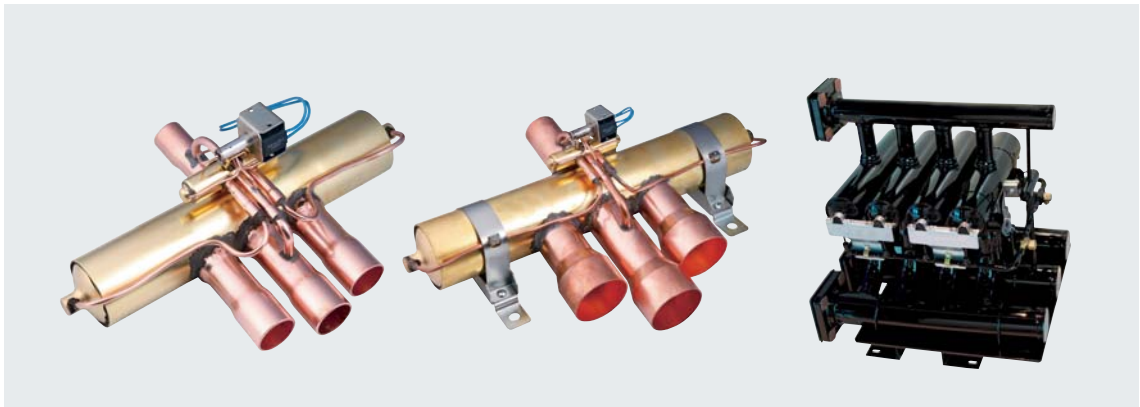


Four-way Reversing Valve RANCO Series



Outline



RANCO series four-way reversal valves 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 spec.

- ◆ 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

Se-ries	Model	Port mm	R22 Nominal Capacity		Max. Working Pressure MPa		Min. Working Pressure MPa		Weight kg
			HP	US.R.T	R22/R407C	R410A	R22/R407C	R410A	
C Se-ries	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 Se-ries	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

Four-way Reversing Valve

RANCO Series



Technical Parameters

Series	Model	Port mm	R22 Nominal Capacity		Max. Working Pressure MPa		Min. Working Pressure MPa		Weight kg
			HP	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
	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	

Four-way Reversing Valve RANCO Series

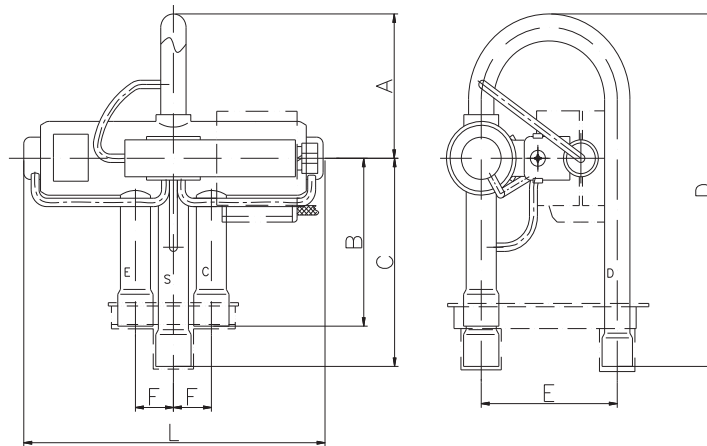


Technical Parameters

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
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

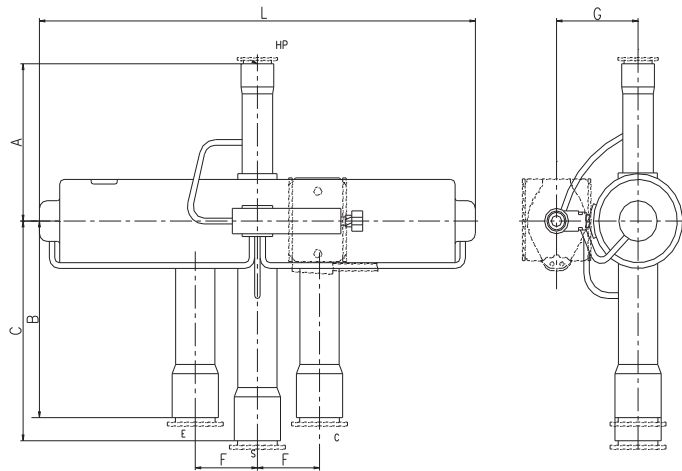


Model	Dimensions mm							Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	D Tube	E/S/C Tube
C01C00S	101	40.5	50	62	102.5	42	12	8.1/8.5	9.6/10
C02C00S	125	52	59	70	120	52.5	16	9.7/9.5	12.75/9.5
N01C00G	104Max	42.5	50	62	104.5	42	12	8.1/8.5	9.64/9.7
N02C00S	128Max	52	59	71.4	120	52.5	16	9.65/9.7	12.8/9.7
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

