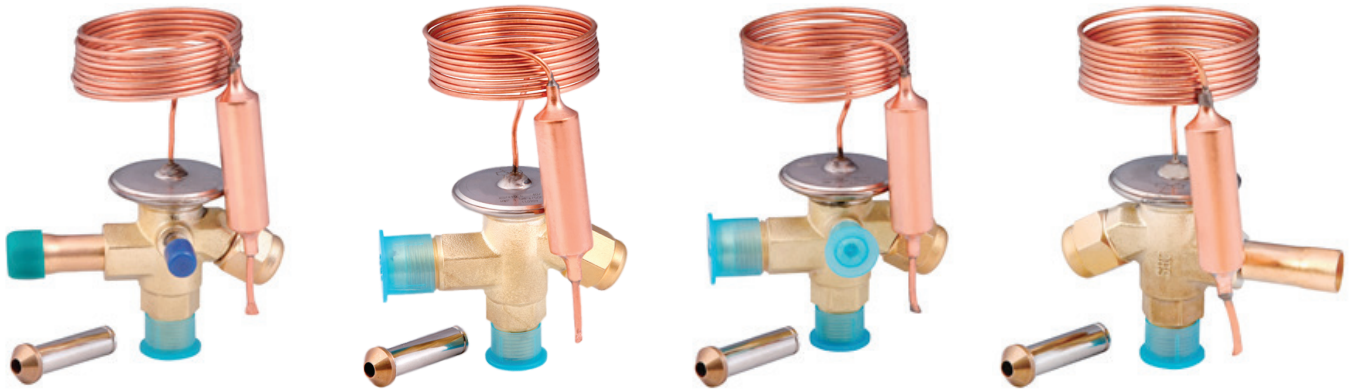


## RFKA SERIES | *Thermostatic Expansion Valve*



RFKA 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, ice makers, air conditioners and dehumidifiers at various evaporation temperatures.

### FEATURES

- COMPACT DESIGN WITH INTERCHANGEABLE ORIFICE
- ANGLE (BOTTOM OUTLET) OR STRAIGHT THROUGH CONFIGURATION
- 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-507
- Applicable ambient temperatures: -30°F to +130°F
- Fluid temperature range: -40°F to +158°F
- Maximum operating pressure:
  - R-134a - 305 psig
  - R-22, R-407C - 405 psig
  - R-404A / R-507 - 505 psig
- Certifications: UL/CSA and PED declaration

### TECHNICAL PARAMETERS

- RFKA series angle shape valve
- Inlet 3/8" flare connection
- Capillary tube length 60"
- Equalization port:
  - RFKA flare/flare type with 1/4" flare connection;
  - RFKA flare/solder type with 1/4" solder connection

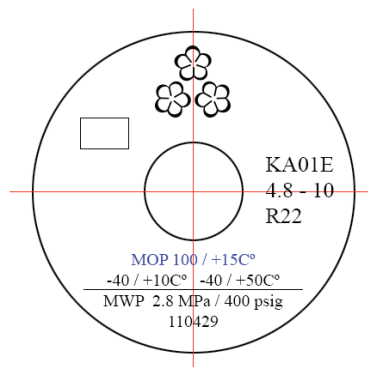
## RFKA SERIES | *Thermostatic Expansion Valve*

### MODEL DESIGNATION LEGEND

Position Number	Model Designation Legend	
1	Product Code	Product Series
	RFKA	Model number
2	Refrigerant	Description
	01	R-22
	02	R-407C
	03	R-404A / R-507
	04	R-134a
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		
RFKA	01	E	xxxx	➔	Thermostatic expansion valve model
RFKA	<b>01</b>	E	xxxx	➔	Refrigerant R-22
RFKA	01	<b>E</b>	xxxx	➔	Connection for external pressure equalization
RFKA	01	E	<b>xxxx</b>	➔	Digits for additional information



## RFKA SERIES | *Thermostatic Expansion Valve*

### 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	RFKA01-4.8-22	RFK-24001	flare / flare	3/8	1/2	-	-	-
	RFKA01E-4.8-13	RFK-24002	flare / flare / flare		1/2	-	1/4	-
	RFKA01-4.8-07	RFK-24005	flare / solder		-	1/2	-	-
	RFKA01E-4.8-08	RFK-24006	flare / solder / solder		-	1/2	-	1/4
R-407C	RFKA02-5.2-24	RFK-24007	flare / flare	3/8	1/2	-	-	-
	RFKA02E-5.2-20	RFK-24008	flare / flare / flare		1/2	-	1/4	-
	RFKA02-5.2-32	RFK-24011	flare / solder		-	1/2	-	-
	RFKA02E-5.2-18	RFK-24012	flare / solder / solder		-	1/2	-	1/4
R-404A / R-507	RFKA03-3.4-21	RFK-24013	flare / flare	3/8	1/2	-	-	-
	RFKA03E-3.4-15	RFK-24014	flare / flare / flare		1/2	-	1/4	-
	RFKA03-3.4--09	RFK-24017	flare / solder		-	1/2	-	-
	RFKA03E-3.4-10	RFK-24018	flare / solder / solder		-	1/2	-	1/4
R-134a	RFKA04-4.0-23	RFK-24019	flare / flare	3/8	1/2	-	-	-
	RFKA04E-4.0-19	RFK-24020	flare / flare / flare		1/2	-	1/4	-
	RFKA04-4.0-30	RFK-24023	flare / solder		-	1/2	-	-
	RFKA04E-4.0-31	RFK-24024	flare / solder / solder		-	1/2	-	1/4

