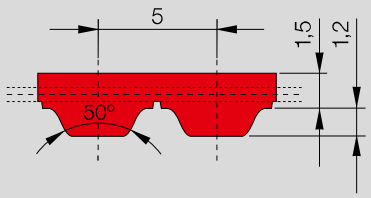
AT high performance Timing Belts

AT 5 GEN III



CONTI® SYNCHROFLEX Timing Belt (SFX) AT 5 GEN III

High performance AT profile with metric pitch and trapezoidal teeth.

Standard version:

- single-sided
- high performance polyurethane in red colour
- steel cord tension members with high density
- steel cord tension members in two-filament construction
- steel cord tension members in highly flexible construction

FA: with bigger back thickness

Type / Length* GEN III	Number of teeth
AT 5 / 225	45
AT 5 / 255	51
AT 5 / 260	52
AT 5 / 280	56
AT 5 / 300	60
AT 5 / 330	66
AT 5 / 340	68
AT 5 / 375	75
AT 5 / 390	78
AT 5 / 420	84
AT 5 / 450	90
AT 5 / 455	91
AT 5 / 480	96
AT 5 / 490	98
AT 5 / 500	100
AT 5 / 525	105
AT 5 / 545	109
AT 5 / 600	120
AT 5 / 610	122
AT 5 / 620	124
AT 5 / 630	126
AT 5 / 660	132
AT 5 / 670	134
AT 5 / 690	138
AT 5 / 710	142

Type / Length* GEN III	Number of teeth
AT 5 / 720	144
AT 5 / 750	150
AT 5 / 780	156
AT 5 / 825	165
AT 5 / 860	172
AT 5 / 875	175
AT 5 / 900	180
AT 5 / 920	184
AT 5 / 975	195
AT 5 / 1050	210
AT 5 / 1125	225
AT 5 / 1230	246
AT 5 / 1500	300
AT 5 / 1750	350
AT 5 / 2000	400
AT 5 / 3350 FA**	670
AT 5 / 3800 FA**	760

Preferred belt width* in mm:
6, 10, 16, 25, 32, 50, 75, 100

* Other dimensions upon request.
** Please request technical support from your Mulco sales partner.

Order example

CONTI® SYNCHROFLEX Timing Belt 50 AT5/450 GEN III

- Belt width in mm
- Type/Pitch
- Belt length in mm
- Specification Generation III

AT 5 GEN III Technical data

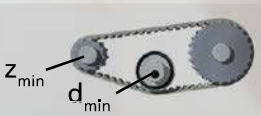
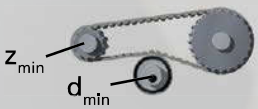
1. Tooth shear strength (specific belt tooth strength)

R.p.m. n [min^{-1}]	F_{Uspec} [N/cm]	M_{spec} [Ncm/cm]	P_{spec} [W/cm]	R.p.m. n [min^{-1}]	F_{Uspec} [N/cm]	M_{spec} [Ncm/cm]	P_{spec} [W/cm]
0	48,48	3,86	0,00	2000	30,07	2,39	5,01
20	47,96	3,82	0,08	2200	29,29	2,33	5,37
40	47,43	3,77	0,16	2400	28,57	2,27	5,71
60	46,94	3,74	0,23	2600	27,91	2,22	6,05
80	46,47	3,70	0,31	2800	27,28	2,17	6,37
100	46,02	3,66	0,38	3000	26,70	2,12	6,67
200	44,05	3,51	0,73	3200	26,14	2,08	6,97
300	42,42	3,38	1,06	3400	25,62	2,04	7,26
400	41,03	3,27	1,37	3600	25,13	2,00	7,54
500	39,82	3,17	1,66	3800	24,66	1,96	7,81
600	38,75	3,08	1,94	4000	24,21	1,93	8,07
700	37,78	3,01	2,20	4500	23,18	1,84	8,69
800	36,91	2,94	2,46	5000	22,25	1,77	9,27
900	36,11	2,87	2,71	5500	21,40	1,70	9,81
1000	35,37	2,81	2,95	6000	20,62	1,64	10,31
1100	34,68	2,76	3,18	6500	19,90	1,58	10,78
1200	34,05	2,71	3,40	7000	19,24	1,53	11,22
1300	33,45	2,66	3,62	7500	18,61	1,48	11,63
1400	32,88	2,62	3,84	8000	18,03	1,43	12,02
1500	32,35	2,57	4,04	8500	17,48	1,39	12,38
1600	31,85	2,53	4,25	9000	16,95	1,35	12,71
1700	31,37	2,50	4,44	9500	16,46	1,31	13,03
1800	30,92	2,46	4,64	10000	15,99	1,27	13,33
1900	30,49	2,43	4,83				

Rotational speeds over 10000 rpm and/or belt speeds over 80 m/s need special drive designs. Please ask our advice.

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

Belt width	b	[mm]	6	10	16	25	32	50	75	100
Tension member strength	F_{zul}	[N]	417	787	1342	2175	2823	4489	6803	9117
Belt weight	AT 5 GEN III	[kg/m]	0,022	0,036	0,058	0,090	0,115	0,180	0,270	0,360

3. Flexibility (Minimum numbers of teeth, minimum diameter)

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