PowerTech 6068TFM Diesel Engine



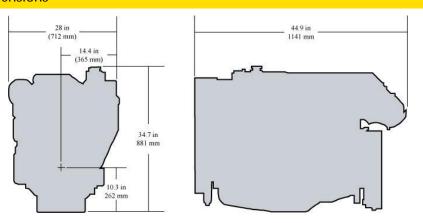
Propulsion Engine Specifications



6068TFM shown

Certifications American Bureau of Shipping China Classification Society Det Norske Veritas IMO MARPOL Annex VI Registro Italiano Navale

Dimensions



| General data | |
|--------------------------|-------------------------|
| Model | 6068TFM50 |
| Number of cylinders | 6 |
| Displacement - L (cu in) | 6.8 (415) |
| Bore and Stroke mm (in) | 106 x 127 (4.17 x 5.00) |
| Compression Ratio | 17.0:1 |
| Engine Type | In-line, 4- Cycle |
| Aspiration | Turbocharged |

| Length - mm (in) | 1141 (44.9) | | |
|-------------------------|----------------------|------------|--|
| Width - mm (in) | 712 (28.0) | 712 (28.0) | |
| Height mm (in) | 881 (34.7) | | |
| Weight, dry kg (lb) | 730 (1609) | | |
| Maximum Installed Angle | Front Up – degrees | 9 | |
| | Front Down – degrees | 0 | |
| | | | |

Features and benefits

Watercooled Turbocharger and Exhaust Manifold

- Cooler and quieter environment for vessel and crew
- Reduced external connections eliminates hoses and fittings that can leak or break

Replaceable Wet-type Cylinder Liners

- Excellent heat dissipation
- Hardened and precision machined for long life
- Rebuild to original specifications

Corrosion Resistant Components

- Provides engine protection from the effects of seawater

Either-side Service

- Oil fill and dipstick combinations
- Remote oil filter for easier service access
- Application and service flexibility to provide installation convenience plus fast and easy maintenance

Heat exchanger or Keel Cooled

- High-capacity heat exchanger designed for reliable operation in adverse conditions
- Integrated expansion tank, heat exchanger and exhaust manifold reduce chances of leaks
- Keel cooler or heat exchanger options provide application flexibility

High Torque and Low Rated RPM

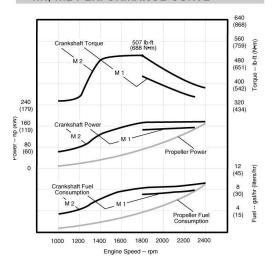
- Enables the engine to turn larger propellers at lower speed for best efficiency
- Excellent vessel control and maneuvering
- Lower rated rpm limits vibration and noise for better crew comfort

Fuel System

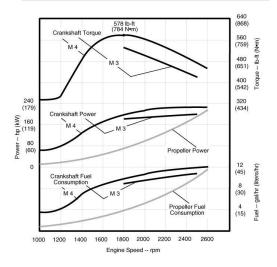
- Proven and reliable Mechanical Governor

Performance curve

M1, M2 PERFORMANCE CURVE



M3, M4 PERFORMANCE CURVE



| Performance data | M4 | M2 |
|---------------------------------|-------------|-------------|
| Rated Power - kW (hp) | 168 (225) | 130.5 (175) |
| Rated Speed - rpm | 2600 | 2400 |
| Low Idle Speed - rpm | 650 | 650 |
| Peak Torque - Nm (ft-lb) | 780 (575) | 684 (504) |
| Peak Torque Speed - rpm | 1800 | 1800 |
| Fuel Consumption - L/h (gal/hr) | 46.8 (12.4) | 36.3 (9.6) |

| M rating | M4 | M2 |
|-----------------------------------|--------------|---------------|
| Typical load factor | 40 % | 65 % |
| Typical annual usage (hr) | 800 | 3000 |
| Typical full-power operation (hr) | 1 of each 12 | 16 of each 24 |

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