



The R&D team at PIX has worked to achieve power ratings considerably higher than most of the competing brands on the market. The compounds used at the heart of these belts are well chosen to match the designated power ratings, providing an increased margin of safety on critical drives.

PIX Power Wrap belts are available in three main categories i.e. Classical, Wedge & Narrow.

Classical :

Top width to height ratio is 1.6:1
Max. Permissible belt speed is 30 m/sec.
permissible flex rate F = 80 per sec.

Wedge :

Top width to height ratio is 1.2:1
Max. Permissible belt speed is 30 m/sec.
permissible flex rate F =100 per sec.

Narrow :

Max. Permissible belt speed is 30 m/sec.
permissible flex rate F = 80 per sec.

Features & Benefits

- “FREE SET” stringent length tolerance guaranteed
- Belt Characteristics ensure high performance in heavy-duty, continuous running applications
- POLYCHLORPRENE Wrap for fire resistance in event of slippage
- ATEX certified, FRAS belts available on request
- EXTENSIVE RANGE available from 250mm to 16789mm
- High PERFORMANCE/PRICE ratio
- Manufacturing to ISO 9001 and ISO/TS 16949 : 2002

FRAS Belts :

The entire PIX range of industrial belts exceeds international standards for oil and heat resistance, as well as anti-static properties.

However, the range is also available to certified FRAS specification (Fire Resistant Anti-Static), where extreme and hazardous conditions are encountered, such as oil rigs, mines, chemical plants etc. PIX FRAS belts are approved by RJB Mining (formerly British Coal), and also carry ATEX certification.

CLASSICAL SECTION : Z

Wrapped V-Belts

Standard : ISO 4183, ISO4184,
BS3790, DIN2215

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- L_p to L_a - 16
- L_i to L_p - 22
- L_i to L_a - 38

Weight per metre (Kgs)

- 0.057

Rec. Min Pulley Dia.

- 50 dp (mm)

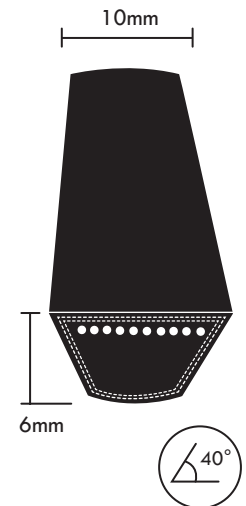
Manufacturing Range

- 241 - 4953 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)
Z 14	360	378	Z 38	965	987	Z 69	1750	1775	Z 113	2870	2892	Z 200	5080	5102
Z 15	381	403	Z 38.5	975	1000	Z 70	1775	1800	Z 114	2900	2918	Z 208	5300	5305
Z 15.5	395	416	Z 39	990	1013	Z 71	1800	1825	Z 115	2920	2943	Z 210	5330	5356
Z 16	410	428	Z 39.5	1000	1025	Z 72	1830	1851	Z 116	2950	2968	Z 220	5600	5610
Z 16.5	420	443	Z 40	1016	1038	Z 73	1854	1876	Z 117	2965	2994	Z 225	5715	5737
Z 17	435	454	Z 40.5	1030	1051	Z 74	1880	1902	Z 118	3000	3019	Z 236	6000	6016
Z 17.5	450	467	Z 41	1041	1063	Z 75	1900	1927	Z 119	3025	3045	Z 240	6100	6118
Z 18	457	479	Z 41.5	1050	1076	Z 76	1930	1952	Z 120	3050	3070	Z 242	6150	6169
Z 18.5	470	494	Z 42	1065	1089	Z 77	1956	1978	Z 122	3100	3121	Z 248	6300	6321
Z 19	480	505	Z 42.5	1080	1102	Z 78	1980	2003	Z 124	3150	3172	Z 264	6700	6728
Z 19.5	500	517	Z 43	1090	1114	Z 79	2000	2029	Z 126	3200	3222	Z 276	7000	7032
Z 20	510	530	Z 43.5	1105	1127	Z 80	2032	2054	Z 128	3250	3273	Z 280	7100	7134
Z 20.5	520	543	Z 44	1120	1140	Z 81	2060	2079	Z 130	3302	3324	Z 295	7500	7515
Z 21	535	555	Z 44.5	1130	1152	Z 82	2083	2105	Z 132	3350	3375	Z 315	8000	8023
Z 21.5	545	568	Z 45	1143	1165	Z 82.5	2095	2118	Z 134	3400	3426			
Z 22	560	581	Z 45.5	1155	1178	Z 83	2100	2130	Z 136	3450	3476			
Z 22.5	575	594	Z 46	1168	1190	Z 83.5	2120	2143	Z 138	3500	3527			
Z 23	585	606	Z 46.5	1180	1203	Z 84	2134	2156	Z 140	3550	3578			
Z 23.5	600	619	Z 47	1190	1216	Z 84.5	2150	2168	Z 142	3600	3629			
Z 24	610	632	Z 47.5	1200	1229	Z 85	2160	2181	Z 143	3630	3654			
Z 24.5	620	644	Z 48	1220	1241	Z 86	2184	2206	Z 144	3658	3680			
Z 25	635	657	Z 48.5	1230	1254	Z 86.5	2200	2219	Z 146	3700	3730			
Z 25.5	650	670	Z 49	1250	1267	Z 87	2210	2232	Z 148	3750	3781			
Z 26	660	682	Z 49.5	1260	1279	Z 88	2240	2257	Z 150	3810	3832			
Z 26.5	675	695	Z 50	1270	1292	Z 89	2260	2283	Z 152	3860	3883			
Z 27	686	708	Z 50.5	1285	1305	Z 90	2286	2308	Z 154	3910	3934			
Z 27.5	700	721	Z 51	1300	1317	Z 91	2311	2333	Z 156	3960	3984			
Z 28	710	733	Z 51.5	1310	1330	Z 92	2337	2359	Z 158	4000	4035			
Z 28.5	725	746	Z 52	1320	1343	Z 93	2360	2384	Z 161	4100	4111			
Z 29	735	759	Z 52.5	1335	1356	Z 94	2388	2410	Z 162	4115	4137			
Z 29.5	750	771	Z 53	1350	1368	Z 95	2413	2435	Z 163	4140	4162			
Z 30	760	784	Z 53.5	1360	1381	Z 96	2438	2460	Z 165	4200	4213			
Z 30.5	775	797	Z 54	1375	1394	Z 97	2464	2486	Z 167	4250	4264			
Z 31	790	809	Z 55	1400	1419	Z 98	2500	2511	Z 172	4370	4391			
Z 31.5	800	822	Z 56	1422	1444	Z 99	2520	2537	Z 173	4394	4416			
Z 32	815	835	Z 57	1450	1470	Z 100	2540	2562	Z 174	4420	4442			
Z 32.5	825	848	Z 58	1475	1495	Z 101	2565	2587	Z 175	4450	4467			
Z 33	840	860	Z 59	1500	1521	Z 102	2591	2613	Z 176	4470	4492			
Z 33.5	850	873	Z 60	1525	1546	Z 103	2615	2638	Z 177	4500	4518			
Z 34	865	886	Z 61	1550	1571	Z 104	2650	2664	Z 180	4572	4594			
Z 34.5	875	898	Z 62	1575	1597	Z 105	2667	2689	Z 181	4600	4619			
Z 35	890	911	Z 63	1600	1622	Z 106	2700	2714	Z 187	4750	4772			
Z 35.5	900	924	Z 64	1625	1648	Z 107	2725	2740	Z 195	4950	4975			
Z 36	914	936	Z 65	1650	1673	Z 108	2750	2765	Z 196	4980	5000			
Z 36.5	925	949	Z 66	1676	1698	Z 109	2775	2791	Z 197	5000	5026			
Z 37	940	962	Z 67	1700	1724	Z 110	2800	2816	Z 198	5030	5051			
Z 37.5	950	975	Z 68	1725	1749	Z 112	2845	2867	Z 199	5050	5077			



CLASSICAL SECTION : A

Wrapped V-Belts

Standard : ISO 4183, ISO4184,
BS3790, DIN2215

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- Lp to La - 20
- Li to Lp - 30
- Li to La - 50

Weight per metre (Kgs)

- 0.106

Rec. Min Pulley Dia.

- 71 dp (mm)

