

# HPS3000



## RIG-SAFE HIGH PRESSURE PUMP SET



### Pump

The Hughes HPS3000, triplex pump has a specification producing a heavy duty capability for dealing with the more difficult problems of industry.

The close coupled, gear driven power end has pressure lubrication, filtration and oil cooling. A standard adaptor housing allows the pump to be flange mounted to the diesel engine flywheel housing ensuring extremely compact and perfectly aligned installations.

For maximum hydraulic efficiency, the in-line valve pump head arrangement is designed to minimise the unswept volume. This improved design is capable of high pressure to high volume with outstanding seal, plunger and valve life.

### Diesel Engine

The 6 cylinder, Volvo TWD1031VE is rated to 226 kW at 1800 rpm in ambient temperatures up to 40° C (219 kW at 50°C). Fuel capacity for 8 hours running is included.

### Rig-Safe Control System

The pump and engine are protected by the renowned AMOT system which provides automatic shutdown in the event of high engine water temperature, low engine oil pressure, high pump oil temperature, low pump oil pressure and low water boost pressure.

A mechanical control panel is provided for operator monitoring.

The engine is fitted with an air starter motor (free air supply required), stainless steel exhaust spark arrestor silencer and over-speed inlet shutdown valve.

### Pressure Control

Pump discharge pressure is controlled by a pneumatically actuated, stainless steel pressure adjusting valve for off-load starting and infinite, fingertip pressure control from zero to maximum.

Pneumatic operated automatic engine throttle mechanism. With the pump off-load the engine remains at idle speed, when the pump is loaded the engine automatically increases to a pre-set speed.

### Crash Frame

The complete pump set including large capacity, stainless steel filter housing is mounted in a fabricated steel crash frame chassis with four- point lift and fork slots.

### Approx Dimensions

Length	3300 mm
Width	1800 mm
Height	2000 mm
Weight	3500 kg

### Features:

- \* Maximum pressure rating 1,400 bar (20,000 psi)
- \* Maximum flow rate 825 litres/min (215 gpm)
- \* Versatile (interchangeable fluid heads and plunger kits)
- \* Stainless steel fluid heads (431 standard or 316)
- \* 225 kW (300 hp) input
- \* Hardened, alloy steel crankshaft with heavy duty, steel backed white metal main bearings, supported between each connecting rod
- \* SG iron crankcase with pressure lubrication, filtration and oil cooling

### Build Options:

- \* Full range of pressures and flows - see HPS3000 data sheet for details
- \* Standard adaptor housing (SAE 1) for flange mounting the pump to the diesel engine flywheel housing (or electric motor)
- \* Piston kits for high volume applications
- \* Safety relief valves
- \* Pressure adjusting and unloading valves
- \* Selector/Diverter valves (manual or actuated)
- \* Complete unit build or bare shaft pump only



**P U M P S L T D**

Highfield Works, Spring Gardens  
Washington, W. Sussex, UK RH20 3BS

Tel: +44 (0) 1903 892358 Fax: +44 (0) 1903 892062

Website: [www.hughes-pumps.co.uk](http://www.hughes-pumps.co.uk)  
Email: [enquiries@hughes-pumps.co.uk](mailto:enquiries@hughes-pumps.co.uk)

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