

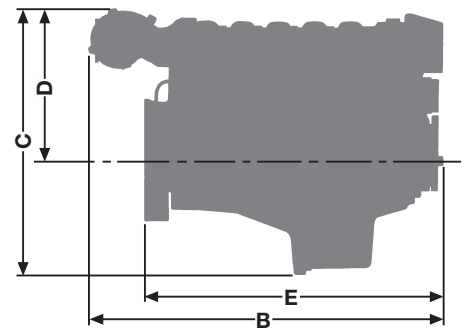
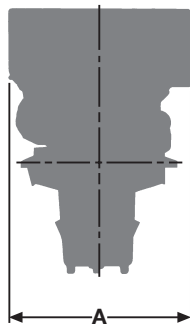
## **MAN marine diesel engines**

Medium-duty operation

265 – 809 kW (360 – 1100 hp)



# D 0836, D 2866, D 2876 In-line engines

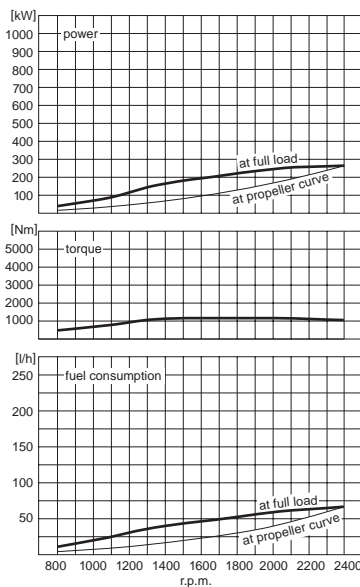


## Technical data:

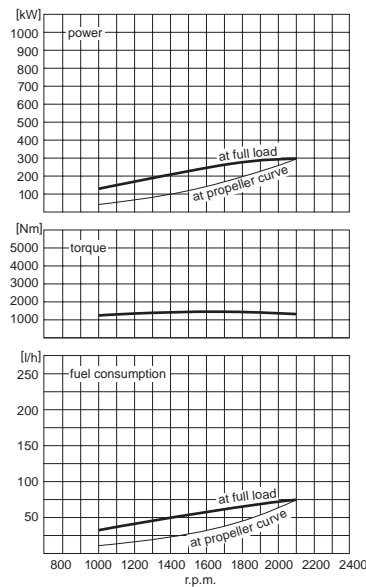
Engine model		D 0836 LE 402	D 2866 LXE 40 <sup>1)</sup>	D 2866 LE 403	D 2876 LE 402 EDC
Bore	mm	108	128	128	128
Stroke	mm	125	155	155	166
No. of cylinders		6	6	6	6
Displacement	l	6.87	11.97	11.97	12.8
Compression ratio		16.0:1	15.5:1	15.5:1	15.0:1
Rotation looking on flywheel		left	left	left	left
Flywheel housing		SAE 1	SAE 1	SAE 1	SAE 1
Average weight of engine ready for installation (dry)	kg	730	1020	1160	1290
Max. output, medium-duty operation	kW (hp)	265 (360)	294 (400)	368 (500)	412 (560)
Rated speed	rpm	2400	2100	2100	2100
Torque at rated speed	Nm	1054	1337	1673	1874
Mean effective pressure	bar	19.3	14.0	17.6	18.3
Max. torque	Nm	-	1461	1777	2150
at speed	rpm	-	1680	1800	1300 - 1400
Specific fuel consumption at rated power	g/kWh	218	216	224	222
Fuel consumption at rated power	l/h	69	76	98	109
A = Width of engine	mm	740	897	869	882
B = Overall length of engine	mm	1377	1448	1565	1605
C = Overall height of engine (flat oil pan)	mm	925	1148	998	966
(deep oil pan)	mm	-	1357	1224	1080
D = Top edge of engine to crankshaft centre	mm	590	817	667	665
E = Length of engine from front edge to edge of flywheel housing	mm	1127	1448	1320	1320

<sup>1)</sup> without wastegate

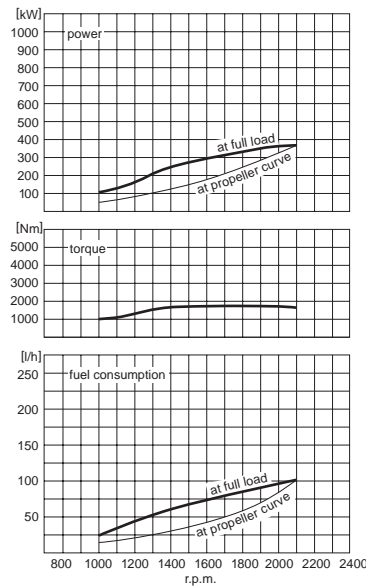
For detailed examinations of installation dimensions, please order drawings from our factory.



