



***MARINE***

***COMMERCIAL***

**Our efficiency.  
Your edge.**



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# **ABOUT FPT INDUSTRIAL**

FPT Industrial is a Brand of Iveco Group, dedicated to the design, production, and sale of powertrains and solutions for on- and off-road vehicles, as well as marine and power generation applications.

At FPT Industrial sustainability is a common underlying commitment, through the entire product development and as a corporate approach.

The extensive product offering includes six engine ranges with power outputs from 30 hp to over 1,000 hp, transmissions with torque up to 500 Nm and front and rear axles from 2.45 to 32 tonne GAW (Gross Axle Weight).

FPT Industrial offers the most complete line-up of natural gas engines for on- and off-road applications on the market, with power outputs ranging from 50 to 520 hp.

A dedicated ePowertrain division is accelerating the path towards net zero-emissions mobility with electric drivelines, battery packs and battery management systems. This extensive offering and its strong focus on R&D makes FPT Industrial a world leader in industrial powertrains and solutions.

We are proud to be a Company driven by sustainability and innovation, one which builds Customer advantage through continuous research and improvement and creates value by leveraging this advantage.

# ***THE WAVE OF INNOVATION***

## Superior Technology & Outstanding Advantages

With over 50 years of marine propulsion expertise, FPT Industrial propels a wide range of vessels worldwide with cutting-edge solutions. Our comprehensive in-house expertise, encompassing both base engines and marine dressing, ensures tailored solutions that meet Customers' specific needs and performance requirements.

FPT Industrial engines deliver reliable performance for a wide range of pleasure and commercial vessels, from recreational boating to light, medium and heavy commercial applications. With engine capacities ranging from 3 to 15.9 liters, our engines are renowned for their exceptional quality, comprehensive features and adaptability to various applications, excelling in both propulsion and auxiliary uses.

The F1, NEF and CURSOR engine families deliver impressive continuous specific power and torque at low speeds, resulting in outstanding efficiency and remarkable durability in all sea conditions.

FPT Industrial is committed to environmental responsibility by minimizing exhaust gas emissions. A significant reduction in noise and vibration ensures a smooth and enjoyable ride, even while delivering high power.

Our engineering expertise has resulted in a lightweight design, delivering exceptional power-to-volume and power-to-weight ratios, ensuring superior performance and easy maintenance.

### Performance

- High power density and top power delivered for different applications.
- Low noise and vibration, assuring the best comfort onboard.

### Reliability

- FPT Industrial marine long blocks are the same applied on hundreds of thousands on-road and off-road applications worldwide, making them a synonym of reliability and uptime, testified by hundreds of Customers all around the world.

### Low Operating Costs

- Our Proactive Assistance and Connected Solutions work together to minimize Total Cost of Ownership and maximize operating efficiency.

### Flexibility

- A compact engine with a low volume/power ratio.
- A full range of available accessories.
- Compliant with a wide range of emissions and Class type approvals.
- Available in heat exchanger and keel cooled configurations.

### Low Environmental Impact

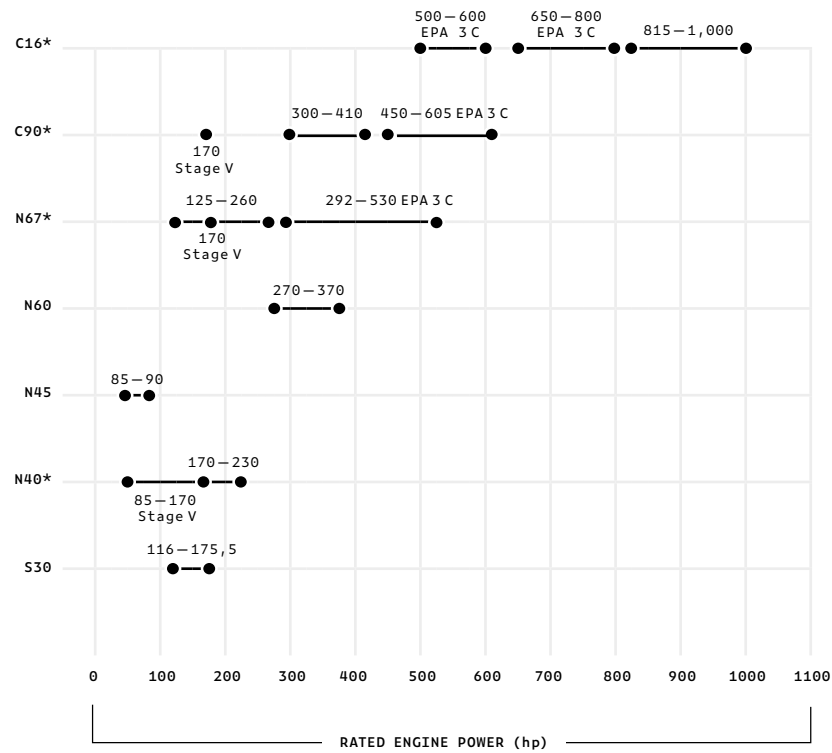
Outstanding environmental impact reduction is achieved through:

- Clean operation and fuel flexibility. Our solutions boasts low emissions and compatibility with renewable HVO (Hydrotreated Vegetable Oil) / XTL drop-in fuels, resulting in a CO<sub>2</sub> reduction of over 90% without compromising performance and service life.
- IMO Tier III compliance. The after-treatment system, co-developed with Frydenbø Industri A/S, ensures clean operation that meets the strictest emissions regulations.
- Modular hybrid propulsion system. Our compact, scalable hybrid system, designed in collaboration with Vulkan, offers zero-emission operation and superior onboard comfort.



