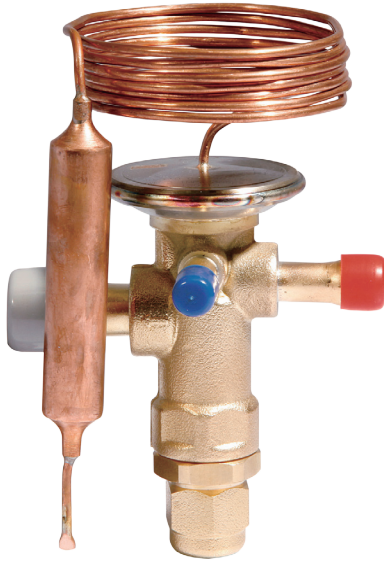


RFGD SERIES | *Thermostatic Expansion Valve*



RFGD 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 FIXED ORIFICE
- ALL COPPER CONNECTIONS
- VALVES WITH MOP FUNCTION CAN BE PROVIDED TO ASSURE RELIABLE COMPRESSOR OPERATION
- BALANCED PORT DESIGN FOR STABLE OPERATION
- BI-DIRECTIONAL CONTROL
- THERMAL SENSING BULB UTILIZES CROSS CHARGE TECHNOLOGY, PROVIDING CONSISTENT SUPERHEAT OVER THE 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

RFGD SERIES | *Thermostatic Expansion Valve*

TECHNICAL PARAMETERS

- RFGD valves available in straight shape with adjustable superheat
- RFGD Valves are available with the following solder connections:
 - Inlet 3/8" ODF/ Outlet 5/8" ODF or
 - Inlet 1/2" ODF/ Outlet 7/8" ODF or
 - Inlet 5/8" ODF/ Outlet 7/8" ODF
- RFGD valves are available with 3 different thermostatic charges having the following temperature ranges:
 - from -40°F to 50°F
 - from -40°F to 23°F
 - from -76°F to -13°F
- Equalization port available as option:
 - 1/4" ODF
- Capillary tube length 5 ft as standard. Different length customizable on request.
- Standard MOP values:
 - T. Range -40°F to 50°F: MOP 59°F or non-MOP
 - T. Range -40°F to 23°F: MOP 32°F
 - T. Range -76°F to -13°F: MOP -4°F

MODEL DESIGNATION LEGEND

Position Number	Model Designation Legend	
1	Product Code	Product Series
	RFGD	Model number
2	Refrigerant	Description
	1	R-22
	2	R-407C
	3	R-404A / R-507
	4	R-134a
	5	R-410A
3	Pressure Equalization	Description
	E	External equalizer
	(Omitted)	Internal equalizer
4	Valve Size	Internal Orifice Size
	From 1 to 6	Valve size: proportional to the orifice size and to the nominal capacity
5	Connections Type	Description
	3	Inlet 3/8" / outlet 5/8"
	4	Inlet 1/2" / outlet 7/8"
	5	Inlet 5/8" / outlet 7/8"
6	Miscellaneous	Description
	xxx	Digits for additional information e.g. static superheat, MOP, Bleed...

RFGD SERIES | *Thermostatic Expansion Valve*

MODEL DESIGNATION EXAMPLE

Position Number						According to Model Designation Legend
1	2	3	4	5	6	
RFGD	04	E	3	4	xxxx	→ Thermostatic expansion valve model
RFGD	04	E	3	4	xxxx	→ Refrigerant: R-134a
RFGD	04	E	3	4	xxxx	→ With external equalizer
RFGD	04	E	3	4	xxxx	→ Capacity: Valve and orifice size 3
RFGD	04	E	3	4	xxxx	→ Connection sizes: Inlet 1/2" ODF, outlet 7/8"
RFGD	04	E	3	4	xxxx	→ Digits for additional information

TECHNICAL DATA

R-22		R-407C ²⁾		R-404A / R-507		R-134a		R-410A	
Model Name ³⁾	Capacity (tons)	Model Name ³⁾	Capacity (tons)	Model Name ³⁾	Capacity (tons)	Model Name ³⁾	Capacity (tons)	Model Name ³⁾	Capacity (tons)
RFGD 01-1 RFGD 01E-1	3.0	RFGD 02-1 RFGD 02E-1	3.1	RFGD 03-1 RFGD 03E-1	2.0	RFGD 04-1 RFGD 04E-1	1.8	RFGD 05-1 RFGD 05E-1	3.5
RFGD 01-2 RFGD 01E-2	4.0	RFGD 02-2 RFGD 02E-2	4.2	RFGD 03-2 RFGD 03E-2	2.8	RFGD 04-2 RFGD 04E-2	2.5	RFGD 05-2 RFGD 05E-2	4.5
RFGD 01-3 RFGD 01E-3	6.0	RFGD 02-3 RFGD 02E-3	6.3	RFGD 03-3 RFGD 03E-3	4.2	RFGD 04-3 RFGD 04E-3	3.6	RFGD 05-3 RFGD 05E-3	7.0
RFGD 01-4 RFGD 01E-4	7.5	RFGD 02-4 RFGD 02E-4	8.1	RFGD 03-4 RFGD 03E-4	5.4	RFGD 04-4 RFGD 04E-4	4.6	RFGD 05-4 RFGD 05E-4	8.6
RFGD 01-5 RFGD 01E-5	9.0	RFGD 02-5 RFGD 02E-5	9.4	RFGD 03-5 RFGD 03E-5	6.4	RFGD 04-5 RFGD 04E-5	5.5	RFGD 05-5 RFGD 05E-5	10.6
RFGD 01-6 RFGD 01E-6	11.0	RFGD 02-6 RFGD 02E-6	11.7	RFGD 03-6 RFGD 03E-6	7.8	RFGD 04-6 RFGD 04E-6	6.8	RFGD 05-6 RFGD 05E-6	12.8

