
800		0,00	0,04	0,12	0,21	0,28	0,34	0,40	0,45	0,49	0,52
900		0,00	0,05	0,13	0,24	0,32	0,38	0,45	0,51	0,55	0,58
1000		0,00	0,05	0,15	0,26	0,35	0,43	0,50	0,56	0,61	0,65
1100		0,00	0,06	0,16	0,29	0,39	0,47	0,55	0,62	0,68	0,71
1200		0,00	0,07	0,18	0,31	0,42	0,51	0,60	0,68	0,74	0,78
1300		0,00	0,07	0,19	0,34	0,46	0,55	0,65	0,73	0,79	0,85
1400		0,00	0,07	0,21	0,36	0,49	0,60	0,70	0,79	0,86	0,91
1500		0,00	0,08	0,22	0,39	0,53	0,64	0,75	0,85	0,92	0,97
1600		0,00	0,09	0,24	0,41	0,57	0,68	0,80	0,90	0,98	1,04
1700		0,00	0,10	0,25	0,44	0,60	0,73	0,85	0,96	1,04	1,10
1800		0,00	0,10	0,26	0,46	0,63	0,76	0,90	1,01	1,10	1,17
1900		0,00	0,10	0,28	0,49	0,67	0,81	0,95	1,07	1,16	1,24
2000		0,00	0,11	0,29	0,51	0,71	0,85	1,00	1,13	1,23	1,30
2100		0,00	0,12	0,31	0,54	0,74	0,90	1,05	1,18	1,29	1,36
2200		0,00	0,12	0,32	0,57	0,77	0,94	1,10	1,24	1,35	1,43
2300		0,00	0,13	0,34	0,60	0,81	0,98	1,15	1,29	1,41	1,49
2400		0,00	0,13	0,35	0,62	0,85	1,02	1,20	1,35	1,47	1,56
2500		0,00	0,14	0,37	0,65	0,88	1,07	1,25	1,40	1,53	1,63
2600		0,00	0,14	0,38	0,67	0,91	1,11	1,30	1,46	1,60	1,69
2700		0,00	0,15	0,40	0,70	0,95	1,15	1,35	1,51	1,65	1,75
2800		0,00	0,15	0,41	0,72	0,99	1,19	1,40	1,57	1,71	1,82
2900		0,00	0,15	0,43	0,75	1,02	1,24	1,45	1,63	1,78	1,88
3000		0,00	0,16	0,44	0,77	1,05	1,28	1,50	1,68	1,84	1,95
3100		0,00	0,17	0,46	0,80	1,09	1,32	1,55	1,74	1,90	2,01
3200		0,00	0,18	0,48	0,82	1,13	1,37	1,60	1,80	1,96	2,07
3300		0,00	0,18	0,49	0,85	1,16	1,40	1,65	1,85	2,02	2,14
3400		0,00	0,18	0,51	0,88	1,20	1,45	1,70	1,91	2,08	2,21
3500		0,00	0,19	0,52	0,90	1,23	1,49	1,75	1,97	2,15	2,27
3600		0,00	0,20	0,54	0,93	1,26	1,54	1,79	2,02	2,21	2,34
3700		0,00	0,20	0,55	0,96	1,30	1,58	1,85	2,08	2,27	2,40
3800		0,00	0,21	0,57	0,98	1,34	1,62	1,90	2,14	2,33	0,99
3900		0,00	0,21	0,58	1,01	1,37	1,66	1,95	2,19	2,39	2,53
4000		0,00	0,22	0,60	1,03	1,40	1,71	2,00	2,25	0,98	2,60
4200		0,00	0,23	0,63	1,08	1,48	1,79	2,10	2,36	2,57	2,73
4400		0,00	0,24	0,65	1,14	1,54	1,88	2,20	2,47	2,70	2,85
4600		0,00	0,25	0,68	1,19	1,62	1,96	2,29	2,59	2,82	2,99
4800		0,00	0,26	0,71	1,24	1,69	2,04	2,40	2,70	2,94	3,12
5000		0,00	0,27	0,74	1,29	1,76	2,13	2,50	2,81	3,07	3,24

Additional power based on drive ratio

WEDGE 5V (E)

		Additional power [kW]									
rpm - faster shaft	Drive ratio	1.00	1.02	1.06	1.12	1.19	1.27	1.39	1.58	1.95	oltre
		1.01	1.05	1.11	1.18	1.26	1.38	1.57	1.94	3.38	3.39
100		0,00	0,01	0,02	0,04	0,04	0,06	0,07	0,07	0,08	0,08
200		0,00	0,01	0,04	0,07	0,09	0,11	0,13	0,15	0,16	0,17
300		0,00	0,02	0,06	0,10	0,14	0,17	0,20	0,22	0,24	0,25
400		0,00	0,03	0,07	0,13	0,18	0,22	0,26	0,29	0,32	0,34
500		0,00	0,04	0,10	0,17	0,23	0,28	0,32	0,37	0,40	0,42
600		0,00	0,04	0,12	0,20	0,27	0,33	0,39	0,44	0,48	0,51
700		0,00	0,05	0,13	0,24	0,32	0,39	0,46	0,51	0,56	0,59
800		0,00	0,06	0,15	0,27	0,37	0,44	0,52	0,59	0,64	0,68
900		0,00	0,07	0,18	0,30	0,41	0,50	0,59	0,66	0,72	0,76
1000		0,00	0,07	0,19	0,34	0,46	0,55	0,65	0,73	0,79	0,85
1100		0,00	0,08	0,21	0,37	0,50	0,61	0,71	0,80	0,88	0,93
1200		0,00	0,09	0,23	0,40	0,55	0,67	0,78	0,88	0,96	1,01
1300		0,00	0,10	0,25	0,43	0,60	0,72	0,85	0,95	1,04	1,10
1400		0,00	0,10	0,27	0,47	0,64	0,78	0,91	1,02	1,12	1,18
1500		0,00	0,10	0,29	0,51	0,68	0,83	0,98	1,10	1,20	1,26
1600		0,00	0,11	0,31	0,54	0,74	0,89	1,04	1,17	1,27	1,35
1700		0,00	0,12	0,33	0,57	0,78	0,94	1,10	1,24	1,35	1,43
1800		0,00	0,13	0,35	0,60	0,82	1,00	1,17	1,32	1,43	1,52
1900		0,00	0,13	0,37	0,64	0,87	1,05	1,24	1,39	1,51	1,60
2000		0,00	0,14	0,38	0,67	0,91	1,11	1,30	1,46	1,60	1,69
2100		0,00	0,15	0,40	0,71	0,96	1,17	1,37	1,54	1,68	1,77
2200		0,00	0,15	0,43	0,74	1,01	1,22	1,43	1,61	1,75	1,86
2300		0,00	0,16	0,44	0,77	1,05	1,28	1,49	1,68	1,83	1,94
2400		0,00	0,17	0,46	0,81	1,10	1,33	1,56	1,76	1,91	2,03
2500		0,00	0,18	0,49	0,84	1,15	1,39	1,63	1,83	1,70	2,11
2600		0,00	0,18	0,50	0,88	1,19	1,44	1,69	1,90	2,07	2,20
2700		0,00	0,19	0,52	0,90	1,24	1,50	1,76	1,98	2,15	2,28
2800		0,00	0,20	0,54	0,94	1,28	1,55	1,82	2,05	2,23	2,37
2900		0,00	0,21	0,56	0,98	1,32	1,61	1,88	2,12	2,31	2,45
3000		0,00	0,21	0,58	1,01	1,38	1,66	1,95	2,19	2,39	2,54
3100		0,00	0,22	0,60	1,04	1,42	1,72	2,01	2,27	2,47	2,62
3200		0,00	0,23	0,62	1,07	1,46	1,78	2,08	2,34	2,55	2,71
3300		0,00	0,24	0,64	1,11	1,51	1,83	2,15	2,41	1,16	2,79
3400		0,00	0,24	0,65	1,14	1,56	1,89	2,21	2,49	1,24	2,88
3500		0,00	0,25	0,68	1,18	1,60	1,94	2,27	2,56	2,79	2,96
3600		0,00	0,26	0,69	1,21	1,65	2,00	2,34	2,63	2,87	3,04
3700		0,00	0,26	0,71	1,24	1,69	2,05	2,40	2,71	2,95	3,13
3800		0,00	0,27	0,74	1,28	1,74	2,11	2,47	1,31	3,03	3,21
3900		0,00	0,28	0,75	1,31	1,79	2,16	2,54	2,85	3,11	3,29
4000		0,00	0,29	0,77	1,35	1,83	2,22	2,60	1,46	3,19	3,38
4200		0,00	0,29	0,81	1,41	1,92	2,33	2,73	3,07	3,35	3,54
4400		0,00	0,31	0,85	1,48	2,01	2,44	2,86	3,22	3,51	3,71
4600		0,00	0,32	0,89	1,54	2,10	1,08	2,99	3,37	3,67	3,88
4800		0,00	0,34	0,93	1,61	2,20	2,66	3,12	3,51	3,82	4,05
5000		0,00	0,35	0,82	2,04	2,29	2,77	3,29	3,65	3,99	4,22

Power rating

WEDGE 8V (E)

