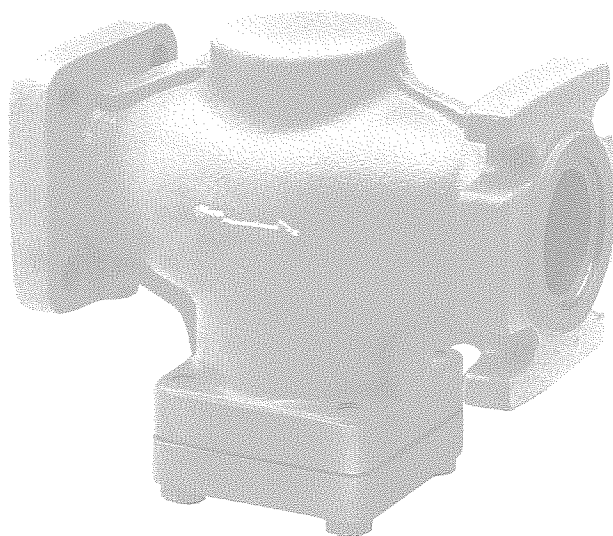


## HANSEN TECHNOLOGIES CORPORATION



2" Strainer: ST200

### INTRODUCTION

These rugged, ductile iron, flanged refrigerant strainers are specifically designed for use in industrial and large commercial refrigeration systems. Their purpose is to facilitate the removal of foreign materials from the refrigeration system, thus protecting the control valves and other components from damage and undue wear. The liberal use and maintenance of strainers can protect and help assure the reliable operation of other components. Strainers can be installed in-line with flanges, or close-coupled to solenoid valves, pressure regulators or other types of flanged valves.

### APPLICATIONS

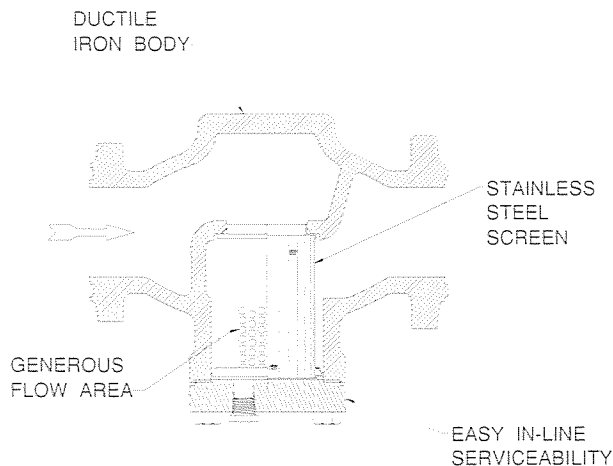
Liquid lines  
Hot gas lines  
Suction lines  
Oil lines

### Specifications, Applications, Service Instructions & Parts

**ST  
STRAINERS**  
1/2" thru 4"

**Flanged**  
3/8" thru 4"  
**FPT, SW, WN, ODS**  
**for refrigerants**

### KEY FEATURES



### ADDITIONAL FEATURES

Suitable for Ammonia, R22, and other refrigerants  
60 mesh screen  
Easily serviced  
Drain plug available  
Can be close-coupled to Hansen or Parker R/S  
solenoid valves or pressure regulators

## MATERIAL SPECIFICATIONS

Body: Ductile iron (65,000 psi tensile)

Bottom cover: 1/2" steel, plated

3/4" thru 1 1/4" ductile iron

1 1/2" thru 4" steel

Screen: Stainless steel, 60 mesh

Gaskets: Non-asbestos, graphite composite

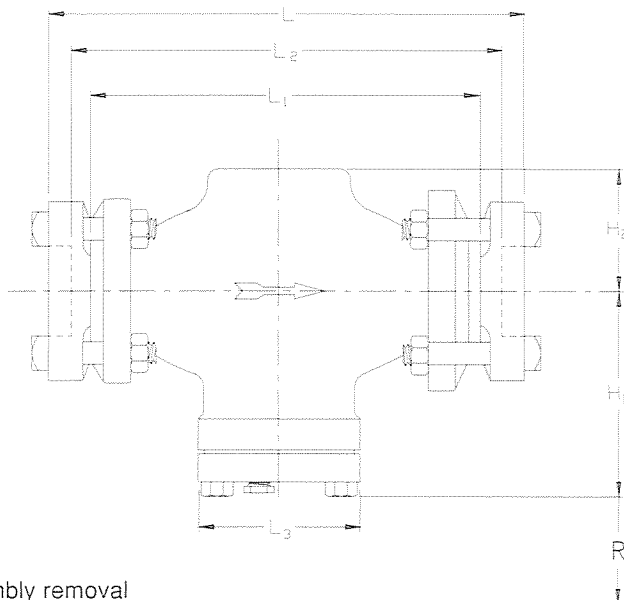
Safe working pressure: 400 psig

Operating temperature: -50F to +250F

## ADVANTAGES

These strainers feature a ductile iron body which is more rugged than cast iron or semi-steel. Generous screen area reduces pressure drop thru strainer as well as increasing the amount of dirt and slag the strainer can remove before servicing. The 60 mesh stainless steel screen is an optimal balance between particle removal, pressure drop and required strainer servicing.

