

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
<b>Valve Series</b> Hermetic Design	<b>Superheat Adjustment</b> A = Adjustable N = Non-Adjustable	<b>Internal Check Valve</b> (optional) Reverse Flow Bypass Application	<b>Equalizer</b> E=External (Omit for Internal)	<b>Bleed Hole</b> (optional) (Omit for no bleed hole)	<b>Capacity</b> Nominal Rating in Tons (See nominal capacity table below)	<b>Refrigerant Code</b> +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>Charge Code</b> C = medium temp CA = heat pump W(MOP) = press. limiting Z = low temp AA = wide range	<b>Capillary Tube Length</b> 30 IN & 5 FT (std)	<b>Inlet x Outlet Connection Sizes</b> 1/4 x 3/8 3/8 x 1/2 1/2 x 5/8 5/8 x 7/8	<b>Connection Type</b> SAE=flare ODF = solder Chatleff (optional) Aeroquip (optional)	<b>Configuration</b> 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

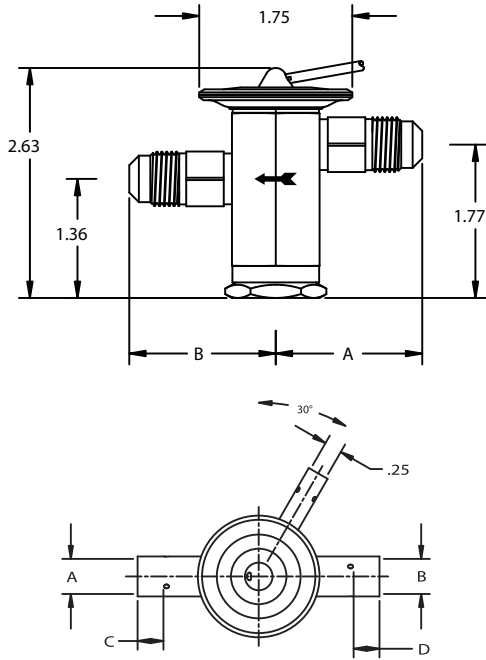
## AA/AN Series – Nominal\* Capacity Table in Tons (kW)

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.

