

The A-series is used for heat pump, air conditioning, food services and commercial applications.

Features

- Stainless steel power element eliminates corrosion and prevents valve failure
- Hermetic, leak-free construction
- Compact size allows installation in limited spaces
- 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
UL/CUL file number: SA 5312

Nomenclature example: AACEB 2 HC 30 IN 3/8 x 1/2 ODF ANG

A	A	C	E	B	2	H	C	30 IN	3/8 x 1/2	ODF	ANG
Valve 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)	(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	C = medium temp CA = heat pump W(MOP) = press. limiting Z = low temp AA = wide range	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 and R-407C are interchangeable refrigerant charges

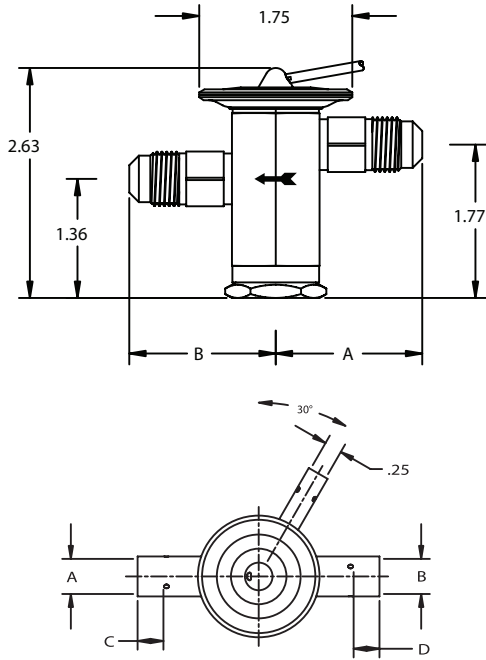
AA/AN Series – Nominal* Capacity Table in Tons (kW)

R-12	R-134a	R-22	R-410A	R-502	R-507/R-404A	R-407C
–	1/8 (0.4)	1/5 (0.7)	–	–	1/8 (0.4)	1/5
1/8 (0.4)	1/4 (0.9)	1/4 (0.9)	1/4 (0.9)	1/8 (0.4)	1/4 (0.9)	1/4 (0.9)
1/4 (0.9)	1/2 (1.8)	1/2 (1.8)	1/2 (1.8)	1/4 (0.9)	1/2 (1.8)	1/2 (1.8)
1/2 (1.8)	3/4 (2.7)	1 (3.5)	1 (3.5)	1/2 (1.8)	3/4	1 (3.5)
1 (3.5)	1 (3.5)	1½ (5.3)	1½ (5.3)	1 (3.5)	1 (3.5)	1¼ (4.4)
–	1½ (5.3)	2 (7.0)	2 (7.0)	–	1¼ (4.4)	2 (7.0)
1½ (5.3)	2 (7.0)	2½ (8.8)	3 (11.0)	1½ (5.3)	2 (7.0)	2½ (8.8)
2 (7.0)	2½ (9.0)	3 (11.0)	4 (14.0)	2 (7.0)	2¼ (8.0)	3¼ (11.5)
2½ (9.0)	3 (11.0)	4 (14.0)	5 (17.0)	2½ (8.8)	2½ (8.8)	4 (14.0)
3 (11.0)	4 (14.0)	5 (17.0)	–	3 (11.0)	3½ (12.0)	5¼ (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.

