

PU Linear 50 TK5-6 Steel

Article code: TBPU000145

General information

Productgroup	Timing belts, PU Linear
Industry segment	General industry; Container & packaging; Paper & print
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

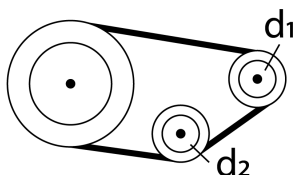
Food Grade (FG)	no
Antistatic (AS)	no
Oil & Fat resistance	good

Technical data

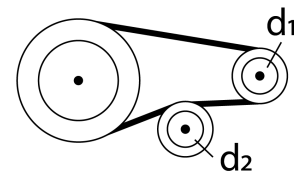
Tooth	profile		T5	
	pitch		5 mm	0.2 in.
Hardness body material	ISO 868		92A Shore	
Belt thickness			2.2 mm	0.09 in.
Coefficient of friction	tooth side to steel	dynamic	0,5	
		static	0,6	
Operating temperature	continuous	from / to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	25	
		d1	38.92 mm	1.53 in.
		d2	60 mm	2.36 in.
	B) with counter flexing	number of teeth, t1	25	
		d1	38.92 mm	1.53 in.
		d2	80 mm	3.15 in.
Belt width			50 mm	1.97 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	390	195		90000
16	550	275		142500
25	910	455		225000
32	1100	550		285000
50	1690	845		450000
75	2400	1200		675000
100.1	3200	1600		900000

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]	
0	2.452	0	
25	2.36	0.005	
50	2.274	0.009	
75	2.23	0.014	
100	2.175	0.018	
150	2.105	0.026	
200	2.05	0.034	
300	1.955	0.049	
400	1.867	0.062	
500	1.815	0.076	
750	1.697	0.106	
1000	1.626	0.136	
1250	1.56	0.163	
1500	1.5	0.188	
1750	1.448	0.211	
2000	1.403	0.234	
3000	1.265	0.316	
4000	1.166	0.389	

Standard