

FERRARI



THOR



THOR

... maximum productivity and unrivalled versatility



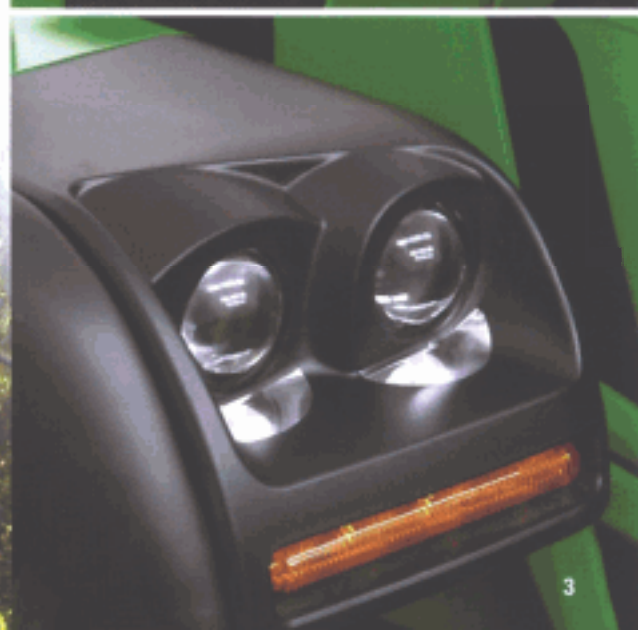
Before designing a new model, we at **FERRARI**, have always carefully studied the needs and desires of our customers. We look after their safety and have the environment surrounding them at heart.

Our company's aim is to put the abilities and ideas of our entire team to the test in order to supply products and services characterised by superior standards of quality at the right price so as to fully satisfy our customers. All of this ensures that our tractors are provided with performances at the top of their category, along with excellent levels of productivity and low operating costs.

The **THOR** are isodiametric drive tractors made in the 'AR' central articulation, 'RS' and 'FR' steering wheels versions.

Compact and easy to handle with exclusive features, they have been studied in detail for specific use in vineyards, orchards, greenhouses or, in general, for specialised crops.

Their excellent weight to power ratio and extraordinary features of manoeuvrability, consumption savings and simple maintenance are what distinguish their value.



- **HIGH POWER** because high performance means low cost.
- **TRANSMISSION WITH AN OS-FRAME**, which features one propeller shaft and one central articulation, giving the vehicle maximum mechanical efficiency and maximum stability especially on difficult terrain.
The system lets the forecarriage oscillate more than the rear axle by more than 15° and vice versa.
- **A PERFECT DISTRIBUTION OF THE WEIGHTS** optimises the vehicle's performance and traction in its working set-up, with the tool mounted on the rear lifting device, in all types of use.
- **HIGH OIL FLOW RATE** to numerous distributors with oversize hydraulic pumps which guarantee high pressures: ideal for using combined equipment and therefore cutting costs and processing times.
- **SHORT WHEELBASE LIMITED** to 1450 mm – one of the best of the category – so it easily moves in all crops and on any type of terrain easily.
- **OUTSTANDING DRIVING COMFORT** because many "spend the day" on a tractor
- **CERTIFICATIONS** THOR tractors are certified as both agricultural machinery and "industrial operators".



_DRIVING SEAT



DRIVING POSITION

The ergonomic layout of the controls, the anatomic design of the seats and the low noise level of the new tractors are just a few of the features that make the driving position comfortable.

ABSOLUTE CONTROL

Absolute control is guaranteed by an ergonomic and user-friendly console. All the elements are grouped logically and are easy to check and memorize.

This allows the operator to keep everything under control. The instruments come in both analog and digital versions.

SPECIAL ROLL-BARS

Prevent the tractor from tipping over.

Also protective post cabs are available upon request.

CABS

The cabs have been designed with extreme care and attention to enhance comfort for the driver.

Excellent ergonomics and comfort optimize the driving environment. Large windows allow broad visibility. Available in the Standard or Compact version, with the latter's height lowered to 170 cm in the Orchard version, they are firmly anchored to the machine structure with special Silent-Blocks so they can be removed in just a few minutes, if necessary.

