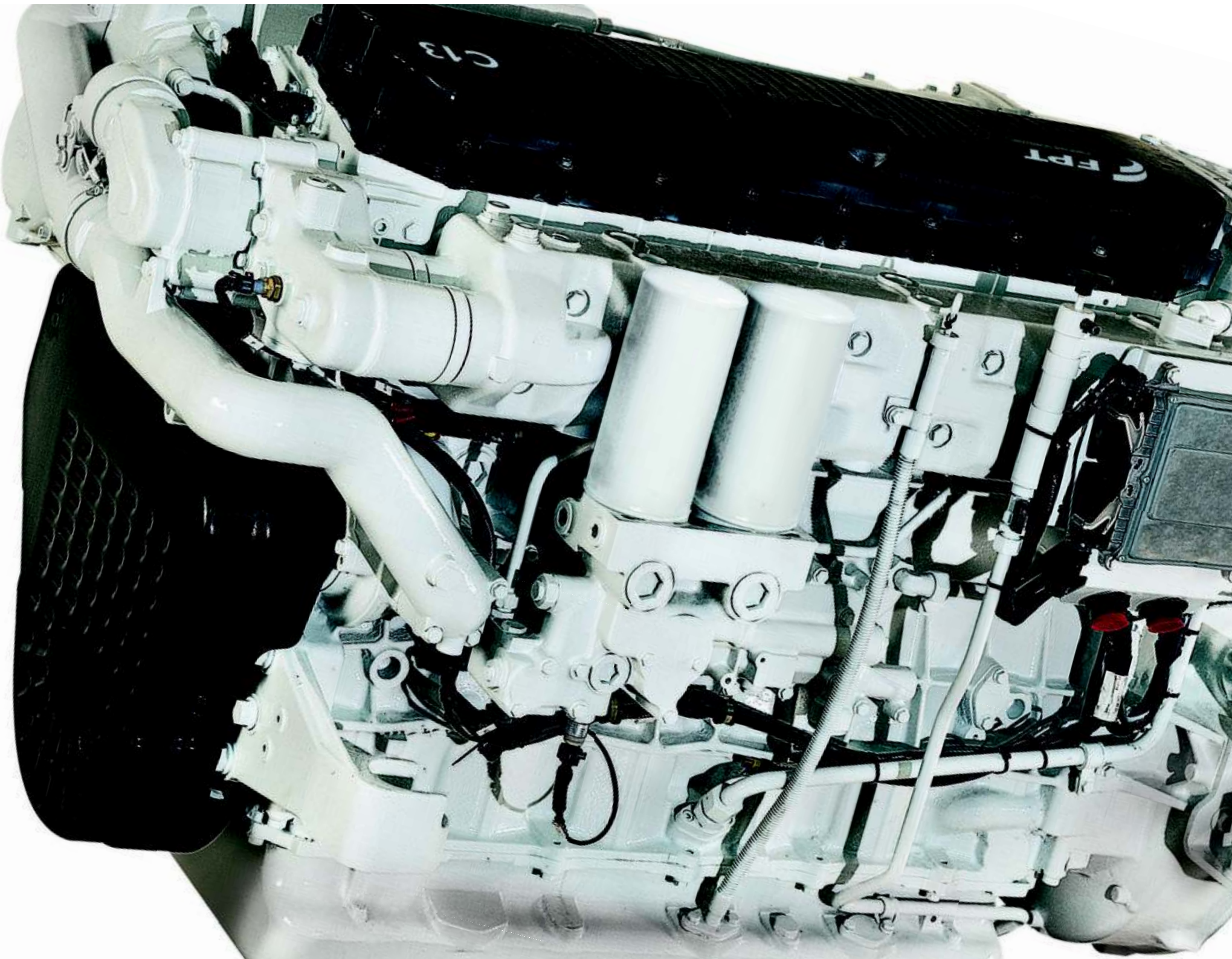


**ENGINES RANGE
FOR MARINE APPLICATIONS.
PROFESSIONAL DUTY.**

THE WAVE OF INNOVATION.







Excellence is our rule.

From commercial lightweight to heavy-duty service, the FPT Industrial range of marine engines was specifically developed for professional applications and is characterized by sturdy design and functional layout ensuring reliability and durability. The compactness of these products allows constant, efficient operation backed up by low running costs, thanks to much longer maintenance intervals and a drastic reduction in consumption.

Thanks to high performance and high torques at low revolutions, boats achieve better efficiency even in the most demanding navigation conditions, without compromising the impressive life-span of the engine. Keel cooled versions ensure sailing even in shallow water.

As controls can be handled with confidence even in difficult navigation conditions, these engines are ideal for intermittent (medium) and continuous commercial services, such as passenger transport, all kinds of fishing, port services, tugs and coastal patrols.



FPT Industrial offers superior technology and outstanding advantages.

