

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

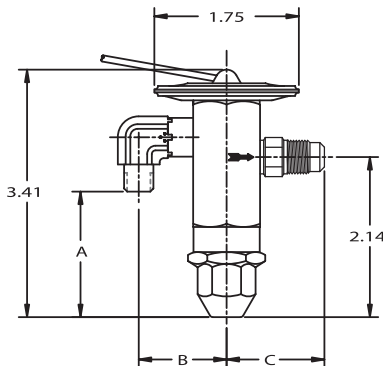
AFA Series – Nominal* Capacity Table in Tons (kW)

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)	-	-	2½ (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.

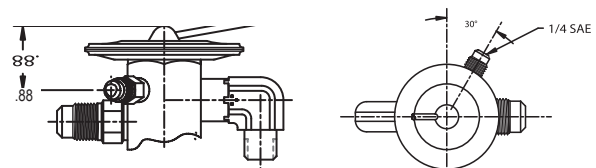
*See Extended Capacity Tables for ratings at a wide range of conditions per ARI standard 750.

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 SAE elbow	3/8 – 1/2 SAE	1.47	1.31	1.73
	3/8 SAE			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	
		1	FC	3/8 X 3/8-1/2 SAE	30 IN	057027	
			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	
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	
			HC	1/4 X 3/8-1/2 SAE	30 IN	057260	
		1/2	HC	3/8 X 3/8-1/2 SAE	5 FT	054229	
			HC	3/8 X 3/8-1/2 SAE	5 FT	054231	
		1	HZ	3/8 X 3/8-1/2 SAE	5 FT	057555	
			HC	3/8 X 3/8-1/2 SAE	5 FT	054232	
		1-1/2	HC	3/8 X 3/8-1/2 SAE	5 FT	054233	
			HC	3/8 X 3/8-1/2 SAE	5 FT	054233	
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	
			MC	1/4 X 3/8-1/2 SAE	30 IN	057853	
		1/2	MC	3/8 X 3/8-1/2 SAE	30 IN	061904	
			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	
			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	
			HC	3/8 X 3/8-1/2 SAE	5 FT	054249	
		3	HZ	3/8 X 3/8-1/2 SAE	5 FT	057556	
			HC	3/8 X 3/8-1/2 SAE	5 FT	054250	
			HZ	3/8 X 3/8-1/2 SAE	5 FT	058484	
R-404A R-507 R-502	AFAE	1/4	SC	1/4 X 3/8-1/2 SAE	30 IN	066427	
			SW45	1/4 X 3/8-1/2 SAE	30 IN	066502	
			SZ	1/4 X 3/8-1/2 SAE	30 IN	066442	
		1/2	SC	1/4 X 3/8-1/2 SAE	30 IN	066428	
			SW45	3/8 X 3/8-1/2 SAE	30 IN	066453	
			SZ	1/4 X 3/8-1/2 SAE	30 IN	066443	
		3/4	SC	3/8 X 3/8-1/2 SAE	30 IN	061911	
			SW45	3/8 X 3/8-1/2 SAE	30 IN	066504	
			SZ	1/4 X 3/8-1/2 SAE	30 IN	066444	
		1	SC	3/8 X 3/8-1/2 SAE	30 IN	061912	
			SW45	3/8 X 3/8-1/2 SAE	30 IN	066452	
			SZ	1/4 X 3/8-1/2 SAE	30 IN	066445	
		1-1/2	SZ	3/8 X 3/8-1/2 SAE	5 FT	063464	
			SC	3/8 X 3/8-1/2 SAE	5 FT	066454	
			SZ	3/8 X 3/8-1/2 SAE	5 FT	063465	
2	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.