

## **RFKH SERIES | *Thermostatic Expansion Valve***



RFKH series thermostatic expansion valves are used to regulate refrigerant flow rate into the evaporator while controlling the refrigerant's superheat at the outlet of the evaporator. They can be used for various refrigerants under all working conditions. Typical applications are refrigeration systems like commercial refrigerators and freezers, icemakers, air conditioners and dehumidifiers at various evaporation temperatures

### **FEATURES**

- STAINLESS STEEL CAPILLARY AND SENSING BULB
- COMPACT DESIGN WITH INTERCHANGEABLE ORIFICE
- VALVES WITH MOP FUNCTION CAN BE PROVIDED TO ASSURE RELIABLE COMPRESSOR OPERATION
- THERMAL SENSING BULB UTILIZES CROSS CHARGE TECHNOLOGY, PROVIDING CONSISTENT SUPERHEAT CONTROL OVER WIDE EVAPORATOR TEMPERATURE RANGE

### **GENERAL SPECIFICATION**

- Applicable for all common HCFC and HFC refrigerants such as: R-22, R-134a, R-404A, R-407C, R-407F, R-410A, R-507
- Applicable ambient temperatures: -30°F to +130°F
- Fluid temperature range: -40°F to +158°F
- Maximum operating pressure: 667 psig
- Certifications: UL/CSA

### **TECHNICAL PARAMETERS**

- RFKH series angle shape valve
- Inlet 3/8" flare connection
- Capillary tube length: 5 ft
- Equalization port:
  - RFKH flare/flare type with 1/4" flare connection;
  - RFKH flare/solder type with 1/4" solder connection

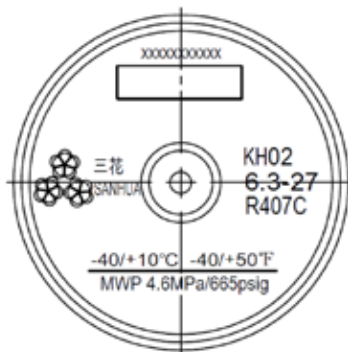
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### MODEL DESIGNATION LEGEND

Position Number	Model Designation Legend	
1	Product Code	Product Series
	RFKH	Thermostatic expansion valve
2	Refrigerant	Description
	01	R-22
	02	R-407C
	03	R-404A / R-507
	04	R-134a
	05	R-410
3	Pressure Equalization	Description
	E	External equalizer
	(Omitted)	Internal equalizer
4	Miscellaneous	Description
	xxxx	Digits for additional information

### MODEL DESIGNATION EXAMPLE

Position Number				According to Model Designation Legend
1	2	3	4	
RFKH	04	E	xxxx	→ Thermostatic expansion valve
RFKH	<b>04</b>	E	xxxx	→ Refrigerant R-134a
RFKH	04	<b>E</b>	xxxx	→ Connection for external pressure equalization
RFKH	04	E	<b>xxxx</b>	→ Digits for additional information



