Refrigerant Strainer

Type RSW
Size: 125mm - 200mm (5" - 8")
For Ammonia, R-22, R134a, R404a, R-507 and other common Refrigerants

Features

- Stainless Steel (60 Mesh) Screen
- Drain Connection for Safe Cleaning
- Ample Screen Area
- Low Pressure Drop
- Desigh Pressure: 27.6 bar (400 psig)

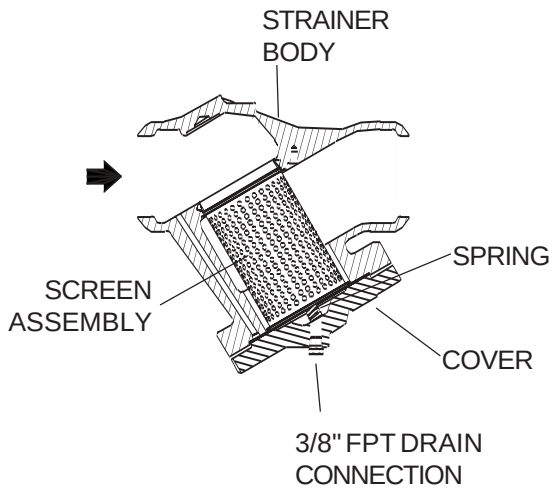

Fig. 1

Description
These rugged valve bodies are made of ASTM A352, Grade LCB cast steel and they butt weld directly into the pipe line, with connections suitable for either metric or U. S. pipe sizes. Refrigerant Strainers with stainless steel screen are designed especially for the protection of R/S Control Valves from foreign materials present in refrigeration systems. The fine stainless screen mesh will collect particles as small as six thousands of an inch in diameter. Generous available screen area allows maximum dirt capacity at minimum pressure drop.

Purpose
The RSF Refrigerant Strainer collect foreign materials and dirt in a refrigerant system at minimal pressure drop in order to minimize damage to or prevent malfunction of control valves. This, of course, is extremely important upon start-up of a new refrigeration system where dirt, scale, and weld particles may be present in the system and are disturbed and circulated when pressure testing or upon system start-up. Also when an existing system is revised, any settled dirt or foreign matter may be disturbed and circulated throughout the system. It is not safe to omit strainers upstream of the control valves unless there is a certainty that the system will always be clean.

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Installation, Service and Parts Information

Service Pointers
It is very important that the strainer is frequently inspected for dirt and cleaned during system start-up and until no further dirt is found.

Before beginning to loosen cover screws, be sure that the strainer has been pumped out and any entrapped refrigerant liquid is properly removed. Then remove Screen Assembly #2 by removing Strainer Cover #3. The screen assembly should be washed with a good solvent and blown dry. The inside of the Strainer Body #1 should also be cleaned.

After the strainer has been thoroughly inspected and cleaned, insert the screen assembly into the strainer body, making sure that it is properly centered to avoid crushing (and that the Spring #6 is properly located). Lightly oil and place gasket on the valve body and fasten the strainer cover in place. Cover bolts must be tightened evenly to the torque values shown.

Additional Service Pointers
Ruptured Screen Assembly: (a) Screen is clogged causing excessive pressure drop to rupture the screen - check and clean more frequently. (b) Fluid velocity too great. Use oversized strainer, or a restricting hand valve to reduce fluid flow.
Collapsed Screen Assembly: (a) Possibly caused by reverse flow through the strainer (avoid reverse flow and never open a hand valve downstream of a strainer before a valve upstream has been opened first). (b) Screen Assembly crushed during installation.
Dirt Passing Through Strainer: (a) Ruptured or collapsed screen assembly. (b) Spring #6 is broken or missing. (c) Fine dirt, less than several thousandths of an inch in size requires more frequent cleaning of the strainer or possible temporary insertion of R/S Filter Bag where applicable.

