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Refrigeration Solenoid Valve Series

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Introduction

H series refrigeration solenoid valve series is extensively applied in the freezing, refrigeration, air conditioner and heat pump system, and is suitable for the liquid, hot-gas and suction pipeline.

Characteristic

Providing normal closed (NC) type - normal open (NO) type

Low winding temperature rise & power consumption and high reliability

High valve-opening pressure and working pressure difference

Providing various AC and DC coils

Valve body connecting to round valve seat, with high leakproofness

General technical parameters

Suitable refrigerants: HCFC/HFC

Applicable media temperature: -40℃~+105℃

Min valve-opening pressure difference: direct-acting type 0 MPa; diaphragm type: 0.03 MPa

Max valve-opening pressure difference 2.5 MPa

Maxi working pressure: 3.5 MPa

Ambient temperature: -30℃ ~ +60℃

Relative humidity: less than 90%

Installation matters: Horizontal upward direction, and arrow direction

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Technical parameter date of H10 series

Series model	Dimension	Connection mode	Opening mode	Flow capacity	Max working pressure	Max valve-opening pressure difference	Min valve-opening pressure difference
				m^3/h	MPa	MPa	MPa
H1020-2	1/4	Screw	Direct-acting type	0.18	3.5	2.5	0
H1028-2	Φ6	Welding		0.18	3.5	2.5	0
H1020-3	3/8	Screw		0.23	3.5	2.5	0
H1028-3	Φ10	Welding		0.23	3.5	2.5	0
H1020-3-OR	3/8	OR Screw		0.23	3.5	2.5	0
H1064-3	3/8	Screw	Diaphragm type	0.80	3.2	2.5	0.03
H1068-3	Φ10	Welding		0.80	3.2	2.5	0.03
H1064-3-OR	3/8	OR Screw		0.80	3.2	2.5	0.03
H1064-4	1/2	Screw		0.80	3.2	2.5	0.03
H1068-4	Φ12	Welding		0.80	3.2	2.5	0.03
H1070-4	1/2	Screw		1.80	3.2	2.5	0.03
H1078-4	Φ12	Welding		1.80	3.2	2.5	0.03
H1070-5	5/8	Screw		1.80	3.2	2.5	0.03
H1078-5	Φ16	Welding		1.80	3.2	2.5	0.03
H1078-6	Φ19	Welding		1.80	3.2	2.5	0.03
H1090-6	3/4	Screw		2.50	3.2	2.5	0.03
H1098-6	Φ19	Welding		2.50	3.2	2.5	0.03
H1098-7	Φ22	Welding		2.50	3.2	2.5	0.03

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Technical parameter date of HDF series

Series model	Dimension	Connection mode	Opening mode	Flow capacity	Max working pressure	Max valve-opening pressure difference	Min valve-opening pressure difference
				m^3/h	MPa	MPa	MPa
HDF6	3/8	Screw	Diaphragm type	0.80	3.2	2.5	0.03
HDF6	Φ10	Welding		0.80	3.2	2.5	0.03
HDF6-OR	3/8	OR Screw		0.80	3.2	2.5	0.03
HDF6	1/2	Screw		0.80	3.2	2.5	0.03
HDF6	Φ12	Welding		0.80	3.2	2.5	0.03
HDF10	1/2	Screw		1.80	3.2	2.5	0.03
HDF10	Φ12	Welding		1.80	3.2	2.5	0.03
HDF10	5/8	Screw		1.80	3.2	2.5	0.03
HDF10	Φ16	Welding		1.80	3.2	2.5	0.03
HDF10	Φ19	Welding		1.80	3.2	2.5	0.03
HDF15	3/4	Screw		2.50	3.2	2.5	0.03
HDF15	Φ19	Welding		2.50	3.2	2.5	0.03
HDF15	Φ22	Welding		2.50	3.2	2.5	0.03

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Technical parameter date of HVR series

