



TECHNICAL DESCRIPTION



AS440S43T/P ON - ARTIC

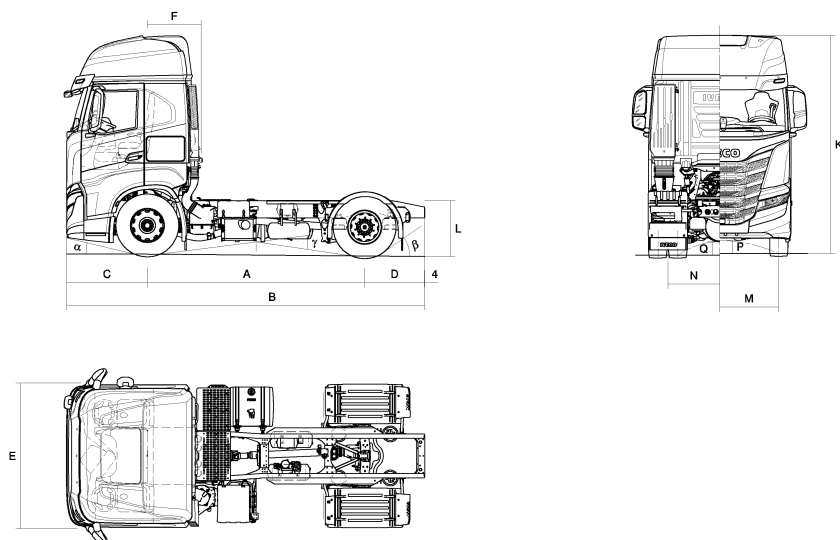
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LIST OF LINKED VCB

VCB code	Gearbox	Wheelbase	Cabin	Drive
AS2AB3DI	I2TX 2420 TD	3800	AS-SX	LH
AS2AB3DA	I2TX 2420 TD	3800	AS-DX	RH

DIMENSIONS & WEIGHTS



DIMENSIONS (mm)

Wheelbase (A)	3800
Max length (B)	6252
Max width over wings (cab) (E)	2550
Front axle to back of cab - including filter (F)	940
Frame height at end of frame, unladen (L)	997
Frame height at front axle, unladen	998
Frame height at rear axle, unladen	997
Front overhang (C)	1410
Rear overhang (D)	1048
Minimum ground clearance (front) (P)	244
Minimum ground clearance (rear) (Q)	240
Overall height to top of cab, unladen (K)	3876
Turning diameter kerb to kerb	15400
Turning diameter wall to wall	17000
Front track (M)	2044
Rear track (N)	1820
Approach angle α (°)	13
Departure angle β (°)	35
Ramp angle γ (°)	16
Side members thickness	7.7
Side members max height	304.4
Side members flange width	80
Frame width at rear	771.4

WEIGHTS (KG)

Wheelbase	3800
Total vehicle kerb weight	7037
Kerbweight on Front Axle	5212
Kerbweight on Rear Axle	1825
G.V.W. (EC)	18000
G.V.W. (Design)	20000
Plated weight on front axle (EC)	7500
Plated weight on front axle (Design)	7500
Plated weight on rear axle(s) (EC)	11500
Plated weight on rear axle(s) (Design)	13000
Max body & payload (Design)	12963

Notes:

Weights are to standard configuration and include: chassis cab (or tractor), driver (75 kg), full fuel tank, Adblue (if present), tools kit and spare wheel (if present).

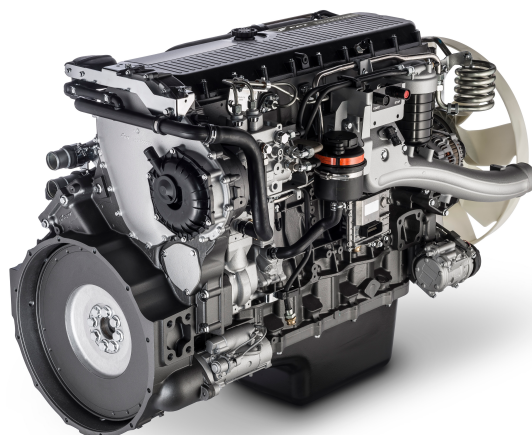
The height of the side member includes the thickness as well.

Wheelbase	Type	Drawing
3800	Left hand drive	5802973436

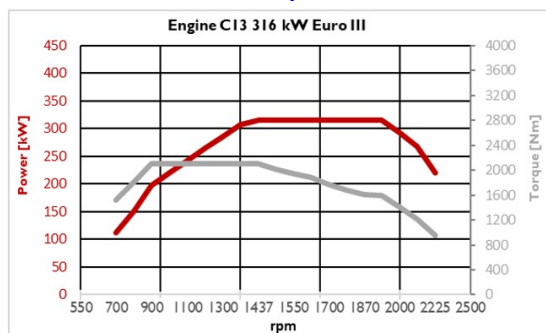
MODEL COMPONENTS

ENGINE

Identification Code	F3HGE61 I
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 ³	12.882
Exhaust gas treatment	silencer
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



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 (on and off-board), control of blink-code and failure indicator light on dashboard, control of engine idling speed and max. engine speed, data exchange with VCM (vehicle control module), supervision of emission values.

