

Conti[®] Synchronotion

Endless PU timing belts.
Tailored for you!

Conti® Synchronotion

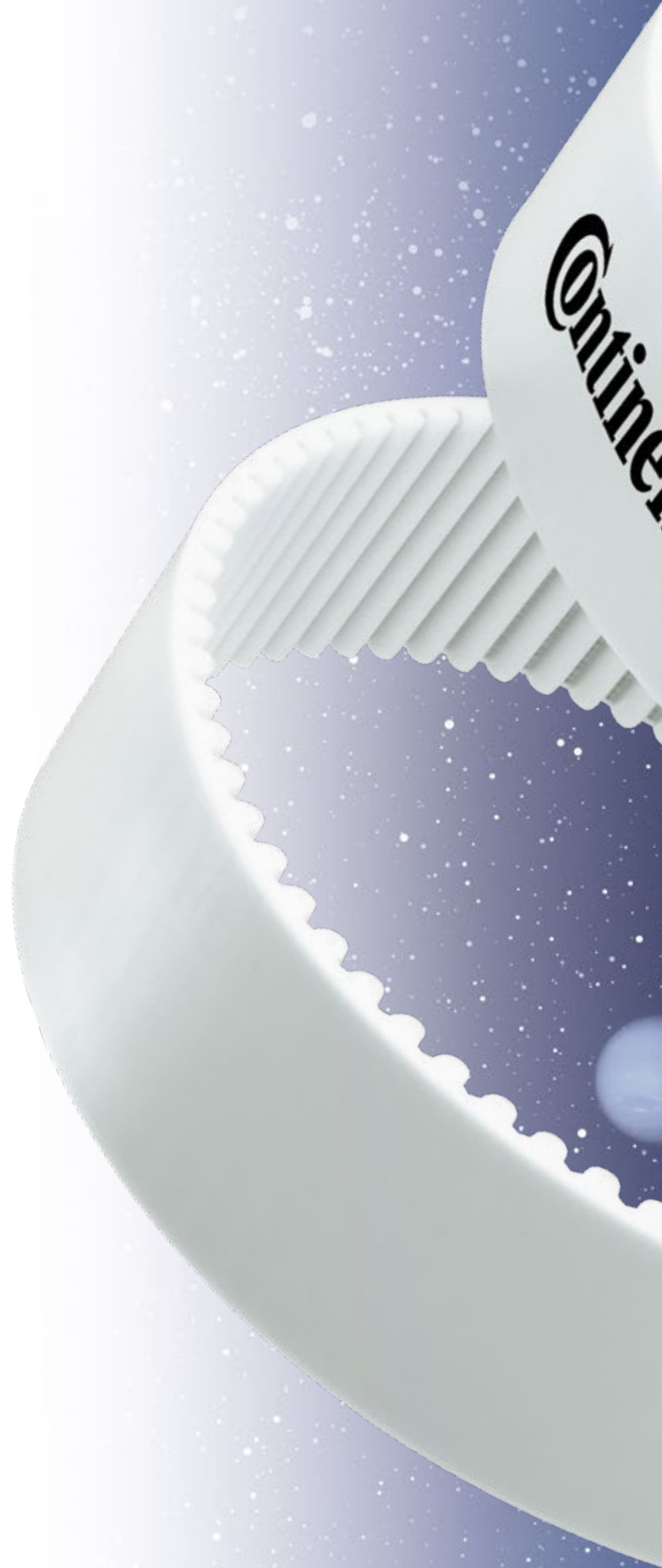
New generation of endless PU timing belts.

Endless PU timing belts with a broad range of profiles and lengths for transport and drive applications across the entire power range.

The Synchronotion is the first truly endless PU timing belt from Continental. With this addition, we are significantly extending our standard belt range so customers can purchase the entire portfolio of drive belts from one single source. The Conti® Synchronotion can be manufactured in custom lengths which gives customers greater design flexibility and additional freedom. The Synchronotion is available in eleven different profiles in the lengths ranging from 1,500 to 14,500 mm, with a maximum width of 100 mm.

Variety of profiles, fully compatible

The numerous profiles make it possible to replace the belts and switch existing systems to Conti® Synchronotion. The dimensions are fully compatible with competitor's products and no changes are necessary. The Synchronotion also offers all the benefits of Continental PU timing belts: reliable power transmission, precise positioning through the use of high-strength tension members in bifilar winding, as well as an abrasion-resistant PU material suitable for applications in demanding environments where dirt and dust are prevalent. The Synchronotion is suitable for transport and drive applications across the entire power range. These include synchronous conveyor systems and transport devices with slide rails as well as positioning and reversing drives in linear and control technology.





Conti® Synchronotion

The right decision for your drive.

Specification

- › In terms of power transmission, the Synchromotion corresponds to the Synchroflex PU timing belt, which is also endless.
- › The bifilar winding of the steel tension member (as standard) reduces the belt run-off tendency, optimizing positional accuracy.
- › The white polyurethane, which is optimized for the extrusion process, is produced in the material preparation plant in our Dannenberg facility. The PU expertise of Continental ensures consistent, reliable quality.
- › Ground belt back for achieving high thickness precision.
- › Oil resistant according to DIN 53428*.
- › Ozone resistant according to DIN ISO 1431*.
- › Resistant against light exposure according to DIN EN ISO 4892*.
- › Outlook: further specifications will be developed and offered later.

