

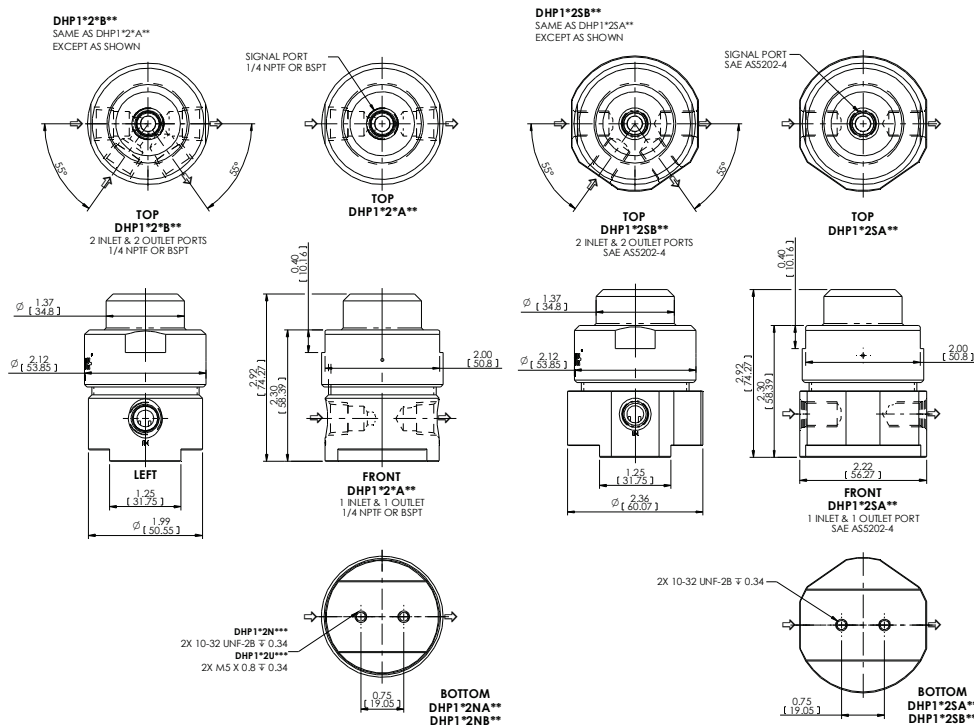
Features

- Standard X-750 Inconel diaphragm for strength, corrosion resistance and longer life.
- Three seat material choices for a wide range of chemical compatibility, (PEEK, CTFE, and Vespel).
- High maximum supply pressure of 6000 PSIG to allow more through put of gas.
- Ambient Temperature range of -40°F to +500°F, depending on seat material.
- Bubble tight shutoff in most conditions.
- Remote control allows operator to adjust pressure away from hazardous gases or remote locations.
- Maintains outlet pressure more accurately under flowing conditions compared to a spring loaded regulator, minimizing droop.
- Faster response to pressure changes.
- Requires self venting pilot regulator.



Operating Principles

When the regulator is provided a remote signal to a specific set point, the downward force of the Range Spring moves the Diaphragm Assembly downward. The Supply Valve opens and allows air to pass to the Outlet Port. As the set point is reached, the downward force of the range spring is balanced by the force of the downstream pressure that acts on the diaphragm, causing the supply valve to close.



Model DHP

Specifications

Supply Valve Cv (1) 0.06

Maximum Supply Pressure

6000 psig, [414 BAR], (41400 kPa)

*Consult seat material chart for maximum pressure

Supply Pressure Effect

0.8 psig change for 100 psig change in supply pressure

Ambient Temperature

-40°F to +500°F, (-40°C to 260°C)

*Consult seat material chart for maximum temperature

Materials of Construction

Body and Housing.....Alloy 316L Stainless Steel

Valve.....316L Stainless Steel

Diaphragm.....Alloy X-750 Inconel

Installation

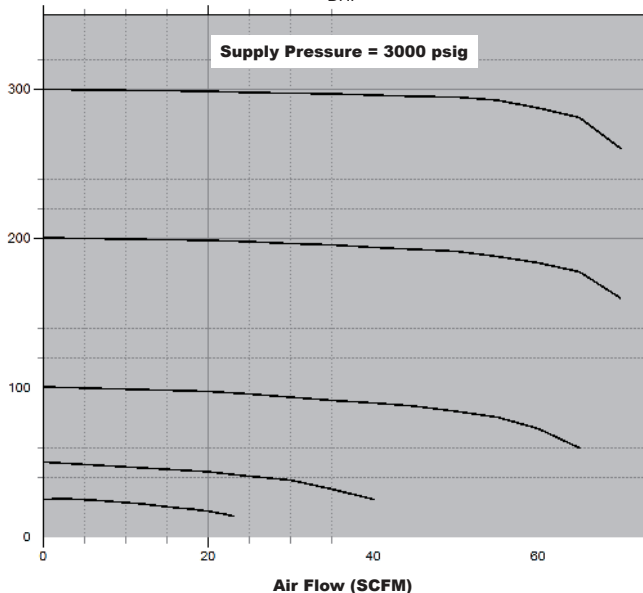
Refer to the *Fairchild Model DHP Installation, Operation and Maintenance Instructions*, IS-10000DHP.

Gauges

See Page 169 for High Pressure Gauges.

Flow Characteristics Chart
DHP

Supply Pressure = 3000 psig



Ordering Information

| Catalog Number | DHP | | 1 | * | * | * | * | * | * |
|--------------------------------|------------------------------|------------|-----|---|---|---|---|---|---|
| Revision | | | 1 | | | | | | |
| Pressure Ranges: | 0-25 psi | 0-1.7 bar | 3 | | | | | | |
| | 0-50 psi | 0-3.5 bar | 4 | | | | | | |
| | 0-100 psi | 0-7.0 bar | 5 | | | | | | |
| | 0-250 psi | 0-17.0 bar | 7 | | | | | | |
| | 0-500 psi | 0-35.0 bar | 9 | | | | | | |
| Inlet/Outlet Port Size: | 1/4" | | 2 | | | | | | |
| Port Thread: | NPTF | | | | N | | | | |
| | BSPT | | | | U | | | | |
| | SAE AS5202 | | | | S | | | | |
| Port Configuration | 2 Port (1 Inlet, 1 Outlet) | | | | | | A | | |
| | 4 Port (2 Inlets, 2 Outlets) | | | | | | B | | |
| Body Material | 316 Stainless Steel | | | | | | | | S |
| | Brass | | | | | | | | C |
| Seat Material | | PSIG | BAR | | | | | | |
| | PEEK | 6000 | 414 | | | | | | P |
| | CTFE | 3500 | 230 | | | | | | T |
| | Vespal | 6000 | 414 | | | | | | V |

*Bubble Tight Shutoff in Most Conditions

| SEAT MATERIAL | MAXIMUM TEMPERATURE* | @ | MAXIMUM INLET PRESSURE |
|---------------|----------------------|---|------------------------|
| CTFE | 175°F (80°C) | @ | 3500 PSIG (241 BAR) |
| PEEK | 500°F (260°C) | @ | 3500 PSIG (241 BAR) |
| PEEK | 175°F (80°C) | @ | 6000 PSIG (414 BAR) |
| VESPEL | 500°F (260°C) | @ | 3500 PSIG (241 BAR) |
| VESPEL | 175°F (80°C) | @ | 6000 PSIG (414 BAR) |

*Temperatures in excess of 175°F (80°C) require a tamper-proof option