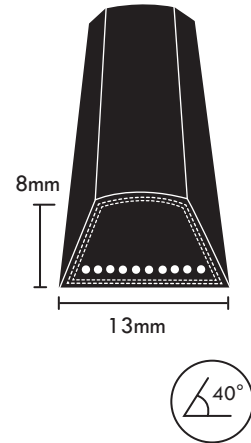
Manufacturing Range

- 330 - 9144 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)
A 15	381	417	A 39	990	1027	A 71	1800	1839	A 113	2870	2906	A 198	5030	5065
A 16	410	442	A 39.5	1000	1039	A 72	1830	1865	A 114	2900	2932	A 199	5050	5091
A 16.5	420	455	A 40	1016	1052	A 73	1854	1890	A 115	2920	2957	A 200	5080	5116
A 17	435	468	A 40.5	1030	1065	A 74	1880	1916	A 116	2950	2982	A 208	5300	5319
A 17.5	450	481	A 41	1041	1077	A 75	1900	1941	A 117	2965	3008	A 210	5330	5370
A 18	457	493	A 41.5	1050	1090	A 76	1930	1966	A 118	3000	3033	A 220	5600	5624
A 18.5	470	506	A 42	1065	1103	A 77	1956	1992	A 119	3025	3059	A 225	5715	5751
A 19	480	519	A 42.5	1080	1116	A 78	1980	2017	A 120	3050	3084	A 236	6000	6030
A 19.5	500	531	A 43	1090	1128	A 79	2000	2043	A 122	3100	3135	A 240	6100	6132
A 20	510	544	A 43.5	1105	1141	A 80	2032	2068	A 124	3150	3186	A 242	6150	6183
A 20.5	520	557	A 44	1120	1154	A 81	2060	2093	A 126	3200	3236	A 248	6300	6335
A 21	535	569	A 44.5	1130	1166	A 82	2083	2119	A 128	3250	3287	A 264	6700	6742
A 21.5	545	582	A 45	1143	1179	A 82.5	2095	2132	A 130	3302	3338	A 276	7000	7046
A 22	560	595	A 45.5	1155	1192	A 83	2100	2144	A 132	3350	3389	A 280	7100	7148
A 22.5	575	608	A 46	1168	1204	A 83.5	2120	2157	A 134	3400	3440	A 295	7500	7529
A 23	585	620	A 46.5	1180	1217	A 84	2134	2170	A 136	3450	3490	A 315	8000	8037
A 23.5	600	633	A 47	1190	1230	A 84.5	2150	2182	A 138	3500	3541			
A 24	610	646	A 47.5	1200	1243	A 85	2160	2195	A 140	3550	3592			
A 24.5	620	658	A 48	1220	1255	A 85.5	2170	2208	A 142	3600	3643			
A 25	635	671	A 48.5	1230	1268	A 86	2184	2220	A 143	3630	3668			
A 25.5	650	684	A 49	1250	1281	A 86.5	2200	2233	A 144	3658	3694			
A 26	660	696	A 49.5	1260	1293	A 87	2210	2246	A 145	3683	3719			
A 26.5	675	709	A 50	1270	1306	A 88	2240	2271	A 146	3700	3744			
A 27	686	722	A 50.5	1285	1319	A 89	2260	2297	A 148	3750	3795			
A 27.5	700	735	A 51	1300	1331	A 90	2286	2322	A 150	3810	3846			
A 28	710	747	A 51.5	1310	1344	A 91	2311	2347	A 152	3860	3897			
A 28.5	725	760	A 52	1320	1357	A 92	2337	2373	A 154	3910	3948			
A 29	735	773	A 52.5	1335	1370	A 93	2360	2398	A 156	3960	3998			
A 29.5	750	785	A 53	1350	1382	A 94	2388	2424	A 158	4000	4049			
A 30	760	798	A 53.5	1360	1395	A 95	2413	2449	A 160	4064	4100			
A 30.5	775	811	A 54	1375	1408	A 96	2438	2474	A 161	4100	4125			
A 31	790	823	A 55	1400	1433	A 97	2464	2500	A 162	4115	4151			
A 31.5	800	836	A 56	1422	1458	A 98	2500	2525	A 163	4140	4176			
A 32	815	849	A 57	1450	1484	A 99	2520	2551	A 165	4200	4227			
A 32.5	825	862	A 58	1475	1509	A 100	2540	2576	A 167	4250	4278			
A 33	840	874	A 59	1500	1535	A 101	2565	2601	A 172	4370	4405			
A 33.5	850	887	A 60	1525	1560	A 102	2591	2627	A 173	4394	4430			
A 34	865	900	A 61	1550	1585	A 103	2615	2652	A 174	4420	4456			
A 34.5	875	912	A 62	1575	1611	A 104	2650	2678	A 175	4450	4481			
A 35	890	925	A 63	1600	1636	A 105	2667	2703	A 176	4470	4506			
A 35.5	900	938	A 64	1625	1662	A 106	2700	2728	A 177	4500	4532			
A 36	914	950	A 65	1650	1687	A 107	2725	2754	A 180	4572	4608			
A 36.5	925	963	A 66	1676	1712	A 108	2750	2779	A 181	4600	4633			
A 37	940	976	A 67	1700	1738	A 109	2775	2805	A 187	4750	4786			
A 37.5	950	989	A 68	1725	1763	A 110	2800	2830	A 195	4950	4989			
A 38	965	1001	A 69	1750	1789	A 111	2819	2855	A 196	4980	5014			
A 38.5	975	1014	A 70	1775	1814	A 112	2845	2881	A 197	5000	5040			



CLASSICAL SECTION : B

Wrapped V-Belts

Standard : ISO 4183, ISO4184,
BS3790, DIN2215

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- L_p to L_a - 26
- L_i to L_p - 43
- L_i to L_a - 69

Weight per metre (Kgs)

- 0.182

Rec. Min Pulley Dia.

- 112 dp (mm)

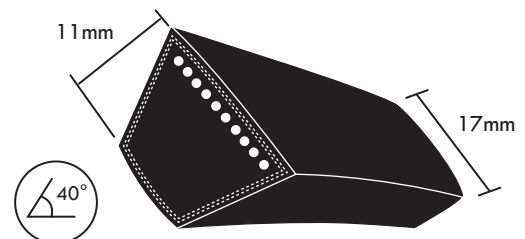
Manufacturing Range

- 406 - 16713 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Inside Length (mm)	Datum/Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/Pitch Length (mm)
B 16	410	449	B 41	1041	1084	B 78	1980	2024	B 127	3226	3269	B 177	4500	4539
B 16.5	420	464	B 41.5	1050	1097	B 79	2000	2050	B 128	3250	3294	B 178	4520	4564
B 17	435	475	B 42	1065	1110	B 80	2032	2075	B 129	3277	3320	B 180	4572	4615
B 17.5	450	488	B 42.5	1080	1123	B 81	2060	2100	B 130	3302	3345	B 181	4600	4640
B 18	457	500	B 43	1090	1135	B 82	2083	2126	B 131	3327	3370	B 184	4674	4717
B 18.5	470	515	B 43.5	1105	1148	B 82.5	2095	2139	B 132	3350	3396	B 185	4699	4742
B 19	480	526	B 44	1120	1161	B 83	2100	2151	B 134	3400	3447	B 186	4724	4767
B 19.5	500	538	B 44.5	1130	1173	B 83.5	2120	2164	B 135	3429	3472	B 187	4750	4793
B 20	510	551	B 45	1143	1186	B 84	2134	2177	B 136	3450	3497	B 189	4800	4844
B 20.5	520	564	B 45.5	1155	1199	B 84.5	2150	2189	B 138	3500	3548	B 190	4825	4869
B 21	535	576	B 46	1168	1211	B 85	2160	2202	B 140	3550	3599	B 191	4850	4894
B 21.5	545	589	B 46.5	1180	1224	B 86	2184	2227	B 142	3600	3650	B 192	4877	4920
B 22	560	602	B 47	1190	1237	B 86.5	2200	2240	B 143	3630	3675	B 195	4950	4996
B 22.5	575	615	B 47.5	1200	1250	B 87	2210	2253	B 144	3658	3701	B 196	4980	5021
B 23	585	627	B 48	1220	1262	B 88	2240	2278	B 146	3700	3751	B 197	5000	5047
B 23.5	600	640	B 48.5	1230	1275	B 89	2260	2304	B 148	3750	3802	B 198	5030	5072
B 24	610	653	B 49	1250	1288	B 90	2286	2329	B 150	3810	3853	B 199	5050	5098
B 24.5	620	665	B 49.5	1260	1300	B 91	2311	2354	B 151	3835	3878	B 200	5080	5123
B 25	635	678	B 50	1270	1313	B 92	2337	2380	B 152	3860	3904	B 204	5182	5182
B 25.5	650	691	B 50.5	1285	1326	B 93	2360	2405	B 154	3910	3955	B 208	5300	5326
B 26	660	703	B 51	1300	1338	B 94	2388	2431	B 155	3937	3980	B 210	5330	5377
B 26.5	675	716	B 51.5	1310	1351	B 95	2413	2456	B 156	3960	4005	B 216	5486	5529
B 27	686	729	B 52	1320	1364	B 96	2438	2481	B 158	4000	4056	B 220	5600	5631
B 27.5	700	742	B 52.5	1335	1377	B 97	2464	2507	B 160	4064	4107	B 224	5690	5733
B 28	710	754	B 53	1350	1389	B 98	2500	2532	B 161	4100	4132	B 225	5715	5758
B 28.5	725	767	B 53.5	1360	1402	B 99	2520	2558	B 162	4115	4158	B 226	5740	5783
B 29	735	780	B 54	1375	1415	B 100	2540	2583	B 163	4140	4183	B 229	5816	5860
B 29.5	750	792	B 55	1400	1440	B 101	2565	2608	B 164	4166	4209	B 236	6000	6037
B 30	760	805	B 56	1422	1465	B 102	2591	2634	B 165	4200	4234	B 238	6045	6088
B 30.5	775	818	B 57	1450	1491	B 103	2615	2659	B 167	4250	4285	B 240	6100	6139
B 31	790	830	B 58	1475	1516	B 104	2650	2685	B 168	4267	4310	B 242	6150	6190
B 31.5	800	843	B 59	1500	1542	B 105	2667	2710	B 170	4318	4361	B 248	6300	6342
B 32	815	856	B 60	1525	1567	B 106	2700	2735	B 172	4370	4412	B 264	6700	6749
B 32.5	825	869	B 61	1550	1592	B 107	2725	2761	B 173	4394	4437	B 276	7000	7053
B 33	840	881	B 62	1575	1618	B 108	2750	2786	B 174	4420	4463	B 280	7100	7155
B 33.5	850	894	B 63	1600	1643	B 109	2775	2812	B 175	4450	4488	B 295	7500	7536
B 34	865	907	B 64	1625	1669	B 110	2800	2837	B 176	4470	4513	B 315	8000	8044
B 34.5	875	919	B 65	1650	1694	B 112	2845	2888						
B 35	890	932	B 66	1676	1719	B 113	2870	2913						
B 35.5	900	945	B 67	1700	1745	B 114	2900	2939						
B 36	914	957	B 68	1725	1770	B 115	2920	2964						
B 36.5	925	970	B 69	1750	1796	B 116	2950	2989						
B 37	940	983	B 70	1775	1821	B 117	2965	3015						
B 37.5	950	996	B 71	1800	1846	B 118	3000	3040						
B 38	965	1008	B 72	1830	1872	B 119	3025	3066						
B 38.5	975	1021	B 73	1854	1897	B 120	3050	3091						
B 39	990	1034	B 74	1880	1923	B 121	3073	3116						
B 39.5	1000	1046	B 75	1900	1948	B 122	3100	3142						
B 40	1016	1059	B 76	1930	1973	B 124	3150	3193						
B 40.5	1030	1072	B 77	1956	1999	B 126	3200	3243						



CLASSICAL SECTION : C

Wrapped V-Belts

Standard : ISO 4183, ISO4184,
BS3790, DIN2215

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- *Lp to La* - 32
- *Li to Lp* - 56
- *Li to La* - 88

Weight per metre (Kgs)

- 0.298

Rec. Min Pulley Dia.

