

## QUANTUM V/N/F







# NARROW BY DESIGN POWERFUL BY NATURE

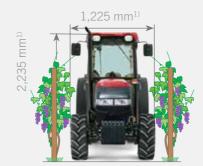
Whether you operate in close planted vineyards, with bush grown fruits or wider spaced orchard trees, Quantum Specialty tractors allow you to care for these high value crops and maximise harvest revenue.e

#### CONFIGURATIONS TO SUIT YOUR APPLICATION.

The new Case IH Quantum V, Quantum N and Quantum F Specialty tractors have the versatility to fit the needs of your business operation.

Quantum V will be the obvious choice in narrow vineyards whilst Quantum N gives more stability when width is less critical. Quantum F provides more operator space and a wider vehicle for orchard use. In addition, cab or platform versions can be specified to tailor a tractor from the Quantum specialty range to suit your exact operating conditions.







QUANTUM V	Rated power ECE R120 <sup>2)</sup> (kW/hp(CV))	QUANTUM N	Rated power ECE R120 <sup>2)</sup> (kW/hp(CV))	QUANTUM F	Rated power ECE R120 <sup>2)</sup> (kW/hp(CV))
Quantum 65 V	48 / 65				
Quantum 75 V	57 / 78	Quantum 75 N	57 / 78	Quantum 75 F	57 / 78
Quantum 85 V	65 / 88	Quantum 85N	65 / 88	Quantum 85 F	65 / 88
Quantum 95 V	71 / 97	Quantum 95 N	71 / 97	Quantum 95 F	71 / 97
Quantum 105 V	106	Quantum 105 N	106	Quantum 105 F	106

Dimensions depending on rear tyres, Details see page 15 - Specification 2 ECE R120 correspond to ISO 14396 and 97 / 68 / EC or 2000 / 25 / EC

# THE QUANTUM V/N/F RANGE SMALL SIZE BIG POWER

Case IH offers a range of twelve, high-performance tractors specially developed to meet the needs of vineyard and orchard customers. The Quantum V, with a minimum width of 1,069 mm, is suited to operation in the most narrow spaced vineyards. In wider spaced plantings and orchards Quantum N or Quantum F tractors are a better choice, with a minimum overall width of 1,225 mm or 1,398 mm. Inside these narrow widths are packed all the features, performance and operator comfort you will require to ensure maximum productivity.



#### DRIVEN WITH CONFIDENCE.

Easy access, a comfortable seat, good visibility, redesigned fender and relocated hydraulic remote levers involves less fatigue for drivers and enables them to operate confidently. Available with air conditioning and active carbon filters for superior operator protection, Quantum tractors match unrivalled comfort in the most unforgiving environments.



#### **ACCESS ALL AREAS.**

A low cab height and optional folding safety frame version enables operation to continue under polytunnels and protection nets. A new foldable beacon for cab versions will permit to quickly lower the profile of the tractor and pass easily under trees and branches.



#### **DESIGNED FOR PRODUCTIVITY.**

High torque, low revving 4 cylinder engines are turbocharged and intercooled to extract the maximum from every drop of fuel. With the addition of the flagship Quantum 105 V/N/F model producing 106 hp(CV), the Quantum tractor series offers excellent performance in a compact package.













#### THE RIGHT TRANSMISSION TO MEET YOUR NEEDS

You can choose between the simplicity of manual gear selection or low effort hydraulic operation. The assertive mechanical transmission offers 16 forward and 16 reverse gears with 40 kph, and is also available with Powershuttle. An optional creeper gearbox allows you to achieve slow working speeds.

#### APPLICATION DRIVEN HYDRAULICS.

With a rear linkage capacity up to 2,600 kg and a separate pump serving the external hydraulic circuit with up to 64 l/min. The Quantum is never short on ability and will power the hydraulic functions and motors of the most complex implements.