# Marine Propulsion - Variable Speed Engines Portfolio Overview

COMMERCIAL LINE-UP 85 ÷ 1,000 hp



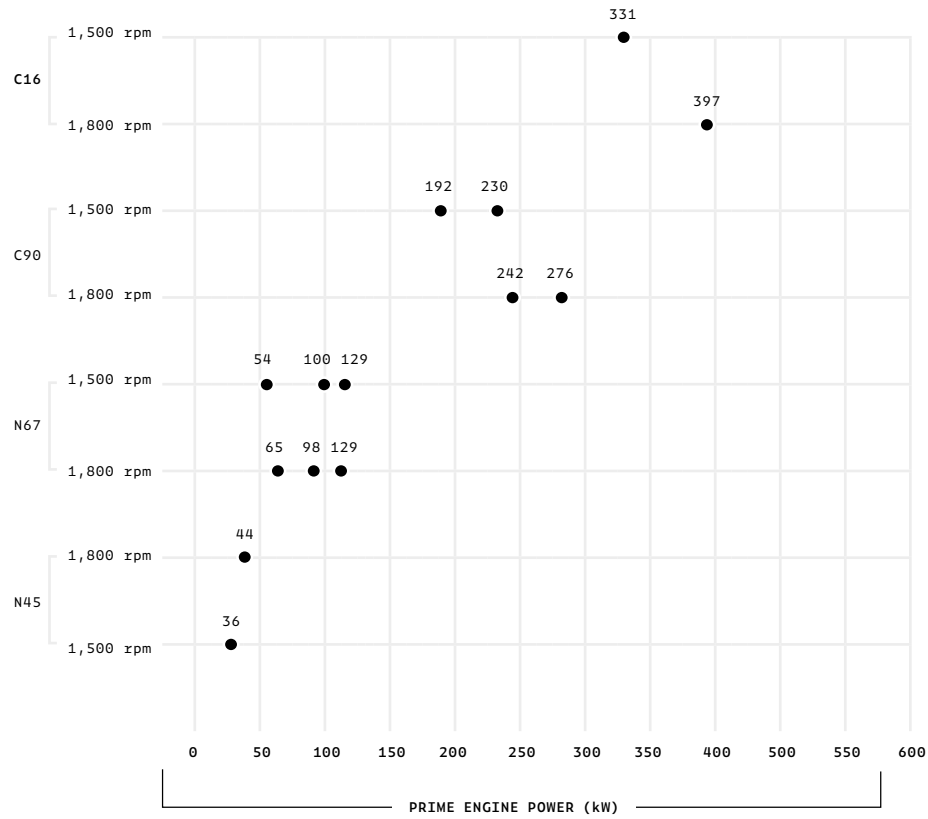
\* Available with Keel Cooling





# Marine Auxiliary - Fixed Speed G-Drive Engines Portfolio Overview

LINE-UP 36 - 331 kW @ 1,500 rpm | 44 - 397 kW @ 1,800 rpm





# Marine Commercial Emissions Regulations

Where	Emission Rules
EU Inland Waterways	IWV Power < 300 KW
	IWV Power ≥ 300 KW
UK Inland Waterways (England, Wales, Scotland, Northern Ireland)	GBTA - final legislation not published yet
EU Coasts and Worldwide seagoing (not ECA)	IMO ≥ 130 kW
	IMO ≥ 130 kW
ECA areas : USA (not USA flagged vessel)	IMO ≥ 130 kW
	in case of propulsion engine power < 750 kW and vessels dimensions are not allowing the installation of an ATS
ECA areas : Canada (within Canadian waters)	IMO ≥ 130 kW up to 15 m
	IMO ≥ 130 kW above 15 m
ECA areas : EU North Sea and Baltic Sea	IMO ≥ 130 kW
USA (USA flagged vessel)	EPA < 600kW
USA (USA flagged vessel)	EPA > 600kW
CHINA (Inland waterways and Coastal areas)	GB15097

**Emission rules - details:**

IWV Stage V = Regulation (EU) 2016/1628

IMO-Marpol = ANNEX VI Technical Code 2008

ECA = IMO-Marpol Emission Controlled Area

EPA = 40CFR1042

GB Stage2 = GB15097:2016

☐ = Aftertreatment system (ATS) required

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
EU Inland Waterways	IWV Stage IIIA						IWV Stage V					
	IWV Stage IIIA						IWV Stage V					
UK Inland Waterways (England, Wales, Scotland, Northern Ireland)							Provisional GB Type Approval required, released based on EU IWV Stage V					
EU Coasts and Worldwide seagoing (not ECA)							IMO Marpol Tier2					
							IMO Marpol Tier3					
ECA areas : USA (not USA flagged vessel)							IMO Marpol Tier2					
							IMO Marpol Tier3					
ECA areas : Canada (within Canadian waters)	IMO Marpol Tier3	IMO Marpol Tier2 - derogation up to end of 2027										
		IMO Marpol Tier3										
ECA areas : EU North Sea and Baltic Sea		IMO Marpol Tier2					IMO Marpol Tier3					
		EPA Tier3										
USA (USA flagged vessel)		EPA Tier 3 temporary allowance in 1042.145(k) through end of MY2023, Special Provisions for certain vessel types 600-1400 kW						EPA Tier4 (Tier 4 exemption process beginning in 2024 in 1042,145(m) to be requested by vessel manufacturer)				
CHINA (Inland waterways and Coastal areas)		GB Stage 1					GB Stage 2					

The International Maritime Organization (IMO) regulates exhaust emissions for diesel engines above 130kW (174 hp), with an exemption for engines used exclusively in emergency applications. The IMO Tier III regulation applies within NOx Emission Control Areas and is effective for vessels built after January 1, 2016, in North America and the US Caribbean Sea.

The Nonroad Mobile Machinery Directive rules exhaust emissions from diesel engines installed on inland waterway vessels operating in the European Union (EU). The Recreational Craft Directive regulates noise and exhaust emissions from propulsion engines on recreational craft operating within the EU.

The United States Environmental Protection Agency (EPA) regulates exhaust emissions from diesel engines installed on marine vessels flagged or registered in the United States.

In the People's Republic of China, the GB15097 National Standard aims to prevent and control air pollution from marine engines, thereby improving ambient air quality. It applies to marine engines installed on inland waterway vessels, coasters, sea-river-through ships, channel ships, and fishing boats.