- 180 dp (mm)

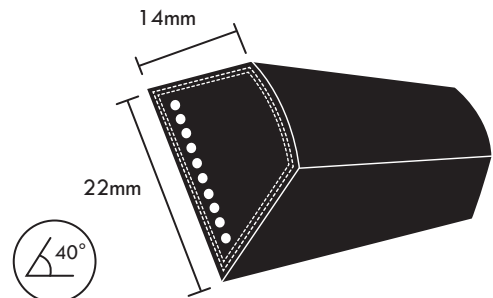
Manufacturing Range

- 788 - 16713 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)
C 26	660	716	C 56	1422	1478	C 99	2520	2571	C 164	4166	4222	C 215	5461	5517
C 32	815	869	C 57	1450	1504	C 100	2540	2596	C 165	4200	4247	C 216	5486	5542
C 32.5	825	882	C 58	1475	1529	C 101	2565	2621	C 167	4250	4298	C 220	5600	5644
C 33	840	894	C 59	1500	1555	C 102	2591	2647	C 168	4267	4323	C 222	5639	5695
C 33.5	850	907	C 60	1525	1580	C 103	2615	2672	C 170	4318	4374	C 224	5690	5746
C 34	865	920	C 61	1550	1605	C 104	2650	2698	C 172	4370	4425	C 225	5715	5771
C 34.5	875	932	C 62	1575	1631	C 105	2667	2723	C 173	4394	4450	C 228	5800	5847
C 35	890	945	C 63	1600	1656	C 106	2700	2748	C 174	4420	4476	C 236	6000	6050
C 35.5	900	958	C 64	1625	1682	C 107	2725	2774	C 175	4450	4501	C 238	6045	6101
C 36	914	970	C 65	1650	1707	C 108	2750	2799	C 176	4470	4526	C 240	6100	6152
C 36.5	925	983	C 66	1676	1732	C 109	2775	2825	C 177	4500	4552	C 242	6150	6203
C 37	940	996	C 67	1700	1758	C 110	2800	2850	C 180	4572	4628	C 248	6300	6355
C 37.5	950	1009	C 68	1725	1783	C 111	2819	2875	C 181	4600	4653	C 250	6350	6406
C 38	965	1021	C 69	1750	1809	C 112	2845	2901	C 184	4674	4730	C 255	6477	6533
C 38.5	975	1034	C 70	1775	1834	C 113	2870	2926	C 185	4699	4755	C 260	6604	6660
C 39	990	1047	C 71	1800	1859	C 114	2900	2952	C 187	4750	4806	C 264	6700	6762
C 39.5	1000	1059	C 72	1830	1885	C 115	2920	2977	C 188	4775	4831	C 265	6731	6787
C 40	1016	1072	C 73	1854	1910	C 116	2950	3002	C 190	4825	4882	C 270	6858	6914
C 40.5	1030	1085	C 74	1880	1936	C 117	2965	3028	C 192	4877	4933	C 276	7000	7066
C 41	1041	1097	C 75	1900	1961	C 118	3000	3053	C 195	4950	5009	C 280	7100	7168
C 41.5	1050	1110	C 76	1930	1986	C 119	3025	3079	C 196	4980	5034	C 285	7239	7295
C 42	1065	1123	C 77	1956	2012	C 120	3050	3104	C 197	5000	5060	C 295	7500	7549
C 42.5	1080	1136	C 78	1980	2037	C 122	3100	3155	C 198	5030	5085	C 300	7620	7676
C 43	1090	1148	C 79	2000	2063	C 124	3150	3206	C 199	5050	5111	C 314	7976	8032
C 43.5	1105	1161	C 80	2032	2088	C 125	3175	3231	C 200	5080	5136	C 315	8000	8057
C 44	1120	1174	C 81	2060	2113	C 126	3200	3256	C 204	5182	5238	C 324	8230	8286
C 44.5	1130	1186	C 82	2083	2139	C 128	3250	3307	C 205	5200	5263	C 328	8331	8387
C 45	1143	1199	C 82.5	2095	2152	C 130	3302	3358	C 208	5300	5339	C 334	8484	8540
C 45.5	1155	1212	C 83	2100	2164	C 132	3350	3409	C 210	5330	5390	C 354	9000	9048
C 46	1168	1224	C 83.5	2120	2177	C 134	3400	3460	C 211	5360	5415	C 356	9050	9098
C 46.5	1180	1237	C 84	2134	2190	C 136	3450	3510	C 212	5385	5441	C 360	9144	9200
C 47	1190	1250	C 84.5	2150	2202	C 138	3500	3561	C 214	5435	5492			
C 47.5	1200	1263	C 85	2160	2215	C 140	3550	3612						
C 48	1220	1275	C 86	2184	2240	C 142	3600	3663						
C 48.5	1230	1288	C 86.5	2200	2253	C 143	3630	3688						
C 49	1250	1301	C 87	2210	2266	C 144	3658	3714						
C 49.5	1260	1313	C 88	2240	2291	C 146	3700	3764						
C 50	1270	1326	C 89	2260	2317	C 148	3750	3815						
C 50.5	1285	1339	C 90	2286	2342	C 150	3810	3866						
C 51	1300	1351	C 91	2311	2367	C 152	3860	3917						
C 51.5	1310	1364	C 92	2337	2393	C 154	3910	3968						
C 52	1320	1377	C 93	2360	2418	C 156	3960	4018						
C 52.5	1335	1390	C 94	2388	2444	C 158	4000	4069						
C 53	1350	1402	C 95	2413	2469	C 160	4064	4120						
C 53.5	1360	1415	C 96	2438	2494	C 161	4100	4145						
C 54	1375	1428	C 97	2464	2520	C 162	4115	4171						
C 55	1400	1453	C 98	2500	2545	C 163	4140	4196						



CLASSICAL SECTION : D

Wrapped V-Belts

Standard : ISO 4183, ISO4184,
BS3790, DIN2215

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- L_p to L_a - 40
- L_i to L_p - 79
- L_i to L_a - 119

Weight per metre (Kgs)

- 0.608

Rec. Min Pulley Dia.

- 355 dp (mm)

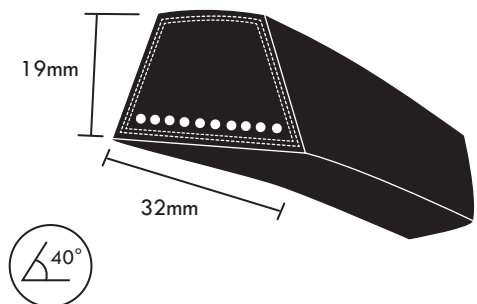
Manufacturing Range

- 1130 - 16815 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (mm)	Datum/ Pitch Length (mm)
D 45	1143	1222	D 80	2032	2111	D 122	3100	3178	D 204	5182	5261	D 285	7239	7318
D 45.5	1155	1235	D 81	2060	2136	D 124	3150	3229	D 205	5200	5286	D 295	7500	7572
D 46	1168	1247	D 82	2083	2162	D 126	3200	3279	D 208	5300	5362	D 297	7550	7623
D 46.5	1180	1260	D 82.5	2095	2175	D 128	3250	3330	D 210	5330	5413	D 300	7620	7699
D 47	1190	1273	D 83	2100	2187	D 130	3302	3381	D 220	5600	5667	D 314	7976	8055
D 47.5	1200	1286	D 83.5	2120	2200	D 132	3350	3432	D 225	5715	5794	D 315	8000	8080
D 48	1220	1298	D 84	2134	2213	D 134	3400	3483	D 228	5800	5870	D 320	8128	8207
D 48.5	1230	1311	D 84.5	2150	2225	D 136	3450	3533	D 236	6000	6073	D 326	8280	8359
D 49	1250	1324	D 85	2160	2238	D 137	3480	3559	D 240	6100	6175	D 330	8385	8464
D 49.5	1260	1336	D 86	2184	2263	D 138	3500	3584	D 242	6150	6226	D 335	8510	8590
D 50	1270	1349	D 86.5	2200	2276	D 140	3550	3635	D 248	6300	6378	D 345	8763	8842
D 50.5	1285	1362	D 87	2210	2289	D 142	3600	3686	D 253	6426	6505	D 351	8915	8994
D 51	1300	1374	D 88	2240	2314	D 143	3630	3711	D 254	6452	6531	D 354	9000	9070
D 51.5	1310	1387	D 89	2260	2340	D 144	3658	3737	D 255	6477	6556	D 358	9100	9172
D 52	1320	1400	D 90	2286	2365	D 146	3700	3787	D 264	6700	6785	D 360	9144	9223
D 52.5	1335	1413	D 91	2311	2390	D 148	3750	3838	D 268	6807	6886	D 374	9500	9579
D 53	1350	1425	D 92	2337	2416	D 150	3810	3889	D 270	6858	6937	D 390	9906	9985
D 53.5	1360	1438	D 93	2360	2441	D 152	3860	3940	D 272	6900	6988	D 394	10000	10079
D 54	1375	1451	D 94	2388	2467	D 154	3910	3991	D 276	7000	7089	D 441	11200	11280
D 55	1400	1476	D 95	2413	2492	D 156	3960	4041	D 280	7100	7191			
D 56	1422	1501	D 96	2438	2517	D 158	4000	4092						
D 57	1450	1527	D 97	2464	2543	D 161	4100	4168						
D 58	1475	1552	D 98	2500	2568	D 162	4115	4194						
D 59	1500	1578	D 99	2520	2594	D 163	4140	4219						
D 60	1525	1603	D 100	2540	2619	D 165	4200	4270						
D 61	1550	1628	D 101	2565	2644	D 167	4250	4321						
D 62	1575	1654	D 102	2591	2670	D 168	4267	4346						
D 63	1600	1679	D 103	2615	2695	D 169	4293	4372						
D 64	1625	1705	D 104	2650	2721	D 172	4370	4448						
D 65	1650	1730	D 105	2667	2746	D 173	4394	4473						
D 66	1676	1755	D 106	2700	2771	D 174	4420	4499						
D 67	1700	1781	D 107	2725	2797	D 175	4450	4524						
D 68	1725	1806	D 108	2750	2822	D 176	4470	4549						
D 69	1750	1832	D 109	2775	2848	D 177	4500	4575						
D 70	1775	1857	D 110	2800	2873	D 180	4572	4651						
D 71	1800	1882	D 112	2845	2924	D 181	4600	4676						
D 72	1830	1908	D 113	2870	2949	D 187	4750	4829						
D 73	1854	1933	D 114	2900	2975	D 190	4825	4905						
D 74	1880	1959	D 115	2920	3000	D 195	4950	5032						
D 75	1900	1984	D 116	2950	3025	D 196	4980	5057						
D 76	1930	2009	D 117	2965	3051	D 197	5000	5083						
D 77	1956	2035	D 118	3000	3076	D 198	5030	5108						
D 78	1980	2060	D 119	3025	3102	D 199	5050	5134						
D 79	2000	2086	D 120	3050	3127	D 200	5080	5159						



