



MARINE DIESEL ENGINES

4BY3-150Z / 4BY3-180Z Series

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	263 kg	[580 lbs]	
Environmental	EU: RCD	BSO II	EMC
	US: EPA Tier3		
Engine mounting	Rubber type flexible mounting		

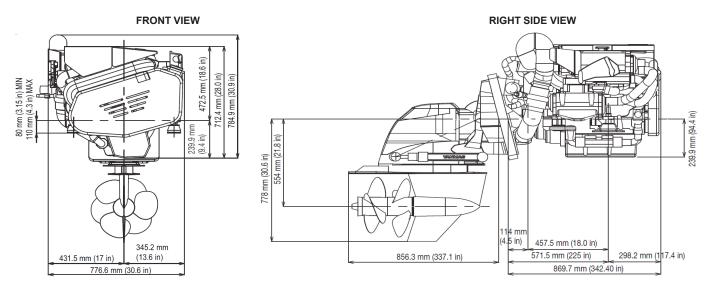
NOTE:

Fuel condition: Density at 15°C = 0.84 g/cm³

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

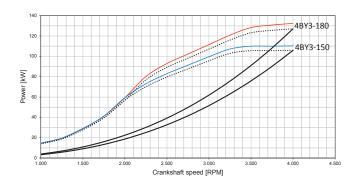


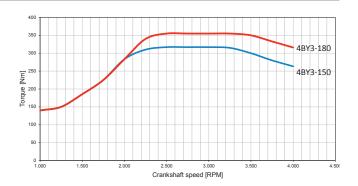
6BY3-260Z with ZT370 Sterndrive





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	1.97	2.18	
Propeller speed [fwd/asn]	2424	2247	2030	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	378 kg				

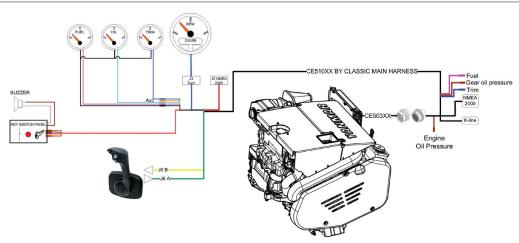
Model	Mercruiser Bravo 1 Steerable Z-drive with single propeller			
Туре	Mechanical cone-clutch type Sterndrive			
Dry weight	59 kg [drive] / 48 kg [Transom + trim-pump] / 8 kg [Propeller]			
Reduction ratio [fwd/asn]	1.36	1.5	1.65	
Propeller speed [fwd/asn]	2424	2667	2424	
Direction of rotation	Clockwise & Counterclockwise viewed from the stern			
Lub oil specifications	Mercury High Performance Gearlube			
Dry weight - engine & gear	370 kg			

- Inner and outer transom surface must be parallel within 3mm in area covered by transom plates and remain within transom thickness limits.
 Area covered by gimbal housing assembly must be flat to within 1.6 mm.
 Area covered by inner transom plate must be flat to within 3.2 mm.

- Transon angle: 13° to 16°.

 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 accesories

- Through transom exhaust
- Exhaust-side 2nd 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.