



*HCK4 "LR" with Adapter for  
Wolf-Linde and H.A. Phillips Replacement*

## INTRODUCTION

The HCK4 "LR" series of in-line gravity drain check valves are dependable, compact, and rugged. The HCK4 "LR" gravity drain check valves feature a low wide-opening pressure differential suitable for liquid transfer systems and other low-pressure-drop applications. In addition, an optional, specially-designed adapter allows direct replacement of existing 3" and 4" Wolf-Linde and H.A. Phillips gravity drain check valves without repiping.

## ADVANTAGES

The HCK4 "LR" series check valves, typically installed in vertical pipe lines, offer reliable operation. Plated bodies, stainless steel seat discs, and stainless steel springs provide superior corrosion resistance. The lapped metal-to-metal seating facilitates durable closing of these check valves.

## KEY FEATURES

- Negligible cracking pressure differential
- Low wide-opening differential of 0.25 psid (.02 bar)
- Replacement Kit requires no piping changes to replace Wolf-Linde and H.A. Phillips gravity drain check valve (3" and 4")
- Low bubble leakage tolerance
- For ammonia, R22, R134a, and other Hansen-approved refrigerants

## MATERIAL SPECIFICATIONS

- Body: Ductile iron, ASTM A536, zinc chromate plated
- Seat Disc: Stainless steel
- Seat Cartridge: Forged steel, ASTM A108, zinc chromate plated
- Spring: Stainless steel
- Adapter: Low carbon steel, zinc chromate plated
- Safe Working Pressure: 400 psig (28 bar g), 600 psig (bar g) available upon request
- Operating Temperature: -60°F to +240°F (-51°C to +115°C) temperatures below -60°F (-51°C) at coincident pressures

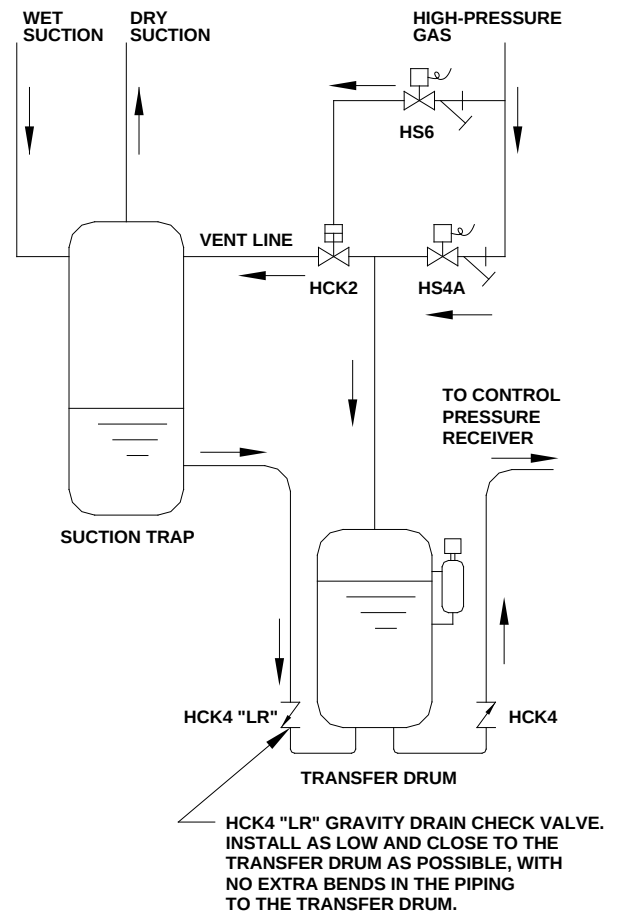
## Specifications, Applications, Service Instructions & Parts

### HCK4 "LR" GRAVITY DRAIN CHECK VALVES

**Gravity Drain Check Valves**  
**2", 3" and 4"**  
**(50, 80 and 100 mm)**

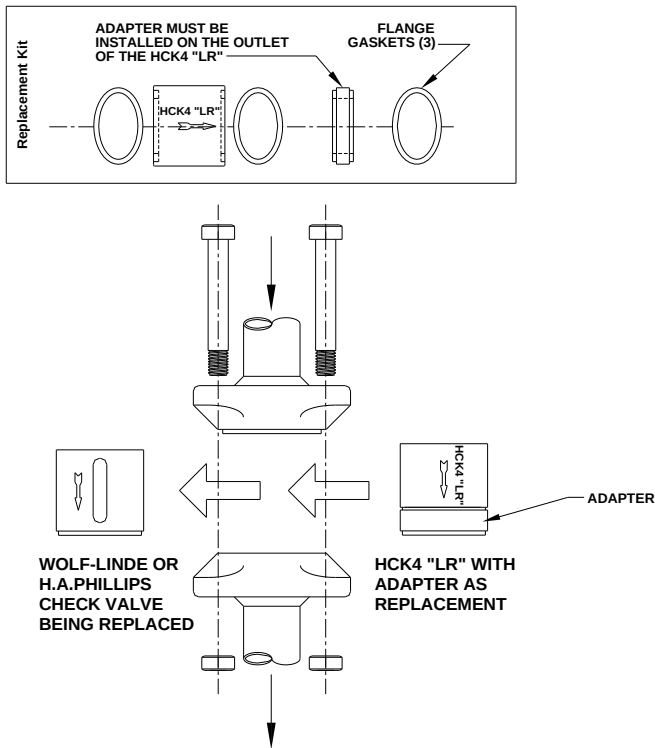


## TYPICAL APPLICATION



Note: The above drawing is for illustration purposes and should not be used for actual engineering or design.

