Commercial

Marine

Marine

High speed propulsion engines

MAN Engines
A Division of MAN Truck & Bus

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MAN Marine Engines

A reliable driving force

At sea, ships and boats have to contend with elemental forces, while harbours require them to navigate precisely through the narrowest of corridors.

Customer Benefits

- Maximum torque at the most fuel efficient point of operation
- Maximum torque across a large range of engine speed for a powerful and steady acceleration
- Class-leading compactness for a space-saving design
- Best fuel consumption values and long service intervals minimizing the TCO
- Low acoustics and low vibrations
- World-wide service network with rapid spare parts supply

Light duty operation

In light duty operation (730–1,800 hp), MAN Engines offer exceptional dynamics accompanied by maximum economic efficiency. And by the way: their pathbreaking technology for adhering to emission guidelines means that they easily take up a leading position on patrol boats, sea-rescue boats and coastguard boats.

Medium duty operation

In medium duty operation (400–1,400 hp), the fuel-saving MAN engines ensure maximum efficiency on accompanying boats, pilot boats and deep-sea patrol boats, on fishing boats, ferries and on passenger ships. A long service life with low lifecycle costs and also quick supply of spare parts through the world-wide servicing network make the MAN engines profit earners in professional navigation.

Heavy duty operation

MAN Engines offer a perfectly coordinated power spectrum for heavy duty (258–1,000 hp) operation with powerful acceleration and high tractive force. They are the ultimate in terms of reliability and efficiency in freight and passenger shipping as well as in trawlers, tugs and push boats.

MAN Service
Competent and motivated

MAN is there for you from the outset. Where qualified guidance is needed for the installation, our experts are at your side with advice and practical assistance. Of course you can always rely on our worldwide service. Qualified service centres provide you with fast and skilled servicing and repairs. Worldwide partners ensure a service network for marine engines. As you can see we are there whenever and wherever you need us.

MAN Environmental Awareness
Future-oriented and eco-friendly

At MAN, we attach very great importance indeed to eco-friendliness. Every day, our engineers do their utmost to develop eco-friendly engines which comply with current emission standards worldwide.
With their particularly low fuel consumption, MAN engines not only ensure high economy, but also protect our environment. And your ears: this means that the quiet yet very powerful engine makes every trip a unique experience. Real recreation – both for the customer and the environment.

Light duty operation

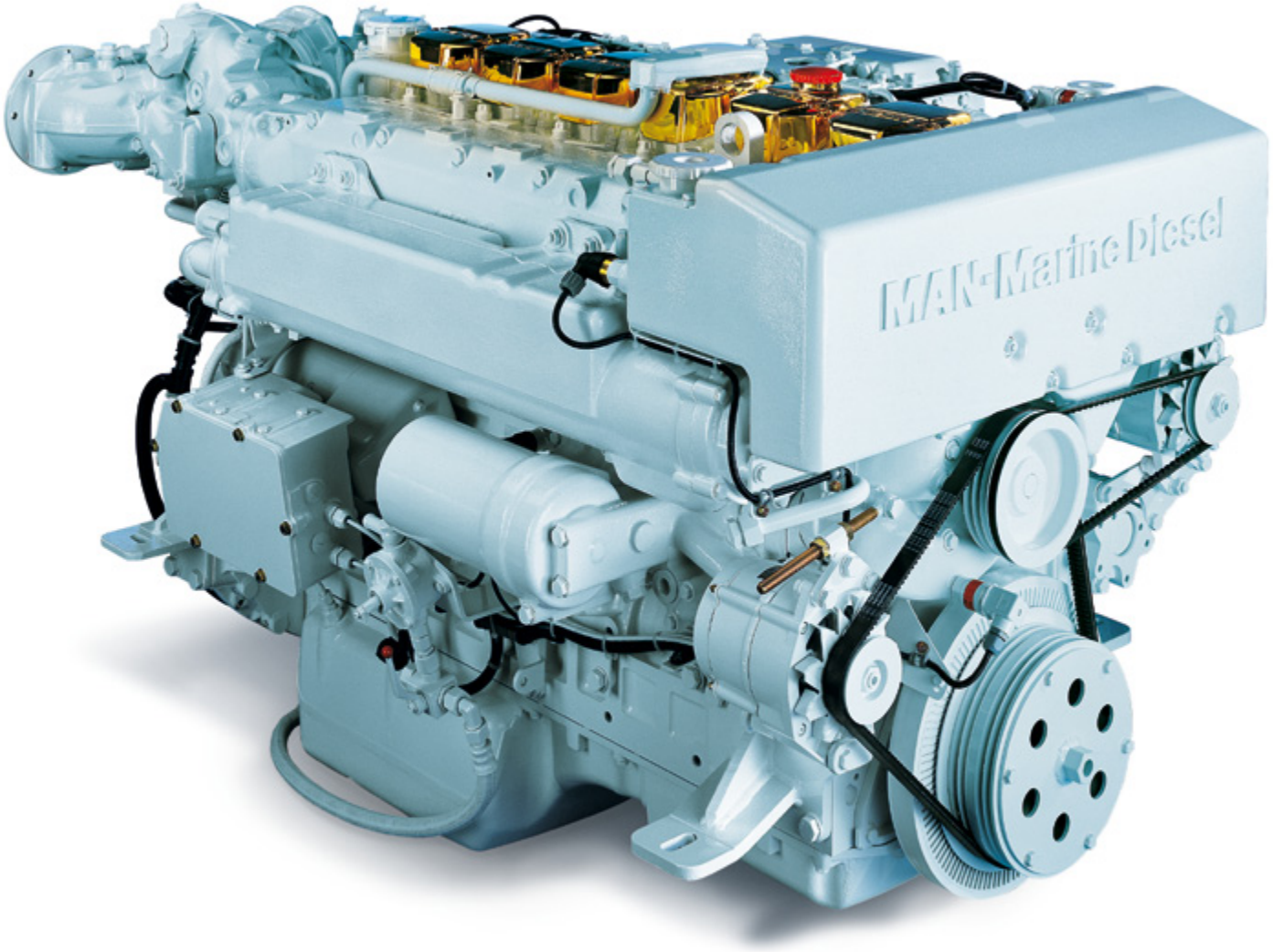
Definition of application type

Characteristics

- Annual operating hours: ≤ 1,000
- Percentage of time at full load: ≤ 20 %
- Average load application: ≤ 50 %
- Particular operation conditions: no wide-open throttle below rated speed
- Average TBO operating hours: ≤ 5000
- Oil change interval: ≤ 400 hours

Typical applications

- Pleasure crafts
- Escort boats and patrol boats
- Ambulance boats
- Police boats



R6-730 and R6-800

Engine description

Characteristics

■ Cylinders and arrangement:	6 cylinders in-line
■ Operation mode:	4-stroke diesel engine, watercooled
■ Turbocharging:	Exhaust turbocharger with intercooler, boost pressure control with waste gate
■ Number of valves:	4 valves per cylinder
■ Fuel system:	Common Rail direct fuel injection with electronic control
■ Engine lubrication:	Closed system with forced feeding, oil cooling and filtering
■ Type of cooling:	Heat exchanger with engine and seawater circuit
■ Engine control:	Electronic injection control (EDC) Electronic engine monitoring including diagnostic unit
■ Fuel:	DIN EN 590

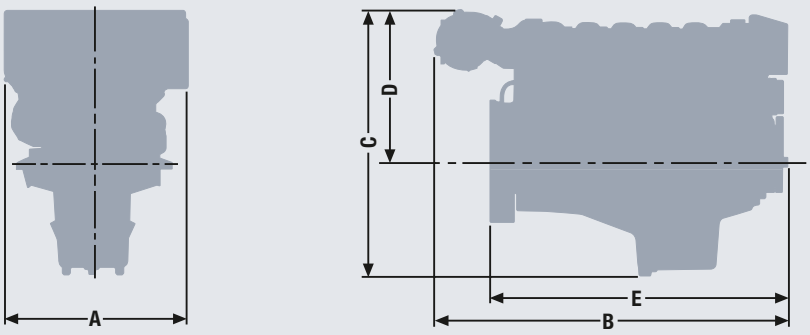
R6-730 and R6-800

Technical data

Technical features R6-730 and R6-800

Type designation		R6-730	R6-800
Displacement	l	12.82	12.82
Maximum output to DIN ISO 3046-1	kW (hp)	537 (730)	588 (800)
Rated speed	rpm	2,300	2,300
Maximum torque	Nm	2,450	2,675
at speed	rpm	1,200–2,100	1,300–2,100
Absolute fuel consumption at rated power [1]	l/h	145	158
Exhaust gas status		IMO Tier 2, EPA Tier 3 [2], RCD 94/25/EC, 97/68/EC, SAV/BSO	IMO Tier 2, EPA Tier 3 [2, 3], RCD 94/25/EC, 97/68/EC, SAV/BSO

1) Tolerance +5% according to DIN ISO 3046-1
2) Fuel consumption may vary
3) For private use only



Dimensions R6-730 and R6-800

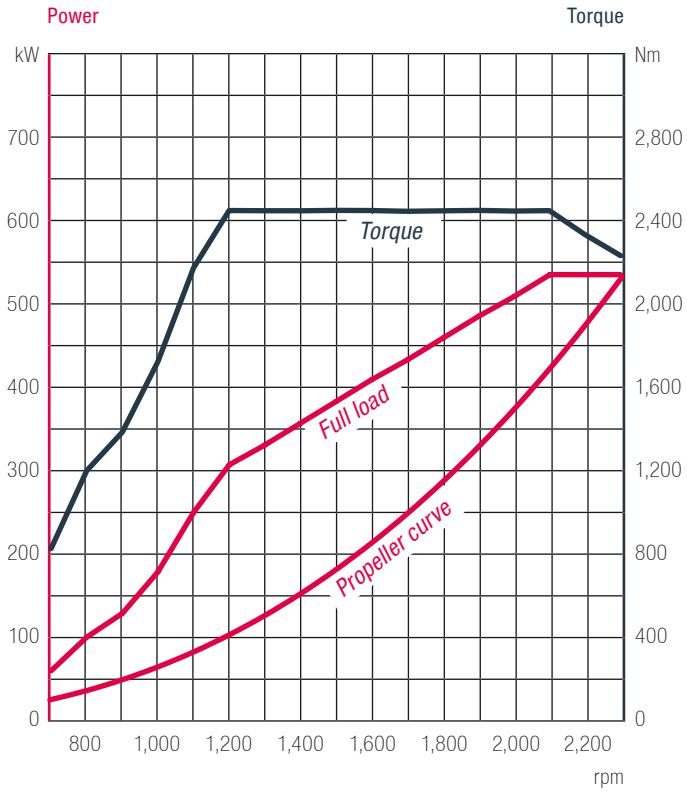
Type designation		R6-730/R6-800
A-Overall width	mm	910
B-Overall length	mm	1,634
C-Overall height – standard oil pan	mm	1,097
D-Top of engine to crankshaft centre	mm	683
E-Length of engine from front end to edge of flywheel housing	mm	1,356
Average weight of engine ready for installation (dry)	kg	1,305

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

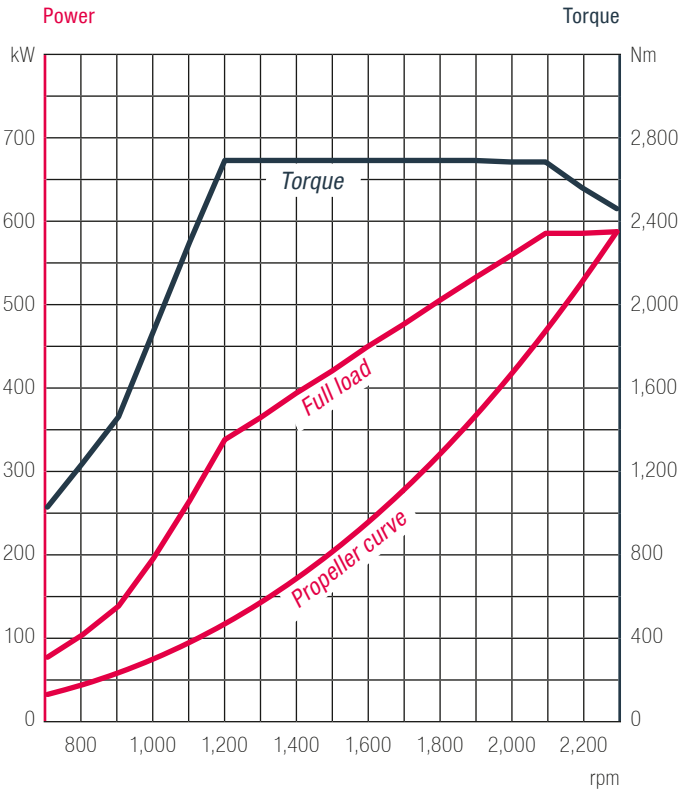
R6-730 and R6-800

Power charts

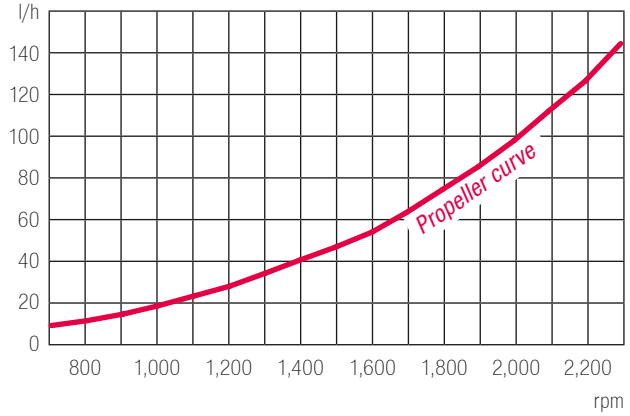
R6-730



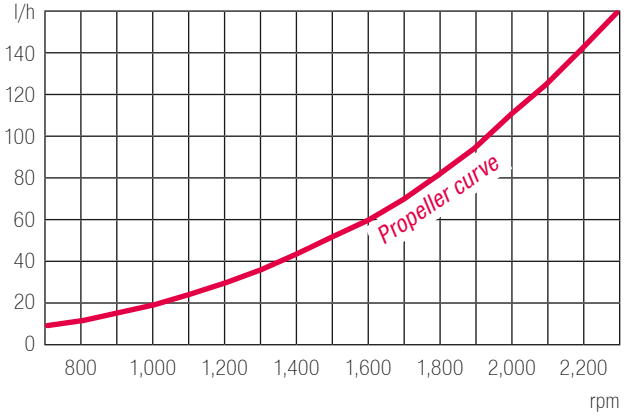
R6-800

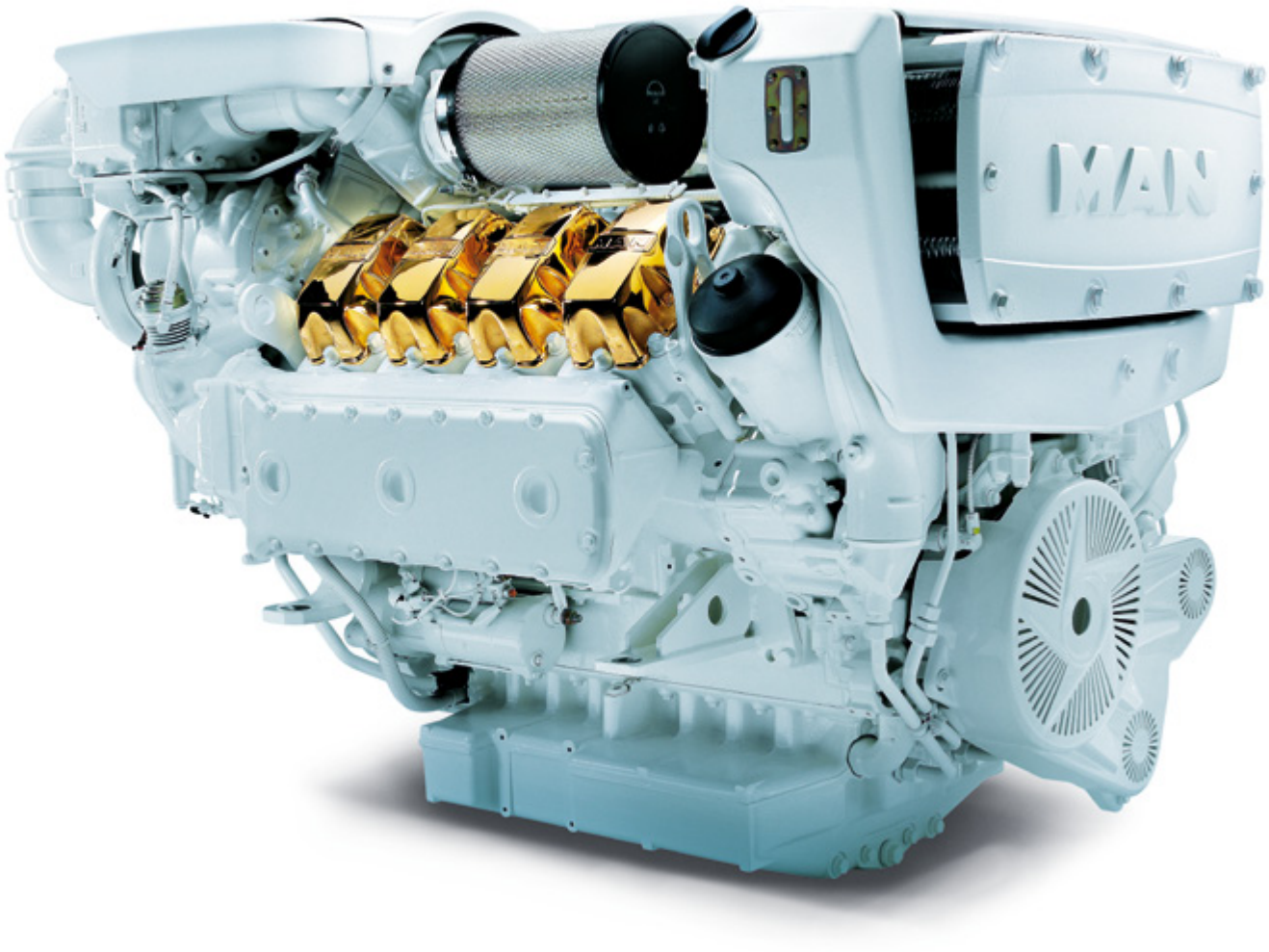


Absolute fuel consumption



Absolute fuel consumption





V8-1000 and V8-1200

Engine description

Characteristics

■ Cylinders and arrangement:	8 cylinders in 90° V arrangement
■ Operation mode:	4-stroke diesel engine, watercooled
■ Turbocharging:	Exhaust turbocharger with intercooler (1-stage: V8-1000, 2-stage: V8-1200), boost pressure control with waste gate
■ Number of valves:	4 valves per cylinder
■ Fuel system:	Common Rail direct fuel injection with electronic control
■ Engine lubrication:	Closed system with forced feeding, oil cooling and filtering
■ Type of cooling:	Plate heat exchanger, seawater cooled
■ Engine control:	Electronic injection control (EDC) Electronic engine monitoring including diagnostic unit
■ Fuel:	DIN EN 590

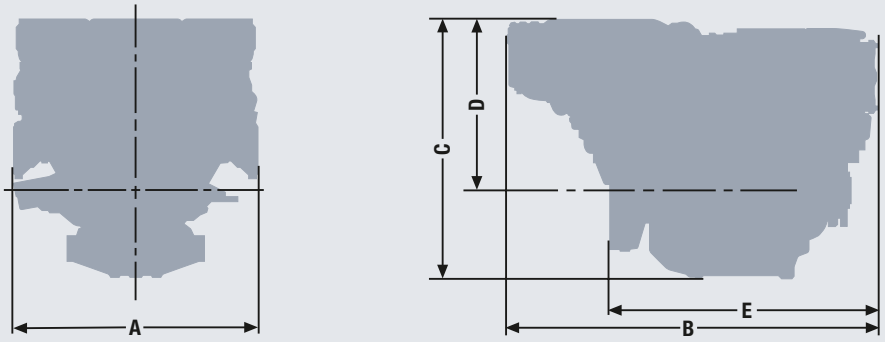
V8-1000 and V8-1200

Technical data

Technical features V8-1000 and V8-1200

Type designation		V8-1000	V8-1200
Displacement	l	16.16	16.16
Maximum output to DIN ISO 3046-1	kW (hp)	735 (1,000)	882 (1,200)
Rated speed	rpm	2,300	2,300
Maximum torque	Nm	3,350	4,010
at speed	rpm	1,300–2,100	1,200–2,100
Absolute fuel consumption at rated power [1]	l/h	195	231
Exhaust gas status		IMO Tier 2, EPA Tier 3 [2], RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3 [2,3], RCD 94/25/EC, 97/68/EC

