



# EXPANSION VALVES

## Type QCX,RCX

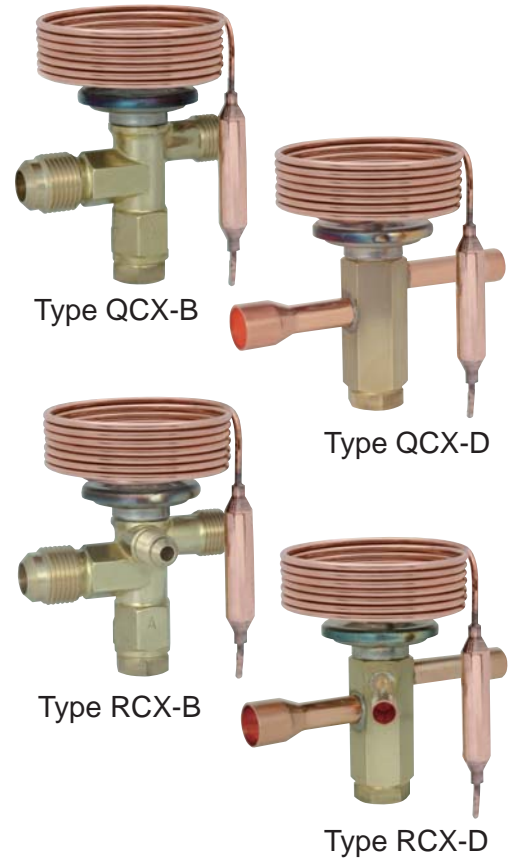
<Refrigerant for R134a,R404A,R407C,R410A,R22>

### General description

- Application:  
Refrigeration display case,  
commercial refrigerator,freezer,  
air conditioning,reefer,etc.

### Features

- Compact size & Light weight.
- Broad temperature range.  
Applicable for deep freezing, refrigeration and  
air conditioning (single flow).
- Both Internal / External equalized types are available.
- Both Flare / Solder connection types are available.
- Adjustable static superheat setting.
- Suitable for refrigeration systems with hot gas defrosting.
- The same products can be used for R22 and R407C.



### Specifications

- Type QCX ... Internal equalizer type
- Type RCX ... External equalizer type
- Max. working pressure : 3.0 MPa
- Airtight test pressure : 3.3 MPa
- Max. temperature of body and sensing bulb : 80 °C
- With superheat external adjust device
- Adjustable range of static superheat :  
1 to 7 °C at R22,R134a,R404A  
1 to 5 °C at R407C,R410A
- Increase of approx 0.045 MPa / one rotation

Charge		A Zone	R Zone	F Zone	MOP (°C)	Temp. Condition
		Evaporating Temp. (°C)				Body Temp.: Ts, Sensing Bulb Temp.: Tb
SA	R22	-40 to 10	-	-	18	$T_s \geq T_b$
C		-	-40 to 0	-	-	$T_s \cong T_b$
SL		-	-	-60 to -25	-20	$T_s \geq T_b$
SA	R404A	-40 to 10	-	-	18	$T_s \geq T_b$
C		-	-40 to 0	-	-	$T_s \cong T_b$
SL		-	-	-60 to -25	-20	$T_s \geq T_b$
C	R134a	-30 to 10		-	-	$T_s \cong T_b$
SA	R407C	-40 to 10	-	-	18	$T_s \geq T_b$
C		-	-40 to 0	-	-	$T_s \cong T_b$
SA	R410A	-45 to 10	-	-	18	$T_s \geq T_b$
C		-	-40 to -10	-	-	$T_s \cong T_b$

