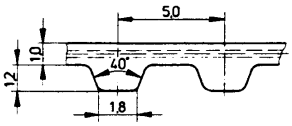
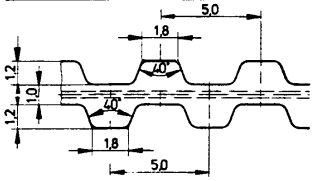
T5 BELTS

709 1205

SS SINGLE SIDED



DL DOUBLE SIDED



AVAILABILITY

TYPE profile/length	No. of teeth Z	BRECO M / V SS	BRECO M / V DL	BRECOFLEX SS	BRECOFLEX DL
T5 / 100	20	●			
T5 / 150	30	●	●		
T5 / 165	33	●			
T5 / 180	36	●			
T5 / 185	37	●			
T5 / 200	40	●			
T5 / 210	42	●			
T5 / 215	43	●			
T5 / 220	44	●			
T5 / 225	45	●			
T5 / 240	48				
T5 / 245	49	●			
T5 / 250	50	●			
T5 / 255	51	●			
T5 / 260	52	●	●		
T5 / 270	54	●			
T5 / 280	56	●			
T5 / 295	59	●			
T5 / 300	60		●		
T5 / 305	61	●			
T5 / 330	66	●			
T5 / 340	68	●			
T5 / 355	71	●			
T5 / 365	73	●			
T5 / 370	74				
T5 / 390	78	●			
T5 / 400	80	●			
T5 / 410	82	●	●		
T5 / 420	84	●			
T5 / 435	87				
T5 / 455	91	●			
T5 / 460	92	●	●		
T5 / 480	96	●			
T5 / 500	100	●			
T5 / 505	101	●			
T5 / 510	102	●			
T5 / 515	103		●		
T5 / 525	105	●	●		
T5 / 545	109	●			
T5 / 550	110	●			
T5 / 560	112	●			
T5 / 575	115	●			
T5 / 590	118	●	●		
T5 / 610	122	●			
T5 / 620	124	●	●		
T5 / 625	125		●		
T5 / 630	126	●			
T5 / 650	130	●			
T5 / 660	132				
T5 / 690	138	●			
T5 / 700	140	●			
T5 / 720	144	●			
T5 / 725	145	●			

Any joined length available in pitch multiples from 500mm.
Minimum quantities apply to belts of 6, 8, 10, 12 or 16mm width
Min. length 650mm.
Min. qty. as per SS

BELT ORDER CODE EXAMPLE

Width	Profile / length	Specification
10	T5 / 455	Synchroflex
25	T5 / 1600	Brecoflex

TECHNICAL DATA SUMMARY

Potential capacity ..... 5 kW
Maximum speed ..... 40000 rpm
Maximum linear speed ..... 80 m/s
Allowable tensile load F_{zul} ..... 350N / 10mm of belt width
Weight per metre ..... 0.024 kg / 10mm of belt width
Full technical data ..... see page 113

STANDARD BELT AND PULLEY WIDTHS

Standard belt widths b	6	8	10	12	16	20	25	32	50
Pulley face width B	11	13	15	17	21	25	30	37	55
Stock pulley width B_N			21		27		36		

TYPE profile/length	No. of teeth Z	BRECO M / V SS	BRECO M / V DL	BRECOFLEX SS	BRECOFLEX DL
T5 / 750	150	●	●		
T5 / 755	151				
T5 / 765	153	●			
T5 / 780	156	●			
T5 / 800	160	●			
T5 / 815	163	●	●		
T5 / 840	168	●			
T5 / 860	172		●		
T5 / 900	180	●			
T5 / 920	184	●			
T5 / 925	185	●			
T5 / 940	188	●	●		
T5 / 945	189				
T5 / 990	198	●			
T5 / 1040	208				
T5 / 1075	215	●			
T5 / 1100	220	●	●		
T5 / 1160	232	●			
T5 / 1215	243	●			
T5 / 1315	263	●			
T5 / 1325	265		●		
T5 / 1380	276	●			
T5 / 1400	280				
T5 / 1500	300	●			
T5 / 1600	320				
T5 / 1700	340				
T5 / 1800	360				
T5 / 1900	380				
T5 / 2000	400				
T5 / 2120	424				
T5 / 2240	448				
T5 / 2360	472				
T5 / 2500	500				
T5 / 2650	530				
T5 / 2800	560				
T5 / 3000	600				
T5 / 3150	630				
T5 / 3350	670				
T5 / 3550	710				
T5 / 3750	750				
T5 / 4000	800				
T5 / 4250	850				
T5 / 4500	900				
T5 / 4750	950				
T5 / 5000	1000				
T5 / 5300	1060				
T5 / 5600	1120				
T5 / 6000	1200				
T5 / 6300	1260				
T5 / 6700	1340				
T5 / 7100	1420				
T5 / 7500	1500				

