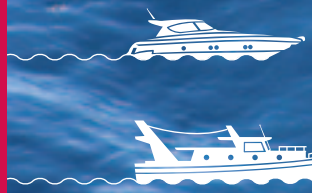
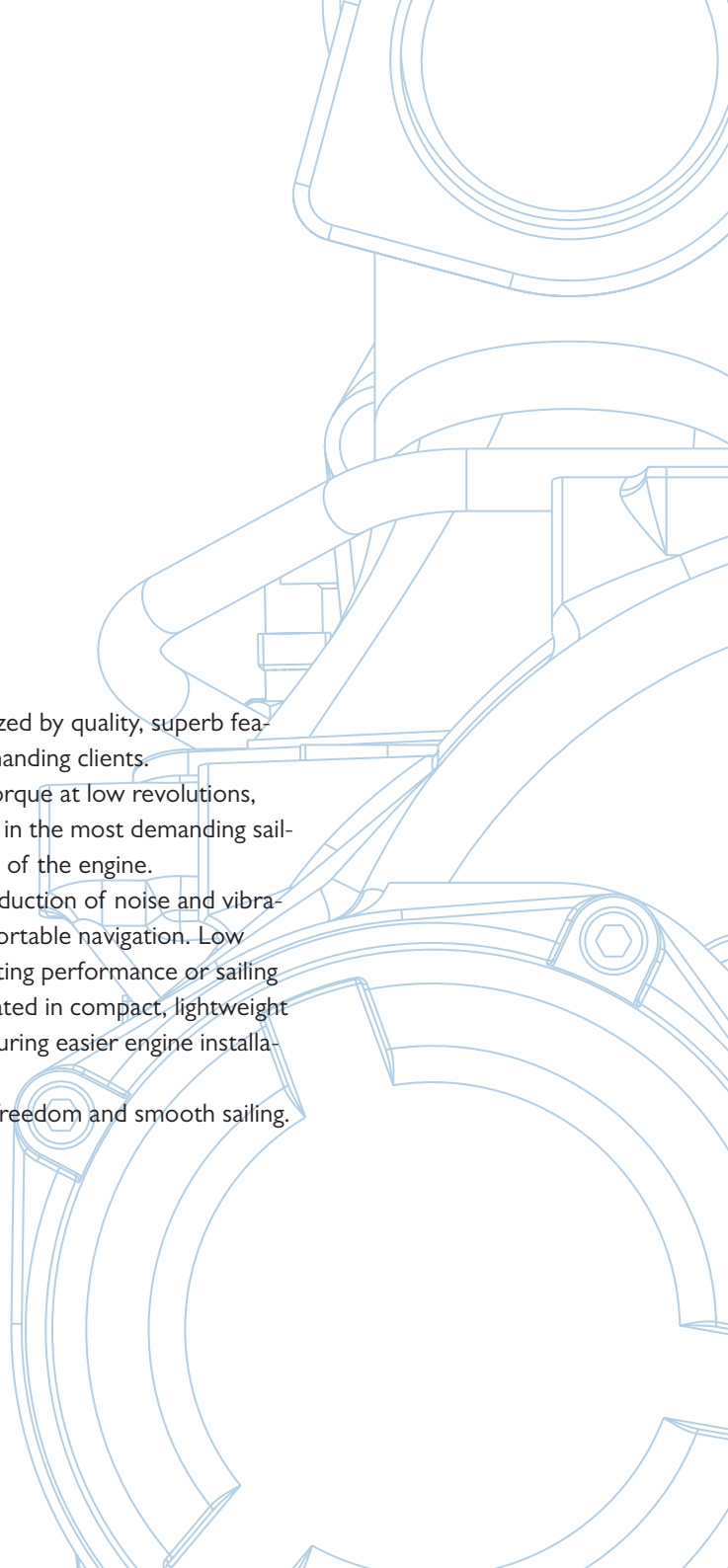
MARINE



FPT
POWERTRAIN TECHNOLOGIES

THE WAVE OF INNOVATION



FPT Industrial offers a complete range of products characterized by quality, superb features and applications versatility, to satisfy even the most demanding clients.

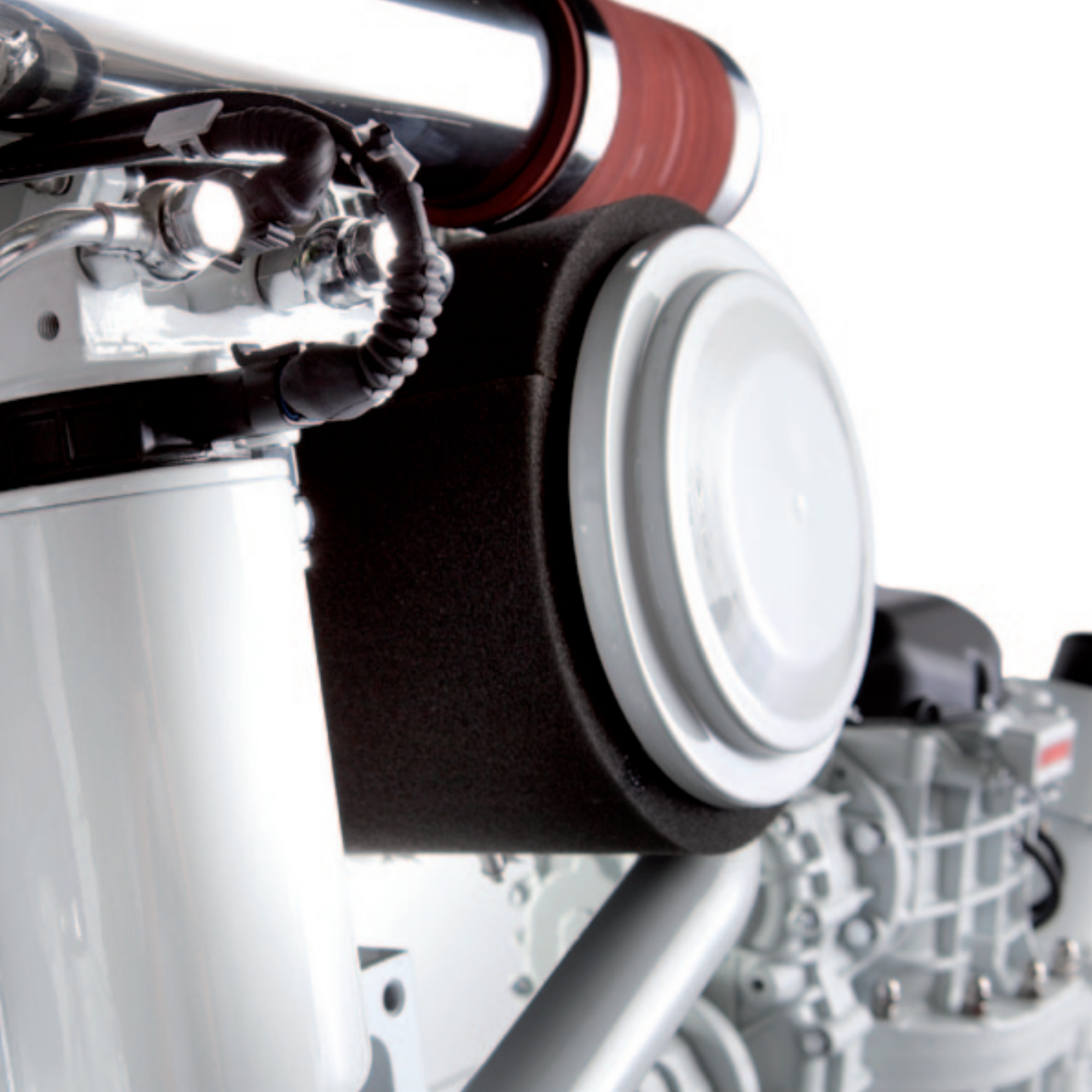
Thanks to maximum and continuous specific power and torque at low revolutions, pleasure and commercial boats achieve better efficiency even in the most demanding sailing conditions, without compromising the impressive life-span of the engine.