* targets according to Continental specification

Range

- › Length: 1,500 mm – approx. 14,500 mm
- › Width: 100 mm (can be cut open and supplied in standard widths depending on the profile)

Length tolerances

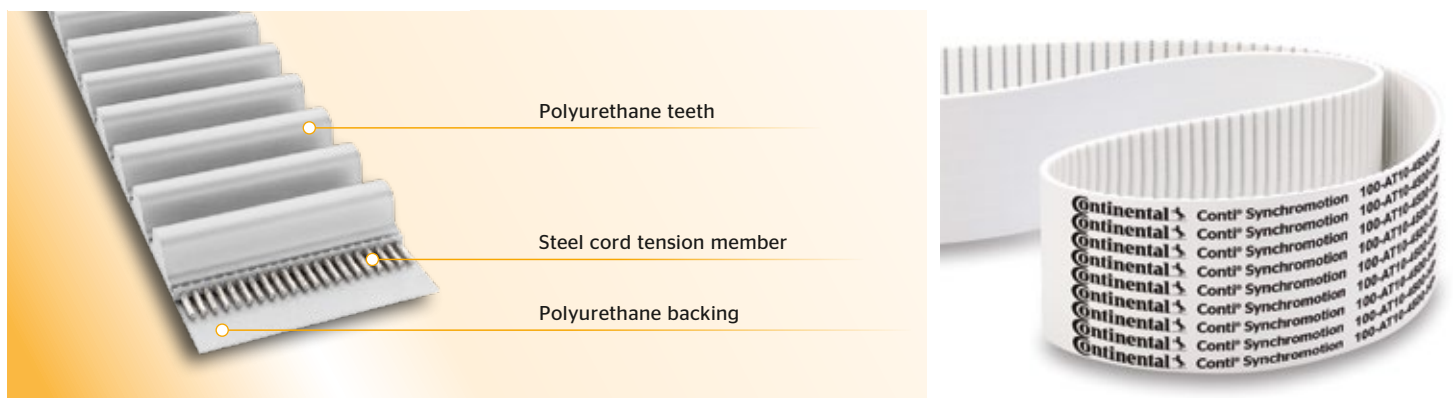
Belt length [mm]	Length tolerance (+/-) [mm]	Belt length [mm]	Length tolerance (+/-) [mm]
1,700	1.13	4,500	2.32
1,900	1.22	4,750	2.40
2,120	1.30	5,000	2.52
2,240	1.35	5,300	2.64
2,360	1.44	5,600	2.72
2,500	1.49	6,000	2.92
2,650	1.57	6,300	3.04
2,800	1.61	6,700	3.19
3,000	1.70	7,100	3.35
3,550	1.91	7,500	3.51
3,750	2.03	8,000	3.70
4,000	2.11	9,000	4.09
4,250	2.24	Additional lengths on request.	

Belt designation

Continental Conti® Synchromotion **100-AT10-4500-HP** MADE IN GERMANY DO NOT CRIMP

| Profile
| Belt length (mm)
| Cord version
| Belt width [mm] or [1/10 inch] for imperial pitch

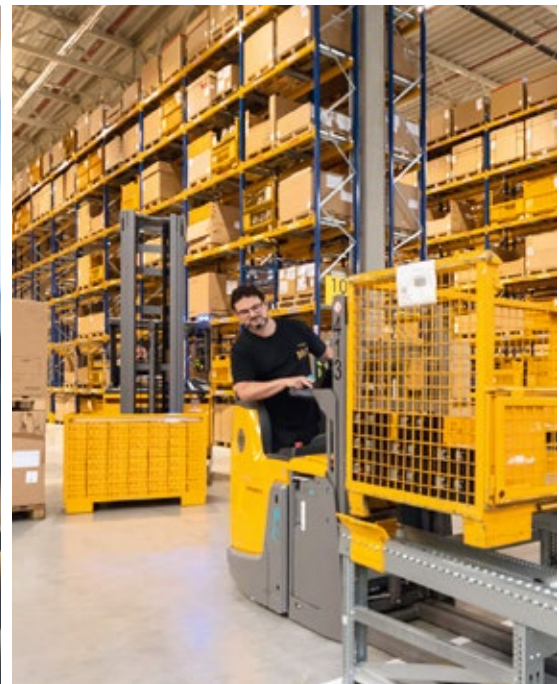
Construction Conti® Synchromotion



Profile			
T, AT	HTD	RPP	H
T5 AT5	H5M H14M	R8M	H
T10 AT10	H8M		
T20 AT20			

Applications

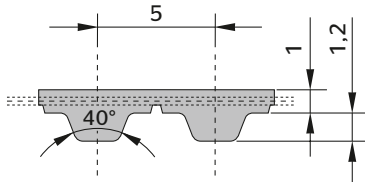
- › Transport Technology
- › Packaging Industry, Robotics
- › Sorting Lines
- › Intralogistics
- › Wood Processing
- › Ceramik-, Glass- and Tiles-Processing
- › Tobacco Industry