#### **EVERY EVENTUALITY COVERED.**

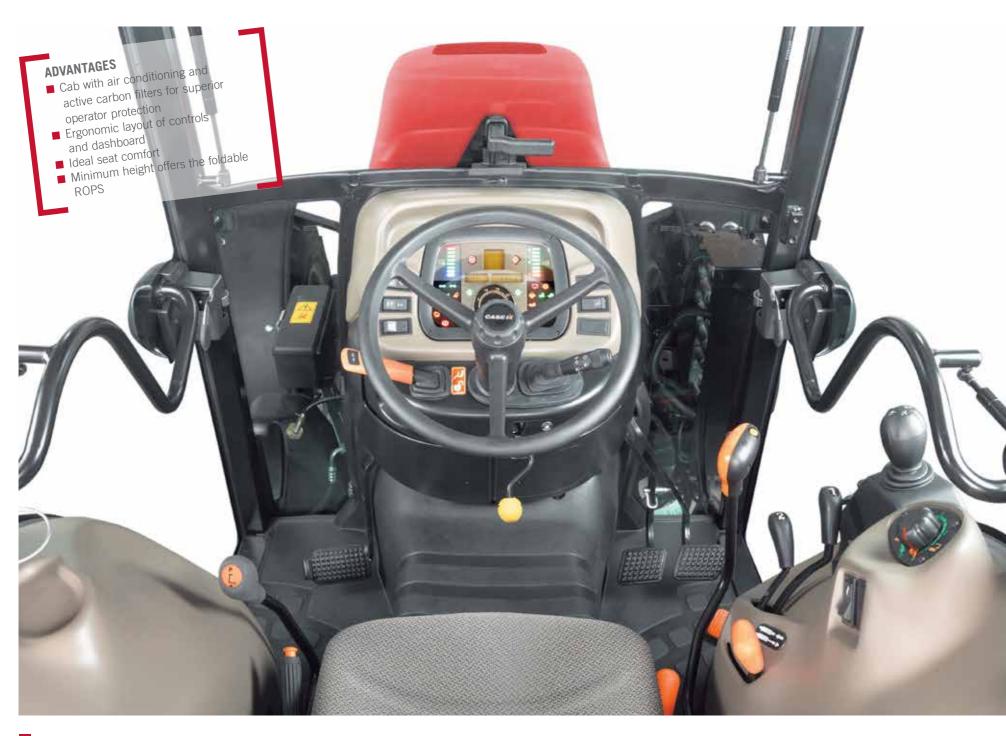
The remote valve system is adjustable to ensure that you can take on any job requiring complex machinery and precision operation. Three remote valves are double-acting with an option of adding an electro-hydraulic diverter function to provide a further 2 valves. Standard outlets are at the rear, but mid mount couplers are available as option to power front or mid mounted implements.

#### PTO SPEEDS FOR MAXIMUM VERSATILITY

Choice of PTO speeds from simple 540/540E to 540/540E/1,000, including ground speed PTO and a new power curve that is perfectly aligned to PTO work, the Quantum puts you in a position to handle the work of all seasons. Furthermore, the rated speed of the PTO was adapted to a lower and more efficient engine speed.

#### **OPTIMUM HANDLING.**

Impressive manoeuvrability, powerful brakes, and automatic 4WD systems will meet the challenges in your operation. Additional safety in slopes offers the park lock system available with 2-speed Powershift transmission.



## SPACIOUS ON THE INSIDE

The Quantum is equipped with a high-specification cab that gives you plenty of headroom. While the tractor is compact and narrow on the outside, you have lots of room on the inside. An ergonomic control layout and fully adjustable seat and steering wheel mean your body and mind are never under stress.

#### PERFECT POSTURE AND HEALTHY ENVIRONMENT.

The luxury seat and multi-angle steering wheel ensure you maintain a healthy posture. On cab models the front and rear windows open for fresh air ventilation. Reassuring handling.

By incorporating the optional air conditioning module inside the roof, it is possible to provide this feature on cab tractors whilst retaining a consistently low operating height. The low centre of gravity ensures excellent handling on rough ground and especially on steep slopes when working along a hillside. Cab filters are mounted externally for easy access.

#### **EXCELLENT VISIBILITY AND CROP CARE.**

Toughened glass panels down to the floor provide excellent all-round visibility right down to the ground. In addition to making your work easier while hitching up implements, you also have a commanding view of your valuable crops. There are no protrusions or edges on the hood or cab that might snag on branches or shoots so the Quantum brushes past without damaging your crop. Working lights integrated into the roof for excellent night vision.

#### IMPLEMENTS ALWAYS IN VIEW.

With slim cab pillars and rear view mirrors the vision to working implements or following sprayers is never at issue.

#### EASY TO DRIVE.

The instrument cluster includes a performance monitor, an electronic tachometer, and features a combination of analogue and digital displays to give you a clear overview of the tractor's status. Control levers and switches are positioned ergonomically, with advanced features like auto 4WD adopted from larger Case IH tractors to make things easier for you.







The foldable ROPS is benefical for low clearance operations.