Rated power [kW]												
rpm - faster shaft Pitch Ø [mm]	315	335	355	380	400	430	450	480	500	540	560	630
50	2,21	2,43	2,68	2,99	3,29	3,59	3,90	4,19	4,49	4,85	5,21	5,93
100	4,11	4,52	4,99	5,58	6,16	6,74	7,32	7,90	8,47	9,16	9,84	11,20
150	5,88	6,49	7,18	8,03	8,88	9,73	10,57	11,41	12,24	13,24	14,24	16,22
200	7,57	8,36	9,26	10,38	11,49	12,59	13,69	14,78	15,87	17,17	18,47	21,03
250	9,20	10,17	11,27	12,64	14,00	15,36	16,70	18,04	19,38	20,97	22,55	25,68
300	10,77	11,91	13,22	14,83	16,44	18,04	19,63	21,20	22,78	24,64	26,50	30,17
350	12,30	13,61	15,11	16,97	18,81	20,64	22,47	24,28	26,07	28,20	30,32	34,50
400	13,77	15,26	16,94	19,04	21,12	23,18	25,22	27,25	29,26	31,65	34,02	38,68
450	15,22	16,86	18,73	21,05	23,36	25,64	27,89	30,14	32,36	34,99	37,59	42,70
500	16,61	18,42	20,47	23,02	25,53	28,03	30,49	32,93	35,34	38,21	41,03	46,56
550	17,97	19,94	22,16	24,92	27,64	30,34	33,00	35,64	38,23	41,31	44,33	50,23
600	19,29	21,41	23,80	26,77	29,70	32,58	35,43	38,24	41,01	44,29	47,49	53,72
650	20,57	22,83	25,39	28,56	31,67	34,75	37,77	40,75	43,68	47,13	50,50	57,02
700	21,81	24,22	26,94	30,29	33,59	36,84	40,03	43,16	46,23	49,84	53,36	60,11
750	23,01	25,56	28,43	31,96	35,43	38,84	42,18	45,46	48,66	52,41	56,05	62,99
800	24,18	26,85	29,87	33,58	37,21	40,76	44,25	47,65	50,96	54,83	58,57	65,64
850	25,30	28,10	31,25	35,12	38,91	42,61	46,21	49,72	53,14	57,10	60,91	68,06
900	26,38	29,31	32,59	36,61	40,54	44,36	48,07	51,68	55,17	59,21	63,07	70,23
950	27,42	30,46	33,87	38,03	42,08	46,01	49,82	53,52	57,07	61,15	65,03	72,14
1000	28,42	31,56	35,09	39,38	43,54	47,58	51,47	55,21	58,81	62,92	66,79	73,78
1050	29,37	32,62	36,25	40,66	44,93	49,04	53,00	56,79	60,41	64,50	68,33	75,14
1100	30,28	33,62	37,35	41,87	46,23	50,40	54,40	58,22	61,83	65,91	69,66	76,19
1150	31,14	34,57	38,40	43,01	47,43	51,66	55,69	59,51	63,10	67,11	70,76	76,95
1200	31,96	35,47	39,37	44,07	48,54	52,82	56,85	60,65	64,19	68,11	71,62	77,39
1250	32,73	36,31	40,28	45,04	49,57	53,85	57,88	61,63	65,11	68,90	72,24	77,50
1300	33,44	37,09	41,12	45,93	50,49	54,77	58,77	62,46	65,85	69,47	72,60	77,26
1350	34,11	37,81	41,90	46,75	51,31	55,57	59,52	63,13	66,38	69,82	72,69	76,67
1400	34,72	38,48	42,59	47,47	52,03	56,25	60,12	63,62	66,74	69,93	72,52	75,72
1450	35,28	39,08	43,23	48,11	52,64	56,80	60,57	63,94	66,88	69,80	72,05	74,38
1500	35,78	39,62	43,78	48,65	53,14	57,22	60,88	64,08	66,81	69,44	71,30	72,65
1550	36,23	40,09	44,26	49,10	53,53	57,51	61,02	64,04	66,53	68,81	70,26	70,52
1600	36,62	40,48	44,65	49,46	53,80	57,66	61,00	63,80	66,03	67,91	68,90	-
1650	36,95	40,82	44,96	49,71	53,96	57,66	60,81	63,37	65,30	66,76	67,22	-
1700	37,23	41,09	45,20	49,87	53,99	57,52	60,45	62,73	64,33	65,32	65,22	-
1750	37,44	41,28	45,34	49,92	53,89	57,24	59,91	61,89	63,13	63,59	-	-
1800	37,59	41,40	45,40	49,86	53,67	56,79	59,19	60,83	61,68	61,58	-	-
1850	37,67	41,44	45,37	49,69	53,32	56,19	58,29	59,56	59,97	-	-	-
1900	37,68	41,40	45,25	49,41	52,82	55,43	57,19	58,07	58,00	-	-	-
1950	37,63	41,29	45,03	49,02	52,19	54,51	55,91	56,34	-	-	-	-
2000	37,51	41,09	44,72	48,51	51,43	53,40	54,41	54,38	-	-	-	-
2100	37,05	40,45	43,80	47,12	49,44	50,69	50,81	-	-	-	-	-
2200	36,30	39,47	42,47	45,24	46,86	47,25	-	-	-	-	-	-
2300	35,24	38,12	40,71	42,83	43,64	-	-	-	-	-	-	-
2400	33,87	36,40	38,51	39,88	39,76	-	-	-	-	-	-	-
2500	32,16	34,30	35,85	36,37	-	-	-	-	-	-	-	-
2600	30,11	31,79	32,71	-	-	-	-	-	-	-	-	-
2700	27,70	28,86	29,07	-	-	-	-	-	-	-	-	-
2800	24,94	25,51	-	-	-	-	-	-	-	-	-	-

V-BELTS - CW

Additional power based on drive ratio

WEDGE 8V (E)

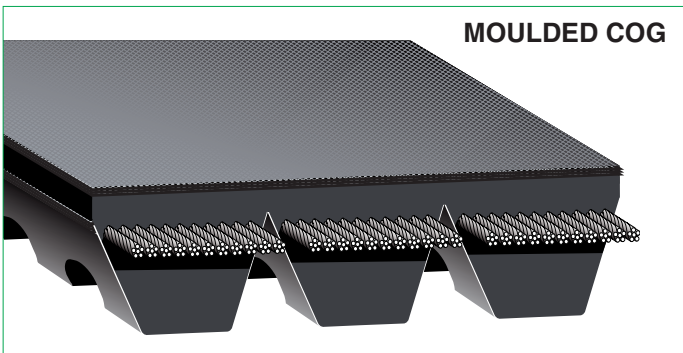
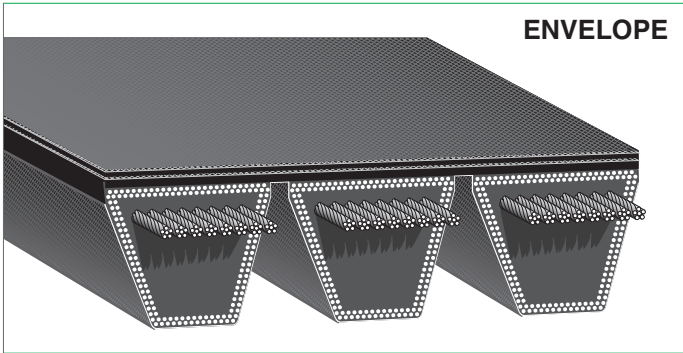
Additional power [kW]										
rpm - faster shaft	Drive ratio									
	1.00 1.01	1.02 1.05	1.06 1.11	1.12 1.18	1.19 1.26	1.27 1.38	1.39 1.57	1.58 1.94	1.95 3.38	oltre 3.39
50	0,00	0,01	0,04	0,08	0,11	0,13	0,16	0,18	0,19	0,21
100	0,00	0,04	0,10	0,16	0,22	0,27	0,32	0,35	0,39	0,41
150	0,00	0,05	0,14	0,24	0,33	0,40	0,48	0,54	0,58	0,62
200	0,00	0,07	0,19	0,33	0,45	0,54	0,63	0,71	0,78	0,82
250	0,00	0,09	0,24	0,41	0,56	0,68	0,79	0,89	0,97	1,03
300	0,00	0,10	0,28	0,49	0,67	0,81	0,95	1,07	1,16	1,24
350	0,00	0,12	0,33	0,57	0,78	0,95	1,11	1,25	1,36	1,44
400	0,00	0,14	0,38	0,65	0,89	1,08	1,26	1,43	1,55	1,65
450	0,00	0,15	0,43	0,74	1,00	1,22	1,43	1,60	1,75	1,85
500	0,00	0,17	0,47	0,82	1,12	1,35	1,58	1,78	1,94	2,06
550	0,00	0,19	0,51	0,90	1,23	1,49	1,74	1,96	2,13	2,27
600	0,00	0,21	0,57	0,99	1,34	1,63	1,90	2,14	2,33	2,47
650	0,00	0,23	0,61	1,07	1,45	1,76	2,06	2,32	2,52	2,68
700	0,00	0,24	0,65	1,15	1,56	1,89	2,21	2,49	2,72	2,88
750	0,00	0,26	0,71	1,23	1,67	2,03	2,38	2,67	2,91	3,09
800	0,00	0,28	0,75	1,31	1,79	2,16	2,53	2,85	3,10	3,29
850	0,00	0,29	0,80	1,39	1,90	2,30	2,69	3,03	3,30	3,50
900	0,00	0,31	0,85	1,47	2,01	2,43	2,85	3,21	3,49	3,71
950	0,00	0,33	0,89	1,55	2,12	2,56	3,01	3,38	3,69	3,91
1000	0,00	0,35	0,94	1,64	2,23	2,71	3,16	3,57	3,88	4,12
1050	0,00	0,36	0,99	1,72	2,34	2,84	3,32	3,74	4,07	4,32
1100	0,00	0,38	1,04	1,80	2,45	2,98	3,48	3,92	4,27	4,53
1150	0,00	0,40	1,08	1,88	2,57	3,11	3,64	4,10	4,46	4,74
1200	0,00	0,41	1,13	1,96	2,68	3,24	3,80	4,28	4,66	4,93
1250	0,00	0,43	1,18	2,04	2,79	3,38	3,96	4,46	4,85	5,14
1300	0,00	0,45	1,22	2,13	2,90	3,52	4,12	4,63	5,04	5,35
1350	0,00	0,46	1,27	2,21	3,01	3,65	4,27	4,81	5,24	5,55
1400	0,00	0,49	1,32	2,29	3,12	3,79	4,43	4,99	5,43	5,76
1450	0,00	0,50	1,36	2,38	3,24	3,92	4,59	5,17	5,63	5,96
1500	0,00	0,51	1,41	2,46	3,35	4,06	4,75	5,35	5,82	6,17
1550	0,00	0,54	1,46	2,54	3,46	4,19	4,91	5,52	6,02	6,38
1600	0,00	0,55	1,51	2,62	3,57	4,32	5,07	5,70	6,21	6,58
1650	0,00	0,57	1,55	2,70	3,68	4,46	5,22	5,88	6,41	6,79
1700	0,00	0,59	1,60	2,78	3,79	4,60	5,38	6,06	6,60	6,99
1750	0,00	0,60	1,65	2,87	3,90	4,74	5,54	6,24	6,80	7,20
1800	0,00	0,62	1,69	2,95	4,02	4,87	5,70	6,41	6,99	7,41
1850	0,00	0,64	1,74	3,03	4,13	5,00	5,85	6,60	7,18	7,61
1900	0,00	0,65	1,79	3,11	4,24	5,14	6,02	6,77	7,37	7,82
1950	0,00	0,68	1,83	3,19	4,35	5,27	6,17	6,95	7,57	8,02
2000	0,00	0,69	1,88	3,27	4,46	5,41	6,33	7,13	7,77	8,23
2100	0,00	0,73	1,97	3,43	4,68	5,68	6,65	7,49	8,16	8,64
2200	0,00	0,76	2,07	3,60	4,91	5,95	6,96	7,84	8,55	9,05
2300	0,00	0,79	2,16	3,77	5,13	6,22	7,28	8,20	8,94	9,46
2400	0,00	0,83	2,26	3,93	5,35	6,49	7,60	8,55	9,32	9,88
2500	0,00	0,86	2,35	4,10	5,57	6,76	7,91	8,91	9,71	10,29
2600	0,00	0,90	2,44	4,26	5,79	7,03	8,23	9,27	10,10	10,70
2700	0,00	0,93	2,54	4,42	6,02	7,30	8,55	9,62	10,49	11,11
2800	0,00	0,96	2,63	4,58	6,24	7,57	8,86	9,98	10,88	11,52



SIT BANDED - Narrow (ISO)

E  Performance index
 MC  Performance index

SPZ - SPA SPB - SPC
XPZ - XPA XPB - XPC



These belts are available in two different ranges:

- MC range (Raw Edge and Moulded Cog): up to 3000 mm length included
- E range (Envelope): over 3000 mm length

Precision Matched

Belt length [mm]	Tolerance [mm]
up to 1399	+/- 2
1400 ÷ 2799	+/- 3
2800 ÷ 5199	+/- 5
over 5200	+/- 8

APPLICATIONS

For shock loads applications, ideal for pulsating loads, high capacity drives and for short-center, heavy-duty drives.

