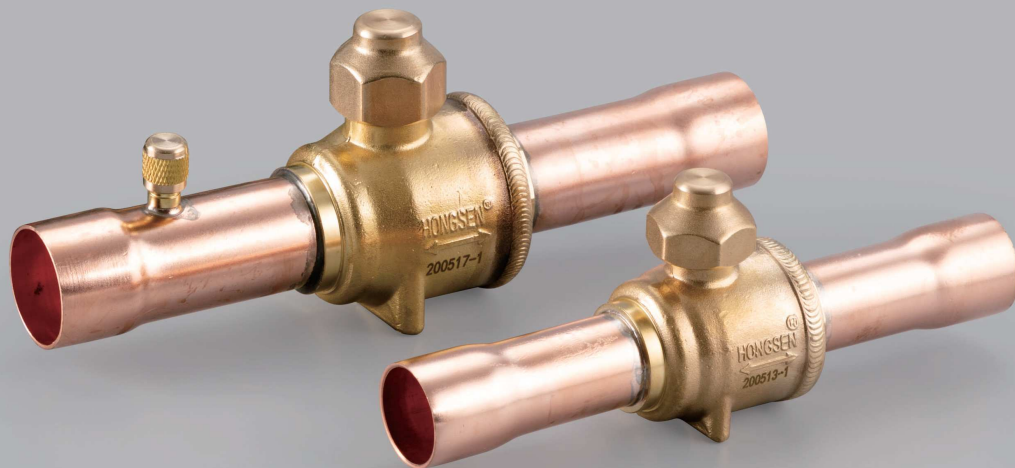


BALL VALVE

Series

uitable for bidirectional flow, used in refrigeration, refrigeration and air conditioning devices of liquid, heating and heat pipes, seats and seals have good sealing.
Equipped with a sealed cap with a secondary seal.



Model HBC Ball Valve



Product Description

- Model HBC ball valve is a manually regulated shut-off valve, which is applicable to two-direction flow.
- Model HBC ball valve is used on the liquid, air suction and hot vapor piping of the freezer, could store and air conditioning unit.
- The valve seat of Model HBC ball valve is well sealed with perfect sealing performance.

- Model HBC ball valve is a through-type ball valve with maximum flow rate and wide scope of operating temperature.
- Model HBC ball valve is equipped with a secondary sealing cap.

Features

- No pressure drop in flow.
- Only turn 1/4 circle to make valve full open or full close.
- Turning stop for full open or full close.
- Full Open and Full Close mark on top of valve stem.
- Two-direction flow is available.
- Argon arc welded structure.
- Explosion-proof valve stem design.
- Modified PTFE sealing.
- Inside liquid accumulation is avoided.
- Could be mounted on the control panel.

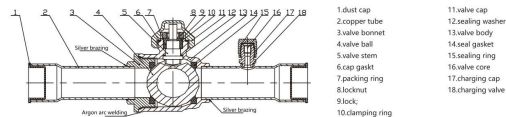
Technical Parameters

Applicable Refrigerant:	HCFC or HFC(Customer choice)
Applicable Medium Temperature:	-40~+120°C
MAX Working Pressure	4.5MPa
MAX Compression Pressure	6.5MPa
Yearly Leakage of Refrigerant	≤2g R22/a

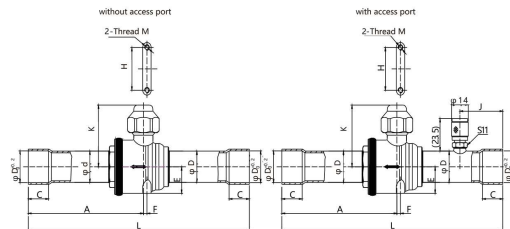
• Two types of Model HBC ball valve are available: one is equipped with the charging and inspection port; the other is not equipped with the charging and inspection port.

