

HANSEN TECHNOLOGIES CORPORATION



2" HOTV Oil Temperature Valve

INTRODUCTION

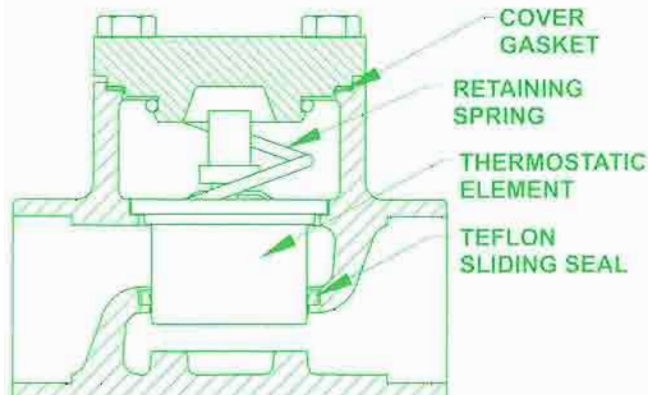
The Hansen Oil Temperature Valve is a 3-way valve used to accurately control the oil temperature of screw compressors or other oil-cooling circuits within appropriate design parameters. The internal thermostatic element modulates to maintain a near constant temperature at the outlet of the valve.

ADVANTAGES

- Easy to service—the valve can stay inline
- Tamperproof temperature setting
- Durable Teflon sliding seal is not affected by compatibility with refrigerants and oils or temperature, unlike O-ring designs
- Suitable for mixing or diverting applications

KEY FEATURES

- Rugged, all-steel construction, weld ends
- Low pressure drop
- Thermostatic element is stainless steel with a plated sensing bulb
- Suitable for ammonia, R22, R134a, and other compatible refrigeration systems



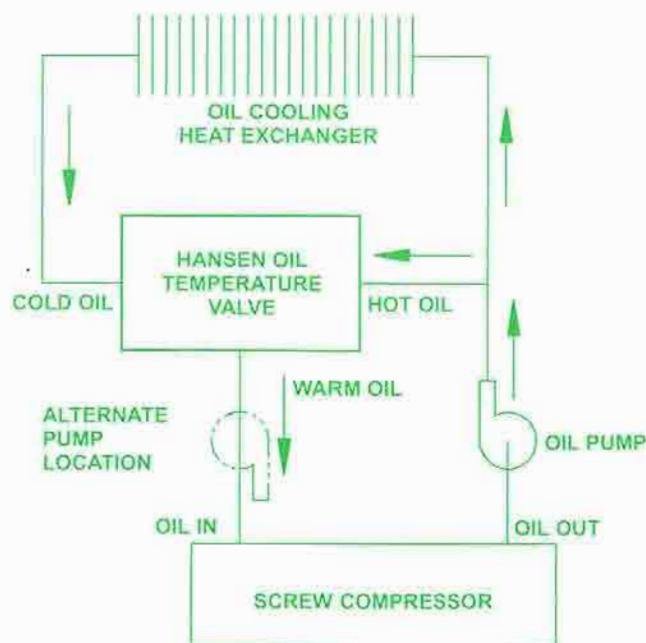
Specifications, Applications, Service Instructions & Parts

HANSEN OIL TEMPERATURE VALVE
1 1/2" or 2"
(40 mm or 50 mm)

for Oil-Cooling Circuits

ISO 9002

TYPICAL MIXING APPLICATION

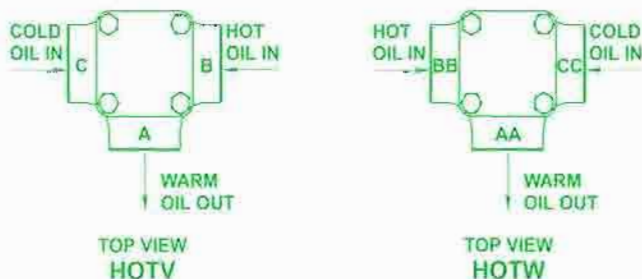


OPERATION

As oil and refrigerant are circulated through the screw compressor, the oil is heated. The hot oil is circulated past the thermostatic element inside the valve and it is also fed to a heat exchanger, which provides cold oil to the opposite side of the valve. The thermostatic element modulates the flow of oil from the cold oil port and the hot oil port to maintain a temperature range $\pm 10^{\circ}\text{F}$ ($\pm 6^{\circ}\text{C}$) of the nominal temperature setting at the outlet.

