

4-WAY REVERSING VALVES

High Volume OEM Item (Type STF)

Type STF & VHV

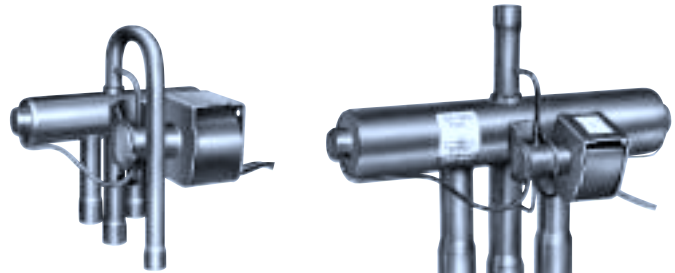
SAGINOMIYA

GENERAL DESCRIPTION

- Pilot operated 4-way reversing valves are suitable for heat pump applications on unitary, split system and window type air conditioners, etc.
- 4-way pilot valve adoption has an advantage of reliable changeover operation.
- Unique device for short cycle prevention is provided.
- Designed for instantaneous reversing and operations under small minimum pressure differential between the high and low side. Pressure drop across the valve, and valve leakage are minimized.
- Provided with drip proof resin encapsulated solenoid coil.
- Coil voltage: 100V. AC, 110V. AC, 200V. AC, 220V. AC
230V. AC, 240V. AC 50/60 Hz

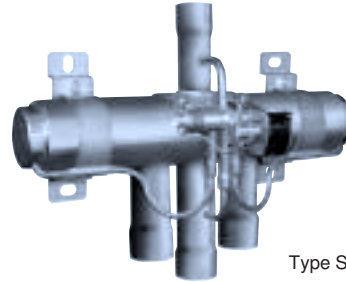
CE mark applicable (available upon request)

UL listed (available upon request)



Type STF-01, 02

Type STF-04, 07, 20



Type STF-25, 30, 40, 50
VHV-60

TYPE NUMBER SELECTION (SPECIFICATIONS)

- Max. working pressure: 3.3MPa {33.7kgf/cm²} (Type STF-Z)
4.15MPa {42.3kgf/cm²} (Type VHV, STF-G)
- Ambient temperature: -20 to 55°C
- Allowable fluid temperature: -20 to 120°C (STF-0101 to 1511)
-20 to 130°C (STF-2011 to 5001, VHV-6001)
- Ambient humidity: Less than 95% R.H.

R22, R407C

Catalog No.	Port Size (mm)	Nominal Capacity R22		O.P.D. (MPa) {kgf/cm ² }		Connection (O.D.)		Wt. (kg)
		(kW)	(U.S.R.T.)	Max.	Min.	Discharge	Suction & Coils	
STF-0101Z	8	4.77	1.36	2.5 {25}	0.25 {2.5}	5/16"	3/8"	0.25
STF-0104Z		5.64	1.60					
STF-0201Z	11.1	9.11	2.59		0.35 {3.5}	3/8"	1/2"	0.37
STF-0202Z					0.25 {2.5}		5/8"	
STF-0301Z	11.5	11.1	3.16		0.3 {3.0}	1/2"	3/4"	0.77
STF-0401Z	15.5	20.2	5.75					
STF-0408Z						3/4"	7/8"	1.32
STF-0712Z	20	34.3	9.76			7/8"	1-1/8"	1.55
STF-1511Z	23	38.2	10.9					
STF-2011Z	24	48.8	13.9					

• Nominal capacities are based on ΔP= 0.015 MPa {0.153 kgf/cm²}, condensing temperature=38°C, evaporating temperature=5°C, superheat=5°C. (R22)

• O.P.D.: Operating Pressure Differential (with air)