The Recreational Craft Regulations (RCR) 2017/737 are UK laws that establish essential requirements for products before they can be placed on or put into service on the UK market, ensuring their safety. These regulations apply to recreational craft, personal watercraft, certain engines, and specified components.

The GB Type Approval Scheme is the automotive regulatory scheme applicable to manufacturers intending to market vehicles and components in Great Britain. It sets safety and environmental standards for new vehicles, parts, and equipment. This scheme is based on the retained EU legislation as of December 31, 2020, and subsequent UK legislation that amends or supplements the retained EU legislation.

## Marine Rating Classification

### Full load reference conditions

Reference	ISO 8665
Ambient pressure (kPa):	100
Air inlet temperature (°C):	25
Relative humidity (%):	30
Fuel density (kg/dm <sup>3</sup> ):	0.835
Fuel calorific value (kJ/kg):	42700
Fuel temperature (°C):	40

### Variable speed Rating class

		Definition
A1	Short range fast pleasure service	Limited to 10% of time Cruising speed at engine rpm <90% of calibration rated speed 300 h/y
A2/B1	Long range pleasure/commercial service	Limited to 10% of time Cruising speed at engine rpm <90% of calibration rated speed 1000 h/y
B	Light duty	Limited to 10% of time Cruising speed at engine rpm <90% of calibration rated speed 1500 h/y
C	Medium duty	Limited to 25% of time Cruising speed at engine rpm <90% of calibration rated speed 3000 h/y
D	Heavy duty	up to 100% of time unlimited h/y

### Fixed speed Rating class : Prime Power (PRP)

Prime Power conforms to ISO 8528

Unlimited hours per year

Maximum mean load factor of 70% of rated power over 24 h of operation.

Overload +10% (maximum of 1 h in 12 h, maximum in 25 h per year)



# ***VARIABLE SPEED PROPULSION ENGINES***

## Engines Specifications

Engine model	Rating	hp	kW	rpm	Dimensions* (L**xWxH) (mm)	Dry Weight (kg)
S30 230 E	B	175.5	129	3,500	780 x 776 x 755	330
S30 230 E	C	115.6	85	3,500	780 x 776 x 755	330
N40 250 E	B1	230	169	2,800	834 x 708 x 772	490
N40 250 E	B	200	147	2,800	834 x 708 x 772	490
N40 250 E***	C	170	125	2,800	834 x 708 x 772	490
N40 250 E***	C	150	110	2,800	834 x 708 x 772	490
N40 250 E***	C	100	74	2,800	834 x 708 x 772	490
N40 250 E***	C	85	63	2,800	834 x 708 x 772	490
N45 100	B	90	66.5	2,800	811 x 700 x 836	450
N45 100	D	85	63	2,800	811 x 700 x 836	450
N60 400 E	B1	370	272	3,000	1,089 x 726 x 789	595
N60 400 E	B	330	242	3,000	1,089 x 726 x 789	595
N60 400 E	C	270	198	3,000	1,089 x 726 x 789	595
N67 150	B	135	99.5	2,800	1,052 x 705 x 910	530
N67 150	D	125	92	2,800	1,052 x 705 x 910	530
N67 220	C	180	132	2,800	1,072 x 749 x 800	605
N67 220	D	150	110	2,800	1,072 x 749 x 800	605
N67 280	B	260	191	2,800	1,072 x 749 x 800	605
N67 280	C	230	169	2,800	1,072 x 749 x 800	605
N67 280	D	180	132	2,500	1,072 x 749 x 800	605
N67 450 N	B1	420	309	3,000	1,088 x 717 x 789	600
N67 450 N	B	370	272	3,000	1,088 x 717 x 789	600
N67 450 N	C	350	257	3,000	1,088 x 717 x 789	600
N67 450 N	D	292	215	2,000	1,088 x 717 x 789	600
N67 450 N***	D	170	125	2,300	1,088 x 717 x 789	600

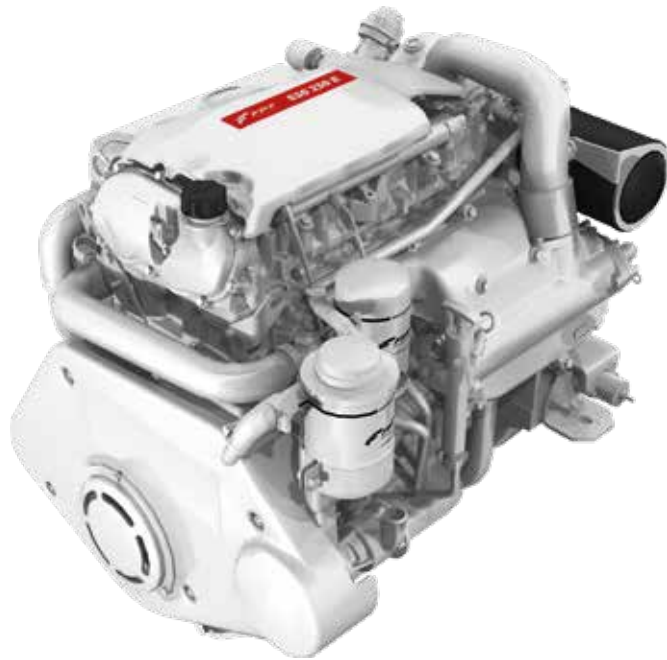
\* Dimensions can be changed according to engine options.

\*\* Length at flywheel.

\*\*\* IWP Stage V Certification.