_TYRES

A WIDE RANGE OF TYRES

The width of the tractors, the firmness of the terrain, the grip level and many other aspects make wheels fundamentally important when choosing a vehicle.

The wide variety of tyres available can adapt the THOR, perfectly to any type of use.

A WHEELS 250/80-18* 280/70-18* 11.5/80-15.3* 320/65-18* 340/65-18*
8.00-20* 9.50-20* 11.2-20* 300/70-20* 320/70-20* 340/65-20

Wheels with 'TRACTOR' profile, suitable for typically agricultural use, for working the land and towing, or whenever you need excellent 'GRIP' to exploit the tractor's performance to the full.

B WHEELS 31X15.50-15 STG* 31X15.50-15 XTC* 38X14.00-20 STG

Wheels for soft track surfaces, ideal for use in maintenance and crop land, or whenever you need to protect the land from tyre pressure without losing grip.

C WHEELS 38X14.00-20 SOFT-TRACK

Wheels for very soft track surfaces, essential for maintenance of parks and lawns with a minimum surface impact.

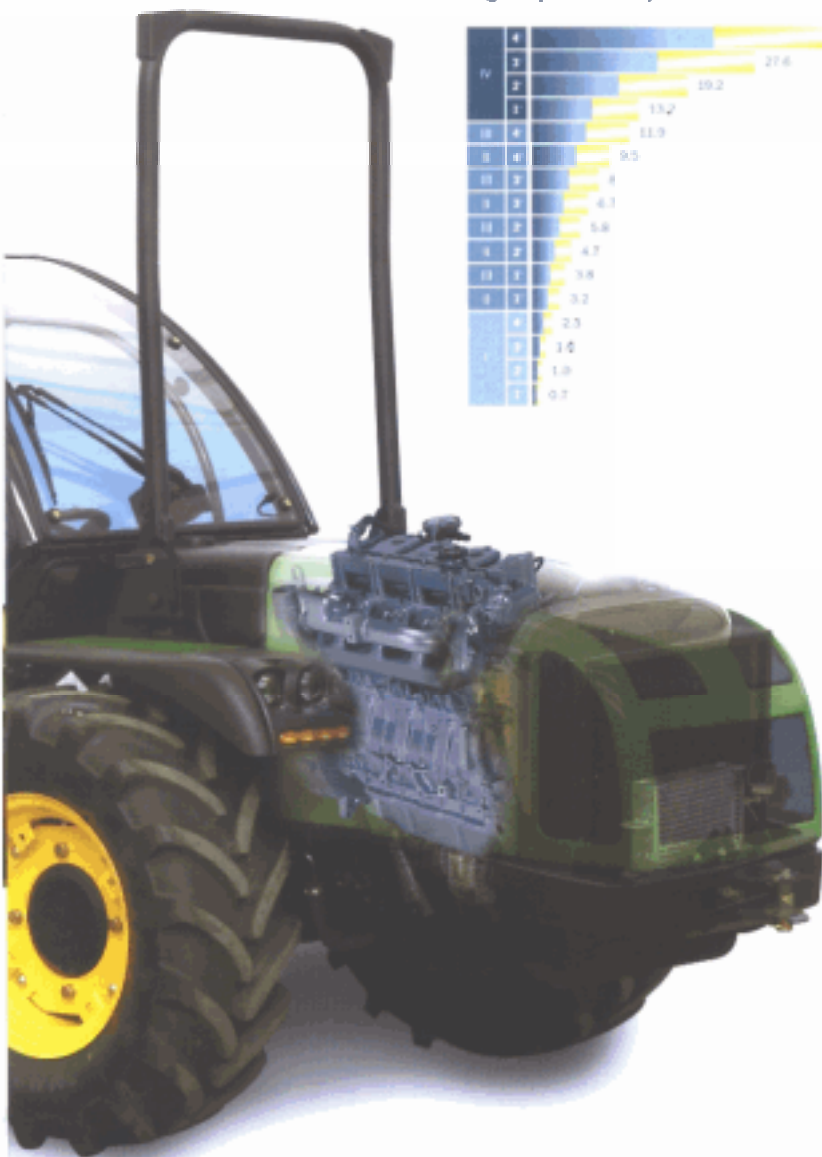
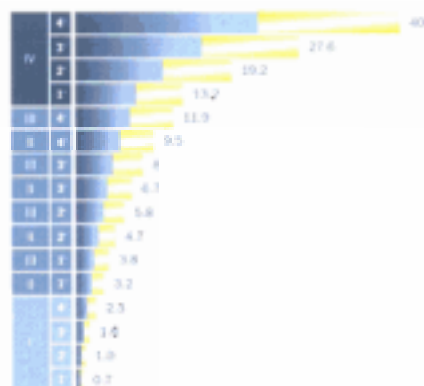


