



DRIVE DESIGN
AND TECHNICAL MANUAL

**TIMING BELT METRIC TOOTH
PROFILE DOUBLE SIDED**

**DRIVE BELT
TECHNOLOGY .**

SECTION 2.1.8 | TIMING BELTS | RUBBER BELTS

DIN 7721 - ISO 13050 / IP27 RMA - MPTA

TIMING BELT METRIC TOOTH PROFILE DOUBLE SIDED D/T5 AND D/T10

FEATURES

From both sides, the rubber teeth will transmit equal power. The special polyamide fabric will allow the belt to drive from both sides, while ensuring low friction, resistance to abrasion, and low noise.

We can produce our double-sided timing belts in 2 arrangements: symmetrical or overlapping

Those belts are well suited for contra-rotating drives thanks to their double symmetrical opposite teeth.

Such drive can allow high load-carrying power and smooth running operation."



Temperature range from -30°C up to +100°C

Moderate resistance to common oils, good resistance to heat and cold environment

Low noise, high speed ratio, high belt speed

Meets RoHS and REACH requirements

Best suited for light load drives and medium duty applications.

STRUCTURE DETAILS

Rubber teeth and backing

Made of highly grade of Chloroprene (CR) formulated in Germany, this polychloroprene teeth and backing rubber is robustly bonded to the tensile cord and fabric to form precisely the teeth to offer perfect gearing, low noise and great fatigue resistance.

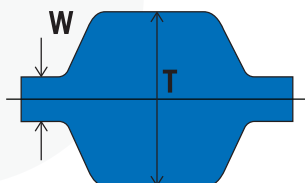
Tensile cord

Very low stretch glass fiber produced in Japan, our glass fiber are helically wound on the width, lateral stability is ensured by computerized building appliance of Z and S cords perfectly paired.

Fabric facing

Featuring very low friction, low noise and long lasting protection of the teeth rubber, our polyamid fabric protects your belt and enable high power transmission.

Dimensions



ISO / CD 17396	D-T5	D-T10
Pitch (mm)	5,0	10,0
Double tooth Height (mm)	3,4	7,0
Tooth Width (mm)	2,65	5,30
Belt Thickness between teeth (mm)	1,0	2,0
Foot radius (mm)	0,40	0,60
Head radius (mm)	0,40	0,60
Belt Weight per meter per 100 mm width (Kg/m)	0,43	0,80
Teeth range (min-max)	132 - 815	66 - 456
Pitch length (mm)	660 - 4075	660 - 4560

Applications



Logistic/
Movement



Packaging

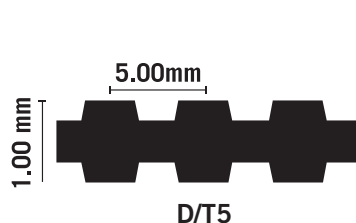
Marking

CMW	450-D/T5	batch code/worker code + position in sleeve
CMW	450-D/T5	batch code/worker code + position in sleeve
CMW	450-D/T5	batch code/worker code + position in sleeve
CMW	450-D/T5	batch code/worker code + position in sleeve
CMW	450-D/T5	batch code/worker code + position in sleeve
CMW	450-D/T5	batch code/worker code + position in sleeve

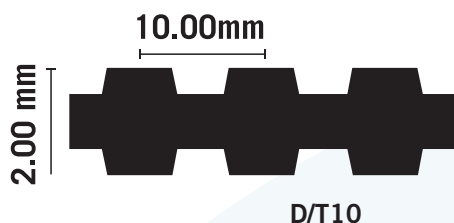
Product Codification

Example	P-1120-D/T10-200 means	P	1120	D/T10	200
		Performance line	Length in mm / 1120 mm	Section T10 Pitch 10 mm	Width 200 mm

