

## V12-1650 and V12-1800 Engine description

#### Characteristics

- Cylinders and arrangement:
- Operation mode:
- Turbocharging:
- Number of valves:
- Fuel system:
- Engine lubrication:
- Type of cooling:
- Engine control:
- Fuel:

- 12 cylinders in 90° V arrangement
  - 4-stroke diesel engine, watercooled
  - 2-stage turbocharger with charge air intercooler and waste gate
- 4 valves per cylinder
- Common Rail direct fuel injection with electronic control
- Closed system with forced feeding, oil cooling and filtering
- Plate heat exchanger, seawater cooled
- Electronic injection control (EDC)
  - Electronic engine monitoring including diagnostic unit
  - DIN EN 590

### V12-1650 and V12-1800 Technical data

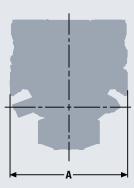
#### Technical features V12-1650 and V12-1800

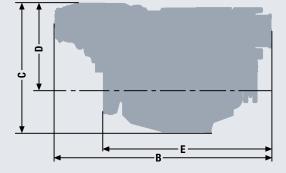
Type designation		V12-1650	V12-1800	
Displacement		24.24	24.24	
Maximum output to DIN ISO 3046-1	kW (hp)	1,213 (1,650)	1,324 (1,800)	
Rated speed	rpm	2,300	2,300	
Maximum torque	Nm	5,510	6,020	
at speed	rpm	1,200–2,100	1,200–2,100	
Absolute fuel consumption at rated power <sup>1)</sup>	l/h	315	339	
Classifiable		✓	_	
Exhaust gas status		IMO Tier 2, EPA Tier 3 <sup>2)</sup> , RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3 <sup>2)3)</sup> , RCD 94/25/EC, 97/68/EC	

1) Tolerance +5% according to DIN ISO 3046-1

2) Increased fuel consumption only with EPA Tier 3

3) for private use only





#### Dimensions V12-1650 and V12-1800

Type designation		V12-1650	V12-1800
A-Overall width		1,150	1,153
B-Overall length	mm	2,255	2,139
C-Overall height	mm	1,350	1,265
D-Top of engine to crankshaft centre	mm	885	811
E-Length of engine from front end to edge of flywheel housing		1,667	1,658
Average weight of engine ready for installation (dry)	kg	2,365	2,365

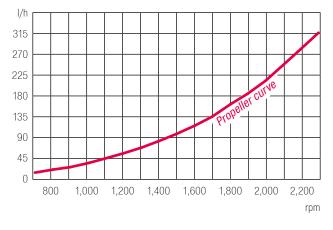
For detailed examinations of installation dimensions, please order drawings from our factory.

# V12-1650 and V12-1800 Power charts

#### Power Torque kW Nm Torque 1,400 5,600 1,200 4,800 4,000 1,000 Full load 800 3,200 600 Propeller our 2,400 ve 1,600 400 200 800 0 0 800 1,000 1,200 1,400 1,600 1,800 2,000 2,200 rpm

Absolute fuel consumption

V12-1650



### V12-1800

