

POLY CHAIN® GT2 *Standard belt range*

8MGT
Pitch: 8 mm

Pitch and length designation	Pitch length mm	No of teeth
8MGT-640	640	80
8MGT-720	720	90
8MGT-800	800	100
8MGT-896	896	112
8MGT-960*	960	120
8MGT-1000	1000	125
8MGT-1040*	1040	130
8MGT-1120	1120	140
8MGT-1200	1200	150
8MGT-1224*	1224	153
8MGT-1280	1280	160
8MGT-1440	1440	180
8MGT-1600	1600	200
8MGT-1760*	1760	220
8MGT-1792	1792	224
8MGT-2000	2000	250
8MGT-2200*	2200	275
8MGT-2240	2240	280
8MGT-2400	2400	300
8MGT-2520	2520	315
8MGT-2600*	2600	325
8MGT-2800*	2800	350
8MGT-2840	2840	355
8MGT-3048*	3048	381
8MGT-3200	3200	400
8MGT-3280*	3280	410
8MGT-3600	3600	450
8MGT-4000	4000	500
8MGT-4400*	4400	550
8MGT-4480	4480	560

14MGT
Pitch: 14 mm

Pitch and length designation	Pitch length mm	No 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-1610*	1610	115
14MGT-1750	1750	125
14MGT-1890	1890	135
14MGT-1960	1960	140
14MGT-2100	2100	150
14MGT-2240	2240	160
14MGT-2310*	2310	165
14MGT-2380	2380	170
14MGT-2450*	2450	175
14MGT-2520	2520	180
14MGT-2590*	2590	185
14MGT-2660	2660	190
14MGT-2800	2800	200
14MGT-3136	3136	224
14MGT-3304	3304	236
14MGT-3360*	3360	240
14MGT-3500	3500	250
14MGT-3850*	3850	275
14MGT-3920	3920	280
14MGT-4326*	4326	309
14MGT-4410	4410	315

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

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

* Sizes available as from January 2005.
All other sizes are available from stock.

www.gates.com/europe/polychain
ptindustrial@gates.com

Your distributor:



Poly Chain® GT2 ordering code is composed as follows:

PC2 8MGT-1200-12

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



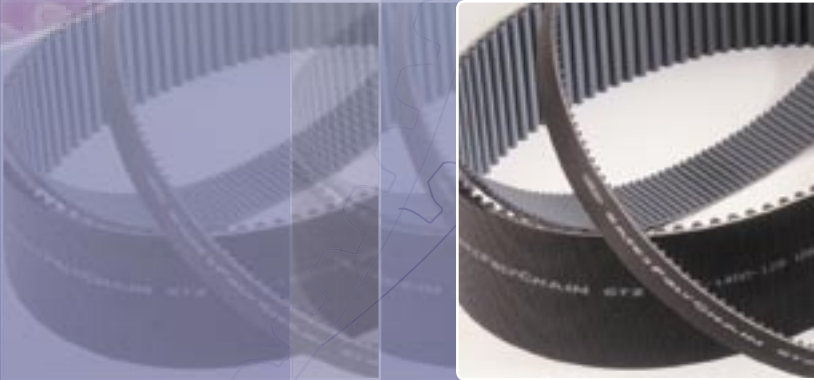
POLY CHAIN® GT2

The most powerful polyurethane synchronous belt on the market

Extended range of sizes with 40% additional power capacity in the speed ranges up to 500 rpm.

Through innovative product design and advanced technical know-how, Gates is capable of answering industry's increasing power transmission drive requirements. On the one hand new products are being developed, on the other hand existing ones are continually being improved.

The same goes for Poly Chain® GT2. Poly Chain® GT2 is Gates' most powerful polyurethane synchronous belt and an ideal replacement for chain drives and gears. This top performing belt for low speed, high torque drives has been upgraded: it has 40% higher power ratings, for the same service life. In addition, the product range has been extended.



Main advantages of Poly Chain® GT2

- maintenance free
- long service life
- light weight
- high tear resistance
- resistance to elongation
- low inertia and high power capacity
- large transmission ratios

POLY CHAIN® GT2

Polyurethane synchronous belt for low-speed, high torque drives

Features

- The belt's 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.

Benefits

- Substantially increased power ratings: 40% higher in speed range up to 500 rpm.
- Highly efficient positive drive.
- Maintenance-free: no lubrication or retensioning needed.
- Savings in space, weight and money.

Make the switch to Poly Chain® GT2 for applications on:

- industrial equipment (mining, construction, food and beverage, wood, paper, pulp, textile)
- vehicles and engines (motorcycles and other motor vehicles)
- lift and handling equipment
- machine tools
- agricultural and forestry equipment (combines, lawn mowers)

POLY CHAIN® GT2

A unique alternative to roller chain

Compared to roller chain Poly Chain® GT2 offers following advantages:

- substantial savings in weight and space
- no lubrication
- no retensioning
- low noise levels compared to chain drives
- resistance against aggressive influences (dust, oil, chemicals, ...)
- unique belt construction resulting in a long and dependable service life

Drive package comparison

	Poly Chain® GT2 14MGT-2520-37	Chain DIN 8178 16B - 2
Belt / Chain length - mm	2520	2540
Pitch - mm	14	25.4
Ratio	2.64	2.63
No of grooves - driveR pulley	34	19
No of grooves - driveN pulley	90	50
Outside diameter driveR pulley - mm	151.52	153.32
Outside diameter driveN pulley - mm	401.07	404.52
Weight driveR pulley - kg	3.8	8.3
Weight driveN pulley - kg	17.2	27.6
Width belt / chain - mm	37	74
Centre distance - mm	816.45	822.13
Speed - rpm	700	700
Design power - kW	30	30
Weight belt / chain - kg	0.74	13.72
Total drive weight - kg	21.74	49.62

The calculation of the chain drive is made according to DIN/ISO 10823.
For more detailed information on this comparison, please contact your Gates representative.

Ideal for gear boxes

Power density comparison

Poly Chain® GT2 has power densities similar to those normally associated with gear systems and can therefore be used to supplement or replace gearbox arrangements.

Drive type	System power density (kW/mm*)
Classical timing belt	0.22
Roller chain	0.39
Spur gear	1.25
Helical gear	1.45
Poly Chain® GT2	1.4

* Values calculated as design kW per mm system width at a nominal 1000 rpm

