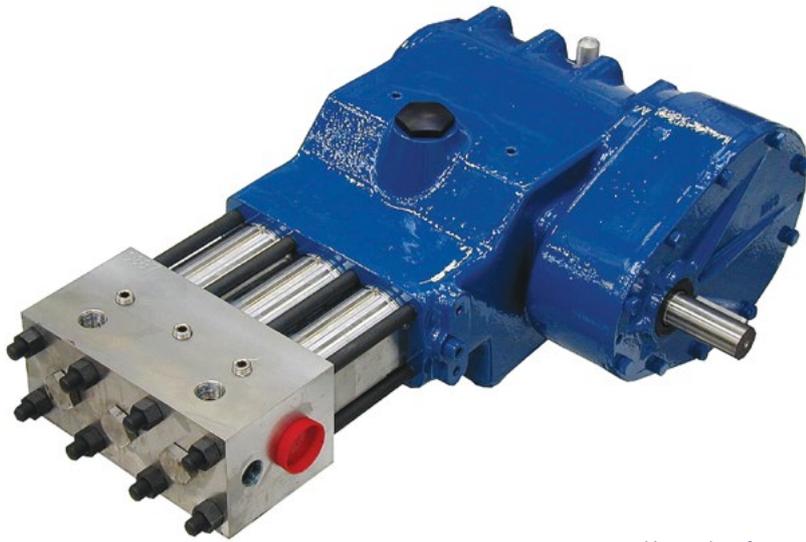


HPS400

High Pressure Triplex Pump



High & Ultra High Pressure Technology



Upgraded performance

Maximum Flowrate	103 lpm at 160 bar (22.6 igpm / 27.2 usgpm at 2,320 psi)
Maximum Pressure	1000 bar at 16 lpm (14,500 psi at 3.6 igpm / 4.4 usgpm)
Maximum Power	30 kW (40hp)

See overleaf for performance options

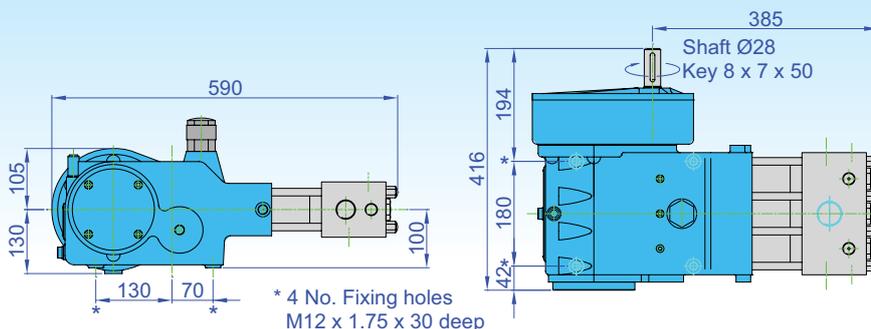
The versatile HPS400 model offers a wide range of flows and pressures and shares critical components with the higher rated HPS650 pump.

The close coupled, gear driven power end has splash lubrication. SAE adaptor housings are available enabling the pump to be flange mounted to a diesel engine flywheel housing or electric motor ensuring extremely compact, perfectly aligned installations and enclosing all moving parts. For maximum hydraulic efficiency, the

in-line valve arrangement is designed to minimise the unswept volume and prevents the adverse effects of cyclic stress within the head block, while allowing all working components to be easily removed on site for service.

This improved design is capable of high pressure to high volume with outstanding seal, plunger and valve life.