**Note:**

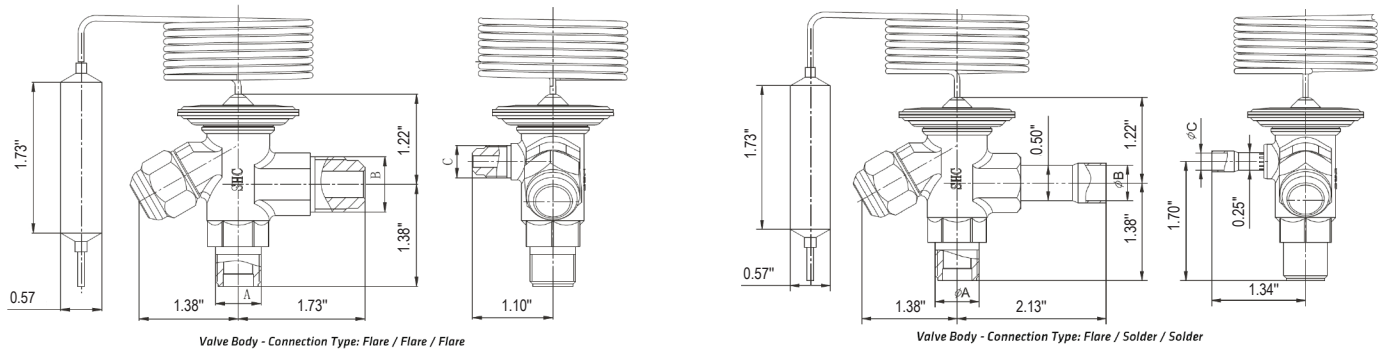
1. Includes valve body less orifice and bulb strap

### THERMOSTATIC CHARGES

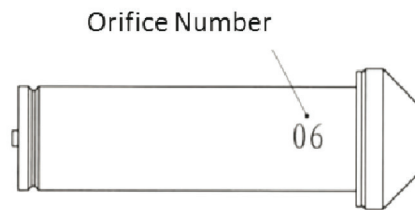
Refrigerant	Temperature Range					
	-40°F to +50°F		-40°F to +23°F		-76°F to -13°F	
	No MOP	MOP: 59°F	MOP: 23°F	MOP: -4°F		
R-22	On Request					
R-407C	Standard	On Request				
R-404A / R-507	Standard	On Request				
R-134a	Standard	On Request			Not Available	

## RFKA SERIES | *Thermostatic Expansion Valve*

### DIMENSIONS



### ACCESSORIES



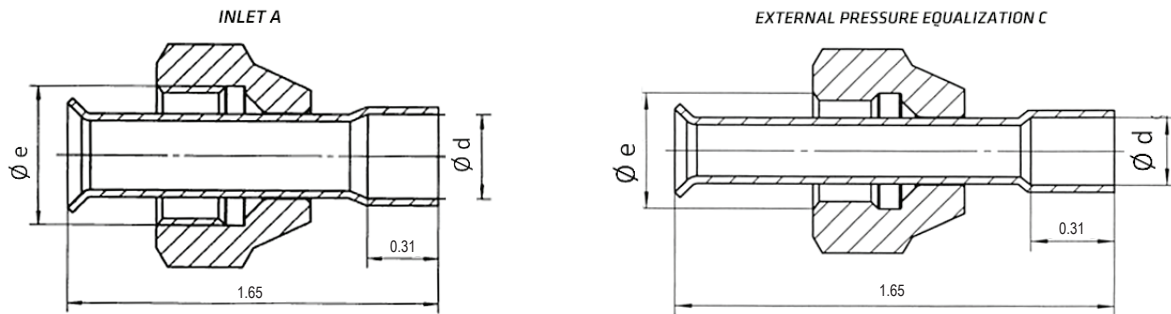
### ORIFICE

Orifice Number	Nominal Capacity <sup>1)</sup> (tons)				Valve Orifice Model	Valve Orifice Part Number
	R-22	R-407C <sup>2)</sup>	R-404A / R-507	R-134a		
0X	0.30	0.31	0.22	0.18	RFKA-023-0X	RFK-24036
0	0.47	0.48	0.38	0.31	RFKA-023-00	RFK-24037
1	1.00	1.03	0.87	0.62	RFKA-023-01	RFK-24038
2	1.38	1.42	1.18	0.79	RFKA-023-02	RFK-24039
3	1.94	2.00	1.71	1.16	RFKA-023-03	RFK-24040
4	2.70	2.82	2.48	1.58	RFKA-023-04	RFK-24041
5	4.24	4.21	3.55	2.37	RFKA-023-05	RFK-24042
6	5.66	5.74	4.49	3.41	RFKA-023-06	RFK-24043

#### 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

## RFKA SERIES | *Thermostatic Expansion Valve*



### SOLDER ADAPTERS FOR RFKA INLET A

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

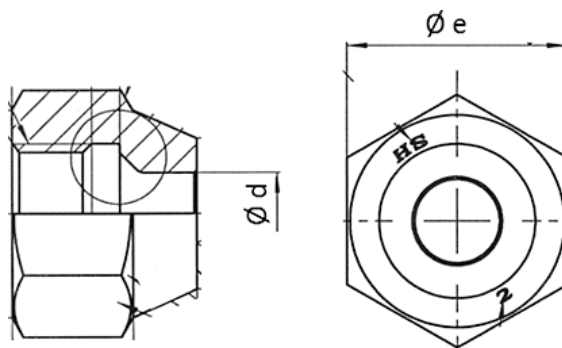
**Note:** 1. Copper tube and flare nut are included

### SOLDER ADAPTERS FOR RFKA EXTERNAL EQUALIZATION

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

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

### FLARE NUTS FOR RFKA



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