LEES GROUP
Power Solutions

MARINE ENGINES | INDUSTRIAL | GENERATORS | SOLAR

MARINE Application

C13 500

PLEASURE - Diesel

CURSOR series

382 kW(500 HP) @ 2000 rpm (C)

SPECIFICATIONS

Thermodynamic Cycle	Diesel 4 stroke
Air Handling	TAA
Arrangement	6L
Bore x Stroke (mm)	135 X 150
Total Displacement (L)	12.9
Valves per cylinder (n°)	4
Cooling System	liquid
Direction of Rotation (viewed facing flywheel)	CCW
Engine management	electronic
InjectionSystem	EUI

STANDARD CONFIGURATION

Flywheel housing (type)	SAE 1
Flywheel size (inch)	14
Air Filter	rear side
Turbocharger	Two Fixed Geometry (water cooled) Turbo in parallel with Aftercooler (TAA)
Heat Excharger	tube type
Exhaust gas water mixer - Exhaust cooled elbow	-
Water charge tank	included
Fuel filter (n°)	n° 1
Fuel prefilter	1 (loose)
Fuel Pump	1 (gear type)
Lift pump	-
Oil filter (n°)	n° 2
Oil sump	aluminium
Oil vapours blow-by circuit	included
Oil heat exchanger	included
Oil filler	on timing cover
Starter	24V - 5.5kW
Alternator	28V - 90A
Engine stop device	by electronic central unit
Wiring harness	with EDC (Engine Diesel Control)
Painting color	white “ICE”

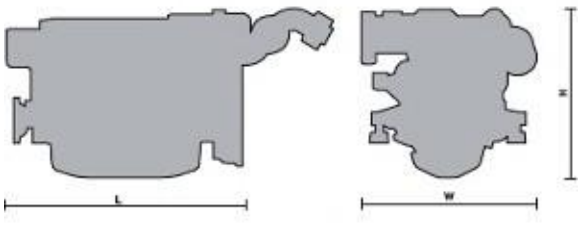
ELECTRICAL SYSTEM

Voltage	24

NOT INCLUDED IN STANDARD CONFIGURATION

Battery - minimum capacity recommended [*] (Ah)	2 x 180
Battery - minimum cold cranking capacity recommended [*] (A)	1200

WEIGHT AND DIMENSIONS



L = 2015
W = 1064
H = 1039
Dry Weight (without marine gear)= Kg 1380

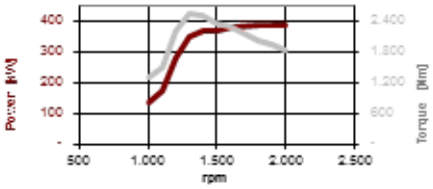
Legend

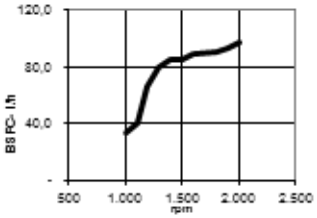
Arrangement	Air Handling	Turbocharger	InjectionSystem	
L (in line)	TAA (Turbocharged with aftercooler) TC (Turbocharged) NA (Naturally Aspirated)	WG (Wastegate) VGT (Variable Geometry Turbocharger)	M (Mechanical) ECR (Electronic Common Rail) EUI (Electronic Unit Injector)	SD: Stern Drive version PD (POD Drive version)

FOR INFORMATION ON THE AVAILABLE RATINGS NOT LISTED IN THIS DOCUMENT PLEASE CONTACT THE FPT INDUSTRIAL SALES NETWORK OR VISIT OUR SITE WWW.FPTINDUSTRIAL.COM

RATING TYPE	A1	A2	B	C
Maximum power (kW(HP)@rpm)	-	-	-	382 (500) @ 2000
High idle speed (rpm)	-	-	-	2170
Low idle speed (rpm)	- -	- -	- -	± 600
Mean piston speed at rated speed (m/s)	-	-	-	10
BMEP at max power (kg/cm)	-	-	-	25.2
Specific fuel consumption at full load (best value) (g/kWh @ rpm)	-	-	-	195 @ 1400
Oil consumption at max rating (% of fuel cons.)			≤ 0.2	
Minimum starting temperature without auxiliaries (°C)			-15 °	
Oil and oil filter maintenance interval for replacement [**] (hours)			600	

* Net Power at flywheel according to ISO 3046/1, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.





A1	High Performance Crafts. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 300 hours per year.
A2	Pleasure Commercial Vessels. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1000 hours per year.
B	Light Duty: Full throttle operation restricted within 10% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1500 hours per year.
C	Medium Duty: Full throttle operation < 25% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 3000 hours per year.
D	Heavy Duty

FEATURES	BENEFITS
SPECIFIC FEATURES The two main technologies featured on these engines, Electronic Common Rail (C90) and Electronic Unit Injector (C13), combined with the 4 valves/cylinder induction system, provide several benefits: high injection pressure and timing precision under any operation condition, excellent performance, low fuel consumption and emissions.	HIGH TORQUE AND POWER & PERFORMANCEREDUCED FUEL CONSUMPTION AND EXHAUST GAS EMISSIONS
TECHNOLOGICAL INNOVATION Features achieved using innovative technologies and production processes such as: Electronic Common Rail or Electronic Unit Injector systems, bed plate cylinder block, rear gear-train timing system and superfinished helicoidal gears.	ENGINE EFFICIENCY AND STIFFNESSVIBRATIONS & NOISE REDUCTION
TECHNOLOGICAL SOLUTIONS FOR SERVICING To reduce maintenance operations and improve engine life and reliability, the CURSOR series adopt plateaux machined cylinder walls and oil cooled pistons by J-jets.	REDUCED MAINTENANCE, LONGER ENGINE LIFE AND RELIABILITY
SOLUTIONS FOR LOW OPERATING COSTS High functional engine design and solutions for long intervals in oil and filters replacement (up to 600 h).	REDUCED MAINTENANCE AND OPERATING COSTS
MARINIZATION Functional engine lay-out, design and specific settings focused on marine duties. Optimized engine and turbo-charging cooling systems.	MARINE LAY-OUT AND SETTINGSSAFETY AND PROTECTION ON BOARD
COMPONENT INTEGRATION Improved technical solutions such as: integrated oil cooler, integrated oil pump and water pump, blow-by system.	LEAKAGE PREVENTION
OPTION LIST Wide range of accessories including electronic remote control, monitoring systems, wide range of emission certifications as IMO MARPOL, 2003/44/EC, EPA Recreational & Commercial and propulsion homologation as RINA.	CUSTOMER ORIENTATION
SERVICEABILITY & MAINTAINABILITY Easier engine servicing thanks to advanced diagnostic equipment & widespread worldwide service network.	QUICK AND ACCURATE SERVICE SUPPORT

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FPT INDUSTRIAL OFFERS THE WIDEST AVAILABILITY OF ENGINE BUILD OPTIONS TO CUSTOMER SPECIFIC REQUIREMENTS WITHIN THE ENGINE SUPPLY. TO FIND OUT MORE ABOUT THE CONFIGURATIONS AND ACCESSORIES WHICH ARE AVAILABLE