FRAS : A SECTION

Wrapped V-Belts

Standard : ISO 4183, ISO4184, BS3790,

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +100°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- Lp to La - 20
- Li to Lp - 30
- Lin to La - 50

Weight per metre (Kgs)

- 0.106

Rec. Min Pulley Dia.

- 71 dp (mm)

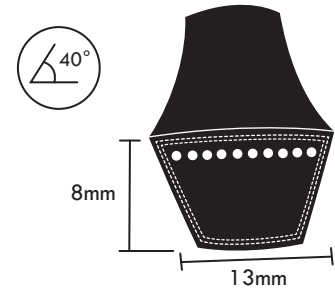
Manufacturing Range

- 330 - 9144 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref
FA 29	FA 37	FA 43	FA 50	FA 60	FA 67	FA 73	FA 79
FA 30	FA 38	FA 44	FA 52	FA 61	FA 68	FA 74	FA 86
FA 31	FA 39	FA 45	FA 54	FA 63	FA 69	FA 75	FA 88
FA 32	FA 41	FA 46	FA 57	FA 65	FA 70	FA 77	
FA 36	FA 42	FA 47	FA 59	FA 66	FA 71	FA 78	



FRAS : B SECTION

Wrapped V-Belts

Standard : ISO 4183, ISO4184, BS3790,

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +100°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- Lp to La - 26
- Li to Lp - 43
- Li to La - 69

Weight per metre (Kgs)

- 0.182

Rec. Min Pulley Dia.

- 112 dp (mm)

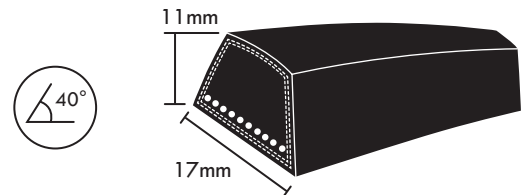
Manufacturing Range

- 406 - 16713 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref
FB 38	FB 45	FB 51	FB 57	FB 63	FB 68	FB 76	FB 96
FB 42	FB 46	FB 52	FB 58	FB 65	FB 69	FB 82	FB 105
FB 43	FB 49	FB 55	FB 59	FB 66	FB 70	FB 83	FB 118
FB 44	FB 50	FB 56	FB 61	FB 67	FB 71	FB 84	



FRAS : C SECTION

Wrapped V-Belts

Standard : ISO 4183, ISO4184, BS3790,

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +100°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- Lp to La - 32
- Li to Lp - 56
- Li to La - 88

Weight per metre (Kgs)

- 0.298

Rec. Min Pulley Dia.

- 180 dp (mm)

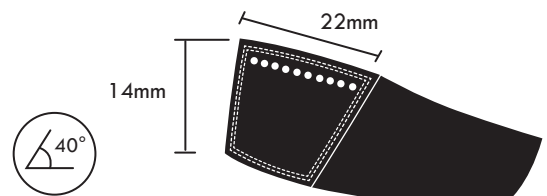
Manufacturing Range

- 788 - 16713 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Belt Ref	Belt Ref	Belt Ref
FC 78	FC 96	FC 108	FC 158
FC 80	FC 98	FC 120	FC 162
FC 90	FC 106	FC 124	



CLASSICAL SECTION : 20

Wrapped V-Belts

Standard : **DIN2215**

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- *Lp to La* - 31
- *Li to Lp* - 48
- *Li to La* - 79

Weight per metre (Kgs)

- 0.243

Rec. Min Pulley Dia.

- 160 dp (mm)

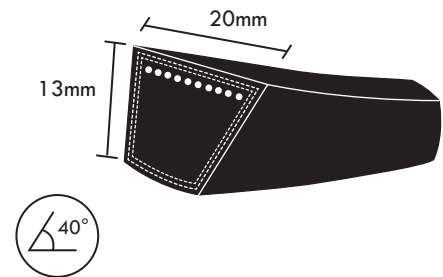
Manufacturing Range

- 901 - 9525 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Inside Length (inches)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (inches)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (inches)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (inches)	Datum/ Pitch Length (mm)
20 x 896	35.28	944	20 x 2120	83.46	2168	20 x 5300	208.66	5348	20 x 8300	326.77	8348
20 x 900	35.43	948	20 x 2240	88.19	2288	20 x 5600	220.47	5648	20 x 8600	338.58	8648
20 x 1000	39.37	1048	20 x 2360	92.91	2408	20 x 6000	236.22	6048	20 x 9000	354.33	9048
20 x 1060	41.73	1108	20 x 2500	98.43	2548	20 x 6100	240.15	6148	20 x 9525	375	9573
20 x 1120	44.09	1168	20 x 2650	104.33	2698	20 x 6150	242.13	6198			
20 x 1180	46.46	1228	20 x 2800	110.24	2848	20 x 6300	248.03	6348			
20 x 1250	49.21	1298	20 x 3000	118.11	3048	20 x 6350	250	6398			
20 x 1320	51.97	1368	20 x 3150	124.02	3198	20 x 6550	257.87	6598			
20 x 1400	55.12	1448	20 x 3350	131.89	3398	20 x 6700	263.77	6748			
20 x 1500	59.06	1548	20 x 3550	139.76	3598	20 x 6750	265.75	6798			
20 x 1600	62.99	1648	20 x 3750	147.64	3798	20 x 7000	275.5	7048			
20 x 1700	66.93	1748	20 x 4000	157.48	4048	20 x 7100	279.5	7148			
20 x 1800	70.87	1848	20 x 4250	167.32	4298	20 x 7250	285.43	7298			
20 x 1900	74.8	1948	20 x 4500	177.17	4548	20 x 7500	295.28	7548			
20 x 2000	78.74	2048	20 x 5000	196.85	5048	20 x 8000	314.96	8048			



CLASSICAL SECTION : E

Wrapped V-Belts

Standard : **ISO 4183, ISO4184, BS3790, DIN2215**

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- *Lp to La* - 53
- *Li to Lp* - 92
- *Li to La* - 145

Weight per metre (Kgs)

- 0.900

Rec. Min Pulley Dia.

- 500 dp (mm)

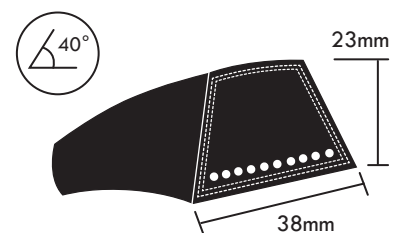
Manufacturing Range

- 2159 - 16713 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Inside Length (inches)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (inches)	Datum/ Pitch Length (mm)	Belt Ref	Inside Length (inches)	Datum/ Pitch Length (mm)
20 x 6350	250	6398	20 x 6750	265.75	6798	20 x 7100	279.5	7148
20 x 6550	257.87	6598	20 x 7000	275.5	7048	20 x 7250	285.43	7298
20 x 6700	263.77	6748	20 x 7100	279.5	7148	20 x 7500	295.28	7548
20 x 6750	265.75	6798	20 x 7250	285.43	7298	20 x 8000	314.96	8048
20 x 7000	275.5	7048	20 x 7500	295.28	7548	20 x 8300	326.77	8348
20 x 7100	279.5	7148	20 x 8000	314.96	8048	20 x 8600	338.58	8648
20 x 7250	285.43	7298	20 x 8300	326.77	8348			
20 x 7500	295.28	7548	20 x 8600	338.58	8648			
20 x 8000	314.96	8048	20 x 6350	250	6398			
20 x 8300	326.77	8348	20 x 6550	257.87	6598			
20 x 8600	338.58	8648	20 x 6700	263.77	6748			
20 x 6350	250	6398	20 x 6750	265.75	6798			
20 x 6550	257.87	6598	20 x 7000	275.5	7048			
20 x 6700	263.77	6748						



CLASSICAL SECTION : 25

Wrapped V-Belts

Standard : DIN2215

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- L_p to L_a - 39
- L_i to L_p - 61
- L_i to L_a - 100

Weight per metre (Kgs)

- 0.393

Rec. Min Pulley Dia.

