

hankooktireusa.com

 **HANKOOK**
driving emotion



ventus V12 evo²

Ultra-High Performance Summer



A white luxury sedan is shown from a low-angle, rear-quarter perspective, driving on a road that stretches towards a sunset over a lake. The sky is filled with soft, wispy clouds, and the sun is low on the horizon, creating a warm glow. The car's sleek lines and multi-spoke alloy wheels are prominent. The overall mood is serene and sophisticated.

Contents

Concept

Pattern designs

Design feature

Technical presentation

Test results

Available sizes

Design Concept

Outstanding Ultra-High Performance Ability

The Ventus V12 evo2 is designed for drivers who like to express their own personality and style while experiencing outstanding traction and handling performance.

The sophisticated sidewall design of the Ventus V12 evo2, along with its advanced tread pattern design, offers drivers of sports cars, coupes and sedans the fresh style they desire.



ventus V12 evo²

Hankook
driving emotion

Features & Benefits

ventus V12 evo²

- *Inspiring high speed stability*
- *Improved braking performance in Wet and Dry conditions*
- *Unique 'Aqua Jet' tread pattern design helps to reduce hydroplaning*
- *Enhanced eco-performance while offering impressive wear-resistance*
- *UTQG 320/AA/A*



ventus V12 evo²

Hankook
driving emotion

Pattern Design



ventus V12 evo²

Hankook
driving emotion

Design feature

Impressive performance through advanced technology

Alignment indicator

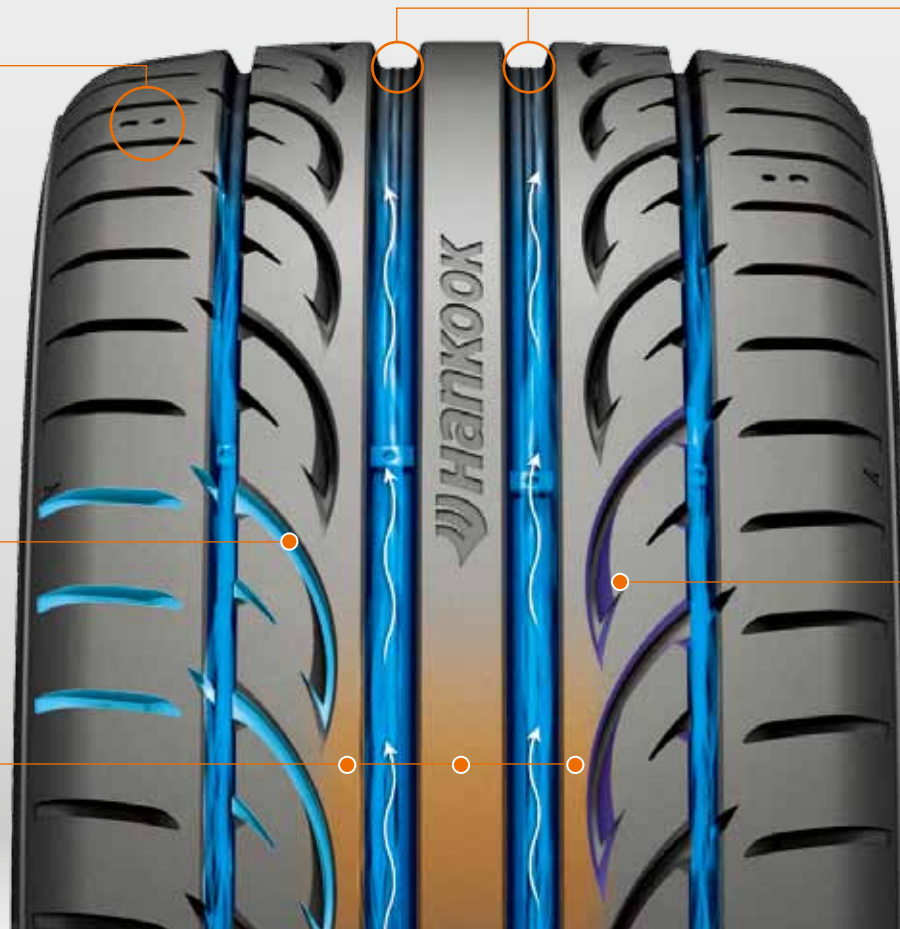
Drivers can check the status of vehicle alignment/tire wear via indicators designed into the tire's tread



Aqua jet

Provides efficient water evacuation from the center of the tire's contact patch for improved wet condition performance

Excellent dry handling



Cooling system

Improves the dispersion of heat generated during use and helps to evacuate water from the tire's contact patch

Stealth technology

Unique wing tip design reduces noise

Tread pattern design

3D tread pattern blocks are incorporated to maintain block stiffness and provide even wear

