

TECHNICAL DESCRIPTION



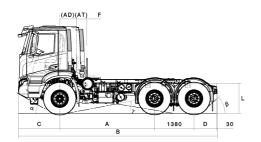
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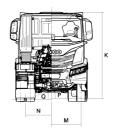


LIST OF LINKED VCB

VCB code	Gearbox	Wheelbase	Cabin	Drive
SUFIMIB2	16S 2220 TO	3300	AT-SX	LH
SUFIMIB4	16S 2220 TO	3300	AT-SX	LH
SUFIMID2	16TX 2240 TO	3300	AT-SX	LH
SUFIMID4	16TX 2240 TO	3300	AT-SX	LH
SUF1M2B2	16S 2220 TO	3500	AT-SX	LH
SUF1M2B4	16S 2220 TO	3500	AT-SX	LH
SUF1M2D2	16TX 2240 TO	3500	AT-SX	LH
SUF1M2D4	16TX 2240 TO	3500	AT-SX	LH

DIMENSIONS & WEIGHTS







	BEP		DIMENSIONS (mm)
Wheelbase (A)	LOII	3300 1380	3500 1380
Max length (B)	L001	6944	7169
Max width over wings (cab) (E)	W002	2550	2550
Front axle to back of cab - including snorkel (F)	l L064.1	940	940
Frame height at end of frame, unladen (L) (drum brakes)	H039	1155	1154
Frame height at end of frame, unladen (L) (disc brakes)	H039	1155	1154
Frame height at front axle, unladen (drum brakes)	H035	1118	1118
Frame height at front axle, unladen (disc brakes)	H035	1119	1119
Frame height at rear axle, unladen (drum brakes)	H037	1145	1145
Frame height at rear axle, unladen (disc brakes)	H037	1145	1145
Front overhang (C)	L016	1440	1440
Rear overhang (D)	L017	785	785
Minimum ground clearance (front) (P)	H015.1	337	337
Minimum ground clearance (rear) (Q)	H016.1	311	311
Overall height to top of cab, unladen (K) (drum brakes)		3135	3135
Overall height to top of cab, unladen (K) (disc brakes)		3136	3136
Turning diameter kerb to kerb	W011	16800	17400
Turning diameter wall to wall	W012	18400	19000
Front track (M) (disc brakes)		2043	2043
Front track (M) (drum brakes)		2053	2053
Rear track (N) (disc brakes)		1827	1827
Rear track (N) (drum brakes)		1831	1831
Approach angle α (°)	H010	30	30
Departure angle β (°)	H011	42	43
Ramp angle γ (°)	HI2	20	20
Side members thickness	H033/H034	10	10

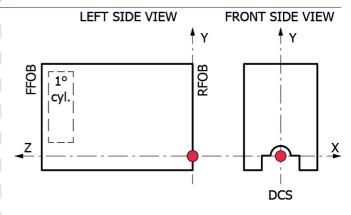
Side members max height	H032	309	309	
Side members flange width	W032	80	80	
Frame width at rear	W036	776	776	
	BEP		WEIGHTS (KG)	
Wheelbase	LOII	3300 1380	3500 1380	
Total vehicle kerb weight (drum brakes)		9762	9793	
Total vehicle kerb weight (disc brakes)		9647	9682	
Kerbweight on Front Axle (drum brakes)		5284	5287	
Kerbweight on Front Axle (disc brakes)		5241	5252	
Kerbweight on rear axle (drum brakes)		4478	4506	
Kerbweight on rear axle (disc brakes)		4406	4430	
G.V.W. (EC)	M002	26000	26000	
G.V.W. (Design)	M001	33500	32000	
Plated weight on rear axle(s) (Design)	M040.2	26000	26000	

Notes:
Weights are to standard configuration and include: chassis cab (or tractor), driver (75 kg), full fuel and Adblue tanks, tools kit and spare wheel (if present). The values of the plated weights / GVW can vary according to the markets and local homologations.

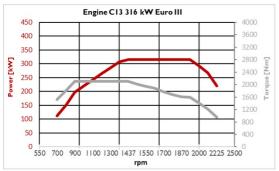
Wheelbase	Туре	Drawing
3300 1380	Left hand drive	5803032831
3500 1380	Left hand drive	5803032832

ENGINE

Identification Code	F3HGE611
Manufacturer	FPT Industrial
Commercial name	Cursor 13
Cycle	diesel
Injection type	Bosch CPN5-22/2
4 Stroke / 2 Stroke cycle	4 stroke
No. of cylinders	6
Cylinders layout	in line
Bore mm	135
Stroke mm	150
Total displacement cm ³	12.9
Exhaust gas treatment	sylencer
Weight (without oil / water) Kg	1230
Injection system	electronic common rail
Injection governor type	Bosch MD1 CE101
Cold starting type	THERMOSTARTER
Type of turbocharging	fix geometry with wastegate
Emissions control	EURO III
Cooling system	liquid



 ENGINE EMISSION EURO III opt. 06044



430 C13 - Cursor 13 - 430 CV - WG

Maximum power: 316 kW (430 HP) @ 1900 rpm Maximum torque: 214 Kgm (2100 Nm) @ 1100 rpm

The central electronic system controls the following functions:Engine preheating, fuel preheating, turbo, injection control, engine brake, control of engine speed and torque, data exchange OBD with ScanTool, engine diagnostic (onandoff-board), control of blink-code and failure indicator light on dashboard, control of engine idling speed and max. engine speed, data exchange with VCM (vehiclecontrol module), supervision of emission values.