1) Tolerance +5% according to DIN ISO 3046-1
2) Fuel consumption may vary
3) For private use only



Dimensions V8-1000 and V8-1200

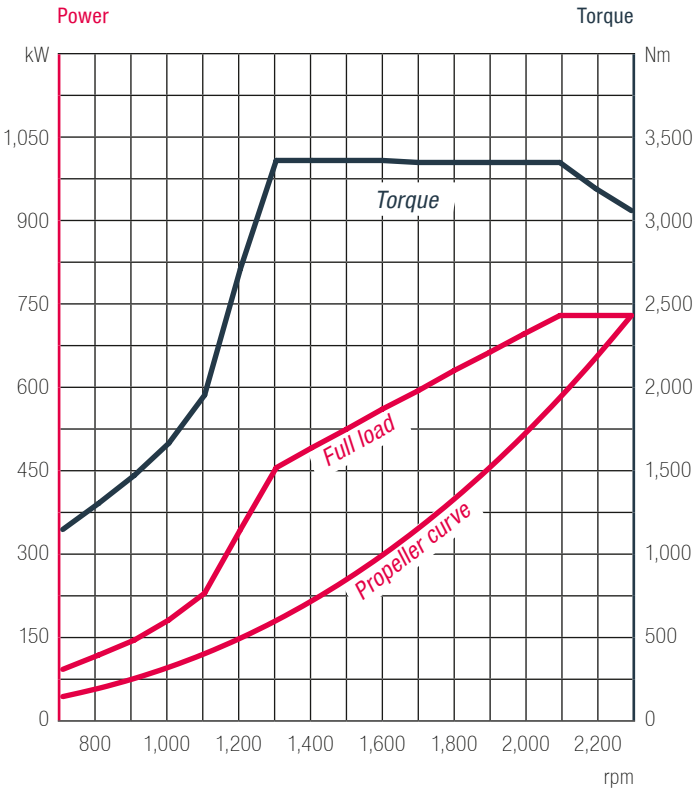
Type designation		V8-1000	V8-1200
A-Overall width	mm	1,153	1,153
B-Overall length	mm	1,736	1,745
C-Overall height	mm	1,236	1,222
D-Top of engine to crankshaft centre	mm	825	811
E-Length of engine from front end to edge of flywheel housing	mm	1,243	1,262
Average weight of engine ready for installation (dry)	kg	1,780	1,875

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

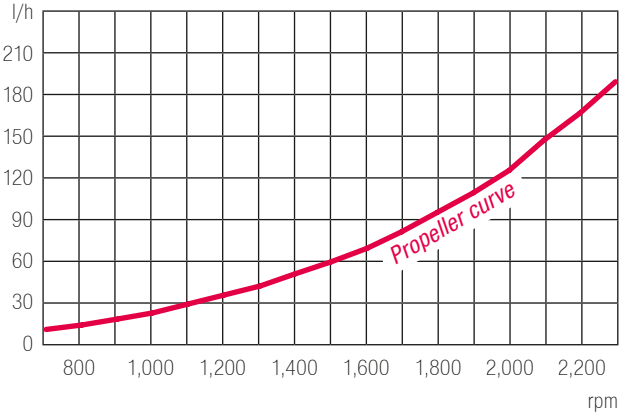
V8-1000 and V8-1200

Power charts

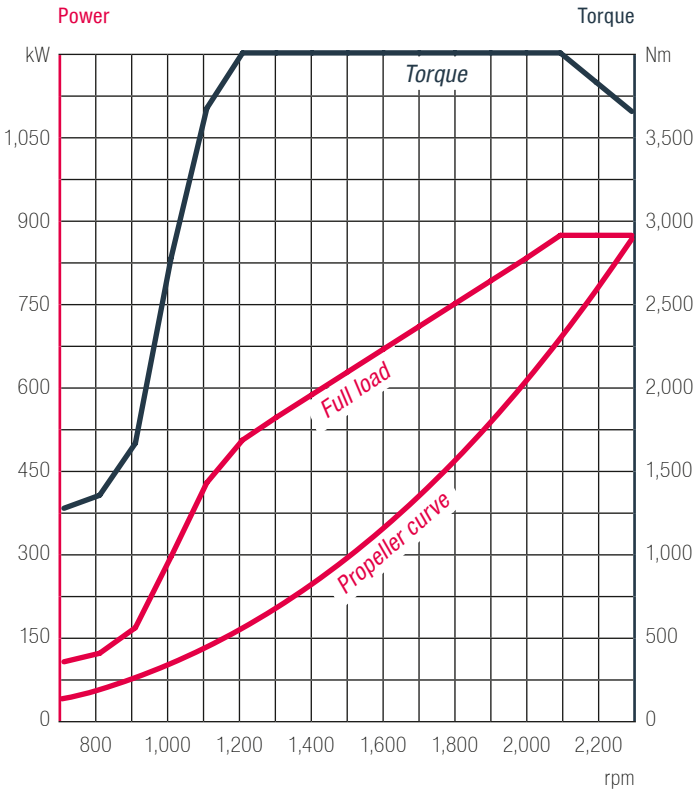
V8-1000



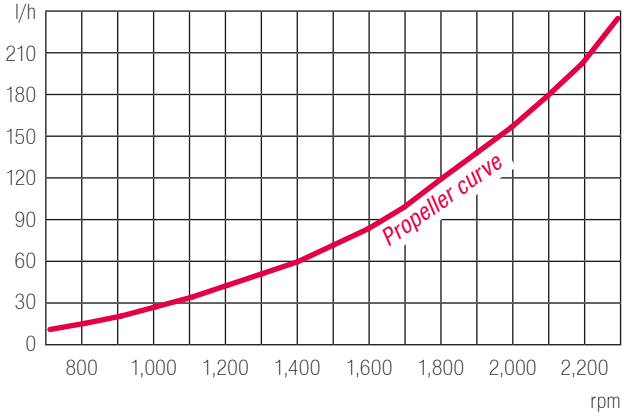
Absolute fuel consumption

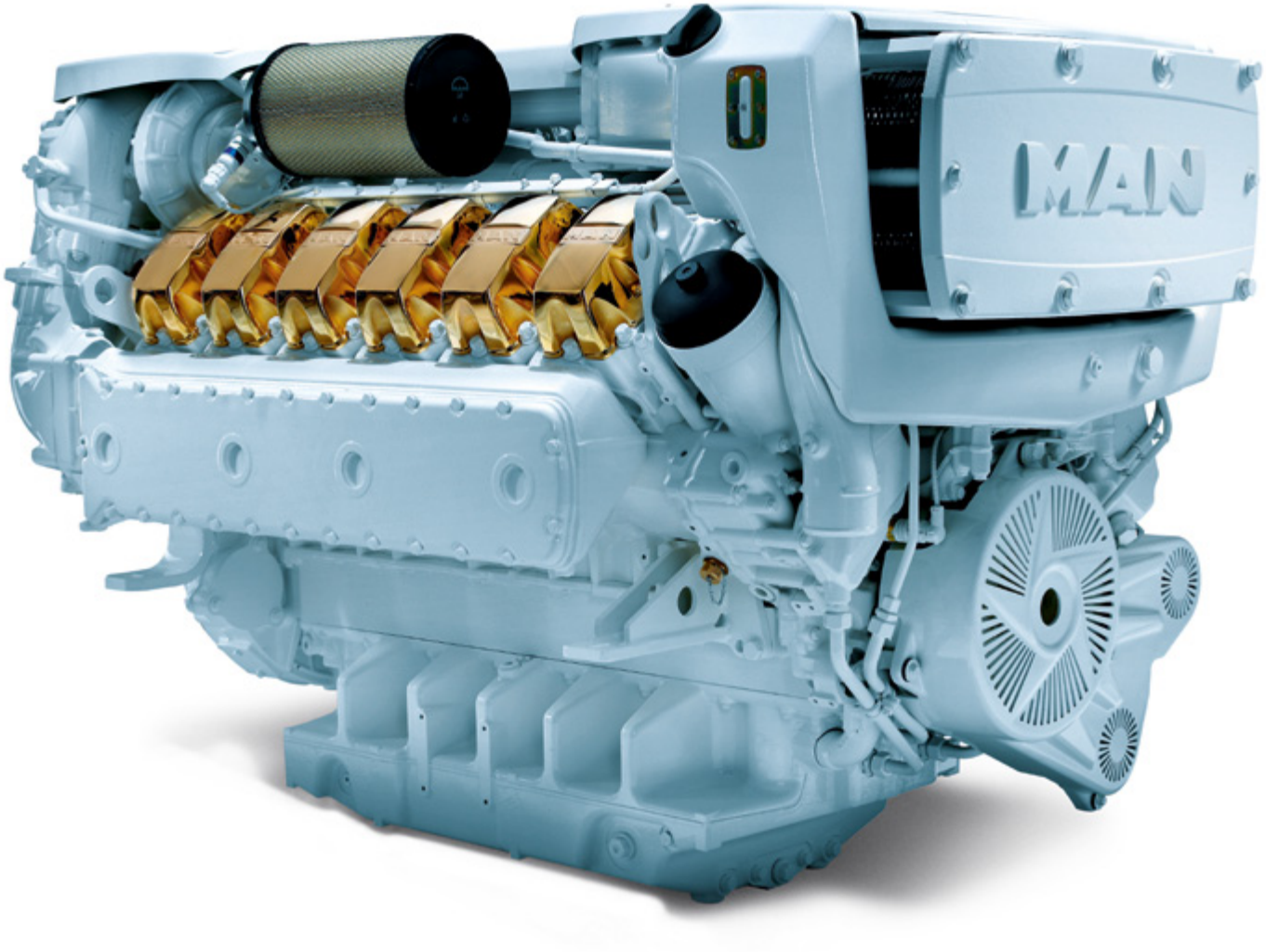


V8-1200



Absolute fuel consumption





V12-1400 and V12-1550

Engine description

Characteristics

Cylinders and arrangement:	12 cylinders in 90° V arrangement
Operation mode:	4-stroke diesel engine, watercooled
Turbocharging:	Exhaust turbocharger with intercooler, boost pressure control with waste gate
Number of valves:	4 valves per cylinder
Fuel system:	Common Rail direct fuel injection with electronic control
Engine lubrication:	Closed system with forced feeding, oil cooling and filtering
Type of cooling:	Plate heat exchanger, seawater cooled
Engine control:	Electronic injection control (EDC) Electronic engine monitoring including diagnostic unit
Fuel:	DIN EN 590

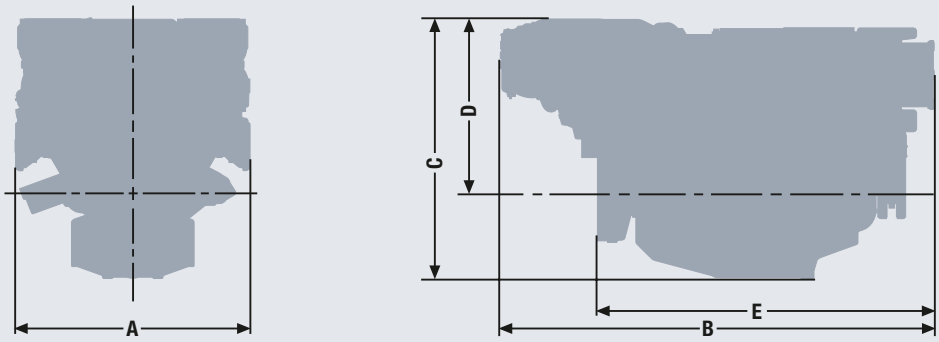
V12-1400 and V12-1550

Technical data

Technical features V12-1400 and V12-1550

Type designation		V12-1400	V12-1550
Displacement	l	24.24	24.24
Maximum output to DIN ISO 3046-1	kW (hp)	1,029 (1,400)	1,140 (1,550)
Rated speed	rpm	2,300	2,300
Maximum torque	Nm	4,670	5,140
at speed	rpm	1,200–2,100	1,300–2,100
Absolute fuel consumption at rated power [1]	l/h	266	296
Classifiable		✓	–
Exhaust gas status		IMO Tier 2, EPA Tier 3 [2), 3)], RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3 [2), 3)], RCD 94/25/EC, 97/68/EC

1) Tolerance +5% according to DIN ISO 3046-1
2) Fuel consumption may vary
3) For private use only



Dimensions V12-1400 and V12-1550

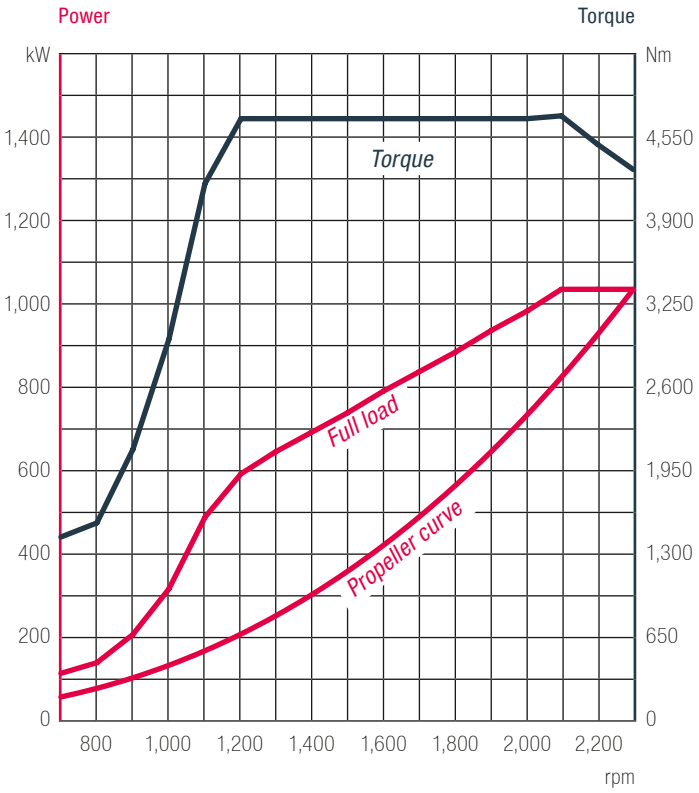
Type designation		V12-1400	V12-1550
A-Overall width	mm	1,270	1,153
B-Overall length	mm	2,230	2,124
C-Overall height	mm	1,289	1,289
D-Top of engine to crankshaft centre	mm	825	825
E-Length of engine from front end to edge of flywheel housing	mm	1,614	1,631
Average weight of engine ready for installation (dry)	kg	2,270	2,270

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

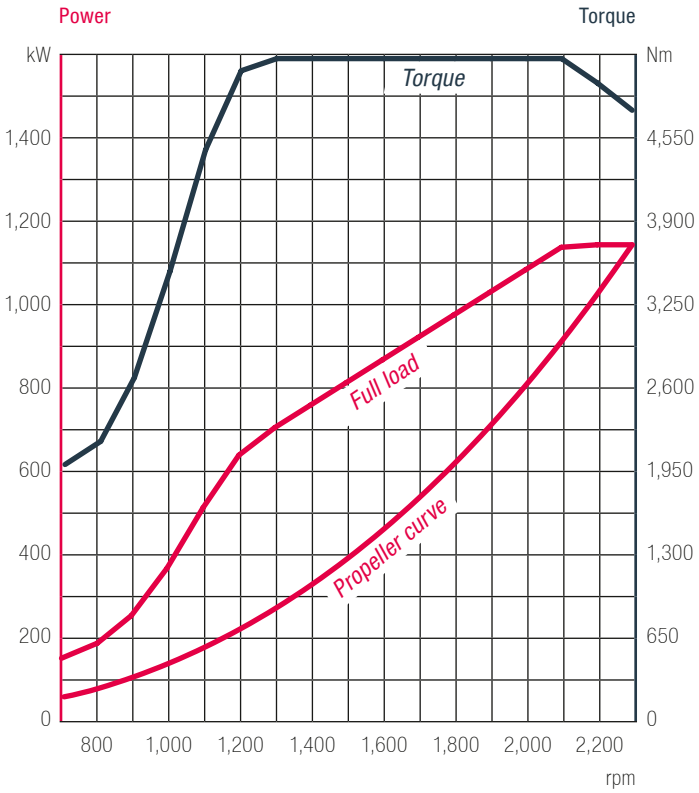
V12-1400 and V12-1550

Power charts

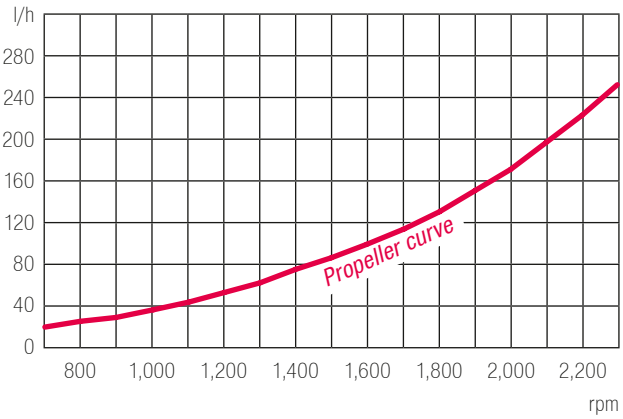
V12-1400



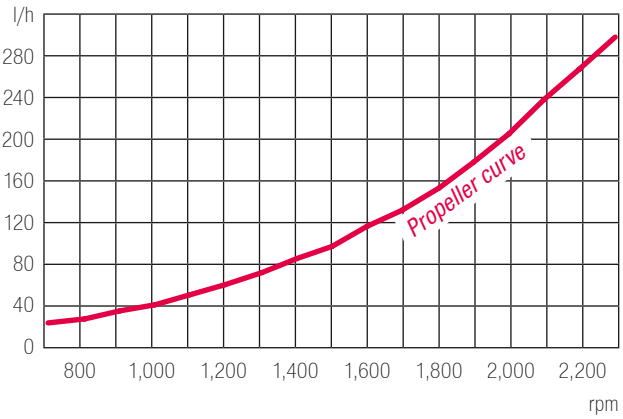
V12-1550

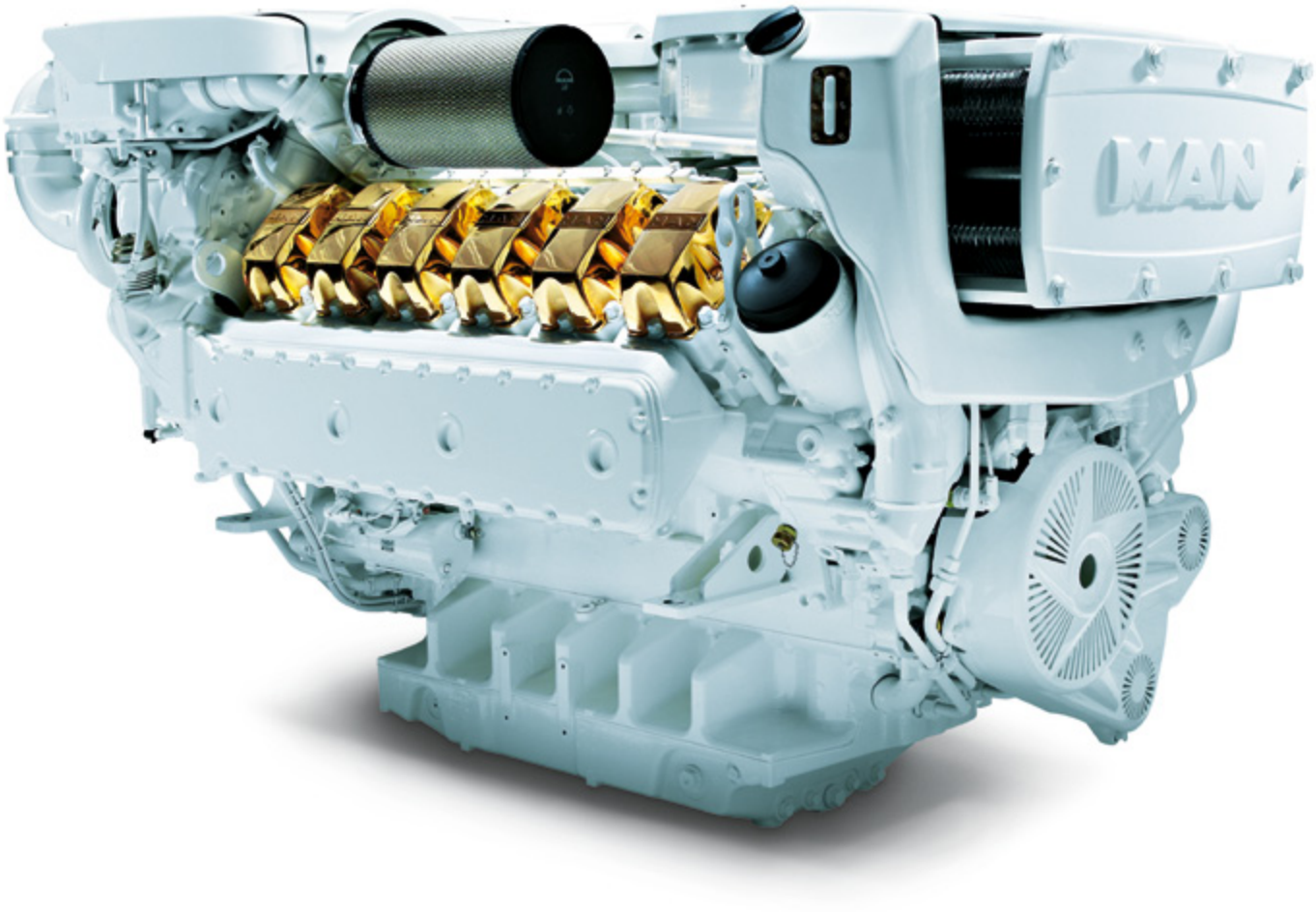


Absolute fuel consumption



Absolute fuel consumption





V12-1650 and V12-1800

Engine description

Characteristics

■ Cylinders and arrangement:	12 cylinders in 90° V arrangement
■ Operation mode:	4-stroke diesel engine, watercooled
■ Turbocharging:	2-stage exhaust turbocharger with intercooler, boost pressure control with waste gate
■ Number of valves:	4 valves per cylinder
■ Fuel system:	Common Rail direct fuel injection with electronic control
■ Engine lubrication:	Closed system with forced feeding, oil cooling and filtering
■ Type of cooling:	Plate heat exchanger, seawater cooled
■ Engine control:	Electronic injection control (EDC) Electronic engine monitoring including diagnostic unit
■ Fuel:	DIN EN 590