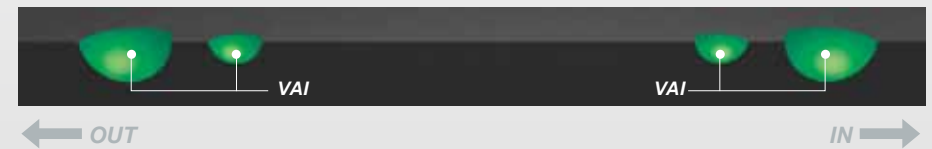
VAI Siping System

VAI Siping System

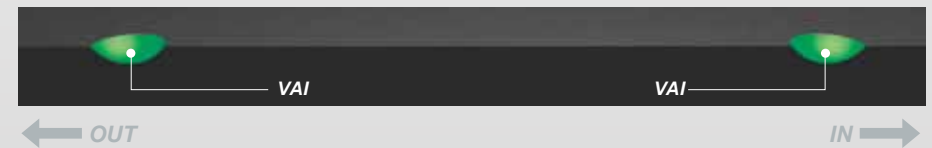
The Visual Alignment Indicator siping system offers drivers an easy way to check tire alignment by comparing tire wear on both the inside and outside of the tire's contact patch.



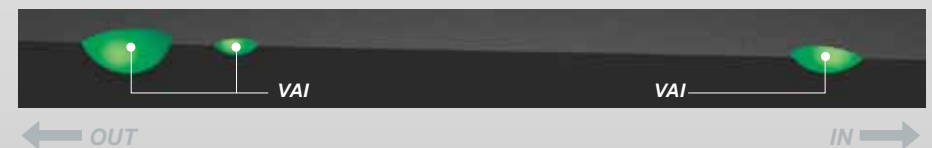
Before use



After use (regular wear)



After use (irregular wear)



Design feature - cooling system

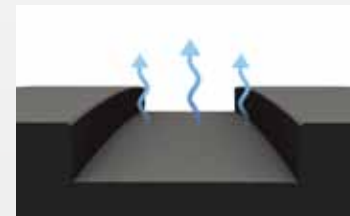
Cooling system / drainage groove

Cooling system

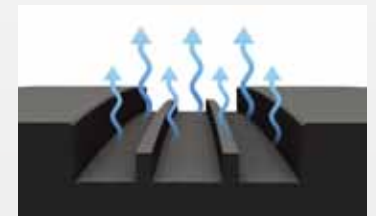
Improves the dispersion of heat generated during use and helps to evacuate water from the tire's contact patch



Cooling system



Conventional

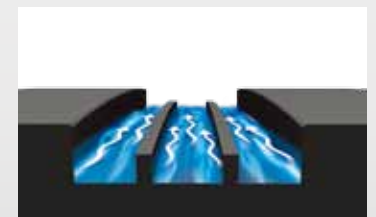


ventus V12 evo²

Drainage groove



Conventional



ventus V12 evo²

Design Feature - aqua jet

Aqua jet

Aqua jet

Provides efficient water evacuation from the center of the tire's contact patch for improved wet condition performance.



Action of aqua jet design



Design feature - stealth technology

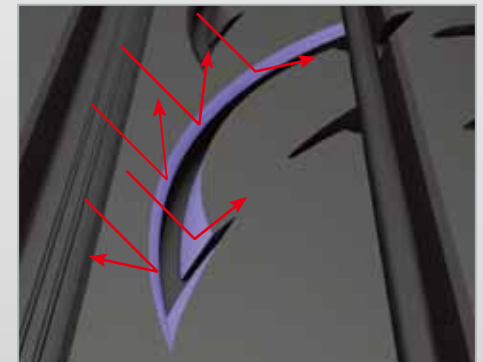
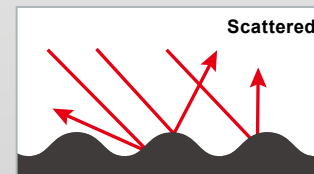
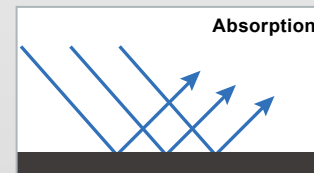
Stealth technology

Stealth Technology

Unique wing tip design reduces noise by incorporating beveled tread block edges to lower unwanted surface impact sound.



Beveled edge scatters incoming noise.



Design feature - aero dynamic sidewall

Aero-dynamic sidewall

Aero-dynamic sidewall

An aero-dynamic design, which incorporates rectangular dimples in the tire's sidewall, helps to minimize noise and vibration by reducing airflow turbulence while driving.



Aero-sidewall dimple

- Sporty, dynamic graphics.
- Carved letters help to prevent sidewall cracking.
- Advanced rectangular dimples offer unique style and help to minimize noise and vibration levels by reducing air turbulence while driving.