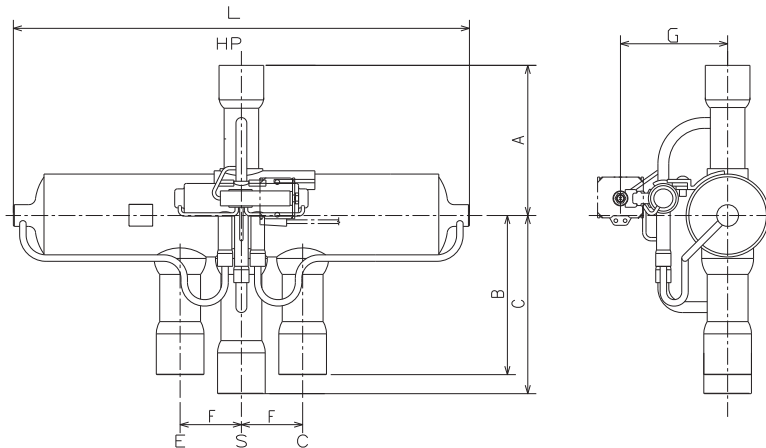
Four-way Reversing Valve RANCO Series



Dimensions



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

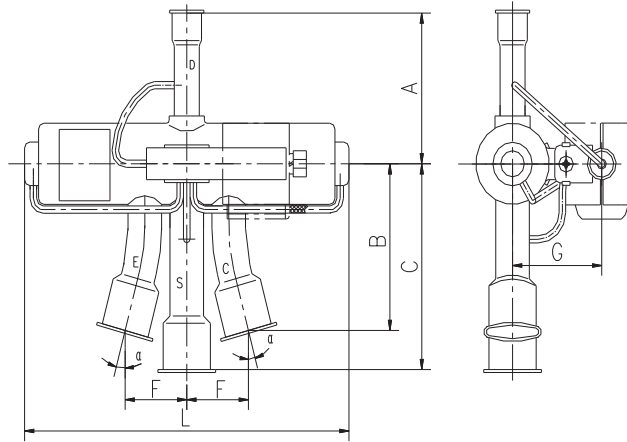


Model	Dimensions mm						Connection Size/Connection Depth mm	
	L	A	B	C	F	G	D Tube	E/S/C Tube
N20C00G	337Max	111	117	131	45	78.8	25.6/25.4	32/30
N30C00G	337Max	111	117	131	45	78.8	32/25	38.3/30
VH1320A	337Max	111	117	131	45	78.8	25.6/25.4	32/30
VH1322A	337Max	111	117	131	45	78.8	28.8/25.4	35.2/30
VH15120	337Max	111	117	131	45	78.8	32/25	38.3/30