## WOLF-LINDE/H.A. PHILLIPS REPLACEMENT



| PORT SIZE | WOLF-LINDE VALVE CODE NUMBER | H.A. PHILLIPS CODE NUMBER | FOR DIRECT REPLACEMENT USE HANSEN REPLACEMENT KIT* |
|-----------|------------------------------|---------------------------|----------------------------------------------------|
| 3"        | 5980                         | 600BJ                     | 72-1001                                            |
| 4"        | 5982                         | 600DJ                     | 72-1002                                            |

\*Replacement kit is supplied with check valve, adapter, and flange gaskets (3), less flanges and bolts.

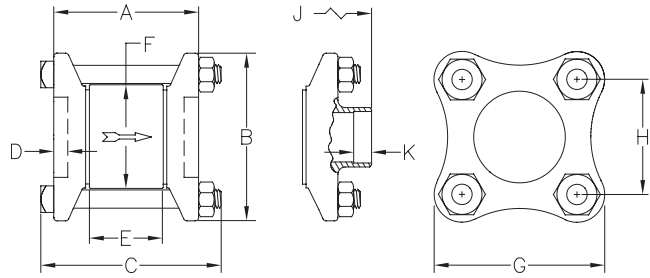
## CAUTION

Hansen valves are only for refrigeration systems. These instructions must be completely read and understood before selecting, using or servicing Hansen valves. Only knowledgeable, trained refrigeration mechanics should install, operate, or service these valves. Stated temperature and pressure limits should not be exceeded. Bonnets, solenoid tubes, etc. 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

All Hansen products, except electronics, are guaranteed against defective materials or workmanship for one year F.O.B. factory. Electronics are guaranteed against defective materials or workmanship for 90 days F.O.B. factory. No consequential damages or field labor is included.

## INSTALLATION DIMENSIONS



| DIMENSION LETTER | HCK4-8LR<br>2" PORT | HCK4-0LR<br>3" PORT | HCK4-1LR<br>4" PORT |
|------------------|---------------------|---------------------|---------------------|
| A                | 5.06"<br>(129mm)    | 6.06"<br>(154mm)    | 6.39"<br>(162mm)    |
| B                | 4.56"<br>(116mm)    | 6.00"<br>(152mm)    | 7.13"<br>(181mm)    |
| C                | 6.38"<br>(162mm)    | 7.50"<br>(191mm)    | 8.00"<br>(203mm)    |
| D                | 0.75"<br>(19mm)     | 1.00"<br>(25mm)     | 1.00"<br>(25mm)     |
| E                | 2.56"<br>(65mm)     | 2.92"<br>(74mm)     | 3.50"<br>(89mm)     |
| F                | 3.62"<br>(92mm)     | 4.84"<br>(123mm)    | 6.06"<br>(154mm)    |
| G                | 4.56"<br>(116mm)    | 6.00"<br>(152mm)    | 7.13"<br>(181mm)    |
| H                | 3.06"<br>(78mm)     | 4.12"<br>(105mm)    | 5.00"<br>(127mm)    |
| J                | 6.06"<br>(154mm)    | 7.06"<br>(179mm)    | 9.89"<br>(251mm)    |
| K                | 0.87"<br>(22mm)     | 1.08"<br>(27mm)     | 1.40"<br>(36mm)     |

"E" dimension is check valve body outside edge to outside edge. Flange groove depth: nominal 0.12" each of two; gasket thickness: nominal 0.06" each of two.

## ORDERING INFORMATION GRAVITY DRAIN CHECK VALVES

| TYPE     | PORT SIZE<br>INCHES<br>(mm) | FLANGE CONNECTION<br>STYLE & SIZES |        |          |
|----------|-----------------------------|------------------------------------|--------|----------|
|          |                             | SW or WN                           |        | ODS      |
|          |                             | STANDARD                           | ALSO   | STANDARD |
| HCK4-8LR | 2" (50)                     | 2"                                 | 1-1/2" | 2-1/8"   |
| HCK4-0LR | 3" (80)                     | 3"                                 | —      | 3-1/8"   |
| HCK4-1LR | 4" (100)                    | 4"                                 | —      | 4-1/8"   |

To Order: Specify valve type, connection style and size, and adapter kit (if needed).

A full line of HCK4 inline check valves (5/8" to 4") and HCK1 piston-type check valves (3/4" to 6") are also available from Hansen.

# HANSEN

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