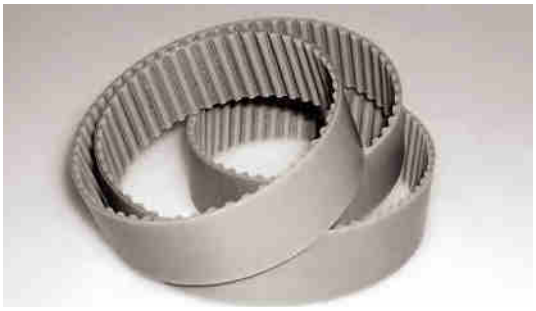
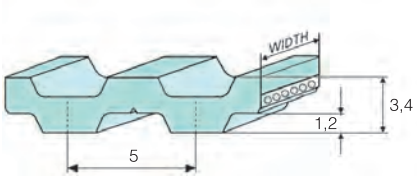
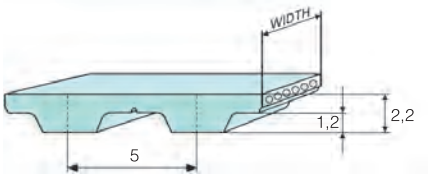
BELT CHARACTERISTICS

BELT WIDTH (mm)	6	8	10	12	16	20	25
PULLEY WIDTH B2 (mm)	12	13	15	17	21	25	30
BELT WEIGHT (gr/cm)	0,116	0,152	0,194	0,237	0,249	0,390	0,497



Standard compound: **Thermoset PU 88 ShA grey/green**
Standard cords: **Twisted Zinked Steel**
Standard belt width tolerance: **+/- 0,50 mm**
Standard sleeve width tolerance: **+/- 10 mm**
Standard thickness tolerance: **+/- 0,15 mm**
Special version belts on request, **see page 24**





BELT LENGTHS AND TOLERANCES

Length (mm)	120	150	165	180	185	200	210	215	220	225	245	250	255	260	270	275	280	295	300	305			
No. of teeth	24	30	33	36	37	40	42	43	44	45	49	50	51	52	54	55	56	59	60	61			
Length tolerance (mm)												+/-0,28											
Length (mm)	**330**	**340**	**350**	**355**	**365**	**375**	**390**	**395**	**400**	**410**	**420**	**425**	**440**	**445**	**450**	**455**	**460**	**475**	**480**	**500**	**510**	**515***	**525**
No. of teeth	66	68	70	71	73	75	78	79	80	82	84	85	88	89	90	91	92	95	96	100	102	103	105
Length tolerance (mm)				+/-0,32											+/-0,36								
Length (mm)	**545**	**550**	**560***	**575**	**590**	**600**	**610**	**620**	**630**	**640**	**650**	**660**	**675**	**690**	**700**	**720**	**725**	**750**	**765**	**780**	**800**	**815**	
No. of teeth	109	110	112	115	118	120	122	124	126	128	130	132	135	138	140	144	145	150	153	156	160	163	
Length tolerance (mm)				+/-0,42												+/-0,48							
Length (mm)	**830**	**840**	**850**	**860**	**885**	**900**	**920**	**940**	**990**	**1000**	**1075**	**1100**	**1130**	**1160**	**1200**	**1215**	**1275**	**1280**	**1315**	**1355**	**1380**	**1440**	
No. of teeth	166	168	170	172	177	180	184	188	198	200	215	220	226	232	240	243	255	256	263	271	276	288	
Length tolerance (mm)				+/-0,56								+/-0,64							+/-0,76				
Length (mm)	**1470**	**1500**	**1580**	**1690**	**1955**																		
No. of teeth	294	300	316	338	391																		
Length tolerance (mm)	+/-0,76		+/-0,88																				

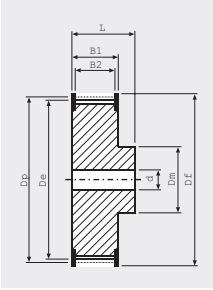
DOUBLETOOTHED BELT LENGTHS

Length (mm)	410	460	515	525	550	590	620	650	685	700	750	815	840	860	940	1075	1100
No. of teeth	82	92	103	105	110	118	124	130	137	140	150	163	168	172	188	215	220
Length tolerance (mm)		+/-0,36			+/-0,42				+/-0,48				+/-0,56			+/-0,64	