This competitive performance is backed up by a drastic reduction of noise and vibrations to create the sensation of powerful yet extremely comfortable navigation. Low exhaust emissions and noise levels are ensured, without affecting performance or sailing pleasure. Engineering experience at FPT Industrial has culminated in compact, lightweight design with low volume/power and weight/power ratios, ensuring easier engine installation and boats' superior efficiency.

High quality of components ensures a great reliability for freedom and smooth sailing. Keel cooled versions allow sailing even in shallow waters.

FPT Industrial offers superior technology and outstanding advantages

PERFORMANCE	Maximum and continuous high specific power High torque at low revs Lightness (weight/power low ratios)
FLEXIBILITY	Compactness (volume/power low ratios) Full range of accessories available Wide range of emission and propulsion certifications Keel cooling versions availability Inboard/outboard units availability (only for Pleasure duty)
LOW ENVIRONMENTAL IMPACT	Drastic reduction of exhaust emissions Low noise and vibrations
LOWER OPERATING COSTS	Lower fuel consumption Longer maintenance intervals costs Longer overhaul intervals



LEGEND

APPLICATION
○ Pleasure
● Professional

ARRANGEMENT
L In-line vertical

AIR INTAKE
NA Naturally Aspirated
TC Turbocharged
TCA Turbocharged After Cooled

PROPULSION SYSTEM
SD Stern Drive version
PD Pod Drive version

S1 Sportive duty
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 useage 300 hours per year.
A2 Pleasure/commercial vessels
Full throttle operation restricted within 10% oftotal use period
Cruising speed at engine rpm <90% of rated speed setting
Maximum useage 1000 hours per year.
B Light duty
Full throttle operation restricted within 10% of total use period
Cruising speed at engine rpm <90% of rated speed setting
Maximum useage 1500 hours per year
C Medium duty
Full throttle operation <25% of use period.
Cruising speedat 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

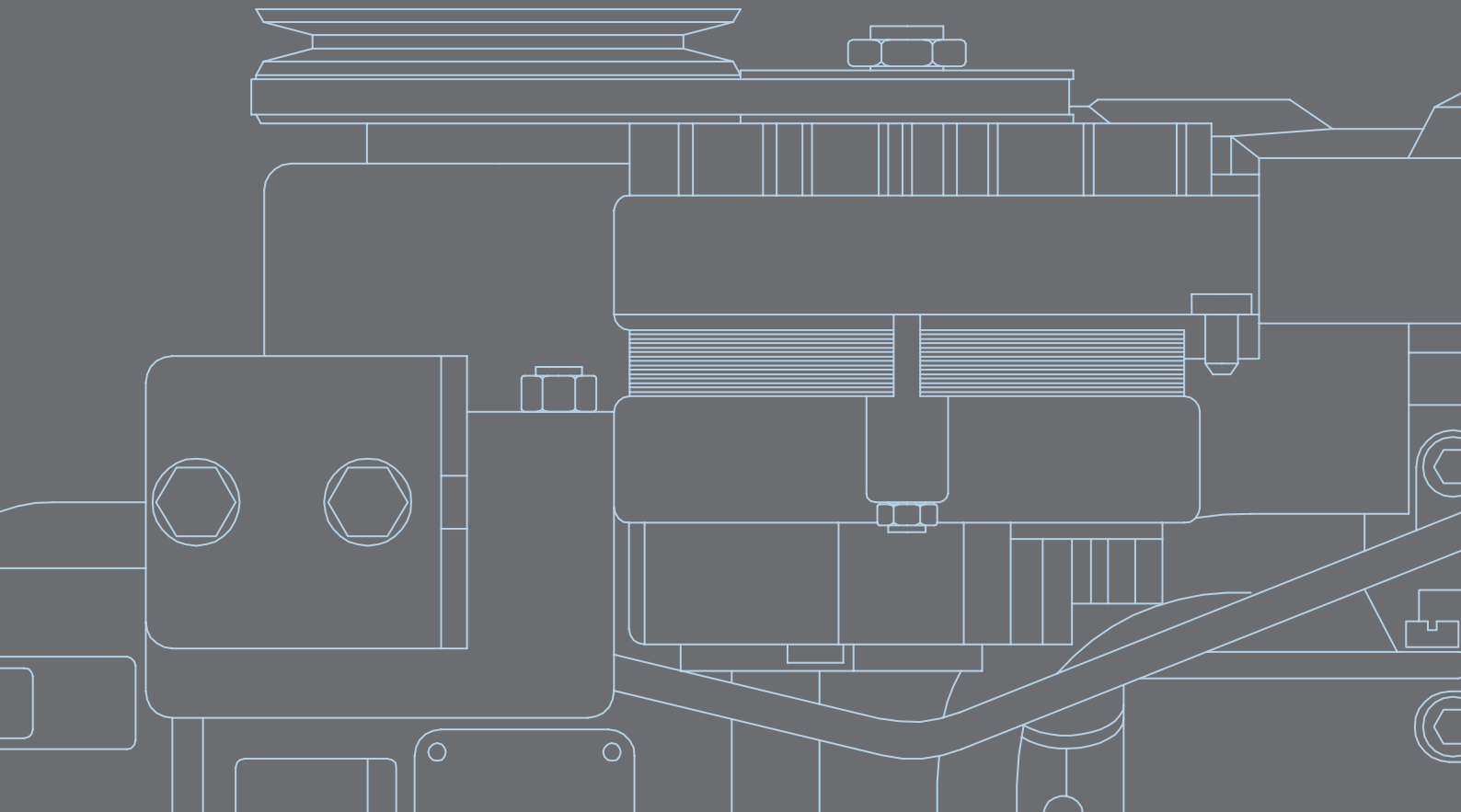
(1) Net rating at fl ywheel according to ISO 3046-1 and delivered after ~ 50 hours running. Engine performance within ± 5%
(2) Available also with Sail Drive
(3) Preliminary data - available from January 2013

