

 SAME DEUTZ-FAHR

R5

100

110

130

150



A different breed.

Aggressive lines and maximum comfort



Solid structure and optimum power-to-weight ratio are the key engineering goals pursued in designing this range of tractors - the best possible balance between maximum productivity and ultimate comfort.

The attributes of these hard-working and comfortable tractors are exemplified by **4 or 6 cylinder Euro II engines; electronic engine management** with optimum constant torque and power curves guaranteeing excellent traction; hydraulic system with high lifting capacity for effortless handling of heavy duty and bulky implements; various transmission options, all giving 40 km/h top speed; disc brakes on all four drive wheels for maximum safety; spacious, ergonomically designed and practical cab with high visibility roof.

Above all, the R5 aims at attractive design, as reflected in the streamlined contours of the hood and the exclusive styling of the cab. The cab is suspended on silent-block mounts, to minimize noise and vibration. Accessible from either side by way of large self-cleaning steps, the cab has a flat floor and doors that open wide, ensuring the operator can mount and dismount easily and safely.

The controls are arranged on the driver's right, easy to use and simple to understand. **6 work lights**, including four at roof level - 2 at the front and 2 at the rear - and 2 mounted at mid-height for extended night vision.

An uninterrupted view in all directions, thanks to an exhaust pipe routed up the corner post of the cab (optional), and a high visibility roof with a transparent hatch covering almost the entire area forward of the driver seat. Especially useful when using a front loader attachment.



■ 4-speed ventilation system (air-conditioning optional) circulates a perfectly measured flow of air through 18 adjustable vents, regulating the temperature inside the cab at a level guaranteed to provide maximum operator comfort, whatever the climatic conditions.



Engine: immediate and powerful response

In keeping with the assertive qualities of their Euro II engines, R5 tractors deliver the outstanding performance associated typically with 4- and 6-cylinder propulsion units. The **R5 100** model, rated **96 HP (70.5 kW)**, is specified with a 4-cylinder turbo, whilst the **R5 110**, rated **101 HP (74 kW)**, has a naturally aspirated 6-cylinder.

With higher production capacities and bigger acreages in mind, the range also offers two further 6-cylinder turbo models: the **R5 130** rated **126 HP (92.6 kW)**, and the **R5 150** rated **151 HP (114.7 kW)**, which is also intercooled.

SDF engines are designed with unit injection pumps, one to each cylinder, operating at high pressures (up to 1400 bar)



■ Control lever on the cab door pillar, allowing variation of engine speed. Function for setting a preferred engine speed.

for more efficient combustion.

The injection pipelines are notably short and all the same length, ensuring rapid injection on all cylinders. Optimum combustion is guaranteed both by strong turbulence of the inducted air, and by the special configuration of the combustion chamber, which ensures fuel and air are mixed thoroughly together. All the new engines are equipped with hydraulic tappets controlling the injection advance. When the oil is cold, the plunger is lifted marginally so the injection can be suitably advanced: as well as optimizing efficiency, this also eliminates any white smoke, emitted usually when engines are started cold. With a **re-designed** tank holding 300 litres, there will be few refuelling stops. The low rated crankshaft speed setting ensures lower levels of stress and wear on moving parts, safeguarding their integrity and durability while at the same time keeping noise levels to a minimum. The engine of the R5 can be started and stopped swiftly and safely, as the key is located conveniently on the instrument panel.

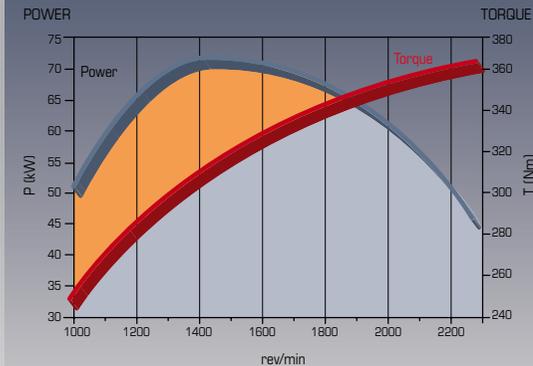
Electronic engine management.

Working hard, without wasting so much as a drop of fuel.

