

# IVECO T-WAY

## TECHNICAL DESCRIPTION T-WAY EU 3



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AT380T47W H - Chassis Cab 6x6

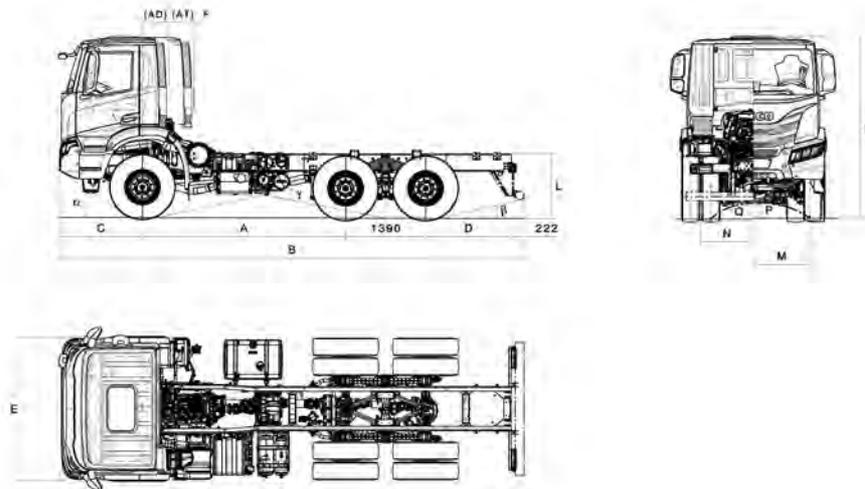
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# IVECO

**LIST OF LINKED VCB**

<b>VCB code</b>	<b>Gearbox</b>	<b>Wheelbase</b>	<b>Cabin</b>	<b>Drive</b>
SZGIE2B4	I6S 2520 TO	3500	AT-SX	LH
SZGIE2D4	I6TX 2240 TO	3500	AT-SX	LH
SZGIE3B4	I6S 2520 TO	3800	AT-SX	LH
SZGIE3D4	I6TX 2240 TO	3800	AT-SX	LH
SZGIE4B4	I6S 2520 TO	4200	AT-SX	LH
SZGIE4D4	I6TX 2240 TO	4200	AT-SX	LH
SZGIE5B4	I6S 2520 TO	4500	AT-SX	LH
SZGIE5D4	I6TX 2240 TO	4500	AT-SX	LH

## DIMENSIONS & WEIGHTS



### DIMENSIONS (mm)

Wheelbase (A)	3500	1390	3800	1390	4200	1390	4500	1390
Max length (B)	7849		8479		9109		9379	
Max width over wings (cab) (E)	2550		2550		2550		2550	
Front axle to back of cab - including filter (F)	900		900		900		900	
Frame height at end of frame, unladen (L)	1195		1195		1196		1195	
Frame height at front axle, unladen	1168		1168		1167		1166	
Frame height at rear axle, unladen	1186		1185		1185		1185	
Front overhang (C)	1440		1440		1440		1440	
Rear overhang (D)	1490		1850		2075		2075	
Minimum ground clearance (front) (P)	371		371		371		371	
Minimum ground clearance (rear) (Q)	311		311		311		311	
Overall height to top of cab, unladen (K)	3237		3237		3236		3235	
Turning diameter kerb to kerb	19400		20300		21500		22300	
Turning diameter wall to wall	21000		21900		23100		23900	
Front track (M)	1981		1981		1981		1981	
Rear track (N)	1831		1831		1831		1831	
Approach angle $\alpha$ (°)	34		34		34		34	
Departure angle $\beta$ (°)	13		11		9		9	
Ramp angle $\gamma$ (°)	23		21		20		21	
Side members thickness	10		10		10		10	
Side members max height	309		309		309		309	
Side members flange width	80		80		80		80	
Frame width at rear	776		776		776		776	

WEIGHTS (KG)

Wheelbase	3500 1390	3800 1390	4200 1390	4500 1390
Total vehicle kerb weight	10440	10523	10575	10624
Kerbweight on Front Axles	5760	5765	5801	5840
Kerbweight on Rear Axles	4680	4758	4774	4784
G.V.W. (EC)	26000	26000	26000	26000
G.V.W. (Design)	33500	33500	33500	33500
Plated weight on front axle (EC)	8000	8000	8000	8000
Plated weight on front axle (Design)	8000	8000	8000	8000
Plated weight on rear axle(s) (EC)	19000	19000	19000	19000
Plated weight on rear axle(s) (Design)	26000	26000	26000	26000
Max body & payload (Design)	23060	22977	22925	22876

