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## Diaphragm Compressors

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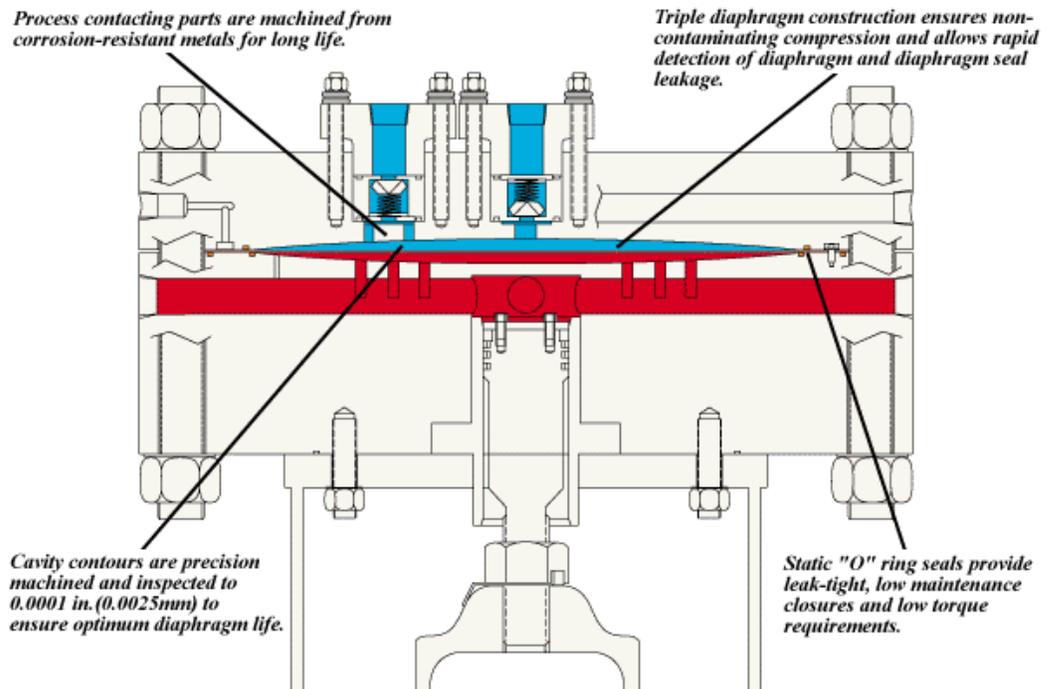
Diaphragm Compressors for cylinder filling, [hydrogen fuel cell technology](#), or transfer of high purity or dangerous gases under pressure -- without contamination or leakage. PPI, Milton Roy's line of diaphragm compressors includes single and multi-stage diaphragm compressor models with displacements to 400 cfm (680 m<sup>3</sup>/hr) and pressures to 30,000 psi (2000 bar). A variety of head closure designs, power-frames, accessories, and materials of construction allow PPI, Milton Roy to match a diaphragm compressor to most process parameters.



The metal diaphragm group of the diaphragm compressor isolates the process gas from the hydraulic fluid and all lubricated parts to ensure purity. PPI, Milton Roy Ultrafram diaphragm technology and proprietary cavity design provide unmatched diaphragm life.

### Benefits of PPI, Milton Roy Diaphragm Compressors

- **Leak-tight compression:** Self energizing static "O" ring seals in the head assembly prevent process gas leakage, a design feature pioneered by PPI. Depending on the process parameters, "O" rings of Buna N, Kalrez™, Aflas™, or composite elastomeric materials are used to achieve long life.
- **Corrosion resistance:** Process heads are machined from 300-series stainless steels, and diaphragm groups are 301ss for most applications. Other materials are available as required by the process gas.
- **Increased diaphragm life:** Critical quality control of all displacement cavities ensures proper contours, reducing combined stresses in critical areas, providing diaphragm compressors with extended service life.
- **Low closure torque:** The "O" ring sealed, flanged head assembly provides a positive seal while reducing bolt torque and maintenance downtime.
- **Highly sensitive leak detection:** PPI, Milton Roy's leak detection system rapidly detects leakage from a diaphragm or diaphragm seal failure. All effluent leakage is totally retained in the head assembly, preventing environmental or process contamination and the associated expense of clean-up operations.



### Compressor Series Displacements and Rated Pressures

Series	Number Of Stages	Maximum Discharge Pressure	Maximum Displacement at 400 RPM	Standard Drive
B	1	6,500 psig (44.8 MPa)	2 cfm (3.5 m <sup>3</sup> /hr)	2.0 hp (1.50 kw)
2000	1	15,000 psig (103.5 MPa)	8 cfm (14 m <sup>3</sup> /hr)	5.0 hp (4.00 kw)
2L	2	15,000 psig (103.5 MPa)	8 cfm (14 m <sup>3</sup> /hr)	5.0 hp (4.00 kw)
4000	1	15,000 psig (103.5 MPa)	50 cfm (85 m <sup>3</sup> /hr)	10.0 hp (7.50 kw)
4L	2	15,000 psig (103.5 MPa)	50 cfm (85 m <sup>3</sup> /hr)	10.0 hp (7.50 kw)
5000	1	30,000 psig (206.8 MPa)	90 cfm (52 m <sup>3</sup> /hr)	30.0 hp (22.40 kw)
5L	2	15,000 psig (103.5 MPa)	90 cfm (52 m <sup>3</sup> /hr)	40.0 hp (30.00 kw)
7000	1	30,000 psig (206.8 MPa)	98 cfm (166 m <sup>3</sup> /hr)	50.0 hp (38.00 kw)
7L	2	7,500 psig (51.7 MPa)	98 cfm (166 m <sup>3</sup> /hr)	50.0 hp (38.00 kw)
9000	1	15,000 psig (103.5 MPa)	110 cfm (187 m <sup>3</sup> /hr)	75.0 hp (55.00 kw)
9L	2	15,000 psig (103.5 MPa)	400 cfm (680 m <sup>3</sup> /hr)	200.0 hp (150.00 kw)

Settle for nothing but the best when you employ the products and services of Pressure Products Industries, Milton Roy (PPI). Since 1954, PPI, Milton Roy has been serving clients nationwide with top-quality [diaphragm compressors](#), [gas compressors](#), equipment for electronic gases, and so much more. No other supplier offers its customers the high level of support available like PPI. [Contact us](#) today to learn more about our extensive line of high pressure products, such as our [hydrogen compressors](#) and [oxygen compressors](#).

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