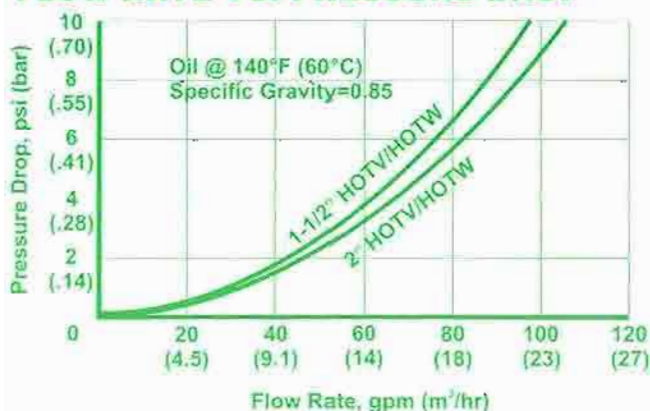
SELECTION

Two different models are available, HOTV and HOTW, to suit particular piping arrangements. The only difference is the position of the hot oil and cold oil inlets.



Standard end connections are 1½" (40 mm) or 2" (50 mm) socket weld. (2½" and 3" connection sizes available soon.)

FLOW RATE VS. PRESSURE DROP



INSTALLATION

Remove the cover and element before welding the valve body in the line. The valve can be mounted in any position. After the valve is welded in the line, reassemble it and check for leaks before placing it in service.

SPECIFICATIONS

Safe Working Pressure: 400 psig (27 bar) standard, contact Hansen for higher pressures
 Body: Cast steel, ASTM-A352 LCB
 Cover: Steel plate, ASTM-A36
 Sliding Seal: Composite Teflon
 Cover Gasket: Nonasbestos, fiber gasket
 Temperature Range: ±10°F (±6°C) of nominal temperature

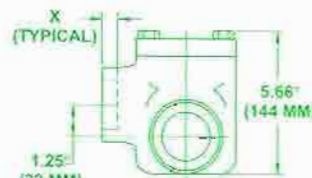
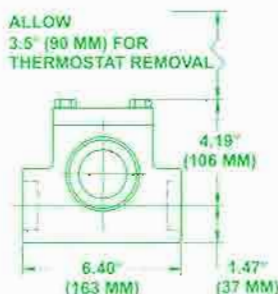
SERVICE AND MAINTENANCE

Before opening the valve for service, be sure it is isolated and pumped out to zero pressure. Loosen the cover bolts equally, break the gasket seal, and check for residual oil or refrigerant pressure. Then, remove the bolts. Remove and replace the thermostatic element if necessary. Reinstall the retaining spring. Replace the cover gasket. Place the cover back on and torque the bolts equally to 40 ft-lbs (54 Nm). Check for leaks before returning the valve to service.

INSTALLATION DIMENSIONS



SIZE	X
1½" (40 MM)	5/8" (16 MM)
2" (50 MM)	7/8" (22 MM)



CAUTION

These instructions and related safety precautions must be read completely and understood before selecting, using, or servicing these valves. Only knowledgeable, trained technicians should install, operate, or service these valves. Stated temperature and pressure limits should not be exceeded. Components should not be removed from a system unless it has been evacuated to zero pressure. See also Safety Precautions in the current List Price Bulletin and the Safety Precautions Sheet supplied with product. Escaping fluids can cause injury, especially to the eyes and lungs.

WARRANTY

Hansen valves are guaranteed for one year F.O.B. our plant. No consequential damages or field labor is included.

ORDERING INFORMATION

To Order: Specify catalog number HOTV or HOTW, socket weld end connection size 1½" (40 mm) or 2" (50 mm), and nominal temperature setting of 120°F (49°C), 130°F (54°C), or 140°F (60°C).

PARTS LIST

Thermostatic Element Replacement Kit (Consists of one thermostatic element and one cover gasket)	
Nominal Temperature	Part Number
120°F (49°C)	30-1104
130°F (54°C)	30-1103
140°F (60°C)	30-1105

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