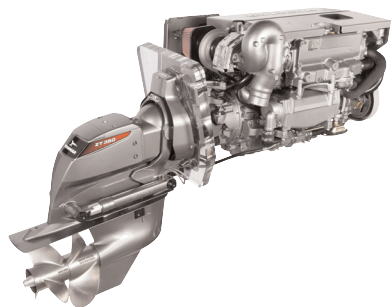


# Yanmar type 6BY2-220Z



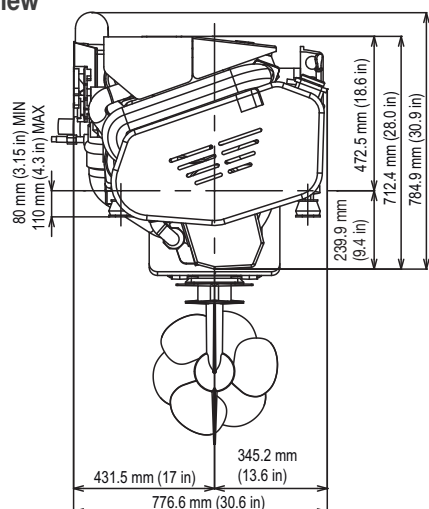
<b>Configuration</b>	In line, 4-stroke cycle, water cooled diesel engine
<b>Maximum output at crankshaft *</b>	162 kW ( 220 mhp) / 4000 rpm
<b>Continuous rating output at crankshaft</b>	124 kW (167 mhp) 3600 rpm
<b>Displacement</b>	2.993 L (183 cu in)
<b>Bore x stroke</b>	84 mm x 90 mm (3.31 in x 3.54 in)
<b>Cylinders</b>	6, Common Rail with vertical injectors
<b>Combustion system</b>	Direct injection
<b>Aspiration</b>	Wastegated, turbocharged with intercooler
<b>Starting system</b>	Electric starting 12 V - 2 kW
<b>Alternator</b>	12 V - 150 A
<b>Cooling system</b>	Fresh water cooling with heat exchanger, and sea water cooled charge air cooler
<b>Lubrication system</b>	Totally enclosed, forced lubricating system with pump
<b>Can Bus</b>	According to NMEA 2000 protocol
<b>Direction of rotation (crankshaft)</b>	Counter clockwise viewed from Flywheel side
<b>Dry weight without sterndrive</b>	315 kg (694 lbs)
<b>Environmental</b>	EU RCD, US EPA Tier 2, BSO II & EMC
<b>Engine mounting</b>	Rubber type antivibration mounts

NOTE: Fuel condition: Density at 15°C = 0.84 g/cm<sup>3</sup>; 1kW = 1.3596 mhp = 1.3410 HP

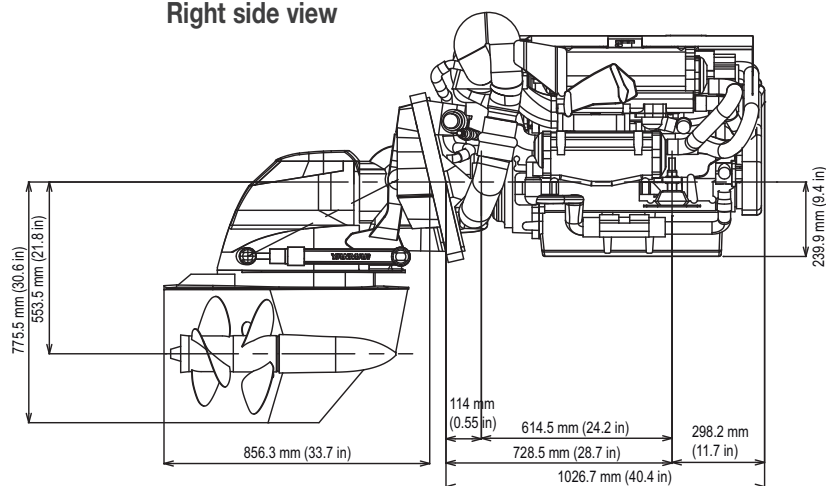
\* Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665 : 2006)