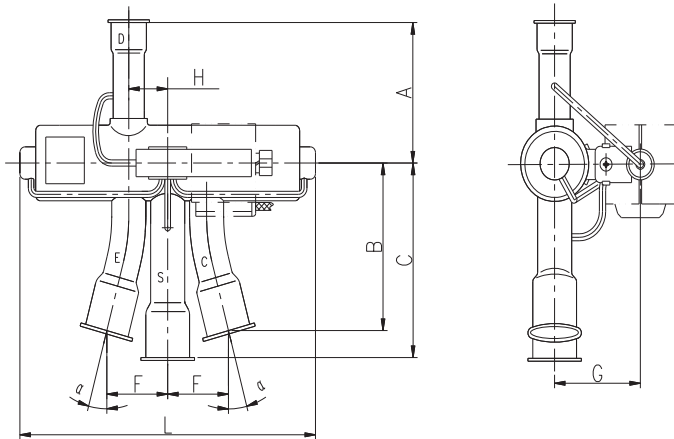
Four-way Reversing Valve RANCO Series



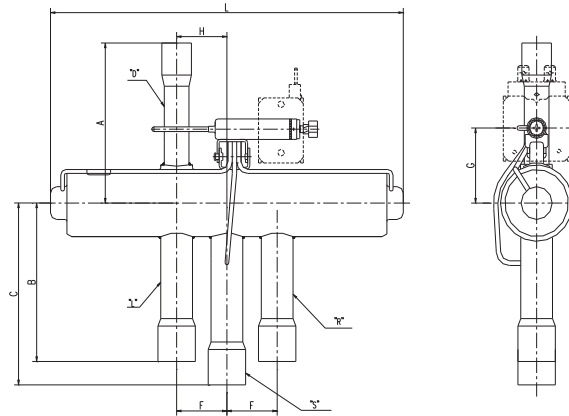
Dimensions



Model	Dimensions (size unit: mm; angle unit: °)								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 (size unit: mm; angle unit: °)								
	L	A	B	C	F	G	H	α	Connection Size/Connection Depth mm
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

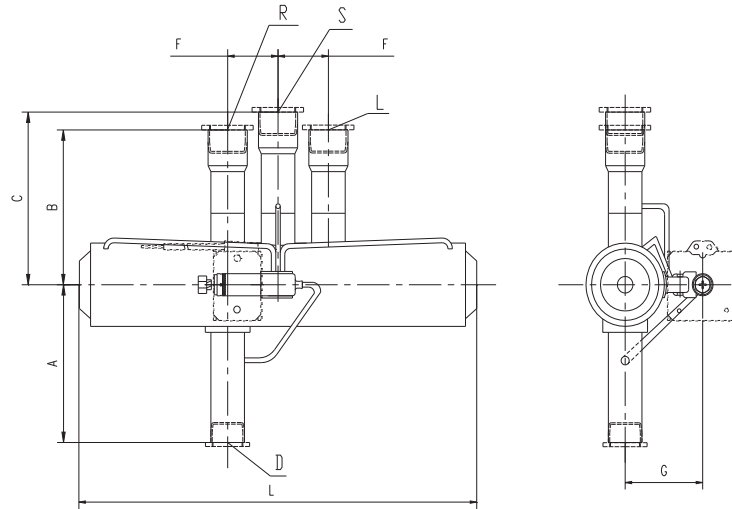


Model	Dimensions mm								Connection Size/Connection Depth mm	
	L	A	B	C	F	G	H	D Tube	E/S/C Tube	
V6-4140K0-2XX	203Max	85.9	82.6	95.3	28.5	41Max	28.5	15.82/19.05	22.36/22.4	