Air turbulence



Tire structure

High grip silica compound

Provides improved dry & wet traction along with lower rolling resistance for improved vehicle fuel economy.

Jointless full cover

Improved durability and braking performance.

Wide steel belt layer

Improved steering stability and handling.

High density polyester carcass

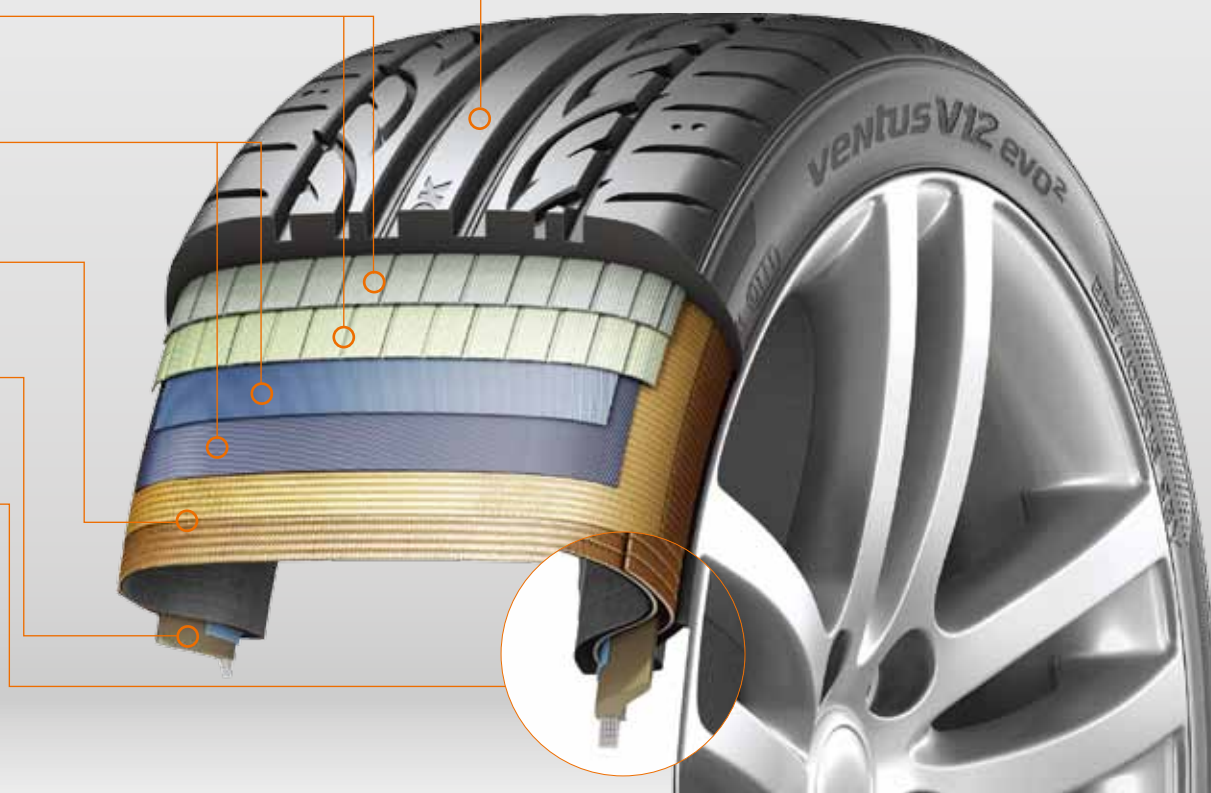
Enhanced sidewall strength.

High stiffness bead filler

Improved handling response.