Engine model	Rating	hp	kW	rpm	Dimensions* (L**xWxH) (mm)	Dry Weight (kg)
N67 550	B1	500	368	3200	1089 x 828 x 824	721
N67 550	B	480	353	3200	1089 x 828 x 824	721
N67 570 EVO	B1	530	390	3000	1089 x 828 x 805	721
N67 570 EVO	B	485	357	3000	1089 x 828 x 805	721
C90 410	C	410	301	2000	1289 x 861 x 973	950
C90 410	D	380	279	2000	1289 x 861 x 973	950
C90 410	D	300	220	2000	1289 x 861 x 973	950
C90 410***	D	170	125	2000	1289 x 861 x 973	950
C90 620 E	B1	605	445	2530	1312 x 863 x 973	940
C90 620 E	B1	580	426	2530	1312 x 863 x 973	940
C90 620 E	B1	550	404	2530	1312 x 863 x 973	940
C90 620 E	B	500	368	2530	1312 x 863 x 973	940
C90 620 E	C	450	331	2530	1312 x 863 x 973	940
C90 650 E	B1	605	445	2530	1312 x 863 x 973	940
C16 600	D	600	441	1800	1470 x 1025 x 1169	1,570
C16 600	D	550	404	1800	1470 x 1025 x 1169	1,570
C16 600	D	500	368	1800	1470 x 1025 x 1169	1,570
C16 1000	B1	1,000	735	2300	1470 x 1166 x 1169	1,640
C16 1000	B1	940	691	2450	1470 x 1166 x 1169	1,640
C16 1000	B	900	662	2300	1470 x 1166 x 1169	1,640
C16 1000	C	815	599	2300	1470 x 1166 x 1169	1,640
C16 1000	C	800	588	2300	1470 x 1166 x 1169	1,640
C16 1000	C	800	588	2000	1470 x 1166 x 1169	1,640
C16 1000	C	750	551	2300	1470 x 1166 x 1169	1,640
C16 1000	C	650	478	2300	1470 x 1166 x 1169	1,640
C16 1000	C	815	599	2000	1470 x 1166 x 1169	1,640
C16 1000	C	750	551	2000	1470 x 1166 x 1169	1,640

# THE F1 SERIES



**Engine model**  
S30 (4 cyl., 3 L)

**Power range**  
From 115.5 to 175.5 hp  
From 85 to 169 kW

## Key Advantages

### Reliability

- Improved reliability derived from F1C engine applied on Light Commercial Vehicles.
- Best-in-class maintenance intervals 600 hours.

### Versatility

- Wide range of accessories and options available.
- Sterndrive Bravo X available as an option.
- Suitable for Light and Medium-Duty applications.

### Lightness and Compactness

- High compactness, useful to fit in the tightest engine rooms.

### Efficiency

- High engine efficiency, vibrations and noise reduction thanks to innovative technologies and production processes.

### Emissions Standards

- Type approvals available.
- Compatibility with XTL / HVO fuels (EN 15940).

## S30 230 E

Arrangement:	4 Cyl. in line
Total Displacement (L):	3.0
Maximum Power (kW (hp) @ rpm):	129 (175.5) @ 3,500
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 780 x 776 x 755 mm
Dry Weight	330 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II
B	129	175.5	3,500	215	exempted
C	85	115.6	3,500	224	exempted

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail





# THE NEF SERIES


**Engine model**

N40 (4 cyl., 3.9 L)  
N45 (4 cyl., 4.5 L)  
N60 (6 cyl., 5.9 L)  
N67 (6 cyl., 6.7 L)

**Power range**

From 85 to 530 hp  
From 63 to 390 kW

**Peak Torque**

Up to 1,580 Nm

## Key Advantages

**Performance**

- N67 best-in-class power density with the minimum fuel consumption and exhaust gas emission.
- N67 torque fast response.

**Efficiency**

- Best-in-class fuel consumption for light duty applications.
- High engine efficiency, vibrations and noise reduction thanks to innovative technologies and production processes.

**Emissions Standards**

- Type approvals available.
- Improved environmental care complying with the most stringent emissions regulations.
- Compatibility with XTL / HVO fuels (EN 15940) – for electronic engines only.

**Reliability**

- Best-in-class maintenance intervals up to 600 hours.
- Proven reliability given by base engine, used in hundreds of thousands of on-road and off-road applications installed annually.
- Both base engine and marine dressing are made by FPT Industrial.
- Reduced maintenance and operating costs.

**Versatility**

- Wide range of accessories and options available.
- Available in heat exchanger and keel cooled configurations.
- Flexibility of use for various marine applications.
- Available with mechanical direct injection or electronic common rail version.



## N40 250 E

Arrangement:	4 Cyl. in line
Total Displacement (L):	3.9
Maximum Power (kW (hp) @ rpm):	169 (230) @ 2,800
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L**xWxH) 834 x 708 x 772 mm
Dry Weight	490 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	IWV Stage V   GBTA
B1*	169	230	2,800	217	●	–
B*	147	200	2,800	214	–	–
C*	125	170	2,800	233	exempted	●
C*	110	150	2,800	241	exempted	●
C	74	100	2,800	261	exempted	●
C*	63	85	2,800	271	exempted	●

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail

## N45 100

Arrangement:	4 Cyl. in line
Total Displacement (L):	4.5
Maximum Power (kW (hp) @ rpm):	66.5 (90) @ 2,800
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	NA
Valves per cylinder:	2
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Mechanical
Injection System:	M

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 811 x 700 x 836 mm
Dry Weight	450 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II
B*	66.5	90	2,800	260	exempted
D*	63	85	2,800	260	exempted

#### Air Handling

NA Naturally Aspirated

#### Injection System

M Mechanical

## N60 400 E

Arrangement:	6 Cyl. in line
Total Displacement (L):	5.9
Maximum Power (kW (hp) @ rpm):	272 (370) @ 3,000
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,089 x 726 x 789 mm
Dry Weight	595 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II
B1	272	370	3,000	227	●
B	242	330	3,000	225	●
C	198	270	3,000	224	●

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail

## N67 150

Arrangement:	6 Cyl. in line
Total Displacement (L):	6.7
Maximum Power (kW (hp) @ rpm):	99.5 (135) @ 2,800
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	NA
Valves per cylinder:	2
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Mechanical
Injection System:	M

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,052 x 705 x 910 mm
Dry Weight	530 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II
B*	99.5	135	2,800	255	exempted
D*	92	125	2,800	257	exempted

#### Air Handling

NA Naturally Aspirated

#### Injection System

M Mechanical

## N67 220

Arrangement:	6 Cyl. in line
Total Displacement (L):	6.7
Maximum Power (kW (hp) @ rpm):	132 (180) @ 2,800
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TC
Valves per cylinder:	2
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Mechanical
Injection System:	M

