



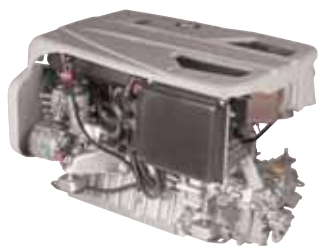
17- ANEXO III: MANUALES

Manual Yanmar

Manual Volvo

Yanmar type 6BY220

The Powerful Gem



Configuration	In line, 4-stroke cycle, water cooled diesel engine
Maximum output at crankshaft *	162 kW (220 mhp) / 4000 rpm
Continuous rating output at crankshaft	124 kW (167 mhp) 3600 rpm
Displacement	2.993 L (183 cu in)
Bore x stroke	84 mm x 90 mm (3.31 in x 3.54 in)
Cylinders	6, 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	Device net according to NMEA 2000 protocol
Direction of rotation (crankshaft)	Counter clockwise viewed from stern
Dry weight without gear	310 kg (683 lbs)
Environmental	EPA Tier 2, RCD, SAV, BSO. Meets the EU comprehensive emissions regulation 2006
Engine mounting	Rubber type antivibration mounts

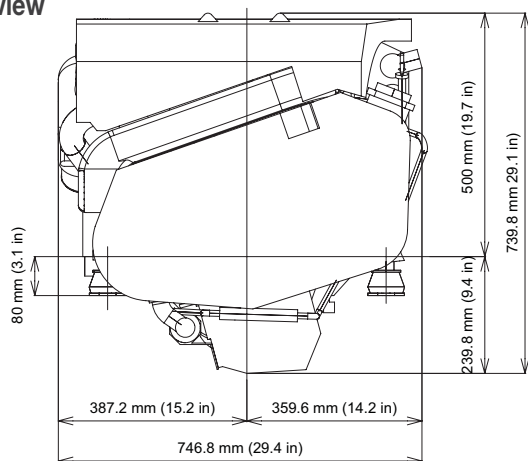
NOTE: Fuel condition: Density at 15°C = 0.84 g/cm³; 1kW = 1.3596 mhp = 1.3410 HP

* Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)

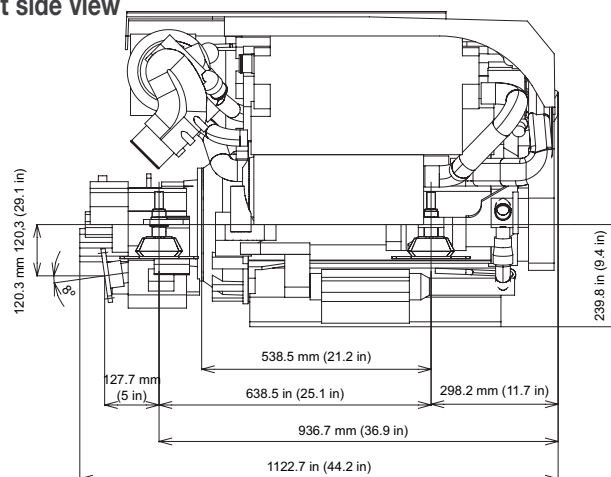
Technical data is according to ISO 8665 / 3046

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

Front view

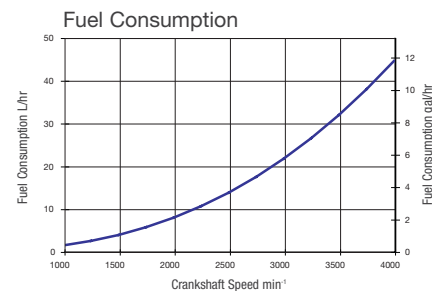
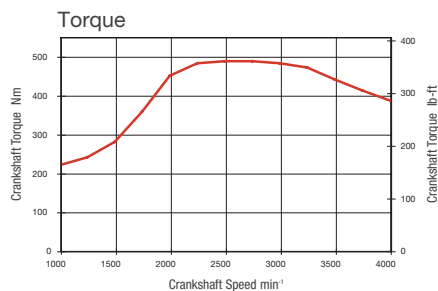
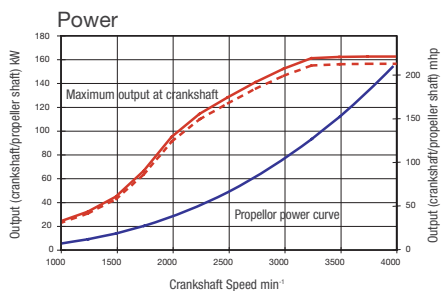


Right side view



6BY220 w/ KM40A marine gear

Performance Curves (Output is according ISO 8665)

