TEXROPE® HFX

Raw edge narrowsection V-belt for compact and economical drives

Thanks to its maximum transverse rigidity combined with excellent longitudinal flexibility, this raw edge narrow-section V-belt performs much better than the wrapped construction.

The new TEXROPE® HFX, or "high flexibility" belt, allows the use of pulleys even smaller than those used with traditional raw edge belts, as the new notch profile reduces bending stresses. As a result, more compact and economical drives can be designed, and much greater speed ratios achieved.





TEXROPE® HFX: the high flexibility belt

Advantages

Belts represent only a small part of the global cost of a drive. Hence, cost savings can be obtained mainly through:

- a reduced size drive
- reduced maintenance costs

Thanks to its unmatched flexibility, TEXROPE® HFX perfectly meets these requirements:

- It easily accomodates small diameters, thus allowing the use of smaller and less costly pulleys.
- The new notch profile evenly distributes bending stresses and enables the belt to run on small diameter pulleys with a significant reduction of fatigue. Belt life is extended, maintenance costs and production downtime are reduced.



Construction

- Top fabric reduces wear, especially where the drive includes back idlers.
- Specially treated tensile cords resist fatigue, shocks, bending and tensile stresses, and ensure minimal elongation.
- Abrasion resistant fibre-reinforced compound.
- Optimised moulded notches ensure excellent flexibility, thus reducing bending stresses and heat buildup.
- Good resistance to mineral oils and temperatures between -30°C and +80°C.
- TEXROPE[®] HFX combines maximum transverse rigidity with excellent longitudinal flexibility.
- Meets ISO 4184, DIN 7753, NF T-47 141 and BS 3790 standards. Meets ISO standard 1813 for static conductivity.
- All TEXROPE® HFX belts are length-stable (not marked with code length system).



Applications

TEXROPE® HFX V-belts accomodate all drives equipped with SPZ, SPA, SPB or SPC section pulleys. They are particularly appropriate for compact drives or for higher power rating and withstand severe operation conditions (extreme temperatures, humidity). Typical applications are air conditioning equipment, machinery for sugar refineries, paper industry, agro-alimentary industry etc.

TEXROPE® HFX characteristics



Power rating comparison

The curves show the comparative progression of basic rated power for B, SPB and XPB belts.

They illustrate:

- the evolution in minimal pulley diameters;
- the differences in power ratings for a similar small diameter pulley;
- the possibilities to reduce pulley diameters for the same power rating;
- the possibilities to combine a reduction of pulley diameter to a higher power rating.



Minimal pulley diameters (mm)





Notch design

The moulded notch design of these belts has been completely revised, in order to allow optimum distribution of bending stresses. Their flex fatigue life is exceptional. This feature considerably improves crack resistance.



TEXROPE® HFX product range

VD7

APL			ЛРА			Лр	APC
Belt code Datum length (mm)		Belt code Datum length (mm)			Belt code L _a (mm)	Belt code L _a (mm)	
XPZ 600	XPZ 1030	XPZ 1650	XPA 732	XPA 1150	XPA 1632	XPB 1000	XPC 2000
XPZ 630	XPZ 1037	XPZ 1700	XPA 750	XPA 1157	XPA 1650	XPB 1060	XPC 2120
XPZ 660	XPZ 1060	XPZ 1750	XPA 757	XPA 1172	XPA 1682	XPB 1120	XPC 2240
XPZ 670	XPZ 1080	XPZ 1800	XPA 775	XPA 1180	XPA 1700	XPB 1180	XPC 2360
XPZ 687	XPZ 1087	XPZ 1850	XPA 782	XPA 1207	XPA 1732	XPB 1250	XPC 2500
XPZ 710	XPZ 1110	XPZ 1900	XPA 800	XPA1220	XPA 1750	XPB 1320	XPC 2650
XPZ 722	XPZ 1120	XPZ 1950	XPA 825	XPA 1232	XPA 1782	XPB 1400	XPC 2800
XPZ 737	XPZ 1137	XPZ 2000	XPA 832	XPA 1250	XPA 1800	XPB 1500	XPC 3000
XPZ 750	XPZ 1150	XPZ 2120	XPA 850	XPA 1257	XPA 1850	XPB 1600	XPC 3150
XPZ 762	XPZ 1162	XPZ 2240	XPA 857	XPA 1272	XPA 1900	XPB 1700	XPC 3350
XPZ 775	XPZ 1180	XPZ 2360	XPA 875	XPA 1282	XPA 1950	XPB 1800	XPC 3550
XPZ 787	XPZ 1212	XPZ 2500	XPA 882	XPA 1307	XPA 2000	XPB 1900	XPC 3750
XPZ 800	XPZ 1220	XPZ 2650	XPA 900	XPA 1320	XPA 2060	XPB 2000	XPC 4000
XPZ 817	XPZ 1237	XPZ 2800	XPA 907	XPA 1332	XPA 2120	XPB 2120	XPC 4250
XPZ 825	XPZ 1250	XPZ 3000	XPA 925	XPA 1360	XPA 2180	XPB 2240	XPC 4500
XPZ 837	XPZ 1280	XPZ 3150	XPA 932	XPA 1382	XPA 2240	XPB 2360	XPC 4750
XPZ 850	XPZ 1287	XPZ 3350	XPA 950	XPA 1400	XPA 2360	XPB 2500	
XPZ 862	XPZ 1320	XPZ 3550	XPA 957	XPA 1442	XPA 2500	XPB 2650	
XPZ 875	XPZ 1337		XPA 975	XPA 1450	XPA 2650	XPB 2800	
XPZ 887	XPZ 1360		XPA 982	XPA 1462	XPA 2800	XPB 3000	
XPZ 900	XPZ 1400		XPA 1000	XPA 1482	XPA 3000	XPB 3150	
XPZ 917	XPZ 1412		XPA 1007	XPA 1500	XPA 3150	XPB 3350	
XPZ 925	XPZ 1437		XPA 1030	XPA 1507	XPA 3350	XPB 3550	
XPZ 937	XPZ 1450		XPA 1060	XPA 1522	XPA 3550	XPB 3750	
XPZ 950	XPZ 1487		XPA 1082	XPA 1532	XPA 3750	XPB 4000	
XPZ 962	XPZ 1500		XPA 1090	XPA 1550	XPA 4000	XPB 4250	Preference should be given
XPZ 975	XPZ 1537		XPA 1107	XPA 1557		XPB 4500	to standard
XPZ 987	XPZ 1550		XPA 1120	XPA 1582		XPB 4750	dimensions in
XPZ 1000	XPZ 1587		XPA 1132	XPA 1600			bold type.
XPZ 1012	XPZ 1600		XPA 1142	XPA 1607			

Physical properties

	XPZ	XPA	ХРВ	XPC	
Nominal section W x T (mm)	10 x 8	13 x 10	16.3 x 13	23 x 18	- + 1
Datum width Wd (mm)	8.5	11	14	19	\
Belt unit weight (kg/m)	0.069	0.123	0.195	0.334	т \
Minimal pulley diameter (mm)	50	63	90	140	' \
Le - L_d (mm)*	13	18	22	30	
а.					+ \

* Le = outside length L_d = datum length

The calculation procedure described in the manual "TEXROPE® V-belt drives" (ref. E/80002) provides all necessary information to calculate a drive system using TEXROPE® HFX belts.

Your distributor:

TEXROPE® is a registered trademark of the Gates Rubber Company.



The publishers reserve the right to amend details where necessary.