



EBV Series and EBVT Series (with Access Fitting) Installation Instructions

- Welded body joint. Factory tested to ensure positive, leak-free performance. Forged brass body construction with extended copper fittings and optional access fittings.
- Full size ports for unrestricted flow on most sizes 1/4" (6 mm) through 2-1/8" (54 mm).
- Dual Teflon seals surround the polished, brass ball to prevent leakage. Stem seal and stem washer provide the primary stem seal. Bottom load stem for safety.
- Stainless steel stop plate ensures fully open to fully closed with a 1/4 turn.
- Ball internal relief port design ensures positive shut-off in either flow direction, even during system evacuation.
- All EBV(T) ball valves are bi-directional and may be installed in any position.
- Full refrigeration service temperature range: -40°F to +325°F (-40°C to +149°C).
- Design working pressure: 700 psig (49 bar).
- U.L. Listed File No. SA13413 (SFJQ)
- The new EBV(T) ball valves are suitable for use with R-12, R-22, R-123, R-125, R-134a, R-236fa, R-402A, R-402B, R-404A, R-407A, R-407C, R-410A, R-422D, R-502, and R-507.
- Date code stamped into valve body Yr/Mo/Day

EBV Series – Inches

Valve Type	Valve Type with Access Fitting	Connection (ODF)	Overall Length D	Socket Depth B	L	Overall Height M	Port Size C	Mounting Holes E	Mounting Hole Size H	Cv	Weight EBV & EBVT (lbs.)
EBV-1020**	EBVT-1020**	1/4	6.50	0.31	0.63	2.14	0.50	0.79	#8-36 UNF	2.1	0.725
EBV-1030	EBVT-1030	3/8	6.50	0.31	0.63	2.14	0.50	0.79	#8-36 UNF	4.3	0.725
EBV-1040	EBVT-1040	1/2	6.50	0.38	0.63	2.14	0.50	0.79	#8-36 UNF	7.0	0.725
EBV-1050	EBVT-1050	5/8	6.50	0.50	0.63	2.14	0.50	0.79	#8-36 UNF	13.9	0.725
EBV-1060	EBVT-1060	3/4	7.25	0.62	0.83	2.63	0.75	1.26	#8-36 UNF	21.0	1.375
EBV-1070	EBVT-1070	7/8	7.25	0.75	0.83	2.63	0.75	1.26	#8-36 UNF	30.3	1.405
EBV-1090	EBVT-1090	1-1/8	8.50	0.91	1.00	2.98	1.00	1.57	#10-32 UNF	61.3	2.10
EBV-1110	EBVT-1110	1-3/8	9.25	0.97	1.22	3.70	1.25	1.89	#10-32 UNF	85.2	3.36
EBV-1130	EBVT-1130	1-5/8	10.00	1.09	1.53	4.29	1.50	2.36	1/4-28 UNF	212	5.39
EBV-1170	EBVT-1170	2-1/8	11.38	1.34	1.87	5.18	2.00	2.95	1/4-28 UNF	285	10.09
EBV-1210	EBVT-1210	2-5/8	14.37	1.47	2.36	6.06	2.50	2.95	1/4-28 UNF	301	19.25
EBV-1250	EBVT-1250	3-1/8	16.54	1.66	2.81	7.01	3.15	4.10	5/16-24 UNF	420	40.13
EBV-2210*	EBVT-2210*	2-5/8	12.88	1.47	1.87	5.18	2.00	2.95	1/4-28 UNF	238	11.11
EBV-2250*	EBVT-2250*	3-1/8	14.37	1.66	2.36	6.06	2.50	2.95	1/4-28 UNF	324	19.25

* Reduced port and not a stock item. Minimum order quantity may be required.