Strong single strand bead wire

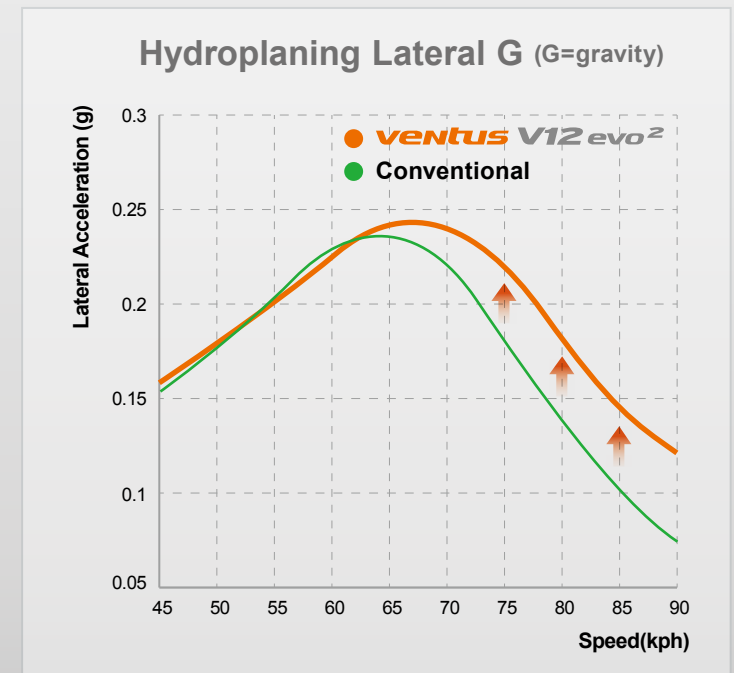
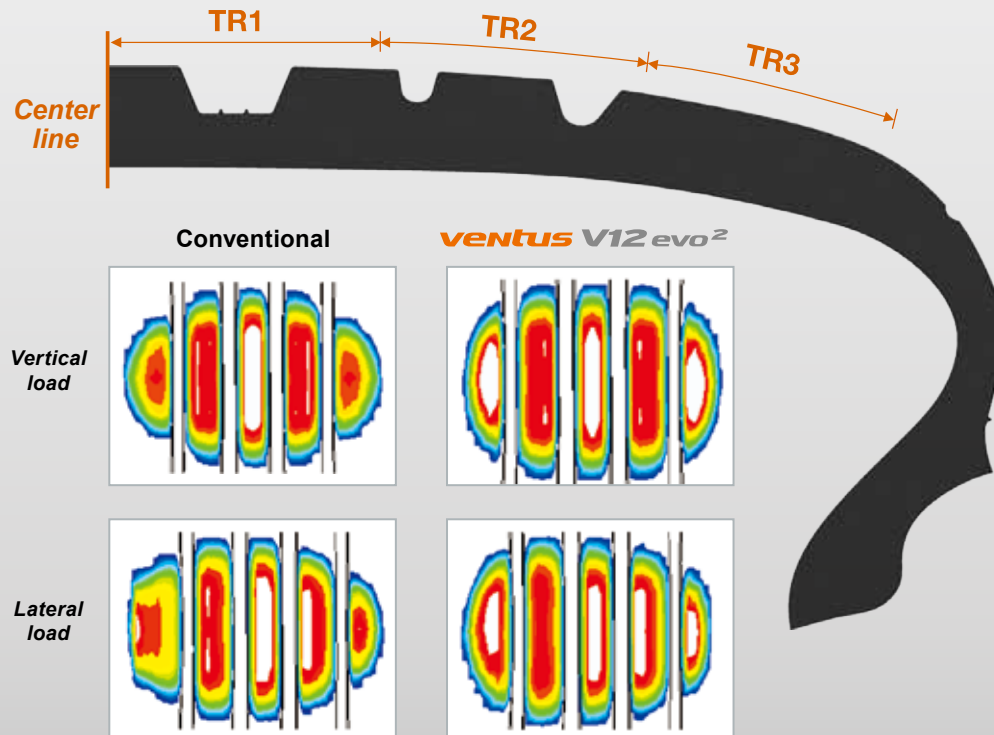
Enhanced uniformity and wheel fitment.



New profile for hydroplaning resistance

MOTORSPORT RACING *Technology*

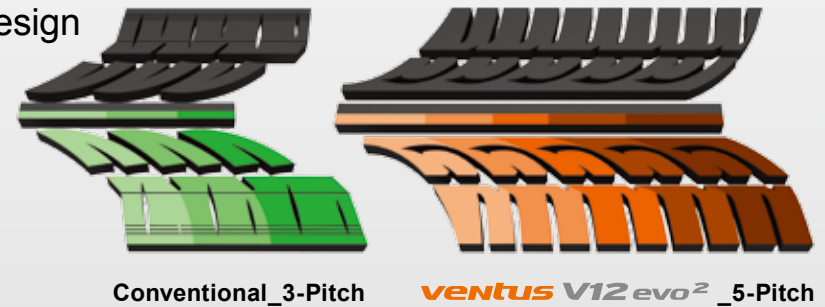
Optimized triple tread radius system based on motorsports racing tire profile technology ensures ideal performance during high-speed driving conditions.



Increased contact area - Excellent handling performance
Improved shoulder roundness - Improved hydroplaning performance

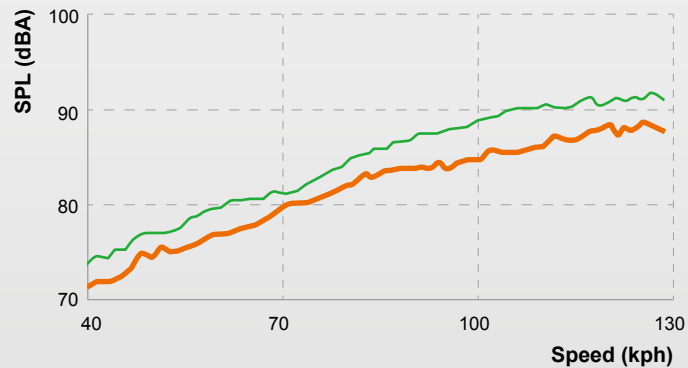
Noise

Road noise is reduced by the use of a 5-pitch tread block design and optimized middle block pitch array.



