



Gates industrial power transmission
product catalogue



Gates belt drive systems - No. 1 choice of industry

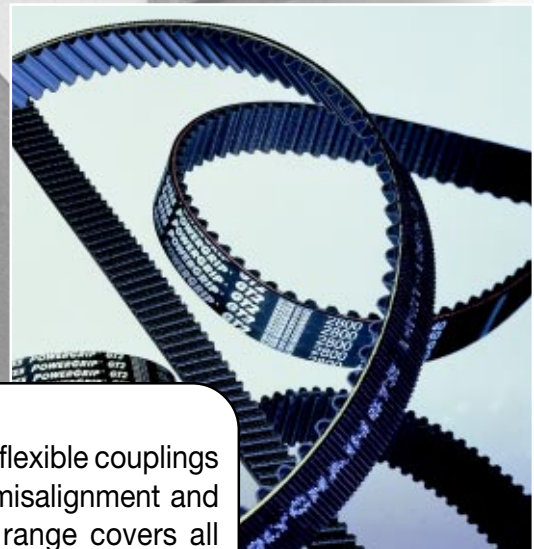
High performance and comprehensive product range

Gates' continuous product development policy has resulted in a comprehensive programme of V-belts, synchronous belts, tensioners, pulleys, flexible couplings and complete drive systems covering a multitude of applications.



Premium belts such as the raw edge, narrow section Quad-Power II and Super HC[®] MN V-belts and the wrapped classical section Hi-Power[®] V-belts ensure excellent performance on heavy-duty industrial drives. All Gates' industrial V-belts feature high modulus polyester cords that exhibit extremely low stretch. Leading-edge technology delivering the advantages every end-user is looking for: less maintenance and greater cost savings.

The latest additions in Gates synchronous belt drive systems are two re-engineered belt lines. The PowerGrip[®] GT2 rubber synchronous belt is the performance choice for high-speed (above 500 rpm) drive applications and is now also available as double-sided Twin Power[®] GT2 belt. The powerful Poly Chain[®] GT2 polyurethane belt handles low-speed (below 500 rpm), high-torque drives. Poly Chain[®] GT2 outperforms roller chain and requires no lubrication or retensioning.



Gates has developed its EuroGrip[®] flexible couplings to connect two shafts subject to misalignment and axial movement. The EuroGrip[®] range covers all European standard motor systems.

Just name the application, and Gates offers you a high-quality and innovative power transmission product that matches perfectly.



Manufacturing and distribution

Gates' products are manufactured in product dedicated plants, each of them specialised in specific power transmission products. Gates has production sites in France, Germany, Poland and Scotland. Distribution is handled from two warehouses: Nevers (France) and Langenfeld (Germany).



All Gates European Power Transmission operations are ISO 9001 and ISO 14001 accredited. The international ISO 9001 assessment covers design, development, production, installation and servicing of products and is evidence of Gates' solid commitment to quality. The Gates factories achieved the ISO 14001 standard by demonstrating that environmental issues and protection are managed within a co-ordinated framework of controls and well-defined procedures.

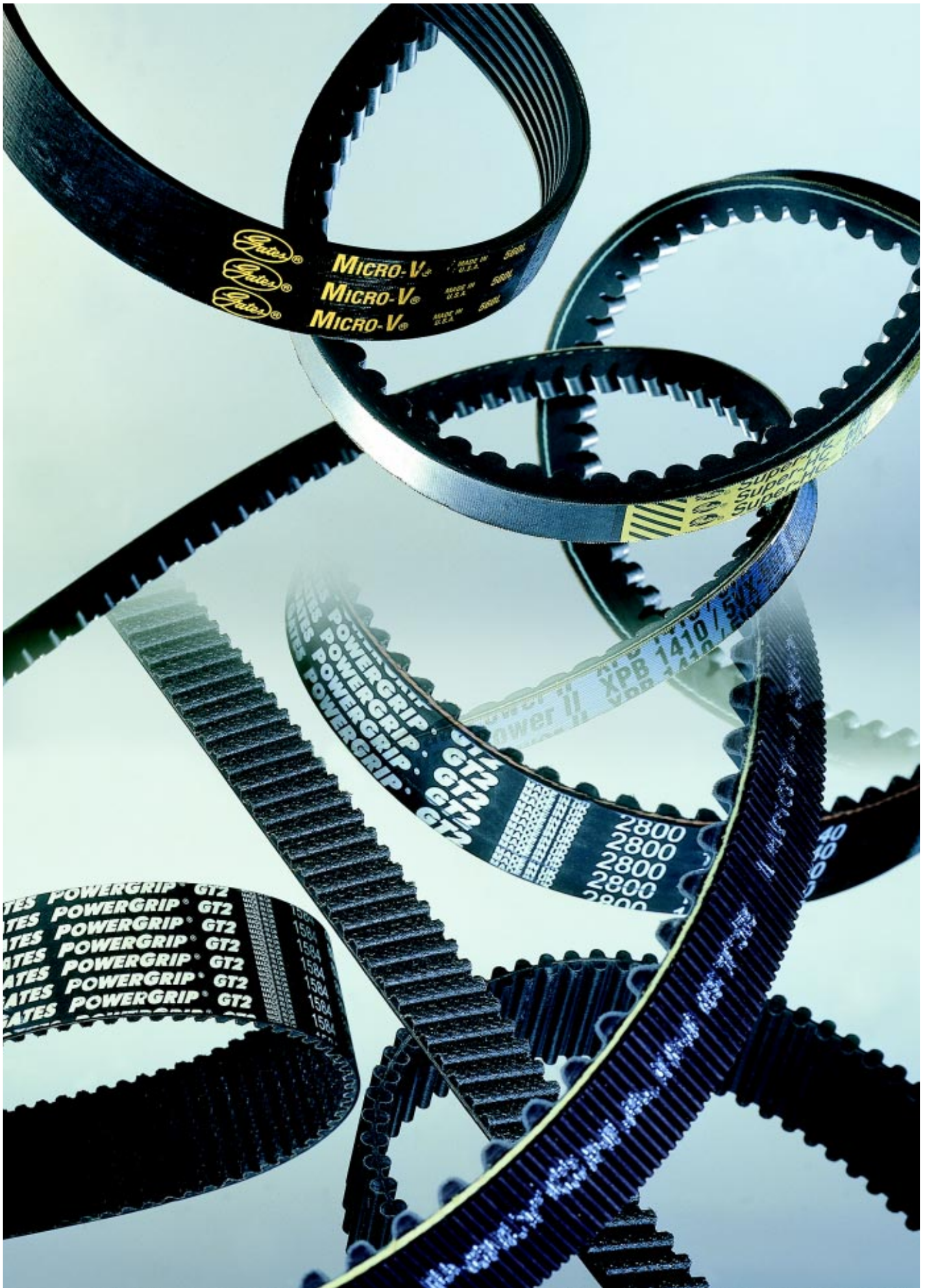
Technical know-how and application engineering

Gates offers product engineering and application support for unmatched design and problem-solving expertise in every aspect of belt drive operations. Industrial designers can rely on Gates' design engineers, who co-operate with the world's leading industrial OE manufacturers to develop the most advanced drive systems. Gates' technical development and test centres complement those of the OEM customers.

Distributors can call on Gates for specialist troubleshooting support to solve any power transmission problem. Gates' engineers are experts in the products they market and provide in-house and on-site training programmes. In addition, Gates offers excellent support programmes, such as Designflex, the leading edge drive calculation software. But, Gates engineers are also at the customers' service to solve even the most difficult V-belt and synchronous drive design problems. Nobody is as committed to supporting its customers as Gates.



TABLE OF CONTENTS



V-belts

Hi-Power®	4
Hi-Power® Dubl-V	7
Super HC® MN	8
Super HC®	8
Quad-Power II	11
PowerBand®	14
Micro-V®	16
Polyflex® JB™	18
Polyflex®	20
Multi-Speed	22
PoweRated®	23

Synchronous belts

PowerGrip® XL, L, H, XH & XXH	26
PowerGrip® MXL	29
PowerGrip® HTD® 3M & 5M	31
PowerGrip® HTD® 8M, 14M & 20M	34
PowerGrip® GT 2MR, 3MR & 5MR	36
PowerGrip® GT2 8MGT & 14MGT	38
Long Length	40
Twin Power®	42
SynchroPower®	44
Poly Chain® GT2	46
Poly Chain® pulleys	48

Flexible couplings

EuroGrip®	50
-----------------	----

Tools

505C Sonic tension meter	52
Laser AT-1 laser alignment device	53

All Gates antistatic V-belts are in accordance with the antistatic requirements as stated in EN 13463-5 - "Non-electrical equipment intended for use in potentially explosive atmospheres - Part-5: protection by constructional safety" - and can as such be used in the conditions described in the Directive 94/9/EC - ATEX.

®: A registered trademark of The Gates Corporation.

HI-POWER®

Wrapped V-belt of conventional cross-section



The wrapped classical section Hi-Power® V-belt has a long reputation for reliability on agricultural and industrial applications. The arched top of the Hi-Power® belt provides superior strength to prevent “dishing” and distortion of the tensile section. The cords are properly aligned, each of them carrying its

full share of the load.

The Flex Weave® oil and heat resistant cover increases the angle facing the direction of pull. As a result, the Flex Weave® fabric develops even less stress for a given amount of bending.

Identification

Durable red marking indicating type and dimensions.

Construction

- Classical cross-section.
- Arched top, concave sidewalls and rounded corners provide uniform tensile loading and uniform pulley sidewall contact for excellent belt service life and reduced pulley wear.
- The Flex Weave® oil and heat resistant cover protects the belt core from the toughest environments.
- The vulcanised “Flex-bonded” tensile cords provide superior resistance to tensile and flexing forces, fatigue and shock loads.
- High-quality rubber compound protects the belt against heat, ozone and sunlight.
- The belt will not catch fire from heat build-up, even with severe slippage.
- Static conductive (ISO 1813).

Advantages

- Excellent performance/cost ratio.
- Reliability and efficiency.
- Long belt life reducing replacement and maintenance costs.
- Match system: all sizes meet Gates UNISSET tolerances.

Sections and nominal dimensions



	Width mm	Height mm
Z	10	6
A	13	8
B	17	11
C	22	14
D	32	19

Z 10 mm		A 13 mm				B 17 mm			
ISO belt ref.	Datum length	ISO belt ref.	Datum length	ISO belt ref.	Datum length	ISO belt ref.	Datum length	ISO belt ref.	Datum length
	mm ISO		mm ISO		mm ISO		mm ISO		mm ISO
Z-17 ^{1/2}	470	A-21	570	A-68	1765	B-25	695	B-75	1955
Z-18 ^{1/2}	495	A-22	595	A-69	1790	B-26	710	B-76	1980
Z-19	505	A-23	620	A-70	1815	B-27	735	B-77	2005
Z-19 ^{1/2}	520	A-23 ^{1/2}	630	A-71	1840	B-27 ^{1/2}	745	B-78	2030
Z-20 ^{1/2}	550	A-24	645	A-72	1865	B-28	770	B-79	2060
Z-22	580	A-24 ^{1/2}	655	A-73	1890	B-29	795	B-80	2085
Z-22 ^{1/2}	595	A-25	680	A-74	1915	B-30	815	B-81	2110
Z-23 ^{1/2}	620	A-26	705	A-75	1940	B-31	845	B-82	2135
Z-24	630	A-27	720	A-76	1965	B-32	870	B-83	2160
Z-25	655	A-27 ^{1/2}	730	A-77	1990	B-33	895	B-84	2185
Z-26 ^{1/2}	695	A-28	745	A-78	2020	B-34	920	B-85	2210
Z-28	730	A-28 ^{1/2}	755	A-79	2040	B-35	940	B-86	2235
Z-29	755	A-29 ^{1/2}	780	A-80	2070	B-36	965	B-87	2260
Z-29 ^{1/2}	770	A-30	795	A-81	2095	B-37	990	B-88	2285
Z-30 ^{1/2}	795	A-31	825	A-82	2120	B-38	1015	B-89	2310
Z-31	805	A-32	850	A-83	2145	B-39	1040	B-90	2335
Z-31 ^{1/2}	820	A-33	875	A-84	2170	B-40	1065	B-91	2365
Z-32 ^{1/2}	845	A-34	900	A-85	2195	B-41	1095	B-92	2390
Z-33 ^{1/2}	870	A-35	925	A-86	2220	B-42	1120	B-93	2415
Z-34 ^{1/2}	895	A-36	950	A-87	2245	B-43	1145	B-94	2440
Z-35 ^{1/2}	920	A-37	975	A-88	2270	B-44	1170	B-95	2465
Z-36	930	A-38	1000	A-89	2295	B-45	1195	B-96	2490
Z-37	955	A-39	1025	A-90	2325	B-46	1220	B-97	2515
Z-37 ^{1/2}	970	A-40	1055	A-91	2350	B-47	1245	B-98	2540
Z-38 ^{1/2}	995	A-41	1080	A-92	2375	B-48	1270	B-99	2565
Z-39	1005	A-41 ^{1/2}	1090	A-93	2400	B-49	1295	B-100	2590
Z-39 ^{1/2}	1020	A-42	1105	A-94	2425	B-50	1320	B-102	2640
Z-41 ^{1/2}	1070	A-43	1130	A-95	2450	B-51	1345	B-103	2665
Z-42	1080	A-44	1155	A-96	2475	B-52	1370	B-104	2695
Z-44	1140	A-45	1180	A-97	2500	B-53	1395	B-105	2720
Z-45	1170	A-46	1205	A-98	2525	B-54	1425	B-106	2745
Z-45 ^{1/2}	1180	A-47	1230	A-100	2575	B-55	1450	B-108	2795
Z-46	1200	A-48	1255	A-102	2625	B-56	1475	B-110	2845
Z-47	1220	A-49	1280	A-104	2680	B-57	1500	B-112	2895
Z-48	1245	A-50	1310	A-105	2705	B-58	1525	B-114	2945
Z-48 ^{1/2}	1255	A-51	1330	A-108	2780	B-59	1550	B-116	3000
Z-49	1270	A-52	1355	A-110	2830	B-60	1575	B-118	3050
Z-50	1295	A-53	1385	A-112	2880	B-61	1600	B-120	3100
Z-51	1320	A-54	1410	A-118	3035	B-62	1625	B-122	3150
Z-52	1340	A-55	1435	A-120	3085	B-63	1650	B-124	3200
Z-55	1420	A-56	1460	A-124	3185	B-64	1675	B-128	3300
Z-57	1470	A-57	1485	A-128	3290	B-65	1700	B-130	3350
Z-59	1520	A-58	1510	A-130	3340	B-66	1730	B-131	3380
Z-63 ^{1/2}	1630	A-59	1535	A-134	3440	B-67	1755	B-133	3430
Z-67	1720	A-60	1560	A-136	3490	B-68	1780	B-134	3455
Z-71	1820	A-61	1585	A-140	3590	B-69	1805	B-136	3505
Z-75	1920	A-62	1610	A-144	3695	B-70	1830	B-140	3610
		A-63	1635	A-147	3770	B-71	1855	B-144	3710
		A-64	1660	A-158	4050	B-72	1880	B-147	3785
		A-65	1690	A-173	4430	B-73	1905	B-148	3810
		A-66	1715	A-180	4610	B-74	1930	B-152	3910
		A-67	1735						

Dimensions in bold are available from stock.

HEAVY-DUTY V-BELTS

B 17 mm		C 22 mm		D 32 mm			
ISO belt ref.	Datum length mm ISO	ISO belt ref.	Datum length mm ISO	ISO belt ref.	Datum length mm ISO		
B-157	4040	C-42	1145	C-144	3730	D-98	2570
B-158	4065	C-43	1165	C-147	3805	D-104	2720
B-162	4165	C-46	1245	C-153	3960	D-110	2975
B-165	4240	C-48	1290	C-158	4085	D-120	3130
B-167	4295	C-49	1320	C-162	4190	D-124	3230
B-173	4445	C-51	1370	C-165	4265	D-128	3330
B-175	4495	C-53	1420	C-173	4465	D-137	3560
B-177	4545	C-54	1445	C-177	4570	D-140	3635
B-180	4625	C-55	1470	C-180	4645	D-144	3740
B-186	4775	C-59	1570	C-195	5025	D-158	4095
		C-60	1595	C-208	5355	D-162	4195
		C-62	1650	C-210	5405	D-170	4400
		C-65	1725	C-222	5660	D-173	4475
		C-66	1750	C-225	5735	D-177	4575
		C-68	1800	C-238	6065	D-180	4650
		C-70	1850	C-240	6120	D-187	4830
		C-71	1875	C-250	6370	D-195	5035
		C-72	1900	C-255	6500	D-197	5085
		C-74	1950	C-265	6755	D-204	5260
		C-75	1980	C-270	6880	D-210	5415
		C-78	2055	C-280	7135	D-223	5680
		C-81	2130	C-285	7260	D-240	6115
		C-82	2155	C-300	7640	D-250	6365
		C-83	2180	C-330	8405	D-270	6875
		C-85	2230			D-282	7180
		C-88	2310			D-298	7585
		C-90	2360			D-300	7635
		C-92	2410			D-330	8400
		C-93	2435			D-360	9160
		C-95	2485				
		C-96	2510				
		C-97	2535				
		C-98	2560				
		C-99	2590				
		C-100	2615				
		C-102	2665				
		C-104	2715				
		C-105	2740				
		C-108	2815				
		C-110	2865				
		C-112	2920				
		C-115	2995				
		C-116	3020				
		C-118	3070				
		C-120	3120				
		C-124	3225				
		C-128	3325				
		C-130	3375				
		C-132	3425				
		C-134	3475				
		C-136	3525				
		C-140	3630				

Hi-Power® ordering code is composed as follows:

Example: Z20.5

Z - Section

20.5 - Length in inch (RMA)

Dimensions in bold are available from stock.

Hi-Power® Dubl-V

Gates' Hi-Power® Dubl-V belt is a wrapped V-belt of conventional cross-section, characterised by a double-V profile. It uses flex-bonded tensile cords, which are highly resistant to flexing forces, and a protective Flex-Weave® cover.

It is the ideal solution for "serpentine" drives (drives with counterrotating shafts) requiring power to be transmitted to grooved pulleys from both the top and the bottom of the belts.

AA 13 mm

Belt ref.	Effective length mm RMA	Datum length mm ISO
AA51	1350	1330
AA55	1450	1435
AA60	1575	1560
AA68	1780	1765
AA75	1960	1940
AA80	2085	2070
AA85	2210	2195
AA90	2340	2325
AA92	2390	2375
AA96	2490	2475
AA105	2720	2705
AA112	2900	2880
AA120	3100	3085
AA128	3305	3290

BB 17 mm

Belt ref.	Effective length mm RMA	Datum length mm ISO
BB35	965	940
BB38	1040	1015
BB42	1140	1120
BB43	1165	1145
BB45	1215	1195
BB46	1240	1220
BB51	1370	1345
BB53	1420	1395
BB55	1470	1450
BB60	1600	1575
BB68	1800	1780
BB71	1880	1855
BB73	1925	1905
BB74	1955	1930
BB75	1980	1955

BB 17 mm

Belt ref.	Effective length mm RMA	Datum length mm ISO
BB81	2130	2110
BB85	2235	2210
BB90	2360	2335
BB92	2410	2390
BB93	2435	2415
BB94	2460	2440
BB97	2535	2515
BB105	2740	2720
BB107	2790	2770
BB108	2815	2795
BB111	2895	2870
BB112	2920	2895
BB116	3020	3000
BB118	3070	3050
BB120	3120	3100
BB122	3170	3150
BB123	3195	3175
BB124	3220	3200
BB127	3300	3275
BB128	3325	3300
BB129	3350	3325
BB130	3375	3350
BB136	3528	3505
BB144	3730	3710
BB155	4010	3990
BB158	4085	4065
BB168	4340	4320
BB169	4365	4345
BB173	4470	4445
BB180	4645	4625
BB195	5025	5005
BB210	5410	5385
BB226	5814	5755
BB228	5864	5805
BB230	5915	5855
BB240	6130	6110
BB270	6895	6870
BB277	7070	7050
BB300	7655	7635

CC 22 mm

Belt ref.	Effective length mm RMA	Datum length mm ISO
CC75	2010	1980
CC81	2165	2130
CC85	2265	2230
CC90	2395	2360
CC96	2545	2510
CC105	2775	2740
CC112	2950	2920
CC120	3155	3120
CC128	3360	3325
CC136	3560	3525
CC144	3765	3730
CC158	4120	4085
CC162	4220	4190
CC173	4500	4465
CC180	4680	4645
CC195	5060	5025
CC210	5440	5405
CC240	6150	6120
CC270	6915	6880
CC300	7675	7640
CC330	8440	8405
CC360	9200	9165
CC390	9960	9930
CC420	10725	10690

DD 32 mm

Belt ref.	Effective length mm RMA	Datum length mm ISO
DD210	5465	5415
DD270	6925	6875
DD300	7690	7635
DD360	9215	9160

Hi-Power® Dubl-V ordering code is composed as follows:

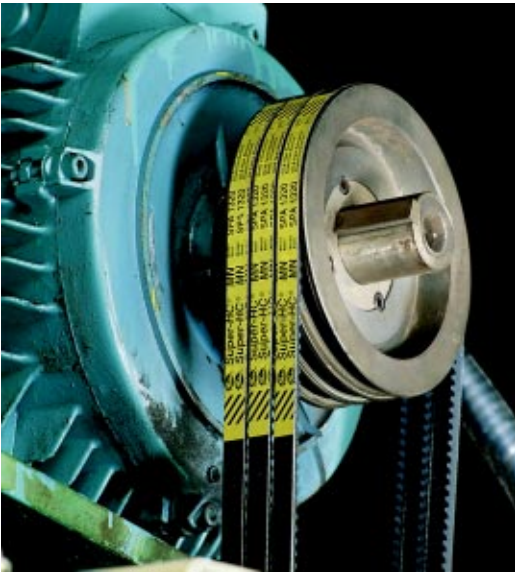
Example: AA51

AA - Section (double)
51 - Length in inch (RMA)

Dimensions in bold are available from stock.