Series model	Dimension	Connection mode	Opening mode	Flow capacity	Max working pressure	Max valve-opening pressure difference	Min valve-opening pressure difference
				m^3/h	MPa	MPa	MPa
HVR6	3/8	Screw	Diaphragm type	0.80	3.2	2.5	0.03
HVR6	Φ10	Welding		0.80	3.2	2.5	0.03
HVR6-OR	3/8	OR Screw		0.80	3.2	2.5	0.03
HVR6	1/2	Screw		0.80	3.2	2.5	0.03
HVR6	Φ12	Welding		0.80	3.2	2.5	0.03
HVR10	1/2	Screw		1.80	3.2	2.5	0.03
HVR10	Φ12	Welding		1.80	3.2	2.5	0.03
HVR10	5/8	Screw		1.80	3.2	2.5	0.03
HVR10	Φ16	Welding		1.80	3.2	2.5	0.03
HVR10	Φ19	Welding		1.80	3.2	2.5	0.03
HVR15	3/4	Screw		2.50	3.2	2.5	0.03
HVR15	Φ19	Welding		2.50	3.2	2.5	0.03
HVR15	Φ22	Welding		2.50	3.2	2.5	0.03

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Technical parameter date of HVF series

Series model	Dimension	Connection mode	Opening mode	Flow capacity	Max working pressure	Max valve-opening pressure difference	Min valve-opening pressure difference
				m^3/h	MPa	MPa	MPa
HVF6	3/8	Screw	Diaphragm type	0.80	3.2	2.5	0.03
HVF6	Φ10	Welding		0.80	3.2	2.5	0.03
HVF6-OR	3/8	OR Screw		0.80	3.2	2.5	0.03
HVF6	1/2	Screw		0.80	3.2	2.5	0.03
HVF6	Φ12	Welding		0.80	3.2	2.5	0.03
HVF10	1/2	Screw		1.80	3.2	2.5	0.03
HVF10	Φ12	Welding		1.80	3.2	2.5	0.03
HVF10	5/8	Screw		1.80	3.2	2.5	0.03
HVF10	Φ16	Welding		1.80	3.2	2.5	0.03
HVF10	Φ19	Welding		1.80	3.2	2.5	0.03
HVF15	3/4	Screw		2.50	3.2	2.5	0.03
HVF15	Φ19	Welding		2.50	3.2	2.5	0.03
HVF15	Φ22	Welding		2.50	3.2	2.5	0.03

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Nominal Refrigerating Capacity kW															
Model				Liquid				Suction				hotgas			
				R22	R134a	R404A R507	R407c	R22	R134a	R404A R507	R407c	R22	R134a	R404A R507	R407c
H1020-2	/	/	/	6.3	4.5	4.3	5.8	0.65	0.51	0.42	0.58	2.5	2.1	2.0	2.6
H1028-2	/	/	/												
H1020-3	/	/	/												
H1028-3	/	/	/												
H1020-3-OR	/	/	/												
H1064-3	HDF6	HVF6	HVR6	15.5	14.1	10.7	14.6	1.8	1.3	1.6	1.7	7.3	5.8	5.9	7.6
H1068-3	HDF6	HVF6	HVR6												
H1064-3-OR	HDF6-OR	HVF6-OR	HVR6-OR												
H1064-4	HDF6	HVF6	HVR6												
H1068-4	HDF6	HVF6	HVR6												
H1070-4	HDF10	HVF10	HVR10	36.2	33.1	25.0	34.3	4.1	2.9	3.2	3.8	16.5	12.6	13.1	16.7
H1078-4	HDF10	HVF10	HVR10												
H1070-5	HDF10	HVF10	HVR10												
H1078-5	HDF10	HVF10	HVR10												
H1078-6	HDF10	HVF10	HVR10												
H1090-6	HDF15	HVF15	HVR15	50.5	46.8	35.7	48.3	5.7	4.0	5.1	5.2	23.2	18.6	19.3	22.7
H1098-6	HDF15	HVF15	HVR15												
H1098-7	HDF15	HVF15	HVR15												

1. Working condition of nominal refrigerating capacity of liquid and suction: evaporating temperature te = -10℃
Pre-valve liquid temperature t1 = +25℃ Solenoid valve pressure drop △p=0.15bar
2. Working condition of nominal refrigerating capacity of hot-gas: condensing temperature tc = +40℃
Valve pressure drop △p=0.8bar Hot steam temperature th=+65℃ Liquid refrigerant superheat △tsub=4k

