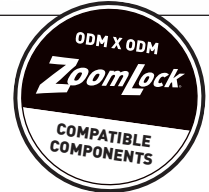




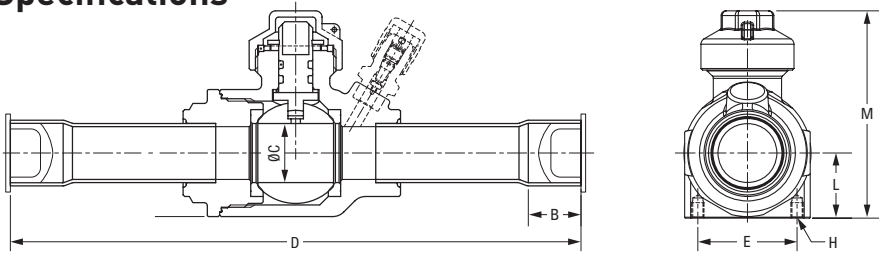
EBVP and EBVP-PZK Ball Valve Series (with Access Fitting)

INSTALLATION INSTRUCTIONS
SD-330 / 42021



- Welded body joint. Factory tested to ensure positive, leak-free performance. Forged brass body construction with extended ODF X ODF or ODM X ODM copper fittings and an access fitting.
- EBVP-PZK with ODM X ODM connections are compatible with ZoomLock® PUSH push-to-connect fittings and ZoomLock® MAX press-to-connect fittings. See Catalog K-2 and Catalog K-3 for more information on ZoomLock.
- Full size ports for unrestricted flow on most sizes –
EBVP Series – 1/4" through 4-1/8"
EBVP-PZK Series – 1/4" through 1-3/8"
Reduced port designs are available for 2-5/8", 3-1/8", 3-5/8", and 4-1/8"
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 EBVP and EBVP-PZK ball valves are bi-directional and may be installed in any position.
- Continuous temperature range: -40 deg F to 248 deg F (-40 deg C to 120 deg C)
- Installation temperature (15 minutes max.) limit: 300 deg F (149 deg C)
- Design working pressure: 700 psig (48 bar), except where noted.
- U.L. Listed File No. SA5460
- The EBVP ball valves are suitable for use with R-22, R-123, R-125, R-134a, R-236fa, R-402B, R-404A, R-407A, R-407C, R-407F, R-410A, R-422D, R-448A, R-449A, R-450A, R-452A, R-454B, R-507 and R-513A.
- **EBVP-PZK ball valves used in combination with ZoomLock PUSH push-to-connect R-410A optimized fittings and ZoomLock MAX press-to-connect fittings are not approved for use with R-22.**
- Date code stamped into valve body YYMMDD

Specifications



Standard (ODF x ODF) – Inches

EBVP Series			Overall Length D	Socket Depth B	L	Overall Height M	Port Size C	Mounting Holes E	Mounting Hole Size H	Cv
Description	Part Number	Connection (ODF)								
EBVP-1020**	502053	1/4	6.50	0.31	0.63	2.14	0.50	0.79	#8-36 UNF	2.1
EBVP-1030	502054	3/8	6.50	0.31	0.63	2.14	0.50	0.79	#8-36 UNF	4.3
EBVP-1040	502055	1/2	6.50	0.38	0.63	2.14	0.50	0.79	#8-36 UNF	7.0
EBVP-1050	502056	5/8	6.50	0.50	0.63	2.14	0.50	0.79	#8-36 UNF	13.9
EBVP-1060	502057	3/4	7.25	0.63	0.83	2.63	0.75	1.26	#8-36 UNF	21.0
EBVP-1070	502058	7/8	7.25	0.75	0.83	2.63	0.75	1.27	#8-36 UNF	30.3
EBVP-1090	502059	1-1/8	8.50	0.91	1.00	2.98	1.00	1.57	#10-32 UNF	61.3
EBVP-1110	502060	1-3/8	9.25	0.97	1.22	3.70	1.25	1.89	#10-32 UNF	85.2
EBVP-1130	502061	1-5/8	10.00	1.09	1.53	4.29	1.50	2.36	1/4-28 UNF	212
EBVP-1170	502062	2-1/8	11.38	1.34	1.87	5.18	2.00	2.95	1/4-28 UNF	285
EBVP-1210	502064	2-5/8	14.37	1.47	2.36	6.06	2.50	2.95	1/4-28 UNF	301
EBVP-1250	502066	3-1/8	16.54	1.66	2.81	7.01	3.15	4.10	5/16-24 UNF	420
EBVP-2210*	502063	2-5/8	12.88	1.44	1.87	5.18	2.00	2.95	1/4-28 UNF	238
EBVP-2250*	502065	3-1/8	14.37	1.66	2.36	6.06	2.50	2.95	1/4-28 UNF	324
EBVP-2290**	502167	3-5/8	16.54	1.69	2.83	7.02	3.12	4.10	5/16-24 UNF	511
EBVP-2330**	502168	4-1/8	16.54	2.20	2.83	7.02	3.12	4.10	5/16-24 UNF	520