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### TECHNICAL DATA

Ref.	Model Name	Part Number <sup>1)</sup>	Connection Type	Inlet ØA	Outlet <sup>4)</sup> ØB		Ext. ØC	
			Inlet / Outlet / Equalizer	Flare (inch)	Flare (inch)	Solder (inch)	Flare (inch)	Solder (inch)
R-22	RFKH01-6.0-22	RFK-24061	flare / flare	3/8	1/2	-	-	-
	RFKH01E-6.0-13	RFK-24062	flare / flare / flare		1/2	-	1/4	-
	RFKH01-6.0-07	RFK-24065	flare / solder		-	1/2	-	-
	RFKH01E-6.0-08	RFK-24066	flare / solder / solder		-	1/2	-	1/4
R-407C	RFKH02-6.3-24	RFK-24067	flare / flare	3/8	1/2	-	-	-
	RFKH02E-6.3-20	RFK-24068	flare / flare / flare		1/2	-	1/4	-
	RFKH02-6.3-32	RFK-24071	flare / solder		-	1/2	-	-
	RFKH02E-6.3-18	RFK-24072	flare / solder / solder		-	1/2	-	1/4
R-404A / R-507	RFKH03-4.8-21	RFK-24073	flare / flare	3/8	1/2	-	-	-
	RFKH03E-4.8-15	RFK-24074	flare / flare / flare		1/2	-	1/4	-
	RFKH03-4.8-09	RFK-24077	flare / solder		-	1/2	-	-
	RFKH03E-4.8-10	RFK-24078	flare / solder / solder		-	1/2	-	1/4
R-134a	RFKH04-2.9-23	RFK-24079	flare / flare	3/8	1/2	-	-	-
	RFKH04E-2.9-19	RFK-24080	flare / flare / flare		1/2	-	1/4	-
	RFKH04-2.9-30	RFK-24083	flare / solder		-	1/2	-	-
	RFKH04E-2.9-31	RFK-24084	flare / solder / solder		-	1/2	-	1/4
R-410A	RFKH05-6.8-66	RFK-24085	flare / flare	3/8	1/2	-	-	-
	RFKH05E-6.8-33	RFK-24086	flare / flare / flare		1/2	-	1/4	-
	RFKH05-6.8-35	RFK-24089	flare / solder		-	1/2	-	-
	RFKH05E-6.8-34	RFK-24090	flare / solder / solder		-	1/2	-	1/4
R-407A / R-407F	RFKH07-6.0-43	RFK-24091	flare / flare	3/8	1/2	-	-	-
	RFKH07E-6.0-42	RFK-24092	flare / flare / flare		1/2	-	1/4	-
	RFKH07-6.0-45	RFK-24095	flare / solder		-	1/2	-	-
	RFKH07E-6.0-46	RFK-24096	flare / solder / solder		-	1/2	-	1/4

**Note:**

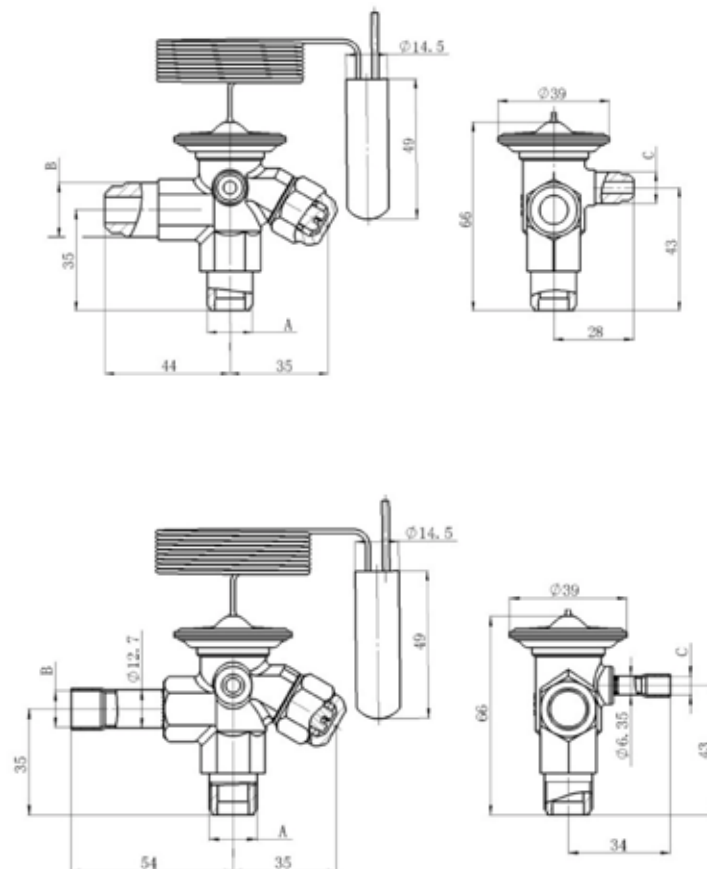
1. Includes valve body with bulb strap, less orifice