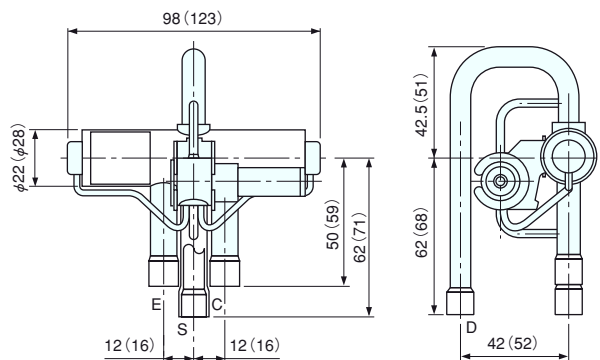
R410A

Catalog No.	Port Size (mm)	Nominal Capacity R410A		O.P.D. (MPa) {kgf/cm ² }		Connection (O.D.)		Wt. (kg)
		(kW)	(U.S.R.T.)	Max.	Min.	Discharge	Suction & Coils	
STF-0101G	8	5.64	1.60	3.1 {31.6}	0.3 {3.1}	5/16"	3/8"	0.25
STF-0104G		6.67	1.90		0.35 {3.6}	3/8"	1/2"	0.37
STF-0201G	11.1	10.8	3.07					
STF-0202G								
STF-0301G	11.5	13.1	3.73			1/2"	5/8"	0.77
STF-0401G	15.5	23.8	6.77				3/4"	
STF-0408G						3/4"	7/8"	1.32
STF-0712G	20	40.5	11.5			7/8"	1-1/8"	1.55
STF-1511G	23	45.1	12.8					
STF-2011G	24	57.7	16.4			1"	1-1/4"	3.4
STF-2501G	28	87.2	24.8				1-1/2"	4.7
STF-3001G	34	123.1	35.0			1-1/4"	1-1/2"	9.1
STF-4001G	40	171.8	48.9				2-1/8"	9.4
STF-5001G	50	214.1	60.9			1-1/2"	2-1/8"	20.0
VHV-6001	60	367.5	104.5				2-5/8"	

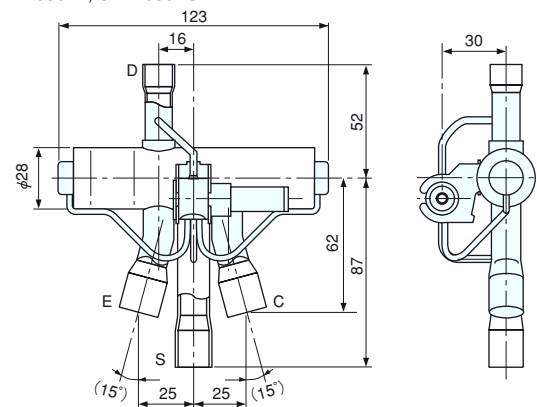
- Nominal capacities are based on $\Delta P = 0.015 \text{ MPa}$ {0.153 kgf/cm²}, condensing temperature=38°C, evaporating temperature=5°C, superheat=5°C. (R410A)
- O.P.D.: Operating Pressure Differential (with air)

DIMENSION

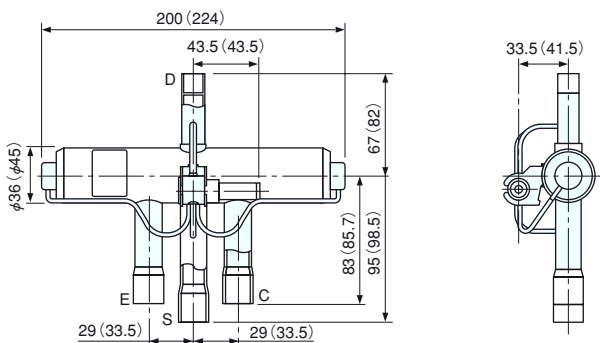
Type STF-0101Z (-0201Z, -0202Z), STF-0101G (-0201G, -0202G)



