

EXPANSION VALVES

Type SCX

SAGINOMIYA

GENERAL DESCRIPTION

- Application: Chillers, cold chain boxes, heat pump air conditioner, air conditioning, etc.
- Suitable for refrigeration systems with hot gas defrosting.
- The same products can be used for R22 and R407C.
- With superheat external adjust device.

SPECIFICATIONS

- Max. working pressure: 3.0 MPa {30kgf/cm²}
- Adjustable range of static superheat:
1 to 7°C at R22, R134a, R404A
1 to 5°C at R407C, R410A
- ○ Increase about 0.045MPa / rotation
- Superheat change: 4 to 5°C (C, SL-charge)
3 to 4°C (SA-charge)



Type SCX-D



Type SCX-B

Charge		A Zone	R Zone	F Zone	MOP (°C)	Temp. Condition
		Evaporating Temp. (°C)				Power Element Temp.: Ts, Sensing Bulb Temp.: Tb
SA	R22	−40 to 10	—	—	18	Ts ≥ Tb
C		—	−40 to 0		—	Ts ≧ Tb
SL			—	−60 to −25	−20	Ts ≧ Tb
C	R134a	−30 to 10		—	—	Ts ≧ Tb
SA	R404A	−40 to 10	—	—	18	Ts ≥ Tb
C		—	−40 to 0		—	Ts ≧ Tb
SL			—	−60 to −25	−20	Ts ≧ Tb
SA	R407C	−40 to 10	—	—	18	Ts ≥ Tb
C		—	−40 to 0		—	Ts ≧ Tb
SA	R410A	−45 to 10	—	—	18	Ts ≥ Tb
C		—	−40 to −10		—	Ts ≧ Tb

VALVE NOMENCLATURE

Catalog No. is decided according to the specifications.

Example: $\frac{\text{SCX}}{\text{I}}$ - $\frac{0445}{\text{II}}$ $\frac{\text{D}}{\text{III}}$ $\frac{\text{U}}{\text{IV}}$ $\frac{\text{SA}}{\text{V}}$

I : Type..... SCX-External equalizer type

II : Model..... The first and the second digits indicate nominal capacity.

The last two digits indicate inlet and outlet pipe size respectively.

III : Connection..... B-Flare Connection, D-Solder Connection

IV : Refrigerant..... H = R22, M = R134a, P = R407C, U = R404A, V = R410A

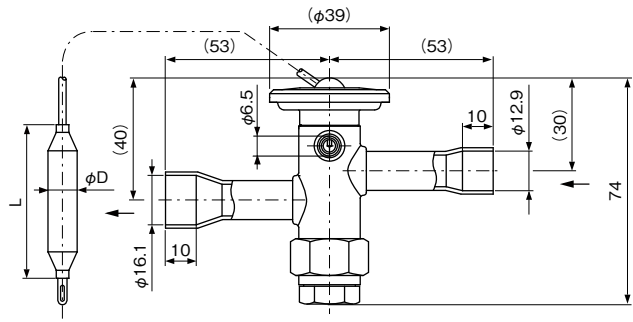
V : Charge type..... SL = SL-charge, C = C-charge, SA = SA-charge

