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## Danfoss 032U7520

# Danfoss EV220B 032U7520 Solenoid Valve User Manual

Model: 032U7520

## 1. INTRODUCTION

This user manual provides essential information for the safe and efficient operation, installation, and maintenance of the Danfoss EV220B 032U7520 Solenoid Valve. Please read this manual thoroughly before installation or operation to ensure proper use and to prevent damage or injury.

## 2. SAFETY INFORMATION

Always observe general safety precautions during installation, operation, and maintenance. Failure to follow these instructions may result in serious injury or property damage.

- Ensure power is disconnected before any installation or maintenance work.
- Only qualified personnel should perform installation and service.
- Verify that the valve's specifications match the system requirements (pressure, temperature, medium).
- Protect the valve from physical damage and extreme environmental conditions.

## 3. PRODUCT DESCRIPTION

The Danfoss EV220B 032U7520 is a robust 2/2-way servo-operated solenoid valve designed for use in various industrial applications. It features a 1/2 inch NPT connection and is suitable for neutral media. The valve is constructed from durable metal, ensuring long-term reliability.



**Figure 3.1:** Danfoss EV220B 032U7520 Solenoid Valve. This image shows the brass body of the valve with a threaded inlet/outlet and the cylindrical solenoid coil assembly extending upwards from the top.

## Key Features:

- **Model:** 032U7520
- **Connection Size:** 1/2 inch NPT
- **Valve Type:** 2/2-way, servo-operated
- **Material:** Metal (Brass body)
- **Application:** Suitable for neutral media

## 4. SETUP AND INSTALLATION

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Proper installation is crucial for the valve's performance and longevity. Follow these steps carefully:

### 1. Preparation:

- Ensure the system is depressurized and drained.
- Clean the pipe threads to remove any debris or sealant residue.
- Verify that the flow direction arrow on the valve body matches the system flow.

### 2. Mounting:

- Mount the valve in a position where it is easily accessible for maintenance.
- The valve can be mounted in any position, but mounting with the coil upwards is recommended for optimal performance and lifespan.
- Use appropriate thread sealant on the NPT connections.
- Tighten the valve securely into the piping system, avoiding overtightening which can damage the threads or valve body.

### 3. Electrical Connection:

- Connect the solenoid coil to the appropriate power supply as specified on the coil label.
- Ensure all electrical connections are secure and insulated to prevent short circuits.
- Adhere to local electrical codes and regulations.

### 4. System Check:

- After installation, slowly pressurize the system and check for leaks.
- Test the valve's operation by applying and removing power to the coil.

## 5. OPERATING INSTRUCTIONS

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The Danfoss EV220B 032U7520 is a normally closed (NC) solenoid valve, meaning it is closed when de-energized and opens when energized.

- **Energizing the Coil:** When electrical power is supplied to the solenoid coil, it creates a magnetic field that pulls the plunger, opening the valve and allowing fluid to flow.
- **De-energizing the Coil:** When power is removed from the coil, the magnetic field collapses, and a spring forces the plunger back to its original position, closing the valve and stopping fluid flow.
- **Manual Override (if applicable):** Some models may feature a manual override. Refer to specific product documentation if a manual override is present and how to use it safely. This model typically does not include a manual override.

Ensure the operating voltage and frequency match the coil's specifications to prevent damage and ensure proper function.

## 6. MAINTENANCE

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Regular maintenance ensures optimal performance and extends the lifespan of your solenoid valve. Always disconnect power before performing any maintenance.

- **Cleaning:** Periodically inspect the valve for dirt, debris, or corrosion. Clean the exterior with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Leak Checks:** Regularly check all connections for signs of leaks. Tighten connections if necessary, but do not overtighten.
- **Coil Inspection:** Inspect the solenoid coil for any signs of damage, overheating, or discoloration. Replace the coil if any damage is observed.
- **Internal Inspection (Advanced):** For internal component inspection or replacement (e.g., diaphragm, plunger), it is recommended to consult a qualified technician or refer to detailed service manuals provided by Danfoss. Ensure the system is fully depressurized and drained before opening the valve.

## 7. TROUBLESHOOTING

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This section provides solutions to common issues. For problems not listed here, contact Danfoss technical support.

