



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.

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	2	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 2HZ-01	057433
	2	Z (Low Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 2HZ-01	054940
	2-1/2	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 2-1/2HC-01	054950
	2-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 2-1/2HC-01	055931
	2-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 2-1/2HC-02	056042
	2-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 2-1/2HC-01	057411
	2-1/2	C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 2-1/2HC-01	054947
	2-1/2	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 2-1/2HZ-01	057434
	3	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 3HC-01	053317
	3	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 3HC-01	053916
	3	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	No	HFES 3HC-02	054756
	3	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 3HC-01	057412
	3	C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 3HC-01	053316
	3	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Straight Thru	No	HFS 3HC-01	053915
	3	CA (Heat Pump)	1/2" X 5/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 3HCA-01	061730
	3	Z (Low Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 3HZ-01	053191
	3	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 3HZ-01	057748
	3	Z (Low Temp.)	1/2" X 5/8" ODF	External	No	5 Ft.	Angle	No	HFES 3HZ-02	064761
	5-1/2	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 5-1/2HC-01	054140
	5-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 5-1/2HC-01	054141
	5-1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 5-1/2HC-01	057781
	5-1/2	C (Med. Temp.)	1/2" X 5/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 5-1/2HC-02	054778
	5-1/2	C (Med. Temp.)	1/2" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 5-1/2HC-04	055187
	5-1/2	C (Med. Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 5-1/2HC-03	054779
	5-1/2	CA (Heat Pump)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 5-1/2HCA-03	065649
	5-1/2	CA (Heat Pump)	1/2" X 5/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 5-1/2HCA-02	057378
	5-1/2	Z (Low Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 5-1/2HZ-01	054777
	5-1/2	Z (Low Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 5-1/2HZ-02	054780
	8	C (Med. Temp.)	1/2" X 5/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 8HC-01	057312
	8	C (Med. Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 8HC-02	057313
	8	C (Med. Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Angle	Yes	HFESC 8HC-01	058609
	8	CA (Heat Pump)	1/2" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 8HCA-04	056818
	8	CA (Heat Pump)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 8HCA-05	056819
	8	W100 (MOP)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 8HW100-01	057354
	10	C (Med. Temp.)	1/2" X 5/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 10HC-02	057315
	10	C (Med. Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 10HC-01	057256
	10	C (Med. Temp.)	7/8" X 1-1/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 10HC-03	057316
	10	CA (Heat Pump)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 10HCA-05	056820
	10	CA (Heat Pump)	5/8" X 1-1/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 10HCA-06	056821
	10	W100 (MOP)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 10HW100-01	058159
	12	C (Med. Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 12HC-01	062737
	15	C (Med. Temp.)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 15HC-01	057317
15	C (Med. Temp.)	7/8" X 1-1/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 15HC-02	057318	
15	CA (Heat Pump)	5/8" X 7/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 15HCA-07	056823	
15	CA (Heat Pump)	5/8" X 1-1/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 15HCA-08	056824	
15	CA (Heat Pump)	7/8" X 1-1/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 15HCA-09	056825	
20	C (Med. Temp.)	7/8" X 1-1/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 20HC-01	062055	
20	CA (Heat Pump)	7/8" X 1-1/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 20HCA-04	058490	
20	CA (Heat Pump)	7/8" X 1-3/8" ODF	External	No	5 Ft.	Straight Thru	No	HFES 20HCA-05	060646	
M (R-134a) *R-12	1/4	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	30 In.	Angle	No	HFE 1/4MC-01	057860
	1/4	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Angle	Yes	HFESC 1/4MC-01	057572
	1/4	C (Med. Temp.)	3/8" X 1/2" SAE	Internal	No	5 Ft.	Angle	No	HF 1/4MC-01	057618
	1/4	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	No	HFS 1/4MC-01	058545
	1/4	C (Med. Temp.)	3/8" X 1/2" ODF	Internal	No	5 Ft.	Angle	Yes	HFSC 1/4MC-01	057573
	1/2	C (Med. Temp.)	3/8" X 1/2" SAE	External	No	5 Ft.	Angle	No	HFE 1/2MC-01	057616
1/2	C (Med. Temp.)	3/8" X 1/2" ODF	External	No	5 Ft.	Straight Thru	No	HFES 1/2MC-01	065645	