APPLICATION	MODEL	CYLINDERS ARRANGEMENT ASPIRATION	DISPLACEMENT LITERS
○	4021 M20[2]	2L / NA	0,686
○	4031 M30[2]	3L / NA	1,028
○	4041 M40[2]	4L / NA	1,372
○	4241 M41[2]	4L / NA	1,995
○	4341 M60[2]	4L / NA	2,199
○	4341 SRM87[2]	4L / TCA	2,199
○	S30 230	4L / TCA	3
○	S30 230SD	4L / TCA	3
○ ●	N40 250	4L / TCA	3,9
○ ●	N45 100[2]	4L / NA	4,5
○ ●	N60 370	6L / TCA	5,9
○ ●	N60 370SD	6L / TCA	5,9
○ ●	N60 400	6L / TCA	5,9
○	N60 400PD	6L / TCA	5,9
○	N60 480	6L / TCA	5,9
○ ●	N67 150	6L / NA	6,7
○ ●	N67 220	6L / TC	6,7
○ ●	N67 280	6L / TCA	6,7
○ ●	N67 450	6L / TCA	6,7
○	N67 450PD	6L / TCA	6,7
○	N67 500PD	6L / TCA	6,7
○ ●	N67 560	6L / TCA	6,7
○ ●	N67 570[3]	6L / TCA	6,7
●	C90 380	6L / TCA	8,7
○	C90 620	6L / TCA	8,7
○	C90 650	6L / TCA	8,7
●	C13 330	6L / TC	12,9
●	C13 500	6L / TCA	12,9
○	C13 825	6L / TCA	12,9

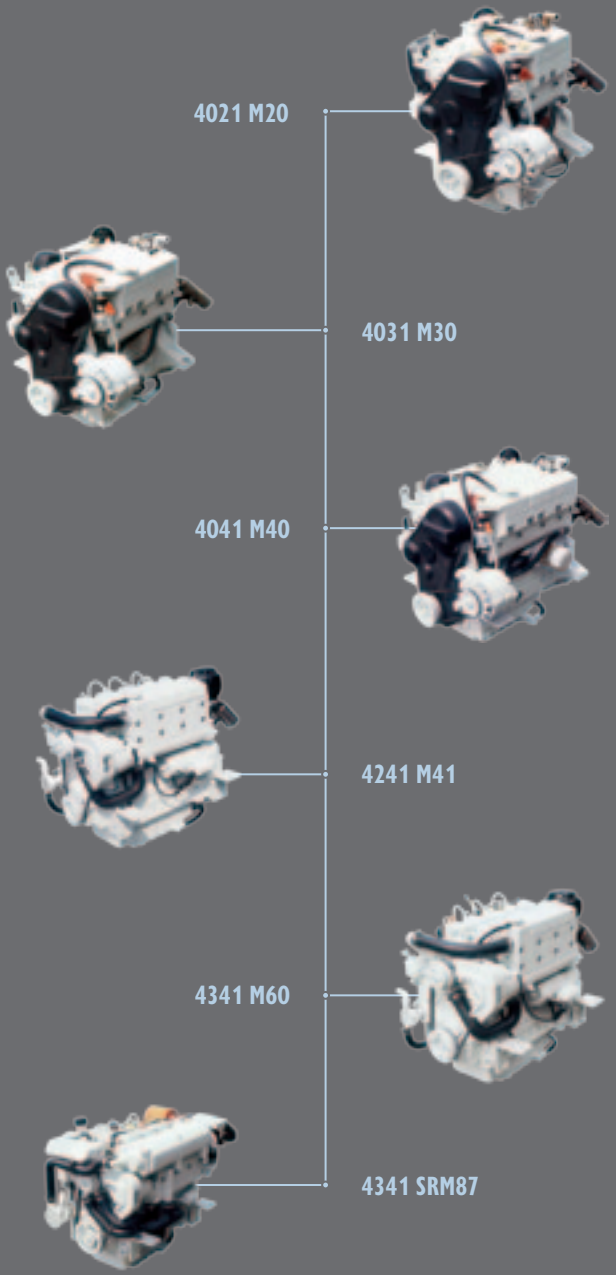
POWER[1] – KW (HP) @ RPM					
S1	A1	A2	B	C	D
–	14,7 (20) @ 3600	–	–	–	–
–	22,1 (30) @ 3600	–	–	–	–
–	29,4 (40) @ 3600	–	–	–	–
–	30 (40,8) @ 3000	–	–	–	–
–	44 (60) @ 3600	–	–	–	–
–	64 (87) @ 3200	–	–	–	–
–	169 (230) @ 4000	–	129 (175,5) @ 3500	85 (115,6) @ 3500	–
–	169 (230) @ 4000	–	–	–	–
–	184 (250) @ 2800	–	147 (200) @ 2800	125 (170) @ 2800	–
–	74 (100) @ 2800	–	66,5 (90) @ 2800	63 (85) @ 2800	63 (85) @ 2800
–	272 (370) @ 2800	–	243 (330) @ 2800	199 (270) @ 2800	–
–	272 (370) @ 3000	–	243 (330) @ 3000	–	–
–	294 (400) @ 3000	272 (370) @ 3000	243 (330) @ 3000	199 (270) @ 3000	–
–	294 (400) @ 3000	272 (370) @ 3000	–	–	–
353 (480) @ 3000	–	–	–	–	–
–	110 (150) @ 2800	–	99,5 (135) @ 2800	92 (125) @ 2800	92 (125) @ 2800
–	162 (220) @ 2800	–	147 (200) @ 2800	132 (180) @ 2800	110 (150) @ 2800
–	206 (280) @ 2800	–	191 (260) @ 2800	169 (230) @ 2800	132 (180) @ 2500
–	331 (450) @ 3000	309 (420) @ 3000	272 (370) @ 3000	258 (350) @ 3000	–
–	331 (450) @ 3000	309 (420) @ 3000	–	–	–
–	368 (500) @ 3000	–	–	–	–
–	412 (560) @ 3000	368 (500) @ 3000	331 (450) @ 3000	–	–
–	419 (570) @ 3000	368 (500) @ 3000	331 (450) @ 3000	–	–
–	–	–	–	301 (410) @ 2000	280 (380) @ 2000
–	456 (620) @ 2530	405 (550) @ 2530	368 (500) @ 2530	331 (450) @ 2530	–
–	478 (650) @ 2530	–	–	–	–
–	–	–	–	–	243 (330) @ 1800
–	–	–	–	382 (520) @ 2000	368 (500) @ 2000
–	607 (825) @ 2400	522 (750) @ 2400	478 (650) @ 2400	442 (600) @ 2400	–

FB Design RED FPT winner of U.I.M. Marathon World Cup and Harmsworth Trophy (August 2010).
RED FPT is powered by 4 FPT Industrial N67 Evolution at 600 HP.

THE 4000 SERIES



The 4000 Series



Technologically advanced solutions, such as pump injectors, fully overhead controlling systems (**FOCS series**) and innovative design for fuel injection systems (**CHD series**), are the main features for this performing Series, which is particularly appreciated for its compactness, lightness, simple installation and maintenance.

Thanks to an efficient sail drive availability, the **4000 Series** is specifically indicated for sailing boats up to 10 meters; for standard propeller shaft transmission, the same engine Series can be widely utilized on pleasure and commercial power-boats up to 5-6 meters.

