

Gates Poly Chain® GT® Carbon™ Belt System Specifications

To satisfy a wide range of loads, speeds and applications, Poly Chain GT Carbon Belts and Sprockets are made in a selection of sizes, capacities and dimensions.

The three principal dimensions of a belt are:

pitch pitch length width

Belt pitch is the distance in millimeters between two adjacent tooth centers as measured on the pitch line of the belt. Belt pitch length is the total length (circumference) in millimeters as measured along the pitch line. The theoretical pitch line of a Poly Chain GT Carbon Belt lies within the tensile member.

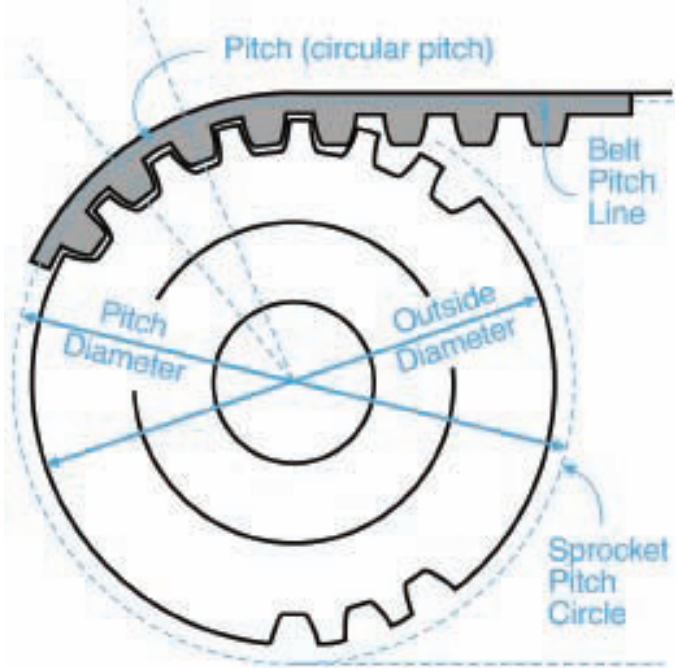
The three principal dimensions of a sprocket are:

pitch number of sprocket grooves width

On the sprocket, pitch is the distance between groove centers and is measured on the sprocket's pitch circle. See illustration at right. The pitch circle of the sprocket coincides with the pitch line of the belt mating with it. The sprocket's pitch diameter is always greater than its outside diameter.

Any Poly Chain GT Carbon Belt must be run with Poly Chain GT2 sprockets of the same pitch.

Gates Poly Chain GT Carbon belts are made in 8mm and 14mm pitches. Standard belt sizes are listed in the stock Poly Chain GT Carbon Belt Tables on page 15. Specifications for the 8mm and 14mm pitch belts list the belt pitch lengths, number of teeth, stock widths and appropriate weights. Using the information from these tables, a code for ordering a specific belt can be determined as shown in the following examples:



Belt Pitch (mm)	Belt Pitch Length (mm)	Belt Width (mm)
8MGT	640	12
14MGT	1190	37

Sprockets for Poly Chain GT Carbon belts are also made in 8mm and 14mm pitches. Standard sprocket sizes are listed in the Sprocket Specification Tables on Pages 66 through 75. For each Poly Chain GT Carbon Belt width, there is a table listing the sprocket code symbol, the applicable bushing style and pertinent dimensional information. The sprocket code symbol components are determined by using the following examples:

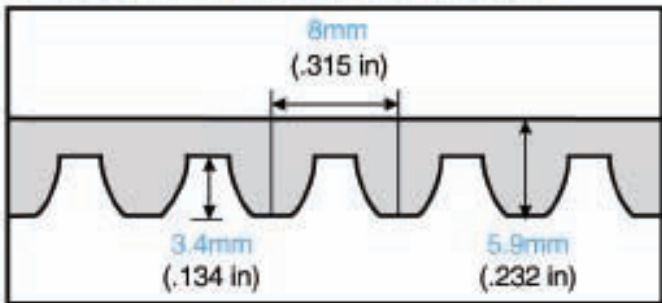
Pitch (mm)	Sprocket Designation & No. of Grooves	Width (mm)
8MX	48S*	12
14MX	36S*	37

*The "S" is used after the number of grooves to help identify it is a sprocket and avoid any confusion with the belt code.

