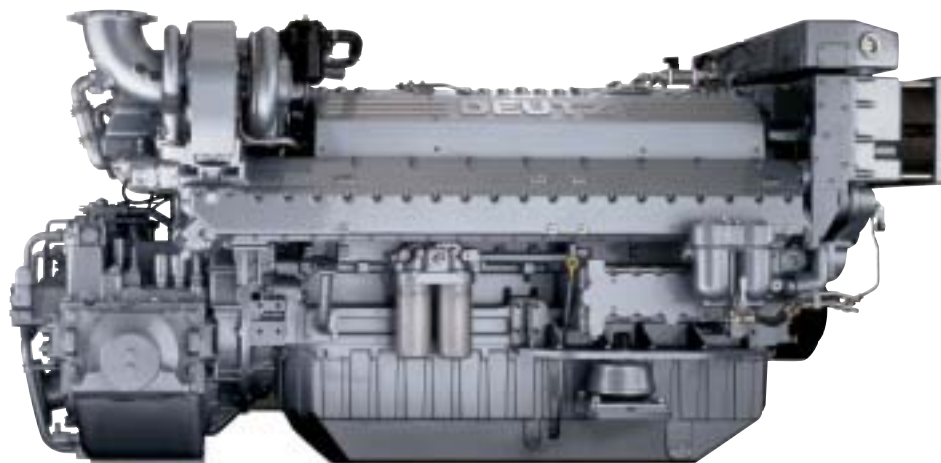


DEUTZ MARINE POWER



2016 Series
1125-1500 kW at 2300 rpm



TCD 2016 – the high-performance engine for yachts.



For many years, when selecting equipment shipyards and owners alike have made the powerful, compact and quiet-running DEUTZ engines their first choice.

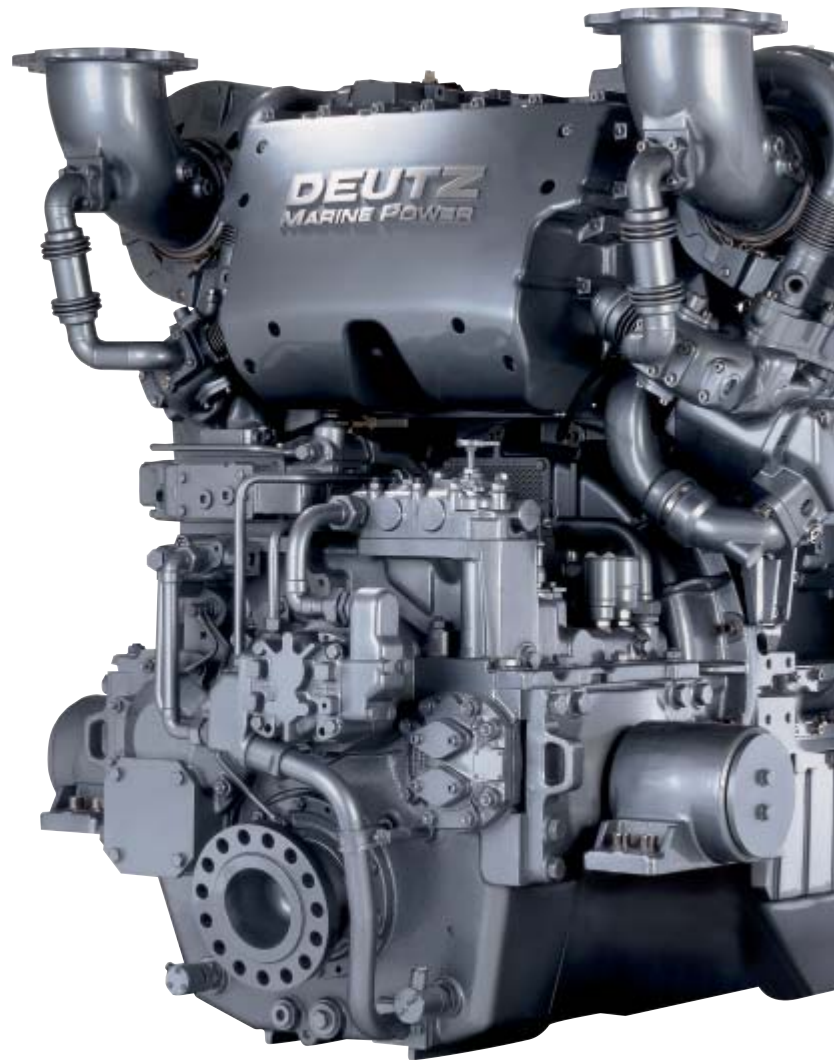
We have now made it even easier for you to choose DEUTZ, as the newly released generation of 20-series high-speed marine diesels is especially designed for use in yachts.