APPLICATION	MODEL	CYLINDERS ARRANGEMENT ASPIRATION	DISPLACEMENT LITERS	POWER[1] – KW (HP) @ RPM				
				S1	A1	A2	B	C
○	4021 M20[2]	2L / NA	0,686	–	14,7 (20) @ 3600	–	–	–
○	4031 M30[2]	3L / NA	1,028	–	22,1 (30) @ 3600	–	–	–
○	4041 M40[2]	4L / NA	1,372	–	29,4 (40) @ 3600	–	–	–
○	4241 M41[2]	4L / NA	1,995	–	30 (40,8) @ 3000	–	–	–
○	4341 M60[2]	4L / NA	2,199	–	44 (60) @ 3600	–	–	–
○	4341 SRM87[2]	4L / TCA	2,199	–	64 (87) @ 3200	–	–	–

LEGEND

APPLICATION
○ Pleasure
● Professional

ARRANGEMENT
L In-line vertical

AIR INTAKE
NA Naturally Aspirated
TCA Turbocharged After Cooled

S1 Sportive duty
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 useage 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 useage 1000 hours per year
B Light duty
Full throttle operation restricted within 10% of total use period
Cruising speed at engine rpm <90% of rated speed setting
Maximum useage 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 useage 3000 hours per year

(1) Net rating at fl ywheel according to ISO 3046-1 and delivered after ~ 50 hours running. Engine performance within ± 5%.
(2) Available also with Sail Drive.

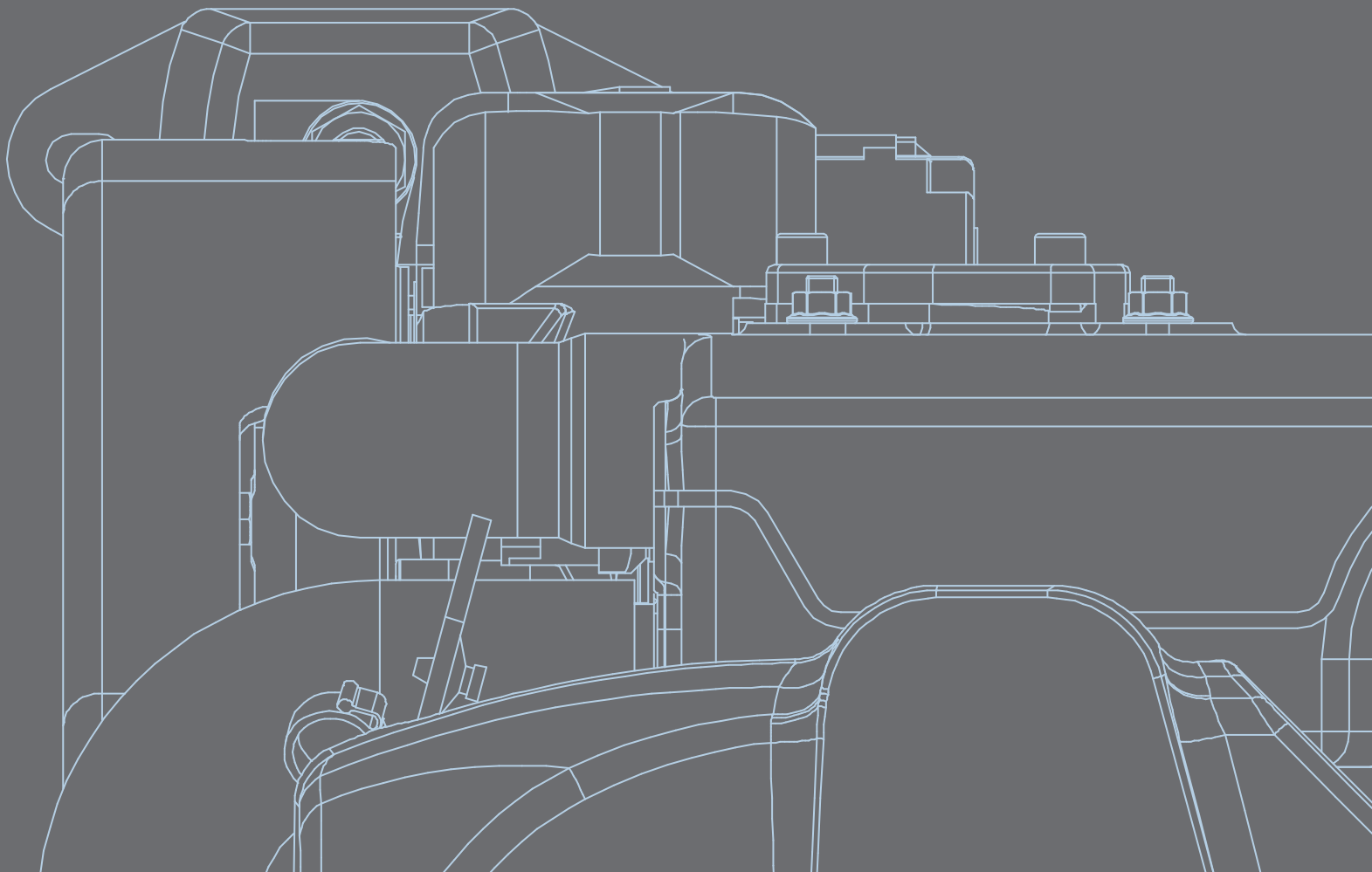
Features

ENGINE DESIGN	FOCS Series · The unit injection pumps, located in the pearlitic grey cast iron cylinder head with the cross flow of the intake and exhaust pipes, allow engine length and weight reduction. CHD Series · The innovative design of the gear train, the injection system design and location and the reduced cylinder pitch allow shortening the engine length.
TECHNOLOGICAL SOLUTIONS	FOCS Series · The mechanical pump-injector units provide a better injection timing, resulting in great performance advantages. CHD Series · The QLC pump offers high performance on all engine speed. Compared to the conventional injection pump, QLC features a one-way flow and a unique delivery fuel system that prevent unwanted variations on injection pressure and timing, eliminating gas bubbles.
NOISE & VIBRATION REDUCTION	FOCS Series · Excellent results have been obtained as of noise emission reduction, thanks to the location of the injection system in the cylinder head, to a ribbing system along all the engine structure and to the complete absence of gears. CHD Series · The innovative design of the fuel injection system, as well as the use of hypereutectic pistons reducing piston slap and of a heavy-duty block, allow a strong reduction of noise levels that are normally associated with those of diesel engines. The special crankshaft balancing ensures exceptionally low vibrations and an excellent operational performance.
REDUCED EMISSIONS	FOCS Series · The injection system has been tested for exhaust emission levels to the lowest limits, thus positioning these engines well below the EEC requirements. CHD Series · The advanced design of the injection and combustion systems results in reduced environmental impact.
ACCESSORIES **MAINTENANCE** **NETWORK**	A wide range of accessories including the sail drive option are available for the 4000 Series. FOCS Series · Components subject to more frequent checking are located in the upper part of the engine, just under the cover. This allows easy and low cost equipment maintenance. CHD Series · All maintenance operations are easier due to the simple construction of the product. Furthermore, for the QLC pump maintenance the services of a pump specialist are not required, as parts servicing can be completed by any qualified workshop.