SUPER HC® MN

*Raw edge, moulded notch,
narrow section V-belt*



In addition to the Super HC® wrapped, narrow section V-belt, Gates markets the Super HC® Moulded Notch V-belt construction. Super HC® MN V-belts put more power where high speeds, high speed ratios or small pulley diameters are required, thus offering significant advantages over classical section V-belts.

Developed through specialised research, Super HC® MN is highly recommended for use on all industrial heavy-duty, narrow section V-belt drives. The Super HC® MN increased transmission efficiency allows more compact and highly economical drive design. Super HC MN belts are available up to 4750 mm ISO datum lengths.

Identification

Durable yellow marking indicating type and dimensions.

Construction

- Raw edge construction, ground.
- Narrow cross-section.
- Moulded notches reduce and evenly distribute thermal and bending stresses. The moulded notch pattern also reduces noise.
- Precision-ground straight sidewalls give a uniform wedging action and ensure the belt fits correctly in the pulley grooves.
- Allows use of back idlers.
- “Flex-bonded” tensile cords are vulcanised as one solid unit making the belt highly resistant to tensile and flexing forces, fatigue and shock loads.
- Elastomeric compound protects the belt against heat, ozone and sunlight.
- Even with severe slippage, the belt will not catch fire from heat buildup.
- Static conductive (ISO 1813).

Advantages

- Excellent performance/cost ratio.
- More power in the same space or same power in 1/3 to 1/2 less space as compared to classical section V-belts.
- Cost and space savings by reducing size of pulleys, bearings, guards and mounts.
- Improved belt life reducing expensive maintenance time.
- Match system: all sizes meet Gates UNISSET tolerances.

Sections and nominal dimensions



	Width mm	Height mm
SPZ	10	8
SPA	13	10
SPB	16	13
SPC	22	18

NOTE

Gates Super HC® wrapped, narrow section V-belt is still available. Also see size listings on following pages.

SPZ

ISO belt ref. MN	ISO belt ref. Wrapped Super HC®	Datum length mm ISO	ISO belt ref. MN	ISO belt ref. Wrapped Super HC®	Datum length mm ISO	ISO belt ref. MN	ISO belt ref. Wrapped Super HC®	Datum length mm ISO	ISO belt ref. MN	ISO belt ref. Wrapped Super HC®	Datum length mm ISO
SPZ 560	SPZ 560	560	SPZ 1150	SPZ 1150	1150	SPZ 1862		1862	SPA 732	SPA 732	732
SPZ 562	SPZ 562	562	SPZ 1162	SPZ 1162	1162	SPZ 1887		1887	SPA 757		757
SPZ 612	SPZ 612	612	SPZ 1180	SPZ 1180	1180	SPZ 1900	SPZ 1900	1900	SPA 782		782
	SPZ 615	615	SPZ 1187	SPZ 1187	1187	SPZ 1937		1937	SPA 800	SPA 800	800
SPZ 630	SPZ 630	630	SPZ 1200		1200	SPZ 1950	SPZ 1950	1950	SPA 807		807
SPZ 637	SPZ 637	637	SPZ 1202		1202	SPZ 1987		1987	SPA 832	SPA 832	832
SPZ 662	SPZ 662	662	SPZ 1212	SPZ 1212	1212	SPZ 2000	SPZ 2000	2000	SPA 850	SPA 850	850
SPZ 670	SPZ 670	670		SPZ 1215	1215	SPZ 2037		2037	SPA 857	SPA 857	857
SPZ 687	SPZ 687	687	SPZ 1237	SPZ 1237	1237	SPZ 2060	SPZ 2060	2060	SPA 882	SPA 882	882
SPZ 710	SPZ 710	710	SPZ 1250	SPZ 1250	1250	SPZ 2120	SPZ 2120	2120	SPA 900	SPA 900	900
SPZ 722		722	SPZ 1262	SPZ 1262	1262	SPZ 2137		2137	SPA 907	SPA 907	907
SPZ 730	SPZ 730	730	SPZ 1270		1270	SPZ 2160		2160	SPA 925	SPA 925	925
SPZ 737	SPZ 737	737		SPZ 1285	1285	SPZ 2180	SPZ 2180	2180	SPA 932	SPA 932	932
SPZ 750	SPZ 750	750	SPZ 1287	SPZ 1287	1287	SPZ 2187		2187	SPA 950	SPA 950	950
SPZ 760		760	SPZ 1312	SPZ 1312	1312	SPZ 2240	SPZ 2240	2240	SPA 957	SPA 957	957
SPZ 762	SPZ 762	762	SPZ 1320	SPZ 1320	1320	SPZ 2262		2262	SPA 975	SPA 975	975
SPZ 772		772	SPZ 1337	SPZ 1337	1337	SPZ 2280		2280	SPA 982	SPA 982	982
SPZ 775	SPZ 775	775	SPZ 1340		1340	SPZ 2287		2287	SPA 1000	SPA 1000	1000
SPZ 787	SPZ 787	787	SPZ 1347		1347	SPZ 2360	SPZ 2360	2360	SPA 1007	SPA 1007	1007
SPZ 800	SPZ 800	800		SPZ 1360	1360	SPZ 2410		2410	SPA 1030	SPA 1030	1030
SPZ 812	SPZ 812	812	SPZ 1362	SPZ 1362	1362	SPZ 2430	SPZ 2430	2430	SPA 1032	SPA 1032	1032
SPZ 825	SPZ 825	825	SPZ 1387	SPZ 1387	1387	SPZ 2500	SPZ 2500	2500		SPA 1057	1057
SPZ 837	SPZ 837	837	SPZ 1400	SPZ 1400	1400	SPZ 2540		2540	SPA 1060	SPA 1060	1060
SPZ 850	SPZ 850	850	SPZ 1412		1412	SPZ 2650	SPZ 2650	2650	SPA 1082	SPA 1082	1082
SPZ 862	SPZ 862	862	SPZ 1420		1420	SPZ 2690		2690	SPA 1090	SPA 1090	1090
SPZ 875	SPZ 875	875	SPZ 1437	SPZ 1437	1437	SPZ 2800	SPZ 2800	2800	SPA 1107	SPA 1107	1107
SPZ 887	SPZ 887	887	SPZ 1450	SPZ 1450	1450	SPZ 2840		2840	SPA 1120	SPA 1120	1120
SPZ 900	SPZ 900	900	SPZ 1462	SPZ 1462	1462	SPZ 3000	SPZ 3000	3000	SPA 1132	SPA 1132	1132
SPZ 912	SPZ 912	912	SPZ 1487	SPZ 1487	1487	SPZ 3150	SPZ 3150	3150	SPA 1140		1140
SPZ 925	SPZ 925	925	SPZ 1500	SPZ 1500	1500	SPZ 3350	SPZ 3350	3350	SPA 1150	SPA 1150	1150
SPZ 937	SPZ 937	937	SPZ 1512		1512	SPZ 3550	SPZ 3550	3550	SPA 1157	SPA 1157	1157
SPZ 950	SPZ 950	950	SPZ 1520		1520				SPA 1180	SPA 1180	1180
SPZ 962	SPZ 962	962	SPZ 1537		1537				SPA 1207	SPA 1207	1207
SPZ 975	SPZ 975	975	SPZ 1550	SPZ 1550	1550				SPA 1215	SPA 1215	1215
SPZ 987	SPZ 987	987	SPZ 1562		1562				SPA 1232	SPA 1232	1232
SPZ 1000	SPZ 1000	1000	SPZ 1587	SPZ 1587	1587				SPA 1250	SPA 1250	1250
SPZ 1010		1010	SPZ 1600	SPZ 1600	1600				SPA 1257	SPA 1257	1257
SPZ 1012	SPZ 1012	1012	SPZ 1612	SPZ 1612	1612				SPA 1272		1272
SPZ 1025		1025	SPZ 1637	SPZ 1637	1637				SPA 1282	SPA 1282	1282
SPZ 1030	SPZ 1030	1030	SPZ 1650	SPZ 1650	1650				SPA 1285	SPA 1285	1285
SPZ 1037	SPZ 1037	1037	SPZ 1662		1662				SPA 1307	SPA 1307	1307
SPZ 1047		1047	SPZ 1687		1687				SPA 1320	SPA 1320	1320
SPZ 1060	SPZ 1060	1060	SPZ 1700	SPZ 1700	1700				SPA 1332	SPA 1332	1332
SPZ 1062	SPZ 1062	1062	SPZ 1737		1737				SPA 1357	SPA 1357	1357
SPZ 1077		1077	SPZ 1750	SPZ 1750	1750				SPA 1360	SPA 1360	1360
SPZ 1080		1080	SPZ 1762		1762				SPA 1382	SPA 1382	1382
SPZ 1087	SPZ 1087	1087	SPZ 1782		1782				SPA 1400	SPA 1400	1400
SPZ 1090	SPZ 1090	1090	SPZ 1787	SPZ 1787	1787				SPA 1407	SPA 1407	1407
SPZ 1112	SPZ 1112	1112	SPZ 1800	SPZ 1800	1800				SPA 1432	SPA 1432	1432
SPZ 1120	SPZ 1120	1120	SPZ 1812		1812				SPA 1450	SPA 1450	1450
SPZ 1137	SPZ 1137	1137	SPZ 1837	SPZ 1837	1837				SPA 1457	SPA 1457	1457
SPZ 1140		1140	SPZ 1850	SPZ 1850	1850				SPA 1482	SPA 1482	1482

Dimensions in bold are available from stock.

SPA

ISO belt ref. MN	ISO belt ref. Wrapped Super HC®	Datum length mm ISO
SPA 732	SPA 732	732
SPA 757		757
SPA 782		782
SPA 800	SPA 800	800
SPA 807		807
SPA 832	SPA 832	832
SPA 850	SPA 850	850
SPA 857	SPA 857	857
SPA 882	SPA 882	882
SPA 900	SPA 900	900
SPA 907	SPA 907	907
SPA 925	SPA 925	925
SPA 932	SPA 932	932
SPA 950	SPA 950	950
SPA 957	SPA 957	957
SPA 975	SPA 975	975
SPA 982	SPA 982	982
SPA 1000	SPA 1000	1000
SPA 1007	SPA 1007	1007
SPA 1030	SPA 1030	1030
SPA 1032	SPA 1032	1032
	SPA 1057	1057
SPA 1060	SPA 1060	1060
SPA 1082	SPA 1082	1082
SPA 1090	SPA 1090	1090
SPA 1107	SPA 1107	1107
SPA 1120	SPA 1120	1120
SPA 1132	SPA 1132	1132
SPA 1140		1140
SPA 1150	SPA 1150	1150
SPA 1157	SPA 1157	1157
SPA 1180	SPA 1180	1180
SPA 1207	SPA 1207	1207
SPA 1215	SPA 1215	1215
SPA 1232	SPA 1232	1232
SPA 1250	SPA 1250	1250
SPA 1257	SPA 1257	1257
SPA 1272		1272
SPA 1282	SPA 1282	1282
SPA 1285	SPA 1285	1285
SPA 1307	SPA 1307	1307
SPA 1320	SPA 1320	1320
SPA 1332	SPA 1332	1332
SPA 1357	SPA 1357	1357
SPA 1360	SPA 1360	1360
SPA 1382	SPA 1382	1382
SPA 1400	SPA 1400	1400
SPA 1407	SPA 1407	1407
SPA 1432	SPA 1432	1432
SPA 1450	SPA 1450	1450
SPA 1457	SPA 1457	1457
SPA 1482	SPA 1482	1482

HEAVY-DUTY V-BELTS

SPA

ISO belt ref. MN	Wrapped Super HC®	Datum length mm ISO
SPA 1500	SPA 1500	1500
SPA 1507	SPA 1507	1507
SPA 1532	SPA 1532	1532
SPA 1550	SPA 1550	1550
SPA 1557	SPA 1557	1557
SPA 1582		1582
SPA 1600	SPA 1600	1600
SPA 1607		1607
SPA 1632		1632
SPA 1650	SPA 1650	1650
SPA 1657		1657
SPA 1682		1682
SPA 1700	SPA 1700	1700
SPA 1707		1707
SPA 1732	SPA 1732	1732
SPA 1750	SPA 1750	1750
SPA 1757		1757
SPA 1782	SPA 1782	1782
SPA 1800	SPA 1800	1800
SPA 1807		1807
SPA 1832	SPA 1832	1832
SPA 1857	SPA 1857	1857
SPA 1882		1882
SPA 1900	SPA 1900	1900
SPA 1907		1907
SPA 1932	SPA 1932	1932
SPA 1950	SPA 1950	1950
SPA 1957		1957
SPA 1982		1982
SPA 2000	SPA 2000	2000
SPA 2032	SPA 2032	2032
SPA 2057		2057
SPA 2060	SPA 2060	2060
SPA 2082	SPA 2082	2082
SPA 2120	SPA 2120	2120
SPA 2132	SPA 2132	2132
SPA 2182		2182
SPA 2207	SPA 2207	2207
SPA 2232		2232
SPA 2240	SPA 2240	2240
SPA 2282		2282
SPA 2300	SPA 2300	2300
SPA 2307		2307
SPA 2332		2332
SPA 2360	SPA 2360	2360
SPA 2382		2382
SPA 2430	SPA 2430	2430
SPA 2482		2482
SPA 2500	SPA 2500	2500
SPA 2532		2532
SPA 2582		2582
SPA 2607		2607

SPB

ISO belt ref. MN	Wrapped Super HC®	Datum length mm ISO
SPB 1250	SPB 1250	1250
SPB 1260		1260
SPB 1320		1320
SPB 1340		1340
SPB 1400		1400
SPB 1410		1410
SPB 1500	SPB 1500	1500
SPB 1510		1510
SPB 1590		1590
SPB 1600	SPB 1600	1600
SPB 1690		1690
SPB 1700	SPB 1700	1700
SPB 1800	SPB 1800	1800
SPB 1900	SPB 1900	1900
SPB 2000	SPB 2000	2000
SPB 2020		2020
SPB 2120	SPB 2120	2120
SPB 2150		2150
SPB 2240	SPB 2240	2240
SPB 2280		2280
SPB 2360	SPB 2360	2360
SPB 2410		2410
SPB 2500	SPB 2500	2500
SPB 2530		2530
SPB 2650	SPB 2650	2650
SPB 2680		2680
SPB 2800	SPB 2800	2800
SPB 2840		2840
SPB 2990		2990
SPB 3000	SPB 3000	3000
SPB 3150	SPB 3150	3150
SPB 3350	SPB 3350	3350
SPB 3550	SPB 3550	3550
SPB 3750	SPB 3750	3750
SPB 4000	SPB 4000	4000
SPB 4250	SPB 4250	4250
SPB 4500	SPB 4500	4500
SPB 4750	SPB 4750	4750
	SPB 5000	5000
	SPB 5300	5300
	SPB 5600	5600
	SPB 6000	6000
	SPB 6300	6300
	SPB 6700	6700
	SPB 7100	7100
	SPB 7500	7500
	SPB 8000	8000

SPC

ISO belt ref. MN	Wrapped Super HC®	Datum length mm ISO
SPC 2000	SPC 2000	2000
SPC 2120	SPC 2120	2120
SPC 2240	SPC 2240	2240
SPC 2360	SPC 2360	2360
SPC 2500	SPC 2500	2500
SPC 2650	SPC 2650	2650
SPC 2800	SPC 2800	2800
SPC 3000	SPC 3000	3000
SPC 3150	SPC 3150	3150
SPC 3350	SPC 3350	3350
SPC 3550	SPC 3550	3550
SPC 3750	SPC 3750	3750
SPC 4000	SPC 4000	4000
SPC 4250	SPC 4250	4250
SPC 4500	SPC 4500	4500
SPC 4750	SPC 4750	4750
	SPC 5000	5000
	SPC 5300	5300
	SPC 5600	5600
	SPC 6000	6000
	SPC 6300	6300
	SPC 6700	6700
	SPC 7100	7100
	SPC 7500	7500
	SPC 8000	8000
	SPC 8500	8500
	SPC 9000	9000
	SPC 9500	9500
	SPC 10000	10000
	SPC 10600	10600

Super HC® MN ordering code is composed as follows:

Example: SPZ560MN

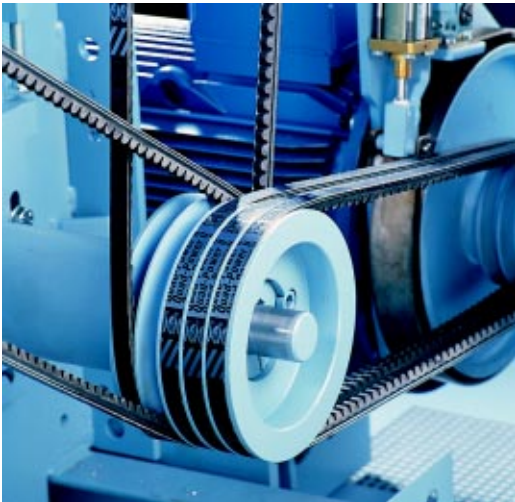
- SPZ** - Section
- 560** - Datum length (mm)
- MN** - Moulded notch

Dimensions in bold are available from stock.



QUAD-POWER II

Raw edge, moulded notch, narrow section V-belt



Quad-Power II is Gates' top-of-the-range narrow section V-belt for heavy-duty industrial drives. It has been developed to replace traditional V-belts on applications where space and weight savings are critical: Quad-Power II is the V-belt with the highest power capacity, even on small pulley diameters.

Improved resistance to outside bends allows the use of back idlers. The new optimised notch profile makes the belts run smoothly in the pulley grooves.

IMPORTANT INFORMATION!
Extensive testing has proven that, compared to the former Quad-Power generation, Gates Quad-Power II V-belt offers up to 15% higher power rating values, ensuring the same service life.

Identification

Durable blue marking indicating type and dimensions.

Construction

- Raw edge construction, ground.
- Narrow cross-section.
- New, optimised notch profile reduces and evenly distributes thermal and bending stresses. Notch depth is in proportion to the cross-section to ensure perfect stability.
- Precision-ground sidewalls give a uniform wedging action.
- Fibre-loaded elastomeric compound withstands heat, ozone and sunlight.
- Flex-bonded polyester tensile cords are vulcanised as one solid unit, increasing the belt's resistance to tensile and flexing forces.
- Double Flex-Weave® textile backing protects the belt against wear — especially when back idlers are used.
- Cross-cords improve belt stability.
- Even with severe slippage, the belt will not catch fire from heat buildup.
- Static conductive (ISO 1813).

Advantages

- The most powerful belt in Gates' industrial V-belt range.
- Excellent performance/cost ratio.
- Increased transmission efficiency as compared to other V-belt types.
- Cost and space savings.
- Maximum belt life reducing maintenance time.
- Match system: all sizes meet Gates UNISSET tolerances.

