

MARINE

High speed propulsion engines



MAN Engines





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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 (730–1,900 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 (560–1,400 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 (200–1,000 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 Warranty **Relaxing and calculable**

With MAN engines for work boats you are on the safe side since MAN Engines goes one step further. With the **“Work Plus”** Warranty you do not only extend the warranty for your engine, but it also gives you the certainty and peace of mind that you have made the right decision. In practice this means an additional year of safety for you and your engine plus attractive pricing which makes this offer even more appealing.

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

Characteristics

- Annual operating hours: $\leq 1,000$
- Percentage of time at full load: $\leq 20\%$
- Average load application: $\leq 50\%$

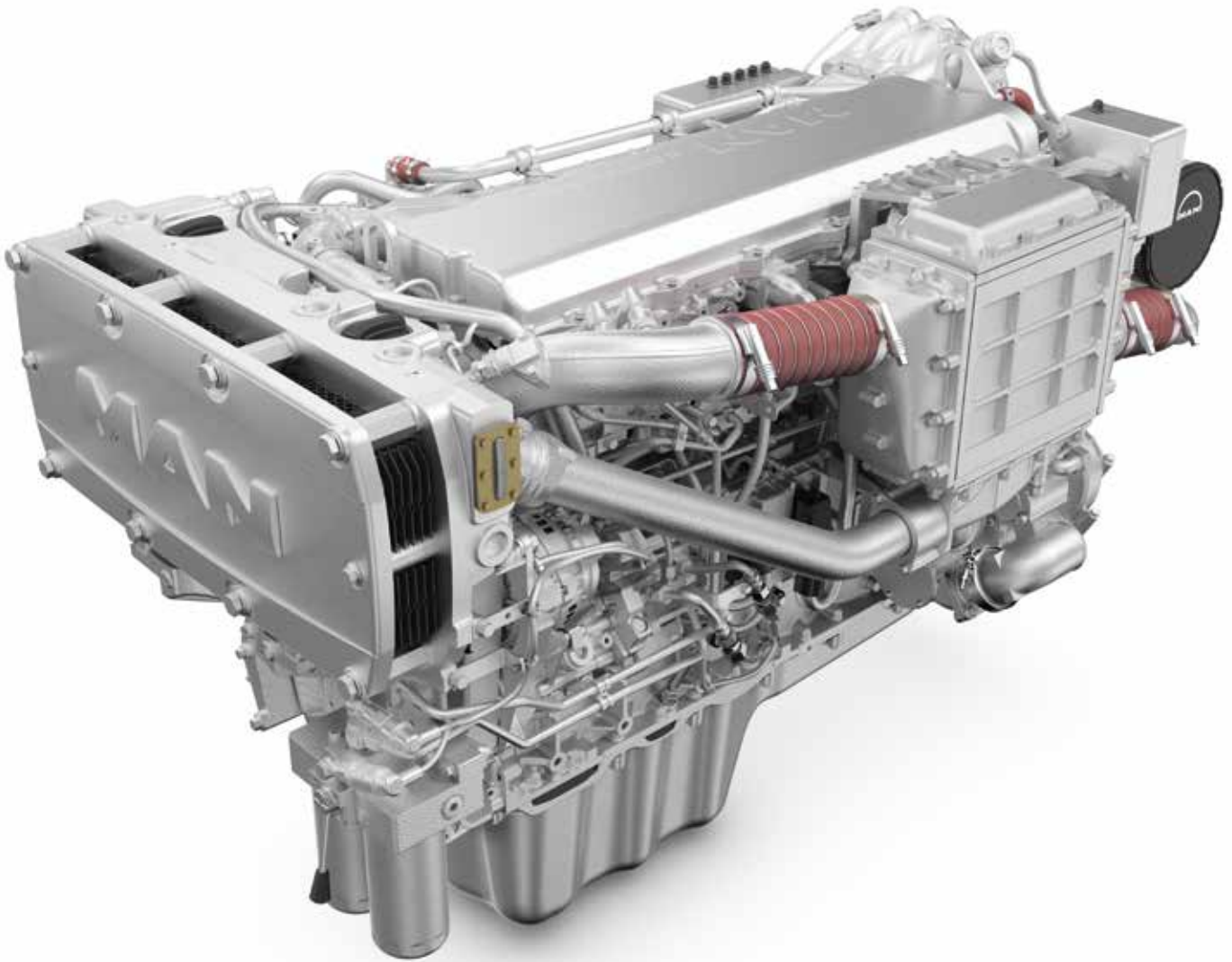
Typical applications

- Season fishing
- Escort boats and patrol boats
- Ambulance boats
- Police boats





D2676



Characteristics

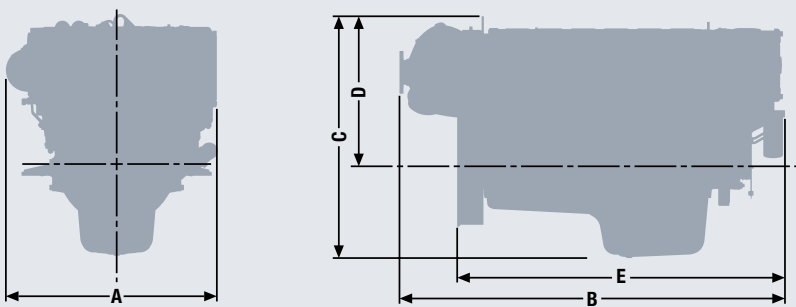
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|------------------------------|--|
| ■ Cylinders and arrangement: | 6 cylinders in-line |
| ■ Operation mode: | 4-stroke diesel engine, watercooled |
| ■ Turbocharging: | Turbocharger with charge air intercooler and waste gate |
| ■ Number of valves: | 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 |

Technical features

Type designation		LE 443	LE 423
Displacement	l	12.42	12.42
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	2,674
at speed	rpm	1,300–2,100	1,400–2,000
Lowest specific fuel consumption ¹⁾	g/kWh	199	213
Classifiable		✓	–
Exhaust gas status		IMO Tier II, EPA Tier 3 RCD 2013/53/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, 97/68/EC

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

2) For private use only



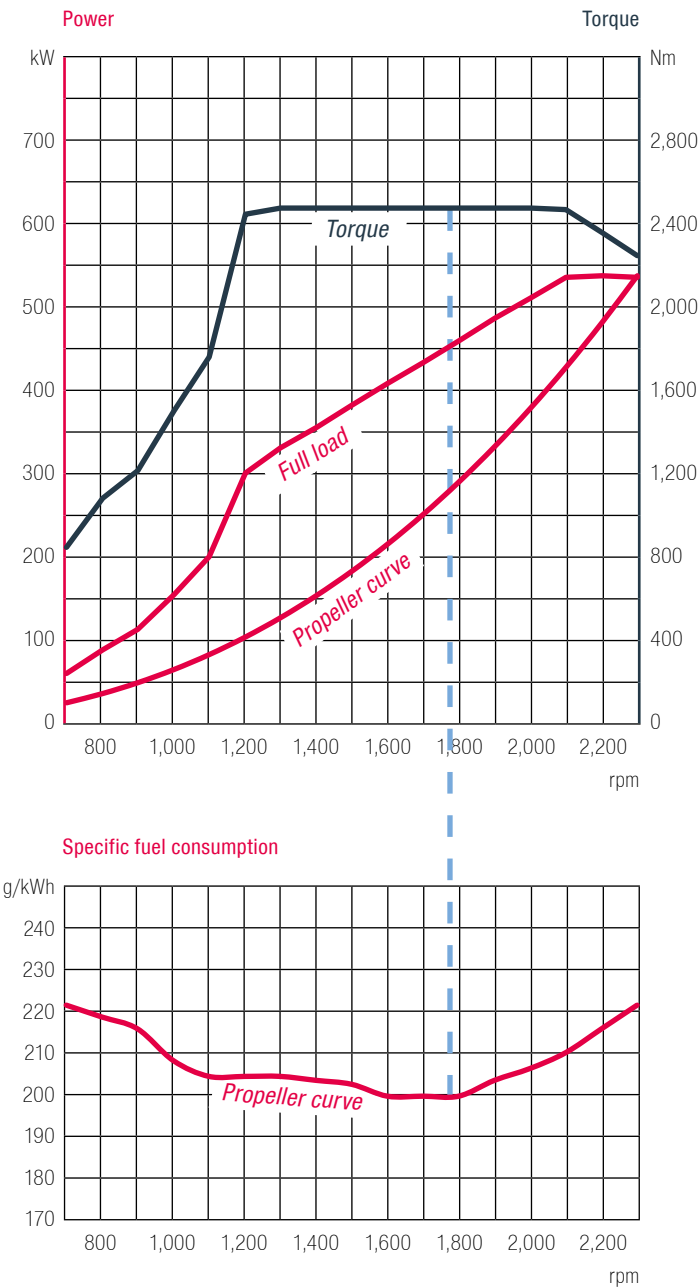
Dimensions

Type designation		LE 443/423
A-Overall width	mm	986
B-Overall length	mm	1,795
C-Overall height – standard oil pan	mm	1,096
D-Top of engine to crankshaft centre	mm	674
E-Length of engine from front end to edge of flywheel housing	mm	1,527
Average weight of engine ready for installation (dry)	kg	1,215

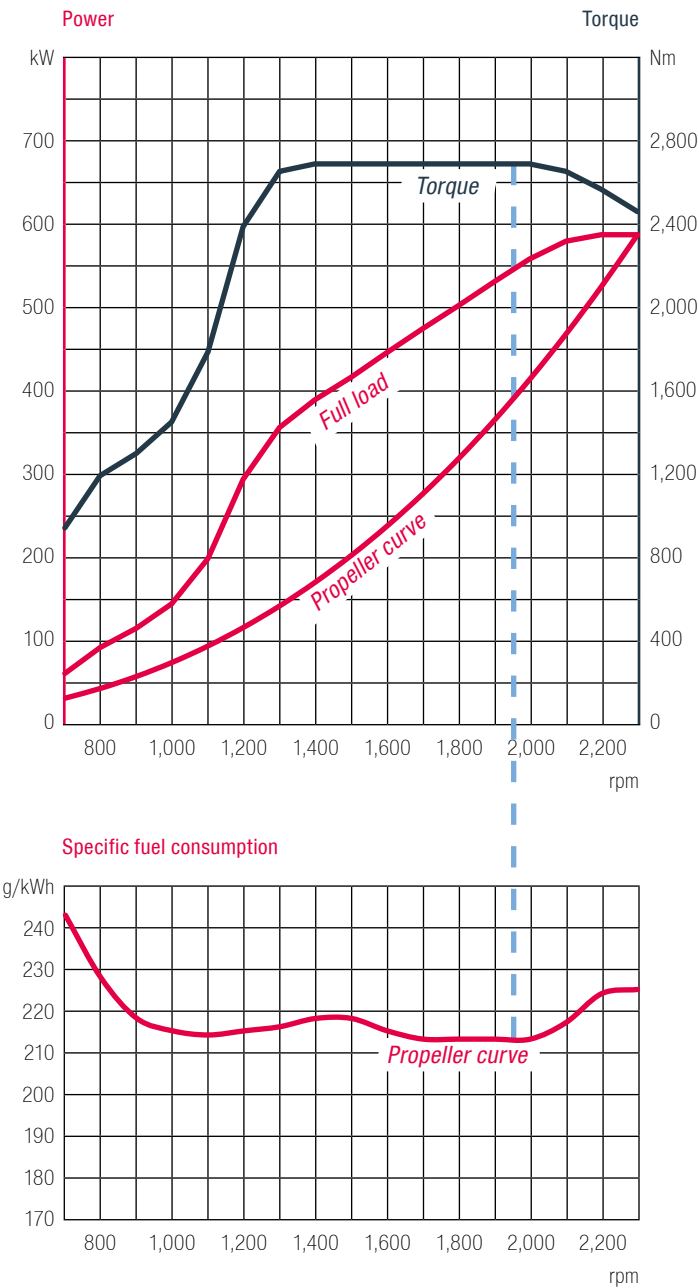
For detailed examinations of installation dimensions, please order drawings from our factory.

D2676

D2676 LE 443

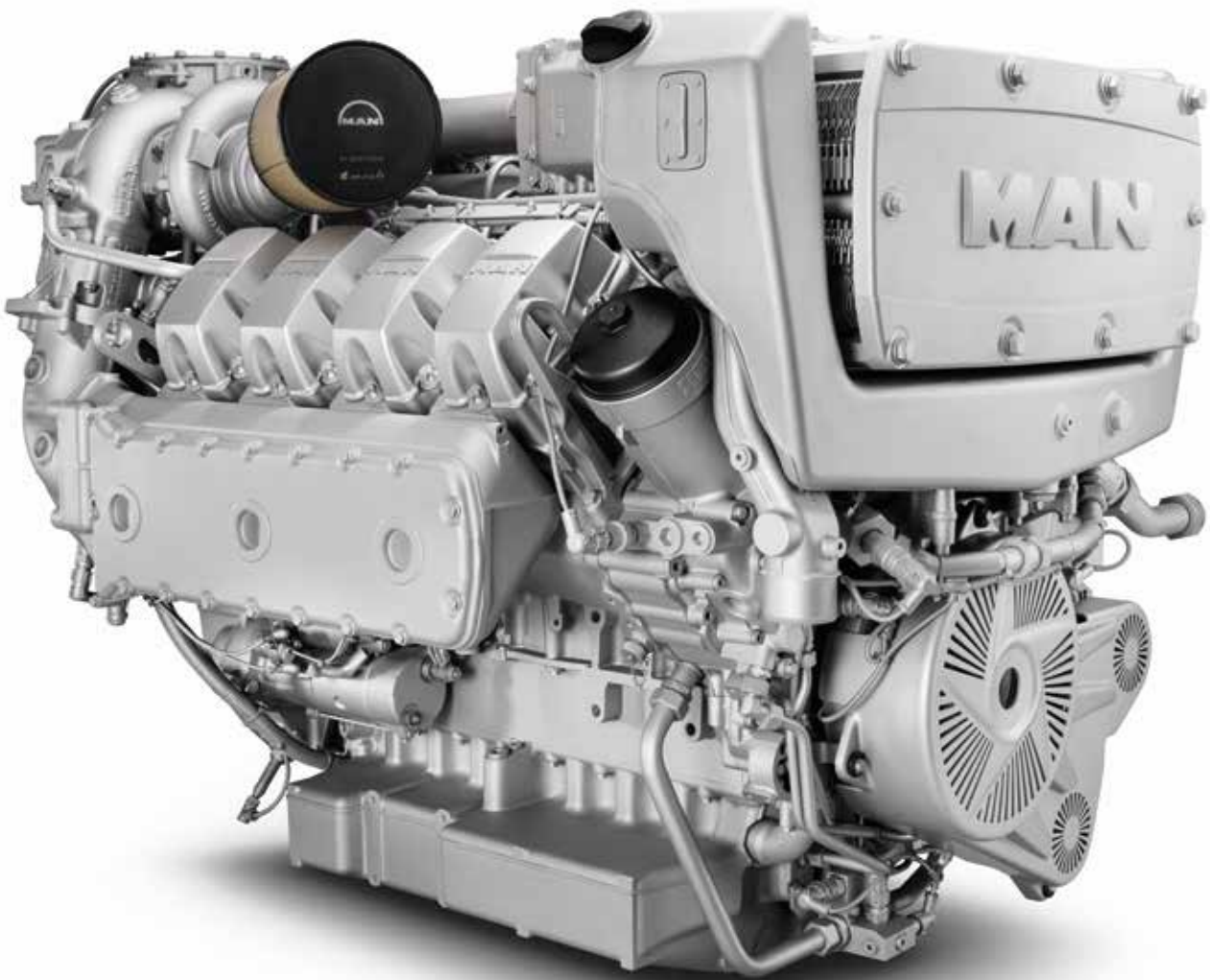


D2676 LE 423



--- Maximum torque at most fuel efficient operating point

D2868



Characteristics

- Cylinders and arrangement: 8 cylinders in 90° V arrangement
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger with charge air intercooler and waste gate (1-stage: D2686 LE 426, 2-stage: D2868 LE 436)
- 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

D2868

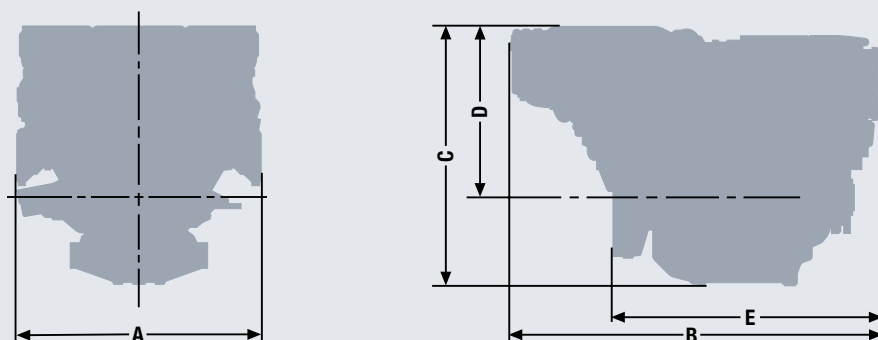
Technical features

Type designation		LE 426	LE 436
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	3,340	4,010
at speed	rpm	1,300–2,100	1,200–2,100
Lowest specific fuel consumption ¹⁾	g/kWh	209	205
Classifiable		–	–
Exhaust gas status		IMO Tier II, EPA Tier 3 ³⁾ , RCD 2013/53/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, 97/68/EC

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

2) For private use only

3) Until 09/30/2017

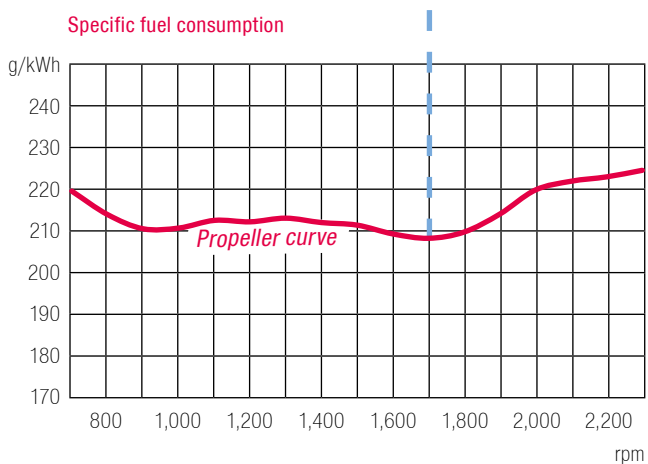
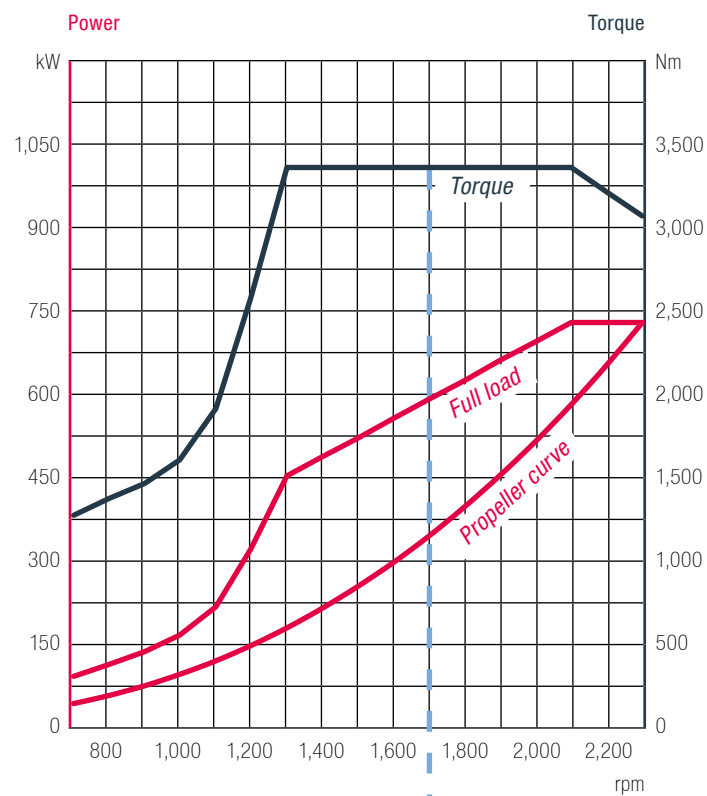


Dimensions

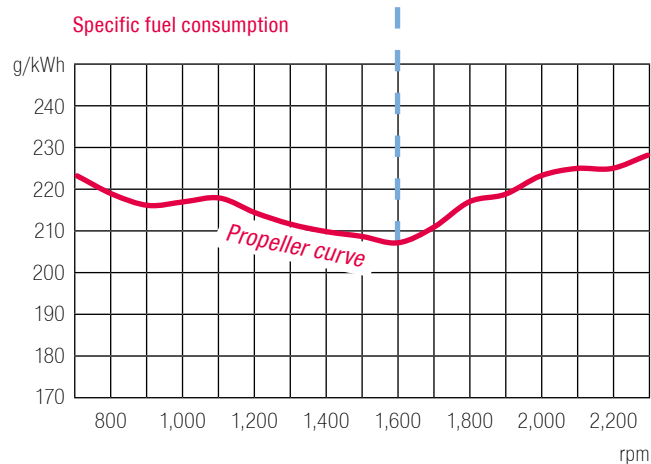
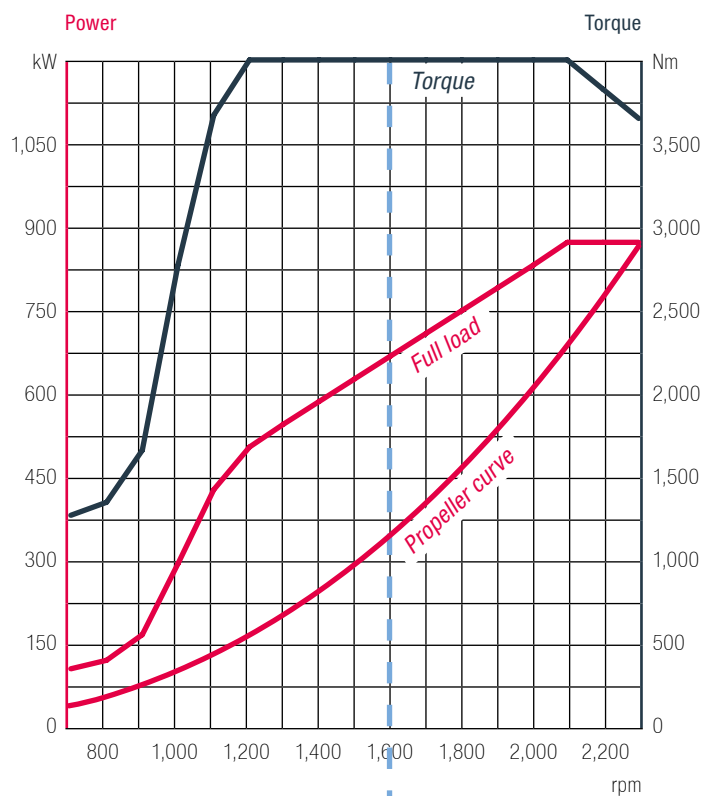
Type designation		LE 426	LE 436
A-Overall width	mm	1,153	1,153
B-Overall length	mm	1,745	1,745
C-Overall height	mm	1,177	1,222
D-Top of engine to crankshaft centre	mm	765	811
E-Length of engine from front end to edge of flywheel housing	mm	1,243	1,262
Average weight of engine ready for installation (dry)	kg	1,780	1,880

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

LE 426



LE 436



--- Maximum torque at most fuel efficient operating point

D2862



Characteristics

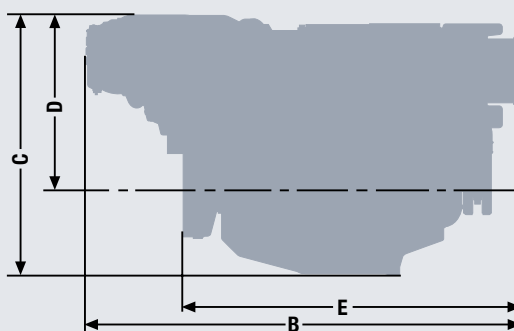
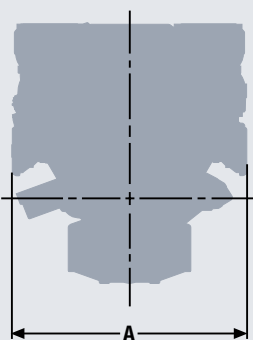
- Cylinders and arrangement: 12 cylinders in 90° V arrangement
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger with charge air intercooler and waste gate (1-stage: D2862 LE 446/426, 2-stage: D2862 LE 456/436)
- Number of valves: 4 valves per cylinder
- Fuel system: 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

Technical features

Type designation		LE 446	LE 426	LE 456	LE 436
Displacement	l	24.24	24.24	24.24	24.24
Maximum output to DIN ISO 3046-1	kW (hp)	1,029 (1,400)	1,140 (1,550)	1,213 (1,650)	1,324 (1,800)
Rated speed	rpm	2,300	2,300	2,300	2,300
Maximum torque	Nm	4,680	5,180	5,510	6,010
at speed	rpm	1,200–2,100	1,200–2,100	1,200–2,100	1,200–2,100
Lowest specific fuel consumption ¹⁾	g/kWh	203	203	195	200
Classifiable		✓	–	✓	–
Exhaust gas status		IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, 97/68/EC