- 250 dp (mm)

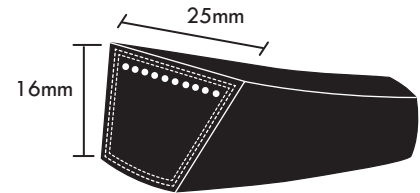
Manufacturing Range

- 1448 - 16637 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Inside Length (inches)	Datum/Pitch Length (mm)	Belt Ref	Inside Length (inches)	Datum/Pitch Length (mm)	Belt Ref	Inside Length (inches)	Datum/Pitch Length (mm)	Belt Ref	Inside Length (inches)	Datum/Pitch Length (mm)
25 x 1400	55.12	1461	25 x 3150	124.02	3211	25 x 7500	295.28	7561	25x12550	494.09	12611
25 x 1448	57	1509	25 x 3350	131.89	3411	25 x 8000	314.96	8061	25x12750	501.97	12811
25 x 1500	59.06	1561	25 x 3450	135.83	3511	25 x 8500	334.65	8561	25x13000	511.81	13061
25 x 1600	62.99	1661	25 x 3550	139.76	3611	25 x 9000	354.33	9061	25x13250	521.65	13311
25 x 1700	66.93	1761	25 x 3750	147.64	3811	25 x 9250	364.17	9311	25x13500	531.5	13561
25 x 1800	70.87	1861	25 x 4000	157.48	4061	25 x 9500	374.02	9561	25x13750	541.34	13811
25 x 1850	72.83	1911	25 x 4250	167.32	4311	25 x 9750	383.86	9811	25x14000	551.18	14061
25 x 1900	74.8	1961	25 x 4450	175.2	4511	25x10000	393.7	10061	25x14250	561.02	14311
25 x 2000	78.74	2061	25 x 4500	177.17	4561	25x10250	403.54	10311	25x14500	570.87	14561
25 x 2120	83.46	2181	25 x 4750	187.01	4811	25x10500	413.39	10561			
25 x 2240	88.19	2301	25 x 5000	196.85	5061	25x10750	423.23	10811			
25 x 2360	92.91	2421	25 x 5300	208.66	5361	25x11000	433.07	11061			
25 x 2500	98.43	2561	25 x 5600	220.47	5661	25x11250	442.91	11311			
25 x 2650	104.33	2711	25 x 6000	236.22	6061	25x11500	452.76	11561			
25 x 2700	106.3	2761	25 x 6300	248.03	6361	25x11750	462.6	11811			
25 x 2800	110.24	2861	25 x 6700	263.78	6761	25x12000	472.44	12061			
25 x 3000	118.11	3061	25 x 7100	279.53	7161	25x12250	482.28	12311			



WEDGE SECTION : SPZ

Wrapped V-Belts

Standard : BS3790

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- L_p to L_a - 13
- L_i to L_p - 37
- L_i to L_a - 50

Weight per metre (Kgs)

- 0.070

Rec. Min Pulley Dia.

- 63 dp (mm)

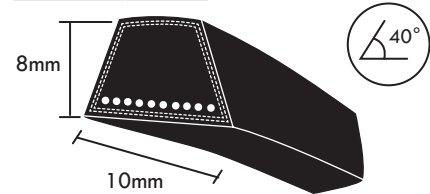
Manufacturing Range

- 365 - 4953 mm

Nominal Length : Pitch Length (L_p) in mm

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)
SPZ 487	487	SPZ 875	875	SPZ 1162	1162	SPZ 1487	1487	SPZ 1950	1950	SPZ 2300	2300
SPZ 500	500	SPZ 887	887	SPZ 1171	1171	SPZ 1500	1500	SPZ 1962	1962	SPZ 2360	2360
SPZ 512	512	SPZ 900	900	SPZ 1180	1180	SPZ 1512	1512	SPZ 1987	1987	SPZ 2400	2400
SPZ 530	530	SPZ 912	912	SPZ 1187	1187	SPZ 1520	1520	SPZ 2000	2000	SPZ 2410	2410
SPZ 562	562	SPZ 922	922	SPZ 1200	1200	SPZ 1537	1537	SPZ 2030	2030	SPZ 2430	2430
SPZ 575	575	SPZ 925	925	SPZ 1212	1212	SPZ 1550	1550	SPZ 2037	2037	SPZ 2437	2437
SPZ 580	580	SPZ 937	937	SPZ 1220	1220	SPZ 1560	1560	SPZ 2050	2050	SPZ 2500	2500
SPZ 587	587	SPZ 940	940	SPZ 1237	1237	SPZ 1562	1562	SPZ 2062	2062	SPZ 2540	2540
SPZ 600	600	SPZ 950	950	SPZ 1250	1250	SPZ 1580	1580	SPZ 2087	2087	SPZ 2580	2580
SPZ 612	612	SPZ 962	962	SPZ 1262	1262	SPZ 1587	1587	SPZ 2100	2100	SPZ 2600	2600
SPZ 625	625	SPZ 975	975	SPZ 1270	1270	SPZ 1600	1600	SPZ 2120	2120	SPZ 2650	2650
SPZ 630	630	SPZ 987	987	SPZ 1280	1280	SPZ 1612	1612	SPZ 2125	2125	SPZ 2690	2690
SPZ 637	637	SPZ 1000	1000	SPZ 1287	1287	SPZ 1620	1620	SPZ 2137	2137	SPZ 2720	2720
SPZ 662	662	SPZ 1010	1010	SPZ 1300	1300	SPZ 1637	1637	SPZ 2150	2150	SPZ 2800	2800
SPZ 670	670	SPZ 1012	1012	SPZ 1312	1312	SPZ 1650	1650	SPZ 2160	2160	SPZ 2840	2840
SPZ 687	687	SPZ 1024	1024	SPZ 1320	1320	SPZ 1662	1662	SPZ 2175	2175	SPZ 2900	2900
SPZ 700	700	SPZ 1030	1030	SPZ 1337	1337	SPZ 1687	1687	SPZ 2180	2180	SPZ 3000	3000
SPZ 710	710	SPZ 1037	1037	SPZ 1340	1340	SPZ 1700	1700	SPZ 2187	2187	SPZ 3150	3150
SPZ 722	722	SPZ 1047	1047	SPZ 1347	1347	SPZ 1737	1737	SPZ 2237	2237	SPZ 3170	3170
SPZ 737	737	SPZ 1060	1060	SPZ 1350	1350	SPZ 1750	1750	SPZ 2240	2240	SPZ 3250	3250
SPZ 750	750	SPZ 1077	1077	SPZ 1362	1362	SPZ 1762	1762	SPZ 2250	2250	SPZ 3350	3350
SPZ 760	760	SPZ 1080	1080	SPZ 1375	1375	SPZ 1787	1787	SPZ 2262	2262	SPZ 3450	3450
SPZ 772	772	SPZ 1087	1087	SPZ 1387	1387	SPZ 1800	1800	SPZ 2280	2280	SPZ 3550	3550
SPZ 775	775	SPZ 1100	1100	SPZ 1400	1400	SPZ 1812	1812	SPZ 2287	2287		
SPZ 787	787	SPZ 1107	1107	SPZ 1412	1412	SPZ 1837	1837				
SPZ 800	800	SPZ 1112	1112	SPZ 1420	1420	SPZ 1850	1850				
SPZ 812	812	SPZ 1120	1120	SPZ 1425	1425	SPZ 1862	1862				
SPZ 825	825	SPZ 1137	1137	SPZ 1437	1437	SPZ 1887	1887				
SPZ 837	837	SPZ 1140	1140	SPZ 1450	1450	SPZ 1900	1900				
SPZ 850	850	SPZ 1147	1147	SPZ 1462	1462	SPZ 1912	1912				
SPZ 862	862	SPZ 1150	1150	SPZ 1470	1470	SPZ 1937	1937				



WEDGE SECTION : SPA

Wrapped V-Belts

Standard : BS3790

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +70°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- L_p to L_a - 18
- L_i to L_p - 45
- L_i to L_a - 63

Weight per metre (Kgs)

- 0.119

Rec. Min Pulley Dia.

- 90 dp (mm)

