

MARINE DIESEL ENGINES

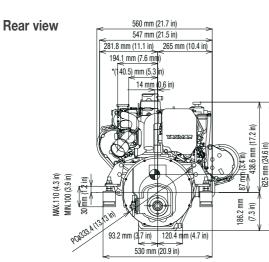


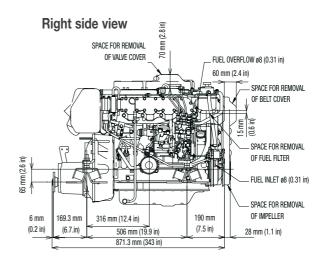
4JH5E Series

Configuration	4-stroke, vertical, water cooled diesel engine						
Maximum output at crankshaft	* 39.6 kW (53,1 mhp) / 3000 rpm						
Continuous rating output at crankshaft	36.0 kW (48,3 mhp) / 2907 rpm						
Displacement	2.19 L (134 cu in)						
Bore x stroke	88 mm x 90 mm (3.46 in x 3.54 in)						
Cylinders	4 in line						
Combustion system	Direct injection						
Aspiration	Natural aspiration						
Starting system	Electric starting 12 V						
Alternator	12 V - 80 A						
Cooling system	Fresh water cooling by centrifugal water pump and rubber impeller sea water pump						
Lubrication system	Enclosed, forced lubricating system						
Direction of rotation (crankshaft)	Counter clockwise viewed from flywheel side						
Dry weight without gear	201 kg (443 lbs)						
Environmental	EU RCD, EPA TIER 3, EMC						
Engine mounting	Rubber type flexible mounts						

NOTE: Fuel condition: Density at 15° C = 0.84 g/cm ³ Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665:2006)

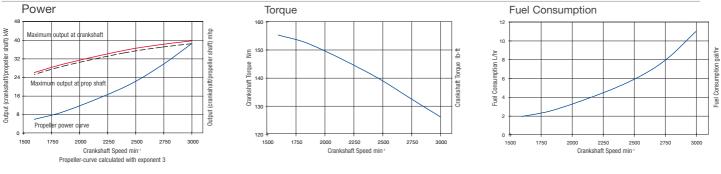
Dimensions (For detailed line-drawings, please refer to our web-site: www.yanmarmarine.com or contact your supplier)







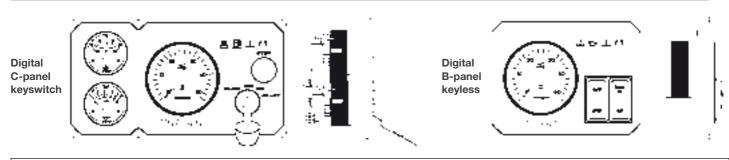
Performance Curves (Output is according ISO 8665)



Marine Gears/Drive

Model	KM35P		KM35A2 (down angle: 7deg)		KM4A1 (down angle: 7deg)			ZF30M		Saildrive SD50
Туре	Mechanical clone clutch		Mechanical cone clutch		Mechanical cone clutch			Mechanical multy disc		Mechanical cone clutch
Dry weight	12 kg (27 lbs)		13 kg (29 lbs)		29 kg (64 lbs)			28 kg (61 lbs)		40 kg (88 lbs)
Reduction ratio (fwd/asn)	2.36/3.16	2.61/3.16	2.33/3.06	2.64/3.06	1.47/1.47	2.14/2.14	2.63/2.63	2.15/2.64	2.70/2.64	2.32/2.32
Propeller speed(fwd/asn)	1271/949	1149/949	1288/980	1136/980	2041/2041	1402/1402	1141/1141	1395/1136	1111/1136	1293/1293
Direction of rotation	Clockwise		Clockwise		Clockwise			Clockwise		Clockwise & counter clockwise
(propeller shaft - fwd)	viewed from stern		viewed from stern		viewed from stern			viewed from stern		viewed from stern
Dry weight engine	213 kg (469.5 lbs)		214 kg (471.7 lbs)		214 kg (471.7 lbs)			229 kg (505 lbs)		241 kg (531 lbs)
and gear/drive										
Length engine	871 mm (34.3 in)		864 mm (34.0 in)		922 mm (36.3 in)			950 mm (37.4 in)		1067 mm (42.0 in)
and gear/drive										

Instrument Panels



Digital B-panel and C-panel with keyswitch

Digital B-panel and C-panel keyless

Keyswitch	Sealed rocker switch for engine on/start				
Stop Button	Sealed rocker switch for glow function				
Tachometer with hour	Tachometer with hour				
Indication (display)	Indication (display)				
Audible alarm	Audible alarm				
Alarm lights	Alarm lights				
Battery low charge	Battery low charge				
Coolant High temperature	Coolant High temperature				
Lubricating oil low pressure	Lubricating oil low pressure				
Water in saildrive seal	Water in saildrive seal				
Extra for all C-panels: Coolant temperature gauge, Lubricating oil pressure gauge					

Accessories

- **Standard Features**
 - Set of flexible engine mounts
 - Exhaust mixing elbow (L-type)
 - V-belt safety cover
 - Fresh water expansion tank
 Alternator 12 V 80 A

 - Electric stop solenoid
 - Operation manual

Optional

- Digital B panel keyless
 Digital C panel with key switch or key less
 Second Alternator 12V80A, 12V130A or 24V75A
 High riser mixing Elbow (Instead of L-Elbow)
 4M, 6M, 10M Extension Wire harness

- · Hot water kit with cocks
- · Second station harness