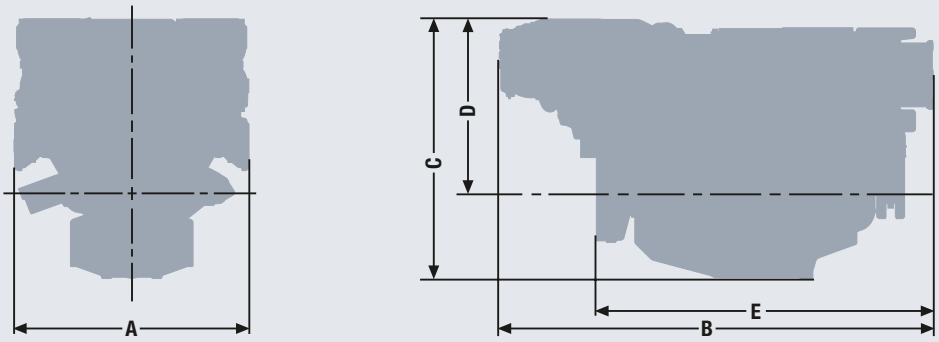
V12-1650 and V12-1800

Technical data

Technical features V12-1650 and V12-1800

Type designation		V12-1650	V12-1800
Displacement	l	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 [1]	l/h	315	339
Classifiable		✓	–
Exhaust gas status		IMO Tier 2, EPA Tier 3 [2], RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3 [2, 3], RCD 94/25/EC, 97/68/EC

1) Tolerance +5% according to DIN ISO 3046-1
2) Fuel consumption may vary
3) For private use only



Dimensions V12-1650 and V12-1800

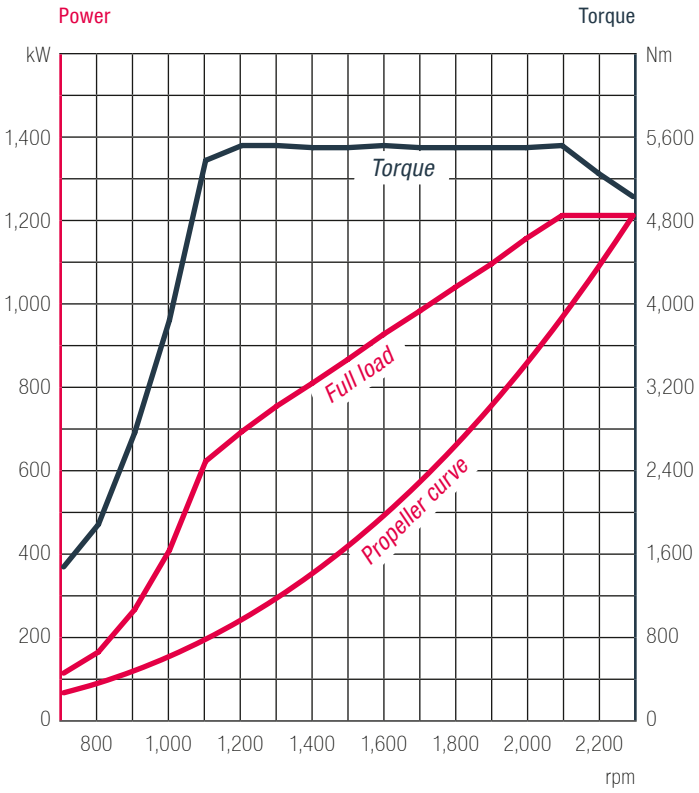
Type designation		V12-1650	V12-1800
A-Overall width	mm	1,150	1,153
B-Overall length	mm	2,255	2,139
C-Overall height	mm	1,350	1,265
D-Top of engine to crankshaft centre	mm	885	811
E-Length of engine from front end to edge of flywheel housing	mm	1,667	1,658
Average weight of engine ready for installation (dry)	kg	2,400	2,365

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

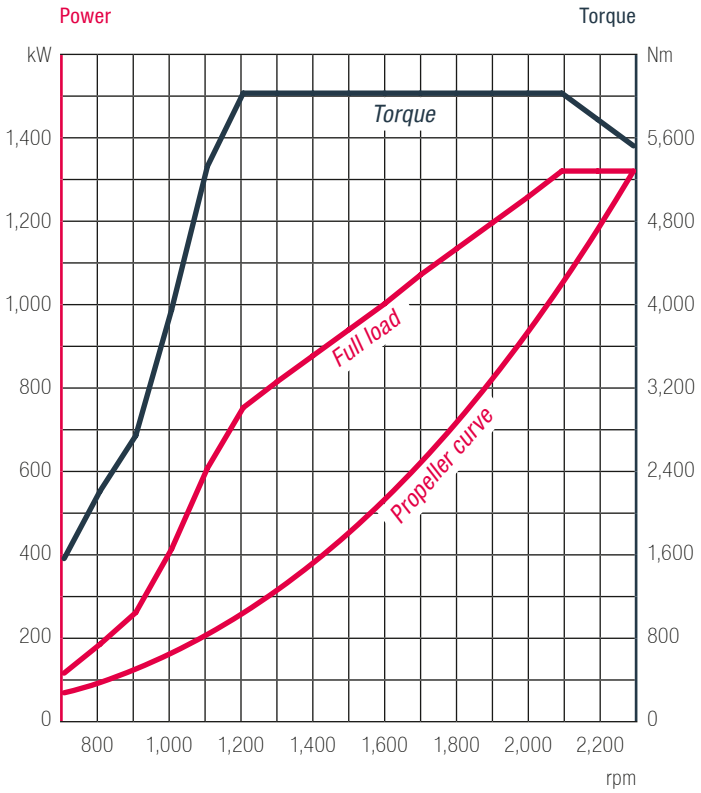
V12-1650 and V12-1800

Power charts

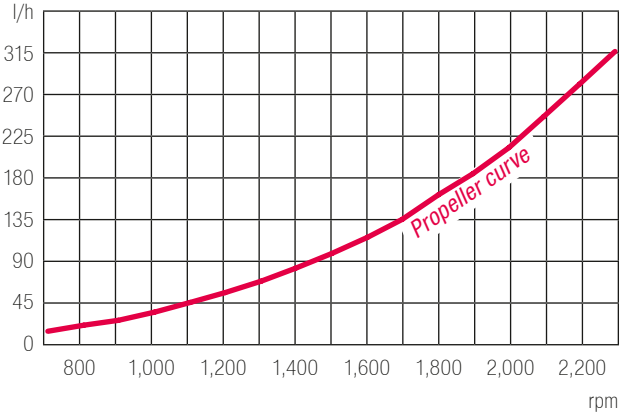
V12-1650



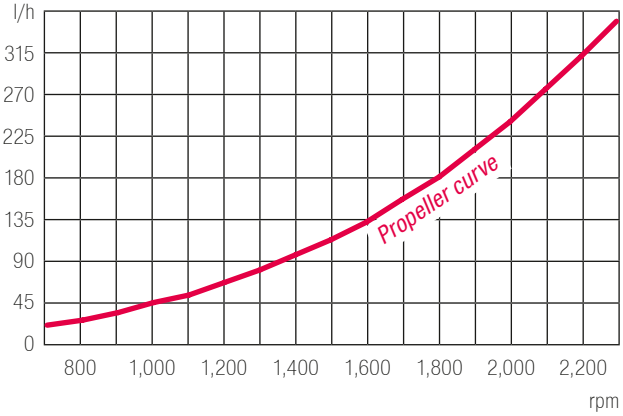
V12-1800



Absolute fuel consumption



Absolute fuel consumption



medium duty

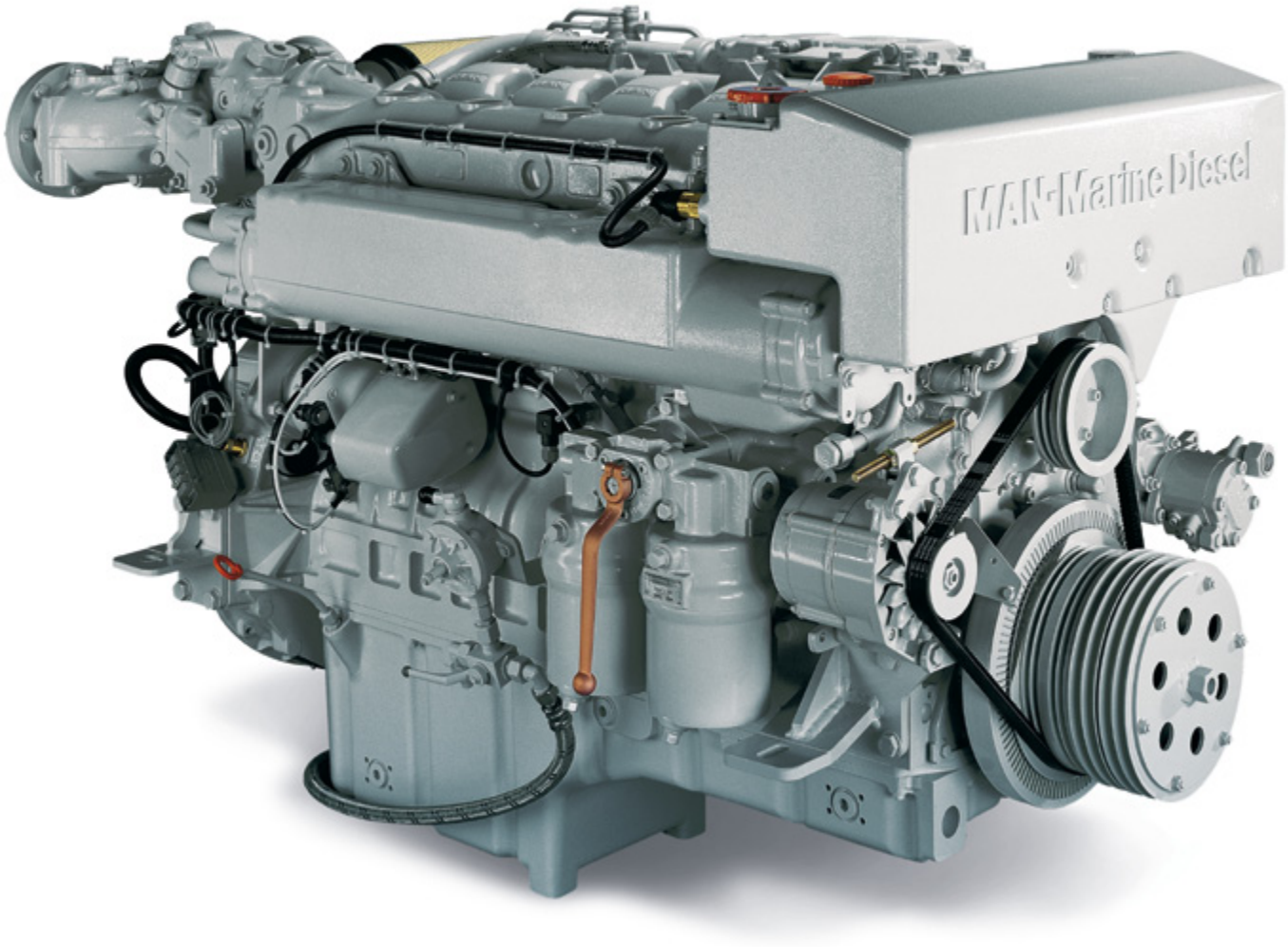
Medium duty operation

Definition of application type

Characteristics	D2876 LE 402[EDC]	D2862 LE 463/LE 466 D2876 LE 443	D2862 LE 422/LE 425 D2862 LE 432/LE 435 D2868 LE 422/LE 425
■ Annual operating hours:	≤ 3,000	≤ 3,000	≤ 4,000
■ Percentage of time at full load:	≤ 50 %		
■ Average load application:	≤ 70 %	≤ 50 %	≤ 60 %
■ Particular operation conditions:	no wide-open throttle below rated speed		

Typical applications

- Escort boats and pilot boats
- Fishing boats
- Passenger boats and ferries
- Cruising vessels
- Seagoing patrol boats



D2876

Engine description

Characteristics

■ Cylinders and arrangement:	6 cylinders in-line
■ Operation mode:	4-stroke diesel engine, watercooled
■ Turbocharging:	Exhaust turbocharger with intercooler, boost pressure control with waste gate
■ Number of valves:	4 valves per cylinder
■ Fuel system:	Direct fuel injection with Bosch injection pump
■ Engine block:	High-strength casting with integrated oil and water ducts and replaceable cylinder liners
■ Engine lubrication:	Closed system with forced feeding, oil cooling and filtering
■ Type of cooling:	Seawater cooled heat exchanger
■ Engine control:	Electronic injection control Electronic engine monitoring including diagnostic unit
■ Fuel:	DMX fuel to ISO 8217, DIN EN 590
■ Average TBO:	10,000 – 12,000 operating hours (LE 402) / 8,000-10,000 operating hours (LE 443)
■ Oil change interval:	400 operating hours (LE 402) / 500 operating hours (LE 443)

D2876

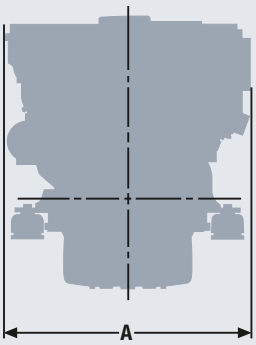
Technical data

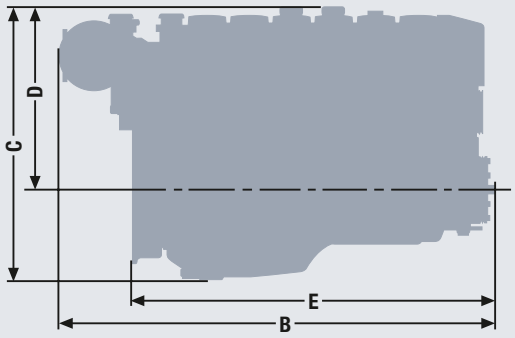
Technical features D2876

Type designation		LE 402EDC	LE 443
Displacement	l	12.82	12.82
Nominal rating [1]	kW (hp)	412 (560)	500 (680)
Rated speed	rpm	2,100	2,100
Torque at rated speed	Nm	1,873	2,274
Maximum torque	Nm	2,095	2,505
at speed	rpm	1,200–1,800	1,200–1,900
Specific fuel consumption [2]	g/kWh	223	219
Fuel consumption [2]	l/h	109	130
Classifiable		✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC	IMO Tier 2, RCD 94/25/EC, 97/68/EC

1) Rating according to DIN 3046-1

2) Consumption at rated power





Dimensions D2876

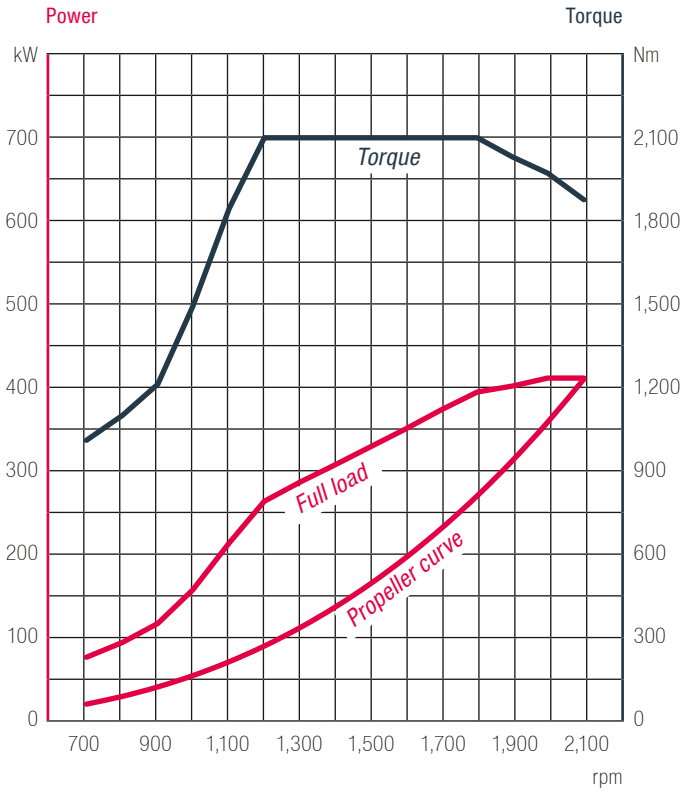
Type designation		LE 402EDC	LE 443
A-Overall width	mm	877	910
B-Overall length	mm	1,605	1,634
C-Overall height	mm	1,080	1,097
D-Top of engine to crankshaft centre	mm	665	683
E-Length of engine from front end to edge of flywheel housing	mm	1,320	1,356
Average weight of engine ready for installation (dry)	kg	1,290	1,305