Benefits

- ✓ COMPACTNESS AND LIGHTNESS
- ✓ HIGH PERFORMANCE
  AND EFFICIENCY IN ANY LOAD
  CONDITION
- ✓ EXCELLENT REDUCTION OF NOISE
  AND VIBRATION LEVELS
  NAVIGATION COMFORT
- ✓ REDUCED ENVIRONMENTAL IMPACT
- ✓ SAIL DRIVE AVAILABILITY
  EASY & ECONOMICAL MAINTENANCE
  WORLWIDE SERVICE NETWORK

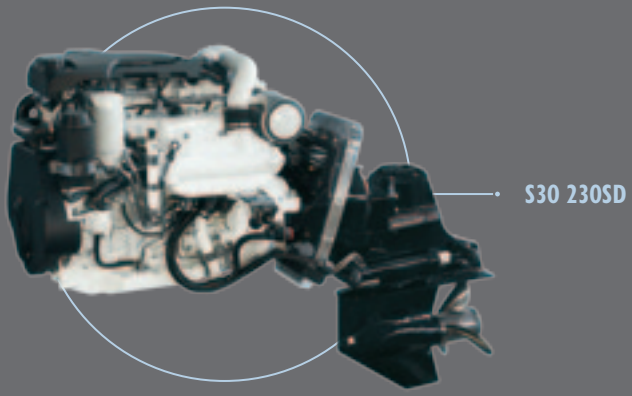
THE F1 SERIES



The F1 Series

Common Rail and electronic systems are the main technologies featured by this Series, which offers important advantages, such as high specific power, torque at low rpm (for boats better planing), low fuel consumption and emissions.

The range of three stern drives availability expands this engine application to any kind of light planing or semiplaning boats for pleasure and light commercial duties (with prop. shaft only) up to 7-8 meters.



APPLICATION	MODEL	CYLINDERS ARRANGEMENT ASPIRATION	DISPLACEMENT LITERS	POWER[1] – KW (HP) @ RPM				
				S1	A1	A2	B	C
○	S30 230	4L / TCA	3	–	169 (230) @ 4000	–	129 (175,5) @ 3500	85 (115,6) @ 3500
○	S30 230SD	4L / TCA	3	–	169 (230) @ 4000	–	–	–

LEGEND

APPLICATION
○ Pleasure
● Professional

ARRANGEMENT
L In-line vertical

AIR INTAKE
TCA Turbocharged After Cooled

PROPULSION SYSTEM
SD Stern Drive version

S1 Sportive duty
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 useage 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 useage 1000 hours per year

B Light duty
Full throttle operation restricted within 10% of total use period
Cruising speed at engine rpm <90% of rated speed setting
Maximum useage 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 useage 3000 hours per year

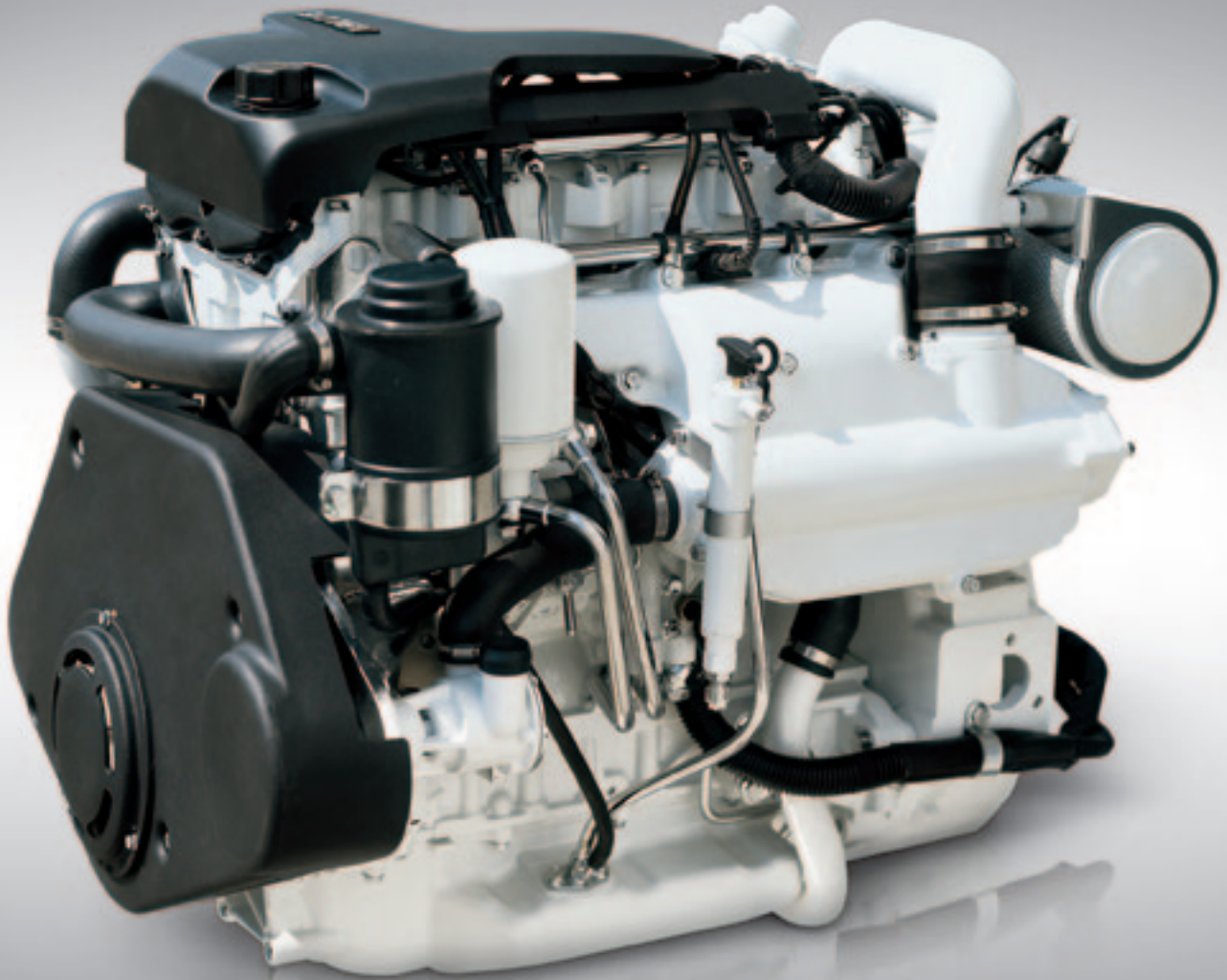
(1) Net rating at fl ywheel according to ISO 3046-1 and delivered after ~ 50 hours running. Engine performance within ± 5%
(2) Available also with Sail Drive