** EBV-1020 and EBVT-1020 are not stock items. Minimum order quantity is required.

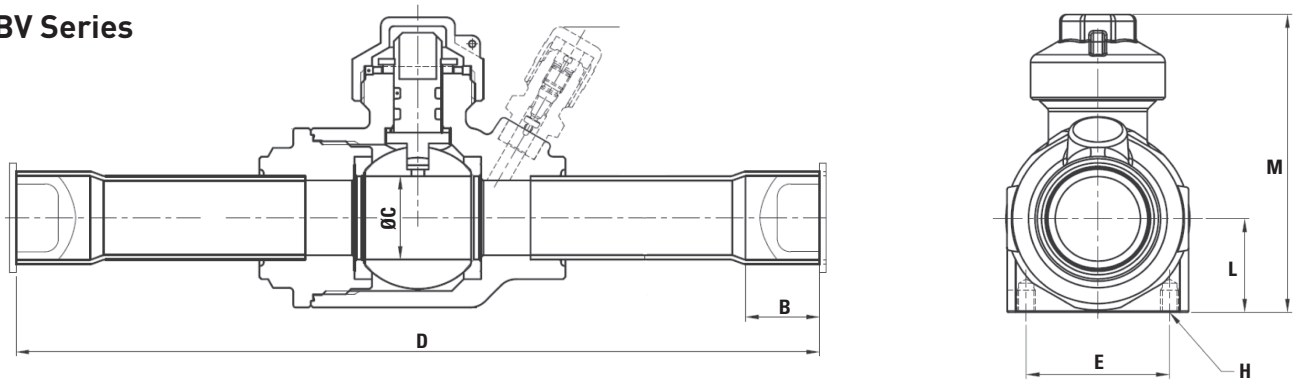
EBV-MM Series – Millimeters

Valve Type	Valve Type with Access Fitting	Connection (ODF) mm	Overall Length D mm	Socket Depth B mm	L mm	Overall Height M mm	Port Size C mm	Mounting Holes E mm	Mounting Hole Size H	Kv	Weight EBV & EBVT (lbs.)
EBV-6MM**	EBVT-6MM**	6	165.10	8.00	16.00	54.36	12.70	20.07	#8-36 UNF	1.80	0.725
EBV-10MM	EBVT-10MM	10	165.10	8.00	16.00	54.36	12.70	20.07	#8-36 UNF	3.67	0.725
EBV-12MM	EBVT-12MM	12	165.10	10.00	16.00	54.36	12.70	20.07	#8-36 UNF	5.97	0.725
EBV-16MM	EBVT-16MM	16	165.10	13.00	16.00	54.36	12.70	20.07	#8-36 UNF	11.86	0.725
EBV-18MM	EBVT-18MM	18	184.15	17.00	21.08	66.80	19.05	32.00	#8-36 UNF	17.93	1.375
EBV-22MM	EBVT-22MM	22	184.15	20.00	21.08	66.80	19.05	32.00	#8-36 UNF	25.86	1.405
EBV-28MM	EBVT-28MM	28	215.90	24.00	25.40	75.69	25.40	39.88	#10-32 UNF	52.29	2.10
EBV-35MM	EBVT-35MM	35	234.95	25.00	31.00	93.98	31.75	48.01	#10-32 UNF	72.68	3.36
EBV-42MM	EBVT-42MM	42	254.00	28.00	38.86	108.97	38.10	59.94	1/4-28 UNF	181.18	5.39
EBV-54MM	EBVT-54MM	54	289.50	35.00	47.50	131.57	50.80	74.93	1/4-28 UNF	242.85	10.09
EBV-64MM	EBVT-64MM	64	365.00	35.00	60.00	153.92	63.50	74.93	1/4-28 UNF	256.16	19.25
EBV-76MM	EBVT-76MM	76	420.00	38.00	72.00	178.30	80.00	104.00	5/16-24 UNF	359.23	40.13
EBV-64MM*	EBVT-64MM*	64	327.15	35.00	47.50	131.57	50.80	74.93	1/4-28 UNF	202.59	11.11
EBV-76MM*	EBVT-76MM*	76	365.00	38.00	60.00	153.92	63.50	74.93	1/4-28 UNF	276.71	19.25

* Reduced port and not a stock item. Minimum order quantity may be required.

