Technical datasheet

PU Linear 100 TK5-6 Aramid

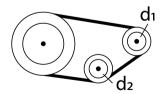


Article code: TBPU000159

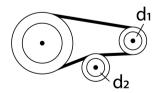
Industry: Container & packaging: Paper & print Main product feature Positive drive, Self-alignment, Wear resistant Belt construction Surface Tension member aramid aramid body Polyurethane surface surface back side Polyurethane surface surface surface Characteristics Polyurethane surface surface <ths< th=""><th>General information</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></ths<>	General information							
Main product feature Positive drive, Self-alignment, Wear resistant Bet construction Tension member aramid Material body Polyurethane Surface tooth side Polyurethane Back side Polyurethane tooth side Pood Grade (FG) no tooth side Polyurethane Characteristics tooth side Polyurethane tooth side Food Grade (FG) no tooth side tooth side tooth side Oll & Fat resistance good tooth side tooth side tooth side tooth side Profile T5 0 n. n. n. Hardness body material ISO 868 Gas 84	Productgroup	Timing belts, PU Lin	ear					
Belt construction Tension member body Polyurethane body Polyurethane body Polyurethane back side Polyurethane	Industry segment	General industry; Co	ontainer & pack	aging; Paper & print				
Tension member image: series of the side of	Main product feature	Positive drive, Self-a	alignment, Wea	r resistant				
Tension member image: series of the side of								
Material SurfacebodyPolyurethaneSurfacetooth sidePolyurethaneback sidePolyurethaneVotarial CharacteristicsNoFood Grade (FG) Antistatic (AS)nononogoodNoOil & Fat resistancegoodDitk Fat resistancegoodprofile pitchNojitchSooPotoSooBelt thicknessSooCoefficient of frictiontooth side to steelQoreating temperaturecontinuousNumber of teeth, ti pitchSooCoefficient of frictiontooth side to steelQoreating temperaturecontinuousNumber of teeth, ti pitchSooQoreating temperaturecontinuousSub counter filexingnumber of teeth, ti sitchQoreating temperaturecontinuousSub counter filexingnumber of teeth, ti sitchBelt thicknessNitch counter filexingQuert INitch counter filexingQuert INitch counter filexingQuert INitch counter filexingRound ISitch counter filexingBelt thicknesSitch counter filexingRound ISitch counter filexingRound ISi	Belt construction							
Number of technical point Polyurethane back side Polyurethane Back side Polyurethane Characteristics Second Grade (FG) no Antistatic (AS) no Second Grade (FG) no Oil & Fat resistance good Second Grade (FG) no Oil & Fat resistance good Second Grade (FG) No Second Grade (FG) Second Grade (FG) No Second Grade (FG)	Tension member		aramid					
back side Polyurethane Characteristics polyurethane Food Grade (FG) no polyurethane antistatic (AS) no polyurethane Oil & Fat resistance good polyurethane polyurethane Technical data Technical data profile on on on on on on Beit thickness pofile on	Material	body	Polyurethan	e				
Characteristics Food Grade (FG) no Antistatic (AS) no Oil & Fat resistance good Technical data Technical data Technical data Ditch T5 m 0.2 in. Hardness body material DSO 868 Q2A Shore m 0.09 in. Beit thickness Coefficient of friction tooth side to steel dynamic 0.05 m 0.09 in. Minimum pulley diameter A) without counter flexing number of teeth, t1 2.2 mm 0.09 in. Minimum pulley diameter A) with counter flexing number of teeth, t1 2.5 m 1.53 in. Bet twidth Mit counter flexing number of teeth, t1 2.5 m 1.53 in. Bett width Mit counter flexing number of teeth, t1 2.5 m 1.53 in. Bett width Immum Imm	Surface	tooth side	Polyurethan	e				
Pool Grade (FG) no Antistatic (AS) no Oil & Fat resistance good Uil & Fat resistance good Technical data mode Tooth mode Tooth mode		back side	Polyurethan	e				
Pool Grade (FG) no Antistatic (AS) no Oil & Fat resistance good Uil & Fat resistance good Technical data mode Tooth mode Tooth mode								
Antistatic (AS) no good Joil & Fat resistance good Technical data Tooth profile pitch 3 Belt thickness 924 Sood 924 Belt thickness 0.0 Coefficient of friction tooth side to steel Minimum pulley diameter A) without counter flexing Number of teeth, 11 25 Bilt thickness 0.0 Coefficient of friction tooth side to steel Minimum pulley diameter A) without counter flexing Number of teeth, 11 25 Bilt thickness 0.0 Bilt thickness 0.0 Bilt thickness 0.0 Coefficient of friction tooth side to steel Minimum pulley diameter A) without counter flexing Number of teeth, 11 25 Bilt with counter flexing number of teeth, 11 Bilt with counter flexing number of teeth, 11 25 Bilt with counter flexing number of teeth, 11 25 Bilt witht Bilt with 100								
