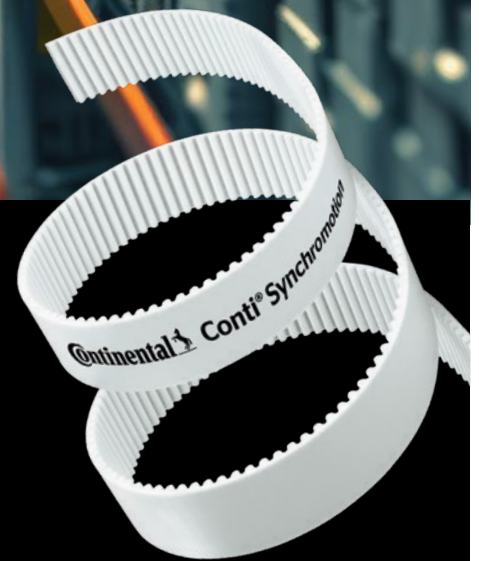


**PAZ  
VERSION  
NOW  
AVAILABLE**

**Perfectly placed quality**  
Endless polyurethane timing belts  
Conti Synchronotion





## ONE BELT, ENDLESS POSSIBILITIES

### Conti Synchronotion

Greater flexibility: Conti Synchronotion is the first truly endless PU timing belt from Continental. It can be manufactured in custom lengths - for maximum flexibility in design.

#### Versatility for your application

The Conti Synchronotion is suitable for virtually all transport and drive operations, from synchronous conveyor systems and transport equipment with slide rails to positioning and reversing drives in linear and control technology.

With its seamless integration and compatibility with competing products, the Conti Synchronotion can be used directly in existing systems without any additional adaptation. This means you immediately benefit from the advantages of our PU timing belts:

- › high-strength tension members with bifilar ("S/Z") winding for optimum tracking
- › reliable power transmission and precise positioning
- › a long service life even in challenging environments









#### Even more robust in the PAZ version

The Conti Synchronotion is also available in a PAZ version. This features polyamide-based fabric reinforcement on the toothed side, which offers numerous additional benefits:

- › an even **longer service life** thanks to additional abrasion protection on the tooth profile
- › **quieter running** and **reduced vibrations thanks to** the fabric surface
- › **improved power transmission** due to the reduced coefficient of friction between belt and pulley
- › **optimized running-in performance**
- › **lower operating costs** thanks to the longer service life and reduced maintenance requirements

## THE RIGHT DECISION FOR YOUR DRIVE SYSTEM.

#### Technical specifications

-  In terms of power transmission, **the Synchronotion corresponds to the Synchroflex PU timing belt, which is also endless.**
-  **The bifilar ("S/Z") 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 our material preparation plant in Dannenberg. Continental's PU expertise ensures consistent, reliable **quality.**
-  The ground backing of the belt ensures **highly precise** thickness.
-  **PU material** oil resistant according to DIN 53428\*.
-  **Ozone resistant** according to DIN ISO 1431\*
-  **UV resistant** according to DIN EN ISO 4892\*.
-  All products also available as **PAZ versions**

\*targets according to Continental specification

#### Available sizes

- › Length: from 1,500 mm (1,900 mm PAZ) to approx. 14,500 mm
- › Width: 100 mm (can be cut and supplied in standard widths depending on the profile)



## Custom-made ex works.

Conti Synchronotion creates design flexibility.

Endless production of the Conti Synchronotion opens up new possibilities in drive technology: with its different designs, individual lengths and more than 10 profile options, it can be

optimized precisely for your specific application. And all this with maximum precision thanks to minimal length tolerances.

### Versions

Profile	Pitch	Cord	PAZ
HTD	★ 5M	★ HP	★
	★ 8M	★ HP	★
	★ 14M	★ HP	★
AT	★ 5	★ HP	★
	★ 10	★ HP	★
	★ 20	★ HP	★
T	★ 5	★ HP	★
	★ 10	★ HP	★
	★ 20	★ HP	★
RPP	★ 8M	★ HP	★
H	-	★ HP	★

