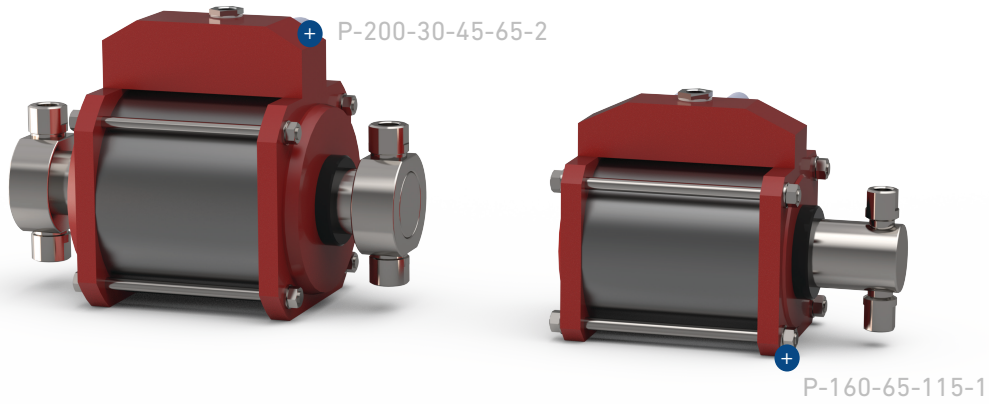
# P-Series Air-driven pumps

## Quiet. Robust. Maintenance-friendly.




**Outlet Pressure Range**
70- 5,000 bar
(1,025 - 72,000 psi)

**Maintenance**
developed for easy maintenance

**Mediums**
Water-based fluids/emulsions , oil-based fluid/emulsions, and more

▶ The P-Series of air-driven pumps reduce maintenance downtime and provide reliability for pumping various liquids with pressure up to 72,500 psi (5,000 bars). The pumps operate with an automatic reciprocating differential area piston principle. They are available as single-acting and double-acting types which provides for a significant range of outlet pressure and flow rate combinations for applications in the oil & gas, automotive, gas processing, hose manufacturing, and other industrial sectors. The P-Series pneumatic pumps can be ATEX certified and are used for pressurizing liquids for burst testing, charging, bolt tensioning, and other high pressure applications.

## Benefits & Features

- Minimize maintenance time by replacing check valves in a few minutes.
- It is simple to convert a single acting pump into a double-acting pump in case of extra flow capacity is required.
- Improved cycling speed because air-cycling valve is mounted directly on top of air cylinder providing less frictional resistance.
- Reduction of noise level due to less frictional resistance of air-cycling valves instead of mechanical pilot.
- Freezing of the pump is avoided through an air cycling valve containing a light weight spool to provide high air flow at low air velocity.
- Suitable for use with water because all wetted parts of the high pressure pump section are made of special selected stainless steel.
- Increased lifetime of seals by using specially developed U-PE seals that provide optimum plunger sealing for many mediums.
- Minimized downtime by reducing time of high pressure seal change with the pump design focusing on simple dismantling of air-drive section.

## Application Areas

- Hydrostatic testing of Oil and Gas objects
- Hydrostatic testing of hoses
- Pressure testing of hydraulic objects
- (Chemcial) injection
- Dismantling of bearings / flanges
- Bolt tensioning
- Food preservation
- Burst testing
- Laboratory testing
- Vessel pressurization
- Resarch & development applications

MADE IN THE NETHERLANDS

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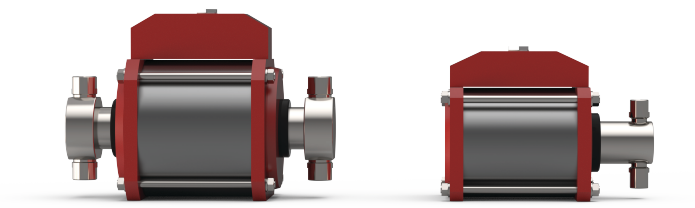
YOUR HIGH PRESSURE EXPERT.

## Dimensions

Please contact us for dimensions of a specific air-driven pump.