_ENGINE_TRANSMISSION

The new VM D700 engines guarantee maximum efficiency at less consumption, while ensuring that all the **THOR** tractors comply with the "strict standards in force" regarding emissions.

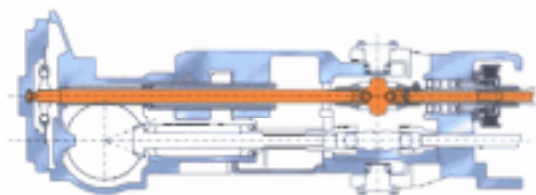
They all feature the standard oil recovery system, with dispersion from the engine cooler and a closed circuit. Four versions of these engines are used on the new range, with three and four cylinders. The latter come standard with **counter-rotating weights** in order to eliminate vibrations: **63-HP D703 TE2 – 64-HP D754 E2 – 84-HP D704 TE2 and 92-HP D754 TE2.**

Graph showing speed in km/h with 20-inch wheels
Engine speed: 2300 rpm



OS-FRAME SYSTEM

The new transmissions are built with an **OS-Frame** which features, **one propeller shaft and one central articulation**, giving the vehicle maximum mechanical efficiency and maximum stability especially on difficult terrain. The central assembly is a single cast iron piece. This structure guarantees **maximum steering angles**, which are impossible to achieve on traditional designs.



SYNCHRONIZED GEARBOX

It has 32 speeds: 16 forward - 16 reverse with a **synchronized reverser**, without overlapping speeds in the various ranges. This allows you to adapt ratios to specific needs in any situation.

CLUTCH

The **Clutch** features **multiple discs in oil bath** with **hydraulic control**. It makes engagements gentle and gradual without losing power, giving excellent results in terms of lifetime and performance. Installed in the centre of the tractor, it reduces engine overhang by restricting the space occupied.

The graph shows the perfect progression of ratios without overlapping speeds in any forward gear range.



DRIVE

Is constant on the four wheels. This lets you move about optimally over both steep slopes and more uneven terrains.

DIFFERENTIAL

Front and rear differential with simultaneous locking device and electrohydraulic control.

REDUCTION GEARS

The reduction gears on the wheel axles are epicyclic to guarantee maximum drive with unlimited duration.

SERVICE BRAKES

With multiple discs in oil bath with hydraulic control. Their perfect grip ensures braking in total safety.

RADIATOR AND COOLING SYSTEM

The radiator and cooling system are fundamental in high power tractors of such small dimensions. This is why a special cooling system has been designed to guarantee that the engine and the hydraulic system operate in maximum safety, even in heavy-duty conditions.

BONNET

The bonnet opens at the front for ease and rapidity when carrying out maintenance, servicing coupons and cleaning the cooling system.

POWER TAKE-OFF CLUTCH

The power takeoff clutch has multiple discs in oil bath with electrohydraulic control. Its main distinguishing feature is no risk of wear or heat build-up, especially when using equipment with a high moment of inertia.

REAR POWER TAKE-OFF

With electrohydraulic control independent and synchronized with all the forward speeds. It can be engaged under load with the brake disengaged. The independent PTO has a speed of 540/750 rpm.



HYDRAULIC SYSTEM



HYDRAULIC SYSTEM

Two circuits with independent pumps and heat exchanger.