Problem	Possible Cause	Solution
Valve does not open when energized.	<ul style="list-style-type: none"><li>• No power to coil.</li><li>• Incorrect voltage/frequency.</li><li>• Coil damaged/burnt out.</li><li>• Debris obstructing plunger.</li><li>• Insufficient pressure differential (for servo-operated valves).</li></ul>	<ul style="list-style-type: none"><li>• Check power supply and wiring.</li><li>• Verify voltage/frequency matches coil specifications.</li><li>• Replace coil.</li><li>• Clean internal components (after depressurizing).</li><li>• Ensure minimum pressure differential is met.</li></ul>

Problem	Possible Cause	Solution
Valve does not close when de-energized.	<ul style="list-style-type: none"> <li>Debris lodged in valve seat.</li> <li>Damaged diaphragm/seal.</li> <li>Coil remains energized.</li> </ul>	<ul style="list-style-type: none"> <li>Clean valve seat and internal components.</li> <li>Replace diaphragm/seal.</li> <li>Check wiring and control system to ensure power is removed.</li> </ul>
Leakage from connections.	<ul style="list-style-type: none"> <li>Improperly tightened connections.</li> <li>Damaged threads or sealant.</li> </ul>	<ul style="list-style-type: none"> <li>Retighten connections with appropriate torque.</li> <li>Reapply thread sealant or replace damaged fittings.</li> </ul>

## 8. SPECIFICATIONS

Detailed technical specifications for the Danfoss EV220B 032U7520 Solenoid Valve:

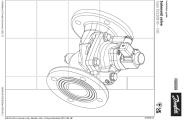
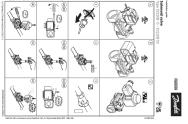
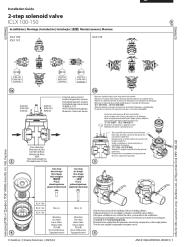
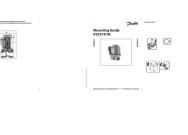
- Model Number:** 032U7520
- Part Number:** G032U7520
- Valve Type:** 2/2-way, Servo-operated, Normally Closed (NC)
- Connection Size:** 0.5 Inches NPT (National Pipe Tapered)
- Number of Ports:** 2
- Material:** Metal (Brass body)
- Item Weight:** Approximately 11 ounces (0.69 LBR)
- Product Dimensions (L x W x H):** 2.5 x 3.75 x 2.13 inches
- UPC-EAN:** 5702423044412
- Manufacturer:** Danfoss
- First Available:** December 14, 2016

## 9. WARRANTY AND SUPPORT

For specific warranty information regarding the Danfoss EV220B 032U7520 Solenoid Valve, please refer to the documentation provided with your purchase or visit the official Danfoss website. Warranty terms typically cover manufacturing defects for a specified period.

For technical support, service, or spare parts, please contact your authorized Danfoss distributor or visit the Danfoss global support portal. Provide the model number (032U7520) and serial number (if applicable) when seeking support.

**Danfoss Official Website:** [www.danfoss.com](http://www.danfoss.com)

	<p><a href="#"><b>Danfoss EV220B 65-100 Solenoid Valve Installation Guide</b></a></p> <p>Comprehensive installation guide for Danfoss EV220B 65, 80, and 100 solenoid valves, covering product contents, specifications, installation steps, and maintenance recommendations.</p>
	<p><a href="#"><b>Danfoss EV220B 15 - EV220B 50 Solenoid Valve Installation Guide</b></a></p> <p>Step-by-step installation guide for Danfoss EV220B 15 and EV220B 50 solenoid valves. Includes technical specifications, safety information, and operational details.</p>
	<p><a href="#"><b>Fisa Tehnica Electrovana Solenoid Danfoss EV220B 15-50</b></a></p> <p>Explorați fișa tehnică detaliată pentru electrovana solenoid Danfoss EV220B 15-50. Descoperiți caracteristicile tehnice, specificațiile de performanță, materialele utilizate și ghidurile de aplicare pentru această electrovană de înaltă calitate.</p>
	<p><a href="#"><b>Danfoss ICLX 100-150 2-Step Solenoid Valve Installation Guide</b></a></p> <p>Comprehensive installation, maintenance, and technical specifications for the Danfoss ICLX 100-150 2-step solenoid valve, covering operation, assembly, and troubleshooting.</p>
	<p><a href="#"><b>Danfoss EV251B NC Mounting Guide</b></a></p> <p>Official mounting guide for the Danfoss EV251B NC solenoid valve. Learn about valve identification, proper installation, coil mounting and replacement, and common troubleshooting steps. Includes technical specifications and support information.</p>
	<p><a href="#"><b>Danfoss ICF Valve Station: Technical Data and Applications</b></a></p> <p>Comprehensive data sheet for Danfoss ICF valve stations (models ICF 15, 20, 25, 50, 65), detailing features, technical specifications, function modules, material data, connection types, and application examples for industrial refrigeration.</p>