***RFKH*** *SERIES*

# THERMOSTATIC EXPANSION VALVE



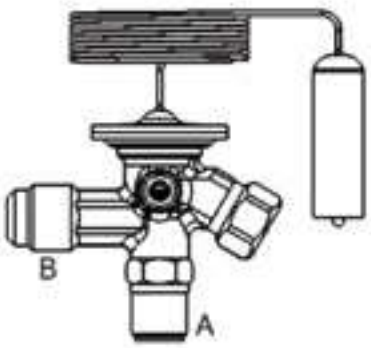
RFKH series thermostatic expansion valves are used to adjust mass flow of refrigerant into the evaporator while controlling the refrigerant´s superheat at the outlet of the evaporator. They can be used for various refrigerants under all working conditions. Typical applications are refrigeration systems like freezers, ice makers, dehumidifiers as well as air conditioners and heat pumps at various evaporation temperature ranges.

## FEATURES

- STAINLESS STEEL CAPILLARY AND SENSING BULB
- EXCHANGEABLE VALVE ORIFICE, EASY TO STOCK HOLDING, CONVENIENT FOR CAPACITY MATCH AND REPAIR
- THERMAL BULB UTILIZES CROSS CHARGE TECHNOLOGY, PROVIDING CONSISTENT SUPERHEAT DEGREE OVER THE WHOLE EVAPORATION TEMPERATURE RANGE
- VALVES WITH MOP FUNCTION CAN BE PROVIDED TO ASSURE RELIABLE COMPRESSOR OPERATION
- APPLICABLE IN A WIDE EVAPORATION TEMPERATURE RANGE
- RELIABLE AND CONSISTENT PERFORMANCE OF SUPERHEAT CONTROL

### GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R407C, R404A, R507, R134a, R404A, R410A, R407A, R407F, R448A/R449A, R452A, R450A/R513A, R455A, R454C
- Ambient temperature min./max.: -35°C / +55°C
- Medium temperature TS min./max.: -40°C / +70°C extended to -60°C / +70°C for range B models
- Max. operating pressure PS: 4.6 MPa (46 bar)
- Installation position:
  - Preferably valve head upwards
  - Flow direction from inlet A to outlet B
- Certifications: UL/CSA and PED declaration






# THERMOSTATIC EXPANSION VALVE



## TECHNICAL PARAMETERS

- RFKH series angle shape valve
- Inlet 3/8" flare connection
- Capillary tube length 1,5m
- Equalization port:
  - RFKH flare/flare type with ¼" flare connection;
  - RFKH flare/solder type with ¼" or 6mm solder connection

## MODEL DESIGNATION LEGEND

| Position Number | Model Designation Legend | |
|---|---|---|
| 1 | **Product Code** | **Product Series** |
| | RFKH | Thermostatic expansion valve |
| 2 | **Refrigerant** | **Description** |
| | 01 | R22 |
| | 02 | R407C |
| | 03 | R404A / R507A |
| | 04 | R134a |
| | 05 | R410A |
| | 07 | R407A / R407F |
| | 08 | R448A / R449A |
| | 10 | R450A |
| | 11 | R452A |
| | 14 | R513A |
| | 20 | R455A / R454C |
| 3 | **Pressure Equalization** | **Description** |
| | E | External pressure equalization |
| | (Omitted) | Internal pressure equalization |
| 4 | **Miscellaneous** | **Description** |
| | xxxxA | Digits for additional information |

# THERMOSTATIC EXPANSION VALVE



## MODEL DESIGNATION EXAMPLE

| Position Number | | | | | According to Model Designation Legend |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | |
| **RFKH** | 01 | E | xxx | xxxA | Thermostatic expansion valve |
| RFKH | **01** | E | xxx | xxxA | Refrigerant R22 |
| RFKH | 01 | **E** | xxx | xxxA | Connection for external pressure equalization |
| RFKH | 01 | E | **xxx** | xxxA | Nominal Capacity (in USRT) |
| RFKH | 01 | E | xxx | **xxxA** | Digits for additional information |

