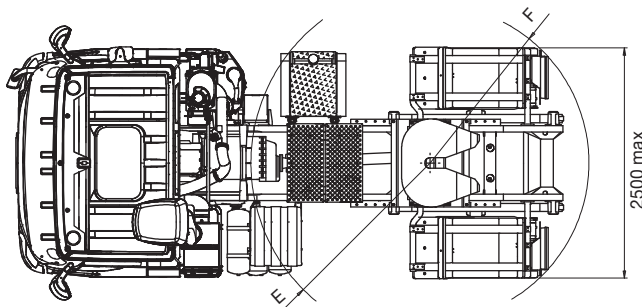


(*) unloaded


DIMENSIONS (mm) (Tyres 315/80R22.5 156/150K)

X	K	G (1)		H		A (*)		E (1)	F (1)	TURNING DIAMETER	
		std	unloaded	loaded	unloaded	loaded	std			std	sidewalks
3500	5975	500	1145	1134	1455	1343	1945	1765	12900	14600	
4200	6675								13800	15500	

(1) Standard fifth wheel position. In case of different positioning needs, the quote may change in relation with the technical GVW of the vehicle. Values to be confirmed in combination with the semitrailer.

(*) With swivelling fifth wheel + 100 mm


WEIGHT (kg)

X	Distribution net weight (**)			Max technical weight				
	1 st axle	2 nd axle	NET WEIGHT	1 st axle	2 nd axle	Weight on fifth wheel	Tractor	Gross combination weight
3500	5225	2630	7855	8000	9000	12145	20000 (3)	55000
4200	5275	2675	7950	8500 (1)	(2)	12050		

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

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

 (2) With tyres 1st axle 385/65R22,5 160 J and reinforced springs (OPT). Other tyres available, subject to the Astra technical office approval.

(3) Only at max speed 70 Kph with Continental/Michelin tyres. Higher speeds are allowed with load reductions subject to the Astra Technical office approval.



ENGINES

CURSOR 13 turbo intercooler diesel injection/cycle with electronic unit injection pumps. 6 in-line cylinders. Single block head, four valves per cylinder, light alloy pistons. Total displacement: 12.882 cm³. Bore for stroke: 135 x 150 mm. Water cooling. Viscostatic cooling fan. Dry air filter with safety cartridge. Vertical muffler. Emissions according to 5 regulation norms SCR (Selective Catalytic Reduction) system composed of catalytic muffler, AdBlue-tank, injection and control system.

	42.41T	42.44T	42.48T	42.52T	42.56T
Model	IVECO F3B E3681D	IVECO F3B E3681G	IVECO F3B E3681F	IVECO F3B E3681E	IVECO F3B E3681A
Max power (EEC)	302 kW (410 HP)	324 kW (440 HP)	353 kW (480 HP)	382 kW (520 HP)	412 kW (560 HP)
Corresponding rpm	1900				
Max torque (EEC)	1900 Nm (194 kgm)	2200 Nm (224 kgm)	2300 Nm (234 kgm)	2400 Nm (245 kgm)	2500 Nm (255 kgm)
Corresponding rpm	1000-1440				1000-1690
Turbine	WG Waste Gate	VGT Variable Geometry Turbine			



GEARBOX

Manual ZF Ecosplit 4 technology gearbox with servoshift, 16 synchronised forward speeds + 2 reverse:

ZF16S2220TO: HD9 42.41T/HD9 42.44T

ZF16S2520TO: HD9 42.48T/HD9 42.52T/HD9 42.56T.