## INSTALLATION DIMENSIONS



R= Clearance for strainer assembly removal

TYPE	SIZE	H <sub>1</sub>	H <sub>2</sub>	L		L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	R	W
				FPT, SW	WN					
ST050	1/2"	3 3/4"	3/4"	3 3/4"	5"	2 15/16"	3"	1 3/8"	3"	1"
ST100	3/4", 1", 1 1/4"	5 1/8"	3/4"	6"	7 3/4"	3 11/16"	4 3/4"	4 5/8"	3"	2 3/4"
ST200	1 1/2", 2"	4 7/8"	3 1/8"	12 1/2"	15"	9 9/16"	10 13/16"	4 1/4"	3 1/2"	4 5/8"
ST250	2 1/2"	5 3/4"	3 1/8"	13 1/4"	16 1/8"	9 1/2"	11"	5 1/2"	4 1/2"	4 5/8"
ST300	3"	6 1/8"	4 1/8"	15"	18 1/2"	12 7/16"	12 3/4"	5 1/2"	4 3/4"	6 5/8"
ST400	4"	7"	4 7/8"	17 1/2"	22 1/4"	13 11/16"	15 3/8"	6 3/4"	5 3/4"	8 3/8"

W= Maximum width of strainer body

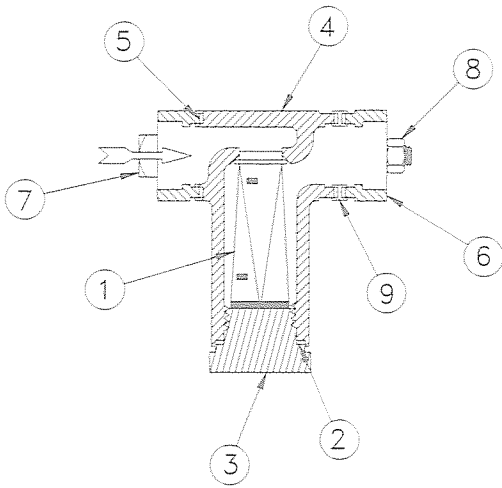
L<sub>1</sub>= Flange face-to-face dimension.

## FLANGE BOLT, FLANGE NUT, AND ADAPTER RING INFORMATION

TYPE	SIZE	FLANGE SHAPE	BOLT QTY.	FLANGE BOLT		FLANGE NUT PART NO.	ADAPTER RING PART NO.
				SIZE	PART NO.		
ST050	1/2"	Oval	2	7/16" - 14 x 4 1/2"	70-0074*	70-0055	70-0056
ST100	3/4", 1", 1 1/4"	Oval	2	5/8" - 11 x 6 1/2"	70-0134	70-0136	70-0187
ST200	1 1/2", 2"	Square	8	5/8" - 11 x 3 3/4"	70-0140	70-0136	75-0267
ST250	2 1/2"	Square	8	3/4" - 10 x 3 3/4"	70-0441	70-0210	75-0268
ST300	3"	Square	8	3/4" - 10 x 3 3/4"	70-0441	75-0210	75-0269
ST400	4"	Square	8	7/8" - 9" x 4"	75-0273	75-0280	75-0270

\* Bolt dimension for separate flanged unit. For close-coupling to HS6 or HS8 use 7/16" - 14" X 5 1/2" bolt (70-0076); or for close-coupling to HA2B use 7/16" - 14" X 7" bolt (70-0077).