# Type number selection (1) (Specifications)

Refrigerant	Charge	Catalog No.			Capacity (U.S.R.T.) {kW}		Connection		Capil. Tube Length (mm)	Wt. (kg)
					A,R Zone	F Zone				
		Internal Equalizer	External Equalizer	Model	C.T. 38°C E.T. -5°C	C.T. 38°C E.T. -30°C	Inlet	Outlet		
R22	<b>SA</b> For Air Conditioning (A Zone)  Evaporating Temp. (-40 to 10°C)	QCX-	RCX-	0334B[D]HSA	0.31 {1.10}	—	3/8" Flare (B)	1/2" Flare (B)	φ 2.4 × 1500	0.28 (QCX-***34B) [ 0.24 (QCX-***34D) ]
				0534B[D]HSA	0.47 {1.65}					
				0834B[D]HSA	0.78 {2.75}					
				1234B[D]HSA	1.25 {4.41}					
				1634B[D]HSA	1.57 {5.51}					
				2434B[D]HSA	2.35 {8.26}					
				3134B[D]HSA	3.13 {11.0}					
	<b>C</b> For Refrigeration (R Zone)  Evaporating Temp. (-40 to 0°C)	QCX-	RCX-	0334B[D]HC	0.31 {1.10}	—				
				0534B[D]HC	0.47 {1.65}					
				0834B[D]HC	0.78 {2.75}					
				1234B[D]HC	1.25 {4.41}					
				1634B[D]HC	1.57 {5.51}					
				2434B[D]HC	2.35 {8.26}					
				3134B[D]HC	3.13 {11.0}					
	<b>SL</b> For Freezing (F Zone)  Evaporating Temp. (-60 to -25°C)	QCX-	RCX-	0334B[D]HSL	—	0.22 {0.79}				
				0534B[D]HSL		0.33 {1.16}				
				0834B[D]HSL		0.54 {1.91}				
				1234B[D]HSL		0.87 {3.07}				
				1634B[D]HSL		1.10 {3.87}				
				2434B[D]HSL		1.68 {5.91}				
				3134B[D]HSL		2.27 {7.97}				
R404A	<b>SA</b> For Air Conditioning (A Zone)  Evaporating Temp. (-40 to 10°C)	QCX-	RCX-	0234B[D]USA	0.20 {0.70}	—	[ 3/8" Solder (D) ]	[ 1/2" Solder (D) ]	φ 2.4 × 1500	0.29 (RCX-***34B) [ 0.24 (RCX-***34D) ]
				0334B[D]USA	0.30 {1.05}					
				0534B[D]USA	0.49 {1.74}					
				0834B[D]USA	0.78 {2.76}					
				1034B[D]USA	0.99 {3.48}					
				1534B[D]USA	1.48 {5.22}					
				2034B[D]USA	1.98 {6.95}					
	3034B[D]USA	2.96 {10.4}								
	<b>C</b> For Refrigeration (R Zone)  Evaporating Temp. (-40 to 0°C)	QCX-	RCX-	0234B[D]UC	0.20 {0.70}	—				
				0334B[D]UC	0.30 {1.05}					
				0534B[D]UC	0.49 {1.74}					
				0834B[D]UC	0.78 {2.76}					
				1034B[D]UC	0.99 {3.48}					
				1534B[D]UC	1.48 {5.22}					
				2034B[D]UC	1.98 {6.95}					
	3034B[D]UC	2.96 {10.4}								
	<b>SL</b> For Freezing (F Zone)  Evaporating Temp. (-60 to -25°C)	QCX-	RCX-	0234B[D]USL	—	0.13 {0.46}				
				0334B[D]USL		0.19 {0.68}				
				0534B[D]USL		0.32 {1.11}				
				0834B[D]USL		0.51 {1.79}				
				1034B[D]USL		0.64 {2.25}				
1534B[D]USL				0.98 {3.44}						
2034B[D]USL				1.32 {4.63}						
3034B[D]USL	1.80 {6.34}									

• External equalizer for RCX: 1/4" flare (for all flare outlet bodies) , 1/4" solder[ID] (for all solder outlet bodies)

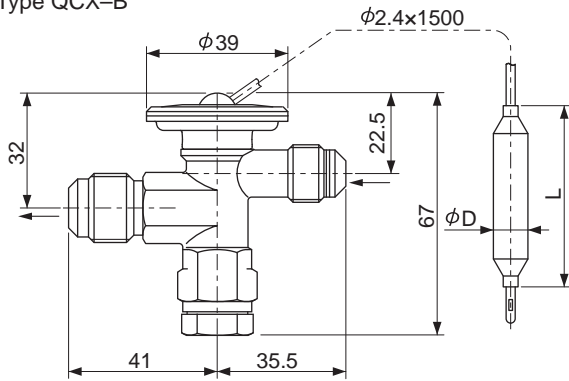
# Type number selection (2) (Specifications)

