SANHUA

AIR CONDITIONING

COMMERCIAL REFRIGERATION

HEAT PUMP

GENERAL PRODUCT CATALOGUE

30 years
SANHUA
SINCE 1984

SUMMARY

SANHUA

"Strive for perfection, ***Pursuit of excellence"***

Sanhua is a leading HVAC&R manufacturer of controls and components with a global footprint and 30 years of experience. Our co-operation with the largest companies in the Automotive, Appliance and HVAC&R industry makes Sanhua a leading worldwide OEM supplier providing the highest quality components at the most competitive price.

Furthermore, strategic acquisitions by Sanhua of leading HVAC brands such as Ranco and Aweco and joint venture projects with Danfoss transformed Sanhua into one of the largest manufacturers of Expansion, Solenoid and Reversing Valves with annual valve sales exceeding 100 Million pieces.

SANHUA IS LISTED IN TOP 100 STRONGEST CHINESE INDUSTRIAL BRANDS.

After sustainable growth over the last 3 decades, Sanhua have made significant progress to introduce a comprehensive range of controls and line components for the Commercial Air conditioning and Refrigeration Industries and to increase its service level coverage in the most important European markets.

QUALITY AND R&D

The company has a sufficient number of modern manufacturing equipment, advanced production engineering and effective control tools.

Products of Sanhua have passed many international and domestic safety certificates such as CQC, CE, TüV, UL, VDE, and have gained trust and satisfaction from customers with reliable and continuous-improving quality.

ISO9001 Quality Management System
ISO14001 Environment Manag.System
QC080000 Hazardous Substance
ISO10012 Measurement Manag System**

*STANDARD **PRODUCT FAMILIES**

4 WAY REVERSING VALVE SHF SERIES
4 WAY REVERSING VALVES SHF (HP) SERIES
ELECTRONIC EXPANSION VALVE DPF-T/S SERIES

SOLENOID VALVE MDF SERIES
SOLENOID VALVES FDF N/C SERIES
SOLENOID VALVES FDF N/O SERIES

THERMOSTATIC EXPANSION VALVE RFKA SERIES
BALL VALVE SBV series
CHECK VALVE PISTON TYPE YCV series

SIGHT GLASS SYJ series
BRASS SERVICE VALVE SSV series
CHARGE VALVE TCJ series

UNI-FLOW FITER DRIER DTG/L series
BI-FLOW FITER DRIERS STG/L series
COPER FILTER DRIER BGQ series
FILTER DRIERS WITH REPLACEABLE CORE HTG series

*customized and total product line is included in the general product catalogue.

GLOBAL FOOTPRINT & **LOCAL SUPPORT**

- **Technical Service Hotline in 4 languages (English, Italian, German and Spanish)**
- **On site engineering support on request.**
- **Online Data Sheets and product catalogues.**
- **72 hours delivery service for standard stocked items within the European Union.**
- **B2B Customer Platform, on line 24x7 order & stock management.**

SANHUA

SANHUA *YOUR ROAD MAP TO THE ECO-DESIGN DIRECTIVE**

*KEEPS YOU ONE STEP AHEAD OF THE COMING **EFFICIENCY** AND **ENVIRONMENTAL** EUROPEAN **CHALLENGES***

EEV Technology + Electronic Controls

- Improves HVACo-R system efficiency up to **20%**
- DPFo-VPF series from 2kW to 1400kW
  *75kW and 1400kW available in Quarter 4
- Advanced MSS (Minimum Stable Superheat) control logic

2 kW

1400kW

4 Way Reversing Valve

- Improves efficiency by **5%**
- SHF series 1kW to 420 kW
- Widest range in the market with Single Body Design

1 kW

420kW

Inverter Controller for Large System

- Improves system efficiency up to **30%**
- **Active Frequency** Conversion Technology
- Wide Range of voltage application

MCHE

- Improves efficiency by **30%**
- Refrigerant Charge Reduction by **30%** Environmental Friendly
- MCHE is lighter in weight, smaller in volume Compact Design

*DIRECTIVE 2012/27/EU

ADERALES

ADVANCED
Technology & Solutions

SANHUA

CHILLING ***IDEAS*** **WORLDWIDE**

SANHUA INTERNATIONAL EUROPE
info@sanhuaeurope.com

2 out of 3 AC units are equipped with a **SANHUA** *reversing valve*

YEARLY SANHUA SUPPLIES OVER 50 MILLION FOUR WAY REVERSING VALVES TO THE COMMERCIAL AND RESIDENTIAL HVAC INDUSTRY WORLDWIDE

DISCOVER WHY

www.sanhuaeurope.com

- Improves efficiency by **5%**
- SHF series 1kW to 420 kW
- Widest range in the market with Single Body Design

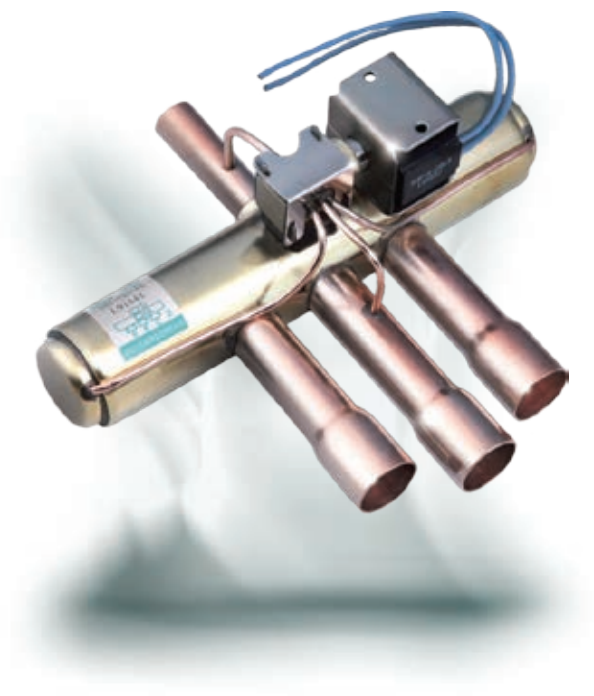
SANHUA

CHILLING *IDEAS* WORLDWIDE

SANHUA INTERNATIONAL EUROPE
info@sanhuaeurope.com

4 Way Reversing Valve

SHF series four-way reversing valves are applicable for heat pump systems such as central, unitary and room air conditioners to realize switching between cooling mode and heating mode by changing the flow path of refrigerant.



FEATURES

- WIDE APPLICATION RANGE
- SUITABLE FOR COOLING CAPACITIES FROM 3 TO 240KW (R407C, CONDITION 1)
- SEVERAL DESIGNS AVAILABLE

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A
- Medium temperature TS min./max.: -30°C / +120°C
- Ambient temperature min./max.: -30°C / +50 or +70°C (Depending on used coil)
- Relative humidity: 0 to 95% RH
- Max. operating pressure PS: 4,5 MPa (45 bar)
- Installation position:
  - Coil upwards or with body axis in horizontal alignment
  - Flow direction according to installation instruction
- Certifications: UL/CSA* and declaration according to LVD or PED

* SHF(L)-4H to SHF-50 valves, coil selection on request

NOMINAL OPERATING CONDITIONS

Nominal operating conditions	Condition 1:	Condition 2:
Condensing Temperature t_c	38°C	54,4°C
Evaporating Temperature t_o	5°C	7,2°C
Superheat Δt_{oh}	5K	5K
Subcooling Δt_{cu}	0K	5K

SHF SERIES
4 Way Reversing Valve

GENERAL CHARACTERISTICS

Valve Model	Part Number	Ø Port	Kv	Connections ODF		PS	OPD		PED category
				ØD	ØE/S/C		MAX	MIN	
		[mm]	[m³/h]	[inch]	[inch]	[MPa]	[MPa]	[MPa]	
SHF(L)-4H-23U	SHF-19001	8,0	1,7	5/16	3/8	4,5	3,1	0,25	3,3
SHF(L)-7H-34U	SHF-19002	11,1	3,1	3/8	1/2	4,5	3,1	0,25	3,3
SHF(L)-9H-35U	SHF-19003	11,5	3,6	3/8	5/8	4,5	3,1	0,3	3,3
SHF(L)-11H-45D1	SHF-19004	11,5	4,5	1/2	5/8	4,5	3,1	0,3	3,3
SHF-14-46	SHF-50001	13,5	6,3	1/2	3/4	4,5	3,1	0,3	3,3
SHF-14-47	SHF-50002	13,5	6,3	1/2	7/8	4,5	3,1	0,3	3,3
SHF-14-57	SHF-50003	13,5	6,3	5/8	7/8	4,5	3,1	0,3	3,3
SHF-20A-46	SHF-50004	15,6	7,9	1/2	3/4	4,5	3,1	0,3	3,3
SHF-20A-47	SHF-50005	15,6	7,9	1/2	7/8	4,5	3,1	0,3	3,3
SHF-20A-57	SHF-50006	15,6	7,9	5/8	7/8	4,5	3,1	0,3	3,3
SHF-20A-67	SHF-50007	15,6	7,9	3/4	7/8	4,5	3,1	0,3	3,3
SHF-20D-46-02	SHF-50008	17,2	9,9	1/2	3/4	4,5	3,1	0,3	3,3
SHF-35A-47	SHF-50009	20,0	13,9	1/2	7/8	4,5	3,1	0,3	3,3
SHF-35A-57	SHF-50010	20,0	13,9	5/8	7/8	4,5	3,1	0,3	3,3
SHF-35A-59	SHF-50011	20,0	13,9	5/8	1-1/8	4,5	3,1	0,3	3,3
SHF-35A-67	SHF-50012	20,0	13,9	3/4	7/8	4,5	3,1	0,3	3,3
SHF-35A-69	SHF-50013	20,0	13,9	3/4	1-1/8	4,5	3,1	0,3	3,3
SHF-35A-79	SHF-50014	20,0	13,9	7/8	1-1/8	4,5	3,1	0,3	3,3
SHF-35B-67-02	SHF-50015	20,9	14,7	3/4	7/8	4,5	3,1	0,3	3,3
SHF-50-911D2	SHF-50016	25,6	18,5	1-1/8	1-3/8	4,5	3,1	0,3	3,3
SHF(L)-70-810	SHF-50017	28,6	28,5	1	1-1/4	4,5	3,1	0,3	3,3
SHF(L)-70-810-01	SHF-50024	28,6	28,5	1	1-1/4	4,5	3,1	0,3	3,3
SHF(L)-100-1012	SHF-50018	34,8	40,5	1-1/4	1-1/2	4,5	3,1	0,3	I
SHF(L)-100-1012-01	SHF-50025	34,8	40,5	1-1/4	1-1/2	4,5	3,1	0,3	I
SHF(L)-140-1214	SHF-50019	41,0	58,4	1-1/2	1-3/4	4,5	3,1	0,3	I
SHF(L)-175-1217	SHF-50020	46,4	70,5	1-1/2	2-1/8	4,5	3,1	0,3	I
SHF(L)-210-1321	SHF-50021	50,0	84,4	1-5/8	2-5/8	4,5	3,1	0,3	I
SHF(L)-350-1721	SHF-50022	59,0	138,4	2-1/8	2-5/8	4,5	3,1	0,3	I
SHF(L)-420-2125	SHF-50023	69,0	177,0	2-5/8	3-1/8	4,5	3,1	0,3	I

SHF SERIES
4 Way Reversing Valve

CAPACITY SELECTION

Valve Model [1]	Part Number	Nominal Capacity (condition 1)							
		R407C[2]		R410A		R134a		R404A / R507	
		ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar
		[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
SHF(L)-4H-23U	SHF-19001	3,8	5,3	4,5	6,4	2,9	4,2	3,2	4,6
SHF(L)-7H-34U	SHF-19002	7,0	9,9	8,5	12,0	5,5	7,8	6,0	8,5
SHF(L)-9H-35U	SHF-19003	8,0	11,3	9,6	13,6	6,3	8,9	6,8	9,7
SHF(L)-11H-45D1	SHF-19004	10,1	14,3	12,2	17,3	7,9	11,2	8,7	12,3
SHF-14-46	SHF-50001	13,9	19,7	16,8	23,8	10,9	15,5	11,9	16,9
SHF-14-47	SHF-50002	13,9	19,7	16,8	23,8	10,9	15,5	11,9	16,9
SHF-14-57	SHF-50003	13,9	19,7	16,8	23,8	10,9	15,5	11,9	16,9
SHF-20A-46	SHF-50004	17,6	24,8	21,2	30,0	13,8	19,5	15,0	21,3
SHF-20A-47	SHF-50005	17,6	24,8	21,2	30,0	13,8	19,5	15,0	21,3
SHF-20A-57	SHF-50006	17,6	24,8	21,2	30,0	13,8	19,5	15,0	21,3
SHF-20A-67	SHF-50007	17,6	24,8	21,2	30,0	13,8	19,5	15,0	21,3
SHF-20D-46-02	SHF-50008	22,1	31,3	26,7	37,8	17,4	24,6	19,0	26,8
SHF-35A-47	SHF-50009	30,9	43,7	37,3	52,8	24,3	34,3	26,5	37,5
SHF-35A-57	SHF-50010	30,9	43,7	37,3	52,8	24,3	34,3	26,5	37,5
SHF-35A-59	SHF-50011	30,9	43,7	37,3	52,8	24,3	34,3	26,5	37,5
SHF-35A-67	SHF-50012	30,9	43,7	37,3	52,8	24,3	34,3	26,5	37,5
SHF-35A-69	SHF-50013	30,9	43,7	37,3	52,8	24,3	34,3	26,5	37,5
SHF-35A-79	SHF-50014	30,9	43,7	37,3	52,8	24,3	34,3	26,5	37,5
SHF-35B-67-02	SHF-50015	32,6	46,2	39,4	55,7	25,6	36,2	28,0	39,6
SHF-50-911D2	SHF-50016	41,2	58,3	49,8	70,4	32,3	45,7	35,3	50,0
SHF(L)-70-810	SHF-50017	63,6	89,9	76,7	108,5	49,9	70,5	54,5	77,0
SHF(L)-70-810-01	SHF-50024	63,6	89,9	76,7	108,5	49,9	70,5	54,5	77,0
SHF(L)-100-1012	SHF-50018	90,3	127,7	109,0	154,1	70,8	100,2	77,4	109,4
SHF(L)-100-1012-01	SHF-50025	90,3	127,7	109,0	154,1	70,8	100,2	77,4	109,4
SHF(L)-140-1214	SHF-50019	130,0	183,8	156,9	221,9	102,0	144,2	111,4	157,5
SHF(L)-175-1217	SHF-50020	157,1	222,2	189,7	268,2	123,2	174,3	134,6	190,4
SHF(L)-210-1321	SHF-50021	188,0	265,9	227,0	321,0	147,5	208,6	161,1	227,8
SHF(L)-350-1721	SHF-50022	308,3	436,0	372,2	526,3	241,8	342,0	264,1	373,5
SHF(L)-420-2125	SHF-50023	394,4	557,7	476,1	673,3	309,4	437,5	337,9	477,9

Note: 1) Pressure drop is valid for flow from ØC to ØS or from ØE to ØS
2) R407C data based on dew point conditions

SHF SERIES
4 Way Reversing Valve

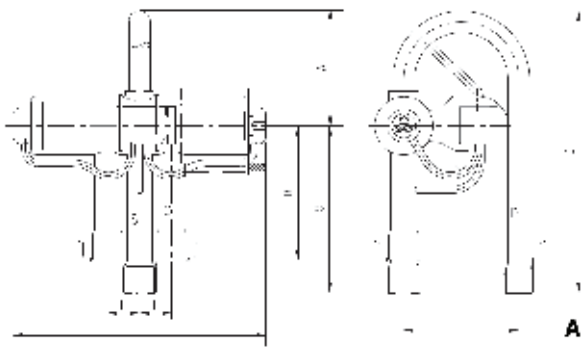
CAPACITY SELECTION

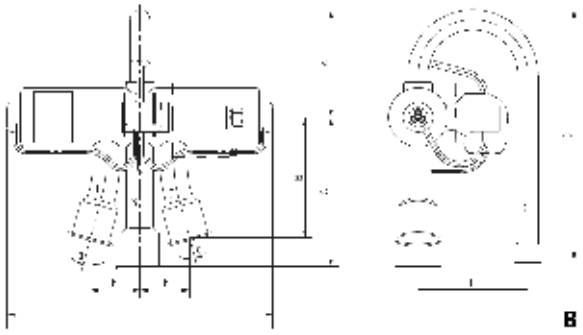
Valve Model [1]	Part Number	Nominal Capacity (condition 2)							
		R407C[2]		R410A		R134a		R404A / R507	
		ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar
		[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
SHF(L)-4H-23U	SHF-19001	3,4	4,8	4,0	5,7	2,7	3,9	2,7	3,9
SHF(L)-7H-34U	SHF-19002	6,4	9,0	7,5	10,6	5,1	7,2	5,1	7,2
SHF(L)-9H-35U	SHF-19003	7,3	10,3	8,5	12,0	5,8	8,2	5,8	8,2
SHF(L)-11H-45D1	SHF-19004	9,2	13,0	10,8	15,2	7,4	10,4	7,3	10,4
SHF-14-46	SHF-50001	12,7	17,9	14,8	21,0	10,1	14,3	10,1	14,3
SHF-14-47	SHF-50002	12,7	17,9	14,8	21,0	10,1	14,3	10,1	14,3
SHF-14-57	SHF-50003	12,7	17,9	14,8	21,0	10,1	14,3	10,1	14,3
SHF-20A-46	SHF-50004	16,0	22,6	18,7	26,5	12,8	18,0	12,7	18,0
SHF-20A-47	SHF-50005	16,0	22,6	18,7	26,5	12,8	18,0	12,7	18,0
SHF-20A-57	SHF-50006	16,0	22,6	18,7	26,5	12,8	18,0	12,7	18,0
SHF-20A-67	SHF-50007	16,0	22,6	18,7	26,5	12,8	18,0	12,7	18,0
SHF-20D-46-02	SHF-50008	20,2	28,5	23,6	33,4	16,1	22,8	16,1	22,7
SHF-35A-47	SHF-50009	28,2	39,8	33,0	46,6	22,5	31,8	22,4	31,7
SHF-35A-57	SHF-50010	28,2	39,8	33,0	46,6	22,5	31,8	22,4	31,7
SHF-35A-59	SHF-50011	28,2	39,8	33,0	46,6	22,5	31,8	22,4	31,7
SHF-35A-67	SHF-50012	28,2	39,8	33,0	46,6	22,5	31,8	22,4	31,7
SHF-35A-69	SHF-50013	28,2	39,8	33,0	46,6	22,5	31,8	22,4	31,7
SHF-35A-79	SHF-50014	28,2	39,8	33,0	46,6	22,5	31,8	22,4	31,7
SHF-35B-67-02	SHF-50015	29,7	42,0	34,8	49,2	23,7	33,5	23,7	33,5
SHF-50-911D2	SHF-50016	37,5	53,1	43,9	62,1	30,0	42,4	29,9	42,3
SHF(L)-70-810	SHF-50017	57,9	81,9	67,7	95,8	46,2	65,3	46,1	65,2
SHF(L)-70-810-01	SHF-50024	57,9	81,9	67,7	95,8	46,2	65,3	46,1	65,2
SHF(L)-100-1012	SHF-50018	82,2	116,3	96,2	136,1	65,6	92,8	65,5	92,7
SHF(L)-100-1012-01	SHF-50025	82,2	116,3	96,2	136,1	65,6	92,8	65,5	92,7
SHF(L)-140-1214	SHF-50019	118,4	167,4	138,5	195,9	94,5	133,6	94,3	133,4
SHF(L)-175-1217	SHF-50020	143,1	202,3	167,4	236,7	114,2	161,5	114,0	161,2
SHF(L)-210-1321	SHF-50021	171,2	242,1	200,3	283,3	136,6	193,2	136,5	193,0
SHF(L)-350-1721	SHF-50022	280,7	397,0	328,5	464,6	224,0	316,8	223,7	316,4
SHF(L)-420-2125	SHF-50023	359,1	507,9	420,2	594,3	286,6	405,3	286,2	404,8

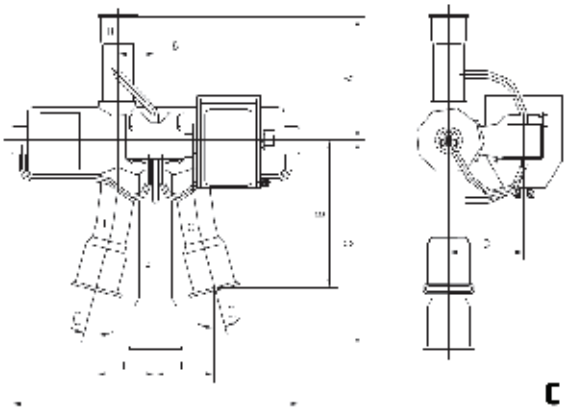
Note: 1) Pressure drop is valid for flow from ØC to ØS or from ØE to ØS
2) R407C data based on dew point conditions

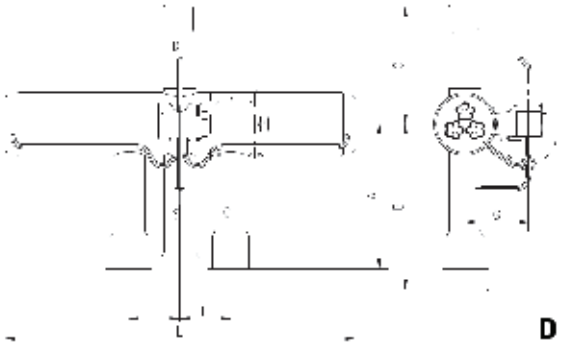
SHF SERIES
4 Way Reversing Valve

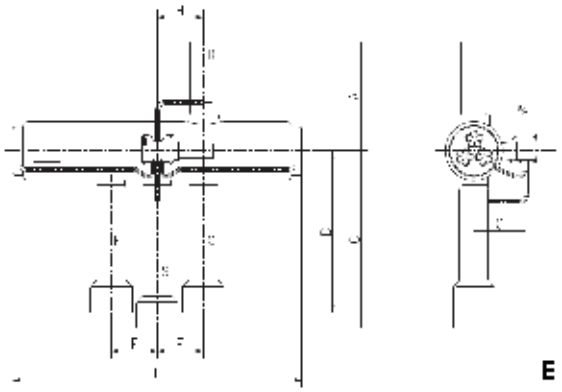
DIMENSIONS - VALVES

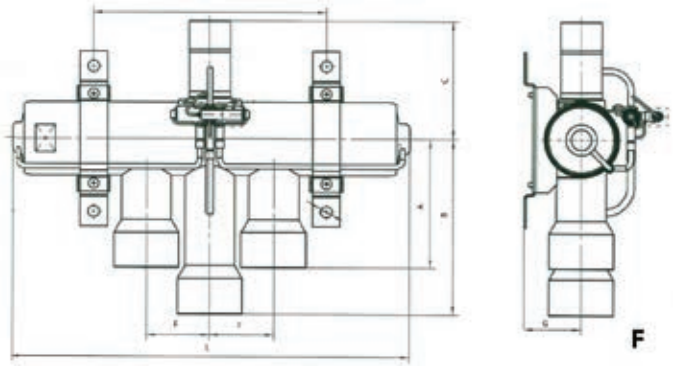












SHF SERIES
4 Way Reversing Valve

DIMENSIONS - VALVES

Valve Model	Part Number	Valve Style	L	A	B	C	D	E	F	G	H	Angle α	Weight
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	[kg]
SHF(L)-4H-23U	SHF-19001	A	94,4	43	50	62	105	43	12	-	-	0	0,20
SHF(L)-7H-34U	SHF-19002		113	51	59	71	119	52	16	-	-	0	0,28
SHF(L)-9H-35U	SHF-19003	B	115,5	51	57	72	119	52	23,5	-	-	15	0,30
SHF(L)-11H-45D1	SHF-19004	C	121,5	52	62	87	-	-	25	31,5	16	15	0,32
SHF-14-46	SHF-50001	D	184,2	67	83	95	-	-	28,6	35,5	-	0	0,72
SHF-14-47	SHF-50002		184,2	67	83	95	-	-	28,6	35,5	-	0	0,72
SHF-14-57	SHF-50003		184,2	67	83	95	-	-	28,6	35,5	-	0	0,72
SHF-20A-46	SHF-50004		176	67	83	95	-	-	28,6	35,5	-	0	0,75
SHF-20A-47	SHF-50005		176	67	83	95	-	-	28,6	35,5	-	0	0,75
SHF-20A-57	SHF-50006		176	67	83	95	-	-	28,6	35,5	-	0	0,75
SHF-20A-67	SHF-50007		176	67	83	95	-	-	28,6	35,5	-	0	0,75
SHF-20D-46-02	SHF-50008		183,6	67	83	95	-	-	28,6	35,5	-	0	0,75
SHF-35A-47	SHF-50009		211	82	87	100	-	-	33	40	-	0	1,30
SHF-35A-57	SHF-50010		211	82	87	100	-	-	33	40	-	0	1,30
SHF-35A-59	SHF-50011		211	82	87	100	-	-	33	40	-	0	1,30
SHF-35A-67	SHF-50012		211	82	87	100	-	-	33	40	-	0	1,30
SHF-35A-69	SHF-50013		211	82	87	100	-	-	33	40	-	0	1,30
SHF-35A-79	SHF-50014		211	82	87	100	-	-	33	40	-	0	1,30
SHF-35B-67-02	SHF-50015		213	82	87	100	-	-	33	40	-	0	1,30
SHF-50-911D2	SHF-50016	E	269	97	149	174	-	-	41,3	40	41,3	0	2,10
SHF(L)-70-810	SHF-50017	D	303	111,8	117	131	-	-	46	86	-	0	3,00
SHF(L)-100-1012	SHF-50018		321	111,8	117	131	-	-	49	86	-	0	3,50
SHF(L)-70-810-01	SHF-50024	F	303	111,8	117	131	-	-	46	86	-	0	3,00
SHF(L)-100-1012-01	SHF-50025		321	111,8	117	131	-	-	49	86	-	0	3,50
SHF(L)-140-1214	SHF-50019		390	135,6	148,7	168,7	-	-	58	97	-	0	7,20
SHF(L)-175-1217	SHF-50020		390	135,6	148,7	168,7	-	-	58	97	-	0	7,60
SHF(L)-210-1321	SHF-50021		452	135,6	148,7	168,7	-	-	71,5	97	-	0	8,70
SHF(L)-350-1721	SHF-50022		553	176,5	180	235	-	-	75	112	-	0	22,00
SHF(L)-420-2125	SHF-50023		613	176,5	180	235	-	-	93	113	-	0	26,00

SHF SERIES
4 Way Reversing Valve

COIL CHARACTERISTICS

Coil Model [1]	Winding Code	Part Number	Electrical function / connection Type	Cable Length	Power Supply	Rated Voltage	Power Consumption			Protection class	Insulation class	Max. Op. Temp.
							AC 50Hz	AC 60Hz	DC			
				[mm]	[-]	[V]	[W]	[W]	[W]	[-]	[-]	[°C]
SQ-A25 22G-00 0001	SHF-4-10L3	SHF-56001	Lead Wires	500	AC	220-240	4,5	3,5	-	IP54	B[2]	130
SQ-A25 200-00 0001	SHF-4-10L2	SHF-56002	Lead Wires	500	AC	200	4,5	3,5	-			
SQ-A25 100-00 0001	SHF-4-10L1	SHF-56003	Lead Wires	500	AC	100	4,5	3,5	-			
SQ-A25 11A-00 0001	SHF-4-10L4	SHF-56004	Lead Wires	500	AC	110-120	4,5	3,5	-			
SQ-A25 024-00 0001	SHF-4-10L5	SHF-56005	Lead Wires	500	AC	24	4,5	3,5	-			
SQ-A25 26H-00 0001	SHF-4-10L6	SHF-56006	Lead Wires	500	AC	265-277	4,5	3,5	-			
SQ-A25 22G-00 0870	SHF-4-10L3	SHF-56024	Lead Wires	1500	AC	220-240	4,5	3,5	-			
SQ-A25 11A-00 0840	SHF-4-10L4	SHF-56025	Lead Wires	1500	AC	110-120	4,5	3,5	-			
SQ-A25 024-00 0161	SHF-4-10L5	SHF-56009	Lead Wires	1500	AC	24	4,5	3,5	-			
SQ-A44 22G-00 0771	SHF-4-10FA5	SHF-56012	Spade (Faston) [4]	-	AC	220-240	6	5	-	IP00	F[3]	155
SQ-A44 220-00 0001	SHF-4-10FA1	SHF-56013	Spade (Faston) [4]	-	AC	220	6	5	-			
SQ-A44 11B-00 0001	SHF-4-10FA2	SHF-56014	Spade (Faston) [4]	-	AC	120	6	5	-			
SQ-A44 10A-00 0001	SHF-4-10FA3	SHF-56015	Spade (Faston) [4]	-	AC	100-110	6	5	-			
SQ-A44 024-00 0771	SHF-4-10FA4	SHF-56016	Spade (Faston) [4]	-	AC	24	6	5	-			
SQ-A44 26H-00 0831	SHF-4-10FA6	SHF-56017	Spade (Faston) [4]	-	AC	265-277	6	5	-			
SQ-D44 012-00 0001	SHF-4-10FA8	SHF-56019	Spade (Faston) [4]	-	DC	12	-	-	10			
SQ-D44 024-00 0001	SHF-4-10FA9	SHF-56020	Spade (Faston) [4]	-	DC	24	-	-	11			
SQ-A27 100-00 0001	-	SHF-56021	Bistable/ Lead W.	500	AC	100	18	18	-	IP54	B[2]	130
SQ-A27 200-00 0001	-	SHF-56022	Bistable/ Lead W.	500	AC	200	18	18	-			
SQ-A27 20K-00 0001	-	SHF-56027	Bistable/ Lead W.	500	AC	220-240	18	18	-			
SQ-D27 012-00 0001	-	SHF-56023	Bistable/ Lead W.	500	DC	12	-	-	20			

Note: 1) Every coil is applicable to all above specified valve models

2) Max ambient temperature up to + 50°C

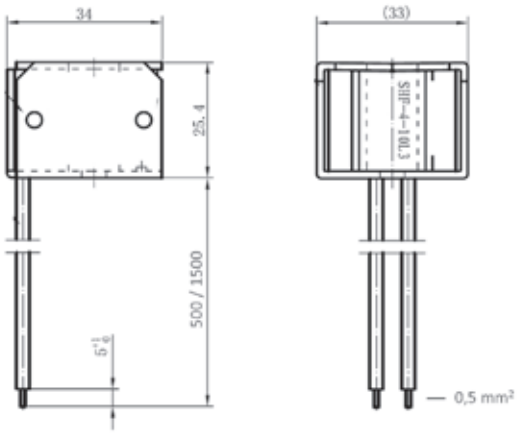
3) Max ambient temperature up to + 70°C

4) Wire Harness for coil with Faston connector:
SQ-000000-090028 (Part Number: SHF-56026)

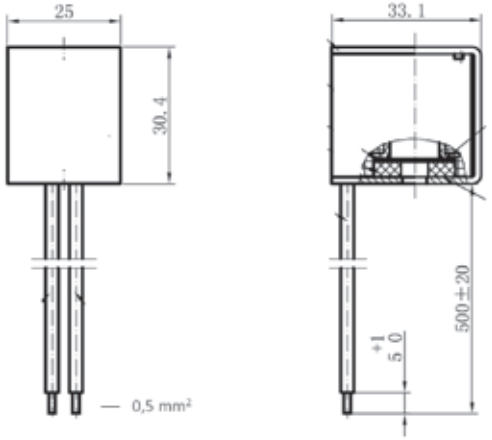
SHF SERIES
4 Way Reversing Valve

DIMENSIONS - COILS

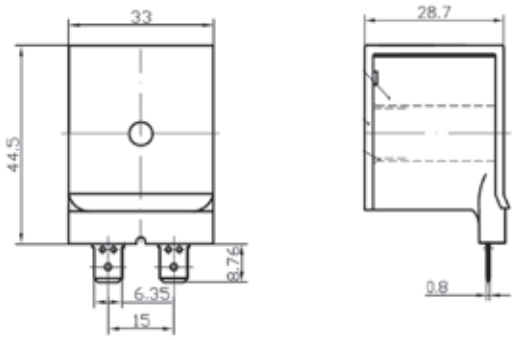
Coils with Lead Wires (SQ-A25 Series)



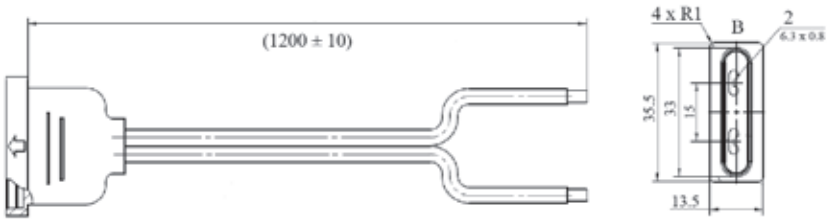
Bistable Coils (SQ-A/D27 Series)



Coils with Spade Connections (SQ-A/D44 Series)

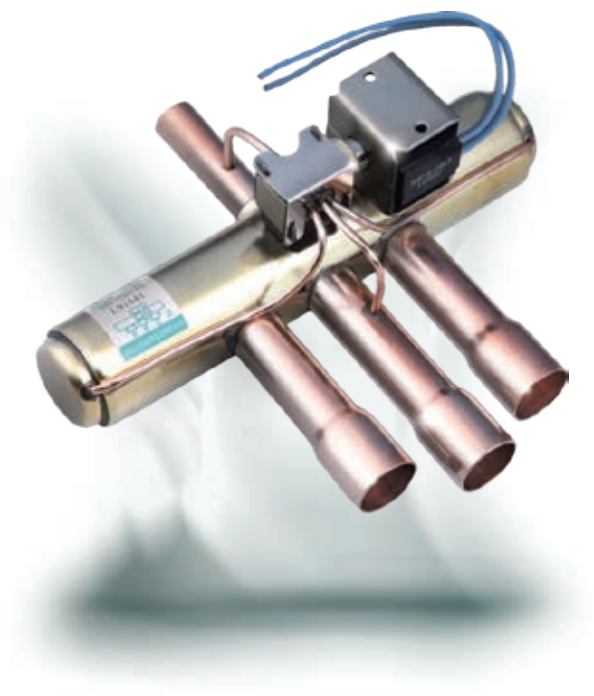


Wire Harness (SQ-000000-090028)



4 Way Reversing Valve

SHF (HP) series four-way reversing valves are designed especially for usage in heat pump systems to realize switching between cooling mode and heating mode by changing the flow path of the refrigerant.



FEATURES

- WIDE APPLICATION RANGE
- SUITABLE FOR COOLING CAPACITIES FROM 3 TO 40 KW (R407C, CONDITION 1)
- SEVERAL DESIGNS AVAILABLE

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Medium temperature TS min./max.: -30°C / +135°C
- Ambient temperature min./max.: -25°C / +70°C
- Relative humidity: 0 to 95% RH
- Max. operating pressure PS: 4,5 MPa (45 bar)
- Max. opening pressure difference OPD: 4,0 MPa (40 bar)
- Installation position:
  - Coil upwards or with body axis in horizontal alignment
  - Flow direction according to installation instruction
- Certifications: UL/CSA* and declaration according to LVD or PED

* Coil selection on request

NOMINAL OPERATING CONDITIONS

Nominal operating conditions	Condition 1:	Condition 2:
Condensing Temperature t_c	38°C	54,4°C
Evaporating Temperature t_o	5°C	7,2°C
Superheat Δt_{oh}	5K	5K
Subcooling Δt_{Cu}	0K	5K

SHF (HP) SERIES
4 Way Reversing Valve

GENERAL CHARACTERISTICS

Valve Model	Part Number	Ø Port	Kv	Connections ODF		MOP	OPD		PED category
				ØD	ØE/S/C		MAX	MIN	
		[mm]	[m³/h]	[inch]	[inch]	[MPa]	[MPa]	[MPa]	
SHF(L)-4H-23U-E	SHF-19005	8,0	1,7	5/16	3/8	4,5	4,0	0,25	3,3
SHF(L)-7H-34U-E	SHF-19006	11,1	3,1	3/8	1/2	4,5	4,0	0,25	3,3
SHF-20D-46-02-E	SHF-50022	17,2	9,9	1/2	3/4	4,5	4,0	0,34	I
SHF-35B-67-02-E	SHF-50023	20,9	14,7	3/4	7/8	4,5	4,0	0,34	I

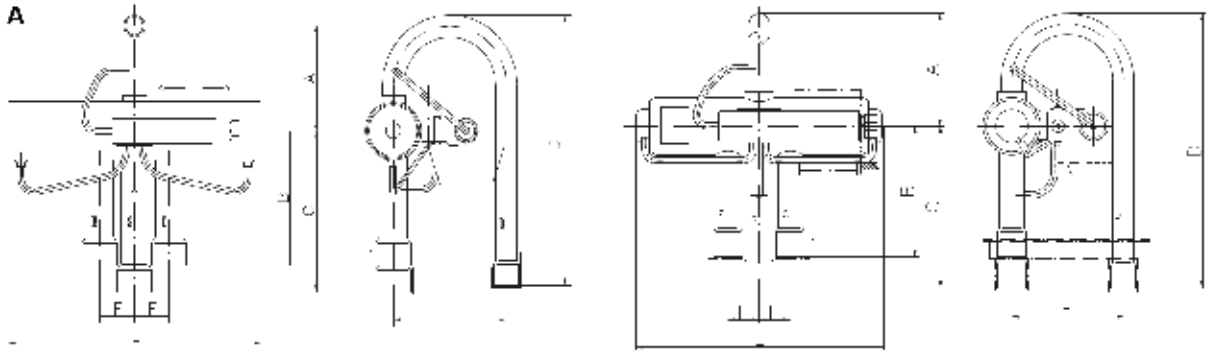
CAPACITY SELECTION

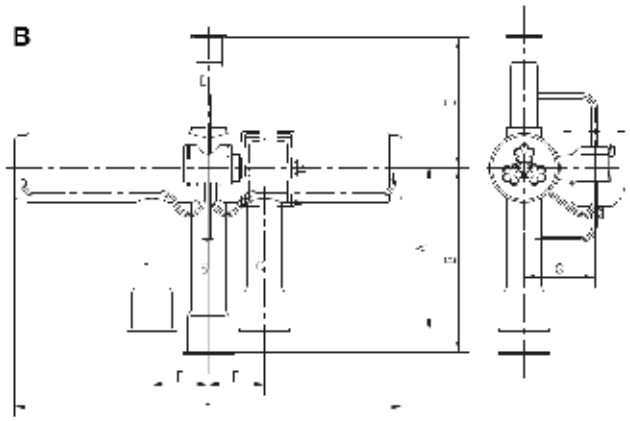
Valve Model [1]	Part Number	Nominal Capacity (condition 1)							
		R407C[2]		R410A		R134a		R404A / R507	
		ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar
		[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
SHF(L)-4H-23U-E	SHF-19005	3,8	5,3	4,5	6,4	2,9	4,2	3,2	4,6
SHF(L)-7H-34U-E	SHF-19006	7,0	9,9	8,5	12,0	5,5	7,8	6,0	8,5
SHF-20D-46-02-E	SHF-50022	22,1	31,3	26,7	37,8	17,4	24,6	19,0	26,8
SHF-35B-67-02-E	SHF-50023	32,6	46,2	39,4	55,7	25,6	36,2	28,0	39,6
Valve Model [1]	Part Number	Nominal Capacity (condition 2)							
		R407C[2]		R410A		R134a		R404A / R507	
		ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar	ΔP: 0,1 bar	ΔP: 0,2 bar
		[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
SHF(L)-4H-23U-E	SHF-19005	3,4	4,8	4,0	5,7	2,7	3,9	2,7	3,9
SHF(L)-7H-34U-E	SHF-19006	6,4	9,0	7,5	10,6	5,1	7,2	5,1	7,2
SHF-20D-46-02-E	SHF-50022	20,2	28,5	23,6	33,4	16,1	22,8	16,1	22,7
SHF-35B-67-02-E	SHF-50023	29,7	42,0	34,8	49,2	23,7	33,5	23,7	33,5

Note: 1) Pressure drop is valid for flow from ØC to ØS or ØE to ØS
2) R407C data based on dew point conditions

SHF (HP) SERIES
4 Way Reversing Valve

DIMENSIONS - VALVES





Valve Model	Part Number	Valve Style	L	A	B	C	D	E	F	G	Weight
			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
SHF(L)-4H-23U-E	SHF-19005	A	94,4	43	50	62	105	43	12	-	0,20
SHF(L)-7H-34U-E	SHF-19006		113	51	59	71	119	52	16	-	0,28
SHF-20D-46-02-E	SHF-50022	B	183,6	67	83	95	-	-	28,6	35,5	0,75
SHF-35B-67-02-E	SHF-50023		213	82	87	100	-	-	33	40	1,23

SHF (HP) SERIES
4 Way Reversing Valve

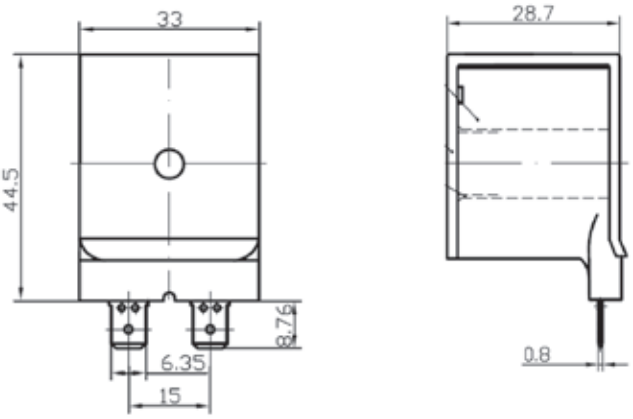
COIL CHARACTERISTICS

Coil Model [1)]	Winding Code	Part Number	Electrical Connection Type	Power Supply	Rated Voltage	Power Consumption			Protection class	Insulation class	Max Operating Temp.
						AC 50Hz	AC 60Hz	DC			
				[-]	[V]	[W]	[W]	[W]	[-]	[-]	[°C]
SQ-A44 22G-00 0771	SHF-4-10FA5	SHF-56012	Spade (Faston)	AC	220 to 240	6	5	-	IP00	F	155
SQ-A44 220-00 0001	SHF-4-10FA1	SHF-56013	Spade (Faston)	AC	220	6	5	-	IP00	F	155
SQ-A44 11B-00 0001	SHF-4-10FA2	SHF-56014	Spade (Faston)	AC	120	6	5	-	IP00	F	155
SQ-A44 10A-00 0001	SHF-4-10FA3	SHF-56015	Spade (Faston)	AC	100 to 110	6	5	-	IP00	F	155
SQ-A44 024-00 0771	SHF-4-10FA4	SHF-56016	Spade (Faston)	AC	24	6	5	-	IP00	F	155
SQ-A44 26H-00 0831	SHF-4-10FA6	SHF-56017	Spade (Faston)	AC	265 to 277	6	5	-	IP00	F	155
SQ-A44 200-00 0001	SHF-4-10FA7	SHF-56018	Spade (Faston)	AC	200	6	5	-	IP00	F	155
SQ-D44 012-00 0001	SHF-4-10FA8	SHF-56019	Spade (Faston)	DC	12	-	-	10	IP00	F	155
SQ-D44 024-00 0001	SHF-4-10FA9	SHF-56020	Spade (Faston)	DC	24	-	-	11	IP00	F	155

Note: 1) Every coil is applicable to all above specified valve models

DIMENSIONS - COIL

Coils with Spade Connections



SANHUA RANCO SERIES

Four Way Reversing Valve

RANCO series four-way reversal valve are applicable for hot pump systems such as central, unit and room air conditioners. The switch between cooling mode to heating mode can be realized by changing flow path of coolants.

