

## PU Torque AT20 Steel NT

Article code: TBUT101000

### General information

<b>Productgroup</b>	Timing belts, PU Torque
<b>Industry segment</b>	General industry; Wood; Building materials: Stone & ceramics, Bricks & tiles
<b>Main product feature</b>	Low friction tooth side, Positive drive, Slip-grip, Wear resistant bottom side

### Belt construction

<b>Tension member</b>		steel
<b>Material</b>	<b>body</b>	Polyurethane
<b>Surface</b>	<b>tooth side</b>	Polyamide fabric
	<b>back side</b>	Polyurethane

### Characteristics

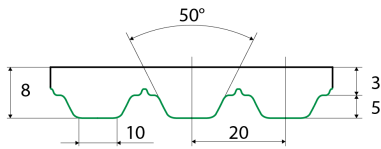
<b>Food Grade (FG)</b>	no
<b>Anti-static (AS)</b>	no
<b>Oil &amp; Fat resistance</b>	Good

### Technical data

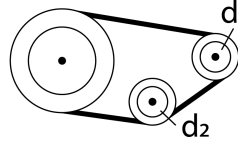
<b>Tooth</b>	profile		AT20	
	pitch		20 mm	0.79 in.
<b>Hardness body material</b>	according to ISO 868		92A Shore	
<b>Belt thickness</b>			8 mm	0.31 in.
<b>Belt weight</b>			9.7 kg/m <sup>2</sup>	1.99 lbs/ft <sup>2</sup>
<b>Coefficient of friction</b>	tooth side to steel	dynamic	0.3	
<b>Operating temperature</b>	continuous	from/to	-10 / 80 °C	14 / 176 °F
<b>Minimum pulley diameter</b>	A) without counter flexing	number of teeth, t1	18	
		d1	111.75 mm	4.4 in.
		d2	120 mm	4.72 in.
	B) with counter flexing	number of teeth, t1	25	
		d1	156.32 mm	6.15 in.
		d2	180 mm	7.09 in.
<b>Belt width</b>	maximum		150 mm	5.91 in.
<b>Belt length</b>	minimum		900 mm	35.43 in.
	maximum		25000 mm	82.02 ft.

## Reference images

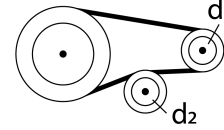
### Side view



### 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]
25	5600	2800	15500	1375000
32	7200	3600	20800	1875000
50	11700	5850	32500	3000000
75	18000	9000	48500	4625000
100	25200	12600	65000	6125000
150.1	37000	18500	98000	9250000

## Tooth load

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/mm]	Specific torque [Ncm/mm]
0	15.14	0	4.819
25	14.81	0.123	4.714
50	14.41	0.24	4.587
75	14.2	0.355	4.52
100	13.87	0.462	4.415
150	13.36	0.668	4.253
200	12.94	0.863	4.119
300	12.23	1.223	3.893
400	11.59	1.545	3.689
500	11.04	1.84	3.514
750	9.94	2.485	3.164
1000	9.08	3.027	2.89
1250	8.37	3.488	2.664
1500	7.78	3.89	2.476
1750	7.21	4.206	2.295
2000	6.82	4.547	2.171
3000	5.42	5.42	1.725
4000	4.39	5.853	1.397

## Belt load

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
18	111.75	114.59	122	86
19	118.12	120.96	128	93
20	124.48	127.32	134	100
21	130.85	133.69	141	105
22	137.22	140.06	147	112
23	143.58	146.42	153	118
24	149.95	152.79	160	125
25	156.32	159.16	166	131
26	162.68	165.52	173	137
27	169.05	171.89	179	144
28	175.41	178.25	185	150
29	181.78	184.62	192	156
30	188.15	190.99	198	163
31	194.51	197.35	204	169
32	200.88	203.72	211	175
33	207.24	210.08	217	182
34	213.61	216.45	224	188
35	219.98	222.82	230	195
36	226.34	229.18	236	201
37	232.71	235.55	243	207
38	239.08	241.92	249	214
39	245.44	248.28	255	220
40	251.81	254.65	262	226
41	258.17	261.01	268	233
42	264.54	267.38	274	239
43	270.91	273.75	281	245
44	277.27	280.11	287	252
45	283.64	286.48	294	258
46	290.01	292.85	300	265
47	296.37	299.21	306	271
48	302.74	305.58	313	278
49	309.10	311.94	319	284
50	315.47	318.31	325	290
51	321.84	324.68	332	296
52	328.20	331.04	338	303
53	334.57	337.41	344	310
54	340.93	343.77	351	315
55	347.30	350.14	357	322
56	353.67	356.51	364	328
57	360.03	362.87	370	335
58	366.40	369.24	376	341
59	372.77	375.61	383	347
60	379.13	381.97	389	354
61	385.50	388.34	395	360
62	391.86	394.70	402	366
63	398.23	401.07	408	373
64	404.60	407.44	414	379
65	410.96	413.80	421	385
66	417.33	420.17	427	392
67	423.70	426.54	434	398
68	430.05	432.90	440	405
69	436.42	439.27	446	406

Standard

Number of teeth	outer Ø [mm]	Effective Ø [mm]	Ø with flanges [mm]	Max. bore [mm]
70	442.78	445.63	453	412
71	449.15	452.00	459	419
72	455.52	458.37	465	425
73	461.88	464.73	472	431
74	468.25	471.01	478	438
75	474.61	477.46	485	444
76	480.98	483.83	491	450
77	487.35	490.20	497	457
78	493.71	496.56	504	463
79	500.08	502.93	510	470
80	506.45	509.30	516	476
81	512.81	515.66	523	482
82	519.18	522.03	529	489
83	525.54	528.39	535	495
84	531.91	534.76	542	501
85	538.28	541.13	548	503
86	544.64	547.49	555	509
87	551.01	553.86	561	516
88	557.38	560.23	567	522
89	563.74	566.59	574	528
90	570.11	572.96	580	535
91	576.47	579.32	586	541
92	582.84	585.69	593	548
93	589.21	592.06	599	554
94	595.57	598.42	605	560
95	601.94	604.79	612	566
96	608.31	611.16	618	573
97	614.67	617.52	625	579
98	621.04	623.89	631	586
99	627.40	630.25	637	592
100	633.77	636.62	644	598
101	640.14	642.99	650	605
102	646.50	649.35	656	611
103	652.87	655.72	663	617
104	659.23	662.08	669	624
105	665.60	668.45	676	630
106	671.97	674.82	682	636
107	678.33	681.18	688	643
108	684.70	687.55	695	649
109	691.07	693.92	701	656
110	697.43	700.28	707	662
111	703.80	706.65	714	663
112	710.16	713.01	720	670
113	716.53	719.38	726	676
114	722.90	725.75	733	682
115	729.26	732.11	739	688
116	735.63	738.48	746	694
117	742.00	744.85	752	700
118	748.36	751.21	758	707
119	754.73	757.58	765	714
120	761.09	763.94	771	720