Length range 1,500 (1,900 PAZ) - 14,500 mm

★ already exists  
Low-temperature version available on request

### Length tolerance\*

Belt length [mm]	Length tolerance (+/-) [mm]	Belt length [mm]	Length tolerance (+/-) [mm]	Belt length [mm]	Length tolerance (+/-) [mm]
1.500	0,52	3.150	0,55	6.000	0,48
1.700	0,56	3.350	0,55	6.300	0,48
1.900	0,61	3.550	0,54	7.100	0,48
2.120	0,65	4.000	0,54	8.000	0,47
2.240	0,68	4.250	0,53	9.000	0,46
2.360	0,72	4.500	0,52	10.000	0,45
2.500	0,74	4.750	0,51	11.000	0,45
2.650	0,78	5.000	0,50	12.000	0,45
2.800	0,80	5.300	0,50	13.000	0,44
3.000	0,85	5.600	0,49	14.000	0,44

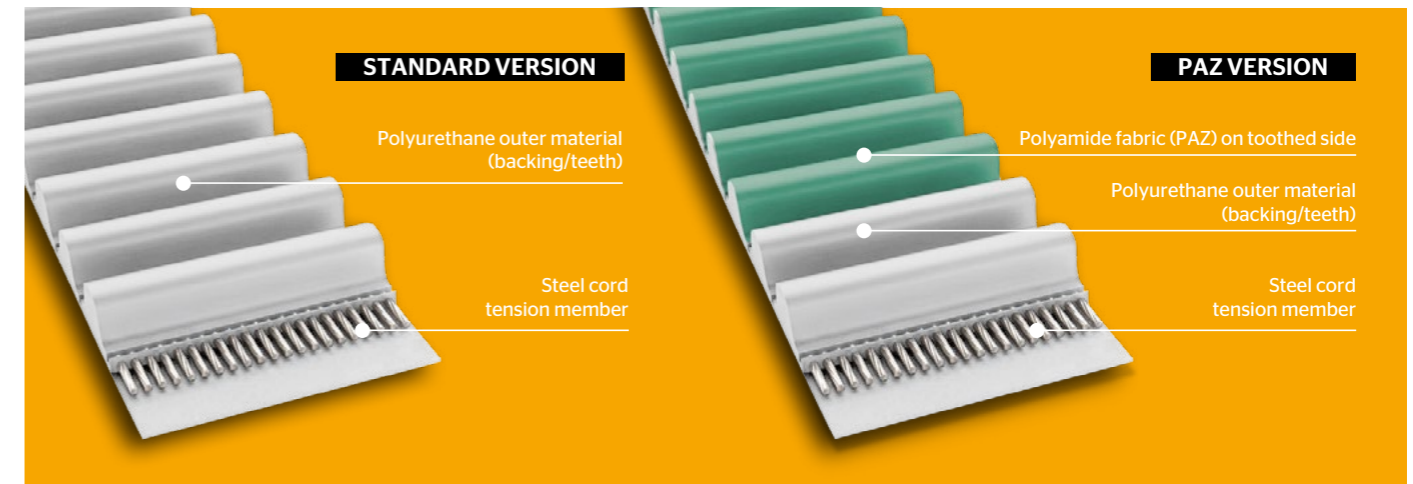
Further lengths available on request.  
\*- up to 3,000 mm belt length relative to center distance  
- from 3,000 mm belt length based on 1,000 mm stretched belt length

### Product designation

**Conti Synchronotion 100-T5-5000-HP PAZ**

- Profile: Belt width (mm) Exception: Trapezoidal profiles (1/10 inch)
- T5: Belt length (mm)
- 5000: Tension member variant
- HP: PAZ version

### Structure



### Profile

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

### Wide-ranging applications

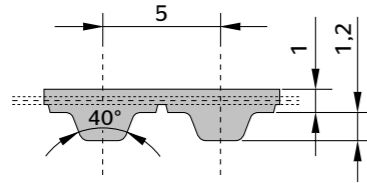
- › Transportation technology
- › Packaging machines, robotics
- › Mail sorting systems
- › Timber processing
- › Ceramic, glass, and tile production
- › Tobacco processing
- › Logistics (outfeed and transfer belts, pallets from shelf to lifting unit)



# T5 HP

## Conti Synchronotion T5 HP

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



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

**Continental** Conti Synchronotion 100-T5-5000-HP

**Continental** Conti Synchronotion 100-T5-5000-HP PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	10	16	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	360	570	930	1.200	1.920	2.940	3.930
Belt weight	T5 HP	[kg/m]	0,02	0,03	0,05	0,07	0,11	0,16	0,21

### Flexibility (min. number of teeth, min. diameter)\*

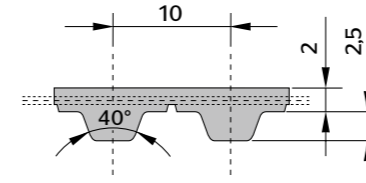
	Timing pulley	z <sub>min</sub>	12
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	30
	Timing pulley	z <sub>min</sub>	18
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	30

\* Values may vary, depending on the application.