Refrigerant	Charge	Catalog No.			Capacity (U.S.R.T.) {kW}		Connection		Capil. Tube Length (mm)	Wt. (kg)	
					A,R Zone	F Zone					
		Internal Equalizer	External Equalizer	Model	C.T. 38°C	C.T. 38°C	Inlet	Outlet			
			E.T. -5°C	E.T. -30°C							
R134a	C For Air Conditioning and Refrigeration (A,R Zone) Evaporating Temp. (-30 to 10°C)	QCX-	RCX-	0234B[D]MC	0.24 {0.85}	—					
				0434B[D]MC	0.36 {1.28}						
				0634B[D]MC	0.61 {2.13}						
				1034B[D]MC	0.96 {3.38}						
				1234B[D]MC	1.21 {4.27}						
				1834B[D]MC	1.82 {6.40}						
				2434B[D]MC	2.43 {8.54}						
				3634B[D]MC	3.64 {12.8}						
R407C	SA For Air Conditioning (A Zone) Evaporating Temp. (-40 to 10°C)	QCX-	RCX-	0334B[D]HSA	0.32 {1.13}	—					
				0534B[D]HSA	0.48 {1.70}						
				0834B[D]HSA	0.81 {2.84}						
				1234B[D]HSA	1.29 {4.54}						
				1634B[D]HSA	1.61 {5.67}						
				2434B[D]HSA	2.42 {8.51}						
				3134B[D]HSA	3.21 {11.3}						
	4734B[D]HSA	4.83 {17.0}									
	C For Refrigeration (R Zone) Evaporating Temp. (-40 to 0°C)	QCX-	RCX-	0334B[D]HC	0.32 {1.13}	—	3/8" Flare (B)	1/2" Flare (B)	φ 2.4 × 1500	0.28 (QCX-***34B)	
				0534B[D]HC	0.48 {1.70}						
				0834B[D]HC	0.81 {2.84}						
				1234B[D]HC	1.29 {4.54}						
				1634B[D]HC	1.61 {5.67}						
				2434B[D]HC	2.42 {8.51}						
3134B[D]HC				3.21 {11.3}							
4734B[D]HC	4.83 {17.0}										
R410A	SA For Air Conditioning (A Zone) Evaporating Temp. (-45 to 10°C)	QCX-	RCX-	0334B[D]VSA	0.35 {1.22}	—					
				0534B[D]VSA	0.52 {1.83}						
				0934B[D]VSA	0.86 {3.04}						
				1434B[D]VSA	1.37 {4.82}						
				1734B[D]VSA	1.73 {6.08}						
				2634B[D]VSA	2.59 {9.12}						
				3534B[D]VSA	3.44 {12.1}						
	5234B[D]VSA	5.18 {18.2}									
	C For Refrigeration (R Zone) Evaporating Temp. (-40 to -10°C)	QCX-	RCX-	0334B[D]VC	0.35 {1.22}	—	3/8" Solder (D)	1/2" Solder (D)		0.24 (QCX-***34D)	0.29 (RCX-***34B)
				0534B[D]VC	0.52 {1.83}						
				0934B[D]VC	0.86 {3.04}						
				1434B[D]VC	1.37 {4.82}						
				1734B[D]VC	1.73 {6.08}						
				2634B[D]VC	2.59 {9.12}						
3534B[D]VC				3.44 {12.1}							
5234B[D]VC	5.18 {18.2}										

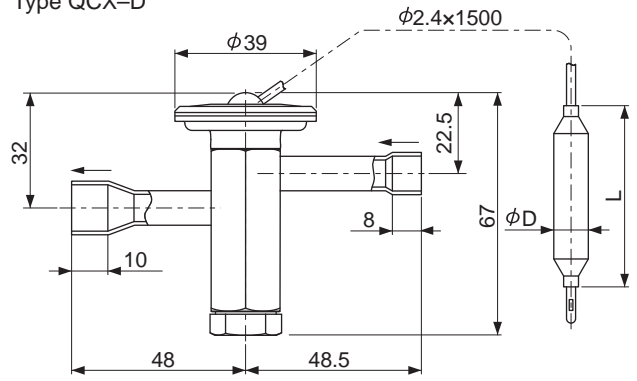
- External equalizer for RCX: 1/4" flare (for all flare outlet bodies) , 1/4" solder[ID] (for all solder outlet bodies)

# Dimensions

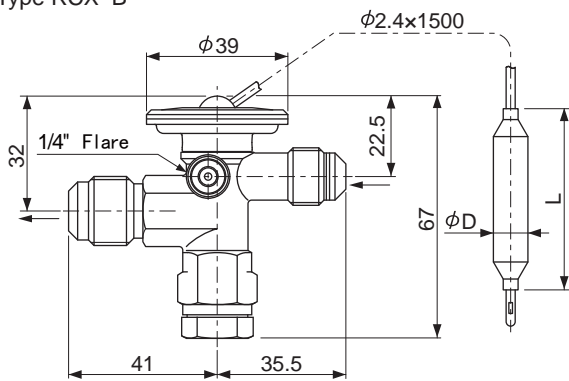
Type QCX-B



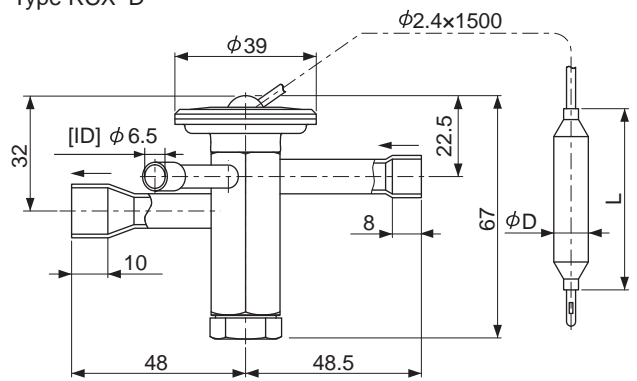
Type QCX-D



Type RCX-B



Type RCX-D

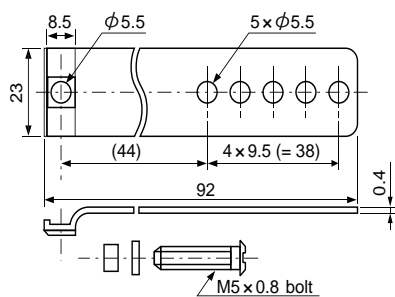


	D	L
SA	12.7	80
C	9.5	50
SL	12.7	80

Unit : mm

# Accessory

- Sending Bulb Mounting Band



Unit : mm

## NOTES FOR SAFETY

Failure to read and follow all instruction carefully before installing or operating the product could cause personal injury and/or property damage.

Specifications are subject to change without notice.