

POLY CHAIN® GT™ CARBON™

POLYURETHANE SYNCHRONOUS BELT WITH OPTIMIZED CURVILINEAR GT TOOTH PROFILE

Give yourself a competitive advantage by designing in the Gates Poly Chain GT Carbon drive system instead of roller chain in your next power transmission application.

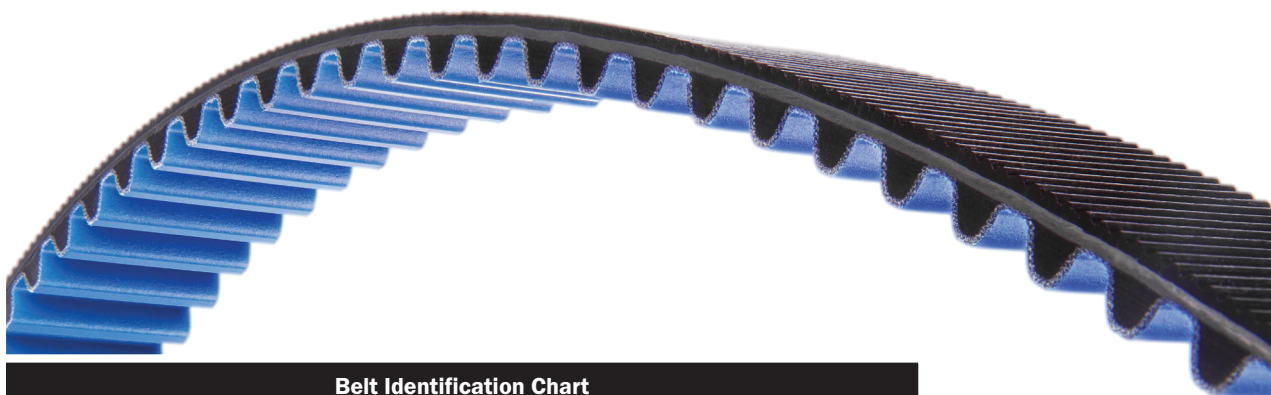
The patented use of carbon fiber as the tensile cord in this belt provides increased horsepower rating for greater power density and compactness. When combined with Gates Poly Chain GT sprockets, you have a lightweight, long-lasting, maintenance-free system that's more than a match for roller chain.

CONSTRUCTION + SPECIFICATIONS

- Durable **polyurethane construction** resists chemicals, oil, pollutants, and abrasion.
- Robust **carbon tensile cord** combines minimal stretch with extraordinary strength and load carrying capacity.
- Gates **curvilinear tooth profile** provides high shear strength and improved load carrying capacity.
- **Nylon tooth facing** reduces friction and eliminates the need for lubrication.

FEATURES + BENEFITS

- Maintenance-free, clean solution for roller chain drive conversion.
- No lubrication required.
- No retensioning required.
- Equivalent capacity to roller chain drives in the same width.
- Operating temperature range: -54°C/-65°F to +85°C/+185°F.



Belt Identification Chart

Examples: 8MGT-640-12 Belt 8MX-22S-12 GT Sprocket

	Standard Widths (mm)	A	B	C
5mm	9, 15, 25	5mm .197 in.	3.6mm .141 in.	1.9mm .076 in.
8mm	12, 21, 36, 62	8mm .315 in.	5.9mm .233 in.	3.4mm .135 in.
14mm	20, 37, 68, 90, 125	14mm .552 in.	10.2mm .401 in.	6mm .236 in.

Note: Gates recommends that Poly Chain GT Carbon belts run only in Poly Chain GT sprockets when used for new applications. Gates recommends that Poly Chain GT Carbon belts be used for replacement belts in Poly Chain GT sprockets.

5mm Pitch



8mm Pitch



14mm Pitch



BELT IDENTIFICATION

14MGT-1400-37
14MGT - 14mm Pitch
1400 - Pitch Length (mm)
37 - Belt Width (mm)

Available Stock Sizes
5M 300-815 (mm)
8M 248-4480 (mm)
14M 994-4410 (mm)

Poly Chain[®] Carbon[™] Volt[™] Belts

Recommended Sprockets

Use Taper-Lock type Poly Chain GT Sprockets when designing a new Poly Chain Carbon Volt belt drive system.

Notes

Poly Chain Carbon Volt belt part numbers follow a similar notation to Poly Chain GT Carbon belts: part number 14GTV-4410-20 denotes a 14mm pitch, Poly Chain Carbon Volt antistatic construction, 4410mm pitch length and 20mm width.

Poly Chain Carbon Volt belts are antistatic in accordance with ISO 9563. When belt drive systems are located in potentially hazardous environments, safe and reliable dissipation of electrostatic charges is critical - a secondary means of dissipation such as static grounding brushes is recommended.