PU belt | T5

Conti® Synchronomotion T5

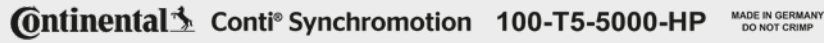
Belts compatible with T-pulley acc. to ISO 17396.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 5 mm
- › Length range: 1,500-14,500 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.2 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	24.00	1.910	0.000
20	23.38	1.861	0.039
40	22.86	1.819	0.076
60	22.41	1.783	0.112
80	22.01	1.751	0.147
100	21.65	1.723	0.180
150	20.90	1.663	0.261
200	20.28	1.614	0.338
300	19.30	1.536	0.483
400	18.55	1.476	0.618
500	17.93	1.427	0.747
600	17.41	1.385	0.870
700	16.96	1.349	0.989
730	16.83	1.339	1.024
800	16.56	1.318	1.104
900	16.20	1.289	1.215
1,000	15.88	1.263	1.323
1,100	15.58	1.240	1.428
1,200	15.31	1.218	1.531
1,300	15.06	1.198	1.632
1,400	14.83	1.180	1.730
1,460	14.69	1.169	1.788
1,500	14.61	1.162	1.826
1,600	14.40	1.146	1.920
1,700	14.21	1.131	2.013
1,800	14.03	1.116	2.104

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,900	13.85	1.102	2.193
2,000	13.69	1.089	2.281
2,200	13.38	1.065	2.453
2,400	13.10	1.042	2.619
2,500	12.96	1.032	2.701
2,600	12.84	1.021	2.781
2,800	12.59	1.002	2.938
2,880	12.50	0.995	3.000
3,000	12.37	0.984	3.092
3,200	12.16	0.967	3.241
3,400	11.96	0.951	3.388
3,600	11.77	0.936	3.530
3,800	11.59	0.922	3.670
4,000	11.42	0.909	3.807
4,500	11.03	0.878	4.136
5,000	10.68	0.850	4.450
5,500	10.36	0.825	4.750
6,000	10.07	0.802	5.037
6,500	9.81	0.780	5.312
7,000	9.56	0.761	5.577
7,500	9.33	0.742	5.831
8,000	9.11	0.725	6.076
8,500	8.91	0.709	6.312
9,000	8.72	0.694	6.540
9,500	8.54	0.679	6.759
10,000	8.37	0.666	6.972

Rotational speeds over 10,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	10	16	25	32	50	75	100
Tension member strength	F _{zul}	[N]	360	570	930	1,200	1,920	2,940	3,930
Belt weight	T5	[kg/m]	0.02	0.03	0.05	0.07	0.11	0.16	0.21

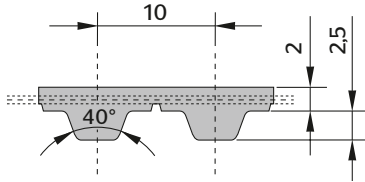
Flexibility (Minimum numbers of teeth, minimum diameter)

without contraflexure 	Timing pulley	z _{min}	10
	Tension roller (smooth), running on teeth	d _{min} [mm]	30
with contraflexure 	Timing pulley	z _{min}	12
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	30

PU belt | T10

Conti® Synchromotion T10

Belts compatible with T-pulley acc. to ISO 17396.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 10 mm
- › Length range: 1,500-14,500 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.3 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	50.50	8.037	0.000
20	49.00	7.798	0.163
40	47.72	7.595	0.318
60	46.62	7.420	0.466
80	45.65	7.265	0.609
100	44.78	7.127	0.746
150	42.94	6.834	1.073
200	41.43	6.595	1.381
300	39.06	6.217	1.953
400	37.22	5.924	2.481
500	35.72	5.684	2.976
600	34.44	5.482	3.444
700	33.34	5.306	3.890
730	33.04	5.258	4.020
800	32.37	5.152	4.316
900	31.50	5.013	4.725
1,000	30.71	4.888	5.119
1,100	30.00	4.774	5.499
1,200	29.34	4.669	5.867
1,300	28.72	4.571	6.223
1,400	28.15	4.481	6.569
1,460	27.83	4.429	6.772
1,500	27.62	4.396	6.905
1,600	27.12	4.317	7.232
1,700	26.65	4.241	7.551
1,800	26.20	4.170	7.861

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,900	25.78	4.103	8.164
2,000	25.38	4.039	8.459
2,200	24.63	3.920	9.030
2,400	23.94	3.810	9.576
2,500	23.62	3.759	9.840
2,600	23.30	3.709	10.098
2,800	22.71	3.615	10.600
2,880	22.49	3.579	10.795
3,000	22.16	3.528	11.082
3,200	21.65	3.445	11.546
3,400	21.16	3.368	11.992
3,600	20.70	3.295	12.423
3,800	20.27	3.226	12.838
4,000	19.86	3.160	13.238
4,500	18.91	3.009	14.181
5,000	18.06	2.874	15.047
5,500	17.28	2.751	15.844
6,000	16.58	2.639	16.579
6,500	15.93	2.535	17.256
7,000	15.33	2.439	17.880
7,500	14.76	2.350	18.456
8,000	14.24	2.266	18.985
8,500	13.74	2.188	19.471
9,000	13.28	2.113	19.917
9,500	12.84	2.043	20.325
10,000	12.42	1.976	20.696

Rotational speeds over 10,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	10	16	25	32	50	75	100
Tension member strength	F _{zul}	[N]	910	1,460	2,430	3,104	4,860	7,300	9,730
Belt weight	T10	[kg/m]	0.05	0.07	0.11	0.15	0.23	0.34	0.45

