## **PREDATOR**<sup>™</sup>

#### HEAVY-DUTY, WRAPPED, ARAMID CORD V-BELT

Gates Predator<sup>™</sup> V-belts are the markets leading V-belts. They are unique and unrivalled in their extreme robustness and high load carrying capability. They are excellent problem solvers that perform well in harsh environments and in extremely demanding applications where standard V-belts have performance issues.

The Predator<sup>™</sup> difference is in the construction: having the highest power density of any V-belt and half the stretch of standard Gates belts because of the use of high strength, high modulus aramid tensile cords.

SECTIONS & NOMINAL DIMENSIONS		
	WIDTH (MM)	HEIGHT (MM)
5VP / SPB-P	17	13
SPC-P	22	18
8VP	26	23
AP	13	8
BP	17	11
СР	22	14

### PREDATOR<sup>™</sup> 4 ORDERING CODE IS COMPOSED AS FOLLOWS

51 521201	
SPB	- Section
2120	- Datum length (mm)
630	- Predator <sup>™</sup>
5VP800	
5V	- Section
Р	- Predator <sup>™</sup>
800	- Effective length (1/10 inch)
AP50	
A	- Section
Р	- Predator <sup>™</sup>
50	- Inside length (inch)

### MAINTENANCE FREE

#### CONSTRUCTION

- Classical and Narrow cross-sections.
- Flex bonded aramid tensile cords.
- Double layer bare back fabric cover.
- Fibre-loaded compound for improved belt stability.
- Gates Curves provide full contact with pulley grooves for uniform loading of cords, uniform wear and increased belt life.
- Non self-igniting the belt will not catch fire from heat build-up, even with severe slippage.

#### **ADVANTAGES**

- Maintenance free.
- Up to 2.2 times more power than standard V-belts.
- Aramid tensile cords easily handle shock loads.
- Up to 35% reduced drive cost.
- Up to 67% reduced drive width.
- Up to 50% reduced drive weight.
- Double layer bare back cover protects against slippage and punctures.
- No increase in shaft load
- Replace MTO 8V pulleys with standard SPC pulleys.
- Reduce overhung loads.
- No need for constant re-tensioning.
- Excellent problem solver.
- Back idlers can be used.

#### TEMPERATURE RANGE

#### -35°C to +80°C

NOTE: For multiple Predator<sup>™</sup> belt drives, matched belts must be ordered. See page 172 for more information on matched belts

## **QUAD-POWER<sup>™</sup> 4**

#### RAW EDGE, MOULDED NOTCH, NARROW SECTION, HIGH TEMP V-BELT

The Gates Quad-Power<sup>™</sup> belt has undergone several evolutions in design since its introduction over 15 years ago. New materials and advanced design features have led to a new generation of Quad-Power<sup>™</sup> 4 V-belt drives that outperform all similarly sized belt drives in a wide range of applications, yielding cost advantages for users and greater design freedom for engineers.

Quad-Power<sup>™</sup> 4 has been developed to replace traditional V-belts on applications where space, weight savings and temperature resistance are required.

Extensive testing has shown that Gates Quad-Power<sup>™</sup> 4 V-belts offer up to 50% higher power ratings than the wrapped Super HC<sup>™</sup>.

The new upgraded EPDM compound allows the belt to handle extreme temperatures up to +130°C.

SECTIONS & NOMINAL DIMENSIONS					
	WIDTH (MM)	HEIGHT (MM)	Height		
PZ / 3VX (SPZX)	10	8	As described in the ICO		
PA (SPAX)	13	10	standards, nominal dimensions		
PB /5VX (SPBX)	17	13	define the pulleys for which these belts are suitable. They do not represent the exact bell size. These are determined by the belt construction and are Gates proprietary.		
PC (SPCX)	22	18			
VX (SPPX)	26	23			



QUAD-POWER <sup>™</sup> 4 ORDERING CODE IS COMPOSED AS FOLLOWS			
XPZ630			
XPZ	- Section		
630	- Datum length (mm)		
5VX1120			
5VX	- Section		
1120	- Effective length (1/10 inch)		

