

A Series Thermo™ - expansion valves

For heat pump, air conditioning, food services and commercial applications.

Features

- Stainless steel power element prevents corrosion and valve failure
- Compact size allows installation in limited spaces
- Hermetic construction
- Mass spectrometer tested to ensure less than 0.10 oz/year external leakage rate

Options

- ZW195 charge available for R-410A systems
- Adjustable or non-adjustable superheat
- SAE or ODF connections standard – Chatleff or Aeroquip are available
- External or internal equalizer
- Internal check valve allows reverse flow for heat pump applications, eliminating the need for external piping and external check valve
- Bleed type pressure equalization to accommodate PSC type compressors
- Pressure limiting charges (MOP) available



Specifications

Maximum working pressure: 700 psig
UR/CUR file number: SA 5312

Model nomenclature example: AACEB 2HC30IN3/8X1/2ODFANG

A	A	C	E	B	2	H	C	30 IN	3/8 X 1/2	ODF	ANG
Series	Superheat adjustment	Internal check valve	Equalizer	Bleed hole	Capacity	Refrigerant code	Charge code	Capillary tube length	Inlet X outlet connection sizes	Connection type	Configuration
Hermetic design	A = Adjustable N = Non-adjustable	(Optional) Reverse flow Bypass Application	E = External (Omit for internal)	(Optional) (Omit for no bleed hole)	Nominal rating in Tons (See Nominal Capacity table below)	+F = R-12 • H = R-22 +M = R-134a • N = R-407C *P = R-507 *R = R-502 *S = R-404A Z = R-410A B = R-448A /R-449A D = R-450A /R-513A T = R-290	C = Medium temp CA = Heat pump W(MOP) ¹ = Press limiting Z = Low temp AA = Wide range A = Medium & low temp	30 IN & 5 FT (std)	1/4 x 3/8 3/8 x 1/2 1/2 x 5/8 5/8 x 7/8	SAE = Flare ODF = Solder Chatleff (Optional) Aeroquip (Optional)	S/T = Straight-thru ANG = 90° Angle

+ = R-12 and R-134a are interchangeable refrigerant charges

* = R-507, R-502, and R-404A are interchangeable refrigerant charges

• = R-22/R-290 and R-407C are interchangeable refrigerant charges

¹ Maximum operating pressure

A Series – nominal* capacity table in Tons (kW)

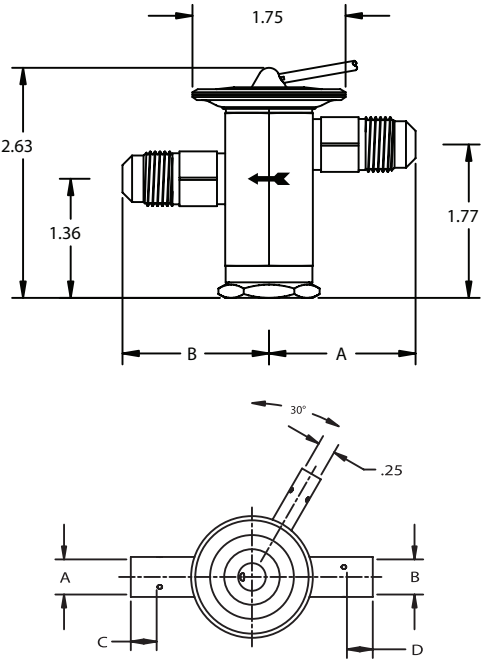
R-12	R-134a	R-450A/R-513A	R-22/R-290	R-410A	R-502	R-507/R-404A	*R-448A/ R-449A	R-407C
–	1/8 (0.4)	1/8 (0.4)	1/5 (0.7)	–	–	1/8 (0.4)	1/5 (0.7)	1/5
1/8 (0.4)	1/4 (0.9)	1/5 (0.7)	1/4 (0.9)	1/4 (0.9)	1/8 (0.4)	1/4 (0.9)	1/4 (0.9)	1/4 (0.9)
1/4 (0.9)	1/2 (1.8)	1/4 (0.9)	1/2 (1.8)	1/2 (1.8)	1/4 (0.9)	1/2 (1.8)	1/2 (1.8)	1/2 (1.8)
1/2 (1.8)	3/4 (2.7)	1/2 (1.8)	1 (3.5)	1 (3.5)	1/2 (1.8)	3/4 (2.7)	1 (3.5)	1 (3.5)
1 (3.5)	1 (3.5)	3/4 (2.7)	1-1/2 (5.3)	1-1/2 (5.3)	1 (3.5)	1 (3.5)	1-1/2 (5.3)	1-1/4 (4.4)
–	1-1/2 (5.3)	1 (3.5)	2 (7.0)	2 (7.0)	–	1-1/4 (4.4)	2 (7.0)	2 (7.0)
1-1/2 (5.3)	2 (7.0)	1-1/2 (5.3)	2-1/2 (8.8)	3 (11.0)	1-1/2 (5.3)	2 (7.0)	2-3/4 (9.7)	2-1/2 (8.8)
2 (7.0)	2-1/2 (9.0)	2 (7.0)	3 (11.0)	4 (14.0)	2 (7.0)	2-1/4 (8.0)	3-1/2 (12.0)	3-1/4 (11.5)
2-1/2 (9.0)	3 (11.0)	2-1/2 (9.0)	4 (14.0)	5 (17.0)	2-1/2 (8.8)	2-1/2 (8.8)	4 (14.0)	4 (14.0)
3 (11.0)	4 (14.0)	3 (11.0)	5 (17.0)	–	3 (11.0)	3-1/2 (12.0)	5-1/2 (20.0)	5-1/4 (19.0)