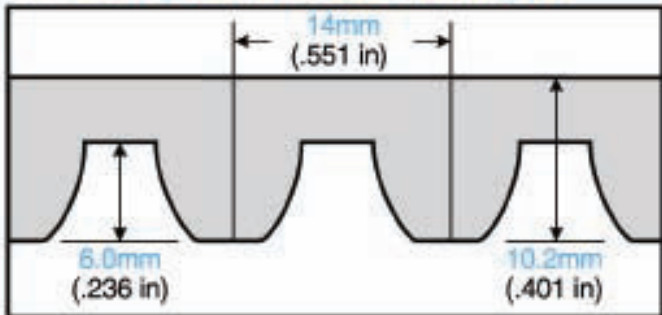
The Bushing style to be used with a specific sprocket is listed in the Sprocket Specifications Tables. Reference to the Stock Bushings for Poly Chain GT2 plus Bore and Keyseat information will give you the data needed to order the proper bushing. For example,

Style 2517 Bushing with a 2-inch bore

8mm Pitch — Reference Dimensions



14mm Pitch — Reference Dimensions



Gates Poly Chain® GT® Carbon™ Belt Standard Line

Stock Sizes

8mm Pitch Lengths

Description	No. of Teeth	Length	
		mm	in
8MGT-640	80	640	25.20
8MGT-720	90	720	28.35
8MGT-800	100	800	31.50
8MGT-896	112	896	35.28
8MGT-960	120	960	37.80
8MGT-1000	125	1000	39.37
8MGT-1040	130	1040	40.95
8MGT-1120	140	1120	44.09
8MGT-1200	150	1200	47.24
8MGT-1224	153	1224	48.19
8MGT-1280	160	1280	50.39
8MGT-1440	180	1440	56.69
8MGT-1600	200	1600	62.99
8MGT-1760	220	1760	69.29
8MGT-1792	224	1792	70.55
8MGT-2000	250	2000	78.74
8MGT-2200	275	2200	86.61
8MGT-2240	280	2240	88.19
8MGT-2400	300	2400	94.49
8MGT-2520	315	2520	99.21
8MGT-2600	325	2600	102.36
8MGT-2800	350	2800	110.24
8MGT-2840	355	2840	111.81
8MGT-3048	381	3048	120.00
8MGT-3200	400	3200	125.98
8MGT-3280	410	3280	129.13
8MGT-3600	450	3600	141.73
8MGT-4000	500	4000	157.48
8MGT-4400	550	4400	173.23
8MGT-4480	560	4480	176.38

14mm Pitch Lengths

Description	No. of Teeth	Length	
		mm	in
14MGT-994	71	994	39.13
14MGT-1120	80	1120	44.09
14MGT-1190	85	1190	46.85
14MGT-1260	90	1260	49.61
14MGT-1400	100	1400	55.12
14MGT-1568	112	1568	61.73
14MGT-1610	115	1610	63.84
14MGT-1750	125	1750	68.90
14MGT-1890	135	1890	74.41
14MGT-1960	140	1960	77.17
14MGT-2100	150	2100	82.68
14MGT-2240	160	2240	88.19
14MGT-2310	165	2310	90.95
14MGT-2380	170	2380	93.70
14MGT-2450	175	2450	96.46
14MGT-2520	180	2520	99.21
14MGT-2590	185	2590	101.97
14MGT-2660	190	2660	104.72
14MGT-2800	200	2800	110.24
14MGT-3136	224	3136	123.46
14MGT-3304	236	3304	130.08
14MGT-3360	240	3360	132.28
14MGT-3500	250	3500	137.80
14MGT-3850	275	3850	151.58
14MGT-3920	280	3920	154.33
14MGT-4326	309	4326	170.32
14MGT-4410	315	4410	173.62

8mm Widths

12mm (.47 in.)	21mm (.83 in.)	36mm (1.42 in.)	62mm (2.44 in.)
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14mm Widths

20mm (.79 in.)	37mm (1.46 in.)	68mm (2.68 in.)	90mm (3.54 in.)	125mm (4.92 in.)
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Long Length Poly Chain GT2 Belting Stock Widths

8mm Pitch Widths			14mm Pitch Widths	
12mm	21mm	36mm	20mm	37mm

Special widths available upon request.

Dimensions are given in inches and millimeters. Inches are shown in black type. Millimeters are shown in blue type.