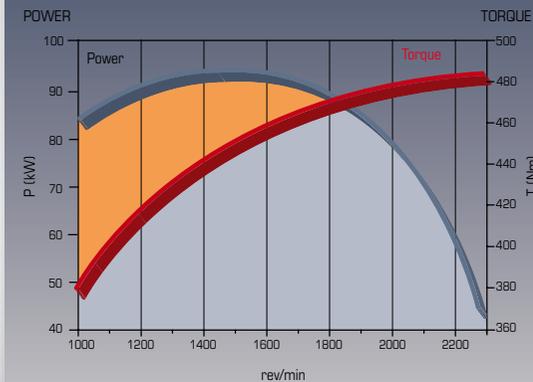
Electronic engine management is standard on all models: fuel flow is metered automatically - in real time - according to the load conditions and the effort required from the engine to overcome them. This optimizes fuel economy.

The operating parameters of the engine are monitored continuously by the electronic control unit of the system, in combination with dedicated sensors, and the correct fuel metering values constantly updated. This means that available power is exploited fully, and fuel consumption, correspondingly, kept under control. And there's more: **the facility of setting, saving and retrieving a minimum and maximum speed combination** that will simplify the task of negotiating headland turns. For operations requiring uniform P.T.O. and ground speeds, the ECU can also ensure a "fixed" mode of operation whereby the engine speed is held constant even under varying load conditions.

R5 100



R5 130





Transmissions to cover every need



Ground speed in km/h with 16.9R34 tyre

Creep range

1 SR	0,50
2 SR	0,68
3 SR	0,90
4 SR	1,29
5 SR	1,74

Low speed range

1 L	1,72
2 L	2,31
3 L	3,08
4 L	4,39
5 L	5,92

Medium speed range

1 M	3,72
2 M	5,00
3 M	6,66
4 M	9,48
5 M	12,79

High speed range

1 V	11,08
2 V	14,09
3 V	19,83
4 V	28,23
5 V	38,08

■ 20+20 transmission with creeper

The mechanical transmission provides all the power needed for heavy duties such as ploughing, soil preparation, seeding and transport. The right speed can be selected with a variety of transmission packages, all having a top speed of 40 km/h and a hydrostatically operated dry type main clutch with cerametallic discs, ensuring R5 models are both efficient and productive.

R5 100 and R5 110 models have a mechanical transmission with 5-speed synchronesh gearbox, dedicated shuttle lever and 3 speed ranges, giving a total of **15 forward and 15 reverse ratios**. With the option of a creeper box for ultra low speed operations, the total number of ratios can be increased to **20 forward + 20 reverse** (minimum speed 0.4-1 km/h).

There is an option of two different transmissions for **R5 130 and R5 150** models, with:

- **underdrive** (each of the single gear speeds can be reduced by 20%). A 4-speed synchronesh gearbox is

complimented by 3 ranges, giving **24 forward and 12 reverse ratios**.

- **creeper** (minimum speed 0.4-1 km/h): 4-speed synchronesh gearbox and 3 ranges (+ creeper), giving **16 forward and 12 reverse ratios**.

The two speed power take-off (540/1000) with oil-immersed multi-disc clutch can be engaged either mechanically (R5 130 and R5 150), or electrohydraulically (R5 100 e R5 110), by pushing a button located on the console to the driver's right. A direct coupling between P.T.O. and engine helps to minimize power losses and reduce noise.



■ 24+12 transmission with underdrive shift

Straight to work, with power and precision



One of the many outstanding features of R5 tractors is undoubtedly their hydraulic system - capable of accommodating any kind of implement.

The system incorporates an 'open centre' circuit with a **pump rated 58 l/min, for R5 100 and R5 110 models, and 68 l/min for R5 130 and R5 150 models.** High flow and fast response of the hydraulic system will enable R5 machines to operate even with implements designed for high power demand.

The rugged rear lift - controlled mechanically by a flex bar attached to the lower lift links - offers high lifting capacity: **3800/5000 kg for the R5 100, 4700/6200 kg for the R5 110, and 5400/7000 kg for the R5 130 and R5 150.** Auxiliary spool valves with 4 or 6 ports are convertible between single and double acting operation for optimized use of implements in the field.





An independent hydraulic circuit supplies oil for the power steering, which is equipped with double cylinders giving a light and smooth touch at the wheel, and guarantees complete functional efficiency even at low engine speeds. The front axle features a 50° steering angle.

Four wheel drive is engaged and disengaged electrohydraulically (pushbutton) on R5 100 and R5 110 models, and mechanically (lever) on R5 130 and R5 150.

Increased traction is provided by front and rear differentials designed to engage in critical operating conditions, either mechanically (pedal operated), in the case of R5 130 and R5 150 models, or electrohydraulically (pushbutton operated) in the case of R5 100 and R5 110 models.