Model Selection							
Model	Size	OD(mm)	Kv(m ³ /h)	Model	Size	OD(mm)	Kv(m ³ /h)
HBC-65	1/4(Φ6)	Φ10	2	HBC-28	1-1/8(Φ28)	Φ25	52.0
HBC-105	3/8(Φ10)	Φ10	5.7	HBC-35	1-3/8(Φ35)	Φ31	80
HBC-125	1/2(Φ12)	Φ10	5.7	HBC-42	1-5/8(Φ42)	Φ37	121
HBC-10	3/8(Φ10)	Φ14	5.7	HBC-54	2-1/8(Φ54)	Φ50	200
HBC-12	1/2(Φ12)	Φ14	10.6	HBC-67	2-5/8(Φ67)	Φ50	200
HBC-16	5/8(Φ16)	Φ14	14.1	HBC-79	3-1/8(Φ79)	Φ50	200
HBC-19	3/4(Φ19)	Φ16	20.4	HBC-67A	2-5/8(Φ67)	Φ60.5	310
HBC-22	7/8(Φ22)	Φ19	28.2	HBC-79A	3-1/8(Φ79)	Φ73	700

Structure

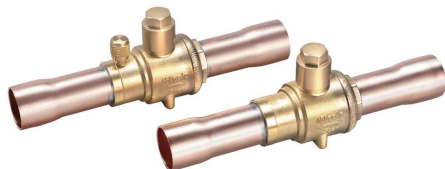


Overall Dimension



Model	A	C	D	d	E	F	K	M	J	H	L
HBC-65	57	6	6.5	10	14	0	32.5	M4	20	44	110
HBC-105	65	8	10.1	10	14	0	32.5	M4	26	44	126
HBC-125	67	10	12.8	12	14	0	32.5	M4	26	44	130
HBC-10	73	9	10.1	16	14.5	2	38	M4	30	50	138
HBC-12	83	10	12.8	16	14.5	2	38	M4	30	50	159
HBC-16	83	12	16.1	16	14.5	2	38	M4	30	50	159
HBC-19	97	14	19.1	19	16.5	3	42	M4	36	58	185
HBC-22	96	17	22.3	22	19	3	43	M4	36	58	185
HBC-28	108	20	28.7	28	24	4	52.5	M4	44	66	208
HBC-35	130	25	35.2	35	30	5	64	M6	44	80	251
HBC-42	145	29	41.5	41.3	35	6	74	M6	56	87	281
HBC-54	157	35	54.2	54	45.5	9	83.5	M6	56	106	305
HBC-67	157	37	67	54	45.5	9	83.5	M6	63	106	305
HBC-79	157	40	79.6	54	45.5	9	83.5	M6	63	106	305
HBC-67A	171	37	67	66.8	54	16	94	M6	72	117	343
HBC-79A	207	37	79.6	79.4	64	16	104	M6	80	117	413

Model QFT Ball Valve



Product Description

Model QFT ball valve is a manually adjusted shut off valve, which is applicable to bidirectional flow, can be applied in the liquid, heating and hot gas pipelines of Refrigeration and A/C equipment. The special design of stem seal and valve ball seal

with special sealing materials ensure the superior performance under common refrigerant working environment.

Features

- Bi-flow direction, can be installed arbitrarily.
- Precision forged high-quality copper valve body.
- Small pressure drop from medium refrigerants.
- Explosion-proof stem design.
- Sealing rings applicable for
- rotary-limit design for fully open/closed
- Secondary reliable sealing structure on the valve stem.
- Can be installed on the control board for easy fixation.

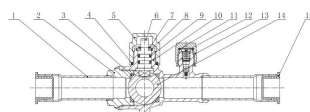
Technical Parameters

MAX. working pressure	650PSI/45BAR
Applicable refrigerant	R22, R134a, R404A, R407C, R410A, etc.
Applicable medium working temperature	-40°C ~ +120°C

Model Selection

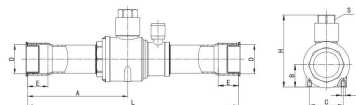
Model	Size
	ID (mm)
QFT-6V/QFT-14	ø6.50 1/2"
QFT-12V/QFT-10	ø10.10 3/4"
QFT-12V/QFT-12	ø12.80 1"
QFT-18V/QFT-16	ø16.10 5/8"
QFT-18V/QFT-19	ø19.20 3/4"
QFT-22V/QFT-22	ø22.30 7/8"
QFT-28V/QFT-28	ø28.70 1 1/8"
QFT-35V/QFT-35	ø35.20 1 3/8"
QFT-42V/QFT-42	ø41.50 1 7/8"
QFT-54V/QFT-54	ø54.20 2 1/8"

Structure

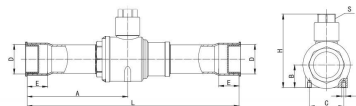


1. Copper tube
2. Valve bonnet
3. Seal gasket
4. cap gasket
5. Valve cap
6. Valve stem
7. Check ring
8. Limiter
9. O-Ring
10. Valve body
11. Seal gasket
12. Valve core
13. Charging cap
14. Valve ball
15. Cap