## Technical Information

| Type | Pressure Ratio[1] | Displacement Volume[2] | | Max. Outlet Pressure[3] | | Flow Capacity[4] | Connection[5] | | Weight |
|---|---|---|---|---|---|---|---|---|---|
| | | cc | cu.inch | Bar | PSI | l/min | Inlet | Outlet | kg |
| P160 - 10-1 | 10 | 98 | 5.99 | 70 | 1,025 | 26.3 | 3/4" NPT | 1/2" NPT | 16 |
| P160 - 20-1 | 21 | 48 | 2.94 | 145 | 2,100 | 13.2 | 3/4" NPT | 1/2" NPT | 15.2 |
| P160 - 30-1 | 28.5 | 35 | 2.16 | 200 | 2,850 | 9.5 | 3/4" NPT | 1/2" NPT | 15.2 |
| P160 - 40-1 | 41 | 25 | 1.50 | 285 | 4,100 | 6.4 | 3/4" NPT | 1/2" NPT | 15.2 |
| P160 - 65-1 | 64 | 16 | 0.96 | 450 | 6,400 | 4.2 | 1/2" NPT | M20x1,5 HP | 13.5 |
| P160 - 115-1 | 114 | 8.8 | 0.54 | 800 | 11,400 | 2.4 | 1/2" NPT | M20x1,5 HP | 13.5 |
| P160 - 180-1 | 178 | 5.7 | 0.35 | 1,245 | 17,800 | 1.5 | 1/2" NPT | M20x1,5 HP | 13.5 |
| P160 - 255-1 | 256 | 3.9 | 0.24 | 1,790 | 25,600 | 1.1 | 1/2" NPT | M20x1,5 HP | 13.5 |
| P160 - 400-1 | 400 | 2.5 | 0.15 | 2,800 | 40,000 | 0.7 | 1/2" NPT | M20x1,5 HP | 13.5 |
| P160 - 520-1 | 522 | 1.9 | 0.12 | 3,655 | 52,200 | 0.5 | 1/2" NPT | M20x1,5 HP | 13.5 |
| P160 - 10-2 | 9.2 | 196 | 12.0 | 65 | 925 | 50 | 3/4" NPT | 1/2" NPT | 22.1 |
| P160 - 20-2 | 20 | 96 | 5.87 | 140 | 1,980 | 25 | 3/4" NPT | 1/2" NPT | 20.5 |
| P160 - 30-2 | 27.5 | 71 | 4.31 | 190 | 2,750 | 18 | 3/4" NPT | 1/2" NPT | 20.5 |
| P160 - 40-2 | 40 | 49 | 3.00 | 280 | 4,000 | 12.2 | 3/4" NPT | 1/2" NPT | 20.5 |
| P160 - 65-2 | 63 | 31 | 1.92 | 440 | 6,300 | 8.0 | 1/2" NPT | M20x1,5 HP | 17.1 |
| P160 - 115-2 | 113 | 18 | 1.08 | 790 | 11,300 | 4.5 | 1/2" NPT | M20x1,5 HP | 17.1 |
| P160 - 180-2 | 177 | 11 | 0.69 | 1,230 | 17,600 | 2.9 | 1/2" NPT | M20x1,5 HP | 17.1 |
| P160 - 255-2 | 255 | 7.9 | 0.48 | 1,785 | 25,500 | 2.1 | 1/2" NPT | M20x1,5 HP | 17.1 |
| P160 - 400-2 | 399 | 5.0 | 0.31 | 2,790 | 39,900 | 1.3 | 1/2" NPT | M20x1,5 HP | 17.1 |
| P160 - 520-2 | 521 | 3.8 | 0.23 | 3,650 | 52,150 | 0.9 | 1/2" NPT | M20x1,5 HP | 17.1 |
| P200 - 30-1 | 32.5 | 48 | 2.94 | 225 | 3,250 | 11.0 | 3/4" NPT | 1/2" NPT | 22.2 |
| P200 - 45-1 | 44.5 | 35 | 2.16 | 310 | 4,450 | 7.8 | 3/4" NPT | 1/2" NPT | 22.2 |
| P200 - 65-1 | 64 | 25 | 1.50 | 450 | 6,400 | 5.4 | 3/4" NPT | 1/2" NPT | 22.2 |
| P200 - 100-1 | 100 | 16 | 0.96 | 700 | 10,000 | 3.5 | 1/2" NPT | M20x1,5 HP | 20.5 |
| P200 - 180-1 | 178 | 8.8 | 0.54 | 1,245 | 17,800 | 1.9 | 1/2" NPT | M20x1,5 HP | 20.5 |
| P200 - 280-1 | 278 | 5.7 | 0.35 | 1,945 | 27,800 | 1.2 | 1/2" NPT | M20x1,5 HP | 20.5 |
| P200 - 400-1 | 400 | 3.9 | 0.24 | 2,800 | 40,000 | 0.9 | 1/2" NPT | M20x1,5 HP | 20.5 |
| P200 - 625-1 | 625 | 2.5 | 0.15 | 4,375 | 62,500 | 0.6 | 1/2" NPT | M20x1,5 HP | 20.5 |
| P200 - 815-1 | 816 | 1.9 | 0.12 | 5,000 | 72,500 | 0.4 | M16x1,5 HP | M16x1,5 HP | 20.5 |
| P200 - 30-2 | 31.5 | 96 | 5.87 | 220 | 3,150 | 21.0 | 3/4" NPT | 1/2" NPT | 28.1 |
| P200 - 45-2 | 43.5 | 71 | 4.31 | 305 | 4,350 | 15.0 | 3/4" NPT | 1/2" NPT | 28.1 |
| P200 - 65-2 | 63 | 49 | 3.00 | 440 | 6,300 | 10.5 | 3/4" NPT | 1/2" NPT | 28.1 |
| P200 - 100-2 | 99 | 31 | 1.92 | 695 | 9,900 | 6.6 | 1/2" NPT | M20x1,5 HP | 24.7 |
| P200 - 180-2 | 177 | 18 | 1.08 | 1,240 | 17,700 | 3.7 | 1/2" NPT | M20x1,5 HP | 24.7 |
| P200 - 280-2 | 277 | 11 | 0.69 | 1,940 | 27,700 | 2.4 | 1/2" NPT | M20x1,5 HP | 24.7 |
| P200 - 400-2 | 399 | 7.9 | 0.48 | 2,795 | 39,900 | 1.6 | 1/2" NPT | M20x1,5 HP | 24.7 |
| P200 - 625-2 | 624 | 5.0 | 0.31 | 4,370 | 62,400 | 1.0 | 1/2" NPT | M20x1,5 HP | 24.7 |
| P200 - 815-2 | 815 | 3.8 | 0.23 | 5,000 | 72,500 | 0.8 | M16x1,5 HP | M16x1,5 HP | 24.7 |

Notes:

[1] Ratio - driving surface air drive piston / driven surface high pressure piston (calculated)

[2] Displacement volume per double stroke (calculated)

[3] Static outlet pressure (calculated and maximum allowed)

[4] Approximate flow at an air drive of 6 bar / 87 psi and an outlet prssure of 0 bar / psi

[5] Connection 3/4" BSP, delivered with 1/2" BSP reducer

## Options

- ATEX version available
- Mounting brackets
- Air controls
- Adapters
- Conversion kits
- Ratio kits
- Special seals

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