



Python[®]

Pneumatically Operated Pumps for Chemical Injection



PROVEN QUALITY. LEADING TECHNOLOGY.

Python® Pneumatically Operated Pumps

Python pumps are ideal for applications that require a pump to operate in a potentially explosive atmosphere and can run off regulated natural gas or compressed air. These pumps have the lowest out of pocket cost, are easy to operate and use half the air consumption of other pumps in the market. Plus, the Python's extreme duty plungers, seals and timing valve are designed for years of operation before replacement.

Ease of serviceability

- Easy access to the pump plunger and packings
- Cartridge style seal in the timing valve for quick and easy repair
- Plunger packings can be replaced in 5 minutes or less

Highest technology timing valve on the market

- Low air/gas consumption for increased efficiency
- Pump cycle rate remains constant regardless of system back pressure

Robust and simple design

- Adjustable fluid packing lasts up to 25 times longer than non-adjustable seals
- Pythons are offered with Chromex and Ceramic coated plungers
- 316 SST fluid section/wetted parts
- HNBR, FKM, FKM ETP, TFEP and FFKM plunger packings and check valve seals
- Proprietary poppet style check valve eliminates valve from sticking

Standards



Ordering Information

| GRACO Python™ Pneumatically Operated Pumps | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|
| Seals / Plunger Size | 1/8" | 3/16" | 1/4" | 3/8" | 1/2" | 5/8" | 3/4" |
| 1.25" Air Piston (CE Approved) | | | | | | | |
| FKM | A25000 | A25001 | A25002 | A25003 | A25004 | A25005 | A25006 |
| FKM-ETP | A25021 | A25022 | A25023 | A25024 | A25025 | A25026 | A25027 |
| HNBR | A25042 | A25043 | A25044 | A25045 | A25046 | A25047 | A25048 |
| FFKM | A25063 | A25064 | A25065 | A25066 | A25067 | A25068 | A25069 |
| 1.75" Air Piston (CE Approved) | | | | | | | |
| FKM | A25007 | A25008 | A25009 | A25010 | A25011 | A25012 | A25013 |
| FKM-ETP | A25028 | A25029 | A25030 | A25031 | A25032 | A25033 | A25034 |
| HNBR | A25049 | A25050 | A25051 | A25052 | A25053 | A25054 | A25055 |
| FFKM | A25070 | A25071 | A25072 | A25073 | A25074 | A25075 | A25076 |
| 2" Air Piston (CE Approved) | | | | | | | |
| FKM | A25014 | A25015 | A25016 | A25017 | A25018 | A25019 | A25020 |
| FKM-ETP | A25035 | A25036 | A25037 | A25038 | A25039 | A25040 | A25041 |
| HNBR | A25056 | A25057 | A25058 | A25059 | A25060 | A25061 | A25062 |
| FFKM | A25077 | A25078 | A25079 | A25080 | A25081 | A25082 | A25083 |
| 1.25" Air Piston (ATEX Approved) | | | | | | | |
| FKM | A25100 | A25101 | A25102 | A25103 | A25104 | A25105 | A25106 |
| FKM-ETP | A25121 | A25122 | A25123 | A25124 | A25125 | A25126 | A25127 |
| HNBR | A25142 | A25143 | A25144 | A25145 | A25146 | A25147 | A25148 |
| FFKM | A25163 | A25164 | A25165 | A25166 | A25167 | A25168 | A25169 |
| 1.75" Air Piston (ATEX Approved) | | | | | | | |
| FKM | A25107 | A25108 | A25109 | A25110 | A25111 | A25112 | A25113 |
| FKM-ETP | A25128 | A25129 | A25130 | A25131 | A25132 | A25133 | A25134 |
| HNBR | A25149 | A25150 | A25151 | A25152 | A25153 | A25154 | A25155 |
| FFKM | A25170 | A25171 | A25172 | A25173 | A25174 | A25175 | A25176 |
| 2" Air Piston (ATEX Approved) | | | | | | | |
| FKM | A25114 | A25115 | A25116 | A25117 | A25118 | A25119 | A25120 |
| FKM-ETP | A25135 | A25136 | A25137 | A25138 | A25139 | A25140 | A25141 |
| HNBR | A25156 | A25157 | A25158 | A25159 | A25160 | A25161 | A25162 |
| FFKM | A25177 | A25178 | A25179 | A25180 | A25181 | A25182 | A25183 |

