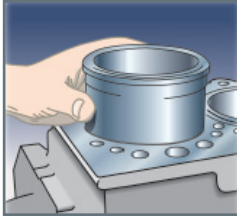


Engine Block

- Six cylinder, in-line, four cycle, liquid cooled, overhead cam, four valve, marine diesel with a heavy-duty, cast iron, industrial-grade engine block.
- Replaceable, wet type cylinder liners are hardened and precision machined for long life. Engine is rebuildable to original factory specifications.
- Liquid cooled cylinder liner top reduces temperatures by up to 130°F (72°C) for durability and head gasket life.
- Balanced, forged crankshaft with induction hardened journals for long life.
- Replaceable valve seats and guides.
- Four valves per cylinder increase air flow and allow unit fuel injector to be placed in the center of the cylinder for an optimal fuel spray pattern. Electronic fuel valve for precise fuel delivery.



- Overhead camshaft reduces the valve train parts and improves performance. Camshaft is gear driven; no chains or timing belt to worry about. Large camshaft journals and bearings for long life. Large roller cam followers.
- Cast aluminum, "floating" valve cover blocks valve train noise. Cover is removable with three bolts for quick service access.
- Articulated pistons with high strength steel crown and aluminum skirt for long life under high loads.
- Torsional crankshaft vibration damper.
- SAE 1 flywheel housing is standard.

Electronic Fuel Injection System

- Electronic engine control unit includes fuel temperature compensation
- Engine diagnostics, monitors critical engine functions.

- Electronically controlled unit injectors provide precise fuel delivery with variable timing for excellent fuel economy and performance. Pilot injection reduces cold start smoke and noise.
- Camshaft driven, gear type fuel pump.
- High capacity fuel filter with air bleed, drain, manual fuel priming pump and water sensor.



Cooling System

- Cooling system available in heat exchanger or keel cooled configuration.
- Two thermostats for safety and quicker warm-ups.
- Cast-iron exhaust manifold has double pass jacket water flow for even temperature control, fast warm-up and no hot spots. Manifold is in the main, full flow, jacket water circuit.
- Gear driven, coolant circulation pump.

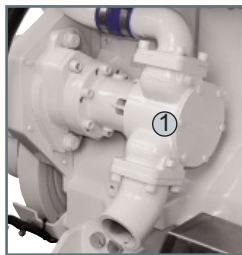


- Large, cast expansion tank. Easy coolant fill. No welds to break.
- Electronically controlled, unit type, fuel injectors protected by valve cover. Precise fuel injection, improved fuel economy and low emissions.
- Closed loop crankcase vent keeps oil vapors inside engine.
- Air filter silences intake.
- Cupro-nickel engine cooling heat exchanger.
- Cast bronze and stainless steel seawater piping.
- Cupro-nickel gear oil cooler
- Jacket water aftercooler for increased output.
- 24 volt starter placed high and dry.
- Gear driven, SAE A, 9 tooth auxiliary drive provides up to 75 foot pounds of torque to power hydraulic pumps.
- Electronic controls. Water resistant module protects engine control unit for electronic fuel injection and ESP engine system profiler.
- Beltguard for operator safety.
- Gear driven, bronze and stainless seawater pump. No belt. Easy impeller change.
- Optional secondary oil fill

L1276A2 Non Service Side

Make a good engine block into a great marine engine.

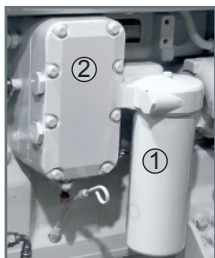
- Heat exchanger cooling includes: (1) Gear driven, flexible impeller seawater pump; no belts to replace. (2) Easy to clean, tube-type heat exchanger is cupro-nickel for long life. (3) Cast expansion tank. No welds to break. Brass filler neck. (4) Bronze and stainless steel seawater piping.



- Cupro-nickel transmission oil cooler (5) uses thermostatically controlled engine coolant for constant gear temperature to prevent condensation.
- Zinc anodes for electrolysis protection.

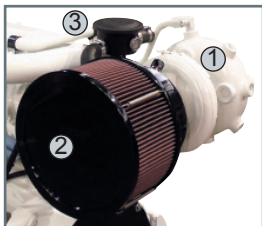
Lubrication System

- (1) Spin-on oil filter has a full flow and a bypass element to trap both small and large contaminants and water.
- (2) Plate-type, full flow oil cooler uses engine coolant to reduce oil temperature and thermal breakdown.
- 500 hour oil change when using specified oil and fuel.
- Multiple oil fill and dip stick locations provide either side service access.
- Positive displacement gear-type oil pump.
- Oil spray cooling reduces piston crown temperature for longer life.
- Large capacity oil pan.



