MAN Energy Solutions Future in the making

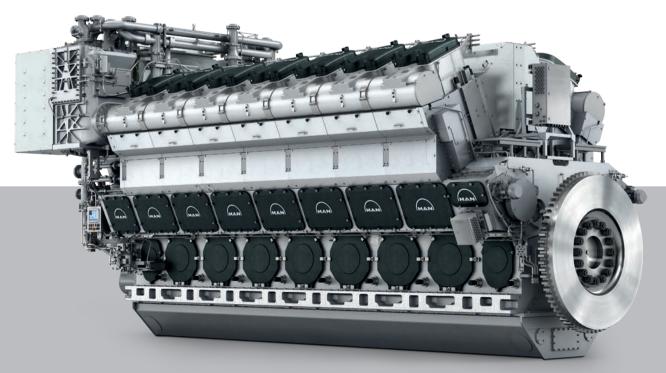


MAN V48/60CR Propulsion

The MAN 48/60CR is a striking combination of top performance, operational flexibility and reliability. High power output, low fuel consumption and low emissions make it perfect for every kind of marine application with a mechanical or diesel-electric propulsion drive.

Benefits at a glance

- High efficiency
- High specific power output
- Low emissions
- Low operating and life cycle costs
- Long maintenance intervals and service life
- High reliability



Fourstroke marine systems

MAN V48/60CR

Propulsion

Dimensions

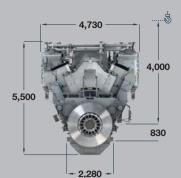
Cyl. No.		12	14	16	18
L	mm	10,790	11,790	13,140	14,140
L ₁	mm	9,088	10,088	11,088	12,088
Dry mass	t	189	213	240	265

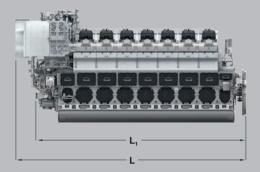
Output

Speed	rpm	514	500
mep	bar	25.8	26.5
MAN 12V48/60CR	kW	14,400	14,400
MAN 14V48/60CR	kW	16,800	16,800
MAN 16V48/60CR	kW	19,200	19,200
MAN 18V48/60CR	kW	21,600	21,600

Minimum centerline distance for twin engine installation: 4,800 mm

Last updated July 2018





General

- Engine cycle: four-stroke
- No. of cylinders: 12, 14, 16, 18
- Bore: 480 mm Stroke: 600 mm
- Swept volume per cyl: 108.6 dm³

Fuel consumption at 85 % MCR*

- SFOC: 173.5g/kWh

Cylinder output (MCR)

- At 514/500 rpm: 1200 kW
- Power-to-weight ratio: 12.3 – 13.1 kg/kW

Compliance with emission regulations

- IMO Tier II
- IMO Tier III (with MAN SCR)

Main features

Turbocharging system

 High efficiency constant pressure MAN TCA series exhaust turbocharging system

Engine automation and control

 MAN in-house developed engine attached safety and control system MAN SaCoSone

Fuel system

 Advanced electronic common rail injection system

Cooling system

 2-string high and low temperature cooling water systems

Starting system

 Starting air valves within cylinder heads

Engine mounting

- Resilient or rigid mounting

Optional equipment

- MAN ECOMAP concept using different IMO Tier II compliant injection maps to improve fuel economy
- Additional power take-off at engine free end available

MCR = Maximum continuous rating SCR = Selective catalytic reduction SFOC = Specific fuel oil consumption *According to IMO E2 test cycle

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