Technical datasheet

PU Linear 50 TK5-6 Aramid

Article code: TBPU000157



General information	
Productgroup	Timing belts, PU Linear
Industry segment	General industry; Container & packaging; Paper & print
Main product feature	Positive drive, Self-alignment, Wear resistant

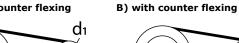
Belt construction		
Tension member		aramid
Material	body	Polyurethane
Surface	tooth side	Polyurethane
	back side	Polyurethane

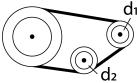
Characteristics		
Food Grade (FG)	no	
Antistatic (AS)	no	
Oil & Fat resistance	good	

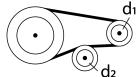
Technical data						
Tooth	profile		T5			
	pitch		5	mm	0.2	in.
Hardness body material	ISO 868		92A	Shore		
Belt thickness			2.2	mm	0.09	in.
Coefficient of friction	tooth side to steel	dynamic	0,5			
		static	0,6			
Operating temperature	continuous	from / to	-10 / 80	°C	14 / 176	°F
Minimum pulley diameter	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







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 logitudinal 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]		Spring force [N]
10	430	215	75000
16	610	305	135000
25	980	490	210000
32	1140	570	260000
50	1800	900	409000
75	2700	1350	590000
100.1	3600	1800	780000

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