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

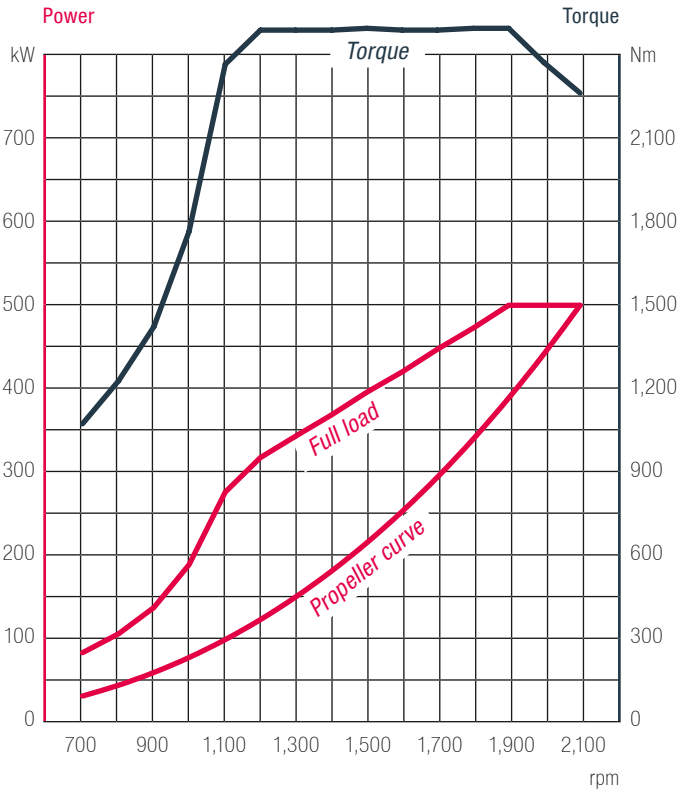
D2876

Power charts

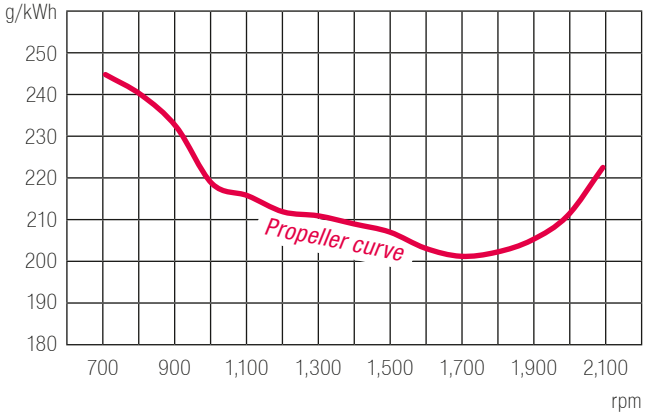
D2876 LE 402EDC



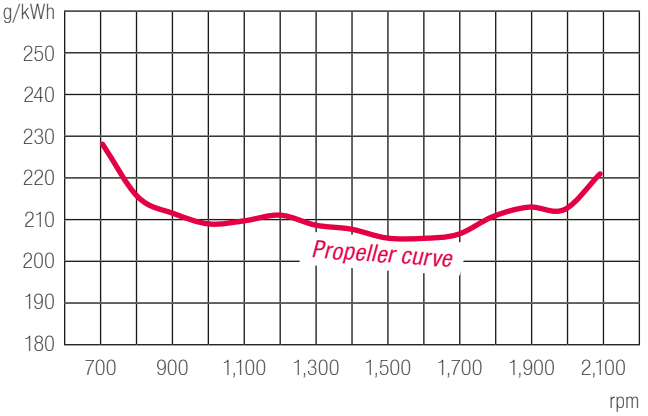
D2876 LE 443



Specific fuel consumption



Specific fuel consumption



D2868

Engine description

Characteristics

- Cylinders and arrangement: 8 cylinders in 90° V arrangement
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Exhaust turbocharger with intercooler, boost pressure control with wastegate
- Number of valves: 4 valves per cylinder
- Fuel system: Common Rail direct fuel injection
- Engine block: High-strength casting with integrated oil and water ducts and replaceable cylinder liners
- Engine Lubrication: Closed system with forced feeding, oil cooling and filtering
- Type of cooling: Plate heat exchanger, seawater cooled
- Engine control: Electronic injection control
Electronic engine monitoring including diagnostic unit
- Fuel: DIN EN 590
- Average TBO: 12,000 operating hours
- Oil change interval: 500 operating hours

D2868

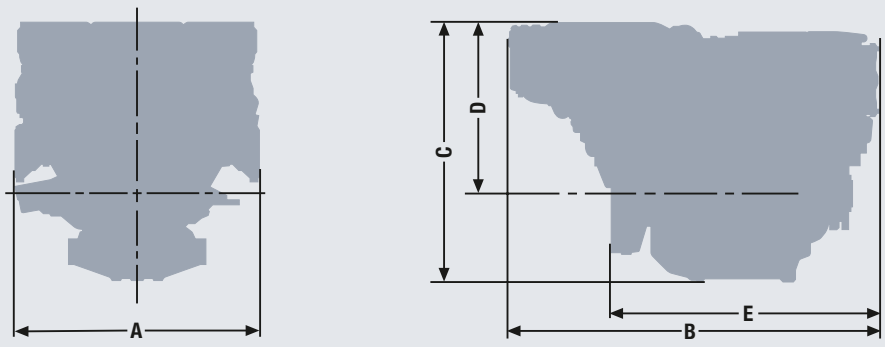
Technical data

Technical features D2868

Type designation		LE 422	LE 425
Displacement	l	16.16	16.16
Maximum output [1]	kW (hp)	588 (800)	588 (800)
Rated speed	rpm	2,100	2,100
Torque at rated speed	Nm	2,674	2,674
Maximum torque	Nm	2,945	2,945
at speed	rpm	1,200–1,900	1,300–1,900
Specific fuel consumption [2]	g/kWh	212	227
Fuel consumption [2]	l/h	148	159
Classifiable		✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3, RCD 94/25/EC, 97/68/EC

1) Rating according to DIN 3046-1

2) Consumption at rated power



Dimensions D2868

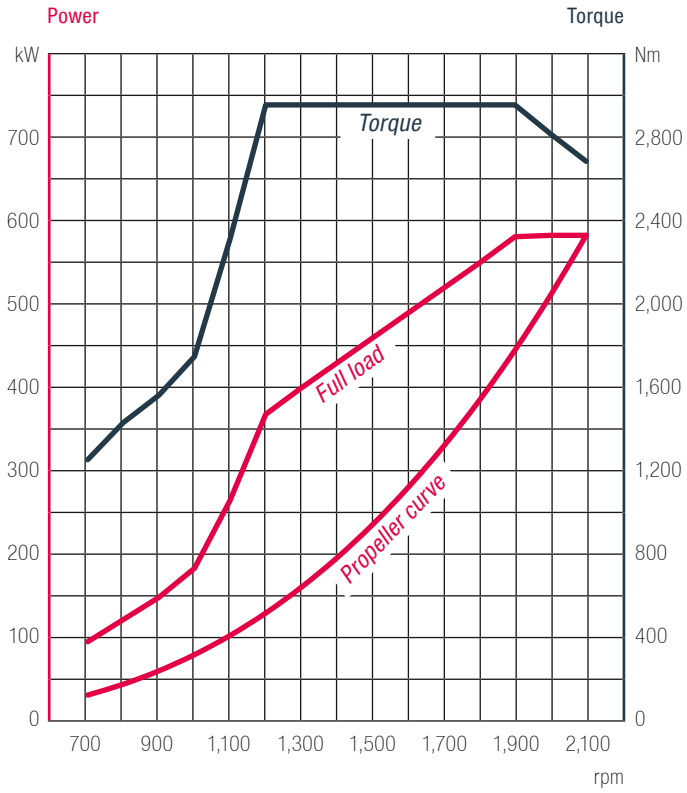
Type designation		LE 422	LE 425
A-Overall width	mm	1,150	1,153
B-Overall length	mm	1,736	1,736
C-Overall height	mm	1,236	1,236
D-Top of engine to crankshaft centre	mm	825	825
E-Length of engine from front end to edge of flywheel housing	mm	1,243	1,243
Average weight of engine ready for installation (dry)	kg	1,800	1,800

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

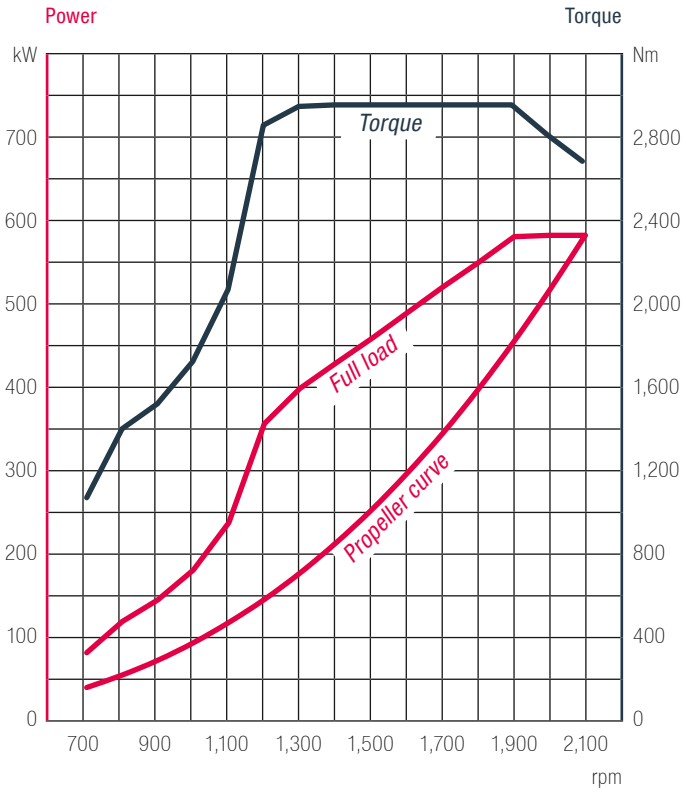
D2868

Power charts

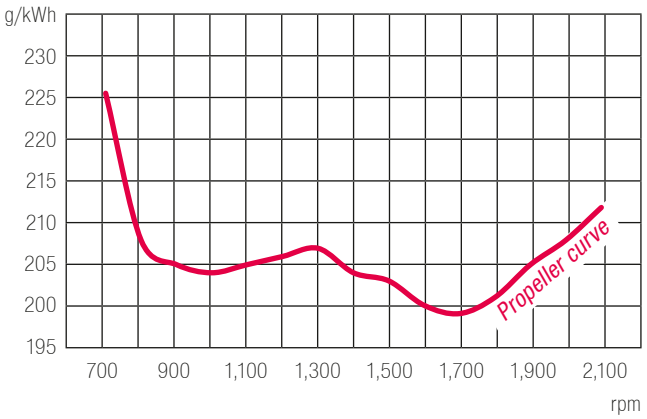
D2868 LE 422



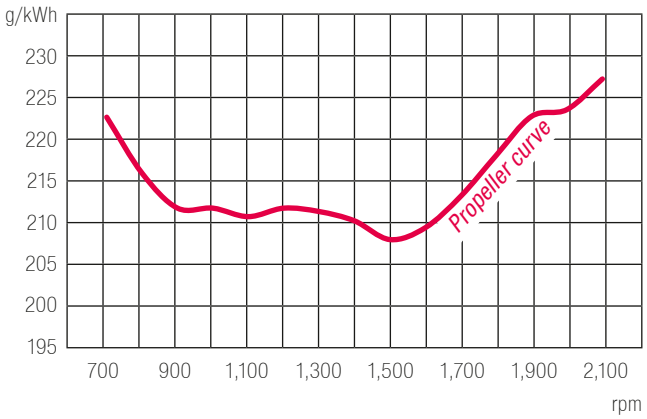
D2868 LE 425

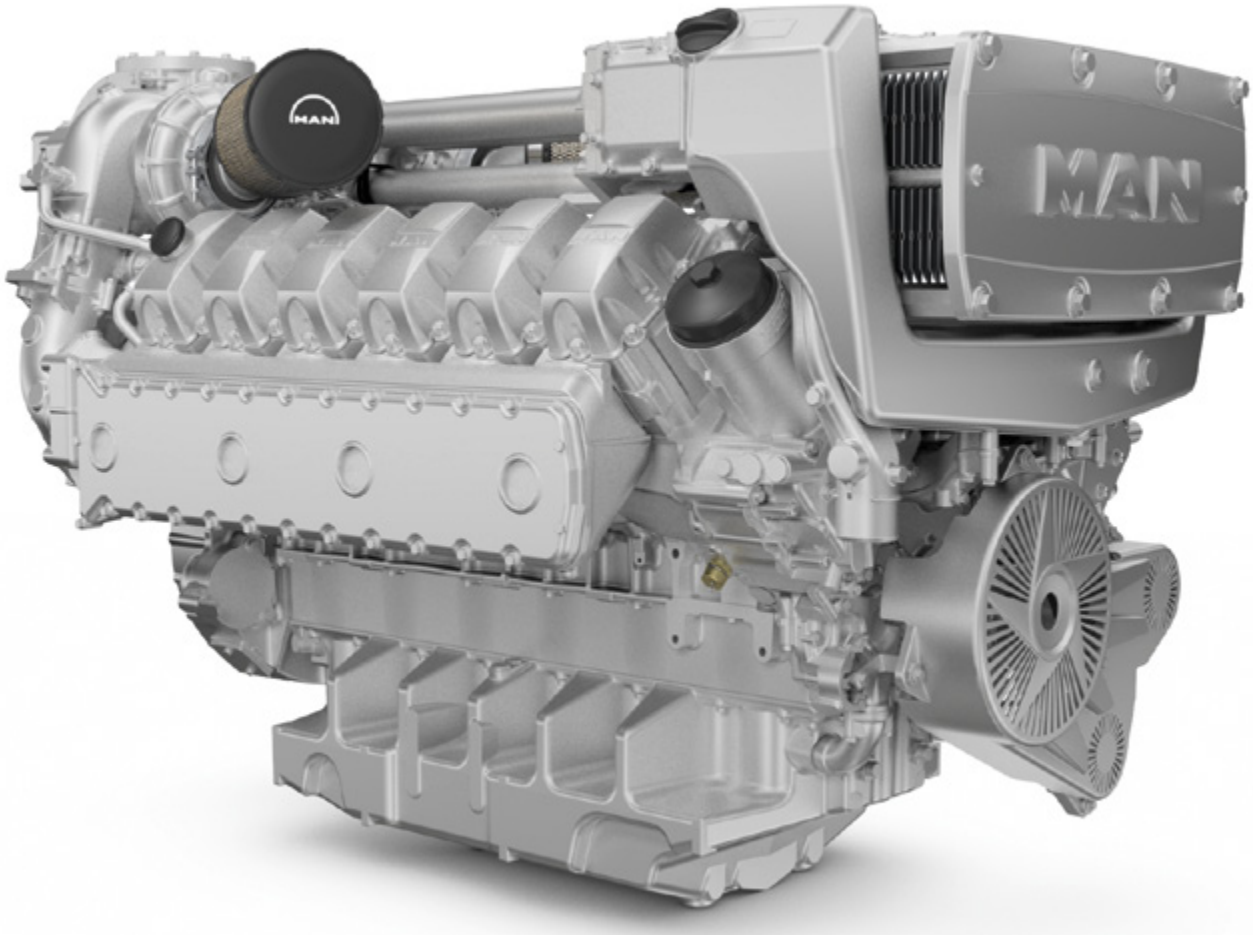


Specific fuel consumption



Specific fuel consumption





D2862

Engine description

Characteristics

Cylinders and arrangement:	12 cylinders in 90° V arrangement
Operation mode:	4-stroke diesel engine, watercooled
Turbocharging:	Exhaust turbocharger with intercooler, boost pressure control with waste gate
Number of valves:	4 valves per cylinder
Fuel system:	Common Rail direct fuel injection with electronic control
Engine block:	High-strength casting with integrated oil and water ducts and replaceable cylinder liners
Engine lubrication:	Closed system with forced feeding, oil cooling and filtering
Type of cooling:	Plate heat exchanger seawater cooled
Engine control:	Electronic injection control (EDC) Electronic engine monitoring including diagnostic unit
Fuel:	DIN EN 590
Average TBO:	12,000 operating hours
Oil change interval:	500 operating hours

D2862

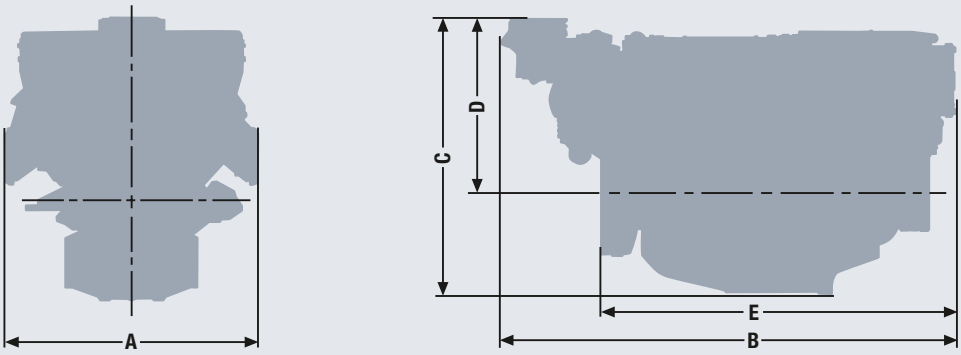
Technical data

Technical features D2862

Type designation		LE 422	LE 425
Displacement	l	24.24	24.24
Nominal rating [1]	kW (hp)	749 (1,019)	749 (1,019)
Rated speed	rpm	2,100	2,100
Torque at rated speed	Nm	3,406	3,406
Maximum torque	Nm	3,780	3,765
at speed	rpm	1,300–1,900	1,100–1,900
Specific fuel consumption [2]	g/kWh	207	215
Fuel consumption [2]	l/h	185	192
Classifiable		✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3, RCD 94/25/EC, 97/68/EC

1) Rating according to DIN 3046-1

2) Consumption at rated power



Dimensions D2862

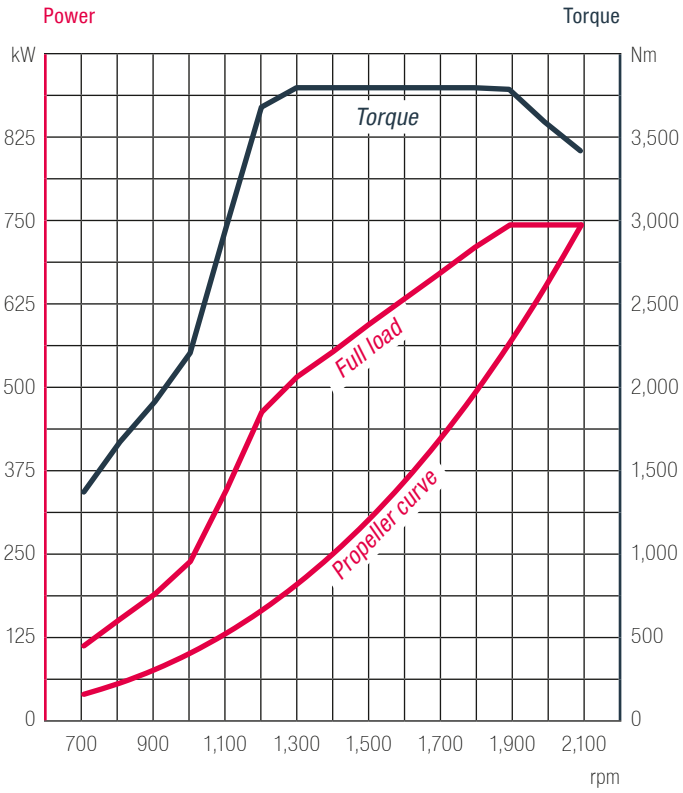
Type designation		LE 422/425
A-Overall width	mm	1,270
B-Overall length	mm	2,230
C-Overall height	mm	1,290
D-Top of engine to crankshaft centre	mm	825
E-Length of engine from front end to edge of flywheel housing	mm	1,614
Average weight of engine ready for installation (dry)	kg	2,270