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

2) For private use only



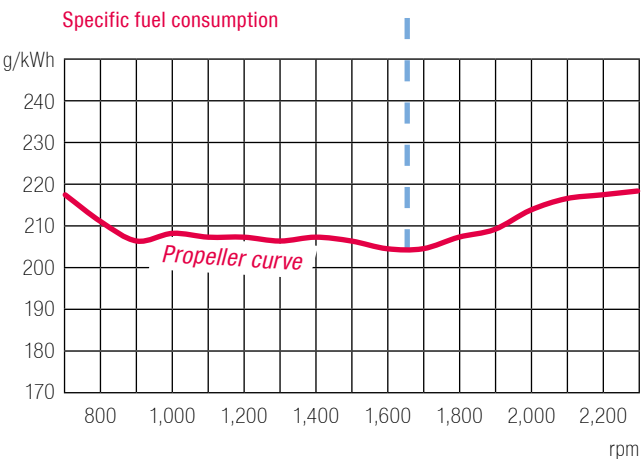
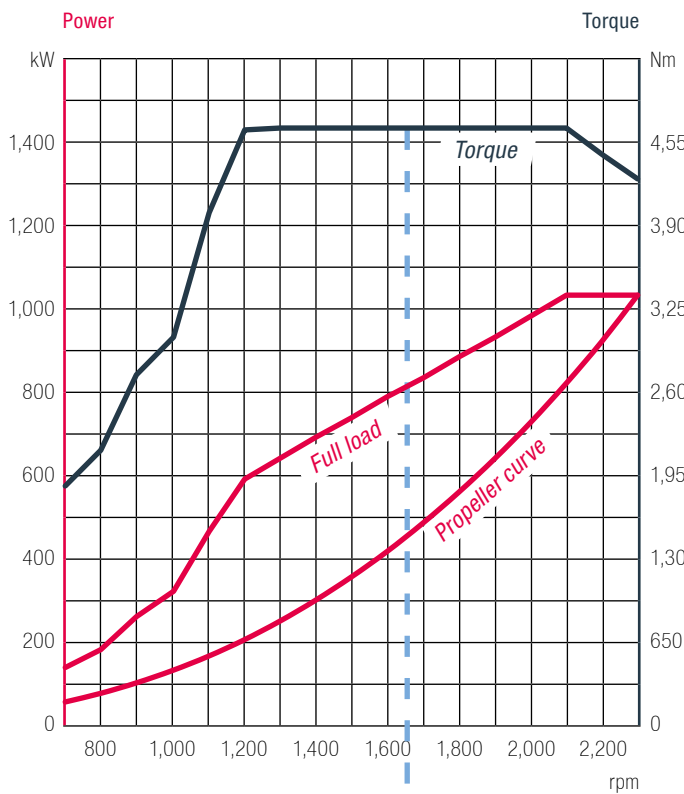
Dimensions

Type designation		LE 446/426	LE 456/436
A-Overall width	mm	1,153	1,153
B-Overall length	mm	2,130	2,139
C-Overall height	mm	1,230	1,272
D-Top of engine to crankshaft centre	mm	765	808
E-Length of engine from front end to edge of flywheel housing	mm	1,630	1,658
Average weight of engine ready for installation (dry)	kg	2,270	2,380

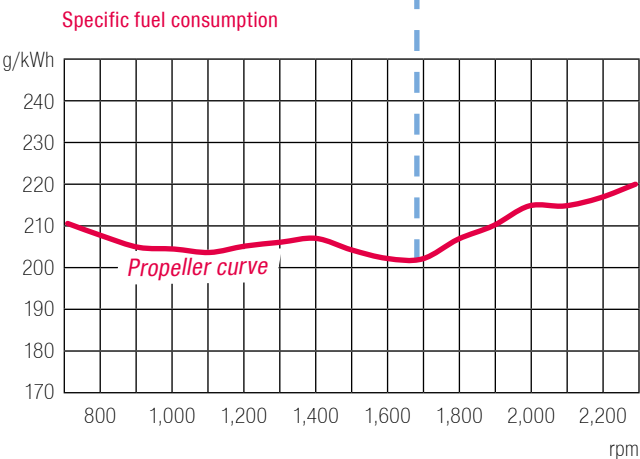
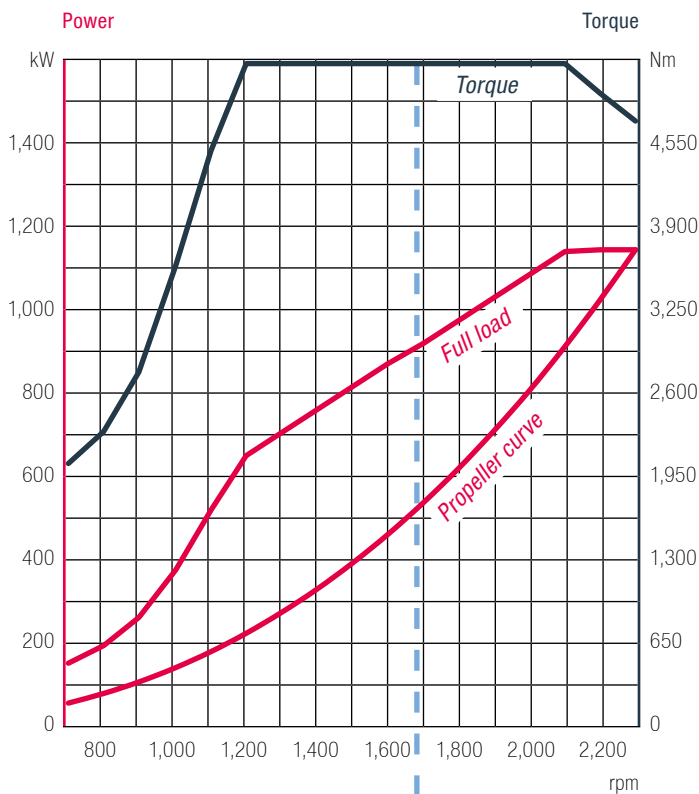
For detailed examinations of installation dimensions, please order drawings from our factory.

D2862

LE 446



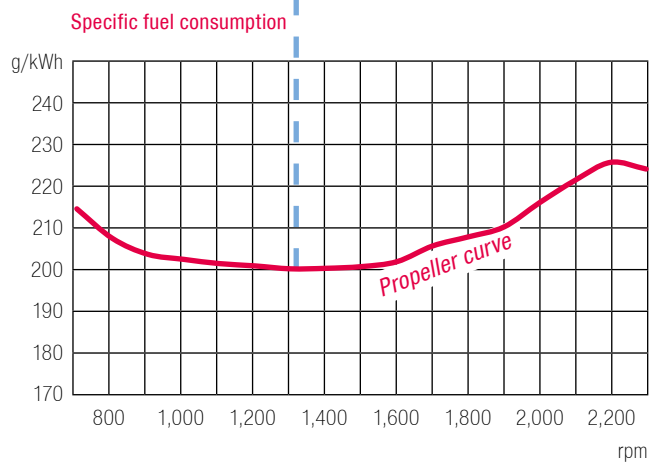
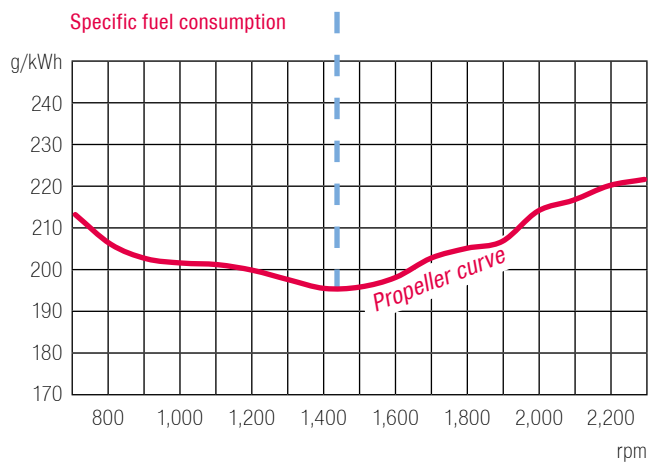
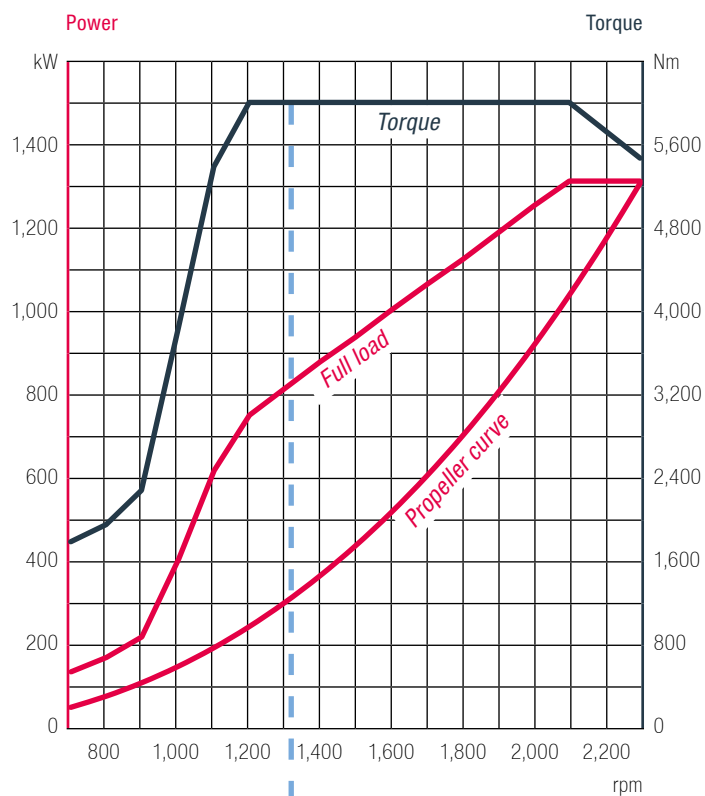
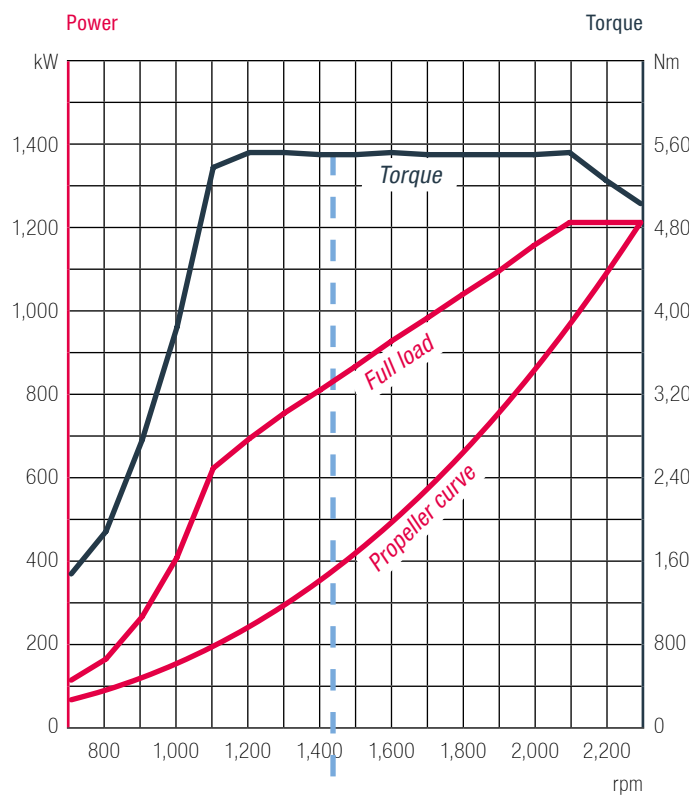
LE 426



--- Maximum torque at most fuel efficient operating point

LE 456

LE 436



--- Maximum torque at most fuel efficient operating point

Medium duty operation

Characteristics

	Annual operating hours	Percentage of time at full load	Average load application
D2676 LE 422/LE 425 LE 432/LE 435	≤ 3,000	≤ 50 %	≤ 70 %
D2862 LE 463/LE 466 LE 483	≤ 3,000	≤ 20 %	≤ 50 %
D2862 LE 422/LE 425 LE 432/LE 435	≤ 4,000		≤ 60 %
D2868 LE 422/LE 425 LE 443			

Typical applications

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





D2676



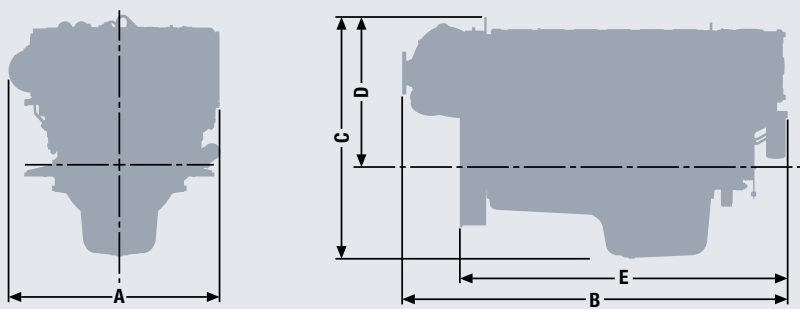
Characteristics

- Cylinders and arrangement: 6 cylinders in-line
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger with charge air intercooler and wastegate
- Number of valves: 4 valves per cylinder
- Fuel system: Common rail injection with high pressure pump
- Engine block: High-strength casting with integrated oil and water ducts and replaceable cylinder liners
- Engine lubrication: Force-feed lubrication, lubrication oil cooler in cooling water circuit of the engine
- Type of cooling: Seawater cooled charge air cooler, plate heat exchanger by rubber impeller pump
- Engine control: Electronic injection control, electronic engine monitoring including diagnostic unit
- Fuel: DIN EN 590

Technical features

Type designation		LE 432	LE 435	LE 422	LE 425
Displacement	l	12.42	12.42	12.42	12.42
Nominal rating ¹⁾	kW (hp)	412 (560)	412 (560)	478 (650)	478 (650)
Rated speed	rpm	2,100	2,100	2,100	2,100
Torque at rated speed	Nm	1,869	1,869	2,174	2,174
Maximum torque	Nm	2,065	2,065	2,402	2,402
at speed	rpm	1,200–1,900	1,200–1,900	1,200–1,900	1,200–1,900
Lowest specific fuel consumption	g/kWh	196	204	197	205
Classifiable		✓	✓	✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC	IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC

1) Rating according to DIN 3046-1



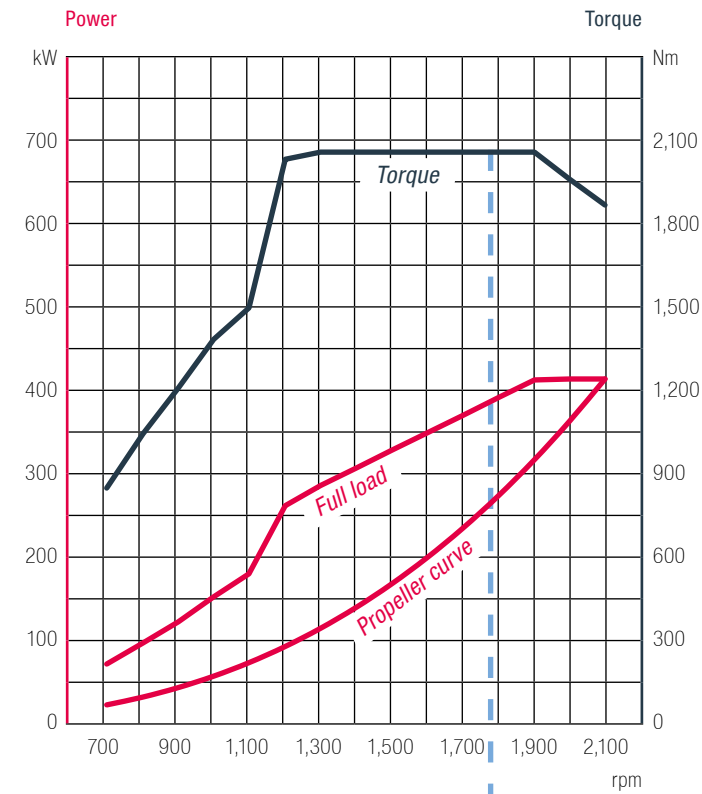
Dimensions

Type designation		LE 432/435/422/425
A-Overall width	mm	986
B-Overall length	mm	1,795
C-Overall height	mm	1,096
D-Top of engine to crankshaft centre	mm	674
E-Length of engine from front end to edge of flywheel housing	mm	1,527
Average weight of engine ready for installation (dry)	kg	1,215

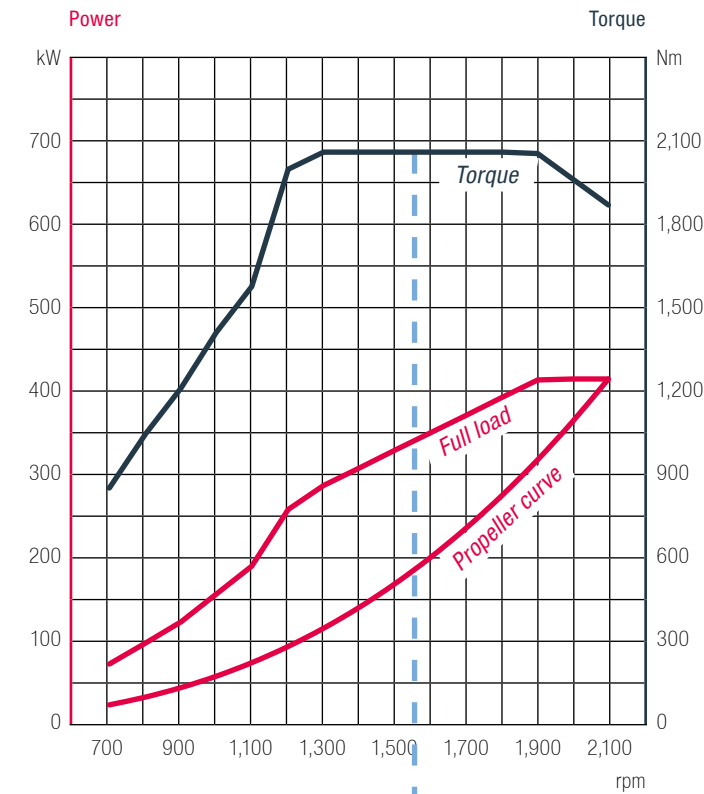
For detailed examinations of installation dimensions, please order drawings from our factory.

D2676

D2676 LE 432

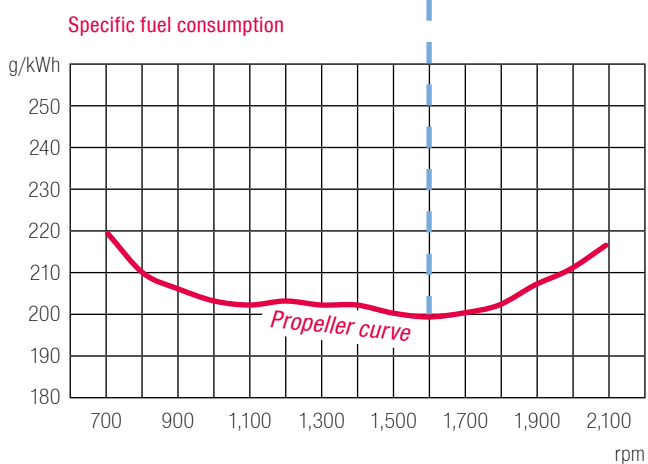
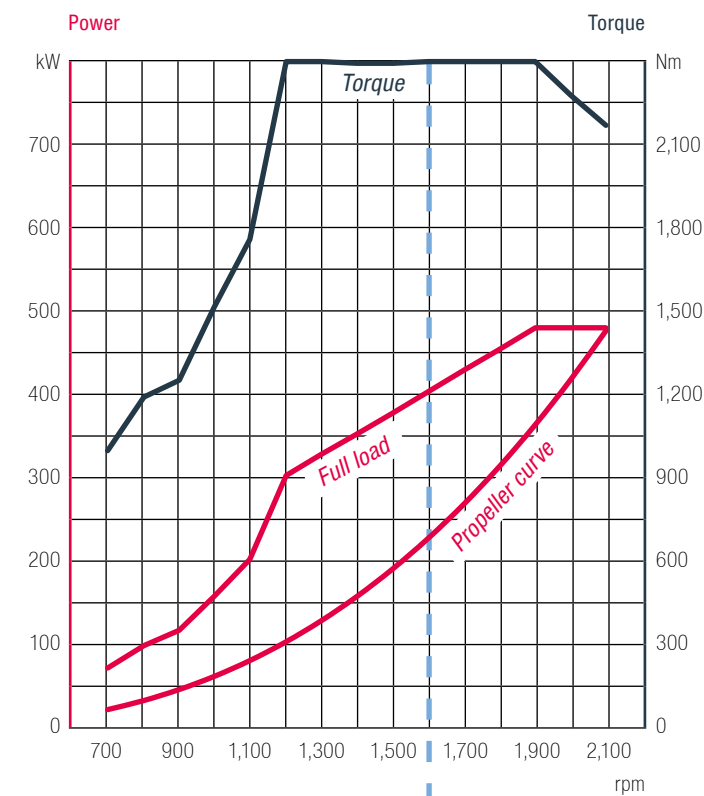


D2676 LE 435

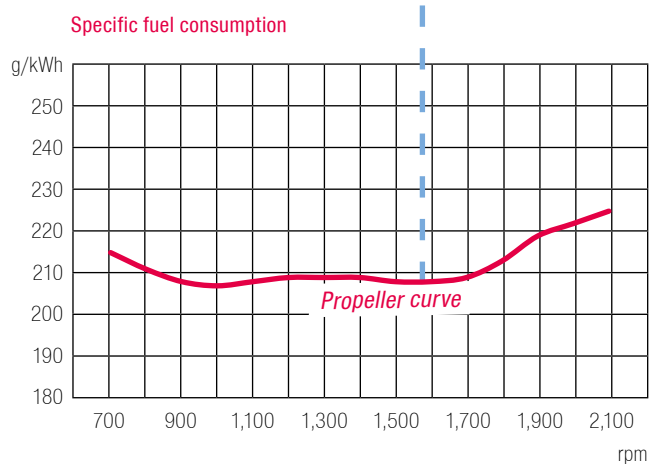
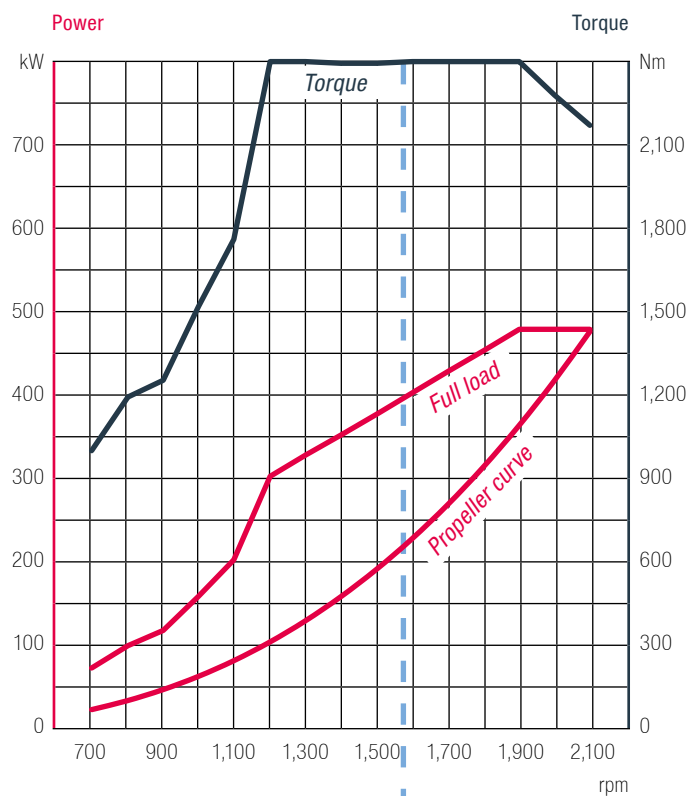