Dimensions



QFT-V with Charging port



QFT without Charging port

Model	Overall Dimension									
	D	L	E	H	A	B	C	M	S	
QFT-6V/QFT-14	ø6.50 1/2"	120	7	45.2	51.1	14	16	M4	S12	
QFT-12V/QFT-10	ø10.10 3/4"	140	9	45.2	60.9	14	16	M4	S12	
QFT-12V/QFT-12	ø12.80 1"	140	10	45.2	60.9	14	16	M4	S12	
QFT-18V/QFT-16	ø16.10 5/8"	150	14	53.3	70.8	17	16	M4	S14	
QFT-18V/QFT-19	ø19.20 3/4"	160	16	54.2	76.5	16.5	22	M4	S14	
QFT-22V/QFT-22	ø22.30 7/8"	186	17	57.0	96.5	18	24.8	M4	S14	
QFT-28V/QFT-28	ø28.70 1 1/8"	208	20	70.4	98.8	22	34	M4	S17	
QFT-35V/QFT-35	ø35.20 1 3/8"	251	25	80.0	119.2	27	38	M4	S17	
QFT-42V/QFT-42	ø41.50 1 7/8"	280	29	100.1	137.1	33	48	M6	S24	
QFT-54V/QFT-54	ø54.20 2 1/8"	305	34	115.2	150.6	40.5	62	M6	S24	

Model QF-CO2 Ball Valve



Product Description

- Model QF-CO2 ball valve is applicable to two-direction flow, can be installed freely.
- Precision cast body with stainless steel.
- No pressure drop due to the full bore structure.
- Explosion-proof stem design.
- Special seals compatible with CO2 operating environment.
- Rotation limit for both full open and close.
- Reliable structure with a secondary seal at valve stem.

Features

- No pressure drop in flow.
- Only turn 1/4 circle to make valve full open or full close.
- Turning step for full open or full close.
- Full Open and Full Close mark on top of valve stem.
- Two-direction flow is available.
- Argon arc welded structure.
- Explosion-proof valve stem design.
- Modified PTFE sealing.
- Inside liquid accumulation is avoided.
- Could be mounted on the control panel.

Technical Parameters

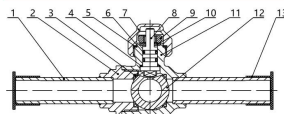
Working temperature:	-50°C ~ +150°C
MAX Working Pressure:	12MPa

Model Selection

Model	Size	OD(mm)	Kv(m3/h)
	OD (mm)		
QF12-CO2	12	10	10
QF16-CO2	16	14	14
QF19-CO2	19	15	20
QF22-CO2	22.3	18.2	28
QF28-CO2	28.6	24.4	52
QF35-CO2	35	29	80
QF42-CO2	41.3	35	121
QF54-CO2	56.3	48	200

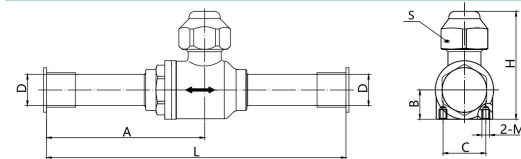
1) Kv value: the flow of water with density of 1 ton/ m³ when passing through the solenoid valve under 100KPa differential pressure
2) MOPD of gaseous medium is about 0.1MPa.

Structure



- copper tube
- valve bonnet
- seal gasket
- A seal
- cap gasket
- Seal ring
- valve cap
- valve stem
- locknut
- Limiter
- valve body
- valve ball
- dust cap

Overall Dimension



Model	Overall Dimension							
	D	L	H	A	B	C	M	S
QF12-CO2	φ12	131.5	50.4	68	13.2	/	M5	S24
QF16-CO2	φ16	154	55.8	81.3	15	22	M5	S24
QF19-CO2	φ19	168	63	89.8	19	30	M5	S24
QF22-CO2	φ22.3	193.5	63	102.6	19	30	M5	S24
QF28-CO2	φ28.6	213	82.8	112.3	30	30	M5	S28
QF35-CO2	φ35	232.6	98.7	125	29.8	48	M6	S32
QF42-CO2	φ41.3	245.3	108.5	127.1	34	55	M6	S32
QF54-CO2	φ56.3	304	129.9	163	45.5	74	M6	S36