



HS4D

Two Step Solenoid Valve

INTRODUCTION

The Hansen HS4D Two Step Solenoid Valve is based on the same strength, reliability, design principles and craftsmanship as the standard Hansen HS4A Solenoid Valve—with added versatility and safety.

The two step solenoid design provides two opening positions for the valve: soft opening/soft closing position (10% rated flow) and fully open. These valves are normally closed and will revert to the closed position in the event of a power failure. Full flow capacity is the same as the standard Hansen HS4A. This makes it ideal for drop-in replacement of existing solenoid valves. Similar to the standard HS4A, the HS4D is superior in its ability to overcome dirt and sticky oil during opening, as well as function in an oil-free “dry” system.

APPLICATIONS

The HS4D is a reliable, rugged-bodied valve that can be used anywhere a soft opening or closing solenoid valve is desired. The partially open position is designed to gradually introduce liquid flow before switching to the fully open position. Additionally, the two step solenoid valve can be used to gradually slow liquid flow prior to fully closing the valve to minimize hydraulic shock. When used as a hot gas defrost valve, the partially open position allows gradual equalization of hot gas during defrost before fully opening the valve.

The HS4D can also be used as a suction solenoid and equalizing valve. After the conclusion of defrost, the partially open valve position can equalize (bleed) gas from the evaporator. After proper bleed time, the valve can be placed in the full open position.

ADVANTAGES

The simple, serviceable design of the Hansen HS4D provides added cost savings and a significantly superior valve. The full skirted piston design is dirt resistant, and standard, power saving coils can be used on all valve sizes. All valves use a spring activated, teflon, dirt-wiping piston seal. Manual opening stems are located on top of valves, up and away from dirt and rust particles to extend stem seal life. Each valve is individually packaged and sealed for valve interior cleanliness and ease of storage until ready for use.



HS4D with Optional Pilot Light and DIN Connector

FEATURES

- Two step solenoid design allows for closed, "soft" open/close, and fully open valve positions
- Tolerant of dry systems
- Teflon main and pilot seats
- Heavy duty, pilot operation
- Available close-coupled strainer/check valve
- Flange-to-flange drop-in replacement for standard HS4A
- CSA certified
- CE available

TECHNICAL SPECIFICATIONS

Safe Working Pressure: 400 psig (28 bar g)
600 psig (41 bar g) for CO₂

Operating Temperature: -60°F to +240°F (-51°C to +115°C)

Materials

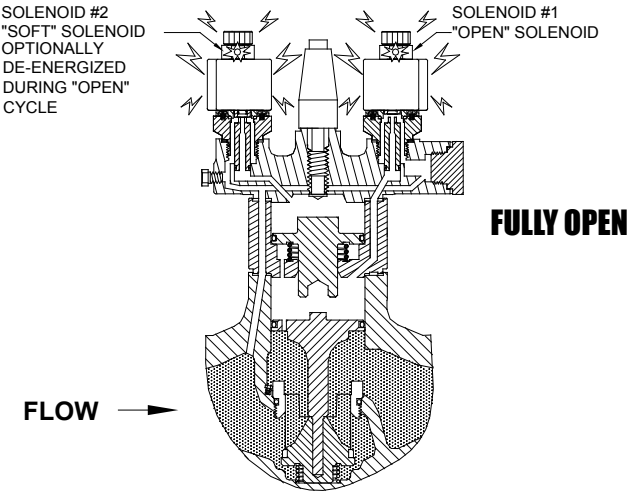
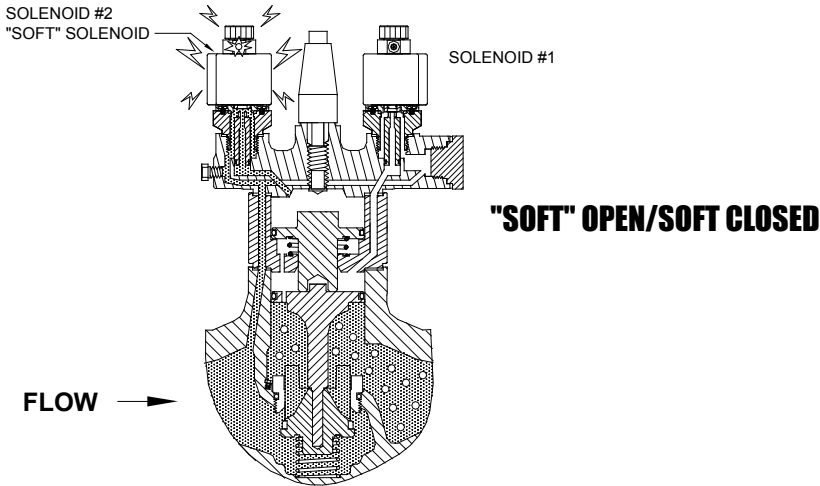
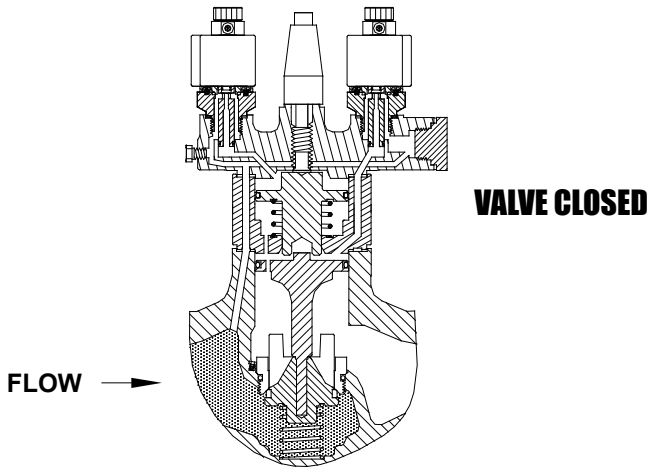
Body: Ductile iron, ASTM A536 (Flanged valves)
Steel, ASTM A352 LCB (Weld-in valves)

Adapter: Ductile iron, ASTM A536

AVAILABLE SIZES

¾" to 4" (20mm to 100mm); Flanged and Weld-in

HS4D TWO STEP SOLENOID PRINCIPLES OF OPERATION



HANSEN

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