FEATURES

- SPECIFICATIONS: 1-240 TON (R22 NOMINAL CAPACITY)
- POWER SAVING: CAN BE USED WITH BI-STABLE COILS TO ENSURE ALMOST ZERO ENERGY CONSUMPTION
- ENERGY SAVING: STAINLESS STEEL SERIES WITH OPTIMIZED MATERIALS, CONSUMING 5% LESS ENERGY THAN REGULAR PRODUCTS

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R407C and R410A etc.
- Applicable medium temperature: -25°C~120°C
- Maximum working pressure: R22: 3.0 MPa R407C: 3.3 MPa, R410A: 4.2 MPa
- Applicable ambient temperature: -25°C~50°C
- Relative humidity: below 95% RH
- Certification: UL, TUV, CQC

TECHNICAL PARAMETERS

Series	Model	Port mm	R22 Nominal Capacity		Max. Working Pressure MPa		Min. Working Pressure MPa		Weight kg
			kW	US.R.T	R22/R407C	R410A	R22/R407C	R410A	
C Series	C01C00S	8,4	3/4~1.5	1	/	3,04	/	0,1	0,21
	C02C00S	11,1	1~2	2	/	3,04	/	0,1	0,3
	C03C00S	11,53	2~3	3	/	3,04	/	0,1	0,3
	C05C00S	15,5	2~6	5	/	3,04	/	0,15	0,7
	C10C00S	19,94	3~12	10	/	3,04	/	0,15	1,16
	C15C00S	23	4.5~15	15	/	3,04	/	0,15	1,3
N Series	N01C00G	8,4	3/4~1.5	1	/	3,04	/	0,1	0,21
	N02C00S	11,1	1~2	2	/	3,04	/	0,1	0,3
	N03C00S	11,53	2~3	3	/	3,04	/	0,1	0,3
	N05C00S	15,5	2~6	5	/	3,04	/	0,1	0,7
	N10C00S	19,94	3~12	10	/	3,04	/	0,1	1,16
	N15C00G	23	4.5~15	15	/	3,04	/	0,1	1,3

SANHUA RANCO SERIES
Four Way Reversing Valve

TECHNICAL PARAMETERS

Series	Model	Port mm	R22 Nominal Capacity		Max. Working Pressure MPa		Min. Working Pressure MPa		Weight kg
			kW	US.R.T	R22/R407C	R410A	R22/R407C	R410A	
V Series	V0-406050-1XX	8	3/4~1.5	0,9	/	3,04	/	0,1	0,2
	V1-408060-1XX	8,71	3/4~1.5	1,4	/	3,04	/	0,1	0,2
	V1-406060-2XX	8,71	3/4~1.5	1,4	/	3,04	/	0,1	0,2
	V2-408050-1XX	11,1	3/4~1.8	2	/	3,04	/	0,1	0,3
	V2-408060-2XX	11,1	3/4~1.8	2	/	3,04	/	0,1	0,3
	V2-410060-3XX	11,1	3/4~1.8	2	/	3,04	/	0,1	0,3
	V3-410080-7XX	11,53	1~3	3	/	3,04	/	0,1	0,3
	V3-412080-8XX	11,53	1~3	3	/	3,04	/	0,1	0,3
	V6-414080-1XX	15,5	2~6	6	/	3,04	/	0,1	0,7
	V6-4140K0-2XX	15,5	2~6	6	/	3,04	/	0,1	0,7
	V10-418100-1XX	19,94	3~10	10	/	3,04	/	0,1	1,2
	V12-4220T0-2XX	25,65	4~12	12	/	3,04	/	0,1	1,3
LV Series	N20C00G	34,5	5~20	20	/	3,5	/	0,15	3,1
	N20C10G	34,5	5~20	20	/	3,5	/	0,15	3,2
	N20C11G	34,5	5~20	00	/	3,5	/	0,15	3,1
	VH10120	34,5	5~20	20	2,25	/	0,15	/	3,8
	VH1320A	34,5	5~20	20	2,25	/	0,15	/	3,2
	VH10122	34,5	5~20	20	2,25	/	0,15	/	3,8
	VH1322A	34,5	5~20	20	2,25	/	0,15	/	3,2
	N30C00G	34,5	7.5~30	30	/	3,5	/	0,15	3,2
	N30C10G	34,5	7.5~30	30	/	3,5	/	0,15	3,3
	VH15120	34,5	7.5~30	30	2,25	/	0,15	/	3,2
	VH15122	34,5	7.5~30	30	2,25	/	0,15	/	3,8
	N40C10G	41	10~40	40	/	3,5	/	0,15	7,3
	N40C11G	41	10~40	40	/	3,5	/	0,15	7,3

SANHUA RANCO SERIES
Four Way Reversing Valve

TECHNICAL PARAMETERS

Series	Model	Port mm	R22 Nominal Capacity		Max. Working Pressure MPa		Min. Working Pressure MPa		Weight kg
			kW	US.R.T	R22/R407C	R410A	R22/R407C	R410A	
LV Series	VH20321	41	10~40	40	2,25	/	0,15	/	7,5
	VH20322	41	10~40	40	2,25	/	0,15	/	7,5
	VH90120	46,4	12~50	50	2,25	/	0,15	/	7,6
	VH90121	46,4	12~50	50	2,25	/	0,15	/	7,6
	N50C10G	46,4	12~50	50	/	3,5	/	0,15	7,6
	N60C10G	50	12~60	60	/	3,5	/	0,15	8,2
	VH91120	50	12~60	60	2,25	/	0,15	/	8,2
VH3 Series	VH32082	41x2	20~80	80	2,25	/	0,34	/	55
	VH32084	41x2	20~80	80	2,25	/	0,34	/	55
	VH32085	41x2	20~80	80	2,25	/	0,34	/	55
	VH32086B	41x2	20~80	08	2,25	/	0,34	/	38,5
	VH32087a	41x2	20~80	80	/	3,5	0,34	/	38
	VH32108a	46.4x2	20~100	100	/	3,5	0,34	/	40
	VH32122	41x3	30~120	120	2,25	/	0,34	/	73
	VH32123	41x3	30~120	120	2,25	/	0,34	/	73
	VH32163	41x4	40~160	160	2,25	/	0,34	/	82
	VH32126B	41x3	30~120	120	2,25	/	0,34	/	41
	VH32166B	41x4	40~160	160	2,25	/	0,34	/	52,5
	VH32205C	46.4x4	40~200	200	2,25	/	0,34	/	134
	VH32245C	50x4	40~240	240	2,25	/	0,34	/	137

ELECTRICAL PARAMETERS OF COIL

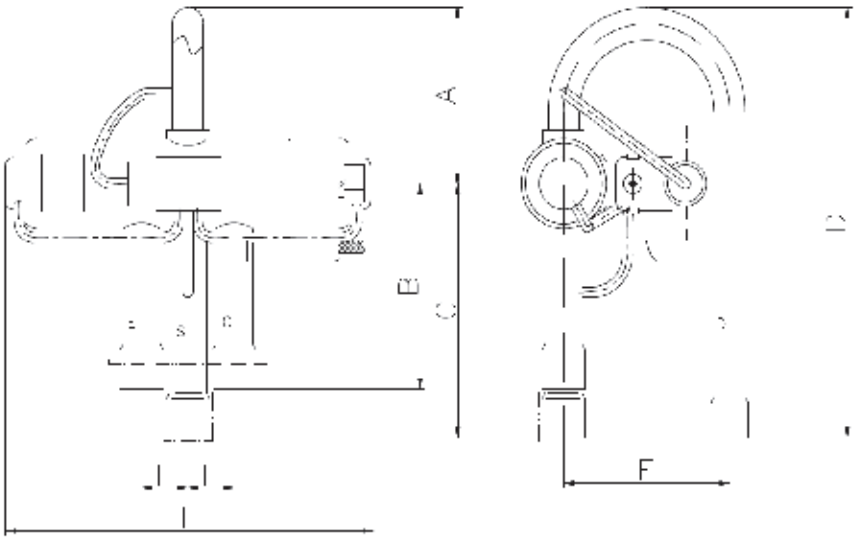
Type	Classification:	Rated Voltage V	Frequency Hz	Power W
Coils with Lead Wires	SHF-4-10W	AC220V~240V~AC208V~230V~AC220V~AC115V 120V~AC100V~AC24V	50/60	4.5/3.5
		AC200V	50/60	6/5
		DC35V	/	7
	SHF-4-10L	AC220V~240V~AC200V~AC100V~AC110V~120V AC24V~AC265V~277V	50/60	4.5/3.5
Coil with Spade Connection	SHF-4-10EA	AC220V~240V~AC220V~AC115V~120V~AC100V 110V~AC24V~AC265V~277V~AC200V	50/60	6/5
	SHF-4-10FA	AC220V~240V~AC220V~AC115V~120V~AC100V 110V~AC24V	50/60	6/5

SANHUA RANCO SERIES
Four Way Reversing Valve

ELECTRICAL PARAMETERS OF COIL

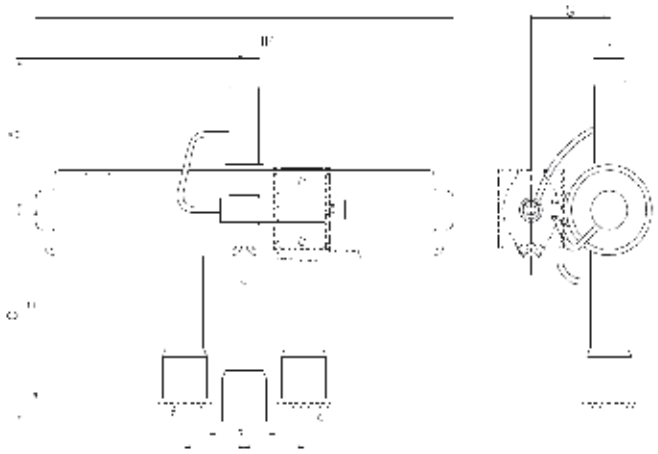
Type	Classification:	Rated Voltage V	Frequency Hz	Power W
Coils with Lead Wires	LDL-41	AC208V~240V	50/60	5/4
	LDL-31	AC120V	50/60	5/4
	LDL-11	AC24V	50/60	5/4
	LDL-51	AC277V	50/60	5/4
Coil with Spade Connection	LDK-31	AC120V	50/60	5/4
	LDK-11	AC24V	50/60	5/4
	LDK-41	AC208V~240V	50/60	5/4
	LDK-51	AC277V	50/60	5/4

DIMENSIONS

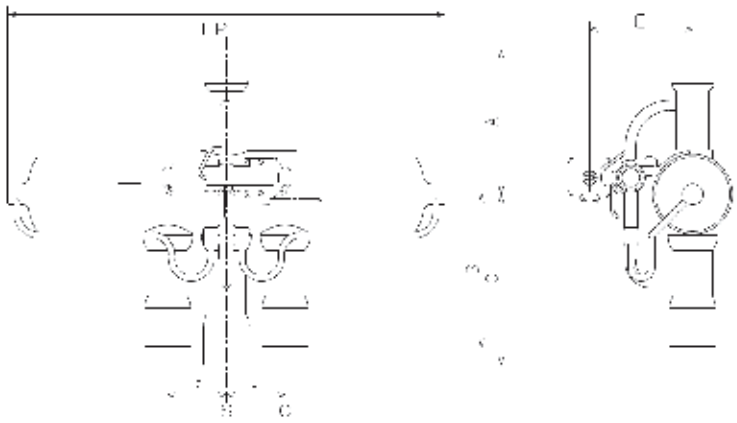


Model	Dimensions mm							Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	D Tube	E/S/C Tube
C01C00S	101	40,5	50	62	102,5	42	12	8.1/8.5	9.6/10
C02C00S	125	52	59	70	120	52,5	16	9.7/9.5	12.75/9.5
N01C00G	104Max	42,5	50	62	104,5	42	12	8.1/8.5	9.64/9.7
N02C00S	128Max	52	59	71,4	120	52,5	16	9.65/9.7	12.8/9.7
V0-40605X-1XX	103Max	40,5	50	62	102,5	42	12	8.12/8.5	9.64/9.7
V1-40606X-2XX	128Max	52	59	71,4	120	52,5	16	9.67/9.7	9.64/9.7
V2-40806X-2XX	128Max	52	59	71,4	120	52,5	16	9.67/9.7	12.84/9.7

SANHUA RANCO SERIES
Four Way Reversing Valve



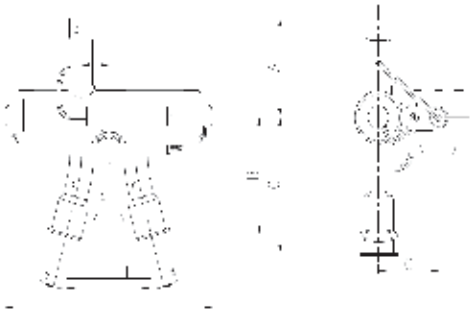
Model	Dimensions mm						Connection Size/Connection Depth mm	
	L	A	B	C	F	G	D Tube	E/S/C Tube
V1-40606X-1XX	128Max	49,3	59	71,4	16	37MAX	9.67/9.7	6.64/9.7
V2-40806X-1XX	128Max	49,3	59	71,4	16	37MAX	9.67/9.7	12.84/9.7
V6-414080-1XX	199Max	66,7	82,6	95	28,5	41MAX	12.83/12.7	22.36/22.4
V10-418100-1XX	210.8Max	81,8	85,9	98,6	33,5	46MAX	16.03/12.7	28.78/25.4
C05C00S	200	68	85	95	28,5	37,4	12.8/13	19.15/19
C10C00S	217Max	82	86	99	33,5	42,7	19.2/19	22.4/22
C15C00S	240Max	91	96	109	37	42,7	22.4/22	28.8/25.4
N05C00S	203Max	66,7	82,6	95,3	28,6	38	12.8/13	19.2/19
N10C00S	214Max	82	86	99	33	42,7	19.2/19	22.4/22
N15C00G	240Max	91	96	109	37	42,7	22.4/22	28.8/25.4



SANHUA RANCO SERIES
Four Way Reversing Valve

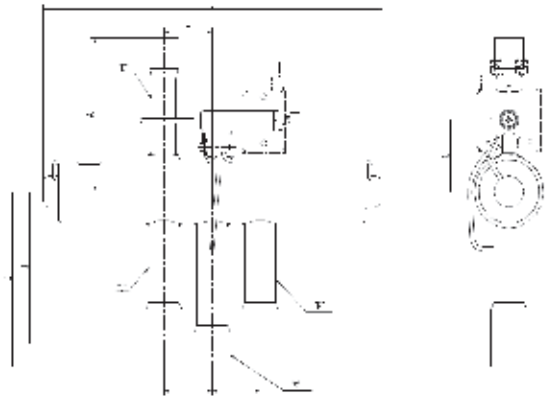
Model	Dimensions mm						Connection Size/Connection Depth mm	
	L	A	B	C	F	G	D Tube	E/S/C Tube
N20C00G	337Max	111	117	131	45	78,8	25.6/25.4	32/30
N30C00G	337Max	111	117	131	45	78,8	32/25	38.3/30
VH1320A	337Max	111	117	131	45	78,8	25.6/25.4	32/30
VH1322A	337Max	111	117	131	45	78,8	28.8/25.4	35.2/30
VH15120	337Max	111	117	131	45	78,8	32/25	38.3/30

Model	Dimensions mm							Connection Size/Connection Depth mm	
	L	A	B	C	F	G	α	D Tube	E/S/C Tube
V2-410060-3XX	128Max	49,3	57,4	71,4	23,6	37Max	15	9.67/9.7	16.03/16
C03C00S	125	49,3	60,5	71,6	25	33,8	15	12.8/10	16/16

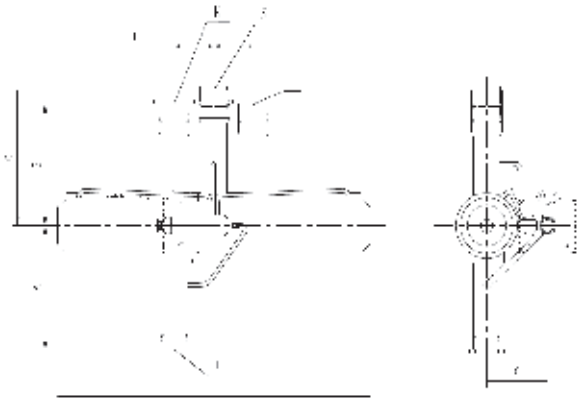


Model	Dimensions mm								Connection Size/Connection Depth mm	
	L	A	B	C	F	G	H	α	D Tube	E/S/C Tube
V3-410080-7XX	128Max	49,3	60,5	71,6	24,1	37Max	16	15	12.84/9.7	16.03/15.8
V3-412080-8XX	128Max	49,3	82,6	87,6	32,5	37Max	16	20	12.84/9.7	19.18/19.1
N03C00S	128Max	49,3	60,5	71,6	24,1	34	16	15	12.8/10	16/16

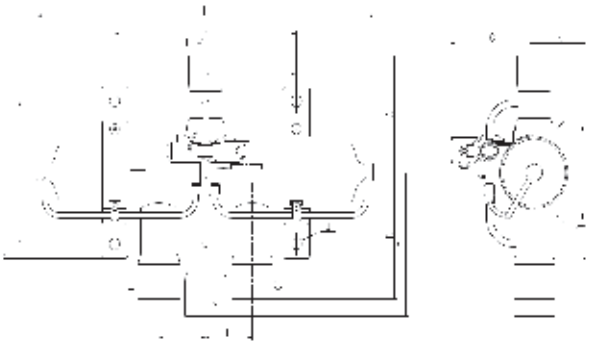
SANHUA RANCO SERIES
Four Way Reversing Valve



Model	Dimensions mm							Connection Size/Connection Depth mm	
	L	A	B	C	F	G	H	D Tube	E/S/C Tube
V6-4140K0-2XX	203Max	85,9	82,6	95,3	28,5	41Max	28,5	15.82/19.05	22.36/22.4

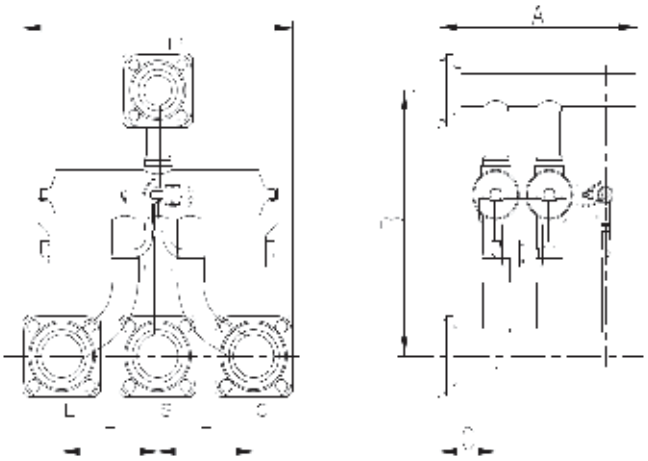


Model	Dimensions mm						Connection Size/Connection Depth mm	
	L	A	B	C	F	G	D Tube	E/S/C Tube
V12-4220T0-2XX	268Max	96,8	149,9	175,3	41,4	46Max	28,58	35.13/25.4



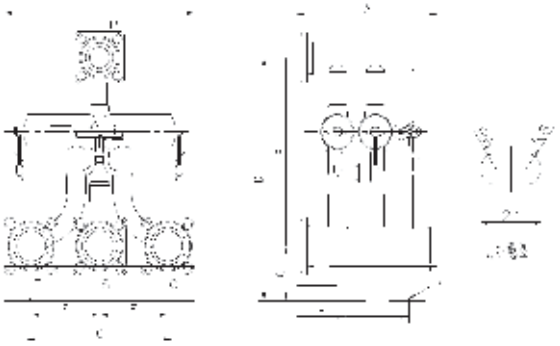
SANHUA RANCO SERIES
Four Way Reversing Valve

Model	Dimensions mm												Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	K	D Tube	E/S/C Tube
N20C10G	337Max	111	117	131	188	94	45	108	120	145	Φ13	57	25.6/25.4	32/30
N20C11G	337Max	111	117	131	188	94	45	108	120	145	Φ13	57	28.8/25.4	35.2/30
N30C10G	337Max	111	117	131	188	94	45	108	120	145	Φ13	57	32/25	38.3/30
N40C10G	422Max	135	148	168	226	113	58	112	166	200	Φ13	63	38.1/33	45/40
N40C11G	422Max	135	148	168	226	113	58	112	166	200	Φ13	63	38.1/33	41.5/40
N50C10G	422Max	135	148	198	226	113	58	112	166	200	Φ13	63	38.1/33	54.2/40
N60C10G	500Max	135	148	198	262	131	71,5	112	166	200	Φ13	63	41.5/33	67/40
VH10120	337Max	111	117	131	188	94	45	108	120	145	Φ13	57	25.6/25.4	32/30
VH10122	337Max	111	117	131	188	94	45	108	120	145	Φ13	57	28.8/25.4	35.2/30
VH15122	337Max	111	117	131	188	94	45	108	120	145	Φ13	57	32/25	38.3/30
VH20321	422Max	135	148	168	226	113	58	112	166	200	Φ13	63	38.1/33	45/40
VH20322	422Max	135	148	168	226	113	58	112	166	200	Φ13	63	41.5/33	41.5/40
VH90120	422Max	135	148	198	226	113	58	112	166	200	Φ13	63	38.1/33	54.2/40
VH90121	422Max	135	148	198	226	113	58	112	166	200	Φ13	63	44.7/33	54.2/40
VH91120	500Max	135	148	198	262	131	71,5	112	166	200	Φ13	63	41.5/33	67/40

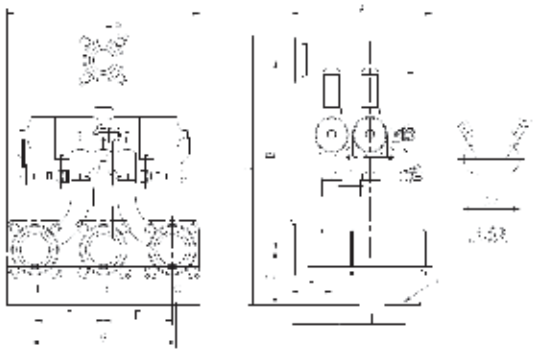


Model	Dimensions mm				Connection Size/Connection Depth mm	
	L	A	B	C	D Tube	E/S/C Tube
VH32082	480	350	445	100	FLANG E RBK50A	FLANG E RBK65A

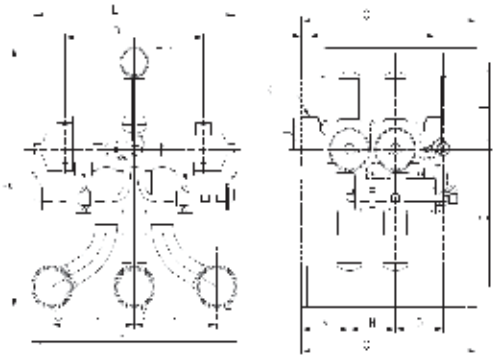
SANHUA RANCO SERIES
Four Way Reversing Valve



Model	Dimensions mm											Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	D Tube	E/S/C Tube
VH32084	480	350	445	130	635	100	171	360	120	160	12×24	FLANG E RBK50A	FLANG E RBK65A

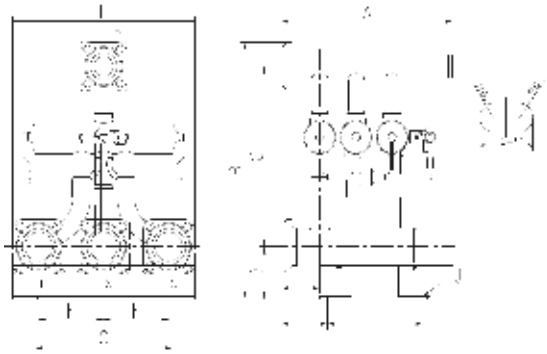


Model	Dimensions mm											Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	D Tube	E/S/C Tube
VH32085	480	350	445	130	635	100	171	360	120	160	12×24	FLANG E RBK50A	FLANG E RBK65A

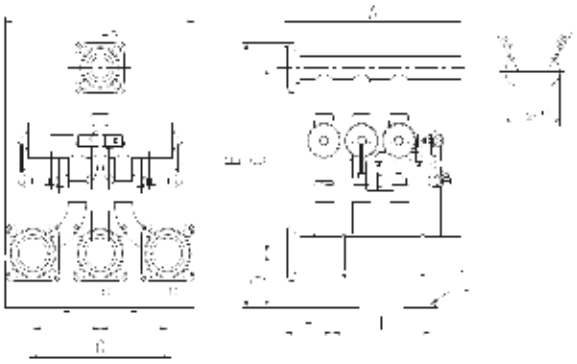


SANHUA RANCO SERIES
Four Way Reversing Valve

Model	Dimensions mm															Connection Size/ Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	K	M	N	O	D Tube	E/S/C Tube
VH32087a	422Max	514	428	365	295	172	171	270	261	17	62	13	100	95	100	54.2/40	79.38/40
VH32108a	422Max	521	428	365	295	172	171	270	261	17	62	13	100	95	100	66.68/40	79.38/40

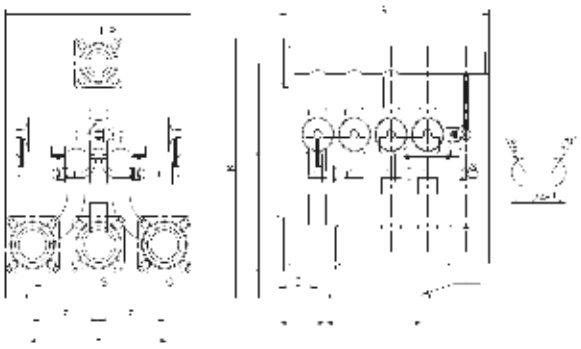


Model	Dimensions mm											Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	D Tube	E/S/C Tube
VH32122	480	450	635	445	130	100	171	360	120	250	12×24	FLANG E RBK50A	FLANG E RBK65A

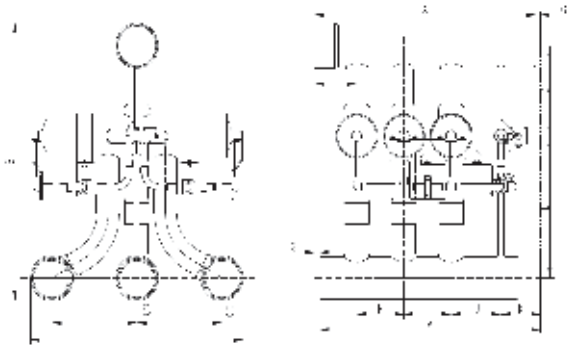


Model	Dimensions mm											Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	D Tube	E/S/C Tube
VH32123	480	450	635	445	130	100	171	360	120	250	12×24	FLANG E RBK50A	FLANG E RBK65A

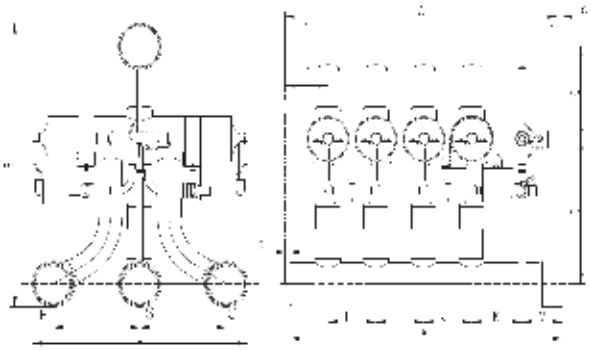
SANHUA RANCO SERIES
Four Way Reversing Valve



Model	Dimensions mm											Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	D Tube	E/S/C Tube
VH32163	480	545	635	445	130	360	171	100	120	250	12×24	FLANG E RBK50A	FLANG E RBK65A

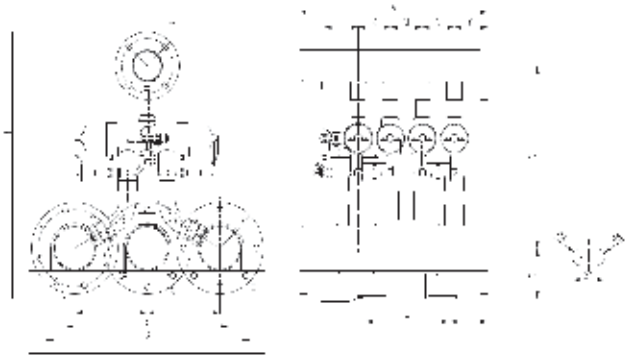


Model	Dimensions mm												Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	K	D Tube	E/S/C Tube
VH32126B	428	445	528	172	270	85	171	10	95	95	100	80	79.38/40	79.38/40

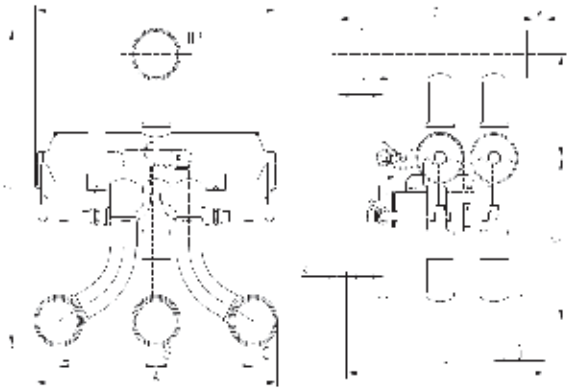


SANHUA RANCO SERIES
Four Way Reversing Valve

Model	Dimensions mm													Connection Size/ Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	K	M	D Tube	E/S/C Tube
VH32166B	428	540	528	172	270	85	171	10	95	95	95	100	80	79.38/40	79.38/40



Model	Dimensions mm																Connection Size/ Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	K	M	N	O	P	D Tube	E/S/C Tube
VH32205C	700	560	748	511	141,5	480	215	600	250	115	100	95	95	95	100	12x24	81 (FLANG)	119 (FLANG)
VH32245C	700	560	775	515	141,5	480	226,8	600	250	115	100	95	95	95	100	12x24	106,3 (FLANG)	119 (FLANG)



Model	Dimensions mm													Connection Size/ Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	K	M	D Tube	E/S/C Tube
VH32086B	422 Max	428	528	345	350	172	171	270	80	65	90	15	20	79.38/40	79.38/40

SANHUA *YOUR ROAD MAP TO THE ECO-DESIGN DIRECTIVE**

*KEEPS YOU ONE STEP AHEAD OF THE COMING **EFFICIENCY** AND **ENVIRONMENTAL** EUROPEAN **CHALLENGES***

EEV Technology + Electronic Controls

- Improves HVACo-R system efficiency up to **20%**
- DPFo-VPF series from 2kW to 1400kW
  *75kW and 1400kW available in Quarter 4
- Advanced MSS (Minimum Stable Superheat) control logic

2 kW

1400kW

4 Way Reversing Valve

- Improves efficiency by **5%**
- SHF series 1kW to 420 kW
- Widest range in the market with Single Body Design

1 kW

420kW

Inverter Controller for Large System

- Improves system efficiency up to **30%**
- **Active Frequency** Conversion Technology
- Wide Range of voltage application

MCHE

- Improves efficiency by **30%**
- Refrigerant Charge Reduction by **30%** Environmental Friendly
- MCHE is lighter in weight, smaller in volume Compact Design

*DIRECTIVE 2012/27/EU

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SANHUA

CHILLING ***IDEAS*** **WORLDWIDE**

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YEARLY SANHUA SUPPLIES OVER 40 MILLION THERMOSTATIC AND ELECTRONIC EXPANSION VALVES TO THE HVAC & AUTOMOTIVE INDUSTRIES WORLDWIDE

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- Improves HVAC&R system efficiency up to **20%**
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  *75kW and 1400kW available in Quarter 4
- Advanced MSS (Minimum Stable Superheat) control logic

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Electronic Expansion Valve

T/S series electronic expansion valves are designed for use in air conditioning and refrigeration systems or in heat pumps. The valve controls the automatic adjustment of refrigerant flow rate and makes the system work under optimized conditions for the purpose of fast cooling or heating, precise temperature control and energy saving. The valve can also be used e.g. for suction line pressure controls. These valves provide bidirectional operation to control the refrigerant flow rate in heating or cooling mode.

FEATURES

- APPLICABLE FOR OIL-FREE SYSTEM (T SERIES)
- SMALLER INSTALLATION SPACE: LOW HEIGHT, SMALL VOLUME, LIGHT WEIGHT
- OPTIMIZED FLOW PATH DESIGN FOR NOISE REDUCTION
- FAST OPERATION, ENERGY SAVING
- APPLICABLE FOR REVERSIBLE SYSTEMS LIKE HEAT PUMPS: BIDIRECTIONAL FLOW

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Cooling capacity: 3,5 to 105 kW (R22 nominal capacity)
- 500 steps (full stroke); 32 ± 20 opening steps
- Medium temperature TS min./max.: -30°C /+70°C (duty cycle rate below 50%)
- Ambient temperature min./max.: -30°C / +60°C (duty cycle rate below 50%)
- Relative humidity: : 0 to 95% RH
- Installation position: :
  - Coil installed in the upwards position, valve rotor central axis within ±15° versus vertical axis
  - Inlet connection preferably sidewise, outlet preferably downwards
- Certifications: UL/CSA and declaration according to LVD or PED

DPF-T/S SERIES
Electronic Expansion Valve

ELECTRICAL PARAMETERS

- Rated voltage: 12V DC(± 10%), rectangular wave
- Actuating mode: 4-phase 8-step permanent magnet stepping motor of direct-acting type
- Excitation mode: 1 ~ 2 phase excitation, monopole actuation
- Excitation rate:
  - Seat Ø 1,3 to 3,2 mm: 30 to 90pps
  - Seat Ø 4,0 to 6,5 mm: 30 to 40pps
- Activation of self-holding mechanism: Maintain excitation in stop position min. 0,1~1,0 sec.
- Min. motion time from completely open to completely closed:
  - Seat Ø 1,3 to 3,2 mm: 6s @ 90pps
  - Seat Ø 4,0 to 6,5 mm: 13s @ 40pps
- Coil current:
  - Seat Ø 1,3 to 3,2 mm: 260mA/phase (20°C)
  - Seat Ø 4,0 to 6,5 mm: 375mA/phase (20°C)
- Coil resistance:
  - Seat Ø 1,3 to 3,2 mm: 46 ± 3.7 Ω/phase (20°C)
  - Seat Ø 4,0 to 6,5 mm: 32 ± 3.2 Ω/phase (20°C)
- Insulation class of coil: E
- Protection class: IP 66

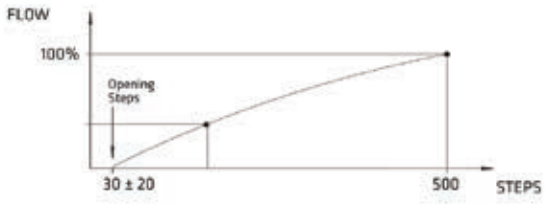
GENERAL CHARACTERISTICS

Valve Model	Part Number [1]	Seat ϕ (mm)	Kv (m^3/h)	Nominal Cooling Capacity [2] [kW]					MOP Max. Oper. Press. [MPa]	MOPD Direct [MPa]	MOPD Rev. (MPa)
				R22	R134a	R407C[3]	R404A R507A	R410A			
DPF(T01)1.3C-07	DPF-09001	1,3	0,05	3,5	2,7	3,5	2,5	4,2	4,5	3,5	≥2.1
DPF(T01)1.65C-05	DPF-09002	1,65	0,08	5,3	4,1	5,3	3,7	6,36			
DPF(T01)1.8C-08	DPF-09003	1,8	0,1	7	5,4	7	4,9	8,4			
DPF(T01)2.0C-03	DPF-09004	2	0,16	8,8	6,7	8,75	6,1	10,5			
DPF(T01)2.2C-01	DPF-09005	2,2	0,2	11	8,1	10,5	7,4	12,6			
DPF(T01)2.4C-01	DPF-09006	2,4	0,23	18	13,5	17,5	12,3	21			
DPF(TS1)3.0C-01	DPF-09007	3	0,39	21	16,2	21	14,7	25,2			≥1.47
DPF(TS1)3.2C-01	DPF-09008	3,2	0,43	28	21,6	28	19,6	33,6			
DPF(S03)4.0C-01	DPF-09010	4	0,5	42	32,3	42	29,4	50,4			≥0.7
DPF(S03)4.5C-01	DPF-09011	4,5	0,7	53	40,4	52,5	36,8	63			
DPF(S03)5.5C-01	DPF-09012	5,5	0,9	70	53,9	70	49,0	84			
DPF(S03)6.5C-02	DPF-09013	6,5	1,1	105	80,9	105	73,5	126		3,0	

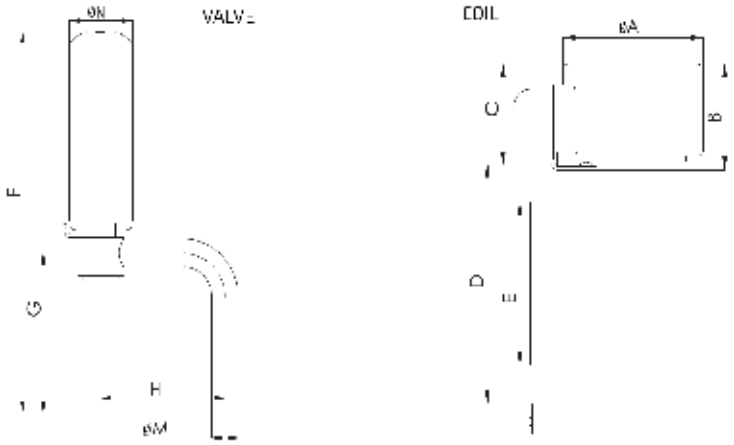
Note: 1) Extent of delivery without coil
2) Nominal working conditions: Condensing Temperature 38°C; Evaporating Temperature 5°C; Sub-cooling 0K; Superheat 0K
3) R407C data based on dew point conditions

DPF-T/S SERIES
Electronic Expansion Valve

FLOW CHARACTERISTIC



DIMENSIONS



Valve Model	Coil Series	Valve Dimensions [mm]				
		F	G	H	Ød	ØN
DPF(T01)1.3C-07 to DPF(T01)2.4C-01	PQ-M10	78	36	30	6,35	17,3
DPF(TS1)3.0C-01 to DPF(TS1)3.2C-01		82	40	30	7,94	17,3
DPF(S03)4.0C-01 to DPF(S03)6.5C-02	PQ-M03	148	64,7	63,4	15,88	35,3

Valve Model	Coil Model	Coil Dimensions [mm]					Coil Part Number
		ØA	B	C	D	E	
DPF(T01)1.3C-07 to DPF(TS1)3.2C-01	PQ-M10 012-000001	38,5	26,4	25,6	700	600	DPF-58001
DPF(S03)4.0C-01 to DPF(S03)6.5C-02	PQ-M03 012-000001	67,5	42,4	33	700	600	DPF-58002

O SERIES

Electronic Expansion Valve

O series electronic expansion valve are mainly used in air conditioning systems variable refrigerant flow to realize automatic adjustment of refrigerant flow rate and make the air conditioning system work under the best working condition for the purpose of fast cooling, precise temperature control and power saving. These valves can also be used for other controls. These valves are reversible which can automatically control the flow of refrigerant in either heating or cooling mode.

