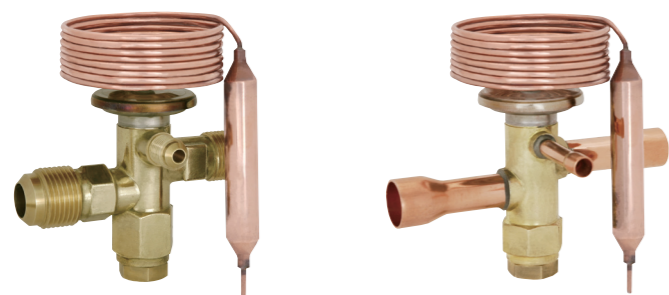


THERMOSTATIC EXPANSION VALVES / Type SCX



Type SCX-B

Type SCX- ** 45D

Thermostatic Expansion Valve Selection Software⇒



URL : <https://www.saginomiya.co.jp/en/auto/utilitysoft.html>

Capacity Table⇒



URL : http://saginomiya.co.jp/en/auto/pdf/scx_capacity.pdf

FEATURES

- Wide temperature range. Applicable for deep freezing, refrigeration and air conditioning systems (single flow).
- Small and lightweight design
- Suitable for refrigeration systems with hot gas defrosting
- Capable of controlling degree of superheat regardless of fluctuations in condensation pressure.
- Compatible with low GWP refrigerants (R448A, R449A)
- Standards : UL/cUL (Please contact us for details such as approved specifications.)

COMMON SPECIFICATIONS

- External equalizer type
- Max. working pressure : 3.0 MPa
- Max. body and sensing bulb temperature : 80°C
- Adjustable range of static superheat :
 - 1 to 7°C (R134a, R404A, R448A, R449A)
 - 1 to 5°C (R407C, R410A)
 ○ Increase about 0.045 MPa / rotation
- Flare connection / Solder connection

| Charge | Evaporating Temp. (°C) | MOP (°C) | Temp. Condition |
|----------|------------------------|----------|-----------------|
| C R134a | -30 to 10 | — | — |
| SA R404A | -40 to 10 | 18 | Ts ≥ Tb |
| C R404A | -40 to 0 | — | — |
| SL R404A | -60 to -25 | -20 | Ts ≥ Tb |
| SA R407C | -40 to 10 | 18 | Ts ≥ Tb |
| C R407C | -40 to 0 | — | — |
| SA R410A | -45 to 10 | 18 | Ts ≥ Tb |
| C R410A | -40 to -10 | — | — |
| SL R410A | -60 to -30 | -20 | Ts ≥ Tb |
| SA R448A | -40 to 10 | 18 | Ts ≥ Tb |
| C R448A | -40 to 0 | — | — |
| SL R448A | -60 to -25 | -20 | Ts ≥ Tb |
| SA R449A | -40 to 10 | 18 | Ts ≥ Tb |
| C R449A | -40 to 0 | — | — |
| SL R449A | -60 to -25 | -20 | Ts ≥ Tb |

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

APPLICATIONS

- Display cases
- Commercial refrigerators
- Cold chain boxes
- Air conditioning systems, Protected horticulture equipments, etc.

