

**4BY3-150Z / 4BY3-180Z**

Configuration	4-stroke, water-cooled diesel engine		
Maximum output at crankshaft	110 kW@4000 rpm	[150 mhp@4000 rpm]	
	132 kW@4000 rpm	[180 mhp@4000 rpm]	
Displacement	1.995 ltr	[122 cu in]	
Bore x stroke	84 mm x 90 mm	[3.31 in x 3.54 in]	
Cylinders	4 in line		
Combustion system	Direct injection with Bosch Common Rail System		
Aspiration	Turbocharger + charge air cooler		
Low Idle rpm	650 - 950 rpm	[adjustable]	
Electric system	12V		
Alternator	12V - 150A		
Start-assist	Glow-plug system		
Cooling system	Fresh water cooling by centrifugal fresh water pump		
	Sea water cooling by rubber impeller seawater pump		
Lubrication system	Enclosed, forced lubricating system		
Direction of rotation [crankshaft]	Counterclockwise viewed from flywheel side		
Dry weight without gear	269 kg	[593 lbs]	
Environmental	EU: RCD	BSO II	EMC
	US: EPA Tier3		
Engine mounting	Rubber type flexible mounting		

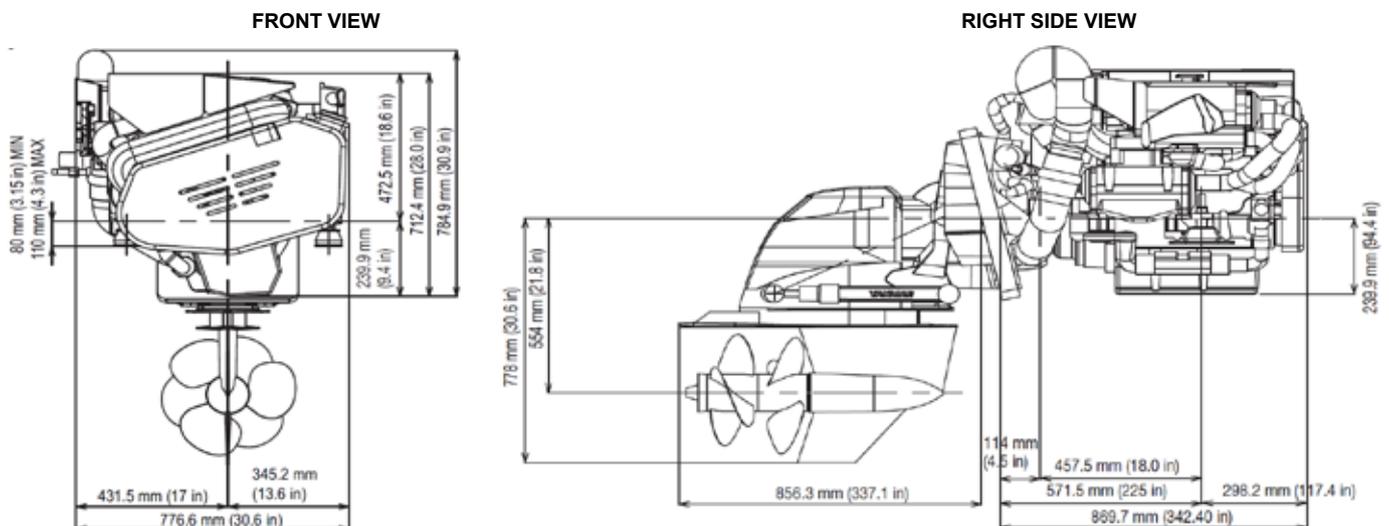
NOTE:

Fuel condition: Density at 15°C = 0.84 g/cm<sup>3</sup>

Fuel temperature 40°C at the inlet of the fuel injection pump [ISO 8665: 2006]

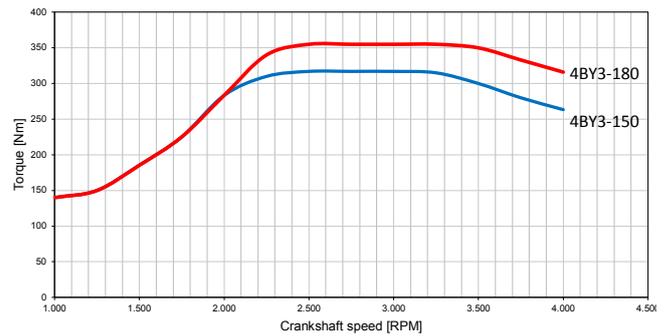
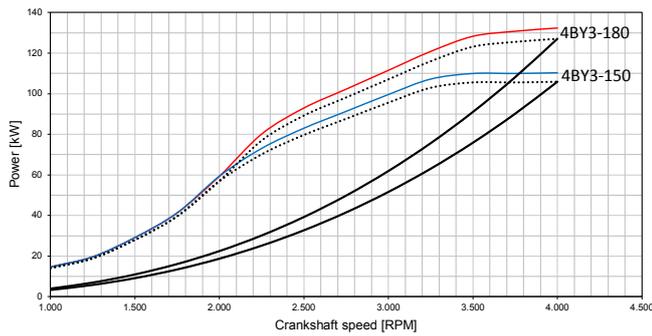
Technical data is according to ISO 8665: 2006/3046-1

