FLUKE®
Calibration

SPLT-40M
Self-Purging Liquid Trap

Instructions

Introduction

The SPLT-40M (the Product) is a Self-Purging Liquid Trap that helps protect the system from liquid contaminants that may be present in the Device Under Test (DUT). The Product includes a replaceable internal filter and electrically actuated purge valve. The maximum working pressure of the Product is 44 MPa (6400 psi). For applications where a more thorough protection from contamination is required, the Contamination Prevention System (CPS-40M-HC40) is also available.

How to Contact Fluke Calibration

To contact Fluke Calibration, call one of the following telephone numbers:

- Technical Support USA: 1-877-355-3225
- Calibration/Repair USA: 1-877-355-3225
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31-40-2675-200
- Japan: +81-3-6714-3114
- Singapore: +65-6799-5566
- China: +86-400-810-3435
- Brazil: +55-11-3759-7600
- Anywhere in the world: +1-425-446-6110

To see product information and download the latest manual supplements, visit Fluke Calibration's website at www.flukecal.com.
To register your product, visit http://flukecal.com/register-product.

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Safety Information

A **Warning** identifies conditions and procedures that are dangerous to the user. A **Caution** identifies conditions and procedures that can cause damage to the Product or the equipment under test.

⚠Warning

To prevent personal injury:

- **Read all safety information before you use the Product.**
- **Wear eye protection.**
- **Use the Product only as specified, or the protection supplied by the Product can be compromised.**
- **Carefully read all instructions.**
- **Do not use the Product if it operates incorrectly.**
- **Do not use the Product if it is altered or damaged.**
- **Disable the Product if it is damaged.**
- **Do not attempt to operate the Product above its rated pressure.**
- **Use care when working with this Product. Do not drop the product or strike it with sharp objects.**
- **Carefully follow the cleaning and decontamination instructions in the manual. Do not use unapproved solvents or cleaners on the Product.**
- **Make sure that the system is depressurized before disassembly.**
- **Make sure that the trap is properly reassembled before pressure is reapplied.**

Symbols

The symbols shown in Table 1 are found in these instructions or on the Product.

Table 1. Symbols

Symbol	Definition
⚠	WARNING, RISK OF DANGER.
CE	Conforms to European Union directives.

Installation and Operation

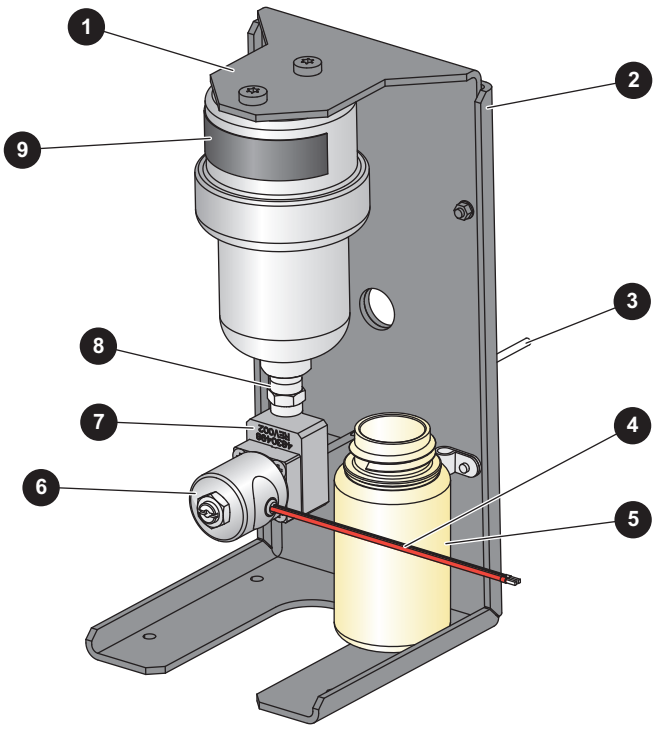
The SPLT-40M protects the pressure controller by acting as a gravity trap and in-line filter between the DUT and the controller. The Product must be operated in an up-right position (valve should be to the bottom, with the pressure connections above). In normal operation, the trap is purged when the controller is vented to atmosphere. This occurs at approximately 170 kPa (25 psi). Fluke Calibration recommends that the Product be installed lower than the pressure controller to protect against situations where the Product is not properly vented and liquid may travel back to the controller.

The Product ships assembled on a stand. The stand can be removed and reversed to mount under a bench or the stand can be removed to mount the Product on a wall. The Product comes with 15 cm (6 inches) of 3 mm (1/8 inch) plastic tubing attached to the valve manifold.