- **LOWER OPERATING COSTS**

- Lower fuel consumption
- Lower maintenance costs
- Longer overhaul intervals

- **RELIABILITY**

- High continuous power
- High torque at low revs
- Long engine life
- Compact and sturdy design

- **FLEXIBILITY**

- Keel cooling versions availability
- Full range of accessories availability
- Wide range of emission and propulsion certifications

- **LOW ENVIRONMENTAL IMPACT**

- Drastic reduction of exhaust emissions
 - Low noise and vibrations
-

FPT Industrial engines line up for marine applications (professional duty).

MODEL	ENGINE CYLINDERS ARRANGEMENT ASPIRATION	DISPLACEMENT (LITERS)	POWER ⁽¹⁾ (KW[HP]@RPM)		
			B	C	D
N45 100	4L / NA	4,5	66.5 (90) @ 2800	63 (85) @ 2800	63 (85) @ 2800
N67 150	6L / NA	6,7	99.5 (135) @ 2800	92 (125) @ 2800	92 (125) @ 2800
N67 220	6L / TC	6,7	147 (200) @ 2800	132 (180) @ 2800	110 (150) @ 2800
N40 250	4L / TAA	4,0	147 (200) @ 2800	125 (170) @ 2800	-
N67 280	6L / TAA	6,7	191 (260) @ 2800	169 (230) @ 2800	132 (180) @ 2500
N60 370	6L / TAA	5,9	243 (330) @ 2800	199 (270) @ 2800	-
N60 370 SD	6L / TAA	5,9	243 (330) @ 3000	-	-
N60 400	6L / TAA	5,9	243 (330) @ 3000	199 (270) @ 3000	-
N67 450	6L / TAA	6,7	272 (370) @ 3000	258 (350) @ 3000	-
N67 560	6L / TAA	6,7	331 (450) @ 3000	-	-
C90 380	6L / TAA	8,7	-	301 (410) @ 2000	280 (380) @ 2000
C13 330	6L / TC	12,9	-	-	243 (330) @ 1800
C13 500	6L / TAA	12,9	-	382 (520) @ 2000	368 (500) @ 2000

(1) Net rating at flywheel according to ISO 3046-1 and delivered after ~ 50 hours running. Engine performance within ± 5%.

B= Light duty: Full throttle operation restricted within 10% of total 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: Maximum rating utilisation up to 100% of use period, for unlimited hours per year.

LEGEND

ARRANGEMENT
L: In-line vertical

AIR INTAKE
NA: Naturally Aspirated
TC: Turbocharged
TAA: Turbocharged After Cooled

SD = Stern Drive version



The NEF series.

Characterized by top production quality standards, the NEF Series is the widest among FPT Industrial engine families for pleasure and commercial duties.

The commercial range (completed by keel cooling versions availability) is characterized by advanced mechanical systems for fuel injection with high continuous power and torque, reliability, low fuel consumption and low servicing costs.



MODEL	ENGINE CYLINDERS ARRANGEMENT ASPIRATION	DISPLACEMENT (LITERS)	POWER ⁽¹⁾ (KW[HP]@RPM)		
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N67 280	6L / TAA	6,7	191 (260) @ 2800	169 (230) @ 2800	132 (180) @ 2500
N60 370	6L / TAA	5,9	243 (330) @ 2800	199 (270) @ 2800	-
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N60 400	6L / TAA	5,9	243 (330) @ 3000	199 (270) @ 3000	-
N67 450	6L / TAA	6,7	272 (370) @ 3000	258 (350) @ 3000	-
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C= Medium duty: Full throttle operation <25% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum useage 3000 hours per year.

D= Heavy duty: Maximum rating utilisation up to 100% of use period, for unlimited hours per year.

LEGEND

ARRANGEMENT
L: In-line vertical

AIR INTAKE
NA: Naturally Aspirated
TC: Turbocharged
TAA: Turbocharged After Cooled

SD = Stern Drive version

FEATURES

Specific features

The NEF Series mechanical fuel injection system is characterized by advanced components ensuring high continuous power and torque at lower rpm, reliability, low fuel consumption and exhaust gas emissions, low servicing costs.

Technological innovation

Features achieved using innovative technologies and production processes such as: advanced injection system, ladder frame cylinder block, fracture split connecting rods, rear gear-train timing system.

Technological solutions for servicing

To reduce maintenance operations and improve engine life and reliability, the NEF mechanical Series engines adopts plateaux machined cylinder walls and oil cooled pistons by J-jets.

Solutions for low operating costs

High functional engine design and solutions for long intervals in oil and filters replacement (up to 600 h).

Marinization

Functional engine lay-out, design and specific settings focused on marine duties. Optimized engine and turbo-charging cooling systems.

Components integration

Improved technical solutions such as: integrated oil cooler, integrated oil pump and water pump, blow-by system.

Option list

Wide range of accessories including keel cooling version availability, monitoring systems, wide range of emission certifications as IMO MARPOL, 2004/26/EC, CCNR, EPA Recreational & Commercial and propulsion homologation as RINA.

Serviceability & maintainability

Widespread worldwide service network.

BENEFITS

HIGH CONTINUOUS POWER AND TORQUE AT LOWER RPM.

MINIMUM FUEL CONSUMPTION AND EXHAUST GAS EMISSION.

ENGINE EFFICIENCY AND STIFFNESS.

