

PU Linear T10 Steel NTB black AS

TBPU000196

General information

Productgroup	Timing Belts, PU Linear
Industry segment	General industry; Electronics
Main product feature	Low friction back side, Low friction tooth side, Positive drive, Wear resistant

Belt construction

Tension member	Steel
Body material	polyurethane
Tooth side surface	polyamide fabric
Back side surface	polyamide fabric

Characteristics

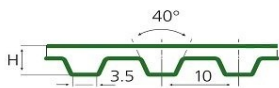
Food Grade (FG)	No
Anti-static (AS)	Yes
Oil & Fat resistance	Good

Technical data

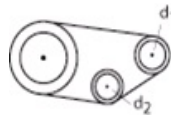
Tooth	profile		T10	
	pitch		10 mm	0.394 in.
Hardness body material	according to ISO 868		92A Shore	
Belt thickness			4.5 mm	0.177 in.
Coefficient of friction	tooth side to steel	dynamic	0.3	
		static	0.3	
Operating temperature	continuous	from/to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	12	
		d1	61.81 mm	2.433 in.
		d2	60 mm	2.362 in.
	B) with counter flexing	number of teeth, t1	20	
		d1	36.35 mm	1.431 in.
		d2	60 mm	2.362 in.
Endless length	minimum		500 mm	19.685 in.
Manufacturing length	standard		100000 mm	328.084 ft.

Reference image(s)

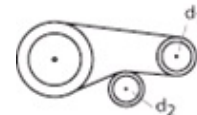
Side view



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.

The information on this data sheet apply to a temperature of approx. 20 °C (68 °F) unless otherwise stated.

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]	Weight [kg/m]
10	840	420	3210	220000	0.05
16	1000	500	5150	385000	0.07
25	2200	1100	8050	632500	0.11
32	2620	1310	10300	825000	0.15
50	4200	2100	16050	1320000	0.23
75	5100	2550	24100	1980000	0.34
100.1	7100	3550	32130	2695000	0.45

Tooth load

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]	Specific torque [Ncm/mm]
0	5.18	0	0.824
25	5	0.021	0.796
50	4.855	0.04	0.773
75	4.7	0.059	0.748
100	4.611	0.077	0.734
150	4.443	0.111	0.707
200	4.275	0.143	0.68
300	4.028	0.201	0.641
400	3.836	0.256	0.611
500	3,68	0.307	0.586
750	3.43	0.429	0.546
1000	3.163	0.527	0.503
1250	2.992	0.623	0.476
1500	2.844	0.711	0.453
1750	2.724	0.795	0.434
2000	2.612	0.871	0.416
3000	2.278	1.139	0.363
4000	2.039	1.359	0.325

Pulley load

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]	Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
12	36.35	38.20	42	24	67	211.42	213.27	217	177
13	39.53	41.38	45	26	68	214.60	216.45	221	181
14	42.71	44.56	49	30	69	217.78	219.63	224	185
15	45.90	47.75	52	34	70	220.97	222.82	227	187
16	49.08	50.93	55	36	71	224.15	226.00	230	191
17	52.26	54.11	58	40	72	227.33	229.18	233	193
18	55.45	57.30	61	44	73	230.52	232.37	236	197
19	58.63	60.48	65	46	74	233.70	235.55	240	201
20	61.81	63.66	68	50	75	236.88	238.73	243	203
21	65.00	66.85	71	52	76	240.07	241.92	246	207
22	68.18	70.03	74	56	77	243.25	245.01	249	209
23	71.36	73.21	77	60	78	246.43	248.28	252	213
24	74.54	76.39	80	62	79	249.61	251.46	256	215
25	77.73	79.58	84	66	80	252.80	254.65	259	219
26	80.91	82.76	87	68	81	255.98	257.83	262	223
27	84.09	85.94	90	72	82	259.16	261.01	265	225
28	87.28	89.13	93	76	83	262.35	264.20	268	229
29	90.46	92.31	96	78	84	265.53	267.38	271	231
30	93.64	95.49	100	82	85	268.71	270.56	275	235
31	96.83	98.68	103	84	86	271.90	273.75	278	239
32	100.01	101.86	106	88	87	275.08	276.93	281	241
33	103.19	105.04	109	88	88	278.26	280.11	284	245
34	106.38	108.23	112	92	89	281.45	283.30	287	247
35	109.56	111.41	115	96	90	284.63	286.48	291	251
36	112.74	114.59	119	98	91	287.81	289.66	294	255
37	115.92	117.77	122	101	92	291.00	292.85	297	257
38	119.11	120.96	125	104	93	294.18	296.03	300	261
39	122.29	124.14	128	106	94	297.36	299.21	303	263
40	125.47	127.32	131	110	95	300.54	302.39	306	267
41	128.66	130.51	135	110	96	303.73	305.58	310	269
42	131.84	133.69	138	112	97	306.91	308.76	313	273
43	135.02	136.87	141	114	98	310.09	311.94	316	279
44	138.21	140.06	144	118	99	313.28	315.13	319	283
45	141.39	143.24	147	120	100	316.46	318.31	322	285
46	144.57	146.42	150	122	101	319.64	321.49	326	289
47	147.76	149.61	154	122	102	322.83	324.68	329	293
48	150.94	152.79	157	124	103	326.01	327.86	332	295
49	154.12	155.97	160	126	104	329.19	331.04	335	299
50	157.31	159.16	163	130	105	332.38	334.23	338	301
51	160.49	162.34	166	134	106	335.56	337.41	341	305
52	163.67	165.52	170	136	107	338.74	340.59	345	309
53	166.85	168.70	173	140	108	341.92	343.77	348	311
54	170.04	171.89	176	144	109	345.11	346.96	351	315
55	173.22	175.07	179	146	110	348.29	350.14	354	317
56	176.40	178.25	182	150	111	351.47	353.32	357	321
57	179.59	181.44	185	152	112	354.66	356.51	361	323
58	182.77	184.62	189	156	113	357.84	359.69	364	327
59	185.95	187.80	192	160	114	361.02	362.87	367	330
60	189.14	190.99	195	162	115	364.21	366.06	370	333
61	192.32	194.17	198	164	116	367.39	369.24	373	336
62	195.50	197.35	201	166	117	370.57	372.42	376	340
63	198.69	200.54	205	170	118	373.76	375.61	380	344
64	201.87	203.72	208	171	119	376.94	378.79	383	348
65	205.05	206.90	211	174	120	380.12	381.97	386	354
66	208.23	210.08	214	175					

Standard