All capacities shown are at 100°F condensing, 40°F evaporator temperature.

*See extended capacity tables for ratings at a wide range of conditions per ARI standard 750.

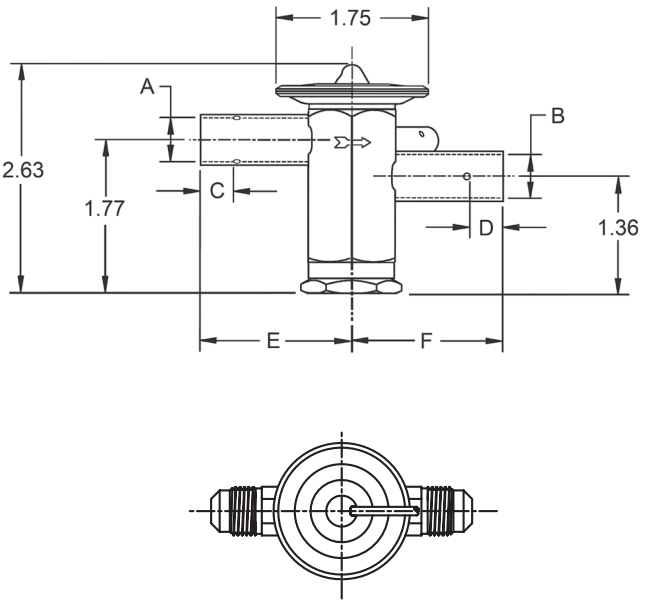
ANCE SAE dimensional data (in.)

Connection size		A	B
Inlet	Outlet		
3/8 SAE	3/8 SAE	1.67	1.67
1/2 SAE	1/2 SAE	1.75	1.75



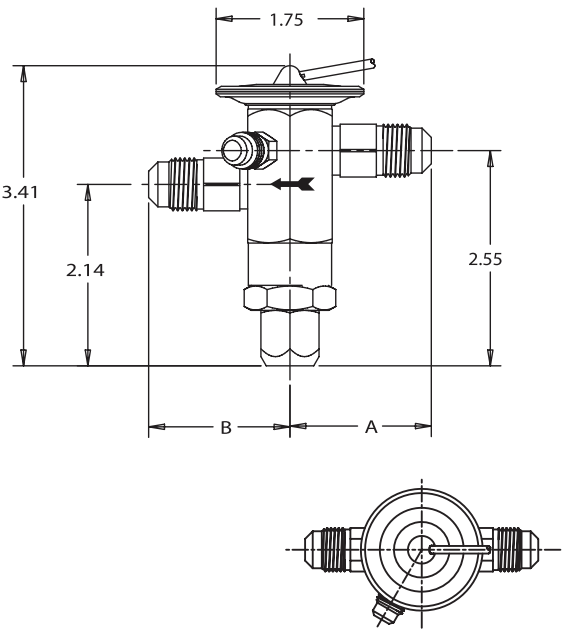
ANCE ODF dimensional data (in.)