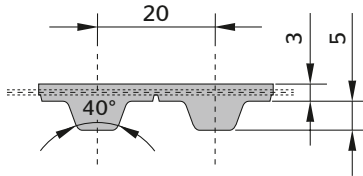
Flexibility (Minimum numbers of teeth, minimum diameter)

without contraflexure 	Timing pulley	z _{min}	12
	Tension roller (smooth), running on teeth	d _{min} [mm]	60
with contraflexure 	Timing pulley	z _{min}	20
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	60

PU belt | T20

Conti® Synchronomotion T20

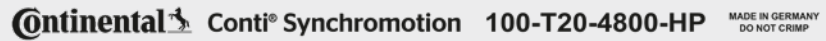
Belts compatible with T-pulley acc. to ISO 17396.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 20 mm
- › Length range: 1,500-14,500 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 1.0 mm
- › Thickness tolerance: +/- 0.4 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	101.50	32.308	0.000
20	98.13	31.237	0.654
40	95.29	30.332	1.271
60	92.82	29.547	1.856
80	90.65	28.855	2.417
100	88.71	28.236	2.957
150	84.59	26.925	4.229
200	81.22	25.854	5.415
300	75.91	24.164	7.591
400	71.79	22.853	9.573
500	68.43	21.781	11.405
600	65.58	20.876	13.117
700	63.12	20.091	14.728
730	62.44	19.875	15.194
800	60.94	19.399	16.252
900	59.00	18.780	17.700
1,000	57.24	18.220	19.080
1,100	55.63	17.709	20.399
1,200	54.16	17.239	21.663
1,300	52.79	16.803	22.875
1,400	51.52	16.398	24.041
1,460	50.79	16.168	24.719

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,500	50.32	16.019	25.162
1,600	49.21	15.663	26.243
1,700	48.15	15.327	27.286
1,800	47.15	15.009	28.292
1,900	46.21	14.708	29.264
2,000	45.31	14.421	30.204
2,200	43.63	13.887	31.993
2,400	42.09	13.397	33.670
2,500	41.36	13.166	34.470
2,600	40.67	12.945	35.245
2,800	39.35	12.525	36.725
2,880	38.85	12.365	37.292
3,000	38.12	12.133	38.117
3,200	36.96	11.766	39.427
3,400	35.88	11.420	40.661
3,600	34.85	11.094	41.822
3,800	33.88	10.784	42.914
4,000	32.96	10.490	43.942
4,500	30.83	9.814	46.249
5,000	28.93	9.208	48.214
5,500	27.20	8.659	49.870
6,000	25.62	8.156	51.247

Rotational speeds over 6,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	25	32	50	75	100
Tension member strength	F _{zul}	[N]	3,422	4,602	7,434	11,446	15,222
Belt weight	T20	[kg/m]	0.18	0.24	0.37	0.55	0.736

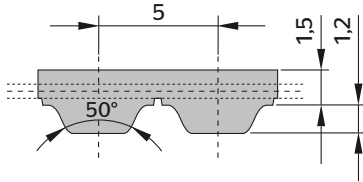
Flexibility (Minimum numbers of teeth, minimum diameter)

	Timing pulley	z _{min}	15
	Tension roller (smooth), running on teeth	d _{min} [mm]	120
	Timing pulley	z _{min}	25
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	120

PU belt | AT5

Conti® Synchromotion AT5

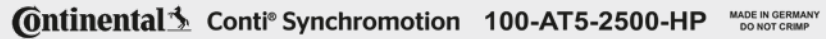
Belts compatible with AT-pulley acc. to ISO 17396.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 5 mm
- › Length range: 1,500-14,500 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.2 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	38.81	3.088	0.000
20	38.37	3.053	0.064
40	37.95	3.020	0.126
60	37.55	2.988	0.188
80	37.17	2.958	0.248
100	36.82	2.930	0.307
150	35.99	2.864	0.450
200	35.24	2.804	0.587
300	33.94	2.701	0.848
400	32.83	2.612	1.094
500	31.86	2.535	1.327
600	31.00	2.467	1.550
700	30.23	2.405	1.763
730	30.01	2.388	1.826
800	29.53	2.350	1.968
900	28.89	2.299	2.166
1,000	28.29	2.252	2.358
1,100	27.75	2.208	2.543
1,200	27.24	2.167	2.724
1,300	26.76	2.129	2.899
1,400	26.31	2.094	3.069
1,460	26.05	2.073	3.169
1,500	25.88	2.060	3.235
1,600	25.48	2.028	3.397
1,700	25.10	1.997	3.556
1,800	24.74	1.968	3.710

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,900	24.39	1.941	3.862
2,000	24.06	1.914	4.010
2,200	23.43	1.865	4.296
2,400	22.86	1.819	4.572
2,500	22.59	1.797	4.706
2,600	22.32	1.777	4.837
2,800	21.83	1.737	5.093
2,880	21.63	1.722	5.192
3,000	21.36	1.700	5.339
3,200	20.92	1.664	5.577
3,400	20.50	1.631	5.808
3,600	20.10	1.600	6.031
3,800	19.73	1.570	6.247
4,000	19.37	1.541	6.457
4,500	18.54	1.476	6.954
5,000	17.80	1.416	7.416
5,500	17.12	1.362	7.847
6,000	16.50	1.313	8.249
6,500	15.92	1.267	8.625
7,000	15.39	1.225	8.977
7,500	14.89	1.185	9.306
8,000	14.42	1.148	9.614
8,500	13.98	1.113	9.903
9,000	13.56	1.079	10.173
9,500	13.17	1.048	10.425
10,000	12.79	1.018	10.661