### QUANTUM MEANS CHOICE

High-performance turbocharged and intercooled diesel engines have been engineered especially for Quantum V, N and F tractors to give you the power you need. From working with a compact harrow through to complex operations with PTO-driven equipment and heavy hydraulic kit, Quantum power will deliver. Effortlessly. With twelve models ranging from 65 to 106 horsepower, the choice is yours.

#### QUANTUM MEANS VERSATILITY.

Choose a Quantum tractor to do the work you need done in your orchards, vineyards or vegetable fields. These engines reach maximum torque output at 1,250 rpm (3.2 litres engines) and 1,300 rpm (4.5 litre engines) so they can operate extremely efficiently at the standard speeds for working with PTO-driven machines. Quantum V, N and F engines can run on up to 100% (B100) bio diesel.

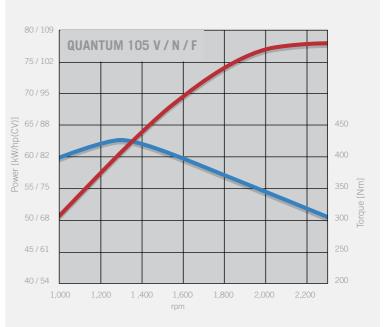
#### QUANTUM MEANS ECONOMY.

These highly efficient, fuel sipping engines keep running all day long with a fuel tank capacity of 77 litres (Quantum V / N) and 90 litres (Quantum F). Exhaust emissions are low too, thanks to EURO stage IIIB compatibility, so there are no complaints from people working outside in the vicinity of these environmentally-friendly tractors.









#### QUANTUM MEANS POWER.

The 4.5 litre engines turn out a massive 398 Nm of torque at 1,300 rpm, so the torque rise of up to 46% translates into smooth delivery of power to the wheels, PTO and hydraulics to cope effortlessly with peak demand on slopes and in the toughest conditions.



# EFFICIENT AND ECONOMICAL

An array of transmission options means you choose the one that fits your operation. Quantum tractors are equipped with a heavy-duty precision transmission for smooth, reliable operation year after year. The PTO is designed to give you economical power delivery in all conditions. Incredible range of gears. Combined with the ground speed PTO, the creeper box makes these tractors ideal for precision planting, vine maintenance and harvesting with additional speeds as low as 300 metres per hour at rated engine speed. At the other end of the scale these narrow tractors can zip along at up to 40 kph handling haulage jobs on the road confidently and economically.

#### **EVEN MORE CHOICE.**

The basic transmission gives you a Synchro Shift gearbox with 4 speeds and 4 ranges and the option of a 12-speed creeper box. With the creeper you then have a total of 28 forward gears and 16 reverse gears at your disposal. The Powershift version doubles the number of forward speeds, so with a creeper box you have 44 gears to choose from. With the Power Clutch you can change up and down a gear at the touch of a button for a smooth change without using the clutch, even on slopes with heavy loads.

#### TAKE ON MORE WITH 3-SPEED PTO.

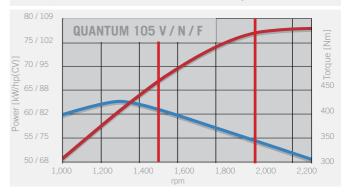
Quantum tractors feature a 540/750 rpm PTO as standard equipment. You can also specify 540/540E/1000 speeds for even more versatility. PTOs on all models are servo-assisted to protect machinery from high torque stress when starting up. Proportional ground speed. PTO speed can be synchronised with tractor travel speed for specialist machinery.







A steady progression between ranges and synchronised gear changes ensure easy, efficient and low effort operation. 16 forward/16 reverse is standard, 32 forward/16 reverse with mechanical splitter also available.



PTO is operated at 2,000 engine rpm or at 1,535 engine rpm in Economy mode for power and efficiency.



Powershift, Powerclutch, Powershuttle and creep speeds are available for the easiest operation and highest productivity.

## **HYDRAULICS** BIG TRACTOR LIFTING POWER

Quantum specialist orchard and vineyard tractors are kitted out with a powerful hydraulic hitch in classic Case IH style. The proven system is designed to make light work of heavy-duty tasks. Lifting power that contributes to the efficiency and profitability of your

#### **EASY HITCH CONTROL**

With a total lifting capacity of 2600 kg the hitch will easily handle your implements and machines. Mechanical hitch control is standard, while electronic hitch control is provided to ensure efficiency during tillage and soil cultivation operations. Like on larger tractors, with EHC you can set the lift height on the dial and then raise and lower the hitch automatically at the flick of a switch. Both mechanical and electronic systems are equipped with automatic draft control. Precision hydraulic stabilizer strut adjustment. The stabilizers for the lower linkage arms can be aligned and locked in place manually using the standard mechanical system. A hydraulic stabilizer strut system is also available to make alignment possible on the move. The hydraulic struts are connected to the 1st remote valve, which is a double-acting connection. Using the 3-button control panel next to the driver's seat, you can adjust the alignment of hitch-mounted equipment while you are driving along. This is ideal when working along a slope.



