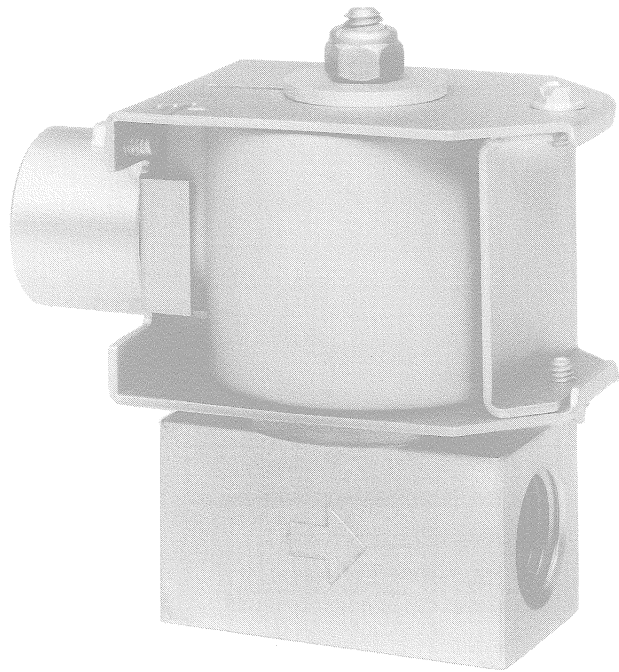


HANSEN TECHNOLOGIES CORPORATION



HS2 Solenoid Valve

INTRODUCTION

This threaded end industrial refrigeration duty solenoid valve is very simple and compact but rugged in construction. Body is plated steel alloy while direct lifting stainless steel plunger contains teflon seat which closes upon stainless steel orifice. When electrically energized, seat opens wide; when de-energized, it closes to stop flow in the arrow direction on the valve body.

APPLICATIONS

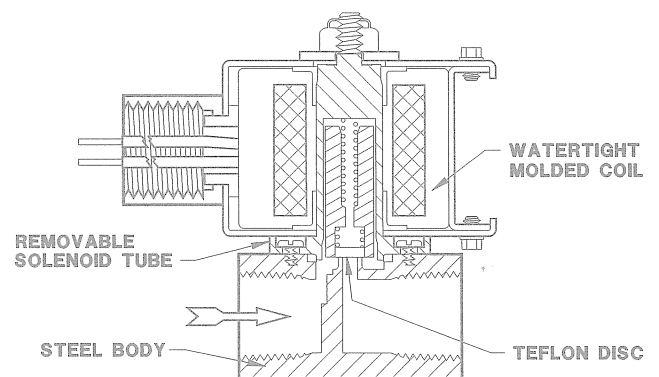
This small, direct lifting valve is used primarily as a pilot for various larger gas-powered or liquid powered main valves, as a remote pilot for back pressure regulators or other devices, or as a liquid stop valve for expansion valves, float valves, or as a general purpose pilot line for ammonia, R22, R134a, and other approved refrigerants or oil.

Specifications, Applications, Service Instructions & Parts

HS2 SOLENOID VALVE 5/32" (4mm) PORT

Threaded End
1/4", 3/8", 1/2" FPT
for refrigerants

KEY FEATURES



ADDITIONAL FEATURES

- Compact, low cost
- Low wattage, Hansen standard coil
- 300 PSI (20 bar) MOPD
- Stainless steel seat orifice
- Body easily grabbed by wrench
- Heavy-duty, direct lift
- CSA Certified
- Non-asbestos gaskets

MATERIAL SPECIFICATIONS

Body: Steel, plated
 Solenoid Tube: Stainless steel
 Plunger: Stainless steel
 Seat Orifice: Stainless steel
 Seat: Teflon
 Safe Working Pressure: 400 PSIG (27 bar)
 Operating Temperature: -60F to 240F (-50 to 115°C)

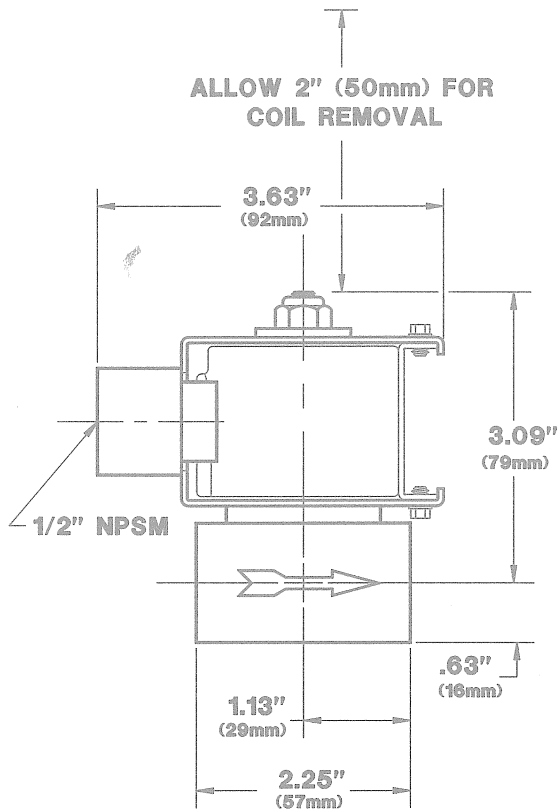
ADVANTAGES

Power saving, low-wattage molded coil; teflon disc seat; stainless steel trim; spring-closing. One standard molded coil fits all Hansen valves.