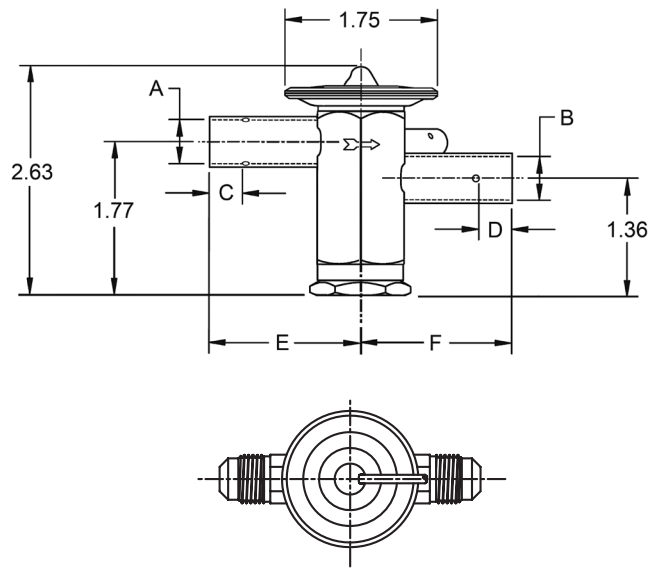
ANCE SAE Dimensional Data

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



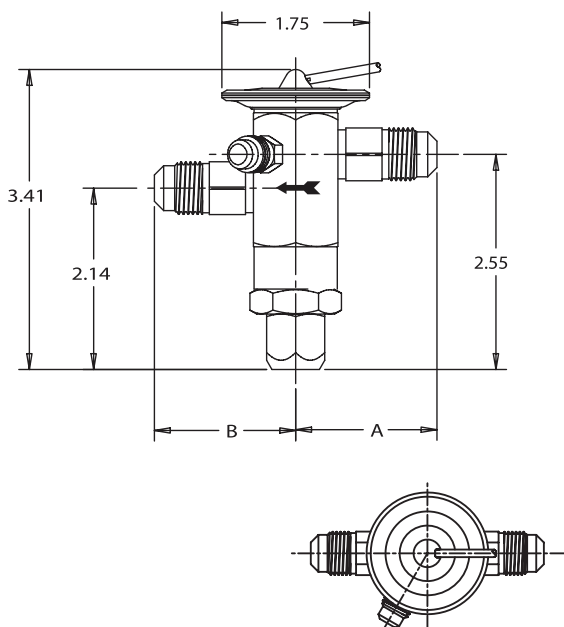
ANCE ODF Dimensional Data

Connection Size		A± .002	B± .002	C MIN	D MIN	E	F
Inlet	Outlet						
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



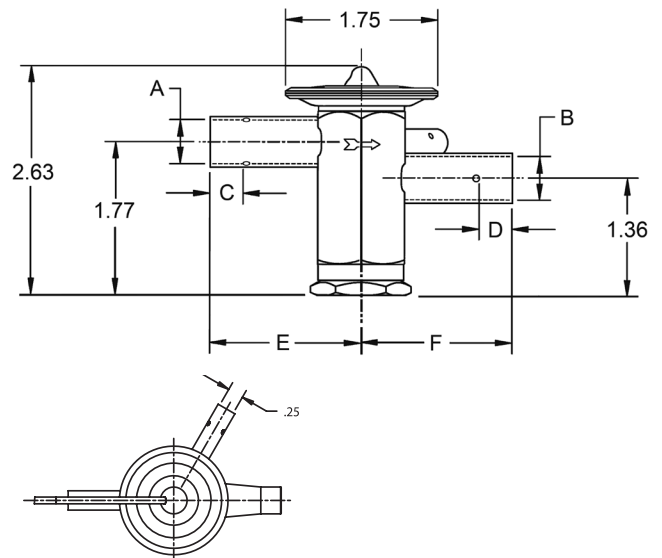
AACE SAE Dimensional Data

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

Connection Size		A± .002	B± .002	C MIN	D MIN	E	F
Inlet	Outlet						
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