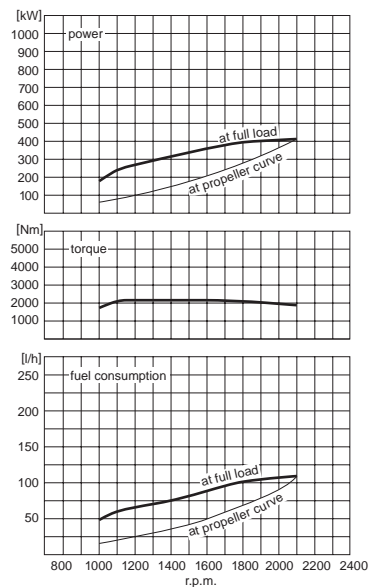
D 0836 LE402, 265 kW (360 hp)



D 2866 LXE40, 294 kW (400 hp)

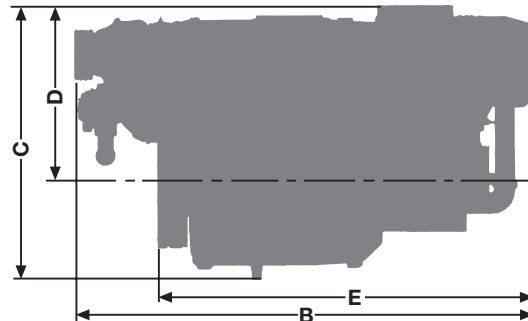


D 2866 LE403, 368 kW (500 hp)



D 2876 LE402 EDC, 412 kW (560 hp)

# D 2848, D 2840, D 2842 V-type engines

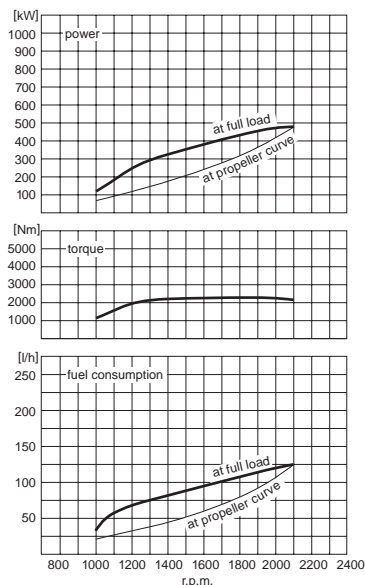


## Technical data:

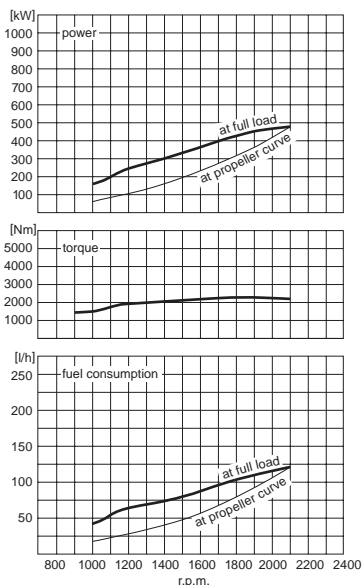
Engine model		D 2848 LE 405	D 2840 LE 401	D 2842 LE <sup>1</sup>	D 2842 LE 401	D 2842 LE 413	D 2842 LE 410 EDC
Bore	mm	128	128	128	128	128	128
Stroke	mm	142	142	142	142	142	142
No. of cylinders		8	10	12	12	12	12
Displacement	l	14.62	18.27	21.93	21.93	21.93	21.93
Compression ratio		13.5:1	13.5:1	15.5:1	13.5:1	15.5:1	13.5:1
Rotation looking on flywheel		left	left	left	left	left	left
Flywheel housing		SAE 1	SAE 1	SAE 1	SAE 1	SAE 1	SAE 1
Average weight of engine ready for installation (dry)	kg	1390	1580	1720	1790	1790	1860
Max. output, medium-duty operation	kW (hp)	478 (650)	478 (650)	497 (676)	588 (800)	735 (1000)	809 (1100)
Rated speed	rpm	2100	2100	2300	2100	2100	2100
Torque at rated speed	Nm	2174	2174	2159	2674	3342	3679
Mean effective pressure	bar	18.7	14.9	12.4	15.3	19.2	21.1
Max. torque	Nm	2294	2272	2324	2789	3600	3830
at speed	rpm	1800	1900	1750	1900	1400	1700
Specific fuel consumption at rated power	g/kWh	215	212	212	212	221	214
Fuel consumption at rated power	l/h	122	121	125	148	193	206
A = Width of engine	mm	1230	1217	1203	1217	1230	1230
B = Overall length of engine	mm	1435	1645	2020	1802	1751	1795
C = Overall height of engine (flat oil pan)	mm	1063	1071	1171	1082	1105	1105
(deep oil pan)	mm	1202	1192	1280	1192	1216	1216
D = Top edge of engine to crankshaft centre	mm	685	660	769	662	685	685
E = Length of engine from front edge to edge of flywheel housing	mm	1176	1334	1638	1491	1491	1491

<sup>1</sup> without wastegate

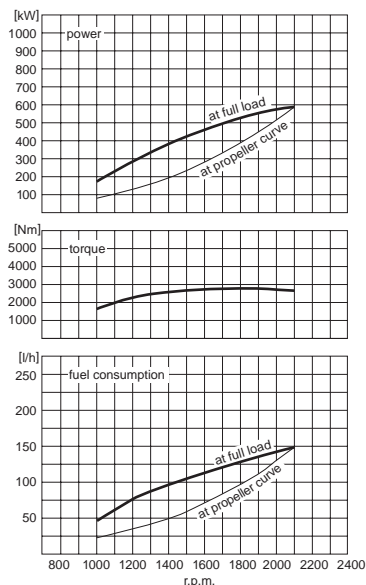
For detailed examinations of installation dimensions, please order drawings from our factory.