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

** EBVP-1020 is a not stock items. Minimum order quantity is required.

+ MRP is 580 psig (40 barg)

ZoomLock Compatible (ODM x ODM) – Inches

ZoomLock EBVP-PZK Series			Overall Length D	Socket Depth B	L	Overall Height M	Port Size C	Mounting Holes E	Mounting Hole Size H	Cv
Description	Part Number	Connection (ODM)								
EBVP-1023-PZK	502159	1/4	6.50	0.31	0.63	2.14	0.50	0.79	#8-36 UNF	2.1
EBVP-1033-PZK	502160	3/8	6.50	0.31	0.63	2.14	0.50	0.79	#8-36 UNF	4.3
EBVP-1043-PZK	502161	1/2	6.50	0.38	0.63	2.14	0.50	0.79	#8-36 UNF	7.0
EBVP-1053-PZK	502162	5/8	6.50	0.50	0.63	2.14	0.50	0.79	#8-36 UNF	13.9
EBVP-1063-PZK	502163	3/4	7.25	0.63	0.83	2.63	0.75	1.26	#8-36 UNF	21.0
EBVP-1073-PZK	502164	7/8	7.25	0.75	0.83	2.63	0.75	1.27	#8-36 UNF	30.3
EBVP-1093-PZK	502165	1-1/8	8.50	0.91	1.00	2.98	1.00	1.57	#10-32 UNF	61.3
EBVP-1113-PZK	502166	1-3/8	9.25	0.97	1.22	3.70	1.25	1.89	#10-32 UNF	85.2

Nomenclature – Inches

Example – EBVP-1030

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

Installation

ZoomLock Instructions

The EBVP-PZK Ball Valve Series with ODM X ODM connections are compatible with ZoomLock PUSH push-to-connect fittings and ZoomLock MAX press-to-connect fittings.

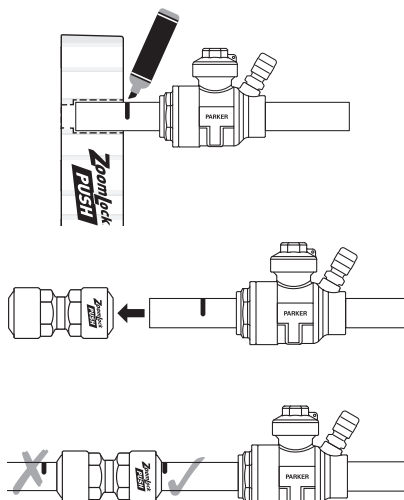
NOTE: Type PZK ODM X ODM models can also be brazed into the ODF solder connections of other components or tubing. See Brazing Instructions, page 4, for the proper brazing method.

ZoomLock PUSH

Consult Catalog K-2 for more detailed installation instructions on ZoomLock PUSH fittings.