- Compressors
- Industrial fans
- Textile machines
- Woodworking machines
- Construction equipment

KEY FEATURES & BENEFITS

- Oil, heat, ozone and abrasion resistance
- Temperature: -20/+70 °C
- Static conductive (ISO 1813)
- Precision Matched
- Guaranteed dimensional stability

BELT MATERIAL

- Tensile members: High resistance polyester
- Compound: Hyprene

V-BELTS - BANDED ISO

SIT have a complete stock of pulleys for all belts.

Available sizes

BANDED XPZ	
Part number	Datum length (Ld) [mm]
MOULDED COG	
XPZ 1250	1250
XPZ 1400	1400
XPZ 1500	1500
XPZ 1600	1600
XPZ 1700	1700
XPZ 1800	1800
XPZ 1900	1900
XPZ 2000	2000
XPZ 2120	2120
XPZ 2240	2240
XPZ 2360	2360
XPZ 2500	2500
XPZ 2650	2650
XPZ 2800	2800
XPZ 3000	3000

BANDED XPA / SPA	
Part number	Datum length (Ld) [mm]
MOULDED COG	
XPA 1250	1250
XPA 1400	1400
XPA 1500	1500
XPA 1600	1600
XPA 1700	1700
XPA 1800	1800
XPA 1900	1900
XPA 2000	2000
XPA 2120	2120
XPA 2240	2240
XPA 2360	2360
XPA 2500	2500
XPA 2650	2650
XPA 2800	2800
XPA 3000	3000
ENVELOPE	
SPA 3150	3150
SPA 3350	3350
SPA 3550	3550
SPA 3750	3750
SPA 4000	4000
SPA 4250	4250
SPA 4500	4500

BANDED XPB / SPB	
Part number	Datum length (Ld) [mm]
MOULDED COG	
XPB 2000	2000
XPB 2120	2120
XPB 2240	2240
XPB 2360	2360
XPB 2500	2500
XPB 2650	2650
XPB 2800	2800
XPB 3000	3000
ENVELOPE	
SPB 3150	3150
SPB 3350	3350
SPB 3550	3550
SPB 3750	3750
SPB 4000	4000
SPB 4250	4250
SPB 4500	4500
SPB 4750	4750
SPB 5000	5000
SPB 5300	5300
SPB 5600	5600
SPB 6000	6000
SPB 6300	6300
SPB 6700	6700
SPB 7100	7100
SPB 7500	7500
SPB 8000	8000

BANDED XPC / SPC	
Part number	Datum length (Ld) [mm]
MOULDED COG	
XPC 3000	3000
ENVELOPE	
SPC 3150	3150
SPC 3350	3350
SPC 3550	3550
SPC 3750	3750
SPC 4000	4000
SPC 4250	4250
SPC 4500	4500
SPC 4750	4750
SPC 5000	5000
SPC 5300	5300
SPC 5600	5600
SPC 6000	6000
SPC 6300	6300
SPC 6700	6700
SPC 7100	7100
SPC 7500	7500
SPC 8000	8000
SPC 8500	8500
SPC 9000	9000
SPC 9500	9500
SPC 10000	10000
SPC 11200	11200
SPC 11800	11800
SPC 12500	12500

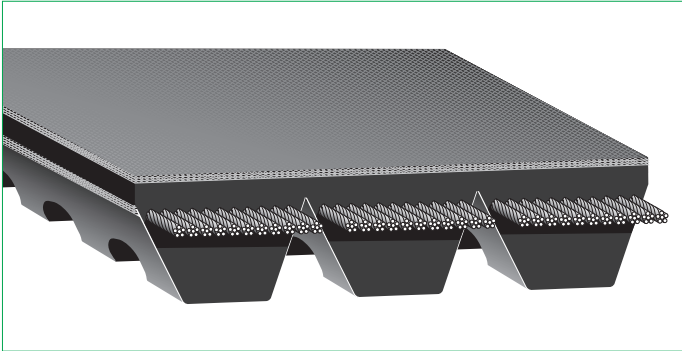


SIT BANDED - Classical (ISO)



Performance index

BX - CX



BANDED Classical belts are available in two different ranges:

- MC range (Raw Edge and Moulded Cog): up to 3000 mm length included
- E range (Envelope): over 3000 mm length (on request)

Precision Matched

Belt length [mm]	Tolerance [mm]
up to 1399	+/- 2
1400 ÷ 2799	+/- 3
over 2800	+/- 5

APPLICATIONS

For shock loads applications, ideal for pulsating loads, high capacity drives and for short-center, heavy-duty drives.

- Compressors
- Industrial fans
- Textile machines
- Woodworking machines
- Construction equipment

KEY FEATURES & BENEFITS

- Oil, heat, ozone and abrasion resistance
- Temperature: -20/+70 °C
- Static conductive (ISO 1813)
- Precision Matched
- Guaranteed dimensional stability

BELT MATERIAL

- Tensile member: High resistance polyester
- Compound: Hyprene

V-BELTS - BANDED ISO

SIT have a complete stock of pulleys for all belts.

Available sizes

BANDED BX	
Part number	Pitch length (Lp) [mm]
BX35	935
BX38	1011
BX42	1113
BX43	1138
BX46	1214
BX48	1265
BX50	1316
BX51	1341
BX52	1367
BX53	1392
BX54	1417
BX55	1443
BX56	1468
BX57	1494
BX58	1519
BX59	1544
BX60	1570
BX62	1621
BX63	1646
BX64	1671
BX65	1697
BX66	1722
BX67	1748
BX68	1773
BX70	1824
BX71	1849
BX72	1875
BX73	1900
BX74	1925
BX75	1951
BX77	2002
BX78	2027
BX79	2052
BX80	2078
BX81	2103
BX82	2129
BX83	2154
BX85	2205
BX87	2256
BX88	2281
BX90	2332
BX93	2408
BX94	2434
BX95	2459
BX96	2484
BX97	2510
BX99	2560
BX100	2586
BX103	2662
BX105	2713
BX108	2789
BX112	2891

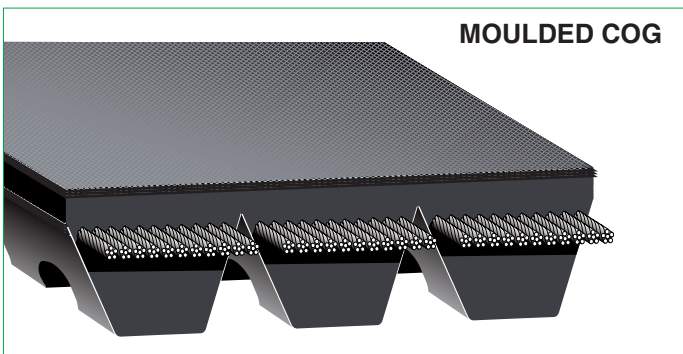
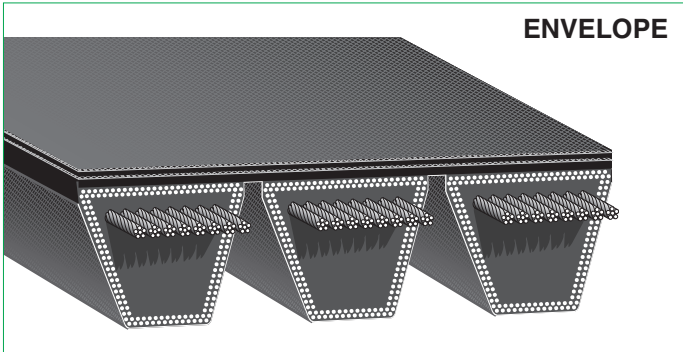
BANDED CX	
Part number	Pitch length (Lp) [mm]
CX60	1598
CX68	1801
CX75	1979
CX81	2131
CX85	2233
CX90	2360
CX96	2512
CX99	2588
CX100	2614
CX105	2741
CX108	2817
CX109	2842
CX112	2918



SIT BANDED WEDGE - Narrow (RMA)

E  Performance index
 MC  Performance index

3V - 5V - 8V
 3VX - 5VX



BANDED WEDGE NARROW RMA belts are available in two different ranges:

- MC range (Raw Edge and Moulded Cog)
- E range (Envelope)

Precision Matched

Belt length [mm]	Tolerance [mm]
up to 1399	+/- 2
1400 ÷ 2799	+/- 3
2800 ÷ 5199	+/- 5
over 5200	+/- 8

APPLICATIONS

For shock loads applications, ideal for pulsating loads, high capacity drives and for short-center, heavy-duty drives.

- Compressors
- Industrial fans
- Textile machines
- Woodworking machines
- Construction equipment

KEY FEATURES & BENEFITS

- Oil, heat, ozone and abrasion resistance
- Temperature: -20/+70°C
- Static conductive (ISO 1813)
- Precision Matched
- Guaranteed dimensional stability

BELT MATERIAL

- Tensile members: High resistance polyester
- Compound: Hyprene

V-BELTS - BANDED RMA

BANDED WEDGE PLUS (RMA)

Section 5VF - 8VF

Ultimate upgrade belt for all heavy-duty industrial machinery and equipment. Ideal for operation in harsh elements on the toughest high power drives (crushers, saws, dryers and blow tanks).

The following sizes are available:

- 5V900 ÷ 5V3550
- 8V1250 ÷ 8V6000

See BANDED WEDGE NARROW RMA table for lengths.

- **Tensile member:** Aramid

SIT have a complete stock of pulleys for all belts.