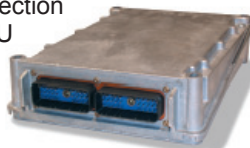
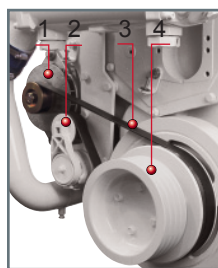
Air System

- US EPA Tier II and IMO exhaust emissions compliant.
- Turbocharged and aftercooled for increased power and performance.
- Turbocharger turbine housing (1) is jacket water cooled for safety.
- Dry air filter (2) protects engine and silences intake noise.
- Air-Sep® closed crankcase vent (3) returns oil vapor to engine oil pan for a clean engine room.
- Two pass, jacket water cooled, charge air aftercooler. Using thermostatically controlled jacket-water instead of seawater normalizes combustion air temperatures to avoid over cooling under light load conditions.



ESP and DC Electrical System

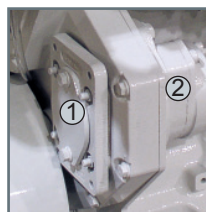
- 24 volt, standard ground electrical system with 24-volt / 75-amp alternator (1) and starter.
- Eight groove poly-vee drive belt (3) with self tensioner (2) powers the alternator.
- 4 groove pulley (4) is optional.
- The Engine Control Unit (ECU) is housed in a water resistant module. It controls the electronic fuel injection system. The ECU supplies a SAE J1939 engine information data stream that is accessible through a CANbus plug for the Electronic System Profiler (ESP) monitor screen. Service diagnostics and error codes are automatically stored.



- Instrument panel has tachometer, DC volt meter, hour meter, coolant temperature and oil pressure gauges, light rheostat, stop button and key switch. Warning lights and audible alarm for low oil pressure and high water temperature.
- Engine and panel are prewired. 20-foot wire harness with plug-ins is standard.

Special Equipment

- Alternator belt guard protects operator.
- Sparkling white IMRON® polyurethane paint protection. Excellent service visibility.
- Operator's and parts manuals.
- Auxiliary Drives: Gear driven, SAE A, 9 tooth spline auxiliary drive (1) provides up to 75 foot lbs of torque to run hydraulic pumps. On keel cooled engines only, an additional gear driven, SAE B, 13 tooth spline, auxiliary drive (2) provides up to 131 foot lbs of torque. **Note:** if both drives are used the maximum combined total torque available is 131 ft lbs.



L1276A2 Accessories and Options

Use these components to make your Luger into an integrated power system that fits your vessel's special requirements.



- Flybridge and auxiliary instrument panels with wire harness plug-ins are easy to install.
- 40 and 60 foot wiring harness extensions.

- High output primary alternators: 24V/100 A or 24V/175 A.
- Second alternator: 24V/75A or 12V/140A
- DC electrical systems. 24 V isolated ground. 12V isolated or standard ground.



- Wet Exhaust: 0-15° and 15-75° from vertical, 6" and 8" stainless steel wet exhaust elbows.



- Dry exhaust: 5" and 6" dry exhaust elbows. 5" x 24" and 6" x 24" stainless steel exhaust compensators. 5" x 24" and 6" x 24" stainless steel exhaust flex. Turbo outlet weld flange.

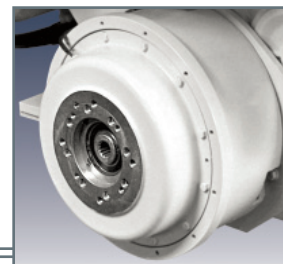
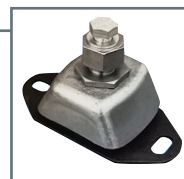


- Oil change pump.
- SAE 1 rear flywheel housing Std. SAE 2 Opt.
- Racor fuel filters.

- Crankshaft pulleys: 3-A/B or 4-A grooves.
- Twin Disc or ZF marine gears. Trolling valves. Shaft couplings.
- Spare parts kits.
- Flexible vibration isolating engine mounts.