TRANSMITTABLE POWER (kW/cm of tooth in mesh)

n\z	10	12	14	16	18	20	24	28	36	42	48	54	60
100	0,0018	0,0022	0,0025	0,0029	0,0032	0,0036	0,0043	0,0050	0,0065	0,0076	0,0086	0,0097	0,0108
200	0,0034	0,0041	0,0047	0,0054	0,0061	0,0068	0,0081	0,0095	0,0122	0,0142	0,0162	0,0183	0,0203
600	0,0087	0,0104	0,0122	0,0139	0,0157	0,0174	0,0209	0,0244	0,0313	0,0365	0,0418	0,0470	0,0522
1000	0,0132	0,0159	0,0185	0,0212	0,0238	0,0265	0,0318	0,0370	0,0476	0,0556	0,0635	0,0714	0,0794
1500	0,0183	0,0219	0,0256	0,0292	0,0329	0,0365	0,0438	0,0511	0,0657	0,0767	0,0876	0,0986	0,1096
2000	0,0228	0,0274	0,0319	0,0365	0,0410	0,0456	0,0547	0,0638	0,0821	0,0958	0,1094	0,1231	0,1368
3000	0,0309	0,0371	0,0433	0,0494	0,0556	0,0618	0,0742	0,0865	0,1112	0,1298	0,1483	0,1669	0,1854
4000	0,0381	0,0457	0,0533	0,0610	0,0686	0,0762	0,0914	0,1067	0,1372	0,1600	0,1829	0,2057	0,2286
5000	0,0450	0,0540	0,0630	0,0720	0,0810	0,0900	0,1080	0,1260	0,1620	0,1889	0,2159	0,2429	0,2699
8000	0,0645	0,0774	0,0903	0,1032	0,1160	0,1289	0,1547	0,1805	0,2321	0,2708	0,3095	0,3481	0,3868

PULLEYS (for more details see our pulleys catalogue)



No. teeth	Dp	De
10	15,92	15,09
12	19,10	18,27
14	22,28	21,45
15	23,87	23,04
16	25,46	24,64
18	28,65	27,82
19	30,24	29,41
20	31,83	31,00
22	35,01	34,19
24	38,20	37,37
25	39,79	38,96
26	41,38	40,55

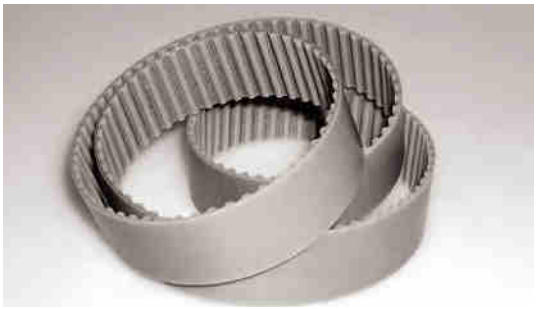
No. teeth	Dp	De
27	42,97	42,14
28	44,56	43,73
30	47,75	46,92
32	50,93	50,10
36	57,30	56,47
40	63,66	62,93
42	66,85	66,02
44	70,03	69,20
48	76,39	75,57
54	85,94	85,09
60	95,49	94,67

*Available also without GAP

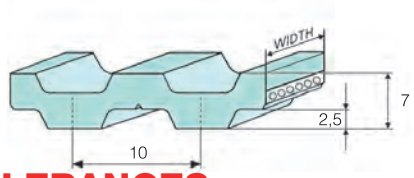
MEGAPOWER 2
T10 - T10DL

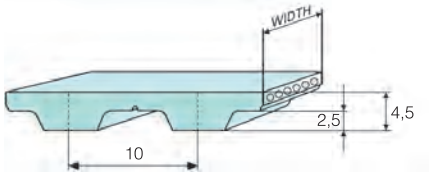
BELT CHARACTERISTICS

BELT WIDTH (mm)	10	12	16	20	25	32	50	75
PULLEY WIDTH B2 (mm)	15	17	21	25	30	37	56	80
BELT WEIGHT (gr/cm)	0,494	0,504	0,683	0,861	1,082	1,386	2,174	3,276