Connection size		A±	B±	C	D	E	F
Inlet	Outlet	.002	.002	MIN	MIN		
1/4 ODF	3/8 ODF	0.25	0.38	0.32	0.32	1.70	1.73
3/8 ODF	3/8 ODF	0.38	0.38	0.32	0.32	1.70	1.73
3/8 ODF	1/2 ODF	0.38	0.50	0.32	0.38	1.73	1.73
1/2 ODF	1/2 ODF	0.50	0.50	0.38	0.38	1.73	1.73
1/2 ODF	5/8 ODF	0.63	0.61	0.38	0.50	1.75	1.75



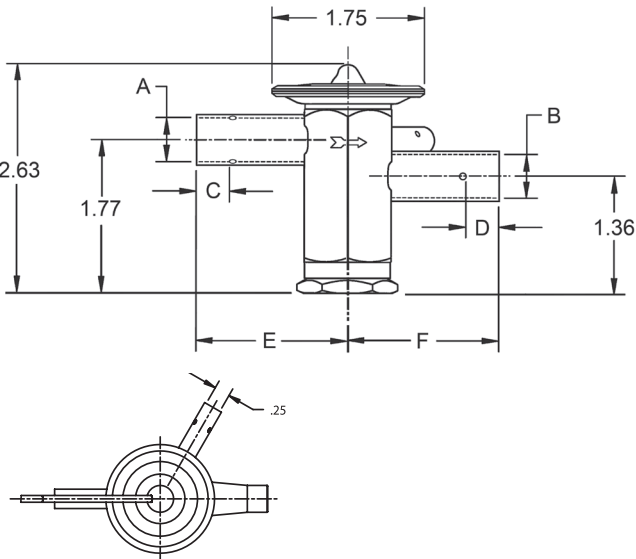
AACE SAE dimensional data (in.)

Connection Size		A	B
Inlet	Outlet		
3/8 SAE	3/8 SAE	1.67	1.67
1/2 SAE	1/2 SAE	1.75	1.75



AACE ODF dimensional data (in.)

Connection Size		A±	B±	C	D	E	F
Inlet	Outlet	.002	.002	MIN	MIN		
1/4 ODF	3/8 ODF	0.25	0.38	0.32	0.32	1.70	1.73
3/8 ODF	3/8 ODF	0.38	0.38	0.32	0.32	1.70	1.73
3/8 ODF	1/2 ODF	0.38	0.50	0.32	0.38	1.73	1.73
1/2 ODF	1/2 ODF	0.50	0.50	0.38	0.38	1.73	1.73
1/2 ODF	5/8 ODF	0.63	0.61	0.38	0.50	1.75	1.75



