

FLUID COMPATIBILITY CHART FOR RIS-STOP OVERFILL PREVENTION VALVES – RIS-STOP-2SF-R

NOTE

The above valves were designed primarily to be compatible with commercial diesel fuel products. All seals are 'Viton' as standard. They are also compatible with the following fluids without modification.

1	Turbine Oil
2	Transformer Oil
3	Mineral based Lubrication Oils
4	Vegetable Oils e.g. Olive, Linseed, Soya Bean

Oil products must have a viscosity level below 200 cSt at the delivery temperature. This is the approximate equivalent to the following at 10°C:

- SAE 30
- ISOVG 32
- Class E Burner Oils

The materials used in RIS-STOP overfill prevention products are:

- Stainless Steel
- Mild Steel
- High Density Polythene
- Viton Seals
- Aluminium (anodised)

Heavier grade oils and other chemicals may require modifications to seals, materials and control orifice sizes to work satisfactorily.

Please contact Risbridger Ltd for details and additional costs involved.

Installation and Operating Instructions for: **RIS-STOP-2SF-R** 2" DIESEL Overfill Prevention Valves

Diesel Fuel Applications:

These valves are designed to be compatible with commercial diesel fuel products NOT Petroleum Spirit.

When in closed position they are not "zero" leakage devices, and as such are not suitable alternatives to shut-off valves when used in continuously pressurised systems.

For additional information see our Information Sheet (INS-RIS-STOP-2 130128) a copy is packed with each valve.

For and Above Ground Tank Installation you will need the following to install the valve:

- A chemically blackened mild steel weld in socket (stock code 4032MS). This part has been supplied separately.
- Thread sealant.

Important installation note:

The valve will not operate correctly with a 'standard' socket.

1. At a suitable position on the tank lid cut a 70mm diameter hole (the tank lid thickness should not exceed 13mm).
2. Remove the socket from the valve assembly and locate the shoulder of the weld socket in the 70mm hole.
3. Join to the tank with a full fillet sealing weld.
4. With the locknut in the full 'up' position on the valve body apply thread sealant to the weld socket and body thread. Take care not to spill or smear sealant on the valve working parts.
5. Screw in the complete valve cartridge so that only 1 or 2 thread pitches remain exposed between the lock nut and top of the weld socket.
6. Rotate the valve body to the correct inlet pipework orientation and tighten the lock nut against the weld socket. **Care should be taken not to damage the protective anodised finish on the valve parts.**
7. Connect the inlet pipework using suitable flange components and tighten the 4 x 8mm bolts to 27Nm (20ft lbs) torque maximum.

Note: The fluid shut-off level is approximately 135mm below the tank lid top surface.

Do not damage the protective anodised finish on the valve parts.

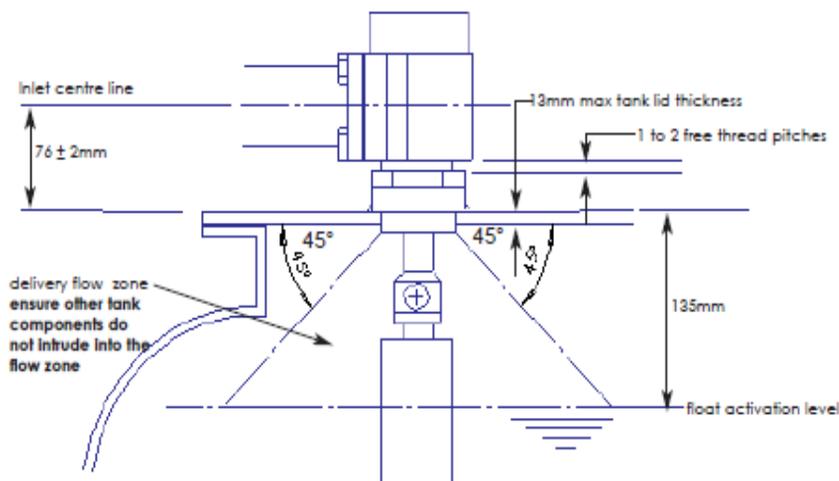


Diagram above shows the layout and installation dimensions for the RIS-STOP-2SF-R.
If you require an adjustable float height we refer you to the adjustable float kit, stock code: RIS-STOP-2/3AF-KIT.

