



SYNCHRONOUS BELTS FOR EXTREMELY POWERFUL INDUSTRIAL DRIVES

POLY CHAIN® GT2

Synchronous belt in polyurethane

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 features increased power ratings of up to 40% higher than previous constructions, while maintaining the same long service life.

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.







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	Т	В	
	mm	mm	mm	
8MGT	8.0	3.4	5.9	
14MGT	14.0	6.0	10.2	

NOTE

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



8MGT Pitch: 8 mm Pitch and Pitch length length designation teeth 8MGT 640 640 80 8MGT 720 720 90 8MGT 800 800 100 8MGT 896 896 112 960 8MGT 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 1792 8MGT 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

	ITINIGI	
Р	itch: 14 mm	
Pitch and	Pitch length	Number
length		of
designation	mm	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.

Poly Chain® GT2 ordering code is composed as follows:

8MGT-640-12

8MGT - Pitch 8 mm 640 - Pitch length (mm) 12 - Belt width (mm)

MINI POLY CHAIN®

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

4000

4400

4480

8MGT 4000

8MGT 4400

8MGT 4480

Synchronous belt with 8 mm, GT tooth profile

500

550

560



This compact polyurethane synchronous belt opens up new opportunities in the design of conveyor drives and is an alternative to roller chains.

Poly Chain® GT does not require lubrication or 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	Pitch length	Number of	
designation	mm	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.

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

8M-352-11.2

8M - Pitch 8 mm

352 - Pitch length (mm)

- Belt width (mm) 11.2

Dimensions in bold are available from stock.





PULLEYS

POLY CHAIN® GT

Poly Chain® GT pulley specifications



	8M		14M			
Pulley	Outside Pulley	Outside	Pulley	Outside	Pulley	Outside
designation	diameter designation mm	diameter mm	designation	diameter mm	designation	diamete mn
12 mm w	vidth 36 n	nm width	20 mm w	idth	68 mm w	idth
8M - 22S-12	54.42 8M - 25S-36	62.06	14M - 28S-20	121.98	14M - 34S-68	148.72
8M - 25S-12	62.06 8M - 28S-36	69.70	14M - 30S-20	130.89	14M - 36S-68	157.63
8M - 28S-12	69.70 8M - 30S-36	74.79	14M - 32S-20	139.80	14M - 38S-68	166.54
8M - 30S-12	74.79 8M - 32S-36	79.89	14M - 34S-20	148.72	14M - 40S-68	175.4
8M - 32S-12	79.89 8M - 34S-36	84.98	14M - 36S-20	157.63	14M - 44S-68	193.28
8M - 34S-12	84.98 8M - 36S-36	90.07	14M - 38S-20	166.54	14M - 48S-68	211.1
8M - 36S-12	90.07 8M - 38S-36	95.17	14M - 40S-20	175.45	14M - 50S-68	220.0
8M - 38S-12	95.17 8M - 40S-36	100.26	14M - 44S-20	193.28	14M - 56S-68	246.7
8M - 40S-12	100.26 8M - 45S-36	112.99	14M - 48S-20	211.11	14M - 60S-68	264.5
8M - 45S-12	112.99 8M - 48S-36	120.63	14M - 50S-20	220.02	14M - 64S-68	282.4
8M - 48S-12	120.63 8M - 50S-36	125.72	14M - 56S-20	246.76	14M - 72S-68	318.0
8M - 50S-12	125.72 8M - 56S-36	141.00	14M - 60S-20	264.58	14M - 80S-68	353.7
8M - 56S-12	141.00 8M - 60S-36	151.19	14M - 64S-20	282.41	14M - 90S-68	398.2
8M - 60S-12	151.19 8M - 64S-36	161.37	14M - 72S-20	318.06	14M -112S-68	496.3
8M - 64S-12	161.37 8M - 75S-36	189.39	14M - 80S-20	353.71	14M -140S-68	621.0
8M - 75S-12	189.39 8M - 80S-36	202.12	14M - 90S-20	398.27	14M -168S-68	745.8
8M - 80S-12	202.12 8M - 90S-36	227.58	14M -112S-20	496.31	14M -192S-68	852.83
8M - 90S-12	227.58 8M -112S-36	283.61	14M -140S-20	621.09		
	8M -140S-36	354.91				
	8M -168S-36	426.21				
	8M -192S-36	487.32				
21 mm w	vidth 62 n	nm width	37 mm w	idth	90 mm w	idth
8M - 22S-21	54.42 8M - 30S-62	74.79	14M - 28S-37	121.98	14M-36S-90	157.63
8M - 25S-21	62.06 8M - 32S-62	79.89	14M - 30S-37	130.89	14M-38S-90	166.5
8M - 28S-21	69.70 8M - 34S-62	84.98	14M - 32S-37	139.80	14M-40S-90	175.4
8M - 30S-21	74.79 8M - 36S-62	90.07	14M - 34S-37	148.72	14M-44S-90	193.2
8M - 32S-21	79.89 8M - 38S-62	95.17	14M - 36S-37	157.63	14M-48S-90	211.1
8M - 34S-21	84.98 8M - 40S-62	100.26	14M - 38S-37	166.54	14M-50S-90	220.0
8M - 36S-21	90.07 8M - 45S-62	112.99	14M - 40S-37	175.45	14M-56S-90	246.7
8M - 38S-21	95.17 8M - 48S-62	120.63	14M - 44S-37	193.28	14M-60S-90	264.5
8M - 40S-21	100.26 8M - 50S-62	125.72	14M - 48S-37	211.11	14M-64S-90	282.4
8M - 45S-21	112.99 8M - 56S-62	141.00	14M - 50S-37	220.02	14M-72S-90	318.0
8M - 48S-21	120.63 8M - 60S-62	151.19	14M - 56S-37	246.76	14M-80S-90	353.7
8M - 50S-21	125.72 8M - 64S-62	161.37	14M - 60S-37	264.58	14M-90S-90	398.2
8M - 56S-21	141.00 8M - 75S-62	189.39	14M - 64S-37	282.41	14M-112S-90	496.3
8M - 60S-21	151.19 8M - 80S-62	202.12	14M - 72S-37	318.06	14M-140S-90	621.0
8M - 64S-21	161.37 8M - 90S-62	227.58	14M - 80S-37	353.71	14M-168S-90	745.8
8M - 75S-21	189.39 8M -112S-62	283.61	14M - 90S-37	398.27	14M-192S-90	852.8
8M - 80S-21	202.12 8M -140S-62	354.91	14M -112S-37	496.31		
8M - 90S-21	227.58 8M -168S-62	426.21	14M -140S-37	621.09		
8M -112S-21	283.61 8M -192S-62	487.32	14M -168S-37	745.87		
8M -140S-21	354.91		14M -192S-37	852.82		
					125 mm v	vidth
					14M - 38S-125	166.5
					14M - 40S-125	175.4
					14M - 44S-125	193.2
					14M - 445-125	211.1
					14M - 50S-125	220.0
					14M - 56S-125	246.7
5 L el					14M - 60S-125	264.5
	pulley ordering code				14M - 64S-125	282.4
is composed as	follows:				14M - 72S-125	282.4 318.0
•						
14M-28S-20	100 100				14M - 80S-125	353.7
14M - Pitch 14					14M - 90S-125	398.2
28S - Number					14M -112S-125	496.3
20 - Belt widt	th (mm)				14M -140S-125	621.0
			I		14M -168S-125	745.8
					14M -192S-125	852.83