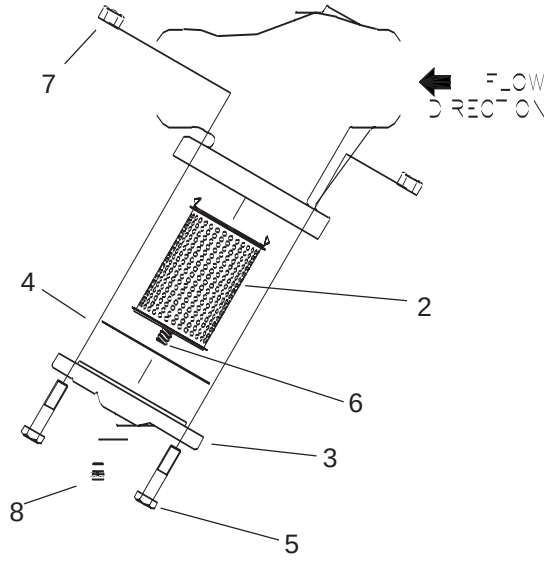
Safe Operation (See also Bulletin RSBCV)
People doing any work on a refrigeration system must be qualified and completely familiar with the system and the Refrigerating Specialties Division valves involved, or all other precautions will be meaningless. This includes reading and understanding pertinent Refrigerating Specialties Division

product bulletins and Safety Bulletin RSB prior to installation or servicing work.

Where cold refrigerant liquid lines are used, it is necessary that certain precautions be taken to avoid damage that could result from liquid expansion. Temperature increase in a piping section full of solid liquid will cause high pressure, due to the expanding liquid that can possibly rupture a gasket, pipe or valve. All hand valves isolating such sections should be marked, warning against accidental closing, and must not be closed until the liquid is removed. Check valves must never be installed upstream of solenoid valves or regulators with electric shut-off, nor should hand valve upstream of solenoid valves or downstream of check valves be closed until the liquid has been removed. It is advisable to properly install relief devices in any section where liquid expansion could take place.
Avoid all piping or control arrangements that might produce thermal or pressure shock. For the protection of people and products, all refrigerant must be removed from the section to be worked on before a valve, strainer, or other device is opened or removed.

Installation (see also Bulletin RSBHV)
Strainer must be installed in a horizontal line with the cover on the bottom. Allow sufficient space below the Strainer Cover #3 (see page 1), to permit the Screen Assembly #2 to be removed for cleaning. If the strainer is insulated make sure the insulation can be easily removed to allow access to the strainer cover. Installation must be done according to all applicable Safety Codes and Standards, and by personnel qualified to install refrigeration systems. Refrigerating Specialties Division control valves and strainers must be installed according to the specific valve's instructions, this bulletin, and generally known safe practices.
ince most maintenance problems caused by dirt occur at the start-up of a system, it is advisable to delay insulating the control valves and strainers until the system has operated for several days. During that time the strainers should be checked for dirt and cleaned as necessary. During installation of strainer remove pipe plug #5 (see page 1) from cover and install a refrigerant drain valve

Warranty
All Refrigerating Specialties products are warranted against defects in workmanship and materials for a period of one (1) year from date of shipment from originating factory. This warranty is in force only when products are properly installed, field assembled, maintained, and operated in use and service as specifically stated in Refrigerating Specialties catalogs or bulletins for normal refrigeration applications, unless otherwise approved in writing by Refrigerating Specialties Division. Defective products or parts of returned to the factory with transportation charges prepaid and found to be defective by factory inspection will be replaced or repaired at Refrigerating Specialties option, free of charge F.O.B. factory. Warranty does not cover products that have been altered or repaired in the field, damaged in transit as a result of accidents, misuse, or abuse. Products disabled by dirt or other foreign substances will not be considered defective.
The express warranty above constitutes the only warranty of 8.5 particular purpose. In no event is Refrigerating Specialties responsible for any consequential damages of any nature whatsoever. No employee, agent, dealer or other person is authorized neither to give any warranties on behalf of Refrigerating Specialties nor to assume for Refrigerating Specialties any other liability in connection with any of it products.



SPARE PARTS					
Item	**Description**	**Qty**	**5"**	**6"**	**8"**
2	Screen Assembly	1			
3	Cover	1			
4	Gasket	1	303005	301703	303002
5	Bolt	8			
6	Spring	1			
2, 4, 6	Screen Kit		201561	201562	201563
7	Nut	8			
4, 5, 7	Bolt Kit		201555	201556	201557
8	Plug Package	12	202553	202553	202553

	LENGTH	HEIGHT	WIDTH
5"	381mm 15"	406 mm 16"	267 mm 10.5"
6"	483 mm 19"	483 mm 19"	318 mm 12.5"
8"	622 mm 24.5"	635 mm 25"	381 mm 15"