The pump comes with the hydroguide and has a flow rate of 31lt/min, while the service pump has a flow rate of 49 l/min.

The system has a hydraulic pressure of 180 bars.

All this allows you to use combined equipment and rationalize the use of the vehicle, reducing processing times.



DISTRIBUTORS

Possibility to have up to 6 hydraulic couplers housed in the central part of the vehicle's protective arch in the rear in a practical and rational manner.

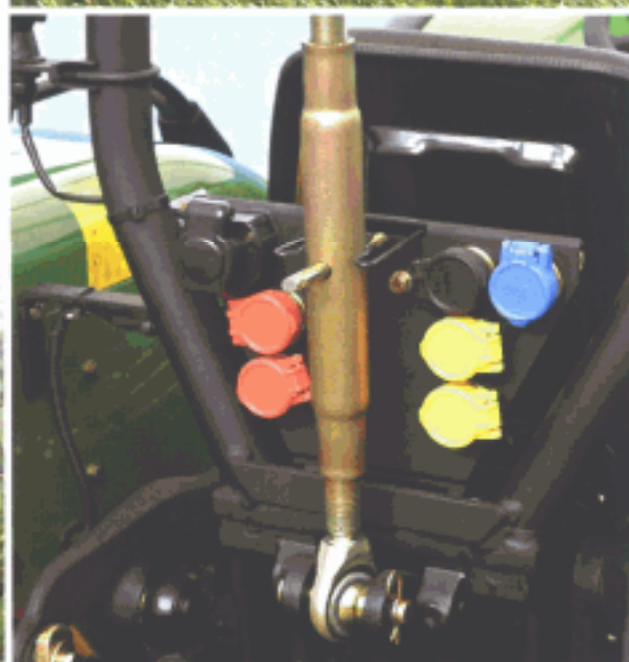
REAR LIFTING DEVICE

The robust rear lifting device has a maximum capacity of 2300 kg. Available with external rams or position and draft control, it guarantees excellent performances in total safety, even with heavy equipment.

The three-point hitch, with normal or quick couplings, can have a hydraulically controlled hitch and right drawbar.

FRONT LIFTING DEVICE

Optional, it guarantees a maximum capacity of 800 kg and comes with four hydraulic couplers.



THOR AR 65 - 75 - 85 - 95

TRACTOR DIMENSIONS

AR	A	B	C	D	E min-max	F min-max	G min-max
3 cylinders	1075	1450	563	2780	2102-2180	1121-1199	237-315
4 cylinders	1142	1450	563	3155	2102-2180	1121-1199	237-315



TRACTOR WIDTH WITH DIFFERENT WHEEL TYPES

TYPE OF TYRE AND RIM	TYRE WIDTH MM	TYRE HEIGHT MM	I Min/max tread mm	L Min/max width mm
250/80-18 with adjustable rim	240	879	900 - 1108	1140 - 1348
280/70-18 with adjustable rim	282	849	1020 - 1108	1302 - 1390
320/65-18 with adjustable rim	320	873	1020 - 1108	1340 - 1428
11.5/80-15.3 with fixed rim	290	888	948 - 972	1342 - 1366
8.00-20 with adjustable rim	217	945	840 - 1080	1165 - 1401
9.50-20 with adjustable rim	245	937	882 - 1230	1127 - 1475
300/70-20 with adjustable rim	286	947	942 - 1144	1228 - 1430
340/65-20 with adjustable rim	343	958	984 - 1144	1327 - 1487
31x15.50-15 XTC o STG with fixed rim	390	790	1056	1550



"AR" TURNING RADIUS

TYRE TYPE	250/80-18	280/70-18	320/65-18	11.5/80-15.3	8.00-20	9.50-20	300/70-20	340/65-20	31x15.50-15
mm.	2680	2700	2770	2710	2660	2670	2740	2775	2930