Old & Fat resistance godd Sold Sector Toth profile Sold Sector Sold Sector Sold Sector Interfaceor Toth profile Sold Sector Sold Sector Sold Sector Interfaceor Interfaceor Hardness body material Sol Sector Sold Sector Sold Sector Sold Sector Interfaceor Interfaceo								
Technical data Tooth profile T5 mm 0.2 in. Hardness body material ISO 868 92A Shore mm 0.09 in. Belt thickness 000 000 000 000 in. Coefficient of friction tooth side to steel dynamic 0.5 mm 0.09 in. Operating temperature continuous from / to -10 / 80 °C 14 / 176 °F Minimum pulley diameter A) without counter flexing number of teeth, t1 25 mm 1.53 in. Image: the steel number of teeth, t1 25 mm 2.36 in. 1.53 in. Image: the steel number of teeth, t1 25 mm 3.53 in. Image: the steel number of teeth, t1 25 mm 3.53 in. Image: the steel number of teeth, t1 25 mm 3.53 in. Image: the steel number of teeth, t1 25 mm 3.15 in. Image: the steel number of teeth, t1								
Tooth profile Image: second seco	Oil & Fat resistance	good						
Tooth profile Image: second seco	Technical data							
pitchpitchindex	Tooth	profile			T5			
Hardness body materialISO 868Iso 868Iso 868ShoreShoreIso 868Belt thickness					5	mm	0.2	in.
Coefficient of friction tooth side to steel dynamic 0,0 <th< th=""><th>Hardness body material</th><th>ISO 868</th><th></th><th></th><th>92A</th><th>Shore</th><th></th><th></th></th<>	Hardness body material	ISO 868			92A	Shore		
Operating temperaturecontinuousformform0,0,6C14/176PFMinimum pulley diameterA) without counter flexingnumber of teeth, t12.05T11/153in.Minimum pulley diameterB) with counter flexingnumber of teeth, t138.92mm1.53in.B) with counter flexingnumber of teeth, t138.92mm1.53in.B) with counter flexingnumber of teeth, t138.92mm31.53in.B) with counter flexingnumber of teeth, t1mm38.92mm31.53in.B) with counter flexingnumber of teeth, t1mm38.92mm31.53in.B) with counter flexingnumber of teeth, t1mmmmmmmmmmmmmmB) with counter flexingnumber of teeth, t1mm <t< th=""><th>Belt thickness</th><th></th><th></th><th></th><th>2.2</th><th>mm</th><th>0.09</th><th>in.</th></t<>	Belt thickness				2.2	mm	0.09	in.
Operating temperaturecontinuousfrom / to-10 / 80°C14 / 176°FMinimum pulley diameterA) without counter flexingnumber of teeth, t125//<	Coefficient of friction	tooth side to steel		dynamic	0,5			
Minimum pulley diameterA) without counter flexingnumber of teeth, t125Image: Comparison of teeth, t125Minimum pulley diameterA) without counter flexingImage: Comparison of teeth, t138.92mm1.53in.B) with counter flexingnumber of teeth, t125Image: Comparison of teeth, t125Image: Comparison of teeth, t125Image: Comparison of teeth, t138.92mm1.53in.B) with counter flexingnumber of teeth, t138.92mm1.53in.Image: Comparison of teeth, t138.92mm3.15in.Belt widthImage: Comparison of teeth, t1Image: Comparison of teeth, t1Image: Comparison of teeth, t138.92mm3.15in.Belt widthImage: Comparison of teeth, t1Image: Comparison of teeth, t1 <th></th> <th></th> <th></th> <th>static</th> <th>0,6</th> <th></th> <th></th> <th></th>				static	0,6			
And and participation of the state of the	Operating temperature	continuous		from / to	-10 / 80	°C	14 / 176	°F
And the second	Minimum pulley diameter	A) without counter f	lexing	number of teeth, t1	25			
B) with counter flexingnumber of teeth, t125B) with counter flexingnumber of teeth, t125mm1.53in.mm3.15in.Belt widthmm3.15minimumControl100mmminimum1.151.15minimum1.151.1				d1	38.92	mm	1.53	in.
Mathematical Mathematical<				d2	60	mm	2.36	in.
Belt width mm 3.15 in. Endless length minimum 100 mm 3.94 in.		B) with counter flexi	ing	number of teeth, t1	25			
Belt width 100 mm 3.94 in. Endless length minimum 500 mm 19.69 in.				d1	38.92	mm	1.53	in.
Endless lengthminimum500 mm19.69 in.				d2	80	mm	3.15	in.
	Belt width				100	mm	3.94	in.
Manufacturing length standard 100000 mm 328.08 ft.	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 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]
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

Because of continuous development, the presented data is subject to alteration. This data replaces that included in previous publications. Ammeraal Beltech excludes any liability for the incorrect use of the above stated information. Subject to the general terms and conditions of sale and delivery, as applied by its operating companies, are all activities performed and services rendered by Ammeraal Beltech.