Technical datasheet

PU Linear 50 ATK10-13 Steel NT

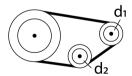
Article code: TBPU000233



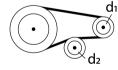
General information					
Productgroup	Timing belts, PU	Linear			
Industry segment	Building materia	ls; Appliances;	Container & packaging		
Main product feature	Positive drive, W	ear resistant, S	elf-alignment		
Belt construction					
Tension member		steel			
Material	body	Polyuretha	ne		
Surface	tooth side	Polyamide	fabric		
	back side	Polyuretha	ne		
Characteristics					
Food Grade (FG)	no				
Antistatic (AS)	no				
Oil & Fat resistance	good				
Technical data					
Tooth	profile			AT10	
	pitch			10 mm	0.39 in.
Hardness body material	ISO 868			92A Shore	
Belt thickness	total			4.5 mm	0.18 in.
Coefficient of friction	tooth side to ste	el	dynamic	0,5	
			static	0,6	
Operating temperature	continuous		from / to	-10 / 80 °C	14/176 °F
Minimum pulley diameter	A) without count	er flexing	number of teeth, t1	25	
			d1	77.73 mm	3.06 in.
			d2	80 mm	3.15 in.
	B) with counter f	lexing	number of teeth, t1	25	
			d1	77.73 mm	3.06 in.
			d2	120 mm	4.72 in.
Endless length	minimum			500 mm	19.69 in.
Manufacturing length	standard			100000 mm	328.08 ft.

Reference images

A) without counter flexing



B) with counter flexing



Fabrication

This information on the fabrication options is general, please contact Ammeraal Beltech for the specific fabrication possibilities of the timing belt of your choice.

Open end, prepared splice, spliced endless with mechanical fastener or a pin joint fastener.

Cleats welded or mechanically attached, metal teeth, guides welded or glued.

Covers can be welded, glued, coated or vulkanized onto the back side of the timing belt.

Thermoplastic covers can be embossed. Perforations, lateral and logitudinal slots, lateral and longitudinal profiles.

Additional Information

Tooth profile according to standard: metric ISO 17396, imperial ISO 5296-1, curvilinear ISO 13050, depending on the belt type. This sheet contains typical values, which apply to a temperature of approx. 20 °C (68 °F), unless otherwise stated, individual data may differ. Consult our specialists for further information like technical calculations. Instructions regarding joining, storage & maintenance and tracking &

tensioning.

Standard belt width [mm]	Allow. tensile load Linear open end & Torque [N]	Allow. tensile load Linear welded endless [N]	Spring force [N]
10	1125	562.5	330000
16	1850	925	560000
25	3750	1875	95200
32	5000	2500	1232000
50	7500	3750	1960000
75	12000	6000	2968000
100.1	16000	8000	3920000

Speed rpm [1/min]	Specific tooth force	Specific power [W/mm]
Speed (bin [1/ iiiii]	[N/mm]	Specific power [w/mm]
0	7.57	0
25	7.423	0.031
50	7.306	0.061
75	7.18	0.09
100	7.078	0.118
150	6.895	0.172
200	6.713	0.224
300	6.418	0.321
400	6.153	0.41
500	5.921	0.493
750	5.452	0.682
1000	5.085	0.848
1250	4.789	0.998
1500	4.536	1.134
1750	4.32	1.26
2000	4.128	1.376
3000	3.53	1.765
4000	3.094	2.063

Standard

Because of continuous development, the presented data is subject to alteration. This data replaces that included in previous publications. Ammeraal Beltech excludes any liability for the incorrect use of the above stated information. Subject to the general terms and conditions of sale and delivery, as applied by its operating companies, are all activities performed and services rendered by Ammeraal Beltech.