



Refrigeration Research, Inc.

For More Than One Half Century



Innovation



Quality



Service

MANIFOLDS

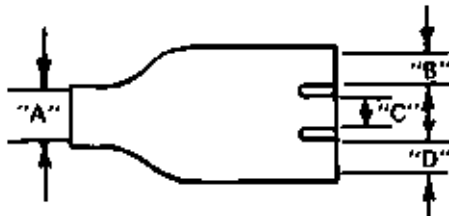
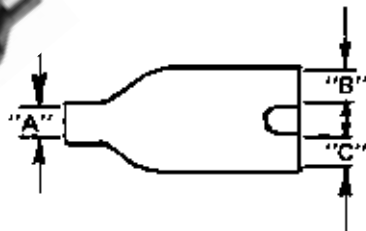
Illustrated are Type 1 and Type 2 Manifolds manufactured by Refrigeration Research. They are of copper construction and fit most applications.

TYPE 1

PART NUMBER	A	B	C	D
693	3/8 ID	1/8 ID	1/8 ID	_____
701	3/8 ID	1/4 ID	1/4 ID	_____
707	5/16 ID	3/32 ID	3/16 ID	_____
709	1/2 ID	1/8 ID	1/8 ID	_____
712	1/2 ID	3/4 ID	3/4 ID	_____

TYPE 2

694	3/8 ID	1/8 ID	1/8 ID	1/8 ID
708	5/8 OD	3/16 ID	3/16 ID	3/16 ID
716	7/8 ID	1/2 ID	1/2 ID	1/2 ID
718	1-1/8 ID	5/8 ID	5/8 ID	5/8 ID
727	1/2 OD	5/16 ID	5/16 ID	5/16 ID



THE POPULAR AND EXCLUSIVE ADJUSTABLE MUFFLER*

This original discharge muffler development by Refrigeration Research permits “tuning” the muffler to the system.

For the first time it is possible to change muffler characteristics without installing a different muffler or even breaking into the system. In fact the muffler may be adjusted without losing charge and while the system is in operation.

The adjustable muffler is provided with a stem which may be turned to “tune” the muffler to the system. It is a well known fact that two systems made up of the same components do not always sound the same when installed in different locations. One may be noisy while the other is relatively quiet. Individual compressor characteristics, length and diameters of lines and other factors may make the difference.

The Bull Dog Adjustable Muffler by Refrigeration Research provides a variable range of muffler characteristics so that the best performance with a particular system can be attained.



*PATENT NUMBER
3,141,519 and 3,253,676
and Patents Pending

CATALOG NUMBER	TONS	O.D.	OVERALL LENGTH	FITTING SIZE	WEIGHT POUNDS
AM-5	2 to 5	4	10	5/8	5.5
AM-10	5 to 10	4	11	7/8	6
AM-25	10 to 25	4	14-1/4	1-1/8	7.5



All mufflers are in accordance with latest  and  requirements, diameters above 3” being furnished complete with Refrigeration Research “Leek Pruf” fusible plugs installed. All mufflers may be mounted horizontally or vertically as long as instructions are followed. CE documentation available upon request.

DISCHARGE MUFFLERS

Some systems are noisy due to vibration and pulsation of gas through the discharge line. To smooth out pulsations and reduce vibration and noise, Refrigeration Research offers the industry's most complete line of Discharge Mufflers.

Refrigeration Research has long been a leading manufacturer of mufflers in production quantities and was first to offer a complete catalogued line.

All mufflers are of hydrogen copper brazed steel construction insuring maximum strength and complete cleanliness.