Sections and nominal dimensions



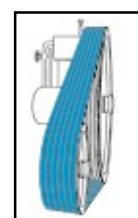
	Width mm	Height mm
XPZ	10	8
XPA	13	10
XPB	16	13
XPC	22	18



Hi-Power®
12 x B 46
pulley width: 234 mm
25000 hr belt life



Super HC®
8 x SPB 1250
pulley width: 158 mm
25000 hr belt life



Quad-Power II
6 x XPB 1250
pulley width: 120 mm
25000 hr belt life

HEAVY-DUTY V-BELTS

XPZ

Belt reference	Datum length	Belt reference	Datum length
ISO	mm ISO	ISO	mm ISO
XPZ 630	630	XPZ 1237	1237
XPZ 637	637	XPZ 1250	1250
XPZ 662	662	XPZ 1262	1262
XPZ 670	670	XPZ 1270	1270
XPZ 687	687	XPZ 1280	1280
XPZ 710	710	XPZ 1285	1285
XPZ 722	722	XPZ 1287	1287
XPZ 730	730	XPZ 1312	1312
XPZ 737	737	XPZ 1320	1320
XPZ 750	750	XPZ 1337	1337
XPZ 760	760	XPZ 1340	1340
XPZ 762	762	XPZ 1362	1362
XPZ 772	772	XPZ 1400	1400
XPZ 787	787	XPZ 1412	1412
XPZ 800	800	XPZ 1420	1420
XPZ 812	812	XPZ 1450	1450
XPZ 837	837	XPZ 1487	1487
XPZ 850	850	XPZ 1500	1500
XPZ 862	862	XPZ 1512	1512
XPZ 875	875	XPZ 1520	1520
XPZ 887	887	XPZ 1537	1537
XPZ 900	900	XPZ 1550	1550
XPZ 912	912	XPZ 1587	1587
XPZ 925	925	XPZ 1600	1600
XPZ 937	937	XPZ 1650	1650
XPZ 950	950	XPZ 1687	1687
XPZ 962	962	XPZ 1700	1700
XPZ 975	975	XPZ 1750	1750
XPZ 980	980	XPZ 1800	1800
XPZ 987	987	XPZ 1850	1850
XPZ 1000	1000	XPZ 1900	1900
XPZ 1010	1010	XPZ 1950	1950
XPZ 1012	1012	XPZ 2000	2000
XPZ 1030	1030	XPZ 2030	2030
XPZ 1037	1037	XPZ 2120	2120
XPZ 1060	1060	XPZ 2160	2160
XPZ 1062	1062	XPZ 2240	2240
XPZ 1077	1077	XPZ 2280	2280
XPZ 1080	1080	XPZ 2360	2360
XPZ 1087	1087	XPZ 2410	2410
XPZ 1090	1090	XPZ 2500	2500
XPZ 1112	1112	XPZ 2540	2540
XPZ 1120	1120	XPZ 2650	2650
XPZ 1137	1137	XPZ 2690	2690
XPZ 1140	1140	XPZ 2800	2800
XPZ 1150	1150	XPZ 2840	2840
XPZ 1162	1162	XPZ 3000	3000
XPZ 1180	1180	XPZ 3150	3150
XPZ 1187	1187	XPZ 3350	3350
XPZ 1200	1200	XPZ 3550	3550
XPZ 1202	1202		
XPZ 1212	1212		

XPA

Belt reference	Datum length	Belt reference	Datum length
ISO	mm ISO	ISO	mm ISO
XPA 747	747	XPA 1800	1800
XPA 757	757	XPA 1850	1850
XPA 782	782	XPA 1900	1900
XPA 800	800	XPA 1950	1950
XPA 832	832	XPA 2000	2000
XPA 850	850	XPA 2060	2060
XPA 857	857	XPA 2120	2120
XPA 882	882	XPA 2240	2240
XPA 900	900	XPA 2360	2360
XPA 907	907	XPA 2430	2430
XPA 925	925	XPA 2500	2500
XPA 932	932	XPA 2650	2650
XPA 950	950	XPA 2800	2800
XPA 957	957	XPA 3000	3000
XPA 975	975	XPA 3150	3150
XPA 982	982	XPA 3350	3350
XPA 1000	1000	XPA 3550	3550
XPA 1007	1007	XPA 3750	3750
XPA 1030	1030	XPA 4000	4000
XPA 1060	1060		
XPA 1082	1082		
XPA 1090	1090		
XPA 1107	1107		
XPA 1120	1120		
XPA 1140	1140		
XPA 1150	1150		
XPA 1157	1157		
XPA 1180	1180		
XPA 1207	1207		
XPA 1215	1215		
XPA 1232	1232		
XPA 1250	1250		
XPA 1257	1257		
XPA 1282	1282		
XPA 1285	1285		
XPA 1307	1307		
XPA 1320	1320		
XPA 1332	1332		
XPA 1357	1357		
XPA 1360	1360		
XPA 1400	1400		
XPA 1450	1450		
XPA 1482	1482		
XPA 1500	1500		
XPA 1507	1507		
XPA 1532	1532		
XPA 1550	1550		
XPA 1582	1582		
XPA 1600	1600		
XPA 1650	1650		
XPA 1700	1700		
XPA 1750	1750		

Dimensions in bold are available from stock.

XPB

Belt reference ISO	Datum length mm ISO
XPB 1250	1250
XPB 1260	1260
XPB 1320	1320
XPB 1340	1340
XPB 1400	1400
XPB 1410	1410
XPB 1450	1450
XPB 1500	1500
XPB 1510	1510
XPB 1550	1550
XPB 1590	1590
XPB 1600	1600
XPB 1650	1650
XPB 1690	1690
XPB 1700	1700
XPB 1750	1750
XPB 1800	1800
XPB 1850	1850
XPB 1900	1900
XPB 1950	1950
XPB 2000	2000
XPB 2020	2020
XPB 2120	2120
XPB 2150	2150
XPB 2240	2240
XPB 2280	2280
XPB 2360	2360
XPB 2410	2410
XPB 2500	2500
XPB 2530	2530
XPB 2650	2650
XPB 2680	2680
XPB 2800	2800
XPB 2840	2840
XPB 2990	2990
XPB 3000	3000
XPB 3150	3150
XPB 3350	3350
XPB 3550	3550
XPB 3750	3750
XPB 4000	4000
XPB 4250	4250
XPB 4500	4500
XPB 4750	4750

XPC

Belt reference ISO	Datum length mm ISO
XPC 2000	2000
XPC 2120	2120
XPC 2240	2240
XPC 2360	2360
XPC 2500	2500
XPC 2650	2650
XPC 2800	2800
XPC 3000	3000
XPC 3150	3150
XPC 3350	3350
XPC 3550	3550
XPC 3750	3750
XPC 4000	4000
XPC 4250	4250
XPC 4500	4500
XPC 4750	4750

Quad-Power II ordering code is composed as follows:

Example: XPZ900

XPZ - Section

900 - Datum length (mm)

Dimensions in bold are available from stock.

POWERBAND®

Multiple V-belt



Gates PowerBand® offers a solution for drives where single belts vibrate, turn over or jump off the pulleys. PowerBand® is especially developed for drives subjected to pulsating loads. It consists of several V-belts joined together by a permanent, high strength tie band, thus being tougher than all the belts taken separately. PowerBand® is available in SPB, SPC, 8V/25J, 9J, 15J, 3VX and 5VX sections. B, C and D sections are available on request.

Identification

Durable marking indicating type and dimensions.

Construction

- Strong band controls belt-to-belt distance and prevents sideways bending.
- Flex-bonded cords.
- Concave sides, arched top and Flex-Weave® cover for PowerBands of wrapped construction (SPB, SPC, 9J, 15J and 8V/25J). Hi-Power® PowerBand® B, C and D sections are available on request.
- Moulded notches for PowerBands of raw edge construction (3VX and 5VX).
- Elastomeric compound.
- Static conductive (ISO 1813).

Advantages

- High stability and smooth running on the toughest drives.
- Important design economies possible.
- Savings in drive space and weight thanks to high transmission efficiency.

Sections and nominal dimensions



	Width mm	Height mm
B	17	10
C	22	12
D	32	19
SPB	16	13
SPC	22	18

	Width mm	Height mm
9J	10	8
15J	16	13
8V/25J	26	23
3VX	10	8
5VX	16	13

QUAD-POWER II POWERBAND®

3VX

Belt ref.	Effective length
RMA	mm RMA
3VX-250	635
3VX-265	675
3VX-280	710
3VX-300	760
3VX-315	800
3VX-335	850
3VX-355	900
3VX-375	950
3VX-400	1015
3VX-425	1080
3VX-450	1145
3VX-475	1205
3VX-500	1270
3VX-530	1345
3VX-560	1420
3VX-600	1525
3VX-630	1600
3VX-670	1700
3VX-710	1805
3VX-750	1905
3VX-800	2030
3VX-850	2160
3VX-900	2285
3VX-950	2415
3VX-1000	2540
3VX-1060	2690
3VX-1120	2845
3VX-1180	2995
3VX-1250	3175
3VX-1320	3355
3VX-1400	3555

5VX

Belt ref.	Effective length
RMA	mm RMA
5VX-500	1270
5VX-530	1345
5VX-560	1420
5VX-600	1525
5VX-630	1600
5VX-670	1700
5VX-710	1805
5VX-750	1905
5VX-800	2030
5VX-850	2160
5VX-900	2285
5VX-950	2415
5VX-1000	2540
5VX-1060	2690
5VX-1120	2845
5VX-1180	2995
5VX-1250	3175
5VX-1320	3355
5VX-1400	3555
5VX-1500	3810
5VX-1600	4065
5VX-1700	4320
5VX-1800	4570
5VX-1900	4825
5VX-2000	5080

* Dimensions according to ISO 4184.

Hi-Power® PowerBand® B, C and D sections are available on request.

9J / 15J / 25J are ISO standards for RMA 3V-PB / 5V-PB / 8V-PB.

8VK sizes with aramid cord are available on special request.

3VX, 5VX, SPB, SPC, 9J & 15J are available in 2, 3, 4 and 5 strands; 8V is available in 3, 4 and 5 strands.

8V PowerBand® belts are designed for use both in 8V and 25J pulleys.

PowerBand® ordering code is composed as follows:

Example: 2/3VX250

2 - Number of ribs

3VX - Section

250 - Effective length in 1/10 inch

Dimensions in bold are available from stock.

SUPER HC® POWERBAND®

SPB

Belt ref.	Datum length
RMA	mm ISO*
SPB 2120	2120
SPB 2240	2240
SPB 2360	2360
SPB 2500	2500
SPB 2650	2650
SPB 2800	2800
SPB 3000	3000
SPB 3150	3150
SPB 3350	3350
SPB 3550	3550
SPB 3750	3750
SPB 4000	4000

9J

Belt ref.	Effective length
	mm ISO
9J 1250	1250
9J 1320	1320
9J 1400	1400
9J 1500	1500
9J 1600	1600
9J 1700	1700
9J 1800	1800
9J 1900	1900
9J 2000	2000
9J 2120	2120
9J 2240	2240
9J 2360	2360
9J 2500	2500
9J 2650	2650
9J 2800	2800
9J 3000	3000
9J 3150	3150
9J 3350	3350
9J 3550	3550

Belt ref.	Datum length
RMA	mm ISO*
SPB 4250	4250
SPB 4500	4500
SPB 4750	4750
SPB 5000	5000
SPB 5300	5300
SPB 5600	5600
SPB 6000	6000
SPB 6300	6300
SPB 6700	6700
SPB 7100	7100
SPB 7500	7500
SPB 8000	8000

15J

Belt ref.	Effective length
	mm ISO
15J 1250	1250
15J 1320	1320
15J 1400	1400
15J 1500	1500
15J 1600	1600
15J 1700	1700
15J 1800	1800
15J 1900	1900
15J 2000	2000
15J 2120	2120
15J 2240	2240
15J 2360	2360
15J 2500	2500
15J 2650	2650
15J 2800	2800
15J 3000	3000
15J 3150	3150
15J 3350	3350
15J 3550	3550
15J 3750	3750
15J 4000	4000
15J 4250	4250
15J 4500	4500
15J 4750	4750
15J 5000	5000
15J 5300	5300
15J 5600	5600
15J 6000	6000
15J 6300	6300
15J 6700	6700
15J 7100	7100
15J 7500	7500
15J 8000	8000
15J 9000	9000

SPC

Belt ref.	Datum length
RMA	mm ISO*
SPC 3000	3000
SPC 3150	3150
SPC 3350	3350
SPC 3550	3550
SPC 3750	3750
SPC 4000	4000
SPC 4250	4250
SPC 4500	4500
SPC 4750	4750
SPC 5000	5000

8V / 25J

Belt ref.	Effective length
	mm ISO
8V 1000	2540
8V 1060	2690
8V 1120	2845
8V 1180	2995
8V 1250	3175
8V 1320	3355
8V 1400	3555
8V 1500	3810
8V 1600	4065
8V 1700	4320
8V 1800	4570
8V 1900	4825
8V 2000	5080
8V 2120	5385
8V 2240	5690
8V 2360	5995
8V 2500	6350
8V 2650	6730
8V 2800	7110
8V 3000	7620
8V 3150	8000
8V 3350	8510
8V 3550	9015
8V 3750	9525
8V 4000	10160
8V 4250	10795
8V 4500	11430
8V 4750	12065
8V 5000	12700
8V 5600	14225
8V 6000	15240

MICRO-V®

Multi-ribbed belt



Through its truncated rib design, Gates Micro-V® multi-ribbed belt ensures an outstanding performance at higher speeds on smaller diameter pulleys. This smooth-running belt provides a power capacity increase up to 80% higher than RMA standards.

The Micro-V® size range has recently been extended and comprises more than 125 standard effective lengths covering a multitude of applications.

Identification

Durable yellow marking indicating type and dimension.

Construction

- Truncated ribs ensure flexibility, reduce heat buildup and improve rib crack resistance.
- High modulus, low stretch polyester tensile member provides superior resistance to fatigue and shock loads.
- All elastomeric rubber compound provides oil and heat resistance.
- Specially formulated fibre reinforced undercord stock improves belt stability.

Advantages

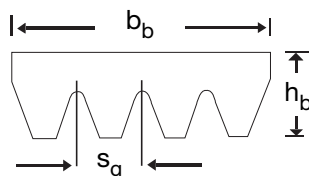
- Extremely smooth and cool running.
- Very high power capacity per rib.
- Long life due to extra load-carrying capacity.
- Improved performance on back idlers.
- Smaller drive package.
- Tolerant of pulley groove debris.

Sections and nominal dimensions



	Pitch S_g mm	Height h_b mm
PJ	2.34	3.6
PL	4.70	6.4
PM	9.40	12.5

Micro-V® belts are available in PJ, PL and PM cross-sections. The figure below shows a cross-sectional view illustrating the nominal belt dimensions — rib width and belt height. All these belts will operate in standard pulleys provided the pulleys are manufactured to the DIN 7867 or ISO 9982 standard for the specific cross-section.



Nominal top width:

$$b_b = N_r \times S_g$$

Where: N_r = number of ribs

S_g = pulley groove spacing

PJ

Belt ref.		Effective length
DIN 7867	RMA	mm DIN/ISO
PJ 406	160 J	406
PJ 432	170 J	432
PJ 457	180 J	457
PJ 483	190 J	483
PJ 508	200 J	508
PJ 559	220 J	559
PJ 584	230 J	584
PJ 610	240 J	610
PJ 660	260 J	660
PJ 711	280 J	711
PJ 723	285 J	723
PJ 737	290 J	737
PJ 762	300 J	762
PJ 813	320 J	813
PJ 838	330 J	838
PJ 864	340 J	864
PJ 914	360 J	914
PJ 955	376 J	955
PJ 965	380 J	965
PJ 1016	400 J	1016
PJ 1041	410 J	1041
PJ 1067	420 J	1067
PJ 1092	430 J	1092
PJ 1105	435 J	1105
PJ 1110	437 J	1110
PJ 1118	440 J	1118
PJ 1123	442 J	1123
PJ 1130	445 J	1130
PJ 1136	447 J	1136
PJ 1150	453 J	1150
PJ 1168	460 J	1168
PJ 1194	470 J	1194
PJ 1200	473 J	1200
PJ 1222	480 J	1222
PJ 1233	485 J	1233
PJ 1244	490 J	1244
PJ 1262	497 J	1262
PJ 1270	500 J	1270
PJ 1280	504 J	1280
PJ 1300	512 J	1300
PJ 1309	515 J	1309
PJ 1321	520 J	1321
PJ 1333	525 J	1333
PJ 1355	534 J	1355
PJ 1371	540 J	1371
PJ 1397	550 J	1397
PJ 1428	562 J	1428
PJ 1439	567 J	1439
PJ 1473	580 J	1473
PJ 1549	610 J	1549
PJ 1600	630 J	1600
PJ 1651	650 J	1651

Belt ref.		Effective length
DIN 7867	RMA	mm DIN/ISO
PJ 1663	655 J	1663
PJ 1752	690 J	1752
PJ 1854	730 J	1854
PJ 1895	746 J	1895
PJ 1910	752 J	1910
PJ 1930	760 J	1930
PJ 1956	770 J	1956
PJ 1981	780 J	1981
PJ 1992	784 J	1992
PJ 2083	820 J	2083
PJ 2210	870 J	2210
PJ 2337	920 J	2337
PJ 2489	980 J	2489

PL

Belt ref.		Effective length
DIN 7867	RMA	mm DIN/ISO
PL 954	375 L	954
PL 991	390 L	991
PL 1075	423 L	1075
PL 1270	500 L	1270
PL 1333	525 L	1333
PL 1371	540 L	1371
PL 1397	550 L	1397
PL 1422	560 L	1422
PL 1562	615 L	1562
PL 1613	635 L	1613
PL 1664	655 L	1664
PL 1715	675 L	1715
PL 1765	695 L	1765
PL 1803	710 L	1803
PL 1842	725 L	1842
PL 1943	765 L	1943
PL 1981	780 L	1981
PL 2019	795 L	2019
PL 2070	815 L	2070
PL 2096	825 L	2096
PL 2134	840 L	2134
PL 2197	865 L	2197
PL 2235	880 L	2235
PL 2324	915 L	2324
PL 2362	930 L	2362
PL 2476	975 L	2476
PL 2515	990 L	2515
PL 2705	1065 L	2705
PL 2743	1080 L	2743
PL 2845	1120 L	2845
PL 2896	1140 L	2896
PL 2921	1150 L	2921
PL 2997	1180 L	2997

PL

Belt ref.		Effective length
DIN 7867	RMA	mm DIN/ISO
PL 3086	1215 L	3086
PL 3124	1230 L	3124
PL 3289	1295 L	3289
PL 3327	1310 L	3327
PL 3493	1375 L	3493
PL 3696	1455 L	3696

PM

Belt ref.		Effective length
DIN 7867	RMA	mm DIN/ISO
PM 2286	900 M	2286
PM 2388	940 M	2388
PM 2515	990 M	2515
PM 2693	1060 M	2693
PM 2832	1115 M	2832
PM 2921	1150 M	2921
PM 3010	1185 M	3010
PM 3124	1230 M	3124
PM 3327	1310 M	3327
PM 3531	1390 M	3531
PM 3734	1470 M	3734
PM 4089	1610 M	4089
PM 4191	1650 M	4191
PM 4470	1760 M	4470
PM 4648	1830 M	4648
PM 5029	1980 M	5029
PM 5410	2130 M	5410
PM 6121	2410 M	6121
PM 6502	2560 M	6502
PM 6883	2710 M	6883
PM 7646	3010 M	7646
PM 8408	3310 M	8408
PM 9169	3610 M	9169
PM 9931	3910 M	9931

Micro-V® ordering code is composed as follows:

Example: PJ 508 BELT

PJ - Section
508 - Effective length (mm)

Dimensions in bold are available from stock.

POLYFLEX® JB™

Polyurethane multiple V-belt



Polyflex® JB™ is synonymous with high power density in small spaces. Developed by Gates and produced to patented manufacturing processes, Polyflex® JB™ belts provide more load-carrying capacity at higher speeds to small precision multiple V-belt drives. This results in significant cost savings and improved design freedom.

Recommended for use on bench type milling machines, lathe drives, woodworking and metalworking machine spindle drives, computer peripheral equipment, small blowers, etc.

Identification

Durable marking indicating type and dimension.

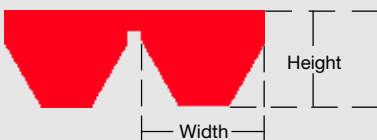
Construction

- Joined belt construction improves stability.
- Ribs relieve bending stress on small pulleys and provide lateral rigidity.
- 60° angle provides more undercord support to the tensile section and distributes the load more evenly.
- Small cross-section meets special application needs such as high shaft speeds, small drive package size and smooth running requirements.
- High modulus polyurethane compound with a high friction coefficient. The precise casting method eliminates overlaps and layers.
- Excellent adhesion of tensile cords and polyurethane compound leads to high fatigue resistance and long belt life.
- Extra toughness. The polyurethane compound resists fatigue, wear and ozone.

Advantages

- Long belt life on small pulleys and compact drives.
- Greater shaft speeds, in excess of 10000 rpm.
- High performance and smooth running for precision applications.
- Cost savings and design freedom.
- Avoids vibrations when subjected to shock loads.