# T10 HP

## Conti® Synchronotion T10 HP

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



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

**Continental** Conti Synchronotion 100-T10-5000-HP

**Continental** Conti Synchronotion 100-T10-5000-HP PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	10	16	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	983	1.460	2.430	3.104	4.860	7.300	9.730
Belt weight	T10 HP	[kg/m]	0,05	0,07	0,11	0,15	0,23	0,34	0,45

### Flexibility (min. number of teeth, min. diameter)\*

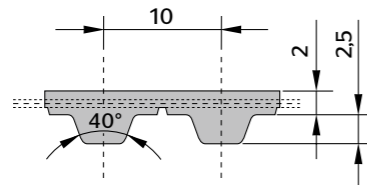
	Timing pulley	z <sub>min</sub>	12
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	60
	Timing pulley	z <sub>min</sub>	20
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	60

\* Values may vary, depending on the application.

# T10 NIRO

## Conti Synchronotion T10 NIRO

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



### Properties:

- > Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- > Bifilar (SZ) tension members 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

Product designation (example):

**Continental** Conti Synchronotion 100-T10-5000-NIRO

**Continental** Conti Synchronotion 100-T10-5000-NIRO PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	10	16	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	750	1.250	2.050	2.750	4.350	6.650	8.850
Belt weight	T10 NIRO	[kg/m]	0,07	0,11	0,18	0,23	0,35	0,53	0,71

### Flexibility (min. number of teeth, min. diameter)\*

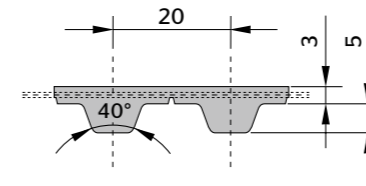
	Timing pulley	z <sub>min</sub>	15
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	72
	Timing pulley	z <sub>min</sub>	24
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	72

\* Values may vary, depending on the application.

# T20 HP

## Conti Synchronotion T20 HP

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



### Properties:

- > Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- > Bifilar (SZ) tension members 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: +/- 0.45

Product designation (example):

**Continental** Conti Synchronotion 100-T20-4800-HP

**Continental** Conti Synchronotion 100-T20-4800-HP PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 6,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	3.422	4.602	7.434	11.446	15.222
Belt weight	T20 HP	[kg/m]	0,18	0,24	0,37	0,55	0,736

### Flexibility (min. number of teeth, min. diameter)\*

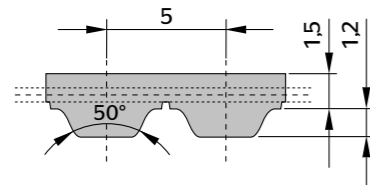
	Timing pulley	z <sub>min</sub>	15
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	120
	Timing pulley	z <sub>min</sub>	25
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	120

\* Values may vary, depending on the application.

# AT5 HP

## Conti Synchronotion AT5 HP

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



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

Conti Synchronotion 100-AT5-2500-HP

Conti Synchronotion 100-AT5-2500-HP PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	10	16	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	900	1.360	2.260	2.750	4.520	6.370	9.050
Belt weight	AT5 HP	[kg/m]	0,03	0,05	0,08	0,10	0,16	0,25	0,328

### Flexibility (min. number of teeth, min. diameter)\*

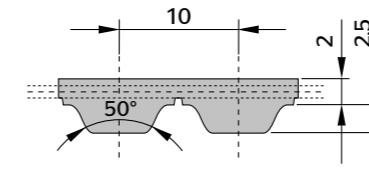
without contraflexure		Timing pulley	z <sub>min</sub>	18
		Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	29
with contraflexure		Timing pulley	z <sub>min</sub>	27
		Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	60

\* Values may vary, depending on the application.

# AT10 HP

## Conti Synchronotion AT10 HP

Belts compatible with AT pulleys acc. to ISO 17396.



