

PU Linear 50 TK20-13 Steel

Article code: TBPU000202

General information

Productgroup	Timing belts, PU Linear
Industry segment	General industry; Wood; Building materials: Stone & ceramics, Bricks & tiles
Main product feature	Positive drive, Self-alignment, Wear resistant

Belt construction

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

Characteristics

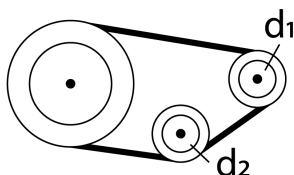
Food Grade (FG)	no
Antistatic (AS)	no
Oil & Fat resistance	good

Technical data

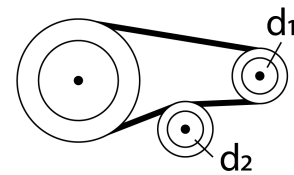
Tooth	profile		T20	
	pitch		20 mm	0.79 in.
Hardness body material	ISO 868		92A Shore	
Belt thickness			8 mm	0.31 in.
Coefficient of friction	tooth side to steel	dynamic	0,5	
		static	0,6	
Operating temperature	continuous	from / to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	30	
		d1	210.08 mm	8.27 in.
		d2	120 mm	4.72 in.
	B) with counter flexing	number of teeth, t1	33	
		d1	127.32 mm	5.01 in.
		d2	210.08 mm	8.27 in.
Belt width			50 mm	1.97 in.
Endless length	minimum		1200 mm	47.24 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]
25	3200	1600		870000
32	4100	2050		1130000
50	6500	3250		1760000
75	9800	4900		2630000
100	13500	6750		3500000
150.1	20000	10000		5000000

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]	
0	10.45	0	
25	10	0.083	
50	9.69	0.161	
75	9.35	0.234	
100	9.14	0.305	
150	8.74	0.437	
200	8.35	0.557	
300	7.78	0.778	
400	7.34	0.979	
500	6.95	1.158	
750	6.33	1.183	
1000	5.83	1.943	
1250	5.39	2.246	
1500	5.11	2.555	
1750	4.84	2.823	
2000	4.59	3.06	
3000	3.84	3.84	
4000	3.31	4.413	

Standard