Single belt sections and nominal dimensions



	Width mm	Height mm
5M-JB	5	3.3
7M-JB	7	5.3
11M-JB	11	7.1

5M - JB

Belt ref.	Effective length mm
5M-JB 280	280
5M-JB 290	290
5M-JB 300	300
5M-JB 307	307
5M-JB 315	315
5M-JB 325	325
5M-JB 335	335
5M-JB 345	345
5M-JB 355	355
5M-JB 365	365
5M-JB 375	375
5M-JB 387	387
5M-JB 400	400
5M-JB 412	412
5M-JB 425	425
5M-JB 437	437
5M-JB 450	450
5M-JB 462	462
5M-JB 475	475
5M-JB 487	487
5M-JB 500	500
5M-JB 515	515
5M-JB 530	530
5M-JB 545	545
5M-JB 560	560
5M-JB 580	580
5M-JB 600	600
5M-JB 615	615
5M-JB 630	630
5M-JB 650	650
5M-JB 670	670
5M-JB 690	690
5M-JB 710	710
5M-JB 730	730
5M-JB 750	750
5M-JB 775	775
5M-JB 800	800
5M-JB 825	825
5M-JB 850	850
5M-JB 875	875
5M-JB 900	900
5M-JB 925	925
5M-JB 950	950
5M-JB 975	975
5M-JB 1000	1000
5M-JB 1030	1030
5M-JB 1060	1060
5M-JB 1090	1090
5M-JB 1120	1120
5M-JB 1150	1150
5M-JB 1180	1180
5M-JB 1220	1220

7M - JB

Belt ref.	Effective length mm
7M-JB 500	490
7M-JB 515	505
7M-JB 530	520
7M-JB 545	535
7M-JB 560	550
7M-JB 580	570
7M-JB 600	590
7M-JB 615	605
7M-JB 630	620
7M-JB 650	640
7M-JB 670	660
7M-JB 690	680
7M-JB 710	703
7M-JB 730	723
7M-JB 750	743
7M-JB 775	768
7M-JB 800	793
7M-JB 825	818
7M-JB 850	843
7M-JB 875	868
7M-JB 900	893
7M-JB 925	918
7M-JB 950	943
7M-JB 975	968
7M-JB 1000	993
7M-JB 1030	1023
7M-JB 1060	1053
7M-JB 1090	1083
7M-JB 1120	1113
7M-JB 1150	1143
7M-JB 1180	1173
7M-JB 1220	1213
7M-JB 1250	1243
7M-JB 1280	1273
7M-JB 1320	1313
7M-JB 1360	1353
7M-JB 1400	1393
7M-JB 1450	1443

7M - JB

Belt ref.	Effective length mm
7M-JB 1500	1493
7M-JB 1550	1543
7M-JB 1600	1593
7M-JB 1650	1643
7M-JB 1700	1693
7M-JB 1750	1743
7M-JB 1800	1793
7M-JB 1850	1843
7M-JB 1900	1893
7M-JB 1950	1943
7M-JB 2000	1993
7M-JB 2060	2053
7M-JB 2120	2113
7M-JB 2180	2173
7M-JB 2240	2233
7M-JB 2300	2293

11M - JB

Belt ref.	Effective length mm
11M-JB 710	692
11M-JB 730	712
11M-JB 750	732
11M-JB 775	757
11M-JB 800	782
11M-JB 825	807
11M-JB 850	832
11M-JB 875	857
11M-JB 900	882
11M-JB 925	907
11M-JB 950	932
11M-JB 975	957
11M-JB 1000	982
11M-JB 1030	1012
11M-JB 1060	1042
11M-JB 1090	1072
11M-JB 1120	1102
11M-JB 1150	1132
11M-JB 1180	1162
11M-JB 1220	1202
11M-JB 1250	1232
11M-JB 1280	1262
11M-JB 1320	1302
11M-JB 1360	1342
11M-JB 1400	1382
11M-JB 1450	1432
11M-JB 1500	1482
11M-JB 1550	1532
11M-JB 1600	1582
11M-JB 1650	1632
11M-JB 1700	1682
11M-JB 1750	1732
11M-JB 1800	1782
11M-JB 1850	1832
11M-JB 1900	1882
11M-JB 1950	1932
11M-JB 2000	1982
11M-JB 2060	2042
11M-JB 2120	2102
11M-JB 2180	2162
11M-JB 2240	2222
11M-JB 2300	2282

Polyflex® JB™ ordering code is composed as follows:

Example: 3/5M280JB

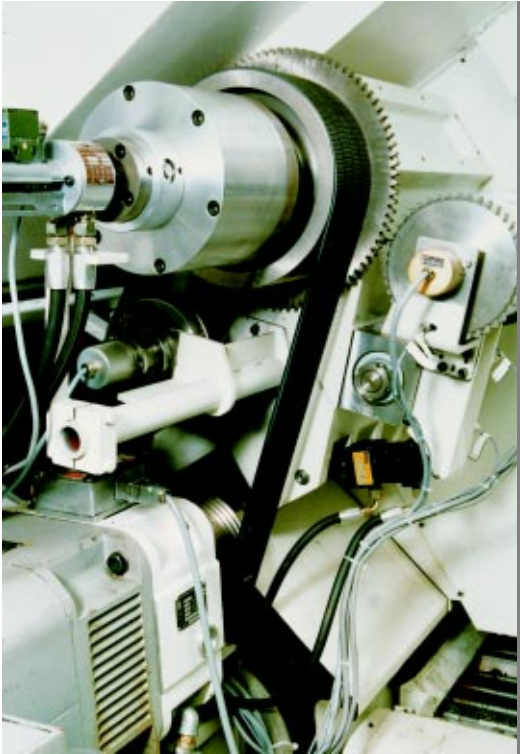
- 3** - Number of ribs
- 5M** - Rib width 5 mm
- 280** - Effective length (mm)
- JB** - Joined belt

Dimensions in bold are available from stock.





Polyurethane V-belt



This compact and strong belt with nominal top width from 3 mm to 11 mm transmits more power and allows high speed ratios. Polyflex® is suited for extremely small diameter pulleys and very compact drives with high rotational speeds. Ideal for use on machines and machine tools requiring high performance and smooth operation in limited space such as bench type milling machines, lathe drives, woodworking and metalworking machine spindle drives, computer peripheral equipment, small blowers, etc.

Identification

Durable marking indicating type and dimension.

Construction

- Polyurethane compound, superior to conventional belt materials, offers high fatigue and wear resistance and a high friction coefficient. It also improves adhesion to the tensile cords.
- Polyurethane is extremely resistant to heat, chemicals and oil.
- Uniformity throughout Polyflex® is ensured because the polyurethane compound is not layered but cast as a single unit after the positioning of the tensile cords in the mould.
- Ribbed top provides lateral rigidity without increasing bending stresses. The ribs also help to keep Polyflex® belts running cool.
- 60° angle results in better support of the tensile section, and provides a more even load distribution.

Advantages

- Design freedom and space savings which are not possible with conventional rubber construction belts.
- Low maintenance cost as belt needs less retensioning.
- Long belt life on compact drives.

Sections and nominal dimensions



	Width mm	Height mm
3M	3	2.3
5M	5	3.3
7M	7	5.3
11M	11	7.1

3M

Belt reference
3M 180
3M 185
3M 190
3M 195
3M 200
3M 206
3M 212
3M 218
3M 224
3M 230
3M 236
3M 243
3M 250
3M 258
3M 265
3M 272
3M 280
3M 290
3M 300
3M 307
3M 315
3M 325
3M 335
3M 345
3M 355
3M 365
3M 375
3M 387
3M 400
3M 412
3M 425
3M 437
3M 450
3M 462
3M 475
3M 487
3M 500
3M 515
3M 530
3M 545
3M 560
3M 580
3M 600
3M 615
3M 630
3M 650
3M 670
3M 690
3M 710
3M 730
3M 750

5M

Belt reference
5M 280
5M 290
5M 300
5M 307
5M 315
5M 325
5M 335
5M 345
5M 355
5M 365
5M 375
5M 387
5M 400
5M 412
5M 425
5M 437
5M 450
5M 462
5M 475
5M 487
5M 500
5M 515
5M 530
5M 545
5M 560
5M 580
5M 600
5M 615
5M 630
5M 650
5M 670
5M 690
5M 710
5M 730
5M 750
5M 775
5M 800
5M 825
5M 850
5M 875
5M 900
5M 925
5M 950
5M 975
5M 1000
5M 1030
5M 1060
5M 1090
5M 1120
5M 1150
5M 1180
5M 1220
5M 1250
5M 1280
5M 1320
5M 1360
5M 1400
5M 1450
5M 1500
5M 1600
5M 1650
5M 1850

7M

Belt reference
7M 500
7M 515
7M 530
7M 545
7M 560
7M 580
7M 600
7M 615
7M 630
7M 650
7M 670
7M 690
7M 710
7M 730
7M 750
7M 775
7M 800
7M 825
7M 850
7M 875
7M 900
7M 925
7M 950
7M 975
7M 1000
7M 1030
7M 1060
7M 1090
7M 1120
7M 1150
7M 1180
7M 1220
7M 1250
7M 1280
7M 1320
7M 1360
7M 1400
7M 1450
7M 1500
7M 1550
7M 1600
7M 1650
7M 1700
7M 1750
7M 1800
7M 1850
7M 1900
7M 1950
7M 2000
7M 2060
7M 2120
7M 2180
7M 2240
7M 2300

11M

Belt reference
11M 710
11M 730
11M 750
11M 775
11M 800
11M 825
11M 850
11M 875
11M 900
11M 925
11M 950
11M 975
11M 1000
11M 1030
11M 1060
11M 1090
11M 1120
11M 1150
11M 1180
11M 1220
11M 1250
11M 1280
11M 1320
11M 1360
11M 1400
11M 1450
11M 1500
11M 1550
11M 1600
11M 1650
11M 1700
11M 1750
11M 1800
11M 1850
11M 1900
11M 1950
11M 2000
11M 2060
11M 2120
11M 2180
11M 2240
11M 2300

Polyflex® ordering code is composed as follows:

Example: 7M1060

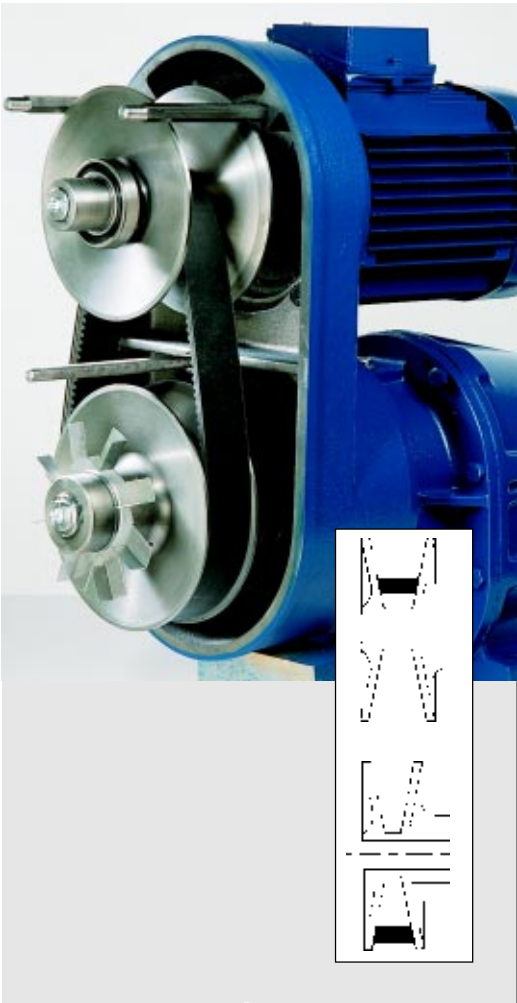
7M - Belt nominal top width 7 mm

1060 - Effective length (mm)

Dimensions in bold are available from stock.

MULTI-SPEED

V-belt for variable speed drives



Gates Multi-Speed belt provides top performance on variable speed drives. It adjusts itself to the pulley groove without difficulty, providing a wide range of speeds and speed ratios.

In addition to the standard Multi-Speed belt line, special sizes (top width, thickness and angle) are available on request.

Identification

Durable marking plus printed size.

Construction

- Engineered notch contour increases flexibility. The notches ensure maximum heat dispersion, considerably decreasing running temperatures.
- Strong transverse rigidity offers high resistance to distortion of the belt in the pulley. This results in even load distribution and wear reduction.
- Uniform composition and thickness of the undercord ensure smooth and silent running.
- Combination of these construction features gives maximum speed adjustment.

Advantages

- Maximum range of speed changes.
- High load-carrying capacity.
- Smooth machine operation.
- Exceptionally long belt life.

	Special Gates sizes					Sizes ISO R 1604						
	Inside length: mm					Pitch length: mm						
Reference	13	23	28	37	47	W16	W20	W25	W31.5	W40	W50	W63
Top width (mm)	13	23	28	37	47	16.6	20.7	25.9	32.6	41.5	51.8	65.3
Thickness (mm)	6	8	9	10	13	5	6.5	8	10	13	16	20
Angle	26°	26°	26°	28°	28°	24°	26°	26°	26°	28°	28°	30°
	600	525 ⁺	650	800	1000	630	630	710	900	1120	1400 ⁺	1800 ⁺
	700	600	700	850	1060	710	710	800	1000	1250	1600 ⁺	2000 ⁺
	800	650	750	900	1120	800	800	900	1120	1400	1800 ⁺	2240 ⁺
	900	700	800	950	1180	900	900	1000	1250	1600	2000 ⁺	2500 ⁺
		750	850	1000	1250	1000	1000	1120	1400	1700	2240 ⁺	2800 ⁺
		800	900	1060	1320		1120	1250	1600	1800	2500 ⁺	3150 ⁺
		850	950	1120	1400		1250	1400	1800	2000	2800 ⁺	
		900	1000	1180	1500			1600	2000	2240	3150 ⁺	
		950	1060	1250	1600					2500		
		1000	1120	1320	1700							
		1060	1180	1400	1800							
		1120	1250	1500	2000							
		1180	1320	1600	2240							
		1250	1400	1700								
		1320	1500	1800								
		1400	1600	2000								
		1500		2240								

Multi-Speed ordering code is composed as follows:

Example: 1000W16

1000 - Pitch length (mm)

W16 - Standardised cross-section

Dimensions in bold are available from stock.

+ mechanically notched

Special capacity V-belt



PoweRated® V-belt is recommended for heavy-duty drives and clutching applications.

The PoweRated® V-belt meets the requirements of high power, clutching, heavy shock loaded and back idler driven lawn and garden equipment.

Identification

Durable moulded marking plus green cover designating PoweRated® as a special capacity belt.

Construction

- Aramid tensile cords.
- Low cord positioning in thin profile gives extreme flexibility.
- Special heavy-duty cord reinforcement and low friction wrapping provide smooth clutching operation.
- Fabric reinforcement on the bottom ensures high crack resistance if back idler is used.

Advantages

- Smooth clutching and disengaging.
- Length stability.
- Special shock resistance.
- Special bending and crack resistance.

Sections and nominal dimensions



	Width inch	Height inch
3L	3/8	7/32
4L	1/2	5/16
5L	21/32	3/8

V-BELT FOR BACK IDLER AND CLUTCHING APPLICATIONS

3L 3/8" nominal top width			4L 1/2" nominal top width			4L 1/2" nominal top width		
Outside circumference		Belt ref.	Outside circumference		Belt ref.	Outside circumference		Belt ref.
inch	mm		inch	mm		inch	mm	
16	406	6716	17	432	6817	71	1803	6871
17	432	6717	18	457	6818	72	1829	6872
18	457	6718	19	483	6819	73	1854	6873
19	483	6719	20	508	6820	74	1880	6874
20	508	6720	21	533	6821	75	1905	6875
21	533	6721	22	559	6822	76	1930	6876
22	559	6722	23	584	6823	77	1956	6877
23	584	6723	24	610	6824	78	1981	6878
24	610	6724	25	635	6825	79	2007	6879
25	635	6725	26	660	6826	80	2032	6880
26	660	6726	27	686	6827	81	2057	6881
27	686	6727	28	711	6828	82	2083	6882
28	711	6728	29	737	6829	83	2108	6883
29	737	6729	30	762	6830	84	2134	6884
30	762	6730	31	787	6831	85	2159	6885
31	787	6731	32	813	6832	86	2184	6886
32	813	6732	33	838	6833	87	2210	6887
33	838	6733	34	864	6834	88	2235	6888
34	864	6734	35	889	6835	89	2261	6889
35	889	6735	36	914	6836	90	2286	6890
36	914	6736	37	940	6837	91	2311	6891
37	940	6737	38	969	6838	92	2337	6892
38	965	6738	39	991	6839	93	2362	6893
39	991	6739	40	1016	6840	94	2388	6894
40	1016	6740	41	1041	6841	95	2413	6895
41	1041	6741	42	1067	6842	96	2438	6896
42	1067	6742	43	1092	6843	97	2464	6897
43	1092	6743	44	1118	6844	98	2489	6898
44	1118	6744	45	1143	6845	99	2515	6899
45	1143	6745	46	1168	6846			
46	1168	6746	47	1194	6847			
47	1194	6747	48	1219	6848			
48	1219	6748	49	1245	6849			
49	1245	6749	50	1270	6850			
50	1270	6750	51	1295	6851			
61	1549	6761	52	1321	6852			
			53	1346	6853			
			54	1372	6854			
			55	1397	6855			
			56	1422	6856			
			57	1448	6857			
			58	1473	6858			
			59	1499	6859			
			60	1524	6860			
			61	1549	6861			
			62	1575	6862			
			63	1600	6863			
			64	1626	6864			
			65	1651	6865			
			66	1676	6866			
			67	1702	6867			
			69	1753	6869			
			70	1778	6870			

V-BELT FOR BACK IDLER AND CLUTCHING APPLICATIONS

5L 21/32" nominal top width			5L 21/32" nominal top width		
Outside circumference		Belt ref.	Outside circumference		Belt ref.
inch	mm		inch	mm	
25	635	6925	70	1778	6970
26	660	6926	71	1803	6971
27	686	6927	72	1829	6972
28	711	6928	73	1854	6973
29	737	6929	74	1880	6974
30	762	6930	75	1905	6975
31	787	6931	76	1930	6976
32	813	6932	77	1956	6977
33	838	6933	78	1981	6978
34	864	6934	79	2007	6979
35	889	6935	80	2032	6980
36	914	6936	81	2057	6981
37	940	6937	82	2083	6982
38	969	6938	83	2108	6983
39	991	6939	84	2134	6984
40	1016	6940	85	2159	6985
41	1041	6941	86	2184	6986
42	1067	6942	87	2210	6987
43	1092	6943	88	2235	6988
44	1118	6944	89	2261	6989
45	1143	6945	90	2286	6990
46	1168	6946	91	2311	6991
47	1194	6947	92	2337	6992
48	1219	6948	93	2362	6993
49	1245	6949	94	2388	6994
50	1270	6950	95	2413	6995
51	1295	6951	96	2438	6996
52	1321	6952	97	2464	6997
53	1346	6953	98	2489	6998
54	1372	6954	99	2515	6999
55	1397	6955			
56	1422	6956			
57	1448	6957			
58	1473	6958			
59	1499	6959			
60	1524	6960			
61	1549	6961			
62	1575	6962			
63	1600	6963			
64	1626	6964			
65	1651	6965			
66	1676	6966			
67	1702	6967			
68	1727	6968			
69	1753	6969			

PoweRated® ordering code is composed as follows:

Example: POWERATED 4L600

4L - Section

600 - Outside circumference in 1/10 inch

NOTE

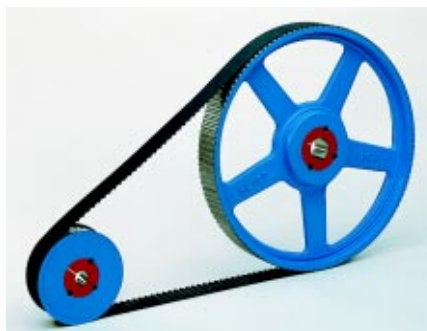
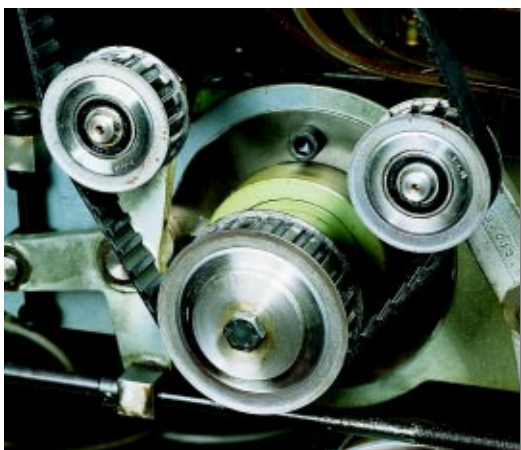
The outside circumference is determined by placing a steel tape around the outside of the belt.

All dimensions are available on request.



POWERGRIP®

Classical synchronous belt



Gates classical synchronous PowerGrip® belt offers a maintenance-free and economical alternative to conventional drives like chains and gears. Its application range extends from minimum drives (computer printers)

to heavy-duty machinery (oil pumps, etc).

Identification

Three part number on the back of the belt indicating belt length, pitch and width.

Construction

- Trapezoidal tooth form.
- Precisely formed and accurately spaced elastomeric teeth ensure correct engagement with the pulley grooves.
- Fibreglass tensile cords.
- Nylon fabric cover protects the tooth surfaces.
- Available in standard pitches according to ISO 5296: MXL, XL, L, H, XH, XXH.

For MXL sizes and description, see chapter on PowerGrip® MXL on pages 29 - 30.

Advantages

- Power transmission of up to 150 kW and speeds of up to 10000 rpm.
- Peripheral speed up to 80 m/s.
- Positive slip-proof engagement.
- Constant angular velocity.
- Efficiencies up to 99%.
- Low bearing load because of freedom of high tension.
- Maintenance-free continuity of operation.
- Wide range of load capacities and speed ratios.
- Compact design.
- Economical operation.

