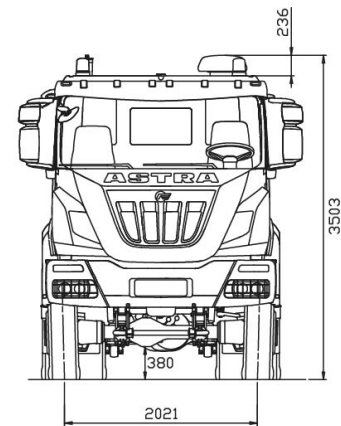
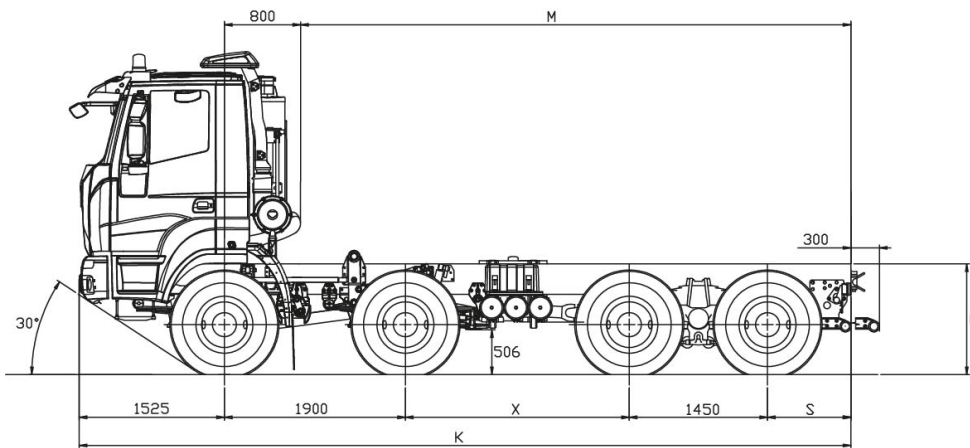




## chassis-cab 8x6 HD86.54



### DIMENSIONS (MM)

X	K	M max(*)	S	H		TURNING DIAMETER (wall to wall)
				unloaded	loaded	
2350	8425	6100	1200	1249	1189	19800
2600	8675	6350	1200	1249	1189	20600
2850	8925	6600	1200	1249	1189	21400
3100	9175	6850	1200	1249	1189	22200
3350	9425	7100	1200	1249	1189	23000
3600	9975	7650	1500	1249	1189	23800
4100	10475	8150	1500	1249	1189	25400

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

### WEIGHTS (KG)

X	Distribution net weight(*)			Max technical weight			
	Front axles	Rear axles	Net Weight	Front axles	Rear axles	Gross Vehicle Weight	Gross Combination Weight
2350	6990	4205	11195	16000 18000 (1) (2)	32000 (2)	50000 (2)	104000
2600	6985	4240	11225				
2850	6970	4270	11240				
3100	6975	4310	11285				
3350	6970	4335	11305				
3600	6955	4400	11355				
4100	6965	4445	11410				

(\*) 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 70 Km/h depending on pneus type and brand.

Higher speeds are allowed with load reductions 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 cm<sup>3</sup>. Bore for stroke: 135 x 150 mm. 6 in-line cylinders. Water cooling. Dry air filter with safety cartridge. Vertical muffler.

Max.power(EEC)	397 KW (540 HP) @ 1900 rpm
Max.torque(EEC)	2300 Nm (240 kgm) @ 1000 - 1690 rpm
Turbine	VGT



## GEARBOX

Manual **ZF 16S2520TO** Ecosplit 4 technology gearbox with servoshift, 16 synchronised forward speeds + 2 reverse:

**On request: ZF ASTRONIC 16AS2630TO - ALLISON HD4700:** only for wheelbase>4100mm

		Speed [kph] calculated at maximum power rpm																	
		Gears / Gear ratios																	
Gearbox model	Rear axle ratio	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	rev. 1st	rev. 2nd
<b>16AS 2630 TO</b>		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
<b>Off road slow</b>	<b>5.01</b>	3.93	4.75	5.81	7.02	8.50	10.28	12.13	14.66	17.94	21.65	26.52	32.04	38.76	46.97	55.42	66.78	4.24	5.13
<b>On road fast</b>	<b>5.01</b>	6.04	7.30	8.94	10.81	13.08	15.82	18.66	22.56	27.59	33.31	40.80	49.29	59.63	72.26	85.27	102.73*	6.52	7.89
<b>16S 2520 TO</b>		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	.84	12.92	10.8
<b>Off road slow</b>	<b>5.01</b>	4.02	4.80	5.84	6.99	8.49	10.15	12.13	14.51	18.35	21.91	26.65	31.85	38.76	46.19	55.42	65.98	4.29	5.13
<b>On road fast</b>	<b>5.01</b>	6.18	7.39	8.98	10.75	13.06	15.62	18.66	22.32	28.23	33.70	40.99	49.00	59.63	71.06	85.27	101.51*	6.60	7.90

(\*) 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".



## TRANSFER BOX

Mechanical with two ratios. Helical spur gears, mounted on three shafts, engaged with each other. Lockable differential by pneumatic control from driver seat. Air-oil cooler. Transmission ratio 1:0,913 - 1:1,407. Front/rear torque distribution ratio 1:2,6.



## AXLES

### FRONT

1st axle driving and steering, with double reduction: central by bevel gear, final by planetary gear in wheel hubs. 2nd axle in high tensile pressed steel, steering, not driving.

**On request:** Cross-axle differential lock.

Reinforced front axle: max technical weight 8 ton or 9 ton (with reinforced suspension). Available axle ratio: 5,01 - 5,47 - 5,96 - 6,28.

### REAR

Two driving axles in tandem, with double reduction: central with bevel gear, final by planetary gear in wheel hubs, interaxle and cross-axle differential lock. Tandem linked to the chassis by reaction rods with silentblocks.

**On request:**

Available rear-axle ratios: 1:3,793; 1:4,229 - 1:5,009 - 1:5,558 - 1:6,095 - 1:6,588.



## SUSPENSIONS

### FRONT

Parabolic springs, n° 3 leaves 26x90 mm, hydraulic shock absorbers. Standard stabilizer bar on 1st axle.

**On request:**

Stabilizer bar on 2nd axle.

Reinforced parabolic springs, n° 4 leaves 26x90 mm (mandatory with 9t version).

### REAR

Parabolic springs, swiveling on central pin: n° 4 leaves 40x100mm, torque bars and stiffening brackets. Standard stabilizer bar on 4th axle.

**On request:**

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 Kgm.). Steel front bumpers with headlamp protection grids, front maneuvering hook, rear underrun bar, rubber mud-guard 2nd axle, steel fuel tank capacity 300 litres.

Characteristics and equipment are subject to changes without prior notice  
Technical data and general specifications - validity to be checked according to each individual configuration



## 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

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 12.058 cm<sup>2</sup>. ABS + EBL system.

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

**Solo vehicles:** two independent circuits, one for 1st and 2nd axle, one for 3rd and 4th axle. **Towing vehicles:** three independent circuits, one for 1st and 2nd axle, one for 3rd and 4th axle and another for the trailer.

**Emergency brake:** Incorporated in service brake.

**Parking brake:** Mechanical spring-type with pneumatic control acting on 3rd and 4th axle wheels.

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

**On request:**

Hydraulic interarder.



## ELECTRICAL SYSTEM

Voltage: 24 V

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.