

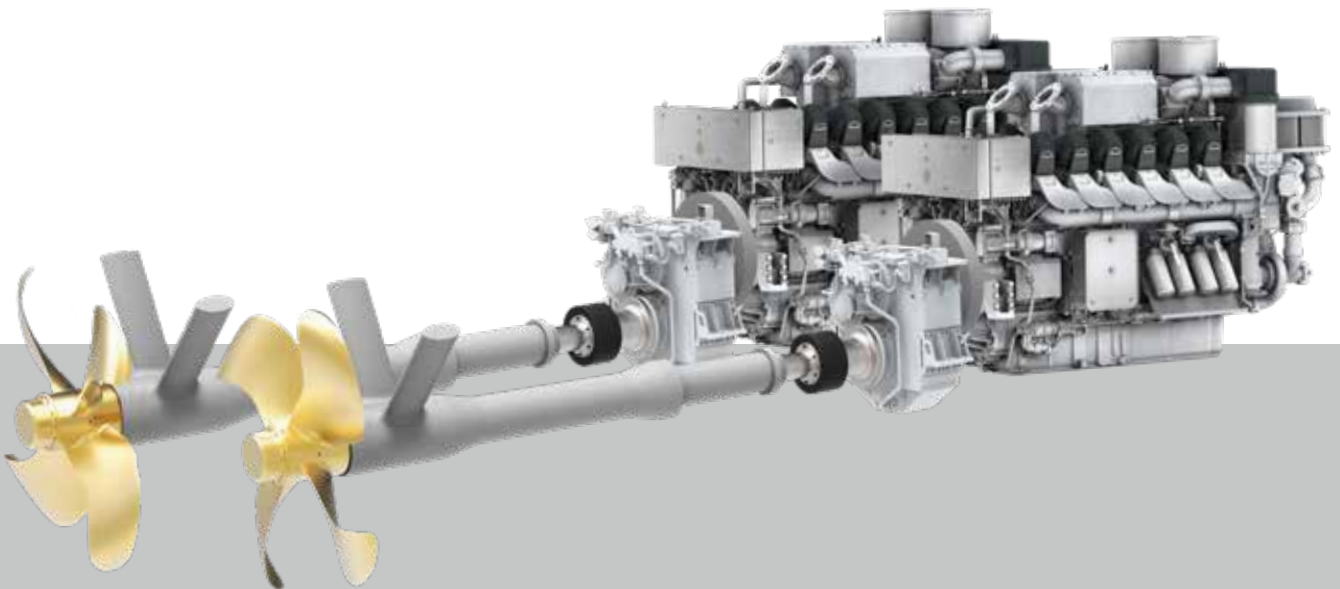
MAN Alpha FP propeller

MAN 175D

Our state-of-the-art high speed propulsion package: MAN Alpha FP propellers tailored with stern tubes, seals, tail shafts, intermediate shafts, couplings and the Alphatronic 3000 control system – optimized and fine-tuned for geared MAN 175D engines.

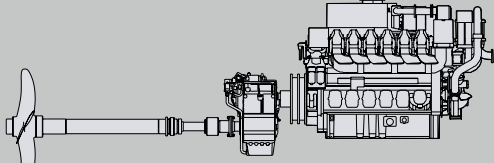
Benefits at a glance

- High efficiency and low noise
- Low operational costs
- Low installation costs
- Superior package value