2.1.8 TIMING BELT METRIC TOOTH PROFILE DOUBLE SIDED



D/T5



D/T10

Standard width

mm
15
20
25
30
40
50

Standard Belt Range

CMW Product code	GTIN (EAN) code	Number of teeth	Pitch Length Lp (mm)
P-660-D/T5-180	3666445062538	132	660
P-690-D/T5-180	3666445062521	138	690
P-705-D/T5-180	3666445062514	141	705
P-710-D/T5-180	3666445062507	142	710
P-720-D/T5-180	3666445062491	144	720
P-750-D/T5-180	3666445062484	150	750
P-755-D/T5-180	3666445062477	151	755
P-780-D/T5-180	3666445062460	156	780
P-790-D/T5-180	3666445062453	158	790
P-800-D/T5-180	3666445062446	160	800
P-810-D/T5-180	3666445062439	162	810
P-815-D/T5-180	3666445062422	163	815
P-840-D/T5-180	3666445062415	168	840
P-850-D/T5-180	3666445062408	170	850
P-875-D/T5-180	3666445062392	175	875
P-880-D/T5-180	3666445062385	176	880
P-885-D/T5-180	3666445062378	177	885
P-890-D/T5-180	3666445062361	178	890
P-900-D/T5-180	3666445062354	180	900
P-910-D/T5-180	3666445062347	182	910
P-930-D/T5-180	3666445062330	186	930
P-940-D/T5-180	3666445062323	188	940
P-990-D/T5-180	3666445062316	198	990
P-1000-D/T5-180	3666445062309	200	1000
P-1035-D/T5-180	3666445062293	207	1035
P-1050-D/T5-180	3666445062286	210	1050
P-1100-D/T5-180	3666445062279	220	1100
P-1140-D/T5-180	3666445062262	228	1140
P-1200-D/T5-180	3666445062255	240	1200
P-1215-D/T5-180	3666445062248	243	1215
P-1275-D/T5-180	3666445062231	255	1275
P-1380-D/T5-180	3666445062224	276	1380
P-1420-D/T5-180	3666445062217	284	1420
P-1500-D/T5-180	3666445062200	300	1500
P-1520-D/T5-180	3666445062194	304	1520
P-1630-D/T5-180	3666445062187	326	1630
P-1740-D/T5-180	3666445062170	348	1740
P-1820-D/T5-180	3666445062163	364	1820
P-1900-D/T5-180	3666445062156	380	1900
P-1905-D/T5-180	3666445062149	381	1905
P-1940-D/T5-180	3666445062132	388	1940
P-1960-D/T5-180	3666445062125	392	1960
P-2000-D/T5-180	3666445062118	400	2000
P-2280-D/T5-180	3666445062101	456	2280
P-3820-D/T5-180	3666445062095	764	3820
P-4075-D/T5-180	3666445062088	815	4075