INSTALLATION

Match arrow on body with system flow direction. Protect interior of valve from dirt during installation. Check mating pipe threads for cleanliness and accuracy before installing. Use small quantity of pipe dope on pipe threads. Use flat jaw wrench on body close to pipe, being careful not to damage pipe threads with pipe wrench jaws. Allow 2" (50mm) above valve for coil removal.

INSTALLATION DIMENSIONS



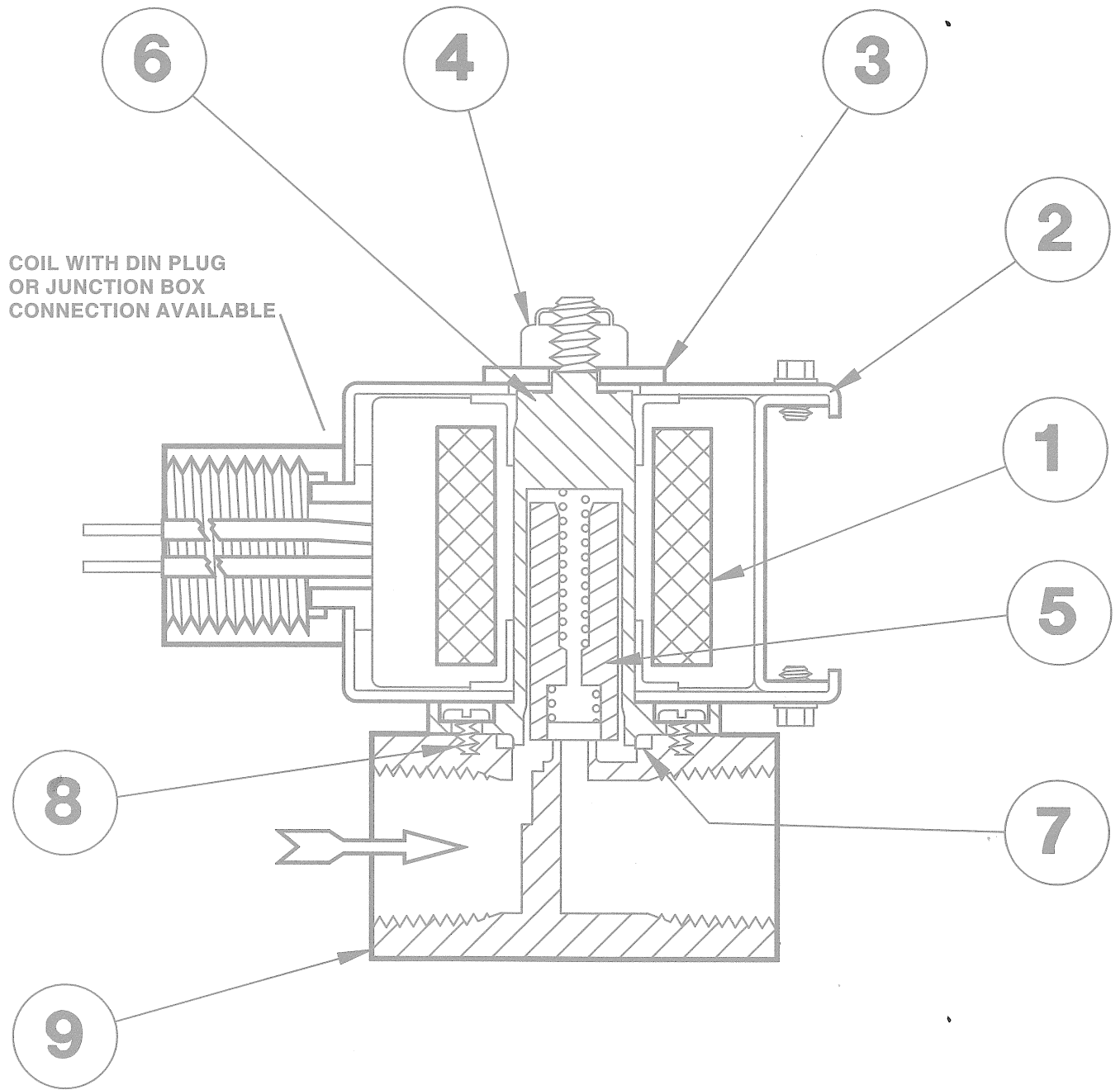
ELECTRICAL

The coil draws 16 watts and will operate properly between 85% and 110% of rated voltage (24V coil draws 19 watts). Standard coil connection is a 1/2" fitting (NPSM) for conduit, with 18" pigtail leads. Coils with DIN plug or junction box are available; contact factory. All coils have a standard zinc plated, steel housing which meets NEMA 3R (rainproof) and NEMA 4 (splashproof, approx. IP65) requirements; junction box is considered NEMA 1. Coil should only be energized while on solenoid tube; otherwise immediate coil burnout may occur. To avoid bending the solenoid tube, remove coil from valve before connecting any electrical conduit. Pilot lights are available.