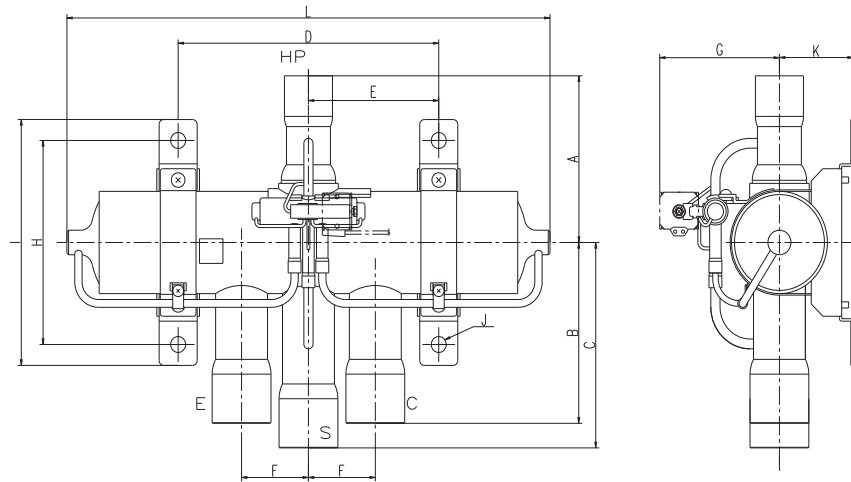
Four-way Reversing Valve RANCO Series



Dimensions



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

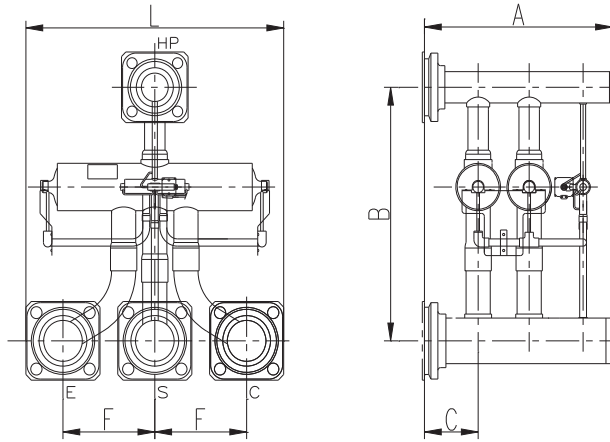


Model	Dimensions mm												Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	K	D Tube	E/S/C Tube
N20C10G	337Max	111	117	131	188	94	45	108	120	145	Φ13	57	25.6/25.4	32/30
N20C11G	337Max	111	117	131	188	94	45	108	120	145	Φ13	57	28.8/25.4	35.2/30
N30C10G	337Max	111	117	131	188	94	45	108	120	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

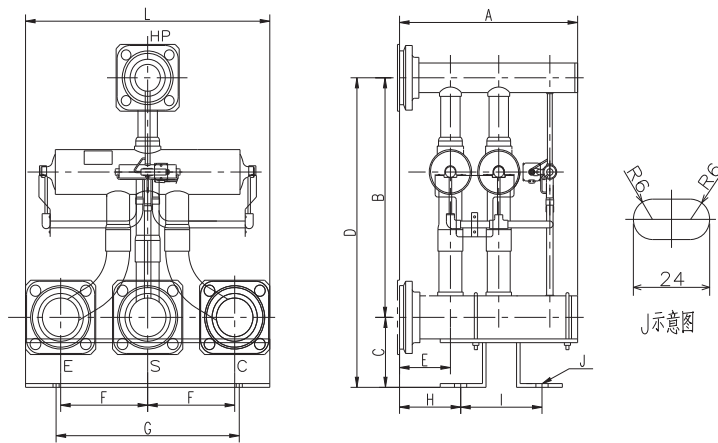
Four-way Reversing Valve RANCO Series



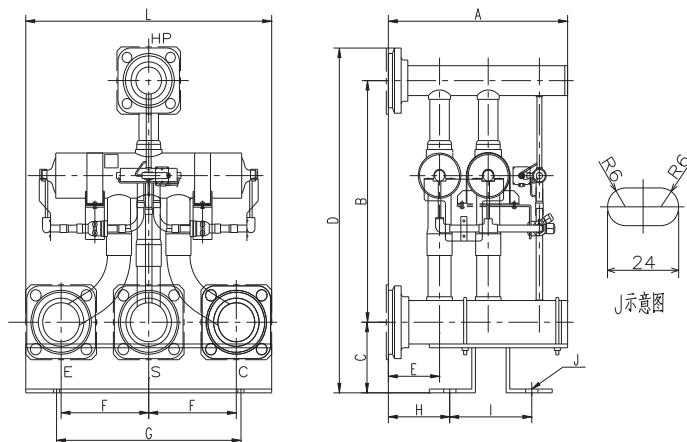
Dimensions



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



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

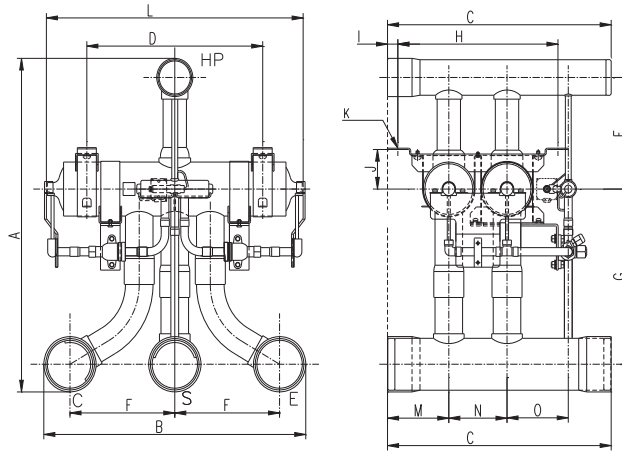


Model	Dimensions mm											Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	D Tube	E/S/C Tube
VH32085	480	350	445	130	635	100	171	360	120	160	12 × 24	FLANG E RBK50A	FLANG E RBK65A

