

Safety, Installation, & Operation Precautions



HIGH PURITY CONTROLS DIVISION

DO NOT ATTEMPT TO SELECT, INSTALL, USE, OR MAINTAIN THIS REGULATOR, VALVE, OR ACCESSORY UNTIL YOU HAVE READ AND FULLY UNDERSTOOD THESE INSTRUCTIONS.

BE SURE THIS INFORMATION REACHES THE OPERATOR AND STAYS WITH THE PRODUCT AFTER INSTALLATION.

DO NOT PERMIT UNTRAINED PERSONS TO INSTALL, USE, OR MAINTAIN THIS REGULATOR, VALVE, OR ACCESSORY.



WARNING

IMPROPER SELECTION, IMPROPER INSTALLATION, IMPROPER MAINTENANCE, MISUSE, OR ABUSE OF REGULATORS, VALVES, OR RELATED ACCESSORIES CAN CAUSE DEATH, SERIOUS INJURY, AND/OR PROPERTY DAMAGE.

Possible consequences include but are not limited to:

- High velocity fluid (gas or liquid) discharge
- Parts ejected at high speed
- Contact with fluids that may be hot, cold, toxic, or otherwise injurious
- Explosion or burning of the fluid
- Lines/hoses whipping dangerously
- Damage or destruction to other components or equipment in the system



WARNING

SAFETY PRECAUTIONS:

1. Inspect the regulator, valve, and accessories before each use.
2. Never connect regulators, valves, or accessories to a supply source having a pressure greater than the maximum rated pressure of the regulator, valve, or accessory.
3. Refer to product label (modification specific) for maximum inlet pressures. If this rated pressure cannot be found, contact your local Tescom representative for the rated pressure prior to installation and use. Verify the designed pressure rating of all equipment (e.g., supply lines, fittings, connections, filters, valves, gauges, etc.) in your system. All must be capable of handling the supply and operating pressure.
4. Clearly establish flow direction of the fluid before installation of regulators, valves, and accessories. It is the responsibility of the user to install the equipment in the correct direction.
5. Do not tighten fittings, gages, or components in pressurized systems.
6. Never turn regulator or valve body. Instead hold regulator or valve body and turn fitting nut.
7. If a regulator or valve leaks or malfunctions, take it out of service immediately.
8. Do not modify equipment or add attachments not approved by the manufacturer.
9. Apply pressure to the system gradually, avoiding a sudden surge of fluid or pressure shock to the equipment in the system.



WARNING

SAFETY PRECAUTIONS (Continued):

10. Regulators are not shut-off devices. Install a pressure relief device downstream of the regulator to protect the process equipment from operating pressure increases. Shut off the supply pressure when the regulator is not in use.
11. CAUTION: Positive seal / tied diaphragm regulators require the downstream pressure vented before turning the handknob counterclockwise to reduce the outlet pressure. Damage may occur to the regulator if this procedure is not followed.
12. Periodic inspection and scheduled maintenance of your equipment is required for continued safe operation.
13. The frequency of servicing is the responsibility of the user based on the application.
14. Never allow problems or lack of maintenance to go unreported.
15. Read and follow precautions on compressed gas cylinder labels.
16. It is important that you analyze all aspects of your application and review all available information concerning the product or system. Obtain, read, and understand the Material Safety Data Sheet (MSDS) for each fluid used in your system.
17. Corrosive, flammable, and toxic gases require special expertise and knowledge of system design and material compatibility in order to minimize the potential for death, serious injury, and/or property damage.



WARNING

SAFETY PRECAUTIONS (Continued):

18. Never use materials for regulators, valves, or accessories that are not compatible with the fluids being used.
19. Never install this product in liquid service. If installed in liquid service, the product life is the sole responsibility of the customer.
20. Tescom HPCD may suggest material for use with specific media upon request. Suggestions are based on technical compatibility resources through associations and manufacturers. Tescom HPCD does NOT guarantee materials to be compatible with specific media – THIS IS THE RESPONSIBILITY OF THE USER!
21. Users must test under normal operating conditions to determine suitability of materials in an application.
22. Vent fluids to a safe environment, and in an area away from employees. Be sure that venting and disposal methods are in accordance with Federal, State, and Local requirements. Locate and construct vent lines to prevent condensation or gas accumulation. Make sure the vent outlet is not obstructed by rain, snow, ice, vegetation, insects, birds, etc. Do not interconnect vent lines; use separate lines if more than one vent is needed.
23. Do not locate regulators, valves, or accessories using flammable fluids near open flames or any other source of ignition.