## MODELS DESIGNATION (VALVE HEAD)




| Code | Description |
|---|---|
| KH01-6.0-26A | Part number |
| -40/10°C | Evaporating temperature (°C) |
| -40/+50°F | Evaporating temperature (°F) |
| R22/R407C | Refrigerant |
| MWP 4.6Mpa | Max. Working pressure (MPa) |
| MWP 665psig | Evaporating temperature (Psig) |

## MODELS WITH MOP FUNCTION

*RFKH valves can be selected with MOP (Max. Operating Pressure) function.*
*MOP protects the compressor motor against excessive evaporating pressure during normal operation.*

| Refrigerant | Range N (-40°C to +10°C) | Range NM (-40°C to -5°C) | Range NL (-40°C to -15°C) | Range B (-60°C to -25°C) |
|---|---|---|---|---|
| | MOP = +15°C | MOP = 0°C | MOP = -10°C | MOP = -20°C |
| R22 | 6,9 barg - STD | 4,0 barg – O.R. | 2,5 barg - STD | N.A. |
| R407C | 6,6 barg - STD | N.A. | N.A. | N.A. |
| R404A / R507 | 8,4 barg - STD | 5,0 barg – O.R. | 3,3 barg - STD | 2,0 barg - STD |
| R134a | 3,9 barg - STD | 1,9 barg – O.R. | 1,0 barg – O.R. | N.A. |
| R410A | 11,5 barg - STD | 7,0 barg – O.R. | 4,7 barg - STD | N.A. |
| R407A / R407F | 7,9 barg - STD | N.A. | N.A. | N.A. |
| R448A / R449A | 7,3 barg - O.R. | 4,2 barg – O.R. | 2,6 barg - STD | 1,5 barg - O.R. |
| R450A | 3,2 barg - O.R. | 1,5 barg – O.R. | 0,7 barg - O.R. | N.A. |
| R452A | 8,0 barg - O.R. | 4,6 barg – O.R. | 3,0 barg - STD | 1,7 barg - STD |
| R513A | 4,3 barg - O.R. | 2,3 barg – O.R. | 1,3 barg - O.R. | N.A. |
| R455A | 6,8 barg - O.R. | 3,8 barg – O.R. | 2,4 barg - O.R. | N.A. |
| R454C | 6,3 barg - O.R. | 3,5 barg – O.R. | 2,2 barg - O.R. | N.A. |

**Note:** STD : Standard product
O.R. : On Request
N.A. : Not Available

# THERMOSTATIC EXPANSION VALVE



## TECHNICAL PARAMETERS

*Tab. A : Models with Range N : Temperature Range from -40°C to +10°C [ without MOP ]*

| Ref. | Model Valve Body | Part Number[1 & 4)] | Connection type | Inlet ØA | Outlet ØB | | | Ext. ØC | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | In / Out / Ext. Pressure Equal. | Flare | Flare | Solder | | Flare | Solder | Solder |
| | | | | [inch] | [inch] | [mm] | [inch] | [inch] | [inch] | [mm] |
| R22 | RFKH01-6.0-22A | 10201028802 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH01E-6.0-13A | 10201028902 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH01-6.0-26A | 10201029202 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH01E-6.0-06A | 10201033302 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH01-6.0-07A | 10201029102 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH01E-6.0-08A | 10201029002 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R407C | RFKH02-6.3-24A | 10201037902 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH02E-6.3-20A | 10201040002 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH02-6.3-27A | 10201029302 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH02E-6.3-28A | 10201033602 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH02-6.3-32A | 10201029402 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH02E-6.3-18A | 10201033502 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R404A / R507A | RFKH03-4.8-21A | 10201028402 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH03E-4.8-15A | 10201028502 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH03-4.8-03A | 10201029702 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH03E-4.8-02A | 10201033902 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH03-4.8-09A | 10201028702 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH03E-4.8-10A | 10201027402 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R134a | RFKH04-2.9-23A | 10201038502 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH04E-2.9-19A | 10201040602 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH04-2.9-29A | 10201030702 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH04E-2.9-17A | 10201035202 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH04-2.9-30A | 10201030802 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH04E-2.9-31A | 10201035302 | flare / solder / solder | | - | - | 1/2 | - | - | 1/4 |
| R410A | RFKH05-7.6-66A | 10201028002 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH05E-7.6-33A | 10201028302 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH05-7.6-37A | 10201031002 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH05E-7.6-36A | 10201035502 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH05-7.6-35A | 10201028102 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH05E-7.6-34A | 10201028202 | flare / solder / solder | | - | - | 1/2 | - | - | 1/4 |
| R407A / R407F | RFKH07-6.0-43A | 10201038702 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH07E-6.0-42A | 10201040902 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH07-6.0-44A | 10201046402 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH07E-6.0-41A | 10201035702 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH07-6.0-45A | 10201031102 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH07E-6.0-46A | 10201035802 | flare / solder / solder | | - | - | 1/2 | - | - | 1/4 |