Standard compound: **Thermoset PU 88 ShA grey/green**
Standard cords: **Twisted Zinked Steel**
Standard belt width tolerance: **+/- 0,50 mm**
Standard sleeve width tolerance: **+/- 10 mm**
Standard thickness tolerance: **+/- 0,30 mm**
Special version belts on request, **see page 24**





BELT LENGTHS AND TOLERANCES

Length (mm)	260	320	340	370	390	400	410	440	450	480	500	530	550	560	600*	610	630*	650	660	680	690
No. of teeth	26	32	34	37	39	40	41	44	45	48	50	53	55	56	60	61	63	65	66	68	69
Length tolerance (mm)			+/-0,32					+/-0,36							+/-0,42					+/-0,48	

Length (mm)	700	720*	730	750	780	800*	810	840	850	880	890	900*	910	920*	950	960	970	980	1000	1010	1050
No. of teeth	70	72	73	75	78	80	81	84	85	88	89	90	91	92	95	96	97	98	100	101	105
Length tolerance (mm)			+/-0,48									+/-0,56								+/-0,64	

Length (mm)	1080	1100	1110	1140	1150	1200	1210	1240	1250	1300	1320	1350	1390	1400	1420	1440	1450	1460	1500	1560
No. of teeth	108	110	111	114	115	120	121	124	125	130	132	135	139	140	142	144	145	146	150	156
Length tolerance (mm)					+/- 0,64											+/- 0,76				

Length (mm)	1600	1610	1700	1750	1780	1800	1880	1960	2250
No. of teeth	160	161	170	175	178		188	196	225
Length tolerance (mm)				+/- 0,88					+/- 1,04

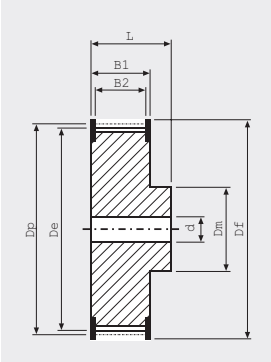
DOUBLETOOTHED BELT LENGTHS

Length (mm)	260	530	630	660	700	720	800	840	900	920	980	1010	1100	1150	1210	1240	1250	1320	1350	1420	1500	1610	1800	1880
No. of teeth	26	53	63	66	70	72	80	84	90	92	98	101	110	115	121	124	125	132	135	142	150	161		188
Length tolerance (mm)	+/-0,28		+/-0,42		+/-0,48			+/-0,56				+/-0,64						+/-0,76				+/- 0,88		

TRANSMITTABLE POWER (kW/cm of tooth in mesh)

n\z	12	14	16	18	20	22	24	26	28	30	36	48	54
100	0,0090	0,0104	0,0119	0,0134	0,0149	0,0164	0,0179	0,0194	0,0209	0,0224	0,0269	0,0358	0,0403
200	0,0166	0,0193	0,0221	0,0249	0,0276	0,0304	0,0331	0,0359	0,0387	0,0414	0,0497	0,0663	0,0746
600	0,0413	0,0482	0,0550	0,0619	0,0688	0,0757	0,0826	0,0894	0,0963	0,1032	0,1238	0,1651	0,1858
1000	0,0614	0,0717	0,0819	0,0922	0,1024	0,1126	0,1229	0,1331	0,1434	0,1536	0,1843	0,2458	0,2765
1500	0,0829	0,0967	0,1106	0,1244	0,1382	0,1520	0,1658	0,1797	0,1935	0,2073	0,2488	0,3317	0,3731
2000	0,1015	0,1184	0,1354	0,1523	0,1692	0,1861	0,2030	0,2200	0,2369	0,2538	0,3046	0,4061	0,4568
3000	0,1330	0,1551	0,1773	0,1994	0,2216	0,2438	0,2659	0,2881	0,3102	0,3324	0,3989	0,5318	0,5983
4000	0,1589	0,1854	0,2118	0,2383	0,2648	0,2913	0,3178	0,3442	0,3707	0,3972	0,4766	0,6355	0,7150
5000	0,1806	0,2107	0,2408	0,2709	0,3010	0,3311	0,3612	0,3913	0,4214	0,4515	0,5418	0,7224	0,8127
8000	0,2398	0,2798	0,3198	0,3597	0,3997	0,4397	0,4796	0,5196	0,5596	0,5995	0,7194		