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Ordering information

Without internal check valve

Refrigerant	Series	Tons*	Charge	Connections	Cap Tube	PCN						
R-410A	AAE	1-1/2	ZW195	3/8 X 1/2 ODF S/T	30 IN	066515						
			ZW195	3/8 X 3/8 ODF S/T	30 IN	064595						
		3	ZW195	3/8 X 1/2 ODF S/T	30 IN	065579						
			ZW195	CHATLEFF	30 IN	015776						
		5	ZW195	1/2 X 5/8 ODF S/T	30 IN	065580						
			ZW195	CHATLEFF	30 IN	015794						
R-134a R-12	AA	1/8	MC	1/4 X 3/8 ODF S/T	30 IN	066030						
			MC	1/4 X 1/2 ODF S/T	30 IN	065821						
		1/4	MC	1/4 X 3/8 ODF S/T	30 IN	062051						
			MC	1/4 X 1/2 ODF S/T	5 FT	065623						
		1	MC	3/8 X 1/2 ODF S/T	30 IN	065776						
		1/2	MC	1/4 X 3/8 SAE S/T	30 IN	058985						
	MC		1/4 X 1/2 ODF S/T	5 FT	065624							
	AAE	1/2	MZ	1/4 X 3/8 SAE S/T	30 IN	058986						
		1/2	MC	1/4 X 1/2 ODF S/T	5 FT	065630						
		1	MC	3/8 X 1/2 ODF S/T	5 FT	065631						
AA		1/4	HC	1/4 X 3/8 ODF S/T	5 FT	056315						
	HC		1/4 X 1/2 ODF S/T	5 FT	055932							
	1/2	HC	1/4 X 1/2 ODF S/T	5 FT	065626							
		HC	3/8 X 3/8 ODF S/T	30 IN	056547							
	R-22 R-407C	AAE	1/2	HC	3/8 X 1/2 SAE S/T	5 FT	057828					
				HC	1/4 X 1/2 ODF S/T	5 FT	065632					
1			HC	3/8 X 1/2 ODF S/T	5 FT	065633						
			HC	3/8 X 1/2 SAE ST	5 FT	057987						
1-1/2			HC	1/4 X 3/8 ODF ST	30 IN	059582						
			HC	1/4 X 1/2 ODF S/T	5 FT	065634						
R-22 R-407C	AAE	1-1/2	HC	3/8 X 1/2 ODF S/T	5 FT	065635						
			HC	3/8 X 1/2 ODF S/T	5 FT	064424						
		2	HCA	3/8 X 1/2 ODF S/T	5 FT	064425						
			HCA	3/8 X 1/2 ODF S/T	30 IN	049632						
		2-1/2	HAA	3/8 X 1/2 ODF S/T	30 IN	063648						
			HAA	CHATLEFF	30 IN	013938						
		3	HCA	3/8 X 1/2 ODF S/T	30 IN	049633						
			HC	3/8 X 1/2 ODF S/T	5 FT	062376						
		4	HC	3/8 X 1/2 SAE S/T	5 FT	056686						
			HCA	3/8 X 1/2 ODF S/T	30 IN	049634						
		5	HCA	1/2 X 5/8 ODF S/T	30 IN	060643						
			HC	1/2 X 5/8 ODF S/T	5 FT	061960						
		R-22 R-407C	AAE	4	HCA	3/8 X 1/2 ODF S/T	30 IN	049638				
					HCA	1/2 X 1/2 ODF S/T	30 IN	061247				
				5	HAA	3/8 X 1/2 ODF S/T	30 IN	063649				
					HAA	CHATLEFF	30 IN	013939				
				6	HC	1/2 X 5/8 ODF S/T	5 FT	059565				
					HC	5/8 X 7/8 ODF S/T	30 IN	061805				
				7	HCA	3/8 X 1/2 ODF S/T	30 IN	054024				
					HCA	1/2 X 5/8 ODF S/T	30 IN	059683				
				8	HW100	3/8 X 5/8 ODF S/T	5 FT	062088				
					2	HCA	3/8 X 1/2 ODF S/T	30 IN	059616			
				R-22 R-407C	AAE	3	HCA	3/8 X 1/2 ODF S/T	30 IN	059603		
							4	HCA	1/2 X 1/2 ODF S/T	30 IN	059605	
						5	HCA	1/2 X 1/2 ODF S/T	30 IN	059607		
							6	HCA	1/2 X 1/2 ODF S/T	30 IN	059608	
