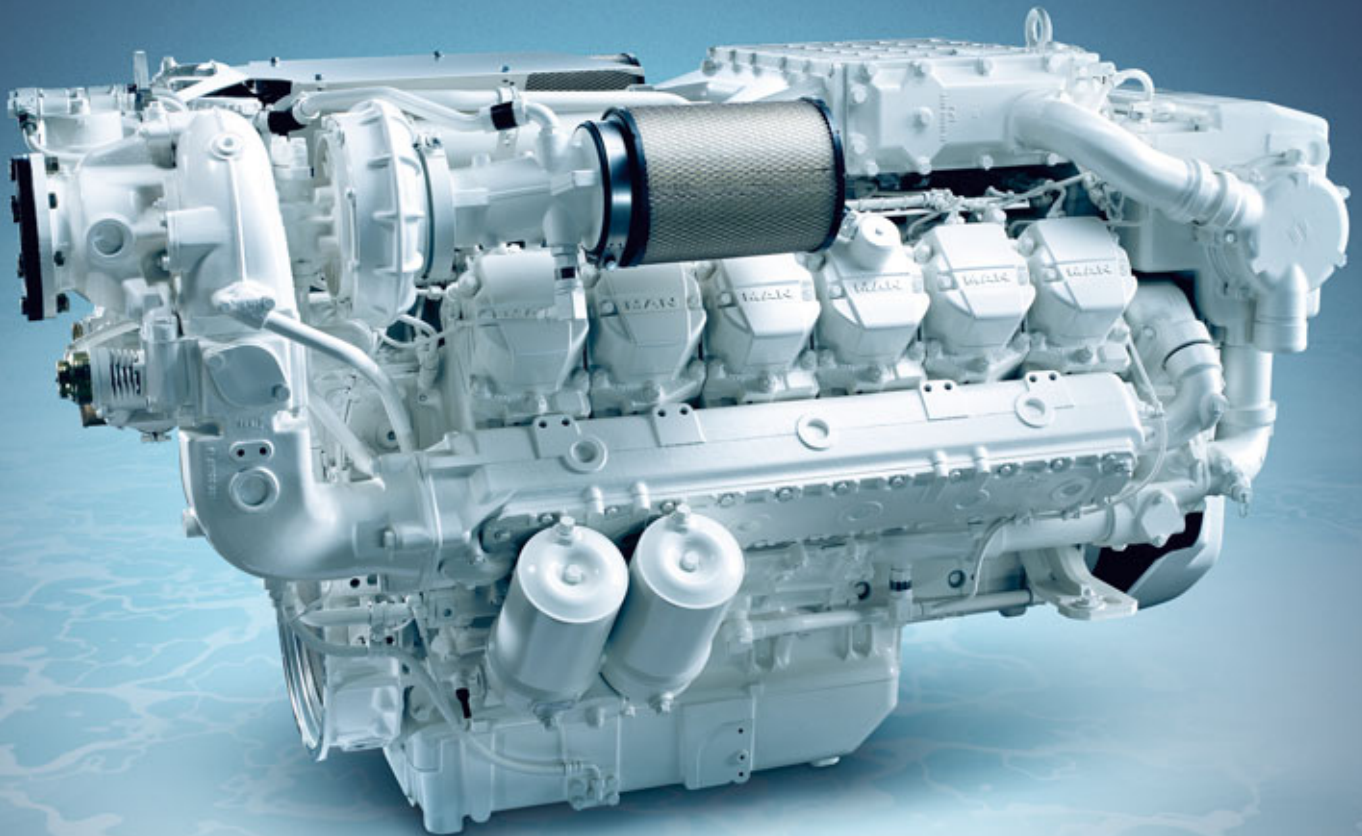


# V8, V10 and V12 Common Rail

MAN marine engines  
for medium duty applications.



MAN Diesel



# Full speed ahead.

Typical applications for medium duty boats cover goods and passenger transportation as well as escort and patrol duties at sea. MAN marine diesel engines perform these tasks reliably and efficiently with high power outputs. With ratings from 379 to 1,400 mhp they have powerful acceleration and high tractive power. MAN engines meet the current emission standards and are environmentally friendly. The worldwide service network ensures minimal maintenance effort and a customer-oriented service.

## Engine description V8, V10, V12 Common Rail.

### Characteristics

Cylinders and arrangement	8, 10, 12 cylinders in 90° V design
Operation mode	watercooled 4-stroke diesel engine exhaust turbocharger with intercooler boost pressure control with waste gate
Number of valves	4 valves per cylinder, replaceable
Fuel injection	Direct injection
Fuel system	Common Rail
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 electric	Electronic injection control Electronic engine monitoring including diagnostic unit
Exhaust gas status	IMO/MARPOL 73/78, SAV, BSO, 97/68/EC RCD 94/25/EC, EPA Tier 2 for private use only
Fuel	DMX fuel to ISO 8217, DIN EN 590

Dimensions D28 Common Rail		V8-750	V10-900	V12-1100
A-Overall width of engine	mm	1,227	1,267	1,307
B-Overall length of engine	mm	1,546	1,688	1,846
C-Overall height of engine	- flat oil pan	-	1,160	1,085
	- deep oil pan	1,114	1,238	1,188
D-Top of engine to crankshaft centre	mm	730	730	730
E-Length of engine from front end to edge of flywheel housing	mm	1,175	1,331	1,493
Average weight of engine ready for installation (dry)	kg	1,565	1,855	1,965