The mechanical hitch system features an easy to use quick raise and lower control.



Fender-mounted hitch controls allow safe and easy attachment of machines and implements, even when working on your own.

#### **ADVANTAGES**

- Choice of MHC mechanical hitch control or EHC electronical hitch control
- Pump flow of 48 I/min standard, 64 I/min available as an option
- Up to 3 mechanical remote valves at the rear with 10 outlets
- Up to 3 Mid-mount valves with 8 outlets and 1 hydraulic motor supply valve with 2 outlets for control of front and mid mounted implements





## VERSATILE OPERATIONS

In addition to the impressive lifting power of the hitch, Quantum tractors are equipped with a hydraulics system that delivers the versatility you need to do a varied day's work. Our Quantum V and Quantum F tractors are equipped with the latest technology to convert power into torque at the wheels as you need it. Those features contributes to the efficiency and profitability of your business.

#### **AUTO 4WD TRACTION.**

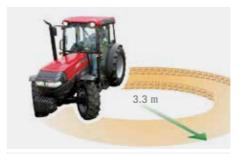
On four-wheel drive versions automatic electro-hydraulic engagement of the front axle is provided to assist the driver in more demanding conditions. 4WD also engages automatically when both brakes are applied to deliver ultimate stopping power when transporting heavy loads at speed. The traction control system switches back to 2WD at speeds above 15 kph and at a steering angle tighter than 30°.

#### IMPRESSIVE MANOEUVRABILITY FOR CONFIDENT HANDLING.

Narrow engines plus a contoured hood enable the front wheels to lock at a really tight angle. A turning radius of just 3 metres is achievable on 2WD versions, making light work of turns at the end of rows, even inconfinded spaces between vines and inside tunnels



The 2 wheel drive version is the ultimate in manoeuvrability.



Turning radius of 3.34 m (Quantum 65V - 85V/F) and 3.44 m (Quantum 95 and 105 V/N/F).



The electro-hydraulic 4 WD is unbeatable when it comes to in-field traction and working on slopes.

## SERVICEABILITY AND SYSTEM SOLUTIONS

Keep driving! Daily checks and cleaning have been made easier with the new swing-out radiator package, while the air filter is conveniently located for quick inspection. And it's simple to check the oil level, with no need to open the engine hood.

When you buy a Case IH machine, you can be sure not only that you're buying the best product, but also that you've got the best dealer back-up behind you. Case IH dealers can offer advice on selecting and financing the right machine, will ensure they deliver what you need when you need it, and will then continue to back you and your equipment with the service and spare parts supply you'd expect from a name as trusted as Case IH.





#### ALL THE PARTS AND SERVICE TO KEEP YOUR EQUIPMENT RUNNING

Find the full line of Case IH parts and components at your local dealer, plus full-service maintenance programmes and industry leading warranties. It is expertise applied by skilled, factory-trained service professionals committed to providing you maximum uptime, season after season.



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#### AROUND THE CLOCK. AROUND THE COUNTRY

Case IH Max Service is a customer support service that provides 24-hour, seven-day-a-week access to the people, products and parts support needed to keep your operation running during the times most critical to your profitability. Max Service backs up your dealer with every resource available to Case IH, to help maximise uptime and productivity of Case IH equipment and increase your return on investment through access to product experts and 24/7 emergency breakdown assistance.



#### AN OPTIMAL FINANCING SOLUTION FOR EVERY INVESTMENT

CNH Industrial Capital is the financing company for Case IH. Our employees are financial experts and have many years of experience in agriculture. We do not only know about Case IH products and the market, we also understand the individual requirements of your operations. Therefore we are always able to offer you a financial solution for your new investments that is tailored specifically to your operational requirements and respective machine usage in the form of loans, rent or leasing. Our most important goal is improving the profitability of your investments! Therefore you can combine every CNH Industrial Capital Financing with Capital accident and breakdown cover, as machine breakdown or repair insurance, in order to exclude risks to your investment and ensure greater planning reliability.

