

## **HI-RISE Valve Series**

## In-Line Slow-Close Valve with Pressure Gauge

## INSTRUCTION FOR SAFE OPERATION AND MAINTENANCE



Understand manual before use. Operation of this device without understanding the manual and receiving proper training is a misuse of this equipment. Obtain safety information at tft.com/serial-number.

This equipment is intended for use by trained and qualified emergency services personnel for firefighting. All personnel using this equipment shall have completed a course of education approved by the Authority Having Jurisdiction (AHJ).

This instruction manual is intended to familiarize firefighters and maintenance personnel with the operation, servicing, and safety procedures associated with this product. This manual should be kept available to all operating and maintenance personnel.







IN-LINE GAUGE STRAIGHT

1

**IN-LINE GAUGE PIVOTING** 

OPERATION RANGE:
PRESSURE MAX 300 PSI (20 BAR)
HYDROSTATIC PROOF TEST:
900 PSI (62 BAR) PER NFPA 1964

TASK FORCE TIPS LLC

MADE IN USA tft.com

3701 Innovation Way, Valparaiso, IN 46383-9327 USA 800-348-2686 · 219-462-6161 · Fax 219-464-7155

#### **TABLE OF CONTENTS**

- 1.0 MEANING OF SAFETY SIGNAL WORDS
- 2.0 SAFETY
- 3.0 GENERAL INFORMATION
  - 3.1 SPECIFICATIONS
  - 3.2 USE WITH SALT WATER
  - 3.3 VARIOUS MODELS AND TERMS
  - 3.4 FLOW CHARACTERISTICS
- 4.0 VALVE OPERATION
  - 4.1 SLOW CLOSE VALVE
- 5.0 WARRANTY
- 6.0 MAINTENANCE
  - 6.1 SERVICE TESTING
  - 6.2 REPAIR
- 7.0 EXPLODED VIEW AND PARTS LISTS
- 8.0 OPERATION AND INSPECTION CHECKLIST

# **DANGER**

#### PERSONAL RESPONSIBILITY CODE

The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

- Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
- IT IS YOUR RESPONSIBILITY to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called on to use.
- IT IS YOUR RESPONSIBILITY to know that you have been properly trained in Firefighting and/or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
- IT IS YOUR RESPONSIBILITY to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
- IT IS YOUR RESPONSIBILITY to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
- Failure to follow these guidelines may result in death, burns or other severe injury.

Fire and Emergency Manufacturers and Service Association, Inc. PO Box 147, Lynnfield, MA 01940 - www.FEMSA.org



PO Box 147, Lynnfield, MA 01940 - w

#### 1.0 MEANING OF SAFETY SIGNAL WORDS

A safety related message is identified by a safety alert symbol and a signal word to indicate the level of risk involved with a particular hazard. Per ANSI Z535.6, the definitions of the four signal words are as follows:



DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.



NOTICE is used to address practices not related to physical injury.

#### 2.0 SAFETY



This equipment is intended for use by trained personnel for firefighting. Use of this equipment for other purposes may involve hazards not addressed by this manual. Seek appropriate guidance and training to reduce risk of injury.



Damage or injury could result from operating this equipment beyond the specified operating pressure. Do not operate the device at pressures higher than the maximum operating pressure stated in the specification section.



Equipment may be damaged if frozen while containing significant amounts of water. Such damage may be difficult to detect visually. Subsequent pressurization can lead to injury or death. Any time the equipment is subject to possible damage due to freezing, it must be tested and approved for use by qualified personnel before being considered safe for use.



Sudden changes in valve position can cause pressure spikes (water hammer) and could lead to hose or pipe failure or an out of control monitor. Open and close the valve slowly to avoid water hammer.



Mismatched or damaged waterway connections may cause equipment to leak or uncouple under pressure. Failure could result in injury. Equipment must be mated to matched connections.



Dissimilar metals coupled together can cause galvanic corrosion that can result in the inability to uncouple the connection, or complete loss of engagement over time. Failure could cause injury. Per NFPA 1962, if dissimilar metals are left coupled together, an anti-corrosive lubricant should be applied to the connection and the coupling should be disconnected and inspected at least quarterly.



