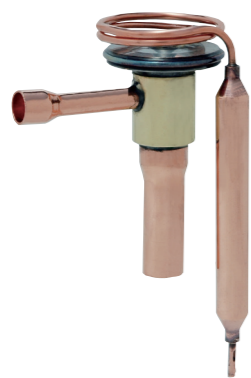


## THERMOSTATIC EXPANSION VALVES (SMALL CAPACITY TYPE) / Type ARX



Type ARX-2303D

### High Volume OEM Item

Drawings must be exchanged for purchase. Please contact SAGINOMIYA for more details.

### FEATURES

- Compact and lightweight design
- Static superheat fixed type
- Suitable for refrigeration systems with hot gas defrosting
- Standards : UL/cUL (Please contact us for details such as approved specifications.)

### APPLICATIONS

- Bottle coolers
- Display cases
- Ice making machines
- Industrial air conditioning systems, etc.

### COMMON SPECIFICATIONS

- Internal equalizer type
- Max. working pressure : 2.8 MPa (Except R407C), 3.3 MPa (R407C)
- Max. body and sensing bulb temperature : 80°C
- Adjustable range of static superheat : 0 to 5°C
- Solder connection

Charge	Evaporating Temp. (°C)	MOP (°C)	Temp. Condition
S	R134a	-	-
	R404A		
	R407C		
CL	R404A		

Ts : Power Element Temp. , Tb : Sensing Bulb Temp.

### DESCRIPTION OF CATALOG NUMBER

ARX -  $\frac{2}{I}$   $\frac{3}{II}$   $\frac{03}{III}$   $\frac{D}{IV}$   $\frac{M}{V}$   $\frac{S}{VI}$   $\frac{S}{VII}$

I	Type
II	Inlet pipe size
III	Outlet pipe size
IV	Capacity
V	Connection
VI	Refrigerant
VII	Charge type

### TYPE NUMBER SELECTION

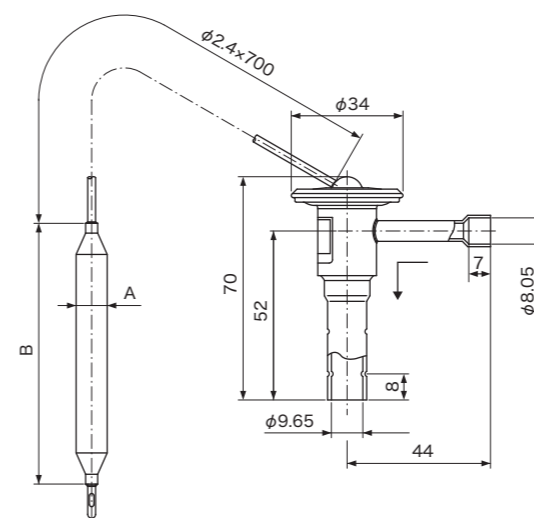
Type	Model	Catalog No.		Equalizer Type	Capacity (U.S.R.T.) (kW)			Connection		Factory superheat setting (°C)	Wt. (kg)
		* 1 Refrigerant	Charge Type		CT 38°C / ET 5°C			Inlet	Outlet		
					R134a	R404A	R407C				
ARX	2302D	M (R134a) U (R404A) P (R407C)	S (R134a, R404A, R407C) CL (R404A)	Internal	0.24 {0.85}	-	-	5/16" Solder	3/8" Solder	* 2 3 (fixed)	0.12
	2303D				0.36 {1.27}	0.34 {1.20}	0.50 {1.76}				
	2305D				0.60 {2.11}	0.57 {2.00}	0.82 {2.88}				
	2308D				0.96 {3.37}	0.93 {3.27}	1.34 {4.71}				
	2310D				1.20 {4.22}	1.14 {4.01}	1.65 {5.80}				
	2315D				1.80 {6.33}	1.71 {6.01}	2.47 {8.70}				

\* 1 For other refrigerant, please contact SAGINOMIYA.

\* 1 Models for flammable refrigerants are also available. Please contact SAGINOMIYA for details.

\* 2 If you need to change superheat setting value, please specify first.

### DIMENSIONS



Unit : mm

Charge	Unit : mm	
	A	B
S	R134a	80
	R404A	
	R407C	
CL	R404A	50

## CONSTANT PRESSURE EXPANSION VALVES / Type CEX



CEX-2333B

Capacity Table⇒



URL : [http://saginomiya.co.jp/en/auto/pdf/cex\\_capacity.pdf](http://saginomiya.co.jp/en/auto/pdf/cex_capacity.pdf)

### FEATURES

- Available for bypass circuit configuration and constant load operation. (excluding hot gas circuit)
- Applicable in the vacuum area.
- Equipped with a strainer in inlet.

### APPLICATIONS

- Bulk coolers
- Water coolers
- Refrigerators
- Air dryers, etc.

