

PU Torque XL Steel

Article code: TBUT102303

General information

Productgroup	Timing belts, PU Torque
Industry segment	General industry; Container & packaging; Paper & print
Main product feature	Positive drive, Non-marking, Wear resistant

Belt construction

Tension member		steel
Material	body	Polyurethane
Surface	tooth side	Polyurethane
	back side	Polyurethane

Characteristics

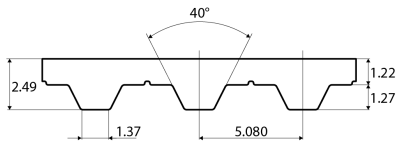
Food Grade (FG)	no
Anti-static (AS)	no
Oil & Fat resistance	Good

Technical data

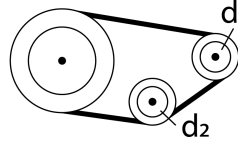
Tooth	profile		XL	
	pitch		5.08 mm	0.2 in.
Hardness body material	according to ISO 868		92A Shore	
Belt thickness			2.3 mm	0.09 in.
Belt weight			2.4 kg/m ²	0.49 lbs/ft ²
Coefficient of friction	tooth side to steel	dynamic	0.5	
Operating temperature	continuous	from/to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	10	
		d1	15.66 mm	0.62 in.
		d2	30 mm	1.18 in.
	B) with counter flexing	number of teeth, t1	15	
		d1	23.75 mm	0.94 in.
		d2	30 mm	1.18 in.
Belt width	maximum		150 mm	5.91 in.
Belt length	minimum		900 mm	35.43 in.
	maximum		25000 mm	82.02 ft.

Reference images

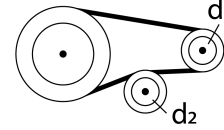
Side view



A) without counter flexing



B) with counter flexing



Fabrication

This information on the fabrication options is general, please contact Ammeraal Beltech to inquire for the specific fabrication possibilities of the timing belt of your choice.

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]
6.35	180	90	750	45000
7.94	210	105	875	52500
9.53	270	135	1125	67500
12.7	360	180	1500	90000
19.1	570	285	2375	142500
25.4	750	375	3125	187500
38.1	1140	570	4750	285000
50.81	1500	750	6250	375000

Tooth load

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]	Specific torque [Ncm/mm]
0	2.51	0	0.203
25	2.42	0.005	0.196
50	2.366	0.01	0.191
75	2.321	0.015	0.188
100	2.263	0.019	0.183
150	2.193	0.028	0.177
200	2.124	0.036	0.172
300	2.022	0.051	0.163
400	1.942	0.066	0.157
500	1.877	0.079	0.152
750	1.753	0.111	0.142
1000	1.665	0.141	0.134
1250	1.587	0.168	0.128
1500	1.526	0.194	0.123
1750	1.474	0.218	0.119
2000	1.428	0.242	0.115
3000	1.288	0.327	0.104
4000	1.187	0.402	0.096

Belt load

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
10	15.66	16.17	20	7
11	17.28	17.79	22	8
12	18.89	19.40	23	11
13	20.51	21.02	25	13
14	22.13	22.64	27	14
15	23.75	24.26	28	14
16	25.36	25.87	30	18
17	26.98	27.49	32	18
18	28.60	29.11	33	21
19	30.21	30.72	35	22
20	31.83	32.34	36	23
21	33.45	33.96	38	25
22	35.06	35.57	40	26
23	36.68	37.19	41	26
24	38.30	38.81	43	27
25	39.92	40.43	44	29
26	41.53	42.04	46	31
27	43.15	43.66	48	32
28	44.77	45.28	49	34
29	46.38	46.89	51	36
30	48.00	48.51	53	37
31	49.62	50.13	54	39
32	51.23	51.74	56	40
33	52.85	53.36	57	42
34	54.47	54.98	59	44
35	56.09	56.60	61	46
36	57.70	58.21	62	46
37	59.32	59.83	64	48
38	60.94	61.45	65	48
39	62.55	63.06	67	50
40	64.17	64.68	69	54
41	65.79	66.30	70	54
42	67.40	67.91	72	54
43	69.02	69.53	74	56
44	70.64	71.15	75	57
45	72.26	72.77	77	60
46	73.87	74.38	78	62
47	75.49	76.00	80	62
48	77.11	77.62	82	64
49	78.72	79.23	83	66
50	80.34	80.85	85	68
51	81.96	82.47	87	70
52	83.57	84.08	88	72
53	85.19	85.70	90	72
54	86.81	87.32	91	73
55	88.43	88.94	93	75
56	90.04	90.55	95	78
57	91.66	92.17	96	79
58	93.28	93.79	98	79
59	94.89	95.40	99	80
60	96.51	97.02	101	82
61	98.13	98.64	103	84
62	99.74	100.25	104	86
63	101.36	101.87	106	86
64	102.98	103.49	108	89
65	104.60	105.11	109	89

Standard

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
66	106.21	106.72	111	92
67	107.83	108.34	112	95
68	109.45	109.96	114	95
69	111.06	111.57	116	97
70	112.68	113.19	117	98
71	114.30	114.81	119	98
72	115.92	116.43	120	101
73	117.53	118.04	122	103
74	119.15	119.66	124	105
75	120.77	121.28	125	108
76	122.38	122.89	127	108
77	124.00	124.51	129	109
78	125.62	126.13	130	109
79	127.23	127.74	132	110
80	128.85	129.36	133	111
81	130.47	130.98	135	113
82	132.09	132.60	137	113
83	133.70	134.21	138	116
84	135.32	135.83	140	116
85	136.94	137.45	141	120
86	138.55	139.06	143	120
87	140.17	140.68	145	123
88	141.79	142.30	146	123
89	143.40	143.91	148	126
90	145.02	145.53	150	126
91	146.64	147.15	151	129
92	148.26	148.77	153	129
93	149.87	150.38	154	132
94	151.49	152.00	156	134
95	153.11	153.62	158	134
96	154.72	155.23	159	136
97	156.34	156.85	161	139
98	157.96	158.47	163	142
99	159.57	160.08	164	142
100	161.19	161.70	166	145
101	162.81	163.32	167	145
102	164.43	164.94	169	147
103	166.04	166.55	171	147
104	167.66	168.17	172	150
105	169.28	169.79	174	150
106	170.89	171.40	175	152
107	172.51	173.02	177	155
108	174.13	174.64	179	155
109	175.74	176.25	180	158
110	177.36	177.87	182	158
111	178.98	179.49	184	161
112	180.60	181.11	185	164
113	182.21	182.72	187	164
114	183.83	184.34	188	167
115	185.45	185.96	190	167
116	187.06	187.57	192	170
117	188.68	189.19	193	170
118	190.30	190.81	195	173
119	191.91	192.42	196	173
120	193.53	194.04	198	175