D 2848 LE405, 478 kW (650 hp)



D 2840 LE401, 478 kW (650 hp)



D 2842 LE401, 588 kW (800 hp)

The propeller curve is based on an exponent value of 2.5

### Definition medium duty operation

Annual operating hours	≤ 3000
Percentage of time at full load	≤ 50%
Average load application	≤ 70%
Particular operating conditions	No wide-open throttle below rated speed

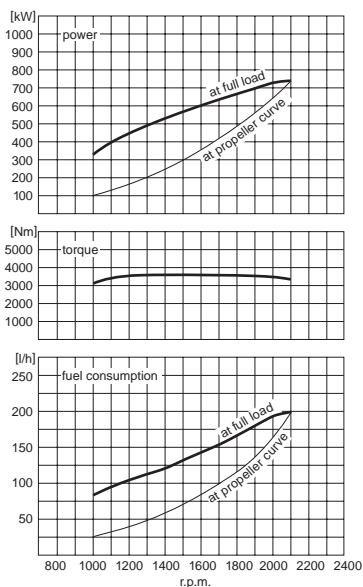
### Typical applications:

- Escort boats
- Pilot boats
- Fishing boats
- Passenger boats
- Ferries
- Cruising vessels
- Seagoing patrol boats

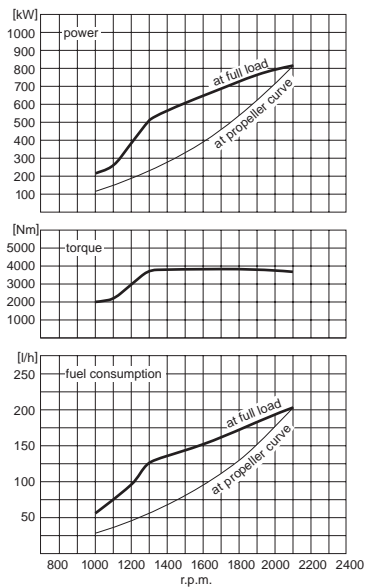
If you have questions concerning the load profile or application please contact our sales department.

### Ratings:

The ratings are to DIN/ISO 3046/1 at 298 K (25° C) ambient temperature, 100 kPa (1000 mbar) barometric pressure and 60% relative humidity.



D 2842 LE413, 735 kW (1000 hp)



D 2842 LE410 EDC, 809 kW (1100 hp)

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### Quality characteristics of MAN engines

- High tractive power even at low speeds
- Powerful acceleration and rapid reaction to commands
- High performance combined with low weight
- Compact, space-saving design
- Large operating range owing to low consumption
- Low running costs
- Long service life
- Low emission values:  
The engines satisfy the IMO regulation on exhaust-gas emissions and various national regulations.
- World-wide service network with rapid supply of spare parts

### Technical description

#### Engine characteristic

Water-cooled 4-stroke diesel engine with 6 cylinders in-line and 8, 10 or 12 cylinder in 90° V design respectively, direct fuel injection, exhaust turbocharger, intercooler, boost pressure control partly with waste gate

#### Components

Cylinder heads/valve gear	Single (D 28) our double (D 08) cylinder heads with 2 or 4 valves per cylinder Replaceable valve seat inserts and valve guides
Fuel system	Bosch injection pump, mechanical or electronic injection control (EDC)
Engine block	High-strength casting with integrated oil and water ducts and with replaceable cylinder liners
Engine lubrication	Closed system with forced feeding, oil cooling and filtering
Type of cooling	Heat exchanger with engine and seawater circuit
Electric/electronics	For engine control please see fuel system Depending on engine model electronic engine monitoring, in some cases including diagnostic unit System voltage 24 V, alternator 55 Amp, 120 Amp optional for V engines
Exhaust gas status	IMO/MARPOL 73/78. On request: ZKR, SAV (Switzerland) and BSO for commercial applications
Quality certificates	ISO 9001 certified by TÜV
Ambient conditions	To ISO 3046, EN 590
Fuels	DMX fuel to ISO 8217
Special equipment	On request

MAN Nutzfahrzeuge Group  
Business Unit Engines  
Department: MVMV  
Postfach 44 02 58  
D-90207 Nürnberg  
e-mail: [marinemotor@de.man-mn.com](mailto:marinemotor@de.man-mn.com)  
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