

POLY CHAIN® GT CARBON™

***Polyurethane synchronous belt
with patented carbon tensile cords***

Through providing you with precise drive solutions of unsurpassed quality and leading edge technology Gates brings you the ultimate in synchronous drive systems. Poly Chain® GT Carbon™ is Gates' newest polyurethane synchronous belt with patented carbon tensile cord design suited for high torque, low speed drives. The materials development engineers from Gates are the first to have incorporated a high fatigue-resisting carbon fibre tensile cord into the belt which is made of a new polyurethane compound. Consequently, Poly Chain® GT Carbon™ is the most powerful synchronous belt in the market providing a maintenance-free, energy saving and environmentally friendly operation offering an excellent alternative to roller chain drives and gear.

Nothing tougher

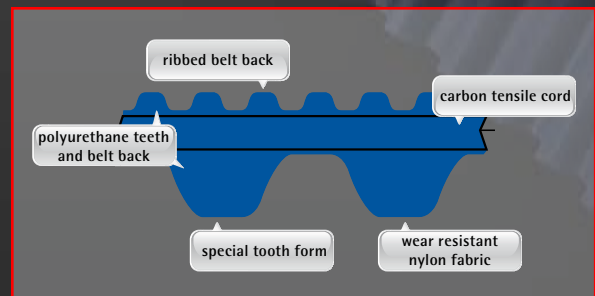


Polyurethane synchronous belt with patented carbon tensile cords

Continuous investment in engineering, field-tested development and proximity to our customers have made us world market leader in drive system solutions. Wherever optimum performance is a priority, our high-tech drive solutions are in operation. Strength, flexibility, durability and reliability are all vital qualities in the field of power transmission. With Gates' new Poly Chain® GT Carbon™ synchronous belts these qualities are guaranteed.

Construction features





- The basic belt consists of a newly developed tough, lightweight polyurethane compound which is chemically resistant and ensures optimum adhesion with the carbon tensile cords.
- The carbon fibre reinforcement provides high strength and length stability with improved shock load and fatigue resistance, while reducing stretch and increasing flexibility.
- The facing is a nylon fabric that acts as a wear resistant surface, protecting the teeth. It also helps keep frictional losses to a minimum.
- The special modified curvilinear tooth profile improves stress distribution and allows higher overall loading.



Additional benefits

- Extraordinary power capacity: at least 25% higher power ratings than Poly Chain® GT2 belts.
- Clean, quiet, compact, durable, maintenance-free, energy saving and environmentally friendly operation.
- Virtual constant belt tension over belt life.
- Ability to use back idlers.
- Designed to fit with current Poly Chain® GT pulleys.
- Suitable for temperatures from -54°C to +85°C.
- Wide application range: industrial equipment (mining, construction, food and beverage, wood, paper, pulp, textile), conveying equipment, lifting and handling equipment, agricultural and forestry equipment, machine tools, motorcycle rear wheel drives, bicycle drives ... and many more

Rotary gear pump drive example: Poly Chain® GT Carbon™ compactness exemplified

Drive	PowerGrip® HTD®	PowerGrip® GT3	Poly Chain® GT2	Poly Chain® GT Carbon™
Pitch (mm)	14	14	14	14
Pulleys (# grooves)	P32/P64	P32/P64	P32/P64	P32/P64
Diameters (mm)	142/285	142/285	142/285	142/285
Belt width (mm)	170	85	37	20
				
	170 mm	85 mm	37 mm	20 mm



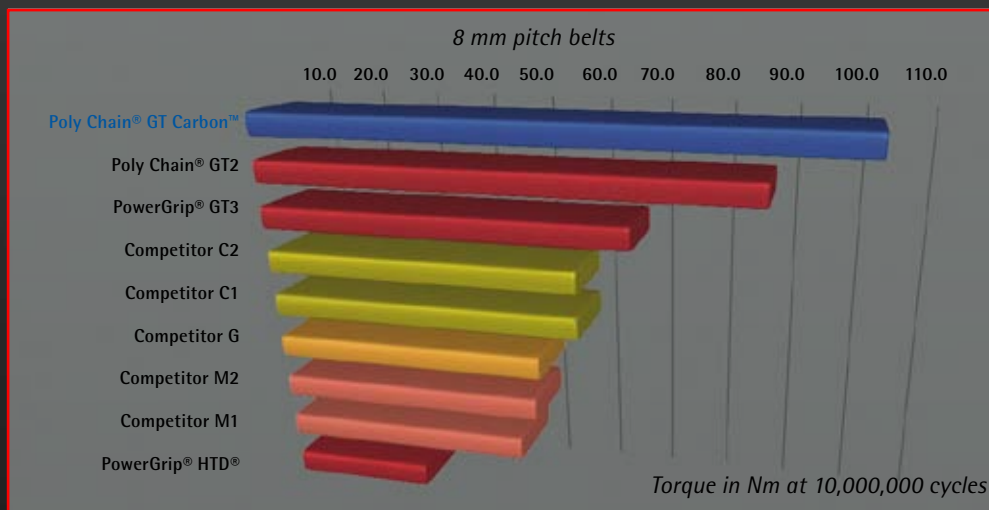
Polyurethane synchronous belt with patented carbon tensile cords

