

PU Linear 50 TK10-13 Steel NT

Article code: TBPU000235

General information

Productgroup	Timing belts, PU Linear
Industry segment	Building materials; Appliances; Container & packaging
Main product feature	Positive drive, Wear resistant, Self-alignment

Belt construction

Tension member		steel
Material	body	Polyurethane
Surface	tooth side	Polyamide fabric
	back side	Polyurethane

Characteristics

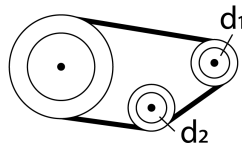
Food Grade (FG)	no
Antistatic (AS)	no
Oil & Fat resistance	good

Technical data

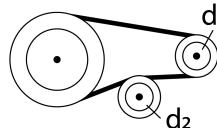
Tooth	profile		T10	
	pitch		10 mm	0.39 in.
Hardness body material	ISO 868		92A Shore	
Belt thickness	total		4.5 mm	0.18 in.
Coefficient of friction	tooth side to steel	dynamic	0,5	
		static	0,6	
Operating temperature	continuous	from / to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	25	
		d1	77.73 mm	3.06 in.
		d2	80 mm	3.15 in.
	B) with counter flexing	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 longitudinal 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	840	420	220000
16	1000	500	385000
25	2200	1100	632500
32	2620	1310	825000
50	4200	2100	1320000
75	5100	2550	1980000
100.1	7100	3550	2695000

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]
0	5.18	0
25	5	0.021
50	4.855	0.04
75	4.7	0.059
100	4.611	0.077
150	4.443	0.111
200	4.275	0.143
300	4.028	0.201
400	3.836	0.256
500	3.68	0.307
750	3.43	0.429
1000	3.163	0.527
1250	2.992	0.623
1500	2.844	0.711
1750	2.724	0.795
2000	2.612	0.871
3000	2.278	1.139
4000	2.039	1.359

Standard