Features

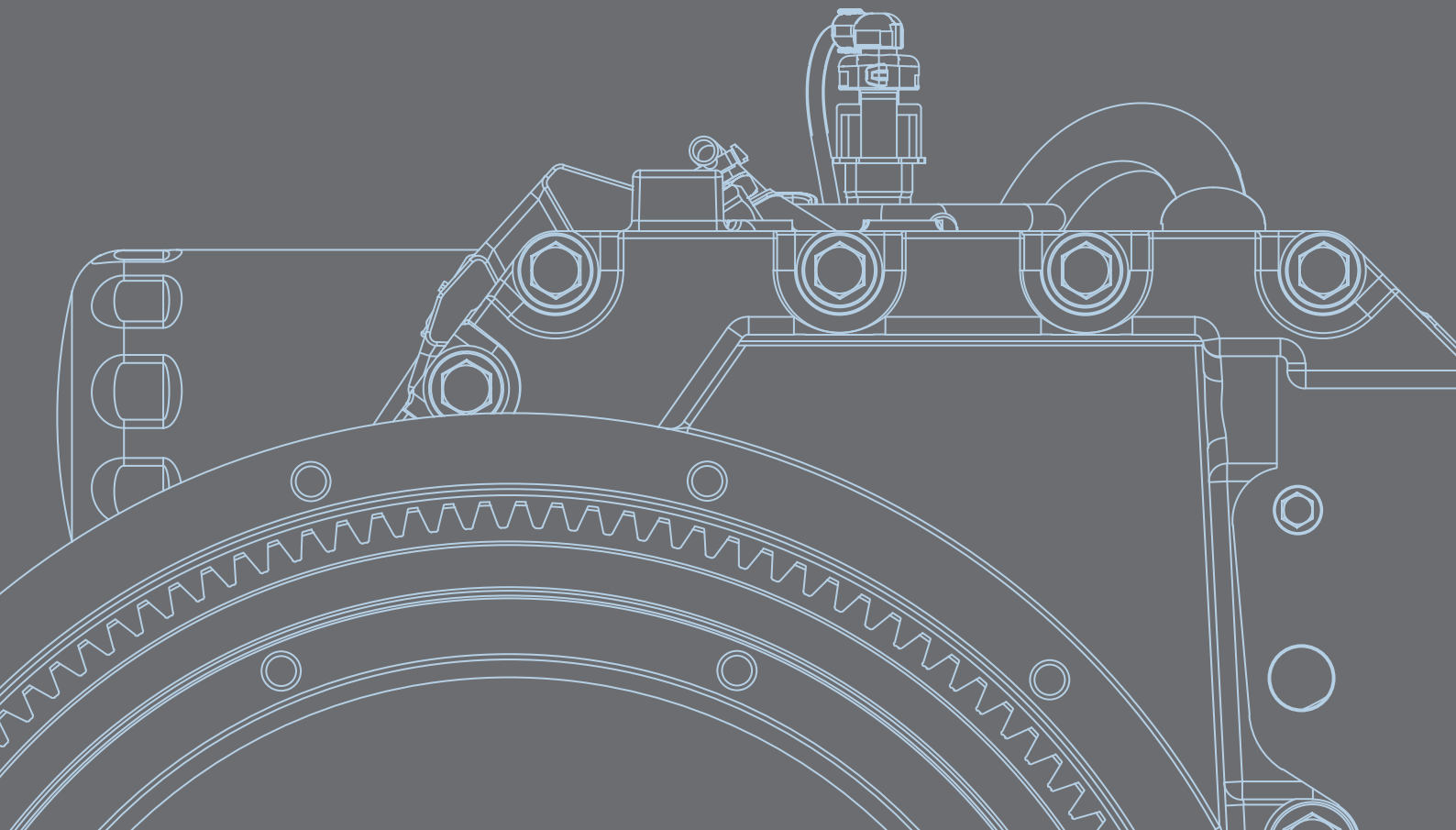
SPECIFIC FEATURES	State-of-the-art 2nd generation Common Rail System (ECR); accurate fuel delivery to achieve high performance in terms of torque and power with the minimum fuel consumption and exhaust gas emissions.
TECHNOLOGICAL INNOVATION	Features achieved using innovative technologies and production processes such as: Electronic Common Rail, 4 valves/cylinder, ladder frame cylinder block, fracture split connecting rods.
TECHNOLOGICAL SOLUTIONS FOR SERVICING	To reduce maintenance operations and improve engine life and reliability, F1 Series engines adopt a valves clearance hydraulic adjustment for the dual overhead camshaft driven by chain 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 can-bus control & monitoring systems, stern drives, propulsion and emission certifications.
SERVICEABILITY & MAINTAINABILITY	Easier engine servicing thank to advanced diagnostic equipment & widespread worldwide service network.

Benefits

- ✓ HIGH TORQUE AND POWER PERFORMACE 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



THE NEF SERIES



The NEF Series

N67 150

N45 100

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

The pleasure range engines can be considered a state-of-the-art in diesel technology (Common Rail and electronic systems, 4 valves/cylinder), ensuring high performance, lightness, compact design, low environmental impact (low smoke, noise and vibration) for cruisers and yachts up to 12 meters.

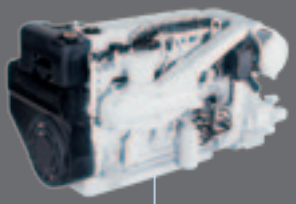
The commercial range (completed by keel cooling versions availability) is characterized by advanced mechanical systems for fuel injection with high continuous power and torque, reliability, low fuel consumptions and low servicing costs.

