



High Pressure Equipment Company

Hipco Valve – Normally Open Maintenance Instructions



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Hipco - Normally Open Valve

Description:

These diaphragm air operators provide remote automatic on/off operation of valves and can be controlled by means of an air regulator, an electrical solenoid, or a manual low pressure valve in the user's air supply line. Air inlet is 1/4" NPT.

The Hipco air operators may be supplied with the valves and operating pressures shown in table.

- Hipco 10-12NFB (normally open)
- Hipco 10-15AF4 (normally open/normally closed)
- Stems & Seats
 - Carbide (for cyclic service)
 - Stellite (for cyclic service)
 - 17-4 (for cyclic service)
- Valve Bodies
 - Hastelloy C, Hastelloy B
 - Inconel 600, Inconel 625
 - Incoloy 800, Incoloy 825
 - Titanium Grade 2, Titanium 6AL4V
 - Nickel
 - Monel
- Packing
- PolyPak
- Temperature Considerations
- Extended stuffing box for temperatures from -423°F to 1,200°F (medium and high pressure connections only)

Valve Series	Maximum Operating Pressure	Approximate Air Pressure to Seat Valve
10-**AF4	10,000 psi	35 psi
10-**AF6	10,000 psi	35 psi
10-**NFA	10,000 psi	35 psi
10-**NFB	10,000 psi	35 psi
10-**NFC	10,000 psi	35 psi
15F-**NFA	15,000 psi	85 psi
15F-**NFB	15,000 psi	85 psi
15F-**NFC	10,000 psi	100 psi
15F-**NFD	10,000 psi	100 psi
20-**LF4	20,000 psi	60 psi
20-**LF6	15,000 psi	85 psi
20-**LF9	10,000 psi	100 psi
30-**HF4	30,000 psi	60 psi
30-**HF6	30,000 psi	85 psi
30-**HF9	30,000 psi	85 psi
40-**HF9	30,000 psi	85 psi
60-**HF4	60,000 psi	70 psi
60-**HF6	60,000 psi	70 psi
60-**HF9	60,000 psi	70 psi

Hipco - Normally Open Valve Maintenance Instructions:

Packing Gland Adjustment Instructions:

1. Relieve the system pressure. Remove the valve from the system and place it securely in a vice.
2. Loosen the lock nut at the top of the valve body.
3. Tighten the packing gland to the appropriate torque for the valve. Suggested packing gland torque values are listed in the Technical Information Section of the High Pressure Equipment Company Catalog.
4. Retighten the lock nut to secure the packing gland position.

Packing Replacement Instructions:

1. Relieve the system pressure. Remove the valve from the system and place it securely in a vice.
2. Loosen the lock nut at the top of the valve body.
3. Unscrew the packing gland and remove the packing gland, stem, and top works assembly from the body. Note the packing and packing washer arrangement.
4. Replace the packing, and place the packing and packing washers into the valve body.
5. Replace the packing gland, stem, and top works assembly into the valve body.
6. Tighten the packing gland to the appropriate torque for the valve. Suggested packing gland torque values are listed in the Technical Information Section of the High Pressure Equipment Company Catalog.

Stem Replacement Instructions:

1. Relieve the system pressure. Remove the valve from the system and place it securely in a vice.
2. Loosen the lock nut at the top of the body.
3. Unscrew the packing gland and remove the body.
4. Loosen and remove the 5/16-18 hex head screws and nuts located along the perimeter of the diaphragm housing. Remove the top section of the diaphragm housing.
5. Remove the 1/4-20 hex nut that holds the stem to the diaphragm support.
6. Remove the old stem and insert the new stem. Replace and tighten the 1/4-20 hex nut onto the end of the stem.
7. Reassemble the diaphragm housing using approximately 20 ft-lb on the 5/16-18 cap screws.
8. Replace the packing as required, and place the packing and packing washers into the valve body.
9. Replace the packing gland, stem, and tops works assembly into the valve body.
10. Tighten the packing gland to the appropriate torque for the valve. Suggested packing gland torque values are listed in the Technical Information section of the High Pressure Equipment Company catalog.