To prevent mechanical damage, do not drop or throw equipment.

#### 3.0 GENERAL INFORMATION

The Task Force Tips Pressure Gauge with Valve is designed for use on standpipes, truck outlets, on the ground, or where having a valve and a pressure reading is advantageous. The 45° models are available with the slow close valve actuator on either the right or left side. The In-line Pressure Gauge incorporates a liquid filled pressure gauge with an easy to read gauge face into a solid aluminum body, protecting the gauge from damage. Gauges are available in 0-200 psi and 0-300 psi versions.

A pitot pickup is built into the casting for an accurate reading of the total pressure in the center of the waterway. The gauge also includes a replaceable lens that protects the gauge face from damage. The lens can easily be changed if it becomes scratched or damaged.

The outlet is available with a pivoting joint that moves ±20° from center for controlling hose kinks on standpipes with horizontal or vertical discharge. Pivoting outlets reduce the weight of hi-rise packs by eliminating a separate elbow. Fully pivoting the discharge changes the gauge reading by less than 5 psi (0.3 bar) at 500 gpm (2000 l/min). Models with a rigid outlet (non-pivoting) are useful for straight in-line applications.

A full time swivel coupling allows the gauge face to be rotated into any direction while in use, allowing the gauge to be seen at all times. For models that do not include a standard drain valve, an optional drain valve can be purchased to also use as a pressure or air bleed (A1621-KIT) when needed. A cap and tether can also be purchased and added to protect the outlet threads when required.

#### 3.1 SPECIFICATIONS

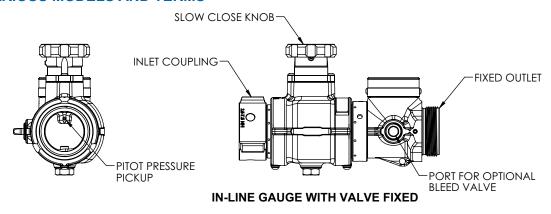
MODEL	IN-LINE STRAIGHT	IN-LINE PIVOTING	IN-LINE 45°
Weight lb (kg)	8.0 (3.6)	8.0 (3.6)	9.6 (4.4)
Length inches (mm)	12.4 (312)	14.4 (366)	11.4 (289)
Width inches (mm)	5.6 (143)	5.6 (143)	Right 8.1 (206)
			Left 8.8 (224)
Height inches (mm)	8.1 (206)	8.1 (206)	9.4 (238)
Waterway Size inches (mm)	2.5 (65)		
Maximum Operating Pressure psi (bar)	300 (20)		
Standard Inlet Coupling inches (mm)	2.5 (65) Female Swivel		
Standard Outlet inches (mm)	2.5 (65) Male Rigid	2.5 (65) Male Rigid	2.5 (65) Male Rigid
		Pivoting ±20°	
Operating Temperature Range of Fluid	33° to 120°F (0° to 50°C)		
Storage Temperature Range	-40° to 150°F(-40° to 65°C)		
Materials Used	Aluminum 6000 series hard anodized MIL8625 class 3 type 2, stainless steel 300 series		

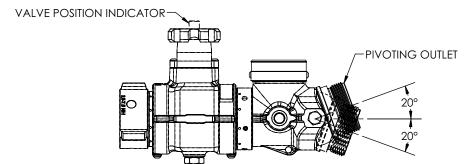
Table 3.1

## 3.2 USE WITH SALT WATER

Use with salt water is permissible provided the equipment is thoroughly cleaned with fresh water after each use. The service life of the equipment may be shortened due to the effects of corrosion, and is not covered under warranty.

