

PU Linear H Aramid NT

Article code: TBP000118

General information

Productgroup	Timing belts, PU Linear
Industry segment	General industry; Container & packaging; Wood: Panel board
Main product feature	Low friction tooth side, Low noise, Positive drive, Wear resistant

Belt construction

Tension member		aramid
Material	body	Polyurethane
Surface	tooth side	Polyamide fabric
	back side	Polyurethane

Characteristics

Food Grade (FG)	no
Anti-static (AS)	no
Oil & Fat resistance	Good

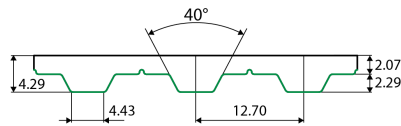
Technical data

Tooth	profile		H	
	pitch		12.7 mm	0.5 in.
Hardness body material	according to ISO 868		92A Shore	
Belt thickness			4.3 mm	0.17 in.
Belt weight			3.5 kg/m ²	0.72 lbs/ft ²
Coefficient of friction	tooth side to steel	dynamic	0.3	
Operating temperature	continuous	from/to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	14	
		d1	55.23 mm	2.17 in.
		d2	50 mm	1.97 in.
	B) with counter flexing	number of teeth, t1	20	
		d1	79.48 mm	3.13 in.
		d2	65 mm	2.56 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.

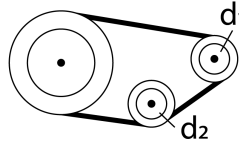
* some timing belt types are available in greater belt widths.

Reference images

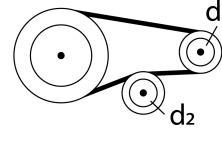
Side view



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 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.

Belt load

Standard belt width [mm]	Allow. tensile load Linear open end & Torque [N]	Allow. tensile load Linear welded endless [N]	Breaking force [N]	Spring force [N]
12.7	830	415	3550	175000
19.1	1250	625	5340	280000
25.4	1650	825	7100	385000
38.1	2480	1240	10650	580000
50.8	330	1650	14220	768000
76.2	4900	2450	22780	1180000
101.61	6300	3150	30350	1570000

Tooth load

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]	Specific torque [Ncm/mm]
0	4.53	0	0.916
25	4.352	0.023	0.88
50	4.235	0.045	0.855
75	4.104	0.065	0.83
100	4.011	0.085	0.811
150	3.845	0.122	0.776
200	3.722	0.158	0.752
300	3.507	0.223	0.709
400	3.341	0.283	0.675
500	3.205	0.339	0.648
750	2.952	0.469	0.597
1000	2.755	0.583	0.557
1250	2.603	0.689	0.526
1500	2.477	0.786	0.501
1750	2.369	0.878	0.479
2000	2.274	0.963	0.446
3000	1.984	1.26	0.401
4000	1.775	1.503	0.359

Belt pulleys

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
14	55.23	56.60	62	42
15	59.27	60.64	66	46
16	63.31	64.68	70	51
17	67.35	68.72	74	54
18	71.40	72.77	78	58
19	75.44	76.81	82	62
20	79.48	80.85	86	66
21	83.52	84.89	90	70
22	87.57	88.94	94	74
23	91.61	92.98	98	78
24	95.65	97.02	102	82
25	99.69	101.06	106	86
26	103.74	105.11	110	90
27	107.78	109.15	114	92
28	111.82	113.19	118	95
29	115.86	117.23	122	98
30	119.91	121.28	126	101
31	123.95	125.32	130	105
32	127.99	129.36	134	110
33	132.03	133.40	138	113
34	136.08	137.45	142	118
35	140.12	141.49	147	121
36	144.16	145.53	151	126
37	148.20	149.57	155	130
38	152.25	153.62	159	134
39	156.29	157.66	163	138
40	160.33	161.70	167	142
41	164.37	165.74	171	146
42	168.42	169.79	175	150
43	172.46	173.83	179	156
44	176.50	177.87	183	158
45	180.54	181.91	187	162
46	184.59	185.96	191	166
47	188.63	190.00	195	170
48	192.67	194.04	199	174
49	196.71	198.08	203	178
50	200.76	202.13	207	182
51	204.80	206.17	211	186
52	208.84	210.21	215	190
53	212.88	214.25	219	195
54	216.93	218.30	223	199
55	220.97	222.34	227	202
56	225.01	226.38	231	206
57	229.05	230.42	235	210
58	233.01	234.47	240	214
59	237.14	238.51	244	218
60	241.18	242.55	248	222
61	245.22	246.59	252	226
62	249.27	250.64	256	230
63	253.31	254.68	260	234
64	257.35	258.72	264	238
65	261.39	262.76	268	242
66	265.44	266.81	272	246
67	269.48	270.85	276	248

Standard

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
68	273.52	274.89	280	250
69	277.57	278.94	284	254
70	281.61	282.98	288	258
71	285.65	287.02	292	260
72	289.69	291.06	296	262
73	293.74	295.11	300	266
74	297.78	299.15	304	269
75	301.82	303.19	308	272
76	305.86	307.23	312	276
77	309.91	311.28	316	279
78	313.95	315.32	320	282
79	317.99	319.36	324	286
80	322.03	323.40	328	290
81	326.08	327.45	332	294
82	330.12	331.49	337	300
83	334.16	335.53	341	304
84	338.20	339.57	345	307
85	342.25	343.62	349	310
86	346.29	347.66	353	314
87	350.33	351.70	357	318
88	354.37	355.74	361	322
89	358.42	359.79	365	326
90	362.46	363.83	369	330
91	366.50	367.87	373	334
92	370.54	371.91	377	336
93	374.59	375.96	381	340
94	378.63	380.00	385	344
95	382.67	384.04	389	348
96	386.71	388.08	393	352
97	390.76	392.13	397	356
98	394.80	396.17	401	360
99	398.84	400.21	405	364
100	402.88	404.25	409	368
101	406.93	408.30	413	372
102	410.97	412.34	417	376
103	415.01	416.38	421	380
104	419.05	420.42	425	385
105	423.01	424.47	430	389
106	427.14	428.51	434	392
107	431.18	432.55	438	395
108	435.22	436.59	442	398
109	439.27	440.64	446	401
110	443.31	444.68	450	404
111	447.35	448.72	454	407
112	451.39	452.76	458	410
113	455.44	456.81	462	413
114	459.48	460.85	466	416
115	463.52	464.89	470	420
116	467.56	468.93	474	423
117	471.61	472.98	478	426
118	475.65	477.02	482	430
119	479.69	481.06	486	433
120	483.73	485.10	490	435