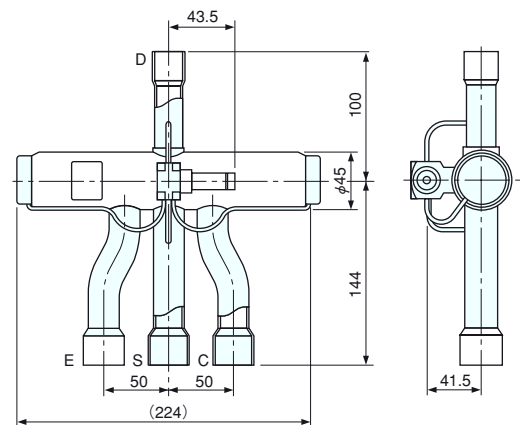
Type STF-0301Z, STF-0301G



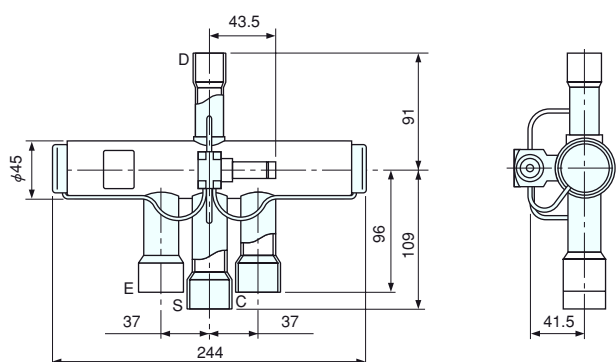
Type STF-0401Z, -0408Z (-0712), STF-0401G, -0408G (-0712G)