N60 400PD

N60 400

N40 250

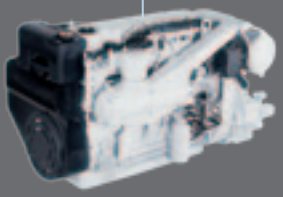
N60 370



N67 220

N67 280

N60 370SD



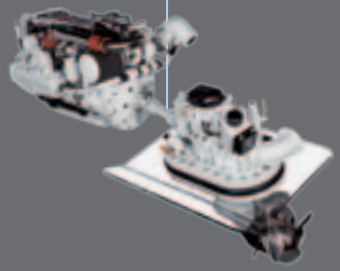
N67 450PD

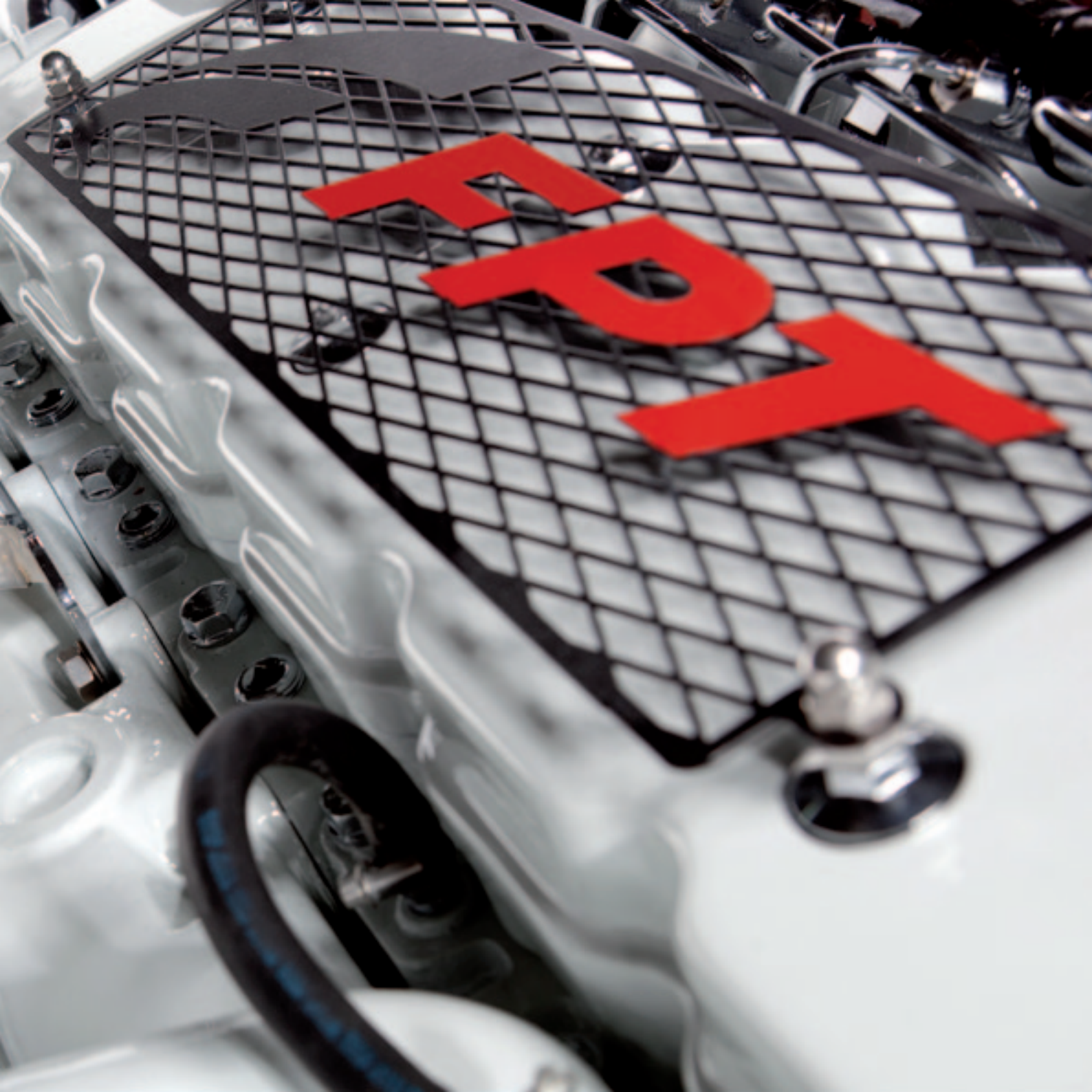
N67 500PD

N67 450

N60 480

N67 560




FPT

APPLICATION	MODEL	CYLINDERS ARRANGEMENT ASPIRATION	DISPLACEMENT LITERS	POWER[1] – KW (HP) @ RPM					
				S1	A1	A2	B	C	D
○ ●	N40 250	4L / TCA	3,9	–	184 (250) @ 2800	–	147 (200) @ 2800	125 (170) @ 2800	–
○ ●	N45 100[2]	4L / NA	4,5	–	74 (100) @ 2800	–	66,5 (90) @ 2800	63 (85) @ 2800	63 (85) @ 2800
○ ●	N60 370	6L / TCA	5,9	–	272 (370) @ 2800	–	243 (330) @ 2800	199 (270) @ 2800	–
○ ●	N60 370SD	6L / TCA	5,9	–	272 (370) @ 3000	–	243 (330) @ 3000	–	–
○ ●	N60 400	6L / TCA	5,9	–	294 (400) @ 3000	272 (370) @ 3000	243 (330) @ 3000	199 (270) @ 3000	–
○	N60 400PD	6L / TCA	5,9	–	294 (400) @ 3000	272 (370) @ 3000	–	–	–
○	N60 480	6L / TCA	5,9	353 (480) @ 3000	–	–	–	–	–
○ ●	N67 150	6L / NA	6,7	–	110 (150) @ 2800	–	99,5 (135) @ 2800	92 (125) @ 2800	92 (125) @ 2800
○ ●	N67 220	6L / TC	6,7	–	162 (220) @ 2800	–	147 (200) @ 2800	132 (180) @ 2800	110 (150) @ 2800
○ ●	N67 280	6L / TCA	6,7	–	206 (280) @ 2800	–	191 (260) @ 2800	169 (230) @ 2800	132 (180) @ 2500
○ ●	N67 450	6L / TCA	6,7	–	331 (450) @ 3000	309 (420) @ 3000	272 (370) @ 3000	258 (350) @ 3000	–
○	N67 450PD	6L / TCA	6,7	–	331 (450) @ 3000	309 (420) @ 3000	–	–	–
○	N67 500PD	6L / TCA	6,7	–	368 (500) @ 3000	–	–	–	–
○ ●	N67 560	6L / TCA	6,7	–	412 (560) @ 3000	368 (500) @ 3000	331 (450) @ 3000	–	–
○ ●	N67 570[3]	6L / TCA	6,7	–	419 (570) @ 3000	368 (500) @ 3000	331 (450) @ 3000	–	–

LEGEND

APPLICATION
○ Pleasure
● Professional

ARRANGEMENT
L In-line vertical

AIR INTAKE
NA Naturally Aspirated
TC Turbocharged
TCA Turbocharged After Cooled

PROPULSION SYSTEM
SD Stern Drive version
PD Pod Drive version

S1 Sportive duty
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 useage 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 useage 1000 hours per year
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Full throttle operation restricted within 10% of total use period
Cruising speed at engine rpm <90% of rated speed setting
Maximum useage 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 useage 3000 hours per year
D Heavy duty
Maximum rating utilisation up to 100% of use period, for unlimited hours per year

(1) Net rating at flywheel according to ISO 3046-1 and delivered after ~ 50 hours running. Engine performance within ± 5%
(2) Available also with Sail Drive (3) Preliminary data - available from January 2013

Mechanical Engines – Features

INJECTION SYSTEM	The NEF Series mechanical fuel injection system is characterized by advanced components providing high torque and power, 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, international 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 TORQUE AND POWER PERFORMACE 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

