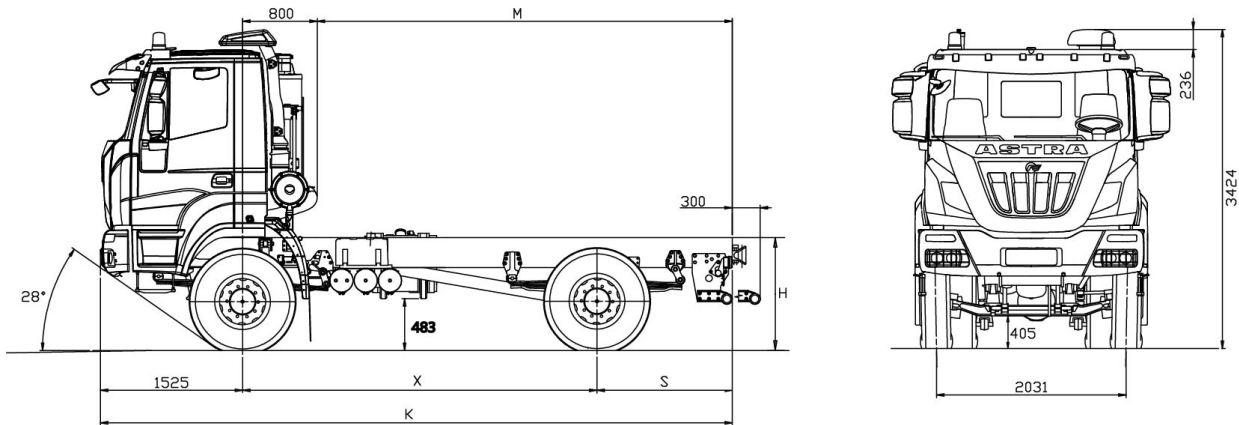



**chassis 4x2
HD42.44**

DIMENSIONS (MM)

X	K	M max(*)	S	H		TURNING DIAMETER (wall to wall)
				unloaded	loaded	
3800	6775	4450	1450	1178	1134	15500
4200	7575	5250	1850	1178	1134	16700
4600	8375	6050	2250	1178	1134	18000
5100	8875	6550	2250	1178	1134	19500

(*) M max.: indicative value to be confirmed by bodybuilder.
(Tyres 315/80R22.5)

WEIGHTS (KG)

X	Distribution net weight(*)			Max technical weight			
	First axle	Rear axles	Net Weight	First axle	Rear axles	Gross Vehicle Weight	Gross Combination Weight
3800	4920	2360	7280	8000 9000 (1)	13000	21000	55000
4200	4915	2415	7330				
4600	4925	2490	7415				
5100	4960	2510	7470				

(*) Net weight including driver with tanks filled to at least 90%, equipped with standard equipment according to the manufacturer's specifications and, if fitted, the mass of the bodywork, spare wheels and tool box.
(1) With tyres on front axles 385/65R22.5 or 325/95R24 and reinforced springs (OPT).

Higher speeds are allowed with load reductions subject to Astra technical office approval.
Other tyres available, subject to 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. Dry air filter with safety cartridge. Vertical muffler.

Max.power(EEC)	324 KW (440 HP) @ 1900 rpm
Max.torque(EEC)	2100 Nm (234 kgm) @ 900 - 1470 rpm
Turbine	VGT



GEARBOX

Manual **ZF 16S2220TO** Ecosplit 4 technology gearbox with servoshift, 16 synchronised forward speeds + 2 reverse:

On request:
ZF16S2320TD
ZF 16S2630TO

Gearbox model	Rear axle ratio	Speed [kph] calculated at maximum power rpm																	
		Gears / Gear ratios																	
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	rev. 1st	rev. 2nd
16S 2220 TO	4.227	13.8	11.54	9.49	7.93	6.53	5.46	4.57	3.82	3.02	2.53	2.08	1.74	1.43	1.2	1.00	.84	12.92	10.8
16S 2320 TD	4.227	16.41	13.8	11.28	9.49	7.76	6.53	5.43	4.57	3.59	3.02	2.47	2.08	1.7	1.43	1.19	1.00	15.36	12.92
	4.227	5.39	6.41	7.85	9.33	11.41	13.55	16.30	19.37	24.66	29.31	35.84	42.55	52.07	61.90	74.38	88.51	5.76	6.85

(*) Max limited speed 90 km/h. Other speeds available, subject to the Astra technical office approval.



CLUTCH

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

On request:
Ceramic clutch 17".



AXLES

FRONT
Steering, hot moulding in high tensile steel.

REAR
Driving axle with double reduction: central with bevel gear, final by planetary gear in wheel hubs. Cross-axle differential lock.
On request: Rear-axle ratio 1:3.793; 1:4.229; 1:5.009; 1:5.558; 1:6.095; 1:6.588.



SUSPENSIONS

FRONT
1st axle, parabolic springs, 4 leaves 24x90 mm, with hydraulic shock absorbers. Standard stabilizer bar.

On request:
Reinforced parabolic springs, 5 leaves 24x90 mm (mandatory with 9t version).

REAR
Parabolic springs, 4 leaves 24x90 mm + 1 leaf 50x90 mm, with hydraulic shock absorbers. Standard stabilizer bar.



CHASSIS

Special steel with high tensile strength limit, two flat and parallel side members (width 820 mm.), C section (320x70x8 mm), cross members bolted to the frame. R.B.M. (Rail Bending Moment): 143.149 Nm (14.597 Kgm.). Steel front bumpers with headlamp protection grids, front manoeuvring hook, rear underrun bar, steel fuel tank capacity 300 litres.



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:

13 R22.5 156/150K

385/65 R22.5 160J (*) + 315/80 R22.5 156/150K

325/95R24 162/160K (*)

(*) Mandatory with 9t front axle load.

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



BRAKES

Front and rear drum brakes, Duo-Duplex with automatic slack adjuster. ABS + EBL system.

Service brake: Pedal controlled air brake, acting on all wheels.

Solo vehicles: two independent circuits, one for 1st axle, one for 2nd axle.

Towing vehicles: three independent circuits, one for 1st axle, one for 2nd axle and another for the trailer.

Emergency brake: Integrated in service brake.

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

IVECO BRAKE TURBO engine brake: braking power 300 kW (402 HP).

On request:

Hydraulic Intarder.

1st axle immobiliser system.

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



STEERING

ZF 8098 quadrilateral power steering on front axle wheels with variable ratio 1:22.2/1:26.2 with auxiliary cylinder. Circuit with main hydraulic pump on engine and emergency pump on gearbox. Steering rods with self-lubricating joints. Height and inclination mechanical adjustable steering wheel.



ELECTRICAL SYSTEM

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

Accumulators: 2 in series, 180 Ah.

Starter motor 24 V 5.5 kW.

Mechanically controlled electrical circuit breaker.



CAB

Standard white short cab built in galvanized pressed steel with hydraulic tilting up to 60°. Cab suspension with 4 helicoidal springs with coaxial shock absorbers and integrated dampers, anti-roll bar and end-of-stroke pads. Tinted electric door windows. Mechanical rear view mirrors, wide angle mirrors and front view mirror. 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.