# THERMOSTATIC EXPANSION VALVE



## TECHNICAL PARAMETERS

*Tab. A : Models with Range N : Temperature Range from -40°C to +10°C [ without MOP ]*

| Ref. | Model Valve Body | Part Number[1 & 4)] | Connection type | Inlet ØA | Outlet ØB | | | Ext. ØC | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | In / Out / Ext. Pressure Equal. | Flare | Flare | Solder | | Flare | Solder | Solder |
| | | | | [inch] | [inch] | [mm] | [inch] | [inch] | [inch] | [mm] |
| R448A / R449A | RFKH08-6.1-49A | 10201038802 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH08E-6.1-48A | 10201041002 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH08-6.1-50A | 10201031202 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH08E-6.1-47A | 10201035902 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH08-6.1-51A | 10201031302 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH08E-6.1-52A | 10201036002 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R450A | RFKH10-2.8-61A | 10201039202 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH10E-2.8-60A | 10201041402 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH10-2.8-72A | 10201031802 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH10E-2.8-59A | 10201036602 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH10-2.8-63A | 10201047402 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH10E-2.8-64A | 10201047502 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R452A | RFKH11-4.5-55A | 10201039302 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH11E-4.5-54A | 10201041502 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH11-4.5-56A | 10201031902 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH11E-4.5-53A | 10201036702 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH11-4.5-57A | 10201032002 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH11E-4.5-58A | 10201036802 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R513A | RFKH14-2.7-68A | 10201039602 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH14E-2.7-67A | 10201041902 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH14-2.7-70A | 10201032702 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH14E-2.7-65A | 10201037402 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH14-2.7-71A | 10201032802 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH14E-2.7-76A | 10201037502 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R455A / R454C | RFKH20-4.3-80A | 10201039702 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH20E-4.3-79A | 10201042002 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH20-4.3-81A | 10201032902 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH20E-4.3-78A | 10201037602 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH20-4.3-82A | 10201033002 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH20E-4.3-83A | 10201037702 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |

# THERMOSTATIC EXPANSION VALVE



*Tab. B : Models with Range N : Temperature Range from -40°C to +10°C [ with MOP = +15°C ]*