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

## MAN engines have outstanding qualities

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

## Technical data D28 Common Rail

Type of engine		V8-750	V10-900	V12-1100
Bore	mm	128	128	128
Stroke	mm	142	142	142
Displacement	l	14.62	18.27	21.93
Compression ratio		15.5:1	15.5:1	15.5:1
Rotation looking on flywheel		left	left	left
Flywheel housing		SAE 1	SAE 1	SAE 1
Maximum output <sup>1</sup>	kW (mhp)	552 (750)	662 (900)	809 (1 100)
Rated speed	rpm	2,100	2,100	2,100
Torque at rated speed	Nm	2,510	3,010	3,679
Maximum torque	Nm	2,740	3,342	4,113
at speed	rpm	1,400-1,800	1,400-1,800	1,300-1,900
Specific fuel consumption <sup>2</sup>	g/kWh	222	211	209
Fuel consumption <sup>2</sup>	l/h	146	167	202
Classifiable		-	-	-

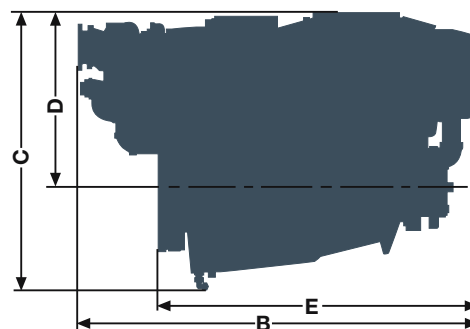
<sup>1</sup> The ratings are for medium duty operations. <sup>2</sup> Consumption at rated power.

### Definition of medium duty operation

Annual operating hours	≤ 3,000
Percentage of time at full load	≤ 50%
Average load application	≤ 70%
Particular operating conditions	no wide-open throttle below rated speed

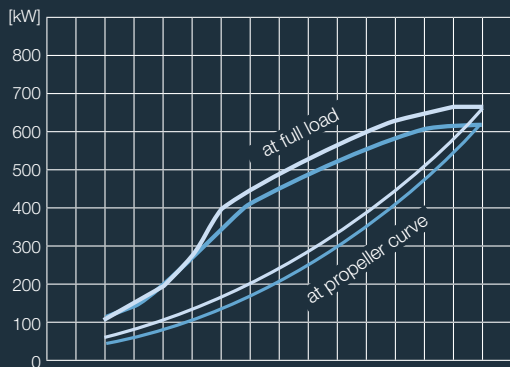
### Typical applications

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

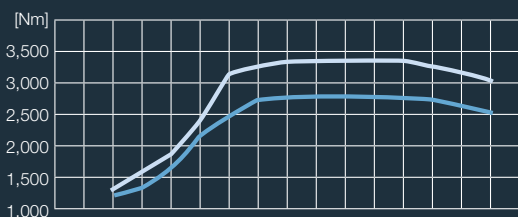


# Power charts V8, V10 and V12.

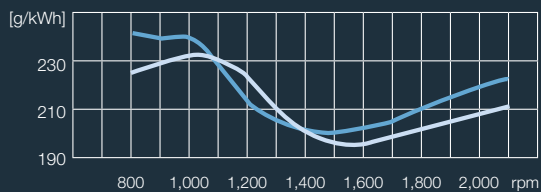
Power



Torque

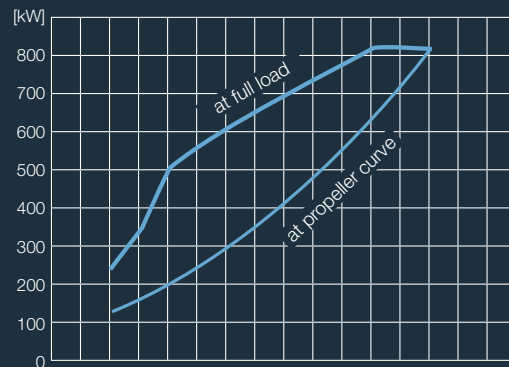


Specific fuel consumption (full load)

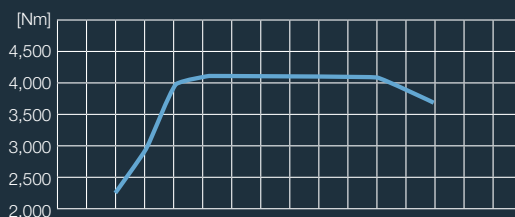


- V8-750 (552 kW, 2,100 rpm)
- V10-900 (662 kW, 2,100 rpm)

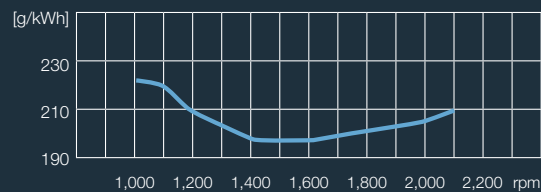
Power



Torque



Specific fuel consumption (full load)



- V12-1100 (809 kW, 2,100 rpm)

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