Compact design, spontaneous acceleration, low fuel consumption and high-performance are the outstanding features of these new generations of engines.

These exclusive yacht engines will set new standards in many respects. Our engine's high reliability and our fast service response ensure that DEUTZ customers are fully satisfied.





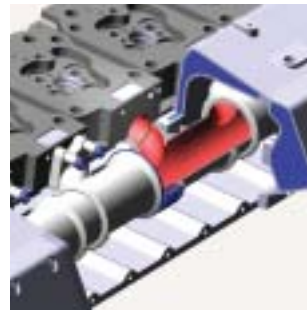
Turbocharger

Two high-performance Holset turbochargers with optimum efficiency produce a maximum charge pressure for particularly efficient combustion and low thermal loading of the engine.



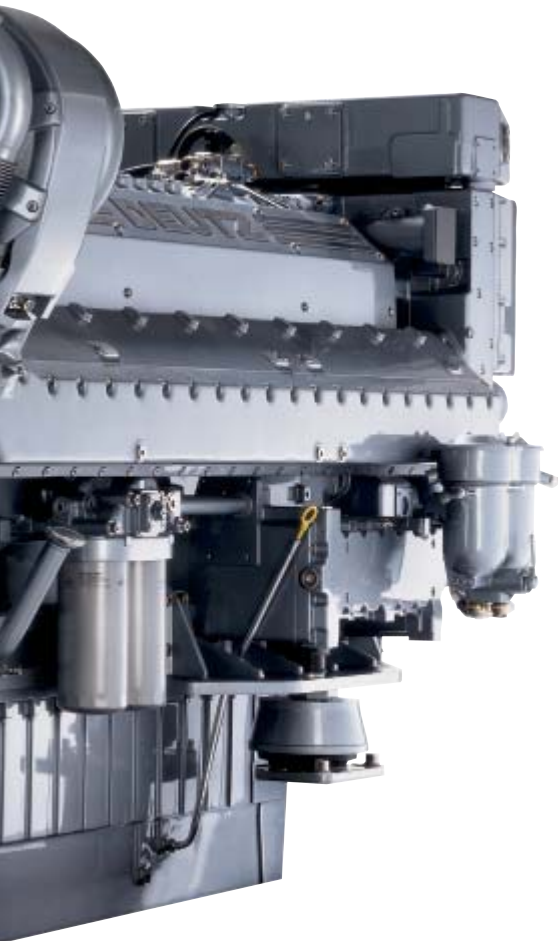
Wastegate

The charge-air-pressure-controlled Wastegate ensures outstanding acceleration.



PEARL® exhaust system

The PEARL® exhaust system makes maximum use of the energy in exhaust gases. The external jacket is water-cooled to reduce the radiated heat.



Features of the TCD 2016

The series comprises 12- and 16-cylinder 60° V-engines with turbocharger and intercooler. Both versions are distinguished by their extremely compact design and outstanding power-to-weight ratio, producing 1125 - 1500 kW with a displacement of 26.3 - 35 liters.

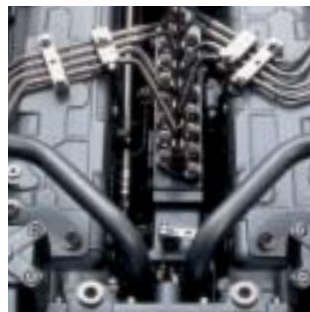
A particularly strong crankcase, main bearings and connecting-rod bearings in full sputter design, and a reinforced steel crankshaft provide maximum reliability, even under extreme loads. Individual cylinder heads with four-valve technology and three-ring aluminum pistons with cooling channel make for low-wear running.