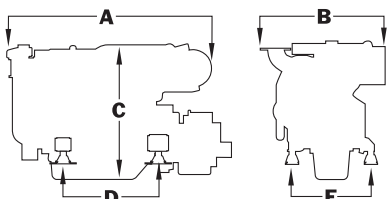


- Coolant level sensor.
- Front PTO with 12 or 24 volt electric clutch and SAE C splined pump mount pad. Provides up to 475 foot pounds intermittent, 400 continuous of torque to power your vessel's hydraulic system.



L1276A2 Specifications and Installation Data

Output rating	CONTINUOUS	MEDIUM	HIGH OUTPUT
FWHP (kW)	340 (252)	425 (315)	525 (389)
Maximum RPM	1800	2100	2100
Cylinders / Configuration / Cycle	6 / Inline / 4	6 / Inline / 4	6 / Inline / 4
Displacement CID (ltr)	763 (12.5)	766 (12.5)	766 (12.5)
Aspiration	All Models: Turbocharged Aftercooled		
Bore x Stroke in (mm)	All Models: 5 x 6.5 (127 x 165)		
Cooling (General)			
Coolant circ pump flow - US gal (ltr)	73 (232)	85 (277)	85 (277)
Heat rejection to jacket water - BTU-min	6,690	8,363	10,331
Cooling (Heat Exchanger)			
HE engine coolant capacity - US gal (ltr)	14.25 (54)	14.25 (54)	14.25 (54)
Rawwater intake/discharge dia. - in (mm)	3 (75)	3 (75)	3 (75)
Rawwater pump flow - gpm (lpm)/rpm	92 (348)	99 (374)	99 (374)
Rawwater pump max. suction head - in (m)	39 (1)	39 (1)	39 (1)
Max. raw water temp. at inlet -°F (°C)	86° (30°)	86° (30°)	86° (30°)
Cooling (Keel Cooled)			
Based on 70° F seawater and minimum full boat speed of 8 knots.			
Return water from keelcooler	70°-130° F.	70°-130° F.	70°-130° F.
KC engine coolant capacity - US gal (ltr)	11.75 (44)	11.75 (44)	11.75 (44)
Water hose inside diameter - in (mm)	3 (75)	3 (75)	3 (75)
Head diameter - in	All Models: 2" NPT or 3" hose barb		
Turbo tube length - ft (m)	48 (14.6)	64 (19.5)	80 (24.4)
1 in. plain round tube length - ft (m)	112 (34.1)	140 (42.7)	174 (53)
Skin cooler aluminum - sq ft (m ²)	51 (4.7)	64 (5.9)	80 (7.4)
Skin cooler steel - sq ft (m ²)	170 (15.8)	212 (19.7)	263 (24.4)
Electrical			
Voltage	All Models: 24V standard (12V optional)		
Min. battery capacity - 24 volt	All Models: 2 x 225 amp hours - 1150 CCA		
Battery cable size up to 10 ft run	"00"	"00"	"00"
Standard panel harness length - ft (m)	All Models: 20 ft (6m) std, 40 & 60 ft optional		
Air and Exhaust			
Engine air consumption - cfm (m ³ /min)	816 (23.1)	1029 (29.1)	1264 (35.8)
Min. engine room vent area - sq in (m ²)	240 (0.16)	301 (0.19)	370 (0.24)
Exhaust gas flow at - cfm (m ³ /min)	1819 (52)	2243 (63.5)	2815 (79.7)
Exhaust gas temperature -°F (°C)	738 (392)	725 (385)	736 (391)
Max. exhaust back pressure - in (mm) H ₂ O	30 (762)	30 (762)	30 (762)
Suggested dry exhaust I.D. - in (mm)	5(125)	6(150)	6(150)
Suggested wet exhaust I.D. - in (mm)	8(203)	8(203)	8(203)
Fuel and Oil			
Minimum fuel suction line - in (mm)	0.5 (12)	0.5 (12)	0.5 (12)
Minimum fuel return line - in (mm)	0.375 (10)	0.375 (10)	0.375 (10)
Maximum fuel pump head - in (m)	39 (1)	39 (1)	39 (1)
Crankcase oil capacity - US qts (ltr)	44 (42)	44 (42)	44 (42)
Other Data			
Engine rotation (facing flywheel)	All Models: Counter-Clockwise		
Flywheel housing size	All Models: Std. SAE 1, 14" Std. (SAE 2, 11.5" opt)		
Optional front PTO size	All Models: SAE 4, 10" or SAE 3, 11.5"		
Max operating down angle - front/rear	0°/12°	0°/12°	0°/12°
Approximate Weight*			
Dry weight with HE, no gear - lbs (kg)	3210 (1456)	3210 (1456)	3210 (1456)
Dry weight, KC, no gear - lbs (kg)	3093 (1403)	3093 (1403)	3093 (1403)

