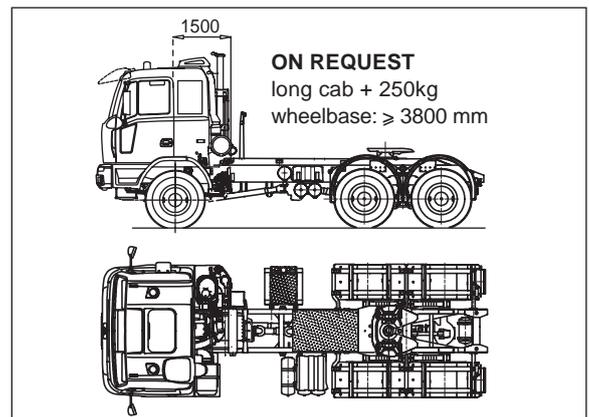
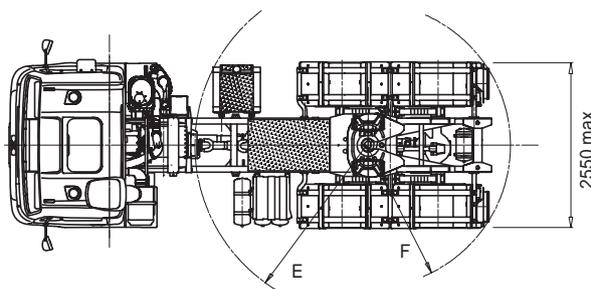
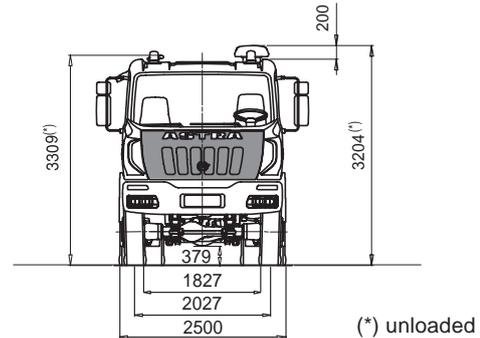
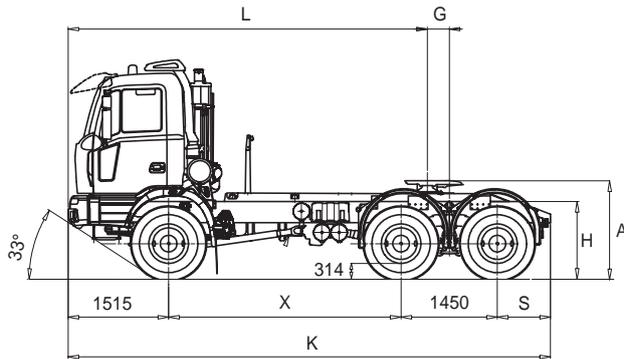


tractor 6x6
66.38T / 66.42T / 66.44T / 66.48T / 66.54T

DIMENSIONS (mm) short cab (Tyres 13R22.5 156/150G)

wheelbases	X	L		G		H		A(*)		E		F		TURNING DIAMETER
		min.	max.	min.	max.	unloaded	loaded	unloaded	loaded	front radius		rear radius		
										min.	max.	min.	max.	
B	3500	5155	5430	285	560	1252	1189	1572	1509	2355	2630	2131	2365	17450
C	3800	5415	5710	305	600	1252	1189	1572	1509	2615	2910	2147	2400	18250

(*) With swivelling fifth wheel + 100 mm


WEIGHT (kg)

Distribution net weight (*)				Max. technical weight					
wheelbases	1 st axle	2 nd +3 rd axle	net weight	1 st axle	2 nd + 3 rd axle	Fifth Wheel	Tractor	Gross Combination Weight	
B	5810	5260	11070	8000	8500 9000 (1)	32000	29930	41000 (2)	104000
C	5850	5250	11100				29900		

(*)Weight including oil, fuel, spare wheel, driver Kg.75

 (1) With tyres 1st axle 385/65R22,5 160J or 365/85R20166G. Other tyres available, subject to the Astra technical office approval.

(2) HD8 66.48 and HD8 66.54 only at max speed 50 km/h. Michelin/Pirelli tyres. Higher speeds are allowed with load reductions subject to the Astra Technical office approval.



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 cm³. 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)	279 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 66.44 and **ZF 16 S 2520 TO** for HD8 66.48 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 S 2220 TO ZF 16 S 2520 TO	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	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).
Power take off at flywheel (ratio 1,29:1) max available torque 900 Nm for concrete mixers.



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



AXLES

FRONT: steering cast iron type; with double reduction, central with bevel pinion-crown, side by means of epicycloid assembly in wheel hubs.