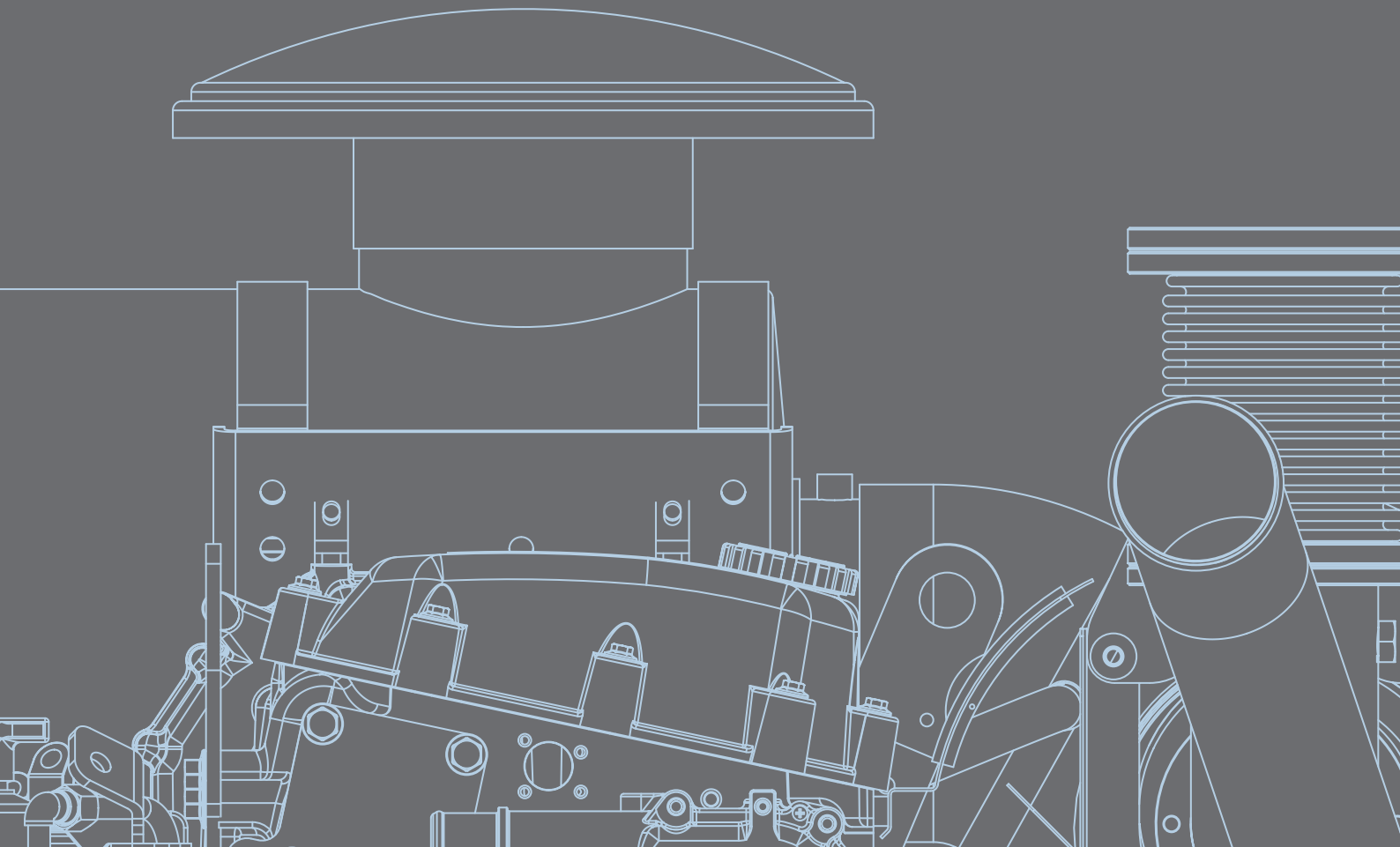
Electronic Engines – Features

SPECIFIC FEATURES	The NEF pleasure 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 cruisers, yachts and light/medium duties commercial boats up to 12 meters.
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 turbocharging optimized 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 availability including electronic remote control, monitoring systems, international emission standards as IMO MARPOL, 2003/44/EC, 2004/26/EC, EPA Recreational & Commercial and propulsion homologation as RINA. Specific for pleasure duty, stern drive and POD drive availability completes and optimizes the NEF Series application for a wide range of boat types and propulsion solution.
SERVICEABILITY & MAINTAINABILITY	Easier engine servicing thanks to advanced diagnostic equipment & widespread worldwide service network.

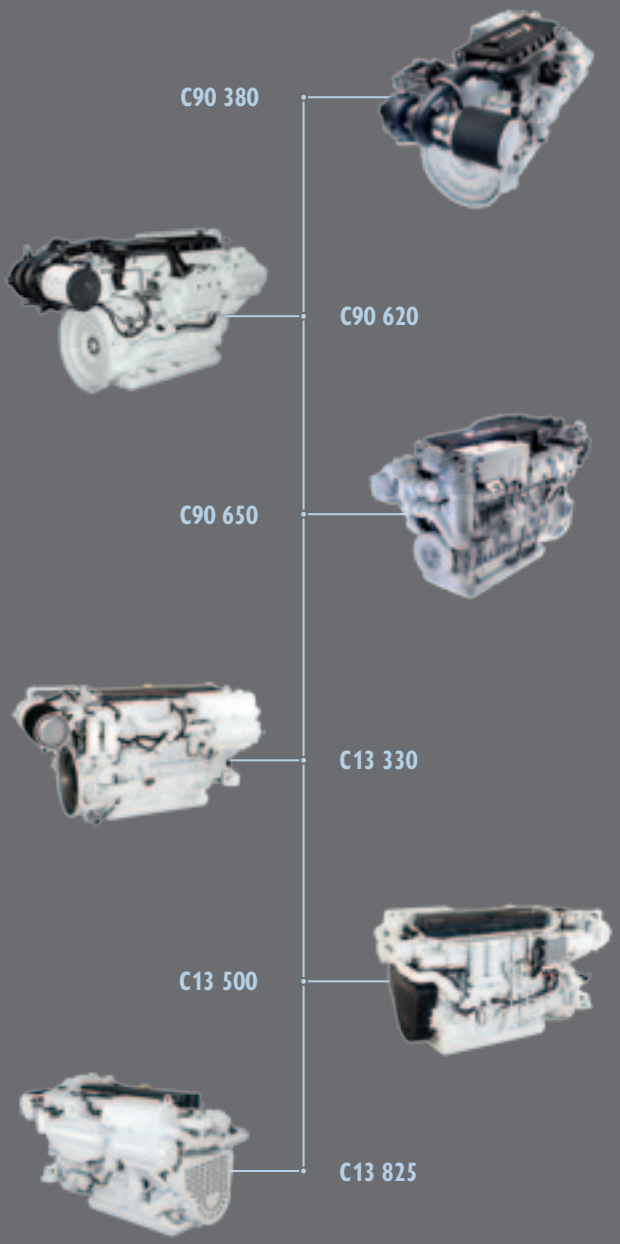
Benefits

- ✓ HIGH TORQUE AND POWER PERFORMACE
  REDUCED 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

THE CURSOR SERIES



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 **Cursor Series** for its outstanding technology, low operating costs, fuel economy and ease of maintenance.

This Series for pleasure applications is recommended for yachts and sport fishing boats up to 16-18 meters (according to boat displacement) and ensures proven performance, reliability and simplified installation.

APPLICATION	MODEL	CYLINDERS ARRANGEMENT ASPIRATION	DISPLACEMENT LITERS	POWER[1] – KW (HP) @ RPM					
				S1	A1	A2	B	C	D
●	C90 380	6L / TCA	8,7	–	–	–	–	301 (410) @ 2000	280 (380) @ 2000
○	C90 620	6L / TCA	8,7	–	456 (620) @ 2530	405 (550) @ 2530	368 (500) @ 2530	331 (450) @ 2530	–
○	C90 650	6L / TCA	8,7	–	478 (650) @ 2530	–	–	–	–
●	C13 330	6L / TC	12,9	–	–	–	–	–	243 (330) @ 1800
●	C13 500	6L / TCA	12,9	–	–	–	–	382 (520) @ 2000	368 (500) @ 2000
○	C13 825	6L / TCA	12,9	–	607 (825) @ 2400	522 (750) @ 2400	478 (650) @ 2400	442 (600) @ 2400	–

LEGEND

APPLICATION
○ Pleasure
● Professional

ARRANGEMENT
L In-line vertical

AIR INTAKE
TCA Turbocharged After Cooled
TC Turbocharged

S1 Sportive duty
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 useage 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 useage 1000 hours per year

B Light duty
Full throttle operation restricted within 10% of total use period
Cruising speed at engine rpm <90% of rated speed setting
Maximum useage 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 useage 3000 hours per year
D Heavy duty
Maximum rating utilisation up to 100% of use period, for unlimited hours per year

(1) Net rating at fl ywheel according to ISO 3046-1 and delivered after ~ 50 hours running. Engine performance within ± 5%
(2) Available also with Sail Drive

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 plateau 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.
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OPTION LIST	Wide range of accessories including electronic remote control, monitoring systems, international emission certifications as IMO MARPOL, 2003/44/EC, EPA Recreational & Commercial and propulsion homologation as RINA.
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Benefits

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- ✓ CUSTOMER ORIENTATION
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FPT
C88

The new FB 41' SF (FB Design) New York-Bermuda record holder (September 2012).
FB 41' SF is powered by two FPT Industrial engines C90 at 650 HP.

Graphic Design STAR Srl, Italy

FPT
POWERTRAIN TECHNOLOGIES

Authorised Distributor

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