

PU Linear 50 ATK10-13 Steel + 2.0 TPU85 transp.

Article code: TBPU000178

General information

Productgroup	Timing belts, PU Linear
Industry segment	General industry; Container & packaging; Wood: Panel board
Main product feature	Positive drive, Wear resistant, Self-alignment

Belt construction

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

Characteristics

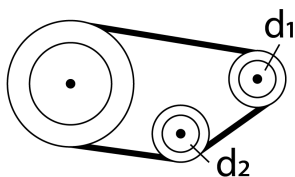
Food Grade (FG)	no
Antistatic (AS)	no
Oil & Fat resistance	good

Technical data

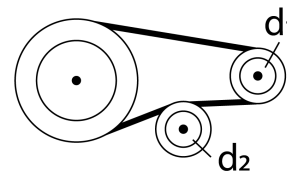
Tooth	profile		AT10	
	pitch		10 mm	0.39 in.
Hardness body material	ISO 868		85A Shore	
Belt thickness			6.5 mm	0.26 in.
Coefficient of friction	tooth side to steel	dynamic	0,5	
		static	0,6	
Operating temperature	continuous	from / to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter 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.
Belt width			50 mm	1.97 in.
Endless length	minimum		500 mm	19.69 in.
Manufacturing length	standard		10000 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	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 [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