* Please note that Aluminium and Stainless steel sockets may also be available as an option.

ALWAYS USE NON-SPARK TOOLS!

RETRO-FITTING TO EXISTING TANKS:

Option A - For existing tank with weld socket

If the existing tank lid has a standard 2" weld socket opening the socket must be reduced to an overall height of between 25 mm and 30 mm - measured from the socket top face to the underside of the tank lid or socket lower face (which ever is greater).

Clean the thread with a 2" BSPP tap to obtain a hand fit for the valve cartridge.

DO NOT FORCE THE VALVE INTO A TIGHT THREAD.

IMPORTANT NOTE.

Please note that the alterations to any tank must be completed in adherence with current Health & Safety Guidelines, Industry Regulations or Safe Working Practices.

Option B - to fit directly into tank lid

If the existing or new tank lid has a material thickness between 10 and 25 mm the lid can be directly drilled and tapped 2" BSP parallel thread to BS 2779 1986 standard as an alternative to using the weld socket 4032MS supplied.

IMPORTANT NOTE.

Please note that the alterations to any tank must be completed in adherence with current Health & Safety Guidelines, Industry Regulations or Safe Working Practices.

In either case use the above diagram and steps 4 through 7 to install the valve correctly.

Operation

1. During the initial delivery check all inlet pipework and joints are leak free. The optional RIS-STOP-2 Test Plug stock code 4100 can be used to assist leakage testing.
1. Open the tanker delivery valve gradually. Maximum delivery pressure should not exceed 8 bar (115 psi).
1. The RIS-STOP-2SF-R exhibits the following characteristics during a delivery:
 - a) A slight delivery pressure rise until the valve fully opens.
 - b) Unrestricted delivery until the float activation level is reached.
 - c) Pulsation on the delivery line warns that the maximum fluid level is approaching. The tanker delivery valve should be closed immediately if this occurs. The valve will **remain closed** if this fluid level is exceeded.

Maintenance and Fault Finding Instructions for:
RIS-STOP-2SF-R (2" Pressure Fill)
OVERFILL PREVENTION VALVE



**ALWAYS USE
NON-SPARK TOOLS!**

**RIS-STOP VALVES MUST ALWAYS BE TESTED FOR CORRECT
OPERATION BEFORE THE SITE INSTALLATION IS SIGNED OFF**

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Introduction

The RIS-STOP-2SF-R Overfill Prevention valve is a Normally Closed, Failsafe mechanical tank overfill prevention device, suitable for pressure fill deliveries to above and below ground fuel storage tanks. The valves are designed and manufactured for use with Diesel.

NB: If use with alternative fuels outside this spectrum is required please refer to Risbridger Ltd.

The RIS-STOP valve is opened with the flow of product being delivered into the tank, and is closed against the delivery flow when the float lifts at the preset maximum tank capacity (Normally 95% of Tank Capacity. For details of Installing an extension to the Float Assembly to the correct level please see RIS-STOP-2SFR-EXTENSION-KIT Installation Instructions.)

Should the float become damaged and stuck in the open position the valve will fail to open to receive fuel into the tank, this indicates a problem with the valve as this is the valves FAILSAFE mode.

Should the RIS-STOP-2SFR Valves need servicing or replacement parts please refer to Risbridger Ltd for more information.

Before starting a Maintenance or Testing Operation Please make sure you observe the correct Health & Safety Precautions and carry out work with due adherence to Site Specific Regulations.