M-20 DISCHARGE MUFFLER SHOWN

CATALOG NUMBER	PART NUMBER	TONS	O.D.	OVERALL LENGTH	FITTING SIZE	WEIGHT POUNDS	REMOVABLE FUSIBLE PLUG
M-2	1760	2	2	7-7/16	3/8	1.0	Not Required
M-3	1761	3	2	7-7/16	1/2	1.0	Not Required
M-5	1762	5	2	7-7/16	5/8	1.0	Not Required
M-10	1758	7-1/2 to 10	3	9	7/8	2.6	Not Required
M-15	1792	10 to 15	3	9-1/4	1-1/8	2.8	Not Required
M-20	1771	15 to 25	3	13-3/4	1-3/8	3.3	Not Required
M-30	1772	25 to 50	4	16	1-5/8	6.5	Installed
M-60	1790	50 to 75	6	26-1/2	2-1/8	26	Installed
M-80	1791	75 to 100	6	28	2-5/8	27	Installed
M-110	1793	100 to 125	6	36	3-1/8	32.5	Installed

SUCTION MUFFLER

These mufflers smooth out suction pulsations resulting in reduced system noise when installed at the compressor on the suction side. They are of hydrogen copper brazed steel construction for maximum strength and complete cleanliness with copper nipples for ease of installation.



PART NUMBER	TONS	OVERALL LENGTH	FITTING SIZE	WEIGHT POUNDS
1677	4-1/2 to 5	6-1/8"	7/8" I.D. (in) 7/8" O.D. (out)	1
1678	6 to 10	6-1/8"	1-1/8" I.D. (in) 1-1/8" O.D. (out)	1
1679	7-1/2 to 12-1/2	6-1/8"	1-3/8" I.D. (in) 1-3/8" O.D. (out)	1
1676	7-1/2 to 10	6-1/8"	1-1/8" I.D. (in) 1-3/8" O.D. (out)	1

All mufflers are in accordance with  and  requirements.

 LISTED

OIL RESERVOIRS

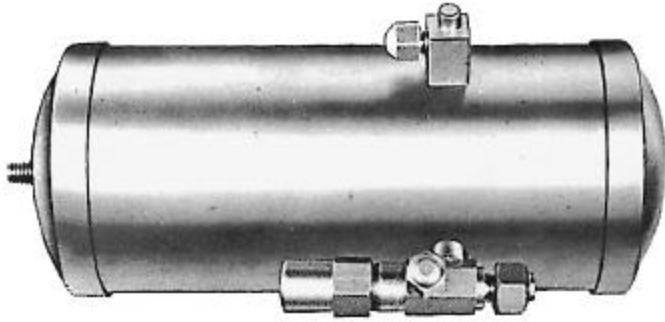
These reservoirs may be used with the oil separator and an oil level regulator to return oil to the compressor.

PART NUMBER	"A" CAPACITY	"B" CAPACITY	TOTAL CAPACITY	LENGTH
5014	.75 gallon	.75 gallon	2 gallon	18"
5014-1	.75 gallon	3 gallon	4 gallon	36"

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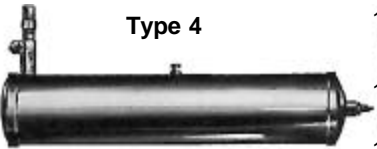
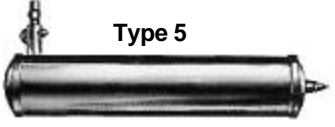


RECEIVERS



Refrigeration Research Receivers are used widely by original equipment manufacturers throughout the industry. They are backed by a reputation for quality and service.

Available in a broad range of types and sizes, these receivers are hydrogen brazed for cleanliness and pressure tested for reliability. A 430PF Fusible plug is installed on all receivers except #2030 and #9028. All valves are supplied with steel stem caps with copper gaskets and brass flare nuts and caps.