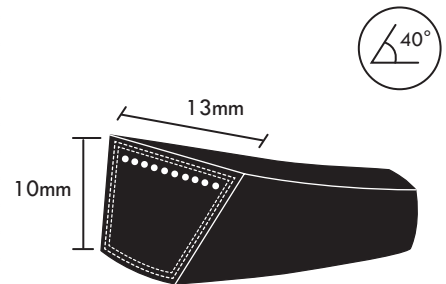
Manufacturing Range

- 576 - 9144 mm

Nominal Length : Pitch Length (L_p) in mm

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)	Belt Ref	Datum/Pitch Length (mm)
SPA 732	732	SPA 1120	1120	SPA 1507	1507	SPA 2032	2032	SPA 2632	2632	SPA 3200	3200
SPA 750	750	SPA 1132	1132	SPA 1525	1525	SPA 2057	2057	SPA 2650	2650	SPA 3250	3250
SPA 757	757	SPA 1150	1150	SPA 1532	1532	SPA 2060	2060	SPA 2682	2682	SPA 3282	3282
SPA 775	775	SPA 1157	1157	SPA 1550	1550	SPA 2082	2082	SPA 2732	2732	SPA 3350	3350
SPA 782	782	SPA 1160	1160	SPA 1557	1557	SPA 2107	2107	SPA 2782	2782	SPA 3382	3382
SPA 800	800	SPA 1180	1180	SPA 1582	1582	SPA 2120	2120	SPA 2800	2800	SPA 3450	3450
SPA 807	807	SPA 1182	1182	SPA 1600	1600	SPA 2125	2125	SPA 2832	2832	SPA 3482	3482
SPA 825	825	SPA 1200	1200	SPA 1607	1607	SPA 2132	2132	SPA 2847	2847	SPA 3500	3500
SPA 832	832	SPA 1207	1207	SPA 1632	1632	SPA 2150	2150	SPA 2882	2882	SPA 3550	3550
SPA 850	850	SPA 1220	1220	SPA 1650	1650	SPA 2157	2157	SPA 2900	2900	SPA 3600	3600
SPA 857	857	SPA 1232	1232	SPA 1657	1657	SPA 2182	2182	SPA 2932	2932	SPA 3670	3670
SPA 875	875	SPA 1250	1250	SPA 1682	1682	SPA 2207	2207	SPA 2982	2982	SPA 3700	3700
SPA 882	882	SPA 1257	1257	SPA 1700	1700	SPA 2232	2232	SPA 3000	3000	SPA 3750	3750
SPA 900	900	SPA 1272	1272	SPA 1707	1707	SPA 2240	2240	SPA 3032	3032	SPA 4000	4000
SPA 907	907	SPA 1280	1280	SPA 1732	1732	SPA 2250	2250	SPA 3070	3070	SPA 4250	4250
SPA 925	925	SPA 1282	1282	SPA 1750	1750	SPA 2267	2267	SPA 3082	3082	SPA 4500	4500
SPA 932	932	SPA 1300	1300	SPA 1757	1757	SPA 2282	2282	SPA 3150	3150	SPA 4590	4590
SPA 950	950	SPA 1307	1307	SPA 1782	1782	SPA 2300	2300	SPA 3182	3182	SPA 5000	5000
SPA 957	957	SPA 1320	1320	SPA 1800	1800	SPA 2307	2307				
SPA 975	975	SPA 1332	1332	SPA 1807	1807	SPA 2332	2332				
SPA 982	982	SPA 1357	1357	SPA 1832	1832	SPA 2350	2350				
SPA 1000	1000	SPA 1360	1360	SPA 1850	1850	SPA 2360	2360				
SPA 1007	1007	SPA 1367	1367	SPA 1857	1857	SPA 2382	2382				
SPA 1025	1025	SPA 1382	1382	SPA 1882	1882	SPA 2432	2432				
SPA 1032	1032	SPA 1400	1400	SPA 1900	1900	SPA 2475	2475				
SPA 1050	1050	SPA 1407	1407	SPA 1907	1907	SPA 2482	2482				
SPA 1060	1060	SPA 1425	1425	SPA 1925	1925	SPA 2492	2492				
SPA 1082	1082	SPA 1432	1432	SPA 1932	1932	SPA 2500	2500				
SPA 1085	1085	SPA 1450	1450	SPA 1950	1950	SPA 2532	2532				
SPA 1090	1090	SPA 1457	1457	SPA 1957	1957	SPA 2582	2582				
SPA 1100	1100	SPA 1482	1482	SPA 1982	1982	SPA 2607	2607				
SPA 1107	1107	SPA 1500	1500	SPA 2000	2000	SPA 2625	2625				



WEDGE SECTION : SPB

Wrapped V-Belts
Standard : BS3790

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- Lp to La - 28
- Li to Lp - 60
- Li to La - 88

Weight per metre (Kgs)

- 0.214

Rec. Min Pulley Dia.

- 140 dp (mm)

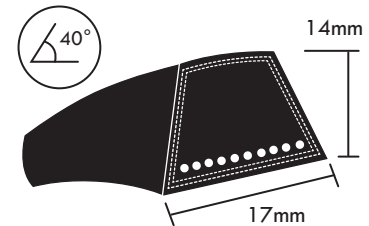
Manufacturing Range

- 940 - 16764 mm

Nominal Length : Pitch Length (Lp) in mm

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)
SPB 1250	1250	SPB 1750	1750	SPB 2360	2360	SPB 3170	3170	SPB 4560	4560	SPB 6340	6340
SPB 1260	1260	SPB 1780	1780	SPB 2380	2380	SPB 3200	3200	SPB 4750	4750	SPB 6700	6700
SPB 1280	1280	SPB 1800	1800	SPB 2400	2400	SPB 3250	3250	SPB 4820	4820	SPB 6720	6720
SPB 1300	1300	SPB 1850	1850	SPB 2410	2410	SPB 3270	3270	SPB 5000	5000	SPB 7100	7100
SPB 1320	1320	SPB 1900	1900	SPB 2430	2430	SPB 3340	3340	SPB 5070	5070	SPB 7500	7500
SPB 1340	1340	SPB 1950	1950	SPB 2500	2500	SPB 3350	3350	SPB 5300	5300	SPB 7610	7610
SPB 1360	1360	SPB 2000	2000	SPB 2530	2530	SPB 3450	3450	SPB 5380	5380	SPB 7990	7990
SPB 1400	1400	SPB 2020	2020	SPB 2540	2540	SPB 3550	3550	SPB 5600	5600	SPB 8000	8000
SPB 1410	1410	SPB 2025	2025	SPB 2580	2580	SPB 3620	3620	SPB 5680	5680	SPB 8500	8500
SPB 1440	1440	SPB 2030	2030	SPB 2600	2600	SPB 3650	3650	SPB 5990	5990	SPB 9000	9000
SPB 1450	1450	SPB 2060	2060	SPB 2650	2650	SPB 3750	3750	SPB 6000	6000	SPB 9010	9010
SPB 1500	1500	SPB 2120	2120	SPB 2675	2675	SPB 3800	3800	SPB 6300	6300		
SPB 1510	1510	SPB 2125	2125	SPB 2680	2680	SPB 3825	3825				
SPB 1540	1540	SPB 2150	2150	SPB 2720	2720	SPB 3870	3870				
SPB 1550	1550	SPB 2180	2180	SPB 2750	2750	SPB 4000	4000				
SPB 1560	1560	SPB 2200	2200	SPB 2800	2800	SPB 4050	4050				
SPB 1590	1590	SPB 2240	2240	SPB 2840	2840	SPB 4060	4060				
SPB 1600	1600	SPB 2275	2275	SPB 2850	2850	SPB 4250	4250				
SPB 1650	1650	SPB 2280	2280	SPB 2900	2900	SPB 4310	4310				
SPB 1690	1690	SPB 2300	2300	SPB 2990	2990	SPB 4370	4370				
SPB 1700	1700	SPB 2310	2310	SPB 3000	3000	SPB 4500	4500				
				SPB 3150	3150						



WEDGE SECTION : SPC

Wrapped V-Belts
Standard : BS3790

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- Lp to La - 30
- Li to Lp - 83
- Li to La - 113

Weight per metre (Kgs)

- 0.360

Rec. Min Pulley Dia.

- 224 dp (mm)

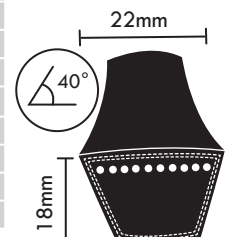
Manufacturing Range

- 1750 - 16789 mm

Nominal Length : Pitch Length (Lp) in mm

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)	Belt Ref	Datum/ Pitch Length (mm)
SPC 1750	1750	SPC 2800	2800	SPC 4000	4000	SPC 6000	6000	SPC 8000	8000	SPC 11500	11500
SPC 2000	2000	SPC 2890	2890	SPC 4100	4100	SPC 6150	6150	SPC 8300	8300	SPC 12500	12500
SPC 2120	2120	SPC 3000	3000	SPC 4250	4250	SPC 6300	6300	SPC 8400	8400		
SPC 2150	2150	SPC 3150	3150	SPC 4400	4400	SPC 6370	6370	SPC 8500	8500		
SPC 2210	2210	SPC 3350	3350	SPC 4500	4500	SPC 6500	6500	SPC 9000	9000		
SPC 2240	2240	SPC 3550	3550	SPC 4750	4750	SPC 6600	6600	SPC 9500	9500		
SPC 2360	2360	SPC 3650	3650	SPC 4900	4900	SPC 6700	6700	SPC 10000	10000		
SPC 2500	2500	SPC 3700	3700	SPC 5000	5000	SPC 7020	7020	SPC 10500	10500		
SPC 2620	2620	SPC 3750	3750	SPC 5300	5300	SPC 7100	7100	SPC 10600	10600		
SPC 2650	2650	SPC 3950	3950	SPC 5600	5600	SPC 7500	7500	SPC 11200	11200		



FIRE RESISTANT ANTISTATIC (FRAS) : FSPZ SECTION

Wrapped V-Belts

Standard : BS3790

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +100°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- *Lp to La* - 13
- *Li to Lp* - 37
- *Li to La* - 50

Weight per metre (Kgs)

- 0.070

Rec. Min Pulley Dia.

- 63 dp (mm)

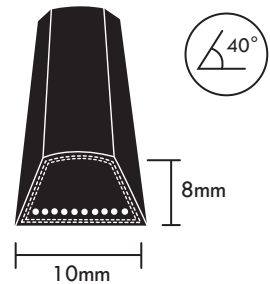
Manufacturing Range

- 365 - 4953 mm

Nominal Length : Pitch Length (Lp) in mm

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref
FSPZ 630	FSPZ 900	FSPZ 1080	FSPZ 1270	FSPZ 1500	FSPZ 1800	FSPZ 2160
FSPZ 670	FSPZ 940	FSPZ 1120	FSPZ 1320	FSPZ 1520	FSPZ 1850	FSPZ 2240
FSPZ 710	FSPZ 950	FSPZ 1140	FSPZ 1340	FSPZ 1587	FSPZ 1900	FSPZ 2280
FSPZ 750	FSPZ 1000	FSPZ 1180	FSPZ 1400	FSPZ 1600	FSPZ 2000	FSPZ 2360
FSPZ 800	FSPZ 1010	FSPZ 1200	FSPZ 1420	FSPZ 1650	FSPZ 2030	FSPZ 2410
FSPZ 850	FSPZ 1060	FSPZ 1250	FSPZ 1470	FSPZ 1700	FSPZ 2120	FSPZ 2500



FIRE RESISTANT ANTISTATIC (FRAS) : FSPA SECTION

Wrapped V-Belts

Standard : BS3790

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +100°C
- Maximum belt linear speed : 42m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- *Lp to La* - 18
- *Li to Lp* - 45
- *Li to La* - 63

Weight per metre (Kgs)

- 0.119

Rec. Min Pulley Dia.