**1/2" STRAINER**



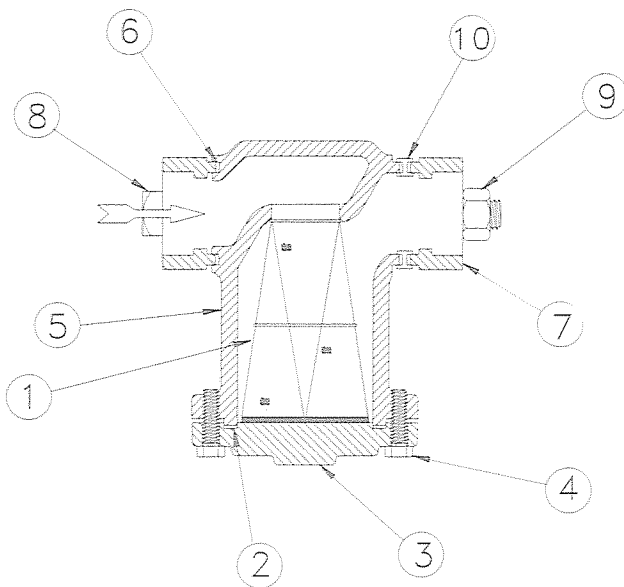
**1/2" STRAINER**

ITEM	DESCRIPTION	QTY.	PART NO.
	Strainer Screen Kit Consists of:		78-1001
1	Screen Assembly	1	78-0005
2	Bottom Cap Gasket	1	78-0043
3	Bottom Cap	1	78-0002
4	Body 1/2"	1	78-0015
5	Flange Gaskets	2	70-0065
6	Flange (various)	2	FACTORY
7	Flange Bolt	2	70-0074 *
8	Flange Nut	2	70-0055
9	Adapter Ring	1	70-0056

**3/4" thru 1 1/4" STRAINER**

ITEM	DESCRIPTION	QTY.	PART NO.
	Strainer Screen Kit Consists of:		78-1003
1	Screen Assembly	1	78-0028
2	Bottom Cover Gasket	1	78-0026
3	Bottom Cover	1	78-0022
4	Bottom Cover Bolts	6	78-0025
5	Body 3/4" thru 1 1/4"	1	78-0021
6	Flange Gaskets	2	70-0132
7	Flange (various)	2	FACTORY
8	Flange Bolt	2	70-0134
9	Flange Nut	2	70-0136
10	Adapter Ring	1	70-0187

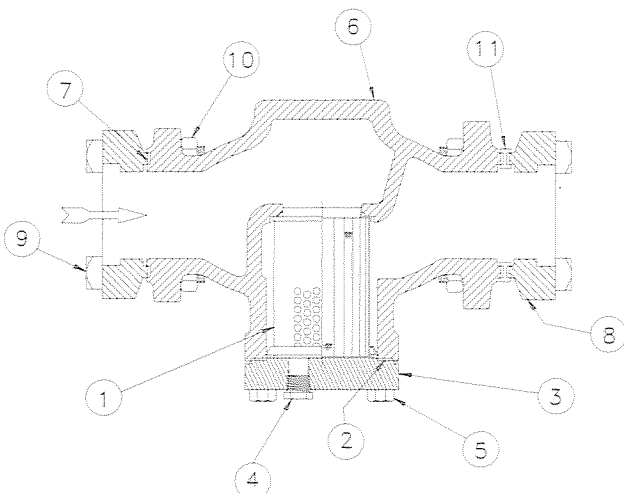
**3/4" thru 1 1/4" STRAINER**



**1 1/2" thru 4" STRAINER**

ITEM	DESCRIPTION	QTY.	PART NO.
	Strainer Screen Kit 1 1/2" 2"		78-1005
	Strainer Screen Kit 2 1/2"		78-1006
	Strainer Screen Kit 3"		78-1007
	Strainer Screen Kit 4"		78-1008
	Above Kits Consist of:		
1a	Screen Assembly 1 1/2" 2"	1	78-0052
1b	Screen Assembly 2 1/2"	1	78-0040
1c	Screen Assembly 3"	1	78-0054
1d	Screen Assembly 4"	1	78-0057
2a	Bottom Cover Gasket 1 1/2", 2"	1	75-0113
2b	Bottom Cover Gasket 2 1/2", 3"	1	75-0128
2c	Bottom Cover Gasket 4"	1	75-0243
3a	Bottom Cover 1 1/2", 2"	1	75-0107
3b	Bottom Cover 2 1/2", 3"	1	75-0121
3c	Bottom Cover 4"	1	75-0234
4	Drain Plug, 3/8" - 18 MPT Hex Head	1	75-0251
5a	Bottom Cover Bolts 1 1/2", 2"	4	75-0175
5b	Bottom Cover Bolts 2 1/2", 3"	4	65-0057
5c	Bottom Cover Bolts 4"	4	75-0291
6a	Body 1 1/2" 2"	1	78-0053
6b	Body 2 1/2"	1	78-0042
6c	Body 3"	1	78-0041
6d	Body 4"	1	78-0058
7a	Flange Gaskets 1 1/2" 2"	2	75-0138
7b	Flange Gaskets 2 1/2"	2	75-0125
7c	Flange Gaskets 3"	2	75-0137
7d	Flange Gaskets 4"	2	75-0253
8	Flange (various)	2	FACTORY
9	Flange Bolt	8	-
10	Flange Nut	8	-
11	Adapter Ring	1	-