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

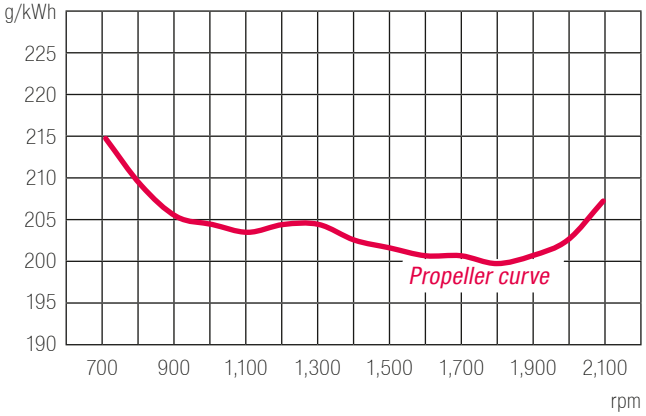
D2862

Power charts

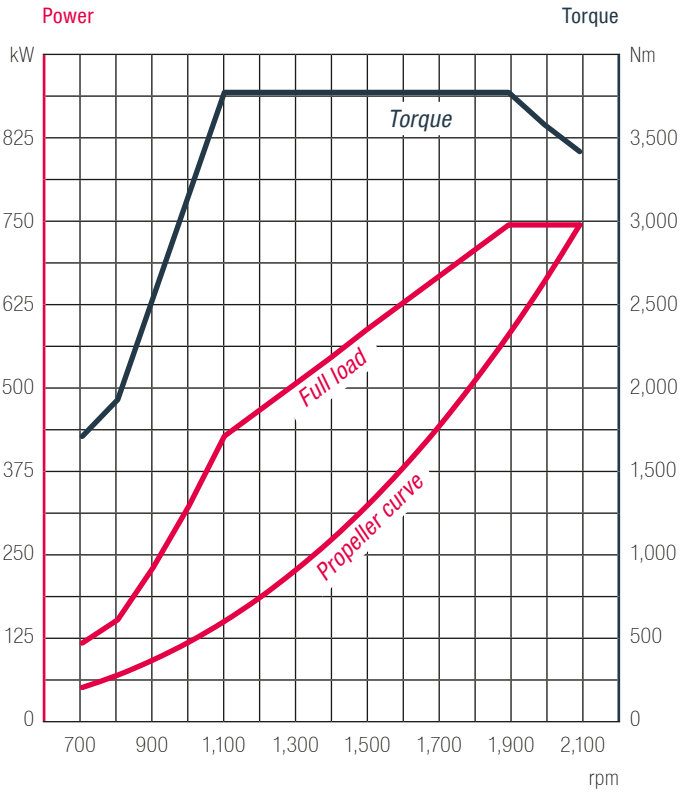
D2862 LE 422



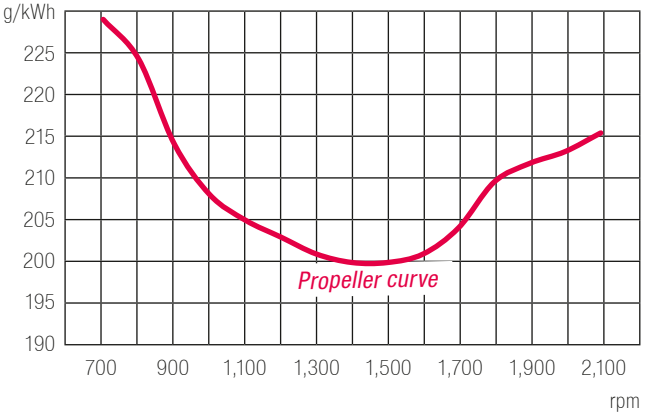
Specific fuel consumption



D2862 LE 425



Specific fuel consumption



D2862

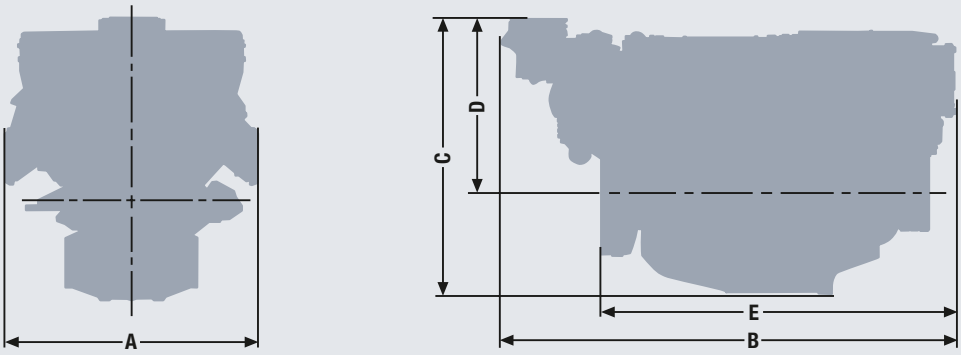
Technical data

Technical features D2862

Type designation		LE 432	LE 435
Displacement	l	24.24	24.24
Nominal rating [1]	kW (hp)	882 (1,200)	882 (1,200)
Rated speed	rpm	2,100	2,100
Torque at rated speed	Nm	4,010	4,010
Maximum torque	Nm	4,450	4,444
at speed	rpm	1,300–1,900	1,400–1,900
Specific fuel consumption [2]	g/kWh	211	208
Fuel consumption [2]	l/h	222	218
Classifiable		✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3, RCD 94/25/EC, 97/68/EC

1) Rating according to DIN 3046-1

2) Consumption at rated power



Dimensions D2862

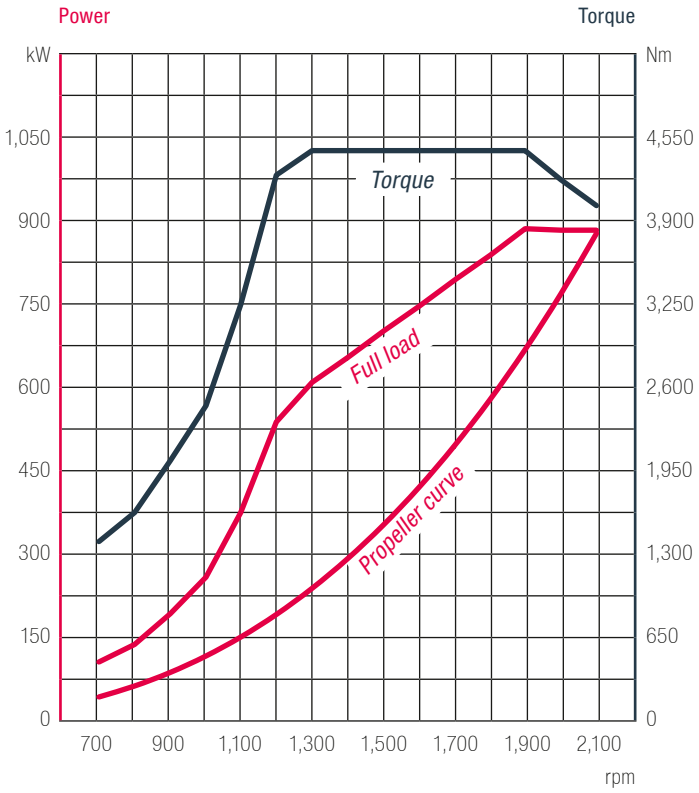
Type designation		LE 432/435
A-Overall width	mm	1,270
B-Overall length	mm	2,230
C-Overall height	mm	1,290
D-Top of engine to crankshaft centre	mm	825
E-Length of engine from front end to edge of flywheel housing	mm	1,614
Average weight of engine ready for installation (dry)	kg	2,270

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

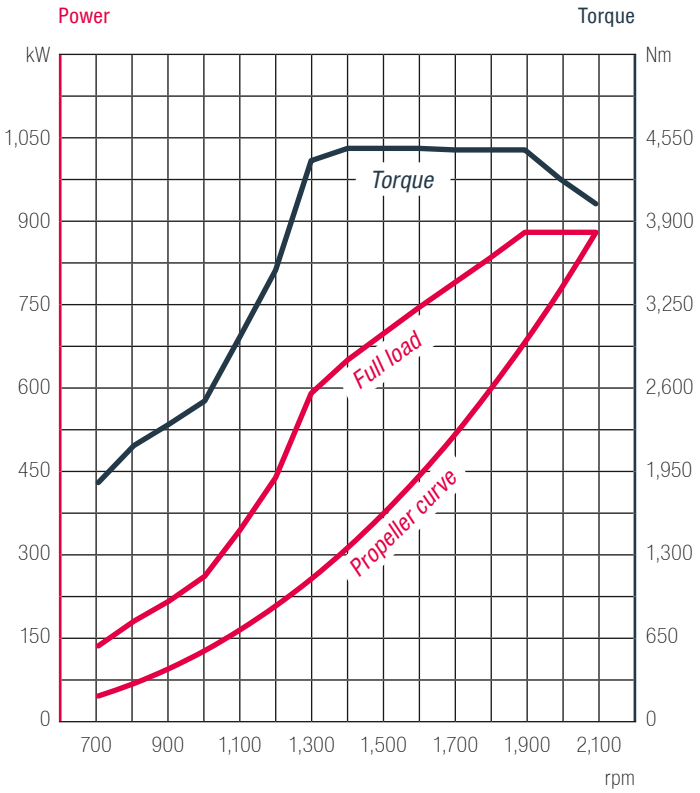
D2862

Power charts

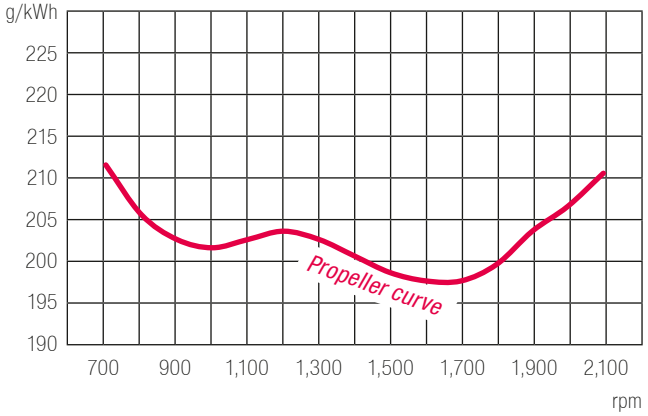
D2862 LE 432



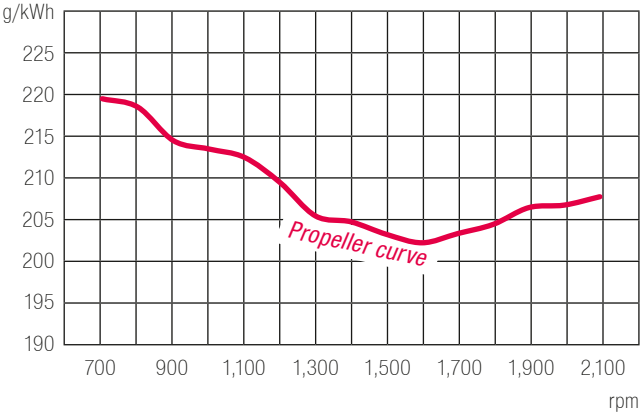
D2862 LE 435



Specific fuel consumption



Specific fuel consumption



D2862

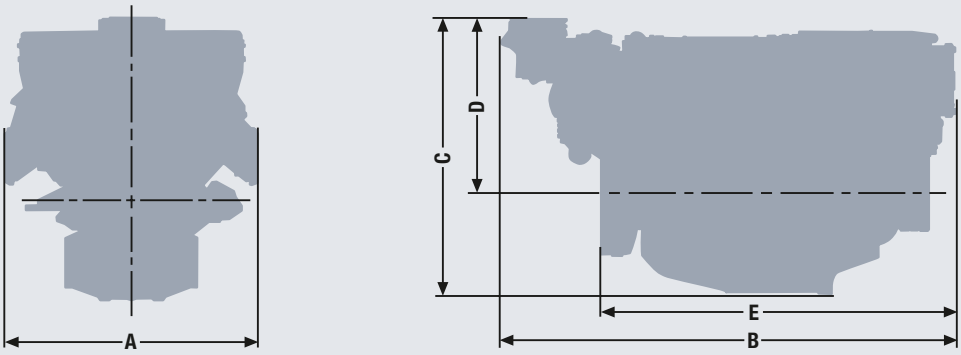
Technical data

Technical features D2862

Type designation		LE 463	LE 466
Displacement	l	24.24	24.24
Nominal rating [1]	kW (hp)	1,029 (1,400)	1,029 (1,400)
Rated speed	rpm	2,100	2,100
Torque at rated speed	Nm	4,680	4,680
Maximum torque	Nm	5,120	5,180
at speed	rpm	1,300–1,900	1,300–1,900
Specific fuel consumption [2]	g/kWh	210	209
Fuel consumption [2]	l/h	257	256
Classifiable		✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3, RCD 94/25/EC, 97/68/EC

1) Rating according to DIN 3046-1

2) Consumption at rated power



Dimensions D2862

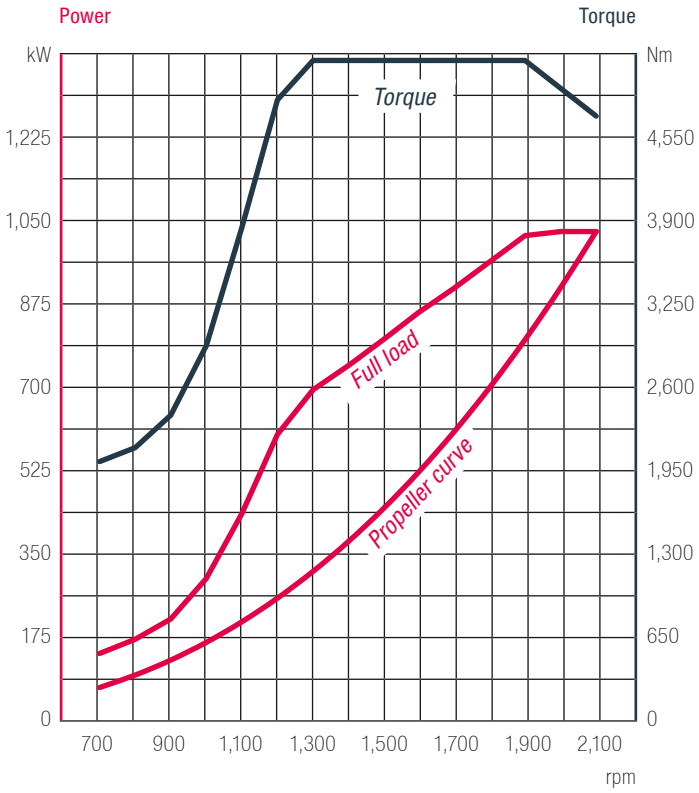
Type designation		LE 463/466
A-Overall width	mm	1,270
B-Overall length	mm	2,230
C-Overall height	mm	1,290
D-Top of engine to crankshaft centre	mm	825
E-Length of engine from front end to edge of flywheel housing	mm	1,614
Average weight of engine ready for installation (dry)	kg	2,270

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

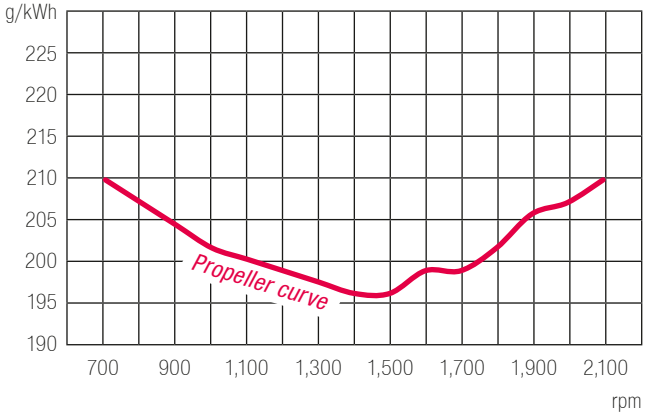
D2862

Power charts

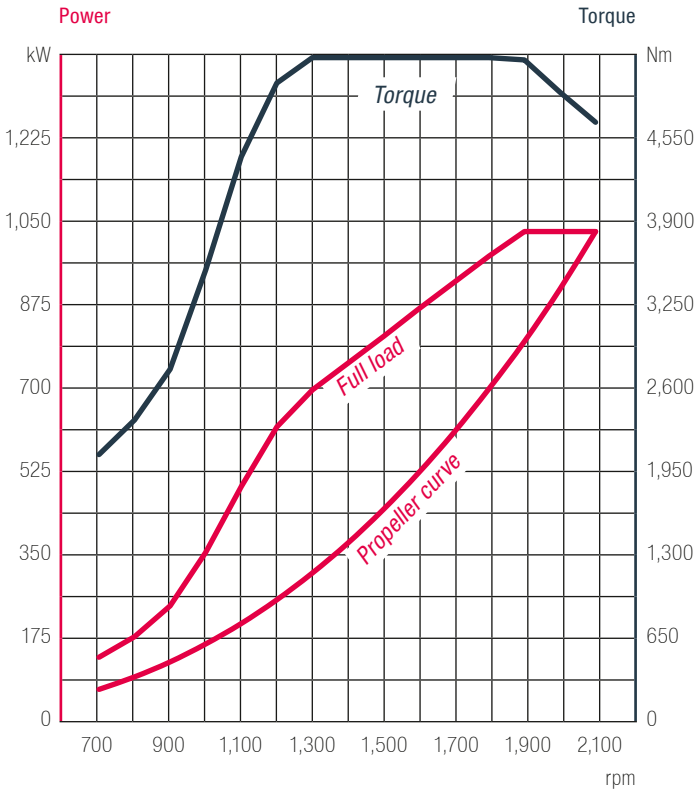
D2862 LE 463



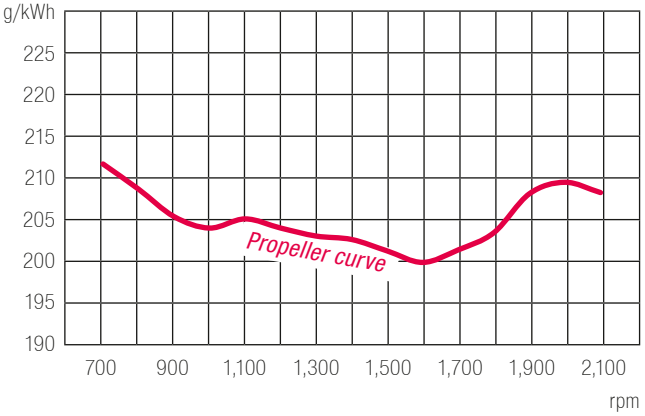
Specific fuel consumption



D2862 LE 466



Specific fuel consumption



heavy duty

Heavy duty operation

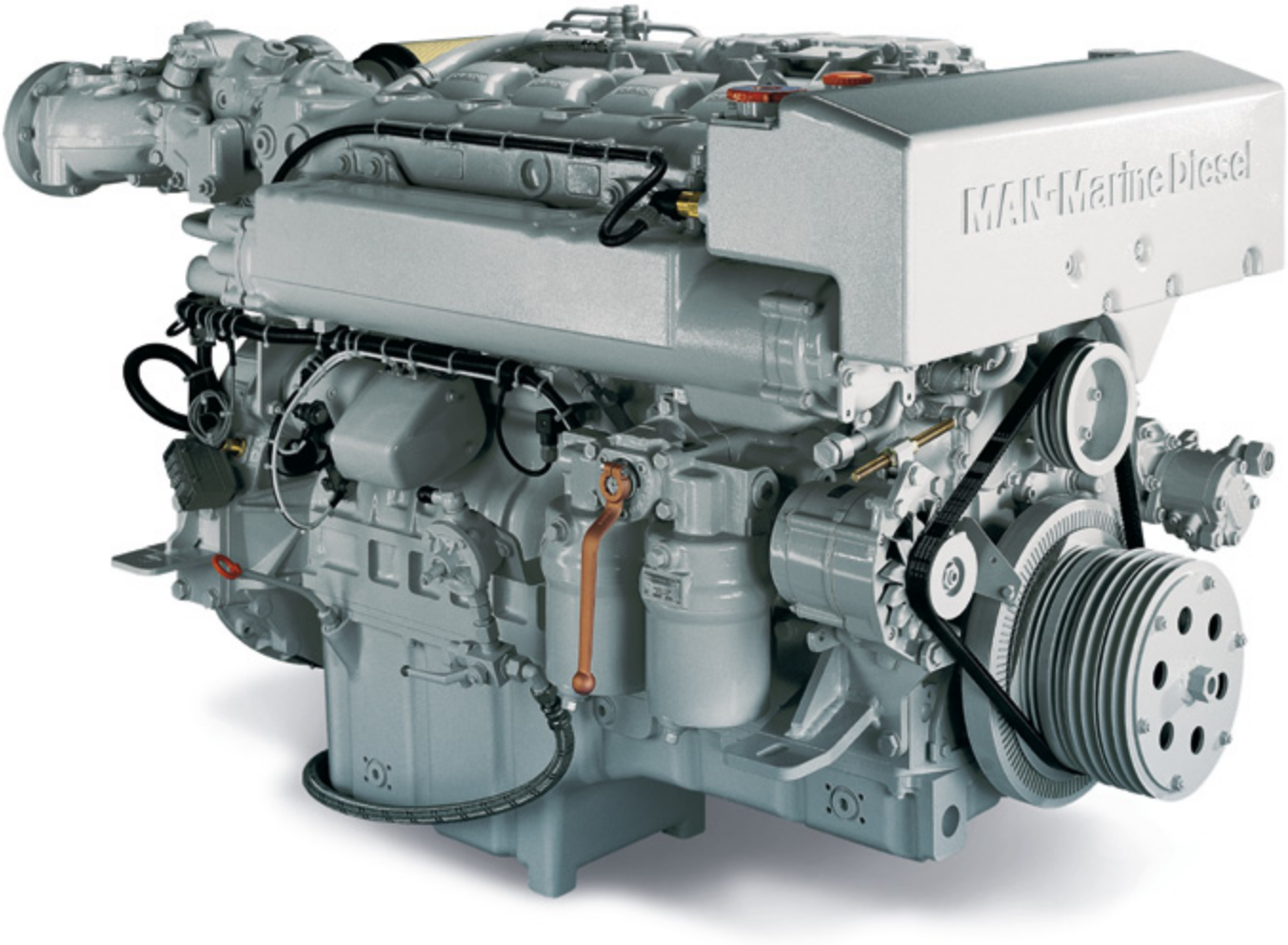
Definition of application type

Characteristics

- Annual operating hours: unlimited
- Percentage of time at full load: ≤ 100 %
- Average load application: ≤ 100 %

Typical applications

- Trawlers
- Tugs and pushboats
- Freight barges and freighters
- Ferries
- Dredgers



D2876

Engine description

Characteristics

- Cylinders and arrangement: 6 cylinders in-line
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Exhaust turbocharger with intercooler, boost pressure control with waste gate
- Number of valves: 2 valves per cylinder
- Fuel system: Direct fuel injection with Bosch injection pump
- Engine block: High-strength casting with integrated oil and water ducts and replaceable cylinder liners
- Engine lubrication: Closed system with forced feeding, oil cooling and filtering
- Type of cooling: Heat exchanger with seawater pump fitted, alternatively equipment for keel cooling
- Engine control: Electronic engine monitoring
- Fuel: DMX fuel to ISO 8217, DIN EN 590
- Average TBO: 20,000 – 25,000 operating hours
- Oil change interval: 400 operating hours

D2876

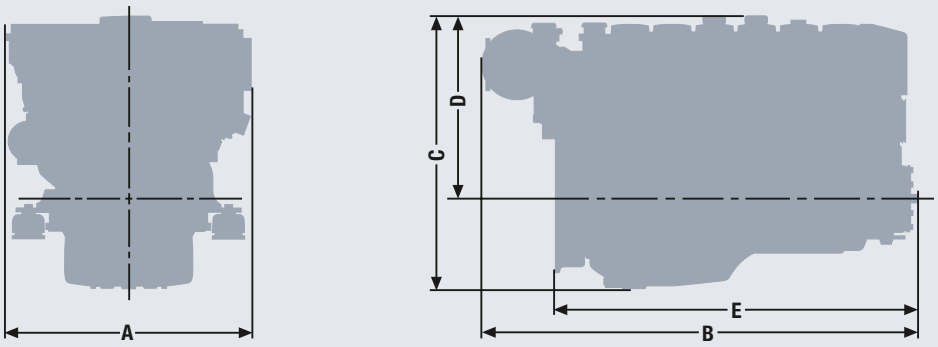
Technical data

Technical features D2876

Type designation		LE 406	LE 403	LE 407
Displacement	l	12.82	12.82	12.82
Nominal rating [1]	kW (hp)	280 (381)	331 (450)	360 (490)
Rated speed	rpm	1,800	1,800	1,800
Torque at rated speed	Nm	1,485	1,756	1,910
Maximum torque	Nm	1,620	1,960	2,074
at speed	rpm	1,300–1,600	1,300–1,500	1,200–1,500
Specific fuel consumption [2]	g/kWh	222	223	222
Fuel consumption [2]	l/h	74	88	95
Classifiable		✓	✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, RCD 94/25/EC, 97/68/EC

1) The rating is according to DIN 3046/1.