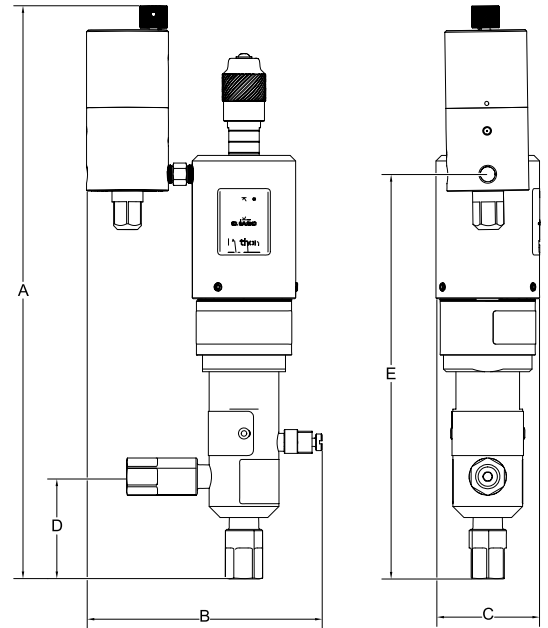


ATEX Approved Python Pump

Technical Data

| Python Chemical Injection Pump | | |
|--|---|------------|
| | US | Metric |
| Maximum air inlet pressure | see charts on back page | |
| Maximum fluid working pressure | see charts on back page | |
| Environmental temperature range | -40°– 176°F | -40°– 80°C |
| Noise (dBA) | | |
| Maximum sound pressure | <70 dBA with included muffler installed | |
| Inlet/Outlet Sizes | | |
| Fluid inlet size | 1/4 in. npt(f) (1/4 npt(m) adapter included) | |
| Fluid outlet size (1/4", 3/8", 1/2", 5/8", & 3/4" plungers only) | 1/4 in. npt(f) | |
| Fluid outlet size (1/8" & 3/16" plungers only) | HiP HF4 | |
| Prime/bleed size (1/4", 3/8", 1/2", 5/8", & 3/4" plungers only) | 10-32 UNF | |
| Prime/bleed size (1/8" & 3/16" plungers only) | 1/16 in. npt(f) | |
| Pneumatic inlet size | 1/8 in. npt(f) (1/4 npt(f) adapter included) | |
| Pneumatic outlet size (exhaust recovery) | 1/8 in. npt(f) | |
| Materials of Construction | | |
| Pump/Check Valve Seal Material | See Configuration Number Matrix below for seal material. | |
| Wetted Parts | See Configuration Number Matrix below for plunger material. All other materials are 316 stainless steel unless otherwise noted. | |
| Weight | | |
| All models | 8-11 lbs. | 3.6-4.9 kg |

Dimensions:



| A | B | C | D | E |
|------------------------|----------------------|----------------------|---------------------|------------------------|
| 13.26 in. (33.7 cm) | 5.3 in. (13.5 cm) | 2.34 in. (5.9 cm) | 2.3 in. (5.8 cm) | 9.125 in. (23.2 cm) |

Configuration Number Matrix

Check the identification plate (ID) for the 12-digit Configuration Number of your pump. Use the following matrix to define the components of your pump. *NOTE: Not all combinations are possible.*

Sample Configuration Number: **PCI-125-19S-XA-A**

| | | | | | | |
|------------------------------|----------------|--------------|----------------|------------------|---------------|-----------|
| PCI | 125 | 19 | S | X | A | A |
| Pneumatic Chemical Injection | Air Motor Size | Plunger Size | Pressure Range | Plunger Material | Seal Material | Qualifier |

| Air Motor Size | | Plunger Size (diameter) | | Pressure Range | | Plunger Material | | Seal Material | | Qualifier | |
|----------------|--------|-------------------------|------|----------------|---|------------------|----------------------------------|---------------|--------|-----------|------|
| 125 | 1-1/4" | 13 | 1/4" | S | Standard Pressure (1/4", 3/8", 1/2", 5/8", 3/4" plungers) | X | Chromex Coated 17-4 PH Stainless | A | FKM | A | ATEX |
| 175 | 1-3/4" | 19 | 3/8" | H | High Pressure (1/8" & 3/16" plungers) | C | Ceramic Coated 17-4 PH Stainless | B | FKMETP | | |
| 200 | 2" | 25 | 1/2" | | | | | C | HNBR | | |
| | | 38 | 5/8" | | | | | D | FFKM | | |
| | | 50 | 3/4" | | | | | | | | |
| | | 63 | 5/8" | | | | | | | | |
| | | 75 | 3/4" | | | | | | | | |

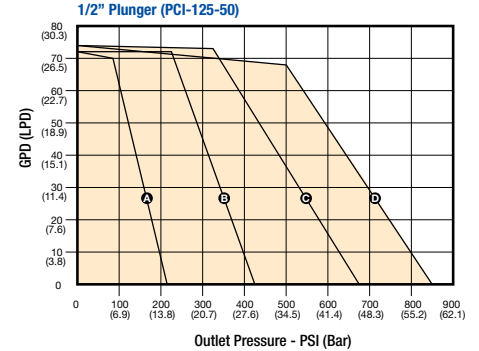
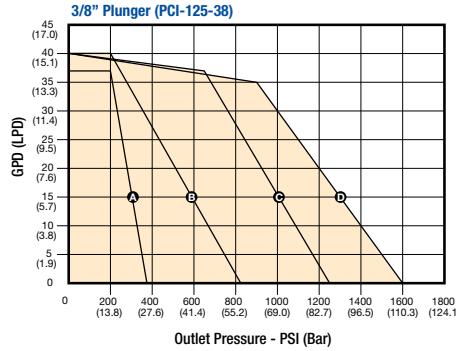
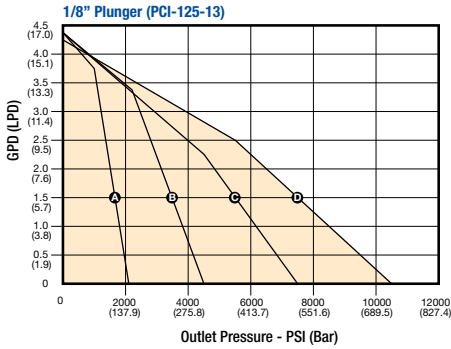
Key Points