TYPE NUMBER SELECTION

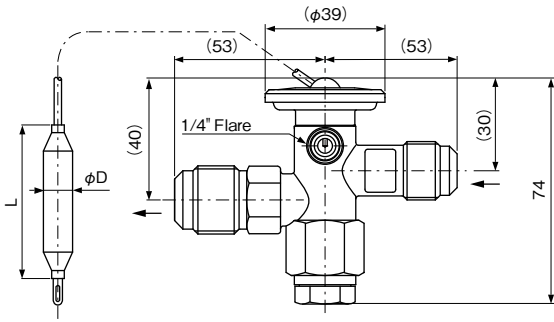
Refrigerant			Catalog No.	Refrigerant	Capacity (U.S.R.T.){kW}		Connection			Capil. Tube Length (mm)	Wt. (kg)	
					A,R Zone	F Zone						
					C.T. 38°C	C.T. 38°C	Inlet	Outlet	Equalizer			
					E.T. —5°C	E.T. —30°C						
F Zone	Freezing	—60 to —25°C (SL:R22,R404A)	SCX—	0645D[B]HSL 0845D[B]HSL 1057DHSL 1257DHSL 1457DHSL	R22	—	3.25 {11.4}	1/2" Solder(D)	5/8" Solder(D)	1/4" Solder(D) [1/4" Flare(B)]	ϕ 2.4 × 1500	0.31 (SCX—**45D) 0.39 [SCX—**45B] 0.32 (SCX—**57D)
							4.53 {15.9}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							5.70 {20.0}	5/8" Solder(D)	7/8" Solder(D)			
							6.83 {24.0}					
							8.08 {28.4}					
			SCX—	0445D[B]USL 0545D[B]USL 0657DUSL 0857DUSL 0957DUSL	R404A	—	1.92 {6.74}	1/2" Solder(D)	5/8" Solder(D)			
							2.67 {9.39}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							3.36 {11.8}	5/8" Solder(D)	7/8" Solder(D)			
							4.03 {14.2}					
							4.76 {16.7}					
R Zone	Refrigeration	—30 to 10°C (C:R134a)	SCX—	0545D[B]MC 0745D[B]MC 0857DMC 1057DMC 1257DMC	R134a	—	4.76 {16.7}	1/2" Solder(D)	5/8" Solder(D)			
							6.62 {23.3}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							8.32 {29.3}	5/8" Solder(D)	7/8" Solder(D)			
							9.98 {35.1}					
							11.8 {41.5}					
		—40 to 0°C (C:R22,R404A,R407C)	SCX—	0645D[B]HC 0845D[B]HC 1057DHC 1257DHC 1457DHC	R22	—	5.78 {20.3}	1/2" Solder(D)	5/8" Solder(D)			
							8.05 {28.3}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							10.1 {35.6}	5/8" Solder(D)	7/8" Solder(D)			
							12.1 {42.6}					
							14.4 {50.5}					
			SCX—	0445D[B]UC 0545D[B]UC 0657DUC 0857DUC 0957DUC	R404A	—	3.65 {12.8}	1/2" Solder(D)	5/8" Solder(D)			
							5.08 {17.9}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							6.38 {22.5}	5/8" Solder(D)	7/8" Solder(D)			
							7.66 {26.9}					
							9.06 {31.9}					
		SCX—	0645D[B]HC 0845D[B]HC 1057DHC 1257DHC 1457DHC	R407C	—	5.95 {20.9}	1/2" Solder(D)	5/8" Solder(D)				
						8.29 {29.1}	[1/2" Flare(B)]	[5/8" Flare(B)]				
						10.4 {36.6}	5/8" Solder(D)	7/8" Solder(D)				
						12.5 {43.9}						
						14.8 {52.0}						
		—40 to —10°C (C:R410A)	SCX—	0645D[B]VC 0945D[B]VC 1157DVC 1357DVC 1657DVC	R410A	—	6.38 {22.4}	1/2" Solder(D)	5/8" Solder(D)			
							8.87 {31.2}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							11.2 {39.2}	5/8" Solder(D)	7/8" Solder(D)			
							13.4 {47.0}					
							15.8 {55.6}					
A Zone	Air Conditioning	—40 to 10°C (SA:R22,R404A,R407C)	SCX—	0645D[B]HSA 0845D[B]HSA 1057DHSA 1257DHSA 1457DHSA	R22	—	5.78 {20.3}	1/2" Solder(D)	5/8" Solder(D)			
							8.05 {28.3}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							10.1 {35.6}	5/8" Solder(D)	7/8" Solder(D)			
							12.1 {42.6}					
							14.4 {50.5}					
			SCX—	0445D[B]USA 0545D[B]USA 0657DUSA 0857DUSA 0957DUSA	R404A	—	3.65 {12.8}	1/2" Solder(D)	5/8" Solder(D)			
							5.08 {17.9}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							6.38 {22.5}	5/8" Solder(D)	7/8" Solder(D)			
							7.66 {26.9}					
							9.06 {31.9}					
			SCX—	0645D[B]HSA 0845D[B]HSA 1057DHSA 1257DHSA 1457DHSA	R407C	—	5.95 {20.9}	1/2" Solder(D)	5/8" Solder(D)			
							8.29 {29.1}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							10.4 {36.6}	5/8" Solder(D)	7/8" Solder(D)			
							12.5 {43.9}					
							14.8 {52.0}					
		—45 to 10°C (SA:R410A)	SCX—	0645D[B]VSA 0945D[B]VSA 1157DVSA 1357DVSA 1657DVSA	R410A	—	6.38 {22.4}	1/2" Solder(D)	5/8" Solder(D)			
							8.87 {31.2}	[1/2" Flare(B)]	[5/8" Flare(B)]			
							11.2 {39.2}	5/8" Solder(D)	7/8" Solder(D)			
							13.4 {47.0}					
							15.8 {55.6}					

DIMENSIONS

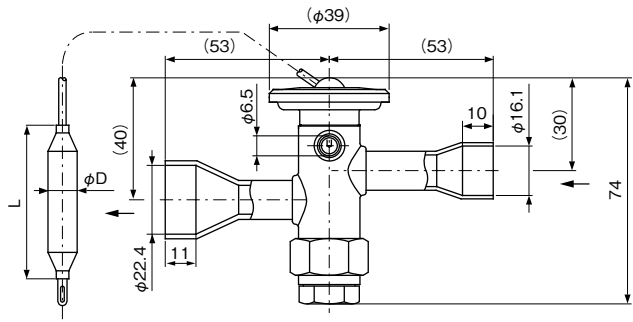
Type SCX-**45D



Type SCX-**45B



Type SCX-**57D



	D	L
SA	12.7	80
C	9.5	50
SL	12.7	80

Unit: mm

ACCESSORY

- Sensing Bulb Mounting Band