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

Conti Synchronotion 100-AT10-4500-HP

Conti Synchronotion 100-AT10-4500-HP PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	16	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	2.006	3.422	4.602	7.434	11.446	15.222
Belt weight	AT10 HP	[kg/m]	0,09	0,15	0,19	0,29	0,44	0,581

### Flexibility (min. number of teeth, min. diameter)\*

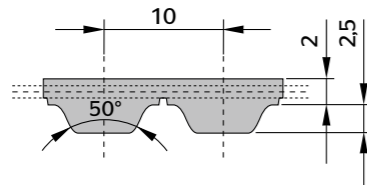
without contraflexure		Timing pulley	z <sub>min</sub>	15
		Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	50
with contraflexure		Timing pulley	z <sub>min</sub>	25
		Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	120

\* Values may vary, depending on the application.

# AT10 HS

## Conti Synchronotion AT10 HS

Belts compatible with AT pulleys acc. to ISO 17396.



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

**Continental** Conti Synchronotion 100-AT10-4500-HS

**Continental** Conti Synchronotion 100-AT10-4500-HS PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	16	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	3.068	5.428	7.200	12.000	17.500	24.000
Belt weight	AT10 HS	[kg/m]	0,10	0,16	0,21	0,33	0,49	0,66

### Flexibility (min. number of teeth, min. diameter)\*

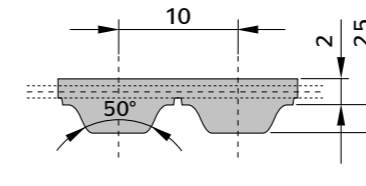
	Timing pulley	z <sub>min</sub>	25
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	80
	Timing pulley	z <sub>min</sub>	42
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	120

\* Values may vary, depending on the application.

# AT10 NIRO

## Conti Synchronotion AT10 NIRO

Belts compatible with AT pulleys acc. to ISO 17396.



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

**Continental** Conti Synchronotion 100-AT10-4500-NIRO

**Continental** Conti Synchronotion 100-AT10-4500-NIRO PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	16	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	1.700	2.900	3.900	6.300	9.700	12.900
Belt weight	AT10 NIRO	[kg/m]	0,09	0,15	0,19	0,29	0,44	0,58

### Flexibility (min. number of teeth, min. diameter)\*

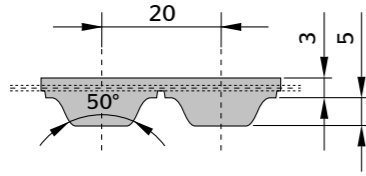
	Timing pulley	z <sub>min</sub>	18
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	60
	Timing pulley	z <sub>min</sub>	30
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	144

\* Values may vary, depending on the application.

# AT20 HP

## Conti Synchronotion AT20 HP

Belts compatible with AT pulleys acc. to ISO 17396.



### Properties:

- > Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- > Bifilar (SZ) tension members 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: +/- 0.45

Product designation (example):

**Continental** Conti Synchronotion 100-AT20-12000-HP

**Continental** Conti Synchronotion 100-AT20-12000-HP PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 6,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	5.428	7.200	12.000	17.500	24.000
Belt weight	AT20 HP	[kg/m]	0,24	0,31	0,48	0,72	0,96

### Flexibility (min. number of teeth, min. diameter)\*

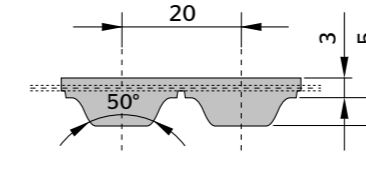
	Timing pulley	z <sub>min</sub>	18
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	120
	Timing pulley	z <sub>min</sub>	25
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	180

\* Values may vary, depending on the application.

# AT20 HS

## Conti Synchronotion AT20 HS

Belts compatible with AT pulleys acc. to ISO 17396.



### Properties:

- > Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- > Bifilar (SZ) tension members 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: +/- 0.45

Product designation (example):

**Continental** Conti Synchronotion 100-AT20-12000-HS

**Continental** Conti Synchronotion 100-AT20-12000-HS PAZ

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 6,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	25	32	50	75	100
Tensile strength	F <sub>zul</sub>	[N]	6.545	8.855	14.245	22.715	30.415
Belt weight	AT20 HS	[kg/m]	0,26	0,33	0,52	0,77	1,03

### Flexibility (min. number of teeth, min. diameter)\*

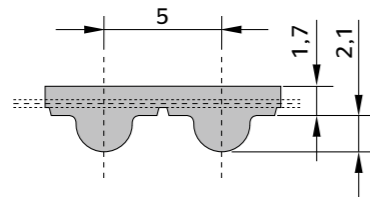
	Timing pulley	z <sub>min</sub>	25
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	160
	Timing pulley	z <sub>min</sub>	35
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	250

\* Values may vary, depending on the application.