Note:

1. Nominal capacities based at the following operating conditions: Condensing temperature: 100°F; Evaporating temperature +40°F; Liquid temperature 99°F; Static superheat: 7°F
2. R-407C data based on dew point conditions
3. Model Name in this table is referred to the first 4 positions of the model designation

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	

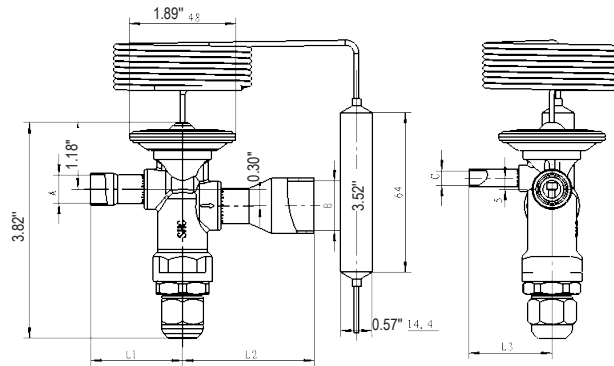
RFGD SERIES | *Thermostatic Expansion Valve*

STANDARD RANGE MODEL LIST

Model Name							
Ref.	Valve Body	Capacity Size All Sizes	Connections IN x OUT (ODF)		Pressure Equal.	Model Number	Product Number
			Code	(inch)	(inch)		
R-407C	RFGD 02E	1 -	3	3/8 x 5/8	1/4	RFGD 02E-3.1-33	RFG-25037
		2 -	4	1/2 x 7/8	1/4	RFGD 02E-4.2-34	RFG-25038
		3 -	4	1/2 x 7/8	1/4	RFGD 02E-6.3-35	RFG-25039
		4 -	4	1/2 x 7/8	1/4	RFGD 02E-8.1-36	RFG-25040
		5 -	5	5/8 x 7/8	1/4	RFGD 02E-9.4-37	RFG-25041
		6 -	5	5/8 x 7/8	1/4	RFGD 02E-11.7-38	RFG-25042
R-404A / R-507	RFGD 03E	1 -	3	3/8 x 5/8	1/4	RFGD 03E-2.0-39	RFG-25043
		2 -	4	1/2 x 7/8	1/4	RFGD 03E-2.8-40	RFG-25044
		3 -	4	1/2 x 7/8	1/4	RFGD 03E-4.2-41	RFG-25045
		4 -	4	1/2 x 7/8	1/4	RFGD 03E-5.4-42	RFG-25046
		5 -	5	5/8 x 7/8	1/4	RFGD 03E-6.4-43	RFG-25047
		6 -	5	5/8 x 7/8	1/4	RFGD 03E-7.8-44	RFG-25048
R-134a	RFGD 04E	1 -	3	3/8 x 5/8	1/4	RFGD 04E-1.8-01	RFG-25049
		2 -	4	1/2 x 7/8	1/4	RFGD 04E-2.5-02	RFG-25050
		3 -	4	1/2 x 7/8	1/4	RFGD 04E-3.6-03	RFG-25051
		4 -	4	1/2 x 7/8	1/4	RFGD 04E-4.6-04	RFG-25052
		5 -	5	5/8 x 7/8	1/4	RFGD 04E-5.5-49	RFG-25053
		6 -	5	5/8 x 7/8	1/4	RFGD 04E-6.8-32	RFG-25054
R-410A	RFGD 05	1 -	3	3/8 x 5/8	1/4	RFGD 05E-3.5-22	RFG-25055
		2 -	4	1/2 x 7/8	1/4	RFGD 05E-4.5-23	RFG-25056
		3 -	4	1/2 x 7/8	1/4	RFGD 05E-7.0-24	RFG-25057
		4 -	4	1/2 x 7/8	1/4	RFGD 05E-8.6-25	RFG-25058
		5 -	5	5/8 x 7/8	1/4	RFGD 05E-10.6-27	RFG-25059
		6 -	5	5/8 x 7/8	1/4	RFGD 05E-12.8-26	RFG-25060

RFGD SERIES | *Thermostatic Expansion Valve*

DIMENSIONS



Note: The drawing represents a model with External Pressure Equalization

Orifice Overall Dimensions (in)		
L1	L2	L3
1.63	2.34	1.48