2) Consumption at rated power.



Dimensions D2876

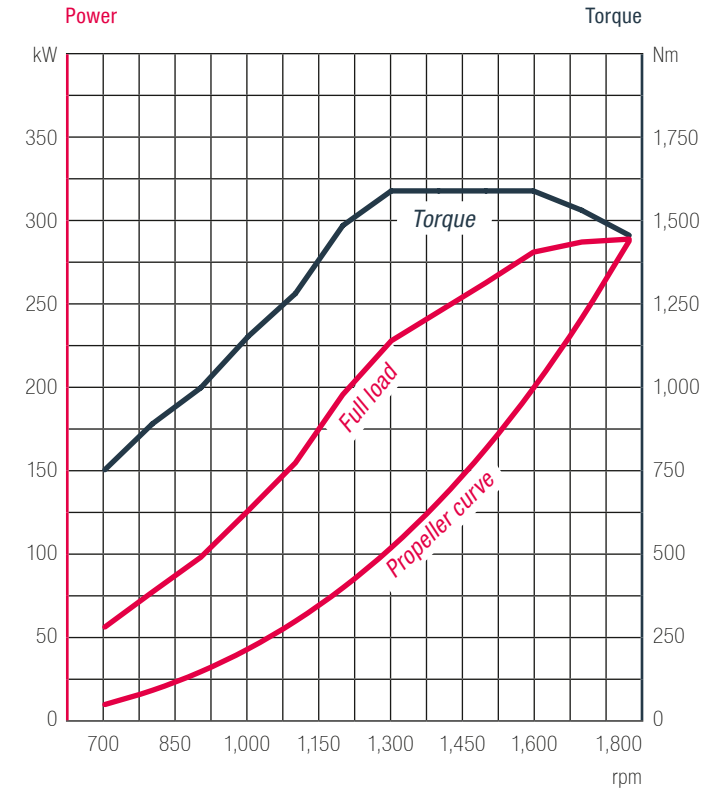
Type designation			LE 406/403/407
A-Overall width		mm	877
B-Overall length		mm	1,565
C-Overall height	– flat oil pan	mm	1,000
	– deep oil pan	mm	1,080
D-Top of engine to crankshaft centre		mm	665
E-Length of engine from front end to edge of flywheel housing		mm	1,320
Average weight of engine ready for installation (dry)		kg	1,160

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

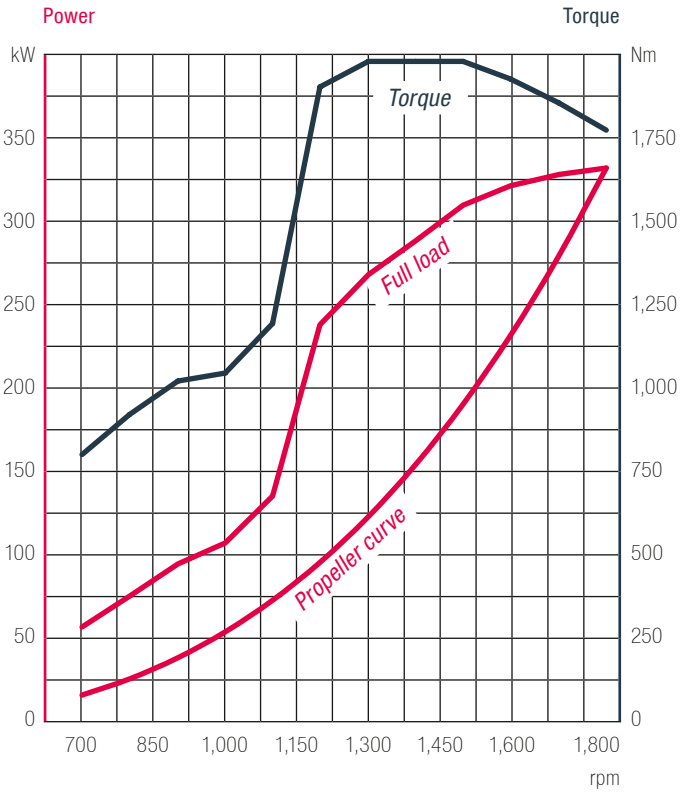
D2876

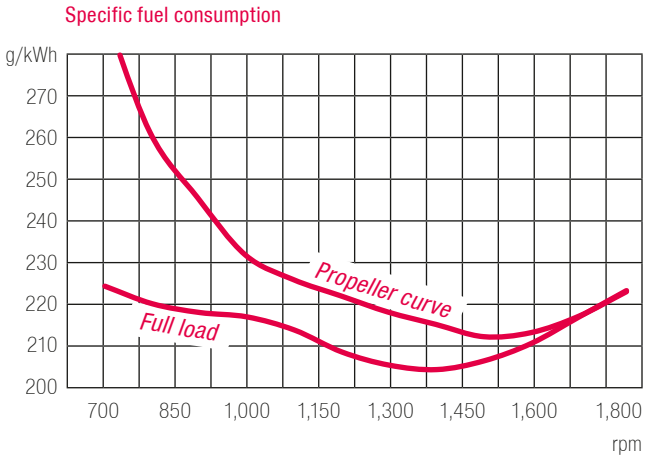
Power charts

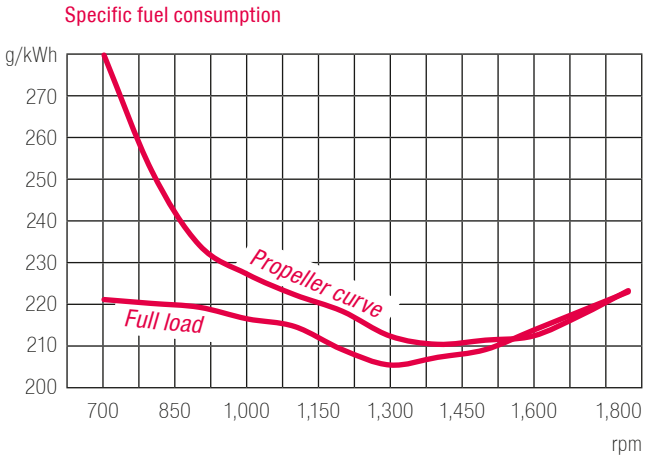
D2876 LE 406



D2876 LE 403



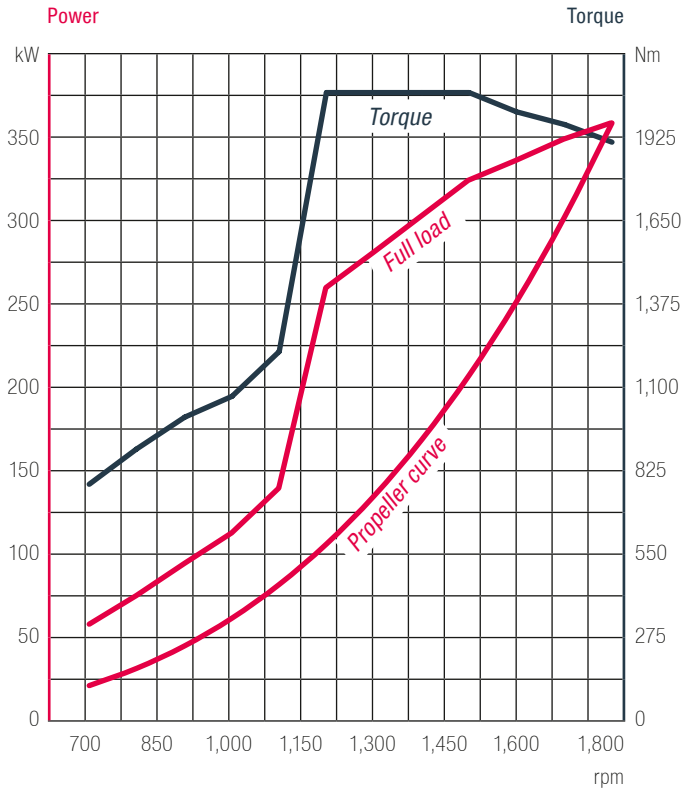


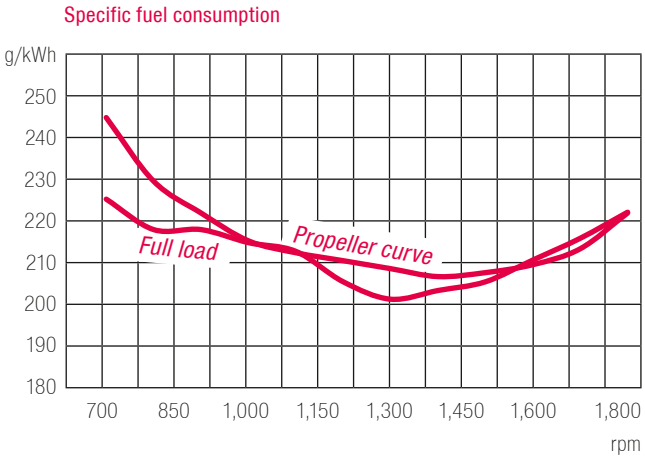


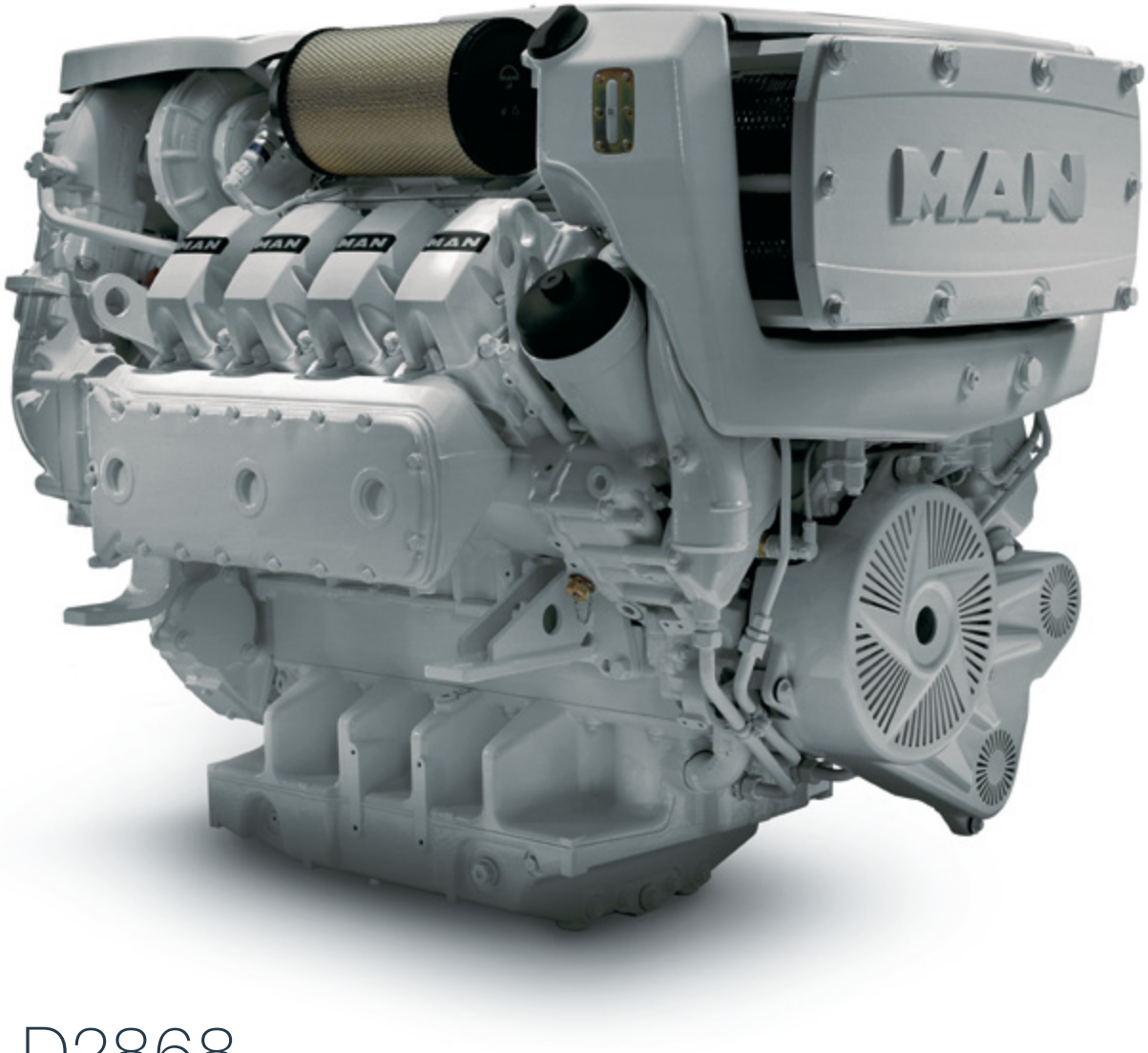
D2876

Power charts

D2876 LE 407







D2868

Engine description

Characteristics

Cylinders and arrangement:	8 cylinders in 90° V arrangement
Operation mode:	4-stroke diesel engine, watercooled
Turbocharging:	Exhaust turbocharger with intercooler
Number of valves:	4 valves per cylinder
Fuel system:	Common Rail direct fuel injection
Engine block:	High-strength casting with integrated oil and water ducts and replaceable cylinder liners
Engine Lubrication:	Closed system with forced feeding, oil cooling and filtering
Type of cooling:	Plate heat exchanger, seawater cooled
Engine control:	Electronic injection control Electronic engine monitoring including diagnostic unit
Fuel:	DIN EN 590
Average TBO:	18,000 operating hours
Oil change interval:	600 operating hours

D2868

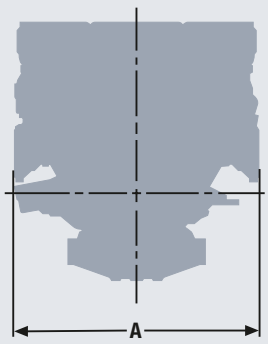
Technical data

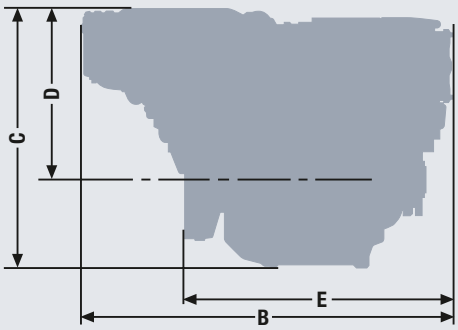
Technical features D2868

Type designation		LE 421	LE 424	LE 431
Displacement	l	16.16	16.16	16.16
Nominal rating [1]	kW (hp)	441 (600)	441 (600)	500 (680)
Rated speed	rpm	1,800	1,800	1,800
Torque at rated speed	Nm	2,340	2,340	2,653
Maximum torque	Nm	2,630	2,630	2,985
at speed	rpm	1,100–1,600	1,100–1,600	1,100–1,600
Specific fuel consumption [2]	g/kWh	206	220	206
Fuel consumption [2]	l/h	108	116	123
Classifiable		✓	✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3, RCD 94/25/EC, 97/68/EC	IMO Tier 2, RCD 94/25/EC, 97/68/EC

1) The rating is according to DIN 3046/1

2) Consumption at rated power





Dimensions D2868

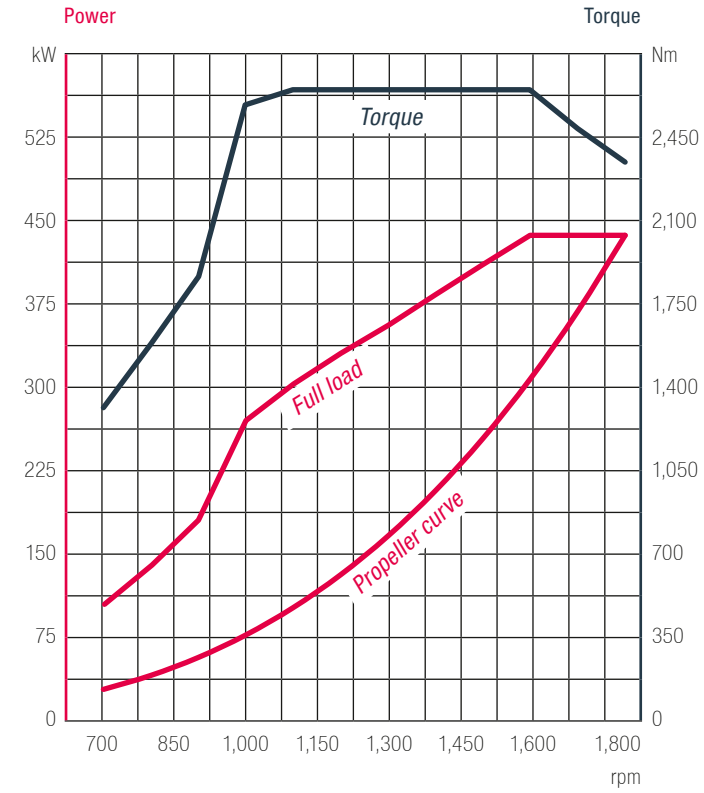
Type designation		LE 421/LE 424/LE 431
A-Overall width	mm	1,153
B-Overall length	mm	1,736
C-Overall height	mm	1,236
D-Top of engine to crankshaft centre	mm	825
E-Length of engine from front end to edge of flywheel housing	mm	1,243
Average weight of engine ready for installation (dry)	kg	1,800