DRIVELINE

GEARBOX

Gearbox model	Gearbox Type	Installation	Box material	Dry weight Kg	Clutch type	Max input	No. of	No. of	Shifting
						torque Nm	forward	reverse	_
							gears	gears	
16S 2220 TO	SYNCRONIZED	ENGINE FLANGED	ALUMINIUM	304.5 - (w/o	Dry clutch	2200	16	2	HH-Coupling
			ALLOY	retarder)	·				control
16TX 2240 TO	AUTOMATED	ENGINE FLANGED	ALUMINIUM	290 - (w/o		2200	16	2	
				retarder)					

GEAR RATIOS

Gearbox model	lst	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	llth	I2th	13th	I4th	I5th	I 6th	rev. Ist	rev. 2nd	
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	
16TX 2240 TO	14.68	12.05	9.92	8.14	6.78	5.56	4.57	3.75	3.22	2.64	2.17	1.78	1.49	1.22	1.00	0.82	14.14	11.61	

CLUTCH

Gearbox model	Туре	Outer diameter mm	Outer diameter (inches)		
16S 2220 TO	Single dry plate	430	17		
16TX 2240 TO	Single dry plate	430	17		

TYRES & WHEELS

Code	Tyres	Front	Rear	Load index	Rolling circumference m
20081	Standard	13R22,5	13R22,5	156/150	3.428
20885	Optional	385/65R22,5	315/80R22,5	164/	3.28
20795	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20013	Optional	325/95R24	325/95R24	162/160	3.747
20079	Optional	13R22,5	13R22,5	156/150	3.428
20497	Optional	12,00R20	12,00R20	154/149	3.42
20022	Optional	325/95R24	325/95R24	162/160	3.863
20790	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20746	Optional	325/95R24	325/95R24	162/160	3.747
20755	Optional	325/95R24	325/95R24	162/160	3.863

REAR AXLE RATIO

^{*:} Standard axle ratio

PERFORMANCE

Gearbox model 16S 2220 TO

A = Total Weights (solo vehicle) Kg - Max Gradeability %
B = Total Weights (vehicle+trailer) Kg - Max Gradeability %

Tyre: 20081 - 13R22.5 - Regional / Works	Efficiency: 0.91	No transfer box
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Axle Gear Gear Speed Speed **RPM RPM** Ratio Ratio Ratio km/h km/h at 80 at 90 40000 26000 I° ۱° 16° 16° km/h km/h 16 16° 3.79 13.8 0.84 7.47 122.75 1237 1392 100.00 3.21 51.78 1.85 4.23 13.8 0.84 6.69 109.98 1381 1554 100.00 3.81 59.91 2.24 4.67 13.8 0.84 6.06 99.62 1525 1715 100.00 4.39 69.03 2.62 92.86 76.97 13.8 0.84 1840 100.00 5.01 5.65 1636 4.83 2.90 13.8 0.84 5.09 83.67 1815 2042 100.00 5.52 92.15 3.35 5.56 13.8 6.09 0.84 4.65 76.39 1988 2237 100.00 6.17 100.00 3.77 13.8 0.84 70.81 2413 6.57 4.31 2145 100.00 6.75 100.00 4.15

IVECO T-WAY

^{*} Max Speed. Calculated speed on the basis of engine rpm and axle ratios. Real speed limits must take into account the speed index of the tyres: K = 110 km / h L = 120 $km / h \dot{M} = 130 km / h$

^{**} Theoretically calculated values, arising from the engine torque without considering the road-friction values and the stability limits of the vehicles. When calculating with more than one tyres or more than one axle ratio, availability of each combination must be checked. Speed and gradeability values are rounded.

	Gearbox model I6TX 2240												
Axle	Gear	Gear	Speed	Speed	RPM	RPM	-	١	E	3			
Ratio	Ratio	Ratio	km/h	km/h	at 80	at 90	260	000	400	40000			
	I°	16°	l l°	I6°	km/h	km/h	I°	16°	I°	16°	Ī		
3.79	14.68	0.82	7.02	125.75	1208	1359	100.00	3.08	56.14	1.76]		
4.23	14.68	0.82	6.29	112.67	1348	1517	100.00	3.68	65.37	2.15			
4.67	14.68	0.82	5.70	102.05	1488	1674	100.00	4.25	75.94	2.52			
5.01	14.68	0.82	5.31	95.12	1597	1796	100.00	4.68	85.37	2.80			
5.56	14.68	0.82	4.79	85.72	1772	1993	100.00	5.35	100.00	3.24			
6.09	14.68	0.82	4.37	78.26	1941	2183	100.00	5.99	100.00	3.66]		
6.57	14.68	0.82	4.05	72.54	2094	2356	100.00	6.56	100.00	4.03			