TECHNICAL SPECIFICATIONS	THOR 65 AR	THOR 75 AR	THOR 85 AR	THOR 95 AR
CHASSIS	Swinging integral chassis OS-FRAME with central articulation			
DRIVE	Four permanent tractor wheels			
ENGINE	4-stroke Diesel with direct injection			
Manufacturer	VM * Daimler-Benz			
Type	D703 TE2	D754 E2	D704 TE2	D754 TE2
No. Cylinders	3		4	
Displacement cc	2082	2970	2776	2970
Induction	Turbo	Natural	Turbo	Turbo
Emission level	In compliance with directive 2000/25 and 97/68 CEE			
Power KW/CV	46/63	47/64	61.5/84	67.5/92
Nominal speed (rpm)			2300	
Maximum tractor torque (Nm/rpm)	220 (at 1400 rpm)	214 (at 1400 rpm)	290 (at 1400 rpm)	338 (at 1300 rpm)
Cooling	Liquid			
Specific fuel consumption (gr/KWh)	254	235	230	238
Tank capacity (lt.)	55			
TRANSMISSION	32-speed synchronized gearbox: 16 AV and 16 RM with synchronized reverser			
Main clutch	With multiple discs in oil bath with hydraulic control			
DIFFERENTIAL LOCK	Front and rear differential with simultaneous locking device and electro-hydraulic control.			
AXLES	Front and rear with epicyclic reduction gear			

TECHNICAL SPECIFICATIONS	THOR 65 AR	THOR 75 AR	THOR 85 AR	THOR 95 AR
POWER TAKEOFF	Rear independent from gear and synchronized with forward speed.			
PTO clutch	Engages under load with brake disengaged			
Engagement control	With multiple discs in oil bath			
Independent PTO rotation speed (rpm)	Electro-hydraulic			
HYDRAULIC SYSTEM	540/750			
Flow rate to hydraulic pump which controls the hydroguide and electro-hydraulic controls (l/min)	Two circuits with independent pumps and heat exchanger			
Flow rate to hydraulic pump which controls the lift and the distributors (l/min)	31			
Maximum hydraulic pressure (bar)	49			
DISTRIBUTORS	180			
Rear (Standard)	Mechanical control to max 6 hydraulic couplers in the version with hydraulic lift by rams and 4 hydraulic couplers in the version with position and draft control			
	1 single-acting and 2 double-acting with level position for free return flow and oil recovery (hydraulic lift by rams)			

Rear (Optional)	2 double-acting with level position for free return flow and oil recovery (position and draft control)			
	1 single-acting, 1 double-acting with level position for free return flow and			
	1 double-acting with float with free return and oil recovery or 1 double-acting and			
	2 double-acting with level position for free return flow and oil recovery (hydraulic lift by rams)			

	1 single-acting, 1 double-acting with level position for free return flow and oil recovery or 1 double-acting and			
	1 double-acting with float with free return and oil recovery (position and draft control)			
ELECTRICAL SYSTEM				
Battery (Ah)	100			
Alternator (A)	55			
REAR LIFTING DEVICE	Standard: with two external rams - Optional: position and draft control			
Three-point hitches	Standard: adjustable in width with couplings cat. 1 and 2			
	Optional: rigid with quick couplings adjustable in width and length cat. 1 and 2			
Three-point drawbars	Standard: with manual adjustment			
	Optional: Hydraulic three-point hitch and right drawbar of lifting device both with hydraulic control from driving seat.			
Lifting capacity at the end of the arms kg	2300			
FRONT LIFTING DEVICE (Optional)	With two external rams with front guard and two double-acting control valves			
Three-point hitches	Standard: rigid with quick couplings Cat. 1			
Carrying capacity kg	800			
DRIVING UNIT	Mono-directional - With platform			
Steering wheel	Height adjustable			
SEATS with safety belts	Standard: comfortable, spring suspended seat, adjustable according to the driver's weight			
	Optional: 'Bostrom' seat			
	With multiple discs in oil bath with hydrostatic control			
	Acting on service brakes			
	With hydrostatic steering with two jacks acting on the central articulated joint			
SERVICE BRAKE				
Parking brake	Front folding securely, fixed to the transmission			
STEERING	Monoblock, mounted on 'Silent block'			
SAFETY	Monoblock, soundproof, mounted on 'Silent block', safety cell integrated in the structure			
Roll bar frame (Standard)				
Frame with pillars (Optional)				
Cab (Optional)				
TYRES	250/80-18			
Standard				
Optional:	280/70-18* 320/65-18* 11.5/80-15.3* 8.00-20* 9.50-20* 300/70-20* 340/65-20* 31x15.50-15 with tread XTC or STG			
TOW HOOKS				
Standard	Front and rear tow hook cat.C			
Optional	Rear Rockinger or Scharmueller tow hooks			
WEIGHT-OPERATIONAL				
With standard roll bar frame (Kg)	1780			
OPTIONAL	1850			
	Flash light set, cyclone prefilter with external air intake, front weights and wheel weights.			