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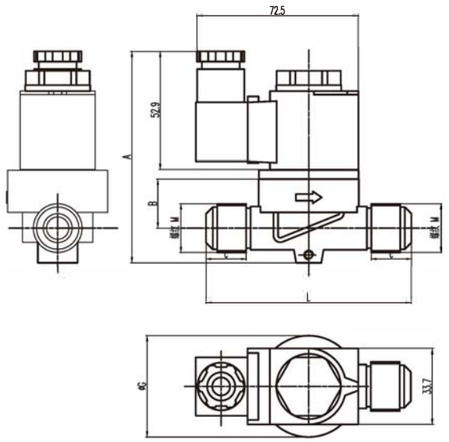
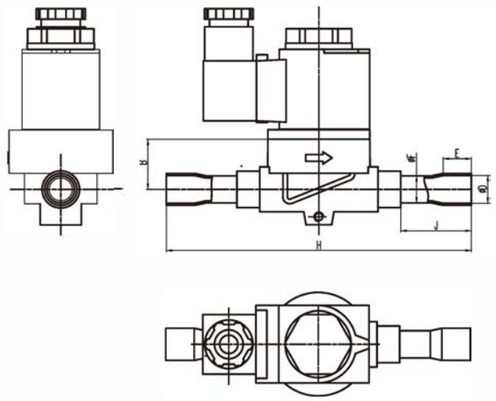
Thread type



Welding type



Model	Outline dimension (MM)													Weight/g
	Dimension	Connection mode	A	B	C	ΦG	L	Thread M	ΦD	E	ΦF	H	J	
H1020-2	1/4	Screw	86	14.5	11.6	Φ26	57	7/16-20UNF						426
H1028-2	Φ6	Welding	86	14.5		Φ26			Φ6	7	Φ6	96	23	399
H1020-3	3/8	Screw	86	14.5	12	Φ26	59	5/8-18UNF						461
H1028-3	Φ10	Welding	86	14.5		Φ26			Φ10	9	Φ10	110	30	417
H1020-3-OR	3/8	OR Screw	86	14.5		Φ26								400
H1064-3	3/8	Screw	89	18.3	11.6	Φ31	67	5/8-18UNF						530
H1068-3	Φ10	Welding	89	18.3		Φ31			Φ10	9	Φ10	120	30	476
H1064-3-OR	3/8	OR Screw	89	18.3	12.8	Φ31	68.6	5/8-18UNF						470
H1064-4	1/2	Screw	89	18.3	15.8	Φ31	74	3/4-16UNF						547
H1068-4	Φ12	Welding	89	18.3		Φ31			Φ12	10	Φ13	126	34	483
H1070-4	1/2	Screw	91	19.7	15.8	Φ45	87.3	3/4-16UNF						685
H1078-4	Φ12	Welding	91	19.7		Φ45			Φ12	10	Φ13	137	34	624
H1070-5	5/8	Screw	91	19.7	18	Φ45	92	7/8-14UNF						717
H1078-5	Φ16	Welding	91	19.7		Φ45			Φ16	14	Φ16	159	40	659
H1078-6	Φ19	Welding	91	19.7		Φ45			Φ19	16	Φ16	159	40	650
H1090-6	3/4	Screw	105	28.2	19	Φ52		1-1/16-14UNF						974
H1098-6	Φ19	Welding	105	28.2		Φ52			Φ19	16	Φ16	169	43	836
H1098-7	Φ22	Welding	105	28.2		Φ52			Φ22	17.5	Φ22	178	48	859