Rotational speeds over 10,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	10	16	25	32	50	75	100
Tension member strength	F _{zul}	[N]	900	1,360	2,260	2,750	4,520	6,370	9,050
Belt weight	AT5	[kg/m]	0.03	0.05	0.08	0.10	0.16	0.25	0.328

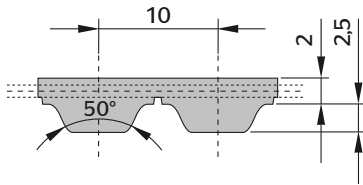
Flexibility (Minimum numbers of teeth, minimum diameter)

without contraflexure 	Timing pulley	z _{min}	15
	Tension roller (smooth), running on teeth	d _{min} [mm]	25
with contraflexure 	Timing pulley	z _{min}	20
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	60

PU belt | AT10

Conti® Synchronmotion AT10

Belts compatible with AT-pulley acc. to ISO 17396.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 10 mm
- › Length range: 1,500-14,500 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.3 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	80.85	12.868	0.000
20	79.66	12.679	0.266
40	78.55	12.502	0.524
60	77.51	12.336	0.775
80	76.52	12.179	1.020
100	75.59	12.030	1.260
150	73.45	11.690	1.836
200	71.54	11.386	2.385
300	68.26	10.863	3.413
400	65.49	10.423	4.366
500	63.10	10.043	5.258
600	61.00	9.708	6.100
700	59.12	9.409	6.897
730	58.59	9.326	7.129
800	57.43	9.140	7.657
900	55.88	8.893	8.382
1,000	54.46	8.667	9.076
1,100	53.14	8.458	9.743
1,200	51.92	8.263	10.384
1,300	50.78	8.081	11.002
1,400	49.70	7.910	11.597
1,460	49.09	7.813	11.945
1,500	48.69	7.749	12.173
1,600	47.73	7.597	12.729
1,700	46.83	7.453	13.268
1,800	45.97	7.316	13.790

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,900	45.14	7.185	14.295
2,000	44.36	7.060	14.786
2,200	42.89	6.825	15.725
2,400	41.53	6.609	16.611
2,500	40.89	6.507	17.036
2,600	40.27	6.409	17.449
2,800	39.09	6.221	18.242
2,880	38.64	6.150	18.547
3,000	37.99	6.046	18.994
3,200	36.95	5.881	19.707
3,400	35.97	5.725	20.383
3,600	35.04	5.577	21.026
3,800	34.16	5.437	21.636
4,000	33.32	5.304	22.215
4,500	31.39	4.995	23.539
5,000	29.64	4.718	24.701
5,500	28.05	4.465	25.717
6,000	26.60	4.233	26.599
6,500	25.26	4.020	27.360
7,000	24.01	3.821	28.009
7,500	22.84	3.635	28.553
8,000	21.75	3.462	28.999
8,500	20.72	3.298	29.355
9,000	19.75	3.143	29.624
9,500	18.83	2.997	29.812
10,000	17.95	2.857	29.923

Rotational speeds over 10,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	16	25	32	50	75	100
Tension member strength	F _{zul}	[N]	2,006	3,422	4,602	7,434	11,446	15,222
Belt weight	AT10	[kg/m]	0.09	0.15	0.19	0.29	0.44	0.581

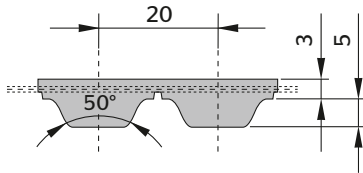
Flexibility (Minimum numbers of teeth, minimum diameter)

without contraflexure 	Timing pulley	z _{min}	15
	Tension roller (smooth), running on teeth	d _{min} [mm]	50
with contraflexure 	Timing pulley	z _{min}	25
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	120

PU belt | AT20

Conti® Synchronotion AT20

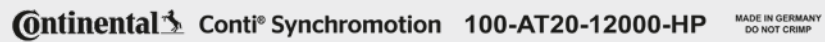
Belts compatible with AT-pulley acc. to ISO 17396.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 20 mm
- › Length range: 1,500-14,500 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 1.0 mm
- › Thickness tolerance: +/- 0.4 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	161.70	51.471	0.000
20	158.67	50.507	1.058
40	155.85	49.610	2.078
60	153.22	48.771	3.064
80	150.74	47.983	4.020
100	148.41	47.240	4.947
150	143.10	45.549	7.155
200	138.40	44.053	9.226
300	130.36	41.495	13.036
400	123.65	39.359	16.487
500	117.89	37.525	19.648
600	112.84	35.918	22.568
700	108.35	34.487	25.281
730	107.09	34.087	26.058
800	104.30	33.199	27.813
900	100.62	32.027	30.185
1,000	97.24	30.952	32.413
1,100	94.12	29.959	34.510
1,200	91.22	29.037	36.488
1,300	88.51	28.175	38.356
1,400	85.98	27.367	40.123
1,460	84.53	26.906	41.136