MODEL COMPONENTS

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
12TX 2420 TD	AUTOMATED	ENGINE FLANGED	ALUMINIUM ALLOY	265 - (w/o retarder)	Automated dry clutch ConAct	2400	12	2	Electro-pneumatically shifted

GEAR RATIOS

Gearbox model	1ste	2de	3ème	4 ^a	5de	6de	7	8	9ème	10ème	11	12 ^a	M.A. I	2 ^a ret						
12TX 2420 TD	16.69	12.92	9.93	7.67	5.90	4.57	3.66	2.83	2.17	1.68	1.29	1.00	15.54	12.03						

CLUTCH

Gearbox model	Type	Outer diameter mm	Outer diameter (inches)			
12TX 2420 TD	Single dry plate	430	17			

Notes:

HI-TRONIX Gearbox: with opt. 78515, further two ratios are available for the reverse gears: 3.40 and 2.64 for **TD** versions.

ELECTRO-PNEUMATIC CLUTCH ACTUATION UNIT - " ConAct " : The **ConAct** (Concentric Clutch Actuator) is a concentric electro-pneumatic release cylinder for push-type clutches. A travel sensor reports the clutch's actual position to the control unit.

REAR AXLE RATIO

Option code	00730	00733 *	00734	02004	06054	78045
Ratio	2.64	2.85	3.36	3.08	3.7	2.47

*: Standard axle ratio

TYRES & WHEELS

Code	Tyres	Front	Rear	Load index	Rolling circumference m
20231	Standard	315/80R22,5	315/80R22,5	156/150	3.28
20852	Optional	385/55R22,5	315/70R22,5	158/	3.09
20885	Optional	385/65R22,5	315/80R22,5	164/	3.28
20146	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20795	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20079	Optional	13R22,5	13R22,5	156/150	3.428
20790	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20549	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20504	Optional	315/70R22,5	315/70R22,5	156/150	3.09
20867	Optional	385/65R22,5	315/80R22,5	160/157	3.28
20900	Optional	385/55R22,5	315/70R22,5	158/	3.09
20866	Optional	385/65R22,5	315/80R22,5	160/157	3.28
20294	Optional	315/70R22,5	315/70R22,5	156/150	3.09
20081	Optional	13R22,5	13R22,5	156/150	3.428

AXLES

Position	Description	Steering Axle
Front	5890/D ON - Axle drop: 142 mm	○
Rear	MS 17X - Arvin Meritor - Single reduction Disc Brakes - Maximum technical load 13.000 Kg	

Only for 4 axles vehicles (8x2x6 version): 2x5890/D ON on front axle

MODEL COMPONENTS

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: 2023 I - 315/80R22.5 TYRES - Regional							Efficiency: 0.93		No transfer box	
Gearbox model I2TX 2420 TD										
Axle Ratio	Gear Ratio 1°	Gear Ratio 12°	Speed km/h 1°	Speed km/h 12°	RPM at 80 km/h	RPM at 90 km/h	A		B	
							18000		40000	
							1°	12°	1°	12°
2.47	16.69	1.00	9.08	151.48	1004	1130	100.00	3.65	41.98	1.31
2.64	16.69	1.00	8.49	141.72	1073	1207	100.00	4.13	45.49	1.53
2.85	16.69	1.00	7.87	131.28	1159	1303	100.00	4.70	50.04	1.78
3.08	16.69	1.00	7.28	121.48	1252	1409	100.00	5.30	55.33	2.05
3.36	16.69	1.00	6.67	111.35	1366	1537	100.00	6.00	62.28	2.36
3.7	16.69	1.00	6.06	101.12	1504	1692	100.00	6.82	71.72	2.73

SUSPENSIONS

Front parabolic suspension : 2 leaf ON (7500-8000 Kg)
3 leaf OFF (8500-9000 Kg)

Rear air suspension : 4 Bellows (13000 Kg)
Stroke Upper / lower : 140 mm / - 61 mm.

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 / 220

DISC BRAKES

FRONT AXLE: Ventilated disc : Diameter 432 (mm) / Braking surface : 784 (cm²)

REAR AXLES: Ventilated disc : Diameter 432 (mm) / Braking surface : 784 (cm²)

MISCELLANEOUS

Fuelling:

Fuel tank: 290 litres, aluminium; filter, fuel pump, prefilter, fuel separator.



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