Available sizes

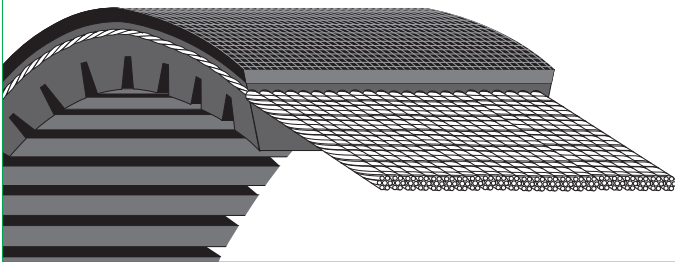
TORQUE TEAM 3V	
Part number	Effective length (Le) [mm]
MOULDED COG	
3VX 250	635
3VX 265	675
3VX 280	710
3VX 300	760
3VX 315	800
3VX 335	850
3VX 355	900
3VX 375	955
3VX 400	1015
3VX 425	1080
3VX 450	1145
3VX 475	1205
3VX 500	1270
3VX 530	1345
3VX 560	1420
3VX 600	1525
3VX 630	1600
3VX 670	1700
3VX 710	1805
3VX 750	1905
3VX 800	2030
3VX 850	2160
3VX 900	2285
3VX 950	2415
3VX 1000	2540
3VX 1060	2690
3VX 1120	2845
3VX 1180	2995
ENVELOPE	
3V 1250	3175
3V 1320	3355
3V 1400	3555

TORQUE TEAM 5V	
Part number	Effective length (Le) [mm]
MOULDED COG	
5VX 500	1270
5VX 530	1345
5VX 560	1420
5VX 600	1525
5VX 630	1600
5VX 670	1700
5VX 710	1805
5VX 750	1905
5VX 800	2030
5VX 850	2160
5VX 900	2285
5VX 950	2415
5VX 1000	2540
5VX 1060	2690
5VX 1120	2845
5VX 1180	2995
ENVELOPE	
5V 1250	3175
5V 1320	3355
5V 1400	3555
5V 1500	3810
5V 1600	4065
5V 1700	4320
5V 1800	4570
5V 1900	4825
5V 2000	5080
5V 2120	5385
5V 2240	5690
5V 2360	5995
5V 2500	6350
5V 2650	6730
5V 2800	7110
5V 3000	7620
5V 3150	8000
5V 3350	8510
5V 3550	9015

TORQUE TEAM 8V	
Part number	Effective length (Le) [mm]
ENVELOPE	
8V 1000	2540
8V 1060	2690
8V 1120	2845
8V 1180	2995
8V 1250	3175
8V 1320	3355
8V 1400	3555
8V 1500	3810
8V 1600	4065
8V 1700	4320
8V 1800	4570
8V 1900	4825
8V 2000	5080
8V 2120	5385
8V 2240	5690
8V 2360	5995
8V 2500	6350
8V 2650	6730
8V 2800	7110
8V 3000	7620
8V 3150	8000
8V 3350	8510
8V 3550	9015
8V 3750	9525
8V 4000	10160
8V 4250	10795
8V 4500	11430
8V 4750	12065
8V 5000	12700
8V 5600	14224
8V 6000	15240

SIT VARIO - for variable pulleys

MOULDED COG



KEY FEATURES & BENEFITS

- Oil, ozone and abrasion resistance
- Temperature: -30/+75 °C
- High-power capacity
- Superior stability

These belts are used for high power transmission on variable speed drive systems.

Belt dimension

Section a x b [mm]	13x6*	22x8*	28x8 28x10*	36x10 36x12*	46x12 46x13* 46x14	50x14 54x16*	70x20
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*= Recommended measures



BELT MATERIAL

- Tensile member: Flexten
- Compound: Chloroprene



Available sizes

Belt section	13x6	22x8 28x8	28x10 36x10	36x12 46x12	46x14 54x14	54x16	70x20
Inside length [mm]	Pitch length [mm]						
400	-	-	-	-	-	-	-
425	455	-	-	-	-	-	-
450	480	-	-	-	-	-	-
475	505	-	-	-	-	-	-
500	530	540	-	-	-	-	-
525	555	560	-	-	-	-	-
550	580	590	-	-	-	-	-
560	590	600	-	-	-	-	-
575	605	610	-	-	-	-	-
600	630	640	650	655	-	-	-
625	655	660	670	680	-	-	-
630	660	670	680	-	-	-	-
650	680	690	700	705	-	-	-
670	700	710	720	-	-	-	-
675	705	715	730	-	-	-	-
700	730	740	750	755	-	-	-
710	740	750	760	765	-	-	-
725	755	760	770	780	-	-	-
750	780	790	800	805	-	-	-
770	800	810	820	825	-	-	-
775	805	815	830	830	-	-	-
790	820	820	840	845	-	-	-
800	830	840	850	855	860	-	-
820	850	860	870	875	880	-	-
850	880	890	900	905	910	-	-
900	930	940	950	955	960	-	-
950	980	990	1000	1005	1010	1025	-
960	990	1000	1010	1015	1020	1035	-
1000	1030	1040	1050	1055	1060	1075	-
1050	1080	1090	1100	1105	1110	1125	-
1060	1090	1100	1110	1115	1120	1135	-
1100	1130	1140	1150	1155	1160	1175	-
1120	1150	1160	1170	1175	1180	1195	-
1150	1180	1190	1200	1205	1210	1225	-
1180	1210	1220	1230	1235	1240	1255	-
1200	1230	1240	1250	1255	1260	1275	-
1225	1255	1260	1270	1280	1285	1300	-
1250	1280	1290	1300	1305	1310	1325	1345
1320	1350	1360	1370	1375	1380	1395	1415
1350	1380	1390	1400	1405	1410	1425	1445
1400	1430	1440	1450	1455	1460	1475	1495
1500	-	1540	1550	1555	1560	1575	1595
1600	-	1640	1650	1655	1660	1675	1695
1700	-	1740	1750	1755	1760	1775	1795
1800	-	1840	1850	1855	1860	1875	1895
1900	-	1940	1950	1955	1960	1975	1995
2000	-	2040	2050	2055	2060	2075	2095
2120	-	2160	2170	2175	2180	2195	2215
2240	-	2280	2290	2295	2300	2315	2335
2360	-	-	2410	2415	2420	2435	2455
2500	-	-	2550	2555	2560	2575	2595
2800	-	-	-	-	-	-	2895
3150	-	-	-	-	-	-	3245
3210	-	-	-	-	-	-	3305
3520	-	-	-	-	-	-	3615

Belt section	46x13
Inside length [mm]	Pitch length [mm]
795	855
845	905
870	930
895	955
945	1005
995	1055
1025	1085
1055	1115
1115	1175
1140	1200
1155	1215
1175	1235
1190	1250
1245	1305
1265	1325
1315	1375
1395	1455
1430	1490
1490	1550
1560	1620
1595	1655
1635	1695
1695	1755
1735	1795
1795	1855
1895	1955
1915	1975
2000	2060
2060	2120
2120	2180
2210	2270
2240	2300
2360	2420
2400	2460
2500	2560
2800	2860

Part Number

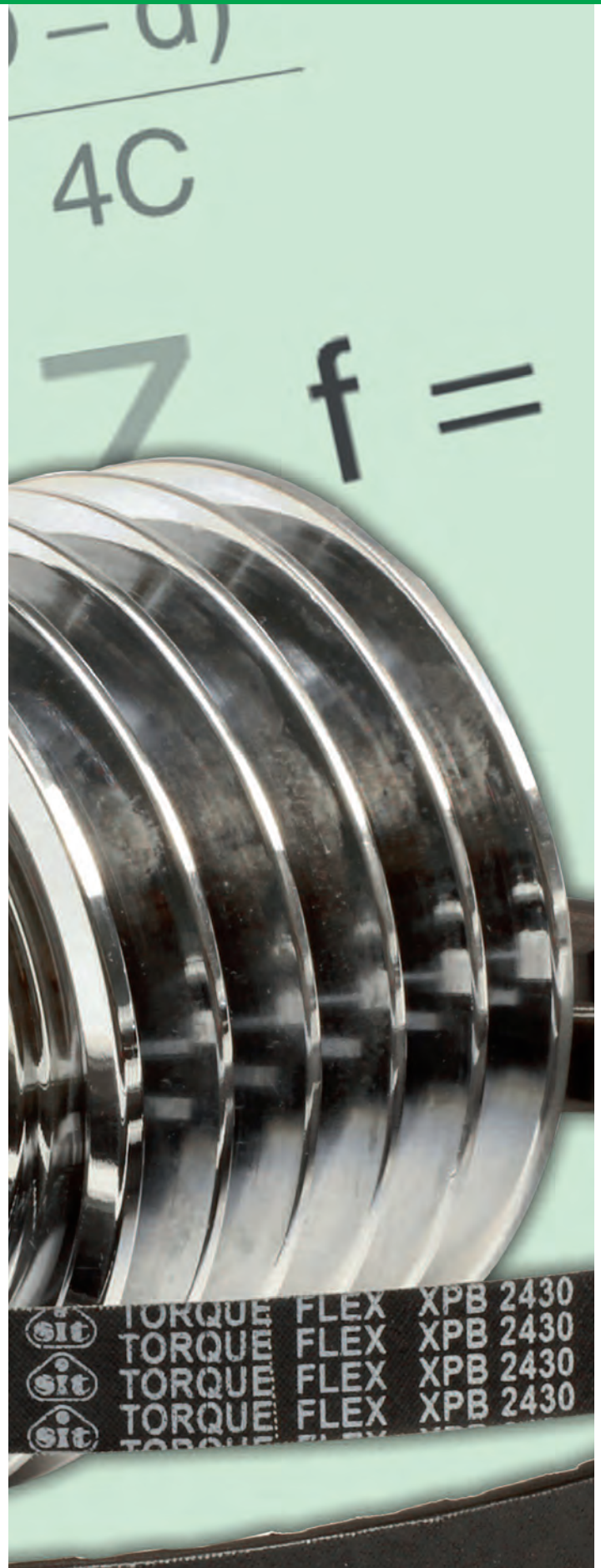
CV 1200 V2810

SIT Vario

Inside length / pitch length mm

Section (width - height)

Drive design (V-Belt)



Design

To obtain the full advantages of a SIT belt, it is necessary that the drive be correctly designed.

In this manual the factors which influence the capacity and service of belts have been outlined. The fundamental theory covering their operation and design has been detailed and the mathematical formulae for calculating drives have been shown. The ratings in this manual are based on the achievement of trouble-free operation

Fundamentals of drive design

There are fundamental relations involving tensions, speeds, friction, etc., which apply to all types of belt driving. These basic concepts are described and their applications to belt drives are discussed.

Definitions

Tension in a belt is a force acting along the length of the belt and tending to elongate it. Belt tension is measured in Newtons (N).

Torque is the effectiveness of a force to produce rotation about an axis, and thus involves the size of the force and its moment arm. Torque is the product of a force (or tension) and the length of the arm through which it acts. The units for torque are Newton metres (Nm) and kilo-Newton metres (kNm).

Energy and work are closely related and are expressed in the same units. Work is the product of a force and the distance through which it acts. Energy is the capacity for performing work. The units are the Joule (J) and the kilo-Joule (kJ). The energy of a moving body in Joules is given by:

$$\frac{1}{2} mv^2$$

where "m" is the mass, in kilograms (kgs.) and "v" is its velocity in metres/second (m/s).

Power is the rate of doing work or transmitting energy. The unit normally used is the kilowatt (kW) which is the work done when a force of 1000 Newtons is displaced through a distance of one metre in one second.