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

## Front view

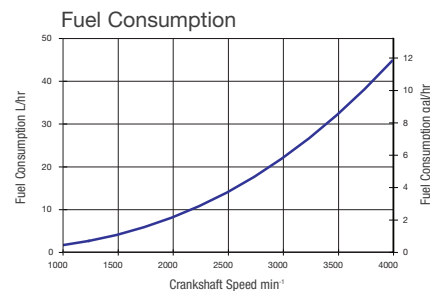
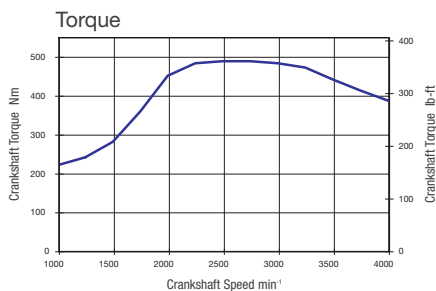
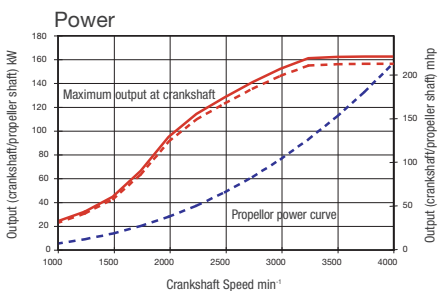


## Right side view



6BY2-220Z with Yanmar Sterndrive ZT350

## Performance Curves (Output is according ISO 8665)



## Yanmar sterndrive set Engine

Model	Yanmar Sterndrive ZT350			
Type	ZT350			
Dry weight with propellers	112 kg (247 lbs)			
Reduction ratio (fwd/asn)	1.65/1.65	1.78/1.78	1.97/1.97	2.18/2.18
Propeller speed (fwd/asn)	2424/2424	2247/2247	2030/2030	1835/1835
Direction of rotation (propeller shaft - fwd)	Clockwise & counter clockwise viewed from flywheel side			
Dry weight engine with sterndrive	427 kg (941 lbs)			

1, Inner and outer transom surface must be parallel within 3mm in area covered by transom plates and remain within transom thickness limits.

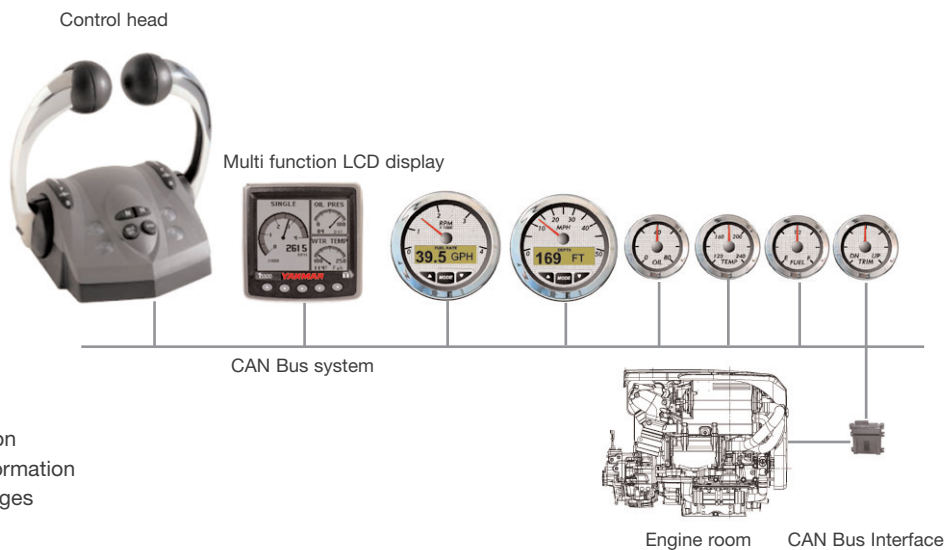
2, Area covered by gimbal housing assembly must be flat to within 1.6mm.

3, Area covered by inner transom plate must be flat to within 3.2mm

4, Transom angle: 13° to 16°

5, Also available with: BravoX-1 and BravoX-2. Contact your local supplier for available configurations

## 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
- High riser mixing elbow
- Flexible Mounts
- Glow plug controller and related parts

### Optional Engine Package System

- Exhaust side dipstick
- Electrical Gearshift

## Electronic Control System

### Standard Electronic Control

- Electronic Control Head
- LCD display

### Optional Electronic Control

- Various engine Monitoring gauges
- Various engine Control heads