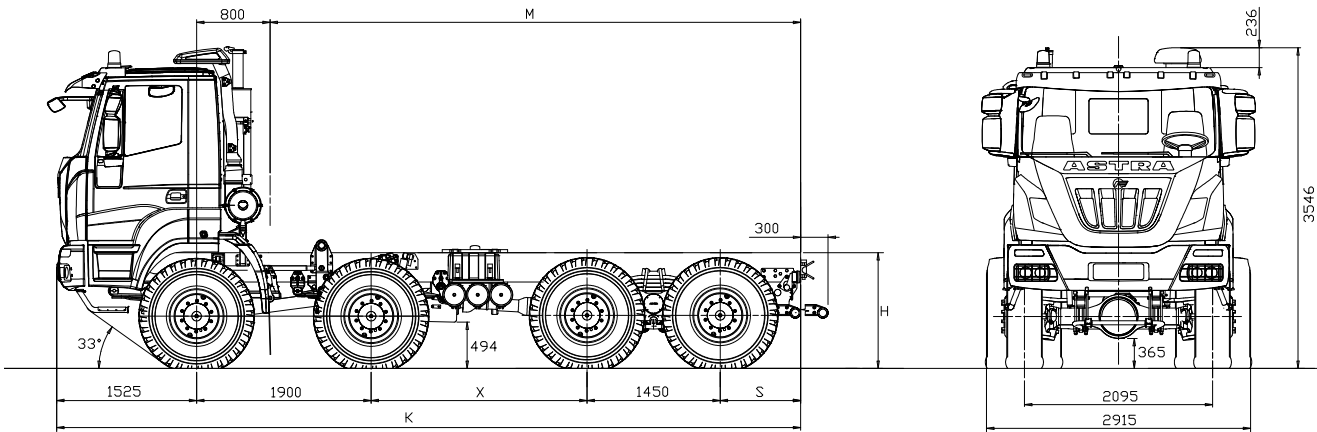



**chassis 8x6
86.48 / 86.54**

DIMENSIONS (mm)

X	K	M max (*)	S	S ON REQUEST	H		TURNING DIAMETER (wall to wall)
					unloaded	loaded	
2350	8425	6100	1200	875/1500	1320	1260	23130
2600	8675	6350	1200	875/1500			23990
2850	8925	6600	1200	875/1500			24860
3100	9175	6850	1200	875/1500			25730
3350	9425	7100	1200	1500			26610
3600	9975	7650	1500	-			27480
4100	10475	8150	1500	-			29230

(*) M Max: indicative value to be confirmed by bodybuilder.
(Tyres 14.00 R20)


WEIGHT (kg)

X	Net weight distribution (*)				Max technical weight			
	1 st axle	2 nd axle	3 rd + 4 th axle	NET WEIGHT	1 st + 2 nd axle	3 rd + 4 th axle	Gross Vehicle Weight	Gross Combination Weight
2350	4373	4054	5096	13523	20000 (1) 21000 (2)	40000 (1) 42000 (2)	60000 (1) 63000 (2)	up to 250000 (3)
2600	4423	4091	5047	13562				
2850	4469	4126	5006	13601				
3100	4511	4157	4971	13639				
3350	4550	4187	4941	13678				
3600	4586	4215	4916	13717				
4100	4652	4265	4878	13795				

(*) Weight including oil, fuel, spare wheel, driver Kg.75 , with 14.00R20 tyres.

(1) With tyres 14.00R20 and max speed limited to 70 Km/h.

(2) With tyres 14.00R20 and max speed limited to 40 Km/h.

(3) Depending on specific configuration and mission.

Higher speeds are allowed with load reductions subject to Astra technical office approval.

Other tyres available, subject to Astra technical office approval.

Technical data and general specifications - validity to be checked according to each individual configuration



ENGINES

CURSOR 13 turbo intercooler euro 3 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.