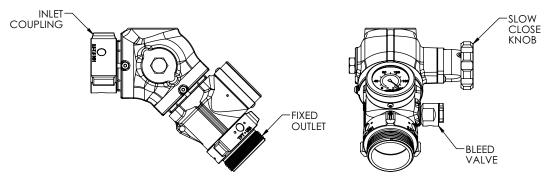
## 3.3 VARIOUS MODELS AND TERMS



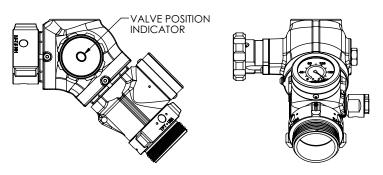


IN-LINE GAUGE WITH VALVE PIVOTING





IN-LINE GAUGE WITH 45° RIGHT VALVE



IN-LINE GAUGE WITH 45° LEFT VALVE

Figure 3.3B

#### 3.4 FLOW CHARACTERISTICS

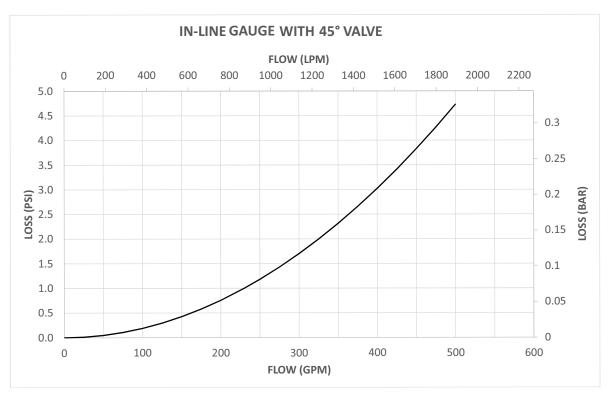


Figure 3.4

## 4.0 VALVE OPERATION

All valves require low force to operate, even under pressure. Positive stops indicate that valves are at the OPEN and CLOSED positions. Attempting to close a valve further than the positive stops will not result in a tighter seal between the ball and valve seat. All valves include markings to indicate the direction of handle rotation to open the valve. Automatic valve lock keeps valve position while flowing at partial openings.

Kicking or standing on the valve controls is considered misuse of the appliance.

## 4.1 SLOW CLOSE VALVE

Slow close valves utilize a knob to actuate. Turning the knob slowly opens or closes the valve. Valve position is indicated by the height of the GREEN valve indicator in the center of the knob.

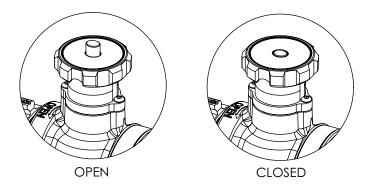


Figure 4.1

#### 5.0 WARRANTY

Task Force Tips LLC, 3701 Innovation Way, Valparaiso, Indiana 46383-9327 USA ("TFT") warrants to the original purchaser of its products ("equipment"), and to anyone to whom it is transferred, that the equipment shall be free from defects in material and workmanship during the five (5) year period from the date of purchase. TFT's obligation under this warranty is specifically limited to replacing or repairing the equipment (or its parts) which are shown by TFT's examination to be in a defective condition attributable to TFT. To qualify for this limited warranty, the claimant must return the equipment to TFT, at 3701 Innovation Way, Valparaiso, Indiana 46383-9327 USA, within a reasonable time after discovery of the defect. TFT will examine the equipment. If TFT determines that there is a defect attributable to it, TFT will correct the problem within a reasonable time. If the equipment is covered by this limited warranty, TFT will assume the expenses of repair.

If any defect attributable to TFT under this limited warranty cannot be reasonably cured by repair or replacement, TFT may elect to refund the purchase price of the equipment, less reasonable depreciation, in complete discharge of its obligations under this limited warranty. If TFT makes this election, claimant shall return the equipment to TFT free and clear of any liens and encumbrances.

This is a limited warranty. The original purchaser of the equipment, any person to whom it is transferred, and any person who is an intended or unintended beneficiary of the equipment, shall not be entitled to recover from TFT any consequential or incidental damages for injury to person and/or property resulting from any defective equipment manufactured or assembled by TFT.

It is agreed and understood that the price stated for the equipment is in part consideration for limiting TFT's liability. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

TFT shall have no obligation under this limited warranty if the equipment is, or has been, misused or neglected (including failure to provide reasonable maintenance) or if there have been accidents to the equipment or if it has been repaired or altered by someone else.