DESCRIPTION OF CATALOG NUMBER

SCX - 05 4 5 B M C
I II III IV V VI VII

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

TYPE NUMBER SELECTION

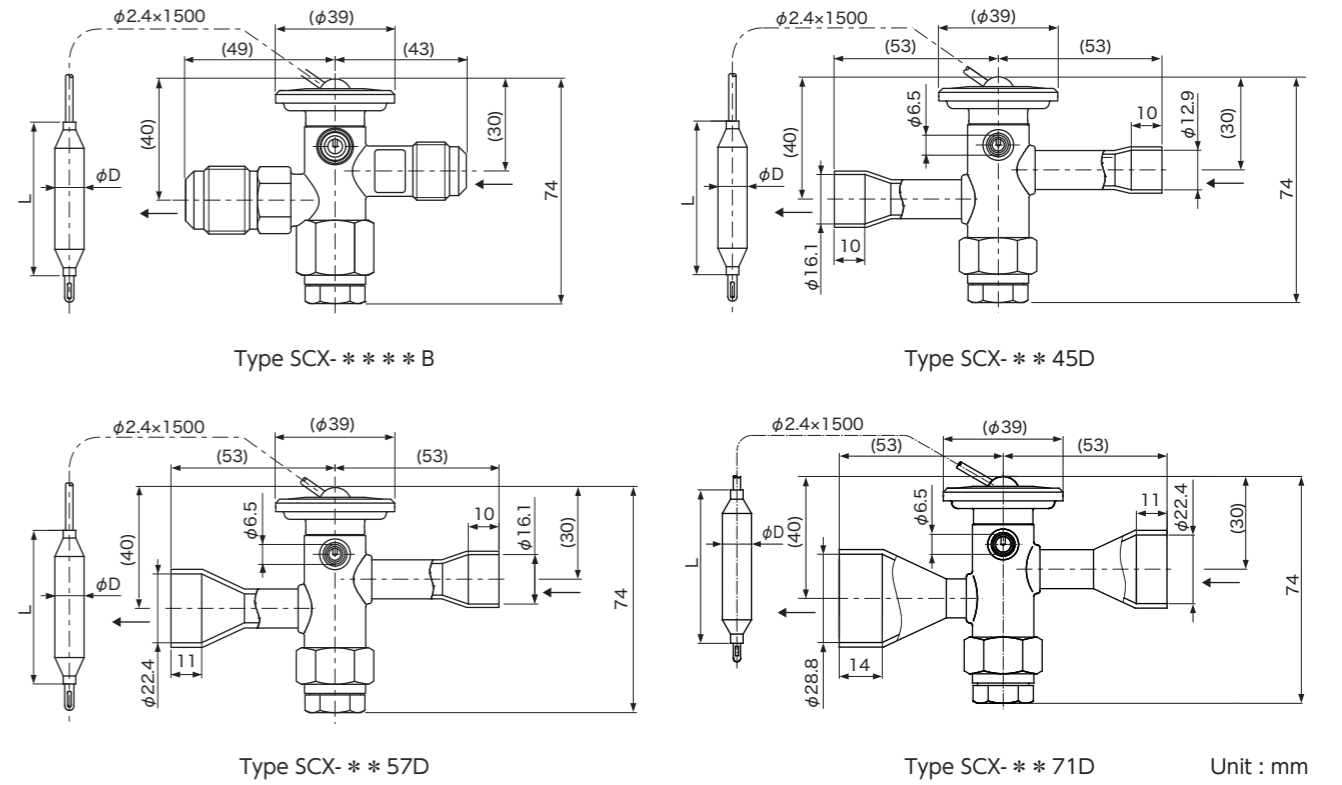
| Catalog No. | | | | Equalizer Type | Capacity (U.S.R.T.) (kW) | | Connection | | | Factory superheat setting (°C) | Wt. (kg) | | |
|-------------|-------------|-------------|-------------|----------------|--------------------------|-------------------------------------|-----------------------------------|---------------|---------------|--------------------------------|---------------|-------------|------|
| Type | Model | Refrigerant | Charge Type | | Charge : SA, C | Charge : SL | Inlet | Outlet | Equalizer | | | | |
| | | | | | CT 38°C ET -5°C | CT 38°C ET -30°C | | | | | | | |
| SCX | 0545B [D] | M (R134a) | C | External | SA C SL | 5 (Except R407C) 2 (R407C) | 1/4" Flare [1/4" Solder] | 4.75 (16.7) | — | 1/2" Flare | 5/8" Flare | 0.39 [0.31] | |
| | 0745B [D] | | | | | | | 6.63 (23.3) | — | [1/2" Solder] | [5/8" Solder] | | |
| | 0857D | | | | | | | 8.33 (29.3) | — | 5/8" Solder | 7/8" Solder | | |
| | 1057D | | | | | | | 9.98 (35.1) | — | | | | |
| | 1257D | | | | | | | 11.8 (41.5) | — | | | | |
| | 0871D | | | | | | | 8.33 (29.3) | — | 7/8" Solder | 1-1/8" Solder | | 0.35 |
| | 1071D | | | | | | | 9.98 (35.1) | — | | | | |
| | 1271D | | | | | | | 11.8 (41.5) | — | | | | |
| | 0445B [D] | 3.64 (12.8) | 1.92 (6.74) | | | | | 1/2" Flare | 5/8" Flare | | | | |
| | 0545B [D] | 5.09 (17.9) | 2.67 (9.39) | | | | | [1/2" Solder] | [5/8" Solder] | | | | |
| | 0657D | 6.40 (22.5) | 3.36 (11.8) | | | | | 5/8" Solder | 7/8" Solder | | | | |
| | 0857D | 7.65 (26.9) | 4.04 (14.2) | | | | | | | | | | |
| | 0957D | 9.07 (31.9) | 4.75 (16.7) | | | | | 7/8" Solder | 1-1/8" Solder | 0.35 | | | |
| | 0671D | 6.40 (22.5) | 3.36 (11.8) | | | | | | | | | | |
| 0871D | 7.65 (26.9) | 4.04 (14.2) | | | | | | | | | | | |
| 0971D | 9.07 (31.9) | 4.75 (16.7) | | | | | | | | | | | |
| 0645B [D] | 5.94 (20.9) | — | H (R407C) | SA C | 0.39 [0.31] | 1/2" Flare | 5/8" Flare | | | | | | |
| 0845B [D] | 8.28 (29.1) | — | | | | [1/2" Solder] | [5/8" Solder] | | | | | | |
| 1057D | 10.4 (36.6) | — | | | | 5/8" Solder | 7/8" Solder | | | | | | |
| 1257D | 12.5 (43.9) | — | | | | | | | | | | | |
| 1457D | 14.8 (52.0) | — | | | | | | | | | | | |
| 1071D | 10.4 (36.6) | — | | | | 7/8" Solder | 1-1/8" Solder | 0.35 | | | | | |
| 1271D | 12.5 (43.9) | — | | | | | | | | | | | |
| 1471D | 14.8 (52.0) | — | | | | | | | | | | | |