For maximum safety during transport duties, braking action applied to all four drive wheels will bring the machine to a stop with minimal effort and trouble.

R5 machines have no problem operating with heavy implements mounted to the rear linkage, as power from the engine is transmitted to the **rear wheels via heavy duty** epicyclic final drive units. **The R5 150 model has a rear axle with adjustable track width**, easily adapted to suit the type of crop and cultivation.

Low maintenance costs



Ease of maintenance is immediately apparent: **the hood opens simply by pushing a button on the front panel**, and the side panels are removable without any need for tools.

This ensures the engine can be exposed immediately and without difficulty, be it for the purpose of topping up the engine coolant, changing or

cleaning the air cleaner element, or servicing the radiators and coolers. All the servicing points for the engine itself are located on the right hand side, quickly and easily accessible. These include the engine oil filter and the dipstick - which can be checked without raising the hood.

To save additional time and trouble,

the recommended oil changes are particularly long: 500 hours for the engine oil, and 1200 hours for the transmission oil.

The cab filters are easily accessible, without the aid of tools, so air quality in the cab can always be kept at levels compatible with maximum environmental comfort.



- Simplified routine maintenance checks. The hood opens simply by pushing a button on the front panel. The side panels are removable without any need for tools.



 **SDF Service**



Customer satisfaction is central to the corporate strategy of SAME DEUTZ-FAHR, and begins the moment a prospective client crosses the threshold at one of our 3000 Dealerships and Authorized Service Centres worldwide.

We may impress customers with the quality and technology of our products, but it will be of little use unless we can meet their long-term expectations, operating a Sales and Service Network capable of turning Customer Satisfaction into a practical reality underpinned by excellence in standards of service, and above all, by the enthusiasm and professionalism of everyone in the organization.

SDF Service.
The name says it all.

The primary task of the SAME DEUTZ-FAHR service network is to respond to the needs of the customer swiftly, professionally and effectively: from negotiation of the purchase, through pre-delivery inspection to scheduled maintenance, repairs, an efficient parts service, and the ability to offer a wide range of accessories.

SDF original parts:
quality that pays.