- Standard pressure pumps feature 1/4 in. NPT(F) inlet and outlet connections.
- High pressure pumps feature 1/4 in. NPT(F) inlet and HiP HF4 outlet connections.
- B32240 can be used to convert HF4 outlet connection to 1/4 in. NPT(F) for applications 10,000 psi and under.

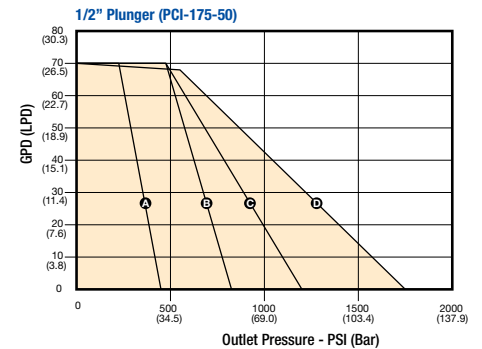
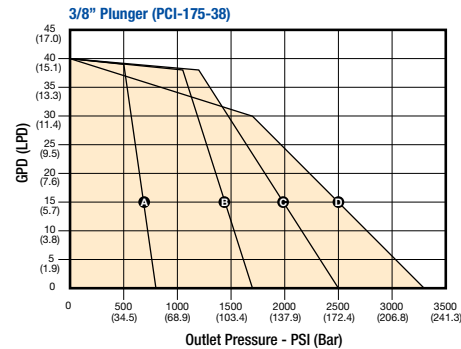
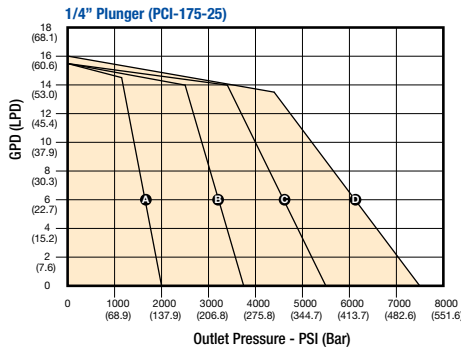
Performance Curves

| KEY | |
|----------------|----------------------|
| Inlet Pressure | |
| A | = 50 psi (3.5 bar) |
| B | = 100 psi (6.9 bar) |
| C | = 150 psi (10.3 bar) |
| D | = 200 psi (13.8 bar) |

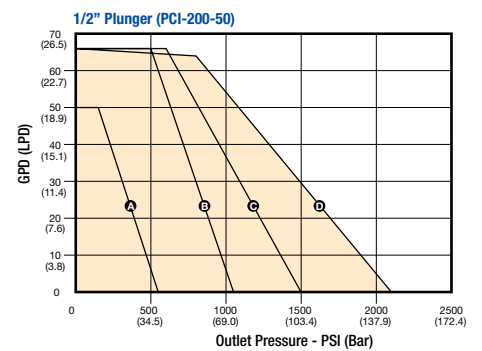
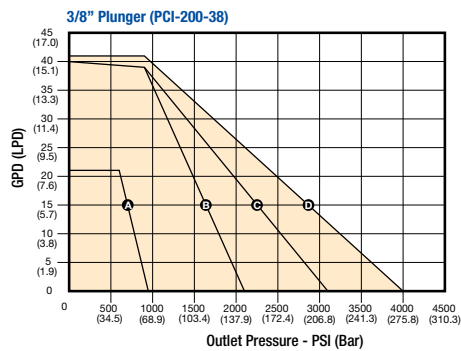
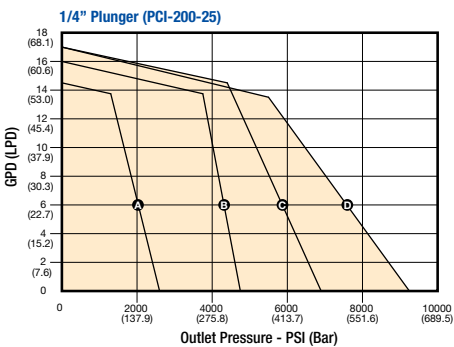
1 1/4" Air Motors (PCI-125)



1 3/4" Air Motors (PCI-175)



2" Air Motors (PCI-200)



Note: Please see instruction manual for different plunger sizes.

All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.



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