

SHUT-OFF BALL VALVES

RBV-CO₂



Freddox RBV-CO₂ ball valves are bi-directional, full bore and suitable for CO₂ subcritical and transcritical applications. They can be used on liquid, suction and hot gas lines in refrigeration and air conditioning systems and can be fully opened or fully closed with only a 1/4 turn of the valve stem.

Freddox RBV-CO₂ shut-off valves are available with or without an access fitting.

The full bore design guarantees a minimal pressure drop and they are equipped with a brass cap with perforation allowing sealing when necessary. Freddox shut-off valves are manufactured to industry leading tolerances and each valve is leak tested using a helium mass spectrometer to ensure the valves perform as expected.

Features

Suitable for CO₂ systems

Hermetically welded (TIG) brass housing for leak free operation for external tightness

Brass upper cover can be sealed to prevent unauthorised access

Chrome-plated brass valve with a stopper for free rotation up to 180°

The self-lubricating graphite PTFE gasket ensures a efficient seal and ensures a long service life

Extended Copper connections for ease of soldering

A pressure equalisation orifice in the valve provides ease of operation by preventing pressure lock

Extended stem designed to prevent ejection is fitted with double O-rings

Universal mounting and fixing holes for bracket mounting

Maximum operating pressure = 45 bar (sub-crit.) / 130 bar (transcrit.)

Operating temperature range = - 40 to + 150°C

Body material : Forged brass EN 12420, EN 12165, CW617N

Tube material : Copper EN 12735-1

Each product individually checked using helium to conform with CE and UL standards

Conformity to EN 12284, EN 378-2, Directive 2014/68/EU (PED), RoHS3 2015/863/EU

TECHNICAL DATA

RBV-45-CO₂ solder ODF/ODF

Ø (Inch)	BRIC CODE	Ø (mm)	BRIC CODE
5/8"	4401-601017713	16	4401-601017713
3/4"	4401-601017727	18	4401-601017714
7/8"	4401-601017728	22	4401-601017715
1"1/8	4401-601017729	28	4401-601017716
1"3/8	4401-601017717	35	4401-601017717
1"5/8	4401-601017730	42	4401-601017718
2"1/8	4401-601017719	54	4401-601017719
2"5/8(*)	4401-601017562	64(**)	4401-601017720
3"1/8	4401-601017563	76	4401-601017510
3"5/8	4401-601017564	89	4401-601017511
4"1/8	4401-601017565	-	-

RBV-45-SV-CO₂ solder ODF/ODF - with access fitting

Ø (Inch)	BRIC CODE	Ø (mm)	BRIC CODE
5/8"	4401-601017738	16	4401-601017738
3/4"	4401-601017751	18	4401-601017739
7/8"	4401-601017752	22	4401-601017740
1"1/8	4401-601017753	28	4401-601017741
1"3/8	4401-601017742	35	4401-601017742
1"5/8	4401-601017754	42	4401-601017743
2"1/8	4401-601017744	54	4401-601017744
2"5/8(*)	4401-601017573	64(**)	4401-601017745
3"1/8	4401-601017574	76	4401-601017525
3"5/8	4401-601017575	89	4401-601017526
4"1/8	4401-601017576	-	-

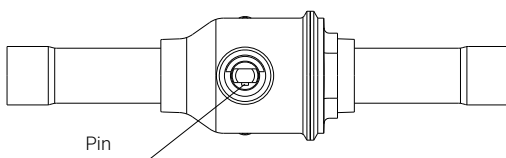
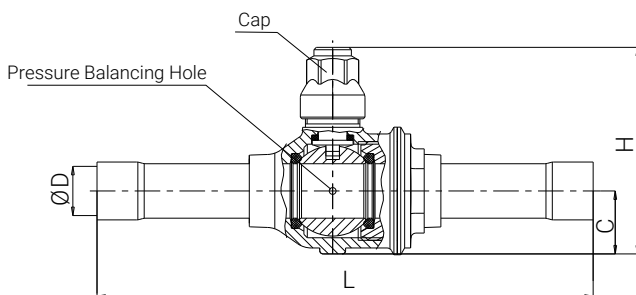
RBV-130-CO₂ solder ODF/ODF

Ø (Inch)	BRIC CODE	Ø (mm)	BRIC CODE
1/4"	4401-601017724	6	4401-601017708
5/16"	4401-601017760	8	4401-601017760
3/8"	4401-601017725	10	4401-601017710
1/2"	4401-601017726	12	4401-601017711
5/8"	4401-601017764	16	4401-601017764
3/4"	4401-601017792	18	4401-601017765
7/8"	4401-601017793	22	4401-601017766
1"1/8	4401-601017794	28	4401-601017767
1"3/8	4401-601017768	35	4401-601017768
1"5/8	4401-601017795	42	4401-601017769
2"1/8	4401-601017958	54	4401-601017958

RBV-130-SV-CO₂ solder ODF/ODF - with access fitting

Ø (Inch)	BRIC CODE	Ø (mm)	BRIC CODE
1/4"	-	6	-
5/16"	-	8	-
3/8"	-	10	4401-601017735
1/2"	4401-601017750	12	4401-601017736
5/8"	4401-601017778	16	4401-601017778
3/4"	4401-601017802	18	4401-601017779
7/8"	4401-601017803	22	4401-601017780
1"1/8	4401-601017804	28	4401-601017781
1"3/8	4401-601017782	35	4401-601017782
1"5/8	4401-601017805	42	4401-601017783
2"1/8	4401-601017784	54	4401-601017784

Dimensions (mm)



(*) Body 3"1/8 - (**) Body 54 mm

Ø (Inch)	Ø (mm)	Kv (m ³ /h)	L (mm)	C (mm)	H (mm)	WEIGHT (g)
1/4"	6	1,6	126	13	49	159
5/16"	8	4,2	132	13	49	163
3/8"	10	5,3	132	13	49	168
1/2"	12	6,6	140	13	49	171
5/8"	16	13	146	18,5	61	295
3/4"	18	17	146	18,5	61	297
7/8"	22	26	185	21	72	710
1"1/8	28	41	205	26	78	760
1"3/8	35	86	208	32	92	1300
1"5/8	42	110	242	38,5	112	2300
2"1/8	54	208	273	48,5	130	3475
2"5/8(**)	64(**)	208	280	48,5	130	3600
2"5/8(*)	64(*)	237	378	60	177	6960
3"1/8	76	340	378	60	177	7780
3"5/8	89	480	423	76	210	12750
4"1/8	-	470	423	76	210	13920

Manufacturer reserves the right to change any product specifications without notice.. Ref. : 4401-601017-RBV-CO2_2212_EN