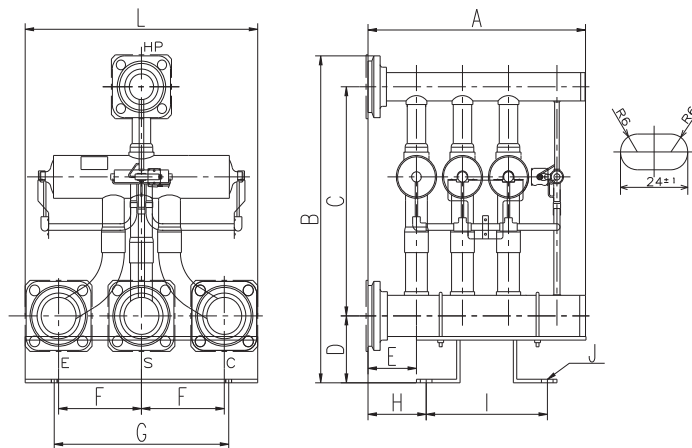
Four-way Reversing Valve RANCO Series



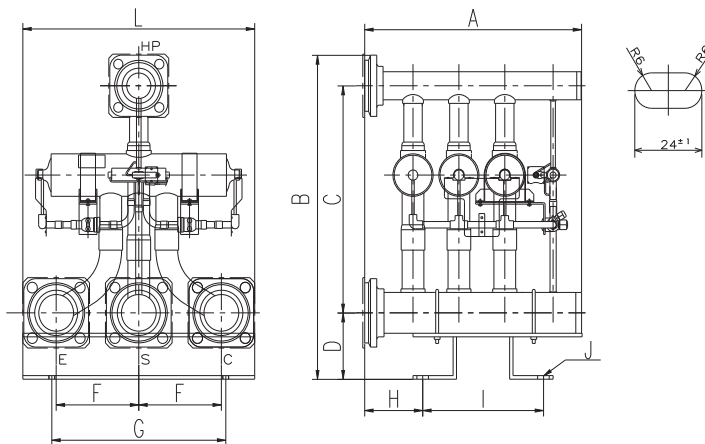
Dimensions



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

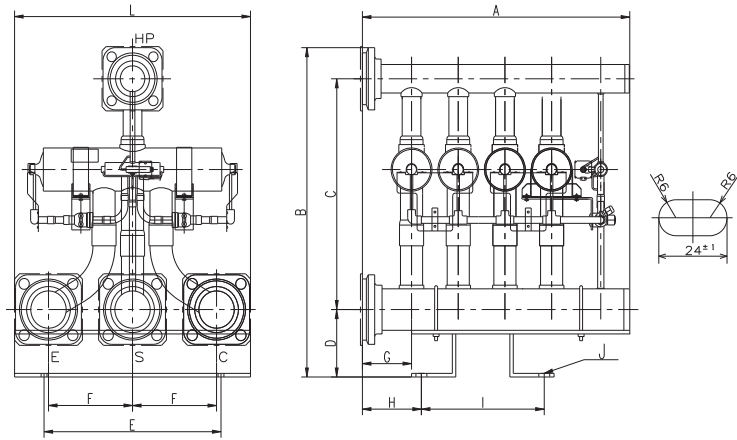


Model	Dimensions mm											Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	D Tube	E/S/C Tube
VH32123	480	450	635	445	130	100	171	360	120	250	12 × 24	FLANG E RBK50A	FLANG E RBK65A