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Safety never hurts! Always read the Operator's Manual before working with any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs, and use any safety features provided. This literature has been published for worldwide circulation. The standard and optional equipment and the availability of individual models may vary from one country to the next. Case IH reserves the right to undertake modifications without prior notice to the design and technical equipment at all times without this resulting in any obligation whatsoever to make such modifications to units already sold. Whilst every effort is made to ensure that the specifications, descriptions and illustrations in this brochure are correct at the time of going to press, these are also subject to change without prior notice. Illustrations may show optional equipment or may not show all standard equipment. Case IH recommends \*\*Accet\*\* [ubricants.

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MODEL	QUANTUM	QUANTUM	QUANTUM	QUANTUM	QUANTUM	QUANTUM	QUANTUM	QUANTUM	QUANTUM	QUANTUM	QUANTUM	QUANTUM
MODEL	65V	75V	85V	95V	105V	75N	95N	105N	75F	85F	95F	105F
ENGINE												
Number of cylinders / Capacity (cm <sup>3</sup> )	4 / 3,200	4 / 3,200	4 / 3,200	4 / 4,500	4 / 4,500	4 / 3,200	4 / 4,500	4 / 4,500	4 / 3,200	4 / 3,200	4 / 4,500	4 / 4,500
Type / Emission level		Turbocharged	and intercooled / El	JRO-Stage IIIB		Turbocharged	l and intercooled / El	JRO-Stage IIIB		ocharged and inter	cooled / EURO-Stag	ge IIIB
Rated power ECE R1203 (kW/hp(CV))	48 / 65	57 / 78	65 / 88	71 / 97	78 / 106	57 / 78	71 / 97	78 / 106	57 / 78	65 / 88	71 / 97	78 / 106
Max.torque ECE R120 <sup>3)</sup> (Nm @ engine rpm)	290 @ 1,250	330 @ 1,250	352 @ 1,250	398 @ 1,300	425 @ 1,300	330 @ 1,250	398 @ 1,300	425 @ 1,300	330 @ 1,250	352 @ 1,250	398 @ 1,300	425 @ 1,300
Torque rise acc. OECD (%)	46	39	30	35	31	39	35	31	39	30	35	31
Fuel tank capacity (litres)	77	77	77	77	77	77	77	77	90	90	90	90
TRANSMISSION												
16 x 16 Synchroshift with mechanical shuttle, 30 or 40 kph	0	0	0	0	0	0	0	0	0	0	0	0
32 x 16 Synchroshift with mechanical shuttle and mechanical splitter, 30 or 40 kph	0	0	0	0	0	0	0	0	0	0	0	0
16 x 16 Synchroshift with powershuttle, 30 or 40 kph	0	0	0	0	0	0	0	0	0	0	0	0
32 x 16 2-speed Powershift with power-shuttle, 30 or 40 kph	•	•	•	•	•	•	•	•	•	•	•	•
28 x 16 Synchroshift with mechanical shuttle and creeper, 30 or 40 kph	0	0	0	0	0	0	0	0	0	0	0	0
44 x 16 2-speed Powershift with powershuttle and creeper, 30 or 40 kph	0	0	0	0	0	0	0	0	0	0	0	0
POWER TAKE OFF												
Engagement type	electro-hydraulic					electro-hydraulic			electro-hydraulic			
Speeds Standard (Option) (rpm)	540 / 540E (1,000 rpm + proportional ground speed)				540 / 540E (1,000 rpm + prop. ground speed)			540 / 540E (1,000 rpm + proportional ground speed)				
DRIVE AND STEERING												
Front axle type	optional 2WD or 4WD				optional 2WD or 4WD			optional 2WD or 4WD				
4WD front axle standard	electro-hydraulic engagement with limited slip or full differential lock				electro-hydraulic engagement with limited slip or full differential lock			electro-hydraulic engagement with limited slip or full differential lock				
4WD optional feature	automatic 4WD and diff lock operation linked to steering angle				automatic 4WD and diff lock operation linked to steering angle			automatic 4WD and diff lock operation linked to steering angle				