CAUTION: Do not insert fingers in the grip ring inside the fitting. Immediate emergency medical attention may be required for removal.

1. Deburr and clean copper to ensure tube ends are free and clear of any residual burrs, oxidation, dirt or debris. Use the ZoomLock PUSH depth gauge to determine the proper insertion depth. Mark the tubing with a permanent marker to indicate proper insertion depth on every tube.
2. Push the ZoomLock PUSH fitting onto the tube. Use the mark to assure insertion depth and secure fit.



PUSH AND DONE.



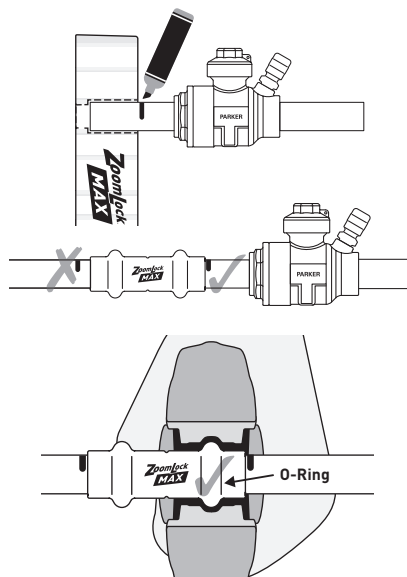
**Catalog K-2 - ZoomLock PUSH
Push-to-Connect Fittings**

To download, scan this QR code with a camera phone.

ZoomLock MAX

Consult Catalog K-3 for more detailed installation instructions on ZoomLock MAX fittings.

1. Deburr and clean copper to ensure tube ends are free and clear of any residual burrs, oxidation, dirt or debris. Use the ZoomLock MAX depth gauge to determine the proper insertion depth. Mark the tubing with a permanent marker to indicate proper insertion depth on every tube.
2. Push the ZoomLock MAX fitting onto the tube. Use the mark to assure insertion depth and secure fit.
3. Use the grooves in the jaw as a guide to properly place the crimping jaw onto the fitting. (See illustration below for proper crimping alignment.) Press and continue to hold the trigger on the ZoomLock MAX Crimping Tool until the tool completes its cycle. Once the tool has completed a full cycle, the crimp is complete.



JAW OVER O-RING, PRESS, AND DONE.



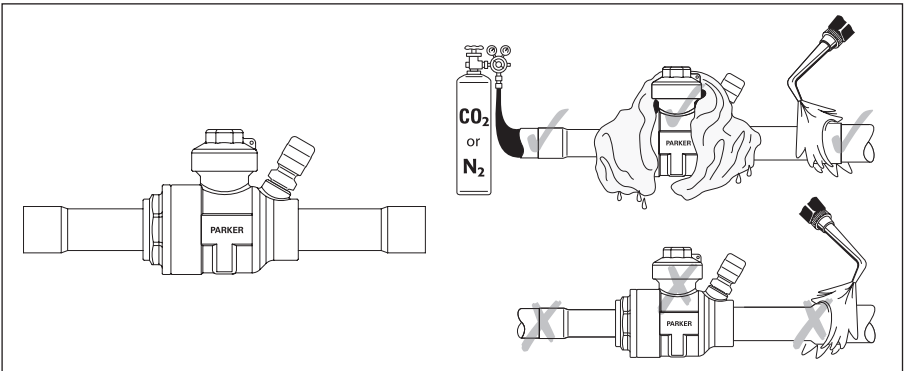
**Catalog K-3 - ZoomLock MAX
Press-to-Connect Fittings**

To download, scan this QR code with a camera phone.

Installation (Continued)

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 phosphor 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-22, R-123, R-125, R-134a, R-236fa, R-404A, R-407A, R-407C, R-407F, R-410A, R-422D, R-448A, R-449A, R-450A, R-452A, R-454B, R-507, and R513A.

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.

NOTICE: DO NOT DISASSEMBLE VALVE FOR ANY REASON.

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