| Ref. | Model Valve Body | Part Number[1 & 4)] | Connection type | Inlet ØA | Outlet ØB | | | Ext. ØC | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | In / Out / Ext. Pressure Equal. | Flare | Flare | Solder | | Flare | Solder | Solder |
| | | | | [inch] | [inch] | [mm] | [inch] | [inch] | [inch] | [mm] |
| R22 | RFKH 01-6.0-205A | 10201042302 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH01E-6.0-204A | 10201039902 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH01-6.0-206A | 10201042402 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH01E-6.0-201A | 10201042102 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH01-6.0-202A | 10201042202 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH01E-6.0-203A | 10201033402 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R407C | RFKH02-6.3-209A | 10201038002 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH02E-6.3-208A | 10201043702 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH02-6.3-210A | 10201029502 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH02E-6.3-211A | 10201033802 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH02-6.3-212A | 10201029602 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH02E-6.3-207A | 10201033702 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R404A / R507A | RFKH03-4.8-218A | 10201045102 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH03E-4.8-217A | 10201040302 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH03-4.8-214A | 10201030102 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH03E-4.8-213A | 10201034502 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH03-4.8-215A | 10201030202 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH03E-4.8-216A | 10201034602 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R134a | RFKH04-2.9-221A | 10201038602 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH04E-2.9-220A | 10201040702 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH04-2.9-222A | 10201045302 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH04E-2.9-219A | 10201045202 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH04-2.9-223A | 10201030902 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH04E-2.9-224A | 10201035402 | flare / solder / solder | | - | - | 1/2 | - | - | 1/4 |
| R410A | RFKH05-7.6-230A | 10201045702 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH05E-7.6-225A | 10201040802 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH05-7.6-229A | 10201045602 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH05E-7.6-228A | 10201045502 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH05-7.6-227A | 10201045402 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH05E-7.6-226A | 10201035602 | flare / solder / solder | | - | - | 1/2 | - | - | 1/4 |

# THERMOSTATIC EXPANSION VALVE



*Tab. C : Models with Range NL : Temperature Range from -40°C to -15°C [ with MOP = -10°C ]*

| Ref. | Model Valve Body | Part Number[1 & 4)] | Connection type | Inlet ØA | Outlet ØB | | | Ext. ØC | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | In / Out / Ext. Pressure Equal. | Flare | Flare | Solder | | Flare | Solder | Solder |
| | | | | [inch] | [inch] | [mm] | [inch] | [inch] | [inch] | [mm] |
| R404A / R507A | RFKH03-4.8-312A | 10201038302 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH03E-4.8-311A | 10201040402 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH03-4.8-308A | 10201030302 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH03E-4.8-307A | 10201034802 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH03-4.8-309A | 10201030402 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH03E-4.8-310A | 10201034902 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R448A / R449A | RFKH08-6.1-315A | 10201039002 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH08E-6.1-314A | 10201041202 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH08-6.1-316A | 10201031502 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH08E-6.1-313A | 10201036302 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH08-6.1-317A | 10201031602 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH08E-6.1-318A | 10201036402 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R452A | RFKH11-4.5-320A | 10201039502 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH11E-4.5-319A | 10201041702 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH11-4.5-321A | 10201032302 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH11E-4.5-324A | 10201037002 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH11-4.5-322A | 10201032402 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH11E-4.5-323A | 10201037102 | flare / solder / solder | | - | - | 1/2 | - | - | 1/4 |

**Note:** 1) Extent of delivery: valve body and bulb strap
2) Different evaporation temperature range on request
3) MOP function on request
4) Part Number is referred to Multi Pack

# THERMOSTATIC EXPANSION VALVE



*Tab. D : Models with Range B : Temperature Range from -60°C to -25°C [ without MOP ]*

| Ref. | Model Valve Body | Part Number[1 & 4)] | Connection type | Inlet ØA | Outlet ØB | | | Ext. ØC | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | In / Out / Ext. Pressure Equal. | Flare | Flare | Solder | | Flare | Solder | Solder |
| | | | | [inch] | [inch] | [mm] | [inch] | [inch] | [inch] | [mm] |
| R404A / R507A | RFKH03-4.8-106A | 10201038102 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH03E-4.8-105A | 10201040102 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH03-4.8-102A | 10201029802 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH03E-4.8-101A | 10201034002 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH03-4.8-103A | 10201029902 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH03E-4.8-104A | 10201034102 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |

*Tab. E : Models with Range B : Temperature Range from -60°C to -25°C [ with MOP -20°C ]*

