TensionRite Belt Frequency Meter

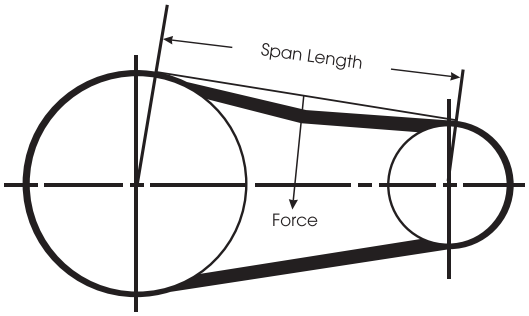
The TensionRite Belt Frequency Meter belt tensioning device measures actual belt tension or frequency and works with all industrial transmission belts including V-belts, synchronous belts, and Poly-V belts.

Details about the TensionRite Belt Frequency Meter can be found on the web at www.goodyearindustrialproducts.com. Or contact your local Goodyear authorized distributor.

Ab«b`qflk Mofk`fmib

Mirkdbo*qvmb d^rdbp rqfifwb qeb ab«b`qflk mofk`fmib ql `eb`h qeb tension of a belt drive.

Qeb d^rdb ab«b`qp qeb `bkqbo lc qeb _biq pm^k ^ka qeb clo`b lc qefp ab«b`qflk fp `l j m^oba ql ^q^odbq ab«b`qflk clo`b clo qeb m^oqf`ri^o span. Then, one can adjust the belt tension until the actual ab«b`qflk clo`b bnr^ip qeb q^odbq+



Measure the span length.

Mark the center of the span. At the center mark, use a tension tester and apply a force perpendicular to the span large enough to ab«b`q qeb _biq .,31 clo bsbov fk`e lc pm^k ibkdqe %Bu7^ .-- pm^k obnrfobp ^ ab«b`qflk lc .--,31 lo . 6,.3 &+

@l j m^ob qeb ^`qr^i ab«b`qflk clo`b tfqe qeb s^irbp fk Qables 5 and 6. A force below the target value indicates under-tension. A force above the target indicates over-tension.

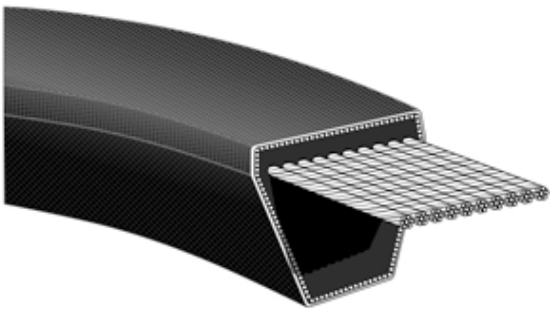
Table 5

Cross Section	Smallest Sheave Diameter Range	RPM Range	Belt Deflection (Force Pounds)			
			Uncogged Hy-T Belts and Uncogged Hy-T Torque Team		Cogged Torque-Flex and Machined Edge Torque Team Belts	
			Used Belt	New Belt	Used Belt	New Belt
A, AX	3.0 - 3.6	1000-2500 2501-4000	3.7 2.8	5.5 4.2	4.1 3.4	6.1 5.0
	3.8 - 4.8	1000-2500 2501-4000	4.5 3.8	6.8 5.7	5.0 4.3	7.4 6.4
	5.0 - 7.0	1000-2500 2501-4000	5.4 4.7	8.0 7.0	5.7 5.1	9.4 7.6
B, BX	3.4 - 4.2	860-2500 2501-4000			4.9 4.2	7.2 6.2
	4.4 - 5.6	860-2500 2501-4000	5.3 4.5	7.9 6.7	7.1 7.1	10.5 9.1
	5.8 - 8.6	860-2500 2501-4000	6.3 6.0	9.4 8.9	8.5 7.3	12.6 10.9
C, CX	7.0 - 9.0	500-1740 1741-3000	11.5 9.4	17.0 13.8	14.7 11.9	21.8 17.5
	9.5 - 16.0	500-1740 1741-3000	14.1 12.5	21.0 18.5	15.9 14.6	23.5 21.6
D	12.0 - 16.0	200-850 851-1500	24.9 21.2	37.0 31.3		
	18.0 - 20.0	200-850 851-1500	30.4 25.6	45.2 38.0		