Standard Belt Range

CMW Product code	GTIN (EAN) code	Number of teeth	Pitch Length Lp (mm)
P-660-D/T10-180	3666445060893	66	660
P-670-D/T10-180	3666445060886	67	670
P-680-D/T10-180	3666445060879	68	680
P-690-D/T10-180	3666445060862	69	690
P-700-D/T10-180	3666445060855	70	700
P-710-D/T10-180	3666445060848	71	710
P-720-D/T10-180	3666445060831	72	720
P-730-D/T10-180	3666445060824	73	730
P-740-D/T10-180	3666445060817	74	740
P-750-D/T10-180	3666445060800	75	750
P-760-D/T10-180	3666445060794	76	760
P-770-D/T10-180	3666445060787	77	770
P-780-D/T10-180	3666445060770	78	780
P-790-D/T10-180	3666445060763	79	790
P-800-D/T10-180	3666445060756	80	800
P-810-D/T10-180	3666445060749	81	810
P-820-D/T10-180	3666445060732	82	820
P-830-D/T10-180	3666445060725	83	830
P-840-D/T10-180	3666445060718	84	840
P-850-D/T10-180	3666445060701	85	850
P-860-D/T10-180	3666445060695	86	860
P-870-D/T10-180	3666445060688	87	870
P-880-D/T10-180	3666445060671	88	880
P-890-D/T10-180	3666445060664	89	890
P-900-D/T10-180	3666445060657	90	900
P-910-D/T10-180	3666445060640	91	910
P-920-D/T10-180	3666445060633	92	920
P-930-D/T10-180	3666445060626	93	930
P-940-D/T10-180	3666445060619	94	940
P-950-D/T10-180	3666445060602	95	950
P-960-D/T10-180	3666445060596	96	960
P-970-D/T10-180	3666445060589	97	970
P-980-D/T10-180	3666445060572	98	980
P-1000-D/T10-180	3666445060565	100	1000
P-1010-D/T10-180	3666445060558	101	1010
P-1020-D/T10-180	3666445060541	102	1020
P-1030-D/T10-180	3666445060534	103	1030
P-1040-D/T10-180	3666445060527	104	1040
P-1050-D/T10-180	3666445060510	105	1050
P-1060-D/T10-180	3666445060503	106	1060
P-1080-D/T10-180	3666445060497	108	1080
P-1100-D/T10-180	3666445060480	110	1100
P-1110-D/T10-180	3666445060473	111	1110
P-1120-D/T10-180	3666445060466	112	1120
P-1140-D/T10-180	3666445060459	114	1140
P-1150-D/T10-180	3666445060442	115	1150
P-1200-D/T10-180	3666445060435	120	1200
P-1210-D/T10-180	3666445060428	121	1210
P-1240-D/T10-180	3666445060411	124	1240
P-1250-D/T10-180	3666445060404	125	1250
P-1260-D/T10-180	3666445060398	126	1260
P-1280-D/T10-180	3666445060381	128	1280
P-1300-D/T10-180	3666445060374	130	1300
P-1320-D/T10-180	3666445060367	132	1320
P-1350-D/T10-180	3666445060350	135	1350
P-1390-D/T10-180	3666445060343	139	1390
P-1400-D/T10-180	3666445060336	140	1400
P-1410-D/T10-180	3666445060329	141	1410
P-1420-D/T10-180	3666445060312	142	1420
P-1440-D/T10-180	3666445060305	144	1440
P-1460-D/T10-180	3666445060299	146	1460
P-1470-D/T10-180	3666445060282	147	1470
P-1480-D/T10-180	3666445060275	148	1480
P-1500-D/T10-180	3666445060268	150	1500

2.1.8 TIMING BELT METRIC TOOTH PROFILE DOUBLE SIDED

Standard Belt Range

CMW Product code	GTIN (EAN) code	Number of teeth	Pitch Length Lp (mm)
P-1520-D/T10-180	3666445060251	152	1520
P-1560-D/T10-180	3666445060244	156	1560
P-1600-D/T10-180	3666445060237	160	1600
P-1610-D/T10-180	3666445060220	161	1610
P-1630-D/T10-180	3666445060213	163	1630
P-1640-D/T10-180	3666445060206	164	1640
P-1690-D/T10-180	3666445060190	169	1690
P-1700-D/T10-180	3666445060183	170	1700
P-1750-D/T10-180	3666445060176	175	1750
P-1780-D/T10-180	3666445060169	178	1780
P-1800-D/T10-180	3666445060152	180	1800
P-1880-D/T10-180	3666445060145	188	1880
P-1960-D/T10-180	3666445060138	196	1960
P-1980-D/T10-180	3666445060121	198	1980
P-2000-D/T10-180	3666445060114	200	2000
P-2100-D/T10-180	3666445060107	210	2100
P-2160-D/T10-180	3666445060091	216	2160
P-2220-D/T10-180	3666445060084	222	2220
P-2230-D/T10-180	3666445060077	223	2230
P-2240-D/T10-180	3666445060060	224	2240
P-2250-D/T10-180	3666445060053	225	2250
P-2300-D/T10-180	3666445060046	230	2300
P-2350-D/T10-180	3666445060039	235	2350
P-2380-D/T10-180	3666445060022	238	2380
P-2480-D/T10-180	3666445060015	248	2480
P-2500-D/T10-180	3666445060008	250	2500
P-2510-D/T10-180	3666445059996	251	2510
P-2600-D/T10-180	3666445059989	260	2600
P-2650-D/T10-180	3666445059972	265	2650
P-2800-D/T10-180	3666445059965	280	2800
P-3000-D/T10-180	3666445059958	300	3000
P-3100-D/T10-180	3666445059941	310	3100
P-3110-D/T10-180	3666445059934	311	3110
P-3500-D/T10-180	3666445059927	350	3500
P-3800-D/T10-180	3666445059910	380	3800
P-3960-D/T10-180	3666445059903	396	3960
P-4050-D/T10-180	3666445059897	405	4050
P-4400-D/T10-180	3666445059880	440	4400
P-4650-D/T10-180	3666445059873	465	4650

