



HFES 1/2FC-01

# HF SERIES THERMOSTATIC EXPANSION VALVES

The HF Series is a balanced ported valve designed for refrigeration, air conditioning and heat pump applications.

**FEATURES**

- Stainless steel replaceable power assembly eliminates corrosion and prevents valve failure
- Two body sizes provide capacities from 1/8 to 13 tons for R-404A
- Bodies, cages and power assemblies can be ordered separately or in pre-packaged Service kits
- Bi-directional capability up to 3-1/2 tons for R-22 on one valve superheat control in cooling and heating
- Optional removable inlet strainer (ODF only)
- Available in straight-through or angle flow configurations
- Available with internal or external equalizer
- Available in ODF or SAE connections

**SPECIFICATIONS**

Maximum Working Pressure..... 450 psig (31 bar)  
 UR/CUR File Number ..... SA5312  
 Canadian CRN ..... 0C21506.513467890YTN

**MODEL NUMBER NOMENCLATURE** - Example: HFE 1/2FC-01

SERIES	SUPERHEAT ADJUSTMENT	EQUALIZER	CONNECTION TYPE	REMOVABLE INLET STRAINER	BLEED HOLE	CAPACITY	SYSTEM REFRIGERANT CODE	CHARGE CODE	SEQUENTIAL IDENTIFIER	CUSTOMER SPECIAL	PACK TYPE
HF		E				1/2	F	C	-01	G	
Balanced Port Design	N = Non-adjustable  (Omit For Adjustable)	E = External  (Omit For Internal)	S = Solder  (Omit For SAE Flare)	C = Inlet Strainer  (ODF Only)	B = Bleed Hole  (Omit For No Bleed Hole)	Nominal Rating in Tons	B = R-448A/R-449A/R-452A D = R-450A/R-513A F = R-12 H = R-22/R-407A M = R-134a N = R-407C P = R-507 R = R-502 S = R-404A/R-407H T = R-290	A = Medium & Low Temp. AA = Wide Range C = Medium Temp. CA = Heat Pump W(MOP) = Press. Limiting Z = Low Temp.	-01 Thru -999	G = Cust. Special  (Omit for Standard)	B1 = Bulk Pack  (Omit for Individual Pack)

**HF SERIES THERMOSTATIC EXPANSION VALVES (Adjustable Superheat Models)**

SYSTEM REFRIGERANT CODE	CAPACITY (NOMINAL TONNAGE)	CHARGE CODE	INLET X OUTLET CONNECTION	EQUALIZER	BLEED	CAP LENGTH	BODY DESIGN	STRAINER	MODEL NUMBER	ITEM NUMBER
B (R-448A, R-449A)	1/4	A (Med./Low Temp.)	1/4" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1/4BA-01	067018
	1/4	A (Med./Low Temp.)	1/4" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/4BA-01	067016
	1/2	A (Med./Low Temp.)	1/4" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1/2BA-01	067019
	1/2	A (Med./Low Temp.)	1/4" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/2BA-01	067017
	1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/2BA-02	066979
	1	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1BA-01	067008
	1	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1BA-01	066980
	1-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1-1/2BA-01	067009
	1-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1-1/2BA-01	066981
	2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 2BA-01	067010
	2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 2BA-01	066982
	2-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 2-1/2BA-01	067011
	2-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 2-1/2BA-01	066983
3-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 3-1/2BA-01	067012	

All capacities shown are at 100°F condensing, 40°F evaporator temperature.

Valve capacity is for the first refrigerant listed. To determine the capacity for additional refrigerants listed, consult the nominal capacity tables for interchangeable refrigerants.

# HF SERIES

# THERMOSTATIC EXPANSION VALVES

SYSTEM REFRIGERANT CODE	CAPACITY (NOMINAL TONNAGE)	CHARGE CODE	INLET X OUTLET CONNECTION	EQUALIZER	BLEED	CAP LENGTH	BODY DESIGN	STRAINER	MODEL NUMBER	ITEM NUMBER
B (R-448A, R-449A)	3-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 3-1/2BA-01	066984
	6	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 6BA-01	066985
	6	A (Med./Low Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFESC 6BA-01	067013
	6	A (Med./Low Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Angle	Yes	HFESC 6BA-02	067014
	8-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 8-1/2BA-01	066986
	8-1/2	A (Med./Low Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Angle	Yes	HFESC 8-1/2BA-02	067015
D (R-450A, R-513A)	1/5	A (Med./Low Temp.)	1/4" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1/5DA-01	096856
	1/5	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFS 1/5DA-01	096840
	1/5	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/5DA-01	096851
	1/5	A (Med./Low Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	Yes	HFESC 1/5DA-01	096858
	1/4	A (Med./Low Temp.)	1/4" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1/4DA-01	096855
	1/4	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1/4DA-01	096839
	1/4	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/4DA-01	096850
	1/4	A (Med./Low Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	Yes	HFESC 1/4DA-01	096857
	1/2	A (Med./Low Temp.)	1/4" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1/2DA-01	096854
	1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1/2DA-01	096838
	1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/2DA-01	096849
	3/4	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 3/4DA-01	096845
	3/4	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 3/4DA-01	096853
	1	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1DA-01	096842
	1	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1DA-01	096852
	1-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1-1/2DA-01	096837
	2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 2DA-01	096843
	3-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 3-1/2DA-01	096844
	4-1/2	A (Med./Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 4-1/2DA-01	096846
	6	A (Med./Low Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 6DA-01	096847
	9	A (Med./Low Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 9DA-01	096848
	11-1/2	A (Med./Low Temp.)	7/8" X 1-1/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 11-1/2DA-01	096841
	F (R-12) *R-134a	1/4	C (Med. Temp.)	1/4" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/4FC-01
1/4		C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/4FC-01	054360
1/4		C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/4FC-02	054134
1/2		C (Med. Temp.)	1/4" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/2FC-01	009955
1/2		C (Med. Temp.)	1/4" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/2FC-01	009810
1/2		C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/2FC-02	054895
1/2		C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 1/2FC-01	056021
1/2		C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/2FC-01	057397
1/2		C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/2FC-02	054892
1/2		C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Straight Thru	No	HFS 1/2FC-01	056013
1/2		C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1/2FC-02	056063
1		C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1FC-01	054909
1		C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 1FC-01	055993
1		C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1FC-02	056151
1		C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1FC-01	057398
1		C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1FC-01	054905
1		C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Straight Thru	No	HFS 1FC-01	056119
1		Z (Low Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1FZ-01	054910
1-1/2		C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1-1/2FC-01	054917
1-1/2		C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 1-1/2FC-01	055994
1-1/2		C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1-1/2FC-01	057399
1-1/2		C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1-1/2FC-01	054914
2		C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 2FC-01	053069
2		C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 2FC-01	057400
2		C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 2FC-01	053060
3-1/2		C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 3-1/2FC-01	054138
H (R-22) *R-407C		1/4	C (Med. Temp.)	1/4" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/4HC-03
	1/4	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/4HC-01	054924