Technical datasheet

PU Linear HTD5M Steel NT AS Black

Article code: TBPU000212



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

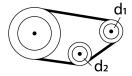
Belt construction		
Tension member		steel
Material	body	Polyurethane
Surface	tooth side	Polyamide fabric
	back side	Polyurethane

Characteristics		
Food Grade (FG)	no	
Antistatic (AS)	yes	
Oil & Fat resistance	yes	

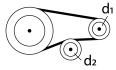
Technical data						
Tooth	profile		HTD5M			
	pitch		5	mm	0.2	in.
Hardness body material	ISO 868		92A	Shore		
Belt thickness	total		3.6	mm	0.14	in.
Belt weight			4.8	kg/m²	0.98	lbs/ft²
Coefficient of friction	tooth side to steel	dynamic	0,3			
Operating temperature	continuous	from / to	-10 / 80	°C	14 / 176	°F
Minimum pulley diameter	A) without counter flexing	number of teeth, t1	16			
		d1	24.32	mm	0.96	in.
		d2	50	mm	1.97	in.
	B) with counter flexing	number of teeth, t1	20			
		d1	30.69	mm	1.21	in.
		d2	50	mm	1.97	in.
Belt width	maximum		100	mm	3.94	in.
Endless length	minimum		500	mm	19.69	in.
Manufacturing length	standard		100000	mm	328.08	ft.

Reference images

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 logitudinal 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.

Standard belt width [mm]	Allow. tensile load Linear open end & Torque [N]	Allow. tensile load Linear welded endless [N]	Spring force [N]
10	880	440	220000
15	1320	660	330000
20	1750	875	450000
30	2600	1300	690000
50	5060	2530	1265000
85	8600	4300	2120000
100.1	10120	5060	2530000

[N/mm] 0 3.68 0 25 3.588 0.007 50 3.545 0.015 75 3.5 0.022 100 3.452 0.029 150 3.37 0.042 200 3.27 0.055 300 3.125 0.078 400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481			
25 3.588 0.007 50 3.545 0.015 75 3.5 0.022 100 3.452 0.029 150 3.37 0.042 200 3.27 0.055 300 3.125 0.078 400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	Speed rpm [1/min]		Specific power [W/mm]
50 3.545 0.015 75 3.5 0.022 100 3.452 0.029 150 3.37 0.042 200 3.27 0.055 300 3.125 0.078 400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	0	3.68	0
75 3.5 0.022 100 3.452 0.029 150 3.37 0.042 200 3.27 0.055 300 3.125 0.078 400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	25	3.588	0.007
100 3.452 0.029 150 3.37 0.042 200 3.27 0.055 300 3.125 0.078 400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	50	3.545	0.015
150 3.37 0.042 200 3.27 0.055 300 3.125 0.078 400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	75	3.5	0.022
200 3.27 0.055 300 3.125 0.078 400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	100	3.452	0.029
300 3.125 0.078 400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	150	3.37	0.042
400 3.017 0.101 500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	200	3.27	0.055
500 2.931 0.122 750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	300	3.125	0.078
750 2.753 0.172 1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	400	3.017	0.101
1000 2.605 0.217 1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	500	2.931	0.122
1250 2.479 0.258 1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	750	2.753	0.172
1500 2.371 0.296 1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	1000	2.605	0.217
1750 2.278 0.332 2000 2.191 0.365 3000 1.923 0.481	1250	2.479	0.258
2000 2.191 0.365 3000 1.923 0.481	1500	2.371	0.296
3000 1.923 0.481	1750	2.278	0.332
	2000	2.191	0.365
4000 1.723 0.574	3000	1.923	0.481
	4000	1.723	0.574

Standard