

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 Hermetic Design	Superheat Adjustment A = Adjustable N = Non-Adjustable	Internal Check Valve (optional) Reverse Flow Bypass Application	Equalizer E=External (Omit for Internal)	Bleed Hole (optional) (Omit for no bleed hole)	Capacity Nominal Rating in Tons (See nominal capacity table below)	Refrigerant Code +F = R-12 • H = R-22 +M = R-134a • N = R-407C *P = R-507 *R = R-502 *S = R-404A Z = R-410A	Charge Code C = medium temp CA = heat pump W(MOP) = press. limiting Z = low temp AA = wide range	Capillary Tube Length 30 IN & 5 FT (std)	Inlet x Outlet Connection Sizes 1/4 x 3/8 3/8 x 1/2 1/2 x 5/8 5/8 x 7/8	Connection Type SAE=flare ODF = solder Chatleff (optional) Aeroquip (optional)	Configuration 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)

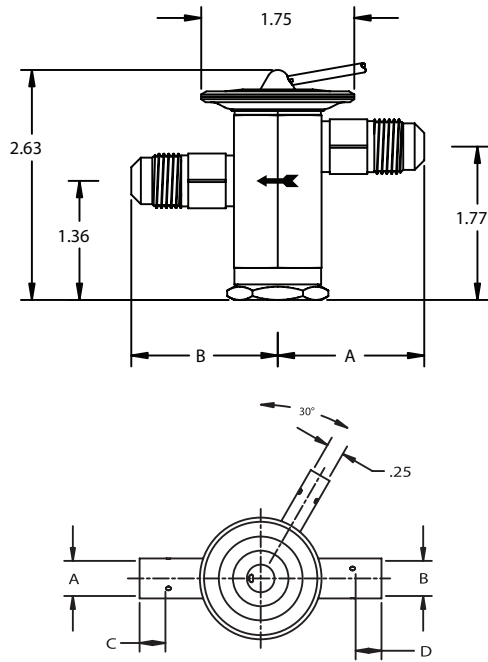
R-12	R-134a	R-22	R-410A	R-502	R-507/R-404A	R-407C
–	1/8 (0.4)	1/5 (0.7)	–	–	1/8 (0.4)	1/5
1/8 (0.4)	1/4 (0.9)	1/4 (0.9)	1/4 (0.9)	1/8 (0.4)	1/4 (0.9)	1/4 (0.9)
1/4 (0.9)	1/2 (1.8)	1/2 (1.8)	1/2 (1.8)	1/4 (0.9)	1/2 (1.8)	1/2 (1.8)
1/2 (1.8)	3/4 (2.7)	1 (3.5)	1 (3.5)	1/2 (1.8)	3/4	1 (3.5)
1 (3.5)	1 (3.5)	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.