**1 1/2" thru 4" STRAINER**



\*See Flange Bolt, Flange Nut, and Adapter Ring Information on page 2

## INSTALLATION

Protect interior of strainer from moisture during storage and installation. Strainer should be installed so that arrow on body is in direction of normal flow. Strainer may be separate unit or close-coupled to solenoid valve or pressure regulator. Install strainer in an accessible area with sufficient space below bottom cover for screen removal. Strainer should be installed upright for ease of servicing.

## SERVICE AND MAINTENANCE

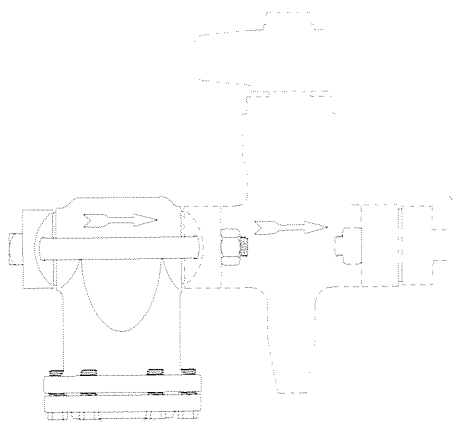
Regular inspection of strainers during system start-up or repairs is essential for optimum benefit. Thereafter, periodic service should be done to maintain performance.

**Before opening strainer or any other component, be sure it is isolated from the system and all refrigerant is removed (pumped out to zero pressure).** Follow usual refrigeration system safe servicing procedure. Read Caution section of this bulletin.

**1/2" strainers:** Use an adjustable wrench to slowly remove screwed 1 3/8" hex bottom cap; being careful to avoid any refrigerant which may still remain. Remove the screen assembly. Clean assembly with a good solvent, blow dry, and inspect. If screen is damaged or unable to remove sediment from mesh, replace the screen assembly. Carefully align screen assembly in center of strainer body and replace bottom cap cover. Pressure test for leaks before returning to service.

**3/4" thru 4" strainers:** Use an 8" adjustable wrench to slowly loosen the bottom cover bolts, being careful to avoid any refrigerant which may still remain. Remove the bottom cover bolts, bottom cover, and screen assembly. Clean screen assembly. Remove the screen assembly. Clean assembly with a good solvent, blow dry, and inspect. If screen is damaged or unable to remove sediment, from mesh, replace the screen assembly. Carefully align screen assembly in center of strainer body and replace bottom cover. Pressure test for leaks before returning to service.

## TYPICAL CLOSE-COUPLED



## CAUTION

Hansen strainers are only for refrigeration systems. Read these instructions completely before selecting, using or servicing these strainers. Only knowledgeable, trained refrigeration mechanics should install, operate or service these strainers. Stated low temperature and high pressure limits should not be exceeded. Bottom cover should not be removed from strainers unless system has been evacuated to zero pressure. See also 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, STRAINERS

TYPE	SIZE	FLANGE STYLE AND SIZES		
		CONNECTIONS AVAILABLE		
		FPT, SW, WN		ODS
		STD	ALSO	STD
ST050	1/2"	1/2"	1/4", 3/8"	5/8"
ST100	3/4"	3/4"	1", 1 1/4"	7/8"
	1"	1"	3/4", 1 1/4"	1 1/8"
	1 1/2"	1 1/4"	3/4", 1"	1 3/8"
ST200	1 1/2"	1 1/2"	2"	1 5/8"
	2"	2"	1 1/2"	2 1/8"
ST250	2 1/2"	2 1/2"	3"	2 5/8"
ST300	3"	3"	--	3 1/8"
ST400	4"	4"	--	4 1/8"

## TYPICAL SPECIFICATIONS

"Refrigerant strainers shall be flanged, ductile iron bodied having stainless steel 60 mesh screens and bottom cover as is necessary for in-line servicing as manufactured by Hansen Technologies Corporation or approved equal."

**HANSEN TECHNOLOGIES CORPORATION**  
 129 West 83rd Street  
 Burr Ridge, Illinois 60521 U.S.A.  
 Telephone: (708) 325-1565  
 Outside IL: 1-800-426-7368  
 FAX: (708) 325-1572