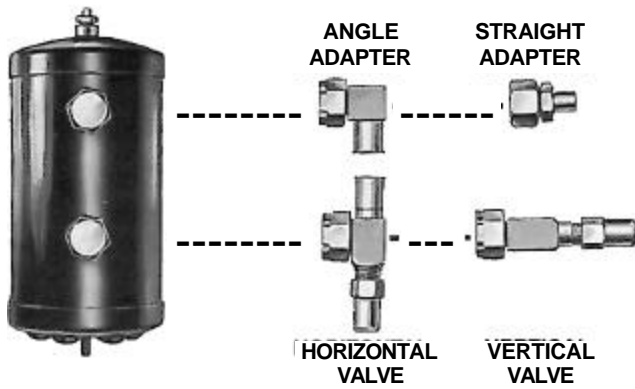
Type 1 	PART NUMBER	*PUMP DOWN CAPACITY	DIAMETER & LENGTH OVER END CAPS	INLET	OUTLET	WT. LBS.
Vertical Mount	2030	2 lb.	3 x 10	1/4 ID Sweat	1/4 ID Sweat	2.4
Type 2 	1947	3 lb.	3 1/2 x 9	3/8 ID Sweat	3/8 SAE Valve	3.3
Horizontal Mount						
Type 3 	5774	2 lb.	3 x 10	1/4 SAE Fitting	1/4 SAE Valve	3
	9028	2 lb.	3 x 10	1/4 ID Sweat	1/4 ID Sweat Valve	3
	1920	2 lb.	3 1/2 x 7 1/2	1/4 SAE Fitting	1/4 SAE Valve	2.9
	1917	3 lb.	3 1/2 x 10	1/4 SAE Fitting	1/4 SAE Valve	3.5
	9017	3 lb.	3 1/2 x 10	1/4 ID Sweat	1/4 ID Sweat Valve	3.5
	1921	4 lb.	4 x 10	1/4 SAE Fitting	1/4 SAE Valve	4.5
	9021	4 lb.	4 x 10	1/4 ID Sweat	1/4 ID Sweat Valve	4.5
	1918	6 lb.	5 x 10	1/4 SAE Fitting	1/4 SAE Valve	7.2
	5315	6 lb.	5 x 10	3/8 SAE Fitting	3/8 SAE Valve	7.3
	6848	6 lb.	5 x 10	3/8 ID Sweat	3/8 ID Sweat Valve	7.3
	1911	10 lb.	6 x 12	3/8 SAE Fitting	3/8 SAE Valve	10.9
6801	10 lb.	6 x 12	3/8 ID Sweat	3/8 ID Sweat Valve	10.9	
3212	16 lb.	6 x 18	1/2 SAE Fitting	1/2 SAE Valve	15.6	
9027	16 lb.	6 x 18	1/2 ID Sweat	1/2 ID Sweat Valve	15.6	
Vertical Mount						
Type 4 	1916	8 lb.	4 x 19	1/4 Sweat	1/4 SAE Valve	7.5
	1915	12 lb.	5 x 18	1/4 Sweat	3/8 SAE Valve	11.4
	1919	19 lb.	5 x 28	3/8 Sweat	3/8 SAE Valve	16.6
Horizontal Mount						
Type 5 	1922	15 lb.	5 X 23	3/8 Sweat	3/8 SAE Valve	14.5
	1923	15 lb.	5 x 23	1/2 Sweat	1/2 SAE Valve	15
Horizontal Mount						

*90% AT 90° for R22, R134a and R502 - For R12 multiply by 1.1 - For R402b and R404a multiply by 0.9
500 psi Working Pressure

Marking of  listing Available if needed.


File No. SA 2400


RECEIVERS FOR ROTALOCK FITTINGS




Receivers below are of hydrogen copper brazed construction insuring maximum cleanliness and strength.

These receivers are designed for either horizontal or vertical mounting and for use with Rotalock valves and fittings to make them as universal in application as possible.

Rotalock receivers do not include valves or fittings, but are supplied with Teflon Gasket installed.

PART NUMBER	*PUMP DOWN CAPACITY	DIAMETER AND LENGTH OVER END CAPS	INLET	OUTLET	MOUNT	LEEK PRUF FUSIBLE PLUG	WEIGHT POUNDS	 CODE IDENT.
3392	4 lb.	4 x 10	1" Rotalock Fitting	1" Rotalock Fitting	Horizontal or Vertical	R	4.7	KN
3388	6 lb.	5 x 10	1" Rotalock Fitting	1" Rotalock Fitting	Horizontal or Vertical	R	7.3	EN
3390	13 lb.	5 x 20	1" Rotalock Fitting	1" Rotalock Fitting	Horizontal or Vertical	R	12.3	EN
3389	10 lb.	6 x 12	1" Rotalock Fitting	1" Rotalock Fitting	Horizontal or Vertical	R	11.1	MN
3413	16 lb.	6 x 18	1" Rotalock Fitting	1" Rotalock Fitting	Horizontal or Vertical	R	14.5	MN
3391	22 lb.	6 x 24	1" Rotalock Fitting	1" Rotalock Fitting	Horizontal or Vertical	R	18.3	MN
3387	28 lb.	6 x 30	1" Rotalock Fitting	1" Rotalock Fitting	Horizontal or Vertical	R	22.0	MN