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

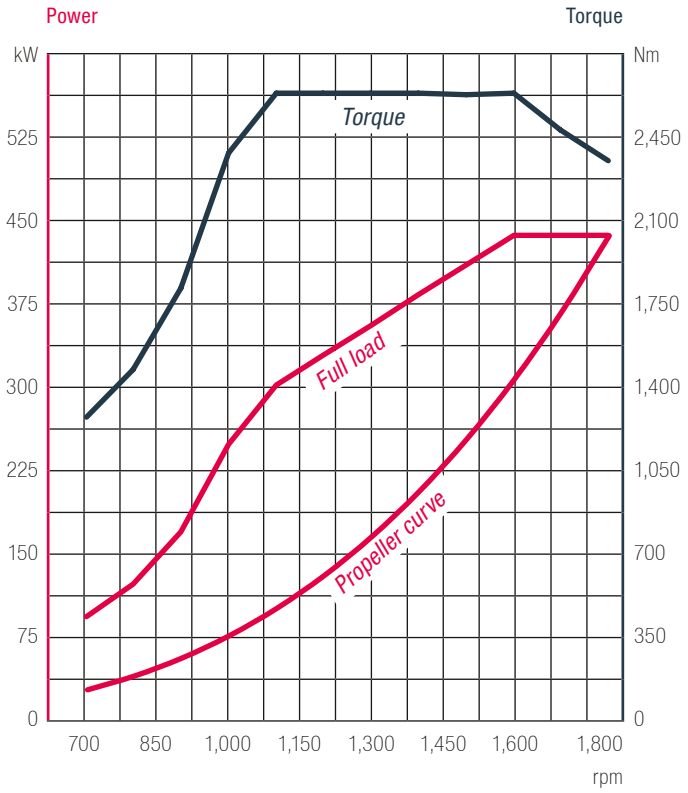
D2868

Power charts

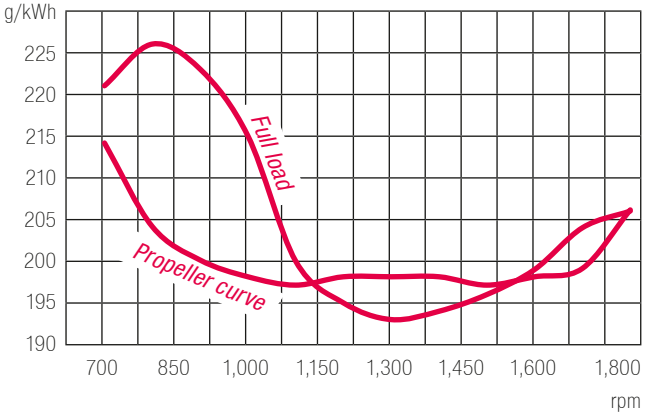
D2868 LE 421



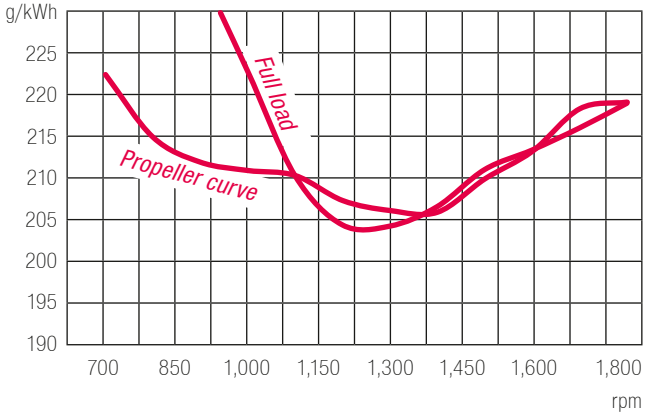
D2868 LE 424



Specific fuel consumption



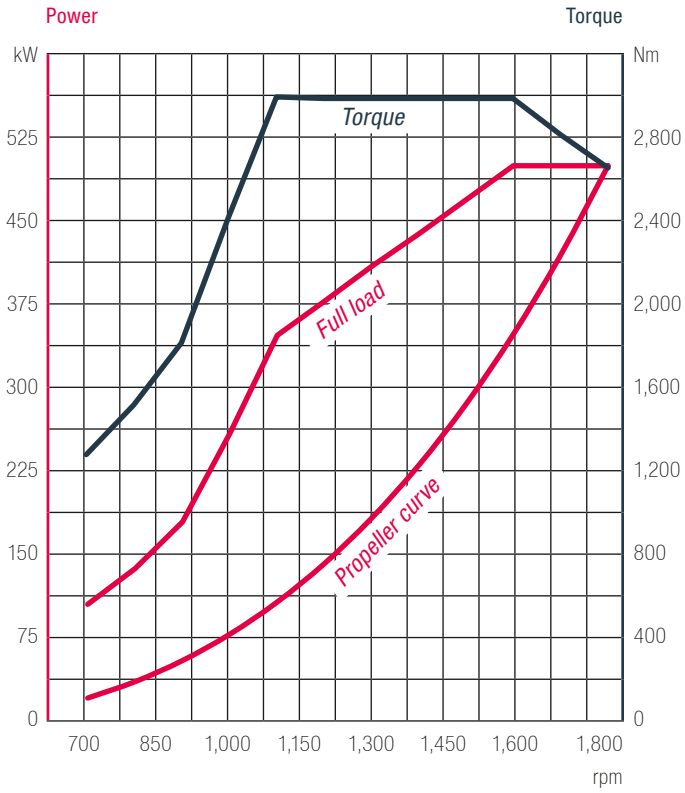
Specific fuel consumption



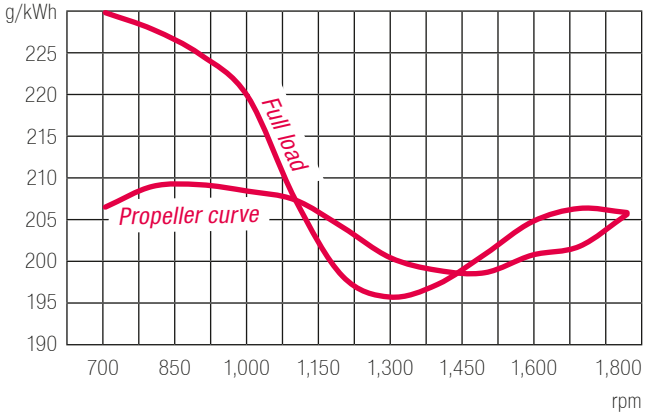
D2868

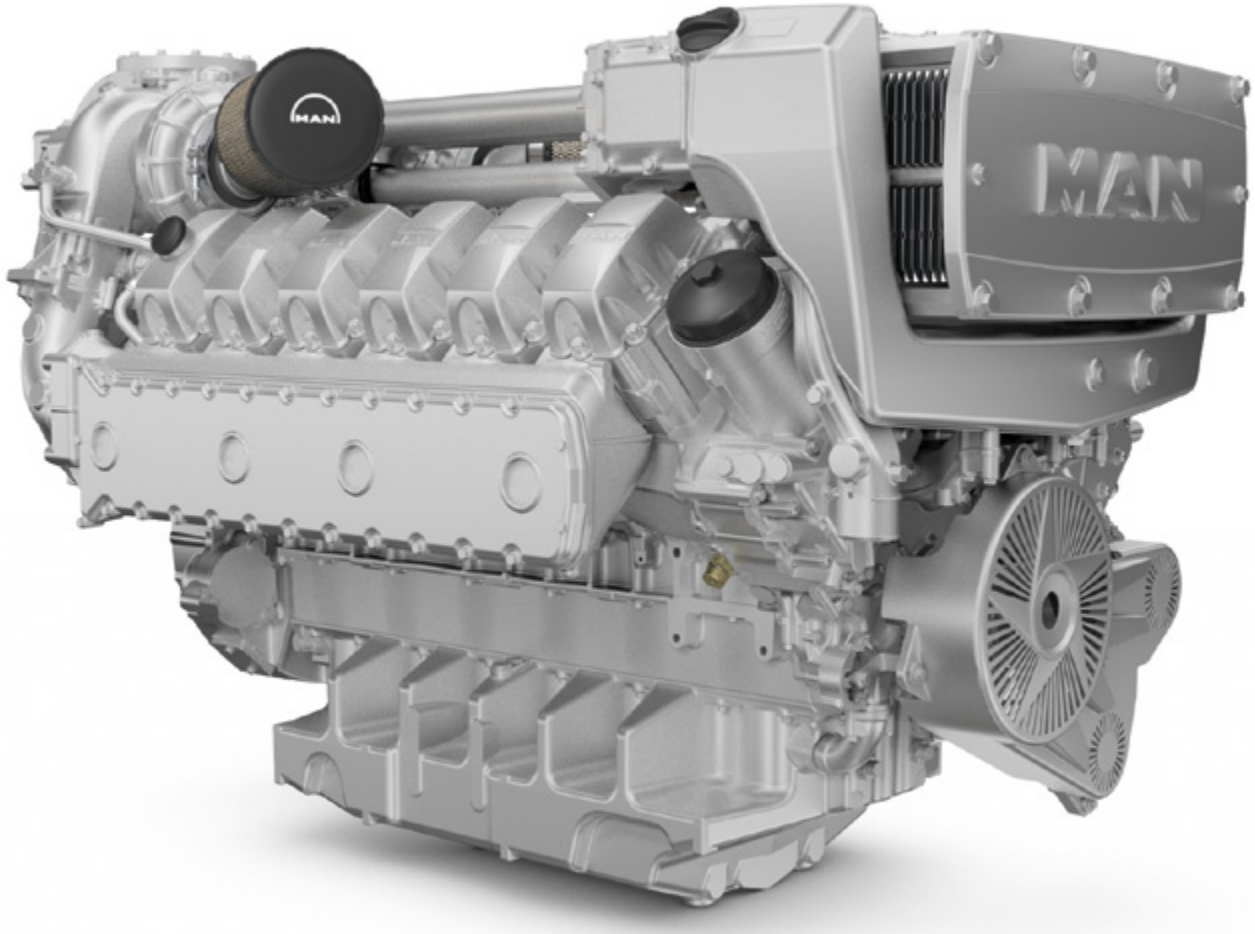
Power charts

D2868 LE 431



Specific fuel consumption





D2862

Engine description

Characteristics

Cylinders and arrangement:	12 cylinders in 90° V arrangement
Operation mode:	4-stroke diesel engine, watercooled
Turbocharging:	Exhaust turbocharger with intercooler
Number of valves:	4 valves per cylinder
Fuel system:	Common Rail direct fuel injection with electronic control
Engine block:	High-strength casting with integrated oil and water ducts and replaceable cylinder liners
Engine lubrication:	Closed system with forced feeding, oil cooling and filtering
Type of cooling:	Plate heat exchanger seawater cooled
Engine control:	Electronic injection control (EDC) Electronic engine monitoring including diagnostic unit
Fuel:	DIN EN 590
Average TBO:	18,000 operating hours
Oil change interval:	600 operating hours

D2862

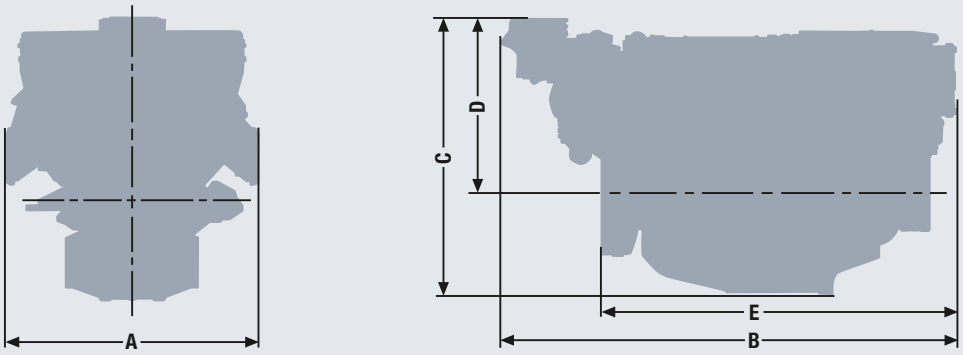
Technical data

Technical features D2862

Type designation		LE 431	LE 434
Displacement	l	24.24	24.24
Nominal rating [1]	kW (hp)	551 (749)	551 (749)
Rated speed	rpm	1,800	1,800
Torque at rated speed	Nm	2,923	2,923
Maximum torque	Nm	3,290	3,305
at speed	rpm	1,000–1,600	1,000–1,600
Specific fuel consumption [2]	g/kWh	213	204
Fuel consumption [2]	l/h	140	134
Classifiable		✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3, RCD 94/25/EC, 97/68/EC

1) The rating is according to DIN 3046/1

2) Consumption at rated power



Dimensions D2862

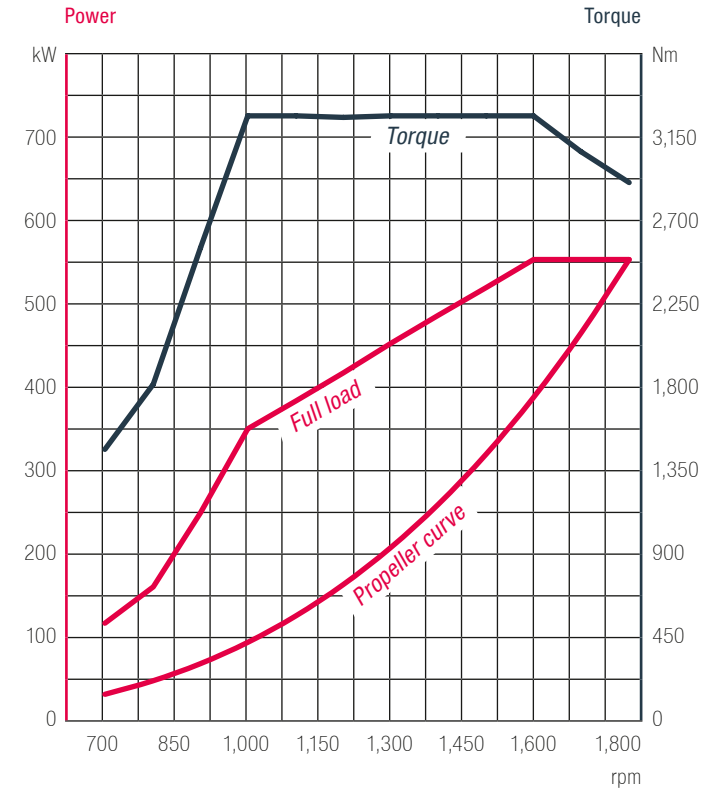
Type designation		LE 431/434
A-Overall width	mm	1,153
B-Overall length	mm	2,124
C-Overall height	mm	1,289
D-Top of engine to crankshaft centre	mm	825
E-Length of engine from front end to edge of flywheel housing	mm	1,631
Average weight of engine ready for installation (dry)	kg	2,270

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

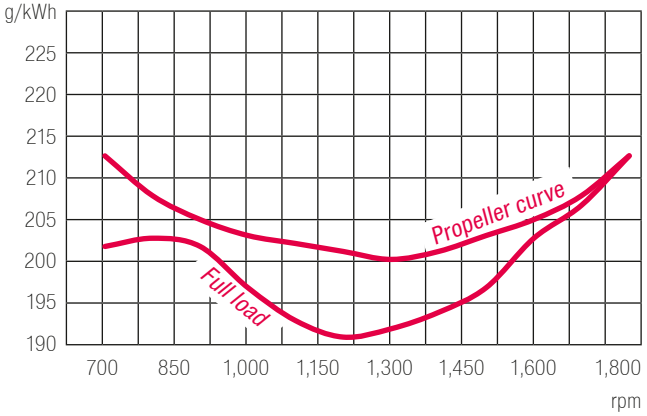
D2862

Power charts

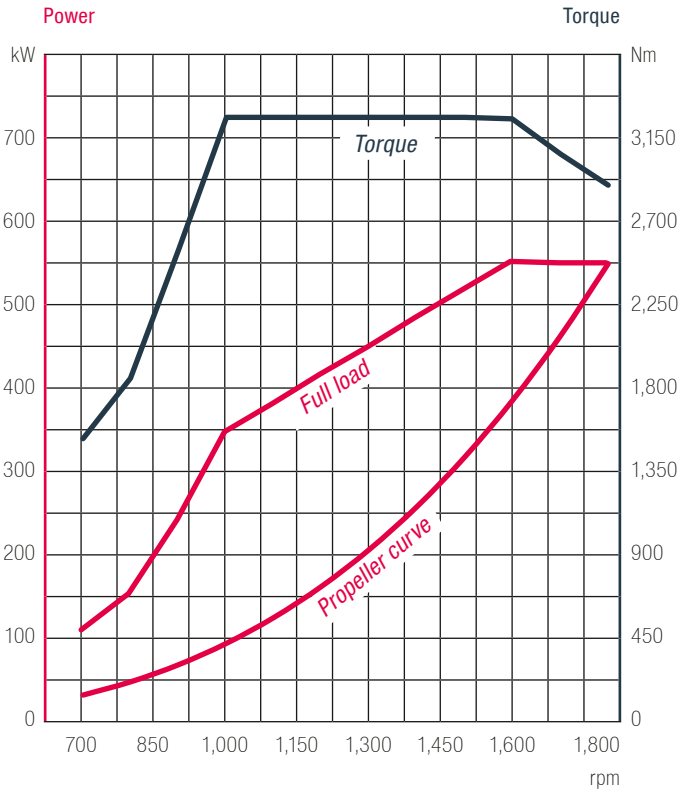
D2862 LE 431



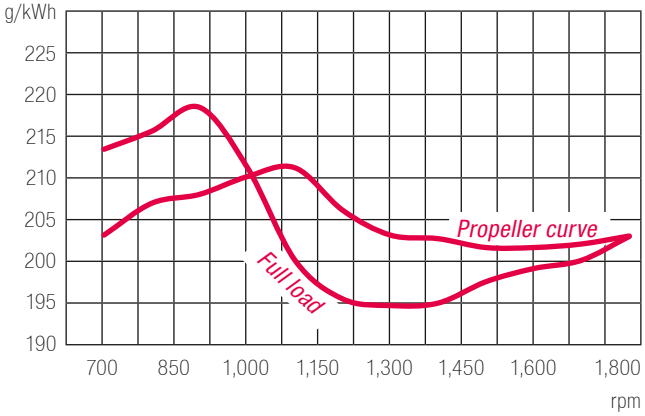
Specific fuel consumption



D2862 LE 434



Specific fuel consumption



D2862

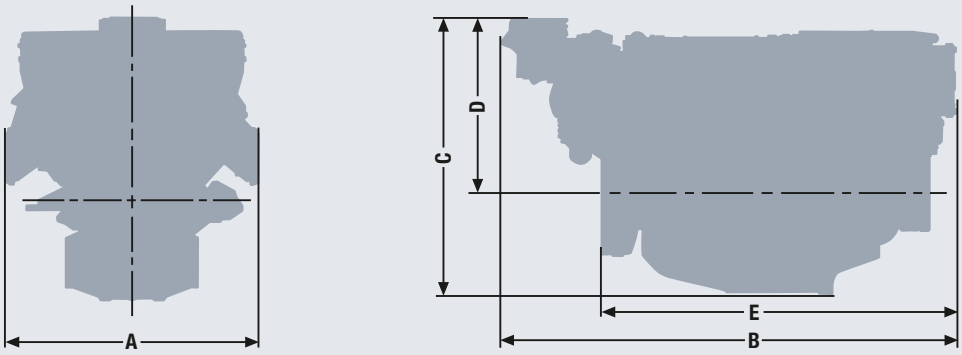
Technical data

Technical features D2862

Type designation		LE 421	LE 424
Displacement	l	24.24	24.24
Nominal rating [1]	kW (hp)	662 (900)	662 (900)
Rated speed	rpm	1,800	1,800
Torque at rated speed	Nm	3,512	3,512
Maximum torque	Nm	3,955	3,955
at speed	rpm	1,000–1,600	1,100–1,600
Specific fuel consumption [2]	g/kWh	212	204
Fuel consumption [2]	l/h	167	161
Classifiable		✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3, RCD 94/25/EC, 97/68/EC

1) The rating is according to DIN 3046/1

2) Consumption at rated power



Dimensions D2862

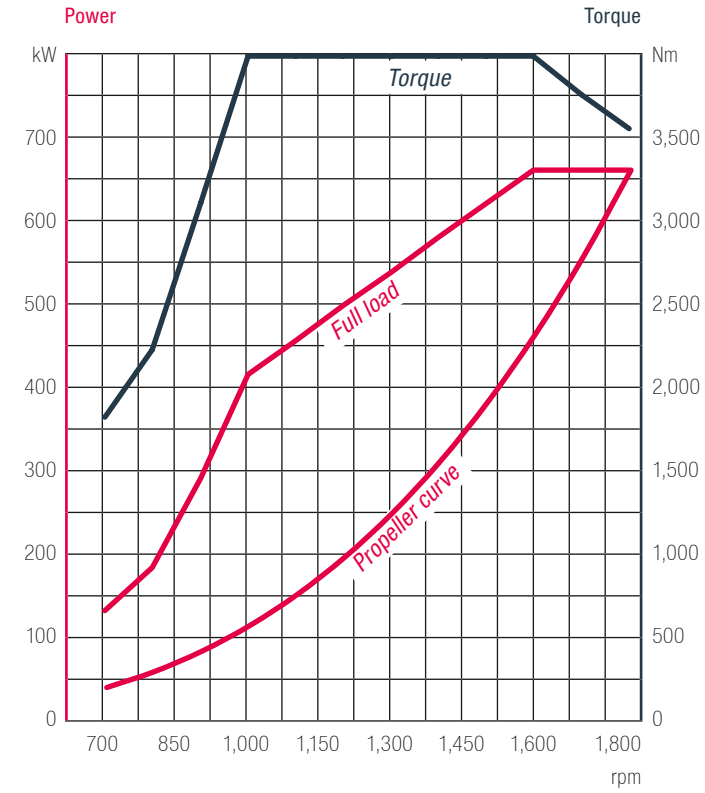
Type designation		LE 421/424
A-Overall width	mm	1,153
B-Overall length	mm	2,124
C-Overall height	mm	1,289
D-Top of engine to crankshaft centre	mm	825
E-Length of engine from front end to edge of flywheel housing	mm	1,631
Average weight of engine ready for installation (dry)	kg	2,270

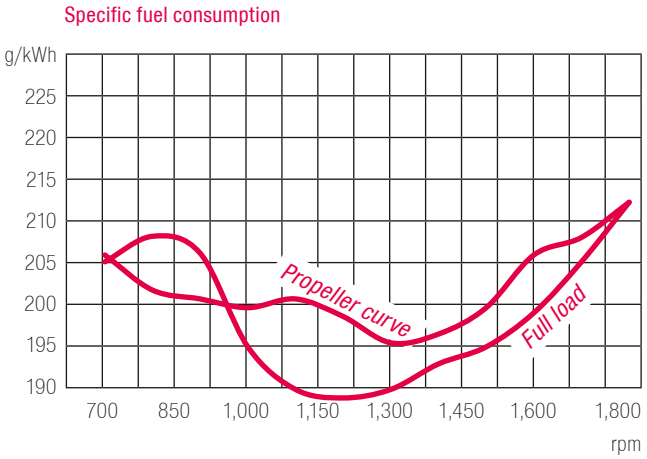
For detailed examinations of installation dimensions, please order drawings from our factory.