7	HCA					1/2 X 1/2 ODF S/T	30 IN	059609				
	8					HCA	1/2 X 1/2 ODF S/T	30 IN	059610			
9	HCA					1/2 X 1/2 ODF S/T	30 IN	059611				
	10					HCA	1/2 X 1/2 ODF S/T	30 IN	059612			
11	HCA					1/2 X 1/2 ODF S/T	30 IN	059613				
	12					HCA	1/2 X 1/2 ODF S/T	30 IN	059614			
R-22 R-407C	AAE					13	HCA	1/2 X 1/2 ODF S/T	30 IN	059615		
							14	HCA	1/2 X 1/2 ODF S/T	30 IN	059616	
						15	HCA	1/2 X 1/2 ODF S/T	30 IN	059617		
							16	HCA	1/2 X 1/2 ODF S/T	30 IN	059618	
						17	HCA	1/2 X 1/2 ODF S/T	30 IN	059619		
							18	HCA	1/2 X 1/2 ODF S/T	30 IN	059620	
		19	HCA			1/2 X 1/2 ODF S/T	30 IN	059621				
			20			HCA	1/2 X 1/2 ODF S/T	30 IN	059622			
		21	HCA			1/2 X 1/2 ODF S/T	30 IN	059623				
			22			HCA	1/2 X 1/2 ODF S/T	30 IN	059624			
		R-22 R-407C	AAE			23	HCA	1/2 X 1/2 ODF S/T	30 IN	059625		
							24	HCA	1/2 X 1/2 ODF S/T	30 IN	059626	
						25	HCA	1/2 X 1/2 ODF S/T	30 IN	059627		
							26	HCA	1/2 X 1/2 ODF S/T	30 IN	059628	
						27	HCA	1/2 X 1/2 ODF S/T	30 IN	059629		
							28	HCA	1/2 X 1/2 ODF S/T	30 IN	059630	
				29	HCA	1/2 X 1/2 ODF S/T	30 IN	059631				
					30	HCA	1/2 X 1/2 ODF S/T	30 IN	059632			
				R-22 R-407C	AAE	31	HCA	1/2 X 1/2 ODF S/T	30 IN	059633		
							32	HCA	1/2 X 1/2 ODF S/T	30 IN	059634	
						33	HCA	1/2 X 1/2 ODF S/T	30 IN	059635		
							34	HCA	1/2 X 1/2 ODF S/T	30 IN	059636	
						35	HCA	1/2 X 1/2 ODF S/T	30 IN	059637		
							36	HCA	1/2 X 1/2 ODF S/T	30 IN	059638	
						37	HCA	1/2 X 1/2 ODF S/T	30 IN	059639		
							38	HCA	1/2 X 1/2 ODF S/T	30 IN	059640	
R-22 R-407C	AAE					39	HCA	1/2 X 1/2 ODF S/T	30 IN	059641		
							40	HCA	1/2 X 1/2 ODF S/T	30 IN	059642	
						41	HCA	1/2 X 1/2 ODF S/T	30 IN	059643		
							42	HCA	1/2 X 1/2 ODF S/T	30 IN	059644	
						43	HCA	1/2 X 1/2 ODF S/T	30 IN	059645		
							44	HCA	1/2 X 1/2 ODF S/T	30 IN	059646	
						45	HCA	1/2 X 1/2 ODF S/T	30 IN	059647		
							46	HCA	1/2 X 1/2 ODF S/T	30 IN	059648	
						R-22 R-407C	AAE	47	HCA	1/2 X 1/2 ODF S/T	30 IN	059649
									48	HCA	1/2 X 1/2 ODF S/T	30 IN
		49	HCA					1/2 X 1/2 ODF S/T	30 IN	059651		
			50					HCA	1/2 X 1/2 ODF S/T	30 IN	059652	
		51	HCA					1/2 X 1/2 ODF S/T	30 IN	059653		
			52					HCA	1/2 X 1/2 ODF S/T	30 IN	059654	
		53	HCA					1/2 X 1/2 ODF S/T	30 IN	059655		
			54					HCA	1/2 X 1/2 ODF S/T	30 IN	059656	
		R-22 R-407C	AAE					55	HCA	1/2 X 1/2 ODF S/T	30 IN	059657
									56	HCA	1/2 X 1/2 ODF S/T	30 IN
				57	HCA			1/2 X 1/2 ODF S/T	30 IN	059659		
					58			HCA	1/2 X 1/2 ODF S/T	30 IN	059660	
				59	HCA			1/2 X 1/2 ODF S/T	30 IN	059661		
					60			HCA	1/2 X 1/2 ODF S/T	30 IN	059662	
