

## J-444TA1 (ST3), J-444TA2 (ST3) & J-444TA3 (ST2)

Silniki Mermaid J444- niezwykle popularne na wodach śródlądowych, znajdują zastosowanie zarówno dla celów komeryjnych jak i rekreacyjnych.

Informacje opisane poniżej odnoszą się do następujących modeli Mermaid J-444TA1 (ST3), J- 444TA2 (ST3) & J-444TA3 (ST2).

### BASE ENGINE SPECIFICATIONS

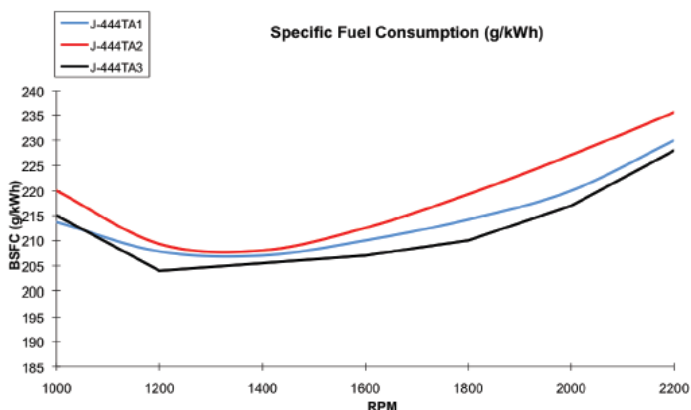
Description	J-444TA1	J-444TA2	J-444TA3
Number of cylinders	4		
Direction of rotation (facing flywheel)	Counter Clockwise		
Bore (mm)	103		
Stroke (mm)	132		
Compression ratio	17.2:1	17.2:1	17.5:1
Displacement (Litres)	4.4		
Rated Power (HP / kW)	100 / 74	114 / 85	125 / 93
Rated Speed (rpm)	2200		
Maximum Torque (Nm)	440	440	525
Maximum Torque Speed (rpm)	1300		
Minimum SFC at full load (g/kWh)	207	208	205
Noise at maximum rating (dBA @ 1 Metre)	89		
Dry weight (Bobtailed) (kg)	577	577	577

### LUBRICATION SYSTEM

Description	J-444TA1	J-444TA2	J-444TA3
Lubricating oil pressure (bar)	4.9	4.9	4.6
Maximum oil temperature: continuous (°C)	125		
Maximum oil temperature: intermittent (°C)	135		
Engine angularity limits (continuous operation)			
Maximum front up or front down	35°		
Maximum lateral right or left	35°		
Total system capacity inc pipes & filter	14 Litres		
Minimum recommended oil grade (API)	CH4	CH4	CF4
Oil filter maintenance interval (Hours)	500		
Oil consumption at maximum rating	0.03% of fuel consumption	0.03% of fuel consumption	0.1% of fuel consumption

### FUEL SYSTEM

Description	J-444TA1	J-444TA2	J-444TA3
Injection system	Rotary Mechanical (Delphi)		
Maximum fuel intake restriction (mbar)	150	150	100
Minimum fuel feed line bore (mm)	8		
Minimum fuel return line bore (mm)	6		
Maximum fuel intake temperature (°C)	50		
Engine pre filter	30 Micron		
Engine main filter	5 Micron		
Emissions level	EU St3A NRMM	EU St3A NRMM	EU St2 NRMM



### INTAKE SYSTEM

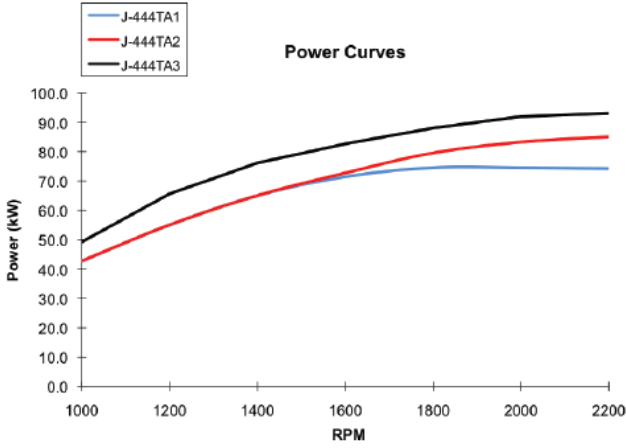
Description	J-444TA1	J-444TA2	J-444TA3
Max allowable restriction (clean filter) (mbar)	50		
Max allowable restriction (dirty filter) (mbar)	80	80	85
Air required for combustion at rated speed	122g/s	135g/s	153g/s
Turbocharging pressure at rated speed	1.1bar	1.25bar	1.2bar
Turbocharged air max temp at engine inlet	131°C	140°C	131°C
Cooled charge air at inlet manifold	60°C	60°C	60°C
Intercooler system max pressure drop	125mbar	125mbar	125mbar