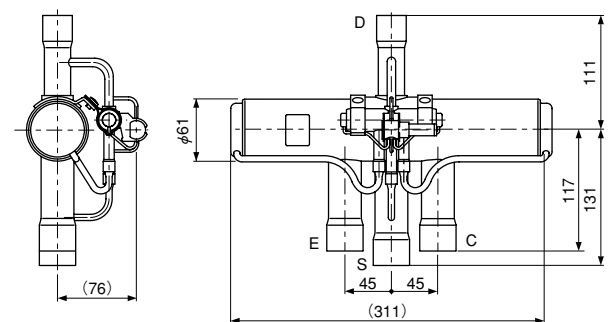
Type STF-1511Z, STF-1511G



Type STF-2011Z, -2011G

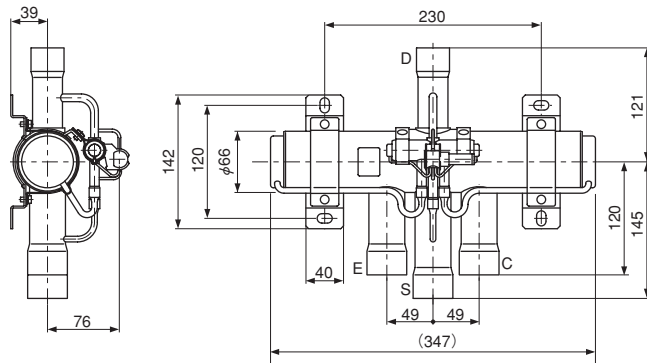


Type STF-2501G

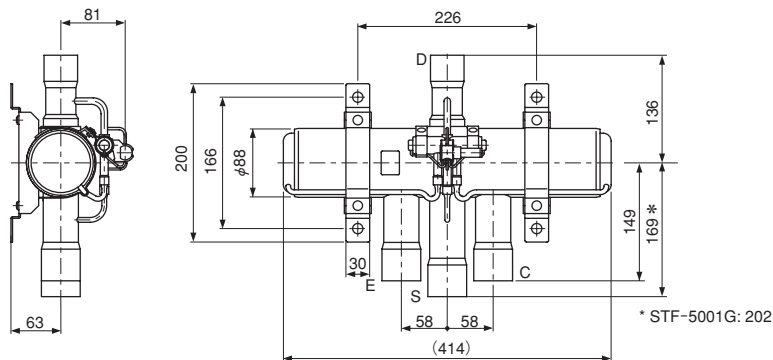


Unit: mm

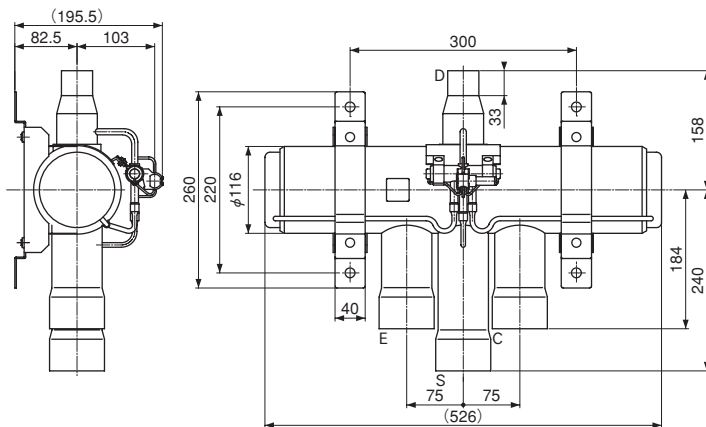
Type STF-3001G



Type STF-4001G, -5001G

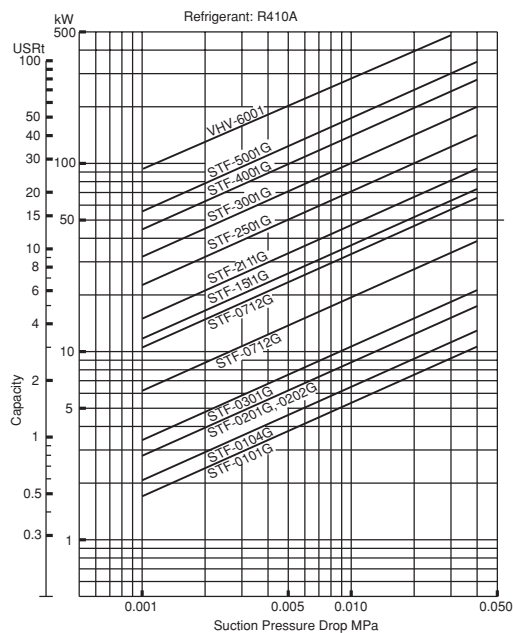
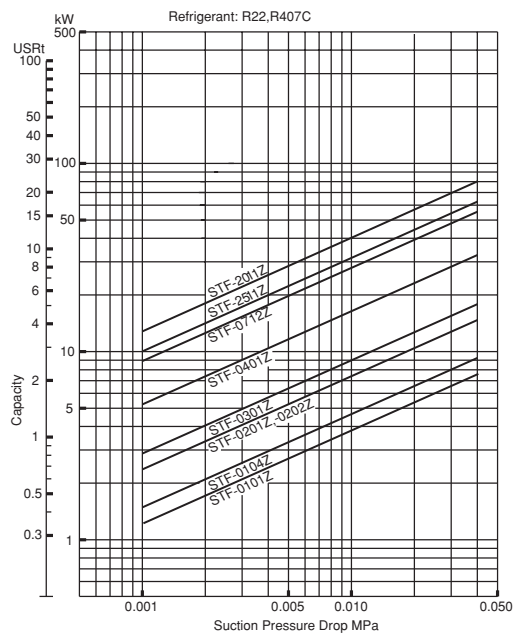


Type VHV-6001



Unit: mm

FLOW RATE (Capacity)



* Flow Rate Conditions
Condensing temp.: 38°C
Evaporator temp.: 5°C
Superheat temp.: 5°C

* Nominal capacity shown in the table
is based on pressure drop across
the valve
 $\Delta P = 0.015 \text{ MPa} \{0.153 \text{ kgf/cm}^2\}$