On request:

ZF 16S2320TD

		Speed [kph] calculated at maximum power rpm																			
		Gears																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	RM1	RM2		
T BOX = 1	ZF16S2320TD	Gear ratios	16.41	13.80	11.28	9.49	7.76	6.53	5.43	4.57	3.59	3.02	2.47	2.08	1.70	1.43	1.19	1.00	15.36	12.92	
		Rear axle ratio	3.793	6.1	7.3	8.9	10.5	12.9	15.3	18.4	21.9	27.9	33.1	40.5	48.1	58.9	70.0	84.1	100.1	6.5	7.7
			4.229	5.5	6.5	8.0	9.5	11.6	13.7	16.5	19.6	25.0	29.7	36.3	43.2	52.8	62.8	75.4	89.8	5.8	6.9
			5.009	4.6	5.5	6.7	8.0	9.8	11.6	14.0	16.6	21.1	25.1	30.7	36.4	44.6	53.0	63.7	75.8	4.9	5.9
			5.558	4.2	4.9	6.1	7.2	8.8	10.5	12.6	14.9	19.0	22.6	27.7	32.8	40.2	47.8	57.4	68.3	4.4	5.3
			6.095	3.8	4.5	5.5	6.6	8.0	9.5	11.5	13.6	17.3	20.6	25.2	29.9	36.6	43.6	52.3	62.3	4.1	4.8
6.588	3.5	4.2	5.1	6.1	7.4	8.8	10.6	12.6	16.1	19.1	23.3	27.7	33.9	40.3	48.4	57.6	3.8	4.5			
T BOX = 1	ZF 16S2220TO/ZF 16S2520TO	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	3.793	7.3	8.7	10.5	12.6	15.3	18.3	21.9	26.2	33.1	39.6	48.1	57.5	70.0	83.4	100.1	119.1	7.7	9.3
			4.229	6.5	7.8	9.5	11.3	13.7	16.4	19.6	23.5	29.7	35.5	43.2	51.6	62.8	74.8	89.8	106.9	6.9	8.3
			5.009	5.5	6.6	8.0	9.6	11.6	13.9	16.6	19.8	25.1	30.0	36.4	43.6	53.0	63.2	75.8	90.2	5.9	7.0
			5.558	4.9	5.9	7.2	8.6	10.5	12.5	14.9	17.9	22.6	27.0	32.8	39.3	47.8	56.9	68.3	81.3	5.3	6.3
			6.095	4.5	5.4	6.6	7.9	9.5	11.4	13.6	16.3	20.6	24.6	29.9	35.8	43.6	51.9	62.3	74.1	4.8	5.8
6.588	4.2	5.0	6.1	7.3	8.8	10.6	12.6	15.1	19.1	22.8	27.7	33.1	40.3	48.0	57.6	68.6	4.5	5.3			



P.T.O.

On request:

Gearbox	ZF 16S2220TO-ZF 16S2520TO	Max torque	Application
P.T.O.	Ratio	Nm	
ZF NH/ 1b	0,91/ 1,09:1	1000	For tipping semitrailer pumps, crane, pumps, etc...
ZF NH/ 1c	0,91/ 1,09:1	1000	For tipping semitrailer pumps, crane, pumps, etc...
ZF NH/ 4c	1,17/ 1,40:1	430	For tipping semitrailer pumps, crane, pumps, etc...



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.

On request: Ceramic clutch 17"

AXLES

FRONT

Steering, hot moulding in high tensile steel. Wheel stud protection.

REAR

Two tandem drive axles. Double reduction: central with crown wheel and pinion and final by epicyclical group in wheel hubs. 2nd axle with torque distributor to the two rear axles. Lockable differentials by pneumatic control from driver seat. Tandem assembled to the chassis by reaction rods with silentblock.

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 springs with bushings, n° 4 leaves 24x90 mm, with hydraulic shock absorbers and standard stabilizer bar.

On request:

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

REAR

Parabolic springs with bushings, n° 4 leaves 24x90 mm + 1 leaf 50x90 mm, with telescopic shock absorbers and standard stabilising bar.

CHASSIS

In steel with high elasticity limit consisting of two flat parallel side members (width 820 mm.) with C section (320x70x8 mm) and cross members riveted to the frame. R.B.M. (Rail Bending Moment): 143.149 Nm (14.592 Kgm.). Front bumpers in steel with headlamp protection grids, front manoeuvring hook, rear underrun bar, steel fuel tank, capacity 300 litres, spot and side alighting steps, fifth wheel false frame, rubber mudguards on 2nd axle, toolbox.