WARNING

SAFETY PRECAUTIONS (Continued):

24. Some fluids when burning do not exhibit a visible flame. Use extreme caution when inspecting and/or servicing systems using flammable fluids to avoid death or serious injury to employees. Provide a device to warn employees of these dangerous conditions.
25. Many gases can cause suffocation. Make certain the area is well ventilated. Provide a device to warn employees of lack of oxygen.
26. Never use oil or grease on these regulators, valves, or accessories. Oil and grease are easily ignited and may combine violently with some fluids under pressure.
27. Have emergency equipment in the area if toxic or flammable fluids are used.
28. Upstream filters are recommended for use with all fluids.
29. Do not bleed system by loosening fittings.
30. Prevent icing of the equipment by removing excess moisture from the gas.

INSTALLATION

Inspect the regulator, valve, and accessories for physical damage and contamination. Do not connect the regulator, valve, or accessory if you detect oil, grease, or damaged parts. If the regulator, valve, or accessory is damaged, contact your local Tescom representative to have the regulator cleaned or repaired.



WARNING

Make sure that the components and materials used in the fluid handling system are compatible with the fluid and have the proper pressure rating.

Safe Component Selection

1. Consider the total system design when selecting a component to ensure safe, trouble-free performance.
2. The user is responsible for assuring all safety and warning requirements of the application are met through his/her own analysis and testing.
3. Tescom may suggest material for use with specific media upon request.
Suggestions are based on technical compatibility resources through associations and manufacturers. Tescom does NOT guarantee materials to be compatible with specific media -- THIS IS THE RESPONSIBILITY OF THE USER!
4. Component function, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system user.



WARNING

Do not modify equipment or add attachments not approved by the manufacturer.

PRODUCT WARRANTY

Tescom Corporation ("Tescom") warrants to the initial user of products manufactured and sold by its High Purity Controls Division (HPCD) that such products are free from defects in materials and workmanship under normal use and service. Said warranty extends for a period of 6 months for corrosives, toxics and flammable gases, and 12 months for inert gases, from the date of installation of the equipment or one year from the date of shipment, whichever comes first. If product is installed in liquid service this warranty is null and void and the product life becomes the sole responsibility of the customer.

Within said warranty period, the HPCD agrees to replace or repair free of charge at its factory in Minnesota, any product or part that is found by the HPCD to have been defective in workmanship or materials.

Tescom will not pay for or warrant repairs made by anyone other than personnel authorized by the HPCD to make such repairs. TESCOM SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL, INCIDENTAL OR INDIRECT DAMAGES, TO THE EXTENT PERMITTED BY LAW. EXCEPT AS OTHERWISE PROVIDED BY LAW, THIS EXPRESS WARRANTY SHALL BE THE EXCLUSIVE WARRANTY AND SHALL BE IN LIEU OF ALL IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF FITNESS FOR PARTICULAR PURPOSE AND MERCHANTABILITY. The warranty and remedies provided in this express warranty shall not apply to any product which has been damaged by accident, abuse or misuse, or modified or changed in any way except by personnel authorized by Tescom. THE REMEDIES STATED HEREIN SHALL BE THE EXCLUSIVE REMEDIES OF THE INITIAL USER UNDER THE EXPRESS WARRANTY CONTAINED HEREIN AND UNDER ANY OTHER WARRANTIES EXPRESS OR IMPLIED AS REQUIRED BY LAW.

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ASSEMBLY/INSTALLATION DRAWINGS, BILL OF MATERIAL Drawings and parts lists for your product may be obtained by calling the number to the right. Tescom will provide these by fax or mail. Your local Tescom representative can provide additional assistance.

Call (800) 447 - 9650
for assembly/installation drawings & bill of material. Be sure to have your complete model number ready.