

# ME870, ME872, ME873 Back Check Valve Instruction Manual

#### **!WARNING!**

Failure to follow these instructions or to properly install and maintain this equipment could result in an explosion and/or fire causing property damage and personal injury or death.

Install, operate and maintain Marshall Excelsior Co. Equipment in accordance with federal, state and local codes and these instructions. The installation in most states must also comply with NFPA #58, ANSI K61.1, and DOT standards.

Only personnel trained in the proper procedures, codes, standards, and regulations of the LP Gas industry should install and service this equipment.

Verify material compatibility with intended liquid-compressed gas product before installation. Contact Marshall Excelsior Co. for material and seal compatibilities.



WARNING: These products contain a chemical known to the state of California to cause cancer and birth defects or reproductive harm







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ME873S-24

# Scope of the Manual

Is manual covers instructions for the Marshall Excelsior (MEC<sup>TM</sup>) ME870, ME872, and ME873 series back check valves.

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#### **Marshall Excelsior Company**

1506 George Brown Drive Marshall, MI 49068 Phone (269) 789-6700 Fax (269) 781-8340 www.marshallexcelsior.com Marshall Excelsior Company

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#### Introduction

The ME870, ME872 and ME873 Series Back Check Valves provide back flow protection to container openings or liquid lines where flow is intended to only occur in one direction. The valve is mechanically held closed until product flow applies pressure to open the valve, allowing flow into the appropriate piping or containers. When flow stops or reverses, the valve returns to the closed position. All MEC<sup>TM</sup> Back Check Valves are supplied with either O-ring soft seats, which can be removed for metal-on-metal seating, or a bonded seal.

**Note:** The O-ring and bonded valve seats are designed to maintain a positive seal requiring a minimum 15 psi pressure differential between the transfer line and container, to open the valve and allow full flow.

# Installation

#### **!WARNING!**

Release all system pressure prior to installation of the valve. Failure to do so could result in personal injury. Use proper safety equipment at all times. Completely purge the system of all LP-Gas or Anhydrous Ammonia.

Apply a suitable thread sealant (i.e. Loctite 565 or equivalent) to the valve-side NPT threads of the back check valve then install into system, aligning the marked arrow on the body with the intended flow direction. Tighten using a suitable wrench onto the body flats provided.

**ME870, ME872:** Repeat the above step for the opposite NPT side of the valve body.

**ME873:** Apply Lubriplate or equivalent grease to provided Flange O-ring and install into groove. Align bolt holes of body with mating  $MEC^{TM}$  square flange and install Flange Bolts until secure.

Pressurize the system after all plumbing is installed to a pressure of at least 150psi, checking all joints for leaks using a suitable leak detector solution such as Marshall Excelsior Leak Detector.

# **!GENERAL WARNING!**

Marshall Excelsior products are mechanical devices that are subject to wear, contaminants, corrosion, and aging of components made of materials such as rubber and metal. Over time these devices will eventually become inoperative. The safe service life of these products will reflect the environment and conditions of use that they are subjected to. Regular inspection and maintenance is essential. Marshall Excelsior products have a long record of quality and service, so LP-Gas dealers may forget hazards that can arise from using aging devices that have outlived their safe service life.

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