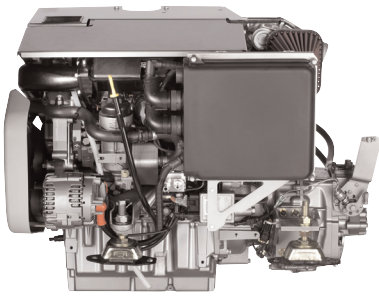


Yanmar type 4BY2-180

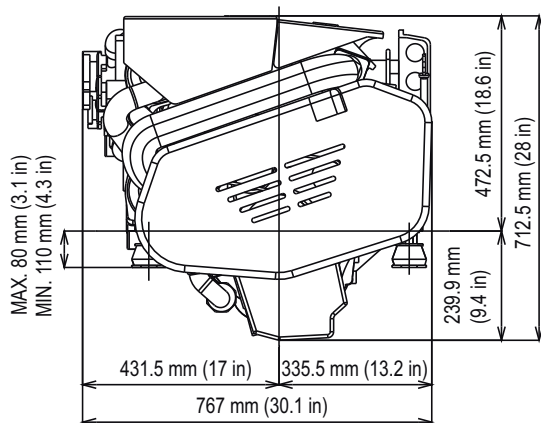


Configuration	In line, 4-stroke cycle, water cooled diesel engine
Maximum output at crankshaft *	132 kW (180 mhp) / 4000 rpm
Continuous rating output at crankshaft	102 kW (137 mhp) 3600 rpm
Displacement	1.995 L (122 cu in)
Bore x stroke	84 mm x 90 mm (3.31 in x 3.54 in)
Cylinders	4, Common Rail with vertical injectors
Combustion system	Direct injection
Aspiration	Wastegated, turbocharged with intercooler
Starting system	Electric starting 12 V - 2 kW
Alternator	12 V - 150 A
Cooling system	Fresh water cooling with heat exchanger, and sea water cooled charge air cooler
Lubrication system	Totally enclosed, forced lubricating system with pump
Can Bus	According to NMEA 2000 protocol
Direction of rotation (crankshaft)	Counter clockwise viewed from Flywheel side
Dry weight without gear	258 kg (569 lbs)
Environmental	EU RCD, US EPA Tier 2, BSO II & EMC
Engine mounting	Rubber type antivibration mounts

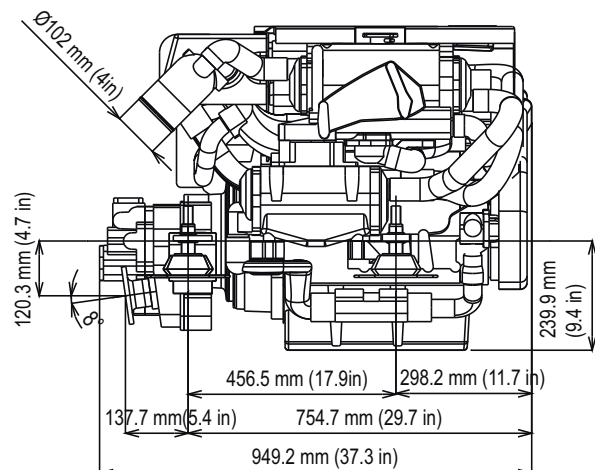
NOTE: Fuel condition: Density at 15°C = 0.84 g/cm³; 1kW = 1.3596 mhp = 1.3410 HP
 * Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665 : 2006)

Dimensions (For detailed line-drawings, please refer to our web-site: www.yanmarmarine.com or contact your supplier)