DIMENSIONS



6BY3-260Z with ZT370 Sterndrive

## PERFORMANCE CURVES



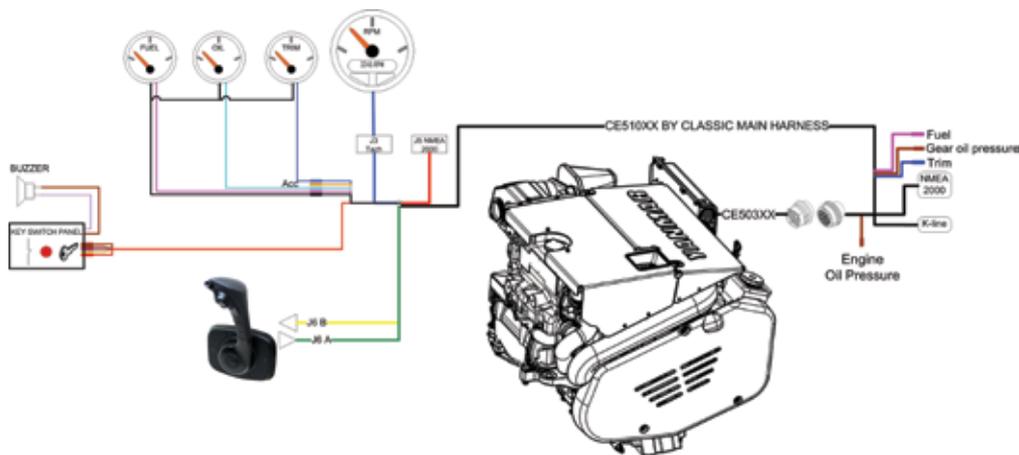
## DRIVE SYSTEMS

Model	ZT370 Steerable Z-drive with duo-propeller			
Type	Hydraulic Actuated Multi-friction disc Sterndrive			
Dry weight	69 kg [drive] / 46 kg [Transom + trim-pump] / 15 kg [Propellers]			
Reduction ratio [fwd/asn]	1.65	1.78	1.65	2.18
Propeller speed [fwd/asn]	2424	2247	2424	1835
Direction of rotation	Clockwise [rear propeller] / Counterclockwise [front propeller]			
Lub oil specifications	API class: GL5 SAE grade #80W90 or QuickSilver High Performance Gearlube			
Dry weight - engine & gear	388 kg			

Model	Mercruiser Bravo 1 Steerable Z-drive with single propeller			
Type	Mechanical cone-clutch type Sterndrive			
Dry weight	59 kg [drive] / 48 kg [Transom + trim-pump] / 8 kg [Propeller]			
Reduction ratio [fwd/asn]	1.36	1.5	1.65	
Propeller speed [fwd/asn]	2424	2667	2424	
Direction of rotation	Clockwise & Counterclockwise viewed from the stern			
Lub oil specifications	Mercury High Performance Gearlube			
Dry weight - engine & gear	373 kg			

- 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 1.6 mm.
- 3 - Area covered by inner transom plate must be flat to within 3.2 mm.
- 4 - Transom angle: 13° to 16°.
- 5 - Also available with Bravo X-2 drive's, please contact your local supplier for support.

## CONTROL SYSTEM "CLASSIC"



## ENGINE ACCESORIES

### Standard engine package

- Single pole, 150A Alternator
- High-riser mixing exhaust elbow
- Automatic glow-plug controller
- Flexible engine mounting
- Analogue throttle with redundancy function

### Optional accessories

- Through transom exhaust
- Exhaust-side 2<sup>nd</sup> dipstick
- Electric gearshift
- NMEA2000 digital display
- Various monitoring gauges
- Full NMEA2000 electronic control system [CAN-bus]

### Propellers

- Propeller size  
20" - 22" - 24" - 26" - 28"
- Propellers with cup  
24" - 26"

NOTE: All data subject to change without notice. Text and illustrations are not binding.