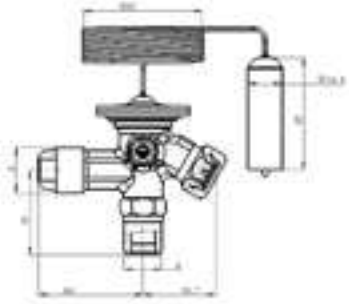
| Ref. | Model Valve Body | Part Number[1 & 4)] | Connection type | Inlet ØA | Outlet ØB | | | Ext. ØC | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | In / Out / Ext. Pressure Equal. | Flare | Flare | Solder | | Flare | Solder | Solder |
| | | | | [inch] | [inch] | [mm] | [inch] | [inch] | [inch] | [mm] |
| R404A / R507A | RFKH03-4.8-406A | 10201038202 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH03E-4.8-405A | 10201040202 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH03-4.8-402A | 10201045002 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH03E-4.8-401A | 10201034202 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH03-4.8-403A | 10201030002 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH03E-4.8-404A | 10201034302 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |
| R452A | RFKH11-4.5-409A | 10201047702 | flare / flare | 3/8 | 1/2 | - | - | - | - | - |
| | RFKH11E-4.5-408A | 10201041802 | flare / flare / flare | | 1/2 | - | - | 1/4 | - | - |
| | RFKH11-4.5-410A | 10201032502 | flare / solder | | - | 12 | - | - | - | - |
| | RFKH11E-4.5-407A | 10201037202 | flare / solder / solder | | - | 12 | - | - | - | 6 |
| | RFKH11-4.5-411A | 10201032602 | flare / solder | | - | - | 1/2 | - | - | - |
| | RFKH11E-4.5-412A | 10201037302 | flare / solder / solder | | - | - | 1/2 | - | 1/4 | - |

**Note:** 1) Extent of delivery: valve body and bulb strap
2) Different evaporation temperature range on request
3) MOP function on request
4) Part Number is referred to Multi Pack

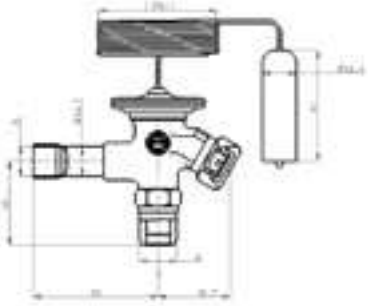
# THERMOSTATIC EXPANSION VALVE



## DIMENSIONS

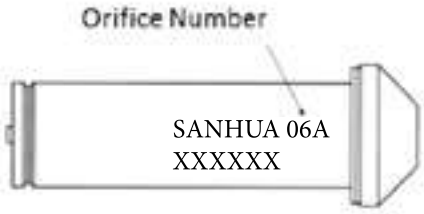


*Valve Body - Connection Type: flare/flare/flare*



*Valve Body - Connection Type: flare/solder/solder*

## ACCESSORIES




## ORIFICES

| Orifice Number | Valve Orifice Model | Valve Orifice Part Number | Nominal Capacity[1] [ kW ] | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | R22 | R407C | R404A R507A | R134a | R410A | R407A R407F |
| 0X | RFKH-023-0X | 10202001702 | 1 | 1 | 0,7 | 0,69 | 1,3 | 1 |
| 0 | RFKH-023-00 | 10202001002 | 1,9 | 2,1 | 1,4 | 1,2 | 2,5 | 1,8 |
| 1 | RFKH-023-01 | 10202001102 | 3,8 | 4 | 2,8 | 2,1 | 5 | 3,7 |
| 2 | RFKH-023-02 | 10202001202 | 5,1 | 5,4 | 4 | 2,7 | 6,2 | 5,1 |
| 3 | RFKH-023-03 | 10202001302 | 8,6 | 9,2 | 6,8 | 4,4 | 11,2 | 8,6 |
| 4 | RFKH-023-04 | 10202001402 | 13,2 | 13,9 | 10,8 | 6,5 | 17 | 13,4 |
| 5 | RFKH-023-05 | 10202001502 | 18,1 | 18,5 | 14,1 | 8,6 | 21,3 | 17,6 |
| 6 | RFKH-023-06 | 10202001602 | 21,3 | 22,1 | 16,8 | 10,3 | 26,8 | 21,2 |

