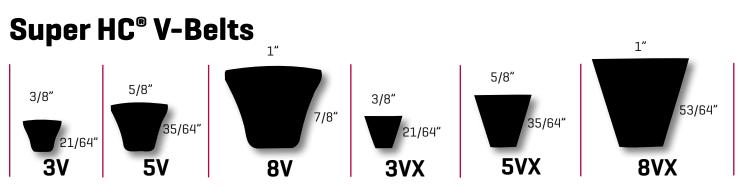


# **BELT I.D. CHART**

For comprehensive product information see Gates Industrial Power Transmission Systems Catalog No. 19993

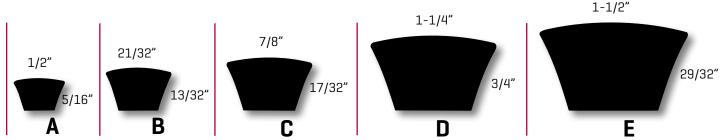
#### **Single V-Belts Predator**<sup>®</sup> V-Belts 1" 22mm 7/8" 5/8 16mm 21/32" 1/2" 5/16" 13/32" 17/32' 8VP BP SPBP SPCP AP CP 5VP

Aramid tensile cords provide superior service on high impact, shock-loaded drives.



Combine cross section designation with Outside Circumference (O.C.) to the nearest whole number, plus a zero to determine Belt Part Number. Example: 5/8" top width 5VX belt with 80" O.C. equals 5VX800 V-Belt. X designates molded notch construction.

#### Hi-Power<sup>®</sup> II V-Belts



Combine cross section plus Inside Circumference [I.C.] to determine Belt Part Number. To calculate I.C., subtract the following values from the O.C.:

Cross Section A B С D Е Subtract from O.C. 2" 3" [Above 210", 1.0"] 4" [Above 210", 2.0"] 5" [Above 210", 3.0"] 7" [Above 210", 4.0"] Dubl-V belts are available in AA, BB, CC and DD cross sections.

1/2"

#### **Tri-Power<sup>®</sup> V-Belts**

# 21/32"

7/8"

## **Synchronous Belts**

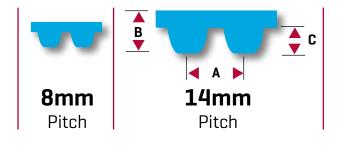
All synchronous belts are identified in a similar manner, in either English or metric units. Belts are identified by: **1.** Pitch: Distance in inches or millimeters between two adjacent tooth centers as measured on the belt pitch line. 2. Pitch Length: Total length (circumference) in inches or millimeters as measured along the pitch line. It is equal to the pitch multiplied by the number of teeth in the belt.

3. Width: Always shown as the last part of the size designation. Denotes width in inches or millimeters.

#### **Poly Chain<sup>®</sup> GT<sup>®</sup> Carbon<sup>™</sup> Belts**

Examples: 8MGT-640-12 Belt 8MX-22S-12 GT2 Sprocket

	Standard			
	Widths (mm)	Α	В	C
8mm	12, 21	8mm	5.9mm	3.4mm
	36, 62	.315 in.	.233 in.	.135 in.
14mm	20, 37	14mm	10.2mm	6mm
	68, 90, 125	.552 in.	.401 in.	2.36 in.



Note: Gates recommends that Poly Chain® GT®Carbon™ belts run only in Poly Chain® GT®2 sprockets when used for new applications. Gates recommends that Poly Chain<sup>®</sup> GT<sup>®</sup> Carbon<sup>™</sup> belts be used for replacement belts in Poly Chain<sup>®</sup> GT<sup>®</sup>2 sprockets.

#### **PowerGrip® GT®2 Belts**

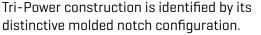
Example	s: 640-8MGT-2 P22-8MGT-2		rocket	5MR-300-09 Belt P18-5MGT-15 Sproc	ket
	Standard Widths (mm)	A	В	C	<b>2mm</b> Pitch
8mm	4, 6, 9	2mm	1.52mm	.76mm	0
		.0787 in.	.060 in.	.030 in.	<b>3mm</b> Pitch
3mm	6, 9, 15	3mm	2.41mm	1.14mm	
		.1181 in.	.095 in.	.045 in.	5mm <sup>**</sup> Pite
5mm	9. 15, 25	5mm	3.81mm	1.93mm	
		.197 in.	.150 in.	.076 in.	8mm Pitch
8mm	12, 20, 30	8mm	5.59mm	3.28mm	
	50, 85	.315 in.	.220 in.	.129 in.	<b>1</b> //
14mm	40, 55, 85	14mm	9.91mm	5.84mm	<b>14mm</b> Pitc
	115, 170	.552 in.	.390 in.	.230 in.	

----ch

Note: PowerGrip® GT®2 belts must be used with PowerGrip® GT®2 sprockets for new designs.

