

PU Torque AT5 Steel

Article code: TBUT000800

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

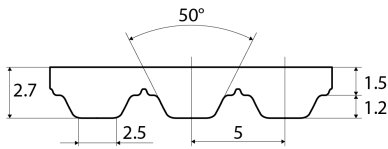
Food Grade (FG)	no
Anti-static (AS)	no
Oil & Fat resistance	Good

Technical data

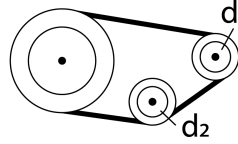
Tooth	profile		AT5	
	pitch		5 mm	0.2 in.
Hardness body material	according to ISO 868		92A Shore	
Belt thickness			2.7 mm	0.11 in.
Belt weight			3.4 kg/m ²	0.7 lbs/ft ²
Coefficient of friction	tooth side to steel	dynamic	0.5	
Operating temperature	continuous	from/to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	15	
		d1	22.64 mm	0.89 in.
		d2	30 mm	1.18 in.
	B) with counter flexing	number of teeth, t1	25	
		d1	38.56 mm	1.52 in.
		d2	60 mm	2.36 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

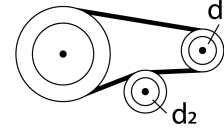
Side view



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]
10	560	280	2000	140000
16	1100	550	4000	280000
25	1700	850	6250	437500
32	2220	1110	8000	560000
50	3500	1750	12800	875000
75	5250	2625	18750	1312500
100.1	7000	3500	25000	1750000

Tooth load

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]	Specific torque [Ncm/mm]
0	3.64	0	0.29
25	3.572	0.007	0.284
50	3.501	0.015	0.279
75	3.468	0.022	0.276
100	3.424	0.029	0.272
150	3.34	0.042	0.266
200	3.292	0.055	0.262
300	3.192	0.08	0.254
400	3.089	0.103	0.246
500	2.995	0.125	0.238
750	2.807	0.175	0.223
1000	2.649	0.221	0.211
1250	2.522	0.263	0.201
1500	2.416	0.302	0.192
1750	2.326	0.339	0.185
2000	2.242	0.374	0.178
3000	1.985	0.496	0.158
4000	1.796	0.599	0.143

Belt load

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
15	22.64	23.87	28	10
16	24.23	25.46	31	12
17	25.83	27.06	32	14
18	27.42	28.65	34	16
19	29.00	30.24	35	16
20	30.60	31.83	37	18
21	32.19	33.42	38	20
22	33.78	35.01	40	22
23	35.38	36.61	42	24
24	36.97	38.20	43	24
25	38.56	39.79	45	25
26	40.15	41.38	46	25
27	41.74	42.97	48	27
28	43.33	44.56	50	29
29	44.93	46.16	51	31
30	46.52	47.75	53	33
31	48.11	49.34	54	35
32	49.70	50.93	56	37
33	51.29	52.52	58	39
34	52.88	54.11	59	39
35	54.47	55.70	61	40
36	56.07	57.30	62	42
37	57.66	58.89	64	43
38	59.25	60.48	66	45
39	60.84	62.07	67	45
40	62.43	63.66	69	47
41	64.02	65.25	70	48
42	65.62	66.85	72	50
43	67.21	68.44	73	52
44	68.80	70.03	75	52
45	70.39	71.62	77	54
46	71.98	73.21	78	56
47	73.57	74.80	80	58
48	75.16	76.39	81	60
49	76.76	77.99	83	60
50	78.35	79.58	85	60
51	79.94	81.17	86	62
52	81.53	82.76	88	64
53	83.12	84.35	89	66
54	84.71	85.94	91	66
55	86.31	87.54	93	68
56	87.90	89.13	94	70
57	89.49	90.72	96	72
58	91.08	92.31	97	74
59	92.67	93.90	99	74
60	94.26	95.49	101	76
61	95.85	97.08	102	79
62	97.45	98.68	104	80
63	99.04	100.27	105	82
64	100.63	101.86	107	82
65	102.22	103.45	109	84
66	103.81	105.04	110	86
67	105.40	106.63	112	88

Standard

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
68	107.00	108.23	113	90
69	108.59	109.82	115	90
70	110.18	111.41	116	90
71	111.77	113.00	118	92
72	113.36	114.59	120	94
73	114.95	116.18	121	96
74	116.54	117.77	123	96
75	118.14	119.37	124	98
76	119.73	120.96	126	100
77	121.32	122.55	128	102
78	122.91	124.14	129	104
79	124.50	125.73	131	104
80	126.09	127.32	132	106
81	127.69	128.92	134	108
82	129.28	130.51	136	110
83	130.87	132.10	137	110
84	132.46	133.69	139	112
85	134.05	135.28	140	114
86	135.64	136.87	142	116
87	137.23	138.46	144	119
88	138.83	140.06	145	120
89	140.42	141.65	147	120
90	142.00	143.24	148	122
91	143.60	144.83	150	124
92	145.19	146.42	151	126
93	146.78	148.01	153	126
94	148.38	149.61	155	129
95	149.97	151.20	156	130
96	151.56	152.79	158	130
97	153.15	154.38	159	132
98	154.74	155.97	161	132
99	156.33	157.56	163	134
100	157.93	159.16	164	136
101	159.52	160.75	166	139
102	161.11	162.34	167	140
103	162.70	163.93	169	140
104	164.29	165.52	171	140
105	165.88	167.11	172	142
106	167.47	168.70	174	146
107	169.07	170.30	175	146
108	170.66	171.89	177	148
109	172.25	173.48	179	150
110	173.84	175.07	180	150
111	175.43	176.66	182	152
112	177.02	178.25	183	152
113	178.62	179.85	185	152
114	180.21	181.44	186	154
115	181.80	183.03	188	154
116	183.39	184.62	190	154
117	184.98	186.21	191	154
118	186.57	187.80	193	156
119	188.16	189.39	194	156
120	189.76	190.99	196	156