Technical datasheet

PU Linear XL Aramid

Article code: TBPU000103



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

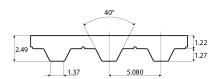
Belt construction		
Tension member		aramid
Material	body	Polyurethane
Surface	tooth side	Polyurethane
	back side	Polyurethane

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

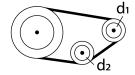
Technical data						
Tooth	profile		XL			
	pitch		5.08	mm	0.2	in.
Hardness body material	ISO 868		92A	Shore		
Belt thickness	total		2.3	mm	0.09	in.
Belt weight			1.8	kg/m²	0.37	lbs/ft²
Coefficient of friction	tooth side to steel	dynamic	0,5			
Operating temperature	continuous	from / to	-10 / 80	°C	14 / 176	°F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	10			
		d1	15.66	mm	0.62	in.
		d2	25	mm	0.98	in.
	B) with counter flexing	number of teeth, t1	15			
		d1	23.75	mm	0.94	in.
		d2	25	mm	0.98	in.
Belt width	maximum		101.6	mm	4	in.
Endless length	minimum		500	mm	19.69	in.
Manufacturing length	standard		100000	mm	328.08	ft.

Reference images

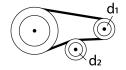
Side view



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 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]	Allow. tensile load Linear welded endless [N]	Spring force [N]
6.35	250	125	40500
7.94	320	160	47250
9.53	410	205	60750
12.7	500	250	81000
19.1	780	390	128250
25.4	1000	500	198750
38.1	1500	750	256500
50.81	2000	1000	337500

[N/mm] 0 2.51 0 25 2.42 0.005 50 2.366 0.01 75 2.321 0.015 100 2.263 0.019 150 2.193 0.028 200 2.124 0.036 300 2.022 0.051 400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327			
25 2.42 0.005 50 2.366 0.01 75 2.321 0.015 100 2.263 0.019 150 2.193 0.028 200 2.124 0.036 300 2.022 0.051 400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	Speed rpm [1/min]		Specific power [W/mm]
50 2.366 0.01 75 2.321 0.015 100 2.263 0.019 150 2.193 0.028 200 2.124 0.036 300 2.022 0.051 400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	0	2.51	0
75 2.321 0.015 100 2.263 0.019 150 2.193 0.028 200 2.124 0.036 300 2.022 0.051 400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	25	2.42	0.005
100 2.263 0.019 150 2.193 0.028 200 2.124 0.036 300 2.022 0.051 400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	50	2.366	0.01
150 2.193 0.028 200 2.124 0.036 300 2.022 0.051 400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	75	2.321	0.015
200 2.124 0.036 300 2.022 0.051 400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	100	2.263	0.019
300 2.022 0.051 400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	150	2.193	0.028
400 1.942 0.066 500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	200	2.124	0.036
500 1.877 0.079 750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	300	2.022	0.051
750 1.753 0.111 1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	400	1.942	0.066
1000 1.665 0.141 1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	500	1.877	0.079
1250 1.587 0.168 1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	750	1.753	0.111
1500 1.526 0.194 1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	1000	1.665	0.141
1750 1.474 0.218 2000 1.428 0.242 3000 1.288 0.327	1250	1.587	0.168
2000 1.428 0.242 3000 1.288 0.327	1500	1.526	0.194
3000 1.288 0.327	1750	1.474	0.218
	2000	1.428	0.242
4000 1.187 0.402	3000	1.288	0.327
	4000	1.187	0.402

Standard