FLEX=endless, M=open length, V=joined
● Standard belt length, normally held in stock
■ Standard belt length, only available to special order.
✱ Intermediate lengths available between 1050-15000mm, only available to special order. Min. quantity will apply.

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Tooth shear strength, tension member tensile strength and flexibility determine belt dimensions. See p.102.

1) Tooth Shear Strength

The belt width (in cm) required to transmit known peripheral force F_U, torque M or power P without exceeding the maximum allowable tooth shear strength is calculated using any of the following formulae and the values from the table:

$$b = \frac{F_U}{z_e . F_{Uspez}} \qquad b = \frac{100 . M}{z_1 . z_e . M_{spez}} \qquad b = \frac{1000 . P}{z_1 . z_e . P_{spez}}$$

b = belt width (in cm)
F_{Uspez} = specific peripheral force(N/cm)
M_{spez} = specific torque (Ncm/cm)
P_{spez} = specific power (W/cm)

z_1 = No. of teeth on the small pulley
z_2 = No. of teeth in the large pulley
t = pitch in mm
a = centre distance in mm

z_e = No. of teeth in mesh (see below)
$z_{e\ max}$=12 for Brecoflex®,Synchroflex® or Breco® M
$z_{e\ max}$ = 6 for Breco® V timing belts

To calculate the number of teeth in mesh, z_e:

$$z_e = \frac{z_1}{180} . \text{arc cos} \frac{(z_2 - z_1).t}{2\pi a}$$

Specific Tooth Shear Strength Tables

Rpm, n (min⁻¹)	$F_{U\,spez}$ (N/cm)	M_{spez} (Ncm/cm)	P_{spez} (W/cm)	Rpm, n (min⁻¹)	$F_{U\,spez}$ (N/cm)	M_{spez} (Ncm/cm)	P_{spez} (W/cm)	Rpm, n (min⁻¹)	$F_{U\,spez}$ (N/cm)	M_{spez} (Ncm/cm)	P_{spez} (W/cm)
	24.00	1.910	0.000		15.58	1.240	1.428		12.16	0.967	3.241
	23.38	1.861	0.039		15.31	1.218	1.531		11.96	0.951	3.338
	22.86	1.819	0.076		15.06	1.198	1.632		11.77	0.936	3.530
	22.41	1.783	0.112		14.83	1.180	1.730		11.59	0.922	3.670
	22.01	1.751	0.147		14.61	1.162	1.826		11.42	0.909	3.807
	21.65	1.723	0.180		14.40	1.146	1.920		11.03	0.878	4.136
	20.28	1.614	0.338		14.21	1.131	2.013		10.68	0.850	4.450
	19.30	1.536	0.483		14.03	1.116	2.104		10.36	0.825	4.750
	18.55	1.476	0.618		13.85	1.102	2.193		10.07	0.802	5.037
	17.93	1.427	0.747		13.69	1.089	2.281		9.81	0.780	5.312
	17.41	1.385	0.870		13.38	1.065	2.453		9.56	0.761	5.577
	16.96	1.349	0.989		13.10	1.042	2.619		9.33	0.742	5.831
	16.56	1.318	1.104		12.84	1.021	2.781		9.11	0.725	6.076
	16.20	1.289	1.215		12.59	1.002	2.938		8.72	0.694	6.540
	15.88	1.263	1.323		12.37	0.984	3.092		8.37	0.666	6.970

For designs over the quoted speed, please contact our Technical Department

2) Tensile Strength of Tension Member

Allowable tensile load F_{zul} on belt cross section in Newtons

BELT WIDTH (in mm)	6	10	16	25	32	50	75	100
	180	330	570	930	1200	1920	2940	3930
Breco M	180	300	540	840	960	1260	–	–
Breco V	90	150	270	420	480	630	–	–
Brecoflex								

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