Power exerted for a period of time produces work, giving rise to the term or unit kilowatt-hour (kWh).

Coefficient of Friction

If, as in Fig. 5, a body of mass "m" kg rests on a horizontal plane surface and a force "F" parallel to the surface is just enough to cause the body to be at the point of slipping, the ratio (μ) of tangential to normal force is known as the coefficient of friction.

$$\mu = \frac{F}{m \times g} \quad (1)$$

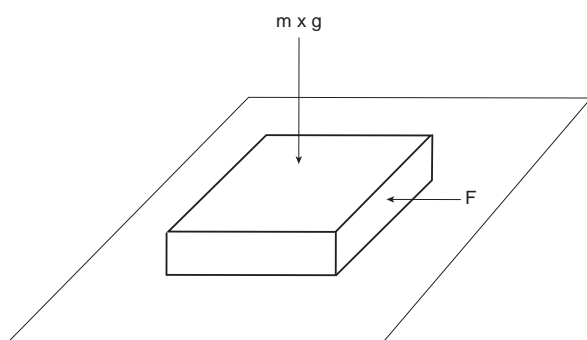


Fig. 5

and economical life. The tension in the belts and the diameters of the pulleys establish the degree of flexing, and the belt speed and length determine the frequency of flexing. Increasing the severity of any of these factors without compensating, by the creasing the severity of some other factor, can be done only with a penalty on belt life and with a sacrifice of the inherently low operating costs of the drive.

Tension Relationship

Consider a rope-or-belt as in Fig. 6 hanging over a pulley which resists rotation.

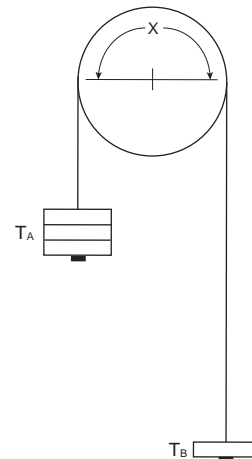


Fig. 6

Tension T_A and T_B are caused by large and small weights respectively. Common experience teaches that if the coefficient of friction between belt and pulley is large enough, a considerable difference in tension is possible in such a system.

Experience also tells us that when the arc of contact is reduced (as in Fig. 7 with a freely turning idler), T_B must be larger to keep the belt from slipping.

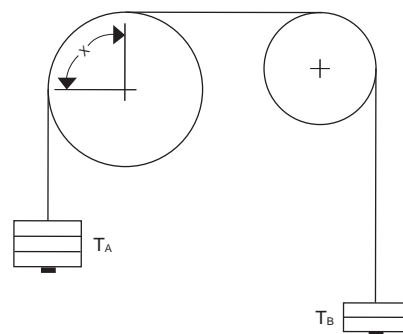


Fig. 7

The essential factors are the tensions, the coefficient of friction and the angle or arc of contact.

If in Fig. 6 or 7 the unbalanced tension ($T_A - T_B$) is large enough to overcome the resistance, the pulley will turn but the action is limited by the length of the belt.

It is an easy step to Fig. 8 where a joined or endless belt is applied to two pulleys and a turning movement or torque applied at shaft O_1 causes a torque at shaft O_2 .

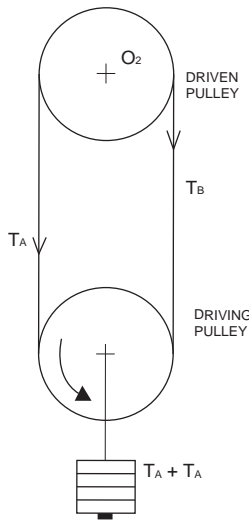


Fig. 8

Thus the action described in Fig. 6 is applicable continuously in a system like Fig. 8, illustrating the fundamental tension relations in belt driving.

To find the relation of T_A , coefficient of friction (μ) and the arc of contact (a in radians) refer to Fig. 9 representing a very small element of the belt of Fig. 6, 7 or 8.

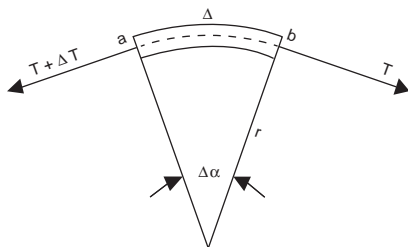


Fig. 9

The tension in the belt at "b" is T , and at "a" is $T + \Delta T$ due to friction. The element "ab" subtends the very small angle $\Delta\alpha$. The forces are more clearly represented in Fig. 10 which shows that the force F_n between this portion of the belt and the pulley is given by:

$$F_n = 2T \sin \frac{\Delta\alpha}{2} \quad (\text{here } \Delta T \text{ is negligible}) \quad (2)$$

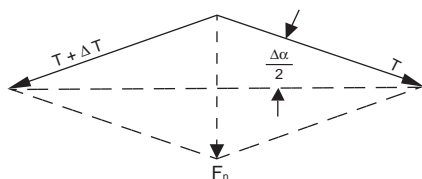


Fig. 10

Equations (4) and (5) below were developed for flat belts.

$$\Delta T = \mu F_n \quad (\text{the belt being at the point of slipping}) \quad (3)$$

$$\frac{\Delta T}{T} = \mu T \frac{\sin \frac{\Delta\alpha}{2}}{\frac{\Delta\alpha}{2}}$$

Taking limits as $\Delta\alpha$ approaches zero, —

$$\frac{dT}{d\alpha} = \mu T$$

Integrating,

$$\mu\alpha = \log_e \frac{T_A}{T_B}$$

$$\frac{T_A}{T_B} = e^{\mu\alpha} \quad (4)$$

$$\frac{T_A}{T_B} = e^{0.0175\mu\alpha} \quad \text{where "a" is arc of contact in degrees} \quad (5)$$

$$F_2 + F_3 = \frac{F_1}{\sin \frac{\beta}{2}}$$

With V and wedge belts the radial force causes a larger total against the faces of the pulley groove due to the wedging effect for which we shall use the symbol "u". The wedging effect is seen by reference to Fig. 11 to be as follows:

$$F_2 + F_3 = \frac{F_1}{\sin \frac{\beta}{2}}$$

$$u = \frac{F_2 + F_3}{F_1} = \frac{1}{\sin \frac{\beta}{2}}$$

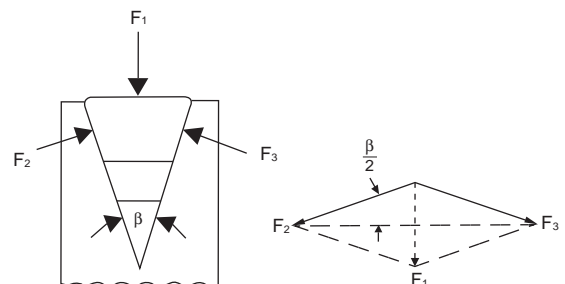


Fig. 11

Then, with V and wedge belts, the force required to cause the infinitesimal section to slip is the radial force multiplied by 'μ' and again by "u". Thus, while the coefficient of friction is independent of the shape of the belt, the effectiveness of 'μ' is multiplied by "u" in wedge belts and the tension formula then becomes:

$$\frac{T_A}{T_B} = e^{u\mu\alpha} \quad (6)$$

With V-grooved pulleys of 38° included angle

$$u = \frac{1}{\sin 19^\circ} = 3.07$$

Centrifugal Tension

At speeds at which V and wedge belts are usually operated, centrifugal tension may be a very important factor.

The centrifugal force F_c (Newtons) acting on a body of mass “m” kg moving “v” m/s in a curved path of radius “r” metres is given by:

$$F_c = \frac{mv^2}{r} \quad (7)$$

If, instead of representing the mass of the body, “m” represents kg per metre of length, the centrifugal force for the element in Fig. 9 is given by:

$$F_c = \frac{mv^2 r \Delta\alpha}{r} = mv^2 r \Delta\alpha \quad (8)$$

The centrifugal force acting on the elements of a belt is balanced by centrifugal tension (T_c) in the belt. From a relationship similar to Fig. 10.

$$F_c = 2T_c \sin \frac{\Delta\alpha}{2} \quad (9)$$

From (8) and (9),

$$T_c = \frac{mv^2 \Delta\alpha/2}{\sin \Delta\alpha/2}$$

Taking limits as $\Delta\alpha$ approaches zero.

$$T_c = mv^2 \quad (10)$$

Now if $T_1 = T_A + T_c$ and $T_2 = T_B + T_c$

Then,

$$R = \frac{T_1 - T_c}{T_2 - T_c} = e^{\mu\alpha} \quad (11)$$

Where R = ratio of tensions.

Note that equations (4), (5), (6) and (11) are valid only under the condition for which they were derived, i.e. when the belt is at the point of slipping.

Otherwise the existing tension ratio will be less than indicated.

Slack Side Tension

For any given condition, there is a minimum slack side tension below which the drive will not operate. The effective tension is established by the power requirement (expressed in kilowatts) and the belt speed.

Since the tight side tension (which is the maximum in the belt) is the sum of the effective tension and the slack side tension, it is advisable to keep the slack side tension as low as possible. This minimum can be best maintained automatically, in which case the actual slack side tension may be very little more than the minimum required.

Drives having a screw adjustment must be set up with some reserve tension to allow for stretch. As the belt gradually stretches, the tension will diminish to a point where the belt must be retightened.

With fixed centre (manually adjusted) drives and with 180° arc of

contact, V and wedge belt drives should be applied with ratio of tensions $R = 5.00$ and the tension should be restored when tension slacks off to the point where $R = 8.00$. If automatic tension adjustment is used with V and wedge belts, R may be permanently held at 8.00 (arc of contact 180°).

Creep

In belt practice the change in length that occurs with time as the belt continues in service is not called “creep”, as might be supposed from the use of this term in other engineering activities. With belts, this change of dimensions with time is called “stretch” or “growth in length”. The term “creep” as applied to belt driving refers to a loss of driven speed as the result of alternate lengthening and shortening of each portion of the belt as it experiences the cycle of tight and slack side tensions.

Whenever a belt passes around a pulley and there is a difference between the entering and leaving tensions, there is belt creep. Consider a portion or element of belt approaching a driving pulley. If the tension is high with reference to the torque the belt will travel at the same speed as the pulley face through some part of the arc of contact. Through the remainder of the arc of contact this portion of belt will be under progressively less tension down to the slack side tension at the exit point. During the slackening process the belt element shortens (recovers from elongation) and consequently moves slower than the pulley face. This relative motion is creep.

If the load is increased, the arc in which creep occurs (the “arc of creep”) increases. If the load is sufficiently increased the arc of creep may become as large as the arc of contact, in which case the belt will be at the point of slipping. The remedy, of course, is to provide more slack side tension.

Whether the belt is being driven by a pulley or is itself driving a pulley the arc of creep always starts from the exit point and progresses towards the entry point as the load increases.