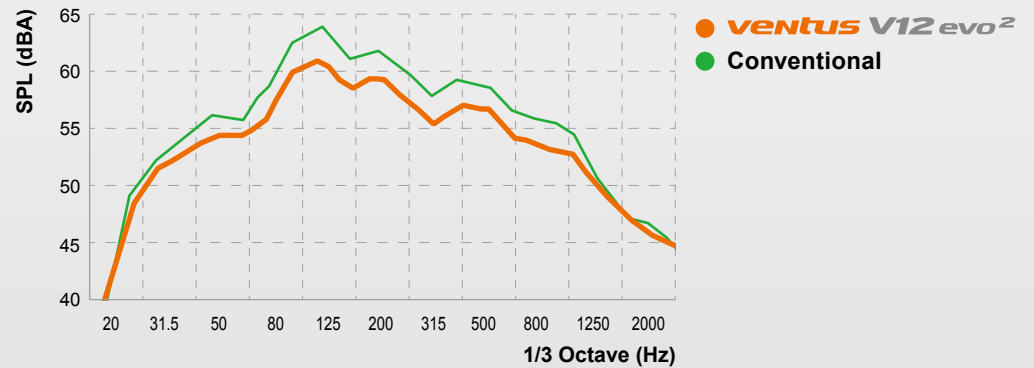
Assessment result

Result of single unit indoor noise assessment



→ **Front wheel condition** – single tire unit assessment. The Ventus V12 evo2 displays outstanding noise performance.

Result of single field unit noise assessment



→ **On field condition** – worn tire unit assessment. The Ventus V12 evo2 displays outstanding noise performance.

Compound technology

By applying a new functionalized styrene polymer in the tread compound of the Ventus v12 evo2 lower rolling resistance was achieved leading to improved vehicle fuel economy.

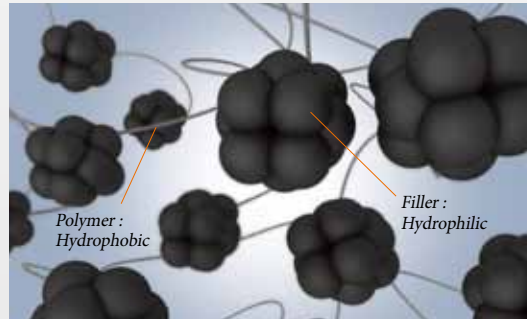
Polymer
Functionalisation

Polymer & Filler
Chemical combination

Filler
Improved dispersibility

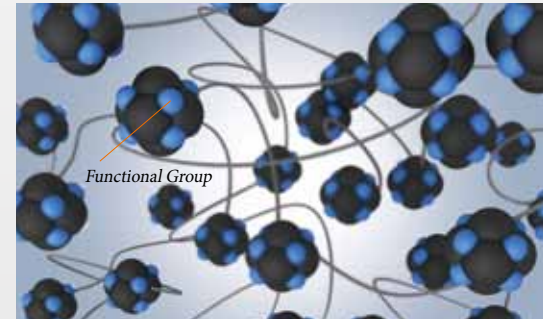
Improved tire rolling resistance performance

Non-functionalised styrene polymer



Conventional

Functionalised styrene polymer



ventus V12 evo²

ventus V12 evo²

- Improved interaction between polymer and filler
- Optimized dispersion of filler
- Minimized energy loss

Dry and wet performance (handling)

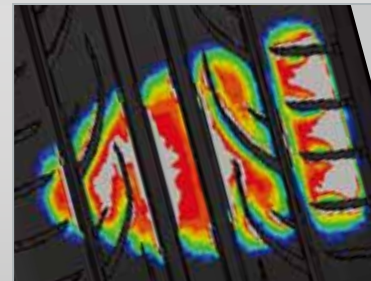
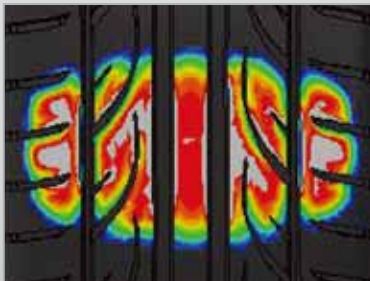
During the initial stage of tire development, computer mapping and forecasting of tire deformation allows engineers to design a carcass profile that maintains optimum shape according to the tire's contact patch. These efforts ensure a more stable and consistent tire structure, enhancing the performance and durability of the tire over a wide range of conditions. It is this attention to design that allows Hankook to develop quality, durable tires that do not compromise on performance.