Sections and nominal dimensions



	Pitch inch	T mm	B mm
XL	1/5	1.27	2.3
L	3/8	1.91	3.5
H	1/2	2.29	4.0
XH	7/8	6.35	11.4
XXH	1 1/4	9.53	15.2

NOTE

For correct usage of belt please request Gates' Synchronous Belt Drive Design Manual (E2/20099).

XL EXTRA LIGHT

Pitch: 1/5" (5.080 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth	Length and pitch designation	Pitch length mm ISO	Number of teeth	Length and pitch designation	Pitch length mm ISO	Number of teeth
46 XL	116.84	23	180 XL	457.20	90	412 XL	1046.48	206
50 XL	127.00	25	182 XL	462.28	91	424 XL	1076.96	212
58 XL	147.32	29	184 XL	467.36	92	432 XL	1097.28	216
60 XL	152.40	30	188 XL	477.52	94	434 XL	1102.36	217
66 XL	167.64	33	190 XL	482.60	95	438 XL	1112.52	219
70 XL	177.80	35	192 XL	487.68	96	450 XL	1143.00	225
76 XL	193.04	38	194 XL	492.76	97	460 XL	1168.40	230
78 XL	198.12	39	196 XL	497.84	98	490 XL	1244.60	245
80 XL	203.20	40	198 XL	502.92	99	506 XL	1285.24	253
84 XL	213.36	42	200 XL	508.00	100	540 XL	1371.60	270
86 XL	218.44	43	202 XL	513.08	101	554 XL	1407.16	277
88 XL	223.52	44	204 XL	518.16	102	564 XL	1432.56	282
90 XL	228.60	45	208 XL	528.32	104	580 XL	1473.20	290
92 XL	233.68	46	210 XL	533.40	105	592 XL	1503.68	296
94 XL	238.76	47	212 XL	538.48	106	672 XL	1706.88	336
98 XL	248.92	49	214 XL	543.56	107	736 XL	1869.44	368
100 XL	254.00	50	220 XL	558.80	110	770 XL	1955.80	385
102 XL	259.08	51	228 XL	579.12	114			
106 XL	269.24	53	230 XL	584.20	115			
108 XL	274.32	54	232 XL	589.28	116			
110 XL	279.40	55	234 XL	594.36	117			
112 XL	284.48	56	240 XL	609.60	120			
114 XL	289.56	57	250 XL	635.00	125			
116 XL	294.64	58	260 XL	660.40	130			
118 XL	299.72	59	264 XL	670.56	132			
120 XL	304.80	60	270 XL	685.80	135			
122 XL	309.88	61	274 XL	695.96	137			
124 XL	314.96	62	280 XL	711.20	140			
126 XL	320.04	63	284 XL	721.36	142			
128 XL	325.12	64	286 XL	726.44	143			
130 XL	330.20	65	290 XL	736.60	145			
132 XL	335.28	66	296 XL	751.84	148			
134 XL	340.36	67	300 XL	762.00	150			
136 XL	345.44	68	306 XL	777.24	153			
138 XL	350.52	69	310 XL	787.40	155			
140 XL	355.60	70	316 XL	802.64	158			
142 XL	360.68	71	322 XL	817.88	161			
144 XL	365.76	72	330 XL	838.20	165			
146 XL	370.84	73	340 XL	863.60	170			
148 XL	375.92	74	344 XL	873.76	172			
150 XL	381.00	75	348 XL	883.92	174			
154 XL	391.16	77	350 XL	889.00	175			
156 XL	396.24	78	352 XL	894.08	176			
158 XL	401.32	79	362 XL	919.48	181			
160 XL	406.40	80	372 XL	944.88	186			
164 XL	416.56	82	380 XL	965.20	190			
166 XL	421.64	83	382 XL	970.28	191			
170 XL	431.80	85	384 XL	975.36	192			
174 XL	441.96	87	390 XL	990.60	195			
176 XL	447.04	88	392 XL	995.68	196			
178 XL	452.12	89	404 XL	1026.16	202			

Available in widths of 6.4 mm (code 025), 7.9 mm (code 031) and 9.5 mm (code 037).

Dimensions in bold are available from stock.

CLASSICAL SYNCHRONOUS BELTS

L LIGHT

Pitch: 3/8" (9.525 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth
124 L	314.33	33
135 L	342.90	36
150 L	381.00	40
165 L	419.10	44
169 L	428.63	45
172 L	438.15	46
187 L	476.25	50
202 L	514.35	54
210 L	533.40	56
225 L	571.50	60
236 L	600.08	63
240 L	609.60	64
244 L	619.13	65
251 L	638.18	67
255 L	647.70	68
270 L	685.80	72
285 L	723.90	76
300 L	762.00	80
322 L	819.15	86
345 L	876.30	92
367 L	933.45	98
390 L	990.60	104
405 L	1028.70	108
420 L	1066.80	112
450 L	1143.00	120
461 L	1171.58	123
480 L	1219.20	128
510 L	1295.40	136
540 L	1371.60	144
600 L	1524.00	160
630 L	1600.20	168
660 L	1676.40	176

Available in widths of 12.7 mm (code 050), 19.1 mm (code 075) and 25.4 mm (code 100).

PowerGrip® ordering code is composed as follows:

Example: 600 H 200

600	- Pitch length 60" (1524.0 mm)
H	- Pitch 1/2" (12.7 mm)
200	- Belt width 2.0" (50.8 mm)

Dimensions in bold are available from stock.

H HEAVY

Pitch: 1/2" (12.7 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth
240 H	609.60	48
255 H	647.70	51
270 H	685.80	54
300 H	762.00	60
310 H	787.40	62
330 H	838.20	66
360 H	914.40	72
370 H	939.80	74
375 H	952.50	75
390 H	990.60	78
420 H	1066.80	84
440 H	1117.60	88
450 H	1143.00	90
480 H	1219.20	96
485 H	1231.90	97
510 H	1295.40	102
520 H	1320.80	104
540 H	1371.60	108
570 H	1447.80	114
600 H	1524.00	120
615 H	1562.10	123
630 H	1600.20	126
660 H	1676.40	132
700 H	1778.00	140
750 H	1905.00	150
800 H	2032.00	160
850 H	2159.00	170
885 H	2247.90	177
900 H	2286.00	180
1000 H	2540.00	200
1100 H	2794.00	220
1130 H	2870.00	226
1250 H	3175.00	250
1325 H	3365.50	265
1400 H	3556.00	280
1460 H	3708.40	292
1700 H	4318.00	340

Available in widths of 19.1 mm (code 075), 25.4 mm (code 100), 38.1 mm (code 150), 50.8 mm (code 200) and 76.2 mm (code 300).

XH EXTRA HEAVY

Pitch: 7/8" (22.225 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth
507 XH	1289.00	58
560 XH	1422.40	64
630 XH	1600.20	72
700 XH	1778.00	80
770 XH	1955.85	88
787 XH	2000.25	90
831 XH	2111.38	95
840 XH	2133.60	96
980 XH	2489.20	112
1120 XH	2844.80	128
1260 XH	3200.40	144
1400 XH	3556.00	160
1540 XH	3911.60	176
1680 XH	4267.20	192
1750 XH	4445.00	200

Available in widths of 50.8 mm (code 200), 76.2 mm (code 300), 101.6 mm (code 400) and 127 mm (code 500).

XXH DOUBLE EXTRA HEAVY

Pitch: 1 1/4" (31.75 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth
700 XXH	1778.00	56
800 XXH	2032.00	64
900 XXH	2286.00	72
1000 XXH	2540.00	80
1200 XXH	3048.00	96
1400 XXH	3556.00	112
1600 XXH	4064.00	128
1800 XXH	4572.00	144

Available in widths of 50.8 mm (code 200), 76.2 mm (code 300), 101.6 mm (code 400) and 127 mm (code 500).

POWERGRIP® MXL

High precision synchronous belt



The PowerGrip® MXL belt is a classical synchronous belt with a pitch of 0.08" (2.032 mm). It is recommended for applications where maximum synchronisation, small package and high speed are required. Space-saving and highly stable, this belt is the ideal solution to precision drives such as office machines and computers.

Identification

Three part number on the back of the belt indicating belt length, pitch and width.

Construction

- Trapezoidal tooth form.
- Elastomeric backing and teeth combine durability and light weight.
- Nylon facing protects and reinforces the tooth surfaces.
- Fibreglass cords provide length stability and flexibility.

Advantages

- Power transmission of up to 0.8 kW and speeds of up to 20000 rpm.
- MXL belts allow small pulley diameters (from 6 mm diameter) with a maximum number of teeth in mesh.
- Highly suitable for stepper motors.
- Accurate positioning.
- Very stable.

Section and nominal dimensions



	Pitch inch	T mm	B mm
MXL	0.08	0.51	1.14

NOTE

For correct usage of belt please request Gates' Synchronous Belt Drive Design Manual (E2/20099).

CLASSICAL SYNCHRONOUS BELTS

MXL

Pitch: 0.08" (2.032 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth	Length and pitch designation	Pitch length mm ISO	Number of teeth	Length and pitch designation	Pitch length mm ISO	Number of teeth
288 MXL	73.152	36	944 MXL	239.776	118	3296 MXL	837.184	412
296 MXL	75.184	37	960 MXL	243.840	120	3360 MXL	853.440	420
320 MXL	81.280	40	976 MXL	247.904	122	3392 MXL	861.568	424
360 MXL	91.440	45	984 MXL	249.936	123	3448 MXL	875.792	431
400 MXL	101.600	50	1000 MXL	254.000	125	3472 MXL	881.888	434
424 MXL	107.696	53	1008 MXL	256.032	126	3520 MXL	894.080	440
432 MXL	109.728	54	1016 MXL	258.064	127	3704 MXL	940.816	463
440 MXL	111.760	55	1032 MXL	262.128	129	3800 MXL	965.200	475
448 MXL	113.792	56	1040 MXL	264.160	130	3904 MXL	991.616	488
456 MXL	115.824	57	1056 MXL	268.224	132	3984 MXL	1011.936	498
464 MXL	117.856	58	1072 MXL	272.288	134	4000 MXL	1016.000	500
472 MXL	119.888	59	1112 MXL	282.448	139	4040 MXL	1026.160	505
480 MXL	121.920	60	1120 MXL	284.480	140	4368 MXL	1109.472	546
488 MXL	123.952	61	1144 MXL	290.576	143	4736 MXL	1202.944	592
504 MXL	128.016	63	1160 MXL	294.640	145	4896 MXL	1243.584	612
520 MXL	132.080	65	1200 MXL	304.800	150	5448 MXL	1383.792	681
536 MXL	136.144	67	1240 MXL	314.960	155			
544 MXL	138.176	68	1264 MXL	321.056	158			
552 MXL	140.208	69	1280 MXL	325.120	160			
560 MXL	142.240	70	1320 MXL	335.280	165			
568 MXL	144.272	71	1400 MXL	355.600	175			
576 MXL	146.304	72	1472 MXL	373.888	184			
584 MXL	148.336	73	1520 MXL	386.080	190			
592 MXL	150.368	74	1560 MXL	396.240	195			
600 MXL	152.400	75	1600 MXL	406.400	200			
608 MXL	154.432	76	1680 MXL	426.720	210			
616 MXL	156.464	77	1768 MXL	449.072	221			
632 MXL	160.528	79	1800 MXL	457.200	225			
640 MXL	162.560	80	1832 MXL	465.328	229			
648 MXL	164.592	81	1856 MXL	471.424	232			
656 MXL	166.624	82	1880 MXL	477.520	235			
664 MXL	168.656	83	1960 MXL	497.840	245			
672 MXL	170.688	84	1984 MXL	503.936	248			
680 MXL	172.720	85	1992 MXL	505.968	249			
696 MXL	176.784	87	2048 MXL	520.192	256			
704 MXL	178.816	88	2136 MXL	542.544	267			
720 MXL	182.880	90	2240 MXL	568.960	280			
736 MXL	186.944	92	2360 MXL	599.440	295			
752 MXL	191.008	94	2384 MXL	605.536	298			
760 MXL	193.040	95	2400 MXL	609.600	300			
776 MXL	197.104	97	2520 MXL	640.080	315			
800 MXL	203.200	100	2544 MXL	646.176	318			
808 MXL	205.232	101	2608 MXL	662.432	326			
824 MXL	209.296	103	2776 MXL	705.104	347			
840 MXL	213.360	105	2864 MXL	727.456	358			
848 MXL	215.392	106	2880 MXL	731.520	360			
856 MXL	217.424	107	2968 MXL	753.872	371			
864 MXL	219.456	108	2976 MXL	755.904	372			
872 MXL	221.488	109	3120 MXL	792.480	390			
880 MXL	223.520	110	3200 MXL	812.800	400			
912 MXL	231.648	114	3264 MXL	829.056	408			

Available in widths of 3.2 mm (code 012),
4.8 mm (code 019) and 6.4 mm (code 025).

MXL ordering code is composed as follows:

Example: 360 MXL 019

360 - Pitch length 3.6" (91.440 mm)

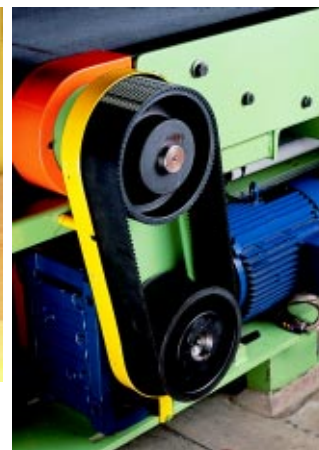
MXL - Pitch 0.08" (2.032 mm)

019 - Belt width 0.19" (4.8 mm)

Dimensions in bold are available from stock.

Synchronous belts for high torque drives

POWERGRIP® HTD®
3M & 5M



Because of an optimised load distribution, the HTD® curvilinear tooth form guarantees high power transmission in low speed and high torque applications. PowerGrip® HTD® 3M and 5M belts are suitable for domestic appliances, office machines, electric hand tools and for applications in the processing and chemical industry.

Identification

Three part number on the back of the belt indicating belt length, pitch and width.

Construction

- Special curvilinear tooth design improves stress distribution and allows higher overall loading.
- Precisely formed and accurately spaced elastomeric teeth ensure smooth engagement with the pulley grooves.
- Durable elastomeric backing protects the belt against environmental pollution as well as frictional wear if power is transmitted from the back of the belt.
- Tough nylon facing protects the tooth surface.
- Fibreglass tensile cords.
- Compact design.

Advantages

- 3M and 5M PowerGrip® HTD® are designed for speeds up to 20000 rpm and capacities up to 10 kW.
- The optimised tooth form permits high loads to be transmitted, even in small pitches.
- Because of close manufacturing tolerances fixed centre distances are practicable. Furthermore, high flexibility allows the use of very small pulleys (outside diameter of 8.79 mm).
- Peripheral speed up to 80 m/s.
- Efficiencies up to 99%.
- Compact design.
- 25% improved tooth jump resistance.
- Long service life and maintenance-free.

Sections and nominal dimensions



	Pitch mm	T mm	B mm
3M	3.0	1.2	2.4
5M	5.0	2.1	3.8

NOTE

For correct usage of belt please request Gates' Synchronous Belt Drive Design Manual (E2/20099).

SYNCHRONOUS BELTS FOR HIGH TORQUE DRIVES

3M

Pitch: 3 mm

Length and pitch designation	Pitch length mm ISO	Number of teeth	Length and pitch designation	Pitch length mm ISO	Number of teeth	Length and pitch designation	Pitch length mm ISO	Number of teeth
105-3M	105	35	336-3M	336	112	1002-3M	1002	334
111-3M	111	37	339-3M	339	113	1071-3M	1071	357
120-3M	120	40	342-3M	342	114	1080-3M	1080	360
123-3M	123	41	345-3M	345	115	1176-3M	1176	392
126-3M	126	42	357-3M	357	119	1245-3M	1245	415
129-3M	129	43	363-3M	363	121	1263-3M	1263	421
141-3M	141	47	372-3M	372	124	1500-3M	1500	500
144-3M	144	48	381-3M	381	127	1530-3M	1530	510
150-3M	150	50	384-3M	384	128	1863-3M	1863	621
156-3M	156	52	393-3M	393	131	1926-3M	1926	642
159-3M	159	53	420-3M	420	140	Available in widths of 6 mm, 9 mm and 15 mm.		
165-3M	165	55	435-3M	435	145			
168-3M	168	56	447-3M	447	149			
171-3M	171	57	462-3M	462	154			
174-3M	174	58	474-3M	474	158			
177-3M	177	59	477-3M	477	159			
180-3M	180	60	480-3M	480	160			
183-3M	183	61	486-3M	486	162			
186-3M	186	62	489-3M	489	163			
189-3M	189	63	501-3M	501	167			
192-3M	192	64	513-3M	513	171			
195-3M	195	65	522-3M	522	174			
201-3M	201	67	525-3M	525	175			
204-3M	204	68	531-3M	531	177			
210-3M	210	70	537-3M	537	179			
213-3M	213	71	552-3M	552	184			
216-3M	216	72	558-3M	558	186			
219-3M	219	73	564-3M	564	188			
222-3M	222	74	570-3M	570	190			
225-3M	225	75	573-3M	573	191			
234-3M	234	78	582-3M	582	194			
237-3M	237	79	591-3M	591	197			
243-3M	243	81	594-3M	594	198			
246-3M	246	82	600-3M	600	200			
249-3M	249	83	612-3M	612	204			
252-3M	252	84	627-3M	627	209			
255-3M	255	85	633-3M	633	211			
267-3M	267	89	645-3M	645	215			
276-3M	276	92	648-3M	648	216			
282-3M	282	94	669-3M	669	223			
285-3M	285	95	672-3M	672	224			
288-3M	288	96	681-3M	681	227			
291-3M	291	97	711-3M	711	237			
294-3M	294	98	720-3M	720	240			
297-3M	297	99	735-3M	735	245			
300-3M	300	100	738-3M	738	246			
306-3M	306	102	753-3M	753	251			
312-3M	312	104	804-3M	804	268			
315-3M	315	105	822-3M	822	274			
318-3M	318	106	882-3M	882	294			
330-3M	330	110	945-3M	945	315			
333-3M	333	111	981-3M	981	327			

5M

Pitch: 5 mm

Length and pitch designation	Pitch length mm ISO	Number of teeth	Length and pitch designation	Pitch length mm ISO	Number of teeth
120-5M	120	24	750-5M	750	150
180-5M	180	36	755-5M	755	151
225-5M	225	45	770-5M	770	154
255-5M	255	51	775-5M	775	155
265-5M	265	53	800-5M	800	160
270-5M	270	54	825-5M	825	165
275-5M	275	55	835-5M	835	167
280-5M	280	56	860-5M	860	172
295-5M	295	59	870-5M	870	174
300-5M	300	60	890-5M	890	178
305-5M	305	61	900-5M	900	180
325-5M	325	65	925-5M	925	185
330-5M	330	66	935-5M	935	187
335-5M	335	67	940-5M	940	188
340-5M	340	68	950-5M	950	190
345-5M	345	69	965-5M	965	193
350-5M	350	70	980-5M	980	196
360-5M	360	72	1000-5M	1000	200
365-5M	365	73	1025-5M	1025	205
370-5M	370	74	1035-5M	1035	207
375-5M	375	75	1050-5M	1050	210
385-5M	385	77	1100-5M	1100	220
400-5M	400	80	1125-5M	1125	225
405-5M	405	81	1135-5M	1135	227
420-5M	420	84	1175-5M	1175	235
425-5M	425	85	1200-5M	1200	240
450-5M	450	90	1225-5M	1225	245
460-5M	460	92	1270-5M	1270	254
475-5M	475	95	1350-5M	1350	270
500-5M	500	100	1380-5M	1380	276
510-5M	510	102	1420-5M	1420	284
520-5M	520	104	1595-5M	1595	319
525-5M	525	105	1690-5M	1690	338
535-5M	535	107	1790-5M	1790	358
550-5M	550	110	1870-5M	1870	374
560-5M	560	112	2100-5M	2100	420
565-5M	565	113	2350-5M	2350	470
575-5M	575	115			
580-5M	580	116			
600-5M	600	120			
610-5M	610	122			
615-5M	615	123			
635-5M	635	127			
640-5M	640	128			
645-5M	645	129			
665-5M	665	133			
670-5M	670	134			
695-5M	695	139			
700-5M	700	140			
710-5M	710	142			
720-5M	720	144			
740-5M	740	148			

Available in widths of 9 mm, 15 mm and 25 mm.

PowerGrip® HTD® ordering code is composed as follows:

Example: HTD 280 5M 25

280 - Pitch length (mm)

5M - Pitch 5 mm

25 - Belt width (mm)

Dimensions in bold are available from stock.

POWERGRIP® HTD®
8M, 14M & 20M



Synchronous belts for high torque drives

The curvilinear PowerGrip® HTD® tooth geometry eliminates stress concentration at tooth roots and allows higher power capacity and longer life.

PowerGrip® HTD® 8M, 14M and 20M belts are used in high performance drives in the machine tool, paper and textile industries where durability and low maintenance are required.

Identification

Three part number on the back of the belt indicating belt length, pitch and belt width.