Outlasts and outperforms competition

A Poly Chain® GT Carbon™ synchronous belt drive system offers innumerable cost saving advantages for both design and maintenance engineers.

Design engineers can obtain a competitive advantage by designing in the Poly Chain® GT Carbon™ drives in their next power transmission application. They will be able to provide end-users with better-performing, longer-lasting, cleaner, quieter and maintenance-free products that operate at a significantly lower overall cost. In the MRO market, Poly Chain® GT Carbon™ drives can substantially reduce day-to-day operational costs. They can also increase production output by eliminating downtime and lost productivity resulting from all-too-frequent maintenance and replacement of defective drive components.

Poly Chain® GT Carbon™ versus competitors' belts



All our knowledge is there for you to share

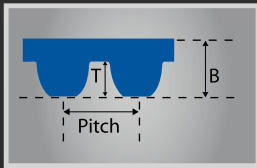
Whatever your challenge, Gates' application engineers will gladly lend a hand at no cost to you. From routine questions to complex analyses, they will help you find the most cost-effective drive solution.

Gates also puts forward a fast and easy resource for selecting and maintaining belt drive systems. With the Gates multilingual DesignFlex® Pro™ programme, you can design a drive in minutes, and get every possible drive solution that fits your design parameters.

If you are interested in finding out more about the many performance advantages of Gates Poly Chain® GT Carbon™ belt drive systems, please visit www.gates.com/europe/carbon or contact your local Gates representative.

Polyurethane synchronous belt with patented carbon tensile cords

Sections and nominal dimensions



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

Belt range

8MGT

Description	Pitch length	Number of teeth
8MGTC-640	640	80
8MGTC-720	720	90
8MGTC-800	800	100
8MGTC-896	896	112
8MGTC-960	960	120
8MGTC-1000	1000	125
8MGTC-1040	1040	130
8MGTC-1120	1120	140
8MGTC-1200	1200	150
8MGTC-1224	1224	153
8MGTC-1280	1280	160
8MGTC-1440	1440	180
8MGTC-1600	1600	200
8MGTC-1760	1760	220
8MGTC-1792	1792	224
8MGTC-2000	2000	250
8MGTC-2200	2200	275
8MGTC-2240	2240	280
8MGTC-2400	2400	300
8MGTC-2520	2520	315
8MGTC-2600	2600	325
8MGTC-2800	2800	350
8MGTC-2840	2840	355
8MGTC-3048	3048	381
8MGTC-3200	3200	400
8MGTC-3280	3280	410
8MGTC-3600	3600	450
8MGTC-4000	4000	500
8MGTC-4400	4400	550
8MGTC-4480	4480	560

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

14MGT

Description	Pitch length	Number of teeth
14MGTC-994	994	71
14MGTC-1120	1120	80
14MGTC-1190	1190	85
14MGTC-1260	1260	90
14MGTC-1400	1400	100
14MGTC-1568	1568	112
14MGTC-1610	1610	115
14MGTC-1750	1750	125
14MGTC-1890	1890	135
14MGTC-1960	1960	140
14MGTC-2100	2100	150
14MGTC-2240	2240	160
14MGTC-2310	2310	165
14MGTC-2380	2380	170
14MGTC-2450	2450	175
14MGTC-2520	2520	180
14MGTC-2590	2590	185
14MGTC-2660	2660	190
14MGTC-2800	2800	200
14MGTC-3136	3136	224
14MGTC-3304	3304	236
14MGTC-3360	3360	240
14MGTC-3500	3500	250
14MGTC-3850	3850	275
14MGTC-3920	3920	280
14MGTC-4326	4326	309
14MGTC-4410	4410	315

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

All dimensions are available from stock.

www.gates.com/europe/pti

Your distributor:



A Tomkins Company

Poly Chain® GT Carbon™ ordering code is composed as follows:

Example: 14MGTC-3360-37
 14MGTC - Pitch 14 mm
 3360 - Pitch length (mm)
 37 - Belt width (mm)