

The AFA series is designed for air conditioning and commercial refrigeration applications requiring angle configuration SAE connections. The AFA is ideal for those applications requiring compact size combined with stable and accurate control over wide load and evaporator temperature ranges.

Features

- Stainless steel power element eliminates corrosion and prevents valve failure
- External superheat adjustment
- Replaceable inlet strainer
- SAE connections only
- Wrench flats on inlet and outlet



Options

- External or internal equalizer

Specifications

- Maximum working pressure: 700 psig
- UL/CUL file number: SA 5312

Nomenclature example: AFAE 1/2 HC 5 FT 3/8 x 1/2 SAE ANG

AF	A	E	1/2	H	C	5 FT	3/8 x 1/2	SAE	ANG
Valve Series Hermetic Design, Flare Connections	Superheat Adjustment A = Adjustable	Equalizer E=External (Omit for Internal)	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	Connection Type SAE=flare	Configuration 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

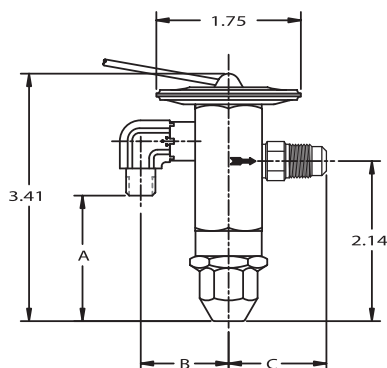
AFA Series – Nominal* Capacity Table in Tons (kW)

R-12	R-134a	R-22	R-502	R-507/R-404A	R-407C
–	1/8 (0.4)	1/5 (0.7)	–	1/8 (0.4)	1/5 (0.7)
1/8 (0.4)	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)	1/4 (0.9)	1/2 (1.8)	1/2 (1.8)
1/2 (1.8)	3/4 (2.7)	1 (3.5)	1/2 (1.8)	3/4 (2.7)	1 (3.5)
1 (3.5)	1 (3.5)	1½ (5.3)	1 (3.5)	1 (3.5)	1¼ (4.4)
–	1½ (5.3)	2 (7.0)	–	1¼ (4.4)	2 (7.0)
1½ (5.3)	2 (7.0)	2½ (9.0)	1½ (5.3)	2 (7.0)	2½ (9.0)
2 (7.0)	2½ (9.0)	3 (11.0)	2 (7.0)	2½ (8.0)	3¼ (11.5)
–	3 (11.0)	–	–	2¾ (9.0)	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.

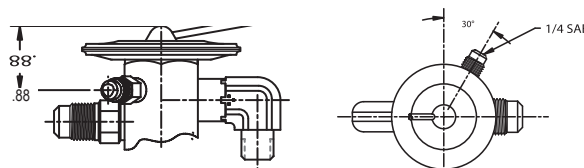
*See Extended Capacity Tables for ratings at a wide range of conditions per ARI standard 750.

Dimensional Data



Remote Bulb Tubing Length 30" or 5' Standard

AFA(E) Connections (in)				
Inlet	Outlet	A	B	C
1/4 SAE elbow	3/8 SAE	1.56	1.31	1.64
	1/2 SAE			1.35
	5/8 SAE			1.98
	3/8 – 1/2 SAE			1.73
3/8 SAE elbow	3/8 SAE	1.47	1.31	1.34
	1/2 SAE			1.36
	5/8 SAE			1.98
	3/8 – 1/2 SAE			1.73