--- Maximum torque at most fuel efficient operating point

D2676 LE 422

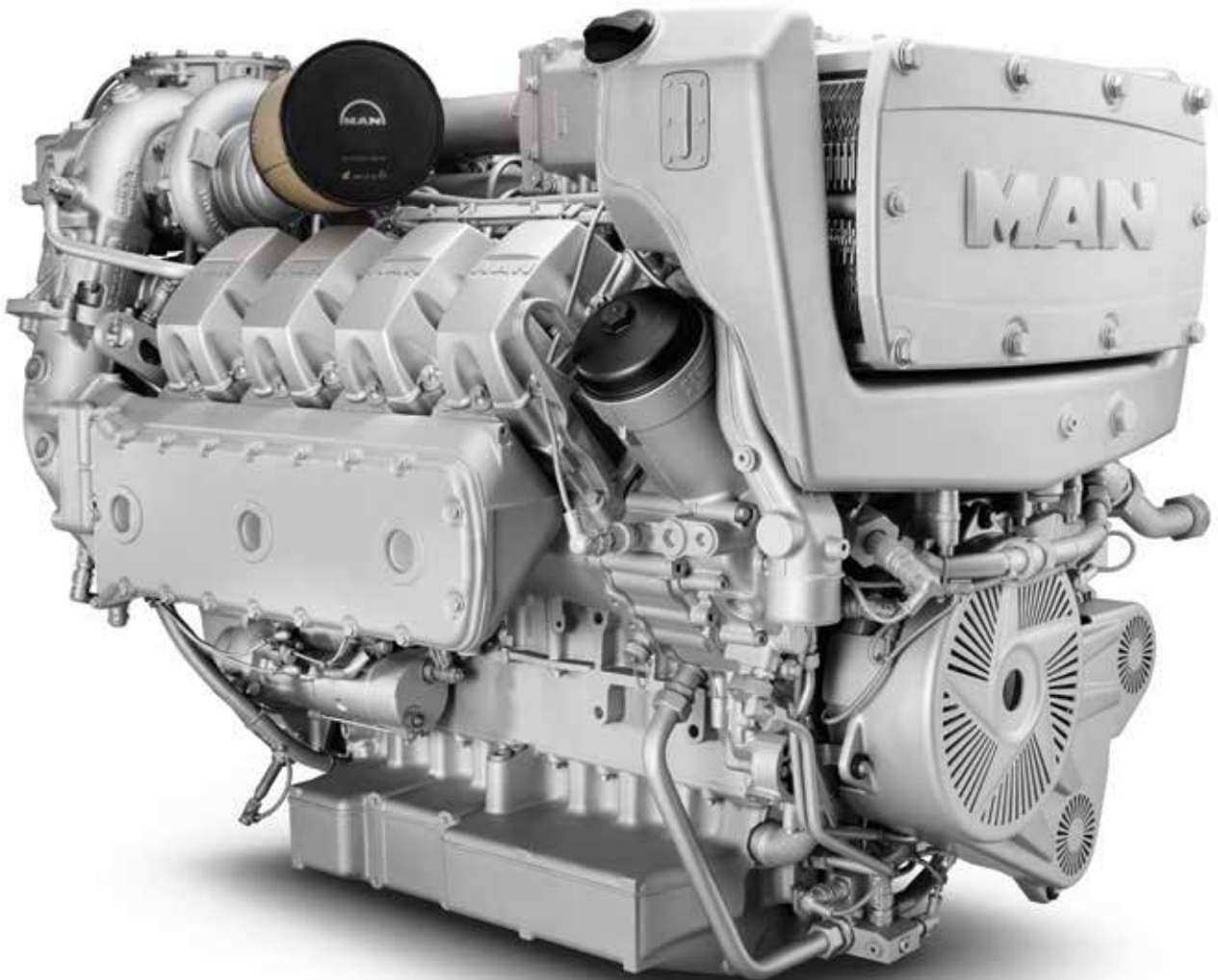


D2676 LE 425



--- Maximum torque at most fuel efficient operating point

D2868



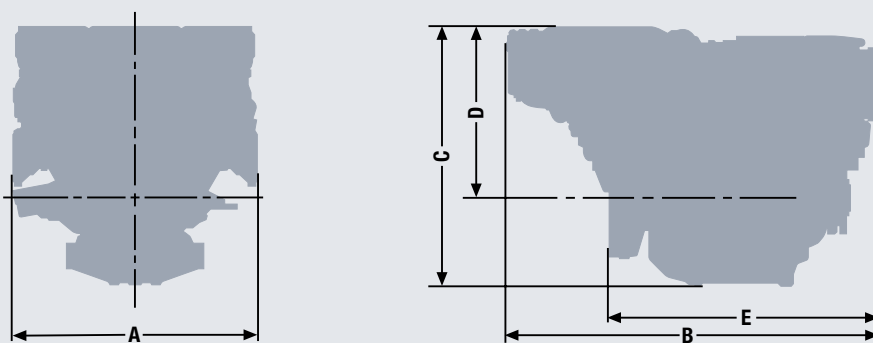
Characteristics

- Cylinders and arrangement: 8 cylinders in V arrangement
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger with charge air intercooler and 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

Technical features

Type designation		LE 422	LE 425	LE 443
Displacement	l	16.16	16.16	16.16
Maximum output ¹⁾	kW (hp)	588 (800)	588 (800)	662 (900)
Rated speed	rpm	2,100	2,100	2,100
Torque at rated speed	Nm	2,674	2,674	3,010
Maximum torque	Nm	2,950	2,980	3,327
at speed	rpm	1,300–1,900	1,400–1,900	1,400–1,900
Lowest specific fuel consumption	g/kWh	198	209	207
Classifiable		✓	✓	–
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC	IMO Tier II, 94/68/EC

1) Rating according to DIN 3046-1



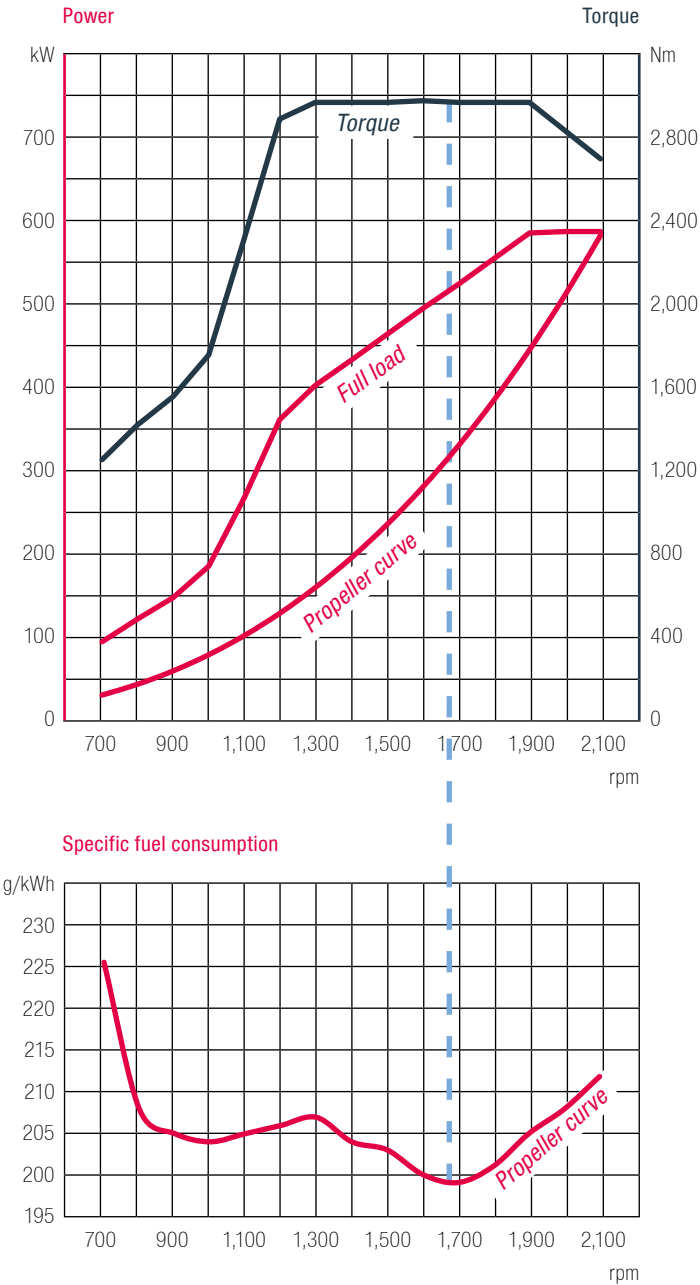
Dimensions

Type designation		LE 422/425/443
A-Overall width	mm	1,153
B-Overall length	mm	1,745
C-Overall height	mm	1,243
D-Top of engine to crankshaft centre	mm	765
E-Length of engine from front end to edge of flywheel housing	mm	1,177
Average weight of engine ready for installation (dry)	kg	1,780

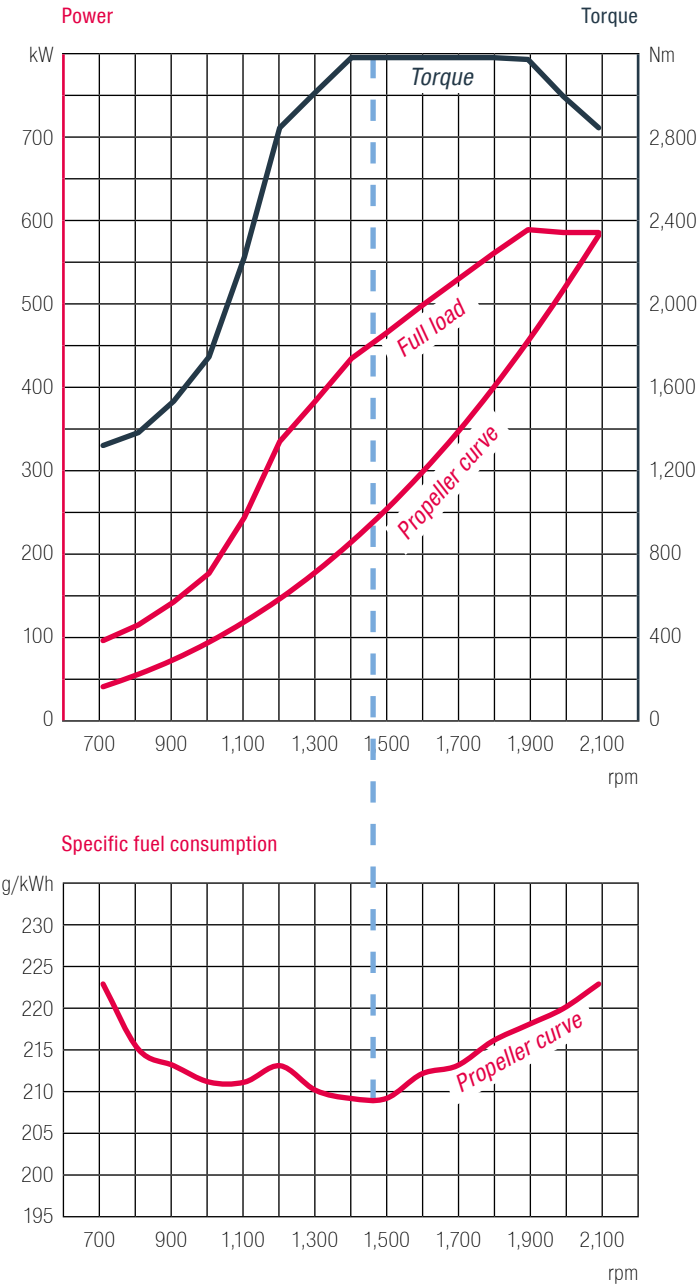
For detailed examinations of installation dimensions, please order drawings from our factory.

D2868

D2868 LE 422

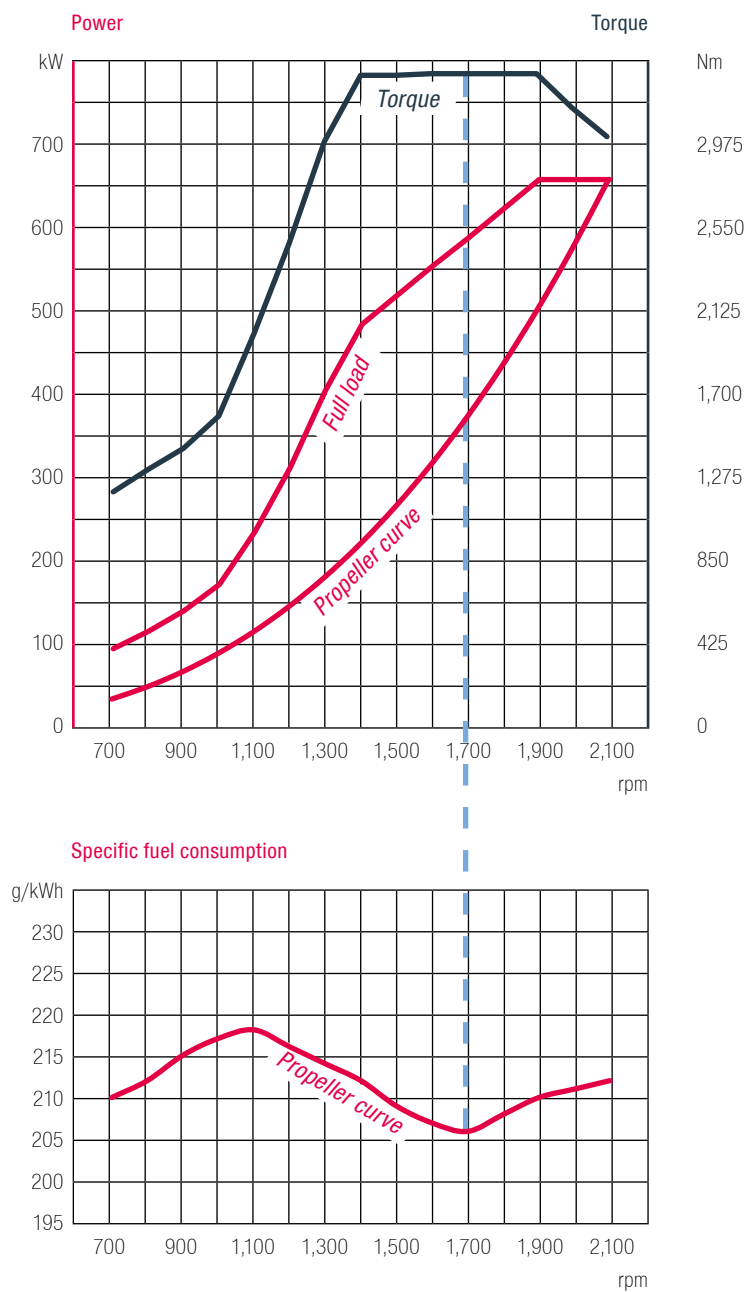


D2868 LE 425



--- Maximum torque at most fuel efficient operating point

D2868 LE 443



--- Maximum torque at most fuel efficient operating point

D2862



Characteristics

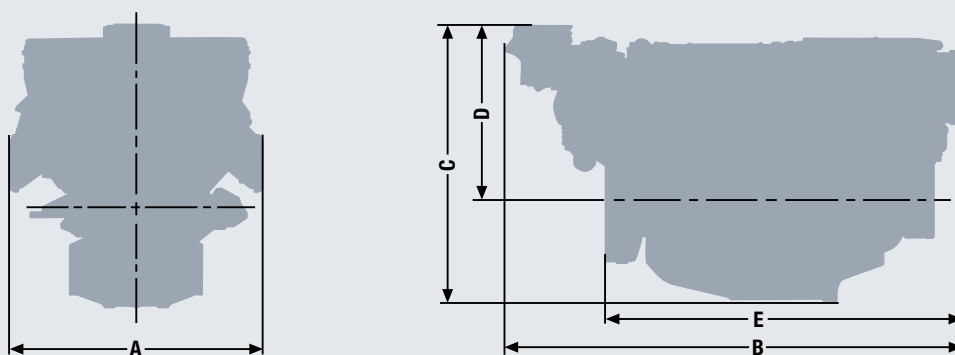
- Cylinders and arrangement: 12 cylinders in V arrangement
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger with charge air intercooler and wastegate
- Number of valves: 4 valves per cylinder
- Fuel system: Common Rail direct fuel injection with electronic control
- 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

Technical features

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	3,770
at speed	rpm	1,300–1,900	1,100–1,900
Lowest specific fuel consumption	g/kWh	207	200
Classifiable		✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, 97/68/EC

1) Rating according to DIN 3046-1

2) Until 09/30/2017



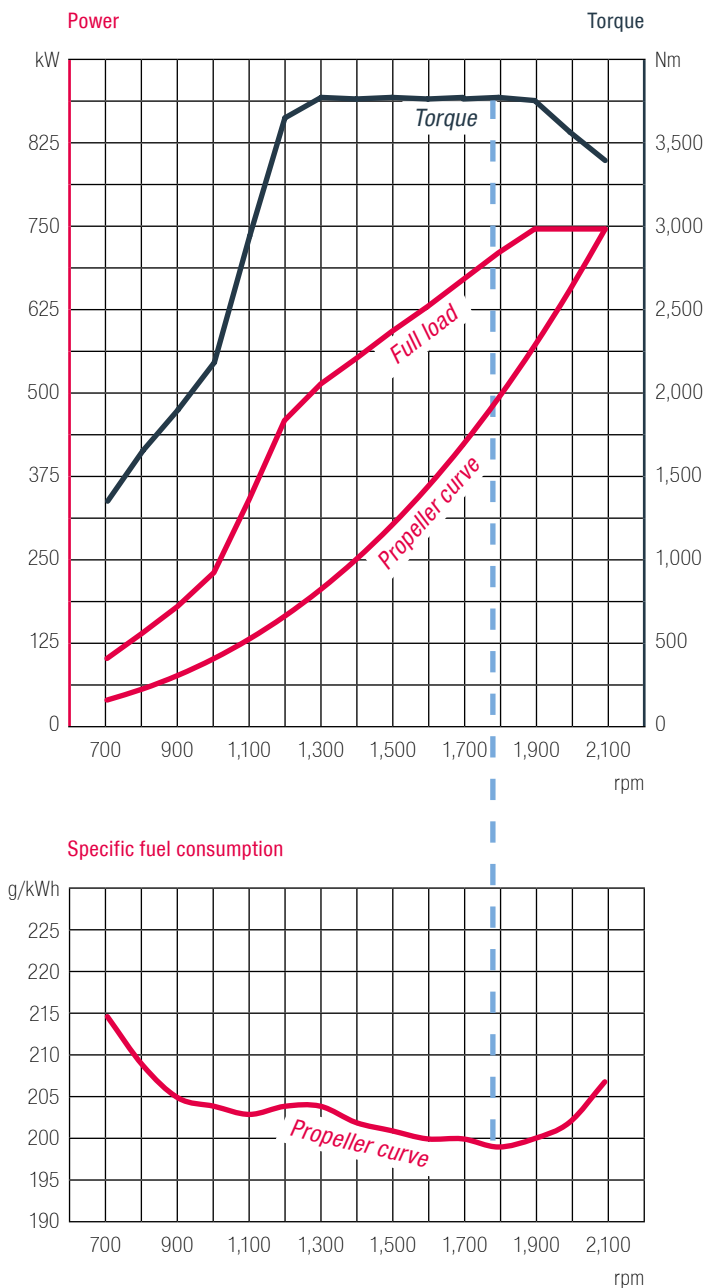
Dimensions

Type designation		LE 422/425
A-Overall width	mm	1,153
B-Overall length	mm	2,130
C-Overall height	mm	1,230
D-Top of engine to crankshaft centre	mm	765
E-Length of engine from front end to edge of flywheel housing	mm	1,630
Average weight of engine ready for installation (dry)	kg	2,270

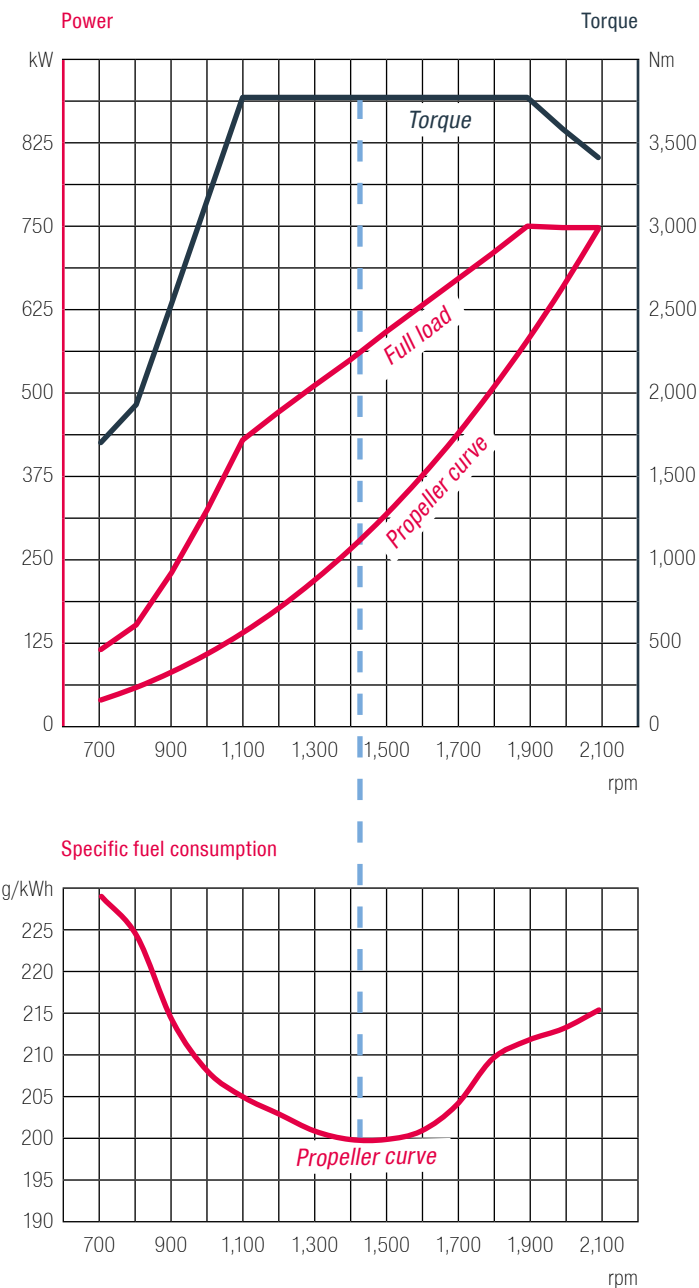
For detailed examinations of installation dimensions, please order drawings from our factory.

D2862

D2862 LE 422



D2862 LE 425



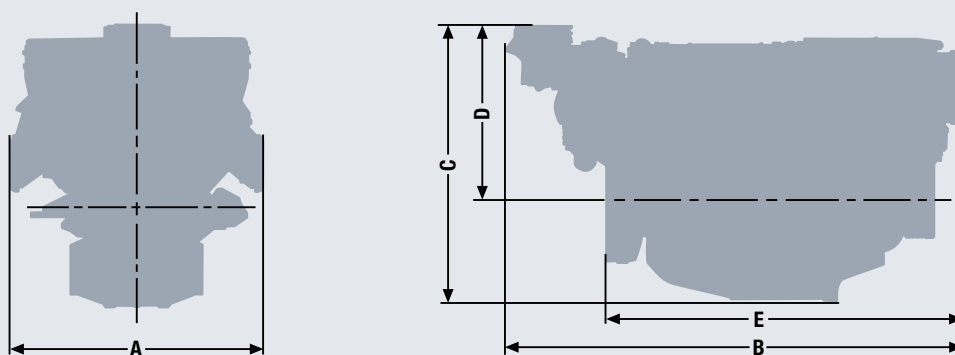
--- Maximum torque at most fuel efficient operating point

Technical features

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	4,450
at speed	rpm	1,300–1,900	1,400–1,900
Lowest specific fuel consumption	g/kWh	198	203
Classifiable		✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, 97/68/EC

1) Rating according to DIN 3046-1

2) Until 09/30/2017



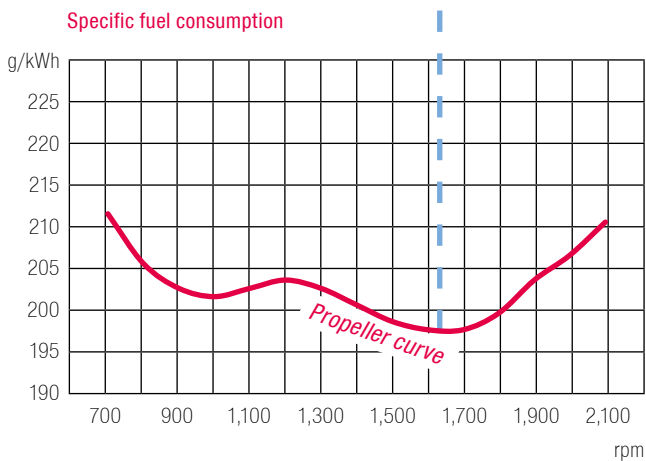
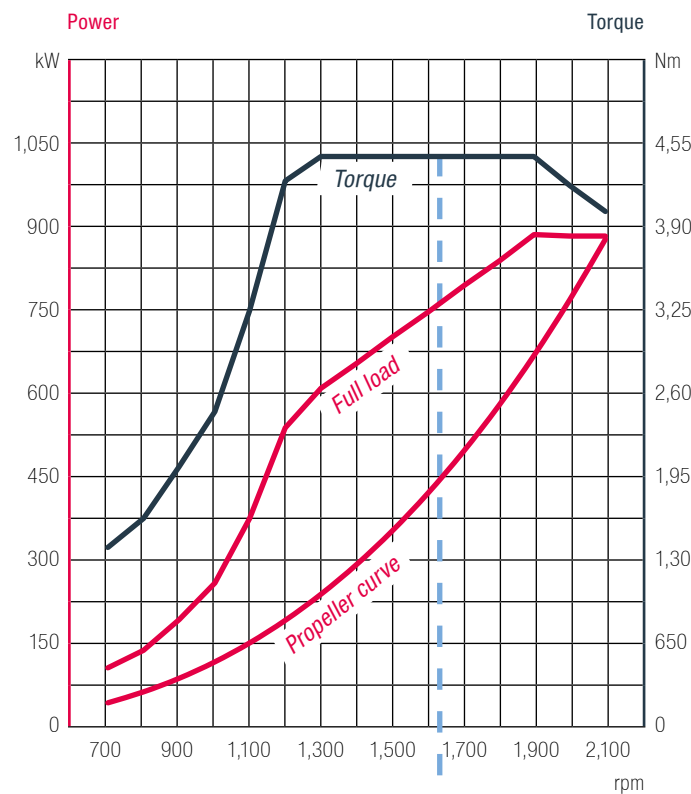
Dimensions

Type designation		LE 432/435
A-Overall width	mm	1,153
B-Overall length	mm	2,130
C-Overall height	mm	1,230
D-Top of engine to crankshaft centre	mm	765
E-Length of engine from front end to edge of flywheel housing	mm	1,630
Average weight of engine ready for installation (dry)	kg	2,270

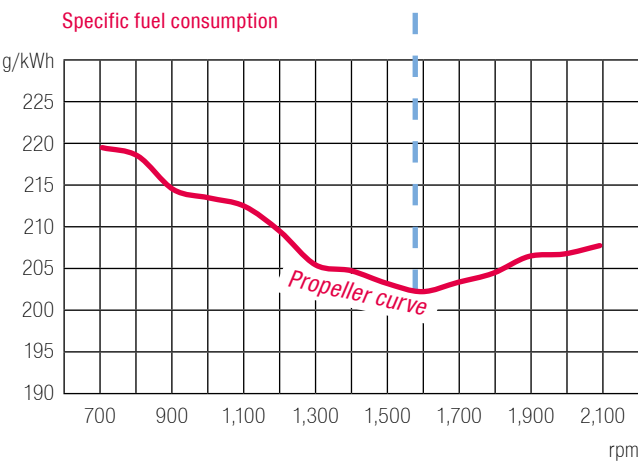
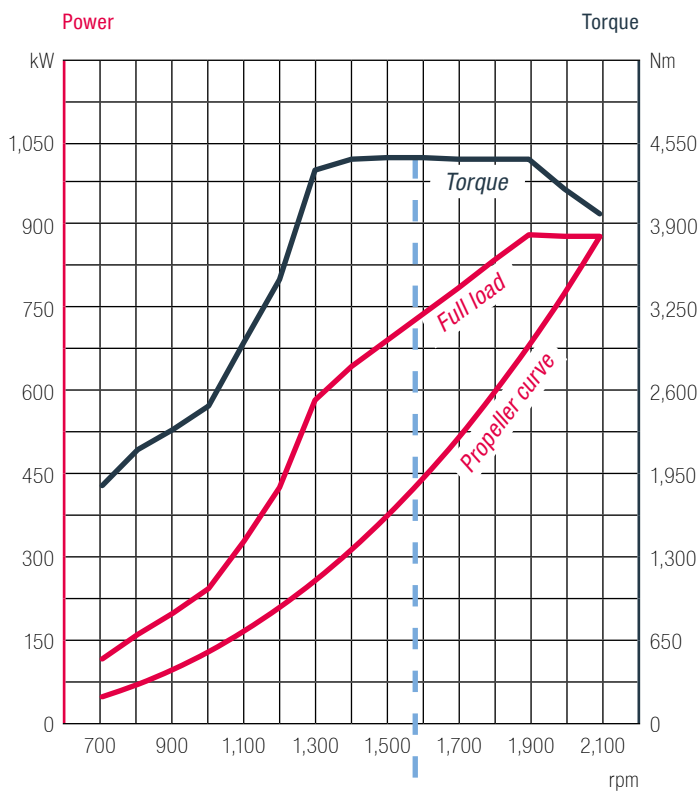
For detailed examinations of installation dimensions, please order drawings from our factory.

