

## ProTech 61-104025-15

# Protech 61-104025-15 Service Valve User Manual

## 1. INTRODUCTION

This manual provides essential instructions for the proper installation, operation, and maintenance of the Protech 61-104025-15 Service Valve. Adhering to these guidelines will ensure safe and efficient performance of the valve. Please read this manual thoroughly before proceeding with any procedures.

## 2. PRODUCT OVERVIEW

The Protech 61-104025-15 Service Valve is a component designed for various industrial and plumbing applications, particularly within HVAC and refrigeration systems. It facilitates isolation and control of fluid flow, allowing for system servicing without complete depressurization or drainage. This valve is compatible with models such as raka, rakb, ralc, rama, ramb, ramc, ramm, ranc, rand, ranl, rapa, rapb, rapc, rapl, rapm, rara, rarl, rasl, rpka, rpkb, rpla, rplb, rpmb, rpmc, rpmd, rpmm, rpne, rpnk, rpnl, rppb, rppc, rppl, rpql, rpri, saka, sakb, spkb.



**Figure 1:** The Protech 61-104025-15 Service Valve. This image displays the brass-colored valve body, featuring two 3/4-inch sweat ODF connections on opposing sides and a hexagonal cap at the top for manual operation.

### 3. SETUP AND INSTALLATION

Installation of the Protech 61-104025-15 Service Valve requires careful attention to connection types and proper sealing techniques. It is recommended that installation be performed by a qualified technician.

#### 3.1 Connection Details

- **Upper Connection Size:** 3/4 inch
- **Upper Connection Type:** Sweat ODF (Outer Diameter Flare)
- **Lower Connection Size:** 3/4 inch
- **Lower Connection Type:** Sweat ODF (Outer Diameter Flare)

#### 3.2 Installation Procedure

1. **Safety First:** Ensure the system is depressurized and drained before beginning installation. Wear appropriate personal protective equipment (PPE).
2. **Prepare Connections:** Clean the ends of the pipes and the valve's sweat connections thoroughly to remove any dirt, grease, or oxidation. Apply appropriate flux to both surfaces.
3. **Position the Valve:** Place the valve in the desired position, ensuring proper alignment with the piping.

- 4. **Solder Connections:** Using a suitable heat source and solder, create strong, leak-free sweat joints. Allow the joints to cool naturally.
- 5. **Leak Test:** After installation, pressurize the system and carefully check all connections for leaks using an approved leak detection method.

## 4. OPERATION

The Protech 61-104025-15 Service Valve is designed for straightforward manual operation to control or isolate fluid flow within a system.

### 4.1 Opening and Closing the Valve

- To **open** the valve, turn the hexagonal cap counter-clockwise until the desired flow is achieved or the valve is fully open.
- To **close** the valve, turn the hexagonal cap clockwise until the valve is fully closed and flow is stopped. Do not overtighten.

Always operate the valve smoothly and avoid sudden, forceful movements to prevent damage to the valve or system components.

## 5. MAINTENANCE

Regular maintenance ensures the longevity and reliable performance of your Protech 61-104025-15 Service Valve.

- **Periodic Inspection:** Visually inspect the valve and its connections regularly for any signs of wear, corrosion, or leaks.
- **Cleaning:** Keep the exterior of the valve clean. Avoid using harsh chemicals that could damage the valve material.
- **Leak Detection:** Periodically check for leaks around the valve body and connections, especially after any system pressure changes.
- **Operational Check:** Cycle the valve (open and close) periodically to ensure smooth operation and prevent seizing, particularly in systems where the valve remains in one position for extended periods.

## 6. TROUBLESHOOTING

This section addresses common issues that may arise with the service valve.

### 6.1 Common Issues and Solutions

Problem	Possible Cause	Solution
Leakage at connections	Improper soldering; damaged pipe or valve connection	Depressurize system, repair or re-solder connection. Replace valve or pipe if damaged.
Valve difficult to turn	Internal corrosion or debris; lack of lubrication	Do not force. Depressurize system and inspect. If internal, valve replacement may be necessary.
No flow or restricted flow when open	Valve not fully open; internal obstruction	Ensure valve is fully open. Depressurize system and inspect for internal debris.

For issues not listed or if solutions do not resolve the problem, contact a qualified service technician.

## 7. SPECIFICATIONS

Specification	Detail
Brand	ProTech
Model Number	61-104025-15
Upper Connection Size	3/4 inch
Upper Connection Type	Sweat ODF
Lower Connection Size	3/4 inch
Lower Connection Type	Sweat ODF
Exterior Finish	Stainless Steel
Number of Ports	2
Specification Met	ASME B16.34
Item Weight	11.2 ounces
Product Dimensions (L x W x H)	3.8 x 3.2 x 4.3 inches
UPC	662766520378

## 8. WARRANTY INFORMATION

Unless otherwise noted, all Protech items carry a one-year limited warranty from the date of purchase. Please retain your proof of purchase for warranty claims.