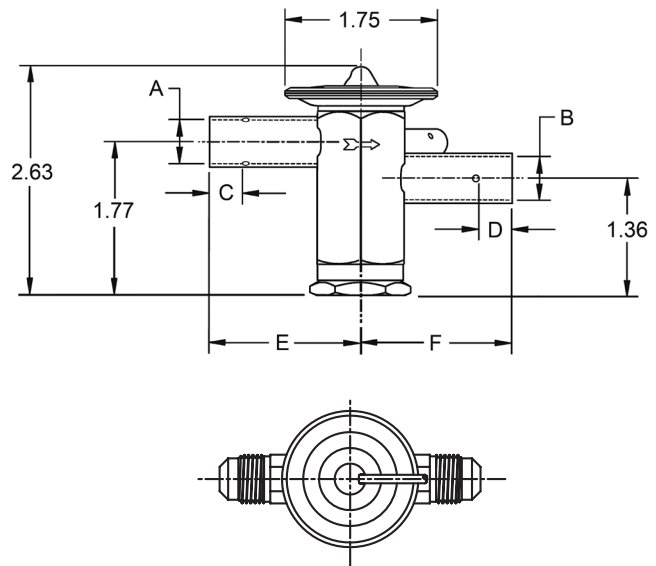
ANCE SAE Dimensional Data

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



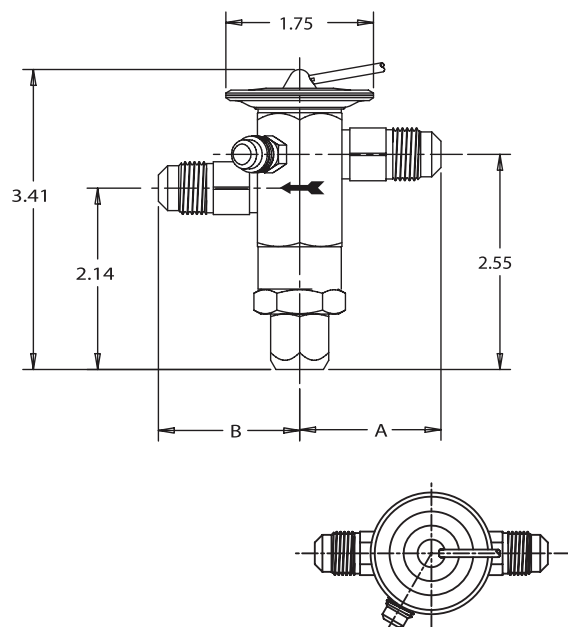
ANCE ODF Dimensional Data

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



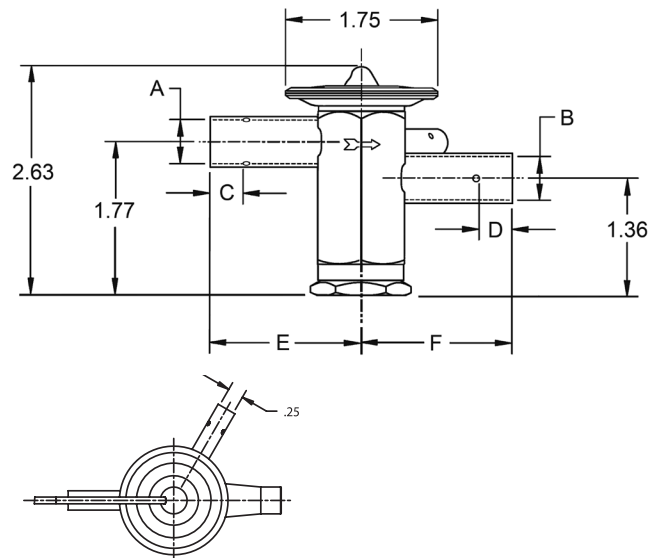
AACE SAE Dimensional Data

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	1/8	MC	1/4 X 1/2 ODF S/T	30 IN	065821
		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
		1/2	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
		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
			HC	3/8 X 1/2 SAE S/T	5 FT	057828
			HC	1/4 X 1/2 ODF S/T	5 FT	065632
	AAE	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
			HC	1/4 X 3/8 ODF S/T	30 IN	059582
		1	HC	1/4 X 1/2 ODF S/T	5 FT	065634
			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
			HCA	1/2 X 1/2 ODF S/T	30 IN	061247
	AAEB	5	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
		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
			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	SZ	3/8 X 1/2 ODF S/T	30 IN	063925
			SC	3/8 X 1/2 ODF S/T	30 IN	066200
			SW45	3/8 X 1/2 ODF S/T	30 IN	065686
		1	SZ	3/8 X 1/2 ODF S/T	30 IN	065149
			SC	3/8 X 1/2 ODF S/T	30 IN	066201
			SC	1/4 X 1/2 ODF S/T	30 IN	066422
	AAE	1/4	SZ	1/4 X 1/2 ODF S/T	30 IN	064435
			SC	1/4 X 1/2 ODF S/T	30 IN	066423
			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	1/4 X 1/2 ODF S/T	30 IN	066436
		3/4	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
		1	SC	3/8 X 1/2 ODF S/T	5 FT	066087
			SW45	3/8 X 1/2 ODF S/T	5 FT	065637
			SZ	3/8 X 1/2 ODF S/T	5 FT	065183
		1-1/4	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
		1-1/2	SC	3/8 X 1/2 ODF S/T	5 FT	066448
			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	SW45	1/2 X 5/8 ODF S/T	5 FT	065148
			SZ	1/2 X 5/8 ODF S/T	5 FT	065691
			SW45	3/8 X 1/2 ODF S/T	5 FT	065693
		3	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
		4	HAA	3/8 X 1/2 ODF S/T	30 IN	064103
			HAA	CHATLEFF	30 IN	014092
	AAECB	1-1/2	HCA	1/2 X 5/8 ODF S/T	5 FT	065870
			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
			HCA	3/8 X 1/2 ODF S/T	30 IN	065941
		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