THOR RS 65 - 75 - 85 - 95

TRACTOR DIMENSIONS

RS	A	B	C	D	E min-max	F min-max	G min-max
3 cylinders	1075	1450	563	2780	2102-2202	1121-1221	237-337
4 cylinders	1142	1450	563	3155	2102-2202	1121-1221	237-337



TRACTOR WIDTH WITH DIFFERENT WHEEL TYPES

TYPE OF TYRE AND RIM	TYRE WIDTH MM	TYRE HEIGHT MM	Min/max tread mm	Min/max width mm
9.50-20 with adjustable rim	245	937	1046 - 1588	1291 - 1833
11/2-20 with adjustable rim	277	982	1134 - 1618	1411 - 1895
320/70-20 with adjustable rim	316	975	1134 - 1618	1450 - 1934
340/65-20 with fixed rim	343	958	1134 - 1618	1477 - 1961
31x15.50-15 XTC o STG with fixed rim	390	790	1220 - 1414	1610 - 1804
38/14-20 STG o GARDEN with adjustable rim	356	990	1238 - 1618	1594 - 1974



"RS" TURNING RADIUS

TYRE TYPE	9.50-20	11/2-20	320/70-20	340/65-20	31x15.50-15	38/14-20
mm.	3150	3200	3250	3280	3280	3280

TECHNICAL SPECIFICATIONS	THOR 65 RS	THOR 75 RS	THOR 85 RS	THOR 95 RS
CHASSIS	Swinging integral chassis OS-FRAME with steering wheels			
DRIVE	Four permanent tractor wheels			
ENGINE	4-stroke Diesel with direct injection			
Manufacturer	VM * Daimler-Benz			
Type	D703 TE2	D754 E2	D704 TE2	D754 TE2
No. Cylinders	3		4	
Displacement cc	2082	2970	2776	2970
Induction	Turbo	Natural	Turbo	Turbo
Emission level	In compliance with directive 2000/25 and 97/68 CEE			
Power KW/CV	46/63	47/64	61.5/84	67.5/92
Nominal speed (rpm)			2300	
Maximum tractor torque (Nm/rpm)	220 (at 1400 rpm)	214 (at 1400 rpm)	290 (at 1400 rpm)	338 (at 1300 rpm)
Cooling			Liquid	
Specific fuel consumption (gr/KWh)	254	235	230	238
Tank capacity (lt.)			55	
TRANSMISSION	32-speed synchronized gearbox: 16 AV and 16 RM with synchronized reverser			
Main clutch	With multiple discs in oil bath with hydraulic control			
DIFFERENTIAL LOCK	Front and rear differential with simultaneous locking device and electro-hydraulic control.			