Table 6

Cross Section	Smallest Sheave Diameter Range	RPM Range	Belt Deflection (Force Pounds)			
			[redacted] Hy-T Wedge Belts and Uncogged Hy-T Wedge Torque Team		[redacted] Hy-T Wedge Belts and Hy-T Wedge Machine Edge Torque Team	
			Used Belt	New Belt	Used Belt	New Belt
3V, 3VX	2.2 - 2.4	1000-2500 2501-4000			3.3 2.9	4.9 4.3
	2.65 - 3.65	1000-2500 2501-4000	3.6 3.0	5.1 [redacted]	4.2 3.8	6.2 [redacted]
	4.12 - 6.90	1000-2500 2501-4000	4.9 4.4	7.3 6.6	5.3 4.9	7.9 7.3
5V, 5VX	4.4 - 6.7	500 - 1749 1750 - 3000 3001 - 4000			10.2 8.8 5.6	15.2 13.2 8.5
	7.1 - 10.9	500 -1740 1741- 3000	12.7 11.2	18.9 16.7	14.8 13.7	22.1 20.1
	11.8 - 16.0	500 -1740 1741- 3000	15.5 14.6	23.4 21.8	17.1 16.8	25.5 25.0
8V	12.5 - 17.0	200 - 850 851-1500	33.0 26.8	49.3 39.9		
	18.0 - 22.4	200 - 850 851-1500	39.6 35.3	59.2 52.7		

HY-T® WEDGE



Part No: 5V1400
5V .62" Top Width – Narrow Profile
1400 140.0" Nominal Outside Length
Envelope Uncogged Construction Shown

APPLICATIONS

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

KEY FEATURES & BENEFITS

- Narrow profile provides savings through efficiency.
- Greater horsepower than the classical belt.
- Strong Vytacord (polyester) tensile members.
- High-grade engineered rubber.
- Oil, heat, ozone, and abrasion resistant.
- Available in raw-edge construction with cogs or envelope construction.
- Matchmaker to eliminate mismatch.
- Static conductive.

A NARROWER CROSS SECTION & STRONGER CONSTRUCTION REDUCES DRIVE COSTS

The savings start in the basic wedge or narrow design of the HY-T Wedge belt. It has a narrower cross section than standard V-belts so it distributes stresses more uniformly to deliver more consistent, more reliable power transmission.

A narrower cross section means the belts are smaller and weigh less. Smaller belts allow for the use of smaller and lighter sheaves, resulting in a more efficient drive.

The savings continue through the higher horsepower capacity provided by Goodyear HY-T V-belt construction. Vytacord tension members, provide strength and dimensional stability. Higher horsepower capacity is also provided through a tough engineered rubber compound cushion, adding to belt strength.

HY-T Wedge is so strong that small sheave diameters aren't a problem. It's often possible to achieve a required horsepower with fewer HY-T Wedge belts than with standard V-belts, reducing sheave size, sheave costs, and belt costs even more.

Since less power is required to run the smaller, lighter drives, more power gets to the load. Therefore, you may be able to downsize drive motors and/or increase drive efficiency for even more savings.

MATCHMAKER® PERFORMANCE

HY-T Wedge belts eliminate mismatch problems as each Matchmaker belt in a single length code is identical in size and performance to every other HY-T Wedge belt in that size, no matter when or where it was produced.

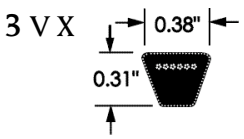
WEDGE OR ENVELOPE CONSTRUCTIONS PROVIDE OPTIMUM PERFORMANCE

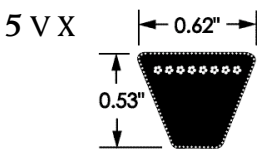
HY-T Wedge belts are available in a raw-edge construction with cogs for increased flexibility and heat dissipation or envelope construction for drives where pulsation, shock loads, high tension, and long centers are involved.

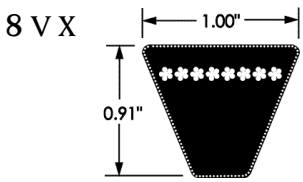
HY-T Wedge Cogged belts are high-horsepower belt constructions that are identified with a 3VX and 5VX prefix and are available in lengths up to 200". The cogged construction provides the high flexibility required for short center distances. The cogs also provide a larger surface area to dissipate heat and prolong belt life. Improved material properties and advanced construction technology results in an average horsepower increase of 30% over standard "Classical" V-belt and wedge belts.