#### **GATES AUSTRALIA PTY LTD**

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### **REDUCE MAINTENANCE**

#### CONSTRUCTION

- Narrow cross-section.
- Service Free.
- Exclusive EPDM rubber compound for increased temperature range to resist cracking.
- Raw edge construction.
- Notch depth is in proportion to the cross-section to ensure perfect stability.
- · Precision-ground sidewalls reduce centre distance variations, vibration and uniform wedging action.
- · Flex-Bonded polyester cords for equal load distribution and reduced stress from flexing.
- Fibre-loaded EPDM compound withstands high heat, ozone, sunlight and provides better cord support.
- Enhanced blue adhesion layer increases tensile cord bond.
- Double Flex-Weave<sup>™</sup> textile backing protects the belt against wear - especially when back idlers are used.
- · Non self-igniting the belt will not catch fire from heat build-up, even with severe slippage
- Static conductive ISO 1813 and RMA IP3-3.

#### ADVANTAGES

- No re-tensioning required.
- Reduce wrapped belt drive width up to 50%.
- Increase efficiency up to 3% over wrapped belts.
- Use smaller diameter pulleys than wrapped belts.
- Moulded notches reduce and evenly distribute thermal and bending stresses.
- Reduce drive maintenance.
- Match free system: all sizes meet Gates UNISET & V80<sup>®</sup> tolerances, can be installed without matching.
- Back idlers can be used.

#### **TEMPERATURE RANGE**

-50°C to +130°C

NOTE: RMA Super  $\mathrm{HC}^{\scriptscriptstyle{\mathrm{M}}}$  moulded notch (3VX, 5VX & 8VX) are rated from -57°C to +121°C







STATISTICS.

#### **DRIVEN BY POSSIBILITY**

USING PREMIUM MATERIALS AND MANUFACTURING METHODS, ALL GATES BELTS MINIMISE OR EVEN ELIMINATE THE NEED FOR ONGOING DRIVE MAINTENANCE.

# **POWER TRANSMISSION SOLUTIONS - V-BELTS**

## HI - POWER<sup>™</sup> II

#### WRAPPED, CLASSICAL CROSS-SECTION V-BELT

The wrapped classical section Hi-Power<sup>™</sup> II V-belt has a big reputation for reliability on agricultural and industrial applications.

Hi-Power<sup>™</sup> II are used in applications across all types of industries and markets. They are renowned for out-performing and out-lasting competitor belts due to their superior construction.

Hi-Power<sup>™</sup> II belts that last longer lead to less downtime and maintenance and hence produces more uptime.

#### GATES CURVES



**CONVENTIONAL V-BELT** 

**GATES V-BELT** 

I ← Width -

SECTIONS & NOMINAL DIMENSIONS			
	WIDTH (MM)	HEIGHT (MM)	
Z (M)	10	6	
А	13	8	
В	17	11	
С	22	14	
D	32	19	
E	38	25	



CONSTRUCTION

- Classical cross-section.
- Fibre-loaded compound for improved belt stability.
- Gates Curves provide full contact with pulley grooves for uniform loading of cords, uniform wear and increased belt life.
- Flex-Bonded polyester cords for equal load distribution and reduced stress from flexing.
- Flex-Weave<sup>™</sup> Cover is a patented fabric construction for longer life, providing extended protection to the belt core from oil, dirt and heat.
- Non self-igniting the belt will not catch fire from heat build-up, even with severe slippage.
- Static conductive ISO 1813 and RMA IP3-3.

#### **ADVANTAGES**

- Premium performance.
- Oil and heat resistant.
- Excellent performance/cost ratio.
- Suitable for dirty/dusty environments.
- Match free system: all sizes meet Gates V80<sup>®</sup> tolerances, can be installed without matching.
- Back idlers can be used.
- Tolerates mild clutching or drive slip.

#### **TEMPERATURE RANGE**

-35°C to +60°C

HI-POWER <sup>™</sup> II ORDERING CODE IS COMPOSED AS FOLLOWS		
Z19		
Z	- Section	
19	- Inside length (inch)	



## **TRI - POWER**<sup>™</sup>

#### RAW EDGE, MOULDED NOTCH, CLASSICAL SECTION, HIGH TEMPERATURE V-BELT

Gates Tri-Power<sup>™</sup> V-belt is built for superior performance on heavy duty drives of classical cross-section.