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,500	83.59	26.607	41.794
1,600	81.33	25.888	43.376
1,700	79.19	25.207	44.875
1,800	77.16	24.560	46.295
1,900	75.22	23.944	47.641
2,000	73.37	23.356	48.916
2,200	69.91	22.253	51.268
2,400	66.72	21.237	53.375
2,500	65.21	20.757	54.342
2,600	63.76	20.294	55.256
2,800	61.00	19.416	56.930
2,880	59.94	19.080	57.544
3,000	58.41	18.593	58.410
3,200	55.98	17.818	59.710
3,400	53.68	17.088	60.841
3,600	51.51	16.396	61.812
3,800	49.45	15.739	62.632
4,000	47.48	15.114	63.310
4,500	42.95	13.671	64.424
5,000	38.87	12.373	64.783
5,500	35.16	11.192	64.461
6,000	31.76	10.110	63.521

Rotational speeds over 6,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	25	32	50	75	100
Tension member strength	F _{zul}	[N]	5,428	7,200	12,000	17,500	24,000
Belt weight	AT20	[kg/m]	0.24	0.31	0.48	0.72	0.96

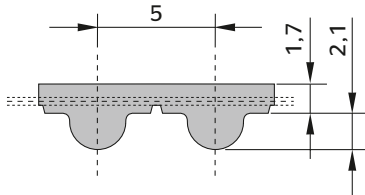
Flexibility (Minimum numbers of teeth, minimum diameter)

	Timing pulley	z _{min}	18
	Tension roller (smooth), running on teeth	d _{min} [mm]	120
	Timing pulley	z _{min}	25
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	180

PU belt | H5M

Conti® Synchronmotion H5M

Belts compatible with HTD-pulley acc. to ISO 13050.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 5 mm
- › Length range: 1,500-14,500 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.2 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	38.81	3.088	0.000
20	38.37	3.053	0.064
40	37.95	3.020	0.126
60	37.55	2.988	0.188
80	37.17	2.958	0.248
100	36.82	2.930	0.307
150	35.99	2.864	0.450
200	35.24	2.804	0.587
300	33.94	2.701	0.848
400	32.83	2.612	1.094
500	31.86	2.535	1.327
600	31.00	2.467	1.550
700	30.23	2.405	1.763
730	30.01	2.388	1.826
800	29.53	2.350	1.968
900	28.89	2.299	2.166
1,000	28.29	2.252	2.358
1,100	27.75	2.208	2.543
1,200	27.24	2.167	2.724
1,300	26.76	2.129	2.899
1,400	26.31	2.094	3.069
1,460	26.05	2.073	3.169
1,500	25.88	2.060	3.235
1,600	25.48	2.028	3.397
1,700	25.10	1.997	3.556
1,800	24.74	1.968	3.710

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,900	24.39	1.941	3.862
2,000	24.06	1.914	4.010
2,200	23.43	1.865	4.296
2,400	22.86	1.819	4.572
2,500	22.59	1.797	4.706
2,600	22.32	1.777	4.837
2,800	21.83	1.737	5.093
2,880	21.63	1.722	5.192
3,000	21.36	1.700	5.339
3,200	20.92	1.664	5.577
3,400	20.50	1.631	5.808
3,600	20.10	1.600	6.031
3,800	19.73	1.570	6.247
4,000	19.37	1.541	6.457
4,500	18.54	1.476	6.954
5,000	17.80	1.416	7.416
5,500	17.12	1.362	7.847
6,000	16.50	1.313	8.249
6,500	15.92	1.267	8.625
7,000	15.39	1.225	8.977
7,500	14.89	1.185	9.306
8,000	14.42	1.148	9.614
8,500	13.98	1.113	9.903
9,000	13.56	1.079	10.173
9,500	13.17	1.048	10.425
10,000	12.79	1.018	10.661

Rotational speeds over 10,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	10	15	25	50	100
Tension member strength	F _{zul}	[N]	900	1,360	2,260	4,520	9,050
Belt weight	H5M	[kg/m]	0,04	0,06	0,10	0,20	0,406

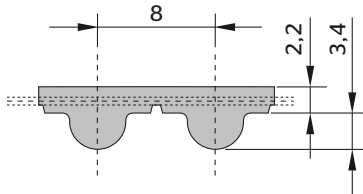
Flexibility (Minimum numbers of teeth, minimum diameter)

without contraflexure 	Timing pulley	z _{min}	15
	Tension roller (smooth), running on teeth	d _{min} [mm]	25
with contraflexure 	Timing pulley	z _{min}	20
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	60

PU belt | H8M

Conti® Synchromotion H8M

Belts compatible with HTD-pulley acc. to ISO 13050.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 8 mm
- › Length range: 1,504-14,496 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.3 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	77.18	9.826	0.000
20	76.04	9.682	0.203
40	74.98	9.547	0.400
60	73.98	9.420	0.592
80	73.04	9.300	0.779
100	72.15	9.186	0.962
150	70.11	8.927	1.402
200	68.29	8.695	1.821
300	65.15	8.296	2.606
400	62.51	7.959	3.334
500	60.23	7.669	4.016
600	58.23	7.414	4.658
700	56.43	7.185	5.267
730	55.93	7.121	5.444
800	54.81	6.979	5.847
900	53.34	6.791	6.401
1,000	51.98	6.619	6.931
1,100	50.73	6.459	7.440
1,200	49.56	6.310	7.930
1,300	48.47	6.171	8.401
1,400	47.44	6.041	8.856
1,460	46.86	5.966	9.122