TECHNICAL SPECIFICATIONS	THOR 65 RS	THOR 75 RS	THOR 85 RS	THOR 95 RS
AXLES	Front and rear with epicyclic reduction gear			
POWER TAKE-OFF	Rear independent from gear and synchronized with forward speed.			
	Engages under load with brake disengaged			
	With multiple discs in oil bath			
	Electro-hydraulic			
	540/750			
HYDRAULIC SYSTEM	Two circuits with independent pumps and heat exchanger			
Flow rate to hydraulic pump which controls the hydroguide and electro-hydraulic controls (l/min)	31			
Flow rate to hydraulic pump which controls the lift and the distributors (l/min)	49			
Maximum hydraulic pressure (bar)	180			
DISTRIBUTORS	Mechanical control to max 6 hydraulic couplers			
Rear (Standard)	1 single-acting and 2 double-acting with level position for free return flow, free return and oil recovery			
Rear (Optional)	1 single-acting, 1 double-acting with level position for free return flow and 1 double-acting with float with free return and oil recovery or 1 double-acting and 2 double-acting with level position for free return flow and oil recovery			
ELECTRICAL SYSTEM				
Battery (Ah)	100			
Alternator (A)	55			
REAR LIFTING DEVICE	Standard: with two external rams - Optional: position and draft control			
Three-point hitches	Standard: adjustable in width with couplings cat. 1 and 2			
	Optional: adjustable in width and length with quick couplings cat. 1 and 2			
	Standard: with manual adjustment			
	Optional: Hydraulic three-point hitch and right drawbar of lifting device both with hydraulic control from driving seat.			
	2300			
Lifting capacity at the end of the arms kg				
FRONT LIFTING DEVICE				
(Optional)	With two external rams with front guard and two double-acting control valves			
Three-point hitches	Standard: rigid with quick couplings Cat. 1			
Carrying capacity kg	800			
DRIVING UNIT	Mono-directional - With platform			
Steering wheel	Height adjustable			
SEATS with safety belts	Standard: comfortable, spring suspended seat adjustable according to the driver's weight			
	Optional: 'Bostrom' seat			
	With multiple discs in oil bath with hydraulic control			
	Acting on service brakes			
	With hydrostatic steering with two rams acting on front wheels			
SERVICE BRAKE				
Parking brake				
STEERING				
SAFETY				
Roll bar (Standard)	Front folding securely fixed to the transmission			
Frame with pillars (Optional)	Monoblock, mounted on 'Silent block'			
Cab (Optional)	Monoblock, soundproof, mounted on 'Silent block', safety cell integrated in the structure			
TYRES				
Standard	9.50-20			
Optional:	11.2-20 * 320/70-20 * 340/65-20 * 38-14/20 with tread STG and soft-Track * 31X15.50-15 with tread XTC and STG			
TOW HOOKS				
Standard	Front and rear tow hook cat.C			
Optional	Rear Rockinger or Scharmueller tow hooks			
WEIGHT-OPERATIONAL				
With standard roll bar frame (Kg)	1885		1955	
OPTIONAL	Flash light set, cyclone prefilter with external air intake, front weights and wheel weights.			

THOR FR 65 - 75 - 85 - 95

TRACTOR DIMENSIONS

FR	A	B	C	D	E min-max	F min-max	G min-max
3 cylinders	1075	1450	563	2780	2135-2156	1154-1175	270-295
4 cylinders	1142	1450	563	3155	2135-2156	1154-1175	270-295



TRACTOR WIDTH WITH DIFFERENT WHEEL TYPES

TYPE OF TYRE AND RIM	TYRE WIDTH MM	TYRE HEIGHT MM	Min/max tread mm	L Min/max width mm
280/70-18 with adjustable rim	282	849	1064 - 1476	1346 - 1758
320/65-18 with adjustable rim	320	873	1170 - 1466	1490 - 1786
340/65-18 with fixed rim	343	899	1170 - 1466	1513 - 1809

