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

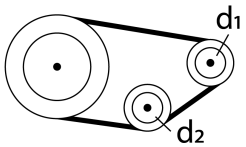
Food Grade (FG)	no
Antistatic (AS)	yes
Oil & Fat resistance	yes

Technical data

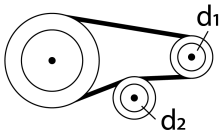
Tooth	profile		HTD5M			
	pitch		5	mm	0.2	in.
Hardness body material	ISO 868		92A	Shore		
Belt thickness	total		3.6	mm	0.14	in.
Belt weight			4.8	kg/m²	0.98	lbs/ft²
Coefficient of friction	tooth side to steel	dynamic	0,3			
Operating temperature	continuous	from / to	-10 / 80	°C	14 / 176	°F
Minimum pulley 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

Speed rpm [1/min]	Specific tooth force [N/mm]	Specific power [W/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	
4000	1.723	0.574	

Standard