### COMMON SPECIFICATIONS

- Internal equalizer type
- Max. working pressure : 1.4 MPa
- Max. body temperature : 80°C
- Pressure adjustment : ◯ increase about 0.03 MPa / rotation
- Flare connection

Temperature class	Refrigerant	Evaporating Temp. (°C)
Standard	R134a	-30 to 10
	R404A	-40 to -5
	R407C	-40 to 0
	R448A	-40 to 0
	R449A	-40 to 0
Extreme Low Temperature	R23	-100 to -70
	R404A	-70 to -5

### DESCRIPTION OF CATALOG NUMBER

CEX - 23 3 3 B U Z  
I II III IV V VI VII

I	Type
II	Inlet pipe size
III	Outlet pipe size
IV	Capacity
V	Connection
VI	Refrigerant
VII	Temperature class

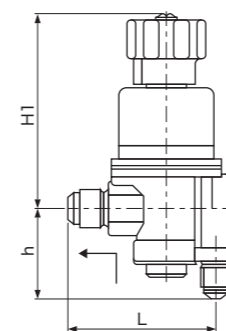
### TYPE NUMBER SELECTION

Type	Catalog No.			Equalizer Type	Adjustable range of set pressure (MPa)	Connection		Factory pressure setting (MPa)	Wt. (kg)	
	Model	Refrigerant	Temperature class			Inlet	Outlet			
CEX	2333B	M (R134a) C (R23, others) U (R404A) P (R407C) C1 (R448A) C1 (R449A)	— (Standard)  Z (Extreme Low Temperature)	Internal	-0.047 to 0.45 (C, U, P, C1)  -0.047 to 0.35 (M)	1/4" (3/8") Flare	3/8" Flare	M : 0.142 C : 0.206 U : 0.412 P : 0.279 C1 : 0.325	0.70	
	2335B						1/2" Flare			1.00
	2345B									
	2348B					3/8" (1/4") Flare	5/8" Flare	1.25		
	2341B									
	2342B					5/8" (1/2") Flare	3/4" Flare	1.40		
	2344B									
	3454B									
	4564B									
4566B										
4568B										

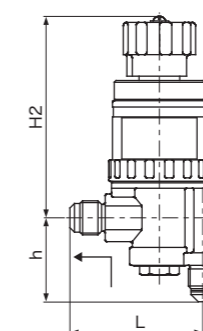
- If the pressure and temperature meet the specified conditions, each fluorocarbon-based refrigerants can be used with each other.
- If you need connection sizes in ( ), please specify first.
- The set pressure is the pressure at the beginning of valve opening.
- For other refrigerant, please contact SAGINOMIYA.

Type	Catalog No.			Capacity (U.S.R.T.) {kW}					
	Model	Refrigerant	Temperature class	CT 38°C ET -5°C					CT -40°C ET -80°C
				R134a	R404A	R407C	R448A	R449A	R23
CEX	2333B	M (R134a) C (R23, others) U (R404A) P (R407C) C1 (R448A) C1 (R449A)	— (Standard)  Z (Extreme Low Temperature)	0.36 {1.27}	0.34 {1.20}	0.51 {1.81}	0.47 {1.65}	0.45 {1.59}	0.19 {0.68}
	2335B			0.72 {2.53}	0.68 {2.39}	0.98 {3.44}	0.89 {3.14}	0.86 {3.01}	0.39 {1.36}
	2345B			1.10 {3.87}	1.05 {3.69}	1.44 {5.07}	1.31 {4.62}	1.26 {4.43}	0.60 {2.10}
	2348B			1.50 {5.28}	1.40 {4.92}	1.96 {6.88}	1.78 {6.27}	1.71 {6.02}	0.89 {3.13}
	2341B			2.60 {9.14}	2.50 {8.79}	3.81 {13.4}	3.47 {12.2}	3.33 {11.7}	1.53 {5.37}
	2342B			4.41 {15.5}	4.21 {14.8}	6.17 {21.7}	5.63 {19.8}	5.40 {19.0}	2.61 {9.16}
	3454B			7.20 {25.3}	6.00 {21.1}	9.90 {34.8}	9.02 {31.7}	8.67 {30.5}	3.58 {12.6}
	4564B			9.58 {33.7}	8.39 {29.5}	13.2 {46.4}	12.0 {42.3}	11.5 {40.5}	4.75 {16.7}
	4566B								
4568B									

### DIMENSIONS



Type CEX



Type CEX-Z

Catalog No.		Unit : mm			
Type	Model	L	H1	H2	h
CEX	2333B	70.5	92	112	47 (46)
	2335B				
	2345B				
	2348B	73.5	92	112	46 (47)
	2341B				
	2342B	81	92	112	48 (49)
	2344B				
	3454B	84.5	93	113	52
	4564B	90.5	95	115	56.5 (55.5)
4566B					
4568B					

- Values in ( ) are the dimensions in the case of connection size ( ) in TYPE NUMBER SELECTION.