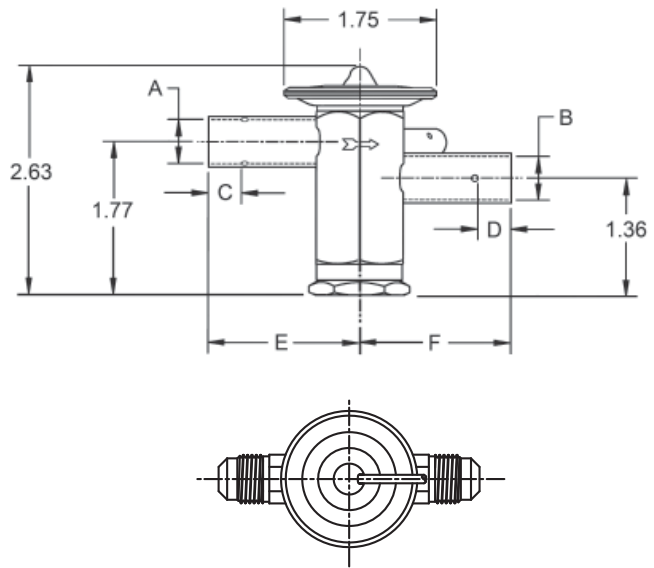
## ANCE SAE Dimensional Data

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



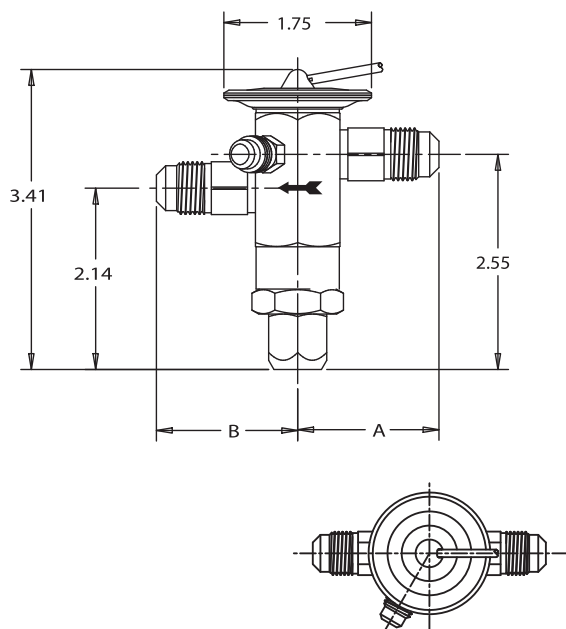
## ANCE ODF Dimensional Data

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



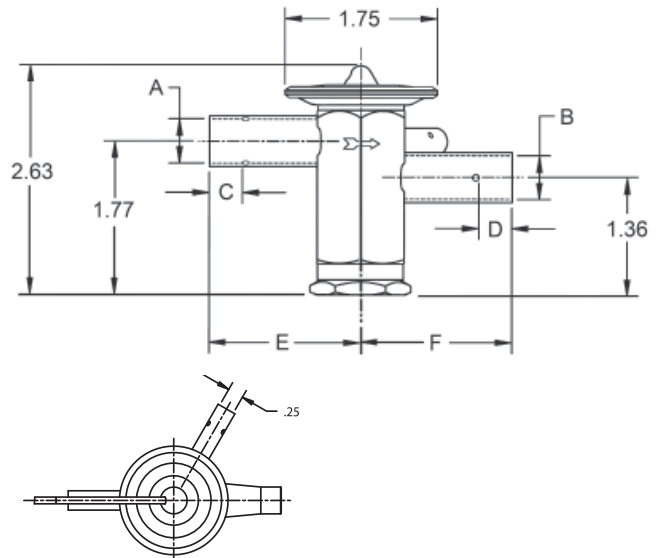
## AACE SAE Dimensional Data

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	3	ZW195	3/8 X 3/8 ODF S/T	30 IN	064595	
			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	1/4	MC	1/4 X 1/2 ODF S/T	5 FT	065623	
		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	
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	
		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
	HC			3/8 X 1/2 ODF S/T	5 FT	065633	
	1		HC	3/8 X 1/2 SAE ST	5 FT	057987	
			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	HAA	3/8 X 1/2 ODF S/T	30 IN	063648
				CHATLEFF	30 IN	013938	
		HCA	HCA	3/8 X 1/2 ODF S/T	30 IN	049633	
			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	
	3	HCA	HCA	1/2 X 5/8 ODF S/T	30 IN	060643	
			HC	1/2 X 5/8 ODF S/T	5 FT	061960	
		HCA	HCA	3/8 X 1/2 ODF S/T	30 IN	049638	
			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	
	5	HC	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	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	HW100	3/8 X 5/8 ODF S/T	5 FT	062088	
			HCA	3/8 X 1/2 ODF S/T	30 IN	059603	
	AAEB	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	
			HCA	1/2 X 5/8 SAE S/T	30 IN	061243	

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	1/4	SC	1/4 X 1/2 ODF S/T	30 IN	063503
			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
		3/4	SW45	3/8 X 1/2 ODF S/T	30 FT	065686
			SZ	3/8 X 1/2 ODF S/T	30 IN	065149
			SC	3/8 X 1/2 ODF S/T	5 FT	066085
		1/2	SW45	1/4 X 1/2 ODF S/T	5 FT	065636
			SW45	3/8 X 1/2 ODF S/T	5 FT	065688
			SZ	3/8 X 1/2 ODF S/T	5 FT	065687
	3/4		SC	3/8 X 1/2 ODF S/T	5 FT	066086
	SC		3/8 X 1/2 ODF S/T	5 FT	066087	
	SW45		3/8 X 1/2 ODF S/T	5 FT	065637	
	1	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	
		SW45	3/8 X 1/2 ODF S/T	5 FT	065698	
	1-1/2	SZ	3/8 X 1/2 ODF S/T	5 FT	065697	
		SC	3/8 X 1/2 ODF S/T	30 IN	065330	
	2	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	
	2-1/4	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	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	
		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	1-1/2	HCA	3/8 X 1/2 ODF S/T	5 FT	058923
				HCA	1/2 X 5/8 ODF S/T	5 FT	065796
			2	HCA	3/8 X 1/2 ODF S/T	5 FT	065865
				HAA	3/8 X 1/2 ODF S/T	30 IN	064102
			2-1/2	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	
		5	HAA	HAA	3/8 X 1/2 ODF S/T	30 IN	064103
CHATLEFF				30 IN	014092		
HCA			HCA	1/2 X 5/8 ODF S/T	5 FT	065870	
			HCA	3/8 X 1/2 ODF S/T	30 IN	065842	
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		