**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	Type	Drawing
3500 1390	Left hand drive	5803035169
3800 1390	Left hand drive	5803035171
4200 1390	Left hand drive	5803035172
4500 1390	Left hand drive	5803035173

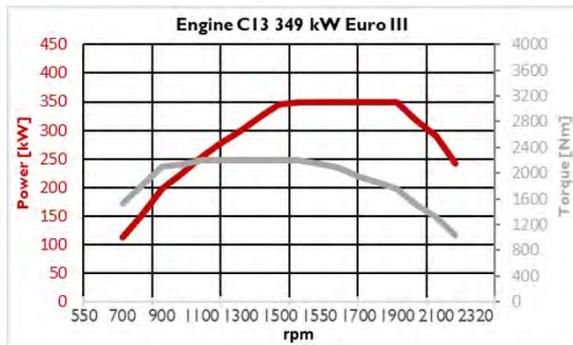
## MODEL COMPONENTS

### ENGINE

Identification Code	F3HGE611
Manufacturer	FPT Industrial
Commercial name	Cursor 13
Cycle	DIESEL
Injection type	DIRECT
4 Stroke / 2 Stroke cycle	4
No. of cylinders	6
Cylinders layout	IN-LINE
Bore mm	135
Stroke mm	150
Total displacement cm <sup>3</sup>	12.882
Exhaust gas treatment	syencer
Weight (without oil / water) Kg	1230
Injection system	Common rail
Cold starting type	THERMOSTARTER
Emissions control	EURO III
Cooling system	water



#### ENGINE EMISSION EURO III opt. 06044



#### 470 C13 - Cursor 13 - 470 CV - WG

Maximum power: 349 kW (475 HP) @ 1900 rpm

Maximum torque: 224 Kgm (2200 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 torque Nm	No. of forward gears	No. of reverse gears	Shifting
16S 2520 TO	SYNCRONIZED	ENGINE FLANGED	ALUMINIUM ALLOY	306 - (w/o retarder)	Dry clutch	2500	16	2	Manual shifting Single - H
16TX 2240 TO	AUTOMATED	ENGINE FLANGED	ALUMINIUM	290 - (w/o retarder)		2200	16	2	

#### GEAR RATIOS

Gearbox model	1st	2 <sup>a</sup>	3rd	4th	5 <sup>a</sup>	6	7 <sup>a</sup>	8	9	10	11 <sup>a</sup>	12.	13de	14	15th	16 <sup>a</sup>	R1	M.A. 2		
16S 2520 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	.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	Type	Outer diameter mm	Outer diameter (inches)			
16S 2520 TO	Single dry plate	430	17			
16TX 2240 TO	Single dry plate	430	17			

## MODEL COMPONENTS

### TYRES & WHEELS

Code	Tyres	Front	Rear	Load index	Rolling circumference m
20081	Standard	13R22,5	13R22,5	156/150	3.428
20115	Optional	395/85R20	395/85R20	168/	3.6
20885	Optional	385/65R22,5	315/80R22,5	164/	3.28
20168	Optional	14,00R20	14,00R20		3.826
20795	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20497	Optional	12,00R20	12,00R20	154/149	3.42
20430	Optional	14,00R20	14,00R20		3.826
20780	Optional	14,00R20	14,00R20	160/157	3.826
20846	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20216	Optional	12,00R20	12,00R20	154/149	3.42
20080	Optional	13R22,5	13R22,5	156/150	3.428

### REAR AXLE RATIO

Option code	05003	06017	06019 *	06021	06034	06036
Ratio	6.09	4.23	4.67	5.01	5.56	6.57

\*: Standard axle ratio

### PERFORMANCE

\* 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 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.