Construction

- Special curvilinear tooth form improves stress distribution and allows higher overall loading.
- Precisely formed and accurately spaced elastomeric teeth ensure correct positioning in the pulley grooves.
- Tough nylon facing protects the tooth surfaces.
- Tensile member provides the required strength combined with excellent flex life and high resistance to elongation.
- Durable elastomeric backing protects against environmental pollution as well as frictional wear if power is transmitted from the back of the belt.
- 8M and 14M pitch belts conform to ISO 13050.

Advantages

- Load capacities up to 1000 kW.
- No slippage. PowerGrip® HTD® belt teeth mesh smoothly with pulley grooves, reducing speed variations.
- Wide speed range.
- Economical operation. No lubrication needed, no need for adjustment due to stretch and wear.
- High mechanical efficiency. The belt construction minimises heat buildup and, since friction is not required to transmit the load, belt tensions are reduced.
- Constant driven speeds.
- Long trouble-free service life (because of excellent abrasion resistance) in many applications where metal components like chains and gears wear out in a matter of months.

Sections and nominal dimensions



	Pitch mm	T mm	B mm
8M	8.0	3.4	6.0
14M	14.0	6.0	10.0
20M	20.0	8.4	13.2

NOTE

For correct usage of belt please request Gates' Synchronous Belt Drive Design Manual (E2/20099).

SYNCHRONOUS BELTS FOR HIGH TORQUE DRIVES

8M

Pitch: 8 mm

Length and pitch designation	Pitch length mm ISO	Number of teeth
264-8M	264	33
320-8M	320	40
376-8M	376	47
384-8M	384	48
424-8M	424	53
480-8M	480	60
512-8M	512	64
520-8M	520	65
560-8M	560	70
576-8M	576	72
600-8M	600	75
608-8M	608	76
624-8M	624	78
640-8M	640	80
656-8M	656	82
720-8M	720	90
760-8M	760	95
776-8M	776	97
800-8M	800	100
856-8M	856	107
880-8M	880	110
912-8M	912	114
920-8M	920	115
960-8M	960	120
968-8M	968	121
976-8M	976	122
1000-8M	1000	125
1040-8M	1040	130
1064-8M	1064	133
1080-8M	1080	135
1120-8M	1120	140
1128-8M	1128	141
1160-8M	1160	145
1176-8M	1176	147
1200-8M	1200	150
1216-8M	1216	152
1224-8M	1224	153
1256-8M	1256	157
1264-8M	1264	158
1280-8M	1280	160
1304-8M	1304	163
1360-8M	1360	170
1424-8M	1424	178
1432-8M	1432	179
1440-8M	1440	180
1512-8M	1512	189
1520-8M	1520	190
1552-8M	1552	194
1584-8M	1584	198
1600-8M	1600	200
1696-8M	1696	212
1728-8M	1728	216

Length and pitch designation	Pitch length mm ISO	Number of teeth
1760-8M	1760	220
1800-8M	1800	225
1896-8M	1896	237
1904-8M	1904	238
2000-8M	2000	250
2080-8M	2080	260
2200-8M	2200	275
2240-8M	2240	280
2272-8M	2272	284
2400-8M	2400	300
2504-8M	2504	313
2600-8M	2600	325
2800-8M	2800	350

Available in widths of 20 mm, 30 mm, 50 mm and 85 mm.

14M

Pitch: 14 mm

Length and pitch designation	Pitch length mm ISO	Number of teeth
784-14M	784	56
826-14M	826	59
924-14M	924	66
966-14M	966	69
1092-14M	1092	78
1190-14M	1190	85
1400-14M	1400	100
1610-14M	1610	115
1778-14M	1778	127
1890-14M	1890	135
2100-14M	2100	150
2310-14M	2310	165
2450-14M	2450	175
2590-14M	2590	185
2800-14M	2800	200
3150-14M	3150	225
3500-14M	3500	250
3850-14M	3850	275
4004-14M	4004	286
4326-14M	4326	309
4578-14M	4578	327

Available in widths of 40 mm, 55 mm, 85 mm, 115 mm and 170 mm.

20M

Pitch: 20 mm

Length and pitch designation	Pitch length mm	Number of teeth
2000-20M	2000	100
2500-20M	2500	125
3400-20M	3400	170
3800-20M	3800	190
4200-20M	4200	210
4600-20M	4600	230
5000-20M	5000	250
5200-20M	5200	260
5400-20M	5400	270
5600-20M	5600	280
5800-20M	5800	290
6000-20M	6000	300
6200-20M	6200	310
6400-20M	6400	320
6600-20M	6600	330

Available in widths of 115 mm, 170 mm, 230 mm, 290 mm and 340 mm.

PowerGrip® HTD® ordering code is composed as follows:

Example: HTD 1040 8M 30

1040	- Pitch length (mm)
8M	- Pitch 8 mm
30	- Belt width (mm)

Dimensions in bold are available from stock.

POWERGRIP® GT
2MR, 3MR & 5MR

Synchronous belt for high power rating



Gates' PowerGrip® GT belt is a technologically advanced synchronous belt offering enhanced performance compared with PowerGrip® and PowerGrip® HTD® belts. It offers increased durability and much higher power capacity — yet it is quieter in operation.

PowerGrip® GT belts are suitable for compact drives in hand tools, kitchen machines, business machines, domestic appliances, high precision servomotor drives and multiaxis applications.

Identification

Three part number on the back of the belt indicating pitch, belt length and width.

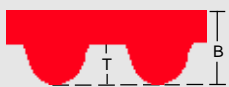
Construction

- PowerGrip® GT teeth are precisely formed and accurately spaced.
- Helically wound tensile member gives enormous strength, flex life and elongation resistance.
- Elastomeric backing protects the cords from environmental pollution and frictional wear.
- Low friction nylon facing protects the tooth surface against wear.

Advantages

- Substantially increased power rating.
- Reduced noise levels.
- Compact drives and less weight.
- Positioning accuracy.
- Improved tooth jump resistance.
- Cost-effective, long-lasting and virtually maintenance-free.

Sections and nominal dimensions



	Pitch mm	T mm	B mm
2MR	2.00	0.71	1.52
3MR	3.00	1.12	2.41
5MR	5.00	1.92	3.81

NOTE

For correct usage of belt please request Gates' Synchronous Belt Drive Design Manual (E2/20099).

SYNCHRONOUS BELTS FOR SUBSTANTIALLY INCREASED POWER RATING

2MR

Pitch: 2 mm

Pitch and length designation	Pitch length mm	Number of teeth
2MR-74	74	37
2MR-76	76	38
2MR-80	80	40
2MR-90	90	45
2MR-100	100	50
2MR-112	112	56
2MR-130	130	65
2MR-132	132	66
2MR-134	134	67
2MR-140	140	70
2MR-142	142	71
2MR-152	152	76
2MR-158	158	79
2MR-164	164	82
2MR-168	168	84
2MR-172	172	86
2MR-178	178	89
2MR-180	180	90
2MR-184	184	92
2MR-186	186	93
2MR-192	192	96
2MR-202	202	101
2MR-208	208	104
2MR-210	210	105
2MR-212	212	106
2MR-216	216	108
2MR-220	220	110
2MR-224	224	112
2MR-232	232	116
2MR-240	240	120
2MR-242	242	121
2MR-250	250	125
2MR-252	252	126
2MR-264	264	132
2MR-274	274	137
2MR-280	280	140
2MR-284	284	142
2MR-286	286	143
2MR-288	288	144
2MR-304	304	152
2MR-310	310	155
2MR-318	318	159
2MR-322	322	161
2MR-330	330	165
2MR-332	332	166
2MR-336	336	168
2MR-356	356	178
2MR-364	364	182
2MR-370	370	185
2MR-380	380	190
2MR-386	386	193
2MR-392	392	196
2MR-400	400	200

Pitch and length designation	Pitch length mm	Number of teeth
2MR-406	406	203
2MR-412	412	206
2MR-420	420	210
2MR-428	428	214
2MR-430	430	215
2MR-436	436	218
2MR-466	466	233
2MR-474	474	237
2MR-480	480	240
2MR-488	488	244
2MR-502	502	251
2MR-516	516	258
2MR-534	534	267
2MR-544	544	272
2MR-660	660	330
2MR-690	690	345
2MR-816	816	408
2MR-930	930	465
2MR-1032	1032	516
2MR-1164	1164	582
2MR-1386	1386	693
2MR-1700	1700	850
2MR-1830	1830	915

Available in widths of 3 mm, 6 mm and 9 mm.

3MR Pitch: 3 mm

Pitch and length designation	Pitch length mm	Number of teeth
3MR-105	105	35
3MR-120	120	40
3MR-135	135	45
3MR-144	144	48
3MR-150	150	50
3MR-165	165	55
3MR-180	180	60
3MR-186	186	62
3MR-192	192	64
3MR-195	195	65
3MR-204	204	68
3MR-210	210	70
3MR-216	216	72
3MR-225	225	75
3MR-231	231	77
3MR-240	240	80
3MR-243	243	81
3MR-246	246	82
3MR-252	252	84
3MR-255	255	85
3MR-267	267	89
3MR-270	270	90
3MR-276	276	92

3MR

Pitch: 3 mm

Pitch and length designation	Pitch length mm	Number of teeth
3MR-285	285	95
3MR-288	288	96
3MR-294	294	98
3MR-300	300	100
3MR-309	309	103
3MR-312	312	104
3MR-324	324	108
3MR-330	330	110
3MR-339	339	113
3MR-357	357	119
3MR-360	360	120
3MR-363	363	121
3MR-375	375	125
3MR-384	384	128
3MR-390	390	130
3MR-393	393	131
3MR-408	408	136
3MR-420	420	140
3MR-426	426	142
3MR-450	450	150
3MR-456	456	152
3MR-480	480	160
3MR-483	483	161
3MR-489	489	163
3MR-495	495	165
3MR-501	501	167
3MR-510	510	170
3MR-513	513	171
3MR-522	522	174
3MR-537	537	179
3MR-540	540	180
3MR-552	552	184
3MR-564	564	188
3MR-570	570	190
3MR-582	582	194
3MR-588	588	196
3MR-600	600	200
3MR-630	630	210
3MR-657	657	219
3MR-750	750	250
3MR-840	840	280
3MR-849	849	283
3MR-897	897	299
3MR-1587	1587	529
3MR-1692	1692	564

Available in widths of 6 mm, 9 mm and 15 mm.

PowerGrip® GT ordering code is composed as follows:

Dimensions in bold are available from stock.

5MR

Pitch: 5 mm

Pitch and length designation	Pitch length mm	Number of teeth
5MR-200	200	40
5MR-225	225	45
5MR-250	250	50
5MR-265	265	53
5MR-275	275	55
5MR-280	280	56
5MR-285	285	57
5MR-300	300	60
5MR-325	325	65
5MR-330	330	66
5MR-340	340	68
5MR-350	350	70
5MR-360	360	72
5MR-375	375	75
5MR-400	400	80
5MR-410	410	82
5MR-415	415	83
5MR-425	425	85
5MR-450	450	90
5MR-460	460	92
5MR-475	475	95
5MR-490	490	98
5MR-500	500	100
5MR-510	510	102
5MR-525	525	105
5MR-530	530	106
5MR-540	540	108
5MR-550	550	110
5MR-600	600	120
5MR-625	625	125
5MR-650	650	130
5MR-665	665	133
5MR-700	700	140
5MR-750	750	150
5MR-775	775	155
5MR-800	800	160
5MR-850	850	170
5MR-860	860	172
5MR-900	900	180
5MR-950	950	190
5MR-980	980	196
5MR-1000	1000	200
5MR-1050	1050	210
5MR-1150	1150	230
5MR-2100	2100	420
5MR-2440	2440	488

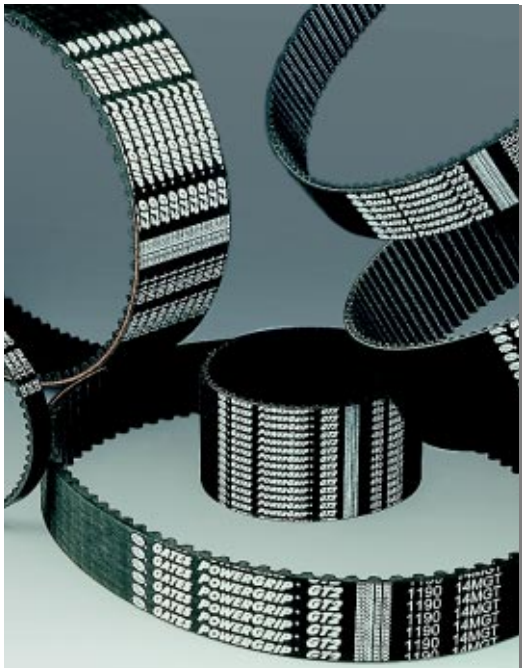
Available in widths of 9 mm, 15 mm and 25 mm.

Example: GT 5MR 275 9	
GT	- PowerGrip® GT
5MR	- Pitch 5 mm
275	- Pitch length (mm)
9	- Belt width (mm)



POWERGRIP® GT2
8MGT & 14MGT

Synchronous belt with significantly increased power capacity



Gates' PowerGrip® GT2 synchronous belt is made of a highly advanced combination of materials. By the use of these first-class materials Gates PowerGrip® GT2 offers extraordinary load-carrying power. It has twice the power rating of PowerGrip® HTD® belts and can be used on existing PowerGrip® HTD® drives for increased durability. They operate on the same pulleys and do not require any adaptation of the drive system. Instead they offer longer service life, thus considerably reducing maintenance costs. PowerGrip® GT2 allows the design of more compact drives with much higher power capacity. Small drive packages increase design flexibility, space utilisation and cost effectiveness.

Identification

Three part number on the back of the belt indicating pitch, belt length and width.

Construction

- Helically wound tensile member provides high strength, excellent flex life and high resistance to elongation.
- Elastomeric backing, bonded to the tensile member, protects the cord from environmental pollution and frictional wear.
- Precision-formed and accurately spaced elastomeric teeth.
- Tough nylon facing with a low coefficient of friction protects the tooth surfaces against wear.

Advantages

- Transmits twice as much power as PowerGrip® HTD® belts.
- Reduced maintenance costs thanks to longer service life.
- Compact, light-weight and cost-effective drives.
- High tooth jump resistance.

Sections and nominal dimensions



	Pitch mm	T mm	B mm
8MGT	8.00	3.40	5.60
14MGT	14.00	6.00	10.00

NOTE

For correct usage of belt please request Gates' Synchronous Belt Drive Design Manual (E2/20099).

SYNCHRONOUS BELTS FOR SUBSTANTIALLY INCREASED POWER RATING

8MGT

Pitch: 8 mm

Length and pitch designation	Pitch length mm	Number of teeth
384-8MGT	384	48
480-8MGT	480	60
560-8MGT	560	70
600-8MGT	600	75
640-8MGT	640	80
720-8MGT	720	90
800-8MGT	800	100
840-8MGT	840	105
880-8MGT	880	110
920-8MGT	920	115
960-8MGT	960	120
1040-8MGT	1040	130
1064-8MGT	1064	133
1120-8MGT	1120	140
1160-8MGT	1160	145
1200-8MGT	1200	150
1280-8MGT	1280	160
1440-8MGT	1440	180
1512-8MGT	1512	189
1584-8MGT	1584	198
1600-8MGT	1600	200
1760-8MGT	1760	220
1800-8MGT	1800	225
2000-8MGT	2000	250
2400-8MGT	2400	300
2600-8MGT	2600	325
2800-8MGT	2800	350
3048-8MGT	3048	381
3280-8MGT	3280	410
3600-8MGT	3600	450
4400-8MGT	4400	550

Available in widths of 20 mm, 30 mm, 50 mm and 85 mm.

14MGT

Pitch: 14 mm

Length and pitch designation	Pitch length mm	Number of teeth
966-14MGT	966	69
1190-14MGT	1190	85
1400-14MGT	1400	100
1610-14MGT	1610	115
1778-14MGT	1778	127
1890-14MGT	1890	135
2100-14MGT	2100	150
2310-14MGT	2310	165
2450-14MGT	2450	175
2590-14MGT	2590	185
2800-14MGT	2800	200
3150-14MGT	3150	225
3360-14MGT	3360	240
3500-14MGT	3500	250
3850-14MGT	3850	275
4326-14MGT	4326	309
4578-14MGT	4578	327
4956-14MGT	4956	354
5320-14MGT	5320	380
5740-14MGT	5740	410
6160-14MGT	6160	440
6860-14MGT	6860	490

Available in widths of 40 mm, 55 mm, 85 mm, 115 mm and 170 mm.

PowerGrip® GT2 ordering code is composed as follows:

Example: GT2 1040 8MGT 20

GT2 - PowerGrip® GT2

1040 - Pitch length (mm)

8MGT - Pitch 8 mm

20 - Belt width (mm)

Dimensions in bold are available from stock.

LONG LENGTH

Open-end synchronous belt



Long Length belting is a special alternative to the timing chain for reversing positioning drives.

Open-end synchronous belting is suitable for linear movements (automated doors, automated warehouse conveyors and elevators), accurate positioning (machine tools, x-y coordinate machines) and reversal drives (computers, printers and office equipment).

Gates Long Length belting is available in various sizes, constructions and tooth designs to cover a wide range of loads, speeds and applications.

Identification

Three part number on the back of the belt indicating product designation, pitch code and belt width.

Construction

PowerGrip® GT 3MR, 5MR and 8MR pitches

PowerGrip® HTD® 3M, 5M, 8M and 14M pitches

PowerGrip® XL, L and H pitches

- Fibreglass or steel tensile cords.
- Rubber teeth and backing.

Poly Chain® GT2 8MGT and 14MGT pitches

- Aramid tensile cord.
- Polyurethane teeth and backing.

SynchroPower® L and H pitches, T5 and T10 pitches, AT5 and AT10 pitches

- Steel tensile cord.
- Polyurethane teeth and backing.

Advantages

- High positioning accuracy, making the belt ideally suited for applications with repetitive movements.
- High power transmission thanks to sophisticated materials and tooth profiles.
- Positive power transmission with low axial load.
- Length stability thanks to high modulus tensile members.
- Easy to attach with clamping fixtures.
- Low maintenance.
- No environmental pollution due to lubricants.

NOTE

For correct usage of belt please request Gates Long Length Design Manual (E2/20065).

POLY CHAIN® GT2



	Pitch mm	T mm	B mm	Length on roll (m)	Width - mm	
					Aramid	
8MGT	8.00	3.40	5.90	30	12, 21, 36	
14MGT	14.00	6.00	10.20	30	20, 37	

POWERGRIP® GT



	Pitch mm	T mm	B mm	Length on roll (m)	Width - mm	
					Fibreglass	Steel
3MR	3.00	1.12	2.41	30	6, 9, 15	6, 9, 15
5MR	5.00	1.92	3.81	30	6, 10, 15, 25	6, 10, 15, 25
8MR	8.00	3.34	5.60	30	10, 15, 20, 30, 50	10, 15, 20, 30, 50

POWERGRIP® HTD®



	Pitch mm	T mm	B mm	Length on roll (m)	Width - mm	
					Fibreglass	Steel
3M	3.00	1.10	2.40	30	6, 9, 15	6, 9, 15
5M	5.00	2.10	3.80	30	6, 10, 15, 25	6, 10, 15, 25
8M	8.00	3.40	6.00	30	10, 15, 20, 30, 50, 85	10, 15, 20, 30, 50, 85
14M	14.00	6.00	10.00	30	25, 40, 55, 85, 115	25, 40, 55, 85, 115

POWERGRIP®



	Pitch		T mm	B mm	Length on roll (m)	Width - code	
	inch	mm				Fibreglass	Steel
XL	1/5	5.080	1.27	2.30	30	025, 031, 037, 050	025, 031, 037, 050
L	3/8	9.525	1.91	3.60	30	037, 050, 075, 100	037, 050, 075, 100
H	1/2	12.700	2.29	4.30	30	050, 075, 100, 150, 200, 300	050, 075, 100, 150, 200, 300

SYNCHROPOWER®



	Pitch		T mm	B mm	Length on roll (m)	Width - mm	
	inch	mm				Steel	
T5		5.000	1.20	2.20	50	6, 10, 16, 25, 32, 50	
T10		10.000	2.50	4.50	50	16, 25, 32, 50, 75, 100	
AT5		5.000	1.20	2.70	50	6, 10, 16, 25, 32, 50	
AT10		10.000	2.50	5.00	50	16, 25, 32, 50, 75, 100	
						Width - code	
L	3/8	9.525	1.91	3.60	61	037, 050, 075, 100, 150	
H	1/2	12.700	2.29	4.30	61	050, 075, 100, 150, 200, 300, 400	

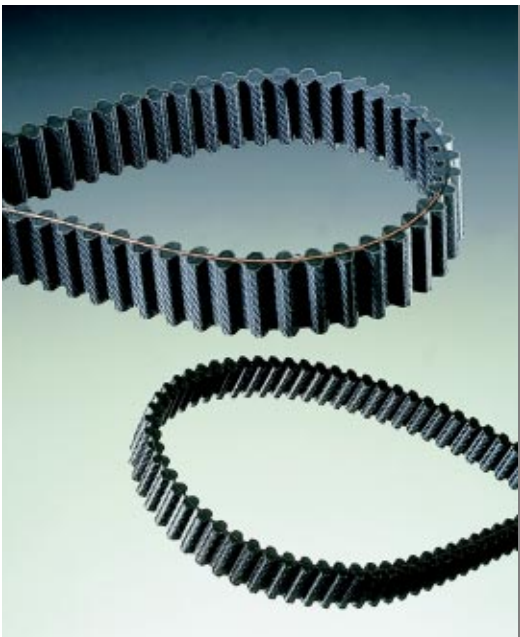
Stock widths are printed in bold. Other lengths and widths on request.