REAR: Two drive axles in tandem with double reduction, central by bevelled pair and final by epicycloid group in wheel hubs.

The intermediate axle is fitted with distributor that distributes torque between the two axles Differential lockable by pneumatic control from driver's seat. The tandem is anchored to the chassis by silent block mounted torque arms.

On request:

Rear-axle ratio 1:3.793

Rear-axle ratio 1:4.229

Rear-axle ratio 1:5.009

Rear axle ratio 1:5.558

Rear-axle ratio 1:6.095

Rear-axle ratio 1:6.588



SUSPENSIONS

FRONT

Parabolic leaf springs with bushings, 4 leaves 24x90 mm, with hydraulic shock absorbers.

Standard stabiliser bar.

On request:

Reinforced conventional springs. 10 leaves 15x90 mm.

Reinforced parabolic springs, n° 5 leaves 24x90 mm.

REAR

Parabolic springs, swivelling on central pin: 4 leaves 40x100 mm, supplemented by torque bars and stiffening brackets.

On request:

Stabiliser bar on 2nd axle.

Stabiliser bar on 3rd axle.

Extra-reinforced conventional springs, 10 leaves 25x100 mm.



CHASSIS

Special steel with high elasticity limit, two flat and parallel side members width 820 mm., C section 320x90x10mm, cross members riveted to the frame.

Steel front bumpers with headlamp protection grids, front manoeuvring hook, rear underrun bar, steel fuel tank capacity 300 litres. Fifth wheel helper frame, spot and side alighting step. rubber mudguards on 2nd and 3rd axles, toolbox, side winch for spare wheel.

On request:

Rapid attachment for compressed air for tyres'inflation.

Rear manoeuvring hook.

Fixed 3½" fifth wheel.

Swivelling 3½" fifth wheel.

Front bumper climbing step.



STEERING

Hydraulic power steering ZF 8098 with variable ratio 1:22.2/1:26.2 with auxiliary cylinder.

Hydraulic pump with gears flanged to engine.

Steering linkage with self lubricating floating joints.

Height and inclination mechanical adjustable steering wheel.



PNEUMATIC SYSTEM

Two-cylinder 630 cc compressor , APU (Air Processing Unit) that includes: regulation valve set at 10.3 bar, drier, 4-way safety valve, pressure reduction valve for parking circuit and services. 3 air tanks, capacity 30 litres + 2 with 20 litres. ABS system and EBL (Electronic Brake Limiter)



TYRES

FRONT: 13R22,5 156/150 G Single tubeless

REAR: 13R22,5 156/150 G Twin tubeless

Spare wheel on the chassis.

Other Possible combinations to be checked with Astra technical office:

TYRES	ASSEMBLY	
	FRONT	REAR
13 R 22,5 156/150G		
12 00 R 20 156/150G	S	D
315/80 R 22,5 156/150G		
365/85 R 20 164G	S	
13 R 22,5 156/150G		
12 00 R 20 156/150G		D
365/80 R 20 160K	S	
385/65 R 22,5 158K		
315/80 R 22,5 156/150G		D
395/85 R 20 168G	S	
525/65 R 20,5 173F		S
16 00 R 20 173G	S	S
16 00 R 20 163G	S	
24 R 20,5 176F		S

S single

D double

Other tyres available, subject to the Astra technical office approval.



BRAKES

Front and rear "duo-duplex" self-adjusting wedge type brakes with automatic play take-up. Total net braking surface 9.276 cm². ABS system.

Service brake: Pedal controlled air brake, acting on all wheels, three independent circuits, one for 1st axle, one for 2nd and 3rd axle and another for the semi-trailer.

Emergency brake: Incorporated in service brake.

Parking brake: Manual spring-type mechanical with pneumatic control acting on 2nd and 3rd axle wheels.

IVECO BRAKE TURBO engine brake:

HD8 440/480 cv braking power 255 kW (347 cv)

On request:

Hydraulic intarder.

1st axle immobiliser system.

OFF/ROAD button for excluding ABS for speed < 15 kph.





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 semi-trailer ABS.
 1 electrical joints 12-pole(ISO 12089-4091) for semi-trailer lighting.
 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, semi-trailer turn indicators , rotating lights,cab lifted,axles differential locked, differential lock, front brakes air pressure low, rear brakes air pressure low, semi-trailer brakes air pressure low, 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), tractor ABS, semi-trailer ABS, main steering circuit failure, steering auxiliary circuit failure.

ASTRA Veicoli Industriali

Via Caorsana, 79
 29100 Piacenza (Italy)
 Tel. ++39-523/5431
 Fax ++39-523/59.17.73
 www.astraspa.com

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.