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,500	46.48	5.918	9.296
1,600	45.57	5.802	9.721
1,700	44.70	5.691	10.132
1,800	43.88	5.586	10.530
1,900	43.09	5.487	10.916
2,000	42.34	5.391	11.291
2,200	40.94	5.212	12.008
2,400	39.64	5.047	12.685
2,500	39.03	4.969	13.009
2,600	38.44	4.894	13.324
2,800	37.31	4.751	13.930
2,880	36.88	4.696	14.163
3,000	36.26	4.617	14.504
3,200	35.27	4.491	15.049
3,400	34.34	4.372	15.565
3,600	33.45	4.259	16.056
3,800	32.61	4.152	16.522
4,000	31.81	4.050	16.964
4,500	29.96	3.815	17.975
5,000	28.29	3.602	18.863
5,500	26.78	3.410	19.638
6,000	25.39	3.233	20.312

Rotational speeds over 6,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	10	15	20	30	50	85	100
Tension member strength	F _{zul}	[N]	1,062	2,006	2,714	4,366	7,434	12,862	15,222
Belt weight	H8M	[kg/m]	0.06	0.09	0.13	0.19	0.32	0.54	0.632

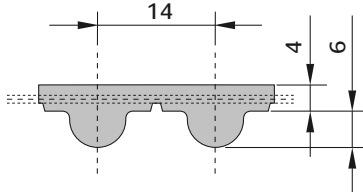
Flexibility (Minimum numbers of teeth, minimum diameter)

without contraflexure 	Timing pulley	z _{min}	20
	Tension roller (smooth), running on teeth	d _{min} [mm]	50
with contraflexure 	Timing pulley	z _{min}	32
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	120

PU belt | H14M

Conti® Synchronomotion H14M

Belts compatible with HTD-pulley acc. to ISO 13050.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 14 mm
- › Length range: 1,512 - 14,490 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.3 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	141.12	31.444	0.000
20	138.78	30.922	0.648
40	136.59	30.434	1.275
60	134.53	29.977	1.883
80	132.60	29.546	2.475
100	130.78	29.139	3.051
150	126.61	28.210	4.431
200	122.90	27.385	5.735
300	116.55	25.968	8.158
400	111.21	24.780	10.380
500	106.62	23.757	12.439
600	102.59	22.859	14.363
700	99.00	22.058	16.169
730	97.99	21.834	16.691
800	95.75	21.335	17.874
900	92.80	20.677	19.488
1,000	90.09	20.073	21.020
1,100	87.58	19.515	22.479
1,200	85.25	18.995	23.870
1,300	83.07	18.510	25.199

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,400	81.03	18.055	26.470
1,460	79.86	17.795	27.207
1,500	79.11	17.626	27.687
1,600	77.29	17.221	28.854
1,700	75.56	16.837	29.974
1,800	73.93	16.472	31.049
1,900	72.36	16.124	32.081
2,000	70.87	15.792	33.074
2,200	68.08	15.169	34.946
2,400	65.50	14.594	36.680
2,500	64.28	14.323	37.498
2,600	63.11	14.061	38.285
2,800	60.88	13.564	39.773
2,880	60.03	13.375	40.337
3,000	58.79	13.099	41.151
3,200	56.82	12.661	42.427
3,400	54.97	12.247	43.606
3,600	53.21	11.856	44.695
3,800	51.54	11.484	45.698
4,000	49.95	11.130	46.620

Rotational speeds over 4,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	40	55	85	100
Tension member strength	F _{zul}	[N]	9,600	13,200	20,400	24,000
Belt weight	H14M	[kg/m]	0.45	0.62	0.96	1.127

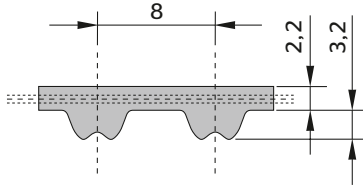
Flexibility (Minimum numbers of teeth, minimum diameter)

without contraflexure 	Timing pulley	z _{min}	26
	Tension roller (smooth), running on teeth	d _{min} [mm]	120
with contraflexure 	Timing pulley	z _{min}	36
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	180

PU belt | R8M

Conti® Synchromotion R8M

Belts compatible with RPP-pulley acc. to ISO 13050.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Metric pitch: 8 mm
- › Length range: 1,504-14,496 mm
- › Maximum width: 100 mm
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.3 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	81.03	10.318	0.000
20	79.84	10.166	0.213
40	78.73	10.024	0.420
60	77.68	9.891	0.621
80	76.69	9.765	0.818
100	75.76	9.646	1.010
150	73.61	9.373	1.472
200	71.70	9.130	1.912
300	68.41	8.710	2.736
400	65.64	8.357	3.501
500	63.24	8.053	4.216
600	61.14	7.784	4.891
700	59.26	7.545	5.531
730	58.73	7.477	5.716
800	57.56	7.328	6.139
900	56.01	7.131	6.721
1,000	54.58	6.950	7.278
1,100	53.26	6.782	7.812
1,200	52.04	6.626	8.326
1,300	50.89	6.480	8.821
1,400	49.82	6.343	9.299
1,460	49.20	6.264	9.578