PARTS LIST

ITEM	DESCRIPTION	QTY	PART NO
	Coil Kit (115V) 1/2" Fitting		70-1057
	Coil Kit (208/230V) 1/2" Fitting		70-1056
	Coil Kit (24V) 1/2" Fitting		70-1058
	Coil Kit (Other Voltages)		FACTORY
	Above Kits Consist of:		
1a	Bare Coil, 115V 50/60Hz, wire leads	1	70-0271
1b	Bare Coil, 208/230V 50/60Hz, wire leads	1	70-0286
1c	Bare Coil, 24V 50/60Hz, wire leads	1	70-0284
1d	Other Voltage Coils	1	FACTORY
2	Coil Housing Assembly Kit	1	70-1060
3	Coil Washer	1	70-0289
4	Coil Nut	1	70-0281
	Solenoid Tube/Plunger Kit*		70-1059
	Above Kit Consists of:		
5	Plunger	1	70-0295
6	Solenoid Tube	1	70-0298
7	Solenoid Tube Gasket	1	70-0301
8	Tube Screws	4	70-0297
3	Coil Washer	1	70-0289
4	Coil Nut	1	70-0281
9a	Body Assembly Kit (1/4" FPT) Complete Valve less Coil Kit		70-1013
9b	Body Assembly Kit (3/8" FPT) Complete Valve less Coil Kit		70-0014
9c	Body Assembly Kit (1/2" FPT) Complete Valve less Coil Kit		70-0015

* Beginning in 1993, a new interchangeable, threaded top, solenoid tube as shown in this bulletin, will be used on all solenoid valves. See Hansen Coil Bulletin SC1 for more details.



SERVICE AND MAINTENANCE

Failure to open: wrong voltage coil; low line voltage; controlling switch or thermostat not contacting; coil is burned-out; inlet/outlet pressure differential too high; plunger jammed closed with dirt.

Failure to close: controlling switch or thermostat not opening contacts; dirt under seat; eroded seat parts; plunger jammed upward by dirt.

Before opening the valve for service, be sure it is isolated from the system and all refrigerant is removed. Disconnect electrical power from coil. Remove the coil by unscrewing the coil nut and removing the washer. Loosen the four solenoid tube screws, proceeding cautiously to avoid any refrigerant still remaining inside. Remove tube screws and pry off the solenoid tube from the body.

Check face of teflon seat in plunger, plunger spring, and seat orifice in body. Clean, polish or replace parts as necessary. The seat orifice is integral with the body. Install new solenoid tube gasket and oil lightly. Reassemble solenoid tube to body with four screws. Carefully check the valve for leaks before restoring to service.

CAUTION

Hansen valves are only for refrigeration systems. These instructions must be completely read and understood before selecting, using or servicing these valves. Only knowledgeable, trained refrigeration mechanics should install, operate, or service these valves. Stated temperature and pressure limits should not be exceeded. Solenoid tubes should not be removed from valves unless system has been evacuated to zero pressure. Must also see Safety Precautions in current List Price Bulletin and Safety Precautions Sheet supplied with product.

WARRANTY

Hansen valves are guaranteed against defective materials or workmanship for one year F.O.B. factory. No consequential damages or field labor is included.

ORDERING INFORMATION, HS2 SOLENOID VALVE

THREADED END CONNECTIONS, FPT	
STD	ALSO
1/2"	1/4", 3/8"

FPT: Female Pipe Thread (American National Standard)

Standard molded solenoid coil is included for 50/60Hz 208/230, 115, or 24 volts; other voltages offered. Standard coil connection is a 1/2" fitting (NPSM). Coils with DIN plug or junction box are available; contact factory. Pilot lights are available.

TO ORDER: Specify type, threaded end connection size, and volts. Unless otherwise specified, standard coil with 1/2" fitting will be supplied.

TYPICAL SPECIFICATIONS

"Refrigerant solenoid valves shall have molded, watertight coils, teflon seats, steel or ductile iron bodies, spring closing pilot and main valve seats, and be suitable for a safe working pressure of 400 PSIG, as manufactured by Hansen Technologies Corporation or approved equal."

OTHER PRODUCTS

Gauge, Purge, and Needle Valves: 1/4"
Threaded Shut-off Valves: 3/8" to 1 1/4"
Socket Weld Shut-off Valves: 1/2" to 2 1/2"
Welding Steel Shut-off Valves: 2" to 14"
Expansion Valves (Regulators): 3/8" to 4"
Refrigerant Solenoid Valves
Pressure Regulators
Refrigerant Check Valves
Gas-Powered Valves
Refrigerant Float Switches
Float Regulators (High Side)
Refrigerant Liquid Pumps
Vari-Level® Adjustable Level Controls
Techni-Level® Transducer Probes
AUTO-PURGERS®
Frost Master® Defrost Controllers

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