Consider the action in the vicinity of the driving pulley. If “E” is the dynamic modulus of elasticity of the belt and “v₁” and “v₂” are the entry and exit velocities respectively.

$$\% \text{ Creep} = 100 \frac{V_1 - V_2}{V_2} =$$

$$100 \left[\frac{\left(1 + \frac{T_1}{E}\right) - \left(1 + \frac{T_2}{E}\right)}{\left(1 + \frac{T_1}{E}\right)} \right] = 100 \left(\frac{T_1 - T_2}{E + T_1} \right)$$

$$\% \text{ Creep} = \frac{100T_e}{E + T_1} \quad (12)$$

Since T_1 is small compared with E we may write:

$$\% \text{ Creep} = \frac{100T_e}{E} \quad (\text{approximately}) \quad (13)$$

Using the belt velocity as it approaches the drive pulley as a base, the belt slows down where it leaves the drive pulley by the amount of the creep percentage. The recovery of this velocity loss occurs where the belt leaves the driven pulley.

While the creep percentage is usually small enough to be neglected, without appreciable error, there are cases where the creep

value may be significant.

Torque and power

Where P = Power in kW
 v = belt speed (m/s)
 T_e = effective tension in Newtons
 rev/min = revolutions per minute

$$P = \frac{T_e v}{1,000} \tag{14}$$

$$P = \text{Torque in Nm} \times \frac{\text{rev/min}}{9550} \tag{15}$$

$$\text{Torque in Nm} = \frac{9550 \times P}{\text{rev/min}} \tag{16}$$

The SIT Belt Flexing Formula

The results of extensive testing in the SIT Laboratories and subsequent confirmation under field conditions are expressed in the "SIT Belt Flexing Formula":

$$\text{Service line in Flexing} = \frac{k \times d^{5.35} \times L}{v^{0.5} \times T_1^{4.12}} \tag{17}$$

Where k = a constant of proportionality
 d = pulley diameter
 L = length of belt
 v = belt speed
 T₁ = tight side tension

The exponents in this formula show the extremely large effect of changes in pulley diameter and belt tension. Similarly they show how a necessarily severe value of one of the factors can be compensated by appropriate changes in the others.

In considering this formula it should be remembered that it is based on resistance to internal damage only.

Obviously, for example, the tension in a belt may be limited by bearing loads, stretch considerations, or other external conditions not included in the formula.

In actual service it is difficult to segregate all factors as was done in our laboratory tests. For this reason the main utility of the formula is not in evaluating "K" to predict absolute values of service, but in the comparisons it makes possible between applications having some degree of similarity. Therefore, we have found the following formula to be very useful for comparing drives using V and wedge belts of the same cross sectional size.

$$\frac{\text{Flexing Service}_x}{\text{Flexing Service}_a} =$$

$$\left(\frac{d_x}{d_a}\right)^{5.35} \times \left(\frac{T_{1a}}{T_{1x}}\right)^{4.12} \times \left(\frac{v_x}{v_a}\right)^{0.5} \times \left(\frac{L_x}{L_a}\right) \tag{18}$$

where "a" is a set of known conditions and "Y" represents the desired conditions. Note that if any factor is the same in both cases, that term in (18) becomes unity and does not affect the ratio of

service. Very often only one factor is changed and formula (18) spotlights the effect of such a change.

Calculation of Arc of Contact

For ordinary two-pulley drives, the arc of contact can be determined from the following approximate formula:

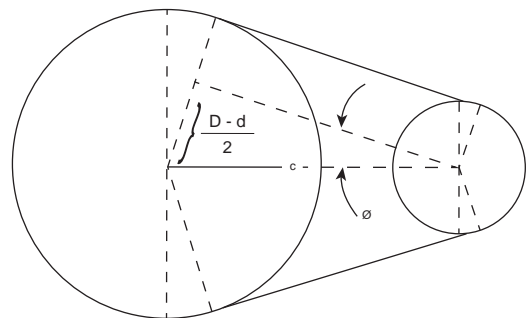
$$\text{Arc of Contact} = 180^\circ - \frac{60(D - d)}{C} \tag{19}$$

Where D = large pulley diameter
 d = small pulley diameter
 C = centre to centre distance
 (n.b. units of measurement must be the same).

The approximate formula is a simplification of the theoretical, which states:

$$\text{Arc} = \pi - 2 \sin^{-1} \left(\frac{D - d}{2C} \right) \text{ (in radians)} \tag{20}$$

■ The formula is apparent from the following sketch.



For small angles, it is assumed that an angle in radians is equal to its sine, and on this assumption,

$$\text{Arc} = 180 - 57.3 \left(\frac{D - d}{2C} \right) \text{ (in degrees)} \tag{21}$$

where 57.3 is the factor for converting radians to degrees. 57.3 is replaced by 60 (in formula 19) in order to compensate somewhat for the slight error introduced by the first assumption.

The approximate formula (19) is within 1° of the theoretical between 180° and 110° it gives arcs 3° too high at 100° and 50° too high at 90°. We recommend that the theoretical formula be used for arcs less than 100°.

Arc of Contact v Area of Contact

From the basic concept of friction between sliding surfaces, the area of surface does not influence the amount of friction. On the other hand, the friction is solely dependent on the character of the faces and the total pressure normal to the faces. It is possible to increase the area of contact and at the same time actually decrease the power capacity. Investigation will disclose the fact that when the power capacity is increased, this is accomplished by increasing one of the vital factors, such as the arc of contact, width of belt, or diameters of the pulleys and speed of belt.

Very often area of contact is thus increased incidentally, but it also frequently happens that of two drives the one with the smaller area has the larger capacity.

Length Formula

The precise formula for belt length around two pulleys as in Fig. 12 is as follows:

$$L = 2C \cos \varnothing + \frac{\pi (D + d)}{2} + \frac{\pi \varnothing (D + d)}{180} \quad (22)$$

Where L = belt length

C = centre to centre distance

D = large pulley diameter

d = small pulley diameter

$$\varnothing = \sin^{-1} \left(\frac{D - d}{2C} \right) \text{ (in degrees)}$$

L, C, D, and d must all be expressed in the same unit of length. The following approximate formula is easier to use and is accurate to within 0.15% with a 7 to 1 pulley ratio and centre distance of 6d, and even more accurate for the average drive:

$$L = 2C + 1.57 (D + d) \frac{(D - d)^2}{4C} \quad (23)$$

This formula can be solved for centre distance instead of belt length as follows:

$$C = \frac{L - 1.57 (D + d)}{4} + \sqrt{\left\{ \frac{L - 1.57 (D + d)}{4} \right\}^2 - \frac{(D - d)^2}{8}}$$

Where D = chosen diameter of large pulley

d = chosen diameter of small pulley

L = length of belt

(appertaining to defined diameters)

C = centre distance

(n.b. all units of measurement must be the same).

INERTIA

In the foregoing pages, inertia loads have not been considered. Generally speaking, inertia will not be a problem.

There has been little attempt to use quantitative values for the effect of inertia, mostly because of the limited knowledge of polar moments or acceleration values of individual components.

Where inertia is shown or suspected to be a factor on a particular drive and the moments and acceleration are known, an effective tension can be derived from inertia considerations using the following formula:

$$T_e = \frac{\pi d_p}{0.015(D)^2} \times \frac{\Delta N}{\Delta t} \times \frac{67\pi d_p}{(D)^2} \times \frac{\Delta N}{\Delta t}$$

Where d = diameter of driven pulley (mm)

I_p = moment of inertia of driven unit (kgm^2)

D = pulley diameter of driven unit (mm)

$\frac{\Delta N}{\Delta t}$ = change in driven speed (rev/min) in time
 $\Delta t \cdot T_e$ is in Newtons and must be added to the calculated T_e at this speed before proceeding to compute the maximum belt tension.

The moment of inertia is most easily found by experiment.

V-BELT DRIVE CONSIDERATIONS

(For more information on installation, maintenance and troubleshooting see pages 120-125).

1. Warped pulleys or rough pulley groove surfaces shorten belt life. For satisfactory service, surface roughness should not exceed 3.0 micrometers.

2. Belt life is affected inversely as the third power of the ambient temperature.

3. Correct belt tension is the key to good belt life.

Too little tension will result in slip damage. Too much tension will markedly reduce flex life. The flex life will decrease as the fourth power of the tension.

4. While there is a factor of safety in a properly designed belt drive which will permit, in an emergency, its operation without the full quota of belts, advantage should be taken of this only along enough to secure belts needed for replacement. When, after any considerable period of service, it becomes necessary to replace damaged or worn belts on the drive, it is essential that the entire set be replaced. All belts in service for any length of time are subject to stretch which makes the partial replacement of belts impractical.

5. A good many drives are now in existence, some of which are not designed according to the ratings given in this handbook. Where such drives are found, SIT belts can be used with the knowledge that they will give service equal or superior to any other comparable belts which may have been used on the drive.

SIT belts are of standard dimensions and can be used interchangeably, complete set by complete set, with any other standard belts and as replacements on any drive having standard pulleys and centre distances.

If, however, satisfactory service has not been obtained from the drive, consideration should be given to changing it to conform with the ratings shown in this handbook.

6. As a rule, the use of idlers on the back of V and wedge belts is not recommended, since the reverse bend reduces the life of the belts. Idlers have been used with some degree of success, however, and where no other means of take-up is possible, properly designed idlers can be used. Grooved idler pulleys operating on the inside of the belt, are preferred. Inside idlers reduce the arc contact and this must be allowed for.

7. Where it is possible to provide automatic take-up either by mounting the motor on rails or by pivoting it on the base, the tensions in the belt can be held much more uniform and greater life will result.

8. In assembling a drive, care must be taken to insure proper alignment of pulleys.

The belts should be operated at tensions just sufficient to insure against slippage. If the tensions are too low the belts will slip, with resulting power loss and increased wear on the belt and pulleys; if too high, the life of the belts will be decreased and the bearing pressures and other machine stresses will be higher than need be.

Time spent in insuring correct tensions will be well repaid by decreased operating and maintenance costs.

Idlers

IDLERS FOR FIXED CENTRE V AND WEDGE BELT DRIVE APPLICATIONS

There must be some provision in the installation of a belt drive for "take-up" to compensate for limited belt stretch and to provide for assembly of belts without undue strain. This adjustment is usually taken care of in the motor rails or sliding base, or by some special provisions, such as shims, etc.

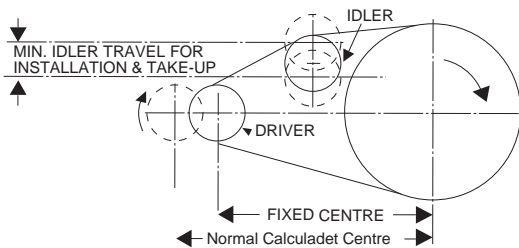
On fixed centre applications, when neither the DriveN nor the Driven unit can be moved to provide necessary adjustment, a mechanical belt tightener such as an idler is necessary.