FEATURES

- HIGH PRECISION: FULL OPEN PULSE 2000
- LONG LIFE
- LOW NOISE
- ENERGY SAVING

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R134A, R404A, R407C, R410A etc.
- Capacity: 1USRT~13.3USRT (R22 Nominal Capacity)
- Applicable medium temperature: -30°C ~ +70°C (electrified rate below 50%)
- Applicable ambient temperature: -30°C ~ +60°C (electrified rate below 50%)
- Relative humidity: below 95% RH
- Installation mode: Coil upwards, central axis of valve rotor within ±15°vertical to horizontal surface

ELECTRICAL PARAMETERS

- Rated voltage: DC12V (±10%), rectangular wave;
- Actuating mode: 4-phase 4-step permanent magnet stepping motor of speed reduction type;
- Excitation mode: 2-2 phase excitation, monopole actuation;
- Excitation rate: 100PPS~250PPS (opening excitation speed ≤ closing excitation speed, the ending excitation mode maintains more than 0.1S);
- Current of coil:80mA/phase(20°C)
- Resistance of coil:150±15Ω/phase(20°C)
- Insulation grade of coil: E

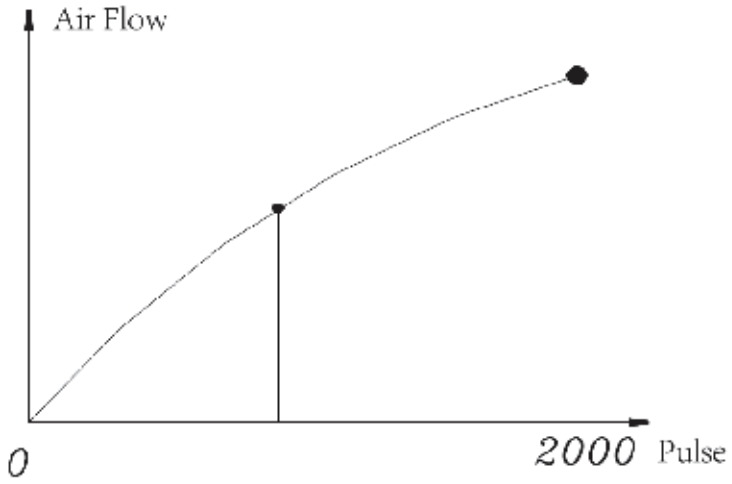
O SERIES
Electronic Expansion Valve

TECHNICAL PARAMETERS

Model	Port mm	R22 Nominal Capacity		Max. Operation Pressure Difference MPa			Internal Leakage ml/min	Reverse Open Valve Pressure Difference MPa		
		kW	US.R.T	R22	R407C	R410A		R22	R407C	R410A
DPF(O)1.3	1.3	5.28	1.5	2.26	2.48	3.43	≤600	3.0	3.3	4.2
DPF(O)2.0	2.0	8.8	2.5							
DPF(O)2.4	2.4	10.56	3.0							
DPF(O)3.2	3.2	14.1	4.0				≤1000			
DPF(O)3.2	3.2	17.6	5.0							
DPF(O)4.0	4.0	21.2	6.0							
DPF(O)5.2	5.2	28.1	8.0							
DPF(O)6.4	6.4	35.2	10.0							
DPF(O)8.0	8.0	47.6	13.3							

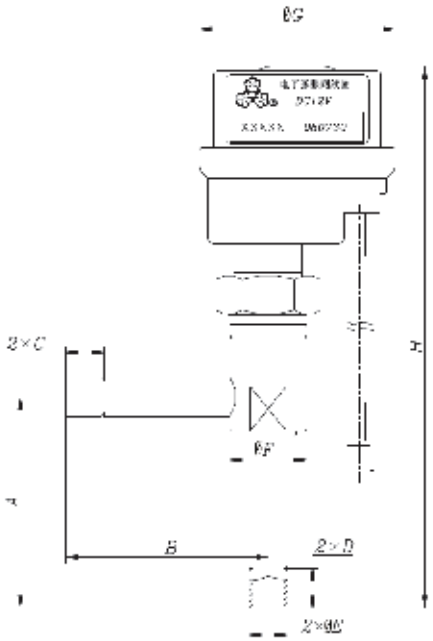
Note:
1) Nominal working conditions: Condensing temperature: 38°C, vaporing temperature 5°C,Supercooling temperature 0°C,superheat temperature 0°C
2) When using other refrigerants, it is need to use a factor to adjust nominal capacity of R22.(R134A --0.75, R407C--1, R410A--1.2)

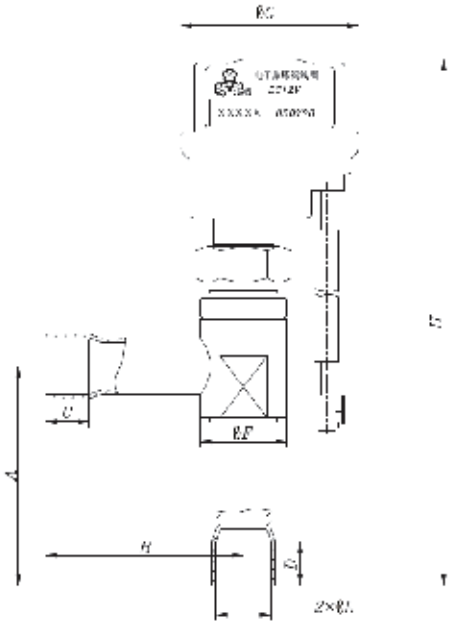
STANDARD FLOW CURVE
Standard Flow Curve



O SERIES
Electronic Expansion Valve

DIMENSIONS





Model	Dimensions (mm)								Note
	A	B	C	D	E	F	G	H	
DPF(O)1.3	43	42.5	8	8	7.94	16	41.2	110	Fig.1
DPF(O)2.0	43	42.5	8	8	7.94	16	41.2	110	
DPF(O)2.4	43	42.5	8	8	7.94	16	41.2	110	
DPF(O)3.2	43	42.5	8	8	7.94	16	41.2	110	
DPF(O)3.2	50	46	10	10	12.8	20	41.2	119	Fig.2
DPF(O)4.0	50	46	10	10	12.8	20	41.2	119	
DPF(O)5.2	50	46	10	10	12.8	20	41.2	119	
DPF(O)6.4	50	46	10	10	12.8	20	41.2	119	
DPF(O)8.0	50	46	10	10	12.8	20	41.2	119	

R SERIES

Electronic Expansion Valve

R series electronic expansion valve are mainly used in air conditioning systems with variable refrigerant flow to realize automatic adjustment of refrigerant flow rate and make the air conditioning system work under the best working condition for the purpose of fast cooling, precise temperature control and power saving. These valves can also be used for other controls. These valves are reversible which can automatically control the flow of refrigerant in either heating or cooling mode.

FEATURES

- APPLICABLE FOR OIL-FREE COOLING SYSTEM
- SMALLER INSTALLATION SPACE: LOW HEIGHT, SMALL VOLUME AND LIGHT WEIGHT
- WIDER APPLICABILITY FOR ELIMINATING SYSTEM REFRIGERANT NOISE: WITH OPTIMIZED FLOW PATH DESIGN
- OUTER ENCAPSULATION COIL STRUCTURE: BETTER CORROSION RESISTANCE

GENERAL SPECIFICATIONS

- Applicable refrigerant: R744(CO2)
- Applicable medium temperature: -30°C ~ 80°C (electrified rate below 40%)
- Applicable ambient temperature: -30°C ~ 60°C (electrified rate below 40%)
- Relative humidity: below 95% RH
- Installation mode: Coil upwards, central axis of valve rotor within ±15°vertical to horizontal surface.
- Direction of Medium: one direction from horizontal tube to Vertical tube

ELECTRICAL PARAMETERS

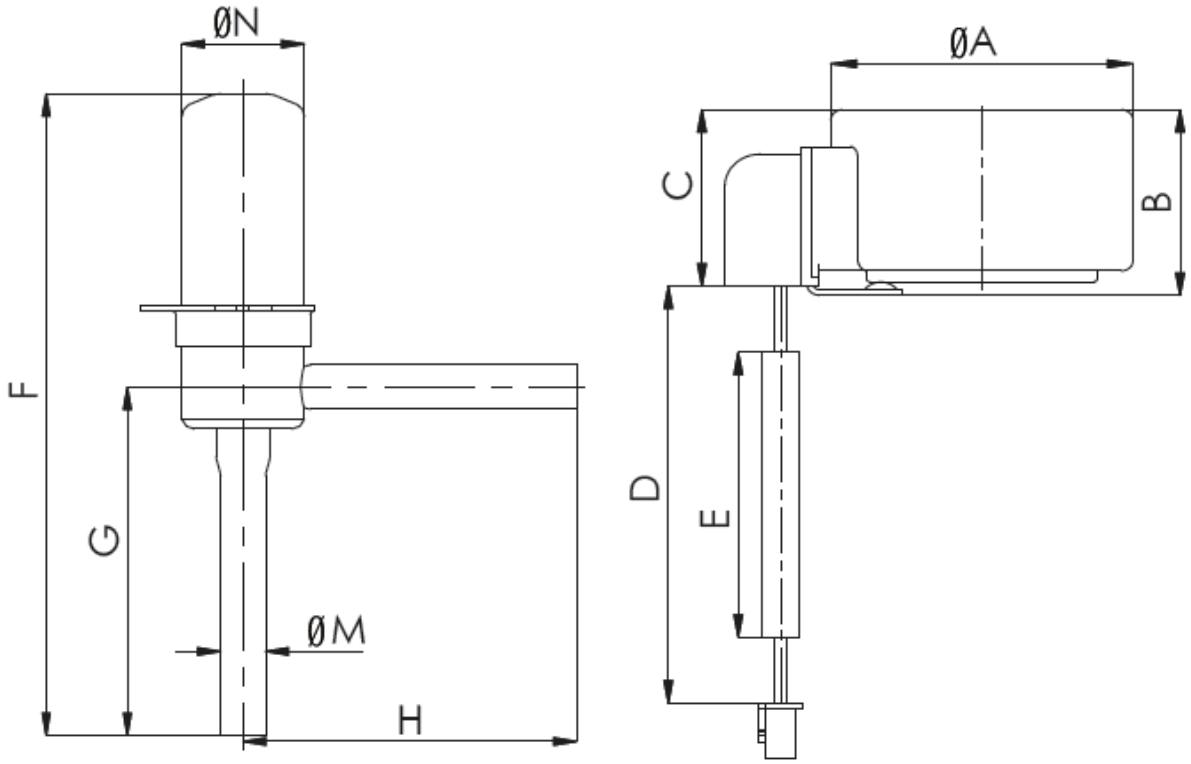
- Rated voltage: DC12V (±10%), rectangular wave
- Actuating mode: 4-phase 8-step permanent magnet stepping motor of direct-operated type
- Excitation mode: 1-2 phase excitation, monopole actuation
- Excitation rate:30~90PPS (the ending excitation mode maintains 0.1~1.0s)
- Current of coil:260mA/phase(20°C)
- Resistance of coil:46±3.7Ω/phase(20°C)
- Insulation grade of coil: E

R SERIES
Electronic Expansion Valve

TECHNICAL PARAMETERS

Model	Port mm	R744 Nominal Capacity		Full Open Pulse	Opening Pulse	Max. Operation Pressure Difference MPa	Internal Leakage ml/min	Max. Working Pressure MPa
		kW	US.R.T					
DPF(O)1.3	1.3	5.28	1.5	2.26	2.48	3.43	≤600	3.0

DIMENSIONS



Port mm	Code of the Coil Series	Dimensions (mm)									
		A	B	C	D	E	F	G	H	M	N
1.5	M10	38.5	26.4	25.6	700	600	92	50	47	6.35	17.3

SANHUA

Micro-Channel Heat Exchangers MCHE

BENEFITS

No galvanic corrosion (100% aluminum)

Refrigerant charge reduction – up to 70%

Long life alloy for very aggressive environments

Helps manufacturers to meet high SEER (Seasonal Efficiency Ratio) and HSPF (Heating Seasonal Performance Factor) requirements.

MCHE is more than 30% higher HT efficiency

Up to 30% lower airside dP

MCHE is lighter in weight, smaller in volume: up to 50%

100% Aluminum, easy to cycle

Minimum performances decrease with lifetime (100% brazed)

Special tube bending structure for A-coil

Special desing for good refrigerant distribution

Special fin desing for good water drainage.

SANHUA MCHE

Evaporator

Over 100,000 coils on the market since 2011

The Sanhua MCHE Evaporator

- Performs in both heating, cooling and as a dehumidifier.
- Operates in both condensing and evaporating mode.

Applications

- Commercial cooling and heating.
- Residential air conditioning and heating.
- Commercial retail refrigeration.

SANHUA MCHE

Heat Pump Coil

The Sanhua MCHE Heat Pump Coil

- Designed to perform in both cooling and heating functions.

Applications

- Commercial heating and cooling applications (Rooftop and chiller units).
- Residential air conditioning units.
- Heating Heat pump units.

SANHUA MCHE

Condenser

Over 1,3 million coils on the market since 2008

The Sanhua MCHE Condenser

- Developed with a superior design and performance in cooling mode.

Applications

- Commercial cooling application for chillers units .
- Residential air conditioning for outdoor units.
- Refrigeration application (transport and retail refrigeration).

SANHUA

COMMERCIAL AC
Key benefits

- Raise product efficiency or reduce footprint
- Save money on raw material, transport, storage
- Improve environmental performance and meet regulations
- Attract customers with lean, MCHE-based products

TRANSPORT REFRIGERATION
Key benefits

- Create high-capacity products for transport
- Attract customers with reduced fuel costs and more cargo space
- Improve environmental performance and meet regulations

PRECISION COOLING
Key benefits

- Precise temperature control to safeguard sensitive equipment
- Compact, space-saving units
- Low energy consumption
- Meet environmental regulations

COLD ROOMS
Key benefits

- Hygiene – very easy to clean
- Build compact space saving units
- Reliable temperature control
- Meet environmental regulations
- Low energy consumption

RESIDENTIAL AC and Heating Heat Pump
Key benefits

- Higher system efficiency
- Better environmental performance
- Lower noise levels

APPLICABILITY

Refrigerant:
R410A, R134a, R22, R407C, R404A

Design pressure:
4.5MPa

Ambient air temperature:
-30°C to 72°C (-22°F to 161.6°F)

Expected refrigerant temperature:
-30°C to 121°C (-22°F to 250°F)

Storage temperature:
-30°C to 121°C (-22°F to 250°F)

ASSEMBLY

SHIPPING PALLET

FIN PROCESS

FIN MACHINE

HELIUM DETECTOR

FURNACES

Manufacturing *capabilities*

SANHUA

FOR DETAILED INFORMATION PLEASE CONTACT:

EMEA MCHE MANAGER

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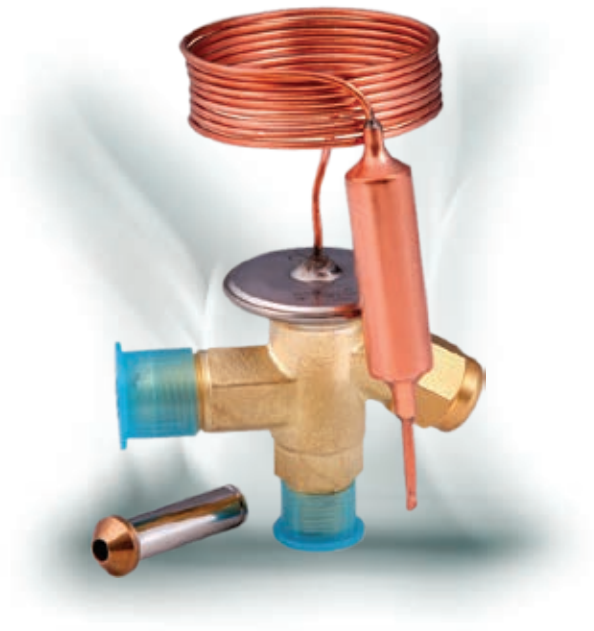
Phone: +33 478 083 457
Mobile: +33 620 586 838

Thermostatic Expansion Valve

RFKA series thermostatic expansion valves are used to adjust mass flow of refrigerant into the evaporator while controlling the refrigerant´s superheat at the outlet of the evaporator. They can be used for various refrigerants under all working conditions. Typical applications are refrigeration systems like freezers, ice makers, dehumidifiers as well as air conditioners and heat pumps at various evaporation temperature ranges.



FEATURES

- EXCHANGEABLE VALVE ORIFICE, EASY TO STOCK HOLDING, CONVENIENT FOR CAPACITY MATCH AND REPAIR
- THERMAL BULB UTILIZES CROSS CHARGE TECHNOLOGY, PROVIDING CONSISTENT SUPERHEAT DEGREE OVER THE WHOLE EVAPORATION TEMPERATURE RANGE
- VALVES WITH MOP FUNCTION CAN BE PROVIDED TO ASSURE RELIABLE COMPRESSOR OPERATION
- APPLICABLE IN A WIDE EVAPORATION TEMPERATURE RANGE
- RELIABLE AND CONSISTENT PERFORMANCE OF SUPERHEAT CONTROL

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R507A ...
- Medium temperature TS min./max.: -40°C/+70°C
- Max. operating pressure PS: 2,1 ... 3,5 MPa (21 ... 35 bar)
- Installation position:
  - Preferably valve head upwards
  - Flow direction from inlet A to outlet B
- Certifications: UL/CSA and PED declaration

TECHNICAL PARAMETERS

- RFKA series angle shape valve
- Inlet 3/8" flare connection
- Capillary tube length 1,5m
- Equalization port:
  - RFKA flare/flare type with ¼" flare connection;
  - RFKA flare/solder type with 6mm solder connection

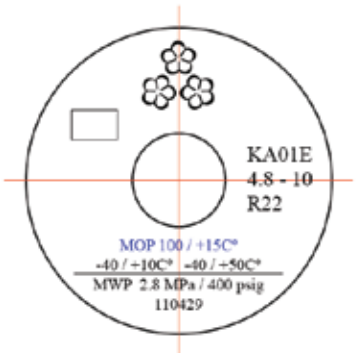
RFKA SERIES
Thermostatic Expansion Valve

MODEL DESIGNATION LEGEND

Position Number	Model Designation Legend	
1	**Product Code**	**Product Series**
	RFKA	Thermostatic expansion valve
2	**Refrigerant**	**Description**
	01	R22
	02	R407C
	03	R404A / R507A
	04	R134a
3	**Pressure Equalization**	**Description**
	E	External pressure equalization
	(Omitted)	Internal pressure equalization
4	**Miscellaneous**	**Description**
	xxxx	Digits for additional information

MODEL DESIGNATION EXAMPLE

Position Number				According to Model Designation Legend
1	2	3	4	
RFKA	01	E	xxxx	Thermostatic expansion valve
RFKA	**01**	E	xxxx	Refrigerant R22
RFKA	01	**E**	xxxx	Connection for external pressure equalization
RFKA	01	E	**xxxx**	Digits for additional information



RFKA SERIES
Thermostatic Expansion Valve

TECHNICAL PARAMETERS

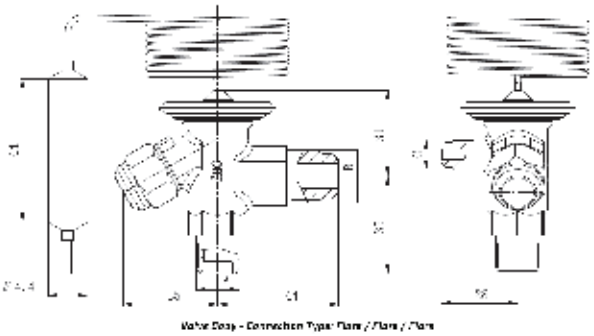
Ref. PS [MPa]	Model Valve Body	Part Number[1]	Connection type	Temp. Range[2]	MOP[3]	Inlet ØA	Outlet[4] ØB			Ext. ØC	
			In / Out / Ext. Pressure Equal.	[°C]	[°C]	flare	Flare	Solder		Flare	Solder
						[inch]	[inch]	[mm]	[inch]	[inch]	
R22 2,8	RFKA01-4.8-22	RFK-24001	flare / flare	+10 to -40	-	3/8	1/2	-	-	-	-
	RFKA01E-4.8-13	RFK-24002	flare / flare / flare				1/2	-	-	1/4	-
	RFKA01-4.8-26	RFK-24003	flare / solder				-	12	-	-	-
	RFKA01E-4.8-06	RFK-24004	flare / solder / solder				-	12	-	-	6
	RFKA01-4.8-07	RFK-24005	flare / solder				-	-	1/2	-	-
	RFKA01E-4.8-08	RFK-24006	flare / solder / solder				-	-	1/2	-	1/4
R407C 2,8	RFKA02-5.2-24	RFK-24007	flare / flare	+10 to -40	-	3/8	1/2	-	-	-	-
	RFKA02E-5.2-20	RFK-24008	flare / flare / flare				1/2	-	-	1/4	-
	RFKA02-5.2-27	RFK-24009	flare / solder				-	12	-	-	-
	RFKA02E-5.2-28	RFK-24010	flare / solder / solder				-	12	-	-	6
	RFKA02-5.2-32	RFK-24011	flare / solder				-	-	1/2	-	-
	RFKA02E-5.2-18	RFK-24012	flare / solder / solder				-	-	1/2	-	1/4
R404A / R507A 3,5	RFKA03-3.4-21	RFK-24013	flare / flare	+10 to -40	-	3/8	1/2	-	-	-	-
	RFKA03E-3.4-15	RFK-24014	flare / flare / flare				1/2	-	-	1/4	-
	RFKA03-3.4-03	RFK-24015	flare / solder				-	12	-	-	-
	RFKA03E-3.4-02	RFK-24016	flare / solder / solder				-	12	-	-	6
	RFKA03-3.4--09	RFK-24017	flare / solder				-	-	1/2	-	-
	RFKA03E-3.4-10	RFK-24018	flare / solder / solder				-	-	1/2	-	1/4
R134a 2,1	RFKA04-4.0-23	RFK-24019	flare / flare	+10 to -40	-	3/8	1/2	-	-	-	-
	RFKA04E-4.0-19	RFK-24020	flare / flare / flare				1/2	-	-	1/4	-
	RFKA04-4.0-29	RFK-24021	flare / solder				-	12	-	-	-
	RFKA04E-4.0-17	RFK-24022	flare / solder / solder				-	12	-	-	6
	RFKA04-4.0-30	RFK-24023	flare / solder				-	-	1/2	-	-
	RFKA04E-4.0-31	RFK-24024	flare / solder / solder				-	-	1/2	-	1/4

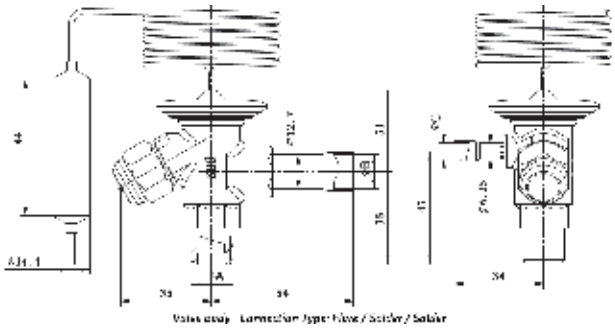
Note:

1) Extent of delivery: valve body and bulb strap
2) Different evaporation temperature range on request
3) MOP function on request

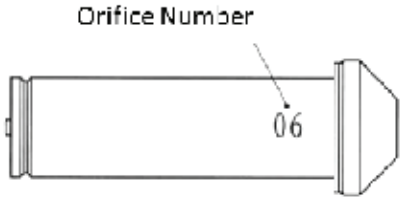
RFKA SERIES
Thermostatic Expansion Valve

DIMENSIONS





ACCESSORIES



ORIFICE

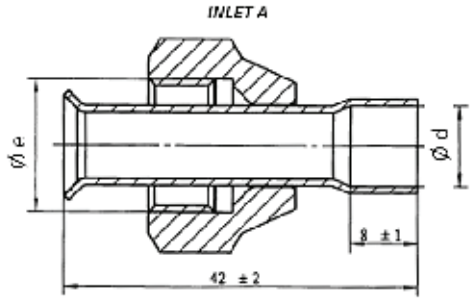
Orifice Number	Nominal Capacity[1] [kW]				Valve Orifice Model	Valve Orifice Part Number
	R22	R407C[2]	R404A / R507A	R134a		
0X	0,5	0,5	0,35	0,33	RFKA-023-0X	RFK-24036
0	1,1	1,1	0,7	0,68	RFKA-023-00	RFK-24037
1	2,5	2,7	1,7	1,6	RFKA-023-01	RFK-24038
2	3,5	3,9	2,4	2,2	RFKA-023-02	RFK-24039
3	5,6	6,3	3,9	3,5	RFKA-023-03	RFK-24040
4	8,1	8,8	5,6	4,9	RFKA-023-04	RFK-24041
5	10,6	11,3	7,4	6,7	RFKA-023-05	RFK-24042
6	16,9	18,3	12	10,6	RFKA-023-06	RFK-24043

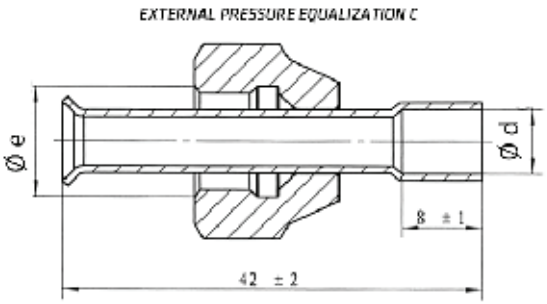
Note:

1) Nominal working conditions: Condensing temperature: 38°C; evaporating temperature 5°C; subcooling 4K; operational superheat 4K

2) R407C data based on dew point conditions

RFKA SERIES
Thermostatic Expansion Valve





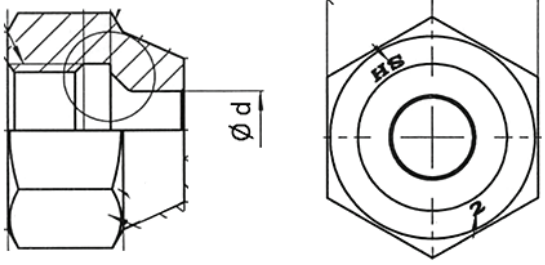
SOLDER ADAPTERS FOR RFKA INLET A

Model	Part Number	SAE Flare Ø e	Solder Connection Ø d
RFKA-038-01	RFK-24044	3/8"	3/8"
RFKA-038-02	RFK-24045		10mm
RFKA-038-05	RFK-24048		1/4"
RFKA-038-06	RFK-24049		6mm

SOLDER ADAPTERS FOR RFKA EXTERNAL PRESSURE EQUALIZATION C

Model	Part Number	SAE Flare Ø e	Solder Connection Ø d
RFKA-038-03	RFK-24046	1/4"	6mm
RFKA-038-04	RFK-24047		1/4"

FLARE NUTS FOR RFKA



Model	Part Number	SAE Flare	Pipe Diameter Ø d		Wrench Size Ø e
		[inch]	[mm]	[inch]	[mm]
ZZ4-0107721	RFK-24050	1/4	6	1/4	17
ZZ4-0107723	RFK-24051	3/8	-	3/8	22
ZZ4-0107724	RFK-24052	1/2	12	1/2	24

RFKB SERIES

Thermostatic Expansion Valve

RFKB series thermostatic expansion valve are used to adjust supply volume of refrigerant in the evaporator which can provide injection of various refrigerants under all working conditions. They can also meet the requirements of freezers, ice makers, dehumidifiers as well as refrigerating systems and air conditioners in various vaporizing temperature ranges.

FEATURES

- COMPACT STRUCTURE
- THERMAL BULB UTILIZES CROSS INJECTION TECHNOLOGY, AND THE WHOLE VAPORIZING TEMPERATURE RANGE SHARE THE SAME SUPERHEAT DEGREE
- VALVES WITH MOP FUNCTION CAN BE PROVIDED TO PREVENT DAMAGES TO COMPRESSOR MOTOR CAUSED BY EXCESSIVE EVAPORATION PRESSURE
- WIDE VAPORIZING TEMPERATURE RANGE

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R290, R134a, R404A, R507 and R407C etc.
- Applicable medium temperature: -40°C~70°C o 60°C~70°C
- Applicable ambient temperature: -35°C~55°C
- Relative humidity: 0~100%RH
- Maximum working pressure: 3.5MPa

NOMINAL CAPACITY

No.	NominalCapacity US.R.T				NominalCapacity kW			
	R22	R407C	R404A/R507	R134a	R22	R407C	R404A/R507	R134a
1	0.35	0.38	0.25	0.22	1.2	1.3	0.9	0.8
2	0.7	0.76	0.5	0.44	2.5	2.7	1.8	1.5
3	1	1.1	0.7	0.63	3.5	3.9	2.5	2.2
4	1.5	1.6	1	0.94	5.3	5.6	3.5	3.3
5	2	2.2	1.4	1.3	7	7.7	4.9	4.6

Note: dNominal capacity is measured under nominal working condition: condensating temperature 38°C, refrigerant temperature before the valve 34°C, vaporizing temperature 5°C, static overheat 3.5°C, operating superheat 4°C.

RFKB SERIES
Thermostatic Expansion Valve

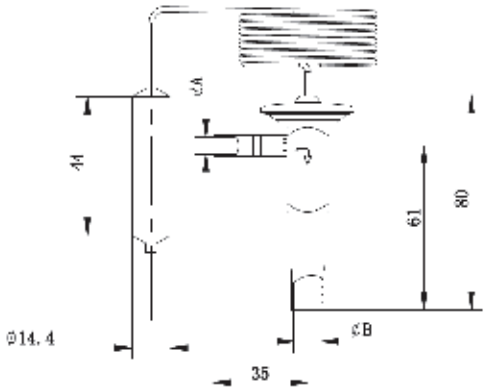
TECHNICAL PARAMETERS

Part Number Legend

Refrigerant	Model	Pressure Equalization	Capillary Tubes Connection mm	Connectionb				Vaporizing Tem-peraturec	
				Inlet×Outlet		Equalization			
				in	mm	in	mm	-40°C~ +10°C	-40°C~ +10°C
R22	RFKA01	Internal Equalization	800a	1/4×3/8 or 3/8×1/2	6×10 or 10×12	1/4	6	Without MOP	MOP +15ºC
	RFKB01E	External Equalization							
R407C	RFKB02	Internal Equalization							
	RFKB02E	External Equalization							
R404A/R507	RFKB03	Internal Equalization							
	RFKB03E	External Equalization							
R134a	RFKB04	Internal Equalization							
	RFKB04E	External Equalization							

Note 1: a 800 is the recommended standard, which can be customized according to specific needs;
Note 2: b Inlet ends are conneted by solder;outlet and outer equalization ends can be connected by thread or solder;
Note 3: c The listed vaporizing temperature is the recommended standard, which can be customized according to specific needs;

DIMENSIONS



Inlet A		Outlet B	
mm	in	mm	in
6	1/4	10	3/8
10	3/8	12	1/2

SANHUA

Technical information

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Certificate of registration
ISO 14001:2004

Certificate of registration
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REACH

NR. 1907/2006
CONFORMITY DECLARATION

BEST SUPPLIER AWARDS

B/S/H/

Carrier

TRANE

Note: Conditions could change without previous notice due to components updating or typing mistakes.
Sanhua declines any responsibility for a wrong product choice based on this table. Please make sure all your requirements are covered in our suggestion.

Controller for EEV

Electronic expansion valve controller is applicable for cooling systems such as room air conditioners, commercial air conditioners and freezers which is the core component for refrigerant flow control.

FEATURES

- HIGH SHARING DESIGN

  ADOPTING SHARING PCB DESIGN (4 MODELS), APPLICABLE FOR DETECTIONS OF THREE TEMPERATURE SENSORS OR ONE TEMPERATURE AND ONE PRESSURE SENSOR

  APPLICABLE FOR SPLIT OR PACKAGED UNIT,EITHER COOLING OR BOTH COOLING AND HEATING WITH VARIOUS VOLTAGE

  APPLICABLE FOR ALL SANHUA ELECTRONIC EXPANSION VALVES ALLOWING TROUBLE-FREE SECLECTION AND COMPATIBILITY FOR CUSTOMERS

  THE CONTROLLER IS EQUIPPED WITH A WHOLE SET OF ADVANCED SYSTEM CONTROL SOLUTIONS FOR WHICH PARAMETERS COULD BE ADJUSTED ACCORDING TO USERS' REQUIREMENTS

- HIGH QUALITY DESIGN

  ADOPTING OVERHEAT FEEDBACK CONTROL, PID CORE ALGORITHM ADJUSTMENT AND CONTROL AS WELL AS FUNCTIONS SUCH AS ABNORMAL PROTECTION CONTROL, DEFROSTING CONTROL AND SENSOR ABNORMAL ALARM

  USING IMPORTED HIGH QUALITY ELEMENTS FOR IMPORTANT COMPONENTS TO ENSURE CONTROL ACCURACY OF THE CONTROLLER

  THE BOTTOM IS PAINTED WITH SILICA GEL TO IMPROVE DUST-FREE, MOISTUREPROOF AND CORROSION RESISTANCE PERFORMANCE

TECHNICAL PARAMETERS

Project / Shared Model	Cooling Only, Cooling & Heating
Voltage	DC12V±10%, AC24V±10%, AC100V~AC240V
Frequency	50Hz/60Hz
Construction mode	One-unit, duel-panel FR-4 design
Ambient temperature and humidity	-20ºC ~ +70ºC, 10% ~ 95%
Storage environment temperature and humidity	-30ºC ~ +85ºC, 10% ~ 95%
Rated Electric Input Power	20VA
Max. Electric Input Power	30VA
Applicable Expansion Valve Type	Q series, O series, S series , R series , T series
Applicable Expansion Valve Port Size	1.3mm ~ 6.5mm

Controller of EEV

TECHNICAL PARAMETERS

Project / Shared Model	Cooling & Heating Type
Applicable Expansion Valve Full Open Pulse	500Pulse, 2000Pulse
Applicable Expansion Valve Excitation Mode	1~2 phase excitation, 2~2 phase excitation
Size	90x70mm, 100x80mm, 110x90mm, available for customization as per customers' needs
Certification	3C/CE/ETL/TUV/UL(including EMC)

Residential Inverter Controller

Residential inverter controller is applicable for controlling room air conditioners including heat pump air conditioning systems, which is the core component of inverter air conditioners.

FEATURES

- HIGH INTEGRATION DESIGN

  IN ADDITION TO RESEARCHING AND DEVELOPING ELECTRIC CONTROL PRODUCTS, WE ALSO PROVIDE WHOLE SET OF ADVANCED COOLING CONTROL SOLUTIONS AND STRUCTURE DESIGN, INCLUDING CONTROL OF COMPRESSORS, ELECTRONIC EXPANSION VALVES, DEFROSTING, OUTSIDE TEMPERATURE, DISCHARGE TEMPERATURE, OVERHEAT PROTECTION AND ROTATING SPEED OF OUTDOOR BLOWERS APPLICABLE FOR SPLIT OR PACKAGED UNIT,EITHER COOLING OR BOTH COOLING AND HEATING WITH VARIOUS VOLTAGE

  WE HAVE LABORATORIES FOR 10HP MUTILPLE INDOOR SYSTEM INLCUDING ENTHALPY DIFFERENCE LABORATORY, ENVIRONMENT & NOISE COMBINED LABORATORY, ENDURANCE LABORATORY, EMC LABORATORY, ELECTRIC ASSEMBLY LABORATORY, THERMAL SHOCK TESTER AND A LARGE BATCH OF HIGH PRECISION IMPORTED TESTING DEVICES TO ENSURE A GOOD DEVELOPING QUALITY

- HIGH QUALITY DESIGN

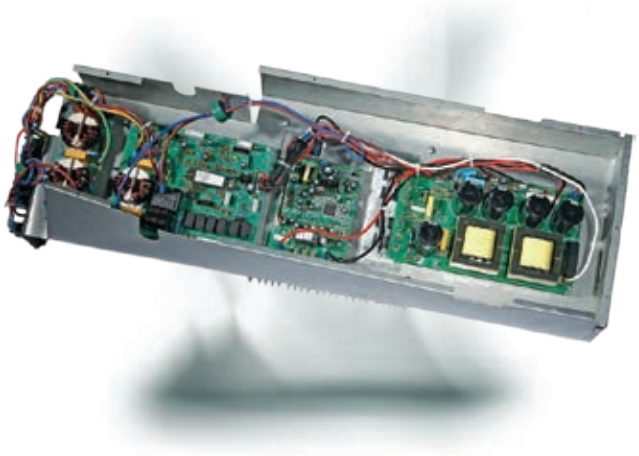
  MASTERING CORE FREQUENCY CONVERSION TECHNOLOGIES TO REALIZE TORQUE COMPENSATION CONTROL AND FIELD WEAKENING, REDUCE COMPRESSOR VIBRATION, NOISE AND IMPROVE THE OPERATION FREQUENCY OF THE COMPRESSOR UTILIZING IMPORTED HIGH QUALITY ELEMENTS FOR IMPORTANT COMPONENTS (MITSUBISHI IPM, FAIRCHILD IPM, NEC CHIPS AND TOSHIBA CHIPS ETC.)

  CONTROL TECHNIQUES WITH MULTIPLE SOLUTIONS TO MEEET VARIOUS NEEDS OF THE CUSTOMERS

TECHNICAL PARAMETERS

Project / Nominal Refrigerating Capacity	1HP	1.5HP	2HP	3HP
Voltage	220V±25%			
Frequency	50Hz/60Hz			
Frequency conversion range	Passive PFC 15-85Hz/Active PFC 15-120Hz			
Power factor	Passive PFC:0.85~0.90 Part PFC:0.95~0.98 Whole range PFC:0.97~0.997			
Construction	One-unit design/Split design			Split design
Allowed ambient temperature	-15ºC ~ +55ºC			-15ºC ~ +55ºC
Compressor actuating method	150° wide-angle actuating/Sine wave actuating			Sine wave actuating
Outdoor fan	DC motor/AC motor			
Throttle mode	Electronic expansion valve/capillary tubes			
Actuating compressor	GMCC, Panasonic, Hitachi, Sanyo, MITSUBISHI etc.			
Certification	3C\CE\ETL\TUV(including EMC)			

Inverter Controller for Large System



Inverter controller for large System is mainly used to control whole electric control systems such in outdoor unit as commercial or multiple inverter air conditioners. They not only realize frequency conversion control over DC converter compressor, but also control all kinds of electric parts such as outdoor blowers, electronic expansion valves and solenoid valves, greatly improving the efficiency of the whole system.