- 90 dp (mm)

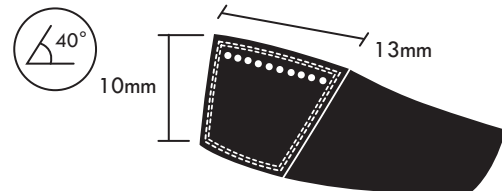
Manufacturing Range

- 576 - 9246 mm

Nominal Length : Inside Length (Li) in Inches

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref
FSPA 875	FSPA 1180	FSPA 1450	FSPA 1800	FSPA 2360
FSPA 1000	FSPA 1250	FSPA 1500	FSPA 1900	FSPA 2500
FSPA 1060	FSPA 1320	FSPA 1600	FSPA 2000	FSPA 3250
FSPA 1120	FSPA 1400	FSPA 1700	FSPA 2120	



FIRE RESISTANT ANTISTATIC (FRAS) : FSPB SECTION

Wrapped V-Belts

Standard : BS3790

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +100°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- *Lp to La* - 28
- *Li to Lp* - 60
- *Li to La* - 88

Weight per metre (Kgs)

- 0.214

Rec. Min Pulley Dia.

- 140 dp (mm)

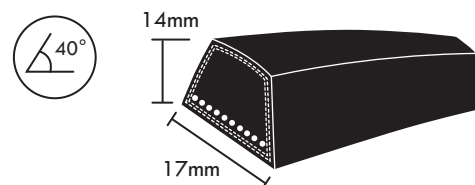
Manufacturing Range

- 940 - 16764 mm

Nominal Length : Pitch Length (Lp) in mm

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Belt Ref	Belt Ref	Belt Ref	Belt Ref
FSPB 1400	FSPB 2000	FSPB 2280	FSPB 2650	FSPB 3170
FSPB 1600	FSPB 2020	FSPB 2360	FSPB 2680	FSPB 3250
FSPB 1700	FSPB 2120	FSPB 2410	FSPB 2800	FSPB 3350
FSPB 1800	FSPB 2150	FSPB 2500	FSPB 2840	FSPB 3550
FSPB 1900	FSPB 2240	FSPB 2530	FSPB 3000	



FIRE RESISTANT ANTISTATIC (FRAS) : FSPC SECTION

Wrapped V-Belts

Standard : BS3790

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +100°C
- Maximum belt linear speed : 30m/sec
- ATEX certified FRAS belts are available

Useful Information

Belt Length Factor (mm)

- L_p to L_a - 30
- L_i to L_p - 83
- L_i to L_a - 113

Weight per metre (Kgs)

- 0.360

Rec. Min Pulley Dia.

- 224 dp (mm)

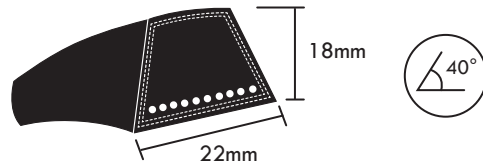
Manufacturing Range

- 1750 - 16789 mm

Nominal Length : Pitch Length (L_p) in mm

'PIX' FRAS belts conforms to : II 2GD c IIB X (Test report no. IB-03-4-934)

Belt Ref	Belt Ref	Belt Ref	Belt Ref
FSPC 2650	FSPC 3550	FSPC 4000	FSPC 4750
FSPC 3350	FSPC 3750	FSPC 4250	FSPC 5600



HIGH CAPACITY NARROW V-BELTS : 3V

Wrapped V-Belts

Standard : RMA IP 22

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec

Useful Information

Belt Length Factor (mm)

- L_p to L_a - 13
- L_i to L_p - 37
- L_i to L_a - 50

Weight per metre (Kgs)

- 0.074

Rec. Min Pulley Dia.

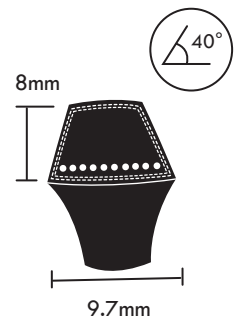
- 63 de (mm)

Manufacturing Range

- 493 - 4826 mm

Nominal Length: Outside Length (L_a) in Inches

Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)
3V 250	635	3V 355	902	3V 520	1321	3V 750	1905	3V 1120	2845
3V 260	660	3V 370	940	3V 530	1346	3V 800	2032	3V 1180	2997
3V 265	673	3V 375	953	3V 560	1422	3V 850	2159	3V 1250	3175
3V 280	711	3V 400	1016	3V 600	1524	3V 900	2286	3V 1320	3353
3V 300	762	3V 425	1080	3V 617	1567	3V 950	2413	3V 1400	3556
3V 315	800	3V 450	1143	3V 630	1600	3V 960	2438	3V 1425	3620
3V 335	851	3V 475	1207	3V 670	1702	3V 1000	2540	3V 1450	3683
3V 350	889	3V 500	1270	3V 710	1803	3V 1060	2692	3V 1500	3810



HIGH CAPACITY NARROW V-BELTS : 5V

Wrapped V-Belts

Standard : RMA IP 22

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec

Useful Information

Belt Length Factor (mm)

- *Lp to La* - 25
- *Li to Lp* - 60
- *Lin to La* - 85

Weight per metre (Kgs)

- 0.201

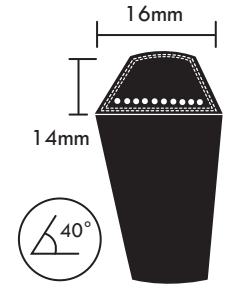
Rec. Min Pulley Dia.

- 140 de (mm)

Manufacturing Range

- 1219 - 16612 mm Nominal Length: Outside Length (La) in Inches

Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)
5V 500	1270	5V 750	1905	5V 1120	2845	5V 1700	4318	5V 2500	6350
5V 530	1346	5V 800	2032	5V 1180	2997	5V 1800	4572	5V 2650	6731
5V 560	1422	5V 850	2159	5V 1250	3175	5V 1900	4826	5V 2800	7112
5V 600	1524	5V 900	2286	5V 1320	3353	5V 2000	5080	5V 3000	7620
5V 630	1600	5V 950	2413	5V 1400	3556	5V 2120	5385	5V 3150	8001
5V 670	1702	5V 1000	2540	5V 1500	3810	5V 2240	5690	5V 3350	8509
5V 710	1803	5V 1060	2692	5V 1600	4064	5V 2360	5994	5V 3550	9017



HIGH CAPACITY NARROW V-BELTS : 8V

Wrapped V-Belts

Standard : RMA IP 22

Features :

- Oil Resistant
- Antistatic
- Temperature range : -18°C to +80°C
- Maximum belt linear speed : 30m/sec

Useful Information

Belt Length Factor (mm)

- *Lp to La* - 53
- *Li to Lp* - 92
- *Li to La* - 145

Weight per metre (Kgs)

- 0.589

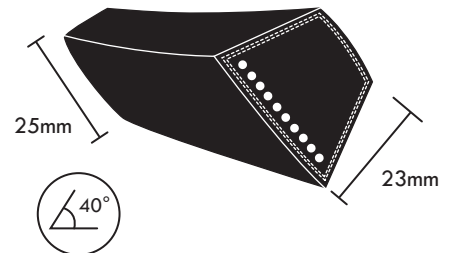
Rec. Min Pulley Dia.

- 335 de (mm)

Manufacturing Range

- 2286 - 16612 mm Nominal Length: Outside Length (La) in Inches

Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)	Belt Ref	Outside Length (mm)
1000	2540	1600	4064	2500	6350	4000	10160
1060	2692	1700	4318	2650	6731	4250	10795
1120	2845	1800	4572	2800	7112	4500	11430
1180	2997	1900	4826	3000	7620	4750	12065
1250	3175	2000	5080	3150	8001	5000	12700
1320	3353	2120	5385	3350	8509	5250	13335
1400	3556	2240	5690	3550	9017	5500	13970
1500	3810	2360	5994	3750	9525		



PIX-X'set® MUSCLE BELTS

HIGH POWER WITH MAINTENANCE FREE FEATURES



Construction:

- Wear resistant rubberised fabric jacket
- Specially designed cushion rubber
- Specially compounded high modulus base rubber
- Specially treated high tenacity high modulus polyester cord

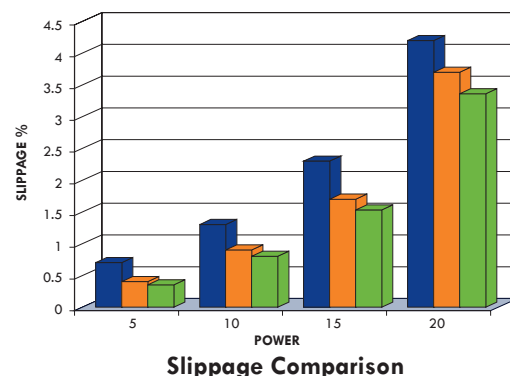
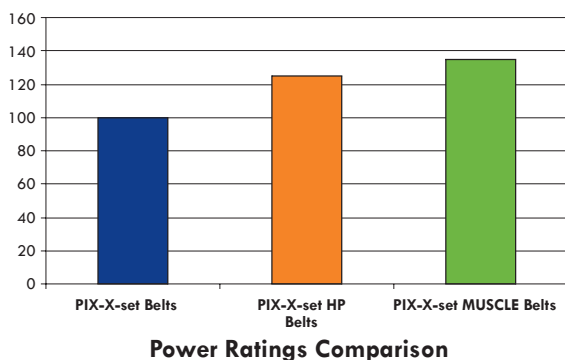
Operating Temperature: -25°C to +120°C

Standards: BS 3790, ISO 4184, IS 2494 for dimensional reference.

Features & Benefits:

- Produced to comply with the latest REACH directives, RoHS regulations, and exclude all restricted chemicals as listed by the EPA in the US
- Increased efficiency level up to 98%
- Extremely high power rating – up to 35% more than a regular belt
- High tensile strength – resistant to elongation and breakage
- Maintenance-Free - No re-tensioning required
- Highly Flexible - The standard construction allows the belt to “reverse bend” in drives with back idlers
- Extended temperature range: from -25°C up to 120°C
- Anti-static – complies with ISO 1813
- Space-saving potential, when designing drives – less belts required
- Longer service life, less down-time, reduced ownership costs

Range: Entire range of Z, A, B, SPZ, SPA, 3L, 4L, 5L, 3V sections are available



STUDY ON BELT ENERGY SAVING

ADVANTAGES OF REC BELT OVER WRAPPED BELT DRIVES IN HVAC APPLICATIONS

An extensive study by PIX Transmission has examined the energy saving potential of raw edged cogged (REC) transmission belts over wrapped belts, when operating under similar conditions in heating, ventilation and air-conditioning (HVAC) applications.