When designing a fixed centre installation, centres should be set so that belts do not have to be forced over the pulley grooves. Calculate the exact running centre distance in mm's and then deduct the following amount for each particular belt section to facilitate belt mounting:

Z	13A	17B	22C	32D
9.0	11.1	14.7	19.0	25.4
SPZ	SPA	SPB	SPC	
11.5	12.5	19.0	25.0	

The initial operating position of the idler should be located at the point where the idler pulley just takes up the belt slack caused by the reduced centres necessary for belt installation.

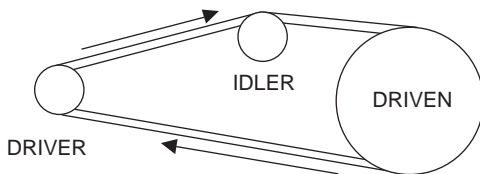
Final idler position design should allow for take-up equal to twice the recommended minimum allowance for stretch and wear found in the last column of Table 5 page 7.



LOCATION AND SIZE OF IDLER

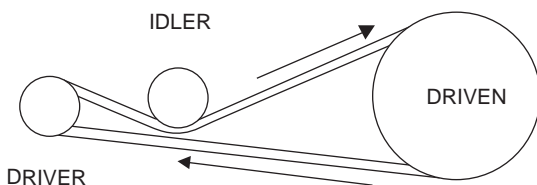
Inside Idler

A grooved idler on the inside of the belts on the slack side of the drive is recommended over a back side idler. Always place the idler as close to the large pulley as possible. The size of the grooved idler pulley should be as large or larger than the small pulley in the drive.



Back Side Idler

Although a back side idler increases the arc of contact on both pulleys, it forces a backward bend in the belts and contributes to premature failure. If such an idler must be used, the diameter of the flat idler pulley should be at least 1/2 times the diameter of the small pulley in the drive located as close to the small pulley as possible.

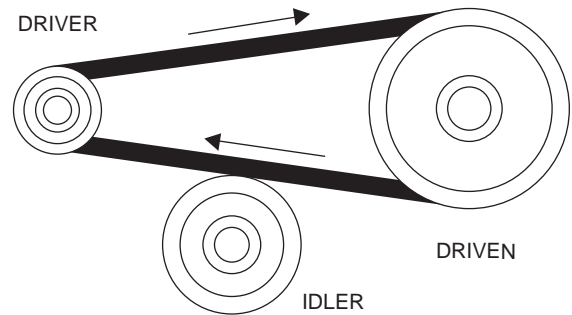


Kiss Idler

A kiss idler differs from the back side idler because it does not penetrate the belt span creating a back bend on the belt and consequently does not contribute to premature failure of the belt.

The usage of kiss idlers is not too common, however it provides a method of controlling belt vibration and whip on shock and pulsating load drives. The kiss idler could be used in single belt drives where joined belts are not applicable.

If a kiss idler is used, the diameter of the flat pulley should be at least 1 1/2 times the diameter of the small pulley.



Calculation of V-Belt drives

SIT V-Belt drive guarantees you extremely high efficiency and long lifetime.

In order to get the best performances a correct calculation must be done.

Here below are shown the required equations and factors for calculation as well as the calculations steps.

Required data for correct calculation of a timing belt drive are:

- Driven machine type
- Drive motor type
- Motor power and/or required driving power
- Operating factor
- Rotational speed of the motor shaft
- Rotational speed of the driven shaft
- Center distance

Total service factor c_0

The total service factor c_0 is determined by adding factors c_1 , c_2 and c_3 :

$$c_0 = c_1 + c_2 + c_3$$

Acceleration factor c_1

Transmission ratio i	Acceleration factor c_3
1,00 - 1,25	-
> 1,25 - 1,75	0,1
> 1,75 - 2,50	0,2
> 2,50 - 3,50	0,3
> 3,50	0,4

$$i = Z_1 / Z_2$$

Glossary of symbol, unit and definition

Symbol	Unit	Definiton
a	mm	Center distance
c_0	-	Predefined total service factor
c_0 err	-	Calculated total service factor
c_2	-	Load factor
c_1	-	Acceleration factor
c_3	-	Fatigue factor
c_4	-	Length factor
i	-	Transmission ratio
L_w	mm	Pitch length of V-Belt
n_1	min ⁻¹	Speed of driving pulley
n_2	min ⁻¹	Speed of driven pulley
P	kW	Power to be transmitted
P_R	kW	Power rating for selected width of belt
P_m	kW	Engine power
d	mm	Pitch diameter of driving pulley
D	mm	Pitch diameter of driven pulley

Fatigue factor c_3

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

Load factor c_2

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 condition.

Intermittent service

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

Normal service

- 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

- 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 MACHINES TYPES	DRIVER TYPES						
<p>Driven Machine Types noted below are representative samples only. Select a category most closely approximating your application from those listed below</p>	<p>ELECTRIC MOTORS: AC Normal Torque Squirrel Cage and Synchronous AC Split Phase DC Shunt Wound Internal Combustion Engines over 600 rev/min</p>			<p>ELECTRIC MOTORS: AC Hi-Torque AC Hi-Slip AC Repulsion-Induction AC Single Phase Series Wound AC Slip Ring DC Compound Wound Series Wound</p>			<p>Single Cylinder Engines and Internal Combustion Engines under 600 rev/min, line shafts, brakes, clutches, direct on line starting.</p>
	"SOFT"/NORMAL TORQUE STARTS			"HEAVY"/HIGH TORQUE STARTS			
DRIVEN MACHINE TYPES	Intermittent Service	Normal Service	Continuous Service	Intermittent Service	Normal Service	Continuous Service	
Agitator: Liquid	LIGHT DUTY	1,0	1,1	1,2	1,1	1,2	1,3
Blowers and Exhausters		1,0	1,1	1,2	1,1	1,2	1,3
Centrifugal pumps and compressor		1,0	1,1	1,2	1,1	1,2	1,3
Fans up to 7,5 kW		1,0	1,1	1,2	1,1	1,2	1,3
Light Duty Conveyors		1,0	1,1	1,2	1,1	1,2	1,3
Belt Conveyors for Sand, Grain, etc.	MEDIUM DUTY	1,1	1,2	1,3	1,2	1,3	1,4
Dough Mixers		1,1	1,2	1,3	1,2	1,3	1,4
Fans over 7,5 kW		1,1	1,2	1,3	1,2	1,3	1,4
Generators		1,1	1,2	1,3	1,2	1,3	1,4
Line Shafts		1,1	1,2	1,3	1,2	1,3	1,4
Laundry Machinery		1,1	1,2	1,3	1,2	1,3	1,4
Machine Tools		1,1	1,2	1,3	1,2	1,3	1,4
Punches-Presses-Shears		1,1	1,2	1,3	1,2	1,3	1,4
Printing Machinery		1,1	1,2	1,3	1,2	1,3	1,4
Positive Displacement Rotary Pumps		1,1	1,2	1,3	1,2	1,3	1,4
Revolving and Vibrating Screens		1,1	1,2	1,3	1,2	1,3	1,4
Brick Machinery		1,2	1,3	1,4	1,4	1,5	1,6
Bucket Elevators		1,2	1,3	1,4	1,4	1,5	1,6
Exciters		1,2	1,3	1,4	1,4	1,5	1,6
Piston Compressors		1,2	1,3	1,4	1,4	1,5	1,6
Conveyors (Drag-Pan-Screw)	1,2	1,3	1,4	1,4	1,5	1,6	
Hammer Mills	1,2	1,3	1,4	1,4	1,5	1,6	
Paper Mill Beaters	1,2	1,3	1,4	1,4	1,5	1,6	
Piston Pumps	1,2	1,3	1,4	1,4	1,5	1,6	
Positive Displacement Blowers	1,2	1,3	1,4	1,4	1,5	1,6	
Pulverizers	1,2	1,3	1,4	1,4	1,5	1,6	
Saw Mill and Woodworking Machinery	1,2	1,3	1,4	1,4	1,5	1,6	
Textile Machinery	1,2	1,3	1,4	1,4	1,5	1,6	
Crushers (Gyratory-Jaw-Roll)	EXTRA HEAVY DUTY	1,3	1,4	1,5	1,5	1,6	1,8
Mill (Ball-Rod-Tube)		1,3	1,4	1,5	1,5	1,6	1,8
Hoists		1,3	1,4	1,5	1,5	1,6	1,8
Rubber Calenders-Extruders-Mills		1,3	1,4	1,5	1,5	1,6	1,8
Chokable Equipment		Minimum Service Factor 2,0					

Belt length correction factors c_4

BELT CROSS SECTION SYMBOL							
SPZ/3V		SPA		SPB/5V		SPC/8V	
Datum Length	L_C Factor	Datum Length	L_C Factor	Datum Length	L_C Factor	Datum Length	L_C Factor
630	0,83	800	0,82	1250	0,85	2000	0,86
710	0,85	900	0,84	1400	0,87	2240	0,88
800	0,87	1000	0,86	1600	0,89	2500	0,90
900	0,89	1120	0,88	1800	0,91	2800	0,91
1000	0,92	1250	0,90	2090	0,92	3150	0,93
1120	0,94	1400	0,92	2240	0,95	3550	0,95
1250	0,96	1600	0,94	2500	0,96	4000	0,97
1400	0,98	1800	0,96	2800	0,98	4500	0,98
1600	1,00	2000	0,98	3150	1,00	5000	1,00
1800	1,02	2240	1,00	3550	1,02	5600	1,02
2000	1,04	2500	1,02	4090	1,04	6300	1,04
2240	1,07	2800	1,04	4500	1,06	7100	1,05
2500	1,09	3150	1,06	5000	1,08	8000	1,07
2800	1,11	3550	1,08	5600	1,09	9000	1,09
3150	1,13	4000	1,10	6300	1,11	10000	1,11
3550	1,15	4500	1,12	7100	1,13	11200	1,12
-	-	-	-	7800	1,15	12500	1,14

BELT CROSS SECTION SYMBOL							
10Z		13A		17B		22C	
Datum Length	L_C Factor	Datum Length	L_C Factor	Datum Length	L_C Factor	Datum Length	L_C Factor
530	0,92	630	0,80	930	0,81	1560	0,82
625	0,95	700	0,82	1000	0,83	1760	0,84
700	0,98	790	0,84	1100	0,85	1950	0,87
780	1,00	890	0,86	1210	0,87	2190	0,90
920	1,04	990	0,88	1370	0,90	2340	0,91
1080	1,07	1100	0,90	1560	0,92	2490	0,92
-	-	1250	0,93	1760	0,95	2720	0,94
-	-	1430	0,96	1950	0,97	2800	0,95
-	-	1550	0,98	2180	0,99	3080	0,96
-	-	1640	0,99	2300	1,00	3310	0,98
-	-	1750	1,00	2500	1,02	3520	0,99
-	-	1940	1,02	2700	1,04	4060	1,02
-	-	2050	1,04	2850	1,05	4600	1,05
-	-	2200	1,05	3200	1,08	5380	1,08
-	-	2300	1,06	3600	1,10	6100	1,11
-	-	2480	1,08	4060	1,13	6860	1,14
-	-	2570	1,09	4430	1,15	7600	1,16
-	-	2700	1,10	4820	1,16	9100	1,21
-	-	2910	1,12	5000	1,18	10700	1,24
-	-	3080	1,13	5370	1,19	-	-
-	-	3290	1,14	8070	1,20	-	-
-	-	3540	1,16	-	-	-	-

Calculation guide

1. Power Transmission Determination

Power transmission P [kW] is determined by multiplying the nominal power of the engine P_m [kW] by the total service factor c_0 .

$$P = P_m \cdot c_0 \text{ [kW];} \quad \text{where } c_0 = c_1 + c_2 + c_3$$

2. Belt selection

The selection of the correct belt section has to be based on the power to be transmitted (P), on the power rating (Pr) and on the maximum allowable drive dimension.