Ordering Information

Internally Equalized						
Refrigerant	Series	Tons*	Charge	Connections	Cap Tube	PCN
R-12	AFA	1/4	FC	1/4 X 3/8-1/2 SAE	5 FT	047753
			FC	1/4 X 3/8-1/2 SAE	30 IN	057047
			FC	3/8 X 3/8-1/2 SAE	5 FT	054258
		1/2	FC	1/4 X 3/8-1/2 SAE	5 FT	047752
			FC	1/2 X 3/8-1/2 SAE	30 IN	057028
			FC	3/8 X 3/8-1/2 SAE	5 FT	054226
			FC	3/8 X 3/8-1/2 SAE	30 IN	057027
		1	FC	3/8 X 3/8-1/2 SAE	5 FT	047758
			FC	3/8 X 3/8-1/2 SAE	30 IN	057029
R-134a R-12	AFA	1/4	MC	1/4 X 3/8-1/2 SAE	5 FT	058536
			MC	1/4 x 3/8-1/2 SAE	30 IN	057607
		1/2	MC	1/4 x 3/8-1/2 SAE	30 IN	057606
			MC	3/8 X 3/8-1/2 SAE	30 IN	059625
		1	MC	1/4 x 3/8-1/2 SAE	30 IN	057605
R-22 R-407C	AFA	1/4	HC	1/4 x 3/8-1/2 SAE	30 IN	057261
			HZ	1/4 X 3/8-1/2 SAE	30 IN	059575
		1/2	HC	1/4 X 3/8-1/2 SAE	30 IN	057260
			HC	3/8 X 3/8-1/2 SAE	5 FT	054229
		1	HC	3/8 X 3/8-1/2 SAE	5 FT	054231
			HZ	3/8 X 3/8-1/2 SAE	5 FT	057555
		1-1/2	HC	3/8 X 3/8-1/2 SAE	5 FT	054232
		2	HC	3/8 X 3/8-1/2 SAE	5 FT	054233
		3	HC	3/8 X 3/8-1/2 SAE	5 FT	054234
R-404A R-507 R-502	AFA	1/4	SC	1/4 X 3/8-1/2 SAE	5 FT	064072
			SW45	1/4 X 3/8-1/2 SAE	30 IN	066498
			SZ	1/4 X 3/8-1/2 SAE	30 IN	066438
		1/2	SC	1/4 X 3/8-1/2 SAE	30 IN	066424
			SW45	1/4 X 3/8-1/2 SAE	30 IN	066499
			SZ	1/4 X 3/8-1/2 SAE	30 IN	066439
		3/4	SC	3/8 X 3/8-1/2 SAE	30 IN	066425
			SW45	3/8 X 3/8-1/2 SAE	30 IN	066500
			SZ	3/8 X 3/8-1/2 SAE	30 IN	066440
		1	SC	3/8 X 3/8-1/2 SAE	30 IN	066426
			SW45	3/8 X 3/8-1/2 SAE	30 IN	066501
			SZ	3/8 X 3/8-1/2 SAE	30 IN	066441

Externally Equalized						
Refrigerant	Series	Tons*	Charge	Connections	Cap Tube	PCN
R-134a R-12	AFAE	1/4	MC	3/8 X 3/8-1/2 SAE	30 IN	063898
		1/2	MC	1/4 X 3/8-1/2 SAE	30 IN	057853
			MC	3/8 X 3/8-1/2 SAE	30 IN	061904
		1	MC	3/8 X 3/8-1/2 SAE	30 IN	057613
		1-1/2	MC	3/8 X 3/8-1/2 SAE	30 IN	060865
		2	MC	3/8 X 3/8-1/2 SAE	30 IN	061906
		3	MC	3/8 X 3/8-1/2 SAE	30 IN	061908
R-22 R-407C	AFAE	1/2	HC	1/4 X 3/8-1/2 SAE	5 FT	054243
		1	HC	3/8 X 3/8-1/2 SAE	5 FT	054246
			HC	1/4 X 3/8-1/2 SAE	5 FT	054245
			HZ	3/8 X 3/8-1/2 SAE	5 FT	057163
		1-1/2	HC	3/8 X 3/8-1/2 SAE	5 FT	054247
			HZ	3/8 X 3/8-1/2 SAE	5 FT	057950
		2	HZ	3/8 X 3/8-1/2 SAE	5 FT	057951
			HC	3/8 X 3/8-1/2 SAE	5 FT	054248
		3	HC	3/8 X 3/8-1/2 SAE	5 FT	054249
			HZ	3/8 X 3/8-1/2 SAE	5 FT	057556
		R-404A R-507 R-502	AFAE	1/4	HC	3/8 X 3/8-1/2 SAE
HZ	3/8 X 3/8-1/2 SAE				5 FT	058484
SC	1/4 X 3/8-1/2 SAE				30 IN	066427
1/2	SW45			1/4 X 3/8-1/2 SAE	30 IN	066502
	SZ			1/4 X 3/8-1/2 SAE	30 IN	066442
	SC			1/4 X 3/8-1/2 SAE	30 IN	066428
3/4	SW45			3/8 X 3/8-1/2 SAE	30 IN	066453
	SZ			1/4 X 3/8-1/2 SAE	30 IN	066443
	SC			3/8 X 3/8-1/2 SAE	30 IN	061911
1	SW45			3/8 X 3/8-1/2 SAE	30 IN	066504
	SZ			1/4 X 3/8-1/2 SAE	30 IN	066444
	SC			3/8 X 3/8-1/2 SAE	30 IN	061912
1-1/2	SW45			3/8 X 3/8-1/2 SAE	30 IN	066452
	SZ			1/4 X 3/8-1/2 SAE	30 IN	066445
	SZ			3/8 X 3/8-1/2 SAE	5 FT	063464
2	SC			3/8 X 3/8-1/2 SAE	5 FT	066454
	SZ			3/8 X 3/8-1/2 SAE	5 FT	063465
	SC			3/8 X 3/8-1/2 SAE	30 IN	061914
	SW45			3/8 X 3/8-1/2 SAE	5 FT	066505
	SZ	3/8 X 3/8-1/2 SAE	5 FT	061646		

* 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.