## 9. SUPPORT

For technical assistance, replacement parts, or further inquiries regarding the Protech 61-104025-15 Service Valve, please contact a qualified HVAC or plumbing professional. For general product information, you may visit the [ProTech Store on Amazon](#).

<div data-bbox="181 109 245 132" data-label="Text"><p>protech</p></div> <div data-bbox="177 138 253 259" data-label="Image"></div> <div data-bbox="167 273 258 331" data-label="Caption"><p>Pro 400K Lux Meter With Case QM1584 User Manual</p></div>	<div data-bbox="341 185 925 215" data-label="Section-Header"><p><a href="#">Protech Pro 400K Lux Meter QM1584 User Manual</a></p></div> <div data-bbox="341 228 1393 336" data-label="Text"><p>User manual for the Protech Pro 400K Lux Meter (Model QM1584), detailing its features, specifications, operating instructions, maintenance, and recommended illumination levels for various environments.</p></div>
<div data-bbox="137 465 201 488" data-label="Text"><p>protech</p></div> <div data-bbox="137 535 233 573" data-label="Section-Header"><p>FPE1</p></div> <div data-bbox="137 676 220 692" data-label="Text"><p>User Manual</p></div> <div data-bbox="255 719 290 730" data-label="Text"><p>TL4645</p></div>	<div data-bbox="341 553 777 582" data-label="Section-Header"><p><a href="#">Protech FPE1 3D Printer User Manual</a></p></div> <div data-bbox="341 593 1358 663" data-label="Text"><p>Comprehensive user manual for the Protech FPE1 3D printer, covering product overview, installation, filament handling, printing, troubleshooting, and Cura settings.</p></div>
<div data-bbox="137 784 201 806" data-label="Text"><p>protech</p></div> <div data-bbox="137 817 233 862" data-label="Text"><p>Digital Microscope with 7" Display</p></div> <div data-bbox="245 817 309 828" data-label="Text"><p>HOBBYIST</p></div> <div data-bbox="170 864 244 983" data-label="Image"></div> <div data-bbox="137 990 220 1005" data-label="Text"><p>User Manual</p></div> <div data-bbox="255 1032 290 1046" data-label="Text"><p>QC3185</p></div>	<div data-bbox="341 846 1335 875" data-label="Section-Header"><p><a href="#">Protech QC3185 Digital Microscope with 7" Display User Manual - 1200X Magnification</a></p></div> <div data-bbox="341 887 1415 996" data-label="Text"><p>User manual for the Protech QC3185 digital microscope featuring a 7-inch HD display, 12MP camera, and 1-1200X continuous magnification. Includes specifications, operating modes, and improvements for electronics maintenance.</p></div>
<div data-bbox="137 1099 201 1122" data-label="Text"><p>protech</p></div> <div data-bbox="137 1133 290 1164" data-label="Text"><p>Temperature/Humidity Data Logger</p></div> <div data-bbox="170 1178 250 1296" data-label="Image"></div> <div data-bbox="137 1305 220 1321" data-label="Text"><p>User Manual</p></div> <div data-bbox="255 1348 290 1361" data-label="Text"><p>QP6013</p></div>	<div data-bbox="341 1296 1094 1326" data-label="Section-Header"><p><a href="#">Protech QP6013 Temperature/Humidity Data Logger User Manual</a></p></div> <div data-bbox="341 1337 1426 1444" data-label="Text"><p>User manual for the Protech QP6013 Temperature/Humidity Data Logger, detailing its features, description, LED status guide, installation, specifications, battery replacement, sensor reconditioning, and warranty information.</p></div>
<div data-bbox="194 1697 233 1713" data-label="Text"><p>protech</p></div> <div data-bbox="181 1727 245 1756" data-label="Image"></div> <div data-bbox="137 1778 290 1906" data-label="Text"><p>Laser Measuring Tape QM1627 User Manual</p></div>	<div data-bbox="341 1742 954 1771" data-label="Section-Header"><p><a href="#">Protech QM1627 Laser Measuring Tape User Manual</a></p></div> <div data-bbox="341 1783 1457 1892" data-label="Text"><p>User manual for the Protech QM1627 Laser Measuring Tape. This guide provides essential safety regulations, an overview of the device's features, operating instructions, troubleshooting tips, technical specifications, and maintenance advice.</p></div>



[Protech QM7410 Compact Non-Contact Infrared Thermometer User Manual](#)

User manual for the Protech QM7410 compact non-contact infrared thermometer. Features rapid detection, laser sighting, and a wide temperature range. Includes specifications, operation instructions, and safety guidelines.