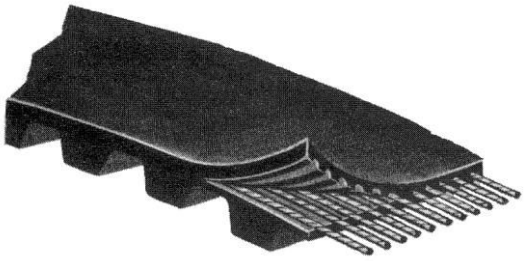
TIMING BELT VECO STANDARD
Features
12005 - 1 / 2

Fiche Technique - Technical Data Sheet

COLMANT CUVELIER RPS
member of SANOK RUBBER GROUP

02-2018

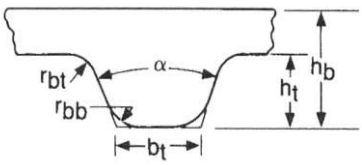


Function
Flexible link between the motor and machine :
- no slip
- accurate
- high or medium speed
- no noise and no maintenance

Conception
Endless timing belts synchro standard, teeth with trapezoïdal profile, made of :
- glass fiber reinforcement which resists tightening and the elongation.
- mix of neopren rubber.
- precision moulded teeth.
- protected coated in nylon wich decreases the friction ratio between belts and pulley.

General specifications
- Positive drive which avoids vibration due to the slip of the belts (like with V.belts) .
- Constant speed of the transmission : no knocks, continuous engagement with each tooth of pulleys which allows a constant angular speed, with no shake, no vibration as opposed to a chain drive.
- Cancel the maintenance. The glass fibre reinforcement anti-elongation avoids the re-tightening of timing belts.
- High mechanical efficiency : reduced friction ratio which decreases the temperature, reduce the tightening of the belt and increases the life time of the transmission.
- Efficiency 98 %
- Working temperature : -34 °C to +85 °C

Teeth profile



Section	Pitch (mm)	hb (mm)	Angular α (°)	ht (mm)	bt (mm)	rbb (mm)	rbt (mm)
XL	5,08	2.54	50	1.27	1.37	0.38	0.38
L	9.52	3.56	40	1.91	3.25	0.51	0.51
H	12.7	4.06	40	2.29	4.45	1.02	1.02
XH	22.22	11.43	40	6.35	7.95	1.19	1.57

Pitch length table (in mm)

Lp	Belt pitch							
	XL		L		H		XH	
	Teeth	Type	Teeth	Type	Teeth	Type	Teeth	Type
152,4	30	60 XL						
177,8	35	70 XL						
203,2	40	80 XL						
228,6	45	90 XL						
254	50	100 XL						
279,4	55	110 XL						
304,8	60	120 XL						
314,32			33	124 L				
330,2	65	130 XL						
355,6	70	140 XL						
381	75	150 XL	40	150 L				
406,4	80	160 XL						
431,8	85	170 XL						
457,2	90	180 XL						
476,25			50	187 L				
482,6	95	190 XL						
508	100	200 XL						
533,4	105	210 XL	56	210 L				
558,8	110	220 XL						
571,5			60	225 L				
584,2	115	230 XL						
609,6	120	240 XL	64	240 L	48	240 H		
635	125	250 XL						
647,7			68	256 L				
660,4	130	260 XL						
685,8			72	270 L	54	270 H		
723,9			76	285 L				
762			80	300 L	60	300 H		
819,15			86	322 L				
838,2					66	330 H		
876,3			92	345 L				
914,4					72	360 H		
933.45			98	367 L				
990.6			104	390 L	78	390 H		
1066.8			112	420 L	84	420 H		
1143.8			120	450 L	90	450 H		
1219.2			128	480 L	96	480 H		
1289.05							58	507 XH
1295,4			136	510 L	102	510 H		
1371.6			144	540 L	108	540 H		
1422.4							64	560 XH
1447.8					114	570 H		
1524			160	600 L	120	600 H		
1600.2					126	630 H	72	630 XH
1676.4					132	660 H		
1778					140	700 H	80	700 XH
1905					150	750 H		
1955.8							88	770 XH
2032					160	800 H		
2133.6							96	840 XH
2159					170	850 H		
2286					180	900 H		
2489.2							112	980 XH
2540					200	1000H		
2794					220	1100H		
2844.8							128	1120 XH
3048								
3175					250	1250H		
3200.4							144	1260 XH
3356					280	1400H	160	1400 XH
3911.6							176	1540 XH
4064								
4318					340	1700H		
4445							200	1750 XH

Standard width

BELT PITCH	WIDTH IN MM								
	6,35 (1/4")	9,52 (3/8")	12,7 (1/2")	19,05 (3/4")	25,4 (1")	38,1 (1"1/2)	50,8 (2")	76,2 (3")	101,6 (4")
XL	025	037							
L			050	075	100				
H				075	100	150	200	300	
XH							200	300	400

Usefull

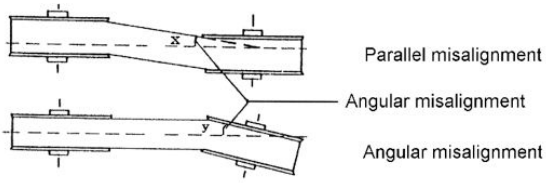
- The diameter of the pulleys must not be less than the width of the belt.
- The speed belt must not be more than 33 m/s. Otherwise, call us.
- If the centre distance is more than eigth times the diameter of the small pulley, the both pulleys must be flanged.
- Protect the belt against chemicals products.
- The life time of the timing belt VECO HTB is minimum 4000 hours in a normal use.
- During the stocking, the belts must be protect from humidity, externe temperatures and direct sunlight.

Montage

Alignment of pulleys :

- Parallelism

- Eccentricity

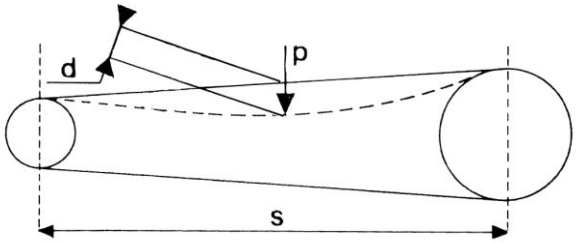


Total angular disalignment = Angle x + Angle y, with a maximum de 0,25 °, or 4 mm per centre distance meter.
The alignment of pulleys can be checked in setting a straight edge across faces of both pulleys.

- Tension of the belt :

- Check that the belt is well tightened in order to avoid that the belt jumps over the teeth
- Never strengthen the belt during the installation
- A too high tension reduces the life time of the belt.
- If there are shocks, please call us.
- To have a correct initial tension "p", see the following table

s : centre distance in mm
d : 1/64 s



INSTALLATION TENSION "p" PER CORD (daN)

	WIDTH								
Pitch	**025**	**037**	**050**	**075**	**100**	**150**	**200**	**300**	**400**
XL	0,07	0,1							
L			0,2	0,3	0,45				
H				0,9	1,1	1,8	2,5	3,85	
XH							3,4	5,2	7,5

- Non adjusting centre distances : Tensioning rollers are not recommanded but you can use them if you follow these conditions :
  - The roller will be set on the soft part
  - If possible inside the belt (see figure 1)
  - The diameter of the roller must be more than 1,33 times the diameter of the small pulley.
  - It must be corrected if its diameter is smaller than the diameter of a pulley with 40 teeth.
  - The arc of contact done by the belt must be as smallest as possible

Fig. 1 Fig. 2