# H5M HP

## Conti Synchronotion H5M HP

Belts compatible with HTD pulleys acc. to ISO 13050.



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

**Conti Synchronotion 100-H5M-6500-HP**

**Conti Synchronotion 100-H5M-6500-HP PAZ**

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	10	15	25	50	100
Tensile strength	F <sub>zul</sub>	[N]	900	1.360	2.260	4.520	9.050
Belt weight	H5M HP	[kg/m]	0,04	0,06	0,10	0,20	0,406

### Flexibility (min. number of teeth, min. diameter)\*

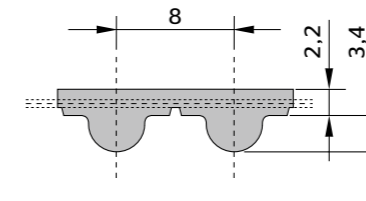
without contraflexure		Timing pulley	z <sub>min</sub>	18
		Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	29
with contraflexure		Timing pulley	z <sub>min</sub>	27
		Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	60

\* Values may vary, depending on the application.

# H8M HP

## Conti Synchronotion H8M HP

Belts compatible with HTD pulleys acc. to ISO 13050.



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

**Conti Synchronotion 100-H8M-2800-HP**

**Conti Synchronotion 100-H8M-2800-HP PAZ**

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 6,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	10	15	20	30	50	85	100
Tensile strength	F <sub>zul</sub>	[N]	1.062	2.006	2.714	4.366	7.434	12.862	15.222
Belt weight	H8M HP	[kg/m]	0,06	0,09	0,13	0,19	0,32	0,54	0,632

### Flexibility (min. number of teeth, min. diameter)\*

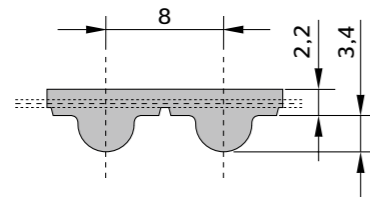
without contraflexure		Timing pulley	z <sub>min</sub>	20
		Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	50
with contraflexure		Timing pulley	z <sub>min</sub>	32
		Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	120

\* Values may vary, depending on the application.

# H8M HS

## Conti Synchronotion H8M HS

Belts compatible with HTD pulleys acc. to ISO 13050.



### Properties:

- > Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- > Bifilar (SZ) tension members 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

Product designation (example):

**Conti Synchronotion 100-H8M-2800-HS**

**Conti Synchronotion 100-H8M-2800-HS PAZ**

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 6,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	10	15	20	30	50	85	100
Tensile strength	F <sub>zul</sub>	[N]	1.652	2.876	4.484	6.844	12.000	20.400	24.000
Belt weight	H8M HS	[kg/m]	0,07	0,11	0,14	0,21	0,35	0,60	0,71

### Flexibility (min. number of teeth, min. diameter)\*

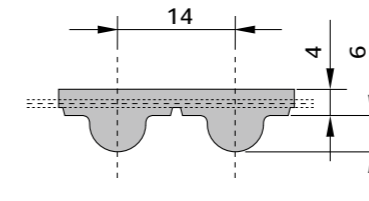
	Timing pulley	z <sub>min</sub>	28
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	80
	Timing pulley	z <sub>min</sub>	45
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	120

\* Values may vary, depending on the application.

# H14M HP

## Conti Synchronotion H14M HP

Belts compatible with HTD pulleys acc. to ISO 13050.



### Properties:

- > Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- > Bifilar (SZ) tension members 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: +/- 0.4

Product designation (example):

**Conti Synchronotion 100-H14M-4956-HP**

**Conti Synchronotion 100-H14M-4956-HP PAZ**

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 4,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	40	55	85	100
Tensile strength	F <sub>zul</sub>	[N]	9.600	13.200	20.400	24.000
Belt weight	H14M HP	[kg/m]	0,45	0,62	0,96	1,127

### Flexibility (min. number of teeth, min. diameter)\*

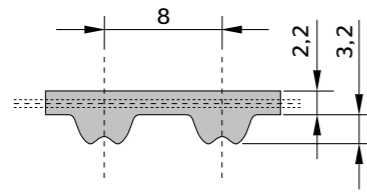
	Timing pulley	z <sub>min</sub>	26
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	120
	Timing pulley	z <sub>min</sub>	36
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	180

\* Values may vary, depending on the application.

