

P2K MODEL

The Safest Design In The Industry



SPECIFICATIONS: STANDARD P2K PUMPING SYSTEMS*

Bore x Stroke	in	1.25, 1.50 x 1.50	1.75 x 1.50	2.00 x 1.50
	(mm)	(32, 38 x 38)	(44.5 x 38)	(50.8 x 38)
Flow Rate	gpm	1.13 – 3.10	2.20 – 4.20	2.87– 5.53
	lpm	4.27 – 11.73	8.32 – 15.89	10.90 – 20.93
Pump Design Rating	hp	7.5 – 20	10 – 20	15 – 20
	kw	5.6 – 15	7.5 – 15	11.2 – 15
Maximum Discharge Pressure	psi	6,000	4,500	3,500
	bar	414	310	241
NPSPR	psi	2	2	2
	bar	0.14	0.14	0.14
Maximum Suction Pressure	psi	300	300	300
	bar	20.7	20.7	20.7

* Contact ACD for additional P2K pump ratings



FEATURES & BENEFITS

- Vertical pump design eliminates gravitational loading on the piston, extending sealing ring life and providing smoother suction valve operation
- Vertical installation offers less vibration, reduced noise, and a compact system footprint
- V-band clamp secures the sump to the intermediate, allowing quick and easy access to the cold end assembly
- External re-lubrication nipples for roller bearings and crosshead provide extended service life
- Packing rings at top of pushrod are retained in cartridges for easy replacement (no removal of sump and cold end required)
- Motor positioned on the backside of the pumping skid eliminates possible fire, explosion, or hazard in the event of a liquid oxygen leak
- Replaceable crosshead wearband eliminates crosshead piston wear and reduces maintenance costs
- Vertical cold end is submerged inside a vacuum-jacketed liquid sump, minimizing heat leak and increasing system efficiency (particularly in poor suction conditions)
- Pump assembly and spare parts are interchangeable with the PD3000 pump
- Easy cold end maintenance by swiveling the pump and drive end 45°

APPLICATIONS

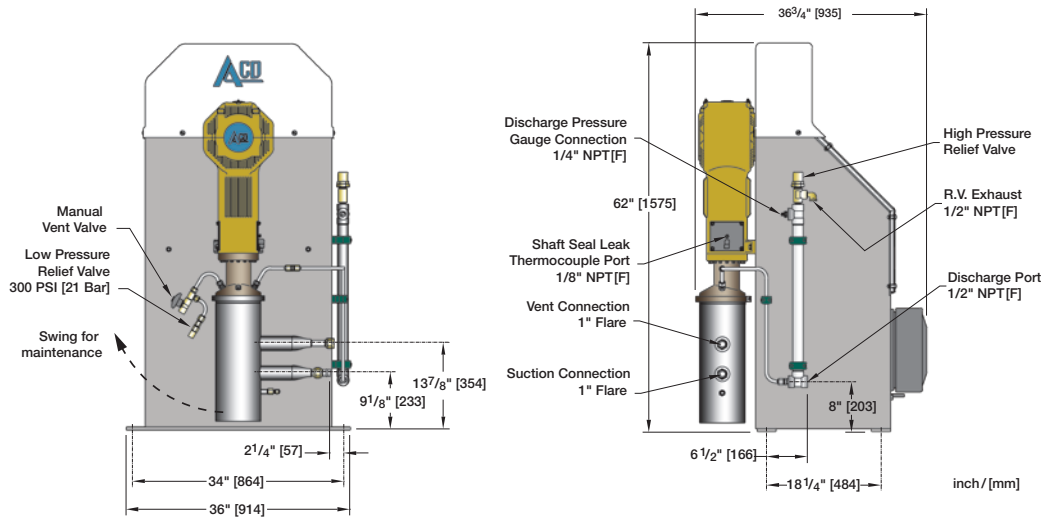
- Heavy duty cylinder filling
- Medium duty storage filling
- Unattended, automatic storage filling

LIQUIDS PUMPED

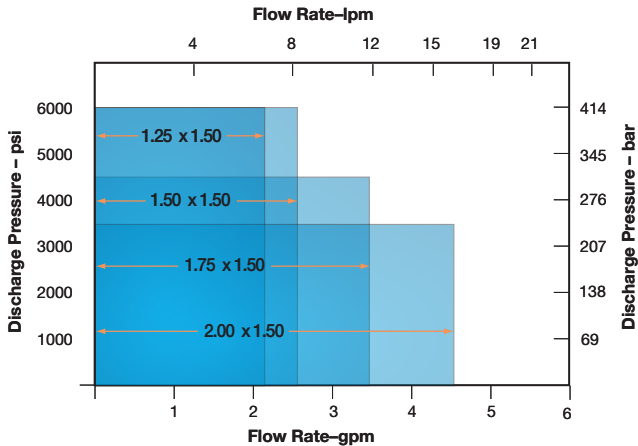
- Nitrogen
- Oxygen
- Argon
- Carbon dioxide
- Methane (LNG)
- Ethylene

P2K MODEL

OVERALL DIMENSIONS



PUMP PERFORMANCE MAP



Maximum Capacity Rating:

- 2.55 gpm (9.6 lpm) @ 6,000 psi (414 bar)
- 3.47 gpm (13.1 lpm) @ 4,500 psi (310 bar)
- 4.54 gpm (17.2 lpm) @ 3,500 psi (241 bar)

Lower flows are available by running the pump slower. Contact ACD Engineering for recommendations for flow/pressure specifications not listed.

TYPICAL SCOPE OF SUPPLY

- Grease-lubricated drive assembly and vacuum-jacketed cold end
- Electric motor with belt drive and guard
- Hot-dipped galvanized steel skid frame
- Over pressure switch gauge (shipped loose)
- Control panel with combination motor starter and running time meter (shipped loose), relay logic
- Vent line with manual valve and low pressure relief valve
- Monel suction strainer
- High pressure relief valve with discharge line and surge chamber

OPTIONAL ACCESSORIES

- PLC control panel
- Automatic control panel
- Loss of prime detector
- Discharge check valve
- Cavitation detector
- Shaft seal leak detector
- Flex sections for suction and tank return lines
- Cool down temperature detector
- Auto unloader valve
- Extended cool down lock-up
- Drive purge
- ASME high pressure relief valve
- Monel cold end – for 4,500+ psig oxygen

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