

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

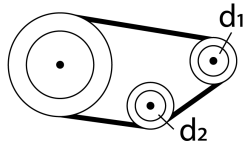
Food Grade (FG)	no
Antistatic (AS)	no
Oil & Fat resistance	good

Technical data

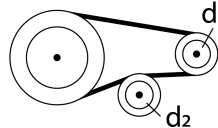
Tooth	profile		T10	
	pitch		10 mm	0.39 in.
Hardness body material	ISO 868		92A Shore	
Belt thickness	total		4.5 mm	0.18 in.
Coefficient of friction	tooth side to steel	dynamic	0,5	
		static	0,6	
Operating temperature	continuous	from / to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter 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