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,072 x 749 x 800 mm
Dry Weight	605 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II
C	132	180	2,800	237	-
D	110	150	2,800	238	exempted

**Air Handling**  
TC Turbocharged

**Injection System**  
M Mechanical

## N67 280

Arrangement:	6 Cyl. in line
Total Displacement (L):	6.7
Maximum Power (kW (hp) @ rpm):	191 (260) @ 2,800
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	2
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Mechanical
Injection System:	M

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,072 x 749 x 800 mm
Dry Weight	605 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II
B*	191	260	2,800	231	●*
C*	169	230	2,800	233	●*
D*	132	180	2,500	221	●*

\* Keel-cooled version available

**Air Handling**  
TCA Turbocharged with aftercooler

**Injection System**  
M Mechanical

## N67 450 N

Arrangement:	6 Cyl. in line
Total Displacement (L):	6.7
Maximum Power (kW (hp) @ rpm):	309 (420) @ 3,000
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,088 x 717 x 789 mm
Dry Weight	600 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	EPA Tier 3 Commercial	China GB II (GB15097- 2016)	IWV Stage V   GBTA
B1*	309	420	3,000	228	●*	●*	●	-
B*	272	370	3,000	227	●*	●*	●	-
C*	257	350	3,000	225	●*	●*	●	-
D*	215	292	2,000	-	●*	●*	-	-
D*	125	170	2,300	234	exempted	-	-	●*

\* Keel-cooled version available

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail

## N67 550

Arrangement:	6 Cyl. in line
Total Displacement (L):	6.7
Maximum Power (kW (hp) @ rpm):	368 (500) @ 3,200
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,089 x 828 x 824 mm
Dry Weight	721 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	EPA Tier 3 Commercial	China GB II (GB15097- 2016)
B1	368	500	3,200	231	●	●	●
B	353	480	3,200	238	●	●	●

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail

## N67 570 EVO

Arrangement:	6 Cyl. in line
Total Displacement (L):	6.7
Maximum Power (kW (hp) @ rpm):	390 (530) @ 3,000
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,089 x 828 x 805 mm
Dry Weight	721 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	EPA Tier 3 Commercial
B1*	390	530	3,000	225	●*	●*
B*	357	485	3,000	222	●*	●*

\* Keel-cooled version available

#### Air Handling

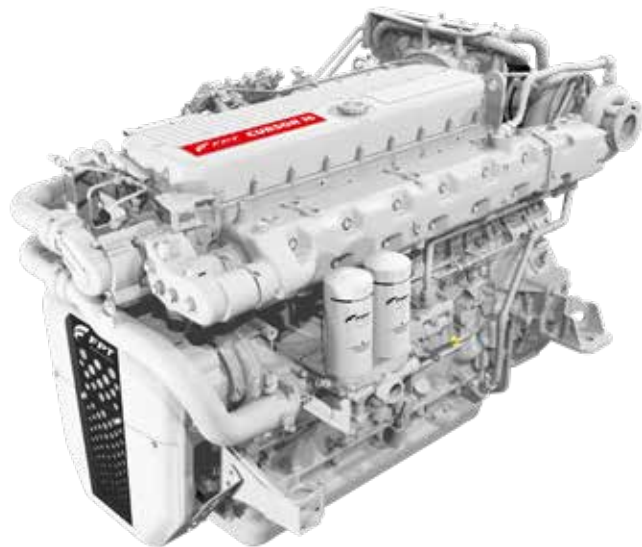
TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail



# THE CURSOR SERIES



**Engine model**  
C90 (6 cyl., 8.7 L)  
C16 (6 cyl., 15.9 L)

**Power range**  
From 170 to 1,000 hp  
From 125 to 735 kW

**Peak Torque**  
Up to 3,510 Nm

## Key Advantages

### Performance

- Top-class performance, leader for peak power and torque fast response in commercial applications.
- CURSOR 9 best-in-class in peak power.
- CURSOR 16 Guinness World Record winner for the fastest diesel on water at 277.5 km/h.

### Efficiency

- CURSOR 9 best-in-class fuel consumption for light duty applications.
- Low fuel consumption if compared with direct competitors.

### Emissions Standards

- Type approvals available.
- Compatibility with XTL / HVO fuels (EN 15940).

### Reliability

- Best-in-class maintenance intervals up to 600 hours.
- Both base engine and marine dressing are made by FPT Industrial.
- Reduced maintenance and operating costs.

### Versatility

- Wide range of accessories and options available.
- Available in heat exchanger and keel cooled configurations.

### Lightness and Compactness

- CURSOR 9 the lightest of its category.
- CURSOR 16 compactness and lightness of a 13L with the durability of a 16L. -13% lighter than 16L competitors avg in commercial range.

## C90 410

Arrangement:	6 Cyl. in line
Total Displacement (L):	8.7
Max Power (kW (hp) @ rpm):	301 (410) @ 2,000
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,289 x 861 x 973 mm
Dry Weight	950 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	EPA Tier 3 Commercial	China GB II (GB15097- 2016)	IWV Stage V   GBTA
C*	301	410	2,000	232	●	●*	●	-
D*	279	380	2,000	222	●	●*	●	-
D*	220	300	2,000	220	●*	●*	●	-
D*	125	170	2,000	256	exempted	-	-	●

\* Keel-cooled version available

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail

## C90 620 E

Arrangement:	6 Cyl. in line
Total Displacement (L):	8.7
Maximum Power (kW (hp) @ rpm):	447 (608) @ 2,530
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,312 x 863 x 973 mm
Dry Weight	940 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	EPA Tier 3 Commercial	China GB II (GB15097- 2016)
B1	426	580	2,530	225	●	●	-
B1	404	550	2,530	224	●	●	●
B	368	500	2,530	228	●	●	●
C	331	450	2,530	228	●	●	●