FEATURES

- UTILIZING ACTIVE FREQUENCY CONVERSION TECHNOLOGY FOR THE WHOLE PROCESS WITH A POWER FACTOR ABOVE 98.5%, APPLICABLE FOR A WIDER RANGE OF VOLTAGE
- USING DC FREQUENCY CONVERSION 180° SINE WAVE ACTUATING TECHNOLOGY, INCREASING TORQUE COMPENSATION, MORE INTELLIGENT CONTROL
- AVAILABLE WITH CIRCUIT CONTROLLED BY ELECTRONIC EXPANSION VALVE TO BETTER BRING WHOLE EFFICIENCY OF THE SYSTEM INTO FULL PLAY
- DC FREQUENCY CONVERSION BLOWER CAN BE EQUIPPED TO IMPROVE THE SYSTEM EFFICIENCY
- PASSING EMC TESTS WITH THE WHOLE FREQUENCY MEETING NATIONAL AND RELEVANT EXPORT STANDARDS

GENERAL SPECIFICATIONS

- Applicable voltage: single phase AC 220V - 230V ± 20%, 3 phase AC380V - 400V ± 15%
- Nominal Refrigerating capacity: 3HP~12HP
- Frequency conversion range: 15~120Hz
- Temperature control accuracy: ±1°
- Compatible indoor units: wall mounted air conditioners, cabinet air conditioners, ceiling air conditioners and duct type air conditioners

Inverter Controller for HP Water Heater

Inverter Controller for HP Water Heater is used to realize overall control of the outdoor unit of heat pump and water heating system. Energy efficiency of whole water heating system can be greatly improved by actuating frequency conversion control over DC converter compressor and electrical parts such as outdoor blower, electronic expansion valve and solenoid valves. Normally, the efficiency can be up to 3.2 with incomparable energy saving advantages over other water heating methods.

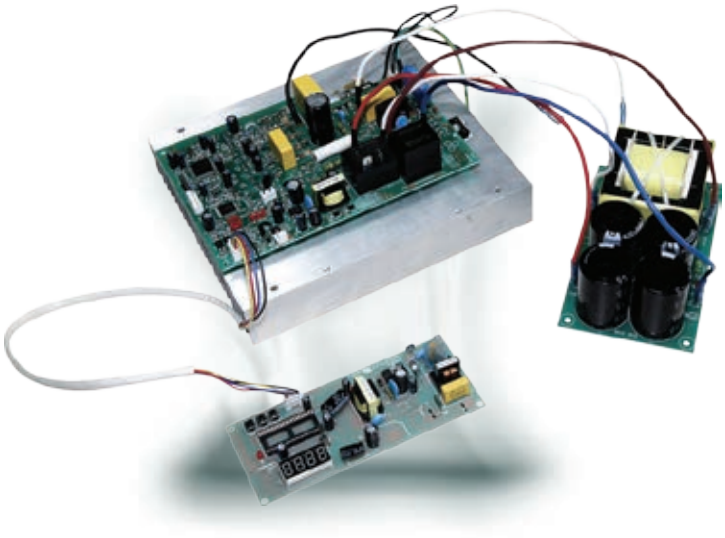
FEATURES

- INTELLIGENT ANTI-FREEZE PROTECTION UNDER LOW TEMPERATURE, SUITABLE FOR OUTDOOR USE IN LOW TEMPERATURE
- UTILIZING ACTIVE FREQUENCY CONVERSION TECHNOLOGY FOR THE WHOLE PROCESS WITH A POWER FACTOR ABOVE 98.5%, APPLICABLE FOR A WIDER RANGE OF VOLTAGE
- USING DC FREQUENCY CONVERSION 180° SINE WAVE ACTUATING TECHNOLOGY, INCREASING TORQUE COMPENSATION AND MORE INTELLIGENT CONTROL
- MULTIPLE STAGE TIMING SWITCH TO MEET THE CUSTOMERS' REQUIREMENTS IN DIFFERENT TIME INTERVALS
- SUB-CONTROLLER CAN NOT ONLY CONTROL TEMPERATURE OF THE WATER TANK BUT ALSO REALIZE INQUIRY OF REAL-TIME TEMPERATURE AND FAULTS ETC.
- AVAILABLE WITH CIRCUIT CONTROLLED BY ELECTRONIC EXPANSION VALVE TO BETTER BRING THE EFFICIENCY OF THE SYSTEM INTO FULL PLAY
- DC FREQUENCY CONVERSION BLOWER CAN BE EQUIPPED TO IMPROVE THE SYSTEM EFFICIENCY
- PASSING EMC TESTS WITH THE WHOLE FREQUENCY MEETING NATIONAL AND RELEVANT EXPORT STANDARDS

GENERAL SPECIFICATIONS

- Applicable voltage: single phase AC220V-230V±20%, 3 phase AC380V-400V±15%
- Frequency conversion range: 15~150Hz
- Water heating temperature: 0~+55°
- Water temperature control accuracy: ±0.5°
- Specifications of controllers: inverter 3HP, inverter 5HP; inverter 3HP+fixed frequency 3HP, inverter 5HP + fixed frequency 5HP

Standard inverter compressor controller



FEATURES

- APPLICABLE FOR UNITS OF 1HP TO 5HP AND FOR MITSUBISHI, SANYO, TCC,GMCC, HITACHI, HIGHLY, PANASONIC,ETC.
- PCB ASSEMBLY WITHOUT C-BOX, OPTIONAL FOR HEATSINK PROVIDED OR HEATSINK OUTSOURCED BY CUSTOMERS THEMSELVES.
- OPTIONAL FOR EXTERNAL HIGH FREQUENCY REACTOR AND BIG ELECTROLYTIC CAPACITOR PROVIDED OR OUTSOURCED BY CUSTOMERS THEMSELVES.
- OPTIONAL DC12V FAN, WHICH CAN AUTOMATICALLY CONTROL TEMPERATURE ACCORDING TO TEMPERATURE OF HEATSINK.
- USE FAIRCHILD 20A,30A IPM AND MITSUBISHI 50的 AIPM
- USE ISOLATED OPTICAL COUPLING ASYNCHRONOUS COMMUNICATION
- HAVE A COMMUNICATING DEBUGGING BOARD.
- USE ISOLATED OPTICAL COUPLING ASYNCHRONOUS COMMUNICATION
- PHASE CURRENT PROTECTION, AC BUSBAR VOLTAGE PROTECTION,HEATSINK OVERHEAT PROTECTION, ETC.

TECHNICAL PARAMETERS

Storage Temperature	**-30C° ~ +85C°**
Humidity	30 ~ 95%RH
ambient temperature for operating	-20**C°** ~ +60**C°**
Power supply	AC187V ~ AC276V,50/60Hz;
PFC	0.97-0.998
Load electric power	max.5000W for inverter
Frequency	15 ~ 110Hz
Temperature control and measurement accuracy	±1**C°**
current measurement accuracy	0.1A
voltage measurement accuracy	2V

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*KEEPS YOU ONE STEP AHEAD OF THE COMING **EFFICIENCY** AND **ENVIRONMENTAL** EUROPEAN **CHALLENGES***

EEV Technology + Electronic Controls

- Improves HVACo-R system efficiency up to **20%**
- DPFo-VPF series from 2kW to 1400kW
  *75kW and 1400kW available in Quarter 4
- Advanced MSS (Minimum Stable Superheat) control logic

2 kW

1400kW

4 Way Reversing Valve

- Improves efficiency by **5%**
- SHF series 1kW to 420 kW
- Widest range in the market with Single Body Design

1 kW

420kW

Inverter Controller for Large System

- Improves system efficiency up to **30%**
- **Active Frequency** Conversion Technology
- Wide Range of voltage application

MCHE

- Improves efficiency by **30%**
- Refrigerant Charge Reduction by **30%** Environmental Friendly
- MCHE is lighter in weight, smaller in volume Compact Design

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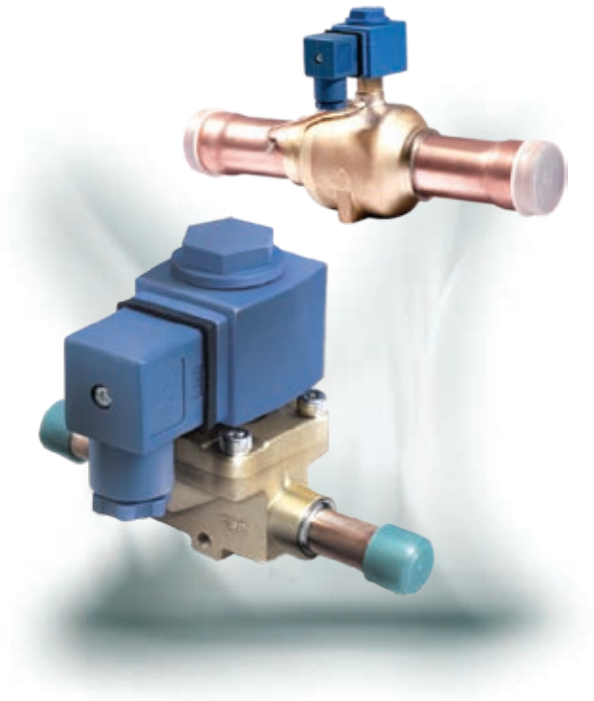
Solenoid Valve

MDF series solenoid valves are direct operated or pilot operated solenoid valves, mainly used in refrigerant control of various devices such as refrigerating and freezing systems, air conditioners and heat pumps.



FEATURES

- COILS: LOW ENERGY CONSUMPTION, RELIABLE
- GREAT VALVE OPENING PERFORMANCE, HIGH MOPD
- COILS ARE DOUBLE SEALED, WATER TIGHT AND SAFE

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R407C, R404A, R410A, R507A
- Medium temperature TS min./max.:
  - MDF 2H...22H and MDF 2L...15L: -30°C/105°C
  - MDF 25H...40H: -40°C/140°C
- Ambient temperature min./max.: -30°C / +55°C
- Relative humidity: 0 to 95% RH
- Installation position:
  - Liquid, suction and discharge line
  - Preferably coil upwards and flow direction corresponds to the arrow
- Declaration according to LVD or PED

TECNHICAL PARAMETERS

Technical parameters of Coil

Model Coil[1)]	Rated Voltage [V]	Supply	Power [W]	Part Number	Frequ. [Hz]	Voltage Tolerance	Insulation Class	Protection Class (w/plug)	Wiring type
MQ-A03024-000001	24	AC	10,5W (50Hz) 8,5W (60Hz)	MDF-60001	50/60	-15% +10%	F	IP65	DIN Plug
MQ-A0311A-000001	110 to 120		12W (50Hz) 10W (60Hz)	MDF-60002					
MQ-A0322G-000001	220 to 240		12W (50Hz) 10W (60Hz)	MDF-60003					
MQ-D03024-000002	24	DC	12W (50Hz) 10W (60Hz)	MDF-60004	-	±10%			

Note: 1) Applicable to MDF-A03 and MDF-B03 valve bodies

MDF SERIES
Solenoid Valve

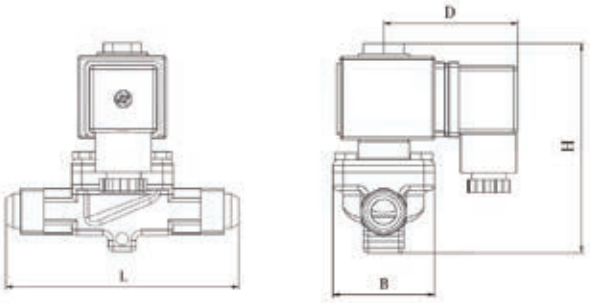
Technical Parameters of Valve Body

Solder	Flare	Normal position	Actuation	Kv [m³/h]	MOP [Mpa]	Max. OPD [Mpa]	Min. OPD [Mpa]
MDF-A03-2H	MDF-A03-2L	NC	Direct	0,16	4,5	3,1	0,00
MDF-A03-3H	MDF-A03-3L			0,23			
MDF-A03-6H	MDF-A03-6L		Pilot[1)]	0,8			0,02
MDF-A03-10H	MDF-A03-10L			1,9			
MDF-A03-15H	MDF-A03-15L			2,3			
MDF-A03-20H	--			5,0			
MDF-A03-22H	--			5,9			
MDF-B03-25H	--		Pilot (P)[2)]	10,0			0,03
MDF-B03-32H	--			15,0			
MDF-B03-40H	--			25,0			

Note: 1) Membrane operated
2) Piston operated

DIMENSIONS

Valve Body
Thread Connection



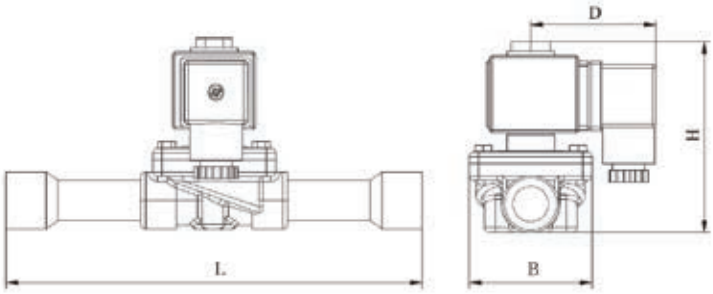
Model Valve Body	SAE Flare Connection [inch]	Part Number [1)]	PED Category	Dimensions [mm]			
				L	B	D	H
MDF-A03-2L 001	1/4	MDF-08039	3.3	59	30	53	82
MDF-A03-3L 001	1/4	MDF-08040	3.3	59	30	53	82
MDF-A03-3L 003	3/8	MDF-08041	3.3	59	30	53	82
MDF-A03-6L 001	3/8	MDF-08042	3.3	69	36	53	88
MDF-A03-6L 003	1/2	MDF-08043	3.3	69	36	53	88
MDF-A03-10L 003	1/2	MDF-08044	3.3	92	42	53	96
MDF-A03-10L 001	5/8	MDF-08045	3.3	92	42	53	96
MDF-A03-15L 001	5/8	MDF-08046	3.3	104	52	53	100
MDF-A03-15L 003	7/8	MDF-08047	3.3	104	52	53	100

Note: 1) Extent of delivery: valve body without coil

MDF SERIES
Solenoid Valve

DIMENSIONS

Valve Body Solder Connection [inch]



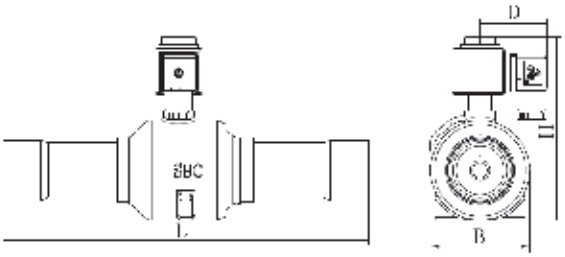
Model Valve Body	Solder Connection [inch]	Part Number[1)]	PED Category	Dimensions [mm]			
				L	B	D	H
MDF-A03-2H 001	1/4	MDF-08001	3.3	102	30	53	82
MDF-A03-3H 001	1/4	MDF-08002	3.3	102	30	53	82
MDF-A03-3H 003	3/8	MDF-08003	3.3	102	30	53	82
MDF-A03-6H 001	3/8	MDF-08004	3.3	111	36	53	88
MDF-A03-6H 003	1/2	MDF-08005	3.3	111	36	53	88
MDF-A03-10H 001	1/2	MDF-08006	3.3	127	42	53	95
MDF-A03-10H 003	5/8	MDF-08007	3.3	127	42	53	95
MDF-A03-15H 001	5/8	MDF-08008	3.3	176	52	53	100
MDF-A03-15H 003	7/8	MDF-08009	3.3	176	52	53	100
MDF-A03-20H 001	7/8	MDF-08010	3.3	191	52	53	117
MDF-A03-20H 003	1-1/8	MDF-08011	3.3	191	52	53	117
MDF-A03-22H 001	7/8	MDF-08012	3.3	191	60	53	117
MDF-A03-22H 009	1-1/8	MDF-08048	3.3	191	60	53	117
MDF-A03-22H 003	1-3/8	MDF-08013	I	191	60	53	117
MDF-B03-25H 003	1-1/8	MDF-08014	3.3	280	76	53	144
MDF-B03-25H 004	1-3/8	MDF-08015	I	280	76	53	144
MDF-B03-32H 001	1-3/8	MDF-08016	I	281	76	53	144
MDF-B03-32H 002	1-5/8	MDF-08017	I	281	76	53	144
MDF-B03-40H 002	1-5/8	MDF-08018	I	281	84	53	152
MDF-B03-40H 004	2-1/8	MDF-08019	I	281	84	53	152

Note: 1) Extent of delivery: valve body without coil

MDF SERIES
Solenoid Valve

DIMENSIONS

Valve Body Solder Connection [mm]



Model Valve Body	Solder Connection [mm]	Part Number[1)]	PED Category	Dimensions [mm]			
				L	B	D	H
MDF-A03-2H 003	6	MDF-08020	3.3	102	30	53	82
MDF-A03-3H 005	6	MDF-08021	3.3	102	30	53	82
MDF-A03-3H 007	10	MDF-08022	3.3	102	30	53	82
MDF-A03-6H 005	10	MDF-08023	3.3	111	36	53	88
MDF-A03-6H 007	12	MDF-08024	3.3	111	36	53	88
MDF-A03-10H 005	12	MDF-08025	3.3	127	42	53	95
MDF-A03-10H 003	16	MDF-08007	3.3	127	42	53	95
MDF-A03-15H 001	16	MDF-08008	3.3	176	52	53	100
MDF-A03-15H 003	22	MDF-08009	3.3	176	52	53	100
MDF-A03-20H 001	22	MDF-08010	3.3	191	52	53	117
MDF-A03-20H 007	28	MDF-08030	3.3	191	52	53	117
MDF-A03-22H 001	22	MDF-08012	3.3	191	60	53	117
MDF-A03-22H 011	28	MDF-08031	3.3	191	60	53	117
MDF-A03-22H 003	35	MDF-08013	I	191	60	53	117
MDF-B03-25H 005	28	MDF-08033	3.3	280	76	53	144
MDF-B03-25H 004	35	MDF-08015	I	280	76	53	144
MDF-B03-32H 001	35	MDF-08016	I	281	76	53	144
MDF-B03-32H 003	42	MDF-08036	I	281	76	53	144
MDF-B03-40H 003	42	MDF-08037	I	281	84	53	152
MDF-B03-40H 004	54	MDF-08019	I	281	84	53	152

Note: 1) Extent of delivery: valve body without coil

FDF (NC) SERIES

Solenoid Valve

FDF series solenoid valves are direct operated or pilot operated solenoid valves, mainly used in refrigerant control of various devices such as refrigerating and freezing systems, air conditioners and heat pumps.

FEATURES

- COILS: LOW ENERGY CONSUMPTION, RELIABLE
- GREAT VALVE OPENING PERFORMANCE, HIGH MOPD

GENERAL SPECIFICATIONS

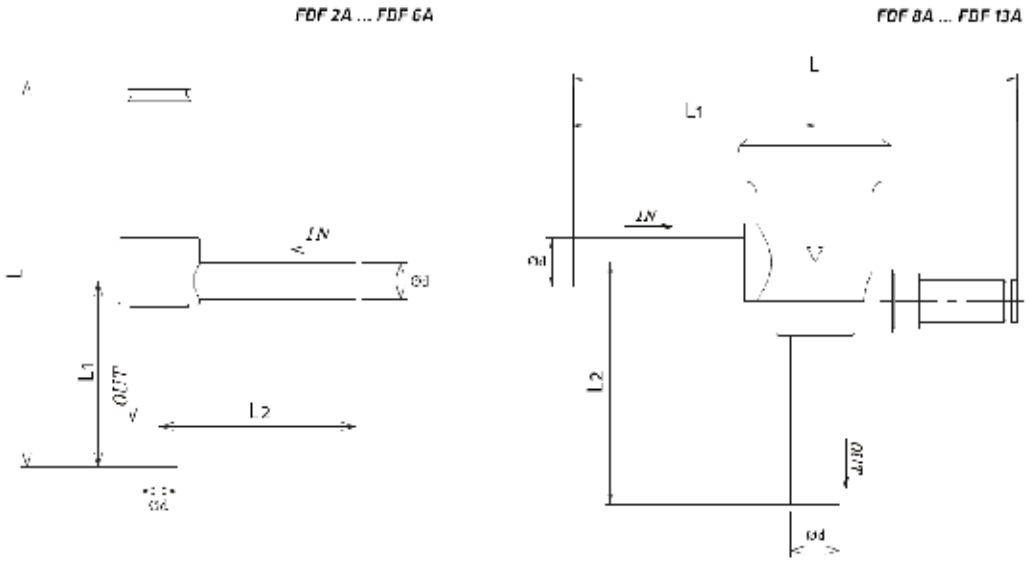
- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Medium temperature TS min./max.: -30°C / 120°C
- Ambient temperature min./max.: -30°C / +50°C
- Relative humidity: 0 to 95% RH
- Installation position: - Liquid, suction and discharge line
  - Coil upwards, coil axis ± 15° tolerance versus vertical axis
  - Flow direction corresponds to the arrow
- Certifications: UL/CSA* and declaration according to LVD or PED

TECNHICAL PARAMETERS OF VALVE BODY

Model Valve Body	Part Number	Normal Position	Actuation	Ø Seat	Kv	MOP	Max. OPD	Min. OPD	Ød OD	Ød OD	Measurement [mm]		
				[mm]	[m³/h]	[MPa]	[MPa]	[MPa]	[mm]	[inch]	L	L1	L2
FDF 2A 94	FDF-06001	NC	Direct	1,9	0,08	4,5	3,4	0	6,35	1/4	67	32	34
FDF 2.5A 08	FDF-06002		Pilot	2,5	0,20		2,1	0,01	6,35	1/4	85	38	38
FDF 3A 08	FDF-06003			2,7	0,26		3,4		7,94	5/16	81	35	36
FDF 4A 10	FDF-06004			4,0	0,26		3,4		6,35	1/4	81	35	38
FDF 6A 58	FDF-06005			5,8	0,56		3,0		7,94	5/16	81	35	36
FDF 8A 21	FDF-06006			8,0	0,95		2,8	0,02	12,7	1/2	114	62	62
FDF 11A 16	FDF-06007			11	2,40				12,7	1/2	113	61	61
FDF 13A 12	FDF-06008			13	3,44				15,88	5/8	114	62	62

FDF (NC) SERIES
Solenoid Valve

DIMENSIONS - VALVE BODY



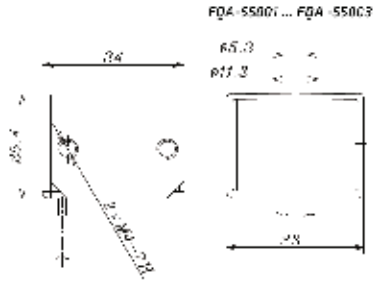
TECNHICAL PARAMETERS OF COIL

Model Coil	Part Number	Rated Voltage [V]	Supply	Power [1] [W]	Freq. [Hz]	Voltage Tolerance	Insulation Class	Wiring type
FQ-A05 024-000709	FQA-55001	24	AC	5 (50Hz) 4,5 (60Hz)	50/60	-15% +10%	B	flying leads
FQ-A05 120-001098	FQA-55002	110 to 120		5 (50Hz) 4,5 (60Hz)				
FQ-A05 22G-001044	FQA-55003	220 to 240		5 (50Hz) 4,5 (60Hz)				

Note:

1) Power consumption based on 220V

DIMENSIONS - COIL



FDF2AK (NO) SERIES

Solenoid Valve

FDF2AK series solenoid valves are direct operated, normally open solenoid valves, mainly used in refrigerant control of various devices such as refrigerating and freezing systems, air conditioners and heat pumps.

FEATURES

- COMPACT DESIGN
- LOW ENERGY CONSUMPTION
- EXCELLENT OPERATION PERFORMANCE

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Medium temperature TS min./max.: -30°C / 120°C
- Ambient temperature: -30°C / +50°C
- Relative humidity: 0 to 95% RH
- Installation position:
- Liquid, suction and discharge line
- Coil upwards, coil axis ±15° tolerance versus vertical axis
- Flow direction corresponds to the arrow
- Declaration according to LVD or PED

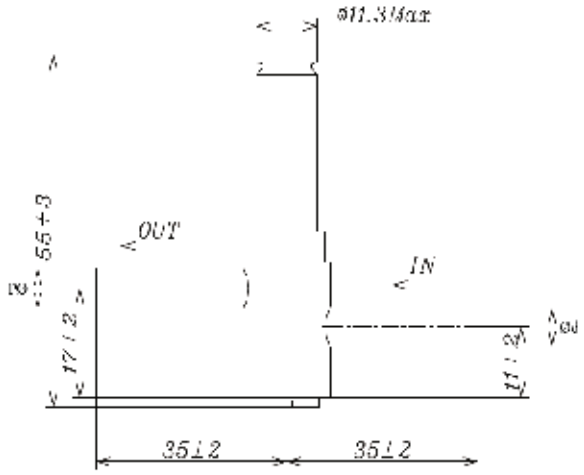
TECHNICAL PARAMETERS OF VALVE BODY

Valve Body Model	Part Number	Normal Position	Actuation	Ø Seat [mm]	Kv [m³/h]	MOP [MPa]	Max. OPD [MPa]	Min. OPD [MPa]	Connection OD Ød	
									[mm]	[inch]
FDF 2AK 01	FDF-06009	NO	Direct	1,8	0,05	4,5	1,5	0	6,35 ±0,1	1/4
FDF 2AK 08	FDF-06010			1,9	0,08					

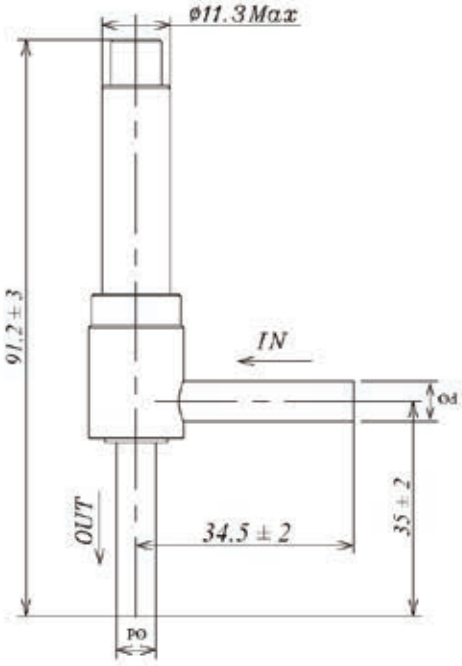
FDF2AK (NO) SERIES
Solenoid Valve

DIMENSIONS - VALVE BODY

FDF2AK01



FDF2AK08



TECNHICAL PARAMETERS OF COIL

Coil Model	Part Number	Rated Voltage [V]	Supply	Power [3] [W]	Used for	Freq. [Hz]	Voltage Tolerance	Insulation Class	Wiring type
FQ-A05024 -000709	FQA-55001	24	AC	5 (50Hz) 4,5 (60Hz)	FDF 2AK 01[1]	50/60	-15% +10%	B	flying leads
FQ-A05120 -001098	FQA-55002	110 to 120		5 (50Hz) 4,5 (60Hz)					
FQA-0522G -001044	FQA-55003	220 to 240		5 (50Hz) 4,5 (60Hz)					
FQA-0522G -001066	FQA-55007	220 to 240		6,5 (50Hz) 5 (60Hz)	FDF 2AK 08[2]				

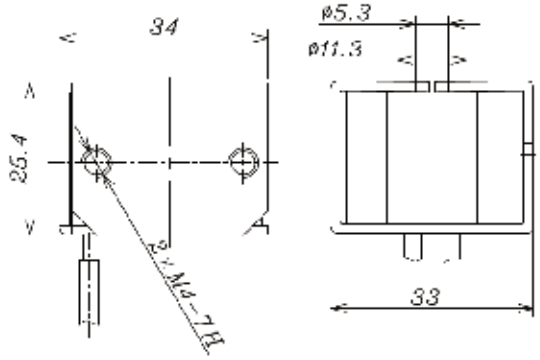
Note:

1) Dimensions: drawing 1
2) Dimensions: drawing 2
3) Power consumption based on 220V

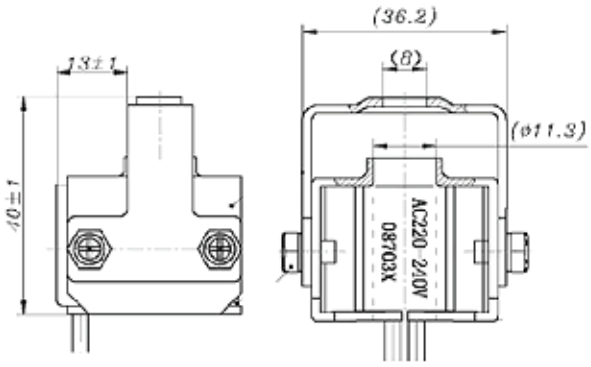
FDF2AK (NO) SERIES
Solenoid Valve

DIMENSIONS - COIL

Drawing 1: FQA-55001, -55002, -55003



Drawing 2: FQA-55007



MDF FLANGE SERIES

Solenoid Valve

MDF flange solenoid valve are used in the oil return line of compressors, applicable for various POE refrigeration oil and general refrigerants such as R22. But applicable maximum differential pressure is different in pure oil and in non-pure oil environments for the oil temperature and viscosity.

FEATURES

- APPLICABLE FOR STOP-AND-GO CONTROL OF OIL RETURN LINE IN REFRIGERATING COMPRESSORS
- DIRECT OPERATED, NORMALLY CLOSE VALVE WITH ZERO MIN. VALVE OPENING PRESSURE DIFFERENCE
- APPLICABLE FOR POE REFRIGERATION OIL AND VARIOUS FLUORIDE REFRIGERANTS
- MAXIMUM VALVE OPENING PRESSURE DIFFERENCE FOR GASSY OIL AND 90°C PURE OIL IS 2.2MPA
- UTILIZING NO CONNECTION TUBE STRUCTURE, BUT FLANGE CONNECTION IS COMPACT, LIGHT, EASY TO INSTALL AND HAVE GOOD PERFORMANCE OF ANTI-VIBRATION
- THE VALVE BODY IS ALL WELDED FOR TIGHTNESS WITH LITTLE LEAKAGE RIS

GENERAL SPECIFICATIONS

- Applicable refrigerant: POE refrigeration oil, R22, R134a, R407C, R404A etc.
- Applicable medium temperature: 0°C ~90°C
- Applicable ambient temperature: -30C ~+55°C
- Maximum working pressure: 4.5MPa(655Psig)

TECHNICAL PARAMETERS *Technical Parameters of Valve Body*

Model	Operation Type	Cv Value	Operation Pressure Difference MPa		
			Max		Min
			Gas and 90°C pure oil	0°C pure oil	
FDF2A905	Directoperated	0.14	2.2	0.8	0

Electrical Parameters of Coil

Series	Insulation Grade	Voltage Change	Frequency Hz	Wiring Type	IP Grade
Matching Coil MQ-A01220	F	AC220V	50	DIN junction box	IP65

FDF FLANGE SERIES

Solenoid Valve

FDF series Solenoid Valve are used in the new compressor system developed by Copeland, which uses a flange to connect the compressor. It is available in high ambient temperature and medium temperature with long service life.

FEATURES

- LOW TEMPERATURE RISE OF THE COIL, LOW ENERGY CONSUMPTION AND RELIABLE;
- LONG SERVICE LIFE, UP TO 35,000,000 TIMES;

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R134a, R404A, R407A, R407C and R507 etc.;
- Applicable medium temperature: +10°C ~ +146°C (non-persistent);
- Applicable ambient temperature: -30°C ~+60°C;
- Relative humidity: below 95% RH

TECHNICAL PARAMETERS *Technical Parameters Of Valve Body*

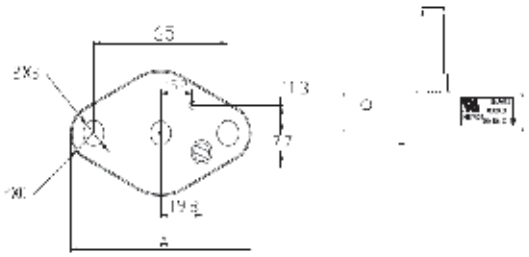
Model	Flow L/min (ΔP=0.345MPa)	Operation Pressure Difference MPa		Max. Working Pressure MPa
		Max	Min	
FDF2A903-01	42.5	2.8	0	3.5
FDF2A903-02				

Electrical Parameters of Coil

Model	Insulation Grade	Rated Voltage V	Voltage Change	Frequency Hz
SHF-4-10FA5	F	AC220V~240V	85%~110%	50/60
SHF-4-10FA2		AC120V		
SHF-4-10FA4		AC24V		

DIMENSIONS

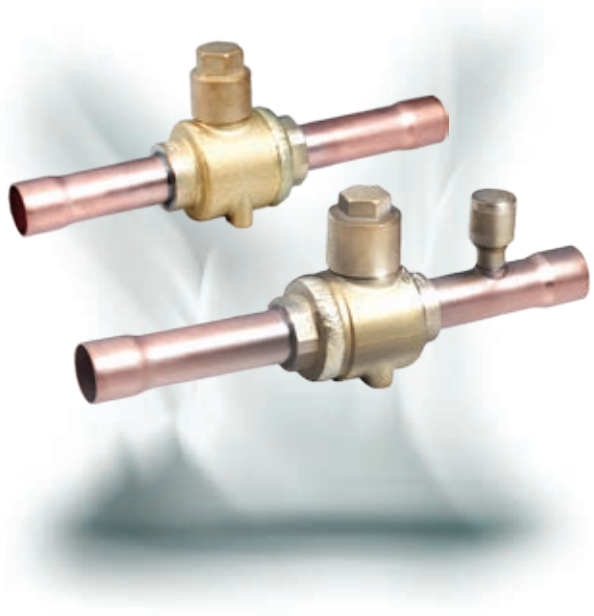
Model	A	B	C
FDF2A903-01	(87)	10.30	R11.1
FDF2A903-02	(90)	13.47	R12.7



SBV SERIES

Ball Valve

The ball valve of series SBV is applicable for commercial air conditioner, freezing or deep-freezing equipment or other refrigeration circuits in order to open and to shut off inner flow path by operating the valve stem. It can also be used as service valve for vacuum pumping and refrigerant injection etc.



FEATURES

- STRAIGHTWAY TYPE, FULL PORT, LOW PRESSURE DROP , COST-EFFECTIVE
- OPTIONAL WITH REINFORCED SPRING
- VALVE BODY AND VALVE SEAT WITH WELDED STRUCTURE, WITH HIGH PRODUCT RELIABILITY
- ROTATE 1/4 CIRCLES FROM FULL-OPEN TO FULL-CLOSE, EASY TO OPERATE
- BIDIRECTIONAL FLOW
- ROTATION STOP ON REQUEST FOR FULL-OPEN AND FULL-CLOSE OF THE VALVE
- SPECIAL SEALING MATERIALS TO PREVENT INTERNAL LEAKAGE

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Medium temperature TS min./max.: -40°C / +120°C
- Max. operating pressure PS: 4,5 MPa (45 bar)
- Installation position: liquid, suction and discharge line in all directions
- Certifications: UL/CSA and PED declaration

SBV SERIES
Ball Valve

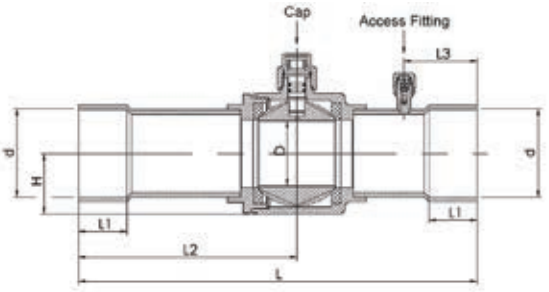
GENERAL CHARACTERISTICS

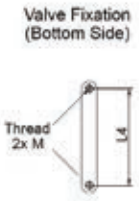
Without Access Fitting		Connections Ø d ODF		Kv	Wrench Size Cap	PED category	With Access Fitting	
Model	Product Number	[inch]	[mm]	[m³/h]	[mm]		Model	Product Number
SBV(M)-A2YHSY-2-S	SBV-13001	-	6	1,9	14	3.3	SBV(M)-JA2YHSY-2-S	SBV-13019
SBV(M)-A2YHSY-1-S	SBV-13002	1/4	-	1,9	14	3.3	SBV(M)-JA2YHSY-1-S	SBV-13020
SBV(M)-A3YHSY-2-S	SBV-13037	3/8	-	5,5	14	3.3	SBV(M)-JA3YHSY-2-S	SBV-13039
SBV(M)-A3YHSY-1-S	SBV-13003	-	10	5,5	14	3.3	SBV(M)-JA3YHSY-1-S	SBV-13021
SBV(M)-A4YHSY-2-S	SBV-13004	-	12	10,2	14	3.3	SBV(M)-JA4YHSY-2-S	SBV-13022
SBV(M)-A4YHSY-1-S	SBV-13005	1/2	-	10,2	14	3.3	SBV(M)-JA4YHSY-1-S	SBV-13023
SBV(M)-A5YHSY-2-S	SBV-13006	-	15	13,2	14	3.3	SBV(M)-JA5YHSY-2-S	SBV-13024
SBV(M)-A5YHSY-1-S	SBV-13007	5/8	16	13,8	14	3.3	SBV(M)-JA5YHSY-1-S	SBV-13025
SBV(M)-A6YHSY-2-S	SBV-13008	-	18	19,5	17	3.3	SBV(M)-JA6YHSY-2-S	SBV-13026
SBV(M)-A6YHSY-1-S	SBV-13009	3/4	-	19,5	17	3.3	SBV(M)-JA6YHSY-1-S	SBV-13027
SBV(M)-A7YHSY-1-S	SBV-13010	7/8	22	28,0	17	3.3	SBV(M)-JA7YHSY-1-S	SBV-13028
SBV(M)-A9YHSY-2-S	SBV-13011	-	28	51,5	17	3.3	SBV(M)-JA9YHSY-2-S	SBV-13029
SBV(M)-A9YHSY-1-S	SBV-13012	1 1/8	-	51,5	17	3.3	SBV(M)-JA9YHSY-1-S	SBV-13030
SBV(M)-A11YHSY-1-S	SBV-13013	1 3/8	35	80,0	17	I	SBV(M)-JA11YHSY-1-S	SBV-13031
SBV(M)-A13YHSY-2-S	SBV-13038	1 5/8	-	119,8	17	I	SBV(M)-JA13YHSY-2-S	SBV-13040
SBV(M)-A13YHSY-1-S	SBV-13014	-	42	119,8	17	I	SBV(M)-JA13YHSY-1-S	SBV-13032
SBV(M)-A17YHSY-1-S	SBV-13015	2 1/8	54	225	19	I	SBV(M)-JA17YHSY-1-S	SBV-13033
SBV(M)-A19YHSY-1-S	SBV-13016	-	64	225	19	I	SBV(M)-JA19YHSY-1-S	SBV-13034
SBV(M)-A21YHSY-2-S	SBV-13017	2 5/8	-	305	19	I	SBV(M)-JA21YHSY-2-S	SBV-13035
SBV(M)-A25YHSY-2-S	SBV-13018	3 1/8	80	635	24	I	SBV(M)-JA25YHSY-2-S	SBV-13036
SBV(M)-A29YHSY-1-S	SBV-13041	3 5/8	92	805	26	I	SBV(M)-JA29YHSY-1-S	SBV-13043
SBV(M)-A33YHSY-2-S	SBV-13046	4 1/8	105	950	32	I	SBV(M)-JA33YHSY-2-S	SBV-13045
SBV(M)-A34YHSY-1-S	SBV-13042	4 1/4	108	950	32	I	SBV(M)-JA34YHSY-1-S	SBV-13044

Note: SBV model with connection size 3-1/2" (89mm) available on request

SBV SERIES
Ball Valve

DIMENSIONS & WEIGHT



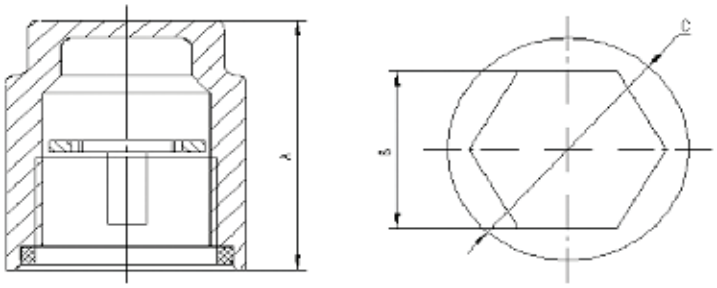


Product Number		L	L1	L2	L3[1)]	L4	D	H	M	Weight
Without access fitting	With Access Fitting	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
SBV-13001	SBV-13019	132	8	68	31	22	14	16	M4 x 0,7	0,28
SBV-13002	SBV-13020	132	8	68	31	22	14	16	M4 x 0,7	0,28
SBV-13037	SBV-13039	132	8	68	31	22	14	16	M4 x 0,7	0,29
SBV-13003	SBV-13021	132	8	68	31	22	14	16	M4 x 0,7	0,29
SBV-13004	SBV-13022	160	10	85	31	22	14	16	M4 x 0,7	0,30
SBV-13005	SBV-13023	160	10	85	31	22	14	16	M4 x 0,7	0,30
SBV-13006	SBV-13024	160	12	85	31	22	14	16	M4 x 0,7	0,30
SBV-13007	SBV-13025	160	12	85	31	22	14	16	M4 x 0,7	0,30
SBV-13008	SBV-13026	185	14	99	37	30	19	20	M4 x 0,7	0,51
SBV-13009	SBV-13027	185	14	99	37	30	19	20	M4 x 0,7	0,51
SBV-13010	SBV-13028	185	17	99	37	30	19	20	M4 x 0,7	0,52
SBV-13011	SBV-13029	208	20	112	44	38	25	25	M4 x 0,7	0,73
SBV-13012	SBV-13030	208	20	112	44	38	25	25	M4 x 0,7	0,73
SBV-13013	SBV-13031	251	25	136	44	48	32	31	M6 x 1,0	1,42
SBV-13038	SBV-13040	281	29	151	56	55	38	35	M6 x 1,0	1,90
SBV-13014	SBV-13032	281	29	151	56	55	38	35	M6 x 1,0	1,90
SBV-13015	SBV-13033	305	34	167	56	74	50	46	M6 x 1,0	3,74
SBV-13016	SBV-13034	305	34	167	70	74	50	46	M6 x 1,0	3,79
SBV-13017	SBV-13035	305	37	167	56	74	60	56	M6 x 1,0	6,08
SBV-13018	SBV-13036	378	42	186,2	80	90	70	63	M6 x 1,0	8,81
SBV-13041	SBV-13043	422,7	42	207,5	75	108	80	75	M6 x 1,0	11,32
SBV-13046	SBV-13045	423	42	210,0	75	148	95	91	M6 x 1,0	19,94
SBV-13042	SBV-13044	423	42	210,0	75	148	95	91	M6 x 1,0	19,94

Note: 1) Applicable to versions with access fitting - SBV(M)-JA series

SBV SERIES
Ball Valve

ACCESSORIES



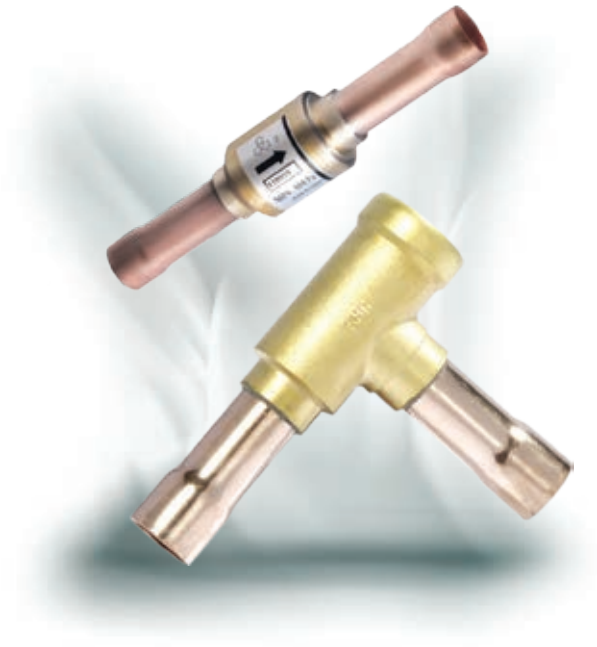
Anti-Rotation Device

Model	Product Number	Applicable for SBV models with:		Cap Nut	Dimensions mm		
		Inch connections:	Metric connections:		A	B	C
SK01	SBV-13101	1" 1/8 - 1" 3/8	28mm - 35mm	M18X1-6H	27,0	H17	Ø 24
SK02	SBV-13102	1" 5/8	42mm	M22X1-6H	27,5	H17	Ø 26
SK03	SBV-13103	2" 1/8 - 2" 5/8	54mm - 64mm	M22X1-6H	27,5	H19	Ø 28
SK04	SBV-13104	3" 1/8 - 3" 5/8	80mm - 92mm	M26X1-6H	29,5	H24	Ø 32
SK05	SBV-13105	4" 1/8 - 4" 1/4	105mm - 108mm	M32X1-6H	32,0	H29	Ø 38

YCV SERIES

Check Valve Piston Type

Piston type check valves are designed for installation in commercial refrigerating systems and in residential or industrial air conditioning plants. They are used to control the unidirectional flow of refrigerant so as to prevent backflow.



