

Cryogenic 1/2" Pressure Builder PB Series

Application

PB series cryogenic regulators are primarily designed to maintain the pressure in cryogenic containers; they may also be used as a line regulator for cryogenic lines and cold gas lines. They are specifically useful in installations where the precision in pressure control and flow capability are important. For use with Oxygen, Nitrogen, Argon, LNG and CO₂.

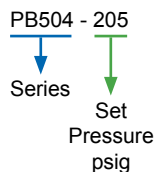
Features

- All parts are copper alloy (brass), PTFE and stainless steel—materials selected specifically for compatibility with cryogenic temperatures down to -320°F (-196° C)
- PTFE seat helps assure a positive shut-off at cryogenic temperatures down to -320°F (-196° C)
- High and low pressure regulators are the same compact size—designed to fit in close quarters
- Customizable pressure settings between 20 - 550 psig (1.4 - 37.9 barg)
- Interchangeable with existing cryogenic regulator units
- Inlet filter (150 Mesh) helps prevent foreign material from entering the regulator.
- Easier to service, use an Allen wrench versus large crescent wrench
- Less field repair because diaphragm is squeezed versus twisted
- Locknut is provided to maintain adjusting screw setting
- Maximum inlet pressure of 600 psig (41.4 barg)
- Cleaned for Oxygen service per CGA G-4.1
- 100% Factory Tested

Materials

| | |
|-----------------------|-----------------|
| Body | Brass |
| Bonnet | Brass |
| Seat | PTFE |
| Springs | Stainless Steel |
| Diaphragm Gasket..... | PTFE |
| Backcap Seal..... | PTFE |
| Diaphragm..... | Bronze |
| Inlet Filter..... | Monel) |

PB504 Series part number configuration



Ordering Information

| Part Number | Inlet / Outlet Connections (FNPT) A | Delivery Pressure Setting Range psig (barg) |
|------------------|-------------------------------------|---|
| PB504-020 to 070 | 1/2" | 20 - 75 psig (1.4 - 5.2 barg) |
| PB504-071 to 175 | | 50 - 180 psig (3.4 - 12.4 barg) |
| PB504-176 to 300 | | 150 - 300 psig (10.3 - 20.7 barg) |
| PB504-301 to 550 | | 250 - 550 psig (17.2 - 37.9 barg) |

Delivery pressure setting psig specified by suffix in PB regulator number. Example: An order for PB504-125 has a maximum inlet pressure rating of 600 psig (41.3 barg) and is set at an outlet pressure of 125 psig (8.6 barg).



PB504