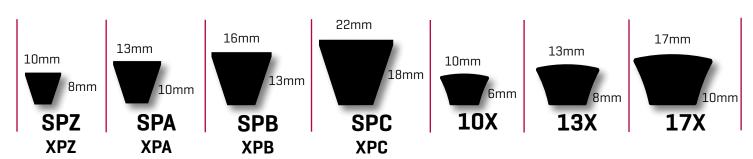
Note: 8mm and 14mm pitch PowerGrip® GT®2 belts can be used to replace non-Gates curvilinear belts in most instances. Reference gates.com/interchange for specific interchange information.

\*\*5mm pitch also available in Poly Chain® construction. See Catalog No. 19993.





#### Metric Power<sup>™</sup> V-Belts



Molded notch construction is available in lengths under 3,000mm only.

#### **Multi-Speed Belts**

First two digits indicate top width in sixteenths of an inch. Next two digits designate sheave angle, in degrees, that the belt is designed to fit. Last three or four digits indicate pitch length to the nearest tenth of an inch.

Example: 2326V310 Belt

<b>23</b> Top Width in 16ths	26 Sheave Angle in	<b>V</b> Multi-Speed	<b>310</b> Pitch Circumference
of an inch: 23/16" = 1-7/16"	Degrees (26)		to the nearest 10th inch: 31.0"

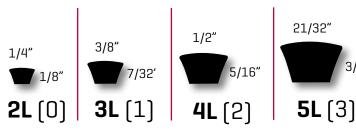
#### Truflex<sup>®</sup> & PoweRated<sup>®</sup> Light Duty V-Belts

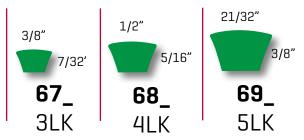
#### **Truflex**®

Part numbers are derived from industry standard number. First digit in Gates number corresponds to first two digits of industry standard number. Belt length is to the nearest tenth of an inch. **Example:** 2450 = 4L450 Belt has 1/2" top width and 45.0" O.C.

#### **PoweRated**<sup>®</sup>

First two digits indicate belt top width. **67** = 3/8", **68** = 1/2", **69** = 21/32" Last two digits indicate length in inches. Example: 6823 Belt has a 1/2" top width and a 23" O.C.





3/8"

#### **PowerBand® Joined Belts**

Made by joining two or more single V-Belts with a permanent, high strength tie-band. PowerBand belts prevent turnover or jumping off the sheave problems associated with heavily shock loaded drives using individual belts. PowerBand belts use the same system of size and length designation as individual belts.

#### **Predator**<sup>®</sup> **PowerBand**<sup>®</sup> **Belts**

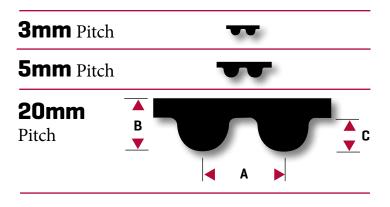
Available in CP, 3VP, 5VP and 8VP sections.



#### **PowerGrip® HTD® Belts**

Examples: 350-5M-15 Belt P28-5M-15AL Sprocket

	Standard			
	Widths (in.)	Α	В	C
3mm	6, 9, 15	3mm	2.41mm	1.22mm
		.1181 in.	.095 in.	.048 in.
5mm	9, 15, 25	5mm	3.81mm	2.08mm
		.197 in.	.150 in.	.082 in.
20mm	115, 170	20mm	13.2mm	8.4mm
	230, 290	.787 in.	.520 in.	.330 in.
	340			



#### **PowerGrip®** Timing Belts

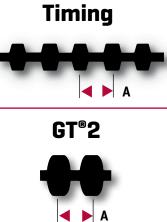
Examples: 210L100 Belt TL18L100 Pulley

	Standard			
	Widths (in.)	Α	В	C
MXL	1/8, 3/16	2.03mm	1.14mm	0.51mm
	1/4	.080 in.	.045 in.	.020 in.
XL	1/4, 3/8	5.08mm	2.29mm	1.27mm
		.200 in.	.090 in.	.050 in.
L	1/2, 3/4	9.53mm	3.60mm	1.91mm
	1	.375 in.	.140 in.	.075 in.
Н	3/4, 1	12.70mm	4.10mm	2.29mm
	1-1/2, 2, 3	.500 in.	.160 in.	.090 in.
ХН	2, 3, 4	22.23mm	11.20mm	6.35mm
		.875 in.	.440 in.	.250 in.
ХХН	2, 3, 4, 5	31.75mm	15.70mm	9.53mm
		1.250 in.	.620 in.	.375 in.
		1.250 in.	.620 in.	.375

#### MXL --XL Η XH XXH В Α

#### **PowerGrip® Twin Power® Belts**

	Power <sup>®</sup> PowerGrip <sup>®</sup>	Tinning Deits	
	Standard Widths (mm)	A	-
XL	1/4, 3/8	5.08mm .200 in.	
L	1/2, 3/4 1	9.53mm .375 in.	
Н	3/4, 1 1-1/2, 2, 3	12.70mm .500 in.	