3. Drive and driven pulleys selection

Pulleys size have to be calculated taking into account the transmission ratio and the minimum recommended diameter of the selected belt. The drive ratio is defined by the following:

$$i = \frac{n_2}{n_1} = \frac{d}{D}$$

Recommended minimum standard pulley diameters for electric motors

MOTOR SPEED rpm	MOTOR POWER [kW]															
	Up to 2.0	2.5	3.0	4.0	5.5	7.5	11.0	15.0	18.5	22.0	30.0	37.0	45.0	55.0	75.0	93.0
2880	50	56	67	67	67	71	90	100	112	125	140	160	180	-	-	-
1140	50	56	67	71	80	90	106	125	140	160	180	200	224	280	300	380
960	50	56	67	71	90	100	125	150	160	200	224	250	280	300	400	-
720	50	56	67	90	100	118	140	160	180	200	250	280	350	400	-	-

All dimensions are in millimeters. Above information is a guide only - if in any doubt consult the motor manufacturer.

4. Determination of belt length

The necessary theoretical belt length is obtained by considering the chosen pulleys of the drive and the necessary center distance. The calculated length shall be selected as near as possible to the standard belt length.

The distance between centers is calculated through the transformed equation using the standard length. The relevant equations are:

$$L_w = 2 \cdot a + \frac{\pi}{2} \cdot (d + D) + \frac{(D - d)^2}{4 \cdot a} \quad \text{Belt pitch length}$$

$$a = \frac{b + \sqrt{b^2 - 32 \cdot (d_{wg} - d_{wk})^2}}{16} \quad \text{Center distance} \quad \text{Where: } b = 4 \cdot L_w - 2 \cdot \pi \cdot (d_{wg} + d_{wk})$$

5. Determination of the number of the belts

The power rating of the defined belt can be selected from the power rating tables on each paragraph.

Total transmissible power of the belt is calculated adding the nominal power rating to the additional power based in the drive ratio and considering the length factor:

$$P_b = (P_R + P_{add}) \cdot C_4$$

The number of belt is then calculated by:

$$\text{belts} = \frac{P_d}{P_b}$$

The result will usually contain a decimal then go up to the next highest/lowest whole number recalculating the resulting service factor. (C_0 err)



Installation

1. CLEAN PULLEYS

Check pulleys for rust and wear. Wipe clean of oil and grease. Take pulleys off machines, do not clean while running.

2. INSPECT PULLEYS FOR WEAR

Worn pulleys will substantially reduce belt life. If the grooves are worn, the belt will bottom out. This will result in slippage and the belts may char or burn. If the sidewalls are dished out, the bottom shoulder of the pulley will wear the bottom corner of the belt, thus causing premature failure. Please use the SIT pulley groove gauge as supplied in the SIT belt maintenance kit.

3. CHECKING ALIGNMENT

Proper alignment is essential to maintain long belt and pulley life.

4. MIXING OF BELTS

MAKES/BRANDS/TYPES NEW AND USED

Do NOT Do It!

a. Don't Mix Belt Makes or Brands

b. Don't Mix Belt Constructions

(Raw edge moulded cog/envelope)

Belt brands should not be mixed due to the difference in performance characteristics. All SIT belts of same type and with same brand name/colour and size reference (datum) are matchable and no selection of suitable belts for multiple applications is necessary.

c. Don't Mix Belts New and Used

The new belts will be overloaded

Always replace used belts with a complete new set of belts. Never install a new or used belt as a replacement for a unit of a matched set or you will substantially reduce drive life.

5. INSTALLING BELTS

RIGHT

Always move the driver unit forward so the belts can easily be slipped into the pulley grooves without damage to the belts.

NOTE - Shut off and lock out the source of power to the motor prior to changing belts.

WRONG

Never force the belts into a pulley with a screwdriver or lever because you will rupture the envelope or top cover fabric and break the edge cords. (A belt so fitted will invariably turn over in its pulley groove).

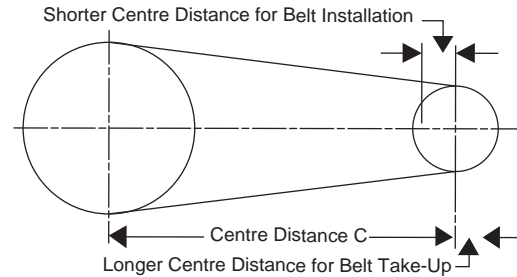
6. CENTRE DISTANCE ALLOWANCES FOR BELT INSTALLATION AND TAKE-UP

After calculating a centre distance from a standard pitch length make provision that the centres can be moved closer together by the amount shown in the following table to facilitate installing the belts without injury. Also, the centres should be adjustable over the calculated distance by an amount as shown in the last column of the table because of manufacturing tolerance and possible stretch and wear of belt.

Slack-off - lower limiting value (for belt installation):
nominal centre distance minus 1.5% of datum length of belt.

Take-up - higher limiting value:
nominal centre distance plus 3% of datum length of belt.

Alternatively refer to Table 14 or Table 5.



Note: Providing that the drive was designed correctly and that any adjusting slides and pivots are maintained, then there should be no problem fitting correct length belts.

Maintenance

V and wedge belt drives are recognized as extremely reliable and efficient means of power transmission.

Since they are basically trouble-free. They are often ignored and do not receive the minimal attention required to realize their full benefit.

1. DIRT

No equipment operates at its best when dirty and belts are no exception. Dirt accelerates belt wear and dirt build-up in a pulley groove impairs traction.

NOTE - Turn off power and lock out source of power to drive motor before cleaning or repairing parts.

2. LOOK AND LISTEN

Belt drive maintenance is not complicated, nor does it require a great deal of time or a large variety of tools.

The main ingredients of good maintenance are to look and listen and then to correct apparent drive problems.

The following maintenance and trouble shooting pointers provide information to help you establish an effective belt drive maintenance programme.

Following installation of belts, inspect the drive and watch it while it runs.

Inspection of a belt drive is simply a matter of looking and listening.

SAFETY NOTE - Belt drives should not be operated without guards in place.

a. WHAT TO LOOK FOR: oil and grease

Belts exposed to oil in spray, liquid or paste form fail prematurely. A drive should be well "policed". Leaky bearings should be repaired immediately. Excess oil on a bearing will splash on the belts. If these conditions cannot be corrected special oil-resistant belts should be used.

Too little oil will cause bearing failure which, in many cases, is blamed on the belts. This condition causes belts to burn out due to overload.

b. WHAT TO LISTEN FOR: squeal

This noise occurs during motor acceleration or when the motor is operating near or at full load.

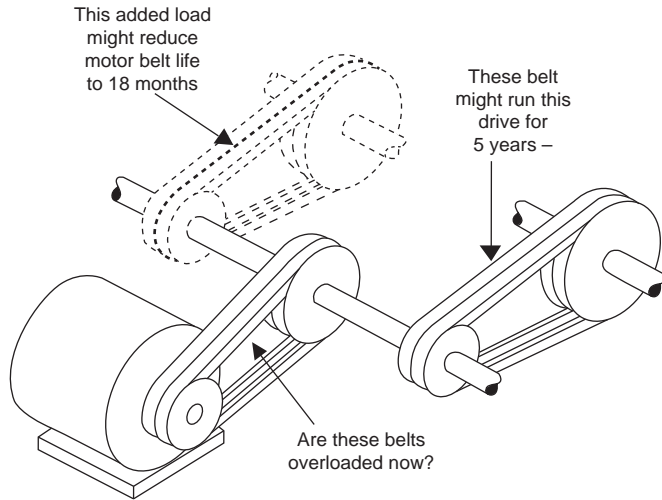
It is a definite indication of belt slippage and requires prompt investigation. Squeal usually is a result of insufficient belt tension. If it persists after all belts have been checked and tension adjusted, the drive itself should be examined for over-loading.

c. Squeak

This sound is like that of a chirping bird or a dry bearing. It occurs on all types and all makes of belts. Dust is often a contributing factor. Never apply dressing or oil to a belt in an effort to eliminate squeak. Re-alignment of an idler may help. Squeak is often annoying but it will not harm belts.

3. ADDED LOADS

Added loads shorten belt life. A check should be made to see that no additional loads have been added since the original drive was selected. Take note of the drive system shown in the following illustration.



4. BELT GUARDS

Guards for drives insure safety and cleanliness. Screened meshed or grilled guards are most satisfactory because they allow air to circulate and heat to escape.

NOTE - Openings are to be no larger than 12 mm. (Human fingers must be unable to be pushed through the mesh).

5. CRACKING

Bottom cracking will not reduce the tensile strength or the operating efficiency of the belt. High temperatures, small diameter pulleys and dust will accelerate bottom cracks. Bottom cracking can be reduced by using larger pulleys and larger reverse bend idler pulleys. It is not necessary to replace a belt simply because bottom cracking has been observed.

6. BELT DRESSING

Do NOT Use Belt Dressing Of Any Kind Under Any Circumstances.

If increasing belt tension fails to eliminate slip/squeal, replace Belts and/or Pulleys.

7. VIBRATION

8. TENSION

Adjust tension to values shown in Table 19.

9. HEAT

All belts are cured in a scientifically controlled time and temperature process. Belts operating in temperatures of less than 70° C are not materially affected; however, at higher temperatures overcuring takes place and shortens belt life. Belts operating in temperatures above 70°C should be checked frequently and a special heat-resistant construction should be considered if belt life is not satisfactory.

10. BELT TURN OVER

Turned over belts indicate conditions of drive misalignment, worn pulleys or excessive vibration.

11. CHANGE IN RIDE OUT

Change in ride out indicates uneven belt wear or worn pulleys.

12. LATERAL VIBRATION

13. BELT WEAR

Wear on sidewalls indicates constant slippage, excessive dust, or rough pulleys.

14. FOREIGN MATTER

Broken belts or excessive wear can result from the presence of foreign material.