Long Length ordering code is composed as follows:

Example: LL HTD 14M 115 (30M) STEEL	
LL	- Long Length
14M	- Pitch HTD® 14 mm
115	- Belt width (mm)
(30M)	- Length on roll (m)
STEEL	- Steel tensile cords

TWIN POWER®

Double-sided synchronous belt



Sections and nominal dimensions



	Pitch mm	W mm	T mm
8MGT	8.0	1.372	3.400
14MGT	14.0	2.794	5.820



	Pitch mm	W mm	T mm
5M	5.0	1.7	2.1



	Pitch inch	W mm	T mm
XL	1/5	0.508	1.27
L	3/8	0.762	1.91
H	1/2	1.372	2.29

Due to its double and directly opposite teeth, Twin Power® synchronous belts ensure high loading capacity on contra-rotating drives and ensure smooth running and high flexibility.

Twin Power® synchronous belts are available with the classical trapezoidal but also with the unique GT2 tooth profile. The Twin Power® GT2 belt has twice the power rating of Twin Power® HTD® belts. It is characterised by extraordinary load-carrying power and high tooth jump resistance, thus ensuring a positive non-slip drive. In addition, it runs at very low noise.

Twin Power® is available in PowerGrip® GT2 8MGT and 14MGT, HTD® 5M and PowerGrip® XL, L and H pitches.

Identification

Three part number on the back side teeth of the belt indicating pitch, belt length and width.

Construction

- Similar in construction to PowerGrip® classical synchronous and PowerGrip® GT2 belts: strong tensile member, precision-formed elastomeric teeth and body.
- Wear resistant nylon fabric on both tooth sides.

Advantages

- High loading capacity.
- Twin Power® can transmit up to 100% of its maximum rated load from either side of the belt; alternatively, it can transmit a load on both sides — provided the sum of the loads does not exceed the maximum capacity.
- Non-slip positive drive.
- Running at low noise.
- Free of lubrication and maintenance.

Twin Power® ordering codes are composed as follows:

Example: TP GT2 480 8MGT 20

TP GT2	- Twin Power® GT2
480	- Pitch length 480 mm
8MGT	- Pitch 8 mm
20	- Belt width (mm)

Example: TP 510 L 050

TP	- Twin Power®
510	- Pitch length 51" (1295.4 mm)
L	- Pitch 3/8" (9.525 mm)
050	- Belt width 1/2" (12.7 mm)

TP GT2 8MGT

Pitch: 8 mm

Length and pitch designation	Pitch length mm	Number of teeth
TP GT2 480 8MGT ¹	480	60
TP GT2 560 8MGT ¹	560	70
TP GT2 600 8MGT ¹	600	75
TP GT2 640 8MGT ¹	640	80
TP GT2 720 8MGT ¹	720	90
TP GT2 800 8MGT ¹	800	100
TP GT2 880 8MGT ¹	880	110
TP GT2 960 8MGT ¹	960	120
TP GT2 1040 8MGT ¹	1040	130
TP GT2 1120 8MGT ²	1120	140
TP GT2 1200 8MGT ²	1200	150
TP GT2 1280 8MGT ²	1280	160
TP GT2 1440 8MGT ²	1440	180
TP GT2 1600 8MGT ²	1600	200
TP GT2 1760 8MGT ²	1760	220
TP GT2 1800 8MGT ²	1800	225
TP GT2 2000 8MGT ²	2000	250
TP GT2 2400 8MGT ²	2400	300
TP GT2 2600 8MGT ²	2600	325
TP GT2 2800 8MGT ²	2800	350
TP GT2 3048 8MGT ²	3048	381
TP GT2 3280 8MGT ²	3280	410
TP GT2 3600 8MGT ²	3600	450
TP GT2 4400 8MGT ²	4400	550
TP GT2 4960 8MGT ³	4960	620

Available in widths of 20 mm, 30 mm, 50 mm and 85 mm.

TP GT2 14MGT

Pitch: 14 mm

Length and pitch designation	Pitch length mm	Number of teeth
TP GT2 1610 14MGT	1610	115
TP GT2 1778 14MGT	1778	127
TP GT2 1890 14MGT	1890	135
TP GT2 2100 14MGT	2100	150
TP GT2 2310 14MGT	2310	165
TP GT2 2450 14MGT	2450	175
TP GT2 2590 14MGT	2590	185
TP GT2 2800 14MGT	2800	200
TP GT2 3150 14MGT	3150	225
TP GT2 3360 14MGT	3360	240
TP GT2 3500 14MGT	3500	250
TP GT2 3850 14MGT	3850	275
TP GT2 4326 14MGT	4326	309
TP GT2 4578 14MGT	4578	327
TP GT2 4956 14MGT	4956	354
TP GT2 5320 14MGT	5320	380
TP GT2 5740 14MGT	5740	410
TP GT2 6160 14MGT	6160	440
TP GT2 6860 14MGT	6860	490

Available in widths of 40 mm, 55 mm, 85 mm, 115 mm and 170 mm.

Also available in slab widths of:

¹100 mm ²330 mm ³150 mm ⁴130 mm

TP HTD 5M

Pitch: 5 mm

Length and pitch designation	Pitch length mm	Number of teeth
TP 425 5M ³	425	85
TP 475 5M ³	475	95
TP 500 5M ¹	500	100
TP 600 5M ¹	600	120
TP 615 5M ¹	615	123
TP 640 5M ¹	640	128
TP 670 5M ¹	670	134
TP 700 5M ¹	700	140
TP 755 5M ¹	755	151
TP 800 5M ¹	800	160
TP 835 5M ¹	835	167
TP 890 5M ¹	890	178
TP 935 5M ⁴	935	187
TP 1100 5M ⁴	1100	220
TP 1200 5M ⁴	1200	240
TP 1270 5M ³	1270	254
TP 1420 5M ³	1420	284
TP 1595 5M ⁴	1595	319
TP 1690 5M ³	1690	338
TP 1870 5M ⁴	1870	374
TP 1945 5M ³	1945	389
TP 2000 5M ³	2000	400
TP 2100 5M ⁴	2100	420
TP 2250 5M ³	2250	450
TP 2350 5M ⁴	2350	470
TP 2525 5M ³	2525	505

Available in widths of 9 mm, 15 mm and 25 mm.

TP XL

Pitch: 1/5" (5.080 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth
TP 150 XL ⁴	381.0	75
TP 160 XL ⁴	406.4	80
TP 170 XL ⁴	431.8	85
TP 180 XL ⁴	457.2	90
TP 190 XL ¹	482.6	95
TP 200 XL ¹	508.0	100
TP 210 XL ¹	533.4	105
TP 220 XL ¹	558.8	110
TP 230 XL ¹	584.2	115
TP 240 XL ¹	609.6	120
TP 250 XL ¹	635.0	125
TP 260 XL ¹	660.4	130
TP 280 XL ¹	711.2	140
TP 290 XL ¹	736.6	145
TP 300 XL ¹	762.0	150
TP 310 XL ¹	787.4	155
TP 348 XL ¹	883.9	174
TP 352 XL ¹	894.1	176

Available in widths of 6.4 mm (code 025), 7.9 mm (code 031) and 9.5 mm (code 037).

TP L

Pitch: 3/8" (9.525 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth
TP 202 L ¹	514.4	54
TP 210 L ¹	533.4	56
TP 225 L ¹	571.5	60
TP 240 L ¹	609.6	64
TP 255 L ¹	647.7	68
TP 270 L ¹	685.8	72
TP 285 L ¹	723.9	76
TP 300 L ¹	762.0	80
TP 322 L ¹	819.2	86
TP 345 L ¹	876.3	92
TP 367 L ¹	933.5	98
TP 390 L ⁴	990.6	104
TP 420 L ⁴	1066.8	112
TP 450 L ⁴	1143.0	120
TP 480 L ⁴	1219.2	128
TP 510 L ⁴	1295.4	136
TP 540 L ⁴	1371.6	144
TP 600 L ⁴	1524.0	160
TP 630 L ⁴	1600.2	168
TP 660 L ⁴	1676.4	176

Available in widths of 12.7 mm (code 050), 19.1 mm (code 075) and 25.4 mm (code 100).

TP H

Pitch: 1/2" (12.700 mm)

Length and pitch designation	Pitch length mm ISO	Number of teeth
TP 240 H ¹	609.6	48
TP 270 H ¹	685.8	54
TP 300 H ¹	762.0	60
TP 330 H ¹	838.2	66
TP 360 H ¹	914.4	72
TP 390 H ²	990.6	78
TP 420 H ²	1066.8	84
TP 450 H ²	1143.0	90
TP 480 H ²	1219.2	96
TP 510 H ²	1295.4	102
TP 540 H ²	1371.6	108
TP 570 H ²	1447.8	114
TP 600 H ²	1524.0	120
TP 630 H ²	1600.2	126
TP 660 H ²	1676.4	132
TP 700 H ²	1778.0	140
TP 750 H ²	1905.0	150
TP 800 H ²	2032.0	160
TP 850 H ²	2159.0	170
TP 900 H ²	2286.0	180
TP 1000 H ²	2540.0	200
TP 1100 H ²	2794.0	220
TP 1250 H ²	3175.0	250
TP 1400 H ²	3556.0	280
TP 1700 H ²	4318.0	340

Available in widths of 19.1 mm (code 075), 25.4 mm (code 100), 38.1 mm (code 150), 50.8 mm (code 200) and 76.2 mm (code 300).

Dimensions in bold are available from stock.

SYNCHROPOWER®

Polyurethane belt, metric pitch



SynchroPower® polyurethane belts offer an optimal price/quality ratio. They provide maximum power transmission combined with perfect tooth meshing and tight and accurate tolerances. SynchroPower® is an ideal solution for applications in office machines, paper industry, mixers, domestic appliances, compressors, film projectors, sewing machines and toys.

Identification

Three part number on the back of the belt indicating pitch code and pitch length.

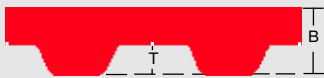
Construction

- Tough and flexible polyurethane compound of consistent quality.
- Steel tensile member.
- Resistant to various oils, ozone and abrasion.
- Temperature ranges from -30°C to +80°C.

Advantages

- Load capacities from 0.5 kW to 30 kW.
- Up to 40000 rpm.
- Speeds up to 75 m/s.
- Efficiency up to 98%.
- Fixed centre distances possible.
- Minimum elongation.
- Long service life.

Sections and nominal dimensions



	Pitch mm	T mm	B mm
T2.5	2.5	0.7	1.3
T5	5.0	1.2	2.2
T10	10.0	2.5	4.5



	Pitch mm	T mm	B mm
AT5	5.0	1.2	2.7
AT10	10.0	2.5	5.0



	Pitch mm	T mm	B mm
DL-T5	5.0	1.2	3.4
DL-T10	10.0	2.5	7.0

AT5 Pitch: 5 mm

Type	Pitch length mm	Number of teeth
AT5 225	225	45
AT5 255	255	51
AT5 275	275	55
AT5 280	280	56
AT5 300	300	60
AT5 340	340	68
AT5 375	375	75
AT5 390	390	78
AT5 420	420	84
AT5 455	455	91
AT5 500	500	100
AT5 545	545	109
AT5 600	600	120
AT5 610	610	122
AT5 630	630	126
AT5 660	660	132
AT5 720	720	144
AT5 750	750	150
AT5 780	780	156
AT5 825	825	165
AT5 975	975	195
AT5 1050	1050	210
AT5 1125	1125	225
AT5 1500	1500	300

Available in widths of 10 mm, 16 mm, 25 mm, 32 mm and 50 mm and in slabs of 200 mm width.

AT10 Pitch: 10 mm

Type	Pitch length mm	Number of teeth
AT10 500	500	50
AT10 560	560	56
AT10 610	610	61
AT10 660	660	66
AT10 700	700	70
AT10 730	730	73
AT10 780	780	78
AT10 800	800	80
AT10 810	810	81
AT10 840	840	84
AT10 890	890	89
AT10 920	920	92
AT10 960	960	96
AT10 980	980	98
AT10 1010	1010	101
AT10 1050	1050	105
AT10 1080	1080	108
AT10 1150	1150	115
AT10 1210	1210	121
AT10 1250	1250	125
AT10 1320	1320	132
AT10 1400	1400	140
AT10 1500	1500	150
AT10 1600	1600	160
AT10 1700	1700	170
AT10 1800	1800	180

Available in widths of 10 mm, 16 mm, 25 mm, 32 mm and 50 mm and in slabs of 200 mm width.

SYNCHRONOUS BELTS IN POLYURETHANE

T2.5 Pitch: 2.5 mm

Type	Pitch length mm	Number of teeth
T2.5 120	120	48
T2.5 145	145	58
T2.5 160	160	64
T2.5 177	177.5	71
T2.5 180	180	72
T2.5 200	200	80
T2.5 230	230	92
T2.5 245	245	98
T2.5 265	265	106
T2.5 285	285	114
T2.5 290	290	116
T2.5 305	305	122
T2.5 317	317.5	127
T2.5 330	330	132
T2.5 380	380	152
T2.5 420	420	168
T2.5 480	480	192
T2.5 500	500	200
T2.5 600	600	240
T2.5 620	620	248
T2.5 650	650	260
T2.5 680	680	272
T2.5 780	780	312
T2.5 880	880	352
T2.5 915	915	366
T2.5 950	950	380
T2.5 1185	1185	474

Available in widths of 4 mm, 6 mm, 8 mm, 10 mm and 12 mm and in slabs of 200 mm width.

T5 Pitch: 5 mm

Type	Pitch length mm	Number of teeth
T5 150	150	30
T5 185	185	37
T5 200	200	40
T5 210	210	42
T5 215	215	43
T5 220	220	44
T5 225	225	45
T5 245	245	49
T5 250	250	50
T5 255	255	51
T5 260	260	52
T5 270	270	54
T5 280	280	56
T5 295	295	59
T5 305	305	61
T5 330	330	66
T5 340	340	68
T5 350	350	70
T5 355	355	71
T5 365	365	73

T5 Pitch: 5 mm

Type	Pitch length mm	Number of teeth
T5 390	390	78
T5 400	400	80
T5 410	410	82
T5 420	420	84
T5 455	455	91
T5 475	475	95
T5 480	480	96
T5 500	500	100
T5 510	510	102
T5 525	525	105
T5 545	545	109
T5 550	550	110
T5 560	560	112
T5 575	575	115
T5 590	590	118
T5 610	610	122
T5 620	620	124
T5 630	630	126
T5 650	650	130
T5 660	660	132
T5 690	690	138
T5 720	720	144
T5 750	750	150
T5 780	780	156
T5 815	815	163
T5 830	830	166
T5 840	840	168
T5 885	885	177
T5 900	900	180
T5 940	940	188
T5 990	990	198
T5 1075	1075	215
T5 1100	1100	220
T5 1160	1160	232
T5 1215	1215	243
T5 1315	1315	263
T5 1380	1380	276

Available in widths of 6 mm, 8 mm, 10 mm, 12 mm, 16 mm, 20 mm and 25 mm and in slabs of 200 mm width.

T10 Pitch: 10 mm

Type	Pitch length mm	Number of teeth
T10 260	260	26
T10 370	370	37
T10 400	400	40
T10 410	410	41
T10 440	440	44
T10 500	500	50
T10 530	530	53
T10 560	560	56
T10 600	600	60
T10 610	610	61
T10 630	630	63
T10 660	660	66
T10 690	690	69
T10 700	700	70
T10 720	720	72
T10 750	750	75
T10 780	780	78
T10 810	810	81
T10 840	840	84
T10 880	880	88
T10 890	890	89
T10 900	900	90
T10 920	920	92
T10 960	960	96
T10 970	970	97
T10 980	980	98
T10 1010	1010	101
T10 1080	1080	108
T10 1110	1110	111
T10 1140	1140	114
T10 1150	1150	115
T10 1210	1210	121
T10 1240	1240	124
T10 1250	1250	125
T10 1300	1300	130
T10 1320	1320	132
T10 1350	1350	135
T10 1390	1390	139
T10 1400	1400	140
T10 1420	1420	142
T10 1460	1460	146
T10 1500	1500	150
T10 1560	1560	156
T10 1610	1610	161
T10 1750	1750	175
T10 1780	1780	178
T10 1880	1880	188
T10 1960	1960	196
T10 2250	2250	225

Available in widths of 10 mm, 12 mm, 16 mm, 20 mm, 25 mm, 32 mm and 50 mm and in slabs of 200 mm width.

DL-T5 Pitch: 5 mm

Double-sided		
Type	Pitch length mm	Number of teeth
DL-T5 410	410	82
DL-T5 460	460	92
DL-T5 590	590	118
DL-T5 620	620	124
DL-T5 750	750	150
DL-T5 815	815	163
DL-T5 860	860	172
DL-T5 940	940	188
DL-T5 1100	1100	220

Available in widths of 6 mm, 8 mm, 10 mm, 12 mm, 16 mm, 20 mm, 25 mm and 32 mm and in slabs of 200 mm width.

DL-T10 Pitch: 10 mm

Double-sided		
Type	Pitch length mm	Number of teeth
DL-T10 530	530	53
DL-T10 630	630	63
DL-T10 660	660	66
DL-T10 720	720	72
DL-T10 840	840	84
DL-T10 980	980	98
DL-T10 1210	1210	121
DL-T10 1240	1240	124
DL-T10 1250	1250	125
DL-T10 1320	1320	132
DL-T10 1350	1350	135
DL-T10 1420	1420	142
DL-T10 1610	1610	161
DL-T10 1880	1880	188

Available in widths of 10 mm, 12 mm, 16 mm, 20 mm, 25 mm, 32 mm and 50 mm and in slabs of 200 mm width.

SynchroPower® ordering code is composed as follows:

Example: PU AT5 720 200

- PU** - Polyurethane
- AT5** - Pitch AT5 - 5 mm
- 720** - Pitch length (mm)
- 200** - Slab width (mm)

All dimensions are available from stock.



POLY CHAIN® GT2

Synchronous belt for extremely powerful industrial drives



Poly Chain® GT2, Gates' most powerful synchronous belt, has been designed for optimum performance on high torque, low speed drives in any industrial application. This lightweight belt transmits up to 30% more power than previous constructions in the same space. Or it transmits the same power in a much more compact space.

Poly Chain® GT2 belts operate on Poly Chain® GT pulleys and do not require any adaptation of the system.

The Poly Chain® GT2 belt construction is based on innovative state-of-the-art design. The body and teeth of the belt are made of a unique polyurethane compound, making the belt tough and virtually immune to abrasion and chemical attack.

Poly Chain® GT2 belts make an excellent alternative to roller chains, requiring neither retensioning nor lubrication. Space-saving, weight-saving and money-saving, Poly Chain® GT2 drives offer a long and reliable service life.

Identification

Three part number on the back of the belt indicating pitch code, pitch length and width.

Construction

- Teeth and body are made of a lightweight polyurethane compound, specially blended for adhesion to the cords and fabric. This uniquely formulated polyurethane makes the belt tough and virtually immune to abrasion and chemicals.
- The aramid tensile cords provide extraordinary power-carrying capacity. Flex fatigue life of aramid is exceptional, and its high impact strength withstands shocks and surge loading.
- The fabric covering the teeth is highly resistant to oil, chemicals, pollutants, corrosion and abrasion. It is exceptionally durable and remains fully operational under extreme temperatures from -54°C up to +85°C.
- The fabric facing reduces friction with the pulley, thereby minimising temperature build-up.

Advantages

- Substantially increased power rating.
- High efficiency positive drive.
- Maintenance-free: no lubrication or retensioning needed.
- Savings in space, weight and money.

Sections and nominal dimensions



	Pitch mm	T mm	B mm
8MGT	8.0	3.4	5.9
14MGT	14.0	6.0	10.2

NOTE

For correct usage of belt, please request Gates' Poly Chain® GT2 Drive Design Manual (E2/20109).

8MGT

Pitch: 8 mm

Pitch and length designation	Pitch length mm	Number of teeth
8MGT-640	640	80
8MGT-720	720	90
8MGT-800	800	100
8MGT-896	896	112
8MGT-1000	1000	125
8MGT-1120	1120	140
8MGT-1200	1200	150
8MGT-1280	1280	160
8MGT-1440	1440	180
8MGT-1600	1600	200
8MGT-1792	1792	224
8MGT-2000	2000	250
8MGT-2240	2240	280
8MGT-2400	2400	300
8MGT-2520	2520	315
8MGT-2840	2840	355
8MGT-3200	3200	400
8MGT-3600	3600	450
8MGT-4000	4000	500
8MGT-4480	4480	560

Available in widths of 12 mm, 21 mm, 36 mm and 62 mm.