*90% AT 90° for R22, R134a and R502 - For R12 multiply by 1.1 - For R402b and R404a multiply by 0.9
 P-Permanent R-Removable 500 psi Working Pressure

Marking of  listing available upon request.



File No. SA 2400

AVAILABLE ROTALOCK VALVES AND FITTINGS FOR ABOVE RECEIVERS

Horizontal Valves

- 27718 – 3/8 SAE flare
- 27689 – 1/2 SAE flare
- 27691 – 5/8 SAE flare

Horizontal Valves

- 23075 – 3/8 I.D. Sweat
- 24601 – 1/2 I.D. Sweat
- 24602 – 5/8 I.D. Sweat

Straight Adapters

- 24246 – 3/8 I.D. Sweat
- 24247 – 1/2 I.D. Sweat
- 24248 – 5/8 I.D. Sweat

Vertical Valves

- 27742 – 3/8 SAE flare
- 27035 – 1/2 SAE flare
- 27036 – 5/8 SAE flare

Vertical Valves

- 24606 – 3/8 I.D. Sweat
- 24490 – 1/2 I.D. Sweat
- 24491 – 5/8 I.D. Sweat

Angle Adapters

- 24957 – 3/8 SAE flare
- 24958 – 1/2 SAE flare
- 24959 – 5/8 SAE flare

Angle Adapters

- 24252 – 3/8 I.D. Sweat
- 24253 – 1/2 I.D. Sweat
- 24254 – 5/8 I.D. Sweat

Teflon Gasket No. 24591

SHELL & COIL TYPE CONDENSER-RECEIVERS

These horizontal condenser-receivers are processed to insure cleanliness and reliability. Water circulates through finned copper tubes. Capacities conservatively rated.



PART NO.	LENGTH OVER END CAPS	DIA. (IN.)	† TONS	REFRIGERANT INLET	REFRIG. OUTLET	LEAK PRUF FUSIBLE PLUG	WATER CONNECTIONS	*RECEIVER PUMP DOWN CAPACITY	WEIGHT LBS.	UL CODE
5803	14	5	1/2	3/8 flare	1/4 valve	R	1/2 SAE Fem. Flare	7 lbs.	18	ON
5806	14	6	3/4	3/8 flare	3/8 valve	R	1/2 SAE Fem. Flare	11 lbs.	22	FN
5802	16-1/4	6	1	3/8 flare	3/8 valve	R	1/2 SAE Fem. Flare	14 lbs.	26	FN
5804	24	6	1-1/2	3/8 flare	3/8 valve	R	1/2 SAE Fem. Flare	19 lbs.	30	FN
5808	36	6	3	1-1/4-12 Rotalock	1-1/4-12 Rotalock	R	3/4 OD	30 lbs.	49	FN
5809	40	6	5	1-1/4-12 Rotalock	1-1/4-12 Rotalock	R	3/4 OD	36 lbs.	59	FN

*90% AT 90° for R22 and R502 - For R12 and R134a multiply by 1.1 - For R402b and R404a multiply by 0.9

†Tons rating for 105°F water delivery

R- Removable



File No. SA 2400

**We maintain a museum of unique
and antique refrigeration equipment
at our Brighton, Michigan (US) plant.
Call us for a tour or visit it at
www.refresearch.com**



**REFRIGERATION
RESEARCH**
INC.

offers the most complete line of
refrigeration system components in the industry.

Research • Design • Quality • Value • Service • Experience

Engineering departments look to Refrigeration Research for assistance in design of component parts and procurement of test samples. We always strive to improve quality and reduce cost through engineering and manufacturing advancements.

Contact us for your special needs or assistance.

**If you have any questions or need more
information, please contact us at:**

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