- General Dimensions - typical pump build
- Approx weight - 110 kg (with gearbox)



Features

- 431 stainless steel pump head
- Solid ceramic plungers & self adjusting seals
- Interchangeable plunger kits
- Hardened, alloy steel crankshaft with heavy duty roller main bearings
- SG iron crankcase with splash lubrication
- Forged connecting rods with low friction, shell type big end bearings and lead bronze lined small end bushes
- Gear driven, eliminating the need for belt drive
- Safety relief valve
- Pressure gauge

Build Options

- 316 stainless steel pump head for seawater applications
- Choice of gear ratio to suit diesel engine or electric motor drive
- SAE adaptor housings (SAE 3, 4 or 5) for flange mounting the pump to a diesel engine flywheel housing or electric motor
- Available without gearbox for low speed direct drive
- 40mm stroke crankshaft for reduced flow / power
- Bare shaft pump only or complete unit build
- ATEX compliant



HPS400 with SAE engine adaptor

HPS400

High Pressure Triplex Pump



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Plunger Diameter mm	Gear ratio Input Speed (rpm)			Pump Speed rpm	Power Required		Nominal Flowrate			Max Pressure	
	1500	1800	2100		kW	HP	lpm	igpm	usgpm	bar	psi
14	2.83			530	20	27	11	2.4	2.9	1000	14,500
		2.83		636	25	33	13	2.9	3.5		
	2.28			658	25	34	14	3.0	3.6		
			2.83	742	29	38	15	3.4	4.1		
	1.92			781	30	40	16	3.6	4.3		
	2.28		789	30	41	16	3.6	4.4			
18	2.83			530	20	27	18	4.0	4.8	600	8,700
		2.83		636	24	33	22	4.8	5.8		
	2.28			658	25	34	23	5.0	6.0		
			2.83	742	28	38	26	5.6	6.8		
	1.92			781	30	40	27	5.9	7.1		
	2.28		789	30	41	27	6.0	7.2			
20	2.83			530	21	28	22	4.9	6.0	500	7,250
		2.83		636	25	34	27	5.9	7.1		
	2.28			658	26	35	28	6.1	7.4		
			2.83	742	29	39	31	6.9	8.3		
	1.92			781	31	41	33	7.3	8.8		
	2.28		789	31	42	33	7.4	8.9			
22	2.83			530	20	27	27	6.0	7.2	400	5,800
		2.83		636	24	33	33	7.2	8.7		
	2.28			658	25	34	34	7.4	9.0		
			2.83	742	28	38	38	8.4	10.1		
	1.92			781	30	40	40	8.8	10.6		
	2.28		789	30	40	41	8.9	10.7			
25	2.83			530	20	27	35	7.7	9.3	310	4,500
		2.83		636	24	33	42	9.3	11.2		
	2.28			658	25	34	44	9.6	11.6		
			2.83	742	28	38	49	10.8	13.0		
	1.92			781	30	40	52	11.4	13.7		
	2.28		789	30	40	52	11.5	13.9			
28	2.83			530	20	27	44	9.7	11.7	250	3,625
		2.83		636	25	33	53	11.6	14.0		
	2.28			658	25	34	55	12.0	14.5		
			2.83	742	29	38	62	13.6	16.3		
	1.92			781	30	40	65	14.3	17.2		
	2.28		789	30	40	66	14.4	17.4			
30	2.83			530	21	28	51	11.1	13.4	220	3,200
		2.83		636	25	33	61	13.4	16.1		
	2.28			658	26	34	63	13.8	16.6		
			2.83	742	29	39	71	15.6	18.8		
	1.92			781	30	41	75	16.4	19.8		
	2.28		789	30	41	75	16.6	20.0			
35	2.83			530	20	27	69	15.1	18.2	160	2,320
		2.83		636	25	33	83	18.2	21.9		
	2.28			658	25	34	85	18.8	22.6		
			2.83	742	29	38	96	21.2	25.5		
	1.92			781	30	40	101	22.3	26.9		
	2.28		789	30	41	103	22.6	27.2			

Additional Notes. 1. Flowrates indicated are swept volume & will reduce by approximately 5% at full pressure
 2. Other gear ratios are available for specific applications, including input speed up to 2700rpm. Consult Hughes Pumps Ltd 3. Pump stroke 45mm

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In line with the Company's policy of research and development, alterations in design, dimensions and appearance are incorporated from time to time in order to ensure that important developments are included at the earliest opportunity. The Company, therefore, reserves the right to alter design, dimensions etc without notice.