VIBRATIONS & NOISE REDUCTION.

REDUCED MAINTENANCE, LONGER ENGINE LIFE AND RELIABILITY.

REDUCED MAINTENANCE AND OPERATING COSTS.

MARINE LAY-OUT & SETTINGS.

SAFETY AND PROTECTION ON BOARD.

LEAKAGE PREVENTION.

CUSTOMER ORIENTATION.

QUICK AND ACCURATE SERVICE SUPPORT.



FEATURES

Specific features

The NEF professional range features state-of-the-art diesel technologies (common rail, electronic systems, 4 valves/cylinder), thus ensuring high performance, lightness, compactness, design, low environmental impact (low smoke, noise and vibration) for light/medium duties commercial boats up to 12 metres.

Technological innovation

Features achieved using innovative technologies and production processes such as: Electronic Common Rail, ladder frame cylinder block, fracture split connecting rods, rear gear-train timing system.

Technological solutions for servicing

To reduce maintenance operations and improve engine life and reliability, the Electronic Common Rail NEF Series adopts plateaux machined cylinder walls and oil cooled pistons by J-jets.

Solutions for low operating costs

High functional engine design and solutions for long intervals in oil and filters replacement (up to 600 h).

Marinization

Functional engine lay-out, design and specific settings focused on marine duties. Optimized engine and turbo-charging cooling systems.

Components integration

Improved technical solutions such as: integrated oil cooler, integrated oil pump and water pump, blow-by system.

Option list

Wide range of accessories including electronic remote control, monitoring systems, stern drives, wide range of emission certifications as IMO MARPOL, 2003/44/EC, EPA Recreational & Commercial and propulsion homologation as RINA.

Serviceability & maintainability

Easier engine servicing thanks to advanced diagnostic equipment & widespread worldwide service network.

BENEFITS

LIGHT/MEDIUM DUTIES POWER AND TORQUE AT LOWER RPM.

MINIMUM FUEL CONSUMPTION AND EXHAUST GAS EMISSION.

ENGINE EFFICIENCY AND STIFFNESS.

VIBRATIONS & NOISE REDUCTION.

REDUCED MAINTENANCE, LONGER ENGINE LIFE AND RELIABILITY.

REDUCED MAINTENANCE AND OPERATING COSTS.

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The CURSOR series.

The CURSOR Series features state-of-the-art technologies providing customers with benefits such as high injection pressure and timing precision under any operation condition, excellent performance, low fuel consumption and emissions.

Professionals of the sea trust the CURSOR Series for its technology, low operating costs, fuel economy and ease of maintenance.



MODEL	ENGINE CYLINDERS ARRANGEMENT ASPIRATION	DISPLACEMENT (LITERS)	POWER ⁽¹⁾ [KW(HP)@RPM]		
			B	C	D
C90 380	6L / TAA	8,7	-	301 (410) @ 2000	280 (380) @ 2000
C13 330	6L / TC	12,9	-	-	243 (330) @ 1800
C13 500	6L / TAA	12,9	-	382 (520) @ 2000	368 (500) @ 2000

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D= Heavy duty: Maximum rating utilisation up to 100% of use period, for unlimited hours per year.

LEGEND

ARRANGEMENT
L: In-line vertical

AIR INTAKE
TAA: Turbocharged After Cooled
TC: Turbocharged

FEATURES

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.

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.

Technological solutions for servicing

To reduce maintenance operations and improve engine life and reliability, the CURSOR Series adopts plateaux machined cylinder walls and oil cooled pistons by J-jets.

Solutions for low operating costs

High functional engine design and solutions for long intervals in oil and filters replacement (up to 600 h).

Marinization

Functional engine lay-out, design and specific settings focused on marine duties. Optimized engine and turbo-charging cooling systems.

Components integration

Improved technical solutions such as: integrated oil cooler, integrated oil pump and water pump, blow-by system.

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.

Serviceability & maintainability

Easier engine servicing thanks to advanced diagnostic equipment & widespread worldwide service network.

BENEFITS

HIGH CONTINUOUS POWER AND TORQUE AT LOWER RPM.

MINIMUM FUEL CONSUMPTION AND EXHAUST GAS EMISSION.

ENGINE EFFICIENCY AND STIFFNESS.

VIBRATIONS & NOISE REDUCTION.

REDUCED MAINTENANCE, LONGER ENGINE LIFE AND RELIABILITY.

REDUCED MAINTENANCE AND OPERATING COSTS.

MARINE LAY-OUT & SETTINGS.

SAFETY AND PROTECTION ON BOARD.

LEAKAGE PREVENTION.

CUSTOMER ORIENTATION.

QUICK AND ACCURATE SERVICE SUPPORT.



**At your service everywhere.
Sales and Services.**

FPT Industrial counts on a worldwide organization including over 1500 sale&service points able to assist Customers in their purchase and to provide them with engine maintenance parts.

Thanks to frequent training courses, FPT Industrial network will be pleased to assist you wherever and whenever necessary, supplying only original parts of proven quality.





P3P03Z00 IE-09.11



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