D2862

D2862 LE 432



D2862 LE 435

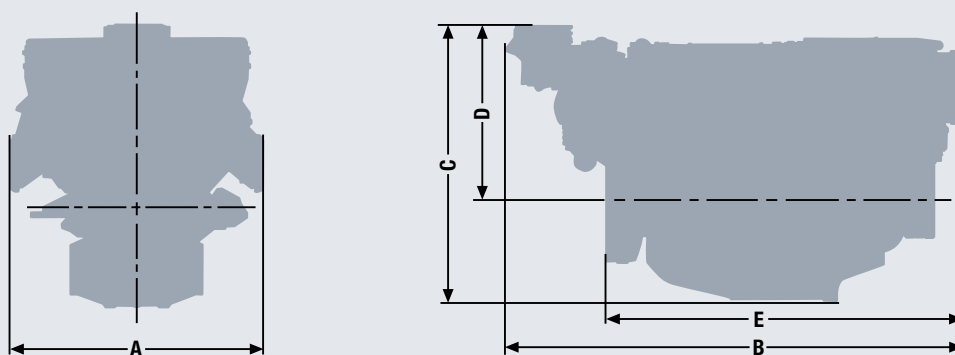


--- Maximum torque at most fuel efficient operating point

Technical features

Type designation		LE 463	LE 466	LE 483
Displacement	l	24.24	24.24	24.24
Nominal rating ¹⁾	kW (hp)	1,029 (1,400)	1,029 (1,400)	1,066 (1,450)
Rated speed	rpm	2,100	2,100	2,100
Torque at rated speed	Nm	4,680	4,680	4,847
Maximum torque	Nm	5,120	5,180	5,355
at speed	rpm	1,300–1,900	1,300–1,900	1,100–1,900
Lowest specific fuel consumption	g/kWh	200	203	209
Classifiable		✓	✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, 97/68/EC	IMO Tier II, 97/68/EC

1) Rating according to DIN 3046-1



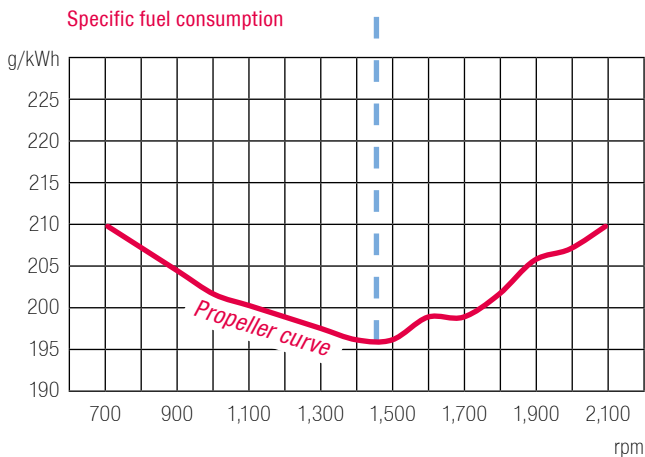
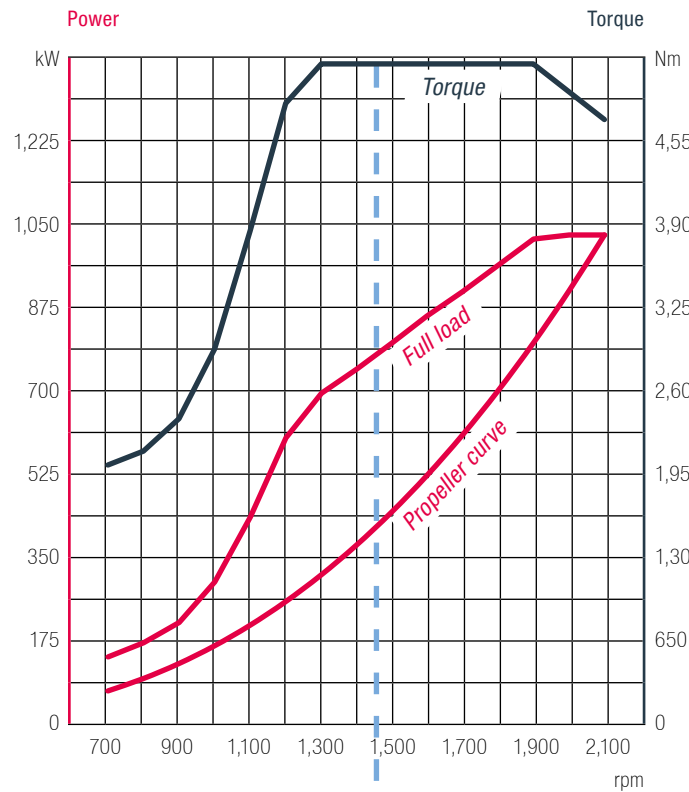
Dimensions

Type designation		LE 463/466	LE 483
A-Overall width	mm	1,153	1,153
B-Overall length	mm	2,130	2,139
C-Overall height	mm	1,230	1,272
D-Top of engine to crankshaft centre	mm	765	808
E-Length of engine from front end to edge of flywheel housing	mm	1,630	1,658
Average weight of engine ready for installation (dry)	kg	2,270	2,365

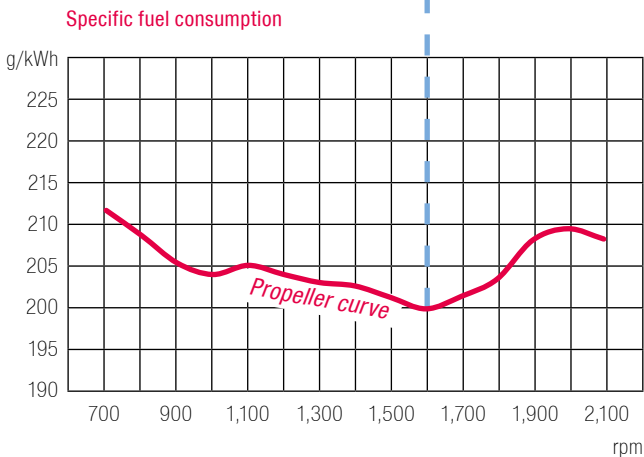
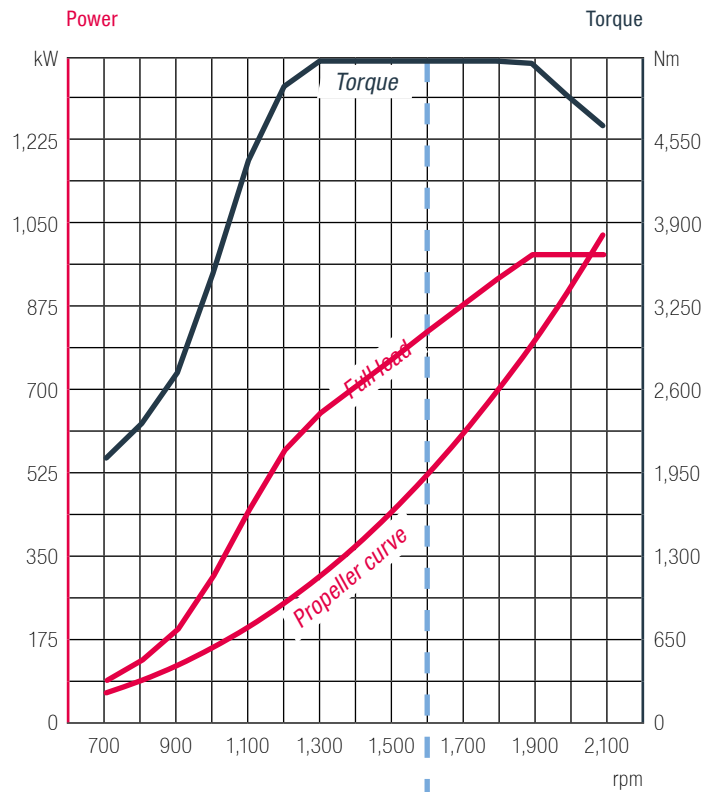
For detailed examinations of installation dimensions, please order drawings from our factory.

D2862

D2862 LE 463

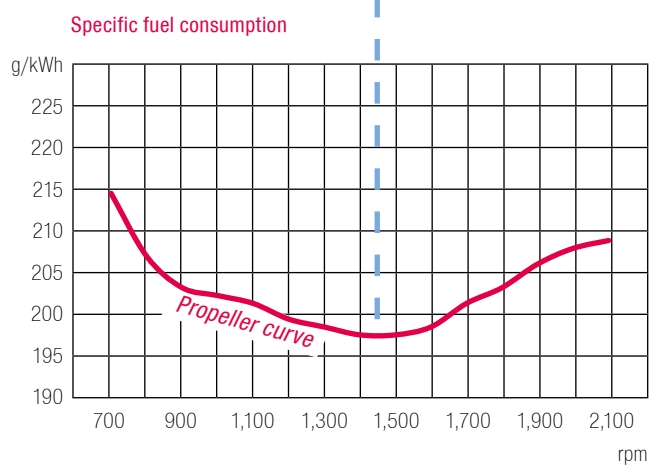
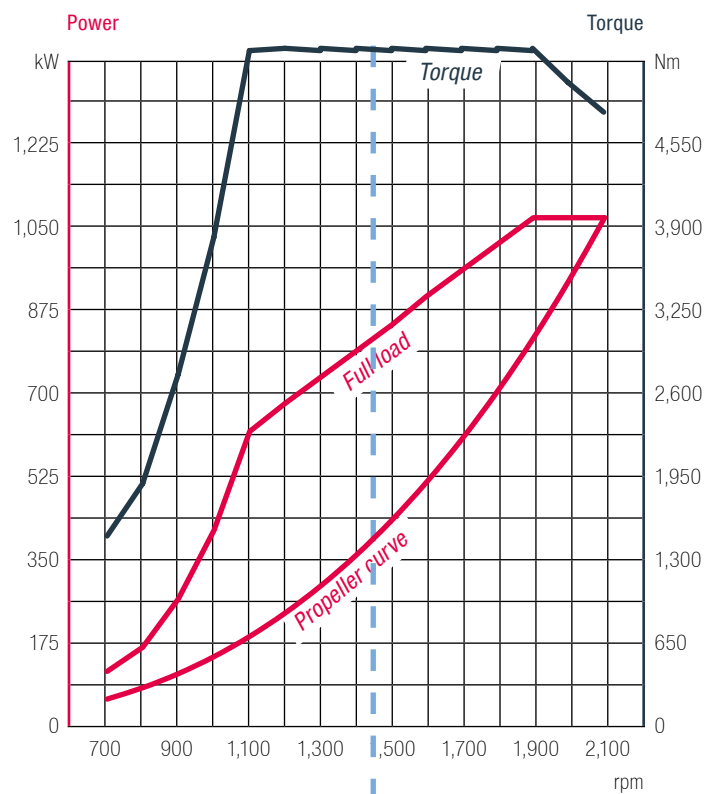


D2862 LE 466



--- Maximum torque at most fuel efficient operating point

D2862 LE 483



--- Maximum torque at most fuel efficient operating point

Heavy duty operation

Characteristics

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

Typical applications

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





D2676



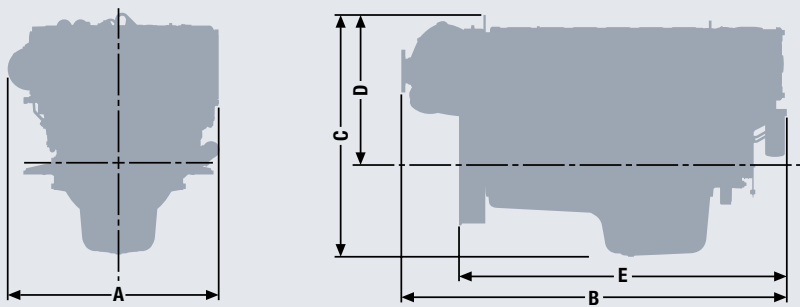
Characteristics

- Cylinders and arrangement: 6 cylinders in-line
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger with charge air intercooler and wastegate
- Number of valves: 4 valves per cylinder
- Fuel system: Common rail injection with high pressure pump
- Engine block: High-strength casting with integrated oil and water ducts and replaceable cylinder liners
- Engine lubrication: Force-feed lubrication, lubrication oil cooler in cooling water circuit of the engine
- Type of cooling: Seawater cooled charge air cooler, plate heat exchanger by rubber impeller pump
- Engine control: Electronic injection control, electronic engine monitoring including diagnostic unit
- Fuel: DIN EN 590

Technical features

Type designation		LE 461	LE 451	LE 441
Displacement	l	12.42	12.42	12.42
Nominal rating ¹⁾	kW (hp)	147 (200)	210 (286)	270 (367)
Rated speed	rpm	1,800	1,800	1,800
Torque at rated speed	Nm	780	1,114	1,432
Maximum torque	Nm	880	1,250	1,616
at speed	rpm	1,200–1,600	1,200–1,600	1,200–1,600
Lowest specific fuel consumption	g/kWh	221	214	212
Classifiable		✓	✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, 97/68/EC	IMO Tier II, 97/68/EC

1) The rating is according to DIN 3046/1



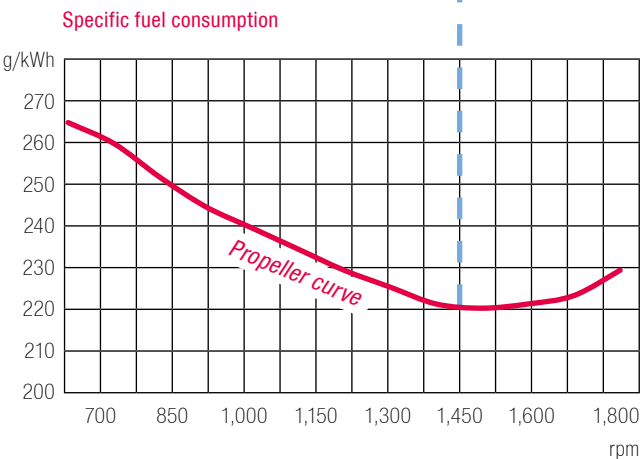
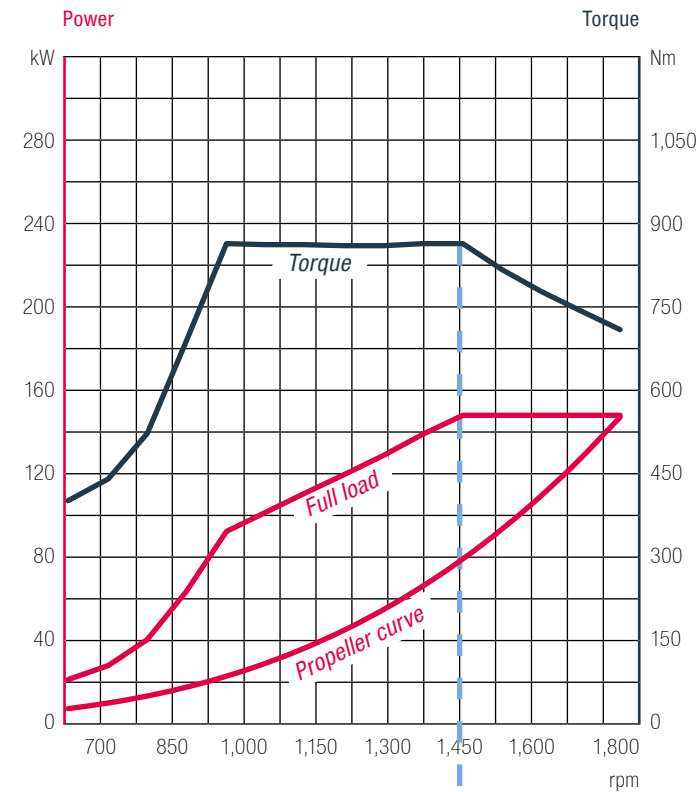
Dimensions

Type designation		LE 461/451/441
A-Overall width	mm	986
B-Overall length	mm	1,795
C-Overall height	mm	1,096
D-Top of engine to crankshaft centre	mm	674
E-Length of engine from front end to edge of flywheel housing	mm	1,527
Average weight of engine ready for installation (dry)	kg	1,215

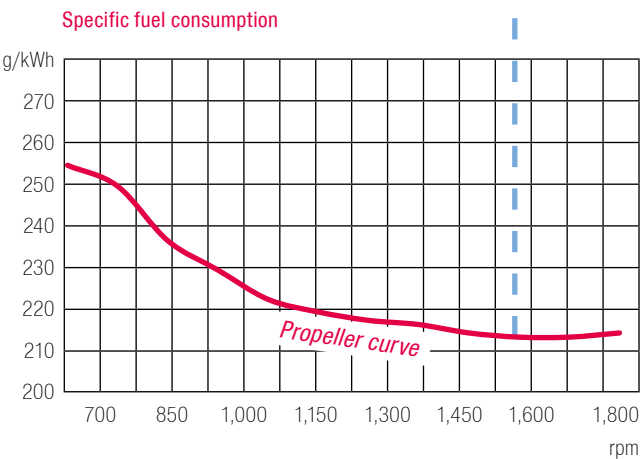
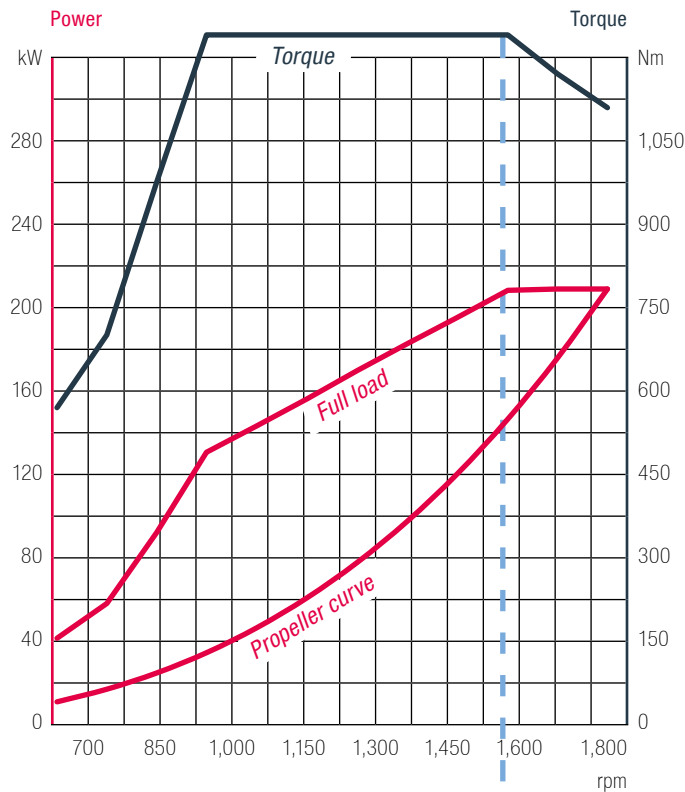
For detailed examinations of installation dimensions, please order drawings from our factory.

D2676

D2676 LE 461

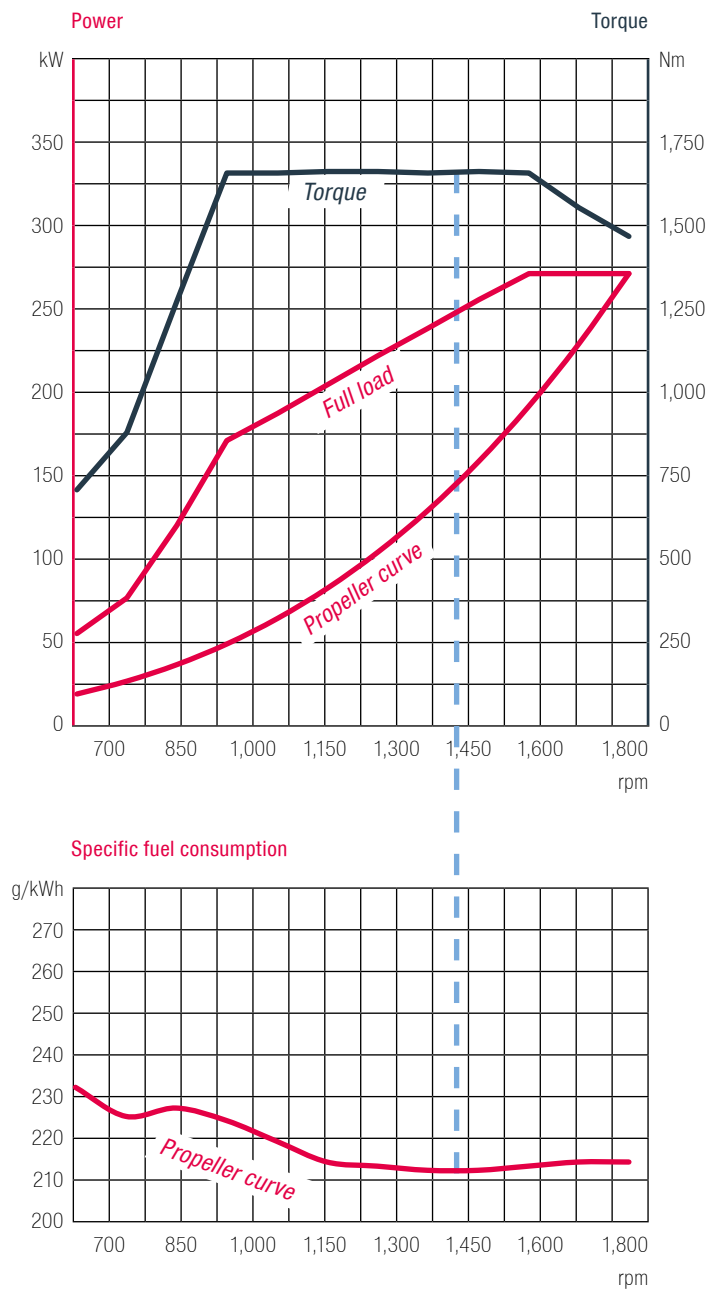


D2676 LE 451



--- Maximum torque at most fuel efficient operating point

D2676 LE 441



--- Maximum torque at most fuel efficient operating point

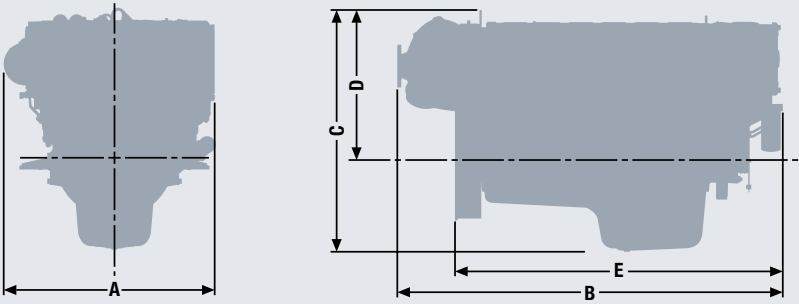
D2676

Technical features

Type designation		LE 431	LE 434	LE 421	LE 424
Displacement	l	12.42	12.42	12.42	12.42
Nominal rating ¹⁾	kW (hp)	324 (440)	324 (440)	382 (520)	382 (520)
Rated speed	rpm	1,800	1,800	1,800	1,800
Torque at rated speed	Nm	1,719	1,719	2,027	2,027
Maximum torque	Nm	1,925	1,925	2,275	2,270
at speed	rpm	1,200–1,600	1,200–1,600	1,200–1,600	1,200–1,600
Specific fuel consumption ²⁾	g/kWh	205	210	207	212
Classifiable		✓	✓	✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3, 97/68/EC	IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC

1) The rating is according to DIN 3046/1

2) Consumption at rated power



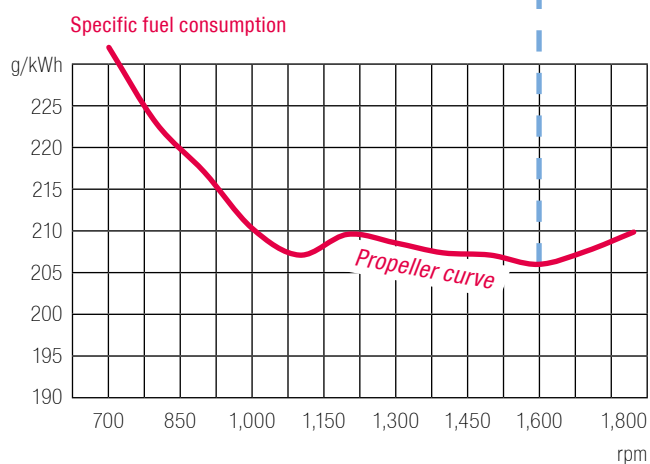
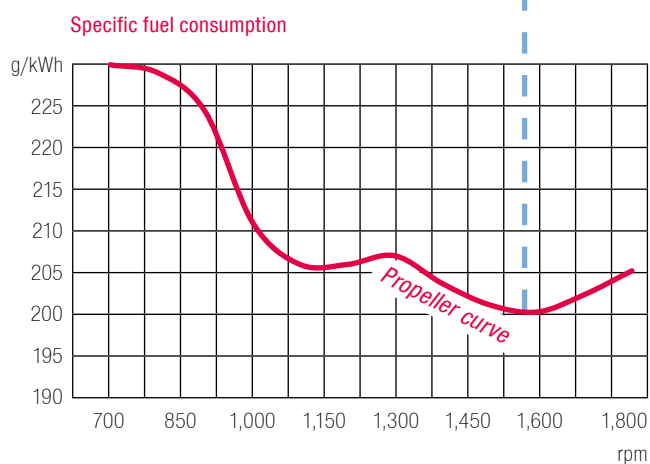
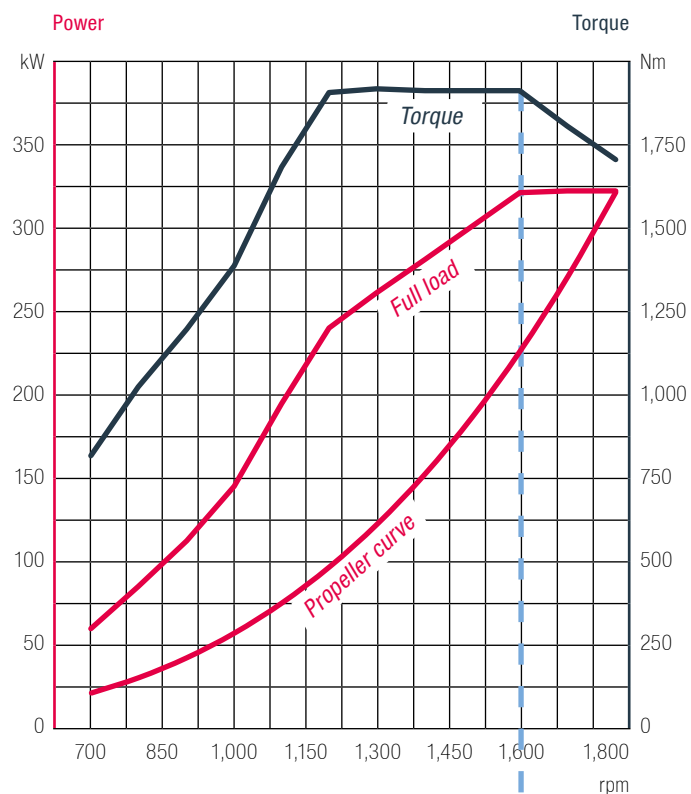
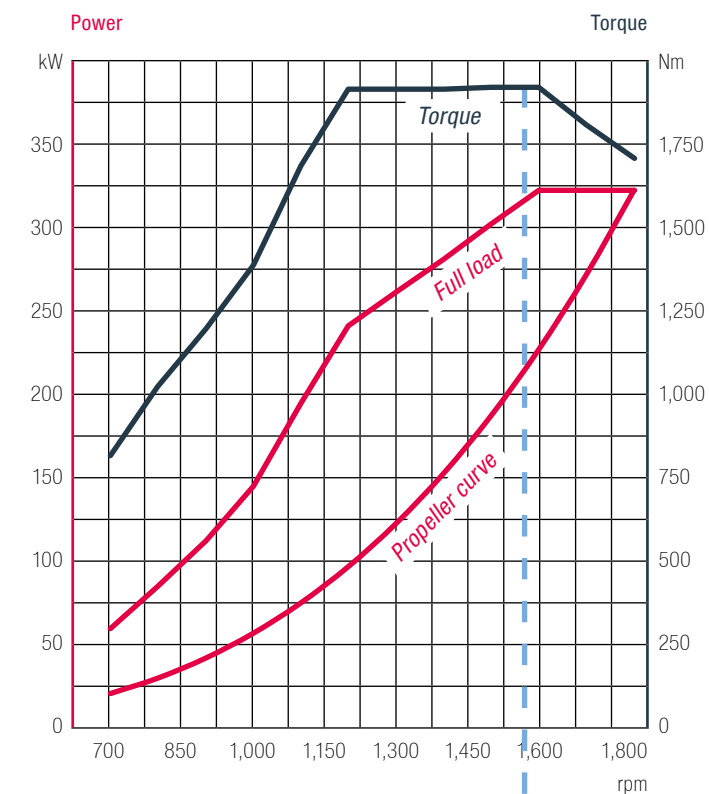
Dimensions

Type designation		LE 431/434/421/424
A-Overall width	mm	986
B-Overall length	mm	1,795
C-Overall height	mm	1,096
D-Top of engine to crankshaft centre	mm	674
E-Length of engine from front end to edge of flywheel housing	mm	1,527
Average weight of engine ready for installation (dry)	kg	1,215

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

D2676 LE 431

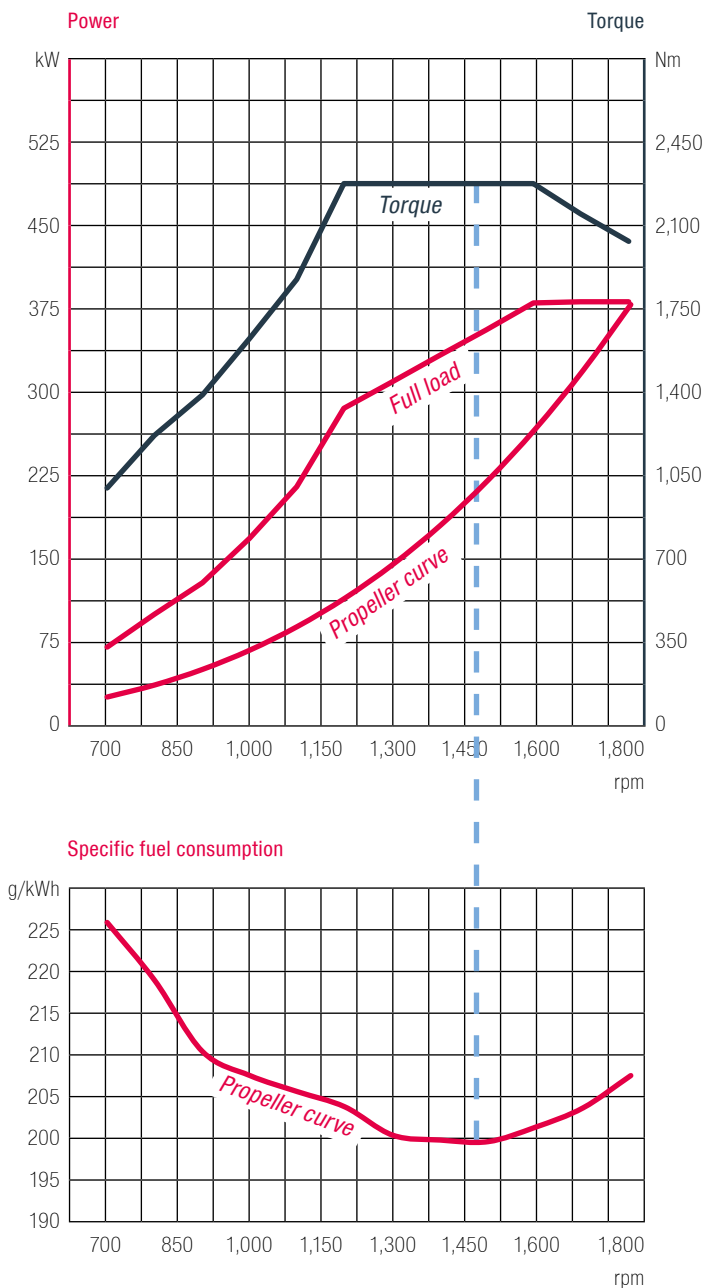
D2676 LE 434



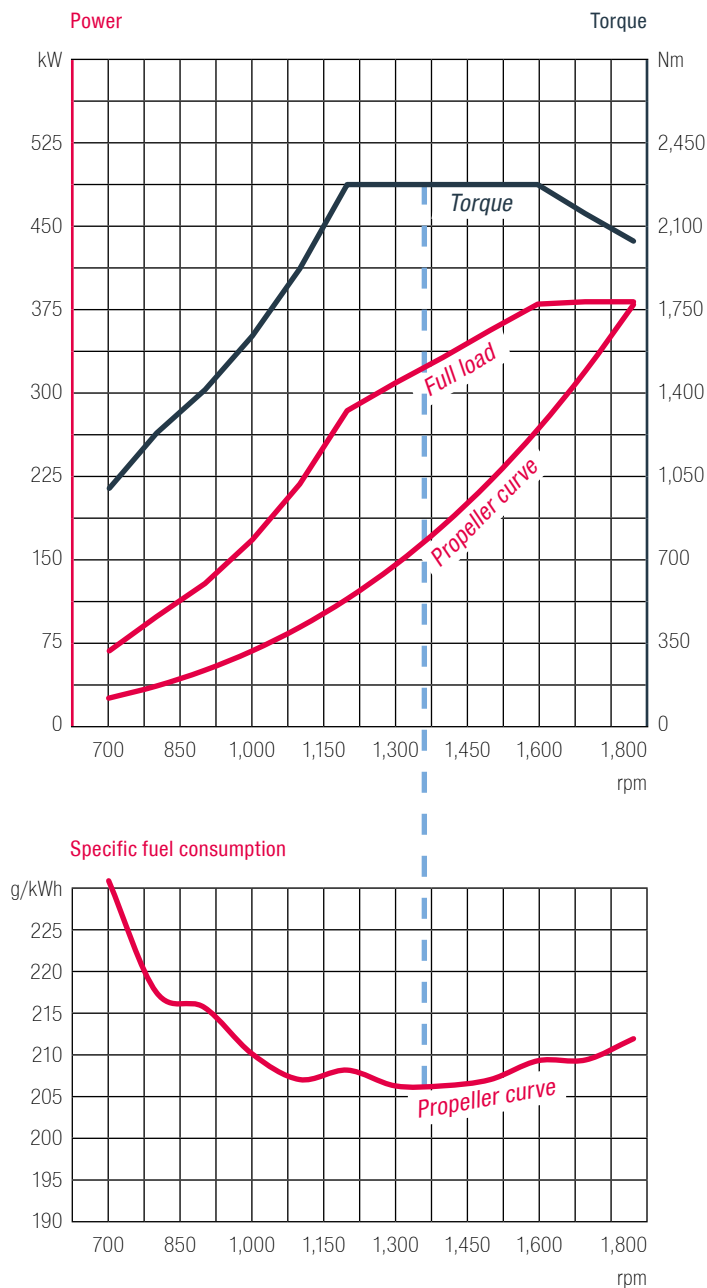
--- Maximum torque at most fuel efficient operating point

D2676

D2676 LE 421



D2676 LE 424



--- Maximum torque at most fuel efficient operating point

D2868



heavy duty

Characteristics

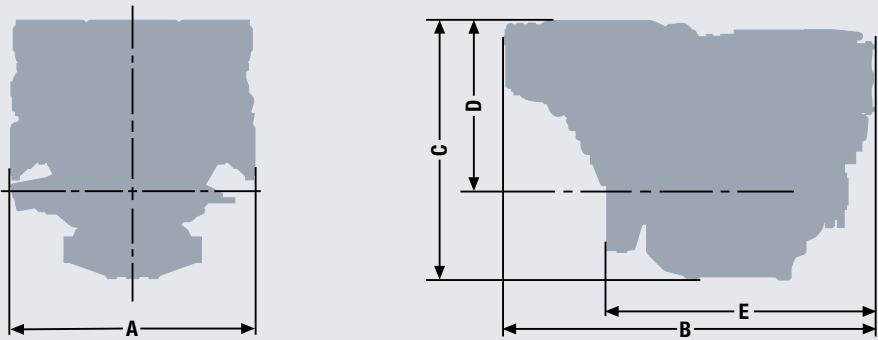
- Cylinders and arrangement: 8 cylinders in V arrangement
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger with charge air intercooler and waste gate
- Number of valves: 4 valves per cylinder
- Fuel system: Common Rail direct fuel injection
- Engine block: High-strength 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

D2868

Technical features

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
Lowest specific fuel consumption	g/kWh	197	206	199
Classifiable		✓	✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC	IMO Tier II, 97/68/EC

1) The rating is according to DIN 3046/1



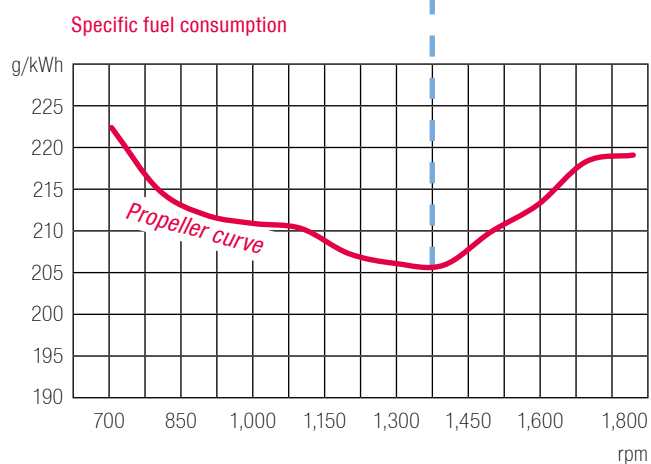
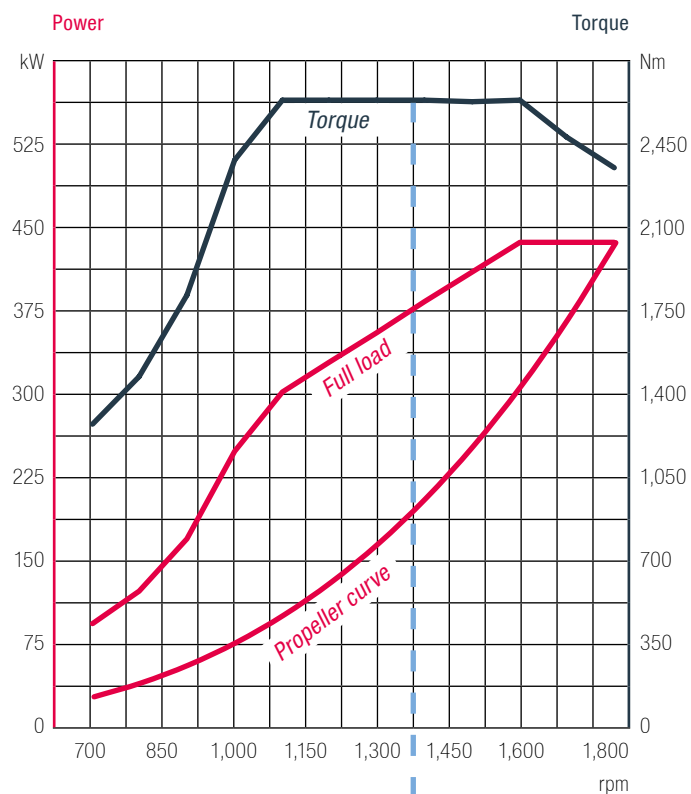
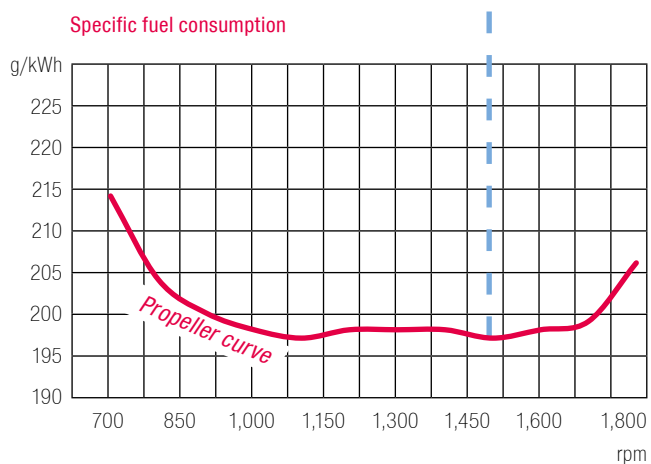
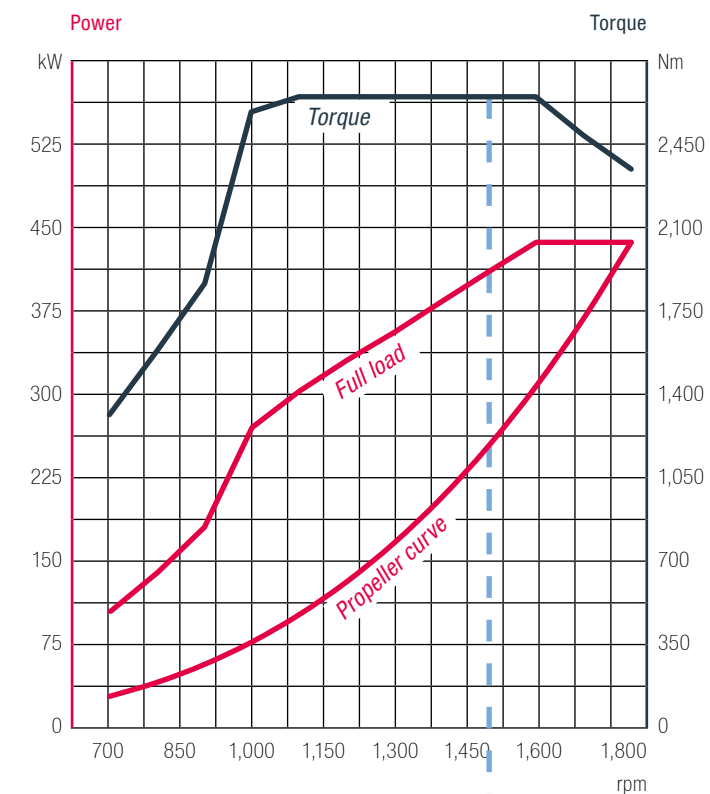
Dimensions

Type designation		LE 421/424/431
A-Overall width	mm	1,153
B-Overall length	mm	1,745
C-Overall height	mm	1,243
D-Top of engine to crankshaft centre	mm	765
E-Length of engine from front end to edge of flywheel housing	mm	1,243
Average weight of engine ready for installation (dry)	kg	1,780

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

D2868 LE 421

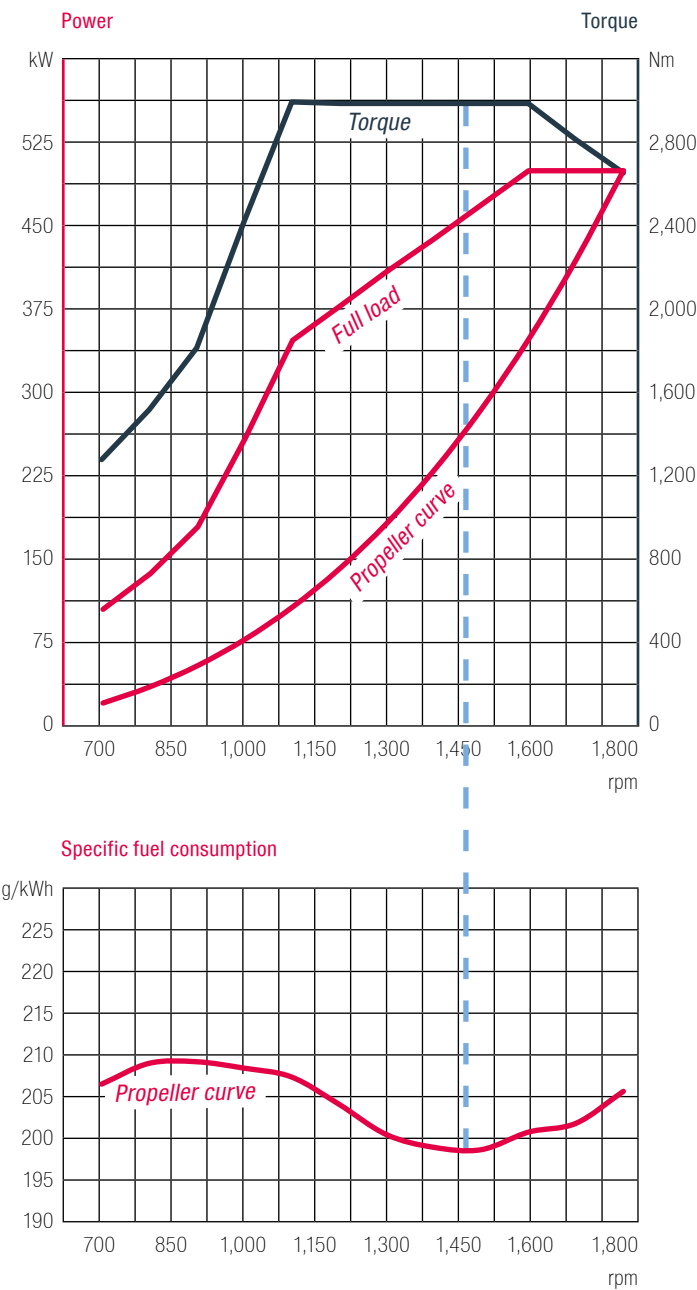
D2868 LE 424



--- Maximum torque at most fuel efficient operating point

D2868

D2868 LE 431



--- Maximum torque at most fuel efficient operating point

D2862



Characteristics

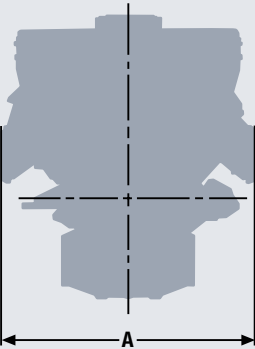
- Cylinders and arrangement: 12 cylinders in V arrangement
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger charge air intercooler and waste gate
- Number of valves: 4 valves per cylinder
- Fuel system: Common Rail direct fuel injection with electronic control
- Engine 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

D2862

Technical features

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	3,305	3,305
at speed	rpm	1,000–1,600	1,000–1,600
Lowest specific fuel consumption	g/kWh	198	202
Classifiable		✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC

1) The rating is according to DIN 3046/1



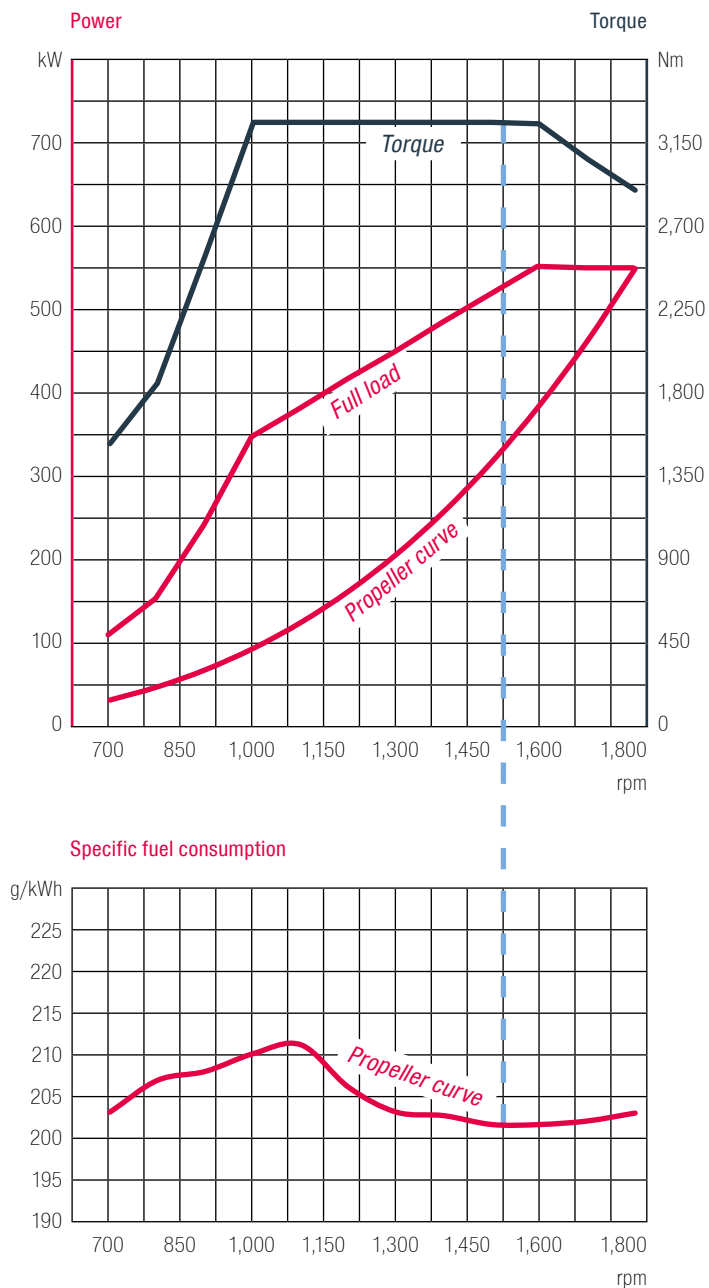
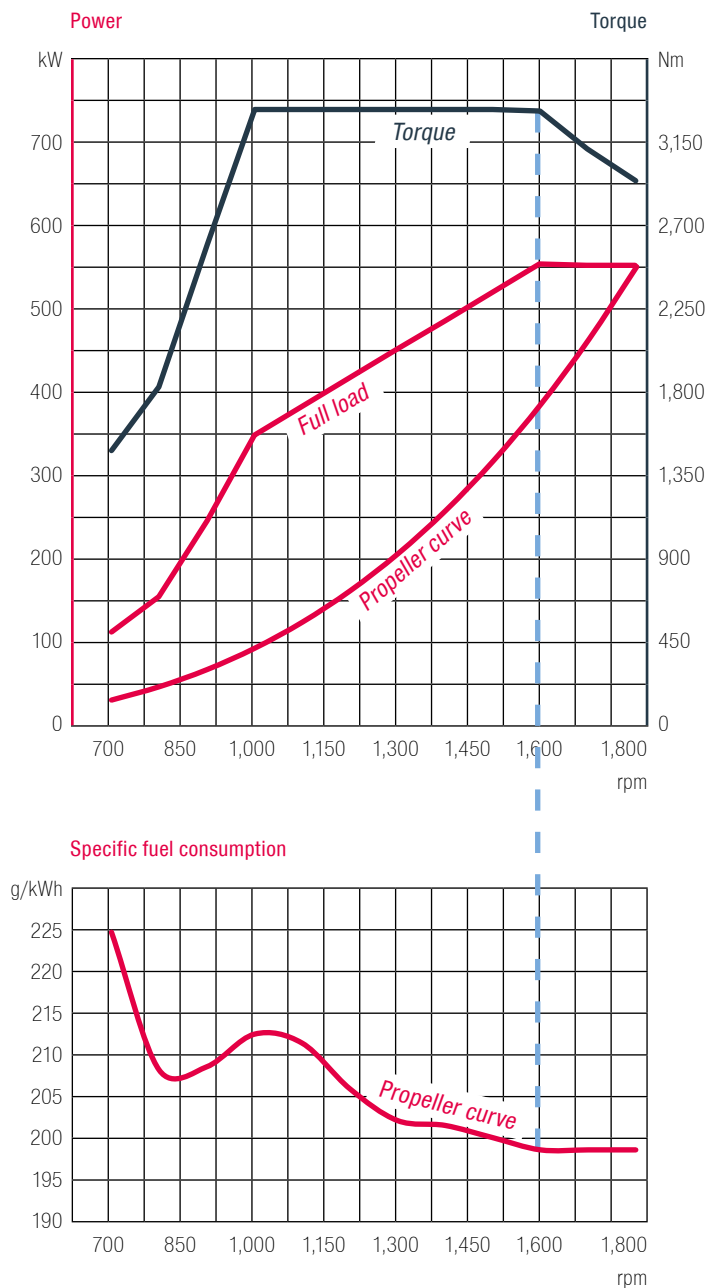
Dimensions

Type designation		LE 431/434
A-Overall width	mm	1,153
B-Overall length	mm	2,130
C-Overall height	mm	1,230
D-Top of engine to crankshaft centre	mm	765
E-Length of engine from front end to edge of flywheel housing	mm	1,630
Average weight of engine ready for installation (dry)	kg	2,270

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

D2862 LE 431

D2862 LE 434



--- Maximum torque at most fuel efficient operating point

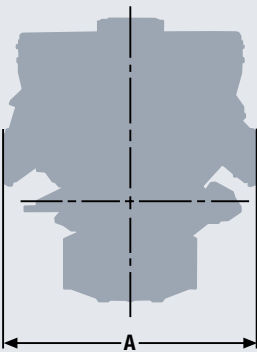
D2862

Technical features

Type designation		LE 421	LE 441	LE 444
Displacement	l	24.24	24.24	24.24
Nominal rating ¹⁾	kW (hp)	662 (900)	735 (1,000)	735 (1,000)
Rated speed	rpm	1,800	1,800	1,800
Torque at rated speed	Nm	3,512	3,900	3,900
Maximum torque	Nm	3,955	4,380	4,380
at speed	rpm	1,100–1,600	1,100–1,600	1,100–1,600
Lowest specific fuel consumption	g/kWh	195	193	193
Classifiable		✓	✓	✓
Exhaust gas status		IMO Tier II, 97/68/EC	IMO Tier II	IMO Tier II, RCD 2013/53/EC, EPA Tier 3 commercial ²⁾ , 97/68/EC

1) The rating is according to DIN 3046/1

2) Until 09/30/2017



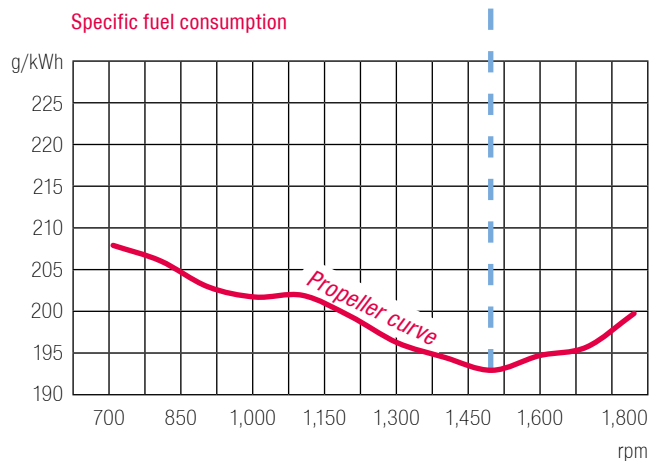
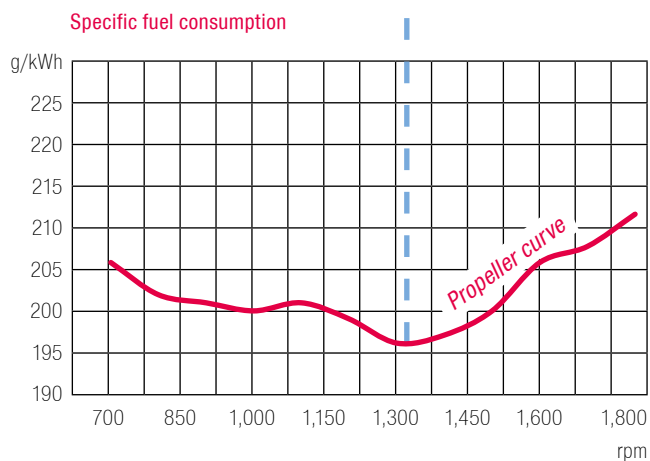
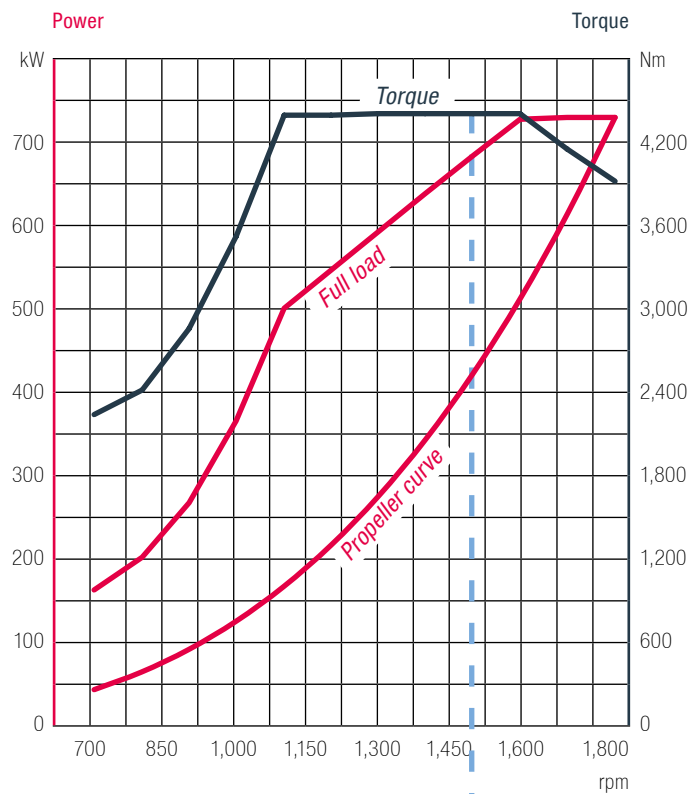
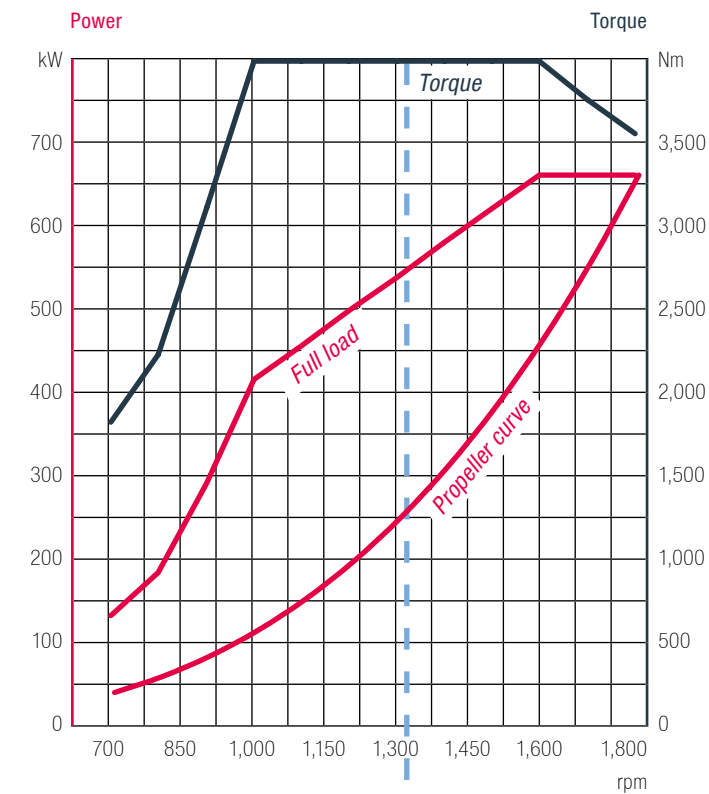
Dimensions

Type designation		LE 421/441/444
A-Overall width	mm	1,153
B-Overall length	mm	2,130
C-Overall height	mm	1,230
D-Top of engine to crankshaft centre	mm	765
E-Length of engine from front end to edge of flywheel housing	mm	1,630
Average weight of engine ready for installation (dry)	kg	2,270

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

D2862 LE 421

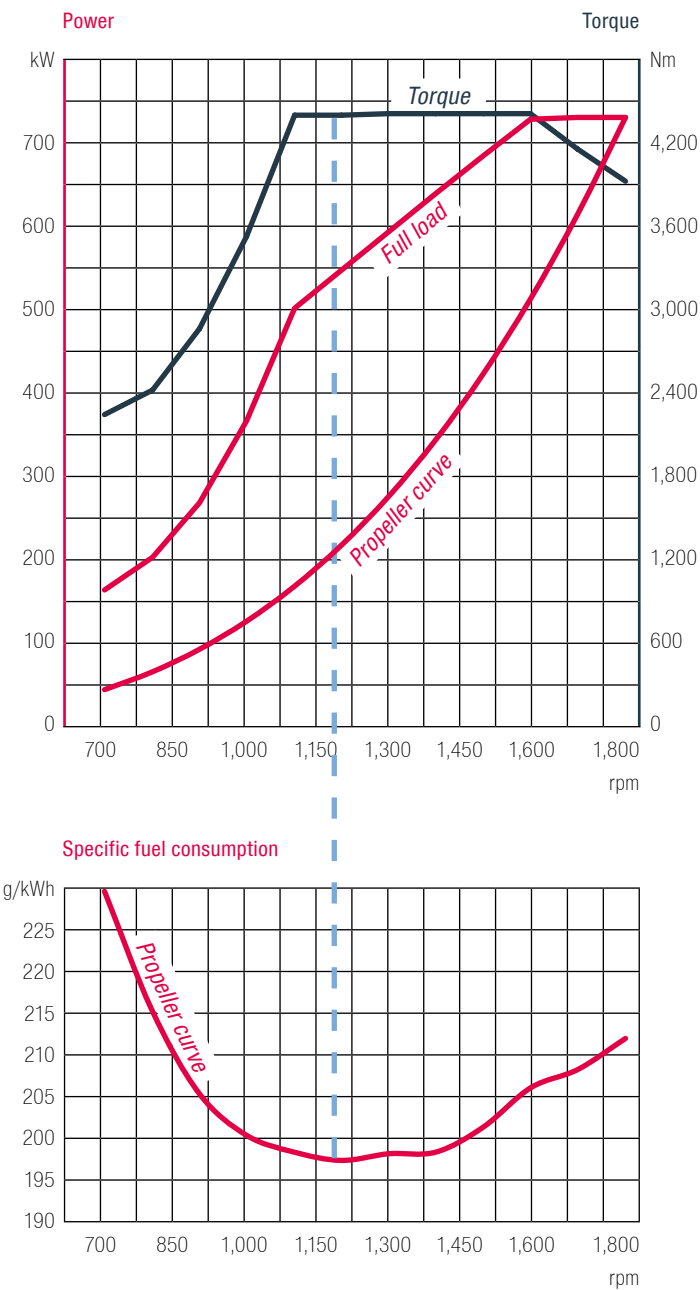
D2862 LE 441



--- Maximum torque at most fuel efficient operating point

D2862

D2862 LE 444



--- Maximum torque at most fuel efficient operating point

Engine range

Light duty

6 inline and V8 engines

Characteristics	Unit	D2676		D2868	
		LE 443	LE 423	LE 426	LE 436
Type designation					
Arrangement and number of cylinders		R6	R6	V8	V8
Nominal rating	hp	730	800	1,000	1,200
Maximum torque	Nm	2,450	2,674	3,340	4,010
Engine classifiable		✓	–	–	–
Rated speed	rpm	2,300	2,300	2,300	2,300
Lowest specific fuel consumption	g/kWh	199	213	209	205
Bore/Stroke	mm	126/166	126/166	128/157	128/157
Displacement	l	12.42	12.42	16.16	16.16
Length of engine from front end to edge of flywheel housing	mm	1,527	1,527	1,243	1,262
Width	mm	986	986	1,153	1,153
Height	mm	1,096	1,096	1,177	1,222
Dry weight	kg	1,215	1,215	1,780	1,880
Exhaust gas status		A	B	A	B

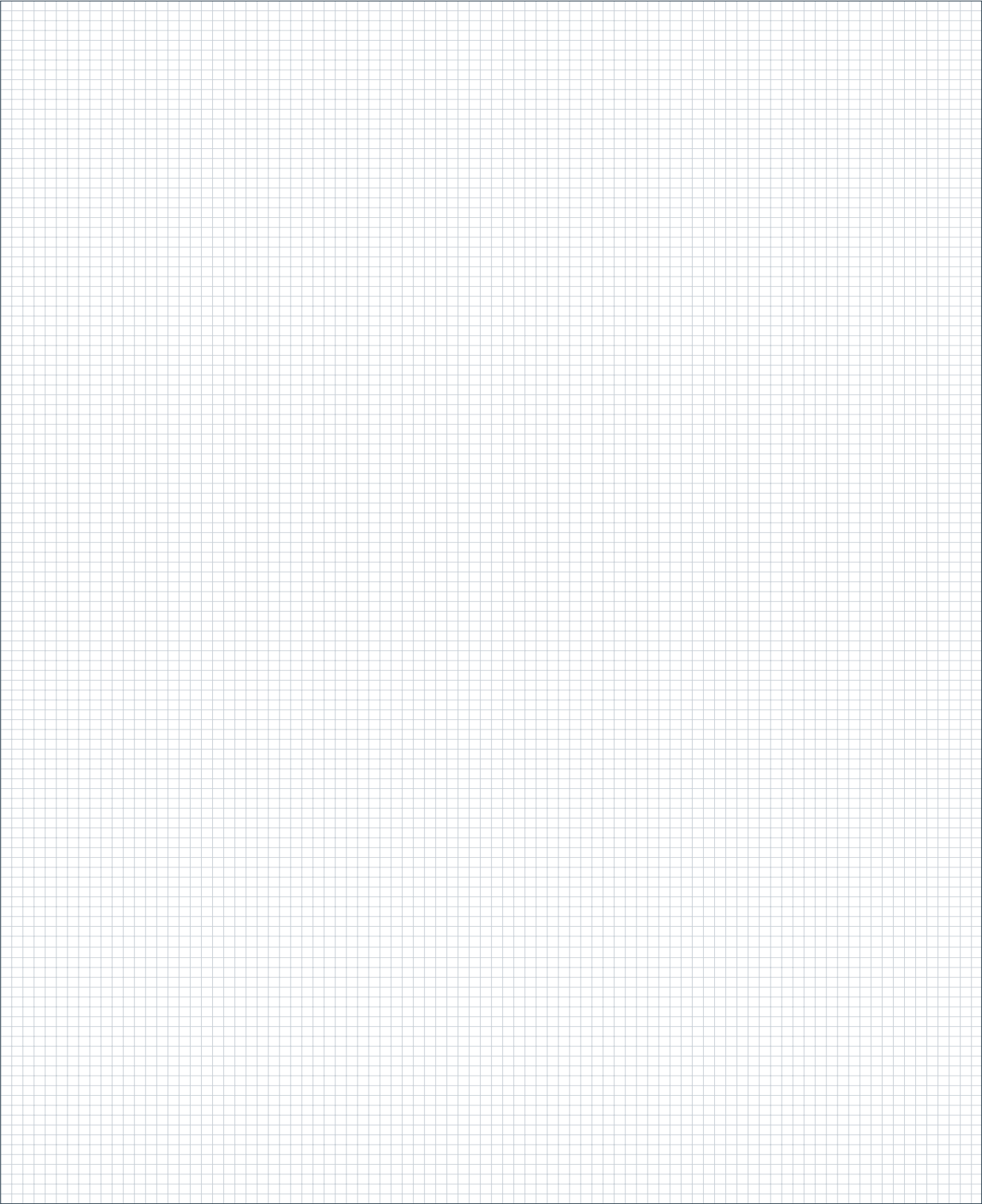
V12 engines

Characteristics	Unit	D2862			
		LE 446	LE 426	LE 456	LE 436
Type designation					
Arrangement and number of cylinders		V12	V12	V12	V12
Nominal rating	hp	1,400	1,550	1,650	1,800
Maximum torque	Nm	4,680	5,180	5,510	6,010
Engine classifiable		✓	–	✓	–
Rated speed	rpm	2,300	2,300	2,300	2,300
Lowest specific fuel consumption	g/kWh	203	203	195	200
Bore/Stroke	mm	128/157	128/157	128/157	128/157
Displacement	l	24.24	24.24	24.24	24.24
Length of engine from front end to edge of flywheel housing	mm	1,630	1,630	1,667	1,667
Width	mm	1,153	1,153	1,150	1,150
Height	mm	1,230	1,230	1,350	1,350
Dry weight	kg	2,270	2,270	2,365	2,365
Exhaust gas status		B	B	B	B

A IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC

B IMO Tier II, EPA Tier 3 for private use only, RCD 2013/53/EC, 97/68/EC

Notes



Engine range

Medium duty

6 inline and V8 engines

Characteristics	Unit	D2676				D2868		
		LE 432	LE 435	LE 422	LE 425	LE422	LE425	LE443
Type designation								
Arrangement and number of cylinders		R6	R6	R6	R6	V8	V8	V8
Nominal rating	hp	560	560	650	650	800	800	900
Maximum torque	Nm	2,065	2,065	2,402	2,402	2,950	2,980	3,327
Engine classifiable		✓	✓	✓	✓	✓	✓	–
Rated speed	rpm	2,100	2,100	2,100	2,100	2,100	2,100	2,100
Lowest specific fuel consumption	g/kWh	196	204	197	205	198	209	207
Bore/Stroke	mm	126/166	126/166	126/166	126/166	128/157	128/157	128/157
Displacement	l	12.42	12.42	12.42	12.42	16.16	16.16	16.16
Length of engine from front end to edge of flywheel housing	mm	1,527	1,527	1,527	1,527	1,177	1,177	1,177
Width	mm	986	986	986	986	1,153	1,153	1,153
Height	mm	1,096	1,096	1,096	1,096	1,243	1,243	1,243
Dry weight	kg	1,215	1,215	1,215	1,215	1,780	1,780	1,780
Exhaust gas status		B	A	B	A	B	A	B

V12 engines

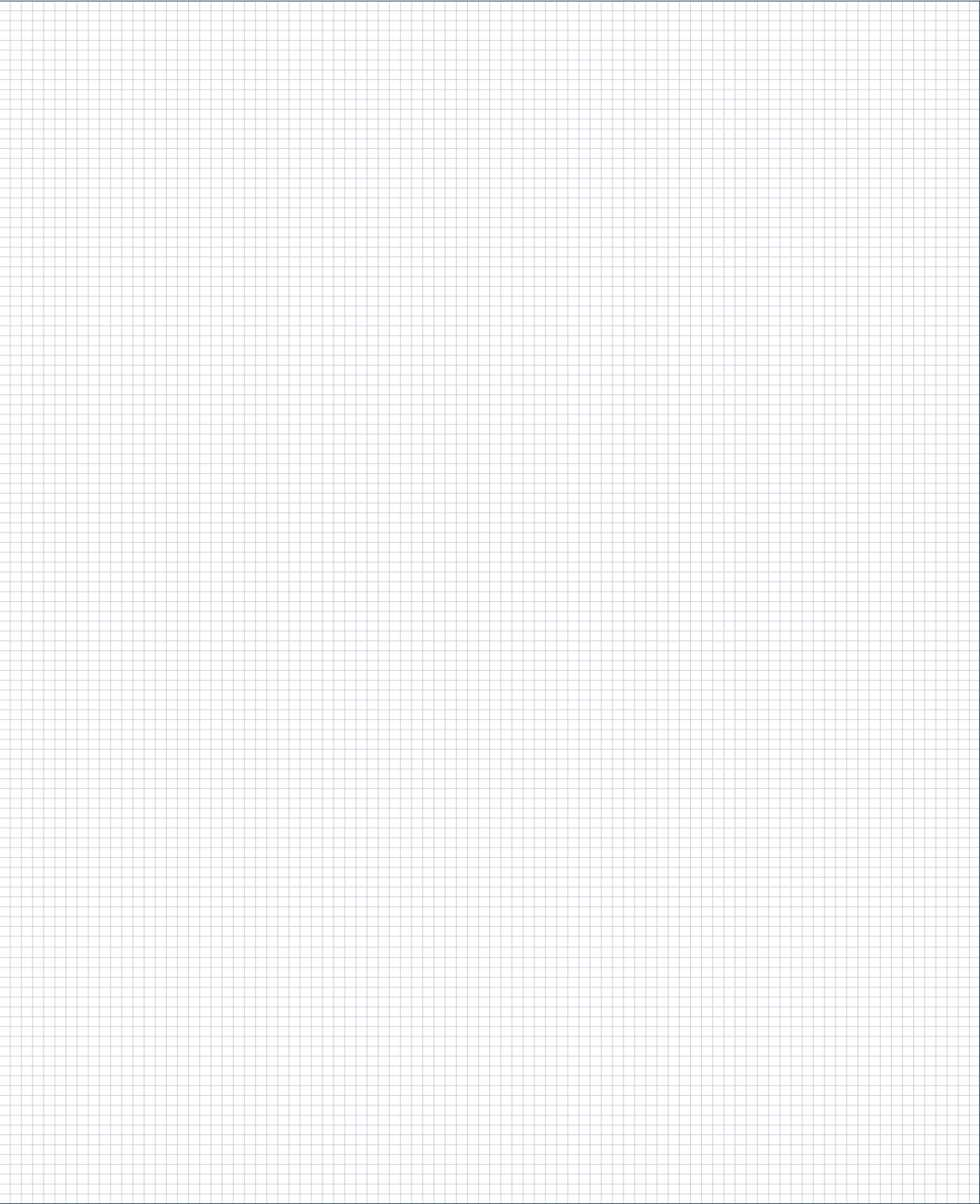
Characteristics	Unit	D2862						
		LE 422	LE 425	LE 432	LE 435	LE 463	LE 466	LE 483
Type designation								
Arrangement and number of cylinders		V12	V12	V12	V12	V12	V12	V12
Nominal rating	hp	1,019	1,019	1,200	1,200	1,400	1,400	1,450
Maximum torque	Nm	3,780	3,770	4,450	4,450	5,120	5,180	5,355
Engine classifiable		✓	✓	✓	✓	✓	✓	✓
Rated speed	rpm	2,100	2,100	2,100	2,100	2,100	2,100	2,100
Lowest specific fuel consumption	g/kWh	207	200	198	203	200	203	209
Bore/Stroke	mm	128/157	128/157	128/157	128/157	128/157	128/157	128/157
Displacement	l	24.24	24.24	24.24	24.24	24.24	24.24	24.24
Length of engine from front end to edge of flywheel housing	mm	1,630	1,630	1,630	1,630	1,630	1,630	1,658
Width	mm	1,153	1,153	1,153	1,153	1,153	1,153	1,153
Height	mm	1,230	1,230	1,230	1,230	1,230	1,230	1,272
Dry weight	kg	2,270	2,270	2,270	2,270	2,270	2,270	2,365
Exhaust gas status		B	A	B	C	B	B	B

A IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC

B IMO Tier II, 97/68/EC

C IMO Tier II, EPA Tier 3, 97/68/EC

Notes



Engine range

Heavy duty

V12 engines

Characteristics	Unit	D2862				
		LE 431	LE 434	LE 421	LE 441	LE 444
Type designation						
Arrangement and number of cylinders		V12	V12	V12	V12	V12
Nominal rating	hp	749	749	900	1,000	1,000
Maximum torque	Nm	3,305	3,305	3,955	4,380	4,380
Engine classifiable		✓	✓	✓	✓	✓
Rated speed	rpm	1,800	1,800	1,800	1,800	1,800
Lowest specific fuel consumption	g/kWh	198	202	195	193	212
Bore/Stroke	mm	128/157	128/157	128/157	128/157	128/157
Displacement	l	24,24	24,24	24,24	24,24	24,24
Length of engine from front end to edge of flywheel housing	mm	1,630	1,630	1,630	1,630	1,630
Width	mm	1,153	1,153	1,153	1,153	1,153
Height	mm	1,230	1,230	1,230	1,230	1,230
Dry weight	kg	2,270	2,270	2,270	2,270	2,270
Exhaust gas status		A	B	A	C	B

A. IMO Tier II, 97/68/EC

B. IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC

C. IMO Tier II

Engine range

Heavy duty

6 inline engines

Characteristics	Unit	D2676						
		LE 461	LE 452	LE 441	LE 431	LE 434	LE 421	LE 424
Type designation								
Arrangement and number of cylinders		R6	R6	R6	R6	R6	R6	R6
Nominal rating	hp	200	286	367	440	440	520	520
Maximum torque	Nm	880	1,250	1,616	1,925	1,925	2,275	2,270
Engine classifiable		✓	✓	✓	✓	✓	✓	✓
Rated speed	rpm	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Lowest specific fuel consumption	g/kWh	221	214	212	198	204	197	204
Bore/Stroke	mm	126/166	126/166	126/166	126/166	126/166	126/166	126/166
Displacement	l	12.42	12.42	12.42	12.42	12.42	12.42	12.42
Length of engine from front end to edge of flywheel housing	mm	1,527	1,527	1,527	1,527	1,527	1,527	1,527
Width	mm	986	986	986	986	986	986	986
Height	mm	1,096	1,096	1,096	1,096	1,096	1,096	1,096
Dry weight	kg	1,215	1,215	1,215	1,215	1,215	1,215	1,215
Exhaust gas status		A	A	A	A	C	A	B

V8 engines

Characteristics	Unit	D2868		
		LE 421	LE 424	LE 431
Type designation				
Arrangement and number of cylinders		V8	V8	V8
Nominal rating	hp	600	600	680
Maximum torque	Nm	2,630	2,630	2,985
Engine classifiable		✓	✓	✓
Rated speed	rpm	1,800	1,800	1,800
Lowest specific fuel consumption	g/kWh	197	206	199
Bore/Stroke	mm	128/157	128/157	128/157
Displacement	l	16.16	16.16	16.16
Length of engine from front end to edge of flywheel housing	mm	1,243	1,243	1,243
Width	mm	1,153	1,153	1,153
Height	mm	1,243	1,243	1,243
Dry weight	kg	1,780	1,780	1,780
Exhaust gas status		A	B	A

Please turn the page for
V12 engines

- A IMO Tier II, 97/68/EC
- B IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC
- C IMO Tier II, EPA Tier 3, 97/68/EC

MAN Truck & Bus AG

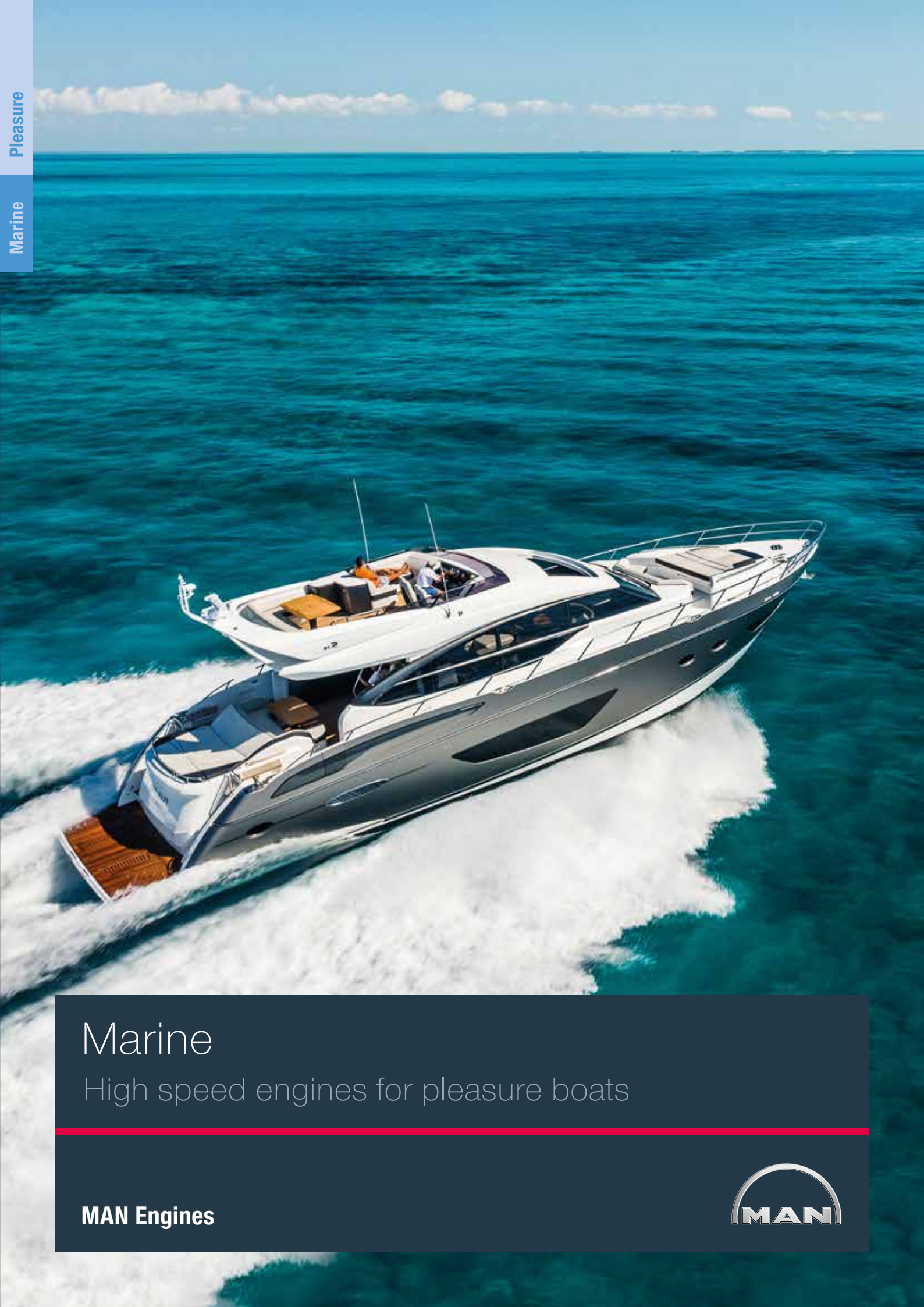
Vogelweiherstraße 33

90441 Nuremberg

www.man-engines.com

D 114 608 - bs 04174 - Printed in Germany

All data provided in this document is non-binding and not guaranteed in any aspect. The relevant data may be subject to changes and will be assessed and determined individually for each project depending specific site and operational conditions.



Marine

High speed engines for pleasure boats

MAN Engines





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70 % of the earth is covered by water

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70 % of the earth is covered by water

With powers ranging from 730 to 1,900 hp, MAN yacht engines are Europe's number one. MAN engines impress with their extraordinary dynamics, their extreme running smoothness, economy and their trend-setting environmental friendliness. The finest from modern common rail.

Customer Benefits

- High tractive power even at low speeds
- Powerful acceleration and rapid reaction to commands
- High performance combined with low weight
- Compact, space-saving design
- High efficiency owing to low fuel consumption
- Low running costs and long service life
- Low emission values
- World-wide service network with rapid supply of spare parts

Get out there and fish it with a MAN Engine

That's a lot of water to cover, and a large amount of fish that comes along with it. Get those lines cast in every one of your "hot spots" with the power of MAN engines covering the distance. Our high-performance i6, V8 and V12 marine engines are just built for pleasure crafts, so you can sportfish in complete comfort and style while getting the fuel efficiency, clean running, smooth acceleration, quiet operation, and total reliability you expect. With a MAN on board, you're already starting off with a nice catch.

Get out there and enjoy it with a MAN Engine

Inline six-cylinder or V8/V12, with their innovative and dependable technology, MAN yacht engines open up new dimensions on the water. They develop enormous torque even at low revs – the kind of power you feel as a tingling down the spine. Breathtaking acceleration and high speeds are experiences to be savoured, yet our compact, lightweight power units are decidedly modest when it comes to fuel consumption. With a MAN on board, you're already starting off the day right.



Reason enough to enjoy life on the ocean with a MAN engine



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 network.

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 ecofriendly

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.

MAN Gold Standard

More safety and improved warranty

The MAN Gold Standard® seal of quality is a perfectly matched overall concept which complies with excellent quality standards both in regards to installation as well as in regards to tuning of the MAN engine system. Close cooperation between ship-builder and the MAN engine specialists ensures that an engine compartment with optimum technical features is implemented. Improved technology and simplified access to the individual servicing points on the engine drastically speed up servicing work. This allows you to cut costs in the short term and maintain the value of the boat in the long term. This certificate of quality gives customers enhanced reliability and a longer warranty on the engine and its components.

If you want only the best, you should rely on the MAN Gold Standard®.

New: MAN Gold Standard Premium is available now. Please contact your local dealer concerning this 5-years factory warranty.



Light duty operation

Definition of application type

Characteristics

- Annual operating hours: $\leq 1,000$
- Percentage of time at full load: $\leq 20 \%$
- Average load application: $\leq 50 \%$

Typical applications

- Pleasure crafts
- Displacement yachts
- Sportfish boats



reddot design award
winner 2016



i6-730 and i6-800

Engine description

Characteristics

- | | |
|------------------------------|--|
| ■ Cylinders and arrangement: | 6 cylinders in-line |
| ■ Operation mode: | 4-stroke diesel engine, watercooled |
| ■ Turbocharging: | Turbocharger with charge air intercooler and 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 |

i6-730 and i6-800

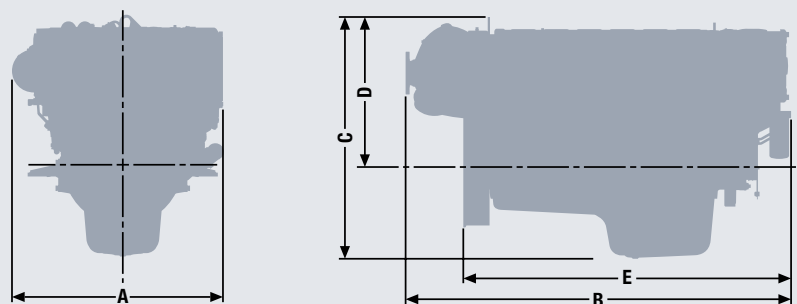
Technical data

Technical features i6-730 and i6-800

Type designation		i6-730	i6-800
Displacement	l	12.42	12.42
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	2,674
at speed	rpm	1,300–2,100	1,400–2,000
Absolute fuel consumption at rated power ¹⁾	l/h	142	158
Classifiable		✓	–
Exhaust gas status		IMO Tier II, EPA Tier 3 RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC

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

2) for private use only



Dimensions i6-730 and i6-800

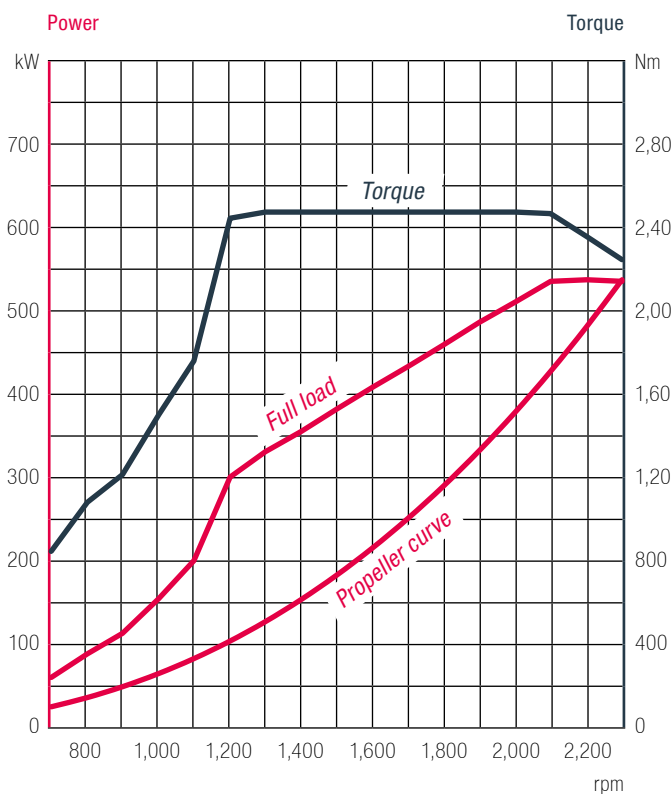
Type designation		i6-730/i6-800
A-Overall width	mm	986
B-Overall length	mm	1,795
C-Overall height – standard oil pan	mm	1,096
D-Top of engine to crankshaft centre	mm	674
E-Length of engine from front end to edge of flywheel housing	mm	1,527
Average weight of engine ready for installation (dry)	kg	1,215

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

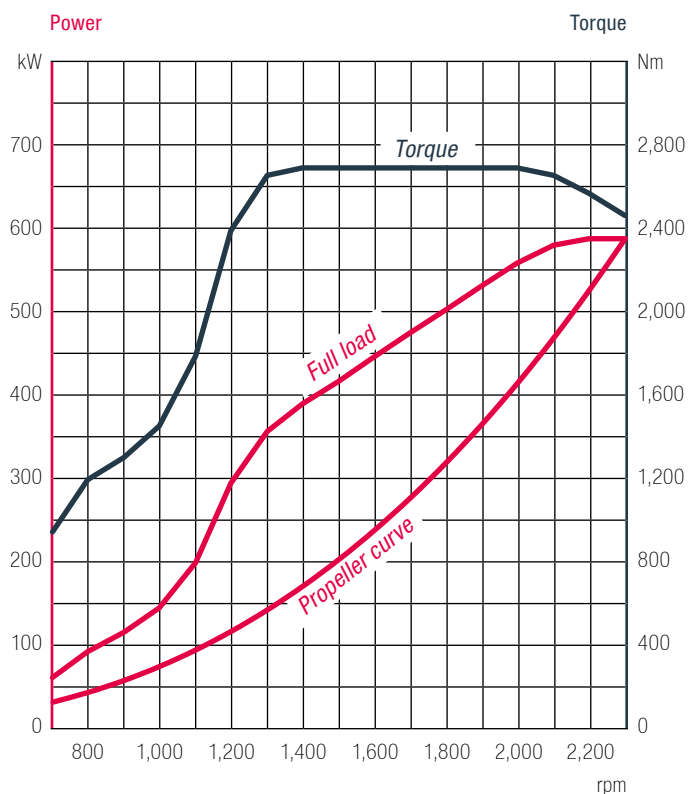
i6-730 and i6-800

Power charts

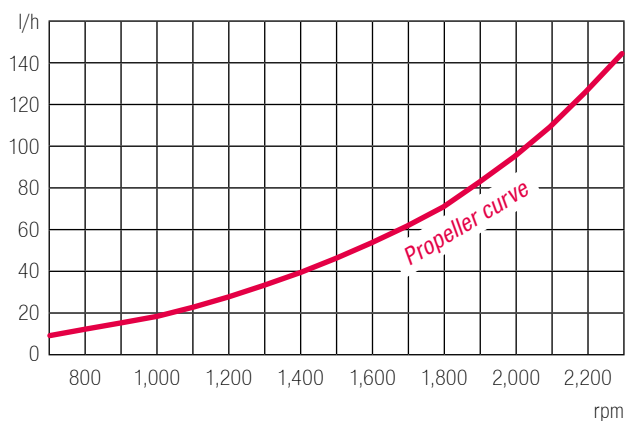
i6-730



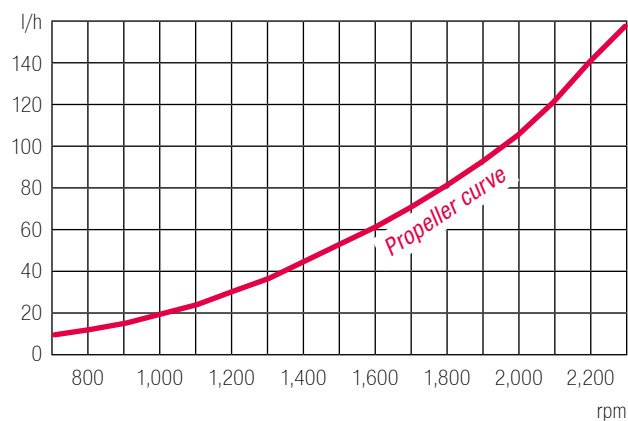
i6-800



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: | Turbocharger with charge air intercooler and waste gate
(1-stage: V8-1000, 2-stage: V8-1200) |
| ■ 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

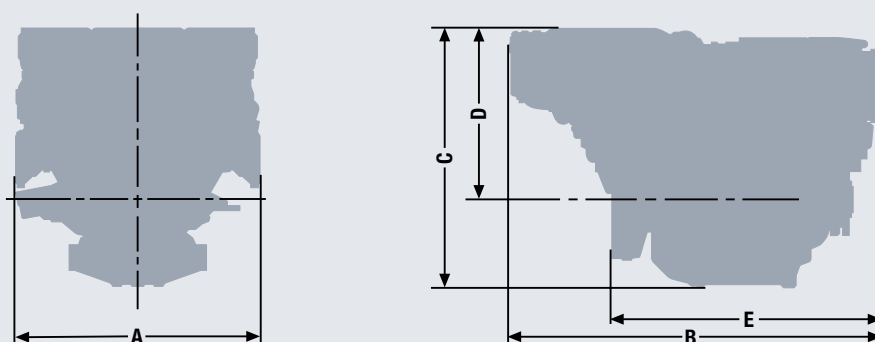
Technical data

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	3,340	4,010
at speed	rpm	1,300–2,100	1,200–2,100
Absolute fuel consumption at rated power ¹⁾	l/h	199	240
Classifiable		–	–
Exhaust gas status		IMO Tier II, EPA Tier 3, RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC

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

2) for private use only



Dimensions V8-1000 and V8-1200

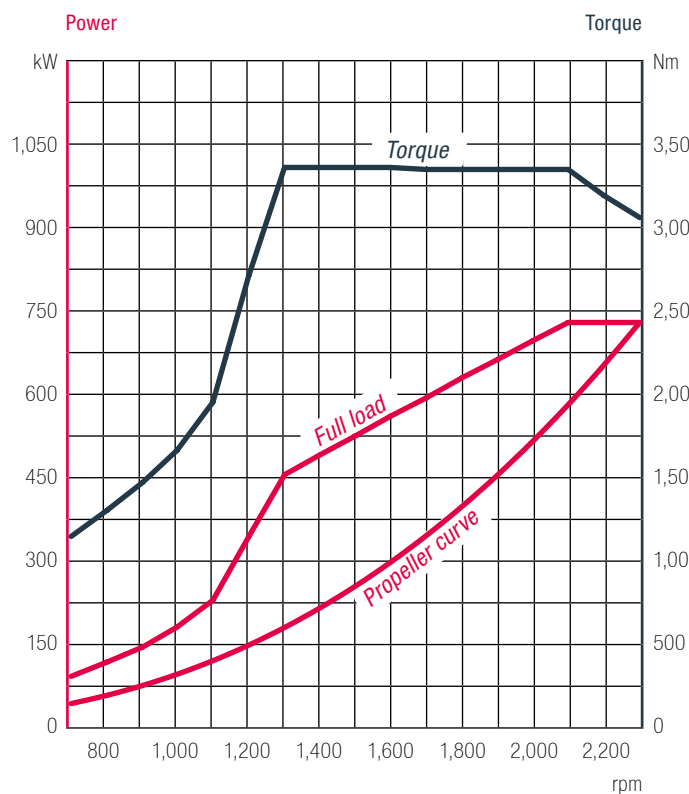
Type designation		V8-1000	V8-1200
A-Overall width	mm	1,153	1,153
B-Overall length	mm	1,745	1,745
C-Overall height	mm	1,177	1,222
D-Top of engine to crankshaft centre	mm	765	811
E-Length of engine from front end to edge of flywheel housing	mm	1,243	1,262
Average weight of engine ready for installation (dry)	kg	1,780	1,880

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

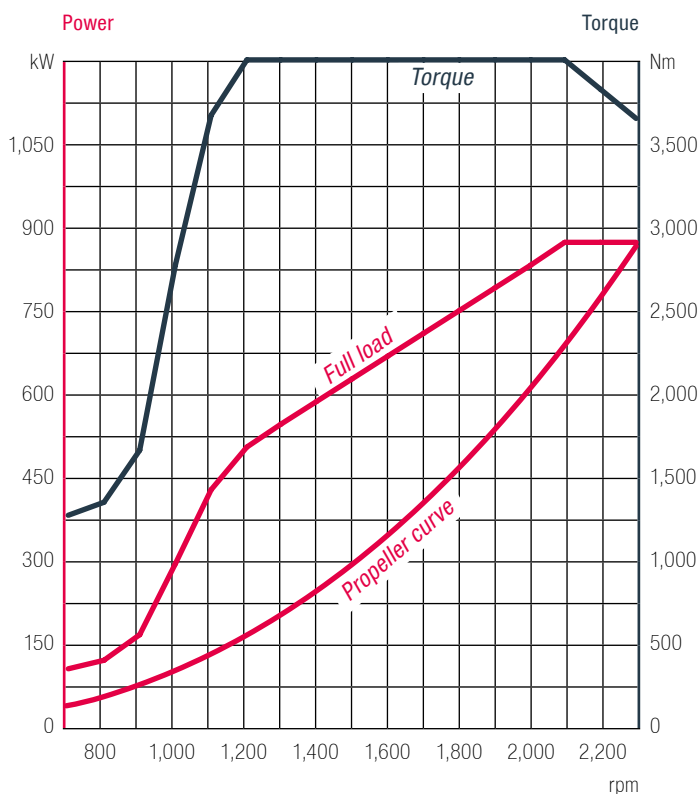
V8-1000 and V8-1200

Power charts

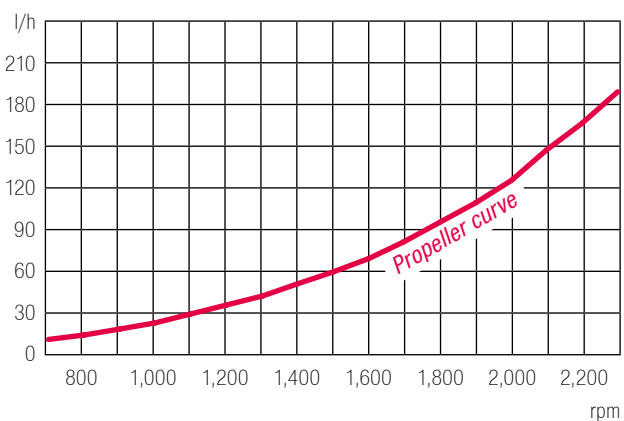
V8-1000



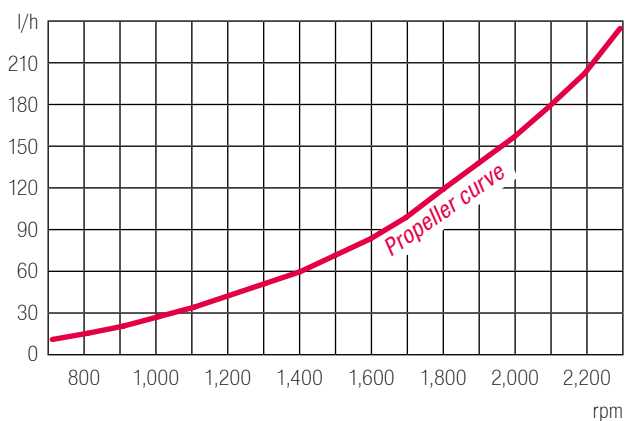
V8-1200



Absolute fuel consumption



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: Turbocharger with charge air intercooler and 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

