

PU Torque HTD8M Steel NT

Article code: TBUT102200

General information

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

Belt construction

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

Characteristics

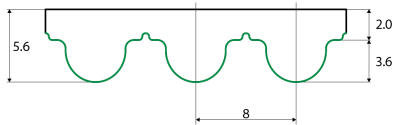
Food Grade (FG)	no
Anti-static (AS)	no
Oil & Fat resistance	Good

Technical data

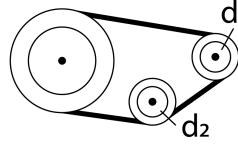
Tooth	profile		HTD8M	
	pitch		8 mm	0.31 in.
Hardness body material	according to ISO 868		92A Shore	
Belt thickness			5.6 mm	0.22 in.
Belt weight			6.9 kg/m ²	1.41 lbs/ft ²
Coefficient of friction	tooth side to steel	dynamic	0.3	
Operating temperature	continuous	from/to	-10 / 80 °C	14 / 176 °F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	18	
		d1	44.46 mm	1.75 in.
		d2	50 mm	1.97 in.
	B) with counter flexing	number of teeth, t1	18	
		d1	44.46 mm	1.75 in.
		d2	120 mm	4.72 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

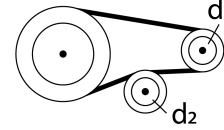
Side view



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	2000	1000	8550	504000
15	2900	1450	12350	728000
30	4250	2125	18050	1064000
50	7170	3585	30400	1792000
85	12750	6375	54150	3192000
100	14550	7275	61750	3640000
115.1	16670	8335	71000	4180000

Tooth load

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]	Specific torque [Ncm/mm]
0	7.4	0	0.942
25	7.31	0.024	0.931
50	7.06	0.047	0.899
75	7	0.07	0.891
100	6.81	0.091	0.867
150	6.608	0.132	0.841
200	6.409	0.171	0.816
300	6.168	0.247	0.785
400	5.903	0.315	0.752
500	5.671	0.378	0.722
750	5.198	0.52	0.662
1000	4.835	0.645	0.616
1250	4.487	0.748	0.571
1500	4.286	0.857	0.546
1750	4.048	0.945	0.515
2000	3.878	1.034	0.494
3000	3.28	1.312	0.418
4000	2.844	1.517	0.362

Belt load

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
18	44.46	45.84	50	32
19	47.00	48.38	52	34
20	49.55	50.93	55	36
21	52.01	53.48	58	38
22	54.64	56.02	60	42
23	57.19	58.57	63	44
24	59.74	61.12	65	46
25	62.28	63.66	68	50
26	64.83	66.21	70	52
27	67.38	68.76	73	56
28	69.92	71.30	75	58
29	72.47	73.85	78	60
30	75.01	76.39	80	62
31	77.56	78.94	83	64
32	80.11	81.49	86	66
33	82.65	84.03	88	68
34	85.20	86.58	91	72
35	87.75	89.13	93	76
36	90.29	91.67	96	78
37	92.84	94.22	98	80
38	95.39	96.77	101	82
39	97.93	99.31	103	84
40	100.48	101.86	106	86
41	103.03	104.41	108	88
42	105.57	106.95	111	90
43	108.12	109.50	114	94
44	110.67	112.05	116	96
45	113.21	114.59	119	98
46	115.76	117.14	121	100
47	118.30	119.68	124	102
48	120.85	122.23	126	104
49	123.40	124.78	129	106
50	125.94	127.32	131	108
51	128.49	129.87	134	110
52	131.04	132.42	136	112
53	133.58	134.96	139	114
54	136.13	137.51	142	116
55	138.68	140.06	144	118
56	141.22	142.60	147	120
57	143.77	145.15	149	122
58	146.32	147.70	152	122
59	148.86	150.24	154	124
60	151.41	152.79	157	124
61	153.96	155.34	159	126
62	156.50	157.88	162	130
63	159.05	160.43	164	134
64	161.59	162.97	167	136
65	164.14	165.52	170	136
66	166.69	168.07	172	140
67	169.23	170.61	175	144
68	171.78	173.16	177	146
69	174.33	175.71	180	146

Standard

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
70	176.87	178.25	182	150
71	179.42	180.80	185	152
72	181.97	183.35	187	156
73	184.51	185.89	190	158
74	187.06	188.44	192	160
75	189.61	190.99	195	162
76	192.15	193.53	198	162
77	194.70	196.08	200	164
78	197.25	198.63	203	166
79	199.79	201.17	205	170
80	202.34	203.72	208	172
81	204.88	206.26	210	174
82	207.43	208.81	213	176
83	209.98	211.36	215	178
84	212.52	213.90	218	180
85	215.07	216.45	221	183
86	217.62	219.00	223	185
87	220.16	221.54	226	187
88	222.71	224.09	228	189
89	225.26	226.64	231	191
90	227.80	229.18	233	193
91	230.35	231.73	236	195
92	232.90	234.28	238	197
93	235.44	236.82	241	201
94	237.99	239.37	243	203
95	240.54	241.92	246	207
96	243.08	244.46	249	209
97	245.63	247.01	251	213
98	248.18	249.56	254	215
99	250.72	252.10	256	217
100	253.27	254.65	259	219
101	255.81	257.19	261	221
102	258.36	259.74	264	224
103	260.91	262.29	266	226
104	263.45	264.83	269	228
105	266.00	267.38	271	231
106	268.55	269.93	274	233
107	271.09	272.47	277	236
108	273.64	275.02	279	239
109	276.19	277.57	282	242
110	278.73	280.11	284	245
111	281.28	282.66	287	247
112	283.83	285.21	289	251
113	286.37	287.75	292	253
114	288.92	290.30	294	255
115	291.47	292.85	297	257
116	294.01	295.39	299	259
117	296.56	297.94	302	262
118	299.10	300.48	305	265
119	301.65	303.03	307	267
120	304.20	305.58	310	269