The raw edge construction and special notch design makes the Tri-Power<sup>™</sup> belt especially suited for drives requiring small diameter pulleys and back idlers.

The ethylene EPDM compound allows the belt to handle extreme temperatures up to +121°C.



SECTI D	ONS & NOI IMENSION	MINAL S
	WIDTH (MM)	HEIGHT (MM)
AX	13	8
BX	17	11
СХ	22	14

TRI-POWER <sup>™</sup> ORDERING CODE IS COMPOSED AS FOLLOWS			
AX39			
AX	- Section		
39	- Inside length (inch)		

### **COMPACT DRIVE SAVES SPACE, WEIGHT AND MONEY**

Over time, belts fail from heat cracks, stretching or excessive wear. Belt re-tensioning and replacement leads to downtime, inefficiency and loss of productivity. Only Gates molded notch V-belts offer an exclusive patented ethylene construction to keep you running when others fail.



### **INCREASE EFFICIENCY**

#### CONSTRUCTION

- Classical cross-section.
- Exclusive ethylene EPDM rubber compound for increased temperature range to resist cracking.
- Fibre-loaded compound for improved belt stability.
- Raw edge construction.
- The moulded notch pattern also reduces noise.
- Precision-ground sidewalls give a uniform wedging action.
- Flex-Bonded polyester cords for equal load distribution and reduced stress from flexing.
- Non self-igniting the belt will not catch fire from heat build-up, even with severe slippage.
- Static conductive ISO 1813 and RMA IP3-3.

#### **ADVANTAGES**

- 15% capacity increase over wrapped belts.
- Increase efficiency up to 3% over wrapped belts.
- Use smaller diameter pulleys than wrapped belts.
- Moulded notches reduce and evenly distribute thermal and bending stresses.
- Match free system: all sizes meet Gates V80<sup>®</sup> tolerances, can be installed without matching.
- Back idlers can be used.

#### **TEMPERATURE RANGE**

-57°C to +121°C

## **SUPER HC<sup>™</sup>**

#### WRAPPED, NARROW CROSS-SECTION V-BELT

Pioneered by Gates, these narrow cross-sections can transmit up to 3 times the power of the classical cross-sections (A, B, C & D) in the same amount of drive space.

Super HC<sup>™</sup> also manages speed ranges that a classical V-belt cannot handle. Suitable for all industrial applications, particularly where space, weight and power capacity are critical.

Designed for heavy industry and the harsh demands of the mining market, Super HC<sup>™</sup> is Gates most popular V-belt construction.

SECTIONS & NOMINAL DIMENSIONS			- Width
	WIDTH (MM)	HEIGHT (MM)	
SPZ / 3V	10	8	
SPA	13	10	
SPB / 5V	17	13	
SPC	22	18	
8V (SPP)	26	23	

### LONGER BELT LIFE

#### CONSTRUCTION

- Narrow cross-section.
- Fibre-loaded compound for improved belt stability.
- Gates Curves provide full contact with pulley grooves for uniform loading of cords, uniform wear and increased belt life.
- Flex-Bonded polyester cords for equal load distribution and reduced stress from flexing.
- Flex-Weave<sup>™</sup> cover is a patented fabric construction for longer life, providing extended protection to the belt core from oil, dirt and heat.
- Non self-igniting the belt will not catch fire from heat build-up, even with severe slippage.
- Static conductive ISO 1813 and RMA IP3-3.

#### ADVANTAGES

- Up to 3 times more power in the same space or same power in 1/3 to 1/2 less space than classical belts.
- Cost and space savings.
- Longer belt life.
- Suitable for dirty/dusty environments.
- Match free system: all sizes meet Gates V80<sup>®</sup> tolerances, can be installed without matching.
- Back idlers can be used.
- Tolerates mild clutching or drive slip.

#### **TEMPERATURE RANGE**

-35°C to +80°C



**CONVENTIONAL V-BELT** 

GATES V-BELT





Super HC<sup>™</sup> 8 x SPB1250 Pullev Width = 158mm 25.000 hr belt life



SUPER HC <sup>™</sup> ORDERING CODE IS COMPOSED AS FOLLOWS			
PZ670			
PZ	- Section		
570	- Datum length (mm)		
V265			
Ŵ	- Section		
65	- Effective length (1/10 inch)		