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail



## C90 650 E

Arrangement:	6 Cyl. in line
Total Displacement (L):	8.7
Maximum Power (kW (hp) @ rpm):	445 (605) @ 2,530
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,312 x 863 x 973 mm
Dry Weight	940 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	EPA Tier 3 Commercial	China GB II (GB15097- 2016)
B1*	445	605	2,530	232	●*	●*	-

\* Keel-cooled version available

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail

## C16 600

Arrangement:	6 Cyl. in line
Total Displacement (L):	15.9
Max Continuous Power (kW (hp) @ rpm):	441 (600) @ 1,800
Thermodynamic cycle:	Diesel 4 stroke
Air handling:	TCA
Valves per cylinder:	4
Cooling System:	Liquid
Direction of Rotation (viewed facing flywheel):	Counterclockwise
Engine management:	Electronic
Injection System:	CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,470 x 1,025 x 1,169 mm
Dry Weight	1,570 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	EPA Tier 3 Commercial	China GB II (GB15097- 2016)
D*	441	600	1,800	212	●*	●*	●
D*	404	550	1,800	217	●*	●*	●
D*	368	500	1,800	217	●*	●*	●

\* Keel-cooled version available

#### Air Handling

TCA Turbocharged with aftercooler

#### Injection System

CR Common Rail

# C16 1000

Arrangement: 6 Cyl. in line  
 Total Displacement (L): 15.9  
 Maximum Power (kW (hp) @ rpm): 735 (1,000) @ 2,300  
 Thermodynamic cycle: Diesel 4 stroke  
 Air handling: TCA  
 Valves per cylinder: 4  
 Cooling System: Liquid  
 Direction of Rotation (viewed facing flywheel): Counterclockwise  
 Engine management: Electronic  
 Injection System: CR

## WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1,470 x 1,166 x 1,169 mm
Dry Weight	1,640 Kg

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	kW	hp	rpm	g/kWh (Rated Speed)	IMO II	EPA Tier 3 Commercial	China GB II (GB15097- 2016)
B1	735	1,000	2,300	228	●	-	●
B1	691	940	2,450	234	●	-	-
B	662	900	2,300	231	●	-	●
C*	599	815	2,300	220	●*	-	●
C*	599	815	2,000	222	●*	-	-
C*	588	800	2,300	233	●*	●*	-
C*	588	800	2,000	224	●*	●*	-
C*	551	750	2,300	219	●*	●*	●
C*	551	750	2,000	222	●*	●*	-
C*	478	650	2,300	241	●*	●*	●

\* Keel-cooled version available

### Air Handling

TCA Turbocharged with aftercooler

### Injection System

CR Common Rail



# ***FIXED SPEED AUXILIARY ENGINES***

# FIXED SPEED AUXILIARY ENGINES LINE-UP

The FPT Industrial marine fixed speed auxiliary engines (G-Drive) range offers a reliable set of solutions for on-board power generators to power and satisfy hotel loads for pleasure and commercial applications.

Available in 50 and 60 Hz versions, fixed speed G-Drive engines have been developed to act in synergy with the FPT Industrial marine propulsion line-up, with power ratings capable of a 10% power overload, according to ISO 8528 prime power.

The rich list of available options allows to meet the most different needs, including fuel pump actuators (GAC) for mechanical engines and the electronic speed controller devices for both mechanical and electronic engines.

Type approvals available on request.

Engine model	Prime power ratings [kWm]	Rated speed [rpm]	Fuel Consumption Rated L/h (Gal/h)	Emissions
N45 100	36	1,500	9.8 (2.6)	IMO-exempted
N45 100	44	1,800	12.0 (3.2)	IMO-exempted
N67 150	54	1,500	14.7 (3.9)	IMO-exempted
N67 150	65	1,800	17.7 (4.7)	IMO-exempted
N67 280	100	1,500	25.6 (6.8)	IMO-exempted
N67 280	98	1,800	25.0 (6.6)	IMO-exempted
N67 450 N	129	1,500	32.0 (8.0)	IMO-exempted-Stage V
N67 450 N	129	1,800	32.2 (8.0)	IMO-exempted-Stage V
C90 410	192	1,500	50.6 (13.4)	IMO II
C90 410	230	1,500	61.0 (16.0)	IMO II
C90 410	242	1,800	64.1 (16.9)	IMO II
C90 410	276	1,800	75.0 (20.1)	IMO II
C16 600	331	1,500	87.0 (23.0)	IMO II, China GB II
C16 600	397	1,800	105.0 (28.0)	IMO II, China GB II, EPA Tier III

# ***ENGINE OPTIONS AND INTEGRATED CONTROL & MONITORING SYSTEM***

# MARINE ENGINE OPTIONS

## **FPT Industrial offers a whole range of options to complete your engine:**

### **Elastic Mountings**

#### **Electrical system**

- Electrical configuration 12V or 24V
- Insulated poles electrical system
- Up-rated Alternators

#### **Power Take-Off**

- Front PTO
- Rear PTO

#### **Monitoring&Control**

- Gauges and sensors
- Digital and analog panels
- Electronic throttle levers and joystick
- Multi-function panels
- Water cooled or dry exhaust pipes
- Gearboxes
- Emission and Class type approvals engine certification with various classification societies

Please contact your local distributor on our locator at [fptindustrial.com](http://fptindustrial.com) to get more information.



# RED HORIZON

## Key Features

Red Horizon is the FPT Industrial marine integrated electronic control and monitoring system developed in partnership with ZF and Simrad Yachting, a Navico Group brand.

Conceived as the perfect connection between pilot and engine, Red Horizon is a combination of high-tech contents and style that culminates in unmatched performance, excellent manoeuvrability and mooring.

Characterized by a skillful and inimitable mix of high-tech contents and style, Red Horizon guarantees:

- Full navigation control and safety.
- Optimal driving comfort.
- Easy handling and harbouring.

## Control and Monitoring Systems

FPT Industrial elevates marine propulsion and manoeuvring with an integrated system that combines ZF's renowned SmartCommand electronic propulsion controls and JMS manoeuvring systems with our common rail engines.

This sophisticated system prioritizes user experience, placing intuitive control at the operator's fingertips.

