Power hydraulics in general

Power where you need it, for as long as you need it

VETUS Hydraulic Systems are an excellent way to move the power of a "Prime Mover" engine to user devices around the boat, by means of the controlled flow of high pressure fluid moving through flexible hoses or rigid tubes. The prime mover may be a main propulsion engine, the engine of a diesel generator, or a "powerpack" engine dedicated to powering the hydraulic system. A user device is any item or system of mechanical equipment, including bow and stern thrusters, windlasses, capstans, winches, cranes, hatch lifters, roll stabilizers and power steering.

Hydraulic systems are complex and require a lot of expertise but the results are well worth the effort. A VETUS customer support team member is available by email, to discuss your boat configuration and usage and to recommend hydraulic user devices and central system equipment.

You will receive our recommendations for your Power Hydraulic system within 48 hours of all information being received and finalized. Remember that in some cases it is difficult or impossible to retrofit a power take-off and it is therefore recommended to order a power take-off when purchasing an engine or gearbox.

Hydraulic Pumps

VETUS hydraulic pumps are variable volume, load sensing, piston pumps and are able to provide full hydraulic flow and pressure at all PTO/ prime-mover engine speeds, providing the engine is producing enough power at those speeds. These pumps adjust themselves to meet the requirement of the activated user devices, and when no hydraulic flow is required, stop pumping and freewheel, so no clutch is required at the Power Take Off (PTO) on which the pump is mounted.

Standard hydraulic pumps stocked by VETUS

Non-standard pumps are made to order.

Part Code	Pump capacity (cc) (fluid pumped in one revolution)	Direction of Rotation	Shaft	Weight kg approx	Torque in Newton Metres for each bar of operating pressure*	Suction and pressure port location	Available SAE flange	Max cont rpm
HT1015SD2	45	LH - anticlockwise	13 spline	27	0.72	rear	SAE B 2 bolt	2800
HT1015E62	62	LH - anticlockwise	13 spline	24	1	rear	SAE B 2 bolt	2600
HT1016SD1	30	LH - anticlockwise	13 spline	24	0.48	side	SAE B 2 bolt	3200
HT1016SD2	45	LH - anticlockwise	13 spline	27	0.72	side	SAE B 2 bolt	2800
HT1017E62	62	RH - clockwise	13 spline	24	1	rear	SAE B 2 bolt	2600
HT1017SD1	30	RH - clockwise	13 spline	24	0.48	side	SAE B 2 bolt	3200
HT1017SD2	45	RH - clockwise	13 spline	27	0.72	side	SAE B 2 bolt	2650
HT1022SD	75	LH - anticlockwise	14 spline	27	1.2	side	SAE C 4 bolt	2400
HT1023SD	75	RH - clockwise	14 spline	27	1.2	side	SAE C 4 bolt	2400
HT1016SD3	100	LH - anticlockwise	17 spline	56	1.6	side	SAE C 4 bolt	2450
HT1016SD4	130	LH - anticlockwise	17 spline	56	2.1	side	SAE C 4 bolt	2200
HT1027**	45	RH - clockwise	13 spline	27	0.72	side	SAE B 2 bolt	2800

* It may be necessary to reduce pump pressure to avoid exceeding the maximum allowed torque for the PTO, even if that means reduced power for the user device.

** This pump is configured to mount on the PTO of a John Deere diesel engine.

All pumps come standard with a connection kit.

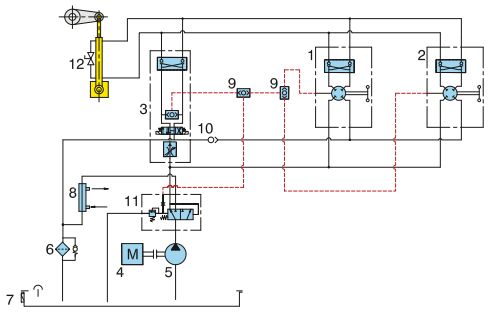

Diagram of a single hydraulic drive

It is possible to connect various equipment devices to one hydraulic pump.

1. Steering pump
2. Second steering position
3. Autopilot
4. Engine
5. Hydraulic pump
6. Return filter
7. Hydraulic fluid tank
8. Oil cooler
9. Shuttle valve
10. Non-return valve
11. Priority valve
12. Steering cylinder with bypass