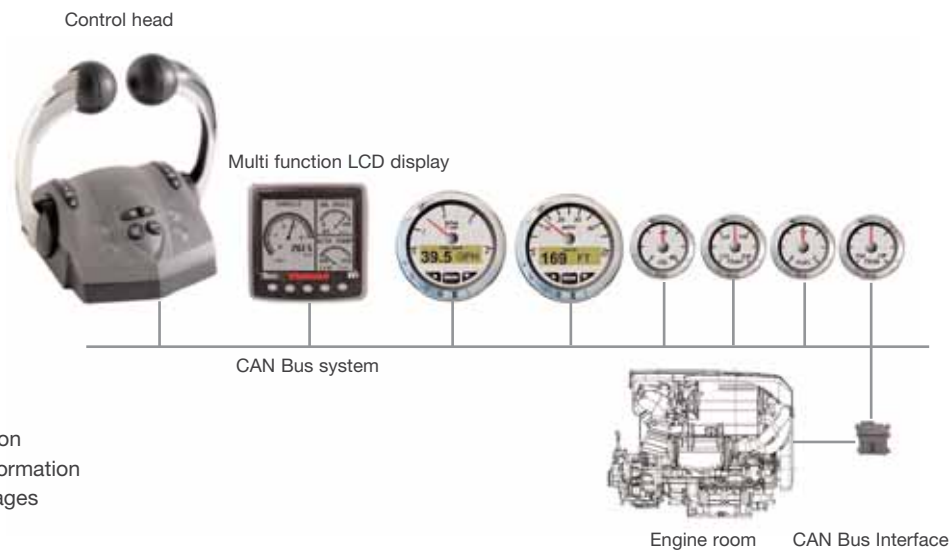


Marine gear (examples) **

Model	KMH40A			
Type	Mechanical multi-disc			
Dry weight	35 kg (77 lbs)			
Reduction ratio (fwd/asn)	1,24/1,24	1,53/1,53	2,04/2,04	2,45/2,45
Propeller speed (fwd/asn)	3226/3226	2614/2614	1961/1961	1633/1633
Direction of rotation (propeller shaft - fwd)	Clockwise & counter clockwise viewed from stern			
Dry weight engine with gear	345 kg (761 lbs)			
Length engine with gear	1064mm (42 in)			

** 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

Accessories

Standard Package

- Set of flexible mounts
- Alternator 12 V - 150 A single pole (24V is not available)
- Engine top and belt cover

