

TLV TempFlag

Instruction Manual

Model ST-C3



Safety Considerations

- Read this section carefully before use and be sure to follow the instructions.
- Installation, inspection, maintenance, repairs, disassembly, adjustment, and valve opening/closing should be carried 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 cautionary items 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



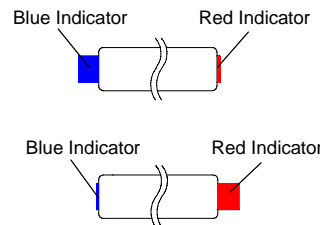
Indicates that there is a possibility of injury or equipment /product damage.

| | |
|--|--|
| | <p>Install properly and DO NOT use this product outside the recommended operating pressure, temperature and other specification ranges. 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>When installing or removing the product, wait until the fixing surface has cooled to room temperature. Improper use may damage the product or cause burns or other injury.</p> |
| | <p>Install only at locations where this product can be securely fastened. Improper use may damage the product or cause burns or other injury.</p> |
| | <p>Do not use on heavily vibrating objects. Improper use may damage the product leading to burns or other injury.</p> |
| | <p>NEVER attempt to modify the product in any way. There are no replacement parts for this product, replace the product itself instead. Failure to observe these precautions may result in damage to the product and burns or other injury due to malfunction.</p> |
| | <p>Use only under conditions in which no freeze-up will occur. Freezing may damage the product leading to burns or other injury.</p> |

Operating Temperature Range: -50°C – 200°C (-58°F – 392°F)

Operation

1. Low Temperature Warning
If the internal temperature of the attached object drops below approx. 50°C/122°F (surface temperature of approx. 30°C/86°F), the blue indicator will protrude completely.
2. High Temperature Warning
If the internal temperature of the attached object rises above approx. 90°C/194°F (surface temperature of approx. 70°C/158°F), the red indicator will protrude completely.
3. Marker Indication
Condensate from rainfall or snow may temporarily make the indicator difficult to see. After time has passed, it should return to normal.



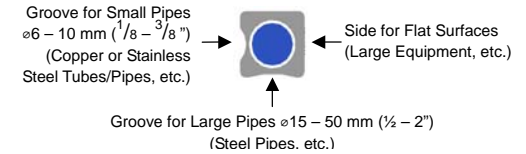
Note: This product is NOT a thermometer. Temperature indications should be considered estimates. Furthermore, when low temperature is indicated, be sure to confirm that the surface of the attached object is at room temperature before starting work.

Installation

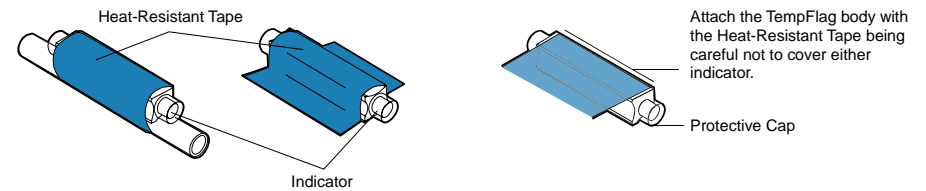


- When installing or removing the product, wait until the fixing surface has cooled to room temperature.
- Do not remove the protective cap.
- For your safety, wear heat-insulated gloves to prevent burns.

1. Attach this product somewhere it is readily visible and accessible, and can be securely fastened. Be careful not to attach this product in a place too dark or too high to see, or too cramped to access easily. Do not attach this product to heavily vibrating objects and do not use under severe conditions (dust, dirt, etc.).
2. Shut off the steam (for tracer tubes/pipes), or shut off the equipment (for other applications) and wait for the surface to cool to room temperature before installation.
3. Using the diagram at the right as a guide, select an installation orientation based on the shape and size of the object this product is being installed on. Remove any dirt, scale, insulation, etc. from the surface of the object, and attach this product securely.
4. This product has been supplied with heat-resistant tape to prevent loss of the product and for accurate temperature readings. Use the tape to securely fasten this product to the desired surface. Be sure that the tape does not cover either indicator. If the tape is too long, cut it to a size suitable for attaching to the product.



- For Pipes/Tubes
- For Flat Surfaces



5. After installation on tracing lines, start the steam flow to ensure proper operation of the 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:
 - Malfunctions due to improper installation, use, handling, etc., by other than TLV CO., LTD. authorized service representatives.
 - Malfunctions due to dirt, scale, rust, etc.
 - Malfunctions due to improper disassembly and reassembly, or inadequate inspection and maintenance by other than TLV CO., LTD. authorized service representatives.
 - Malfunctions due to disasters or forces of nature.
 - Accidents or malfunctions due to any other cause beyond the control of TLV CO., LTD.

Under no circumstances will TLV CO., LTD. be liable for consequential economic loss damage or consequential damage to property.

Service

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

| | |
|-------------------------------------|----------------------|
| North America: | [1]-704-597-9070 |
| Argentina: | [54]-(0)11-5197-7274 |
| United Kingdom: | [44]-(0)1242-227223 |
| France: | [33]-(0)4-72482222 |
| Germany & Other European Countries: | [49]-(0)7263-9150-0 |
| Australia: | [61]-(0)3-9873-5610 |
| China: | [86]-21-6482-8622 |
| Malaysia: | [60]-3-5635-1988 |
| Korea: | [82]-(0)31-726-2105 |
| Other South-East Asian Countries: | [65]-6747-4600 |
| Other Countries: | [81]-(0)79-427-1818 |

TLV CO., LTD.

881 Nagasuna, Noguchi Kakogawa, Hyogo 675-8511, JAPAN
Tel: 81-(0)79 - 422 - 1122 Fax: 81-(0)79 - 422 - 0112