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	
			ZW195	CHATLEFF	30 IN	065579	
		3	ZW195	1/2 X 5/8 ODF S/T	30 IN	065580	
			ZW195	CHATLEFF	30 IN	015794	
			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	
			MC	1/4 X 3/8 SAE S/T	30 IN	058985	
		1/2	MC	1/4 X 1/2 ODF S/T	5 FT	065624	
			MZ	1/4 X 3/8 SAE S/T	30 IN	058986	
		AAE	1/2	MC	1/4 X 1/2 ODF S/T	5 FT	065630
	MC			3/8 X 1/2 ODF S/T	5 FT	065631	
	1		MC	3/8 X 1/2 ODF S/T	5 FT	065631	
	R-22 R-407C	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
			1	HC	3/8 X 1/2 SAE S/T	5 FT	057828
				HC	1/4 X 1/2 ODF S/T	5 FT	065632
			1/2	HC	3/8 X 1/2 ODF S/T	5 FT	065633
HC				3/8 X 1/2 SAE ST	5 FT	057987	
1			HC	1/4 X 3/8 ODF ST	30 IN	059582	
			HC	1/4 X 1/2 ODF S/T	5 FT	065634	
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		HC	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		
		HCA	3/8 X 1/2 ODF S/T	30 IN	049633		
3		HC	3/8 X 1/2 ODF S/T	5 FT	062376		
		HC	3/8 X 1/2 SAE S/T	5 FT	056686		
		HCA	3/8 X 1/2 ODF S/T	30 IN	049634		
		HCA	1/2 X 5/8 ODF S/T	30 IN	060643		
		4	HC	1/2 X 5/8 ODF S/T	5 FT	061960	
			HCA	3/8 X 1/2 ODF S/T	30 IN	049638	
5		HCA	1/2 X 1/2 ODF S/T	30 IN	061247		
		HAA	3/8 X 1/2 ODF S/T	30 IN	063649		
		HAA	CHATLEFF	30 IN	013939		
		HC	1/2 X 5/8 ODF S/T	5 FT	059565		
		HC	5/8 X 7/8 ODF S/T	30 IN	061805		
		HCA	3/8 X 1/2 ODF S/T	30 IN	054024		
		HCA	1/2 X 5/8 ODF S/T	30 IN	059683		
		HW100	3/8 X 5/8 ODF S/T	5 FT	062088		
		AAEB	2	HCA	3/8 X 1/2 ODF S/T	30 IN	059616
			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	

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-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 6A	30 IN	065921	
			SC	1/4 X 1/2 ODF S/T	30 IN	063503	
			SW45	1/4 X 3/8 ODF S/T	5 FT	065676	
		1/4	SZ	1/4 X 3/8 ODF S/T	5 FT	065675	
			SC	1/4 X 1/2 ODF S/T	30 IN	063504	
			SW45	1/4 X 1/2 ODF S/T	5 FT	065685	
		1/2	SZ	1/4 X 1/2 ODF S/T	5 FT	065682	
			SZ	3/8 X 1/2 ODF S/T	30 IN	063925	
			SC	3/8 X 1/2 ODF S/T	30 IN	066200	
		3/4	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	
		AAE	1	SC	1/4 X 1/2 ODF S/T	30 IN	066422
				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
				SW45	3/8 X 1/2 ODF S/T	5 FT	065688
	1/2		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	
			SZ	1/4 X 1/2 ODF S/T	30 IN	066437	
			SC	3/8 X 1/2 ODF S/T	5 FT	066087	
			SW45	3/8 X 1/2 ODF S/T	5 FT	065637	
	3/4		SZ	3/8 X 1/2 ODF S/T	5 FT	065183	
			SC	3/8 X 1/2 ODF S/T	5 FT	066081	
			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	
			SW45	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		
		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		
	2-1/4	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	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	
		AAE	1-1/2	ZW195	3/8 X 1/2 ODF S/T	30 IN	065946
				ZW195	3/8 X 1/2 ODF S/T	30 IN	065942
	ZW195			3/8 X 1/2 ODF S/T	30 IN	065943	
	ZW195			3/8 X 1/2 ODF S/T	30 IN	065944	
	ZW195			3/8 X 1/2 ODF S/T	30 IN	065945	
	ZW195			3/8 X 1/2 ODF S/T	30 IN	065946	
	2		HCA	3/8 X 1/2 ODF S/T	30 IN	063795	
			HCA	3/8 X 1/2 ODF S/T	5 FT	058923	
			HCA	3/8 X 1/2 ODF S/T	30 IN	063676	
			HAA	3/8 X 1/2 ODF S/T	30 IN	064102	
			HAA	CHATLEFF	30 IN	014091	
			HCA	3/8 X 1/2 ODF S/T	5 FT	065868	
	3	HCA	1/2 X 5/8 ODF S/T	5 FT	065797		
		HCA	3/8 X 1/2 ODF S/T	5 FT	065869		
HAA		3/8 X 1/2 ODF S/T	30 IN	064103			
HAA		CHATLEFF	30 IN	014092			
HAA		1/2 X 5/8 ODF S/T	5 FT	065863			
HCA		3/8 X 1/2 ODF S/T	30 IN	065842			
AAE	1-1/2	HCA	3/8 X 1/2 ODF S/T	30 IN	065842		
		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		
		HCA	3/8 X 5/8 ODF S/T	30 IN	065844		