**A** = Total Weights (solo vehicle) Kg - Max Gradeability %

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

**Tyre: 20081 - 13R22.5 TYRES - Regional / Works**      **Efficiency: 0.91**      **Off road slow**

#### Gearbox model I6S 2520 TO

Axle Ratio	Gear Ratio 1°	Gear Ratio 16°	Speed km/h 1°	Speed km/h 16°	RPM at 80 km/h	RPM at 90 km/h	A		B	
							26000		40000	
							1°	16°	1°	16°
4.23	13.8	0.84	4.18	68.74	1396	1571	100.00	7.43	100.00	4.58
4.67	13.8	0.84	3.79	62.26	1542	1734	100.00	8.32	100.00	5.15
5.01	13.8	0.84	3.53	58.04	1654	1861	100.00	9.01	100.00	5.60
5.56	13.8	0.84	3.18	52.30	1835	2065	100.00	10.12	100.00	6.31
6.09	13.8	0.84	2.91	47.75	2010	2262	100.00	11.19	100.00	7.00
6.57	13.8	0.84	2.69	44.26	2169	2440	100.00	12.16	100.00	7.62

#### Gearbox model I6TX 2240 TO

Axle Ratio	Gear Ratio 1°	Gear Ratio 16°	Speed km/h 1°	Speed km/h 16°	RPM at 80 km/h	RPM at 90 km/h	A		B	
							26000		40000	
							1°	16°	1°	16°
4.23	14.68	0.82	3.93	70.42	1363	1533	100.00	7.22	100.00	4.44
4.67	14.68	0.82	3.56	63.78	1505	1693	100.00	8.10	100.00	5.01
5.01	14.68	0.82	3.32	59.45	1614	1816	100.00	8.77	100.00	5.44
5.56	14.68	0.82	2.99	53.57	1792	2016	100.00	9.86	100.00	6.14
6.09	14.68	0.82	2.73	48.91	1962	2208	100.00	10.90	100.00	6.81
6.57	14.68	0.82	2.53	45.34	2117	2382	100.00	11.84	100.00	7.42

**Tyre: 20081 - 13R22.5 TYRES - Regional / Works**      **Efficiency: 0.91**      **On road fast**

#### Gearbox model I6S 2520 TO

Axle Ratio	Gear Ratio 1°	Gear Ratio 16°	Speed km/h 1°	Speed km/h 16°	RPM at 80 km/h	RPM at 90 km/h	A		B	
							26000		40000	
							1°	16°	1°	16°
4.23	13.8	0.84	6.69	109.98	1396	1571	100.00	4.07	64.92	2.40
4.67	13.8	0.84	6.06	99.62	1542	1734	100.00	4.68	75.37	2.80
5.01	13.8	0.84	5.65	92.86	1654	1861	100.00	5.14	84.68	3.09
5.56	13.8	0.84	5.09	83.67	1835	2065	100.00	5.87	100.00	3.57
6.09	13.8	0.84	4.65	76.39	2010	2262	100.00	6.56	100.00	4.01
6.57	13.8	0.84	4.31	70.81	2169	2440	100.00	7.18	100.00	4.41

## MODEL COMPONENTS

### Gearbox model I6TX 2240 TO

Axle Ratio	Gear Ratio 1°	Gear Ratio 16°	Speed km/h 1°	Speed km/h 16°	RPM at 80 km/h	RPM at 90 km/h	A		B	
							26000		40000	
							1°	16°	1°	16°
4.23	14.68	0.82	6.29	112.67	1363	1533	100.00	3.93	71.14	2.31
4.67	14.68	0.82	5.70	102.05	1505	1693	100.00	4.53	83.45	2.70
5.01	14.68	0.82	5.31	95.12	1614	1816	100.00	4.98	94.77	2.99
5.56	14.68	0.82	4.79	85.72	1792	2016	100.00	5.69	100.00	3.45
6.09	14.68	0.82	4.37	78.26	1962	2208	100.00	6.37	100.00	3.89
6.57	14.68	0.82	4.05	72.54	2117	2382	100.00	6.97	100.00	4.28

### 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 cm<sup>2</sup>

#### Tandem

Drum brakes 410 mm (410 x 200)  
Friction area: 3220 cm<sup>2</sup>

### SUSPENSIONS

#### Front parabolic suspension STD

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

#### Rear semi elliptic parabolic suspension STD

Capacity: **26.000 kg.**

### AXLES

Position	Description
Front	5985/2D - Drive a. H.R. (Drum br. D.D.)
Rear	453291/2D - Tandem H.R. (Drum brake 2D)

### TRANSFER BOX

#### Type

Model	TC 2200
OFF ROAD Low Ratio	1.6
ON ROAD Normal Ratio	1

### 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

### 390L FUEL TANK

#### Fuelling

Capacity (l.)	390
Material	Aluminium

## MODEL COMPONENTS

### 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 independent 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 clutch 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 accelerator 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).



**IVECO**

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