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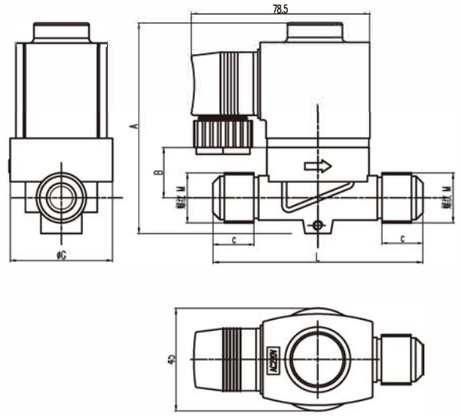
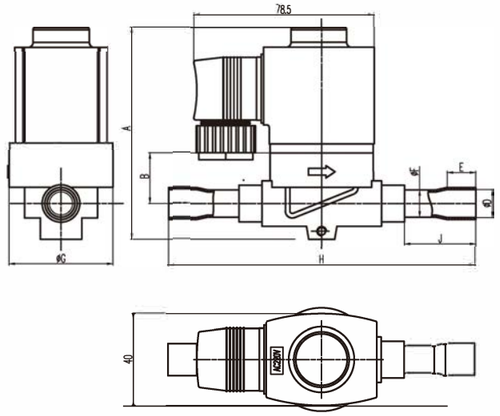
Thread type



Welding type



Model	Outline dimension (MM)													Weight/g
	Dimension	Connection mode	A	B	C	ΦG	L	Thread M	ΦD	E	ΦF	H	J	
HDF6	3/8	Screw	86	18.3	11.6	Φ31	67	5/8-18UNF						626
HDF6	Φ10	Welding	86	18.3		Φ31			Φ10	9	Φ10	120	30	571
HDF-OR	3/8	OR Screw	86	18.3	12.8	Φ31	68.6	5/8-18UNF						565
HDF6	1/2	Screw	86	18.3	15.8	Φ31	74	3/4-18UNF						647
HDF6	Φ12	Welding	86	18.3		Φ31			Φ12	10	Φ12	125	34	579
HDF10	1/2	Screw	90	19.7	15.8	Φ45	87.3	3/4-18UNF						779
HDF10	Φ12	Welding	90	19.7		Φ45			Φ12	10	Φ12	137	34	707
HDF10	5/8	Screw	90	19.7	18	Φ45	92	7/8-18UNF						812
HDF10	Φ16	Welding	90	19.7		Φ45			Φ16	14	Φ16	158	40	733
HDF10	Φ19	Welding	90	19.7		Φ45			Φ19	16	Φ16	158	40	736
HDF15	3/4	Screw	103	28.2	19	Φ52	97.3	1-1/16-14UNF						1060
HDF15	Φ19	Welding	103	28.2		Φ52			Φ19	16	Φ16	168	43	921
HDF15	Φ22	Welding	103	28.2		Φ52			Φ22	17.5	Φ22	175	48	967

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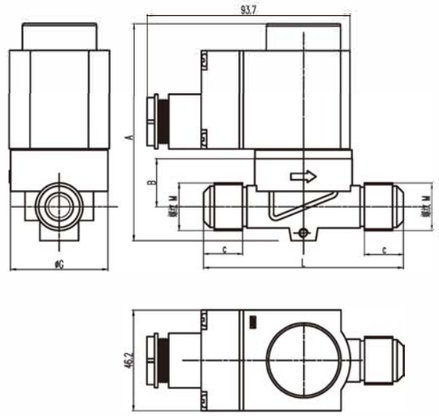
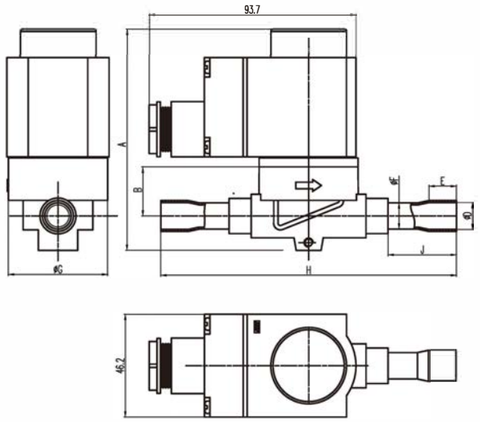
Thread type