THIS IS A LIMITED EXPRESS WARRANTY ONLY. TFT EXPRESSLY DISCLAIMS WITH RESPECT TO THE EQUIPMENT ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. THERE IS NO WARRANTY OF ANY NATURE MADE BY TFT BEYOND THAT STATED IN THIS DOCUMENT.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### 6.0 MAINTENANCE

TFT products are designed and manufactured to be damage resistant and require minimal maintenance. However, as the primary firefighting tool upon which your life depends, it should be treated accordingly. The unit should be kept clean and free of dirt by rinsing with water after each use. Any inoperable or damaged parts should be repaired or replaced before placing the unit in service. To help prevent mechanical damage, do not drop or throw equipment.

In applications where appliances are left continuously connected to the apparatus or other devices or are used where water is trapped inside the appliance, the appliance must be flushed with fresh water following each use and inspected for damage.

This appliance should be disconnected, cleaned and visually inspected inside and out at least quarterly, or as water quality and use may require. Moving parts such as handles, valve ball and couplings should be checked for smooth and free operation. Seals shall be greased as needed with Silicone based grease such as Molykote 112. Any scrapes that expose bare aluminum should be cleaned and touched up with enamel paint such as Rust-Oleum. Replace any missing or damaged parts before returning to service.

Any equipment taken out of service due to failure should be returned to the factory for repair or replacement. If you have any questions regarding the testing or maintenance of your valve, please call Task Force Tips at 800-348-2686.

#### 6.1 SERVICE TESTING

In accordance with NFPA 1962, equipment must be tested a minimum of annually. Units failing any part of this test must be removed from service, repaired and retested upon completion of the repair.

#### 6.2 REPAIR

Factory service is available. Factory serviced equipment is repaired by experienced technicians, wet tested to original specifications, and promptly returned. All returns require a Returns Goods Authorization (RGA) number. Call TFT service department at 1-800-348-2686 to troubleshoot and, if needed, obtain an RGA and directions for return.

Repair parts and service procedures are available for those wishing to perform their own repairs. Task Force Tips assumes no liability for damage to equipment or injury to personnel that is a result of user service. Contact the factory or visit the web site at tft.com for parts lists, exploded views, test procedures and troubleshooting guides.

Performance tests shall be conducted on the equipment after a repair, or anytime a problem is reported to verify operation in accordance with TFT test procedures. Consult factory for the procedure that corresponds to the model and serial number of the equipment. Any equipment which fails the related test criteria should be removed from service immediately. Troubleshooting guides are available with each test procedure or equipment can be returned to the factory for service and testing.



It is the responsibility of service technicians to ensure the use of appropriate protective clothing and equipment. The chosen protective clothing and equipment must provide protection from potential hazards users may encounter while servicing equipment. Requirements for protective clothing and equipment are determined by the Authority Having Jurisdiction (AHJ).



Any alterations to the product or its markings could diminish safety and constitutes a misuse of this product.



All replacement parts must be obtained from the manufacturer to assure proper performance and operation of the device.

#### 7.0 EXPLODED VIEW AND PARTS LISTS

Exploded views and part lists are available at tft.com/serial-number.

#### 8.0 OPERATION AND INSPECTION CHECKLIST

#### BEFORE EACH USE, equipment must be inspected to this checklist:

- 1. There is no obvious damage such as missing, broken or loose parts, damaged labels, etc.
- 2. Valve operates freely through full range and regulates flow
- 3. "OFF" position does fully shut off and flow is stopped
- 4. The waterway is clear of obstructions
- 5. Coupling is tight and leak free

#### BEFORE BEING PLACED BACK IN SERVICE, equipment must be inspected to this list:

- 1. All controls and adjustments are operational
- 2. There are no broken or missing parts
- 3. Shutoff valve closes off the flow completely
- 4. There is no damage that could impair safe operation (e.g. detents, cracks, corrosion, or other defects)
- 5. The waterway is clear of obstructions
- 6. The equipment is clean and markings are legible
- 7. Coupling is retightened properly



Equipment failing any part of the checklist is unsafe for use and must have the problem corrected before use or being placed back into service. Operating equipment that has failed the checklist is a misuse of this equipment.