Traction force at **driving**

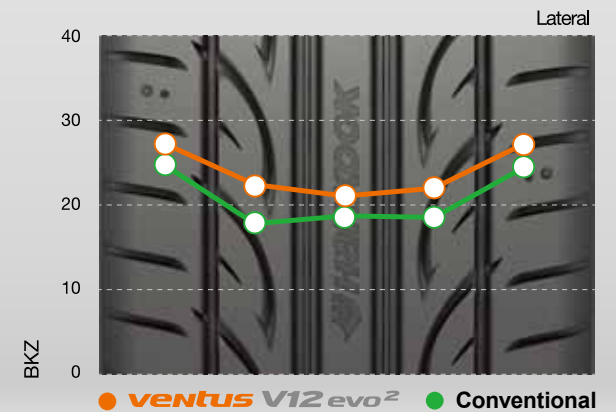
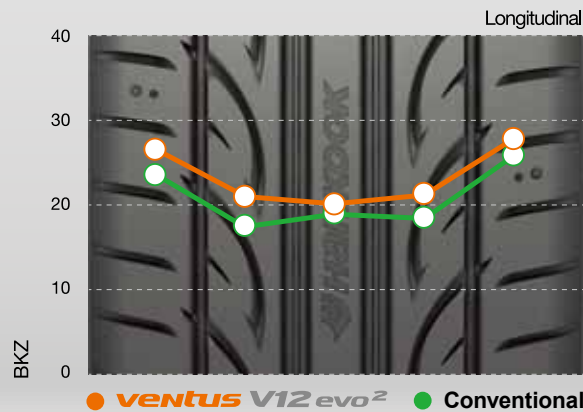
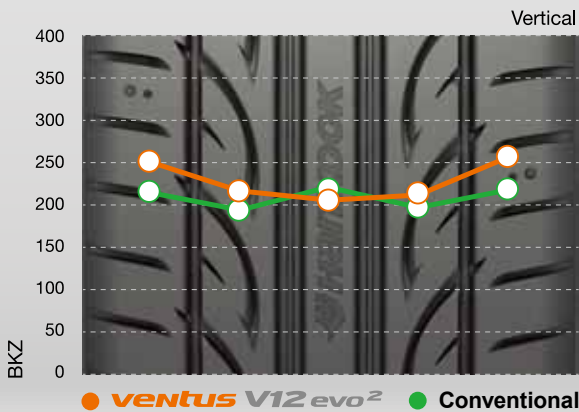
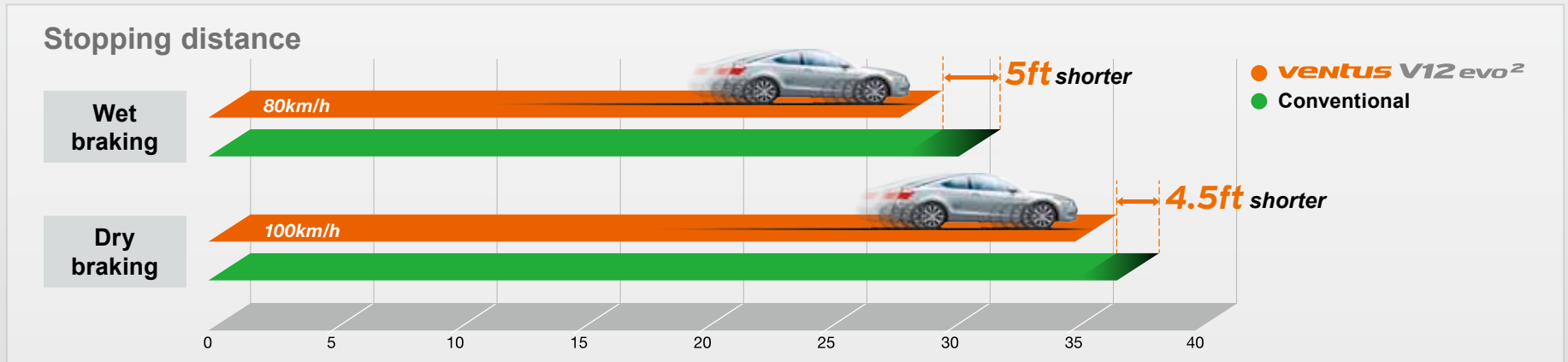


Traction force at **cornering**



Dry and wet performance (braking)

Optimized tread block stiffness balance allows the Ventus V12 evo2 to offer impressive wet and dry braking performance.



