

P2 Series High Flow Pumps Data Sheet

The P2 series pumps are pneumatically driven, single air drive, double acting, reciprocating positive displacement pumps producing near continuous flows.

P2 Pumps are suitable and commonly used for chemical injection, where continuous injection rates from small to medium flows at high accuracy and or high pressure are required.

P2 series pumps are manufactured in two different plunger sizes, 15mm & 20mm to provide a wide range of pressures and flows up to 21,400 psig.

The P2 pump utilises a common air motor, shuttle valve assembly, hydraulic section housings and check valves and has been designed to be modular using interchangeable inserts, pistons and components permitting the pump to be economically reconfigured to either the 15mm or 20mm model for different pressures and flows within a short period of time.

All P2 series pumps are CE marked, ATEX compliant (94/9/EC) II 2 Gc T6 & NACE compliant as standard and suitable for H2S fluid service.

Pump Overview:

Air Motor:	Single air drive motor, hardened anodised aluminium air chamber, 306mm aluminium air motor piston, 316 stainless steel air motor end flanges, nitrile seals. Auto moisture drain system for improved pump life		
Air Shuttle Assembly:	Hardened anodised aluminium cylinder, aluminium shuttle, HNBR seals.		
Hydraulic Cylinders:	316 stainless steel cylinders & internal components. (The Hydraulic cylinders are isolated from the main air motor to ensure no fluids can be transferred to the motor and exhausted to atmosphere)		
Hydraulic Pistons:	15mm & 20mm OD 316 SS with high velocity oxy fuel coating providing better chemical resistance.		
Main Hydraulic Seals:	Ultra High Molecular Weight Polyethylene (Tecafine (PE)) UHMWPE-10. (PTFE compound available)		
Check Valves:	316 stainless steel cylinder & internal components, ceramic compound ball & seat.		
Total Net Weight:	56Kg	Maximum Noise Level:	95 db

Pump Connection Sizes:

Air Inlet:	3/4" NPT (F)	Pilot Air Supply:	3/8" NPT (F)	Air Shuttle Exhaust:	3/8" NPT (F)
Fluid Inlet:	3/4" NPT (F)	Fluid Outlet:	9/16" MP (F)		

Pump Performance:

Max Pump Air Supply:	100 psig.	Max Pilot Air Supply:	100 psig.
Max Air Consumption:	180 scfm.	Air Quality Required:	Cooled & dry plant air.
Pump Ratio:	15mm: 214 - 1	20mm: 120 - 1	
Max Discharge Pressure Static:	15mm: 21,400 psig	20mm: 12,000 psig	
Discharge Volume per Stroke:	15mm: 25cc	20mm: 45cc	
Max Discharge Flow @ 0 psig:	15mm: 6.1 ltr/min	20mm: 11.4 ltr/min	

Air input to hydraulic discharge pressure static/stall values.

Pump Model	Hydraulic Piston Diameter	Pump Ratio	20 psig Air Supply	40 psig Air Supply	60 psig Air Supply	80 psig Air Supply	100 psig Air Supply
CP-P2-15-D	15mm	214 - 1	4,282	8,564	12,848	17,129	21,411
CP-P2-20-D	20mm	120 - 1	2,400	4,800	7,200	9,600	12,000