PULLEYS (for more details see our pulleys catalogue)



No. teeth	Dp	De
12	38,20	36,25
14	44,56	42,71
15	47,75	45,90
16	50,93	49,08
18	57,30	55,45
19	60,48	58,63
20	63,66	61,81
22	70,03	68,18
24	76,39	74,55
25	79,58	77,73
26	82,76	80,91

No. teeth	Dp	De
27	85,94	84,10
28	89,13	87,28
30	95,49	93,65
32	101,86	100,01
36	114,59	112,74
40	127,32	125,48
44	140,06	138,21
48	152,79	150,94
54	171,89	170,03
60	190,99	189,14

*Available also without GAP

MEGAPOWER FEASIBILITY TABLE

	MXL	XL	L	H	T2	T2,5	T5	T10	T5DL	T10DL	AT5	AT10
Min no. teeth pulley st. cords	10	10	15	14	10	10	10	12	10	12	15	15
Min outside idler dia	18	30	60	80	18	18	30	60	30	60	60	120
Min inside idler dia	20	30	60	60	20	20	30	60	30	60	25	50
Min no. teeth pulley HF cords	-	-	-	-	-	-	10	12	10	12	12	15
Min outside idler dia	-	-	-	-	-	-	30	50	30	50	40	80
Min inside idler dia	-	-	-	-	-	-	30	50	30	50	25	50
Min no. teeth pulley HP cords	-	-	-	-	-	15	15	15	-	-	25	25
Min outside idler dia	-	-	-	-	-	30	40	100	-	-	60	150
Min inside idler dia	-	-	-	-	-	30	60	100	-	-	40	80
Min no. teeth pulley HPF cords	-	-	-	-	-	-	12	14	-	-	20	16
Min outside idler dia	-	-	-	-	-	-	30	80	-	-	40	100
Min inside idler dia	-	-	-	-	-	-	30	80	-	-	40	60
Min no. teeth pulley kevlar cords	12	10	15	14	12	12	12	15	12	15	15	15
Min outside idler dia	20	30	60	80	20	20	30	60	30	60	60	120
Min inside idler dia	20	20	60	60	20	20	30	60	30	60	25	50
Min no. teeth pulley fiberglass cords	-	13	18	18	-	-	15	15	-	-	-	-
Min outside idler dia	-	35	65	90	-	-	40	70	-	-	-	-
Min inside idler dia	-	35	65	65	-	-	40	70	-	-	-	-
Min no. teeth pulley polyester cords	12	10	-	-	-	12	12	-	-	-	-	-
Min outside idler dia	20	30	-	-	-	20	30	-	-	-	-	-
Min inside idler dia	20	20	-	-	-	20	30	-	-	-	-	-
Min no. teeth pulley stainless steel cords	-	13	18	18	-	-	15	15	15	15	15	19
Min outside idler dia	-	35	65	80	-	-	40	70	40	70	65	110
Min inside idler dia	-	35	65	65	-	-	40	70	40	70	60	110
Steel cords	O	O	O	O	O	O	O	O	O	O	O	O
High Flexibility cords	X	X	X	X	X	X	M	M	M	M	M	M
High Performance cords	X	X	X	X	X	M	M	M	X	X	M	M
High Performance Flexibility	X	X	X	X	X	X	M	M	X	X	M	M
Kevlar cords	R	R	R	M	M	M	M	M	M	M	M	M
Fiberglass cords	X	R	M	M	X	X	M	M	X	X	X	X
Polyester cords	M	M	X	X	M	M	M	X	X	X	X	X
Stainless steel cords	X	M	M	M	X	X	M	M	M	M	M	M
Pu yellow coating 50 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
Porol mousse 10 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
Linatex 42 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
Tenax 40 / 45 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
White alimentary rubber 70 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
Neoprene rubber 70 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
Gummy correx 48 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
NBR 70 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
Hypalon 60 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
Honey comb 45 ShA cover	M	M	M	M	M	M	M	M	X	X	M	M
FDA compound	M	M	M	M	M	M	M	M	M	M	M	M