POWER RATING

2.1.7 TIMING BELT METRIC TOOTH PROFILE

Section T5 / 10 mm

r.p.m. of small Pulley	Number of teeth on small pulley z_k									
	Number of teeth (T)	12	14	16	18	20	22	24	28	30
n_k (min ⁻¹)	Pitch ϕd_w (mm)									
	Pitch diameter (mm)	19.10	22.28	25.46	28.65	31.83	35.01	38.20	44.56	47.75
100		11	12	14	16	18	20	21	28	23
200		21	24	29	32	36	39	43	55	45
300		31	37	42	47	52	57	62	80	66
400		41	47	54	61	67	74	81	104	86
500		50	58	66	74	83	91	99	127	105
600		58	67	78	87	97	106	116	149	123
700		66	78	89	100	110	121	133	171	141
800		74	87	99	111	123	137	149	191	158
900		82	96	109	122	137	150	164	210	173
1000		89	104	119	134	149	163	179	229	189
1100		96	112	129	145	160	176	193	247	204
1200		103	120	138	155	171	189	206	265	219
1300		109	128	146	164	183	201	219	282	233
1400		116	136	155	174	194	212	232	297	246
1500		122	143	163	184	204	224	245	313	259
1600		129	150	171	193	213	235	256	329	272
1700		134	156	179	201	223	246	268	344	285
1800		140	163	187	210	233	256	279	359	297
1900		146	169	194	218	243	266	291	374	309
2000		151	176	201	226	252	276	302	387	320
2200		161	189	215	243	269	296	323	415	343
2400		172	201	230	258	287	315	344	442	365
2600		183	212	243	273	304	335	364	468	387
2800		193	224	256	289	320	353	385	494	408
3000		202	236	269	303	338	371	405	519	429
3200		212	248	283	318	354	389	424	544	450
3400		222	259	296	333	370	407	444	570	471
3600		232	270	309	348	386	424	463	595	491
3800		241	282	321	362	402	442	482	619	512
4000		251	293	334	375	417	459	501	643	531
4200		260	303	346	390	432	476	519	666	551
4400		268	313	358	403	448	493	538	689	569
4600		277	323	369	415	462	508	554	711	588
4800		285	333	380	427	475	522	570	732	605
5000		293	342	390	439	488	537	584	751	620
5500				410	461	512	563	615	789	652
6000				420	472	525	577	629	808	668
6500				416	468	520	572	624	800	661
7000				393	442	491	540	589	755	624
7500				344	387	429	473	516	662	547
8000					296	328	362	395	506	418
8500					160	179	196	214	274	226