*Test Data: The Ventus V12 evo2 provided wet braking distances of 5 feet shorter and dry braking distances of 4.5 feet shorter versus Ventus V12 evo in internal testing.

Test results

Performance



Available sizes

S-Code	Size	L / I & SS	Measuring Rim	Rim Width Range	Max. Load		Overall Diameter	Section Width	Tread Width	Tread Depth	Revs/ Mile
					Air	Load					
1015379	205/55ZR16 XL	94W	6.5	5.5-7.5	50	1,477	24.9	8.3	6.5	10.0	811
1015239	245/40ZR17 XL	95Y	8.5	8.0-9.5	50	1,521	24.7	9.7	8.4	10.0	816
1015413	255/40ZR17 XL	98Y	9.0	8.5-10.0	50	1,653	25.0	10.2	8.7	10.0	806
1015410	205/45ZR17 XL	88W	7.0	6.5-7.5	50	1,235	24.3	8.0	6.8	10.0	832
1015411	215/45ZR17 XL	91Y	7.0	7.0-8.0	50	1,356	24.6	8.3	7.4	10.0	819
1015412	225/45ZR17 XL	94Y	7.5	7.0-8.5	50	1,477	25.0	8.8	7.7	10.0	808
1015237	235/45ZR17 XL	97Y	8.0	7.5-9.0	50	1,609	25.4	9.2	8.0	10.0	796
1015240	245/45ZR17 XL	99Y	8.0	7.5-9.0	50	1,709	25.7	9.5	8.4	10.0	786
1015234	205/50ZR17 XL	93Y	6.5	5.5-7.5	50	1,433	25.1	8.3	6.8	10.0	803
1015690	215/50ZR17 XL	95W	7.0	6.0-7.5	50	1,521	25.5	8.8	6.7	10.0	791
1015689	225/50ZR17 XL	98Y	7.0	6.0-8.0	50	1,653	25.9	9.1	7.5	10.0	779
1015248	245/35ZR18 XL	92Y	8.5	8.0-9.5	50	1,389	24.8	9.7	8.4	10.0	815
1015251	255/35ZR18 XL	94Y	9.0	8.5-10.0	50	1,477	25.0	10.2	8.7	10.0	807
1015417	265/35ZR18 XL	97Y	9.5	9.0-10.5	50	1,609	25.3	10.6	9.1	10.0	797
1015256	275/35ZR18 XL	99Y	9.5	9.0-11.0	50	1,709	25.6	10.9	9.4	10.0	790
1015258	285/35ZR18 XL	101Y	10.0	9.5-11.0	50	1,819	25.9	11.3	9.8	10.0	780
1015242	215/40ZR18 XL	89Y	7.5	7.0-8.5	50	1,279	24.8	8.5	7.4	10.0	815
1015414	225/40ZR18 XL	92Y	8.0	7.5-9.0	50	1,389	25.1	9.0	7.7	10.0	805
1015416	235/40ZR18 XL	95Y	8.5	8.0-9.5	50	1,521	25.4	9.4	8.0	10.0	795
1015418	245/40ZR18 XL	97Y	8.5	8.0-9.5	50	1,609	25.7	9.7	8.3	10.0	785
1015252	255/40ZR18 XL	99Y	9.0	8.5-10.0	50	1,709	26.0	10.2	8.7	10.0	775
1015255	265/40ZR18 XL	101Y	9.5	9.0-10.5	50	1,819	26.3	10.6	9.1	10.0	766
1015257	275/40ZR18 XL	103Y	9.5	9.0-11.0	50	1,929	26.7	10.9	9.4	10.0	757
1015243	215/45ZR18 XL	93Y	7.0	7.0-8.0	50	1,433	25.6	8.3	7.4	10.0	787
1015415	225/45ZR18 XL	95Y	7.5	7.0-8.5	50	1,521	25.9	8.8	7.7	10.0	778
1015250	245/45ZR18 XL	100Y	8.0	7.5-9.0	50	1,764	26.7	9.5	8.4	10.0	757
1015253	255/45ZR18 XL	103Y	8.5	8.0-9.5	50	1,929	27.0	10.0	8.7	10.0	746
1015247	235/50ZR18 XL	101Y	7.5	6.5-8.5	50	1,819	27.3	9.6	7.8	10.0	740
1015288	255/30ZR19 XL	91Y	9.0	8.5-9.5	50	1,356	25.1	10.2	9.0	10.0	805
1015292	265/30ZR19 XL	93Y	9.5	9.0-10.0	50	1,433	25.3	10.6	9.4	10.0	797
1015294	275/30ZR19 XL	96Y	9.5	9.0-10.0	50	1,565	25.6	10.9	9.8	10.0	790
1015297	285/30ZR19 XL	98Y	10.0	9.5-10.5	50	1,653	25.8	11.3	10.1	10.0	782
1015299	295/30ZR19 XL	100Y	10.5	10.0-11.0	50	1,764	26.0	11.8	10.5	10.0	775

