

Keep this sheet in a safe place for future reference.

# TLV® Ball Valve

Model **BV1 / BV1L**



## Safety Considerations

- Read this section carefully before use and be sure to follow the instructions.
- Installation, inspection, maintenance, repairs, disassembly, adjustment and valve be carried opening/closing should out only by trained maintenance personnel.
- The precautions listed in this manual are designed to ensure safety and prevent equipment damage and personal injury.
- The three types of cautionary items above are very important for safety: be sure to observe all of them as they relate to installation, use, maintenance, and repair. Furthermore, TLV accepts no responsibility for any accidents or damage occurring as a result of failure to observe these precautions.

**Symbol**  Indicates that there is a possibility of injury or equipment / product damage.

	<p><b>Install properly and DO NOT use this product outside the recommended operating pressure, temperature and other specification ranges.</b> Improper use may result in such hazards as damage to the product or malfunctions that may lead to serious accidents. Local regulations may restrict the use of this product to below the conditions quoted.</p>
	<p><b>Take measures to prevent people from coming into direct contact with product outlets.</b> Failure to do so may result in burns or other injury from the discharge of fluids.</p>
	<p><b>When disassembling or removing the product, wait until the internal pressure equals atmospheric pressure and the surface of the product has cooled to room temperature.</b> Disassembling or removing the product when it is hot or under pressure may lead to discharge of fluids, causing burns, other injuries or damage.</p>
	<p><b>NEVER attempt to modify the product in any way.</b> Failure to observe these precautions may result in damage to the product and burns or other injury due to malfunction or the discharge of fluids.</p>
	<p><b>Do not use excessive force when connecting threaded pipes to the product.</b> Over-tightening may cause breakage leading to fluid discharge, which may cause burns or other injury.</p>
	<p><b>Use only under conditions in which no freeze-up will occur.</b> Freezing may damage the product, leading to fluid discharge, which may cause burns or other injury.</p>
	<p><b>Use only under conditions in which no water hammer will occur.</b> The impact of water hammer may damage the product, leading to fluid discharge, which may cause burns or other injury.</p>
	<p><b>Do not stand on or apply body weight to the handle.</b> The handle may break, resulting in injury or other accident.</p>
	<p><b>Do not carry the product by the handle.</b> The handle is not secured and may move causing injury.</p>
	<p><b>Do not place fingers inside the product.</b> The handle may be turned resulting in injury.</p>

## Specifications

Model	BV1	BV1L
Body Material	ASTM A351 Gr.CF8	ASTM A351 Gr.CF8
Valve (Ball) Opening	Full Bore	Reduced Bore
Max. Operating Press. (PMO) Max. Allowable Press. (PMA)*	1.0 MPaG	1.0 MPaG
Max. Operating Temp. (TMO) Max. Allowable Temp. (TMA)*	185 °C	100 °C
Suitable Fluid**	Hot & Cold Water, Air, Steam	Hot & Cold Water, Air

\* Maximum allowable pressure (PMA) and maximum allowable temperature (TMA) are PRESSURE SHELL DESIGN CONDITIONS, NOT OPERATING CONDITIONS.

\*\* Do not use for toxic, flammable or otherwise hazardous fluids. (1 MPa = 10.197 kg/cm<sup>2</sup>)

## Installation & Operational Consideration

	<p><b>Before installing the product, blow out the piping to remove any piping scraps, dirt, oil and scale.</b> Failure to do so may lead to damage caused by foreign matter.</p>
	<p><b>Do not remove the product from its package until just prior to installation.</b> The package keeps damage causing foreign materials out of the product.</p>
	<p><b>Use only in the full open and full closed positions.</b> Avoid using the product in a partially open position. Prolonged use in a partially open position may cause damage to the valve seat resulting in leaks.</p> <p><b>For BV1 with handle lock feature* only: Install so that the handle is on top.</b> For installations on vertical or horizontal piping where the handle is not on top, there may be cases in which the handle lock plate slides back, preventing use of the lock feature. In such cases, secure the lock plate by threading a pin or wire through the opening in the handle. * Only available in some countries.</p>

(Repair parts are not supplied for these products. Please replace entire product.)

## Product Warranty

1. Warranty Period  
One year following product delivery.
2. Warranty Coverage  
TLV CO., LTD. warrants this product to the original purchaser to be free from defective materials and workmanship. Under this warranty, the product will be repaired or replaced at our option, without charge for parts or labor.
3. This product warranty will not apply to cosmetic defects, nor to any product whose exterior has been damaged or defaced; nor does it apply in the following cases:
  - 1) Malfunctions due to improper installation, use, handling, etc., by other than TLV CO., LTD. authorized service representatives.
  - 2) Malfunctions due to dirt, scale, rust, etc.
  - 3) Malfunctions due to improper disassembly and reassembly, or inadequate inspection and maintenance by other than TLV CO., LTD. authorized service representatives.
  - 4) Malfunctions due to disasters or forces of nature.
  - 5) Accidents or malfunctions due to any other cause beyond the control of TLV CO., LTD.
4. Under no circumstances will TLV CO., LTD. be liable for consequential economic loss damage or consequential damage to property.

For Service or Technical Assistance: Contact your TLV representative or your regional TLV office.

**TLV CO., LTD.**

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