FEATURES

- THIS VALVE CAN ENSURE THE ONLY CORRECT FLOW DIRECTION
- EQUIPPED WITH DAMPING SPRING TO FREELY INSTALL THE VALVE AT POSITIONS WITH PRESSURE PULSE
- AVAILABLE IN TWO TYPES OF MODEL: STRAIGHTWAY VALVE AND L-SHAPE VALVE, EASY TO CONNECT
- SPECIAL VERSION OF CHECK VALVE EQUIPPED WITH REINFORCED SPRING AVAILABLE, APPLICABLE TO COMPRESSOR DISCHARGE PIPES IN SINGLE OR MULTI COMPRESSOR SYSTEMS (YCVSH SERIES)
- LOW PRESSURE DROP DURING OPERATION

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Medium temperature TS min./max.: -50°C / +140°C
- Max. operating pressure PS: 4,6 MPa (46 bar)
- Installation position:
  - Flow direction corresponds to the arrow
  - Straight-way type: preferably installed with vertical axis and flow upwards, sloping axis up to horizontal is tolerable
  - L-shape type: flow direction from bottom to top
- Declaration according to PED

YCV SERIES
Check Valve Piston Type

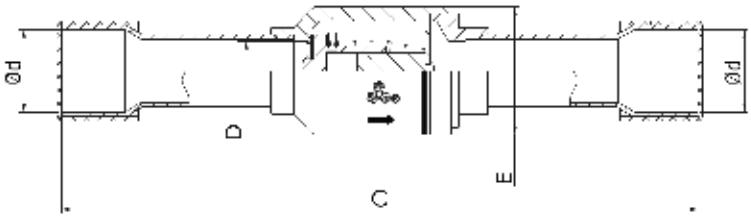
GENERAL CHARACTERISTICS

Model	Part Number	Type	Connections ODF		Kv	Min. OPD	Dimensions			PED category
			Ø d				ØD	C	E	
			[inch]	[mm]	[m³/h]	[kPa]	[mm]	[mm]	[mm]	
YCVS 5-11GSHC-1	YCV-15001	straight-way	-	6	0,56	5	5	90	18	3,3
YCVS 5-22GSHC-1	YCV-15002	straight-way	1/4	-	0,56	5	5	90	18	3,3
YCVS 8-33GSHC-1	YCV-15007	straight-way	3/8	-	1,43	5	8	110	18	3,3
YCVSH 8-33GSHC-1	YCV-15008	straight-way	3/8	-	1,43	15	8	110	18	3,3
YCVS 8-33GSHC-2	YCV-15009	straight-way	-	10	1,43	5	8	110	18	3,3
YCVSH 8-33GSHC-2	YCV-15010	straight-way	-	10	1,43	15	8	110	18	3,3
YCVS 10-33GSHC-1	YCV-15015	straight-way	-	12	2,1	5	10	130	22	3,3
YCVSH 10-33GSHC-1	YCV-15016	straight-way	-	12	2,1	15	10	130	22	3,3
YCVS 10-44GSHC-1	YCV-15017	straight-way	1/2	-	2,1	5	10	130	22	3,3
YCVSH10-44GSHC-1	YCV-15018	straight-way	1/2	-	2,1	15	10	130	22	3,3
YCVS 13-55GSHC-1	YCV-15021	straight-way	5/8	16	3,9	5	13	140	28	3,3
YCVSH 13-55GSHC-1	YCV-15022	straight-way	5/8	16	3,9	15	13	140	28	3,3
YCVS 17-55GSHC-1	YCV-15027	straight-way	-	18	5,52	5	17	165	34	3,3
YCVSH 17-55GSHC-1	YCV-15028	straight-way	-	18	5,52	15	17	165	34	3,3
YCVS 17-66GSHC-1	YCV-15029	straight-way	3/4	-	5,52	5	17	165	34	3,3
YCVSH 17-66GSHC-1	YCV-15030	straight-way	3/4	-	5,52	15	17	165	34	3,3
YCVS 17-77GSHC-1	YCV-15051	straight-way	7/8	22	5,52	5	17	165	34	3,3
YCVSH 17-77GSHC-1	YCV-15052	straight-way	7/8	22	5,52	15	17	165	34	3,3
YCVS 20-77GSHC-1	YCV-15033	L-shape	7/8	22	13,2	10	20	132	87	3,3
YCVSH 20-77GSHC-1	YCV-15034	L-shape	7/8	22	13,2	30	20	132	87	3,3
YCVS 26-88GSHC-1	YCV-15039	L-shape	-	28	19,02	10	26	196	123	3,3
YCVSH 26-88GSHC-1	YCV-15040	L-shape	-	28	19,02	30	26	196	123	3,3
YCVS 26-99GSHC-1	YCV-15041	L-shape	1 1/8	-	19,02	10	26	196	123	3,3
YCVSH 26-99GSHC-1	YCV-15042	L-shape	1 1/8	-	19,02	30	26	196	123	3,3
YCVS 31-BBGSHC-1	YCV-15045	L-shape	1 3/8	35	29,1	10	31	196	123	I
YCVSH 31-BBGSHC-1	YCV-15046	L-shape	1 3/8	35	29,1	30	31	196	123	I
YCVS 31-DDGSHC-1	YCV-15047	L-shape	1 5/8	-	29,1	10	31	196	123	I
YCVSH 31-DDGSHC-1	YCV-15048	L-shape	1 5/8	-	29,1	30	31	196	123	I
YCVS 31-DDGSHC-2	YCV-15049	L-shape	-	42	29,1	10	31	196	123	I
YCVSH 31-DDGSHC-2	YCV-15050	L-shape	-	42	29,1	30	31	196	123	I

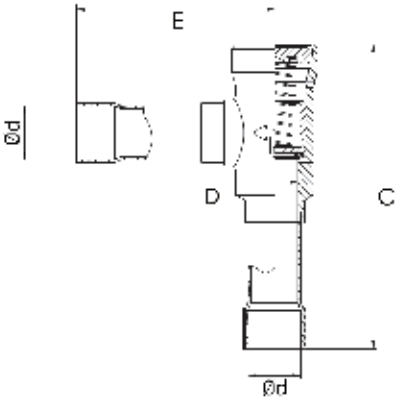
YCV SERIES
Check Valve Piston Type

GENERAL CHARACTERISTICS

Straight-way



L-shape



Float Type SERIES

Check Valve

Float type check valve are used in air conditioning system in shunt connection with capillary tubes to control the forward and reverse flow of refrigerant and make refrigerant flow in a specified direction.

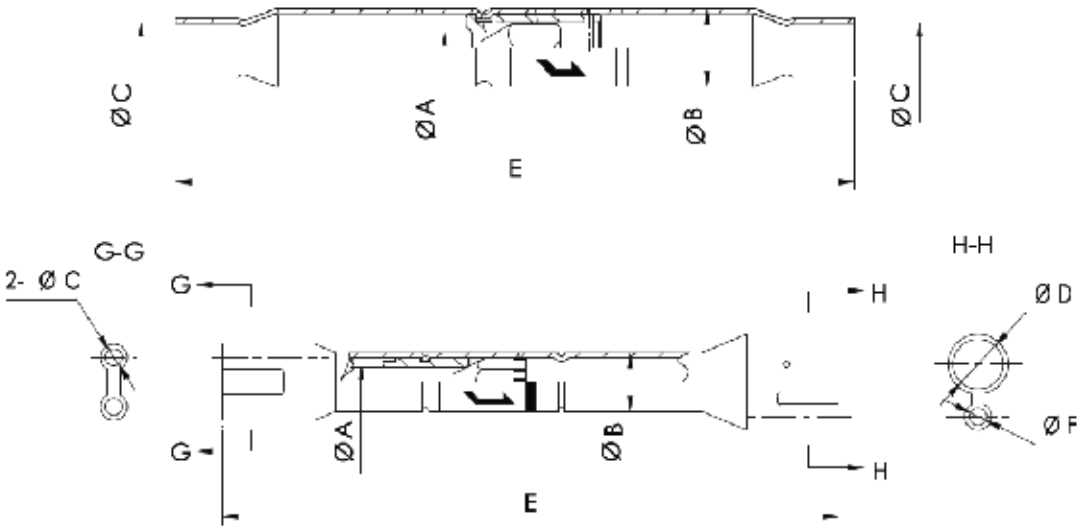
FEATURES

- GOOD SEALING PERFORMANCE, STABLE STRUCTURE: USING HIGH QUALITY ENGINEERING PLASTIC VALVE CORE
- SMALL FLOW RESISTANCE, BIG FLOW RATE

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R407C, R410A etc.
- Applicable medium temperature: -30°C~+120°C
- Maximum working pressure: 4.2MPa

DIMENSIONS



Float Type SERIES
Check Valve

DIMENSIONS

Model	Dimensions mm				
	A	B	C	D/F	E
YCV3	3	9.52	3.18	3.18	100
			6.35	6.35	
YCV5	5	12.7	9.52	9.52	110
			12.7	12.7	
YCV8	8	19.05	12.7	12.7	150
			15.88	15.88	
YCV11	11	22.2	15.88	15.88	160
			19.05	19.05	
YCV14	14	28	19.05	19.05	
			22.2	22.2	
CV/CAV	4.8	9.52	2.7	6.0/3.1	100
			2.9	6.5/2.7	
			3.1	6.5/2.9	
			3.3	8.1/2.7	
			3.5	8.1/3.3	

SYJ SERIES

Sight Glass

Sight glasses are installed after the filter drier in liquid line of refrigerating systems, in order to observe property changes of the refrigerant (liquid/vapor) and to indicate the moisture level by colors.

FEATURES

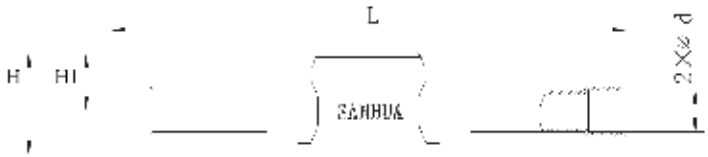
- HIGH PRECISION COLOR INDICATOR
- INDICATOR PASTED CLOSELY TO THE GLASS TO PREVENT SURFACE CONTAMINATION
- SOLID AND CORROSION RESISTANT BRASS MATERIAL
- GOOD READABILITY DUE TO HIGH CLEAR SIGHT GLASS OF WIDE ANGLE
- SEALING OF LOW CREEP PTFE TO ENSURE LEAKAGE FREE PERFORMANCE

GENERAL SPECIFICATION

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Ambient temperature min./max.: -50°C / +80°C
- Medium temperature TS min./max.: -50°C / +80°C
- Max. operating pressure PS: 4,6 MPa (46 bar)
- Installation position:
  - Liquid and suction line
  - Preferably in vertical lines, recommended position for horizontal lines is upwards without inclination in any direction
- Declaration according to PED

GENERAL CHARACTERISTICS

Version with female/female Solder Connections



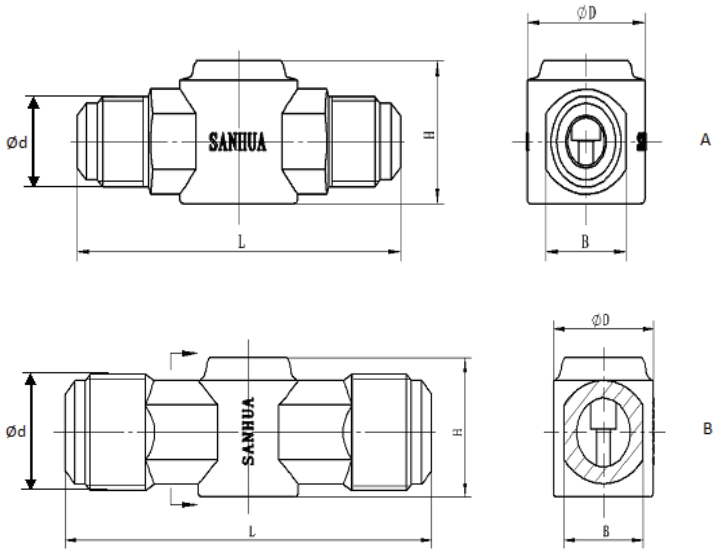
SYJ SERIES
Sight Glass

Version with female/female Solder Connections

Model ODF Solder	Connection Type	Connections ODF		Dimensions & Weight				PED Category	Product Number
		Ød		L	H	H1	Weight		
		[inch]	[mm]	[mm]	[mm]	[mm]	[g]		
SYJ-A00061-000	solder	-	6	101	24	14	100	3.3	SYJ-42001
SYJ-A00040-000	solder	1/4	-	101	24	14	100	3.3	SYJ-42002
SYJ-A00060-000	solder	3/8	-	119	24	14	100	3.3	SYJ-42003
SYJ-A00101-000	solder	-	10	119	24	14	100	3.3	SYJ-42004
SYJ-A00080-000	solder	1/2	-	146	30	17	200	3.3	SYJ-42005
SYJ-A00121-000	solder	-	12	146	30	17	200	3.3	SYJ-42006
SYJ-A00100-000	solder	5/8	16	146	30	17	200	3.3	SYJ-42007
SYJ-A00120-000	solder	3/4	-	173	37	21	300	3.3	SYJ-42008
SYJ-A00140-000	solder	7/8	22	173	37	21	300	3.3	SYJ-42009

Version with male/male Flare Connections

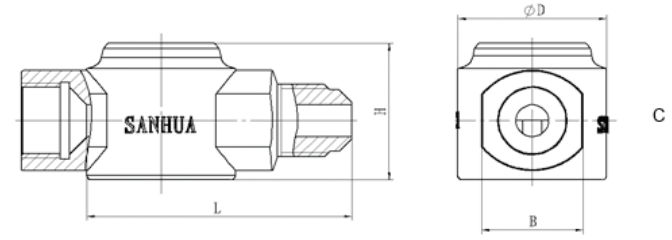
Model Flare	Connection Type	SAE Flare	Dimensions & Weight				PED Category	Drawing	Product Number
		Ød	L	H	ØD	Weight			
		[inch]	[mm]	[mm]	[mm]	[g]			
SYJ-A02040-000	flare	1/4	67	24	14	110	3.3	A	SYJ-42010
SYJ-A02060-000	flare	3/8	82	24	14	240	3.3	A	SYJ-42011
SYJ-A02080-000	flare	1/2	88	30	17	240	3.3	A	SYJ-42012
SYJ-A02100-000	flare	5/8	104	30	17	320	3.3	A	SYJ-42013
SYJ-A02120-000	flare	3/4	110	32	15	340	3.3	B	SYJ-42014



SYJ SERIES
Sight Glass

Version with male/female Flare connections

Model male/female flare	Connection Type	SAE Flare	Dimensions & Weight					PED Category	Drawing	Product Number
		Ød	L	H	ØD	B	Weight			
		[inch]	[mm]	[mm]	[mm]	[mm]	[g]			
SYJ-A02040-100	flare	1/4	46	30	32	22	200	3,3	C	SYJ-42015
SYJ-A02060-100	flare	3/8	57	30	32	22	240	3,3	C	SYJ-42016
SYJ-A02080-100	flare	1/2	59	32	30	24	250	3,3	C	SYJ-42017
SYJ-A02100-100	flare	5/8	71	37	30	24	320	3,3	D	SYJ-42018
SYJ-A02120-100	flare	3/4	75	37	30	24	330	3,3	D	SYJ-42019



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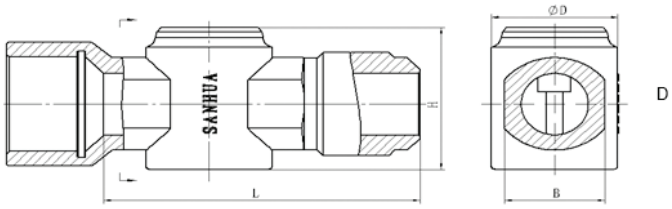


D

SYJ SERIES
Sight Glass

Moisture Indication Limits

Refrigerant	Moisture Content 25°C: PMM		
	Green/Dry	Middle Color	Yellow/Wet
R22	<30	30~90	>90
R134a	<50	50~200	>200
R404A	<15	15~90	>90
R507	<15	15~90	>90
R407C	<120	120~280	>280
R410A	<75	75~150	>150

Refrigerant	Moisture Content 40°C: PMM		
	Green/Dry	Middle Color	Yellow/Wet
R22	<45	45~130	>130
R134a	<80	80~225	>225
R404A	<30	30~140	>140
R507	<30	30~140	>140

Brass Service Valve

Brass service valves of series SSV are applicable for split air conditioners to connect indoor unit and outdoor unit. It can also be used in other cooling or refrigeration systems. The inner path of the valve can be closed by operating the valve stem. The 3way version (with charge port) can be used as service valve for vacuum pumping and refrigerant injection.

FEATURES

- AVAILABLE WITHOUT AND WITH CHARGE PORT
- COST EFFICIENT SOLUTION
- RELIABLE AND ROBUST DESIGN

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R134a, R404A, R407C, R410A, R507A...
- Ambient temperature min./max.: -30°C / +55°C
- Medium temperature TS min./max.: -30 °C / +120°C
- Max. operating pressure PS: 4,5 MPa (45 bar)
- Installation position: Preferably liquid and suction line
- Certifications: UL/CSA and PED declaration

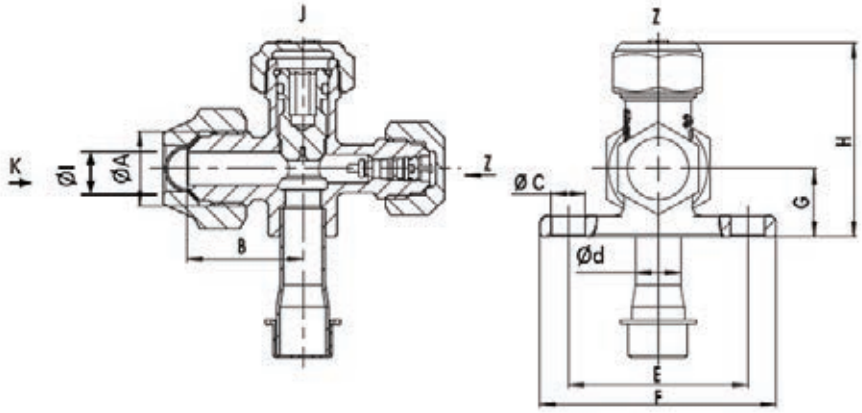
GENERAL CHARACTERISTICS

Model	Part Number[1)]	Connections					Cooling capacity	PED Category
		ØA Flare	Ød ODF		ØI Pipe	Charge Port Flare		
		[inch]	[inch]	[mm]	[mm]	[inch]	[kW]	
SSV-A2GSHC-23	SSV-14001	7/16-20UNF	1/4	6,35	4,8	-	0,7 - 1,5	3,3
SSV-JA3GSHC-20	SSV-14002	5/8-18UNF	3/8	9,52	7,0	1/4	0,7 - 3,7	3,3
SSV-JA4GSHC-19	SSV-14003	3/4-16UNF	1/2	12,7	10	1/4	1,1 - 7,5	3,3
SSV-JA5GSHC-15	SSV-14004	7/8-14UNF	5/8	15,9	12,5	1/4	1,5 - 8,8	3,3
SSV-JA6GSHC-13	SSV-14005	1 1/16-14UNS	3/4	19,1	16	1/4	3,7 - 5,9	3,3

Note: 1) Extent of delivery:
- SSV-JA valve body with schrader valve, cap charge port, cap shut-off valve, nut pipe connection
- SSV-A valve body, cap shut-off valve, nut pipe connection, without charge port

SSV SERIES
Brass Service Valve

DIMENSIONS



Model	Part Number	Dimensions [mm]						Wrench Size [mm]			
		B	ØC	E	F	G	H	Nut Pipe Connection K	Cap Shut-off Valve J	Valve[1] Steam J	Cap Charge Port Z
SSV-A2GSHC-23	SSV14001	23	7,2	38	50	14	36	19	17	5	-
SSV-JA3GSHC-20	SSV14002	24,5	7,2	38	50	14,5	41	22	19	5	17
SSV-JA4GSHC-19	SSV14003	28	7,2	38	50	16	44	24	22	5	17
SSV-JA5GSHC-15	SSV14004	34	7,2	38	50	17	47	27	26	5	17
SSV-JA6-GSHC-13	SSV14005	40	7,2	44	56	23	61	32	30	5	17

Note: 1) Allen screw

Angle Valve

Applicable for compressors, reservoirs of commercial air conditioner, freezing or deep-freezing equipment or for pipe connection; it can close inner passage of the valve by operating the valve stem.

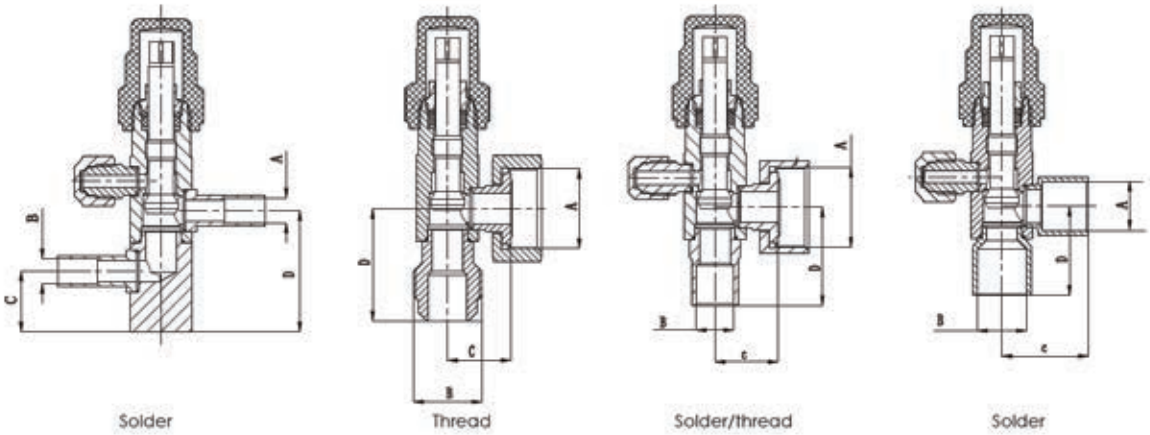
FEATURES

- BIDIRECTIONAL FLOW
- PRODUCTS ARE 100% H/HE INSPECTED
- HIGH PRECISION AND RELIABILITY: PROCESSED BY DEDICATED EQUIPMENT
- GOOD CONSISTENCY: MULTI-SPOT WELDED BY TUNNEL FURNACE
- EXCELLENT TEMPERATURE RESISTANCE: UTILIZING SPECIAL SEALING MATERIALS

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R134a, R407C and R410A etc.
- Applicable medium temperature: -40°C ~ +150°C
- Maximum working pressure: 4.83MPa
- Certification: UL

DIMENSIONS



Angle Valve

GENERAL CHARACTERISTICS

Model	Dimensions							Connection Type
	Diagonal Size of Valve Body mm	A		B		Structure Size mm		
		Thread	Solder in	Thread	Solder in	C	D	
GZF(20)-ZB022	20	/	1/4	/	1/4	28	29	Solder
GZF(20)-ZB033		/	3/8	/	3/8	28	29	
GZF(20)-ZB044		/	1/2	/	1/2	28	29	
GZF(20)-ZB055		/	5/8	/	5/8	28	29	
GZF(20)-ZA042		3/4-16UNF	/	7/16-20UNF	/	19,8	30	Thread
GZF(20)-ZA043			/	5/8-18UNF	/	19,8	30	
GZF(20)-ZA044			/	3/4-16UNF	/	19,8	30	
GZF(20)-ZA045			/	7/8-14UNF	/	19,8	30	
GZF(20)-ZC042			/	/	1/4	19	27	Solder / thread
GZF(20)-ZC043			/	/	3/8	16,5	39,5	
GZF(20)-ZC044			/	/	1/2	19	27	
GZF(20)-ZC045			/	/	5/8	19	27	
GZF(20)-ZC083		1-14UNS	/	/	3/8	20,5	32	
GZF(20)-ZC084			/	/	1/2	20,5	32	
GZF(20)-ZC085			/	/	5/8	20,5	37	
GZF(20)-ZA082			/	7/16-20UNF	/	20,5	33,5	Thread
GZF(20)-ZA083			/	5/8-18UNF	/	20,5	33,5	
GZF(20)-ZA084			/	3/4-16UNF	/	20,5	33,5	
GZF(20)-ZA085			/	7/8-14UNF	/	30,5	36,5	
GZF(22)-ZB055	22	/	5/8	/	5/8	33,5	40	Solder
GZF(22)-ZB085		1-14UNS	/	7/8-14UNF	/	36	39,5	Thread
GZF(30)-ZB066	30	/	3/4	/	3/4	17,5	50	Solder
GZF(30)-ZB077		/	7/8	/	7/8	40	42	
GZF(30)-ZB099		/	1 1/8	/	1 1/8	51	53	
GZF(30)-ZC0A7		1 1/4-12UNF	/	/	7/8	25	42	Solder / thread
GZF(30)-ZC0A9		1 1/4-12UNF	/	/	1 1/8	25	56,5	
GZF(30)-ZC0B7		1 3/4-12UN	/	/	7/8	25	56,5	
GZF(30)-ZC0B9		1 3/4-12UN	/	/	1 1/8	27,5	57	

Angle Valve

GENERAL CHARACTERISTICS

Model	Dimensions							Connection Type
	Diagonal Size of Valve Body mm	A		B		Structure Size mm		
		Thread	Solder in	Thread	Solder in	C	D	
GZF(20)-ZA042	35	/	1 1/8	/	1 1/8	52,5	58	Solder
GZF(20)-ZA043		/	1 3/8	/	1 3/8	52,5	58	
GZF(20)-ZA044		/	1 5/8	/	1 5/8	52,5	58	
GZF(20)-ZA045		1 3/4-12UN	/	/	1 1/8	31	56,5	Solder / thread
GZF(20)-ZC042		1 3/4-12UN	/	/	1 3/8	31	62,5	
GZF(20)-ZC043		1 3/4-12UN	/	/	1 5/8	31	62,5	
GZF(30)-ZC0A7	50	/	1 5/8	/	1 5/8	62,5	69	Solder
GZF(30)-ZC0A9		/	2 1/8	/	2 1/8	67,5	74	
GZF(30)-ZC0B7		1 3/4-12UN	/	/	1 5/8	62,5	69	Solder / thread
GZF(30)-ZC0B9		1 3/4-12UN	/	/	2 1/8	41,8	72,5	

Receiver Valve

Receiver valve are used for tube connection or compressor and reservoirs of commercial air conditioner, freezing or deepfreezing equipment. Inner path of the valve can be closed or opened by operating the valve stem.

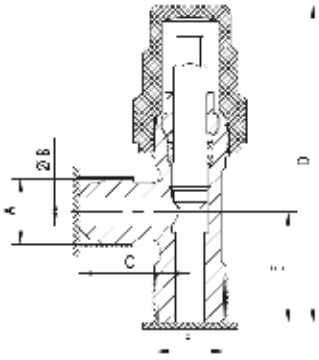
FEATURES

- COST EFFECTIVE: OPTIMAL DESIGN BASED ON PERFORMANCE
- GOOD APPEARANCE AND ENDURABLE: THE VALVE BODY TREATED WITH SHOT BLAST.
- WELL SEALING PERFORMANCE: WITH PARTICULAR SEALING STRUCTURE AND DESIGN

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R134a, R407C, R410A
- Applicable medium temperature: -40°C ~ +120°C
- Maximum working pressure: 4.83 MPa
- Certification: UL

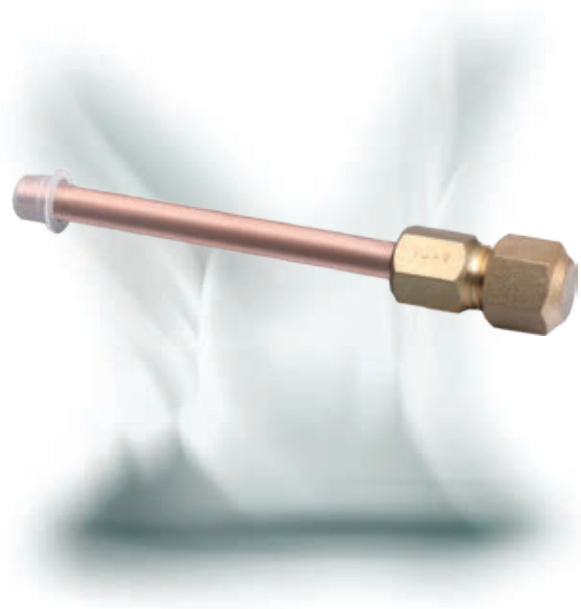
DIMENSIONS



Model	A in	Dimensions mm				F in
		B	C	D	E	
ZJF-A22	7/16-20UNF	4.8	23.5	74	23.5	NPT 1/4
ZJF-A23	7/16-20UNF	4.8	27	77	27	NPT 3/8
ZJF-A33	5/8-18UNF	7	27	77	27	NPT 3/8
ZJF-A32	5/8-18UNF	7	27	77	27	NPT 1/4
ZJF-A34	5/8-18UNF	7	32	114	37	NPT 1/2
ZJF-A44	3/4-16UNF	10	36	114	37	NPT 1/2
ZJF-A43	3/4-16UNF	10	36	114	37	NPT 3/8
ZJF-A54	7/8-14UNF	12.5	36	114	37	NPT 1/2
ZJF-A66	1 1/16-14UNS	16	42	122	43	NPT 3/4
ZJF-A76	1 1/4-12UNF	20	48	122	43	NPT 3/4

Charge Valve

Charge valves are mainly installed in air conditioning and refrigeration systems. They are used as service valve for circuit evacuation to vacuum and for refrigerant injection.



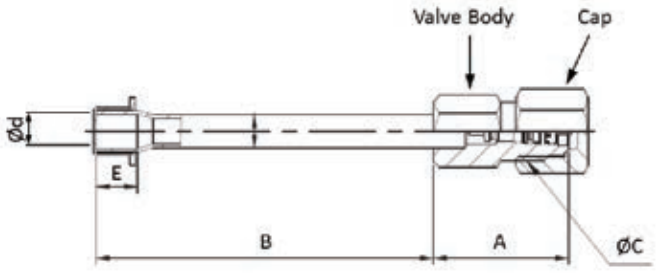
FEATURES

- SIMPLE STRUCTURE, CONVENIENT TO USE
- PREVENT REFRIGERANT LOSS THROUGH INTEGRATED SHRADER VALVE

GENERAL SPECIFICATION

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Ambient temperature min./max.: -30/+55°C
- Medium temperature TS min./max.: -30°C / +80°C
- Max. operating pressure PS: 4,5 MPa (45 bar)
- Installation position: liquid or suction line
- Declaration according to PED

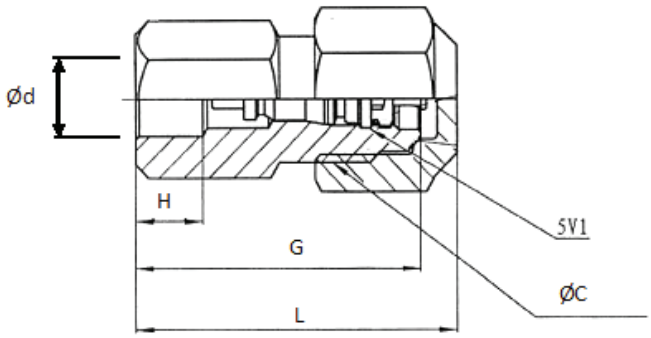
DIMENSIONS



Model	Part Number 1)	Connections			Dimensions			Wrench Size		Refrigerant
		Solder ODF Ød		Flare UNF ØC	A	B	E	Valve Body	Cap	
		[mm]	[inch]	[inch]	[mm]			[mm]		[mm]
TCJ-2HMSZ-1	TCJ-14001	6,35	1/4	7/16-20	26	65	8	12	14	R22
TCJ-2GMS-1	TCJ-14002	6,35	1/4	1/2-20	26	65	8	14	17	R134a/R404A/R407C R410A/R507

Note: 1) Extent of delivery: valve body, schrader valve and cap

TCJ SERIES
Charge Valve

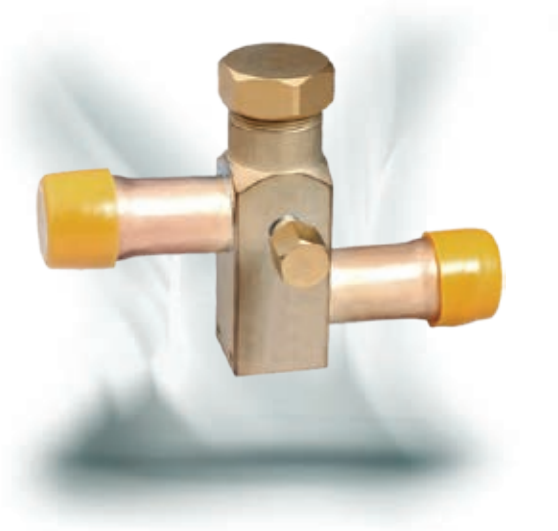


Model	Part Number [1)]	Connections			Dimensions			Wrench Size		Refrigerant
		Solder ODF Ød		Flare UNF ØC	L	G	H	Valve Body	Cap	
		[mm]	[inch]	[inch]	[mm]			[mm]		[mm]
TCJ-2HLEN-1	TCJ-14003	6,35	1/4	7/16-20	29	26	6	12	14	R22
TCJ-2GLEN-2	TCJ-14004	6,35	1/4	1/2-20	29	26	6	14	17	R134a/R404A/R407C R410A/R507

Note: 1) Extent of delivery: valve body and cap

Bar-Stock Service Valve

Bar-stock service valve can be used in split air conditioners to connect indoor unit and outdoor unit, which can close the inner passage of the valve by operating the valve stem; it can be used as service valve during maintenance for the purpose of vacuum pumping and refrigerant injection. It can also be used in other refrigerating systems.