### EXHAUST SYSTEM

Description	J-444TA1	J-444TA2	J-444TA3
Max allowable restriction (clean filter) (mbar)	Dry manifold & turbo with thermal shield		
Max allowable back pressure (mbar)	150		
Max exhaust temp at rated speed (°C)	480	545	560
Exhaust flow at maximum output (kg/h)	457	504	580
Water cooled exhaust connection diameter	89mm / 3.5"		
Dry exhaust connection size	N/A		

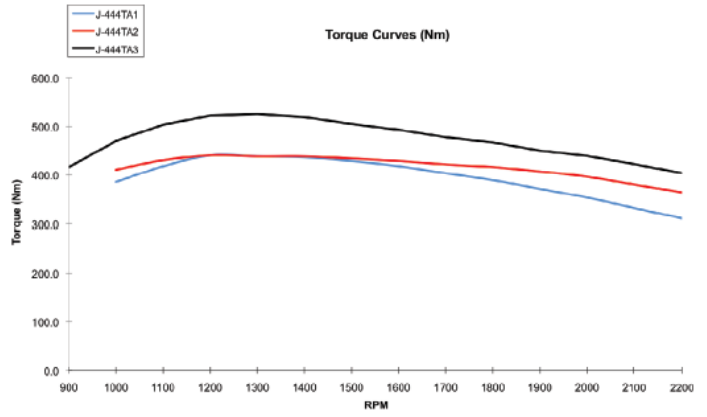
## POWER CURVES

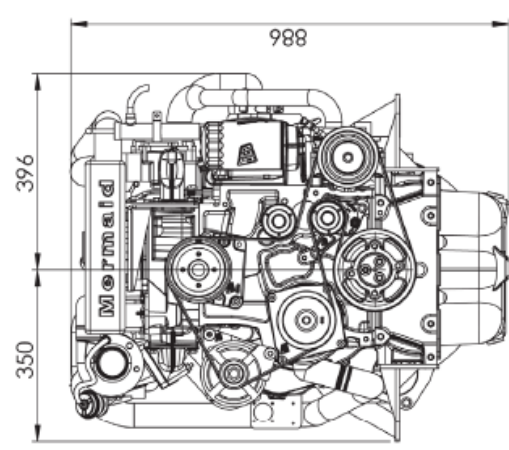
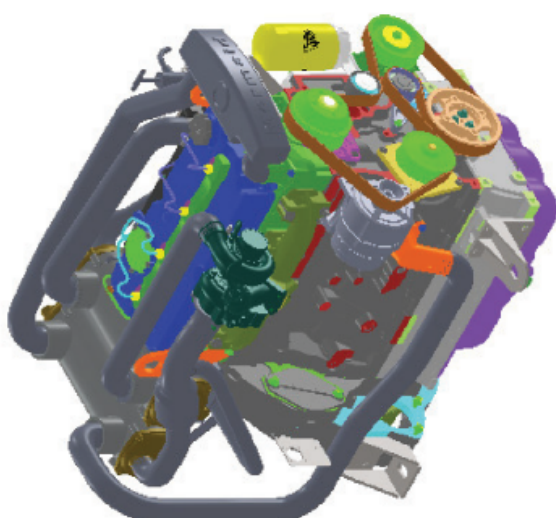
Performance shown is to ISO Fuel Stop Power (ISO14396) after 50 hours running without fan.



## TORQUE CURVES

Performance shown is to ISO Fuel Stop Power (ISO14396) after 50 hours running without fan.



5	6	7	8	A	B	C	D	E
								
								
<b>REVISIONS</b> THIRD ANGLE ALL DIMENSION IN mm DEBUR AND BREAK SHARP EDGES UNLESS OTHERWISE STATED FINISH TO SURFACE DRAWING FINISH TO ASSEMBLY MACHINE FACES AND SURFACE FINISH TO SURFACE UNLESS OTHERWISE STATED			<b>REVISIONS</b> MATERIAL: Natural DRAWN: M. Vainny CHECKED: J. Cooper DATE: 06/04/2013 SCALE: 1:100			<b>DESCRIPTION</b> Mermaid Marine J444 GAD DWG NO. J444 TCA SHEET NO. A3 REV.		
PAY SPECIAL ATTENTION TO SHEET SCALE, IT MAY AFFECT ACTUAL MODEL SCALE WHEN IMPORTED INTO DIFFERENT SOFTWARE.								
GENERAL TOLERANCES UNLESS OTHERWISE STATED FABRICATED: ±0.10 (±0.005) MACHINED: ±0.25 (±0.010) ANGULAR: ±0.30 HOLES TO BE WITHIN CLASS (0.05) OF TILT POSITION SCREW THREAD CLASS (2A) INTERNAL: 4H								
WEIGHT: 1020.34kg								