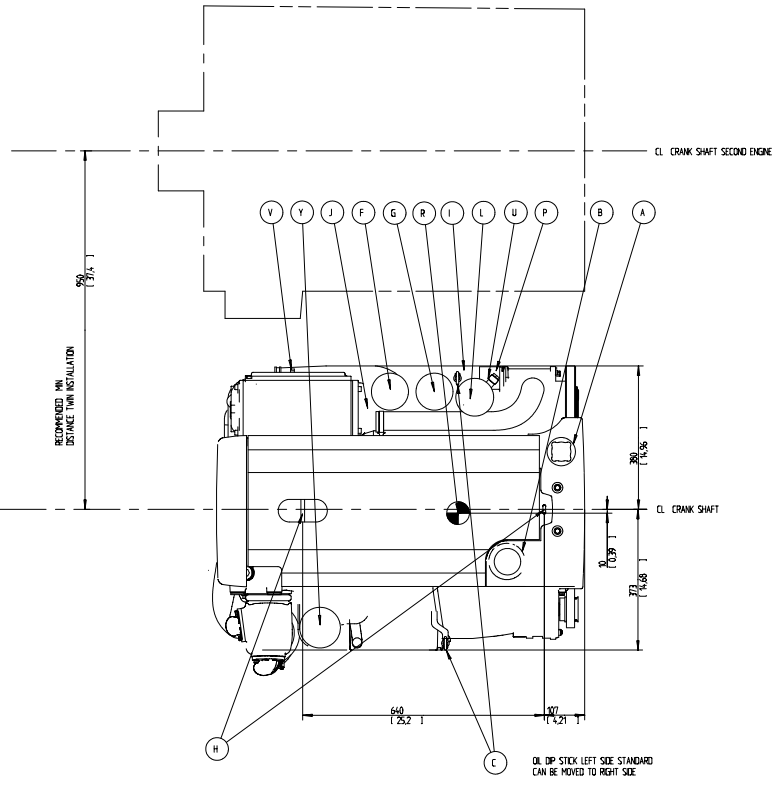
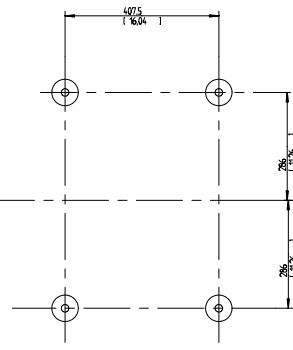
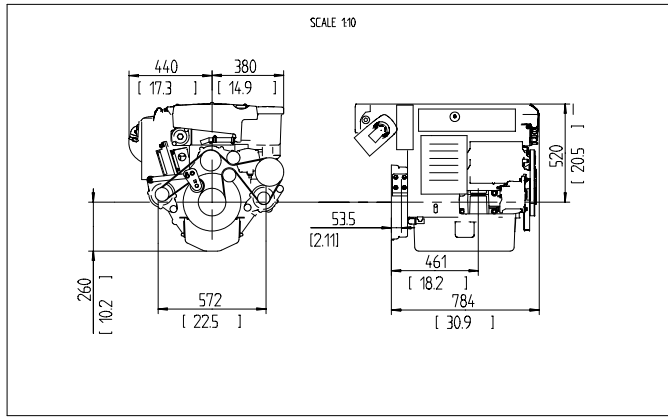
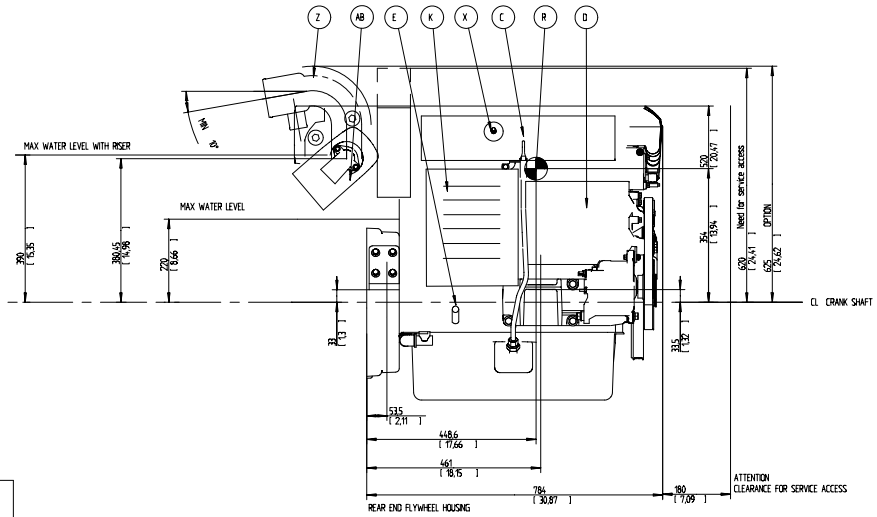
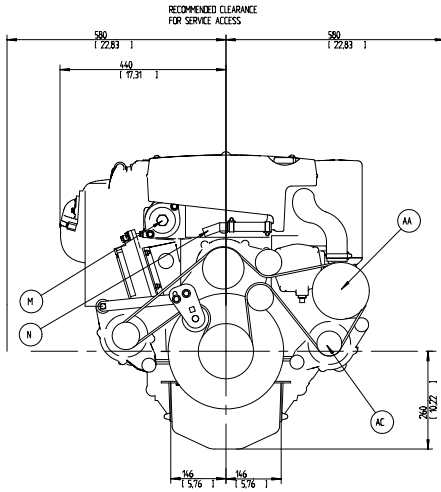
- Exhaust mixing elbow (L-type)

Optional

- High riser mixing elbow
- Exhaust side dipstick
- Glow plug controller and related parts

- Dual top mount Teleflex control head (throttle position sensor included)
- Teleflex CAN single and double top mount control heads
- Teleflex interface module for analogue sensors (engine oil pressure, fuel tank level, etc)
- Various gauges

- (A) WATER FILLER CAP, FRESH WATER
- (B) OIL FILLER CAP, ENGINE
- (C) OIL DIP STICK, ENGINE LEFT OR RIGHT SIDE MOUNTED
- (D) ECU CONTROL UNIT
- (E) OIL DRAIN (WITH PUMP), ENGINE Ø125
- (F) OIL FILTER MAIN
- (G) OIL FILTER BYPASS
- (H) LIFTING EYE
- (I) WATER DRAIN, FRESH WATER
- (J) WATER DRAIN, SEA WATER
- (K) AIR FILTER
- (L) FUEL FILTER
- (M) HOT WATER OUTLET
- (N) HOT WATER INLET
- (P) SEA WATER INLET Ø38
- (Q) OIL DIP STICK REVERSE GEAR
- (R) CENTRE OF GRAVITY
- (S) WATER INLET
- (T) OIL DRAIN REVERSE GEAR
- (U) FUEL INLET CONNECTION
- (V) FUEL RETURN TO TANK
- (X) ENGINE STOP
- (Y) CRANK CASE VENTILATION
- (Z) EXHAUST RISER Ø 102 (4") (OPTION)
- (AA) SEA WATER PUMP
- (AB) EXHAUST ELBOW Ø102 (4")
- (AC) EXTRA ALTERNATOR



SCALE 15

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	<p>DATE: 01/21</p> <p>ENGINE: DP-ENGINOS</p> <p>SCALE: 15</p>
<p>DRAWN BY: DIMENSION DRAWING</p> <p>DATE: 01/21</p> <p>3591349</p>	<p>1</p>