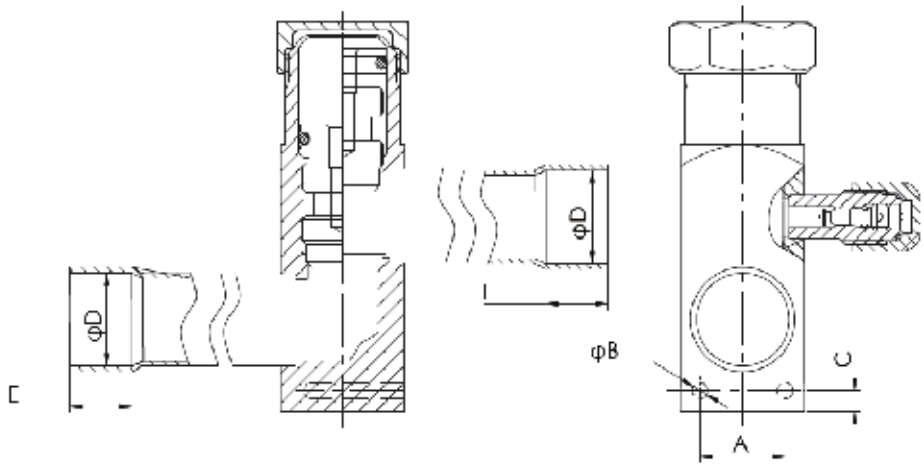
FEATURES

- COST-EFFECTIVE: UNIQUE METAL CAPTURE STRUCTURE, ENSURE HIGH QUALITY
- VARIOUS SQUARE SHAPES TO MEET SPECIAL INSTALLATION MODE AND FLOW REQUIREMENTS OF EQUIPMENT
- GOOD CONSISTENCY: SIMULTANEOUS WELDING OF MULTIPLE SPOTS BY TUNNEL FURNACE
- HIGH TESTING PRECISION: PRODUCTS ARE 100% H/HE INSPECTED

GENERAL SPECIFICATIONS

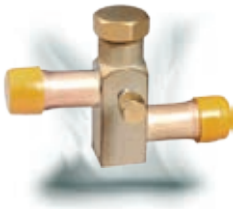
- Applicable refrigerant: R22, R134a, R407C, R410A etc.
- Applicable medium temperature: -30°C ~ +120°C
- Maximum working pressure: 4.2MPa, 4.83 MPa for special square body v
- Certification: UL

TECHNICAL PARAMETERS

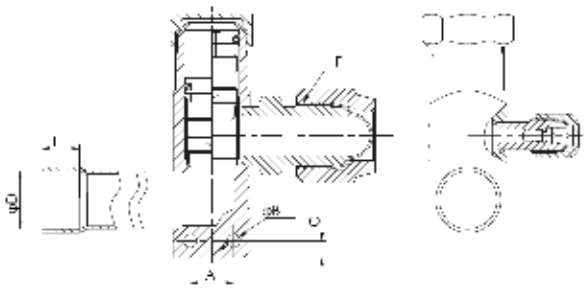


Solder Connection

Bar-Stock Service Valve



Type	Model	Copper tube Size in	Dimensions mm					Thread Size F
			A	B	C	D	E	
Solder Connection	SMV-JA3Y	3/8	10.6±0.5	3.6±0.10	3,6	9,6	8±1.0	/
	SMV-JA4Y	1/2	17.7±0.5	3.6±0.10	3,6	12,8	9.7±1.0	/
	SMV-JA5Y	5/8	17.7±0.5	3.6±0.10	3,6	15,95	14.2±1.0	/
	SMV-JA6Y	3/4	17.7±0.5	3.6±0.10	3,6	19,13	15.7±1.0	/
	SMV-JA7Y	7/8	17.7±0.5	3.6±0.10	3,6	22,33	19±1.0	/
	SMV-JA8Y	1	17.7±0.5	3.6±0.10	3,6	25,4	15±1.0	/
	SMV-JA9Y	9/8	17.7±0.5	3.6±0.10	3,6	28,8	15±1.0	/
	SMV-8JA3Y	3/8	10.6±0.5	3.6±0.10	3,6	9,6	8±1.0	/
	SMV-15JA4Y	1/2	17.7±0.5	3.6±0.10	3,6	12,8	9.7±1.0	/
	SMV-15JA5Y	5/8	17.7±0.5	3.6±0.10	3,6	15,95	14.2±1.0	/
	SMV-15JA6Y	3/4	17.7±0.5	3.6±0.10	3,6	19,13	15.7±1.0	/
	SMV-17JA7Y	7/8	17.7±0.5	3.6±0.10	3,6	22,33	19±1.0	/



Solder/Flare Nut

Type	Model	Copper tube Size in	Dimensions mm					Thread Size F
			A	B	C	D	E	
Solder / Flare Nut	SMV-JA3	3/8	10.6±0.5	3.6±0.10	3,6	9,6	8±1.0	5/8-18UNF
	SMV-JA4	1/2	17.7±0.5	3.6±0.10	3,6	12,8	9.7±1.0	3/4-16UNF
	SMV-JA5	5/8	17.7±0.5	3.6±0.10	3,6	15,95	14.2±1.0	7/8-14UNF
	SMV-JA6	3/4	17.7±0.5	3.6±0.10	3,6	19,13	15.7±1.0	1 1/16-14UNS
	SMV-JA7	7/8	17.7±0.5	3.6±0.10	3,6	22,33	19±1.0	1 1/16-14UNS
	SMV-8JA3	3/8	10.6±0.5	3.6±0.10	3,6	9,6	8±1.0	5/8-18UNF
	SMV-15JA4	1/2	17.7±0.5	3.6±0.10	3,6	12,8	9.7±1.0	3/4-16UNF
	SMV-15JA5	5/8	17.7±0.5	3.6±0.10	3,6	15,95	14.2±1.0	7/8-14UNF
	SMV-15JA6	3/4	17.7±0.5	3.6±0.10	3,6	19,13	15.7±1.0	1 1/16-14UNS
	SMV-17JA7	7/8	17.7±0.5	3.6±0.10	3,6	22,33	19±1.0	1 1/16-14UNS

SANHUA *YOUR ROAD MAP TO THE ECO-DESIGN DIRECTIVE**

*KEEPS YOU ONE STEP AHEAD OF THE COMING **EFFICIENCY** AND **ENVIRONMENTAL** EUROPEAN **CHALLENGES***

EEV Technology + Electronic Controls

- Improves HVACo-R system efficiency up to **20%**
- DPFo-VPF series from 2kW to 1400kW
  *75kW and 1400kW available in Quarter 4
- Advanced MSS (Minimum Stable Superheat) control logic

2 kW

1400kW

4 Way Reversing Valve

- Improves efficiency by **5%**
- SHF series 1kW to 420 kW
- Widest range in the market with Single Body Design

1 kW

420kW

Inverter Controller for Large System

- Improves system efficiency up to **30%**
- **Active Frequency** Conversion Technology
- Wide Range of voltage application

MCHE

- Improves efficiency by **30%**
- Refrigerant Charge Reduction by **30%** Environmental Friendly
- MCHE is lighter in weight, smaller in volume Compact Design

*DIRECTIVE 2012/27/EU

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Every second A/C system

in the world is equipped with

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SANHUA IS PROVIDING INVERTER CONTROLLER SOLUTIONS TO ITS CUSTOMERS HELPING THEM TO IMPROVE SYSTEM EFFICIENCY BY UP TO 30%

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- *Improves system efficiency up to* ***30%***
- ***Active Frequency*** *Conversion Technology*
- *Wide Range of voltage application*

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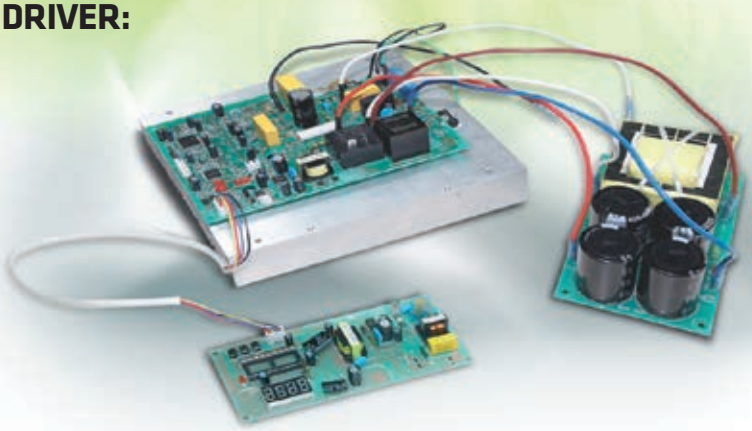
Electronic Controls

FEATURES OF STANDARD INVERTER DRIVER:

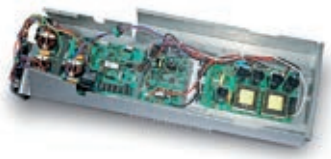


- Up to 30% high energy efficiency.
- Mutually optimized and qualified: More than 20 Years Experienced Japanese Experts in Compressor Inverter Driver.
- Famous Compressor Brand: Mitsubishi, Sanyo, Toshiba, Hitachi, Panasonic...
- Capacity from 1HP to 12HP, Single phase or Three phase Power.
- Wide compressor speed range from 10Hz to 120Hz.
- Excellent compressor noise and vibration reduce technology.
- Protects compressor with current and voltage monitoring.
- Active power factor correction (PF > 0.985).
- Total core algorithms developed by Sanhua inside the CPU.
- Multi board easy for combine, update, after sale service and good for qualified power management.
- Wide application: Industrial, Refrigeration, RAC, CAC, Heat pump water heater, HVAC, DC motors...

Controller for EEV

Inverter Controller for HP Water Heater

Inverter Controller for Large System



Residential Inverter Controller

SANHUA

Manufacturing *capabilities*

ANNUAL CAPACITY OF INVERTER CONTROLLER FOR 2012 IS 500,000 SETS, AND THE CAPACITY WILL BE EXPANDED TO 1 MILLION SETS IN 2013.
ALL EQUIPMENT IS IMPORTED, FOR EXAMPLE DEK ENGLAND PRINTING MACHINE, JUKI JAPAN SMT MACHINE, HELLER AMERICA REFLOW SOLDERING MACHINE, OMRON JAPAN AUTO OPTICAL INSPECTOR, AND PANASONIC JAPAN AUTO PLUG-IN MACHINE.

Production Line & Product Warehouse

IQC, Raw Material Ware House & SMT Workshop Equipments

The former Foxconn management team brings scientific manufacturing process and strict quality control. Along with all the advanced equipment, we achieve a modern production process from raw material input to product output.

> IQC, Raw Material Ware House & SMT Workshop Equipment:

> Transistor Curve Tracer ,Precision LCR Meter etc. (IQC Equipment)

> Electric Moisture-proof Cabinet, Vacuum Packaging Machine, Hygrothermograph, Check List (Raw material warehouse and Equipment)

> Silk screen printing machine (DEK UK)

> SMT machine (JUKI Japan)

> Re-flow Welding Machine (HELLER USA)

> Auto optics inspector (Omron Japan)

> Auto plug-in machine (Panasonic Japan)

SANHUA

DTG/L SERIES

Uni-Flow Filter Driers

The filter driers of series DTG are used in refrigeration system with unidirectional flow to absorb moisture and acid in the system and to filter out the impurities.

FEATURES

- HIGH EFFICIENT IN MOISTURE ABSORPTION, FILTERING IMPURITY, ACID, PAINT REMAINS AND MUD REMOVAL
- HYBRID DESICCANT
- DURABLE AND SOLID FILTER CORES
- FILTERING FINENESS: 20μm
- CORROSION RESISTANT PAINTING SURVIVES SALT SPRAY TEST OF 500 HOURS
- CONNECTION TYPE: FLARE OR SOLDER

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Ambient temperature min./max.: -30°C / +55°C
- Medium temperature TS min./max.: -30°C / +120°C
- Max. operating pressure PS max.: 4,83 MPa (48,3 bar) - 700 PSI
- Installation position:
  - Flow direction corresponds to the arrow
  - Preferably installed in liquid line
- Certifications: UL/CSA and PED declaration

TECNHICAL PARAMETERS *Desiccant Selection Table*

	Medium Type	80% 3Å desiccant and 20% active alumina	100% 3Å desiccant
Refrigerant [1]	HFC	Applicable	Applicable
	HCFC	Applicable	Applicable
	CFC	Applicable	Not Applicable
Oil [2]	Mineral oil or AB	Applicable	Applicable
	Pure POE or PAG	Applicable	Applicable
	POE or PAG with additive	Not Applicable	Applicable

Note:
1) For CFC system, usage of core with alumina is recommended as a strong capability to absorb acid may be needed
2) When the systems use oil with additive, it is not recommended to use a core with alumina.

DTG/L SERIES
Uni-Flow Filter Driers

Model Designation Legend

1	**Product Code**	**Filter Drier Series**	
	DTG	Indicates unidirectional filter drier	
2	**Filter Core**	**Structure and Material**	
	A	Loos core, 100%3Å desiccant	
	B	Solid core, 100%3Å desiccant	
	E	Loos core, 80% 3Å desiccant and 20% active alumina	
	F	Solid core, 80% 3Å desiccant and 20% active alumina	
3	**Internal Volume**	**Expressed in [inch³]**	**Expressed in [cm³]**
	03	3	49
	05	5	82
	08	8	131
	16	16	262
	30	30	492
	41	41	672
	75	75	1229
4	**Connection Size**	**Pos. 5 shows "0": Solder [inch]**	**Pos. 5 shows "4": SAE Flare [inch]**
	02	1/4	1/4
	25	5/16	-
	03	3/8	3/8
	04	1/2	1/2
	05	5/8	5/8
	06	3/4	3/4
	07	7/8	7/8
	09	1 1/8	-
	Connection Size	**Pos. 5 shows "1": Solder [mm]**	
	06	6	
	(08) *	(5/16" version can be used e.g. DTG-B03 **25**0)	
	10	10	
	12	12	
	16	16	
	(22) *	(7/8" version can be used e.g. DTG-B16 **07**0)	
	28	28	
5	**Pipe Connection**	**Type**	
	0	Solder with inch connections	
	1 *	Solder with metric connections	
	4	SAE flare connections	
6	**Version Number**	**Description**	
	901	Standard product	

Note: * Solder connections which fit to metric and inch are marked with inch product codes e.g. 8 and 22mm

DTG/L SERIES
Uni-Flow Filter Driers

MODEL DESIGNATION EXAMPLE

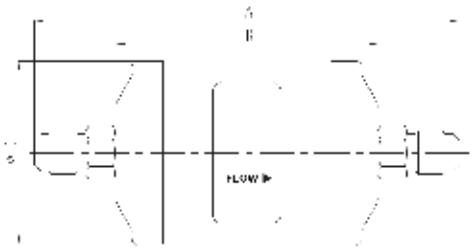
Position Number						According to Model Designation Legend
1	2	3	4	5	6	
DTG	B	03	06	1	901	Unidirectional filter drier
DTG	**B**	03	06	1	901	Solid filter core with 100% 3Å desiccant
DTG	B	**03**	06	1	901	3 inch³ internal volume
DTG	B	03	**06**	1	901	When Pos. 5 is "1": connection size 6mm
DTG	B	03	06	**1**	901	Solder connection metric
DTG	B	03	06	1	**901**	Standard product

GENERAL CHARACTERISTICS OF DTG-B FILTER - FLARE CONNECTION

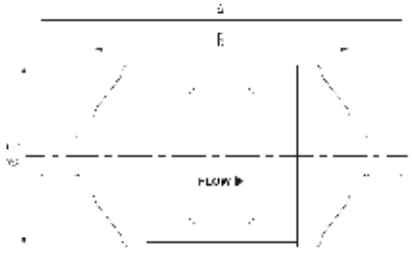
Model	Part Number	Type of Connection	Nominal Volume	Connection	Dimensions & Weight 1)				PED Category
				SAE Flare	ØD	B	A	Weight	
			[cm³]	[inch]	[mm]	[mm]	[mm]	[g]	
DTG-B03 024-901	DTG-30001	flare	49	1/4	45	65	112,0	160	3,3
DTG-B03 034-901	DTG-30002	flare	49	3/8	45	65	125,2	160	3,3
DTG-B03 044-901	DTG-30153	flare	49	1/2	45	65	133,2	160	3,3
DTG-B05 024-901	DTG-30003	flare	82	1/4	68	76	123,0	450	3,3
DTG-B05 034-901	DTG-30004	flare	82	3/8	68	76	136,2	450	3,3
DTG-B08 024-901	DTG-30005	flare	131	1/4	68	98	145,0	550	3,3
DTG-B08 034-901	DTG-30006	flare	131	3/8	68	98	158,2	550	3,3
DTG-B08 044-901	DTG-30007	flare	131	1/2	68	98	166,2	550	3,3
DTG-B16 024-901	DTG-30008	flare	262	1/4	68	118	165,0	660	3,3
DTG-B16 034-901	DTG-30009	flare	262	3/8	68	118	178,2	660	3,3
DTG-B16 044-901	DTG-30010	flare	262	1/2	68	118	186,2	660	3,3
DTG-B16 054-901	DTG-30011	flare	262	5/8	68	118	195,4	660	3,3
DTG-B16 064-901	DTG-30012	flare	262	3/4	68	118	195,4	660	3,3
DTG-B30 034-901	DTG-30013	flare	492	3/8	80	193	253,2	1550	3,3
DTG-B30 044-901	DTG-30014	flare	492	1/2	80	193	261,2	1550	3,3
DTG-B30 054-901	DTG-30015	flare	492	5/8	80	193	270,4	1550	3,3
DTG-B30 064-901	DTG-30016	flare	492	3/4	80	193	270,4	1550	3,3
DTG-B30 074-901	DTG-30017	flare	492	7/8	80	193	283,0	1550	3,3
DTG-B41 044-901	DTG-30018	flare	672	1/2	94	194	262,2	2050	3,3
DTG-B41 054-901	DTG-30019	flare	672	5/8	94	194	271,4	2050	3,3

Note: 1) Dimensions are rounded up to integral mm

DTG/L SERIES
Uni-Flow Filter Driers



Flare Connection



Solder Connection

GENERAL CHARACTERISTICS OF DTG-B FILTER - SOLDER CONNECTION

Model [inch]	Part Number [inch]	Model [mm]	Product Number [mm]	Type pf connection	Nominal Volumen	Connection		Dimensions & Weight 1)				PED category
						Solder		DØ	B	A	Weight	
					[cm³]	[inch]	[mm]	[mm]	[mm]	[mm]	[g]	
DTG-B03 020-901	DTG-30020	DTG-B03 061-901	DTG-30053	solder	49	1/4	6	45	65	103	160	3,3
DTG-B03 250-901	DTG-30021	DTG-B03 250-901	DTG-30021	solder	49	5/16	8	45	65	103	160	3,3
DTG-B03 030-901	DTG-30022	DTG-B03 101-901	DTG-30055	solder	49	3/8	10	45	65	103	160	3,3
DTG-B03 040-901	DTG-30023	DTG-B03 121-901	DTG-30056	solder	49	1/2	12	45	65	113	160	3,3
DTG-B05 020-901	DTG-30024	DTG-B05 061-901	DTG-30057	solder	82	1/4	6	69	76	114	450	3,3
DTG-B05 250-901	DTG-30025	DTG-B05 250-901	DTG-30025	solder	82	5/16	8	69	76	114	450	3,3
DTG-B05 030-901	DTG-30026	DTG-B05 101-901	DTG-30059	solder	82	3/8	10	69	76	114	450	3,3
DTG-B05 040-901	DTG-30027	DTG-B05 121-901	DTG-30060	solder	82	1/2	12	69	76	124	450	3,3
DTG-B05 050-901	DTG-30028	DTG-B05 161-901	DTG30054	solder	82	5/8	16	69	76	124	450	3,3
DTG-B08 020-901	DTG-30029	DTG-B08 061-901	DTG-30061	solder	131	1/4	6	69	98	136	550	3,3
DTG-B08 250-901	DTG-30030	DTG-B08 250-901	DTG-30030	solder	131	5/16	8	69	98	136	550	3,3
DTG-B08 030-901	DTG-30031	DTG-B08 101-901	DTG-30063	solder	131	3/8	10	69	98	136	550	3,3
DTG-B08 040-901	DTG-30032	DTG-B08 121-901	DTG-30064	solder	131	1/2	12	69	98	146	550	3,3
DTG-B08 050-901	DTG-30033	DTG-B08 161-901	DTG-30062	solder	131	5/8	16	69	98	146	550	3,3
DTG-B16 020-901	DTG-30034	DTG-B16 061-901	DTG-30065	solder	262	1/4	6	69	118	156	660	3,3
DTG-B16 250-901	DTG-30035	DTG-B16 250-901	DTG-30035	solder	262	5/16	8	69	118	156	660	3,3
DTG-B16 030-901	DTG-30036	DTG-B16 101-901	DTG-30067	solder	262	3/8	10	69	118	156	660	3,3
DTG-B16 040-901	DTG-30037	DTG-B16 121-901	DTG-30068	solder	262	1/2	12	69	118	166	660	3,3
DTG-B16 050-901	DTG-30038	DTG-B16 161-901	DTG-30066	solder	262	5/8	16	69	118	166	660	3,3
DTG-B16 060-901	DTG-30039	-	-	solder	262	3/4	-	69	118	178	660	3,3
DTG-B16 070-901	DTG-30040	DTG-B16 070-901	DTG-30040	solder	262	7/8	22	69	118	178	660	3,3
DTG-B30 030-901	DTG-30041	DTG-B30 101-901	DTG-30069	solder	492	3/8	10	81	193	231	1550	3,3
DTG-B30 040-901	DTG-30042	DTG-B30 121-901	DTG-30070	solder	492	1/2	12	81	193	241	1550	3,3
DTG-B30 050-901	DTG-30043	DTG-B30 161-901	DTG-30075	solder	492	5/8	16	81	193	241	1550	3,3
DTG-B30 060-901	DTG-30044	-	-	solder	492	3/4	-	81	193	253	1550	3,3

DTG/L SERIES
Uni-Flow Filter Driers

GENERAL CHARACTERISTICS OF DTG-B FILTER - SOLDER CONNECTION

Model [inch]	Part Number [inch]	Model [mm]	Product Number [mm]	Type pf connection	Nominal Volumen	Connection		Dimensions & Weight [1]				PED category
						Solder		DØ	B	A	Weight	
					[cm³]	[inch]	[mm]	[mm]	[mm]	[mm]	[g]	
DTG-B30 070-901	DTG-30045	DTG-B30 070-901	DTG-30045	solder	492	7/8	22	81	193	253	1550	3,3
DTG-B30 090-901	DTG-30046	DTG-B30 281-901	DTG-30071	solder	492	1 1/8	28	81	193	263	1550	3,3
DTG-B41 040-901	DTG-30047	DTG-B41 121-901	DTG-30072	solder	672	1/2	12	94	194	242	2050	3,3
DTG-B41 050-901	DTG-30048	DTG-B41 161-901	DTG-30058	solder	672	5/8	16	94	194	242	2050	3,3
DTG-B41 070-901	DTG-30049	DTG-B41 070-901	DTG-30049	solder	672	7/8	22	94	194	254	2050	3,3
DTG-B41 090-901	DTG-30050	DTG-B41 281-901	DTG-30073	solder	672	1 1/8	28	94	194	264	2050	3,3
DTG-B75 070-901	DTG-30051	DTG-B75 070-901	DTG-30051	solder	1229	7/8	22	94	333	393	3400	3,3
DTG-B75 090-901	DTG-30052	DTG-B75 281-901	DTG-30074	solder	1229	1 1/8	28	94	333	403	3400	3,3

Note: 1) Dimensions are rounded up to integral mm

GENERAL CHARACTERISTICS OF DTG-F FILTER - FLARE CONNECTION

Model [1]	Part Number	Type of Connection	Nominal Volume	Connection	Dimensions & Weight [2]				PED Category
				SAE Flare	DØ	B	A	Weight	
DTG-F03 024-901	DTG-30078	flare	49	1/4	45	65	112,0	160	3,3
DTG-F03 034-901	DTG-30079	flare	49	3/8	45	65	125,2	160	3,3
DTG-F03 044-901	DTG-30154	flare	49	1/2	45	65	133,2	160	3,3
DTG-F05 024-901	DTG-30080	flare	82	1/4	69	76	123,0	450	3,3
DTG-F05 034-901	DTG-30081	flare	82	3/8	69	76	136,2	450	3,3
DTG-F08 024-901	DTG-30082	flare	131	1/4	69	98	145,0	550	3,3
DTG-F08 034-901	DTG-30083	flare	131	3/8	69	98	158,2	550	3,3
DTG-F08 044-901	DTG-30084	flare	131	1/2	69	98	166,2	550	3,3
DTG-F16 024-901	DTG-30085	flare	262	1/4	69	118	165,0	660	3,3
DTG-F16 034-901	DTG-30086	flare	262	3/8	69	118	178,2	660	3,3
DTG-F16 044-901	DTG-30087	flare	262	1/2	69	118	186,2	660	3,3
DTG-F16 054-901	DTG-30088	flare	262	5/8	69	118	195,4	660	3,3
DTG-F16 064-901	DTG-30089	flare	262	3/4	69	118	195,4	660	3,3
DTG-F30 034-901	DTG-30090	flare	492	3/8	81	193	253,2	1550	3,3

DTG/L SERIES
Uni-Flow Filter Driers

GENERAL CHARACTERISTICS OF DTG-F FILTER - FLARE CONNECTION

Model [1]	Part Number	Type of Connection	Nominal Volume	Connection	Dimensions & Weight [2]				PED Category
				SAE Flare	DØ	B	A	Weight	
			[cm³]	[inch]	[mm]	[mm]	[mm]	[g]	
DTG-F30 044-901	DTG-30091	flare	492	1/2	81	193	261,2	1550	3,3
DTG-F30 054-901	DTG-30092	flare	492	5/8	81	193	270,4	1550	3,3
DTG-F30 064-901	DTG-30093	flare	492	3/4	81	193	270,4	1550	3,3
DTG-F30 074-901	DTG-30094	flare	492	7/8	81	193	283,0	1550	3,3
DTG-F41 044-901	DTG-30095	flare	672	1/2	94	194	262,2	2050	3,3
DTG-F41 054-901	DTG-30096	flare	672	5/8	94	194	271,4	2050	3,3

Note: 1) Delivery time on request
2) Dimensions are rounded up to integral mm

GENERAL CHARACTERISTICS OF DTG-F FILTER - SOLDER CONNECTION

Model [1] [inch]	Part Number [inch]	Model [1] [mm]	Product Number [mm]	Type pf connection	Nominal Volumen	Connection		Dimensions & Weight [2]				PED category
						Solder		DØ	B	A	Weight	
DTG-F03 020-901	DTG-30097	DTG-F03 061-901	DTG-30130	solder	49	1/4	6	45	65	103	160	3,3
DTG-F03 250-901	DTG-30098	DTG-F03 250-901	DTG-30098	solder	49	5/16	8	45	65	103	160	3,3
DTG-F03 030-901	DTG-30099	DTG-F03 101-901	DTG-30131	solder	49	3/8	10	45	65	103	160	3,3
DTG-F03 040-901	DTG-30100	DTG-F03 121-901	DTG-30132	solder	49	1/2	12	45	65	113	160	3,3
DTG-F05 020-901	DTG-30101	DTG-F05 061-901	DTG-30133	solder	82	1/4	6	69	76	114	450	3,3
DTG-F05 250-901	DTG-30102	DTG-F05 250-901	DTG-30102	solder	82	5/16	8	69	76	114	450	3,3
DTG-F05 030-901	DTG-30103	DTG-F05 101-901	DTG-30134	solder	82	3/8	10	69	76	114	450	3,3
DTG-F05 040-901	DTG-30104	DTG-F051 21-901	DTG-30135	solder	82	1/2	12	69	76	124	450	3,3
DTG-F05 050-901	DTG-30105	DTG-F05 1 61-901	DTG-30136	solder	82	5/8	16	69	76	124	450	3,3
DTG-F08 020-901	DTG-30106	DTG-F08 061-901	DTG-30137	solder	131	1/4	6	69	98	136	550	3,3
DTG-F08 250-901	DTG-30107	DTG-F08 250-901	DTG-30107	solder	131	5/16	8	69	98	136	550	3,3
DTG-F08 030-901	DTG-30108	DTG-F08 101-901	DTG-30138	solder	131	3/8	10	69	98	136	550	3,3
DTG-F08 040-901	DTG-30109	DTG-F08 121-901	DTG-30139	solder	131	1/2	12	69	98	146	550	3,3
DTG-F08 050-901	DTG-30110	DTG-F08 161-901	DTG-30140	solder	131	5/8	16	69	98	146	550	3,3
DTG-F16 020-901	DTG-30111	DTG-F16 061-901	DTG-30141	solder	262	1/4	6	69	118	156	660	3,3

DTG/L SERIES
Uni-Flow Filter Driers

GENERAL CHARACTERISTICS OF DTG-F FILTER - SOLDER CONNECTION

Model [1] [inch]	Part Number [inch]	Model [1] [mm]	Product Number [mm]	Type pf connection	Nominal Volumen	Connection		Dimensions & Weight [2]				PED category
						Solder		DØ	B	A	Weight	
					[cm³]	[inch]	[mm]	[mm]	[mm]	[mm]	[g]	
DTG-F16 250-901	DTG-30112	DTG-F16 250-901	DTG-30112	solder	262	5/16	8	69	118	156	660	3,3
DTG-F16 030-901	DTG-30113	DTG-F16 101-901	DTG-30142	solder	262	3/8	10	69	118	156	660	3,3
DTG-F16 040-901	DTG-30114	DTG-F16 121-901	DTG-30143	solder	262	1/2	12	69	118	166	660	3,3
DTG-F16 050-901	DTG-30115	DTG-F16 161-901	DTG-30144	solder	262	5/8	16	69	118	166	660	3,3
DTG-F16 060-901	DTG-30116	-	-	solder	262	3/4	-	69	118	178	660	3,3
DTG-F16 070-901	DTG-30117	DTG-F16 070-901	DTG-30117	solder	262	7/8	22	69	118	178	660	3,3
DTG-F30 030-901	DTG-30118	DTG-F30 101-901	DTG-30145	solder	492	3/8	10	81	193	231	1550	3,3
DTG-F30 040-901	DTG-30119	DTG-F30 121-901	DTG-30146	solder	492	1/2	12	81	193	241	1550	3,3
DTG-F30 050-901	DTG-30120	DTG-F30 161-901	DTG-30147	solder	492	5/8	16	81	193	241	1550	3,3
DTG-F30 060-901	DTG-30121	-	-	solder	492	3/4	-	81	193	253	1550	3,3
DTG-F30 070-901	DTG-30122	DTG-F30 070-901	DTG-30122	solder	492	7/8	22	81	193	253	1550	3,3
DTG-F30 090-901	DTG-30123	DTG-F30 281-901	DTG-30148	solder	492	1 1/8	28	81	193	263	1550	3,3
DTG-F41 040-901	DTG-30124	DTG-F41 121-901	DTG-30149	solder	672	1/2	12	94	194	242	2050	3,3
DTG- F41 050-901	DTG-30125	DTG-F41 161-901	DTG-30150	solder	672	5/8	16	94	194	242	2050	3,3
DTG-F41 070-901	DTG-30126	DTG-F41 070-901	DTG-30126	solder	672	7/8	22	94	194	254	2050	3,3
DTG-F41 090-901	DTG-30127	DTG-F41 281-901	DTG-30151	solder	672	1 1/8	28	94	194	264	2050	3,3
DTG-F75 070-901	DTG-30128	DTG-F75 070-901	DTG-30128	solder	1229	7/8	22	94	333	393	3400	3,3
DTG-F75 090-901	DTG-30129	DTG-F75 281-901	DTG-30152	solder	1229	1 1/8	28	94	333	403	3400	3,3

Note: 1) Delivery time on request
2) Dimensions are rounded up to integral mm

SELECTION TABLE

Model	Capacity [kW]					Moisture Absorption (gram H_2O)							
	R134a	R404A / R507A	R22	R407C	R410A	R134a		R404A / R507A		R407C / R410A		R22	
						75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
						23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C
DTG-B03 020-901	7,7	6,7	8,1	8,1	8,1	4,2	3,8	5,7	3,4	3,4	3,1	3,7	3,4
DTG-B03 024-901	7,7	6,7	8,1	8,1	8,1	4,2	3,8	5,7	3,4	3,4	3,1	3,7	3,4
DTG-B03 250-901	9,5	6,7	9,5	9,5	9,8	4,2	3,8	5,7	3,4	3,4	3,1	3,7	3,4
DTG-B03 030-901	14,4	10,6	14,8	14,8	14,8	4,2	3,8	5,7	3,4	3,4	3,1	3,7	3,4
DTG-B03 034-901	14,4	10,6	14,8	14,8	14,8	4,2	3,8	5,7	3,4	3,4	3,1	3,7	3,4

DTG/L SERIES
Uni-Flow Filter Driers

SELECTION TABLE

Model	Capacity [kW]					Moisture Absorption (gram H_2O)							
	R134a	R404A / R507A	R22	R407C	R410A	R134a		R404A / R507A		R407C / R410A		R22	
						75°F / 23,9°C	125°F / 51,7°C	75°F / 23,9°C	125°F / 51,7°C	75°F / 23,9°C	125°F / 51,7°C	75°F / 23,9°C	125°F / 51,7°C
DTG-B03 040-901	24,6	17,2	25,0	24,6	25,0	4,2	3,8	5,7	3,4	3,4	3,1	3,7	3,4
DTG-B03 044-901	24,6	17,2	25,0	24,6	25,0	4,2	3,8	5,7	3,4	3,4	3,1	3,7	3,4
DTG-B05 020-901	8,4	6,0	8,4	8,4	8,4	11,6	10,9	17,7	10,2	10,9	9,5	11,4	9,7
DTG-B05 024-901	8,4	6,0	8,4	8,4	8,4	11,6	10,9	17,7	10,2	10,9	9,5	11,4	9,7
DTG-B05 250-901	10,9	7,4	10,9	10,9	11,3	11,6	10,9	17,7	10,2	10,9	9,5	11,4	9,7
DTG-B05 030-901	23,9	16,9	24,3	23,9	24,6	11,6	10,9	17,7	10,2	10,9	9,5	11,4	9,7
DTG-B05 034-901	23,9	16,9	24,3	23,9	24,6	11,6	10,9	17,7	10,2	10,9	9,5	11,4	9,7
DTG-B05 040-901	25,3	17,9	25,7	25,7	26,0	11,6	10,9	17,7	10,2	10,9	9,5	11,4	9,7
DTG-B05 050-901	34,8	24,6	35,5	35,2	35,9	11,6	10,9	17,7	10,2	10,9	9,5	11,4	9,7
DTG-B08 020-901	8,4	6,0	8,4	8,4	8,4	14,8	14,2	23,7	19,8	14,8	13,0	15,5	13,1
DTG-B08 024-901	8,4	6,0	8,4	8,4	8,4	14,8	14,2	23,7	19,8	14,8	13,0	15,5	13,1
DTG-B08 250-901	11,6	8,1	12,0	11,6	12,0	14,8	14,2	23,7	19,8	14,8	13,0	15,5	13,1
DTG-B08 030-901	25,0	17,6	25,3	25,0	25,7	14,8	14,2	23,7	19,8	14,8	13,0	15,5	13,1
DTG-B08 034-901	25,0	17,6	25,3	25,0	25,7	14,8	14,2	23,7	19,8	14,8	13,0	15,5	13,1
DTG-B08 040-901	30,6	21,5	31,3	30,9	31,7	14,8	14,2	23,7	19,8	14,8	13,0	15,5	13,1
DTG-B08 044-901	30,6	21,5	31,3	30,9	31,7	14,8	14,2	23,7	19,8	14,8	13,0	15,5	13,1
DTG-B08 050-901	44,7	31,7	45,7	45,4	46,1	14,8	14,2	23,7	19,8	14,8	13,0	15,5	13,1
DTG-B16 020-901	10,9	7,7	11,3	10,9	11,3	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 024-901	10,9	7,7	11,3	10,9	11,3	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 250-901	11,6	8,1	12,0	11,6	12,0	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 030-901	25,7	17,9	26,0	26,0	26,4	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 034-901	25,7	17,9	26,0	26,0	26,4	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 040-901	32,4	22,9	33,1	32,7	33,8	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 044-901	32,4	22,9	33,1	32,7	33,8	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 050-901	43,3	30,6	43,6	43,6	44,3	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 054-901	43,3	30,6	43,6	43,6	44,3	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 060-901	46,4	32,7	47,1	46,8	47,8	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 064-901	46,4	32,7	47,1	46,8	47,8	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B16 070-901	47,1	33,4	48,2	47,8	48,5	20,6	19,5	33,2	18,3	20,6	17,6	20,9	17,7
DTG-B30 030-901	25,7	17,9	26,0	26,0	26,4	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 034-901	25,7	17,9	26,0	26,0	26,4	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 040-901	33,1	23,2	33,8	33,4	34,1	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 044-901	33,1	23,2	33,8	33,4	34,1	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 050-901	45,7	32,0	46,4	46,1	46,8	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 054-901	45,7	32,0	46,4	46,1	46,8	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 060-901	62,6	44,0	63,7	63,3	64,4	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 064-901	62,6	44,0	63,7	63,3	64,4	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 070-901	63,0	44,3	64,0	63,7	64,7	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1

DTG/L SERIES
Uni-Flow Filter Driers

SELECTION TABLE

Model	Capacity [kW]					Moisture Absorption (gram H_2O)							
	R134a	R404A / R507A	R22	R407C	R410A	R134a		R404A / R507A		R407C / R410A		R22	
						75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
						23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C
DTG-B30 074-901	63,0	44,3	64,0	63,7	64,7	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B30 090-901	70,7	52,1	75,3	74,6	76,0	51,4	48,7	83,4	51,4	51,3	43,7	52,1	44,1
DTG-B41 040-901	35,2	24,6	35,9	35,5	36,2	63,7	59,7	103,5	55,7	63,7	58,9	70,2	59,4
DTG-B41 044-901	35,2	24,6	35,9	35,5	36,2	63,7	59,7	103,5	55,7	63,7	58,9	70,2	59,4
DTG-B41 050-901	60,8	42,9	61,9	61,5	62,6	63,7	59,7	103,5	55,7	63,7	58,9	70,2	59,4
DTG-B41 054-901	60,8	42,9	61,9	61,5	62,6	63,7	59,7	103,5	55,7	63,7	58,9	70,2	59,4
DTG-B41 070-901	90,4	63,7	91,8	91,4	92,8	63,7	59,7	103,5	55,7	63,7	58,9	70,2	59,4
DTG-B41 090-901	92,1	64,7	93,6	92,8	94,6	63,7	59,7	103,5	55,7	63,7	58,9	70,2	59,4
DTG-B75 070-901	91,4	64,0	92,8	91,8	93,9	123,3	115,6	200,3	107,9	123,3	114,0	135,8	114,9
DTG-B75 090-901	95,3	67,2	97,1	96,4	98,1	123,3	115,6	200,3	107,9	123,3	114,0	135,8	114,9

Note: The above data is based on filter driers with inch connections and clean system at ideal conditions; with impurities accumulated in the filter, the capacity may decrease.

SELECTION FORMULAS

Filter Driers for liquid line are manufactured in compliance with ARI Standard 710. Maximum flow rate of liquid refrigerant at a differential pressure of 0,07bar (1psi) is indicated by kW (ton) which is based on the temperature of liquid refrigerant 30°C (86°F), the evaporating temperature of -15°C (5°F) and the following mass flow:

- 0,40 kg/min/kW (3.1 lb/min/ton) R134a
- 0,53 kg/min/kW (4.1 lb/min/ton) R404A, R507A
- 0,39 kg/min/kW (3.0 lb/min/ton) R22, R407C
- 0,36 kg/min/kW (2.8 lb/min/ton) R410A

Note: Data on water absorption is based on the following EPD (method: ASHRAE Standard 63.1):

- 60ppm R22
- 50ppm R134a
- 50ppm R404A
- 50ppm R407C
- 50ppm R410A
- 50ppm R507A

SANHUA

Technical information

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CHILLING *IDEAS* WORLDWIDE

SANHUA INTERNATIONAL EUROPE
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Certificate of registration
ISO 14001:2004

Certificate of registration
ISO 9001:2008

REACH

NR. 1907/2006
CONFORMITY DECLARATION

BEST SUPPLIER AWARDS

B/S/H/

Carrier

TRANE

Note: Conditions could change without previous notice due to components updating or typing mistakes.
Sanhua declines any responsibility for a wrong product choice based on this table. Please make sure all your requirements are covered in our suggestion.

STG SERIES

Bi-Flow Filter Driers

The filter driers of series STG are used in refrigeration system with bidirectional flow to absorb moisture and acid in the system and to filter out the impurities.

FEATURES

- HIGH EFFICIENT IN MOISTURE ABSORPTION, FILTERING IMPURITY, ACID, PAINT REMAINS AND MUD REMOVAL
- HYBRID DESICCANT
- DURABLE AND SOLID FILTER CORES
- FILTERING FINENESS: 20μm
- CORROSION RESISTANT PAINTING CAN SURVIVE SALT SPRAY TEST OF 500 HOURS
- CONNECTION TYPE: FLARE OR SOLDER

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Ambient temperature min./max.: -30°C / +55°C
- Medium temperature TS min./max.: -30°C / +120°C
- Max. operating pressure PS: 4,83 MPa (48,3 bar)
- Installation position: preferably installed in liquid line
- Certifications: UL/CSA and PED declaration

TECNHICAL PARAMETERS *Desiccant Selection Table*

	Medium Type	80% 3Å Desiccant and 20% Active Alumina	100% 3Å Desiccant
Refrigerant [1]	HFC	applicable	applicable
	HCFC	applicable	applicable
	CFC	applicable	not applicable
Oil [2]	Mineral oil or AB	applicable	applicable
	Pure POE or PAG	applicable	applicable
	POE or PAG with additive	not applicable	applicable

Note:
1) For CFC system, usage of core with alumina is recommended as a strong capability to absorb acid may be needed
2) When the systems use oil with additive, it is not recommended to use a core with alumina.