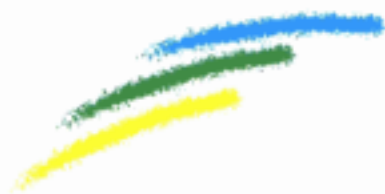


"FR" TURNING RADIUS

TYRE TYPE	280/70-18	320/65-18	340/65-18
mm.	3240	3260	3280

TECHNICAL SPECIFICATIONS	THOR 65 FR	THOR 75 FR	THOR 85 FR	THOR 95 FR
CHASSIS	Swinging integral chassis OS-FRAME with steering wheels			
DRIVE	Four permanent tractor wheels			
ENGINE	4-stroke Diesel with direct injection			
Manufacturer	VM * Daimler-Benz			
Type	D703 TE2	D754 E2	D704 TE2	D754 TE2
No. Cylinders	3		4	
Displacement cc	2082	2970	2776	2970
Induction	Turbo	Natural	Turbo	Turbo
Emission level	In compliance with directive 2000/25 and 97/68 CEE			
Power KW/CV	46/63	47/64	61.5/84	67,5/92
Nominal speed (rpm)			2300	
Maximum tractor torque (Nm/rpm)	220 (at 1400 rpm)	214 (at 1400 rpm)	290 (at 1400 rpm)	338 (at 1300 rpm)
Cooling			Liquid	
Specific fuel consumption (gr/KWh)	254	235	230	238
Tank capacity (lt.)			55	
TRANSMISSION	32-speed synchronized gearbox: 16 AV and 16 RM with synchronized reverser			
Main clutch	With multiple discs in oil bath with hydraulic control			
DIFFERENTIAL LOCK	Front and rear differential with simultaneous locking device and electro-hydraulic control.			

TECHNICAL SPECIFICATIONS	THOR 65 FR	THOR 75 FR	THOR 85 FR	THOR 95 FR
AXLES		Front and rear with epicyclic reduction gear		
POWER TAKE-OFF		Rear independent from gear and synchronized with forward speed.		
		Engages under load with brake disengaged		
		With multiple discs in oil bath		
		Electro-hydraulic		
		540/750		
		Two circuits with independent pumps and heat exchanger		
PTO clutch				
Engagement control				
Independent PTO rotation speed (rpm)				
HYDRAULIC SYSTEM				
Flow rate to hydraulic pump which controls the hydroguide and electro-hydraulic controls (l/min)		31		
Flow rate to hydraulic pump which controls the lift and the distributors (l/min)		49		
Maximum hydraulic pressure (bar)		180		
DISTRIBUTORS		Mechanical control to max 6 hydraulic couplers		
Rear (Standard)		1 single-acting and 2 double-acting with level position for free return flow and oil recovery		
Rear (Optional)		1 single-acting, 1 double-acting with level position for free return flow and 1 double-acting with float with free return and oil recovery or 1 double-acting and 2 double-acting with level position for free return flow and oil recovery		
ELECTRICAL SYSTEM				
Battery (Ah)		100		
Alternator (A)		55		
REAR LIFTING DEVICE		Standard: with two external rams - Optional: position and draft control		
Three-point hitches		Standard: adjustable in width with couplings cat. 1 and 2		
		Optional: adjustable in width and length with quick couplings cat. 1 and 2		
		Standard: with manual adjustment		
		Optional: Hydraulic three-point hitch and right drawbar of lifting device both with hydraulic control from driving seat.		
		2300		
		With two external rams with front guard and two double-acting control valves		
		Standard: rigid with quick couplings Cat. 1		
		800		
		Mono-directional - With platform		
		Height adjustable		
		Standard: comfortable spring suspended seat adjustable according to the driver's weight		
		Optional: 'Bostrom' seat		
		With multiple discs in oil bath with hydraulic control		
		Acting on service brakes		
		With hydrostatic steering with two rams acting on front wheels		
		Front folding securely fixed to the transmission		
		Monoblock, mounted on 'Silent block'		
		Monoblock, soundproof, mounted on 'Silent block',		
		safety cell integrated in the structure available in the Standard or Compact versions		
TYRES				
Standard		280/70-18		
Optional:		320/65-18 * 340/65-18		
TOW HOOKS				
Standard		Front and rear tow hook cat.C		
Optional		Rear Rockinger or Scharmueller tow hooks		
WEIGHT-OPERATIONAL				
With standard roll bar frame (Kg)	1885		1955	
OPTIONAL		Flash light set, cyclone prefilter with external air intake, front weights and wheel weights.		



FROM YOUR LOCAL DEALER



BCS S.p.A - Ferrari Division

Viale Mazzini, 161 - 20081 Abbiategrosso (Milano)

Tel. +39 02 94821 - Fax +39 02 9482398

E.mail: export@bcs-ferrari.it - www.ferrariagri.it