 **SDF Parts**



TECHNICAL SPECIFICATION

Version	R5.100 4WD	R5.110 4WD	R5.130 4WD	R5.150 4WD																			
ENGINE	SDF 1000.4 WT TIER II	SDF 1000.6 W TIER II	SDF 1000.6 WT TIER II	SDF 1000.6 WTI TIER II																			
Cylinders/Displacement	n°/cm³	4/4000	6/6000	6/6000																			
Aspiration		Turbo	Naturally Aspirated	Turbo Intercooler																			
Max. homologated power (2000/25/CE)	HP/kW	96/70.5	101/74	126/92.6																			
Max. homologated power (ECE R24.03)	HP/kW	91/67	99/72.8	120/88.3																			
Rated speed	rpm	2300	2300	2350																			
Max. torque	Nm	367	390	479																			
Max. torque engine speed	rpm	1400	1400	1400																			
Torque backup	%	32	33	33																			
Cooling		liquid-oil																					
Engine control		electronic management																					
Air cleaner		dry with double element and cyclone prefilter																					
Silencer		with vertical exhaust																					
Fuel tank capacity std/opt	litres	140+180		160+140																			
DIMENSIONS AND WEIGHTS: (with rear tyres)	16.9 R34	16.9 R34	16.9 R38	18.4 R38																			
Max. length without link arms	mm	3783	4102	4264																			
Width min.- max.	mm	2000-2320	2082-2304	2170-2670																			
Max. height at cab	mm	2687	2687	2977																			
Ground clearance	mm	450	450	500																			
Wheelbase	mm	2375	2633	2750																			
Front track min.- max.	mm	1630-1734	1630-1734	1826-1944																			
Rear track min.- max.	mm	1602-1740	1602-1740	1794-1802																			
Weight with cab	kg	4055/3695	4320/3960	5450/5250																			
TRANSMISSION		single disc, self adjusting, hydrostatically operated																					
Gearbox clutch		5 synchronized gears, 3 gears ranges 15 FWD + 15 REV (R5 100 - 110)																					
Mechanical gearbox		5 synchronized gears, 4 gear ranges with creeper 20 FWD + 20 REV (R5 100 - 110)																					
Mechanical gearbox		4 synchronised gears, 3 gear ranges with creeper 16 FWD + 12 REV (R5 130 - 150)																					
Mechanical gearbox		4 synchronised gears with splitter, 3 gear ranges 24 FWD + 12 REV (R5 130 - 150)																					
Max. speed	km/h	40																					
Shuttle		mechanical																					
Rear differential lock		mechanical - epicyclic final drives																					
Lubrication		forced																					
15 FWD + 15 REV GEARBOX (R5 100 - 110) - SPEED IN KM/H AT ENGINE SPEED OF 2300 RPM WITH 16.9 R34 REAR TYRES																							
1 L	2 L	3 L	1 M	4 L	2 M	5 L	3 M	4 M	1 H	5 M	2 H	3 H	4 H	5 H									
1,72	2,31	3,08	3,72	4,39	5	5,92	6,66	9,48	11,08	12,79	14,9	19,83	28,23	38,08									
20 FWD + 20 REV GEARBOX WITH CREEPER (R5 100 - 110) - SPEED IN KM/H AT ENGINE SPEED OF 2300 RPM WITH 16.9 R34 REAR TYRES																							
1 CR	2 CR	3 CR	4 CR	1 L	5 CR	2 L	3 L	1 M	4 L	2 M	5 L	3 M	4 M	1 H	5 M	2 H	3 H	4 H	5 H				
0.5	0.68	0.9	1.29	1.72	1.74	2.31	3.08	3.72	4.39	5	5.92	6.66	9.48	11.08	12.79	14.9	19.83	28.23	38.08				
16 FWD + 12 REV GEARBOX WITH CREEPER (R5 130 - 150) - SPEED IN KM/H AT ENGINE SPEED OF 2300 RPM WITH 16.9 R34 REAR TYRES																							
1 L CR	2 L CR	3 L CR	1 L	4 L CR	2 L	3 L	4 L	1 M	2 M	3 M	4 M	1 H	2 H	3 H	4 H								
0.43	0.65	0.97	1.19	1.36	1.77	2.64	3.70	3.78	5.65	8.40	11.77	12.01	17.94	26.70	37.41								
PLEASE NOTE: REVERSE SPEEDS ARE EQUAL TO THE CORRESPONDING FORWARD SPEEDS WITHOUT CREEPER.																							
24 FWD + 12 REV GEARBOX WITH SPLITTER (R5 130-150) - SPEED IN KM/H AT ENGINE SPEED OF 2350 RPM WITH 18.4 R 38 REAR TYRES																							
1 L SP	1 L	2 L SP	2 L	3 L SP	3 L	4 L SP	1 M SP	4 L	1 M	2 M SP	2 M	3 M SP	3 M	4 M SP	1 H SP	4 M	1 H	2 H SP	2 H	3 H SP	3 H	4 H SP	4 H
0.97	1.19	1.45	1.77	2.17	2.64	3.04	3.10	3.70	3.78	4.63	5.64	6.89	8.40	9.66	9.85	11.77	12.01	14.71	17.94	21.90	26.69	30.69	37.41
PLEASE NOTE: REVERSE SPEEDS ARE SLIGHTLY LOWER TO THE CORRESPONDING FORWARD SPEEDS WITHOUT UNDERDRIVE.																							

REAR P.T.O.	
Clutch	multiple discs in oil bath with independent engagement
Speed	rpm 540 - 1000
BRAKES AND STEERING	
Brakes	oil-immersed disc brake on all four wheels
Parking brake	multidisc oil-immersed - mechanically actuated
Hydrostatic steering	reactive type with dedicated pump
Steering angle	4WD 50°
FRONT AXLE	
Drive engagement	mechanical or electrohydraulic (R5 100 - 110)
Front differential lock	mechanical or electrohydraulic (R5 100 - 110)
HYDRAULIC LIFT	
Rear hitch control	mechanical
Maximum lifting capacity	kg R5 100: 3800/5000 - R5 110: 4700/6200 R5 130 - 150: 5400/7000
Pump delivery	l/min. R5 100 - 110: 58 - R5 130 - 150: 68
Auxiliary hydraulic control valves	(ways) 4 / 6
3 point linkage (link arms and top link)	fixed hitching balls - automatic hitching
RH link arm and top link	mechanically regulated
DRIVING POSITION	
Cab	suspended on 4 silent-block, ventilation, 2 doors, front, rear wiper and high visibility roof
Instruments	analog
Cab conditioning	heating and air conditioning
Driver's seat	with longitudinal, height and driver's weight adjustment

DEALER CONTACT



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Company with
Quality System Certified
in compliance with
ISO 9001:2000



The above specifications refer to tractors with all available equipment. For standard equipment and options, refer to the current price list and ask your local dealer for details.