1. Before you operate the Product, insert the other end of the 1/8 inch plastic tubing in the provided waste bottle. Use a longer tube or other waste bottle as needed. Position the waste bottle so you can see when the waste bottle is full so that it can be emptied.
2. The label on the filter housing identifies the filter ports. Connect the OUT port to the TEST port of the Controller with suitably rated tubing and fittings. Make sure to use PTFE tape on the NPT fitting to the OUT port.
3. Connect the Product external driver cable connected to the solenoid valve to the DRV1 connections on the back of the controller.
4. Use the front panel of the controller and push **Set up > Instrument Setup > External Valves** and make sure the **SPLT** option is switched to **Installed**.

The Product is shown in Table 2.

Table 2. SPLT-40M



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No.	Description	No.	Description
1	Filter mount bracket	6	Solenoid valve
2	Stand bracket	7	Valve manifold (1/8” tube push to connect fitting on back)
3	1/8” plastic tubing	8	NPT Nipple
4	Cable (red)	9	Filter housing
5	Waste bottle		

To operate the Product, select an appropriate hose and/or fittings to connect the DUT to the IN port on the Product. Use PTFE tape on the NPT fitting to the IN port.

Maintenance

The Product is a filter between the DUT and the Controller. If contaminants (particulates or oily substances) are visible in the waste bottle the filter should be inspected. When the coalescing filter element becomes dirty or saturated it can restrict the flow which could affect the pressure reading. The frequency of inspection will vary depending on the condition of Devices Under Test (DUT) that have been calibrated. With time and experience, you can determine if a regular inspection interval is more appropriate, or if the filter should be inspected when the waste bottle/container is full.

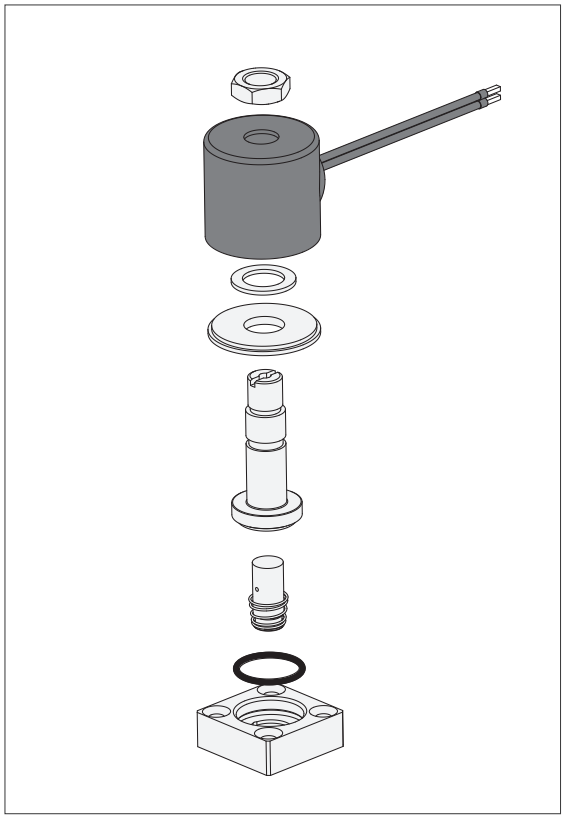
To replace the filter element:

1. Remove all pressure from the system.
2. Disconnect the inline connector near the valve.
3. Unscrew the lower housing of the filter element.

The coalescing filter is held in place by a round, knurled nut under the coalescing filter.

To inspect the valve:

1. Disassemble the valve (see Figure 2).
2. Inspect the valve, paying attention to the sealing surface of the plunger and the base.



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Figure 2. 40M Valve, Exploded View

Replacement Parts

Replacement parts are in Table 3.

Table 3. Replacement Parts

Part	Description
3136996	Disposable CoalescingFilter Element (located inside the high-pressure filter)
4873567	Inline Cable Assembly, from SPLT to Controller
4392813	Purge Valve
2208136	Receptacle, from Valve to Inline Cable (not included with valve)

Specifications

Pressure Connections.....¼ in. NPT F
Power Requirements.....18 V to 24 V to actuate valve, 27 watts
Weight .....4.8 kg (10.6 lb)
Dimensions.....27 cm H x 12.7 cm W x 13.2 cm D (10.6 in x 5 in x 5.2 in)
Maximum Working Pressure .....44 MPa (6400 psi)
Operational Capacity of Filter Body .....40 cm^3 total interior volume

LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke product will be free from defects in material and workmanship for one year from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke's behalf. To obtain service during the warranty period, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that Service Center with a description of the problem.

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