** EBV-6MM and EBVT-6MM are not stock items. Minimum order quantity is required.

EBV Series



Nomenclature – Inches

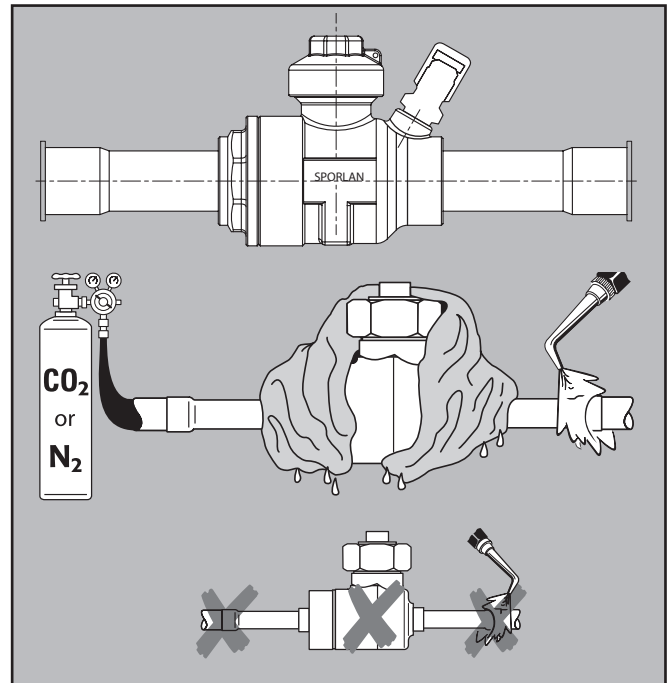
Example – EBVT-1030

EBV	T	-	1	03	0
Valve Type	Access Fitting		Series: 1 = Full Port 2 = Reduced port	Fitting Size: (In eighths of an inch) ie: 03 = 3/8"	Fitting Configuration: 0 = ODF x ODF

Nomenclature – mm

Example – EBVT-10MM

EBV	T	-	10MM	R	
Valve Type	Access Fitting		Metric Fitting Size	Reduced Port	Fitting Configuration: ODF x ODF



Brazing Instructions

1. DO NOT DISASSEMBLE.
2. WRAP THE BODY OF THE VALVE WITH A WET RAG (to dissipate heat-overheating causes damage).
3. Bleed dry nitrogen or CO₂ through the valve while brazing.
4. Use flux with silver brazing alloys.
5. Flux not required with phoscopper alloys, on copper to copper joints, but flux is recommended for deeper penetration and more uniform results with all alloys.
6. Use large enough torch to rapidly heat joint to brazing temperature. Direct flame away from existing copper to brass joints.
7. Quench to reduce heat spread after brazing.

Operation Notes

1. Remove seal cap. **CAUTION:** Pressure may be under seal cap, remove slowly.
2. Rotate stem using adjustable wrench. Turn 90° against the mechanical stops. Align open arrow with refrigerant

line for non-directional flow. Turn clock-wise to close; counter-clockwise to open.

3. This valve contains mechanical stops. **DO NOT USE EXCESSIVE FORCE AGAINST STOPS OR PERMANENT DAMAGE MAY OCCUR.**
4. Install seal cap.
5. Valves are designed for use with R-12, R-22, R-123, R-125, R-134a, R-236fa, R-402A, R-402B, R-404A, R-407A, R-407C, R-410A, R-422D, R-507 and RS-44.

NOTICE: DO NOT DISASSEMBLE VALVE FOR ANY REASON.

For use with CFC, HFC, and HCFC refrigerants listed in CAN/CSA B52 and ANSI/ASHRAE 15 Sec. 9.2 where the saturation vapor pressure at 125°F (52°C) (high side) and 80°F (27°C) (low side) is less than the maximum design working pressure. After charging, mark unit with refrigerant type and oil type.

NOTE: WARRANTY IS VOID IF THESE INSTRUCTIONS ARE NOT FOLLOWED.



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