On request:

- Rapid attachment for compressed air for tyres inflation.
- Rear manoeuvring hook.
- Fixed 2" fifth wheel h 150.
- Fixed 2" fifth wheel h 185.
- Side winch for spare wheel.

TYRES

FRONT: 315/80R22,5 156/150 K Single tubeless

REAR: 315/80R22,5 156/150 K Twin tubeless

Spare wheel on the chassis.

Other Possible combinations:

TYRES	ASSEMBLY	
	FRONT	REAR
13 R 22,5 156/150G 12 00 R 20 156/150G	S	D
385/65 R 22,5 160J (*)	S	
315/80 R 22,5 156/150K		D

S single

D double

(*) Mandatory with 9 ton front axle load.

Other tyres available, subject to Astra technical office approval.

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.

ABS system and EBL (Electronic Brake Limiter).

BRAKES

Front and rear "duo-duplex" self-adjusting wedge type brakes with automatic play take-up.

Total net braking surface 6.184 cm². ABS.

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

Emergency brake: Incorporated in service brake.

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

IVECO BRAKE TURBO engine brake:

HD9 410 braking power 200 kW (272 cv)

HD9 440/480/520/560 braking power 295 kW (408 HP)

On request:

Hydraulic intarder (42.44T / 42.48T / 42.52T / 42.56T).

1st axle immobiliser system.

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

STEERING

Hydraulic power steering ZF 8098 with variable ratio 1:22.2/1:26.2. Hydraulic pump with gears flanged to engine. Steering linkage with self lubricating floating joints. Steering column adjustable in height and angle.

ELECTRICAL SYSTEM

Voltage: 24 V

Alternator generator 90 A - 28 V (2520 W).

Accumulators: 2 in series, 170 Ah.

Starter motor 24 V 5,5 kW.

Mechanically controlled main circuit breaker.

ABS anti-lock system with 4-conduits and 4-electric valves control unit.

Phonic wheels and sensors on 1st and 2nd axle.

1 electrical joint 7-pole (ISO 7638) for semi-trailer ABS.

1 electrical joint 15-pole (ISO 12089-4091) for semi-trailer lighting.

Offset trim lights.

Electrical provision for outfitters.

Provision for diagnostics.

Provision for radio/cb (without speakers)

Glow plug for cold start.

On request:

170 Ah tropicalized accumulators;

Reverse alarm;

Electrically controlled main circuit breaker.

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



CAB

White cab built in galvanized pressed steel with hydraulic tilting up to 60°. Cab suspension with 4 helical springs with coaxial shock absorbers and integrated dampers, anti-roll bar and end-of-stroke pads. Tinted electric door windows. Internal panels completely washable and fireproof. Compressed air quick coupling for cab cleaning. 4-speed ventilation and heating system with air recirculation system. Air suspended 3-way adjustable driver seat with seat belts. Mechanical passenger seat with seat belts.

On request:

Air conditioning with anti-pollen filter
 Cab rear window.
 Car radio RDS, CD.
 Car radio RDS, CD with steering wheel controls
 Car radio RDS, CD, MP3 Bluetooth technology.
 External sun visor.
 Extra cab colour: to be specified in the order.
 Heated and electric powered rear view mirrors.
 Remote controlled and centralized closing of doors.
 Roof hatch.
 Rotating lights on top of the cab.
 White engine hood with central mask in IC575 colour.



INSTRUMENTATION

Trip Computer multifunction display. Multiplex electronic system for fundamental information for the driver: average speed, consumption and general information about the main components for ideal use of the vehicle.

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, semitrailer turn indicators, rotating lights, cab lifted, axles differential locked, differential lock, front brakes air pressure low, rear brakes air pressure low, semitrailer 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, semitrailer ABS, main steering circuit failure, steering auxiliary circuit failure, low urea level.



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
Rear axle with final red. oil	16
Cooling system water.....	33
Diesel	300
AD Blue.....	45

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