





## ENGINES

CURSOR 13 turbo intercooler euro 3 diesel injection/cycle with electronic unit injection pumps. Single block head, four valves per cylinder, light alloy pistons. Total displacement: 12.882 cm<sup>3</sup>. Bore for stroke: 135 x 150 mm. 6 in-line cylinders. Water cooling. Viscostatic cooling fan. Dry air filter with safety cartridge. Vertical muffler

	66.38	66.42	66.44	66.48	66.54*
Model	IVECO F3B	IVECO F3B	IVECO F3B	IVECO F3B	IVECO F3B
Max. power (EEC)	280 kW ( 380 HP)	309 kW (420 HP)	324 kW (440 HP)	353 kW (480 HP)	397 kW (540 HP)
Corresponding rpm	1.900	1.900	1.900	1.900	1.900
Max. torque (EEC)	1.800 Nm (183 kgm)	1.900 Nm (194 kgm)	2.100 Nm (214 kgm)	2.200 Nm (224 kgm)	2.350 Nm (240 kgm)
Corresponding rpm	1.000-1.440	1.000-1.440	1.000-1.440	1.000-1.440	1.000-1.690
Turbine	WG Waste Gate		VGT variable geometry		

\*Requires additional engine radiator, for extremely hot climate (>42°C).



## GEARBOX

Manual gear **ZF 16 S 2220 TO** for HD8 66.38 / HD8 66.42 / HD8 66.44 and **ZF 16 S 2520 TO** for HD8 66.48 / HD8 66.54 - with servoshift, 16 synchronised forward speeds + 2 reverse.

		Speed [kph] at maximum power																		
		Gears																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	RM	RM	
ZF 16 S2220TO ZF 16 S 2520TO	Gear ratios	13,80	11,54	9,49	7,93	6,53	5,46	4,57	3,82	3,02	2,53	2,08	1,74	1,43	1,20	1,00	0,84	12,92	10,80	
	Rear axle ratio	1:3,793	7,5	8,9	10,9	13,0	15,8	18,9	22,5	27,0	34,1	40,7	49,5	59,2	72,0	85,9	103,0	122,7	8,0	9,5
		1:4,229	7,1	8,5	10,3	12,3	15,0	17,9	21,4	25,6	32,4	38,7	47,0	56,2	68,4	81,5	97,8	116,4	7,6	9,1
		1:5,009	5,7	6,8	8,2	9,8	11,9	14,3	17,1	20,4	25,8	30,8	37,5	44,8	54,6	65,0	78,0	92,9	6,0	7,2
		1:5,558	5,1	6,1	7,4	8,9	10,8	12,9	15,4	18,4	23,3	27,8	33,8	40,4	49,2	58,6	70,3	83,7	5,4	6,5
		1:6,095	4,6	5,6	6,8	8,1	9,8	11,7	14,0	16,8	21,2	25,3	30,8	36,8	44,8	53,4	66,1	76,3	5,0	5,9
		1:6,588	4,3	5,1	6,3	7,5	9,1	10,9	13,0	15,5	19,6	23,4	28,5	34,1	41,5	49,4	59,3	70,6	4,6	5,5



## P.T.O.

On request:

Gearbox	ZF16S2220TO-ZF16S2520TO	Max. torque	Application
P.T.O.	Ratio	Nm.	
ZF NH/1b	0,91/1,09:1	1000	For tipping unit pumps, pumps for cranes, ecc..
ZF NH/1c	0,91/1,09:1	1000	For tipping unit pumps, unit pumps for concrete, pumps for cranes, ecc..
ZF NH/4c	1,17/1,40:1	430	For tipping unit pumps, ecc..
ZFN221/10bpl+N353/1c	1,75/2,09:1+0,91/1,09:1	560+600	double PTO for concrete pumps

**ZF NMV1 221 Power take-off** (ratio 1,55:1) max available torque 1300 Nm for concrete pumps (only with gear ZF16S2520TO).



## CLUTCH

Single dry plate, diameter 17". Pull type engagement with diaphragm spring. Hydro-pneumatic power steering engagement control, with driven disk wear recovery slave cylinder.



## TRANSFER

Mechanical with two ratios. It consists of a series of helical spur gears, mounted on three propeller shafts, engaged with each other. Differential can be locked by pneumatic control.

Transmission ratio: 1:1 - 1:1,6

Front/rear torque distribution ratio: 1:4,0





## ELECTRICAL SYSTEM

Voltage: 24 V  
 Alternator generator 90 A - 28 V (2520 W).  
 Accumulators: 2 in series, 143 Ah.  
 Starter motor 24 V 5,5 kW.  
 Mechanically controlled electrical circuit breaker.  
 1 electrical joint 7-pole(ISO 7638) for trailer ABS(if applicable).  
 1 electrical joints 15-pole(ISO 12089-4091) for trailer lighting (if applicable).  
 Electrical provision for outfitters.  
 Provision for diagnostics.  
 Provision for radio/cb (without speakers)  
 Glow plug for cold start.

### On request:

170 Ah accumulators;  
 143 Ah tropicalised accumulators;  
 Reverse alarm;  
 Electric main current cut-off switch.



## CAB

White cab with hydraulic tipping. Built in moulding fiberglass with tubular steel armature. Tested on the most demanding off road routes. Cab suspension with guiding arms, 4 helicoidal springs, double action shock absorbers, anti-roll bar and end-of-stroke pads. Internal panels completely washable and fireproof. 4-speed ventilation and heating system with air recirculation system.

Collapsible first step. Electric power windows on driver and passenger doors. Driver seat with pneumatic suspension and seat belt. Mechanical passenger with seat belts. Tinted athermic windows. Steering wheel adjustable in height and angle.

### On request:

Car radio RDS, CD;  
 Car radio RDS, CD, MP3, Blue Tooth technology;  
 Compressed air quick coupling for cab cleaning;  
 Roof hatch;  
 Air conditioning;  
 Centralized closing of the doors with remote control;  
 Extra colour cab: metallic / non-metallic;  
 Heated and electric powered rear view mirrors;  
 Cab rear window;  
 External sun visor.



## SERVICE DATA(I)

Engine oil sump and filters .....	28
Gearbox oil: ZF 16S2220TO/ZF 16S2520TO .....	13
Power steering oil .....	8,5
Cab tipping oil .....	1
Clutch circuit oil .....	0,5
Integral PTO oil .....	3
Intermediate axle with final red. oil .....	27
Rear axle with final red. oil .....	16
Cooling system water .....	33
Diesel .....	300



## INSTRUMENTATION

Dashboard and ergonomic instrument board contain the function buttons and the identification commands.

**Indicator lights:** engine oil low pressure, alternator charging low, main beam lights, side lights, engine warm-up, rear fog light, hazard lights, tractor turn indicators, trailer turn indicators (if applicable), rotating lights, cab lifted, axles differential locked, differential lock, front brakes air pressure low, rear brakes air pressure low, trailer brakes air pressure low (if applicable), parking brake engaged, splitter (reduction on), slow speeds (1-4/9-12), power take-off on (if applicable) air filters clogged, power steering oil level low, rear view mirrors heated (if applicable), ABS, trailer ABS (if applicable), main steering circuit failure, steering auxiliary circuit failure.

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### DEALER

Characteristics and equipment are subject to changes without prior notice.



Technical data and general specifications - validity to be checked according to each individual country.