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,500	48.80	6.214	9.760
1,600	47.84	6.092	10.207
1,700	46.93	5.976	10.638
1,800	46.07	5.866	11.057
1,900	45.25	5.761	11.462
2,000	44.46	5.661	11.856
2,200	42.98	5.473	12.608
2,400	41.62	5.299	13.319
2,500	40.98	5.218	13.659
2,600	40.36	5.138	13.991
2,800	39.18	4.988	14.627
2,880	38.73	4.931	14.872
3,000	38.07	4.848	15.229
3,200	37.03	4.715	15.801
3,400	36.05	4.590	16.344
3,600	35.12	4.472	16.859
3,800	34.24	4.360	17.348
4,000	33.40	4.252	17.813
4,500	31.46	4.005	18.874
5,000	29.71	3.783	19.806
5,500	28.12	3.580	20.620
6,000	26.66	3.394	21.328

Rotational speeds over 6,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[mm]	10	15	20	30	50	85	100
Tension member strength	F _{zul}	[N]	1,062	2,006	2,714	4,366	7,434	12,862	15,222
Belt weight	R8M	[kg/m]	0.06	0.09	0.12	0.18	0.30	0.51	0.603

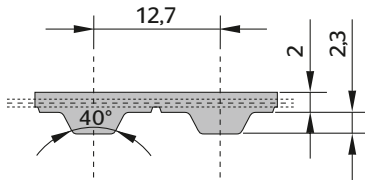
Flexibility (Minimum numbers of teeth, minimum diameter)

<p>without contraflexure</p>	Timing pulley	z _{min}	20
	Tension roller (smooth), running on teeth	d _{min} [mm]	50
<p>with contraflexure</p>	Timing pulley	z _{min}	32
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	120

PU belt | H

Conti® Synchronotion H

Belts compatible with H-pulley acc. to DIN 5296.



Properties:

- › Timing belts made of highly durable polyurethane elastomer incorporating a steel-cord tension member
- › Bifilar (SZ) tension member for improved tracking
- › Imperial pitch 1/2 inch = 12.7 mm
- › Length range: 1,511 - 14,491 mm
- › Maximum width: 400 (in 1/10 inch)
- › Width tolerance: +/- 0.5 mm
- › Thickness tolerance: +/- 0.3 mm

Branding (example)



Tooth shear strength (specific belt tooth strength)

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
0	50.50	10.207	0.000
20	49.00	9.903	0.207
40	47.72	9.646	0.404
60	46.62	9.423	0.592
80	45.65	9.227	0.773
100	44.78	9.051	0.948
150	42.94	8.679	1.363
200	41.43	8.375	1.754
300	39.06	7.895	2.480
400	37.22	7.523	3.151
500	35.72	7.219	3.780
600	34.44	6.962	4.374
700	33.34	6.739	4.940
730	33.04	6.678	5.105
800	32.37	6.543	5.481
900	31.50	6.367	6.001
1,000	30.71	6.208	6.501
1,100	30.00	6.063	6.984
1,200	29.34	5.929	7.451
1,300	28.72	5.806	7.904
1,400	28.15	5.691	8.343
1,460	27.83	5.625	8.601
1,500	27.62	5.583	8.770
1,600	27.12	5.482	9.185
1,700	26.65	5.387	9.589
1,800	26.20	5.296	9.984

R.p.m. n [min ⁻¹]	F _{Uspec} [N/cm]	M _{spec} [Ncm/cm]	P _{spec} [W/cm]
1,900	25.78	5.211	10.368
2,000	25.38	5.130	10.743
2,200	24.63	4.978	11.468
2,400	23.94	4.839	12.161
2,500	23.62	4.773	12.497
2,600	23.30	4.710	12.825
2,800	22.71	4.591	13.462
2,880	22.49	4.546	13.710
3,000	22.16	4.480	14.074
3,200	21.65	4.376	14.663
3,400	21.16	4.278	15.230
3,600	20.70	4.185	15.777
3,800	20.27	4.097	16.304
4,000	19.86	4.014	16.812
4,500	18.91	3.822	18.009
5,000	18.06	3.650	19.109
5,500	17.28	3.494	20.122
6,000	16.58	3.351	21.055
6,500	15.93	3.220	21.915
7,000	15.33	3.098	22.708
7,500	14.76	2.984	23.439
8,000	14.24	2.878	24.111
8,500	13.74	2.778	24.729
9,000	13.28	2.684	25.295
9,500	12.84	2.595	25.813
10,000	12.42	2.510	26.285

Rotational speeds over 10,000 rpm need special drive designs. Please ask our advice.

Tension member strength (permitted tensile force of the belt F_{zul}), Belt weight

Belt width	b	[1/10 inch/mm]	050/12.7	075/19.1	100/25.4	150/38.1	200/50.8	300/76.2	400/101.6
Tension member strength	F _{zul}	[N]	1,216	1,824	2,433	3,649	4,865	7,298	9,730
Belt weight	H	[kg/m]	0.06	0.08	0.11	0.17	0.23	0.34	0.45

Flexibility (Minimum numbers of teeth, minimum diameter)

without contraflexure 	Timing pulley	z _{min}	14
	Tension roller (smooth), running on teeth	d _{min} [mm]	60
with contraflexure 	Timing pulley	z _{min}	20
	Tension roller (smooth), running on the back of the belt	d _{min} [mm]	80

EPIX Online Order Management Platform

Easier, more convenient, faster, safer - the new Continental PTG Industry Online Order Management Platform for Drive belts now offers dealers a modern digital platform for convenient ordering.

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