Product No. Series 9239

8mm Pitch — 12mm Wide

Part No.	Product No.	Number of Teeth	Pitch Length (in)	Weight (Lbs.)	Part No.	Product No.	Number of Teeth	Pitch Length (in)	Weight (Lbs.)
8GTV-640-12	9239-0080	80	25.20	.079	8GTV-2000-12	9239-0250	250	78.74	.248
8GTV-720-12	9239-0090	90	28.35	.089	8GTV-2200-12	9239-0275	275	86.61	.273
8GTV-800-12	9239-0100	100	31.50	.099	8GTV-2240-12	9239-0280	280	88.19	.278
8GTV-896-12	9239-0112	112	35.28	.111	8GTV-2400-12	9239-0300	300	94.49	.298
8GTV-960-12	9239-0120	120	37.80	.119	8GTV-2520-12	9239-0315	315	99.21	.313
8GTV-1000-12	9239-0125	125	39.37	.124	8GTV-2600-12	9239-0325	325	102.36	.323
8GTV-1040-12	9239-0130	130	40.95	.129	8GTV-2800-12	9239-0350	350	110.24	.347
8GTV-1120-12	9239-0140	140	44.09	.139	8GTV-2840-12	9239-0355	355	111.81	.352
8GTV-1200-12	9239-0150	150	47.24	.149	8GTV-3048-12	9239-0381	381	120.00	.378
8GTV-1224-12	9239-0153	153	48.19	.152	8GTV-3200-12	9239-0400	400	125.98	.397
8GTV-1280-12	9239-0160	160	50.39	.159	8GTV-3280-12	9239-0410	410	129.13	.407
8GTV-1440-12	9239-0180	180	56.69	.179	8GTV-3600-12	9239-0450	450	141.73	.447
8GTV-1600-12	9239-0200	200	62.99	.199	8GTV-4000-12	9239-0500	500	157.48	.496
8GTV-1760-12	9239-0220	220	69.29	.218	8GTV-4400-12	9239-0550	550	173.23	.546
8GTV-1792-12	9239-0224	224	70.55	.222	8GTV-4480-12	9239-0560	560	176.38	.556

8mm Pitch — 21mm Wide

Part No.	Product No.	Number of Teeth	Pitch Length (in)	Weight (Lbs.)	Part No.	Product No.	Number of Teeth	Pitch Length (in)	Weight (Lbs.)
8GTV-640-21	9239-1080	80	25.20	.139	8GTV-2000-21	9239-1250	250	78.74	.434
8GTV-720-21	9239-1090	90	28.35	.156	8GTV-2200-21	9239-1275	275	86.61	.478
8GTV-800-21	9239-1100	100	31.50	.174	8GTV-2240-21	9239-1280	280	88.19	.486
8GTV-896-21	9239-1112	112	35.28	.195	8GTV-2400-21	9239-1300	300	94.49	.521
8GTV-960-21	9239-1120	120	37.80	.208	8GTV-2520-21	9239-1315	315	99.21	.547
8GTV-1000-21	9239-1125	125	39.37	.217	8GTV-2600-21	9239-1325	325	102.36	.565
8GTV-1040-21	9239-1130	130	40.95	.226	8GTV-2800-21	9239-1350	350	110.24	.608
8GTV-1120-21	9239-1140	140	44.09	.243	8GTV-2840-21	9239-1355	355	111.81	.617
8GTV-1200-21	9239-1150	150	47.24	.261	8GTV-3048-21	9239-1381	381	120.00	.662
8GTV-1224-21	9239-1153	153	48.19	.266	8GTV-3200-21	9239-1400	400	125.98	.695
8GTV-1280-21	9239-1160	160	50.39	.278	8GTV-3280-21	9239-1410	410	129.13	.712
8GTV-1440-21	9239-1180	180	56.69	.313	8GTV-3600-21	9239-1450	450	141.73	.782
8GTV-1600-21	9239-1200	200	62.99	.347	8GTV-4000-21	9239-1500	500	157.48	.869
8GTV-1760-21	9239-1220	220	69.29	.382	8GTV-4400-21	9239-1550	550	173.23	.955
8GTV-1792-21	9239-1224	224	70.55	.389	8GTV-4480-21	9239-1560	560	176.38	.973

8mm Pitch — 36mm Wide

Part No.	Product No.	Number of Teeth	Pitch Length (in)	Weight (Lbs.)	Part No.	Product No.	Number of Teeth	Pitch Length (in)	Weight (Lbs.)
8GTV-640-36	9239-2080	80	25.20	.238	8GTV-1440-36	9239-2180	180	56.69	.536
8GTV-720-36	9239-2090	90	28.35	.268	8GTV-1600-36	9239-2200	200	62.99	.596
8GTV-800-36	9239-2100	100	31.50	.298	8GTV-1760-36	9239-2220	220	69.29	.655
8GTV-896-36	9239-2112	112	35.28	.334	8GTV-1792-36	9239-2224	224	70.55	.667
8GTV-960-36	9239-2120	120	37.80	.357	8GTV-2000-36	9239-2250	250	78.74	.744
8GTV-1000-36	9239-2125	125	39.37	.372	8GTV-2200-36	9239-2275	275	86.61	.819
8GTV-1040-36	9239-2130	130	40.95	.387	8GTV-2240-36	9239-2280	280	88.19	.834
8GTV-1120-36	9239-2140	140	44.09	.417	8GTV-2400-36	9239-2300	300	94.49	.893
8GTV-1200-36	9239-2150	150	47.24	.447	8GTV-2520-36	9239-2315	315	99.21	.938
8GTV-1224-36	9239-2153	153	48.19	.456	8GTV-2600-36	9239-2325	325	102.36	.968
8GTV-1280-36	9239-2160	160	50.39	.476	8GTV-2800-36	9239-2350	350	110.24	1.042