“In these days of rising energy prices and more stringent regulations, it is important to consider all options for reducing the energy profile of all machinery” reveals Dr P Thavamari, Vice President - R&D Belting. “This is something our customers are asking us for, and was a primary reason for us to carry out the study”.

So PIX, who supply both types of belts, carried out the research to quantify the comparative energy efficiency of Raw Edge Cogged against traditional Wrapped construction. The results have proved conclusively that REC belts can benefit HVAC customers with potential energy savings of up to 3.8% over wrapped belts.

Any machinery that requires high power transmission coupled with small pulley diameters and high speeds can benefit from REC belts, and ventilation manufacturers are an obvious place to spread the word of their energy saving potential. REC belts with their preformed cogged structure provide extra flexibility and smooth running characteristics, so are ideal for smaller pulleys. They also transmit significantly more torque than their wrapped counterparts.

Efficiency losses in friction belt drives come from two main sources - creep and friction. When belts are installed on pulleys, their static tension is fairly equally distributed between the two ‘strands’ of the belt stretched between the pulleys. When the drive is set in motion, torque transmission is achieved by the installed tension being redistributed, forming a ‘tight side’ and a ‘slack side’, the change in length between tight and slack side strands can only be accommodated by ‘creeping’ of the belt surface over the pulley. The net result of this creep is an effective speed loss at the driven pulley.

Friction energy loss is present wherever belt bending and belt ‘entry-to’ and ‘exit-from’ pulley grooves occurs. The textile filled compounds used in wedge belt manufacture are intended primarily to support the load carrying cords of the belts effectively, whilst having good wear properties. A cogged raw edge belt construction minimises belt bending-stiffness, but the materials do have a finite damping energy ratio, which means that hysteresis energy is converted into heat during the constant bending and straightening of the belt in operation.

Hysteresis and friction losses occur as the belt slips across the groove flanks each time the belt enters and leaves the grooves. Raw edge belts have a lesser coefficient of friction, hence suffer less friction loss. The effects of creep, friction energy loss help to promote REC wedge belts over their wrapped counterparts. Wrapped belt drives may also utilise more belts on similar pulley diameters (due to their lesser power capacity), which will further reduce efficiency.

These advantages are well recognised by engineers in “flagship” OEM producers. A leading HVAC equipment manufacturer’s chief engineer commented recently “This is an important and valuable investigation, and one that endorses what we have accepted for some time now. The REC system has measurable advantages over the wrapped belt - and when we are all looking for ways to demonstrate how to maximise energy efficiency, it serves as an important signpost towards best practice”.

The investigation also explored the relative advantages of REC over wrapped belt, in terms of belt re-tensioning requirements, by studying the belt tension decay, with time, under controlled conditions.

A new belt drive with proper installation will initially give 95 to 97 % efficiency. Over time energy is lost due to slippage, flex bending of belt over the pulleys etc. Ultimately this loss disseminates as heat, which in turn affects the performance of pulleys, shafts, couplings and associated bearings.

In most of the drives, maintaining optimum belt tension during the course of service by reducing the tension decay itself would lead to a substantial energy saving.



PIX also explored the relative advantages of REC over wrapped belt, in terms of belt re-tensioning requirements, by studying the belt tension decay with time under controlled conditions. Finally the survey analysed and quantified the economic advantage of REC over the wrapped belt.

In all the studies, the belt was mounted over the drive, driven and tensioner pulleys, applied the required tension, by moving the tensioner pulley upward till the specified tension is reached. The belt was allowed to run for one minute without applying the load on the generator so that belt seats properly in to the pulley grooves.

The belt tension was re-adjusted and then the tensioner pulley was locked on its position. The test was started and after reaching the testing speed, the load was gradually applied on the generator within a minute.

ENERGY CONSUMPTION

The energy saving study was calculated by applying a 6 kW load on the generator and the cumulative power consumed by the motor with wrapped belt A42 was recorded in the data acquisition system for every 30 seconds, up to 150 hours. Then a REC belt AX 42 was tested under similar condition and the data recorded in the system. The summary of power consumption at 24 hours interval, up to 150 hours, for wrapped as well as REC belts is given in table below.

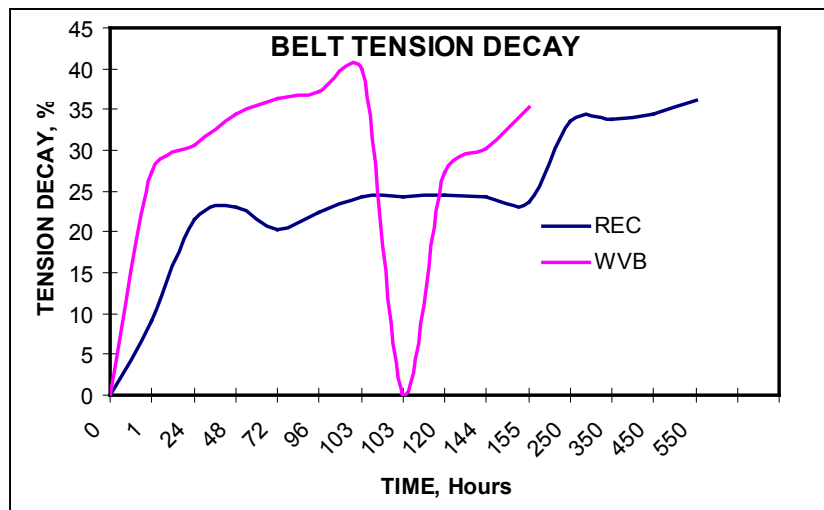
Energy consumption of belt drive

Time, Hours	Energy consumption, kW		Energy savings, %
	A42	AX42	
1	8.26	7.95	3.75
24	198.82	190.91	3.98
48	395.33	382.28	3.30
72	594.65	574.49	3.39
96	795.74	764.35	3.94
120	991.80	952.92	3.92
144	1192.18	1144.94	3.96
150	1240.05	1194.45	3.68

STUDY ON BELT TENSION DECAY WITH TIME

In this study wrapped V belt was mounted on the fixture, 50kg tension applied and allowed run under 6 kW load in the generator.

The tension decay with time was recorded for every 30 seconds using the data acquisition system. The testing condition is set in such a way that the rig gets tripped whenever the belt slippage exceeds the preset limit of 4% and in such case the belt was allowed to cool down to 30 minutes, belt tension re-adjusted to the original level and then the testing restarted till the belt failed to transmit power. The tension decay study for REC belt under similar condition as that of wrapped belt was done



till the belt failure. The tension decay in terms of percentage with respect to the original for wrapped as well as REC belts is given in figure below.

From the graph the following inferences can be drawn

A significant portion of tension decay takes place within 24 hours of starting the testing; nearly 30 % in wrapped and around 20% in the case of REC belt. Such a sharp decay in belt tension could be attributed to the bedding of belts into the pulley grooves

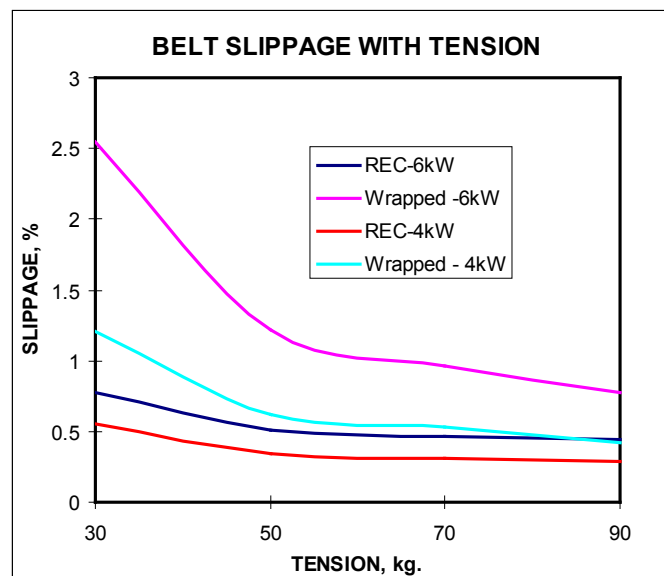
The reversal in the rate of decay is attributed to the heat induced thermal shrinkage of polyester cord. The shrinkage force of polyester cord tries to counteract the tension decay by working against the belt growth.

The performance of REC belt under laboratory testing conditions seems to be almost 3.0 to 3.5 times better than the corresponding wrapped belt.

BELT SLIPPAGE WITH TENSION

The effect of belt tension on slippage of wrapped belt drive in comparison with REC belt has been studied by varying the tension from 30 to 90 kg, at 4 as well as 6 kW loads. In all the tests, the belt after applying the tension was allowed to run and the slippage recorded after 30 minutes only considered for the comparison.

The results are depicted in figure below



From the graph it is clear that the wrapped v belt experiences higher slippage than the REC belt at any given running condition. The power rating in general is decided based on the maximum power at which the belt slippage does not exceed one percent. Under this laboratory test condition, the power rating of wrapped belt is around 5 kW and that of REC is 8 kW which means that under this running condition the power rating of REC belt is 60% higher than that of wrapped belt.

CONCLUSION

The calculations clearly demonstrate that REC belts give energy savings of 3.68 to 3.98%, over the wrapped v belt equivalent, under laboratory testing conditions.

The cost economic analysis based on the field test data indicates an attractive return on investment of REC belt for the HVAC industry. Apart from intangible benefits like less tension on shaft and associated bearings, less down time, and better reliability, with high energy saving potential, the pay back period on investment of REC belts can be as short as 3 to 4 weeks, depending on the drive.