Customized Multi Function Displays, built upon Simrad technology, excel in engine monitoring, providing a comprehensive overview of the vessel's operation through seamless integration with various onboard devices.





## FPT INDUSTRIAL MONITORING SYSTEMS

### Key Features

- Based on Simrad technology, the Multi Function Display (MFD) of NSX Series has been customized to match with FPT Industrial marine common rail engines. The NSX panels provide more than an engine monitoring visualization, thanks to the potential integration with many other vessel devices:
  - Radar
  - Autopilot
  - Camera /Thermal camera
  - Echosounder
  - Trip data statistics
  - Audio Control
- **7", 9" and 12" displays** are available with SolarMax HD IPS technology optimized for viewing from all angles and in bright sunlight. Their size allows best use of dash and screen space, allowing larger displays in smaller places while also providing a streamlined and attractive options for mounting.
- **Simrad Companion App** is available to access marine data, operating manual and information anywhere. It is compatible with smartphones and tablets and available for Android and iOS.
- **Compatibility:**
  - NEF Family: N40, N60, N67 450 N, N67 550, N67 570 EVO
  - Cursor Family: C90 170, C90 410, C90 650 E, C90 620 E, C90 650 EVO, C16 600, C16 1000



## FPT INDUSTRIAL PREMIUM CONTROL

### Key Features

- FPT Industrial takes control systems to the next level by integrating ZF advanced electronic propulsion controls (SmartCommand) and maneuvering systems (JMS), specifically designed to work seamlessly with our engines. This ensures optimal performance and efficiency. The FPT Industrial Premium Controls, featuring the innovative and compact 5200 control head, integrate the latest CAN bus technology. This user-friendly design enhances comfort and safety through different control modes.
- **Visual indicators** on the control head help to easily locate the neutral detent position; 2-color LED's indicate which control head is in command and whether the corresponding transmission is engaged.
- FPT Industrial Premium Controls offer customizable special features to optimize the maneuverability for docking and trolling. Advanced control modes include:
  - ✓ **CRUISE**
  - ✓ **EASIDOCK**
  - ✓ **AUTOTROLL**
  - ✓ **WARM UP**
  - ✓ **ONE LEVER**



## FPT INDUSTRIAL PREMIUM JOYSTICK

### Key Features

- FPT Industrial adopts ZF manoeuvring systems (JMS) specifically suited for our engines. This ensures optimal engine and system performance for efficient vessel operation. The FPT Industrial Premium Joystick provides **simple and intuitive boat control** during manoeuvres and allows captains to confidently navigate even complex docking situations.
- Standard control heads can make maneuvers like sideways docking, 360° spot turns and precise low-speed control a struggle. However, with FPT Industrial Premium Joystick, these complex operations become effortless.
- The system also controls the throttle of the engines and shifts the transmissions with automatically controlled trolling valves to deliver the needed precise speed and responsiveness **for smooth manoeuvring and easy docking even in tight spaces.**
- Thanks to an integrated electronic compass, the FPT Industrial Premium Joystick **keeps the vessel going in the selected direction.**
- Ready to work with an additional iAnchor kit, **to automatically maintain the position of vessel** against wind and current.





**We innovate constantly.  
We increase the benefits for  
end users and create value  
for the businesses we serve.**





***YOU ASK  
FOR THE  
BEST.  
WE MAKE  
IT HAPPEN.***

When the market becomes increasingly challenging, it is essential to have reliable partners.

We collaborate closely with you to provide tailor-made solutions, maximizing engine performance and durability. We are committed to doing everything possible to support you and your business.


## Extended Warranty. Everyday closer to your needs.

On top of the Base Warranty, it is possible to submit our Extended Warranty program, that covers all required FPT Industrial Genuine parts along with any repairs carried out by highly qualified technicians.

The FPT Industrial Extended Warranty guarantees:

- Customizable offer according to your needs.
- Avoid unexpected repair costs during your chosen operation period with our transparent FPT Industrial product warranties.
- Assistance performed by FPT Industrial qualified technicians.
- Optimal Product performance thanks to FPT Industrial Genuine Parts.

Our FPT Industrial Extended Warranty is made with the aim to be closer to you in your everyday activities. You can customize it according to your needs and extend it up to five years. To request a quotation please contact your FPT Industrial Dealer of reference.

	OPERATING HOURS	COVERAGE	DURATION
	Max. limit depending on rating <input type="checkbox"/> Light-Duty Commercial up to 7,500 hrs <input type="checkbox"/> Medium & Heavy-Duty Commercial up to 10,000 hrs	<input type="checkbox"/> BRONZE Engine Major components only* <input type="checkbox"/> SILVER Complete Engine	<input type="checkbox"/> Up to 5 Years

\* List of major components: cylinder head; cylinder block; crankshaft; camshaft; connecting rod; pistons; timing gears; flywheel; flywheel housing; oil pump; exhaust manifold; engine control unit.

## Proactive Assistance. Your direct connection to the Control Room.

Ensuring optimal engine performance and smooth operations has never been easier, thanks to our Telematic systems, we will take care of you. Installing the Telematic Kit on your engine you will allow FPT Industrial Control Room to analyze your engine data in real-time. Through this advanced system, we can promptly detect any action that will maximize the performances of your vessel.

Our dedicated team is always ready to provide prompt assistance and support. With this proactive approach, we can address any potential issues, ensuring that your engine performs at its best.

Experience the convenience of enhanced engine performance and the peace of mind that comes with our close monitoring and support.

- Engine Status monitoring.
- Maximize uptime thanks to the prompt activation of the FPT Industrial local Service Point, which is informed about the issue before leaving the Workshop supported by the remote pre-diagnosis.
- Engine diagnostics and repair based on FPT Industrial technical know-how and field experience.
- Monitor the performances of individual boat or fleet in real time, with periodic reports tailored to your mission.
- Total Cost of Ownership (TCO) reduction by optimizing engine performance, fuel consumption and by reducing up to 60% the Maintenance & Repair downtime.