				61	HCA			1/2 X 1/2 ODF S/T	30 IN	059663		
					62			HCA	1/2 X 1/2 ODF S/T	30 IN	059664	
				R-22 R-407C	AAE			63	HCA	1/2 X 1/2 ODF S/T	30 IN	059665
									64	HCA	1/2 X 1/2 ODF S/T	30 IN
65	HCA							1/2 X 1/2 ODF S/T	30 IN	059667		
	66							HCA	1/2 X 1/2 ODF S/T	30 IN	059668	
67	HCA							1/2 X 1/2 ODF S/T	30 IN	059669		
	68							HCA	1/2 X 1/2 ODF S/T	30 IN	059670	
69	HCA							1/2 X 1/2 ODF S/T	30 IN	059671		
	70							HCA	1/2 X 1/2 ODF S/T	30 IN	059672	
R-22 R-407C	AAE							71	HCA	1/2 X 1/2 ODF S/T	30 IN	059673
									72	HCA	1/2 X 1/2 ODF S/T	30 IN
						73	HCA	1/2 X 1/2 ODF S/T	30 IN	059675		
							74	HCA	1/2 X 1/2 ODF S/T	30 IN	059676	
						75	HCA	1/2 X 1/2 ODF S/T	30 IN	059677		
							76	HCA	1/2 X 1/2 ODF S/T	30 IN	059678	
						77	HCA	1/2 X 1/2 ODF S/T	30 IN	059679		
							78	HCA	1/2 X 1/2 ODF S/T	30 IN	059680	
						R-22 R-407C	AAE	79	HCA	1/2 X 1/2 ODF S/T	30 IN	059681
									80	HCA	1/2 X 1/2 ODF S/T	30 IN
		81	HCA					1/2 X 1/2 ODF S/T	30 IN	059683		
			82					HCA	1/2 X 1/2 ODF S/T	30 IN	059684	
		83	HCA					1/2 X 1/2 ODF S/T	30 IN	059685		
			84					HCA	1/2 X 1/2 ODF S/T	30 IN	059686	
		85	HCA					1/2 X 1/2 ODF S/T	30 IN	059687		
			86					HCA	1/2 X 1/2 ODF S/T	30 IN	059688	
		R-22 R-407C	AAE					87	HCA	1/2 X 1/2 ODF S/T	30 IN	059689
									88	HCA	1/2 X 1/2 ODF S/T	30 IN
				89	HCA			1/2 X 1/2 ODF S/T	30 IN	059691		
					90			HCA	1/2 X 1/2 ODF S/T	30 IN	059692	
				91	HCA			1/2 X 1/2 ODF S/T	30 IN	059693		
					92			HCA	1/2 X 1/2 ODF S/T	30 IN	059694	
				93	HCA			1/2 X 1/2 ODF S/T	30 IN	059695		
					94			HCA	1/2 X 1/2 ODF S/T	30 IN	059696	
				R-22 R-407C	AAE			95	HCA	1/2 X 1/2 ODF S/T	30 IN	059697
									96	HCA	1/2 X 1/2 ODF S/T	30 IN
97	HCA							1/2 X 1/2 ODF S/T	30 IN	059699		
	98							HCA	1/2 X 1/2 ODF S/T	30 IN	059700	
99	HCA							1/2 X 1/2 ODF S/T	30 IN	059701		
	100							HCA	1/2 X 1/2 ODF S/T	30 IN	059702	
R-22 R-407C	AAE							101	HCA	1/2 X 1/2 ODF S/T	30 IN	059703
									102	HCA	1/2 X 1/2 ODF S/T	30 IN
								103	HCA	1/2 X 1/2 ODF S/T	30 IN	059705
									104	HCA	1/2 X 1/2 ODF S/T	30 IN
						105	HCA	1/2 X 1/2 ODF S/T	30 IN	059707		
							106	HCA	1/2 X 1/2 ODF S/T	30 IN	059708	
						107	HCA	1/2 X 1/2 ODF S/T	30 IN	059709		
							108	HCA	1/2 X 1/2 ODF S/T	30 IN	059710	
						R-22 R-407C	AAE	109	HCA	1/2 X 1/2 ODF S/T	30 IN	059711
									110	HCA	1/2 X 1/2 ODF S/T	30 IN
								111	HCA	1/2 X 1/2 ODF S/T	30 IN	059713
									112	HCA	1/2 X 1/2 ODF S/T	30 IN
		113	HCA					1/2 X 1/2 ODF S/T	30 IN	059715		
			114					HCA	1/2 X 1/2 ODF S/T	30 IN	059716	