TYPE NUMBER SELECTION

| Catalog No. | | | | Equalizer Type | Capacity (U.S.R.T.) (kW) | | Connection | | | Factory superheat setting (°C) | Wt. (kg) |
|-------------|-------------|-------------|----------------------|----------------------|--------------------------|----------------------|----------------------|----------------------|-----------|--------------------------------|----------|
| Type | Model | Refrigerant | Charge Type | | Charge : SA, C | Charge : SL | Inlet | Outlet | Equalizer | | |
| | | | | | CT 38°C ET -5°C | CT 38°C ET -30°C | | | | | |
| SCX | 0645B [D] | V (R410A) | SA C SL | External | 6.37 {22.4} | 3.59 {12.6} | 1/2" Flare [1/2"] | 5/8" Flare [5/8"] | 5 | 0.39 {0.31} | |
| | 0945B [D] | | | | 8.87 {31.2} | 5.00 {17.6} | | | | | |
| | 1157D | | | | 11.2 {39.2} | 6.28 {22.1} | 5/8" Solder | 7/8" Solder | | | |
| | 1357D | | | | 13.4 {47.0} | 7.54 {26.5} | | | | | |
| | 1657D | | | | 15.8 {55.6} | 8.91 {31.3} | | | | | |
| | 1171D | | | | 11.2 {39.2} | 6.28 {22.1} | 7/8" Solder | 1-1/8" Solder | | | 0.32 |
| | 1371D | | | | 13.4 {47.0} | 7.54 {26.5} | | | | | |
| | 1671D | | | | 15.8 {55.6} | 8.91 {31.3} | | | | | |
| | 0545B [D] | 5.43 {19.1} | 2.90 {10.2} | | 1/2" Flare [1/2"] | 5/8" Flare [5/8"] | | | | | |
| | 0745B [D] | 7.56 {26.6} | 4.01 {14.1} | | | | | | | | |
| | 0957D | 9.50 {33.4} | 5.06 {17.8} | | 5/8" Solder | 7/8" Solder | 0.39 {0.31} | | | | |
| | 1157D | 11.4 {40.0} | 6.06 {21.3} | | | | | | | | |
| | 1357D | 13.5 {47.4} | 7.17 {25.2} | | | | | | | | |
| | 0971D | 9.50 {33.4} | 5.06 {17.8} | | 7/8" Solder | 1-1/8" Solder | | 0.32 | | | |
| 1171D | 11.4 {40.0} | 6.06 {21.3} | | | | | | | | | |
| 1371D | 13.5 {47.4} | 7.17 {25.2} | | | | | | | | | |
| 0545B [D] | 5.20 {18.3} | 2.84 {10.0} | 1/2" Flare [1/2"] | 5/8" Flare [5/8"] | | | | | 0.35 | | |
| 0745B [D] | 7.25 {25.5} | 3.95 {13.9} | | | | | | | | | |
| 0957D | 9.13 {32.1} | 4.98 {17.5} | 5/8" Solder | 7/8" Solder | 0.39 {0.31} | | | | | | |
| 1157D | 10.9 {38.4} | 5.97 {21.0} | | | | | | | | | |
| 1357D | 12.9 {45.5} | 7.05 {24.8} | | | | | | | | | |
| 0971D | 9.13 {32.1} | 4.98 {17.5} | 7/8" Solder | 1-1/8" Solder | | 0.32 | | | | | |
| 1171D | 10.9 {38.4} | 5.97 {21.0} | | | | | | | | | |
| 1371D | 12.9 {45.5} | 7.05 {24.8} | | | | | | | | | |

• For other refrigerant, please contact SAGINOMIYA.

DIMENSIONS



| Charge | Unit : mm | |
|--------|-----------|----|
| | D | L |
| SA | 12.7 | 80 |
| C | 9.5 | 50 |
| SL | 12.7 | 80 |

ACCESSORY

- Sensing Bulb Mounting Band