Available sizes

S-Code	Size	L / I & SS	Measuring Rim	Rim Width Range	Max. Load		Overall Diameter	Section Width	Tread Width	Tread Depth	Revs/ Mile
					Air	Load					
1015300	305/30ZR19 XL	102Y	11.0	10.5-11.5	50	1,874	26.3	12.2	10.8	10.0	768
1015301	325/30ZR19 XL	105Y	11.5	11.0-12.0	50	2,039	26.7	13.0	11.5	10.0	755
1015281	225/35ZR19 XL	88Y	8.0	7.5-9.0	50	1,235	25.2	9.0	7.7	10.0	800
1015419	235/35ZR19 XL	91Y	8.5	8.0-9.5	50	1,356	25.5	9.4	8.0	10.0	792
1015285	245/35ZR19 XL	93Y	8.5	8.0-9.5	50	1,433	25.4	9.7	8.3	10.0	796
1015420	255/35ZR19 XL	96Y	9.0	8.5-10.0	50	1,565	26.0	10.2	8.7	10.0	775
1015293	265/35ZR19 XL	98Y	9.5	9.0-10.5	50	1,653	26.3	10.6	9.1	10.0	766
1015295	275/35ZR19 XL	100Y	9.5	9.0-11.0	50	1,764	26.6	10.9	9.4	10.0	759
1015298	285/35ZR19 XL	103Y	10.0	9.5-11.0	50	1,929	26.9	11.3	9.8	10.0	750
1015282	225/40ZR19 XL	93Y	8.0	7.5-9.0	50	1,433	26.1	9.0	7.7	10.0	773
1015286	245/40ZR19 XL	98Y	8.5	8.0-9.5	50	1,653	26.7	9.7	8.4	10.0	755
1015290	255/40ZR19 XL	100Y	9.0	8.5-10.0	50	1,764	27.0	10.2	8.7	10.0	746
1015296	275/40ZR19 XL	105Y	9.5	9.0-11.0	50	2,039	27.7	10.9	9.4	10.0	729
1015283	225/45ZR19 XL	96Y	7.5	7.0-8.5	50	1,565	27.0	8.8	7.7	10.0	748
1015287	245/45ZR19 XL	102Y	8.0	7.5-9.0	50	1,874	27.7	9.5	8.3	10.0	729
1015291	255/45ZR19 XL	104Y	8.5	8.0-9.5	50	1,984	28.1	10.0	8.7	10.0	719
1015374	305/25ZR20 XL	97Y	11.0	10.5-11.5	50	1,609	26.0	12.2	10.8	10.0	777
1015364	245/30ZR20 XL	90Y	8.5	8.0-9.0	50	1,323	25.8	9.7	8.4	10.0	781
1015368	255/30ZR20 XL	92Y	9.0	8.5-9.5	50	1,389	26.1	10.2	9.0	10.0	774
1015371	275/30ZR20 XL	97Y	9.5	9.0-10.0	50	1,609	26.5	10.9	9.8	10.0	760
1015373	285/30ZR20 XL	99Y	10.0	9.5-10.5	50	1,709	26.8	11.3	10.1	10.0	754
1015365	245/35ZR20 XL	95Y	8.5	8.0-9.5	50	1,521	26.8	9.7	8.4	10.0	754
1015369	255/35ZR20 XL	97Y	9.0	8.5-10.0	50	1,609	27.0	10.2	8.7	10.0	747
1015372	275/35ZR20 XL	102Y	9.5	9.0-11.0	50	1,874	27.6	10.9	9.4	10.0	732
1015366	245/40ZR20 XL	99Y	8.5	8.0-9.5	50	1,709	27.7	9.7	8.4	10.0	728
1015367	245/45ZR20 XL	103Y	8.0	7.5-9.0	50	1,929	28.7	9.5	8.4	10.0	704
1015370	255/45ZR20 XL	105Y	8.5	8.0-9.5	50	2,039	29.1	10.0	8.7	10.0	694
1015758	275/30ZR21 XL	98Y	9.5	9.0-10.0	50	1,653	27.5	10.9	9.8	10.0	733
1015375	245/35ZR21 XL	96Y	8.5	8.0-9.5	50	1,565	27.8	9.7	8.4	10.0	727

Memo

Be Safe...
Air 'Em UP

This information is printed on FSC® certified paper using soy ink.
*FSC®: This mark is awarded to products made of wood produced through responsible forestry.



U.S. Headquarters 1450 Valley Road, Wayne, New Jersey 07470 Tel: 1-800-HANKOOK, Fax: 1-800-TIRES-OK

hankooktireusa.com