POWER RATING

2.1.7 TIMING BELT METRIC TOOTH PROFILE

Section T10 / 10 mm

r.p.m. of small Pulley	Number of teeth on small pulley z_k														
	12	14	16	18	20	22	24	26	28	30	32	36	40	44	48
n_k (min ⁻¹)	Pitch ϕd_w (mm)														
	38.20	44.56	50.93	57.30	63.66	70.03	76.39	82.76	89.12	95.49	101.86	114.59	127.32	140.06	152.79
0100	0036	0046	0047	0053	0059	0065	0071	0077	0083	0089	0095	0106	0118	0130	0142
0200	0069	0089	0093	0104	0115	0128	0139	0150	0161	0173	0185	0208	0231	0254	0277
0300	0102	0130	0136	0152	0169	0186	0203	0220	0237	0254	0270	0305	0339	0372	0406
0400	0133	0169	0176	0199	0220	0243	0264	0287	0309	0330	0353	0397	0441	0486	0529
0500	0162	0208	0215	0243	0269	0297	0323	0350	0377	0404	0431	0486	0539	0593	0647
0600	0190	0243	0253	0285	0316	0348	0379	0411	0443	0474	0506	0569	0632	0696	0759
0700	0217	0278	0289	0325	0361	0398	0434	0469	0506	0542	0578	0651	0722	0795	0867
0800	0243	0312	0323	0364	0404	0445	0486	0525	0566	0607	0647	0728	0809	0889	0970
0900	0267	0343	0357	0401	0446	0491	0534	0579	0624	0668	0713	0803	0891	0980	1070
1000	0292	0374	0389	0437	0486	0534	0582	0631	0679	0728	0777	0874	0971	1068	1165
1100	0314	0403	0419	0471	0524	0576	0628	0681	0733	0785	0838	0942	1048	1153	1258
1200	0337	0432	0449	0505	0561	0617	0673	0729	0785	0842	0898	1010	1122	1234	1346
1300	0358	0459	0477	0537	0597	0656	0716	0775	0835	0895	0955	1074	1193	1313	1432
1400	0378	0486	0505	0568	0631	0695	0758	0821	0883	0947	1010	1136	1263	1389	1515
1500	0399	0512	0531	0599	0665	0731	0798	0864	0931	0998	1064	1196	1330	1463	1595
1600	0418	0537	0558	0628	0698	0767	0837	0907	0977	1047	1116	1256	1395	1535	1674
1700	0438	0562	0583	0657	0729	0803	0875	0949	1021	1094	1167	1313	1459	1605	1751
1800	0456	0586	0609	0684	0761	0836	0913	0989	1065	1141	1217	1369	1522	1674	1826
1900	0474	0609	0633	0712	0792	0870	0950	1028	1108	1187	1266	1424	1582	1741	1899
2000	0493	0633	0657	0740	0821	0904	0985	1068	1150	1232	1314	1478	1642	1806	1971
2200	0527	0678	0704	0792	0879	0968	1056	1143	1231	1319	1408	1583	1760	1935	2111
2400	0562	0721	0749	0843	0936	1030	1124	1217	1311	1405	1498	1685	1873	2060	2247
2600	0596	0764	0794	0893	0992	1091	1190	1289	1389	1488	1587	1786	1984	2183	2381
2800	0616	0806	0837	0942	1047	1152	1257	1361	1466	1570	1675	1884	2094	2303	2512
3000		0848	0880	0990	1101	1211	1321	1431	1541	1651	1762	1982	2202	2423	2642
3200		0889	0924	1039	1155	1270	1385	1500	1617	1732	1847	2078	2309	2540	2771
3400		0930	0966	1087	1208	1328	1449	1570	1691	1812	1932	2174	2415	2657	2899
3600		0971	1008	1134	1261	1386	1513	1638	1765	1890	2017	2268	2520	2772	3024
3800		1011	1050	1181	1313	1443	1575	1706	1837	1969	2099	2362	2624	2887	3150
4000			1090	1227	1364	1499	1636	1773	1908	2045	2182	2454	2726	3000	3272
4200			1130	1272	1414	1554	1696	1837	1979	2120	2261	2544	2826	3109	3392
4400			1169	1316	1462	1608	1754	1900	2046	2192	2339	2631	2923	3215	3508
4600			1207	1357	1508	1659	1809	1960	2111	2261	2412	2714	3016	3317	3619
4800			1241	1396	1551	1706	1862	2017	2172	2328	2483	2793	3103	3413	3723
5000			1273	1432	1591	1751	1910	2070	2229	2388	2547	2865	3183	3502	3820
5200			1303	1465	1628	1791	1953	2117	2279	2442	2605	2930	3256	3581	3907
5400			1327	1493	1660	1825	1991	2157	2323	2489	2655	2987	3318	3651	3983
5600			1347	1516	1685	1853	2022	2190	2358	2527	2696	3032	3369	3706	4044
5800			1363	1533	1703	1874	2044	2214	2385	2555	2725	3066	3407	3747	4087
6000			1371	1542	1714	1885	2056	2228	2399	2570	2742	3084	3427	3770	4112



Your expert in DRIVE BELT TECHNOLOGY

CMW Power Transmission designs, manufactures and distributes rubber and polyurethane drive belts in wide variety of industrial and agricultural applications to become your favourite power transmission brand.

CMW Power Transmission SAS

21 Avenue de l'Industrie, 69960 Corbas, France
+33 4 28 29 29 82 | **email** info@cmwpt.com