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### THERMOSTATIC CHARGES

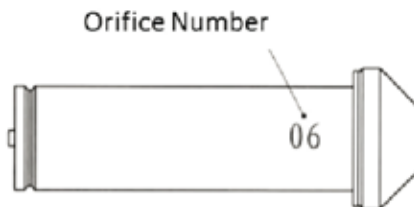
Refrigerant	Temperature Range			
	-40°F to +50°F		-40°F to +23°F	-76°F to -13°F
	No MOP	MOP: 59°F	MOP: 23°F	MOP: -4°F
R-22	On Request			
R-407A / R-407F	Standard	On Request		
R-407C	Standard	On Request		
R-404A / R-507	Standard	On Request		
R-134a	Standard	On Request	Not Available	
R-410A	Standard	On Request	Not Available	

### DIMENSIONS



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### ACCESSORIES



### ORIFICE

Orifice Number	Valve Orifice Model	Valve Orifice Part Number	Nominal Capacity <sup>1)</sup> (tons)					
			R-22	R-407C <sup>2)</sup>	R-404A / R-507	R-134a	R-410A	R-407A / R-407F
0X	RFKH-023-0X	RFK-24097	0.28	0.28	0.20	0.20	0.31	0.28
0	RFKH-023-00	RFK-24098	0.54	0.60	0.40	0.34	0.63	0.51
1	RFKH-023-01	RFK-24099	1.08	1.14	0.80	0.60	1.28	1.05
2	RFKH-023-02	RFK-24100	1.45	1.54	1.14	0.77	1.59	1.45
3	RFKH-023-03	RFK-24101	2.45	2.62	1.93	1.25	2.84	2.45
4	RFKH-023-04	RFK-24102	3.75	3.95	3.07	1.85	4.32	3.81
5	RKH-023-05	RFK-24103	5.15	5.26	4.01	2.45	5.43	5.00
6	RFKH-023-06	RFK-24104	6.06	6.28	4.78	2.93	6.82	6.03

**Note:**

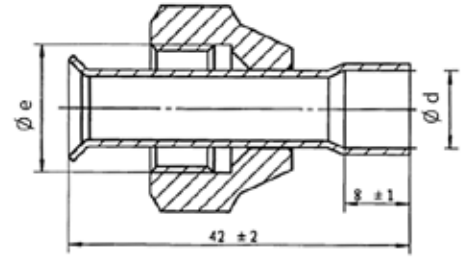
1. Nominal working conditions: Condensing temperature 100°F; evaporating temperature +40°F; liquid temperature 99°F
2. R-407C data based on dew point conditions

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### SOLDER ADAPTERS FOR RFKH INLET A

Model	Part Number <sup>1)</sup>	SAE Flare $\varnothing e$	Solder Connection $\varnothing d$
RFKH-038-01	RFK-24044	3/8"	3/8"
RFKH-038-05	RFK-24048	3/8"	1/4"

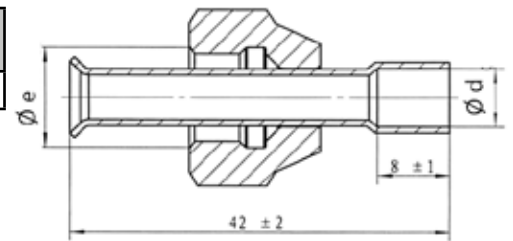
**Note:** 1. Copper tube and flare nut are included



### SOLDER ADAPTERS FOR RFKH EXTERNAL EQUALIZATION

Model	Part Number <sup>1)</sup>	SAE Flare $\varnothing e$	Solder Connection $\varnothing d$
RFKH-038-04	RFK-24047	1/4"	1/4"

**Note:** 1. Copper tube and flare nut are included



### FLARE NUTS FOR RFKH

Model	Part Number	SAE Flare (inch)	Tube Diameter $\varnothing d$ (inch)	Wrench Size $\varnothing e$ (inch)
JZF-000-011072	RFK-24050	1/4	1/4	5/8
JZF-000-011073	RFK-24051	3/8	3/8	13/16
JZF-000-011074	RFK-24052	1/2	1/2	15/16