		115	HCA					1/2 X 1/2 ODF S/T	30 IN	059717		
			116					HCA	1/2 X 1/2 ODF S/T	30 IN	059718	
		R-22 R-407C	AAE					117	HCA	1/2 X 1/2 ODF S/T	30 IN	059719
									118	HCA	1/2 X 1/2 ODF S/T	30 IN
								119	HCA	1/2 X 1/2 ODF S/T	30 IN	059721
									120	HCA	1/2 X 1/2 ODF S/T	30 IN
				121	HCA			1/2 X 1/2 ODF S/T	30 IN	059723		
					122			HCA	1/2 X 1/2 ODF S/T	30 IN	059724	
				123	HCA			1/2 X 1/2 ODF S/T	30 IN	059725		
					124			HCA	1/2 X 1/2 ODF S/T	30 IN	059726	
				R-22 R-407C	AAE			125	HCA	1/2 X 1/2 ODF S/T	30 IN	059727
									126	HCA	1/2 X 1/2 ODF S/T	30 IN
127	HCA							1/2 X 1/2 ODF S/T	30 IN	059729		
	128							HCA	1/2 X 1/2 ODF S/T	30 IN	059730	
129	HCA							1/2 X 1/2 ODF S/T	30 IN	059731		
	130							HCA	1/2 X 1/2 ODF S/T	30 IN	059732	
131	HCA							1/2 X 1/2 ODF S/T	30 IN	059733		
	132							HCA	1/2 X 1/2 ODF S/T	30 IN	059734	
R-22 R-407C	AAE							133	HCA	1/2 X 1/2 ODF S/T	30 IN	059735
									134	HCA	1/2 X 1/2 ODF S/T	30 IN
						135	HCA	1/2 X 1/2 ODF S/T	30 IN	059737		
							136	HCA	1/2 X 1/2 ODF S/T	30 IN	059738	
						137	HCA	1/2 X 1/2 ODF S/T	30 IN	059739		
							138	HCA	1/2 X 1/2 ODF S/T	30 IN	059740	
						139	HCA	1/2 X 1/2 ODF S/T	30 IN	059741		
							140	HCA	1/2 X 1/2 ODF S/T	30 IN	059742	
						R-22 R-407C	AAE	141	HCA	1/2 X 1/2 ODF S/T	30 IN	059743
									142	HCA	1/2 X 1/2 ODF S/T	30 IN
		143	HCA					1/2 X 1/2 ODF S/T	30 IN	059745		
			144					HCA	1/2 X 1/2 ODF S/T	30 IN	059746	
		145	HCA					1/2 X 1/2 ODF S/T	30 IN	059747		
			146					HCA	1/2 X 1/2 ODF S/T	30 IN	059748	
		147	HCA					1/2 X 1/2 ODF S/T	30 IN	059749		
			148					HCA	1/2 X 1/2 ODF S/T	30 IN	059750	
		R-22 R-407C	AAE					149	HCA	1/2 X 1/2 ODF S/T	30 IN	059751
									150	HCA	1/2 X 1/2 ODF S/T	30 IN
				151	HCA			1/2 X 1/2 ODF S/T	30 IN	059753		
					152			HCA	1/2 X 1/2 ODF S/T	30 IN	059754	
				153	HCA			1/2 X 1/2 ODF S/T	30 IN	059755		
					154			HCA	1/2 X 1/2 ODF S/T	30 IN	059756	
				155	HCA			1/2 X 1/2 ODF S/T	30 IN	059757		
					156			HCA	1/2 X 1/2 ODF S/T	30 IN	059758	
				R-22 R-407C	AAE			157	HCA	1/2 X 1/2 ODF S/T	30 IN	059759
									158	HCA	1/2 X 1/2 ODF S/T	30 IN
159	HCA							1/2 X 1/2 ODF S/T	30 IN	059761		
	160							HCA	1/2 X 1/2 ODF S/T	30 IN	059762	
161	HCA							1/2 X 1/2 ODF S/T	30 IN	059763		
	162							HCA	1/2 X 1/2 ODF S/T	30 IN	059764	
163	HCA							1/2 X 1/2 ODF S/T	30 IN	059765		
	164							HCA	1/2 X 1/2 ODF S/T	30 IN	059766	
R-22 R-407C	AAE							165	HCA	1/2 X 1/2 ODF S/T	30 IN	059767
									166	HCA	1/2 X 1/2 ODF S/T	30 IN
						167	HCA	1/2 X 1/2 ODF S/T	30 IN	059769		
							16					