	86.48	86.54*
Model	CURSOR 13	CURSOR 13
Max. power (EEC)	353 kW (480 HP)	397 kW (540 HP)
Corresponding rpm	1.900 rpm	
Max. torque (EEC)	2.200 Nm (224 kgm)	2.350 Nm (240 kgm)
Corresponding rpm	1.000-1.440 rpm	1.000-1.690 rpm
Turbine	VGT Variable Geometry Turbine	

*Requires additional engine radiator, for extremely hot climate (>42°C).



GEARBOX

Manual gearbox **ZF 16 S 2520 TO** with servoshift, 16 synchronised forward speeds + 2 reverse

On request:

ZF ASTRONIC 16AS2630TO: HHD9 66.48 / HHD9 66.54

ALLISON HD4700: HHD9 66.48 / HHD9 66.54 (wheelbase>4100mm)

		Speed [kph] at maximum power (*)																		
		Gears																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	RV1	RV2	
ZF 16 S 2520 TO	Gear ratio	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 1:7,29	Transfer box 1:0,913	4,7	5,7	6,9	8,3	10,0	12,0	14,3	17,2	21,7	25,9	31,5	37,7	45,8	54,6	65,5	78,0*	5,1	6,1
		Transfer box 1:1,407	3,1	3,7	4,5	5,4	6,5	7,8	9,3	11,1	14,1	16,8	20,4	24,4	29,7	35,4	42,5	50,6	3,3	3,9
ZF 16 AS 2630 TO	Gear ratio	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	1,00	0,83	13,07	10,81	
	Rear axle ratio 1:7,29	Transfer box 1:0,913	4,6	5,6	6,9	8,3	10,0	12,2	14,4	17,4	21,2	25,6	31,4	37,9	45,9	55,5	65,5	79,2*	5,0	6,1
		Transfer box 1:1,407	3,0	3,6	4,5	5,4	6,5	7,9	9,3	11,3	13,7	16,6	20,4	24,6	29,8	36,0	42,5	51,4	3,3	3,9

(*) Max limited speed 70 km/h. Other speeds available, subject to the Astra technical approval.

		Speed [kph] at maximum power (*)								
		Gears								
		1	2	3	4	5	6	7	RV	
ALLISON HD 4700	Gearbox ratio	7,63	3,51	1,91	1,43	1,00	0,74	0,64	4,80	
	Rear axle ratio 1:7,29	Transfer box 1:0,913	8,6	19,2	34,3	45,8	65,5	88,6*	102,4*	13,7
		Transfer box 1:1,407	5,6	12,5	22,3	29,7	42,5	57,5	66,4	8,9

(*) Max limited speed 70 km/h. Other speeds available, subject to the Astra technical approval.



P.T.O.

On request:

Gearbox	ZF 16S 2520 TO	Max. torque	Application
P.T.O.	Ratio	Nm	
ZF NH/1b	0,91/1,09:1	1000	For tipping unit pumps, pumps for cranes, etc..
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...
ZF N221/10B-PL + NL/1c	1,75/2,09:1+0,91/1,09:1	560+600	double PTO for concrete pumps

ZF NMV 221 Power take-off (ratio 1,55:1) max available torque 1300 Nm for concrete pumps.

ZF NMV 221 Power take-off (ratio 0,98:1) max available torque 2000 Nm for concrete pumps.

Multipower power take-off (ratio 1,29:1) max available torque 900 Nm for concrete mixers.

Parker Chelsea 870 XAF power take-off (ratio 1,67:1) max available torque 908 Nm for Allison gearbox.

Parker Chelsea 870 XBF power take-off (ratio 1,56:1) max available torque 854 Nm for Allison gearbox.

Technical data and general specifications - validity to be checked according to each individual configuration



CLUTCH

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

On request:

Ceramic clutch 17".



TRANSFER BOX

Mechanical with two ratios. Helical spur gears, mounted on three propeller shafts, engaged with each other. Lockable differential by pneumatic control from driver seat.

Air-oil cooler.

	480 HP	540 HP
Model	STEYR VG2700	
Transmission ratio	1:0,913 - 1:1,407	
Front/rear torque distribution ratio	1:2,6	



AXLES

FRONT

1st Kessler axle, driving and steering, steel housing. Max technical weight 10 ton. 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.

