



# **MARINE COMMON RAIL ENGINES**

# **6LF Series - 485 / 530 / 550**

Configuration	in-line, 4-stroke, vertical, water	in-line, 4-stroke, vertical, water-cooledel diesel engine	
Max. output at crankshaft*	356 kW@3000 rpm 390 kW@3000 rpm 404 kW@3000 rpm	[485 mhp@3000 rpm] [530 mhp@3000 rpm] [550 mhp@3000 rpm]	
No. of cylinders	6 cylinders		
Displacement	6.728 L	[411 cu in]	
Bore x stroke	104 mm x 132 mm	[4.10 in x 5.20 in]	
Aspiration	Turbocharged & intercooled	Turbocharged & intercooled	
Combustion system	Direct injection Bosch commor	Direct injection Bosch common rail system	
Starting system	Electric starting 12V - 3kW or 2	Electric starting 12V - 3kW or 24V - 4kW	
Engine management	Electronic	Electronic	
Cooling system	<b>5</b> ,	Fresh water cooling by centrifugal fresh water pump Seawater cooling by rubber impeller seawater pump	
Alternator	12V - 90A, 24V - 70A	12V - 90A, 24V - 70A	
Lubrication system	Enclosed, forced lubricating sys	Enclosed, forced lubricating system	
Engine lube oil specifications	API class: CD or higher, SAE gr	API class: CD or higher, SAE grade: 10W-30 or 15W-40	
Direction of rotation at crankshaft	Counterclockwise (CCW) viewe	Counterclockwise (CCW) viewed from stern	
Dry weight without gear	780 kg	[1720 lbs]	
Engine dimensions† L x W x H	1519 x 893 x 881 mm		
Emission compliance	EU: RCD 2, EMC	US: EPA Tier 3**, IMO Tier 2	
Flywheel housing size	SAE #3		
	SAE #3 Electronic		

#### NOTE:

Fuel condition: Density at  $15^{\circ}C = 0.84 \text{ g/cm}^3$ : 1 kW = 1.3596 mhp = 1.3410 HP

Technical data is according to (ISO 8665)

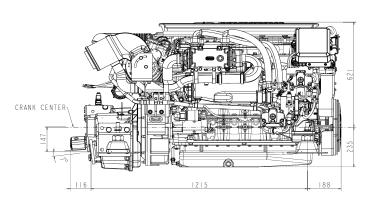
†Length measured with with ZF280 gearbox & high-riser elbow (Dimensions may vary with other gears/elbow)

**DIMENSIONS** 

#### Gear view

# 406 487 Ø 154

#### Right side view



6LF with ZF280-1A gear (Not to be used for engine installation)

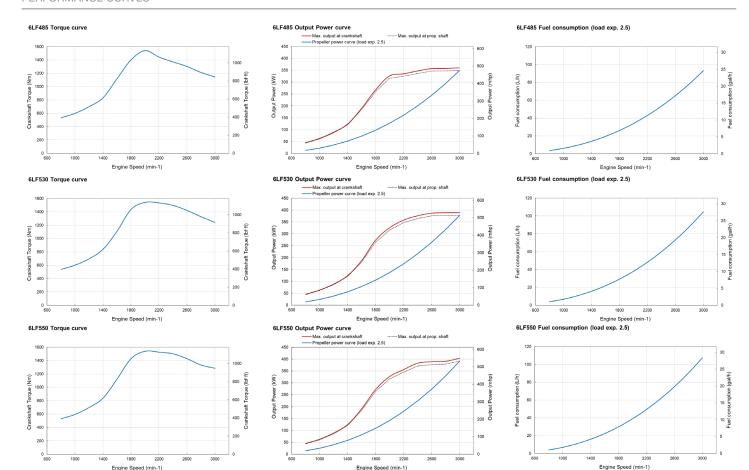
 $<sup>^{\</sup>star}$  Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)

<sup>\*\*</sup> The 6LF550 is not EPA Commercial certified.





#### PERFORMANCE CURVES



#### MARINE GEAR\*

Model	ZF280-1A [Down angle: 7deg] / ZF280-1 [parallel]	
Clutch type	Hydraulic multi disc	
Dry weight**	103 kg [227 lbs]	
Reduction ratio [fwd/asn]	Gear ratio's available from ZF	
Direction of rotation [viewed from stern]	Clockwise & counterclockwise	
Lubrication system	Forced lubrication	
Lube oil specifications	API class: CF or higher, SAE grade: #30	
Max. lube oil capacity	4.5 L	
Dry weight - engine & gear	883 kg [1947lbs]	

<sup>\*</sup> Other marine gearboxes and configurations available upon request. Contact your local supplier for more information.

#### ACCESSORIES

## Standard engine package

- Exhaust mixing elbow [high riser]
- 12V Electric system [single pole] / 24V Electric system [2-pole]
- Flexible mounts
- Alternator 12V 90A / 24V 70A
- VC20 Vessel Control System
- Electronic CAN-bus control head
- Backup Panel
- Lubrication oil evacuation pump [manual]
- Belt safety cover

### Optional accessories

- Secondary alternator 24V 110A including smart regulator
- Secondary alternator 12V 125A or 24V 65A [2-pole]
- Second or third station
- Hot water connector
- NMEA 2000 Engine monitoring system
- JC20A Inboard Joystick
- Extension harness [3m, 5m, 10m]
- Front PTO pulley
- Man Over Board Switch

<sup>\*\*</sup> Dry weight including cooler, brackets & damper disk.