STG SERIES
Bi-Flow Filter Driers

Model Designation Legend

1	**Product Code**	**Filter Drier Series**	
	STG	Indicates bidirectional filter drier	
2	**Filter Core**	**Structure and Material**	
	A	Loos core, 100%3Å desiccant	
	B	Solid core, 100%3Å desiccant	
	E	Loos core, 80% 3Å desiccant and 20% active alumina	
	F	Solid core, 80% 3Å desiccant and 20% active alumina	
3	**Internal Volume**	**Expressed in [inch³]**	**Expressed in [cm³]**
	03	3	49
	05	5	82
	08	8	131
	16	16	262
	30	30	492
4	**Connection Size**	**Pos. 5 shows "0": Solder [inch]**	**Pos. 5 shows "4": SAE Flare [inch]**
	02	1/4	1/4
	25	5/16	-
	03	3/8	3/8
	04	1/2	1/2
	05	5/8	5/8
	06	3/4	3/4
	07	7/8	7/8
	09	1 1/8	-
	Connection Size	**Pos. 5 shows "1": Solder [mm]**	
	06	6	
	(08) *	(5/16” version can be used e.g. STG-B08 250)	
	10	10	
	12	12	
	16	16	
	(22) *	(7/8” version can be used e.g. STG-B16 070)	
	28	28	
5	**Pipe Connection**	**Type**	
	0	Solder with inch connections	
	1 *	Solder with metric connections	
	4	SAE flare connections	
6	**Version Number**	**Description**	
	901	Standard product	

Note: * Solder connections which fit to metric and inch are marked with inch product codes e.g. 8 and 22mm

STG SERIES
Bi-Flow Filter Driers

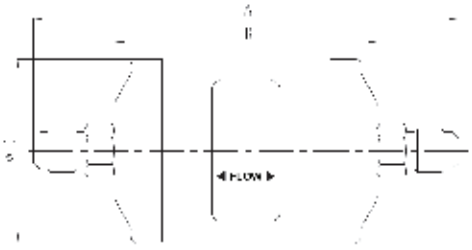
MODEL DESIGNATION EXAMPLE

Position Number						According to Model Designation Legend
1	2	3	4	5	6	
STG	B	05	06	1	901	Bidirectional filter drier
STG	**B**	05	06	1	901	Solid filter core with 100% 3Å desiccant
STG	B	**05**	06	1	901	5 inch³ internal volume
STG	B	05	**06**	1	901	When Pos. 5 is "1": connection size 6mm
STG	B	05	06	**1**	901	Solder connection metric
STG	B	05	06	1	**901**	Standard product

GENERAL CHARACTERISTICS OF STG-B FILTER - FLARE CONNECTION

Model	Part Number	Type of Connection	Nominal Volume	Connection	Dimensions & Weight [1]				PED Category
				SAE Flare	ØD	B	A	Weight	
			[cm³]	[inch]	[mm]	[mm]	[mm]	[g]	
STG-B05 024-901	STG-31001	flare	82	1/4	69	76	123	450	3,3
STG-B05 034-901	STG-31002	flare	82	3/8	69	76	137	450	3,3
STG-B05 044-901	STG-31003	flare	82	1/2	69	76	145	450	3,3
STG-B08 024-901	STG-31004	flare	131	1/4	69	98	145	580	3,3
STG-B08 034-901	STG-31005	flare	131	3/8	69	98	159	580	3,3
STG-B08 044-901	STG-31006	flare	131	1/2	69	98	167	580	3,3
STG-B16 034-901	STG-31007	flare	262	3/8	81	118	179	900	3,3
STG-B16 044-901	STG-31008	flare	262	1/2	81	118	187	900	3,3
STG-B16 054-901	STG-31009	flare	262	5/8	81	118	196	900	3,3
STG-B30 034-901	STG-31010	flare	492	3/8	81	193	254	1700	3,3
STG-B30 044-901	STG-31011	flare	492	1/2	81	193	262	1700	3,3
STG-B30 054-901	STG-31012	flare	492	5/8	81	193	271	1700	3,3
STG-B30 064-901	STG-31013	flare	492	3/4	81	193	271	1700	3,3

Note: 1) Dimensions are rounded up to integral mm



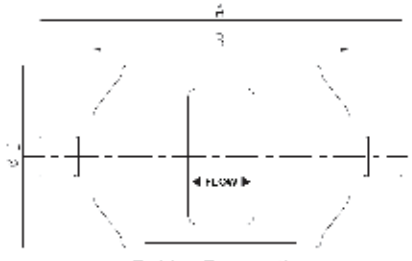
Flare Connection

STG SERIES
Bi-Flow Filter Driers

GENERAL CHARACTERISTICS OF STG-B FILTER - SOLDER CONNECTION

Model [inch]	Part Number [inch]	Model [mm]	Part Number [mm]	Type pf connection	Nominal Volumen	Connection		Dimensions & Weight [1]				PED category
						Solder		DØ	B	A	Weight	
					[cm³]	[inch]	[mm]	[mm]	[mm]	[mm]	[g]	
STG-B05 020-901	STG-31014	STG-B05 061-901	STG-31031	solder	82	1/4	6	69	76	114	450	3,3
STG-B05 030-901	STG-31015	STG-B05 101-901	STG-31032	solder	82	3/8	10	69	76	114	450	3,3
STG-B05 040-901	STG-31016	STG-B05 121-901	STG-31033	solder	82	1/2	12	69	76	124	450	3,3
STG-B08 020-901	STG-31017	STG-B08 061-901	STG-31034	solder	131	1/4	6	69	98	136	580	3,3
STG-B08 250-901	STG-31018	STG-B08 250-901	STG-31018	solder	131	5/16	8	69	98	136	580	3,3
STG-B08 030-901	STG-31019	STG-B08 101-901	STG-31035	solder	131	3/8	10	69	98	136	580	3,3
STG-B08 040-901	STG-31020	STG-B08 121-901	STG-31036	solder	131	1/2	12	69	98	146	580	3,3
STG-B16 030-901	STG-31021	STG-B16 101-901	STG-31037	solder	262	3/8	10	81	118	156	900	3,3
STG-B16 040-901	STG-31022	STG-B16 121-901	STG-31038	solder	262	1/2	12	81	118	166	900	3,3
STG-B16 050-901	STG-31023	STG-B16 161-901	STG-31087	solder	262	5/8	16	81	118	166	900	3,3
STG-B16 070-901	STG-31024	STG-B16 070-901	STG-31024	solder	262	7/8	22	81	118	178	900	3,3
STG-B30 030-901	STG-31025	STG-B30 101-901	STG-31039	solder	492	3/8	10	81	193	231	1700	3,3
STG-B30 040-901	STG-31026	STG-B30 121-901	STG-31040	solder	492	1/2	12	81	193	241	1700	3,3
STG-B30 050-901	STG-31027	STG-B30 161-901	STG-31088	solder	492	5/8	16	81	193	241	1700	3,3
STG-B30 060-901	STG-31028	-	-	solder	492	3/4	-	81	193	253	1700	3,3
STG-B30 070-901	STG-31029	STG-B30 070-901	STG-31029	solder	492	7/8	22	81	193	253	1700	3,3
STG-B30 090-901	STG-31030	STG-B30 281-901	STG-31043	solder	492	1 1/8	28	81	193	263	1700	3,3

Note: 1) Dimensions are rounded up to integral mm



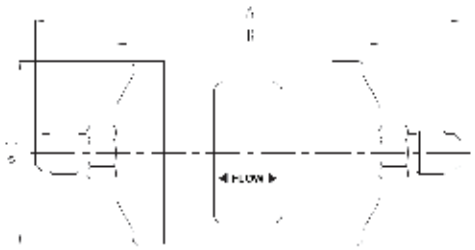
Solder Connection

STG SERIES
Bi-Flow Filter Driers

GENERAL CHARACTERISTICS OF STG-F FILTER - FLARE CONNECTION

Model [1]	Part Number	Type of Connection	Nominal Volume	Connection	Dimensions & Weight [2]				PED Category
				SAE Flare	ØD	B	A	Weight	
			[cm³]	[inch]	[mm]	[mm]	[mm]	[g]	
STG-F05 024-901	STG-31044	flare	82	1/4	69	76	123	450	3,3
STG-F05 034-901	STG-31045	flare	82	3/8	69	76	137	450	3,3
STG-F05 044-901	STG-31046	flare	82	1/2	69	76	145	450	3,3
STG-F08 024-901	STG-31047	flare	131	1/4	69	98	145	580	3,3
STG-F08 034-901	STG-31048	flare	131	3/8	69	98	159	580	3,3
STG-F08 044-901	STG-31049	flare	131	1/2	69	98	167	580	3,3
STG-F16 034-901	STG-31050	flare	262	3/8	81	118	179	900	3,3
STG-F16 044-901	STG-31051	flare	262	1/2	81	118	187	900	3,3
STG-F16 054-901	STG-31052	flare	262	5/8	81	118	196	900	3,3
STG-F30 034-901	STG-31053	flare	492	3/8	81	193	254	1700	3,3
STG-F30 044-901	STG-31054	flare	492	1/2	81	193	262	1700	3,3
STG-F30 054-901	STG-31055	flare	492	5/8	81	193	271	1700	3,3
STG-F30 064-901	STG-31056	flare	492	3/4	81	193	271	1700	3,3

Note: 1) Delivery time on request
2) Dimensions are rounded up to integral mm



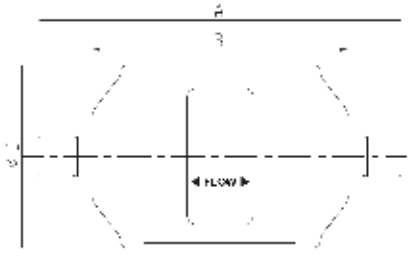
Flare Connection

STG SERIES
Bi-Flow Filter Driers

GENERAL CHARACTERISTICS OF STG-F FILTER - SOLDER CONNECTION

Model [1] [inch]	Part Number [inch]	Model [1] [mm]	Part Number [mm]	Type pf connection	Nominal Volumen	Connection		Dimensions & Weight [2]				PED category
						Solder		DØ	B	A	Weight	
					[cm³]	[inch]	[mm]	[mm]	[mm]	[mm]	[g]	
STG-F05 020-901	STG-31057	STG-F05 061-901	STG-31074	solder	82	1/4	6	69	76	114	450	3,3
STG-F05 030-901	STG-31058	STG-F05 101-901	STG-31075	solder	82	3/8	10	69	76	114	450	3,3
STG-F05 040-901	STG-31059	STG-F05 121-901	STG-31076	solder	82	1/2	12	69	76	124	450	3,3
STG-F08 020-901	STG-31060	STG-F08 061-901	STG-31077	solder	131	1/4	6	69	98	136	580	3,3
STG-F08 250-901	STG-31061	STG-F08 250-901	STG-31061	solder	131	5/16	8	69	98	136	580	3,3
STG-F08 030-901	STG-31062	STG-F08 101-901	STG-31078	solder	131	3/8	10	69	98	136	580	3,3
STG-F08 040-901	STG-31063	STG-F08 121-901	STG-31079	solder	131	1/2	12	69	98	146	580	3,3
STG-F16 030-901	STG-31064	STG-F16 101-901	STG-31080	solder	262	3/8	10	81	118	156	900	3,3
STG-F16 040-901	STG-31065	STG-F16 121-901	STG-31081	solder	262	1/2	12	81	118	166	900	3,3
STG-F16 050-901	STG-31066	STG-F16 161-901	STG-31082	solder	262	5/8	16	81	118	166	900	3,3
STG-F16 070-901	STG-31067	STG-F16 070-901	STG-31067	solder	262	7/8	22	81	118	178	900	3,3
STG-F30 030-901	STG-31068	STG-F30 101-901	STG-31083	solder	492	3/8	10	81	193	231	1700	3,3
STG-F30 040-901	STG-31069	STG-F30 121-901	STG-31084	solder	492	1/2	12	81	193	241	1700	3,3
STG-F30 050-901	STG-31070	STG-F30 161-901	STG-31085	solder	492	5/8	16	81	193	241	1700	3,3
STG-F30 060-901	STG-31071	-	-	solder	492	3/4	-	81	193	253	1700	3,3
STG-F30 070-901	STG-31072	STG-F30 070-901	STG-31072	solder	492	7/8	22	81	193	253	1700	3,3
STG-F30 090-901	STG-31073	STG-F30 281-901	STG-31086	solder	492	1 1/8	28	81	193	263	1700	3,3

Note: 1) Delivery time on request
2) Dimensions are rounded up to integral mm



Solder Connection

STG SERIES
Bi-Flow Filter Driers

SELECTION TABLE

Model	Capacity [kW] [1]					Moisture Absorption (gram H_2O)							
	R134a	R404A / R507A	R22	R407C [2]	R410A	R134a		R404A / R507A		R407C [2] / R410A		R22	
						75°F / 23,9°C	125°F / 51,7°C	75°F / 23,9°C	125°F / 51,7°C	75°F / 23,9°C	125°F / 51,7°C	75°F / 23,9°C	125°F / 51,7°C
STG-B05 020-901	7,4	5,3	7,7	7,7	7,7	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7
STG-B05 024-901	7,4	5,3	7,7	7,7	7,7	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7
STG-B05 030-901	16,5	11,6	16,9	16,5	16,9	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7
STG-B05 034-901	16,5	11,6	16,9	16,5	16,9	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7
STG-B05 040-901	25,0	17,6	25,3	25,0	25,3	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7
STG-B05 044-901	25,0	17,6	25,3	25,0	25,3	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7
STG-B08 020-901	8,8	6,0	8,8	8,8	8,8	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5
STG-B08 024-901	8,8	6,0	8,8	8,8	8,8	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5
STG-B08 250-901	15,8	10,9	16,2	15,8	16,2	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5
STG-B08 030-901	17,2	12,0	17,6	17,2	17,6	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5
STG-B08 034-901	17,2	12,0	17,6	17,2	17,6	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5
STG-B08 040-901	25,7	17,9	26,4	26,0	26,4	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5
STG-B08 044-901	25,7	17,9	26,4	26,0	26,4	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5
STG-B16 030-901	19,7	13,7	20,0	19,7	20,0	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2
STG-B16 034-901	19,7	13,7	20,0	19,7	20,0	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2
STG-B16 040-901	30,2	21,5	30,9	30,6	30,9	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2
STG-B16 044-901	30,2	21,5	30,9	30,6	30,9	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2
STG-B16 050-901	34,1	23,9	34,8	34,5	35,2	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2
STG-B16 054-901	34,1	23,9	34,8	34,5	35,2	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2
STG-B16 070-901	42,2	29,9	42,9	42,6	43,3	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2
STG-B30 030-901	25,0	17,6	25,3	25,0	25,7	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 034-901	25,0	17,6	25,3	25,0	25,7	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 040-901	30,9	21,8	31,7	31,7	32,0	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 044-901	30,9	21,8	31,7	31,7	32,0	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 050-901	35,5	25,0	36,2	35,9	36,6	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 054-901	35,5	25,0	36,2	35,9	36,6	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 060-901	39,6	28,1	40,1	39,7	40,4	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 064-901	39,6	28,1	40,1	39,7	40,4	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 070-901	46,4	32,4	47,1	46,8	47,5	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1
STG-B30 090-901	54,2	38,0	55,2	54,5	55,6	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1

Note: 1) The above data is based on filter driers with inch connections and clean system at ideal conditions; with impurities accumulated in the filter, the capacity may decrease.

2) R407C data based on dew point conditions

STG SERIES
Bi-Flow Filter Driers

SELECTION FORMULAS

Filter driers for liquid line are manufactured in compliance with ARI Standard 710. Maximum flow rate of liquid refrigerant at a differential pressure of 0,07bar (1psi) is indicated by kW (ton) which is based on the temperature of liquid refrigerant 30°C (86°F), the evaporating temperature of -15°C (5°F) and the following mass flow:

- 0,40 kg/min/kW (3.1 lb/min/ton) R134a
- 0,53 kg/min/kW (4.1 lb/min/ton) R404A, R507A
- 0,39 kg/min/kW (3.0 lb/min/ton) R22, R407C
- 0,36 kg/min/kW (2.8 lb/min/ton) R410A

Note: Data on water absorption is based on the following EPD (method: ASHRAE Standard 63.1):

- 60ppm R22
- 50ppm R134a
- 50ppm R404A
- 50ppm R407C
- 50ppm R410A
- 50ppm R507A

Copper Filter Drier

The copper filter driers of series BGQ are used in refrigeration system with unidirectional flow to absorb moisture and acid in the system and to filter out the impurities.

FEATURES

- COMPACT DESIGN AND LOW WEIGHT
- HIGH EFFICIENT IN MOISTURE ABSORPTION AND FILTERING IMPURITY
- HYBRID DESICCANT
- FILTERING FINENESS: 100μM
- CONNECTION TYPE: SOLDER

GENERAL SPECIFICATIONS

- Applicable for all common HCFC, HFC and HC refrigerants such as: R134a, R404A, R407C, R410A, R507A, R600a ...
- Ambient temperature min./max.: -30/+55°C
- Medium temperature TS min./max.: -30°C / +80°C
- Max. operating pressure PS: 4,2 MPa (42 bar)
- Installation position:
- Liquid line
- Flow direction corresponds to the arrow
- Certifications: UL/CSA and PED declaration

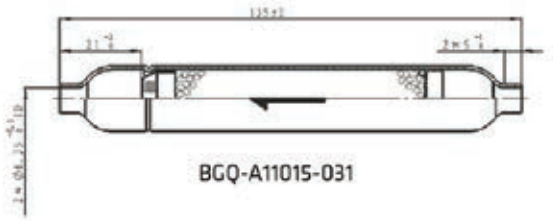
TECHNICAL PARAMETERS

Model	Part Number	Molec. Sieve Type	Molec. Sieve Weight [g]	Refrigerant
BGQ-A11015-031	BGQ-28001	XH-11	15	R134a, R404A, R407C, R410A, R507A, R600a
BGQ-A11020-011	BGQ-28002	XH-11	20	R134a, R404A, R407C, R410A, R507A, R600a
BGQ-A11030-090	BGQ-28003	XH-9	30	R134a, R600a

BGQ SERIES
Copper Filter Drier

DIMENSIONS

Model	Connections				Dimensions [mm]			
	Inlet Ød$_1$		Outlet Ød$_2$		ØD	L	L1	L2
	[mm]	Type [1)]	[mm]	Type [1)]				
BGQ-A11015-031	6,35	Ød$_1$ ID ODF	6,35	Ød$_2$ ID ODF	19,05	135 ±2	5	5
BGQ-A11020-011	6,5	Ød$_1$ ID ODF	6,35	Ød$_2$ OD ODM	25,4	127 ±3	8	10
BGQ-A11030-090	9,52	Ød$_1$ ID ODF	9,52	Ød$_2$ OD ODM	25,4	155 ±3	8	10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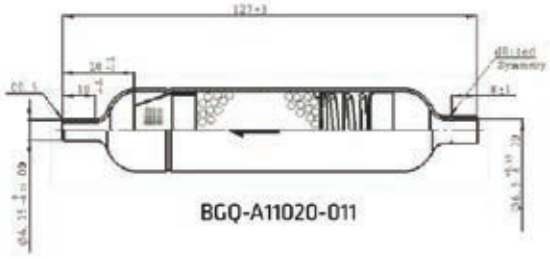
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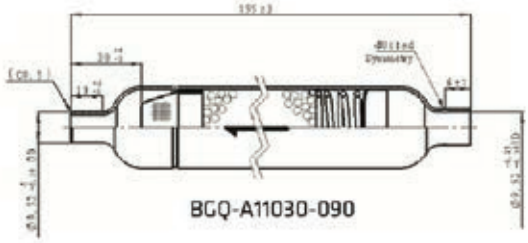

BGQ-A11030-090

Filter Driers with Replaceable Core

The filter driers with replaceable core (HTG series) are used in liquid line and suction line of refrigerating, freezing and air conditioning system. The filter housing allows to choose different kinds of cores. It's sealed by bottom cover for an easy removal and replacement of core from the bottom. The core holder requires minimum free space to remove the core for replacement.

FEATURES

- HIGH EFFICIENT IN MOISTURE ABSORPTION, FILTERING IMPURITY, ACID, PAINT REMAINS AND MUD REMOVAL
- HYBRID DESICCANT
- DURABLE AND SOLID FILTER CORES
- FILTERING FINENESS: 20μm
- CORROSION RESISTANT PAINTING CAN SURVIVE SALT SPRAY TEST OF 500 HOURS
- CONNECTION TYPE: FLARE OR SOLDER

FEATURES OF FILTER ELEMENT

- **SH48-A80 FILTER ELEMENT:**

  80% 3A DESICCANT AND 20% ACTIVATED ALUMINA,
  IT PROVIDES A GOOD DESICCATION ABILITY AND AN ACID ABSORPTION CAPABILITY IN A WIDE TEMPERATURE RANGE. THE CORE RESISTANCE IS GUARANTEED WITH HIGH LEVEL OF VIBRATION THANKS TO AN ANTI-SHOCK DESIGN. SUGGESTED INSTALLATION POSITION ON LIQUID LINE

- **SH48-A00 FILTER ELEMENT:**

  100% 3A DESICCANT
  IT PROVIDES THE MAXIMUM LEVEL OF DESICCATION ABILITY IN A WIDE TEMPERATURE RANGE. THE CORE RESISTANCE IS GUARANTEED WITH HIGH LEVEL OF VIBRATION THANKS TO AN ANTI-SHOCK DESIGN. SUGGESTED INSTALLATION POSITION ON LIQUID LINE

GENERAL SPECIFICATIONS

- Applicable for all common HCFC and HFC refrigerants such as: R22, R134a, R404A, R407C, R410A, R507A ...
- Ambient temperature min./max.: -30°C / +55°
- Medium temperature TS min./max.: -40°C / +70°C
- Max. operating pressure PS: from 4,5 MPa (45 bar) (see table 1)
- Installation position: preferably installed in liquid line
- Certifications: UL/CSA and PED declaration

HTG SERIES
Filter Driers with Replaceable Core

MODEL DESIGNATION EXAMPLE

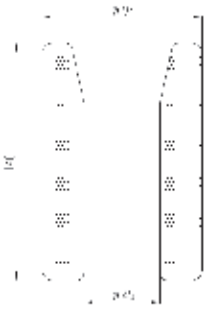
Position Number						According to Model Designation Legend
1	2	3	4	5	6	
HTG	A96	28	1	901		Replaceable core filter drier
HTG	**A96**	28	1	901		96 inch^3 internal volume
HTG	A96	**28**	1	901		When Pos. 4 is "1": connection size 28mm
HTG	A96	28	**1**	901		Solder connection metric
HTG	A96	28	1	**901**		Standard product

TECHNICAL PARAMETERS

Desiccant Selection Table

	Medium Type	80% 3A desiccant 20% active alumina	100% 3A desiccant
Core Model	-	SH48-A80	SH48-A00
Core Part Number	-	HTG-29102	HTG-29103
Suggested Installation position	-	Liquid Line	Liquid Line
Refrigerant	HFC	Applicable	Suggested
	HCFC	Suggested	Applicable
	CFC	Applicable	Not Applicable
	HC	Applicable	Applicable
Oil	Mineral oil or AB	Suggested	Applicable
	Pure POE or PAG	Applicable	Suggested
	POE or PAG with addictive	Not applicable	Applicable

Note: 1) For CFC system, usage of core with alumina is recommended as a strong capability to absorb acid may be needed
2) When the systems use oil with additive, it is not recommended to use a core with alumina.



Filter core dimensions

HTG SERIES
Filter Driers with Replaceable Core

Model Designation Legend

1	**Product Code**	**Filter Drier Series**	
	HTG	Indicates replaceable core filter drier	
2	**Internal volume**	**Expressed in inch³**	**Expressed in cm³**
	A48	48	787
	A96	96	1573
	B44	144	2360
	B92	192	3146
3	**Connection size**	**Pos. 4 shows "0": Solder [inch]**	
	05	5/8	
	07	7/8	
	09	1 1/8	
	11	1 3/8	
	13	1 5/8	
	17	2 1/8	
	21	2 5/8	
	Connection size	**Pos. 4 shows "1": Solder [mm]**	
	05	16 - (5/8" version can be used e.g. HTG-A48 050)	
	07	22 - (7/8" version can be used e.g. HTG-A48 070)	
	28	28	
	11	35 - (1 3/8" version can be used e.g. HTG-A48 110)	
	42	42	
	17	54 - (2 1/8" version can be used e.g. HTG-A48 170)	
4	**Pipe Connection**	**Type**	
	0	Solder with inch connections	
	1 *	Solder with metric connections	
5	**Version Number**	**Description**	
	901	Standard product	

Note: * Solder connections which fit to metric and inch are marked with inch product codes e.g. 16, 22, 35 and 54mm

HTG SERIES
Filter Driers with Replaceable Core

GENERAL CHARACTERISTICS OF FILTER *Table 1*

Series	Model	Part Number	Solder Connections ODF		Number of cores	Dimensions & Weight					Design Pressure (MPa)	PED category
						A	B	L	G	Weight [1]		
			[in]	[mm]		[mm]	[mm]	[mm]	[mm]	[kg]		
HTG A48s	HTG-A48050-901	HTG-29001	5/8	16	1	250	164	170	116	5,1	4,5	Cat. I
	HTG-A48070-901	HTG-29002	7/8	22		249	163	170	116	5,1	4,5	
	HTG-A48090-901	HTG-29003	1 1/8	-		254	168	170	121	5,1	4,5	
	HTG-A48281-901	HTG-29004	-	28		254	168	170	121	5,1	4,5	
	HTG-A48110-901	HTG-29005	1 3/8	35		253	167	170	121	5,1	4,5	
	HTG-A48130-901	HTG-29006	1 5/8	-		272	186	170	141	5,1	4,5	
	HTG-A48421-901	HTG-29007	-	42		272	186	170	141	5,1	4,5	
	HTG-A48170-901	HTG-29008	2 1/8	54		275	182	170	145	5,1	4,5	
	HTG-A48210-901	HTG-29009	2 5/8	-		277	177	170	149	5,1	4,5	
HTG A96s	HTG-A96050-901	HTG-29010	5/8	16	2	391	305	310	116	6,2	4,5	
	HTG-A96070-901	HTG-29011	7/8	22		390	304	310	116	6,2	4,5	
	HTG-A96090-901	HTG-29012	1 1/8	-		395	309	310	121	6,2	4,5	
	HTG-A96281-901	HTG-29013	-	28		395	309	310	121	6,2	4,5	
	HTG-A96110-901	HTG-29014	1 3/8	35		394	308	310	121	6,2	4,5	
	HTG-A96130-901	HTG-29015	1 5/8	-		413	327	310	141	6,2	4,5	
	HTG-A96421-901	HTG-29016	-	42		413	327	310	141	6,2	4,5	
	HTG-A96170-901	HTG-29017	2 1/8	54		416	323	310	145	6,2	4,5	
	HTG-A96210-901	HTG-29018	2 5/8	-		418	318	310	149	6,2	4,5	
HTG B44s	HTG-B44050-901	HTG-29019	5/8	16	3	532	446	310	116	7,6	4,5	
	HTG-B44070-901	HTG-29020	7/8	22		531	445	310	116	7,6	4,5	
	HTG-B44090-901	HTG-29021	1 1/8	-		536	450	310	121	7,6	4,5	
	HTG-B44281-901	HTG-29022	-	28		536	450	310	121	7,6	4,5	
	HTG-B44110-901	HTG-29023	1 3/8	35		535	449	310	121	7,6	4,5	
	HTG-B44130-901	HTG-29024	1 5/8	-		554	468	310	141	7,6	4,5	
	HTG-B44421-901	HTG-29025	-	42		554	468	310	141	7,6	4,5	
	HTG-B44170-901	HTG-29026	2 1/8	54		557	464	310	145	7,6	4,5	
	HTG-B44210-901	HTG-29027	2 5/8	-		559	459	310	149	7,6	4,5	
HTG B92s	HTG-B92050-901	HTG-29028	5/8	16	4	677	591	310	116	9,1	4,5	
	HTG-B92070-901	HTG-29029	7/8	22		676	590	310	116	9,1	4,5	
	HTG-B92090-901	HTG-29030	1 1/8	-		681	595	310	121	9,1	4,5	
	HTG-B92281-901	HTG-29031	-	28		681	595	310	121	9,1	4,5	
	HTG-B92110-901	HTG-29032	1 3/8	35		680	594	310	121	9,1	4,5	
	HTG-B92130-901	HTG-29033	1 5/8	-		699	613	310	141	9,1	4,5	
	HTG-B92421-901	HTG-29034	-	42		699	613	310	141	9,1	4,5	
	HTG-B92170-901	HTG-29035	2 1/8	54		702	609	310	145	9,1	4,5	
	HTG-B92210-901	HTG-29036	2 5/8	-		704	604	310	149	9,1	4,5	

Note: 1) Weight of filter shell (must be added the filter core weight: 0.6 kg)

HTG SERIES
Filter Driers with Replaceable Core

SELECTION TABLE - WITH CORE SH48-A00 *Table 2*

Model	Capacity [kW] [1]					Moisture Absorption [gram H_2O]							
	R134a	R404A / R507A	R22	R407C [2]	R410A	R134a		R404A / R507A		R407C [2] / R410A		R22	
						75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
						23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C
HTG-A48050-901	65,5	45,9	67,6	67,6	67,6	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A48070-901	104,7	73,5	108,2	108,2	108,2	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A48090-901	150,5	105,7	155,4	155,4	155,4	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A48281-901	150,5	105,7	155,4	155,4	155,4	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A48110-901	202,7	142,5	209,3	209,3	209,3	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A48130-901	248,9	174,7	256,6	256,6	256,6	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A48421-901	59,9	174,7	256,6	256,6	256,6	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A48170-901	353,5	248,2	364,7	364,7	364,7	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A48210-901	392,7	276,2	405,7	405,7	405,7	67,4	58,1	72,6	59,6	57,0	51,8	62,2	57,0
HTG-A96050-901	65,5	45,9	67,6	67,6	67,6	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-A96070-901	104,7	73,5	108,2	108,2	108,2	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-A96090-901	150,5	105,7	155,4	155,4	155,4	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-A96281-901	150,5	105,7	155,4	155,4	155,4	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-A96110-901	202,7	142,5	209,3	209,3	209,3	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-A96130-901	248,9	174,7	256,6	256,6	256,6	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-A96421-901	248,9	174,7	256,6	256,6	256,6	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-A96170-901	353,5	248,2	364,7	364,7	364,7	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-A96210-901	392,7	276,2	405,7	405,7	405,7	134,8	116,1	145,2	119,2	114,0	103,7	124,4	114,0
HTG-B44050-901	65,5	45,9	67,6	67,6	67,6	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B44070-901	104,7	73,5	108,2	108,2	108,2	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B44090-901	150,5	105,7	155,4	155,4	155,4	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B44281-901	150,5	105,7	155,4	155,4	155,4	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B44110-901	202,7	142,5	209,3	209,3	209,3	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B44130-901	248,9	174,7	256,6	256,6	256,6	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B44421-901	248,9	174,7	256,6	256,6	256,6	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B44170-901	353,5	248,2	364,7	364,7	364,7	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B44210-901	392,7	276,2	405,7	405,7	405,7	202,2	174,3	217,8	178,8	171,0	155,4	186,6	171,0
HTG-B92050-901	65,5	45,9	67,6	67,6	67,6	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0
HTG-B92070-901	104,7	73,5	108,2	108,2	108,2	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0
HTG-B92090-901	150,5	105,7	155,4	155,4	155,4	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0
HTG-B92281-901	150,5	105,7	155,4	155,4	155,4	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0
HTG-B92110-901	202,7	142,5	209,3	209,3	209,3	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0
HTG-B92130-901	248,9	174,7	256,6	256,6	256,6	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0
HTG-B92421-901	248,9	174,7	256,6	256,6	256,6	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0
HTG-B92170-901	353,5	248,2	364,7	364,7	364,7	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0
HTG-B92210-901	392,7	276,2	405,7	405,7	405,7	269,6	232,4	290,4	238,4	228,0	207,2	248,8	228,0

HTG SERIES
Filter Driers with Replaceable Core

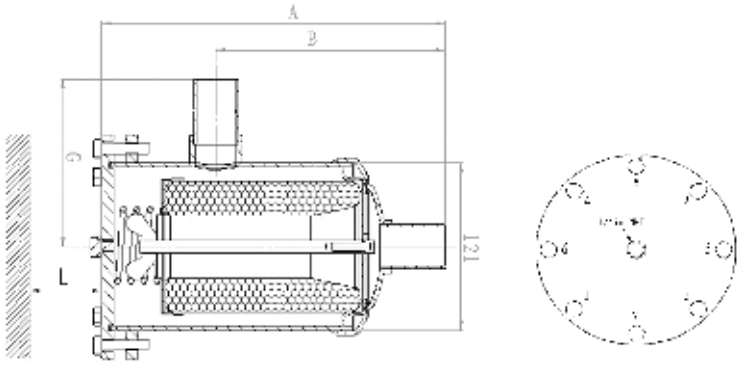
SELECTION TABLE - WITH CORE SH48-A80 *Table 3*

Model	Capacity [kW] [1]					Moisture Absorption [gram H_2O]							
	R134a	R404A / R507A	R22	R407C [2]	R410A	R134a		R404A / R507A		R407C [2] / R410A		R22	
						75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
						23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C
HTG-A48050-901	65,5	45,9	67,6	67,6	67,6	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A48070-901	104,7	73,5	108,2	108,2	108,2	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A48090-901	150,5	105,7	155,4	155,4	155,4	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A48281-901	150,5	105,7	155,4	155,4	155,4	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A48110-901	202,7	142,5	209,3	209,3	209,3	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A48130-901	248,9	174,7	256,6	256,6	256,6	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A48421-901	59,9	174,7	256,6	256,6	256,6	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A48170-901	353,5	248,2	364,7	364,7	364,7	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A48210-901	392,7	276,2	405,7	405,7	405,7	58,0	50,0	61,7	50,7	47,9	43,5	52,9	48,5
HTG-A96050-901	65,5	45,9	67,6	67,6	67,6	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-A96070-901	104,7	73,5	108,2	108,2	108,2	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-A96090-901	150,5	105,7	155,4	155,4	155,4	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-A96281-901	150,5	105,7	155,4	155,4	155,4	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-A96110-901	202,7	142,5	209,3	209,3	209,3	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-A96130-901	248,9	174,7	256,6	256,6	256,6	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-A96421-901	248,9	174,7	256,6	256,6	256,6	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-A96170-901	353,5	248,2	364,7	364,7	364,7	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-A96210-901	392,7	276,2	405,7	405,7	405,7	115,9	99,8	123,4	101,3	95,8	87,1	105,7	96,9
HTG-B44050-901	65,5	45,9	67,6	67,6	67,6	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B44070-901	104,7	73,5	108,2	108,2	108,2	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B44090-901	150,5	105,7	155,4	155,4	155,4	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B44281-901	150,5	105,7	155,4	155,4	155,4	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B44110-901	202,7	142,5	209,3	209,3	209,3	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B44130-901	248,9	174,7	256,6	256,6	256,6	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B44421-901	248,9	174,7	256,6	256,6	256,6	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B44170-901	353,5	248,2	364,7	364,7	364,7	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B44210-901	392,7	276,2	405,7	405,7	405,7	173,9	149,9	185,1	152,0	143,6	130,5	158,6	145,4
HTG-B92050-901	65,5	45,9	67,6	67,6	67,6	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8
HTG-B92070-901	104,7	73,5	108,2	108,2	108,2	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8
HTG-B92090-901	150,5	105,7	155,4	155,4	155,4	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8
HTG-B92281-901	150,5	105,7	155,4	155,4	155,4	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8
HTG-B92110-901	202,7	142,5	209,3	209,3	209,3	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8
HTG-B92130-901	248,9	174,7	256,6	256,6	256,6	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8
HTG-B92421-901	248,9	174,7	256,6	256,6	256,6	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8
HTG-B92170-901	353,5	248,2	364,7	364,7	364,7	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8
HTG-B92210-901	392,7	276,2	405,7	405,7	405,7	231,9	199,9	246,8	202,6	191,5	174,0	211,5	193,8

Note: 1. The data reported in the Table 2 and 3 is based on filter driers in a clean system at ideal conditions; with impurities accumulated in the filter, the capacity may decrease.

2. R407C data based on dew point conditions

HTG SERIES
Filter Driers with Replaceable Core



SELECTION FORMULAS

Filter driers for liquid line are manufactured in compliance with ARI Standard 710. Maximum flow rate of liquid refrigerant at a differential pressure of 0,07bar (1psi) is indicated by kW (ton) which is based on the temperature of liquid refrigerant 30°C (86°F), the evaporating temperature of -15°C (5°F) and the following mass flow:

- 0,40 kg/min/kW (3.1 lb/min/ton) R134a
- 0,53 kg/min/kW (4.1 lb/min/ton) R404A, R507A
- 0,39 kg/min/kW (3.0 lb/min/ton) R22, R407C
- 0,36 kg/min/kW (2.8 lb/min/ton) R410A

Note: Data on water absorption is based on the following EPD (method: ASHRAE Standard 63.1):

- 60ppm R22
- 50ppm R134a
- 50ppm R404A
- 50ppm R407C
- 50ppm R410A
- 50ppm R507A

SANHUA

Technical information

sanhuaeurope.com

CHILLING *IDEAS* WORLDWIDE

SANHUA INTERNATIONAL EUROPE
info@sanhuaeurope.com

Certificate of registration
ISO 14001:2004

Certificate of registration
ISO 9001:2008

REACH

NR. 1907/2006
CONFORMITY DECLARATION

BEST SUPPLIER AWARDS

B/S/H/

Carrier

TRANE

Note: Conditions could change without previous notice due to components updating or typing mistakes.
Sanhua declines any responsibility for a wrong product choice based on this table. Please make sure all your requirements are covered in our suggestion.

BDF/KMV SERIES

Bi-stable Solenoid Valve

BDF/KMV bi-stable solenoid valve are used in duel temperature/double control household refrigerators, deep freezers, wine cabinet, water dispenser and other similar small scale cooling systems to switch the flow path of refrigerants.

FEATURES

- MAINTAINING WORKING CONDITIONS WITH PULSE ACTUATION AND MAGNET LATCHING MODE
- GOOD INNER LEAKAGE PERFORMANCE
- LOW NOISE

GENERAL SPEC.

- Applicable refrigerant: R600a, R134a etc.
- Applicable medium temperature: -30°C ~ +65°C
- Ambient temperature: -20°C ~ +60°C
- Relative humidity: below 95% RH
- Maximum working pressure: 2.5MPa

TECHNICAL PARAMETERS

Model	Voltage V	Frequency Hz	Sealing Structure	Max. Opening Differential Pressure MPa	Air Flow L/h (Δ P=0.4MPa)	Inner Leakage ml/min (Δ P=0.4MPa)
BDF	AC110V~120V	50/60	Rubber	1.6	≥1000	≤10
KMV	AC220V~240V	50/60	Steel ball	1.6	≥1000	<83.3

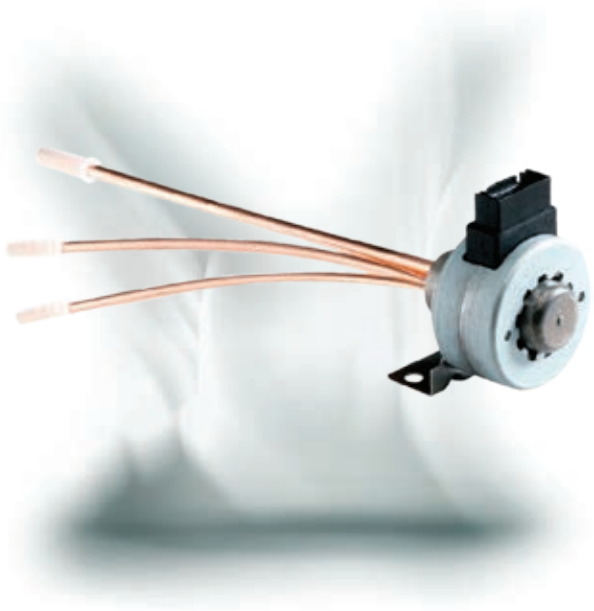
DIMENSIONS

- Product structure and interface dimensions can be customized according to customers' requirements.

DDF SERIES

Step Valve

DDF series step valve are mainly used in duel temperature/ double control household refrigerators with variable temperature areas (with 0°C preservation area or -7°C temperature area) and similar refrigeration systems for controlling and switching the flow direction of refrigerant.