FRONT BUMPER

Steel front bumper

DISC BRAKES

DUO DUPLEX drum brake

Electronic braking system (EBS)

Front axle

Drum brakes 410 mm (410 x 180)

Friction area: 2884 cm2

Tandem

Drum brakes 410 mm (410 x 200)

Friction area: 3220 cm2

or

Disc brakes allround

Electronic braking system (EBS)

Brake Assist System (BAS)

ESP with OFF ROAD MODE available as option

AXLES

Position	Description
Front	5890/D OFF - Axle drop: 72 mm
Front	5890/T OFF - Assale con Drop di 72 mm
Rear	453291/2D - Tandem H.R. (Drum brake 2D)
Rear	453291 ADB - Tandem Hub Reduction (Disc Brakes)

SUSPENSIONS

Front parabolic suspension:

Standard capacity: 8.000 kg (options for 8.500 kg and 9.000 kg)

Rear parabolic suspension STD (semi-elliptic option):

Standard capacity: 26.000 kg

BATTERY

Electrics	
Voltage V	24
Alternator power V/A	28 / 90
Starter power kW	5.5
No. of batteries	2
Batteries capacity V/Ah	12 / 170

FUEL TANK 290 L

Fuelling

Capacity (I.) 290
Material Aluminium

390L FUEL TANK

Fuelling

Capacity (I.) 390
Material Aluminium

MISCELLANEOUS

THE AVAILABILITY OF THE FOLLOWING OPTIONS DEPENDS ON VERSIONS AND MARKETS:

SAFETY:

TPMS (on cluster): Tyre Pressure Monitoring System is an electronic system which monitors the air pressure inside a tyre and provides information on faults in real time to the driver. In addition to improving vehicle safety, TPMS helps the driver plan tyre maintenance and contributes to reducing fuel consumption.

ESP: Electronic Stability Program (ESP).

The **ESP** system acts in skidding phase, by adjusting the engine power and braking on individual wheels with different intensities so as to stabilise the position of the vehicle. It is effective both in case of sudden deviations from the trajectory and in correcting situations of oversteer or understeer, which may occur in case of incorrectly approaching a bend.

LDWS: Lane Departure Warning System

(LDWS). The Lane Departure Warning System beeps when the vehicle strays from the lines that mark the driving lane without the indicators being activated. The system is very effective in preventing accidents due to distraction or sleepiness.

FUEL CONSUMPTION OPTIMIZATION:

ECOSWITCH: Designed to reduce fuel consumption, **ECOSWITCH** is an important aid for the driver. It activates the "iEco program" in order to optimise gear shifting strategy and performance according to actual vehicle weight, assuring the best productivity under any operating condition.

ECO ROLL: On all type of incline (also on moderate one), the eco-roll function serves to open the driveline and retain the kinetic energy of the vehicle for longer or to slightly increase it by reducing the engine-drag torque that affects the impellers. If the vehicle subsequently slows down, the engine must increase the injected fuel quantity at a later point. Driver actions during an active rolling function such as accelerator pedal, brake actuation, changing to manual, or speed range selector actuation lead to the termination of the rolling function and the closing of the driveline. Depending upon the speed range, the last gear before the rolling phase can be engaged or a new gear can be calculated and engaged when the rolling function is terminated.

ECO ROLL works in the range (50km/h; 92km/h) and is indipendent from Cruise Control setting.

GPS-PREDICTIVE DRIVING (OPT Code 78878)

GPS-predictive driving is the driving strategy implemented in TraXon with predictive functionality to determine the optimal gear early for any driving situation, according to the electronic horizon information acquired via GPS by a provider and made available on the CAN bus. The electronic horizon acquires the current location of the vehicle via GPS and determines the route from topographical street maps (uphill gradient, curves, max permissible speed). GPS-predictive driving is used to improve the gear shifting and Eco-rolling strategy.

DRIVEABILITY:

ROCKING MODE (OPT Code 78507) TRAXON provides a Rocking function to have the clucth reating directly to accelerator pedal movements for rocking the vehicle out of a depression in the terrain in low grip conditions. When the Rocking mode is activated, it is possible to disengage the clutch immediately by releasing the accelerator pedal, roll back the vehicle and engage the clutch immediately again by depressing the acceletor pedal. The HMI provided for the Rocking mode includes: a dedicated switch to let the driver activate / deactivate the Rocking mode. A specific indication on the Instrument Cluster to inform when the Rocking function is active ("ROCK" indication in the transmission modes area).

OFF-ROAD MODE is an high mobility function with which the gearshifting logic allows higher rpms before shifting to faster gears, thus providing higher engine power and torque.

CREEPING MODE is an high mobility function with which the vehicle moves forward at minimum speed, simply by releasing the service brake pedal, useful for precise maneuvering operations at low speed (active via Quick Menu).



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