



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.

# THERMOSTATIC EXPANSION VALVES

# HF SERIES

SYSTEM REFRIGERANT CODE	CAPACITY (NOMINAL TONNAGE)	CHARGE CODE	INLET X OUTLET CONNECTION	EQUALIZER	BLEED	CAP LENGTH	BODY DESIGN	STRAINER	MODEL NUMBER	ITEM NUMBER
H (R-22) *R-407C	1/4	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1/4HC-01	055927
	1/4	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/4HC-01	057409
	1/4	C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/4HC-01	054921
	1/4	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1/4HC-01	055493
	1/4	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Straight Thru	No	HFS 1/4HC-02	055633
	1/4	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	Yes	HFSC 1/4HC-01	057467
	1/4	Z (Low Temp.)	1/4" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/4HZ-01	059653
	1/4	Z (Low Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/4HZ-01	054925
	1/4	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/4HZ-01	057428
	1/4	Z (Low Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Straight Thru	No	HFS 1/4HZ-01	056169
	1/2	C (Med. Temp.)	1/4" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/2HC-02	059079
	1/2	C (Med. Temp.)	1/4" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/2HC-01	009812
	1/2	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/2HC-01	054361
	1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 1/2HC-01	054838
	1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1/2HC-02	055827
	1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/2HC-01	057291
	1/2	C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/2HC-02	054135
	1/2	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Straight Thru	No	HFS 1/2HC-02	054136
	1/2	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1/2HC-03	054723
	1/2	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	Yes	HFSC 1/2HC-01	057293
	1/2	W35 (MOP)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/2HW35-01	054362
	1/2	Z (Low Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/2HZ-01	054365
	1/2	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1/2HZ-01	055889
	1/2	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/2HZ-01	057429
	1/2	Z (Low Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/2HZ-01	054364
	1/2	Z (Low Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	Yes	HFSC 1/2HZ-01	057482
	1	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1HC-01	054930
	1	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 1HC-01	055494
	1	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1HC-02	055708
	1	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1HC-01	057410
	1	C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1HC-01	054927
	1	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1HC-01	055702
	1	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Straight Thru	No	HFS 1HC-02	055928
	1	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	Yes	HFSC 1HC-01	057468
	1	W35 (MOP)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1HW35-01	054932
	1	Z (Low Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1HZ-01	054931
	1	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1HZ-01	057430
	1	Z (Low Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1HZ-01	054928
	1-1/2	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1-1/2HC-01	054936
	1-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 1-1/2HC-01	055495
	1-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1-1/2HC-02	055863
	1-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1-1/2HC-01	057292
	1-1/2	C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1-1/2HC-01	054933
	1-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1-1/2HC-01	055969
	1-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Straight Thru	No	HFS 1-1/2HC-02	056018
	1-1/2	Z (Low Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1-1/2HZ-01	054937
	1-1/2	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1-1/2HZ-01	055870
	1-1/2	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1-1/2HZ-01	057321
	2	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 2HC-01	054942
	2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 2HC-01	054946
2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 2HC-02	055706	
2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 2HC-01	057294	
2	C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 2HC-01	054939	
2	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	Yes	HFSC 2HC-01	057470	
2	CA (Heat Pump)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 2HCA-01	059670	
2	Z (Low Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 2HZ-01	054943	