FEATURES

- OPTIMIZED DESIGN OF REFRIGERATION SYSTEM, LOWER POWER CONSUMPTION
- LOW OPERATION NOISE: UTILIZING ROTARY ACTUATION

GENERAL SPEC.

- Applicable refrigerant: R600a and R134a
- Applicable medium temperature: -20°C ~ +65°C
- Applicable ambient temperature: -20°C ~ +60°C
- Relative humidity: below 95%RH
- Noise: Distance 15cm, starting noise ≤ 50dB (A), rotary noise ≤ 40dB (A)

TECHNICAL PARAMETERS

Technical Parameters of Valve Body				
Model	**Port mm**	**Air Flow L/h (Δ P=0.8MPa)**	**Inner Leakage mL/min (Δ P=0.8MPa)**	**Max. Working Pressure MPa**
DDF	0.8	≥1500	150	2.5
Electrical Parameters of Coil				
Resistance at 20°C Ω	**Rated Voltage V**	**Voltage Change**	**Rated Current When Unidirectional Winding is Powered mA**	**Max. Differential Pressure of Opening Valve MPa**
46±3	DC12V	90%~110%	260	1.8

DIMENSIONS

- Product structure and interface dimensions can be customized according to the customer's requirements.

A SERIES

Drain Pump

Drain pump are used in packaged air conditioners, indoor units of ceiling air conditioners to drain the condensing water generated by heat exchangers during cooling and dehumidification.

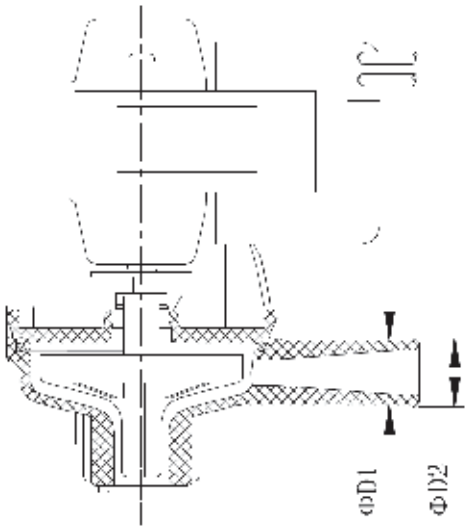
FEATURES

- LOW NOISE, LOW VIBRATION AND LIGHT WEIGHT
- SMALL SCALE WITH ENOUGH FLOW RATE, LONG LIFE
- COST-EFFECTIVE

GENERAL SPECIFICATIONS

- Applicable fluid temperature: 0°C ~ +40°C (but no fluid frozen)
- Applicable ambient temperature: -10°C ~ 45°C
- Relative humidity: below 95% RH
- Certification: UL, CQC and VDE

DIMENSIONS



Model	Dimensions mm			
	D1		D2	
PSB-7A	13	16	14	17
PSB-12A	13	16	14	17

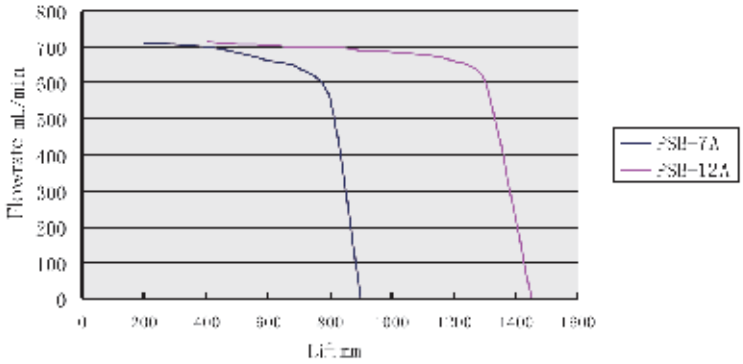
Note: 1) Type and length of leads, terminal insulation casing and support will be optional subject to the customers´needs.

2) In addition to the water outlet direction shown in the figure, there are another three optional outlet directions every 90°.

A SERIES
Drain Pump

TECHNICAL PARAMETERS

Model	Rated Lift mm	Rated Flow ml/min	Rated Voltage V	Rated Current Max mA	Input Power Max W
PSB-7A	700	≥450	AC220V~240V	108/96	10.8/96
		≥450	AC220V~240V	108/96	10.8/96
PSB-7A	700	≥450	AC220V~240V	108/96	10.8/96

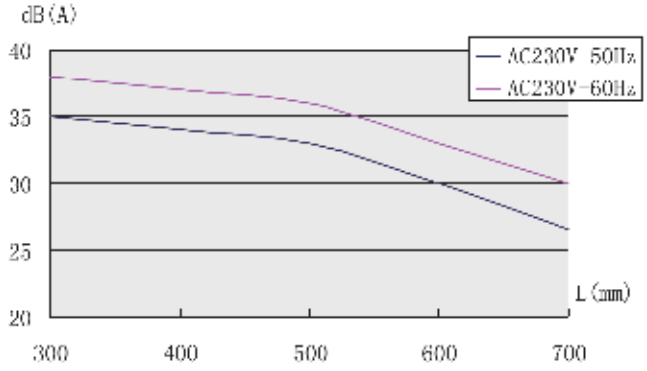


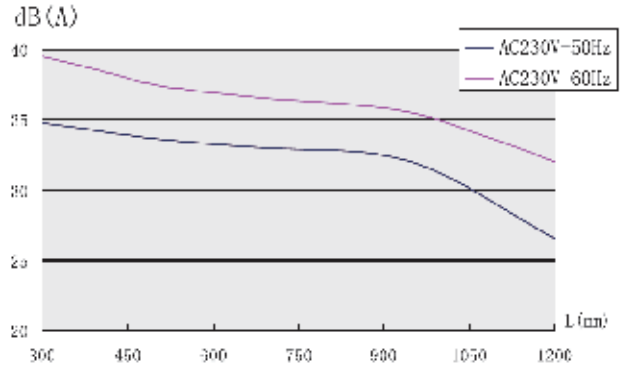
Lift and Flowrate Graph

- AC230V 50Hz/60Hz, at a water level of 10mm, testing draining noise in 1min under different lift (at the distance of 1m)

PSB-7A Model Lift - Noise Graph

- PSB-12A Model Lift - Noise Graph AC230V 50Hz/60Hz, at a water level of 10mm, testing draining noise in 1min under different lift (at the distance of 1m)





PSB-12A Model Lift - Noise Graph

- AC230V 50Hz/60Hz, at a water level of 10mm, testing draining noise in 1min under different lift (at the distance of 1m)

B SERIES

Drain Pump

PSB-7B/12B series drain pump are used in packaged air conditioners and indoor unit of ceiling air conditioners to drain the condensate generated by the heat exchanger during cooling and dehumidification.

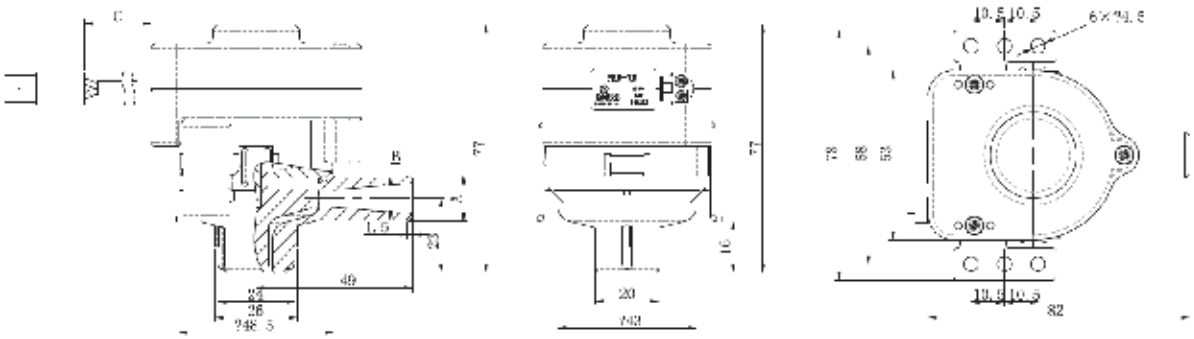
FEATURES

- LOW NOISE, LOW VIBRATION AND LIGHT WEIGHT
- SMALL VOLUME, BIG FLOW AND LONG SERVICE LIFE
- LOW ENERGY CONSUMPTION
- COST-EFFECTIVE

GENERAL SPECIFICATIONS

- Applicable fluid temperature: 0°C ~ +40°C (but no fluid frozen)
- Applicable ambient temperature: -10°C ~ 45°C
- Relative humidity: below 95% RH

DIMENSIONS

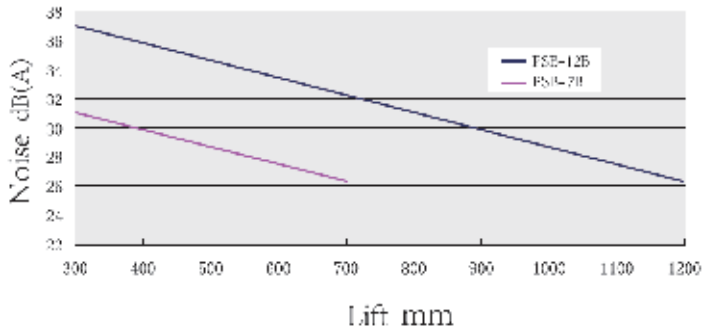


A	B	C
Φ 14	Φ 17	620
Φ 13	Φ 16	850

B SERIES
Drain Pump

TECHNICAL PARAMETERS

Model	Rated Lift mm	Rated Flow ml/ min	Rated Voltage V	Rated Current Max mA	Input Power Max W
PSB-7B	700	≥450	DC12V	260	3.2
PSB-12B	1200	≥400	DC12V	370	4.5



Lift and Noise Graph

- AC230V 50Hz/60Hz, at a water level of 10mm, testing draining noise in 1min under different lift (at the distance of 1m)

YKG (A) SERIES

Float Level Switch

YKG (A) series level switches are applicable to many environments, usually connected to actuators such as drain pumps or electromagnetic valves to control the fluid level in the equipment for the purpose of level warning in the system.

FEATURES

- RELIABLE ACTION POINT, AND LONG LIFE
- COST EFFECTIVE

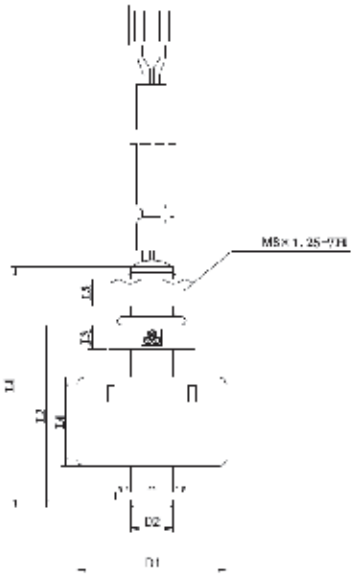
GENERAL SPECIFICATIONS

- Applicable fluid temperature: 0°C ~ +40°C (but no fluid frozen)
- Applicable ambient temperature: -10°C ~ +60°C
- Relative humidity: below 95% RH

TECHNICAL PARAMETERS

Model	Max. Contact Power W	Max. Switching Voltage V	Max. Switching Current A	Action Life 10 thousand times	Contact Resistance between Reed Contacts mΩ
YKG(A)-10	10	DC 100/AC 100	DC 0.5/AC 0.5	100	≤300
YKG(A)-50	50	DC 300/AC 300	DC 0.7/AC 0.5	100	≤300

DIMENSIONS



Model	Dimension	
L1	41±0.5	44±0.5
L2	31±0.5	34±0.5
D1	φ25	
D2	φ7	
L3	15	
L4	4	
L5	4.5	

P SERIES

Accummulator

P series accumulator is installed between the suction port of the refrigerating system compressors and evaporator to separate gas and fluid, store fluid, return oil and filter.

FEATURES

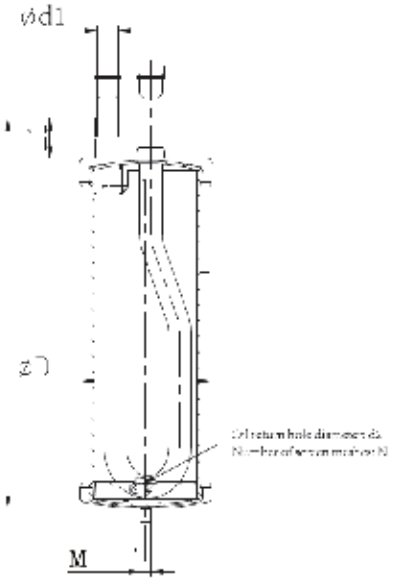
- INLET AND OUTLET ARE MADE OF COPPER TUBES
- AIR GUIDING PART DIRECT THE REFRIGERANT TOWARD THE WALL WHICH FORM A SLIPSTREAM TO MAKE THE REFRIGERANT EXPAND QUICKLY AND SLOW THE FLOW TO LET THE LIQUID DROP DOWN. THIS EFFECTIVELY SEPARATES THE LIQUID AND GAS.
- THE U TUBE DESIGN GUARANTEE A MAX FLOW OF REFRIGERANT AND STOP LITTLE LUBRICATION OIL. THE INLET OF U TUBE IS BEHIND AIR GUIDING PART WHICH CAN PREVENT THE LIQUID FROM ENTERING COMPRESSOR. AT THE SAME TIME, IT CAN CHANGE THE DIRECTION OF REFRIGERANT TO COMPLETELY SEPARATE THE LIQUID AND GAS.
- THE BALANCING HOLE IN THE UPPER U TUBE CAN EFFECTIVELY ELIMINATE THE SIPHON CAUSED THE RESTART OF SYSTEM SO AS TO AVOID EXCESSIVE LIQUID ENTERING COMPRESSOR.
- THE OIL RETURN HOLE IS MATCHING THE SYSTEM CAPACITY TO OPTIMIZE THE FLOW OF LIQUID REFRIGERANT AND LUBRICATION OIL INTO COMPRESSOR.
- CONNECTION TUBE, U TUBE AND VOLUME OF ACCUMULATOR IS DESIGNED BASED ON THE BASIC DE MAND OF HEAT PUMP SYSTEM INCLUDING SAFETY STORE CAPACITY (VS. TOTAL CAPACITY) ; PROTECTIVE FLOW CONTROL BACK TO COMPRESSOR ALLOWS A PROPER AND RELIABLE LIQUID REFRIGERANT AND LUBRICATION OIL BACK TO COMPRESSOR. THIS COMBINATION IS TO ACHIEVE A MINIMUM PRESSURE DROP AND LARGEST REFRIGERANT CAPACITY.
- POWDER COATED SURFACE CAN SURVIVE 500HOURS OF SALT SPRAY TEST.
- INCORPORATED FUSE OF 430F

GENERAL SPECIFICATIONS

- Applicable refrigerant: CFC, HCFC, HFC etc.
- Applicable medium temperature: -30°C ~+120°C (22°F~+240°F)
- Applicable ambient temperature: -35°C ~+55°C (22°F~+131°F)
- Maximum working pressure: 2.5MPa
- Certification: UL, CSA and PED

P SERIES
Accummulator

TECHNICAL PARAMETERS



Model	L mm	Screw Size M	D mm	d1 mm	L1 mm	N meshes/ in	d2 mm
ACM-P00076-037	262.9	3/8-16UNC-2A	76	12.7	28.4	30	1.4
ACM-P00076-038	262.9	3/8-16UNC-2A	76	16	28.4	30	1.4
ACM-P00076-027	382.3	3/8-16UNC-2A	76	16	34.3	60	1.4
ACM-P00076-016	382.3	3/8-16UNC-2A	76	19.2	34.3	60	1.4
ACM-P00101-061	190.5	3/8-16UNC-2A	101.6	19.2	34.3	60	1.4
ACM-P00101-057	244.3	3/8-16UNC-2A	101.6	16	27.7	30	0.9
ACM-P00101-074	293.4	M8	101.6	16	27.7	60	0.74
ACM-P00101-063	320	3/8-16UNC-2A	101.6	19.2	34.3	60	1.4
ACM-P00101-064	357.1	3/8-16UNC-2A	101.6	19.2	34.3	30	2.03
ACM-P00101-065	438.2	3/8-16UNC-2A	101.6	22.4	40.4	60	1.0
ACM-P00127-177	244.3	3/8-16UNC-2A	127	22.4	40.4	60	1.4
ACM-P00127-180	287.8	3/8-16UNC-2A	127	19.2	34.3	30	1.4
ACM-P00127-181	327.2	3/8-16UNC-2A	127	22.4	40.4	30	1.4
ACM-P00127-186	389.6	3/8-16UNC-2A	127	22.4	40.4	30	1.4
ACM-P00127-205	438.2	3/8-16UNC-2A	127	22.4	40.4	30	1.4
ACM-P00153-052	381	3/8-16UNC-2A	152.4	28.7	38.1	30	3.2
ACM-P00153-053	388.2	3/8-16UNC-2A	152.4	35.1	40	30	2.03
ACM-P00153-003	400.6	3/8-16UNC-2A	152.4	35.1	45/60	30	1.4
ACM-P00153-054	487.2	3/8-16UNC-2A	152.4	35.1	45	30	1.8
ACM-P00153-043	570	M12	152.4	35.1	40	30	2.03

S SERIES

Accumulator

S series accumulator is installed between the suction port of the refrigerating system compressors and evaporator to separate gas and fluid, store fluid, return oil and filter.

FEATURES

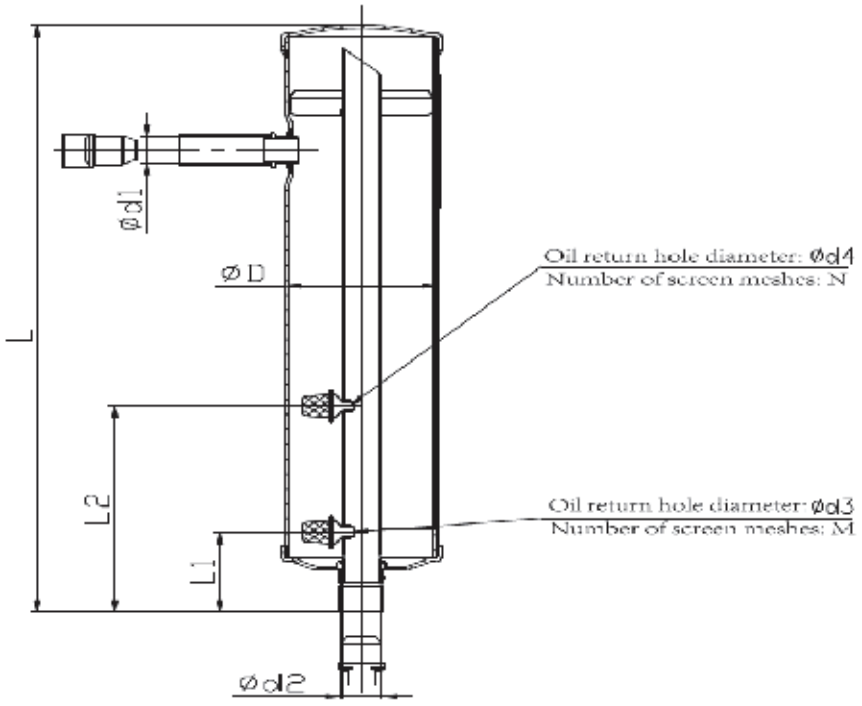
- INLET AND OUTLET ARE MADE OF COPPER TUBES
- AIR GUIDING PART DIRECT THE REFRIGERANT TOWARD THE WALL WHICH FORM A SLIPSTREAM TO MAKE THE REFRIGERANT EXPAND QUICKLY AND SLOW THE FLOW TO LET THE LIQUID DROP DOWN. THIS EFFECTIVELY SEPARATES THE LIQUID AND GAS.
- THE U TUBE DESIGN GUARANTEE A MAX FLOW OF REFRIGERANT AND STOP LITTLE LUBRICATION OIL. THE INLET OF U TUBE IS BEHIND AIR GUIDING PART WHICH CAN PREVENT THE LIQUID FROM ENTERING COMPRESSOR. AT THE SAME TIME, IT CAN CHANGE THE DIRECTION OF REFRIGERANT TO COMPLETELY SEPARATE THE LIQUID AND GAS.
- THE BALANCING HOLE IN THE UPPER U TUBE CAN EFFECTIVELY ELIMINATE THE SIPHON CAUSED THE RESTART OF SYSTEM SO AS TO AVOID EXCESSIVE LIQUID ENTERING COMPRESSOR
- THE OIL RETURN HOLE IS MATCHING THE SYSTEM CAPACITY TO OPTIMIZE THE FLOW OF LIQUID REFRIGERANT AND LUBRICATION OIL INTO COMPRESSOR.
- CONNECTION TUBE, U TUBE AND VOLUME OF ACCUMULATOR IS DESIGNED BASED ON THE BASIC DEMAND OF HEAT PUMP SYSTEM INCLUDING SAFETY STORE CAPACITY (VS. TOTAL CAPACITY) ; PROTECTIVE FLOW CONTROL BACK TO COMPRESSOR ALLOWS A PROPER AND RELIABLE LIQUID REFRIGERANT AND LUBRICATION OIL BACK TO COMPRESSOR. THIS COMBINATION IS TO ACHIEVE A MINIMUM PRESSURE DROP AND LARGEST REFRIGERANT CAPACITY.
- POWDER COATED SURFACE CAN SURVIVE 500HOURS OF SALT SPRAY TEST
- ADVANCED STRUCTURE DESIGN AND PROCESS, COST-EFFECTIVE

GENERAL SPECIFICATIONS

- Applicable refrigerant: CFC, HCFC, HFC etc.
- Applicable medium temperature: -30°C~+120°C (-22°F~+240°F)
- Applicable ambient temperature: -35°C~+55°C (-22°F~+131°F)
- Maximum working pressure: 2.5MPa (362.5Psig)
- Certification: UL, CSA and PED

S SERIES
Accumulator

TECHNICAL PARAMETERS



Model	L mm	D mm	d1 mm	d2 mm	L1 mm	L2 mm	d3 mm	d4 mm	M meshes/in	N meshes/in
ACM-S00063-004	355.6	63.5	16	16	51	127	1.52	0.74	60	60
ACM-S00063-005	355.6	63.5	16	16	51	127	3.2	0.74	60	60
ACM-S00063-006	355.6	63.5	16	16	51	127	0.74	0.74	60	60
ACM-S00063-012	431.8	63.5	19.2	19.2	51	127	1.14	0.74	60	60
ACM-S00076-007	279.4	76	19.2	19.2	64.3	140.5	1.52	1.52	30	30
ACM-S00076-008	330.2	76	22.4	22.4	70.6	146.8	1.52	1.52	30	30
ACM-S00101-023	333.3	101.6	19.2	19.2	50.8	127	1.52	0.74	30	60
ACM-S00101-033	333.3	101.6	22.4	22.4	50.8	127	1.52	0.74	60	60
ACM-S00101-017	371.4	101.6	19.2	19.2	50.8	127	1.52	0.74	60	60
ACM-S00101-012	371.4	101.6	22.4	22.4	50.8	127	1.52	0.74	60	60
ACM-S00101-022	438	101.6	22.4	22.4	50.8	127	1.52	0.74	30	60
ACM-S00101-021	485.7	101.6	22.4	22.4	50.8	127	1.52	0.74	60	60
ACM-S00101-016	523.7	101.6	22.4	22.4	50.8	127	1.52	0.74	60	60
ACM-S00101-025	558.8	101.6	19.2	19.2	50.8	127	0.74	0.74	60	60

V SERIES

Liquid Receiver

V series receiver are usually installed on high pressure liquid line of refrigeration systems to store excessive refrigerant when the load of the system changes.

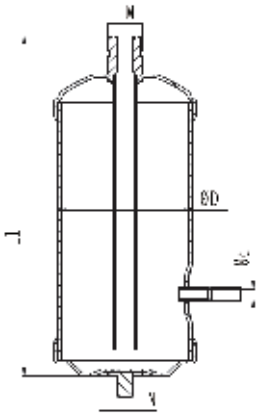
FEATURES

- THE INLET IS USE SOLDER CONNECTION AND OUTLET USES THREAD CONNECTION
- INTERNAL FLOW-OUT IS REALIZED BY SUCTION TUBE

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R134a, R407C and R410A etc.
- Applicable medium temperature: -30°C~+120°C (-22°F~+240°F)
- Applicable ambient temperature: -35°C~ +60°C (-22°F~+131°F)
- Maximum working pressure: 3.5MPa
- Certification: UL, PED

TECHNICAL PARAMETERS



Model	M in	d		L	D		L		N
		in	mm		in	mm	in	mm	
LRA-V00076-017	3/4-16UNF-2A	0,256	6,5	0,75	3	76,2	8,27	210	screw 3/8-16UNC-2A
LRA-V00076-018	3/4-16UNF-2A	0,256	6,5	0,6	3	76,2	6,73	171	screw 3/8-16UNC-2A
LRA-V00127-016	3/4-16UNF-2A	0,256	6,5	2,1	5	127	009	221	screw 3/8-16UNC-2A
LRA-V00127-017	3/4-16UNF-2A	0,381	9,67	3,5	5	127	12,95	329	screw 3/8-16UNC-2A
LRA-V00153-004	3/4-16UNF-2A	0,381	9,67	5	6	152,4	12,95	329	screw 3/8-16UNC-2A
LRA-V00153-011	1-14UNS-2A	0,381	9,67	6	6	152,4	15,95	405	screw 3/8-16UNC-2A
LRA-V00153-012	1-14UNS-2A	0,506	12,85	8	6	152,4	19,96	507	screw 3/8-16UNC-2A

Suction line Accumulator (Compressor)

Applicable for household air conditioner compressor, the Accumulator is installed in front of the compressor to separate refrigerant and refrigeration oil and impurities not completely gasified by evaporators. It has functions of gas-liquid separation, liquid storage, oil return and noise reduction to ensure that the compressor would not be damaged by fluid impact.

FEATURES

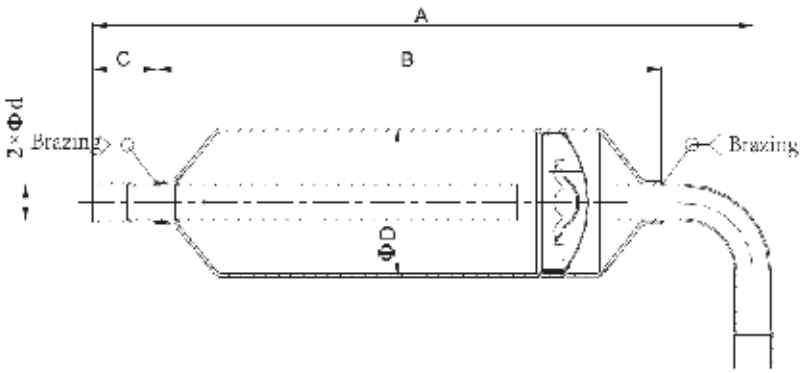
- CORROSION RESISTANCE: FINISHED WITH POWDER PAINTING SURVIVING 500 HOURS OF SALT SPRAY TEST
- LONG SERVICE LIFE: STEEL CASING, MORE ENDURABLE

GENERAL SPECIFICATIONS

- Applicable refrigerant: CFC,HCFC, HFC etc.
- Applicable medium temperature: -30°C~+120°C (-22°F~+240°F)
- Applicable ambient temperature: -30°C~ +65°C (-22°F~+131°F)
- Maximum working pressure: 4.8MPa
- Certification: UL and CSA

TECHNICAL PARAMETERS

Steel Receiver



Suction line Accumulator (Compressor)

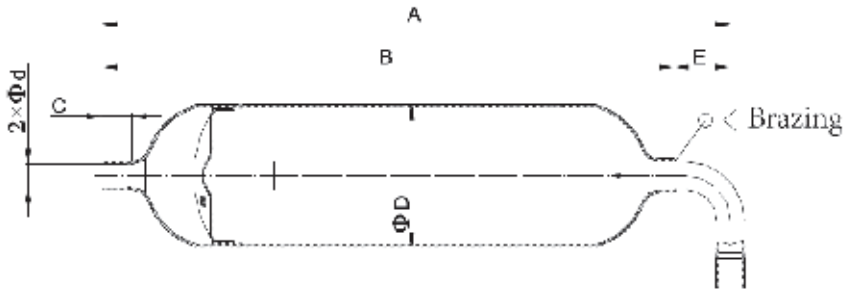
TECHNICAL PARAMETERS

Steel Receiver

Model	Dimensions					Connection Type
	D mm	B mm	A mm	C mm	d in	
KCY-FXX025	25,4	70~330	120~450	25~150	1/2, 1/4, 3/8	Solder Connection
KCY-FXX031	31,75	70~330	120~450	25~150	1/2, 1/4, 3/8	
KCY-FXX035	35	70~330	120~450	25~150	1/2, 1/4, 3/8	
KCY-FXX040	40	90~330	140~450	25~150	1/2, 1/4, 3/8	
KCY-FXX048	48	90~330	140~450	25~150	1/2, 1/4, 3/8	
KCY-FXX050	50,8	90~330	140~450	25~150	1/2, 1/4, 3/8	
KCY-FXX065	65	130~330	180~450	25~150	1/2, 1/4, 3/8	

DIMENSIONS

Copper Receiver



Model	Dimensions						Connection Type
	D mm	B mm	A mm	C mm	E mm	d in	
KCY-CXX025	25,4	70~330	120~450	5~15	25~150	1/2, 1/4, 3/8	Solder Connection
KCY-CXX030	30	70~330	120~450	5~15	25~150	1/2, 1/4, 3/8	
KCY-CXX031	31,75	70~330	120~450	5~15	25~150	1/2, 1/4, 3/8	
KCY-CXX035	35	90~330	140~450	5~15	25~150	1/2, 1/4, 3/8	
KCY-CXX041	41,3	90~330	140~450	5~15	25~150	1/2, 1/4, 3/8	
KCY-CXX048	48	90~330	140~450	5~15	25~150	1/2, 1/4, 3/8	
KCY-CXX050	50,8	130~330	180~450	5~15	25~150	1/2, 1/4, 3/8	
KCY-CXX057	57,2	130~330	180~450	5~15	25~150	1/2, 1/4, 3/8	

Compensator

The Compensator is applicable for commercial air conditioner, freezing or deep-freezing equipment or other refrigeration circuits in order to open and to shut off inner flow path by operating the valve stem. It can also be used as service valve for vacuum pumping and refrigerant injection etc.

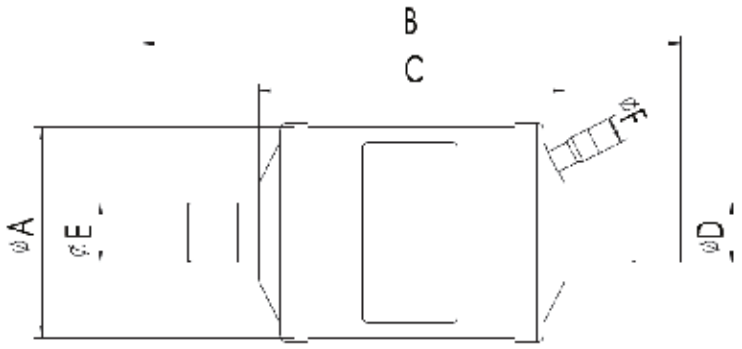
FEATURES

- SOLID COPPER SOLDER CONNECTION
- MINIMIZE PRESSURE DROP
- GUARANTEE THE MAXIMUM WORKING PRESSURE
- POWDER COATED SURFACE CAN SURVIVE 500 HOURS OF SALT SPRAY TEST
- EXCELLENT ANTI-SHOCK AND VIBRATION PERFORMANCE: USING STEEL CASING

GENERAL SPECIFICATIONS

- Applicable refrigerant: HFC, HCFC and HC
- Applicable medium temperature: -30°C~ +120°C (-22°F~+240°F)
- Applicable ambient temperature: -30°C~ +55°C (-22°F~+131°F)
- Maximum working pressure: 4.83MPa
- Certification: UL, CSA

DIMENSIONS TECHNICAL PARAMETERS



Compensator

TECHNICAL PARAMETERS

Model	Dimensions						Connection Type
	A mm	B mm	C mm	D in	E in	F in	
JYQ-A23070-001	89	182,6	84,6	7/8	7/8	3/8	Solder Connection
JYQ-A31070-001	89	206,7	108,7	7/8	7/8	3/8	
JYQ-A36070-001	89	226,5	128,5	7/8	7/8	3/8	
JYQ-A45070-001	89	258	160	7/8	7/8	3/8	
JYQ-A78070-001	89	358,4	260,4	7/8	7/8	3/8	

Muffler

Muffler are used in refrigerating systems such as household air conditioners or commercial air conditioners. Muffler are installed in discharge line or other pipes with vibration and noise to eliminate and alleviate noises.

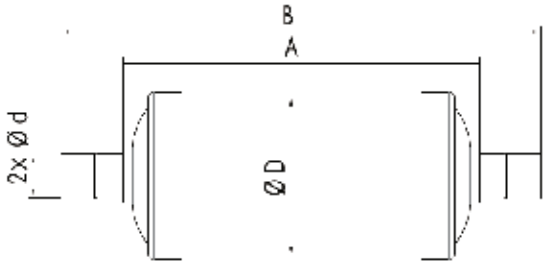
FEATURES

- CORROSION RESISTANT: FINISHED WITH EPOXY POWDER PAINTING
- EXCELLENT ANTI-SHOCK AND ANTI-VIBRATION PERFORMANCE WITH STEEL OR COPPER CASING

GENERAL SPECIFICATIONS

- Applicable refrigerant: R22, R410A and R407C
- Applicable medium temperature: -30°C~+120°C (-22°F~+240°F)
- Applicable ambient temperature: -30°C~ +55°C (-22°F~+131°F)
- Maximum working pressure: 4.8MPa
- Certification: UL, CSA

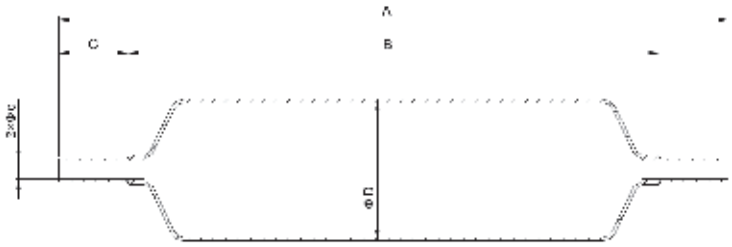
TECHNICAL PARAMETERS



Regular Steel Muffler

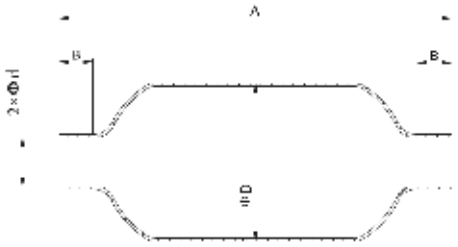
Model	Dimensions					Connecction Type
	D mm	A mm	B mm	d in	d in	
JYQ-A23070-001	63	76.2	154.4	1/2	1/2	Solder Connections
JYQ-A31070-001	76	115.6	163.8	1/2	1/2	
JYQ-A36070-001	76	190.5	238.7	1/2	1/2	
JYQ-A45070-001	76	123.9	231.9	1/2	1/2	

Muffler



Spun Steel Muffler

Model	Dimensions					Connecction Type
	D mm	A mm	B mm	C mm	d in	
XYQ-FXX025	25,4	70~330	120~450	25~150	1/2, 1/4, 3/8	Solder Connections
XYQ-FXX031	31,75	70~330	120~450	25~150	1/2, 1/4, 3/8	
XYQ-FXX035	35	70~330	120~450	25~150	1/2, 1/4, 3/8	
XYQ-FXX040	40	70~330	120~450	25~150	1/2, 1/4, 3/8	
XYQ-FXX048	48	90~330	120~450	25~150	1/2, 1/4, 3/8	
XYQ-FXX050	50,8	90~330	120~450	25~150	1/2, 1/4, 3/8	
XYQ-FXX065	65	130~330	120~450	25~150	1/2, 1/4, 3/8	



Spun Copper Muffler

Model	Dimensions				Connecction Type
	D mm	B mm	A mm	d in	
XYQ-CXX025	25,4	5~15	70~330	1/2, 1/4, 3/8	Solder Connections
XYQ-CXX030	30	5~15	70~330	1/2, 1/4, 3/8	
XYQ-CXX031	31,75	5~15	70~330	1/2, 1/4, 3/8	
XYQ-CXX035	35	5~15	70~330	1/2, 1/4, 3/8	
XYQ-CXX041	41,3	5~15	90~330	1/2, 1/4, 3/8	
XYQ-CXX048	48	5~15	90~330	1/2, 1/4, 3/8	
XYQ-CXX050	50,8	5~15	90~330	1/2, 1/4, 3/8	

Y SERIES

Pressure Vessel

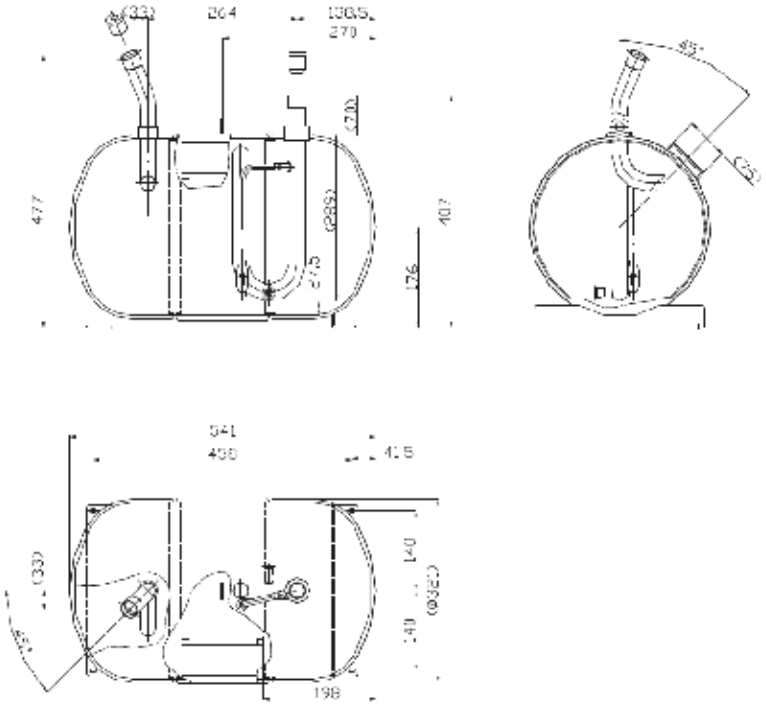
FEATURES

- THE DESIGN, MANUFACTURING AND INSPECTION IS BASED ON NB/T 47012 AND TSG R0004 STANDARD
- THE WELDING IS GOVERNED BY JB/T 4709
- THE INSPECTION OF WELDING LINE IS GOVERNED BY GRADE II IN JB/T 4730.2 WITH X-RAY.
- THE PRESSURE TEST IS FOLLOWING NB/T 47012

GENERAL SPECIFICATIONS

- Type of the vessel: D2
- Maximum operating pressure: 10 MPa
- Material of the main pressure parts: Carbon Steel and stainless steel
- Applicable refrigerant: as per customer
- Diameter range of body: Φ150 ~ Φ700 mm
- Maximum length of the product: 4000 mm

TECHNICAL PARAMETERS



GZJ SERIES

Assembly

GZJ series piping assembly is applicable for heat pump air conditioning systems such as room air conditioners to provide flow path for refrigerant.

FEATURES

- ALL HAVE BEEN TESTED AGAINST AIR TIGHTNESS TO ENSURE NO LEAKAGE UPON DELIVERY
- COMPLETE PERFORMANCE TEST ON VALVES SUCH AS 4-WAY VALVES AND ELECTRONIC EXPANSION VALVES TO ENSURE THE PRODUCT PERFORMANCE UPON DELIVERY

GENERAL SPECIFICATIONS

- Applicable refrigerant: HFC, HCFC and CFC etc.
- Applicable medium temperature: -30°C~+120°C
- Maximum working pressure: R22, R407C: 3MPa R410A: 4.15MPa

TECHNICAL PARAMETERS

Item	Refrigerant	Standard
Content of undissolved impurites	R22	≤5mg
	R407C	≤5mg
	R410A	≤5mg
Content of mineral oil	R22	≤20mg
	R407C	≤15mg
	R410A	≤15mg
Content of chloride ion	R22	/
	R407C	≤5PPM
	R410A	

DIMENSIONS

Due to the particularity of pipe components, the installation position, product structure and connection size required by different customers differs, even those required by different model of products of one customer differs. Therefore, product structure and interface size are varied subject to the specific customer and product model.

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