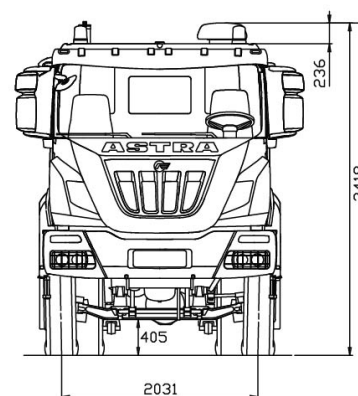
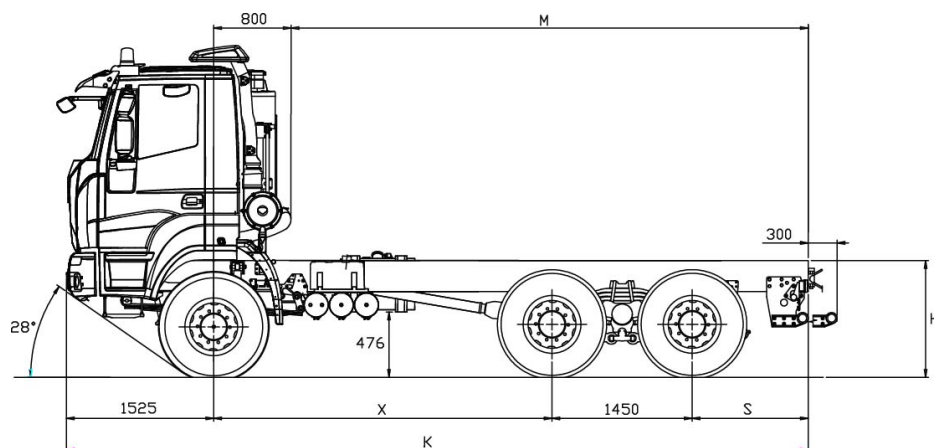




chassis 6x4 HD64.42



DIMENSIONS (MM)

X	K	M max(*)	S	H		TURNING DIAMETER (wall to wall)
				unloaded	loaded	
3200	7375	5050	1200	1198	1131	15900
3500	7675	5350	1200	1198	1131	16800
3800	7975	5650	1200	1198	1131	17800
4100	8275	5950	1200	1198	1131	18700
4500	8675	6350	1200	1198	1131	20000
4750	9625	7300	1900	1198	1131	20700

(*) M max.: indicative value to be confirmed by bodybuilder
(Tyres 13R22.5)

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
3200	4860	4730	9590	8000 9000 (1)	32000 (2)	40000 (2)	121.500
3500	4890	4730	9620				
3800	4930	4740	9670				
4100	4950	4745	9695				
4500	4985	4745	9730				
4750	4965	4845	9810				

(*) 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).

(2) With tyres 325/95R24 or max speed limited to 70Km/h depending on pneus type and brand. The data shown are indicative and non-binding.

(3) For manual gearbox with additional parking brake air chambers. For automated gearbox check mission and configuration with Technical Dept.

Payload and vehicle dimension data must always be verified during final testing. Do not use the drawing in the present sheet to design the equipment. Astra reserves the right to make any changes at any time and without notice.



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) 309 KW (420 HP) @ 1900 rpm
Max.torque(EEC) 1900 Nm (224 kgm) @ 900 - 1500 rpm
Turbine with waste gate valve



GEARBOX

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

On request:

Automated ZF Astronic 16S2630 TO, 16 synchronised forward speeds + 2 reverse.

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
16AS 2630 TO		14.12	11.68	9.54	7.89	6.52	5.39	4.57	3.78	3.09	2.56	2.09	1.73	1.43	1.18	1	.83	13.07	10.81
	4.227	6.51	7.87	9.64	11.66	14.11	17.06	20.12	24.33	29.76	35.92	44.00	53.16	64.31	77.94	91.97*	110.80*	7.04	8.51
16S 2220 TO		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
	4.227	6.66	7.97	9.69	11.60	14.08	16.84	20.12	24.07	30.45	36.35	44.21	52.85	64.31	76.64	91.97*	109.48*	7.12	8.52

(*) 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 disk wear recovery slave cylinder.



AXLES

FRONT

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

REAR

Two drive axles in tandem. Double reduction: central with beveled pair, final in the wheel hubs by means of epicycloidal assembly. Torque distribution between the axles by means of a distributor fitted on the intermediate axle. Differential lockable from driver seat. Tandem assembled to the chassis by reaction rods with silentblocks.

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, n° 4 leaves 24x90 mm, with hydraulic shock absorbers. Standard stabilizer bar.

On request:

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

REAR

Parabolic springs, swivelling on central pin: n° 4 leaves 40x100 mm.

On request:

Stabilizer bar on 2nd axle.

Stabilizer bar on 3rd axle.

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



CHASSIS

Special steel with high tensile strength limit, two flat and parallel side members (width 820 mm.), C section (320x90x10mm), cross members bolted to the frame. R.B.M. (Rail Bending Moment): 202.020 Nm (20.593 Kg.m.). Steel front bumpers with headlamp protection grids, front manoeuvring hook, rear underrun bar, steel fuel tank capacity 300 litres.



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:

315/80R22.5 156/150K

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

Characteristics and equipment are subject to changes without prior notice

The data shown are indicative and non-binding. Payload and vehicle dimension data must always be verified during final testing.

325/95R24 162/160K (*)

(*) Mandatory with 9 ton front axle load

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 + EBL system.

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

Solo vehicles: two independent circuits, one for 1st axle, one for 2nd and 3rd axle;

Towing vehicles: three independent circuits, one for 1st axle, one for 2nd and 3rd axle and another for the trailer.

Emergency brake: Incorporated in service brake.

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

IVECO BRAKE TURBO engine brake: braking power 255 kW (342 HP).

On request:

Hydraulic intarder.

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

Front and rear "simplex" self-adjusting brake system with no ABS system and no hydraulic intarder.



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

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 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.