## Genuine Parts. Original is better.

Our Genuine Parts are manufactured with the same rigorous procedures and premium materials as your FPT Industrial engine. They ensure:

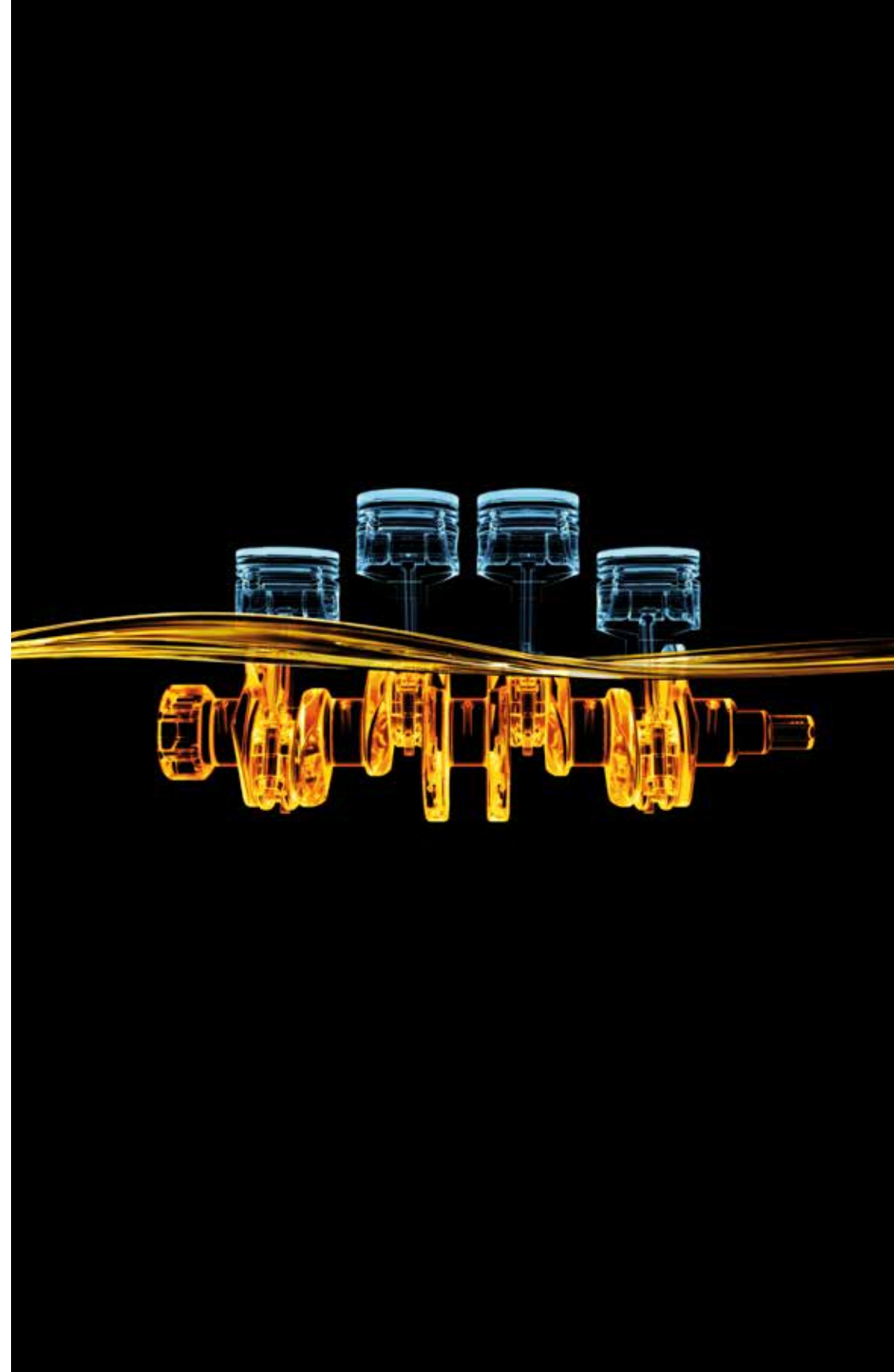
- **Total Compatibility:** guaranteed to perfectly fit with your engine.
- **Optimized Service Life:** exceptional durability without compromising engine performance.
- **Guaranteed Operation:** assured to achieve optimal engine output.

By choosing FPT Industrial Genuine Parts, you maintain the best conditions just like from the manufacturing plant, maximizing engine output and uptime. Our network of Authorized Workshops features highly qualified technicians ready to expertly assist you in achieving peak engine efficiency.

## The perfect combination.

FPT Industrial Genuine Engine Oils are designed with Customer's missions in mind. Developed for exceptional performance under any condition, our lubricants deliver:

- **Enhanced Protection & Durability:** extended engine life and minimized downtime with superior wear and tear resistance.
- **Maximized Uptime & Fuel Efficiency:** our core focus is keeping your equipment running strong. FPT Industrial Fluids has been developed to guarantee the highest level of cleanliness, protection and efficiency, resulting in:
  - +87% cleaner pistons and +68% better top ring protection.
  - +41% Cylinder Wear protection.
  - +20% improved Soot Handling and Sludge Control.
  - -20% in Total Cost of Ownership (TCO).
  - Reduced fuel and oil consumption for a greener future. C16 600, C16 1000



## **You need help? We are here for you.**

Because you never stop, neither do we. Our Customer Contact Centre is active 24/7, to assist you and to activate our local support network.

For any issue or need, our technical and expert support service is ready to help you anytime, anywhere.

If you need technical support or assistance on-site, you can always rely on more than 70 dealers global network and over 900 Service points.

Discover our global dealers' network:







All the pictures, drawings illustrations and descriptions contained in this brochure are based on product information available to FPT Industrial at the time of printing (30/06/2024). Some of the engine line-ups may refer to a specific market configuration which may not be present or offered for sale available in all other markets. The colors featured in this brochure may differ from the originals. FPT Industrial reserves the right to introduce any modifications, at any time and without any prior advance notice, to design, material, components equipment and/or technical specifications.