REAR

Two Kessler driving axles in tandem. Max technical weight 40 ton. Double reduction: central with bevel gear, final by planetary gear in wheel hubs. Tandem linked to the chassis by reaction rods with silentblocks.

Rear axle ratio 1:7,29.



SUSPENSIONS

FRONT

Parabolic springs, 4 leaves 26x90 mm, hydraulic shock absorbers. Stabilizer bar on 1st axle.

On request:

Stabilizer bar on 2nd axle.

REAR

Parabolic springs, swivelling on central pin: 5 leaves 40x100 mm.

Stabilizer bar on 4th axle.

On request:

Stabilizer bar on 3rd axle.



CHASSIS

Special steel with high tensile strength limit, two flat and parallel side members (width 820 mm.), twin C section (320x90x10+6mm), cross members bolted to the frame. R.B.M. (Rail Bending Moment): 300.122 Nm (30.604 Kgm). Steel front bumpers with headlamp protection grids, front manoeuvring hook, rear underrun bar, steel fuel tank capacity 300 litres.

On request:

Rapid pneumatic connection for tyre inflation.

Rear underrun bar in set back position.

Rear manoeuvring hook.

Rear automatic towing hook.

Rubber mudguards on 2nd and 3rd axle.

Front bumper climbing step.



TYRES

FRONT: 14.00R20 Pirelli PS 22 Single tubeless

REAR: 14.00R20 Pirelli PS 22 Twin tubeless

Spare wheel on the chassis.

Other tyres available, subject to the 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 + 2 with 20 litres. ABS system and EBL (Electronic Brake Limiter).



BRAKES

Front disc brakes, 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 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: Integrated in service brake.

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

IVECO BRAKE TURBO engine brake:

HHD9 480/540 HP braking power 300 kW (402 HP).

On request:

Hydraulic interarder.

1st + 2nd axle immobiliser system.

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



STEERING

Hydraulic power steering ZF 8099 with variable ratio 1:22.2/1:26.2, with 3 auxiliary cylinders mounted on axles.

Hydraulic pumps flanged to engine.

Steering linkage with self lubricating floating joints.

Emergency steering pump on transfer box.

Mechanically adjustable steering wheel for height and angle.





SERVICE DATA(I)

Engine oil sump and filters	28 (+2,5)
Gearbox oil	14,5
Power steering oil	18
Cab tipping oil	1
Clutch circuit oil	0,5
Transfer box oil	13
Front axle oil	22,5
Intermediate axle oil	21,5
Rear axle oil	22,5
Engine cooling water	33
Diesel	300



ELECTRICAL SYSTEM

Voltage: 24 V
 Alternator generator 90 A - 28 V (2520 W).
 Accumulators: 2 in series, 170 Ah.
 Starter 24 V 5,5 kW.
 Mechanically controlled electrical circuit breaker.
 Anti-block system ABS with 4 conduits and 4 electric valves electronic system.
 1 electrical joint 7-pole (ISO 7638) for trailer ABS (if applicable).
 1 electrical joints 15-pole (ISO 12089-4091) for trailer lighting (if applicable).
 Electrical provision for outfitters.
 Provision for diagnostics.
 Provision for radio/cb (without speakers)
 Glow plug for cold start.
On request:
 225 Ah accumulators;
 Reverse alarm.



CAB

Standard white short cab (AD/HD) 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 powered door windows.

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.

On request:

Air conditioning with anti-pollen filter.
 Cab rear window.
 Car radio RDS, CD.
 Car radio RDS, CD, MP3 Bluetooth technology.
 External sun visor.
 Extra colour cab: to be specified in the order.
 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

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, trailer turn indicators (if applicable), rotating lights, cab lifted, axles differential locked, differential lock, front brakes air pressure low, rear brakes air pressure low, trailer brakes air pressure low (if applicable), 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), ABS, trailer ABS (if applicable), main steering circuit failure, steering auxiliary circuit failure.

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DEALER

Characteristics and equipment are subject to changes without prior notice.



Technical data and general specifications - validity to be checked according to each individual configuration