Welding type



Model	Outline dimension (MM)													Weight/g
	Dimension	Connection mode	A	B	C	ΦG	L	Thread M	ΦD	E	ΦF	H	J	
HVR6	3/8	Screw	95	18.3	11.6	Φ31	67	5/8-18UNF						703
HVR6	Φ10	Welding	95	18.3		Φ31			Φ10	9	Φ10	120	30	654
HVR6-OR	3/8	OR Screw	95	18.3	12.8	Φ31	68.6	5/8-18UNF						642
HVR6	1/2	Screw	95	18.3	15.8	Φ31	74	3/4-16UNF						724
HVR6	Φ12	Welding	95	18.3		Φ31			Φ12	10	Φ12	126	34	657
HVR10	1/2	Screw	98	19.7	15.8	Φ45	87.3	3/4-16UNF						849
HVR10	Φ12	Welding	98	19.7		Φ45			Φ12	10	Φ12	137	34	777
HVR10	5/8	Screw	98	19.7	18	Φ45	92	7/8-14UNF						885
HVR10	Φ16	Welding	98	19.7		Φ45			Φ16	14	Φ16	159	40	803
HVR10	Φ19	Welding	98	19.7		Φ45			Φ19	16	Φ16	159	40	808
HVR15	3/4	Screw	111	28.2	19	Φ52	97.3	1-1/16-14UNF						1142
HVR15	Φ19	Welding	111	28.2		Φ52			Φ19	16	Φ16	169	43	1001
HVR15	Φ22	Welding	111	28.2		Φ52			Φ22	17.5	Φ22	179	48	1027

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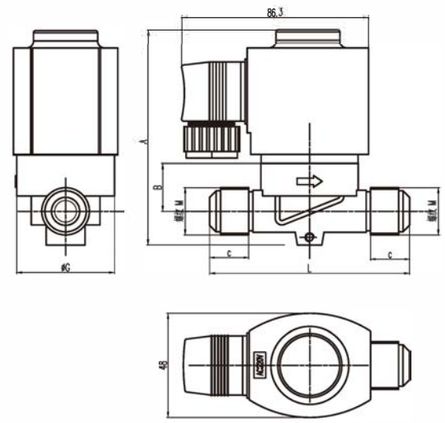
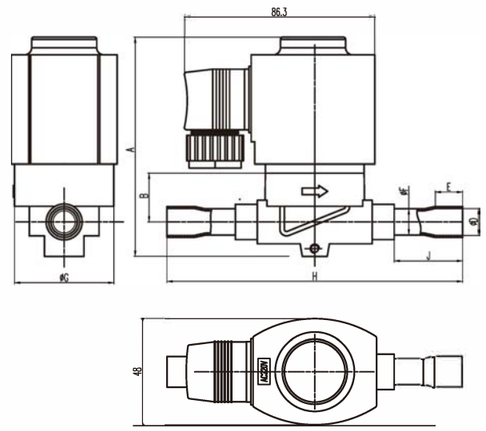
Thread type



Welding type



Model	Outline dimension (MM)													Weight/g
	Dimension	Connection mode	A	B	C	ΦG	L	Thread M	ΦD	E	ΦF	H	J	
HVF6	3/8	Screw	93.7	18.3	11.6	Φ31	67	5/8-18UNF						770
HVF6	Φ10	Welding	93.7	18.3		Φ31			Φ10	9	Φ10	120	30	715
HVF6-OR	3/8	OR Screw	93.7	18.3	12.8	Φ31	68.6	5/8-18UNF						709
HVF6	1/2	Screw	93.7	18.3	15.8	Φ31	74	3/4-16UNF						792
HVF6	Φ12	Welding	93.7	18.3		Φ31			Φ12	10	Φ12	126	34	724
HVF10	1/2	Screw	97.3	19.7	15.8	Φ45	87.3	3/4-16UNF						915
HVF10	Φ12	Welding	97.3	19.7		Φ45			Φ12	10	Φ12	137	34	847
HVF10	5/8	Screw	97.3	19.7	18	Φ45	92	7/8-14UNF						954
HVF10	Φ16	Welding	97.3	19.7		Φ45			Φ16	14	Φ16	159	40	887
HVF10	Φ19	Welding	97.3	19.7		Φ45			Φ19	16	Φ16	159	40	873
HVF15	3/4	Screw	110	28.2	19	Φ52	97.3	1-1/16-14UNF						1212
HVF15	Φ19	Welding	110	28.2		Φ52			Φ19	16	Φ16	169	43	1070
HVF15	Φ22	Welding	110	28.2		Φ52			Φ22	17.5	Φ22	179	48	1109

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