Min. turning radius <sup>1)</sup> 4WD (m) <b>HYDRAULIC SYSTEM</b>	3.34	3.34	3.34	3.44	3.44	3.34	3.44	3.44	3.34	3.34	3.44	3.44
Max. pump flow - steering system		35 I/m	in with high flow p	ump		35 l/m	in with high flow p	ump		35 I/min with h	igh flow pump	
Max. pump flow -												
rear hitch and external services		64 I/m	iin with high flow p	ump		64 l/min with high flow pump			64 I/min with high flow pump			
Max. number of remote valve outlets (rear/mid)	10 / 8 and 2 motor				10 / 8 and 2 motor			10 / 8 and 2 motor				
Rear linkage control type	MHC (Mechanical Hitch Control) or EHC (Electonic Hitch Control)				MHC (Mech.Hitch Control) or EHC (Elec.Hitch Control)			MHC (Mechan. Hitch Control) or EHC (Elec. Hitch Control)				
	Manual adjustment or hydraulic adjustment				Manual adjustment or hydraulic adjustment with			Manual adjustment or hydraulic adjustment				
Rear linkage stabilisers	with independent valve				independent valve			with independent valve				
Max. lift capacity (kg)	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600
WEIGHTS* AND DIMENSIONS1)												
Approximate shipping weight 2WD less cab / 4WD cab (kg)	2,320 / 2,710	2,320 / 2,710	2,320 / 2,710	2,410 / 2,790	2,410 / 2,790	2,405 / 2,765	2,495 / 2,855	2,495 / 2,855	2,762 / 2,910	2,762 / 2,910	-/3,000	-/3,000
Max. permissible total weight 2WD less cab / 4WD cab (kg)	3,650 / 3,800	3,650 / 3,800	3,650 / 3,800	3,650 / 3,800	3,650 / 3,800	3,650 / 4,000	3,650 / 4,000	3,650 / 4,000	3,900 / 4,400	3,900 / 4,400	- / 4,400	- / 4,400
Total height 4) over steering wheel / ROPS (mm)	1,315 / 2,245	1,315 / 2,245	1,360 / 2,290	1,400 / 2,380	1,400 / 2,380	1,410 / 2,340	1,460 / 2,440	1,460 / 2,440	1,450 / 2,390	1,450 / 2,390	1,500 / 2,480	1,500 / 2,480
Total height <sup>4)</sup> standard cab (mm)	2,145	2,145	2,190	2,190	2,190	2,235	2,250	2,250	2,273	2,273	2,273	2,273
Min. width on standard tyres <sup>4)</sup> (mm)	1,080	1,080	1,200	1,200	1,200	1,305	1,530	1,530	1,398	1,398	1,398	1,398
Min. width on rear tyres (mm)	1,069 mm with 11.2 R28 (280/85 R28				1,225 mm with 320/85 R28		1,398 mm with 340/85 R28					
Wheel base - 2WD / 4WD (mm)	2,080 / 2,093	2,080 / 2,093	2,080 / 2,093	2,165 / 2,180	2,165 / 2,180	2,080 / 2,093	2,165 / 2,180	2,165 / 2,180	2,068 / 2,093	2,068 / 2,093	- / 2,180	- / 2,180
Min Max. track width, front 2 WD (mm)	856 - 1,088	856 - 1,088	856 - 1,088	856 - 1,088	856 - 1,088	1,002 - 1,214	1,002 - 1,214	1,002 - 1,214	1,146 - 1,565	1,146 - 1,565	-	-
Min Max. track width, front 4 WD (mm)	835 - 1,049	835 - 1,049	835 - 1,049	835 - 1,049	835 - 1,049	1,041 - 1,275	1,041 - 1,275	1,041 - 1,275	1,217 - 1,547	1,217 - 1,547	1,217 - 1,547	1,217 - 1,547
Min Max. track width, rear (mm)	781 - 1,261	781 - 1,261	781 - 1,261	781 - 1,261	781 - 1,261	943 - 1,350	943 - 1,350	943 - 1,350	1,096 - 1,550	1,096 - 1,550	1,096 - 1,550	1,096 - 1,550
STANDARD TYRES *, 2)												
Front 2WD, 4WD	7.00-12, 8.0/75-15	7.00-12, 8.0/75-15	7.00-12, 240/70 R16	7.00-12, 240/70 R16	7.00-12, 240/70 R16	7.00-12, 260/70 R16	7.00-12, 280/70 R18	7.00-12, 280/70 R18	6.50-16, 260/70 R20	6.50-16, 260/70 R20	-, 260/70 R20	-, 260/70 R20
		1 11	320/85R24	320/85R24	320/85R24							

<sup>\*</sup> To comply with legislation and specification in your country

Standard Equipment Optional Equipment - Not available

With standard tyres Other tyres on request SECE R120 correspond to ISO 14396 and 97/68/EC 4) for 4WD tractor equipped with standard tyres