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Engine Type	Output		Ship speeds [knots]							Engine Type	Output		Ship speeds [knots]									
	Power [kW]	RPM	Recommended propeller diameters [mm]								Power [kW]	RPM	Recommended propeller diameters [mm]									
			30	25	20	15	30	25	20				15									
12V175D	1,499	1,600	1,450	1,550	1,650	1,800	1,900	2,050	2,200	2,300	20V175D	2,500	1,600	1,600	1,750	1,900	1,975	2,075	2,200	2,350	2,500	
12V175D	1,499	1,800	1,400	1,500	1,650	1,750	1,800	1,850	1,950	2,100	20V175D	2,500	1,800	1,500	1,650	1,775	1,900	1,975	2,050	2,150	2,300	
12V175D	1,740	1,800	1,400	1,500	1,600	1,700	1,800	1,950	2,050	2,200	20V175D	2,900	1,800	1,550	1,700	1,850	1,950	2,100	2,150	2,200	2,350	
12V175D	1,860	1,800	1,400	1,550	1,650	1,750	1,850	1,950	2,050	2,200	20V175D	3,100	1,800	1,600	1,700	1,850	2,000	2,125	2,200	2,250	2,400	
12V175D	2,040	1,800	1,450	1,550	1,700	1,800	1,850	1,975	2,100	2,225	20V175D	3,400	1,800	1,625	1,750	1,900	2,025	2,150	2,275	2,325	2,400	
12V175D	2,220	1,900	1,450	1,550	1,700	1,850	2,000	2,150	2,250	2,300	20V175D	3,700	1,900	1,600	1,750	1,850	2,000	2,150	2,250	2,350	2,425	
12V175D	2,220	1,800	1,450	1,600	1,750	1,850	1,900	2,000	2,150	2,250	20V175D	3,700	1,800	1,650	1,775	1,925	2,050	2,200	2,325	2,400	2,450	
12V175D	2,400	2,000	1,400	1,525	1,650	1,775	1,900	1,950	2,000	2,100	20V175D	4,000	2,000	1,600	1,700	1,850	1,975	2,100	2,200	2,350	2,450	
16V175D	2,000	1,600	1,525	1,700	1,775	1,850	2,000	2,150	2,275	2,400	20V175D	4,400	2,000	1,650	1,800	1,900	2,000	2,200	2,250	2,400	2,500	
16V175D	2,000	1,800	1,425	1,550	1,700	1,775	1,850	1,975	2,100	2,200	Reduction gear ratio											
16V175D	2,320	1,800	1,500	1,600	1,750	1,875	1,925	2,025	2,150	2,275	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	Standard shaft diameter:			
16V175D	2,480	1,800	1,500	1,650	1,775	1,900	1,975	2,050	2,150	2,300	Ø 175 mm											
16V175D	2,720	1,800	1,525	1,675	1,800	1,950	2,050	2,100	2,200	2,350	Ø 205 mm											
16V175D	2,960	1,800	1,525	1,650	1,775	1,900	2,050	2,150	2,200	2,300	Ø 225 mm											
16V175D	2,960	1,800	1,550	1,700	1,850	1,975	2,100	2,175	2,200	2,350	Ø 245 mm											
16V175D	3,200	2,000	1,500	1,625	1,750	1,875	2,000	2,125	2,225	2,275	Ø 265 mm											
Reduction gear ratio			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5												

Open four-bladed propellers are optimized for a diesel-mechanical twin screw vessel operating at 85% engine rating. For specific engine versions and rating conditions, see the MAN 175D propulsion engine data sheet. The standard propeller program is dimensioned according to Lloyd's Register No Ice. Other blade numbers, ducted FPPs, tailor-made nozzles, shaft and stern tube systems for water/bio oil lubrication are available upon request.

Propulsion package heritage

Tradition, development and customization are the bedrock of MAN Energy Solution's excellence in integrated propulsion packages. The first propulsion package for a hot-bulb engine can be dated back to 1902.

The high speed package

The new MAN 175D based propulsion packages are characterized by all core elements – such as main engines, reduction gearboxes, shaft lines, stern tubes, propellers and propulsion control systems – being designed, matched, optimized and commissioned for integration into tailored solutions. Flanged FPP hub/shaft connection or conical shaft taper fitting can be opted as preferred.

Owners' operating benefits

- Optimal operating economy is ensured thanks to the optimized layout of engine, reduction

- gearbox, propeller, propulsion control and safety system
- Operating reliability, durability and predictable service intervals are assured by a tailored package solution
- One company supplying, testing and commissioning the package, together with the subsequent lifetime accumulation of performance and operating experience for the propulsion components.

Owners' service benefits

- Service documentation, maintenance programs and spare parts catalogues for the propulsion equipment – available from one point of contact – is the basis for efficient service routines and identification of parts
- One service organization addressing all propulsion plant support requirements via the worldwide network of MAN PrimeServ representatives, authorized workshops and service centers
- The content and coverage of tailored PrimeServ service and

- maintenance contracts range from basic parameter handling, service hour interval notifications and local half year propulsion system checks, to all scheduled services performed by MAN PrimeServ
- MAN PrimeServ Assist can also be included in a service agreement. Our experts can analyze your engine data and can provide technical support and maintenance advice.
- To ensure optimal operation, our MAN PrimeServ Academy offers complete propulsion system instruction and training for engineers, operators and service staff.

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