O = Ex stock
R = On request without minimum quantity
M = On request with minimum quantity
X = Not available

USEFUL FORMULAS AND CONVERSION TABLE

SPEED

$$V = \frac{d_1 \cdot n_1}{19100} \qquad n_1 = \frac{V \cdot 19100}{d_1} \qquad d_1 = \frac{V \cdot 19100}{n_1}$$

V: peripheral speed [m/s]
n_1: rotation speed [RPM]
d_1: pulley diameter [mm]

FORCES AND TORQUE

$$F_u = \frac{19{,}1 \cdot 10^6 \cdot P}{d_1 \cdot n_1} \qquad F_u = \frac{2000 \cdot M}{d_1} \qquad F_u = \frac{P \cdot 10^3}{d_1}$$

$$M_t = \frac{P \cdot 9550}{n_1} \qquad M_t = \frac{F_u \cdot d_1}{2000} \qquad M_t = \frac{P \cdot d_1}{2 \cdot V}$$

F_u: peripheral force [N]
M_t: drive torque [Nm]
P: power [kW]
n_1: rotation speed [RPM]
d_1: pulley diameter [mm]
V: peripheral speed [m/s]

SPEED

$$P = \frac{F_u \cdot d_1 \cdot n_1}{19{,}1 \cdot 10^6} \qquad P = \frac{M_t \cdot n_1}{9550} \qquad P = \frac{F_u \cdot V}{1000}$$

P: power [kW]
F_u: peripheral force [N]
M_t: drive torque [Nm]
n_1: rotation speed [RPM]
d_1: pulley diameter [mm]

To convert from	To	Multiply by
CV	HP	0,9863201
CV	kcal/h	63,24151
CV	W	735,4988
CV	kW	0,7354988
CV	kgf • m/s	75
CV	lbf • ft/s	542,476
HP	CV	1,01387
HP	kcal/h	641,1865
HP	W	745,6999
HP	kW	0,7456999
HP	kgf • m/s	76,04022
HP	lbf • ft/s	550
in	m	0,0254
in	cm	2,54
in	mm	25,4
in	ft	0,083
in^2	m^2	0,00064516
in^2	cm^2	6,4516
in^2	mm^2	645,16
in^2	ft^2	0,006944444
in^3	m^3	$1{,}63871 \cdot 10^{-5}$
in^3	cm^3	16,38706
in^3	mm^3	16387,06
in^3	ft^3	0,000578704

To convert from	To	Multiply by
J	CV • h	$3{,}77673 \cdot 10^{-7}$
J	HP • h	$3{,}72506 \cdot 10^{-7}$
J	kWh	$2{,}77778 \cdot 10^{-7}$
kg	lb	2,204623
kgf	N	9,80665
kgf	lbf	2,204623
kgf • m/s	CV	0,01333333
kgf • m/s	W	9,80665
kgf • m/s	kW	0,00980665
kW	CV	1,359622
kW	kcal/h	859,8452
kW	W	1000
kW	kgf • m/s	101,9716
kW	lbf • ft/s	737,5621
lb	kg	0,4535924
lb	kgf	0,4535924
lb	N	4,448222
N	kgf	0,1019716
N	lbf	0,2248089
W	CV	0,001359622
W	HP	0,001341022
W	kcal/h	0,8598452
W	kW	0,001
W	kgf • m/s	0,1019716
W	lbf • ft/s	0,7375621