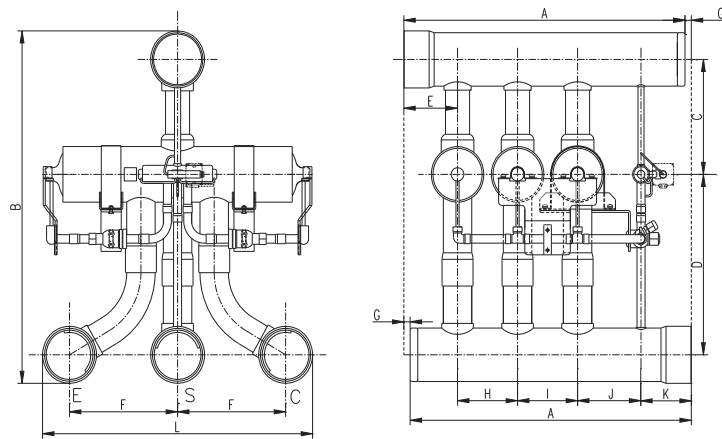
Four-way Reversing Valve RANCO Series



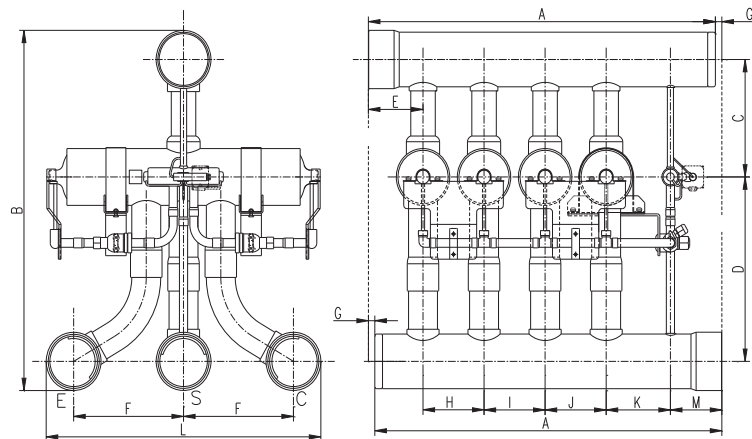
Dimensions



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

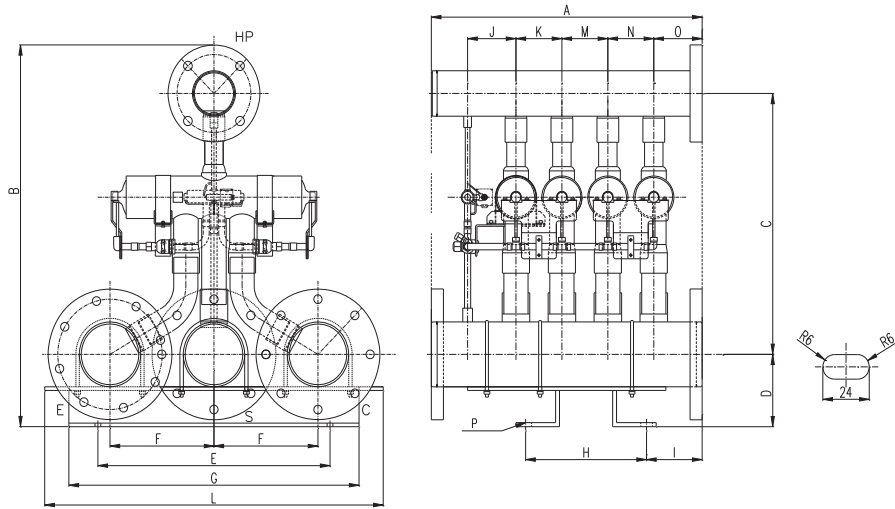


Model	Dimensions mm													Connection Size/Connection Depth mm	
	L	A	B	C	D	E	F	G	H	I	J	K	M	D Tube	E/S/C Tube
VH32166B	428	540	528	172	270	85	171	10	95	95	95	100	80	79.38/40	79.38/40

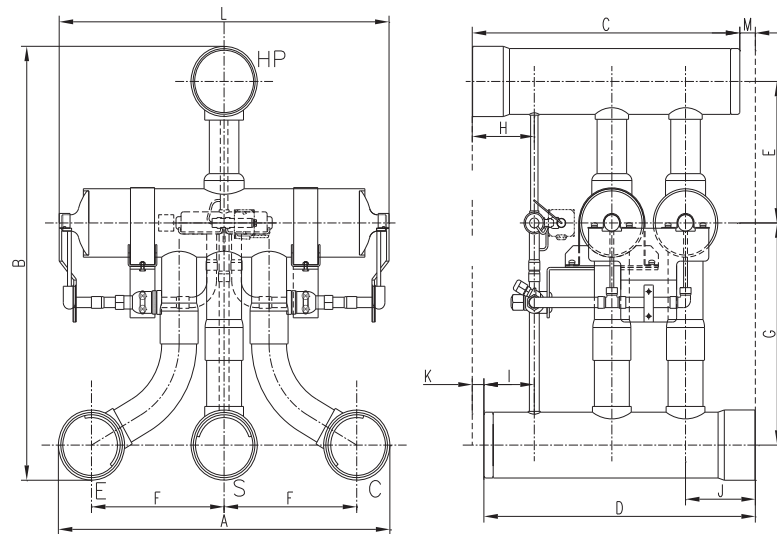
Four-way Reversing Valve RANCO Series



Dimensions



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	