Chatleff gasket kit – KG-10045 (PCN: 066031)

* For interchangeable refrigerant charges R-134a/R-12, R-404A/ R-507/R-502 and R-22/R-290/R-407C the tons of capacity shown in the table are for the first (primary) refrigerant listed. Consult the Nominal Capacity Table for determining the tons of capacity for the secondary refrigerants listed.

Example: A 1/4 ton R-12 valve is required. What R-134a ton valve should be selected?

Solution: From the nominal capacity table, a 1/2 ton R-134a valve is equivalent to a 1/4 ton R-12 valve.

Without internal check valve (cont.)

Refrigerant	Series	Tons*	Charge	Connections	Cap Tube	PCN
R-404A R-507 R-502	AA	1/8	SC	1/4 X 3/8 ODF S/T	30 IN	065921
			SC	1/4 X 1/2 ODF S/T	30 IN	063503
		1/4	SW45	1/4 X 3/8 ODF S/T	5 FT	065676
			SZ	1/4 X 3/8 ODF S/T	5 FT	065675
		1/2	SC	1/4 X 1/2 ODF S/T	30 IN	063504
			SW45	1/4 X 1/2 ODF S/T	5 FT	065685
			SZ	1/4 X 1/2 ODF S/T	5 FT	065682
			SZ	3/8 X 1/2 ODF S/T	30 IN	063925
		3/4	SC	3/8 X 1/2 ODF S/T	30 IN	066200
			SW45	3/8 X 1/2 ODF S/T	30 IN	065686
			SZ	3/8 X 1/2 ODF S/T	30 IN	065149
			SC	3/8 X 1/2 ODF S/T	30 IN	066201
		1	SW45	3/8 X 1/2 ODF S/T	30 IN	066506
			SZ	3/8 X 1/2 ODF S/T	30 IN	063926
			SC	1/4 X 1/2 ODF S/T	30 IN	066422
			SW45	1/4 X 1/2 ODF S/T	30 IN	066508
		1/4	SZ	1/4 X 1/2 ODF S/T	30 IN	066435
			SC	1/4 X 1/2 ODF S/T	30 IN	066423
			SC	3/8 X 1/2 ODF S/T	5 FT	066085
			SW45	1/4 X 1/2 ODF S/T	5 FT	065636
	AAE	1/2	SW45	3/8 X 1/2 ODF S/T	5 FT	065688
			SZ	1/4 X 1/2 ODF S/T	30 IN	066436
			SZ	3/8 X 1/2 ODF S/T	5 FT	065687
			SC	3/8 X 1/2 ODF S/T	5 FT	066086
		3/4	SW45	3/8 X 1/2 ODF S/T	30 IN	066509
			SZ	1/4 X 1/2 ODF S/T	30 IN	066437
			SC	3/8 X 1/2 ODF S/T	5 FT	066087
		1	SW45	3/8 X 1/2 ODF S/T	5 FT	065637
			SZ	3/8 X 1/2 ODF S/T	5 FT	065183
			SC	3/8 X 1/2 ODF S/T	5 FT	066081
		1-1/4	SW45	3/8 X 1/2 ODF S/T	5 FT	066079
			SZ	3/8 X 1/2 ODF S/T	5 FT	066080
			SC	3/8 X 1/2 ODF S/T	5 FT	066448
		1-1/2	SC	3/8 X 1/2 SAE S/T	30 IN	061882
			SW45	3/8 X 1/2 ODF S/T	5 FT	065698
			SZ	3/8 X 1/2 ODF S/T	5 FT	065697
		2	SC	3/8 X 1/2 ODF S/T	30 IN	065330
			SW45	3/8 X 1/2 ODF S/T	5 FT	065690
			SZ	3/8 X 1/2 ODF S/T	5 FT	065689
		2-1/4	SW45	3/8 X 1/2 ODF S/T	5 FT	066082
			SZ	3/8 X 1/2 ODF S/T	5 FT	066083
			SC	3/8 X 1/2 ODF S/T	5 FT	066084
		2-1/2	SC	3/8 X 1/2 SAE S/T	30 IN	061885
			SW45	1/2 X 5/8 ODF S/T	5 FT	065148
			SZ	1/2 X 5/8 ODF S/T	5 FT	065691
		3	SC	3/8 X 1/2 ODF S/T	30 IN	066510
			SW45	3/8 X 1/2 ODF S/T	5 FT	065693
			SZ	3/8 X 1/2 ODF S/T	5 FT	065692

With internal check valve

Refrigerant	Series	Tons*	Charge	Connections	Cap Tube	PCN
R-410A	AAE	1-1/2	ZW195	3/8 X 1/2 ODF S/T	5 FT	065871
			ZW195	CHATLEFF	30 IN	016432
		2	ZW195	3/8 X 1/2 ODF S/T	5 FT	065872
			ZW195	CHATLEFF	30 IN	016615
		3	ZW195	3/8 X 1/2 ODF S/T	5 FT	065873
			ZW195	CHATLEFF	30 IN	015795
		4	ZW195	3/8 X 1/2 ODF S/T	5 FT	065874
			ZW195	CHATLEFF	30 IN	016433
		5	ZW195	1/2 X 5/8 ODF S/T	5 FT	065875
			ZW195	CHATLEFF	30 IN	015796
	AAECB	1-1/2	ZW195	3/8 X 1/2 ODF S/T	30 IN	065946
		2	ZW195	3/8 X 1/2 ODF S/T	30 IN	065942
		3	ZW195	3/8 X 1/2 ODF S/T	30 IN	065943
		4	ZW195	3/8 X 1/2 ODF S/T	30 IN	065944
		5	ZW195	3/8 X 1/2 ODF S/T	30 IN	065945
R-22 R-407C	AAE	1	HCA	3/8 X 1/2 ODF S/T	30 IN	063795
		1-1/2	HCA	3/8 X 1/2 ODF S/T	5 FT	058923
		2	HCA	3/8 X 1/2 ODF S/T	30IN	063676
		2-1/2	HAA	3/8 X 1/2 ODF S/T	30 IN	064102
			HAA	CHATLEFF	30 IN	014091
		3	HCA	3/8 X 1/2 ODF S/T	5 FT	065868
			HCA	1/2 X 5/8 ODF S/T	5 FT	065797
		4	HCA	3/8 X 1/2 ODF S/T	5 FT	065869
			HAA	3/8 X 1/2 ODF S/T	30 IN	064103
		5	HAA	1/2 X 5/8 ODF S/T	5 FT	065863
			HAA	CHATLEFF	30 IN	014092
	AAECB	1-1/2	HCA	3/8 X 1/2 ODF S/T	30 IN	065842
		2	HCA	3/8 X 1/2 ODF S/T	30 IN	065959
		3	HCA	3/8 X 1/2 ODF S/T	30 IN	065941
		4	HCA	3/8 X 5/8 ODF S/T	30 IN	065844