# R8M HP

## Conti Synchronotion R8M HP

Belts compatible with RPP pulleys acc. to ISO 13050.



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

**Conti Synchronotion 100-R8M-8000-HP**

**Conti Synchronotion 100-R8M-8000-HP PAZ**

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 6,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), belt weight

Belt width	b	[mm]	10	15	20	30	50	85	100
Tensile strength	F <sub>zul</sub>	[N]	1.062	2.006	2.714	4.366	7.434	12.862	15.222
Belt weight	R8M HP	[kg/m]	0,06	0,09	0,12	0,18	0,30	0,51	0,603

### Flexibility (min. number of teeth, min. diameter)\*

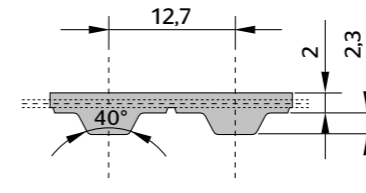
without contraflexure	Timing pulley	z <sub>min</sub>	20
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	50
with contraflexure	Timing pulley	z <sub>min</sub>	32
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	120

\* Values may vary, depending on the application.

# H HP

## Conti Synchronotion H HP

Belts compatible with H pulleys acc. to DIN 5296.



### Properties:

- Timing belts made of highly durable polyurethane elastomer with steel-cord tension members
- Bifilar (SZ) tension members 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

Product designation (example):

**Conti Synchronotion 200-H-2540-HP**

**Conti Synchronotion 200-H-2540-HP PAZ**

### Tooth shear strength (specific belt tooth strength)

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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

RPM n [min <sup>-1</sup> ]	F <sub>Uspec</sub> [N/cm]	M <sub>spec</sub> [Ncm/cm]	P <sub>spec</sub> [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 above 10,000 rpm<sup>-1</sup> need special drive designs. We'll be happy to advise you.

### Tensile strength (permissible tensile force on the belt F<sub>zul</sub> at 0.45% elongation), 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
Tensile strength	F <sub>zul</sub>	[N]	1.216	1.824	2.433	3.649	4.865	7.298	9.730
Belt weight	H HP	[kg/m]	0,06	0,08	0,11	0,17	0,23	0,34	0,45

### Flexibility (min. number of teeth, min. diameter)\*

without contraflexure	Timing pulley	z <sub>min</sub>	14
	Tension roller (smooth), running on teeth	d <sub>min</sub> [mm]	60
with contraflexure	Timing pulley	z <sub>min</sub>	20
	Tension roller (smooth), running on back of belt	d <sub>min</sub> [mm]	80

\* Values may vary, depending on the application.

### Service Tools

#### Online Order Management Platform

Easier, more convenient, faster, more secure - the new Continental web shop for V-belts and timing belts from the industrial segment now offers dealers a modern digital platform for placing their orders with ease.  
[shop.continental-industry.com](http://shop.continental-industry.com)



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### Conti Professional 3

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### Conti E-Learning







#### An important step towards digital learning






With "Belt Basics" Continental has launched its first interactive e-learning tool.







It provides an entertaining and in-depth overview of belt technology. Cooperation with educational experts has created a bridge between conveying technical know-how and enjoyment of the learning process.  
[www.continental-learningplatform.com](http://www.continental-learningplatform.com)



### The benefits at a glance:

-  The Continental standard range of rubber industrial belts for dealers and the replacement market
-  Comprehensive information such as product and performance features
-  Technical data sheets
-  Uploading of orders, e.g. as an Excel spreadsheet
-  Easy navigation
-  Stock checks

-  Online and offline version
-  Available on mobile devices
-  New, user-friendly interface
-  Easy operation
-  Two-shaft and multi-shaft calculation as well as linear drives and lifting applications in a single program
-  Automated data sheet creation

-  Interactive study
-  Compact and easy to understand
-  Flexible use
-  Based on solid know-how
-  Designed to motivate
-  Free of charge and immediately available

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