BANDO

BANFLEX SCRUM

Features

Features of Banflescrum

- **Vibration-free stable transmission**

The belt bonds two or three ridges and therefore is mostly vibration-free. Hence, it allows stable transmission without the belt flipping over or detachment from the pulleys.

- **Most suitable for vertical shaft drive operation**

The bonding of the belt prevents contact between belts and detachment from the pulleys. Therefore, even in the case of a vertical shaft drive, there is no need to use special pulleys (such as deep-grooved pulleys).

Features common to Banflescrum and Banflex

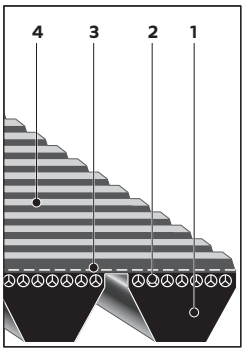
- **High-speed and smooth power transmission**

The high accuracy of the belt cross-section and effective length and no variation of belt sink on the pulleys allow high-speed smooth power transmission close to flat belts. Although the previous V-belts can be used up to 30 to 40 m/s, Banflescrum can be designed to be used with a speed up to 60 m/s.

- **Lightweight and compact design**

It can be used with small pulley diameters, allows for a high speed ratio, and allows the power transmission system to be light and compact. For example, a device that had used two-stage deceleration with V-belts can be changed to one stage deceleration.

Structure



1. Compression rubber

- Polyurethane rubber with excellent abrasion resistance and large friction factor and allowable compression stress
- 60° belt angle that gives uniform load distribution

2. Cord

Polyester cord with a large tensile strength, little flex fatigue, and little permanent elongation

3. Reinforcing canvas

Polyamide fiber that increases the widthwise rigidity and sures stable running

4. Back face rib

Unique ribs that reduce bending stress

Note

- When you use multiple Banflex belts, be sure to use the Scrum type
- To provide the dynamic performance of the belt, a “lubricant” is compounded in the belt. This compounding ingredient may become deposited in white on the belt surface due to changes in ambient temperature etc. or may become slightly wet due to a liquid. This will be absorbed into the belt with time and is no abnormality.

Belt Combinations

No. of ridges	Combination	No. of ridges	Combination
2	2	7	2+3+2
3	3	8	3+2+3
4	2+2	9	3+3+3
5	2+3	10	2+3+3+2
6	3+3	12	3+3+3+3

Banflescrum has two or three ridges as the standard. For four or more ridges, please use a combination of belts with two and three belts as shown in the following table (The recommended maximum number of ridges is 12.)

Matched set

When using a combination of multiple belts, please specify a matched set. We deliver a set of belts of lengths within the allowable range shown in the following table

- **Allowable range of effective lengths for use of multiple belts (matching limit)**

Nominal outside length	Allowable range of length (mm)
180~500	0.25
515~1000	0.50
1030~1500	0.75
1550~2300	1.00

Standard length of Banflescrum

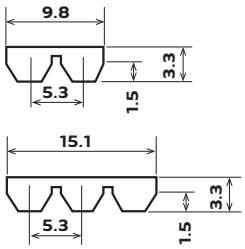
■ Belt indication method

7 - 5MS 1000

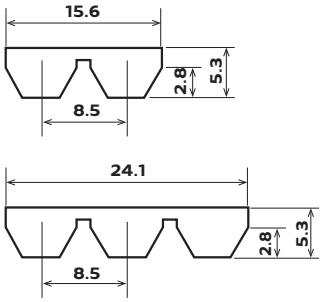
- 7 — No. of ridges (Combination 2+3+2)
- 5MS — Belt type (Type 5MS)
- 1000 — Nominal length (1000 mm)

■ Cross-sectional profile of Banflescrum belt

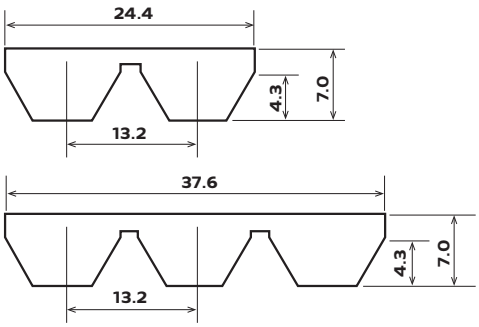
5MS



7MS



11MS



■ Standard effective lengths (Banflescrum)

(Unit: mm)

5MS				7MS				11MS			
Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length
280	277	670	667	500	494	1090	1084	710	701	1280	1271
290	287	690	687	515	509	1120	1114	730	721	1320	1311
300	297	710	707	530	524	1150	1144	750	741	1360	1351
307	304	730	727	545	539	1180	1174	775	766	1400	1391
315	312	750	747	560	554	1220	1214	800	791	1450	1441
325	322	775	772	580	574	1250	1244	825	816	1500	1491
335	332	800	797	600	594	1280	1274	850	841	1550	1541
345	342	805	802	615	609	1320	1314	875	866	1600	1591
355	352	825	822	630	624	1360	1354	900	891	1650	1641
365	362	850	847	650	644	1400	1394	925	916	1700	1691
375	372	875	872	670	664	1450	1444	950	941	1750	1741
387	384	900	897	690	684	1500	1494	975	966	1800	1791
400	397	925	922	710	704	1550	1544	1000	991	1850	1841
412	409	950	947	730	724	1600	1594	1030	1021	1900	1891
425	422	975	972	750	744	1650	1644	1060	1051	1950	1941
437	434	1000	997	775	769	1700	1694	1090	1081	2000	1991
450	447	1030	1027	800	794	1750	1744	1120	1111	2060	2051
462	459	1060	1057	825	819	1800	1794	1150	1141	2120	2111
475	472	1090	1087	850	844	1850	1844	1180	1171	2180	2171
487	484	1120	1117	875	869	1900	1894	1220	1211	2240	2231
500	497	1150	1147	900	894	1950	1944	1250	1241	2300	2291
515	512	1180	1177	925	919	2000	1994				
518	515	1220	1217	950	944	2060	2054				
530	527	1250	1247	975	969	2120	2114				
545	542	1280	1277	1000	994	2180	2174				
560	557	1320	1317	1030	1024	2240	2234				
580	577	1360	1357	1060	1054	2300	2294				
600	597	1400	1397								
615	612	1450	1447								
630	627	1500	1497								
650	647	1850	1847								

■ Belt outside length tolerance

Nominal outside length	Outside length tolerance (mm)
180~ 307	±2.5
315~ 615	±4.0
630~1090	±5.0
1120~1500	±6.5
1550~1900	±7.5
1950~2300	±9.0

(Note) Please note that when you switch from Banflex to Banflescrum, the center distance becomes shorter (3 to 5 mm for 5M → 5MS, 5 to 6 mm for 7M → 7MS, 6 to 8 mm for 11M → 11MS).