14MGT

Pitch: 14 mm

Pitch and length designation	Pitch length mm	Number of teeth
14MGT-994	994	71
14MGT-1120	1120	80
14MGT-1190	1190	85
14MGT-1260	1260	90
14MGT-1400	1400	100
14MGT-1568	1568	112
14MGT-1750	1750	125
14MGT-1890	1890	135
14MGT-1960	1960	140
14MGT-2100	2100	150
14MGT-2240	2240	160
14MGT-2380	2380	170
14MGT-2520	2520	180
14MGT-2660	2660	190
14MGT-2800	2800	200
14MGT-3136	3136	224
14MGT-3304	3304	236
14MGT-3500	3500	250
14MGT-3920	3920	280
14MGT-4410	4410	315

Available in widths of 20 mm, 37 mm, 68 mm, 90 mm and 125 mm.

Mini Poly Chain® 8M GT tooth profile

This compact polyurethane synchronous belt opens up new opportunities in the design of conveyor drives and is an alternative to roller chains. Poly Chain® does not require lubrication, nor tensioning and is characterised by low noise levels even at high transport speeds. The special construction is highly resistant to aggressive influences such as dust, oil and chemicals.

8M

Pitch: 8 mm

Pitch and length designation	Pitch length mm	Number of teeth
8M-248	248	32
8M-288	288	36
8M-352	352	44
8M-416	416	52
8M-456	456	57
8M-480	480	60
8M-544	544	68
8M-608	608	76

Available in widths of 11.2 mm, 21 mm and 36 mm.

Poly Chain® GT2 ordering code is composed as follows:

Example: PC2 8MGT-1200-12	
PC2	- Poly Chain® GT2
8MGT	- Pitch 8 mm
1200	- Pitch length (mm)
12	- Belt width (mm)

Mini Poly Chain® GT ordering code is composed as follows:

Example: PCGT 8M-480-11.2	
PCGT	- Poly Chain® GT
8M	- Pitch 8 mm
480	- Pitch length (mm)
11.2	- Belt width (mm)

All dimensions are available from stock.

POLY CHAIN® GT

Poly Chain® GT pulley specifications



8M 12 mm width

Pulley designation	Outside diameter mm
8M - 22S-12	54.42
8M - 25S-12	62.06
8M - 28S-12	69.70
8M - 30S-12	74.79
8M - 32S-12	79.89
8M - 34S-12	84.98
8M - 36S-12	90.07
8M - 38S-12	95.17
8M - 40S-12	100.26
8M - 45S-12	112.99
8M - 48S-12	120.63
8M - 50S-12	125.72
8M - 56S-12	141.00
8M - 60S-12	151.19
8M - 64S-12	161.37
8M - 75S-12	189.39
8M - 80S-12	202.12
8M - 90S-12	227.58

8M 21 mm width

Pulley designation	Outside diameter mm
8M - 22S-21	54.42
8M - 25S-21	62.06
8M - 28S-21	69.70
8M - 30S-21	74.79
8M - 32S-21	79.89
8M - 34S-21	84.98
8M - 36S-21	90.07
8M - 38S-21	95.17
8M - 40S-21	100.26
8M - 45S-21	112.99
8M - 48S-21	120.63
8M - 50S-21	125.72
8M - 56S-21	141.00
8M - 60S-21	151.19
8M - 64S-21	161.37
8M - 75S-21	189.39
8M - 80S-21	202.12
8M - 90S-21	227.58
8M - 112S-21	283.61
8M - 140S-21	354.91

8M 36 mm width

Pulley designation	Outside diameter mm
8M - 25S-36	62.06
8M - 28S-36	69.70
8M - 30S-36	74.79
8M - 32S-36	79.89
8M - 34S-36	84.98
8M - 36S-36	90.07
8M - 38S-36	95.17
8M - 40S-36	100.26
8M - 45S-36	112.99
8M - 48S-36	120.63
8M - 50S-36	125.72
8M - 56S-36	141.00
8M - 60S-36	151.19
8M - 64S-36	161.37
8M - 75S-36	189.39
8M - 80S-36	202.12
8M - 90S-36	227.58
8M - 112S-36	283.61
8M - 140S-36	354.91
8M - 168S-36	426.21
8M - 192S-36	487.32

8M 62 mm width

Pulley designation	Outside diameter mm
8M - 30S-62	74.79
8M - 32S-62	79.89
8M - 34S-62	84.98
8M - 36S-62	90.07
8M - 38S-62	95.17
8M - 40S-62	100.26
8M - 45S-62	112.99
8M - 48S-62	120.63
8M - 50S-62	125.72
8M - 56S-62	141.00
8M - 60S-62	151.19
8M - 64S-62	161.37
8M - 75S-62	189.39
8M - 80S-62	202.12
8M - 90S-62	227.58
8M - 112S-62	283.61
8M - 140S-62	354.91
8M - 168S-62	426.21
8M - 192S-62	487.32

14M 20 mm width

Pulley designation	Outside diameter mm
14M - 28S-20	121.98
14M - 30S-20	130.89
14M - 32S-20	139.80
14M - 34S-20	148.72
14M - 36S-20	157.63
14M - 38S-20	166.54
14M - 40S-20	175.45
14M - 44S-20	193.28
14M - 48S-20	211.11
14M - 50S-20	220.02
14M - 56S-20	246.76
14M - 60S-20	264.58
14M - 64S-20	282.41
14M - 72S-20	318.06
14M - 80S-20	353.71
14M - 90S-20	398.27
14M - 112S-20	496.31
14M - 140S-20	621.09

14M 37 mm width

Pulley designation	Outside diameter mm
14M - 28S-37	121.98
14M - 30S-37	130.89
14M - 32S-37	139.80
14M - 34S-37	148.72
14M - 36S-37	157.63
14M - 38S-37	166.54
14M - 40S-37	175.45
14M - 44S-37	193.28
14M - 48S-37	211.11
14M - 50S-37	220.02
14M - 56S-37	246.76
14M - 60S-37	264.58
14M - 64S-37	282.41
14M - 72S-37	318.06
14M - 80S-37	353.71
14M - 90S-37	398.27
14M - 112S-37	496.31
14M - 140S-37	621.09
14M - 168S-37	745.87
14M - 192S-37	852.82

14M 68 mm width

Pulley designation	Outside diameter mm
14M - 34S-68	148.72
14M - 36S-68	157.63
14M - 38S-68	166.54
14M - 40S-68	175.45
14M - 44S-68	193.28
14M - 48S-68	211.11
14M - 50S-68	220.02
14M - 56S-68	246.76
14M - 60S-68	264.58
14M - 64S-68	282.41
14M - 72S-68	318.06
14M - 80S-68	353.71
14M - 90S-68	398.27
14M - 112S-68	496.31
14M - 140S-68	621.09
14M - 168S-68	745.87
14M - 192S-68	852.82

14M 90 mm width

Pulley designation	Outside diameter mm
14M-36S-90	157.63
14M-38S-90	166.50
14M-40S-90	175.45
14M-44S-90	193.28
14M-48S-90	211.11
14M-50S-90	220.02
14M-56S-90	246.76
14M-60S-90	264.58
14M-64S-90	282.41
14M-72S-90	318.06
14M-80S-90	353.71
14M-90S-90	398.27
14M-112S-90	496.31
14M-140S-90	621.09
14M-168S-90	745.87
14M-192S-90	852.82

14M 125 mm width

Pulley designation	Outside diameter mm
14M - 38S-125	166.54
14M - 40S-125	175.45
14M - 44S-125	193.28
14M - 48S-125	211.11
14M - 50S-125	220.02
14M - 56S-125	246.76
14M - 60S-125	264.58
14M - 64S-125	282.41
14M - 72S-125	318.06
14M - 80S-125	353.71
14M - 90S-125	398.27
14M - 112S-125	496.31
14M - 140S-125	621.09
14M - 168S-125	745.87
14M - 192S-125	852.82

Poly Chain® GT pulley ordering code is composed as follows:

Example: PCGT 8M 22S 12	
PCGT	- Poly Chain® GT pulley
8M	- Pitch 8 mm
22S	- 22 teeth
12	- Belt width (mm)

All dimensions are available from stock.



Flexible couplings



EuroGrip® flexible couplings are designed to connect two shafts subject to misalignment and axial movement and relieve the stress that would result from a rigid coupling. Gates EuroGrip® flexible couplings consist of a rubber sleeve and two metal end pieces. The design of Gates EuroGrip® flexible couplings

is unique, with its OGEE lines allowing the coupling to act as a torque/life indicator for the drive.

Gates EuroGrip® flexible couplings are available in sizes 19, 28, 42, 48 and 60 and are bored to suit a taper bush or a plain bore and keyway. Gates EuroGrip® flexible couplings have high vibration damping capacity, which makes them especially suitable for direct drive applications in pumps and compressors. Their high compliance is especially appreciated by designers of speed control systems, where resonance can be a problem. The zero backlash characteristics result in high positioning accuracy and repeatability, allowing a wide range of applications in the linear actuator market.

Construction

- Unique OGEE lines on the sleeve are an indicator of torque and product life.
- Sleeves are made of a high-performance elastomeric compound. The sleeve design allows the coupling to act as a predictable fuse in the system.
- End pieces are made of a high-grade aluminium to reduce weight and inertia. The aluminium end pieces are anodised to increase wear resistance and strength. Available either with finished bore and keyway or to suit a taper bush.
- Temperature ranges from -25°C to +100°C.

Advantages

- High vibration damping. Damping increases with load, which will prevent resonance.
- Low noise levels and quiet in operation.
- Zero backlash and, consequently, high positioning accuracy.
- Easy to install and to replace. Can be inspected without stopping the drive.
- Built-in safety measure: the driven machine will stop when the coupling fails.
- High tolerance of combinations of radial and angular misalignment.
- Durable.
- Low inertia.
- Compact design.
- Light weight.

NOTE

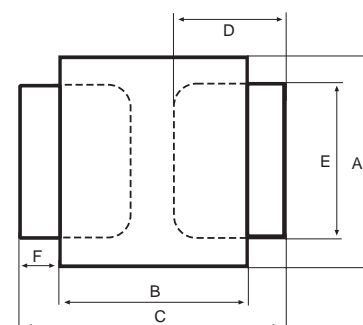
For correct usage of the EuroGrip® flexible couplings, please request Gates' EuroGrip® manual (E2/20103).

Sleeve dimensions

The principal dimensions of a EuroGrip® sleeve are the outside diameter, the sleeve length and the total coupling length.

Gates EuroGrip® couplings are made in sizes 19, 28, 42, 48 and 60.

Coupling size code	Nominal shaft mm	Sleeve OD mm (A)	Sleeve length mm (B)	Sleeve weight g	Coupling total length mm (C)
19	19	46	28	35	48
28	28	77	38	125	60
42	42	102	48	250	80
48	48	126	58	450	94
60	60	150	65	750	105



End piece dimensions

The principal dimensions of a EuroGrip® end piece are the taper bush size, the bore, the end piece length and the shoulder diameter.

Coupling size code	Back fixed taper bush	Front fixed taper bush	Standard bore mm	End piece length mm (D)	Shoulder diameter mm (E)	Shoulder thickness mm (F)	Over tooth diameter mm	Inertia J kgm ²	Weight with MPB ⁽²⁾ g
19 ⁽¹⁾	MPB ⁽²⁾	MPB ⁽²⁾	14 / 19	22	42	9	36	0.000009	50
28	1108	1008	24 / 28	28	72	11	62	0.000105	200
42	1615	1215	38 / 42	38	96	16	84	0.000469	550
48	2017	1615	48	45	118	18	104	0.001330	1000
60	2517	2017	55 / 60	50	136	20	120	0.002572	1350

⁽¹⁾ Size 19 available with bore and key only. All other EuroGrip® couplings (sizes 28, 42, 48 and 60) available with bore and key or to suit taper bush. Size 28 with 1108 taper bush requires a shallow key.

⁽²⁾ MPB = Minimum Plain Bore.

Note: End pieces are keyed according to ISO. Bore is to tolerance H7 fit (ISO). End pieces are also available with unfinished bore.

Part numbers

Coupling	Part	Part number	Part	Part number 9902 -		
19	Sleeve	9901-51901	14 mm bore end piece	01914		
			19 mm bore end piece	01919		
			MPB end piece	01900		
28	Sleeve	9901-52801	24 mm bore end piece	02824		
			End piece for taper bush - back fixed (1108)	9902-02801	28 mm bore end piece	02828
			End piece for taper bush - front fixed (1008)	9902-02802	MPB end piece	02800
42	Sleeve	9901-54201	38 mm bore end piece	04238		
			End piece for taper bush - back fixed (1615)	9902-04201	42 mm bore end piece	04242
			End piece for taper bush - front fixed (1215)	9902-04202	MPB end piece	04200
48	Sleeve	9901-54801	48 mm bore end piece	04848		
			End piece for taper bush - back fixed (2017)	9902-04801	MPB end piece	04800
			End piece for taper bush - front fixed (1615)	9902-04802		
60	Sleeve	9901-56001	55 mm bore end piece	06055		
			End piece for taper bush - back fixed (2517)	9902-06001	60 mm bore end piece	06060
			End piece for taper bush - front fixed (2017)	9902-06002	MPB end piece	06000

505C

Sonic tension meter



Correct belt installation tension is essential for optimum performance and reliability of multi-ribbed, V-belt and synchronous belt drives. The 505C sonic tension meter ensures a simple and extremely accurate tension measurement by analysing sound waves (natural frequencies) from the belt through the sensor. It processes the input signals and gives an accurate digital display of tension.

Gates' tension tester is user-friendly: it is compact, computerised and stores data for repetitive use. Gates' sonic tension tester measures belt tension accurately every time. It is supplied with a handy instruction manual.

Features

- Stores weight, width and span constants for up to ten different drive systems.
- New auto gain adjustment function cancels out background noise automatically.
- Shuts off automatically after ten minutes of inactivity, making it an energy-saving device.
- Measurement range: 10 Hz to 1000 Hz.
- Flexible sensor (cord and inductive sensor available on request).
- H 160 mm x D 26 mm x W 59 mm.

Optional accessories

Cord sensor

The cord sensor is recommended for measuring tensions at a distance from the tension meter.

Inductive sensor

The inductive sensor is recommended for measurement of steel corded belts particularly in noisy or windy environments.

Sonic tension meter calibrator - model U-305-OS1

This special calibrator (oscillator) is available for the frequency test of the 505C sonic tension meter. This oscillator generates 5 types of oscillations (sine wave): 25, 90, 500, 2000 and 4000 Hz. It features a frequency accuracy of 0.1% or even lower.



CALIBRATOR MODEL U-305-OS1

NOTE

GATES SONIC TENSION METER SHOULD NOT BE USED IN EXPLOSIVE RISK AREAS.

LASER AT-1

Laser alignment device



A fast and accurate method to measure misalignment is ensured by Gates' unique laser alignment device, LASER AT-1. Mounted in a few seconds, the laser line projected onto the targets allows you to quickly ascertain and correct misalignment. The LASER AT-1 identifies parallel as well as angular misalignment between the pulleys and is suitable for pulley diameters of 60 mm and larger. It is so light it can be mounted on non-magnetic pulleys with the double sided adhesive tape and used on both horizontal and vertical shaft installations.

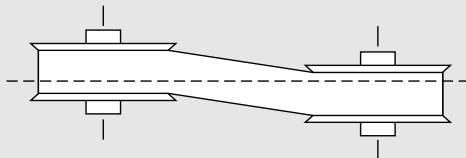
Advantages

- For both V-belts and synchronous belts.
- Shows parallel and angular misalignment between the pulleys.
- Much faster and more accurate than measuring with earlier, conventional methods.
- For both horizontally and vertically shaft machines.
- Alignment can be made by one operator.
- Also suitable for non-magnetic pulleys.

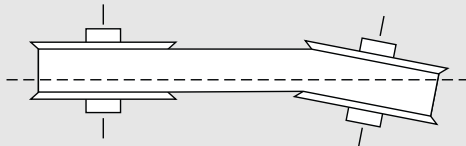
Technical characteristics

- Pulley diameters ≥ 60 mm
- Beam angle 78°
- Measurement distance 10 m (33 ft)
- Battery 1 x R6 (AA) 1.5 V
- Battery operation 8 hours continuously
- Laser class 2
- Output power < 1 mW
- Laser wave length 635 – 670 nm
- Temperature range -10°C up to $+50^\circ\text{C}$
- Housing ABS plastics
- Back plate Anodised aluminium
- Weight 0.25 kg
- Dimensions W 147 mm x H 87 mm x D 28 mm

PARALLEL MISALIGNMENT



ANGULAR MISALIGNMENT



Calibration accuracy Offset < 0.5 mm
Angle $< 0.1^\circ$

Targets 2 pieces magnet targets with adjustable centre line

Light weight Because of its light weight it can be mounted on non-magnetic pulleys with double-sided adhesive tape.

NOTE

THE LASER AT-1 SHOULD NOT BE USED IN EXPLOSIVE RISK AREAS.

Support

DesignFlex calculation software

You may calculate your own application by means of one of Gates' design manuals or by using DesignFlex, a Windows-based multilingual software program. This software is available on CD-ROM (E/20098) but can also be downloaded from Gates' website at www.gates.com/europe. The program offers a step-by-step drive calculation procedure for both V-belts and synchronous belts based on the criteria and/or limitations specified by the user. DesignFlex runs under Windows 95, 98, 2000, NT, Millennium, requires a Pentium 133 processor or higher and an 800 x 600 screen resolution or higher. A minimum of 32 MB RAM is recommended for satisfactory calculation speed.



Gates' application engineers at your service

If your application cannot be designed with the aid of Gates' design manuals or the DesignFlex software, you can always contact Gates' application engineers. They are at your service to solve even the most difficult drive design problem. Gates engineers will calculate your drive design free of charge with a minimum of delay.



Electronic price list

Gates' electronic price list for industrial Power Transmission products is available on CD-ROM and enables the user to easily select any product from the power transmission range by product number, bar code, description, type, profile and dimension. A full colour photograph and a drawing of the belt profiles complete the information. The information on the CD-ROM is available in 6 languages.

Gates literature

Please consult our web site at www.gates.com/europe for specific and updated information on other Gates industrial belt products and our list of available literature. Industrial Power Transmission brochures and leaflets can be downloaded from the site. Distributors may link up with the Gates European site thus supplying visitors with updated information on the European Gates organisation.



Addresses

Operations

FRANCE

GATES S.A.

Power Transmission Division
111, Rue Francis Garnier
B.P. 37
F - 58027 Nevers-Cedex
TL : (33) 3 / 86 71 75 00
FX : (33) 3 / 86 36 62 47

GERMANY

GATES GmbH Aachen

Eisenbahnweg 50
D - 52068 Aachen
TL : (49) 241 / 5108-0
FX : (49) 241 / 5108-297

UK

GATES POWER TRANSMISSION Ltd

Tinwald Downs Road
Heathhall - Dumfries
DG1 1TS, Scotland
TL : (44) 1387 / 24 20 00
FX : (44) 1387 / 24 20 10

POLAND

GATES POLSKA Sp. z o.o.

Ul. Jaworzyska 301
P - 59-220 Legnica
TL : (48) 76 / 855 10 00
Fx : (48) 76 / 855 10 01

Sales offices

BELGIUM

GATES EUROPE N.V.

Dr. Carlierlaan 30
B - 9320 Erembodegem
TL : (32) 53 / 76 27 11
FX : (32) 53 / 76 27 13

FRANCE

GATES FRANCE S.A.R.L.

B.P. 37
Zone Industrielle
F - 95380 Louvres
TL : (33) 1 / 34 47 41 41
FX : (33) 1 / 34 72 60 54

GERMANY

GATES GmbH Langenfeld

Haus Gravener Str. 191-193
D - 40764 Langenfeld
TL : (49) 2173 / 795-0
FX : (49) 2173 / 795-150

ITALY

GATES S.R.L.

Via Senigallia 18
(Int. 2 - Blocco A - Edificio 1)
I - 20161 Milano MI
TL : (39) 02 / 662 16 21
FX : (39) 02 / 645 86 36

SPAIN

GATES VULCA S.A.

Polígono Industrial
Les Malloles
E - 08660 Balsareny
TL : (34) 93 / 877 70 00
FX : (34) 93 / 877 70 39

Web site and e-mail address

www.gates.com/europe - inforequest@gates.com

Every effort has been made to ensure the accuracy and comprehensiveness of the information given in this catalogue. However, Gates cannot be held responsible if its products are used in special or exceptional circumstances without prior consultation with and clearance from a Gates representative.

This issue is released April 2004 and supersedes all previous versions of Gates' industrial belt catalogues. If your catalogue is more than 2 years old, please consult a Gates representative to check whether you have the latest version.

YOUR DISTRIBUTOR:



Drive the Technology