| Orifice Number | Valve Orifice Model | Valve Orifice Part Number | Nominal Capacity[1] [ kW ] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | R448A | R449A | R450A | R452A | R513A | R455A | R454C |
| 0X | RFKH-023-0X | 10202001702 | 1,1 | 1,0 | 0,6 | 0,8 | 0,6 | 0,6 | 0,6 |
| 0 | RFKH-023-00 | 10202001002 | 2,1 | 2,0 | 1,1 | 1,5 | 1,0 | 1,3 | 1,2 |
| 1 | RFKH-023-01 | 10202001102 | 4,0 | 4,0 | 1,9 | 3,0 | 1,8 | 2,5 | 2,4 |
| 2 | RFKH-023-02 | 10202001202 | 5,0 | 4,9 | 2,3 | 3,7 | 2,2 | 3,5 | 3,3 |
| 3 | RFKH-023-03 | 10202001302 | 8,9 | 8,8 | 4,2 | 6,7 | 4,0 | 6,0 | 5,8 |
| 4 | RFKH-023-04 | 10202001402 | 13,6 | 13,4 | 6,3 | 10,1 | 6,1 | 9,8 | 9,4 |
| 5 | RFKH-023-05 | 10202001502 | 17,0 | 16,8 | 7,9 | 12,7 | 7,6 | 12,6 | 12,1 |
| 6 | RFKH-023-06 | 10202001602 | 21,4 | 21,1 | 9,9 | 16,0 | 9,6 | 15,1 | 14,5 |

**Note:** 1) Nominal working conditions: Condensing temperature 38°C; evaporating temperature +4,4°C; liquid temperature 37°C
2) R407C data based on dew point conditions
3) Nominal capacity based on
- Static Superheat (SS) 5K (for models without MOP) and 4K (for models with MOP)
- Opening Superheat(OS) 6K

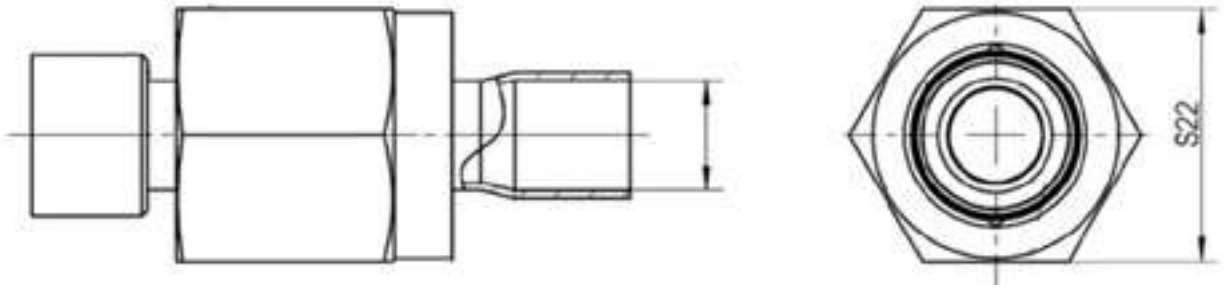
# THERMOSTATIC EXPANSION VALVE



## SOLDER ADAPTERS FOR RFKH INLET A

| Model | Part Number[1)] | SAE Flare Ø e | Solder Connection Ø d |
|---|---|---|---|
| RFK-A04-038010 | 20200001602 | 3/8″ | 3/8" |
| RFK-A04-038011 | 20201002502 | | 10mm |
| RFK-A04-038012 | 20201002602 | | 1/4" |
| RFK-A04-038013 | 20201002702 | | 6mm |

**Note:** 1) Copper pipe and flare nut are in the extent of delivery




## SOLDER ADAPTERS FOR RFKH EXTERNAL PRESSURE EQUALIZATION C

| Model | Part Number[1)] | SAE Flare Ø e | Solder Connection Ø d |
|---|---|---|---|
| RFKA-038-03 | 20201000502 | 1/4″ | 6mm |
| RFKA-038-04 | 20201000602 | | 1/4" |

**Note:** 1) Copper pipe and flare nut are in the extent of delivery