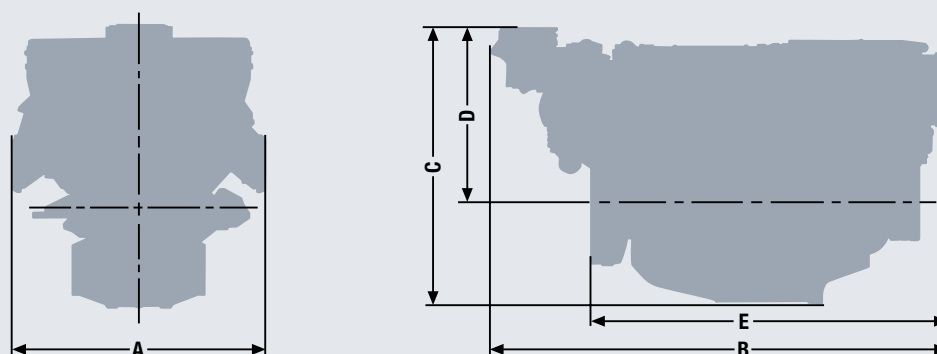
Technical data

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	4,680	5,180
at speed	rpm	1,200–2,100	1,200–2,100
Absolute fuel consumption at rated power ¹⁾	l/h	267	299
Classifiable		✓	–
Exhaust gas status		IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC

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

2) for private use only



Dimensions V12-1400 and V12-1550

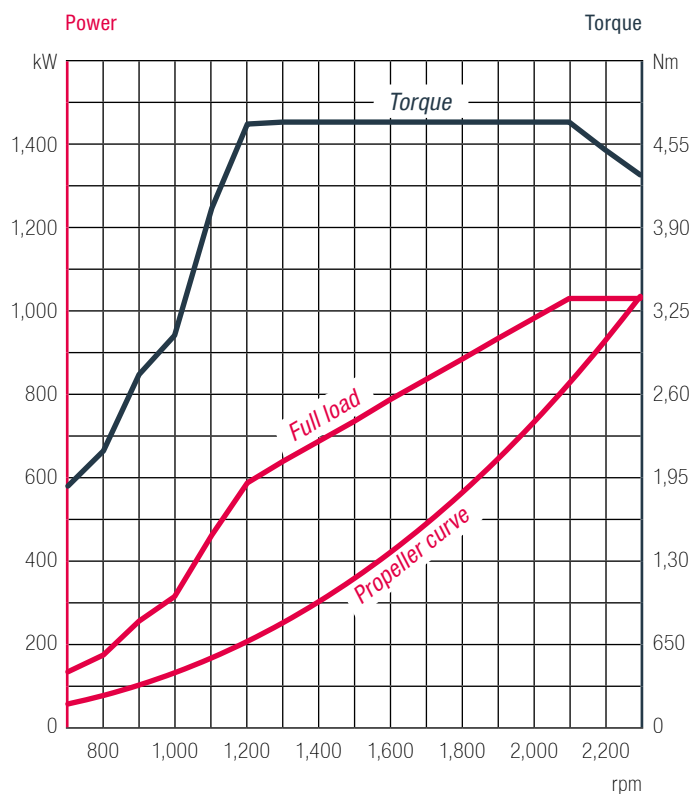
Type designation		V12-1400/1550
A-Overall width	mm	1,153
B-Overall length	mm	2,130
C-Overall height	mm	1,230
D-Top of engine to crankshaft centre	mm	765
E-Length of engine from front end to edge of flywheel housing	mm	1,630
Average weight of engine ready for installation (dry)	kg	2,270

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

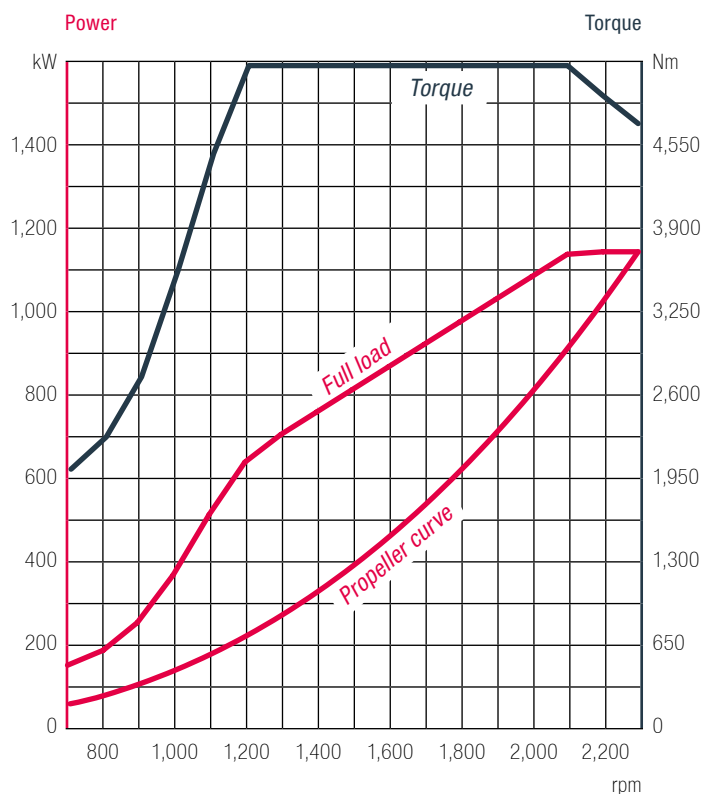
V12-1400 and V12-1550

Power charts

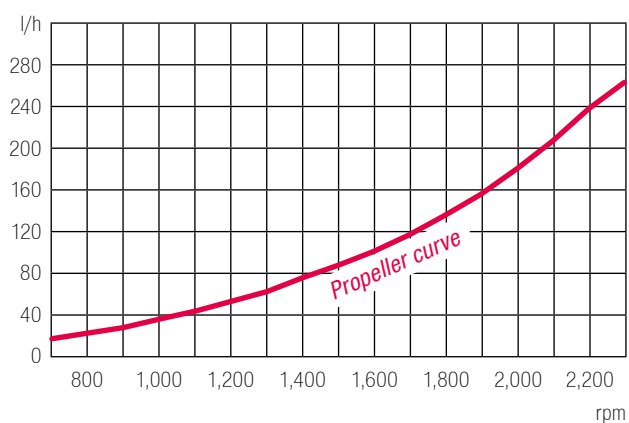
V12-1400



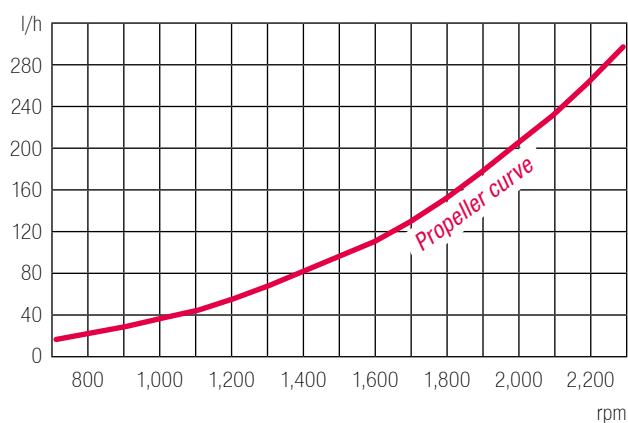
V12-1550



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 turbocharger with charge air intercooler and 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

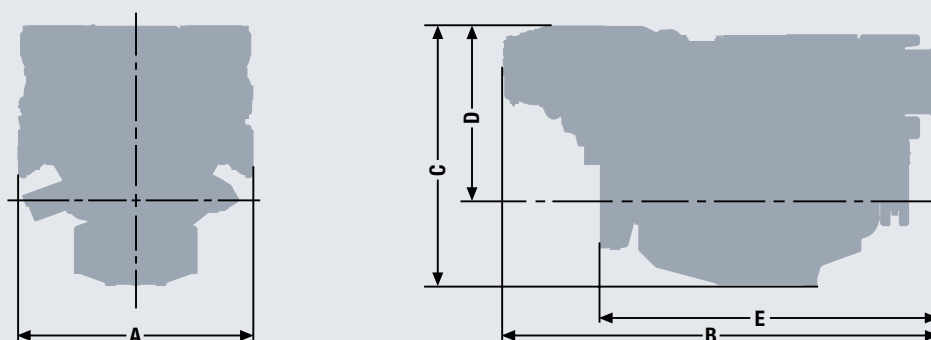
Technical data

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	6,010
at speed	rpm	1,200–2,100	1,200–2,100
Absolute fuel consumption at rated power ¹⁾	l/h	323	351
Classifiable		✓	–
Exhaust gas status		IMO Tier II, EPA Tier 3, RCD 2013/53/EC, 97/68/EC	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC

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

2) for private use only



Dimensions V12-1650 and V12-1800

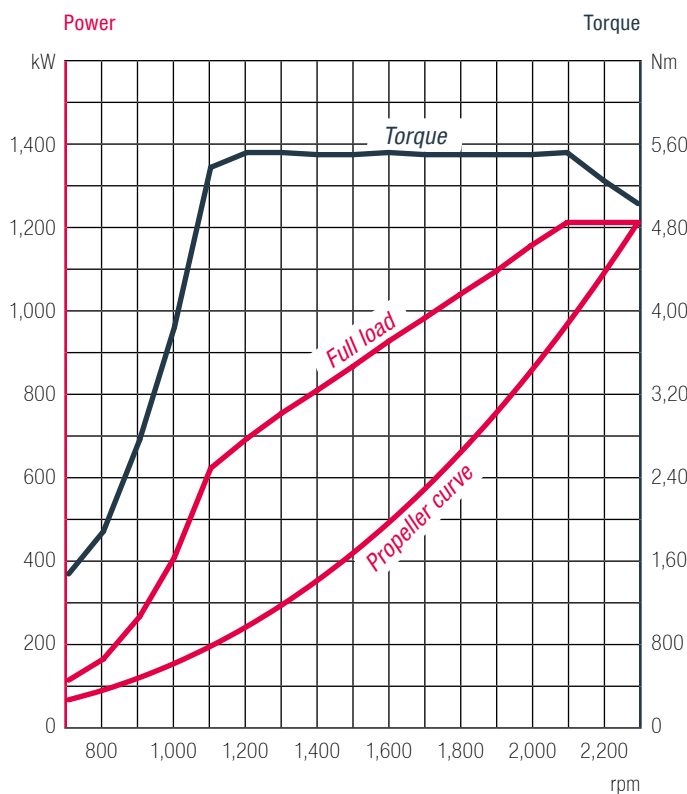
Type designation		V12-1650/1800
A-Overall width	mm	1,153
B-Overall length	mm	2,139
C-Overall height	mm	1,275
D-Top of engine to crankshaft centre	mm	808
E-Length of engine from front end to edge of flywheel housing	mm	1,658
Average weight of engine ready for installation (dry)	kg	2,380

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

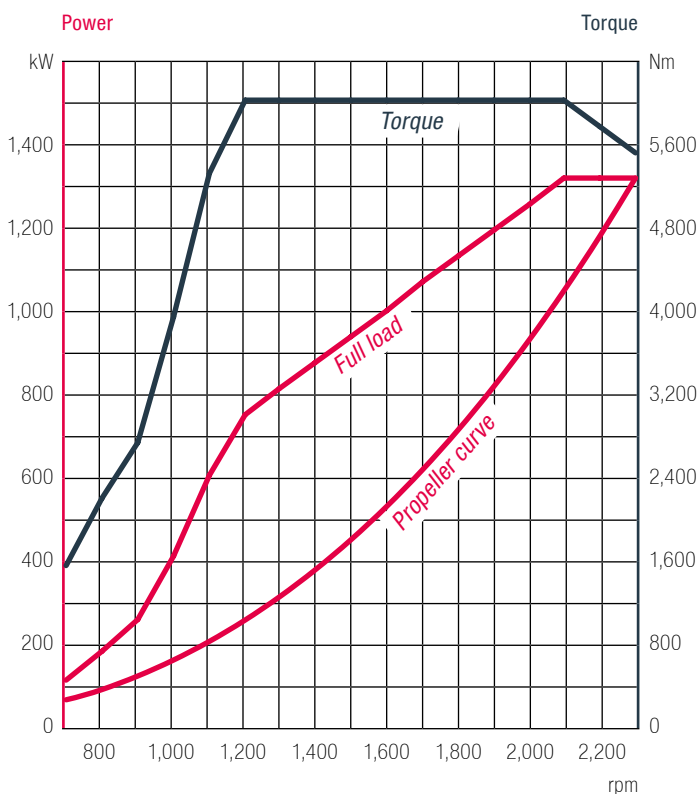
V12-1650 and V12-1800

Power charts

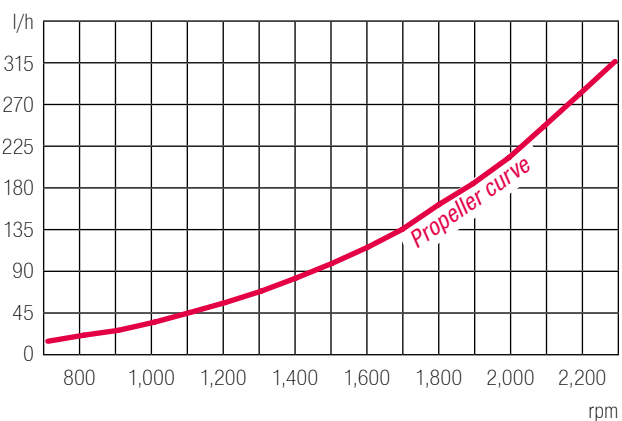
V12-1650



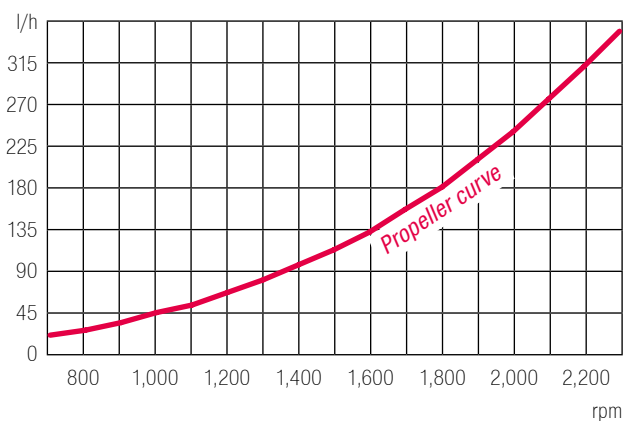
V12-1800



Absolute fuel consumption



Absolute fuel consumption





V12-1900

Engine description

Characteristics

- Cylinders and arrangement: 12 cylinders in 90° V arrangement
- Operation mode: 4-stroke diesel engine, watercooled
- Turbocharging: Turbocharger with charge air intercooler and 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

V12-1900

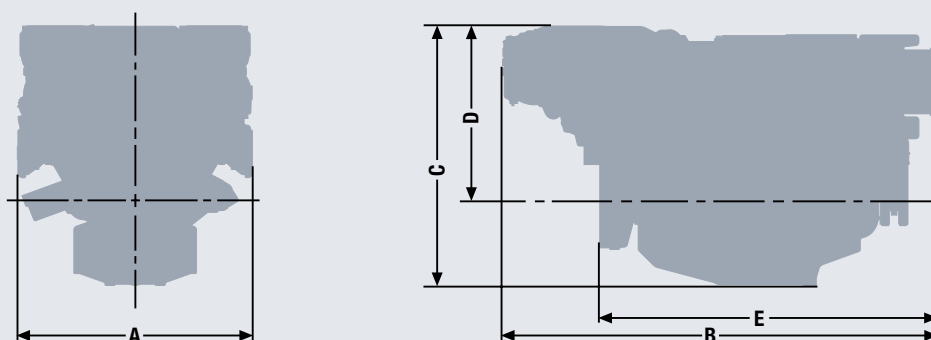
Technical data

Technical features V12-1900

Type designation	V12-1900	
Displacement	l	24.24
Maximum output to DIN ISO 3046-1	kW (hp)	1,397 (1,900)
Rated speed	rpm	2,300
Maximum torque	Nm	6,220
at speed	rpm	1,200–2,100
Absolute fuel consumption at rated power ¹⁾	l/h	373
Classifiable		–
Exhaust gas status	IMO Tier II, EPA Tier 3 ²⁾ , RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC	

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

2) for private use only



Dimensions V12-1900

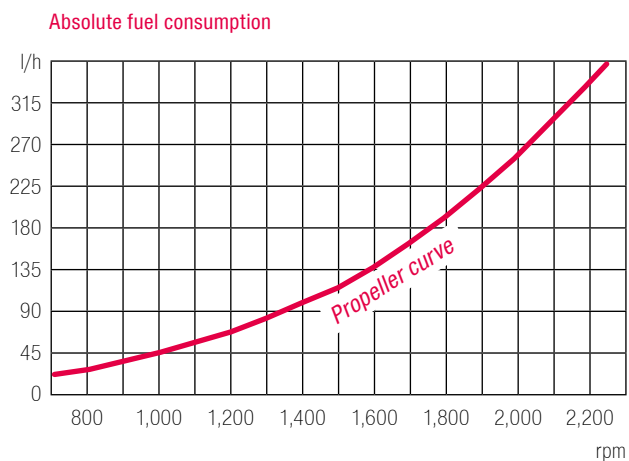
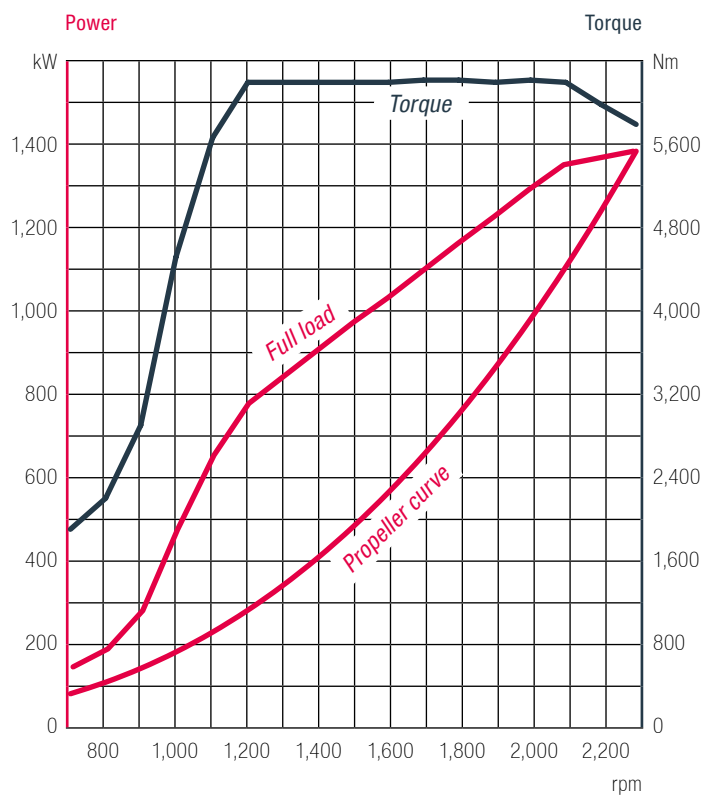
Type designation	V12-1900	
A-Overall width	mm	1,153
B-Overall length	mm	2,139
C-Overall height	mm	1,272
D-Top of engine to crankshaft centre	mm	808
E-Length of engine from front end to edge of flywheel housing	mm	1,658
Average weight of engine ready for installation (dry)	kg	2,380

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

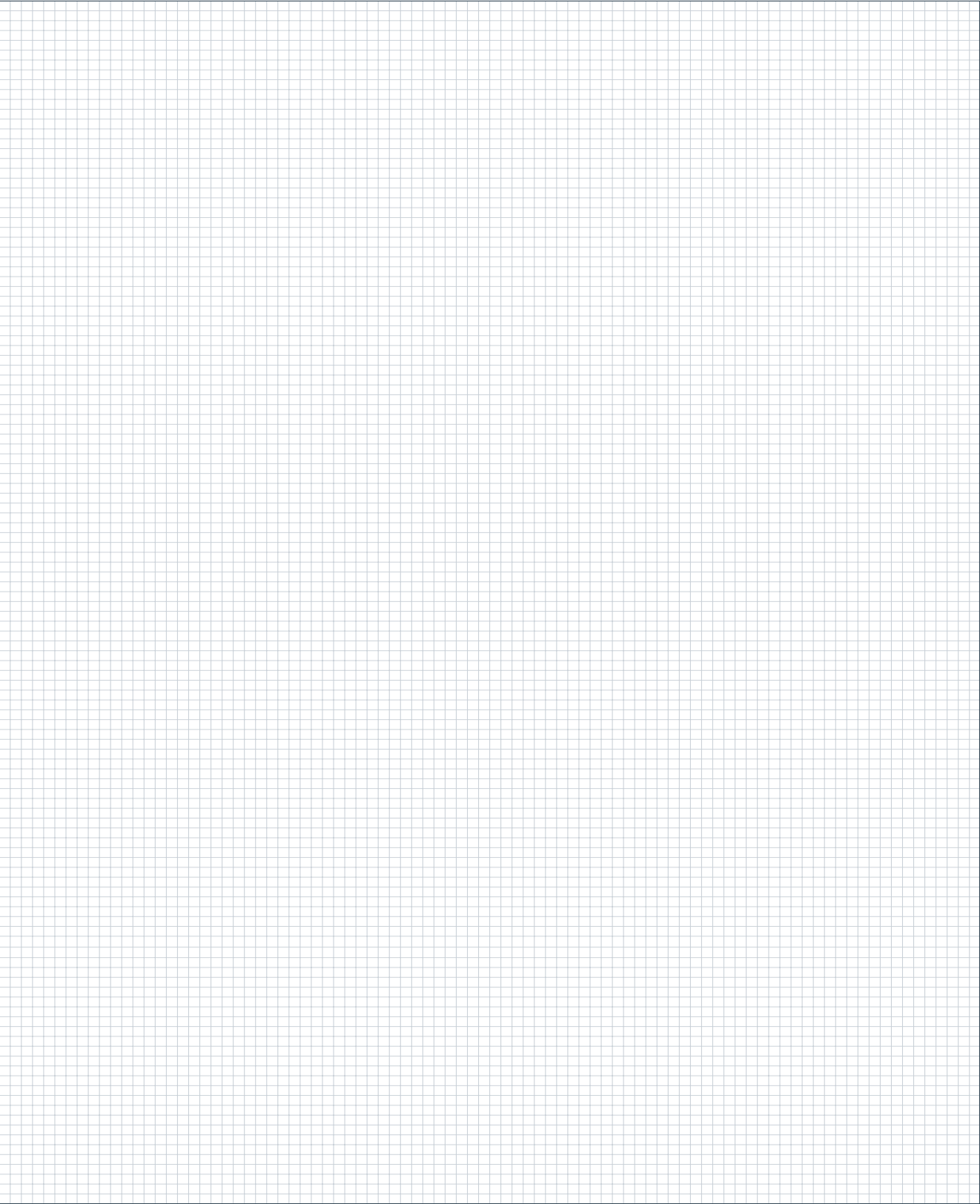
V12-1900

Power charts

V12-1900



Notes



Engine range

Light duty

6 inline and V8 engines

Characteristics	Unit	i6		V8	
Type designation		730	800	1000	1200
Arrangement and number of cylinders		R6	R6	V8	V8
Nominal rating	hp	730	800	1,000	1,200
Maximum torque	Nm	2,450	2,674	3,340	4,010
Engine classifiable		✓	–	–	–
Rated speed	rpm	2,300	2,300	2,300	2,300
Fuel consumption	l/h	142	158	199	240
Bore/Stroke	mm	126/166	126/166	128/157	128/157
Displacement	l	12.42	12.42	16.16	16.16
Length of engine from front end to edge of flywheel housing	mm	1,527	1,527	1,243	1,262
Width	mm	986	986	1,153	1,153
Height	mm	1,096	1,096	1,177	1,222
Dry weight	kg	1,215	1,215	1,780	1,880
Exhaust gas status		A	B	A	B

V12 engines

Characteristics	Unit	V12				
Type designation		1400	1550	1650	1800	1900
Arrangement and number of cylinders		V8	V12	V12	V12	V12
Nominal rating	hp	1,400	1,550	1,650	1,800	1,900
Maximum torque	Nm	4,680	5,180	5,510	6,020	6,220
Engine classifiable		✓	–	✓	–	–
Rated speed	rpm	2,300	2,300	2,300	2,300	2,300
Fuel consumption	l/h	267	299	323	351	373
Bore/Stroke	mm	128/157	128/157	128/157	128/157	128/157
Displacement	l	24.24	24.24	24.24	24.24	24.24
Length of engine from front end to edge of flywheel housing	mm	1,630	1,630	1,658	1,658	1,658
Width	mm	1,153	1,153	1,153	1,153	1,153
Height	mm	1,230	1,230	1,275	1,275	1,275
Dry weight	kg	2,270	2,270	2,380	2,380	2,380
Exhaust gas status		B	B	C	B	B

A IMO Tier II, EPA Tier 3, RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC

B IMO Tier II, EPA Tier 3 for private use only, RCD 2013/53/EC, RCD 94/25/EC, 97/68/EC

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