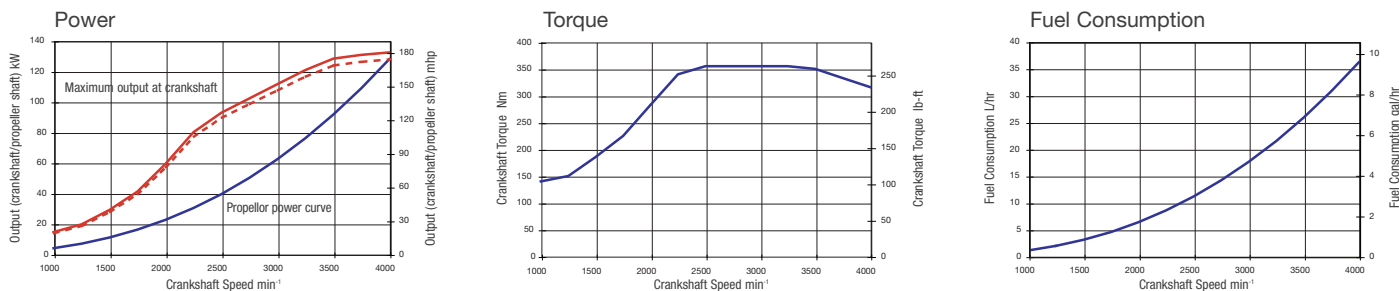
Front view



Right side view



Performance Curves (Output is according ISO 8665)

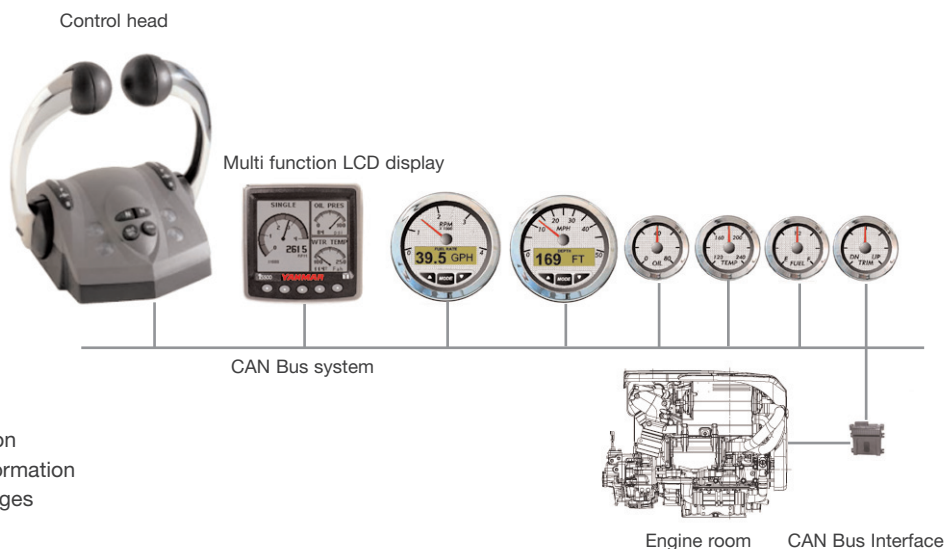


Marine gear (examples) **

Model	KMH40A				
Type	Mechanical multi-disc				
Dry weight	34 kg (75 lbs)				
Reduction ratio (fwd/asn)	1,24/1,24	1,53/1,53	2,04/2,04	2,45/2,45	2,62/2,62
Propeller speed (fwd/asn)	3226/3226	2614/2614	1961/1961	1633/1633	1527/1527
Direction of rotation (propeller shaft - fwd)	Clockwise & counter clockwise viewed from Flywheel side				
Dry weight engine with gear	292 kg (644 lbs)				

** Other marine gearboxes and configurations available upon request. Contact your local supplier for more information.

Instrument Panels



Multi function LCD display:

- engine information
- maintenance information
- diagnosis messages

Engine Accessories

Standard Engine Package System

- Alternator 12V - 150A single pole
- Protection cover for engine transmission
- Exhaust mixing Elbow (L-type)
- Flexible Mounts
- Glow plug controller and related parts

Optional Engine Package System

- High riser mixing elbow
- Exhaust side dipstick
- Electrical Gearshift
- Trolling

Electronic Control System

Standard Electronic Control

- Electronic Control Head
- LCD display
- Back-up throttle control system

Optional Electronic Control

- Various engine Monitoring gauges
- Various engine Control heads