Example: TP1200-8MGT-20 Belt (GT2) Twin Power<sup>®</sup> PowerGrip<sup>®</sup> GT<sup>®</sup>2 Belts

	Standard Widths (mm)	A
3mm	6, 9, 15	3mm
		.118 in.
5mm	9, 15, 25	5mm
		.197 in.
8mm	20, 30, 50	8mm
	85	.315 in.
14mm	40, 55, 85	14mm
	115, 170	.552 in.

Note: Additional sizes available.

#### Synchro-Power<sup>®</sup> Polyurethane Belts

Example: T5-270-8

Synchro-Power<sup>®</sup> Belts

.098 in.

.394 in.

T2.5

2.5mm

Timing



**Example:** 270H075U

Synchro-Power<sup>®</sup> Timing Belts

	Α	
4XL	2.03mm	
	.080 in.	
	= 00	

	~	<u>م</u>	
4		Δ	

🔺 🕨 A

#### Super HC<sup>®</sup> & Super HC<sup>®</sup> **Molded Notch PowerBand® Belts**

Available in 3V, 3VX, 5V, 5VX and 8V sections.

#### Hi-Power<sup>®</sup> II PowerBand<sup>®</sup> Belts

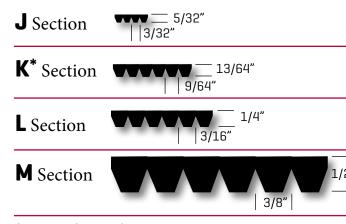
Available in A, B, C and D sections.

#### **Micro-V<sup>®</sup> Belts**

Identified by a three-part system consisting of: [1] A standard length designation [2] Cross Section (3) Number of ribs

Example: 780L12 Belt (1) An effective length of 78" (2) L cross section

(3) 12 ribs wide



9/32"

7/16"

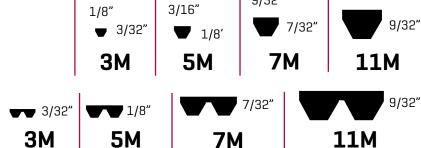
\*Automotive Product

#### **Polyflex® and Polyflex® JB® Belts**

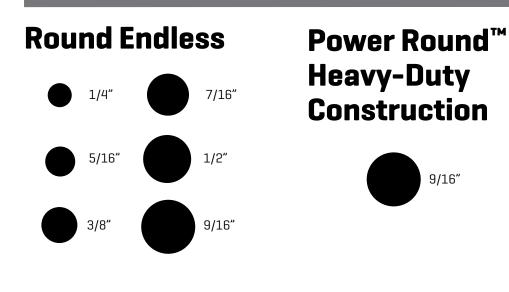
Identified by a three-part system consisting of: [1] Number of Strands [2] Top width of belt in mm (3) Length in mm

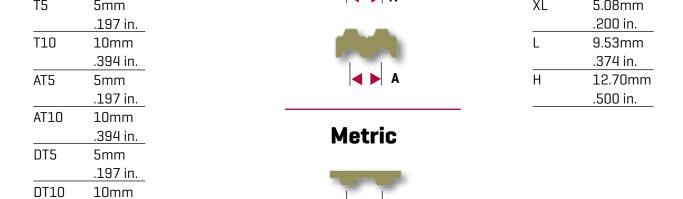
Example: 3/7M850 Belt: (1) 3 strands

(2) 7M profile (3) An effective length of 850mm



#### **Round Belts**





## **Long-Length Belting**

#### **PowerGrip® and Poly Chain® Belting**

Poly Chain GT Carbon (Carbon)	8mm and 14mm		
PowerGrip GT2 (Fiberglass)	2mm, 3mm, 5mm and 8mm	PowerGrip GT2 (Steel)	5mm and 8mm
PowerGrip HTD (Fiberglass)	3mm, 5mm, 8mm and 14mm	PowerGrip HTD (Steel)	14mm
PowerGrip Timing (Fiberglass)	MXL, XL, L and H	PowerGrip Timing (Steel)	Н

Notes: Minimum order quanity - 50ft. fiberglass construction, 98 ft. steel construction, 50 ft. Poly Chain GT Carbon construction. Refer to Catalog No. 19993 for widths.

#### **Gates Mectrol® Polyurethane Belting**

Available in: T5, AT5, T10, AT10, T20, HTD5, HTD8, HTD14, STD5, STD8, XL, L, H, XH Available with: Nylon tooth and/or back. Polyurethane, Rubber, Foam, PVC, and Special Backings. Contact Gates Mectrol 800.394.4844

Warning: Do not use Gates belts, pulleys, or sprockets on any aircraft propeller or motor drive systems or in-flight accessory drives. Gates products are not designed or intended for aircraft use.

# www.gates.com/pt

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