HY-T Wedge Envelope belts are identified with a 3V, 5V, or 8V prefix and are recommended for drives where pulsation, shock loads, high tension, and long centers are involved. It features a continuous V-section that is protected by a wide angle, synthetic fabric impregnated with high-quality Goodyear engineered rubber compound. This unique envelope achieves the high strength HY-T Wedge belts need to withstand high loading forces. It also provides the torsional rigidity required in long center drives delivering the traction needed for accurate tracking and precision performance.

HY-T® WEDGE







COGGED SIZES

Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)
3VX250	25.0	3VX375	37.5	3VX560	56.0	3VX850	85.0	3VX1250	125.0
3VX265	26.5	3VX400	40.0	3VX600	60.0	3VX900	90.0	3VX1320	132.0
3VX280	28.0	3VX425	42.5	3VX630	63.0	3VX950	95.0	3VX1400	140.0
3VX300	30.0	3VX450	45.0	3VX670	67.0	3VX1000	100.0	3VX1500	150.0
3VX315	31.5	3VX475	47.5	3VX710	71.0	3VX1060	106.0		
3VX335	33.5	3VX500	50.0	3VX750	75.0	3VX1120	112.0		
3VX355	35.5	3VX530	53.0	3VX800	80.0	3VX1180	118.0		

Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)
5VX450	45.0	5VX590	59.0	5VX740	74.0	5VX930	93.0	5VX1250	125.0
5VX470	47.0	5VX600	60.0	5VX750	75.0	5VX950	95.0	5VX1320	132.0
5VX490	49.0	5VX610	61.0	5VX780	78.0	5VX960	96.0	5VX1400	140.0
5VX500	50.0	5VX630	63.0	5VX800	80.0	5VX1000	100.0	5VX1500	150.0
5VX510	51.0	5VX650	65.0	5VX810	81.0	5VX1030	103.0	5VX1600	160.0
5VX530	53.0	5VX660	66.0	5VX830	83.0	5VX1060	106.0	5VX1700	170.0
5VX540	54.0	5VX670	67.0	5VX840	84.0	5VX1080	109.0	5VX1800	180.0
5VX550	55.0	5VX680	68.0	5VX850	85.0	5VX1120	112.0	5VX1900	190.0
5VX560	56.0	5VX690	69.0	5VX860	86.0	5VX1150	115.0	5VX2000	200.0
5VX570	57.0	5VX710	71.0	5VX880	88.0	5VX1180	119.0		
5VX580	58.0	5VX730	73.0	5VX900	90.0	5VX1230	123.0		

NONCOGGED SIZES

Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)
3V250	25.0	3V375	37.5	3V560	56.0	3V850	85.0	3V1250	125.0
3V265	26.5	3V400	40.0	3V600	60.0	3V900	90.0	3V1320	132.0
3V280	28.0	3V425	42.5	3V630	63.0	3V950	95.0	3V1400	140.0
3V300	30.0	3V450	45.0	3V670	67.0	3V1000	100.0		
3V315	31.5	3V475	47.5	3V710	71.0	3V1060	106.0		
3V335	33.5	3V500	50.0	3V750	75.0	3V1120	112.0		
3V355	35.5	3V530	53.0	3V800	80.0	3V1180	118.0		

Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)
5V500	50.0	5V850	85.0	5V1250	125.0	5V1900	190.0	5V2800	280.0
5V560	56.0	5V900	90.0	5V1320	132.0	5V2000	200.0	5V3000	300.0
5V630	63.0	5V950	95.0	5V1400	140.0	5V2120	212.0	5V3150	315.0
5V670	67.0	5V1000	100.0	5V1500	150.0	5V2240	224.0	5V3350	335.0
5V710	71.0	5V1060	106.0	5V1600	160.0	5V2360	236.0	5V3550	355.0
5V750	75.0	5V1120	112.0	5V1700	170.0	5V2500	250.0		
5V800	80.0	5V1180	118.0	5V1800	180.0	5V2650	265.0		

Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)	Part Number	Effective Length (in)
8V1000	100.0	8V1400	140.0	8V2000	200.0	8V2800	280.0	8V4000	400.0
8V1060	106.0	8V1500	150.0	8V2120	212.0	8V3000	300.0	8V4250	425.0
8V1120	112.0	8V1600	160.0	8V2240	224.0	8V3150	315.0	8V4500	450.0
8V1180	118.0	8V1700	170.0	8V2360	236.0	8V3350	335.0	8V4750	475.0
8V1250	125.0	8V1800	180.0	8V2500	250.0	8V3550	355.0	8V5000	500.0
8V1320	132.0	8V1900	190.0	8V2650	265.0	8V3750	375.0	8V5600	560.0