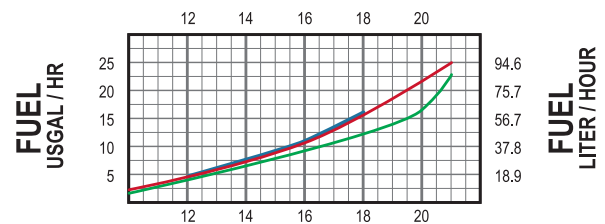
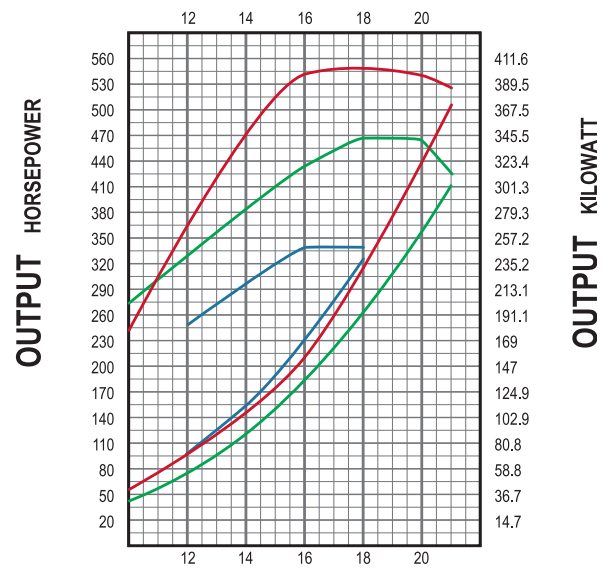
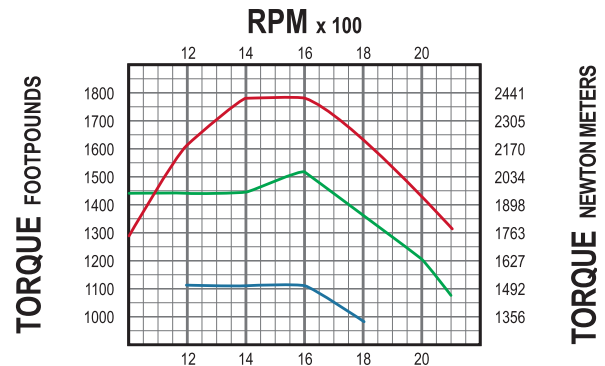


Dimensions	inch (mm)
A length	69.94 (1776)
B width	46.02 (1169)
C height	41.31 (1049)
D mounds	34.55 (878)
E mounts	26.0 (660)

*Do NOT use for installation. Contact factory for current installation drawings.

L1276A2 Performance Data

High Output Rating ¹ FWHP / kW / @ rpm	525 / 389 / 2100
Medium Duty Rating ¹ FWHP / kW / @ rpm	425 / 315 / 2100
Continuous Duty Rating FWHP / kW / @ rpm	340 / 252 / 1800



RATING	CONTINUOUS				MEDIUM DUTY ¹				HIGH OUTPUT ¹			
	A	B	C	D	A	B	C	D	A	B	C	D
Curve												
RPM												
ft/lbs												
fw hp												
pdhp												
gph												
1000	--	--	--	--	1439	274	44.4	2.2	1291	246	55	2.8
1200	1120	256	97.5	4.9	1440	329	76	3.8	1609	368	95	4.6
1400	1114	297	154	7.5	1441	384	122	6.1	1775	473	151	7.3
1600	1116	340	231	11.4	1517	432	181	9.2	1775	541	224	11.4
1800	992	340	328	16.3	1351	463	259	12.6	1628	558	318	16.1
2000	--	--	--	--	1211	461	354	17.3	1435	546	438	22.0
2100	--	--	--	--	1062	425	410	23.4	1315	525	507	25.5

Notes: 1. Max. cruise rpm for High Output and Medium Duty ratings is 1900 or 200 rpm below highest attainable rpm-whichever is lower.
 Curves: A. Maximum torque at flywheel. B. Flywheel power. Prop shaft power is 3-3.5% lower due to marine reduction gear power loss. C. Theoretical prop power draw (3.0 exponent).
 D. Fuel consumption based on theoretical propeller HP draw. Your fuel consumption will vary higher or lower depending on your vessel and operating conditions.

Dealer

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