Together with the engine, the standard flange-mounted ZF gearbox forms a compact and secure unit. The elastic engine and gearbox mountings noticeably reduce the body noise.



Cooling

Self-regulating mixed cooling results in low temperatures in all power ranges. Fuel cooling is also incorporated into this system.



Injection / Monitoring

A proven electronic GAC regulator controls the fuel injection. The MKS monitoring system, developed by DEUTZ, ensures reliable engine monitoring, and hence engine protection, in all load ranges.



Charge-air cooler

High-efficiency charge-air cooler in modern plate and fin-type aluminium technology with minimum weight and dimensions to assure best power to weight ratios.



Performance and dimensions

	Units		TCD 2016 V12		TCD 2016 V16	
			Design 60° V-engine 12-cylinder		Design 60° V-engine 16-cylinder	
Bore / Stroke	mm	inch	132	160	5.20	6.30
Displacement	liters	cu inch	26.30	1605.00	35.04	2138.00
Rated power ¹	kW	hp	1125	1509	1500	2012
Rated speed	rpm	rpm	2300		2300	
Fuel consumption at rated power ²	g/kWh	gal/h	215	76.2	216	102.0
Fuel consumption at max. efficiency ²	g/kWh	gal/h	191	25.7	196	35.8
Weight, dry	kg	lbs	2900	6393	3700	8157
Overall width	mm	inch	1366	53.74	1365	53.74

1 Nominal power according to DEUTZ Power category D for Yachts and fast patrol:

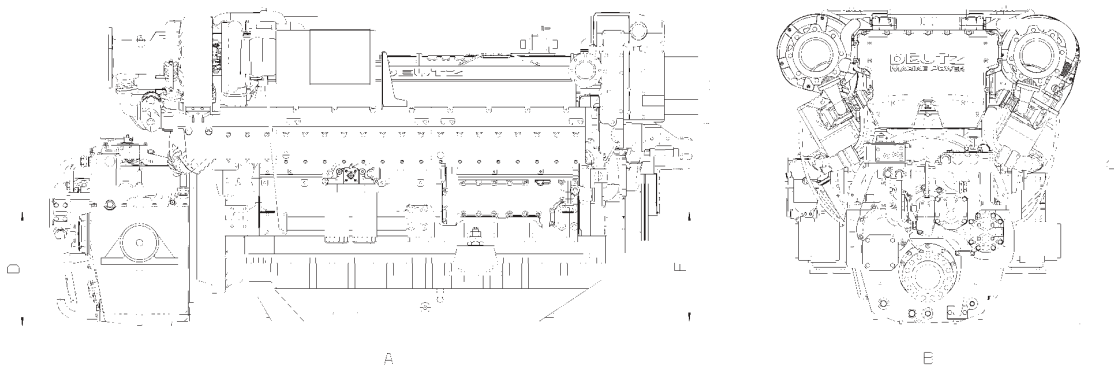
- Typical operating time per year 1000 h
- Operating period with more than 90% of nominal power max. 10%
- Average load max. 40%

The power is given for the ISO 3046 conditions: 25°C air-intake temperature, 50°C charge-air coolant intake temperature, 1000 mbar air pressure and 30% rel. air humidity.

For the following conditions according to IACS a power reduction of 2.5% applies: 45°C air-intake temperature, 50°C charge-air coolant intake temperature, 1000 mbar air pressure and 60% rel. air humidity.

2 Specific fuel consumption with a tolerance of 5% including all engine driven pumps at nominal rating and for the following conditions: 25°C air-intake temperature, 50°C charge-air coolant intake temperature, 1000 mbar air pressure and 30% rel. air humidity.

The data on this sheet is for information only and is not binding. The definitive values are those given in the quotation.



Engine type	Dimensions in		A		B		C		D		E		Gearbox
TCD 2016 V12	mm	inch	2365	93.1	1290	50.8	1390	54.7	450	17.7	400	15.7	ZF 2050 A
TCD 2016 V16	mm	inch	2830	111.4	1335	52.6	1400	55.1	500	19.7	480	18.9	ZF 2550 A