D2862

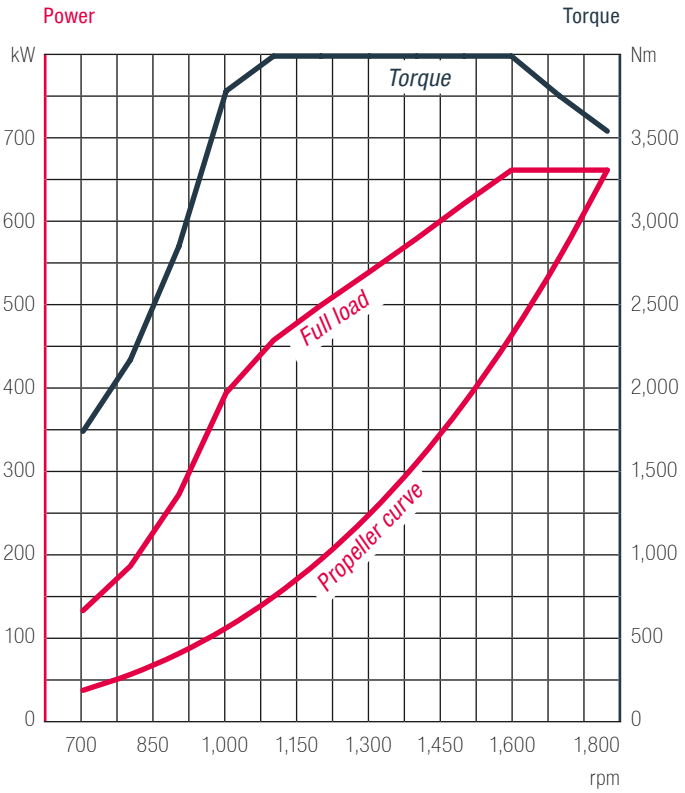
Power charts

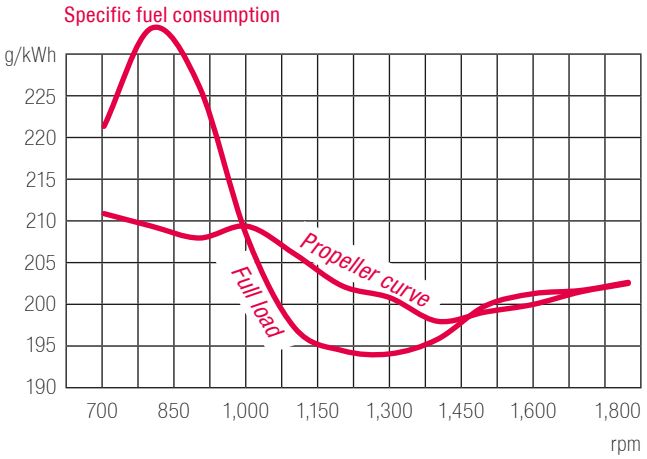
D2862 LE 421





D2862 LE 424





D2862

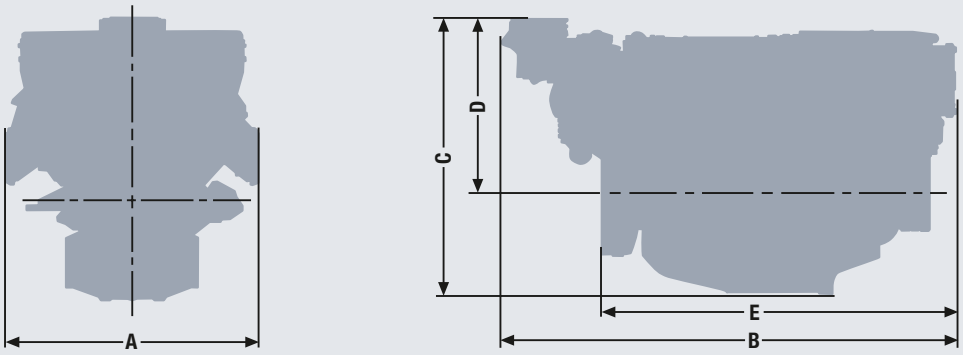
Technical data

Technical features D2862

Type designation		LE 441	LE 444
Displacement	l	24.24	24.24
Nominal rating [1]	kW (hp)	735 (1,000)	735 (1,000)
Rated speed	rpm	1,800	1,800
Torque at rated speed	Nm	3,900	3,900
Maximum torque	Nm	4,380	4,380
at speed	rpm	1,100–1,600	1,100–1,600
Specific fuel consumption [2]	g/kWh	200	212
Fuel consumption [2]	l/h	175	186
Classifiable		✓	✓
Exhaust gas status		IMO Tier 2, RCD 94/25/EC, 97/68/EC	IMO Tier 2, EPA Tier 3, RCD 94/25/EC, 97/68/EC

1) The rating is according to DIN 3046/1

2) Consumption at rated power



Dimensions D2862

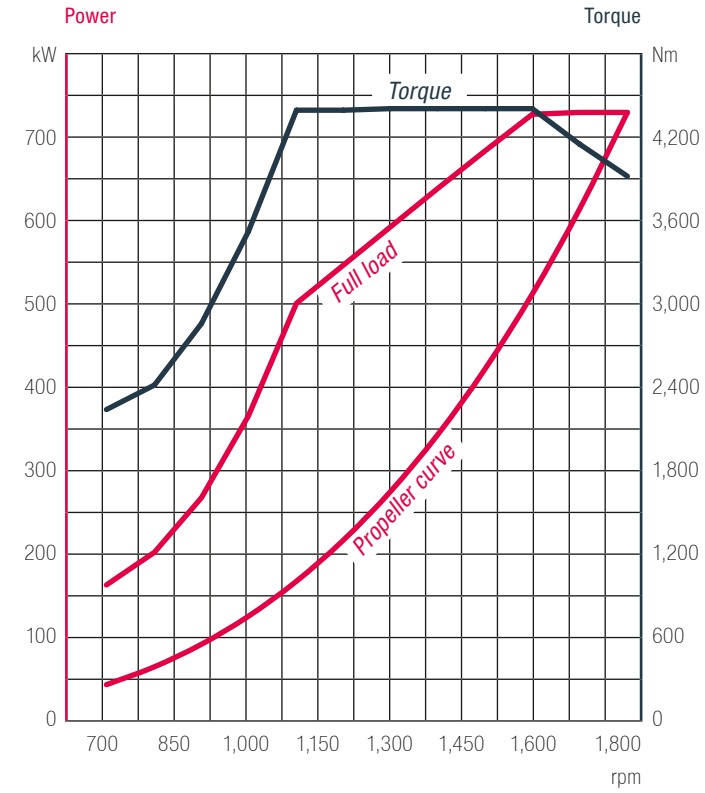
Type designation		LE 441/444
A-Overall width	mm	1,153
B-Overall length	mm	2,124
C-Overall height	mm	1,289
D-Top of engine to crankshaft centre	mm	825
E-Length of engine from front end to edge of flywheel housing	mm	1,631
Average weight of engine ready for installation (dry)	kg	2,270

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

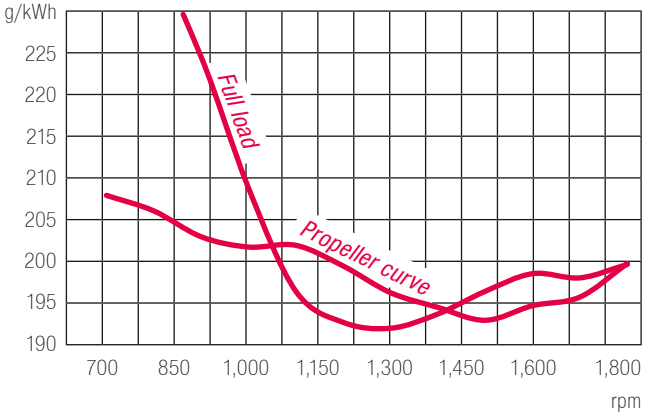
D2862

Power charts

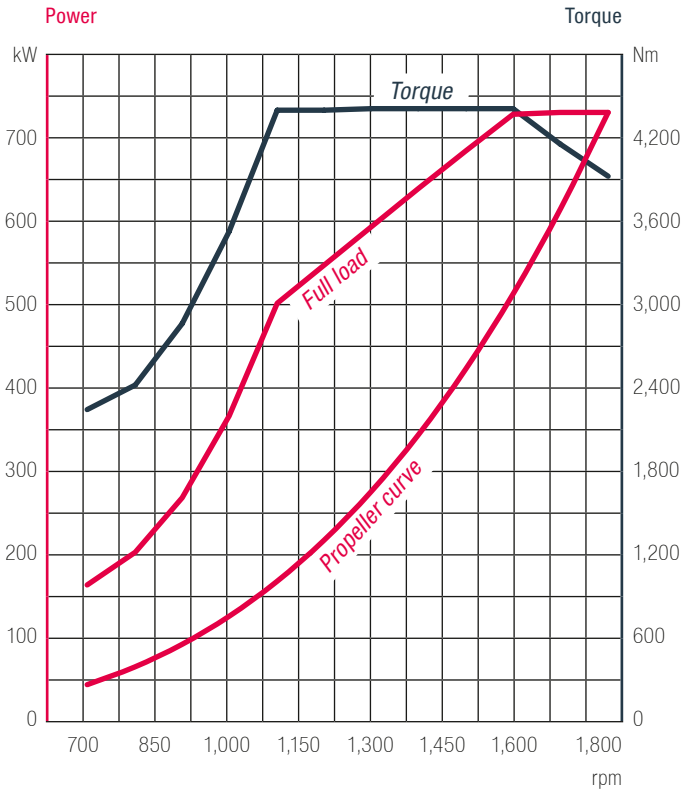
D2862 LE 441



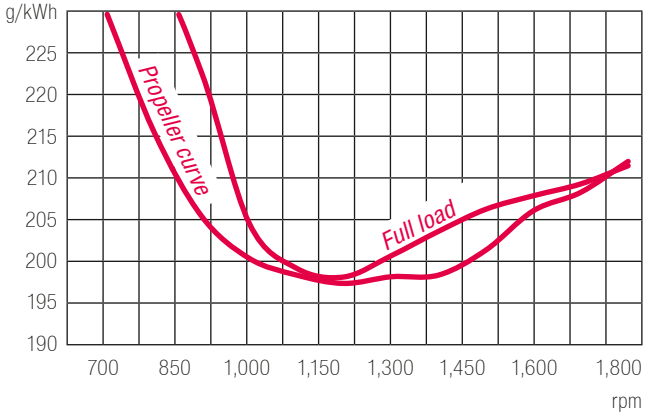
Specific fuel consumption



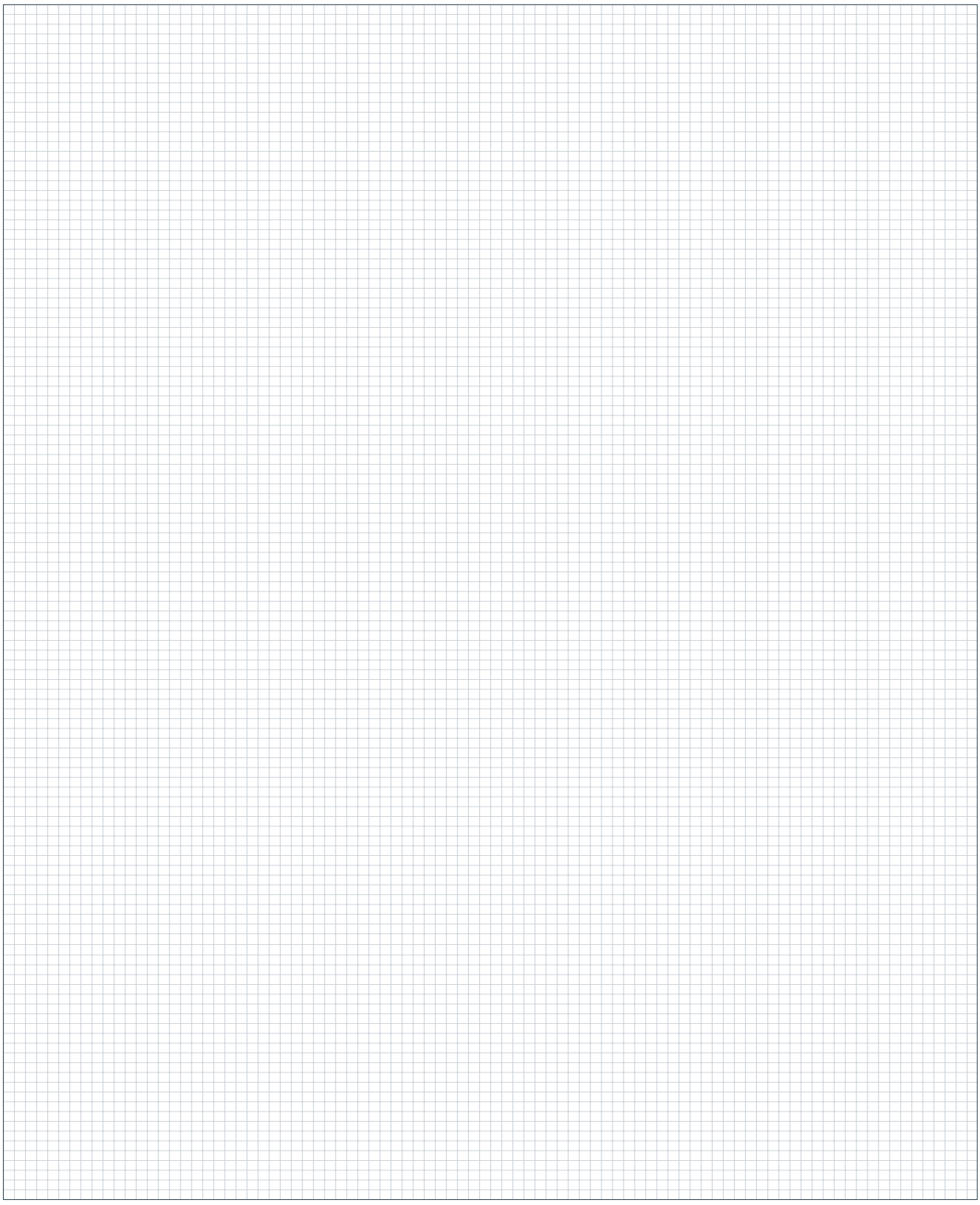
D2862 LE 444



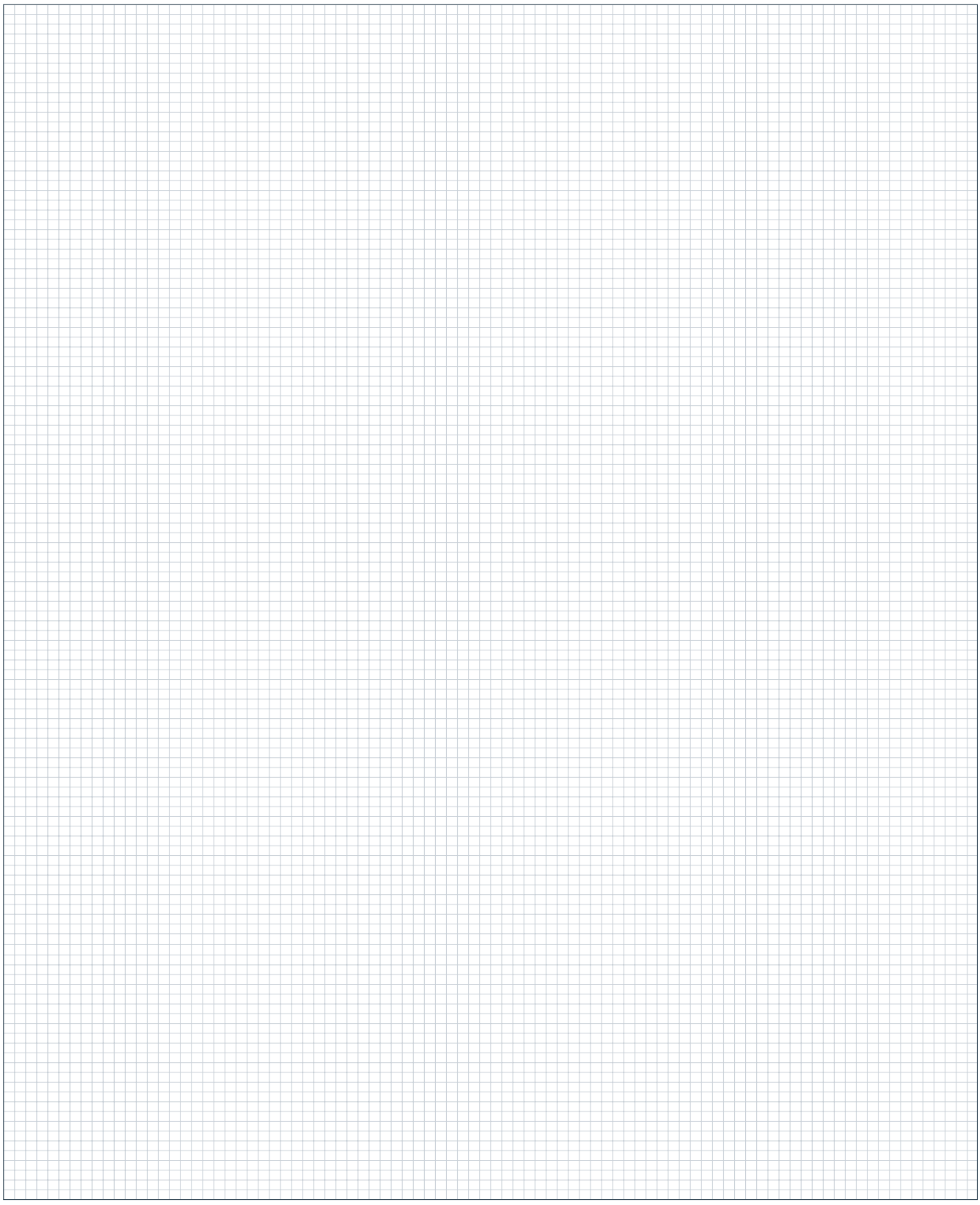
Specific fuel consumption



Notes



Notes



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