Before starting work ensure you have the following:-

RECOMMENDED MAINTENANCE TOOLS REQUIRED FOR RIS-STOP-3P



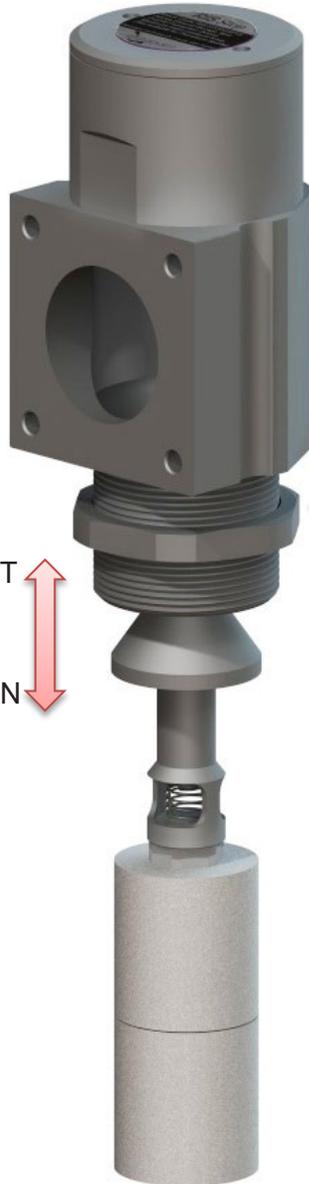
- Spanners 17mm, 19mm, 70mm (or adjustable up to 3 inch)
- Metric sockets 17mm, 19mm
- Torque wrench
- Thread / O-ring Grease

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FAULT FINDING – STEP 1. CHECKING THE VALVE IS FREE.



VALVE SHUT
↑
VALVE OPEN
↓



1. Loosen the Lock Nut, which is 70mm on the flats. Removed the 4 bolts from the inlet pipework. Then remove the valve for inspection.

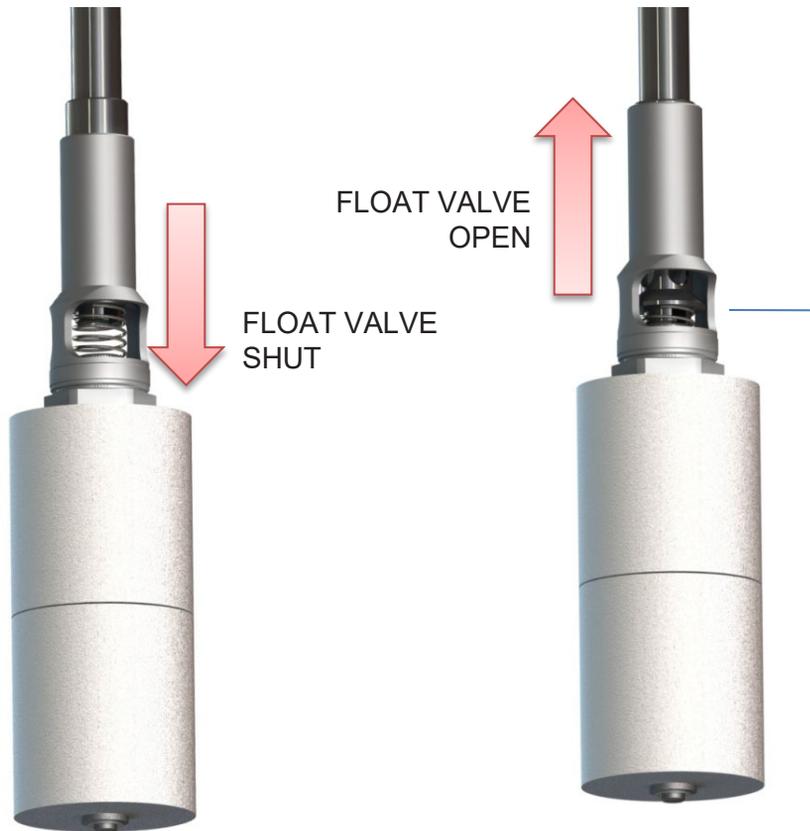
2. Manually open the valve several times to ensure it moves freely and returns to the closed position unassisted.

IF THE VALVE DOES NOT MOVE FREELY, THEN THE VALVE NEEDS RETURNING TO RISBRIDGER FOR INSPECTION AND REPAIR OR REPLACEMENT.

ENSURE THE PIPEWORK IS CORRECTLY IN-LINE AND DOES NOT REQUIRE FORCE TO BE ALIGNED. EXCESSIVE FORCE FROM THE INLET PIPEWORK WILL TWIST THE VALVE AND PREVENT IT FROM OPERATING CORRECTLY.

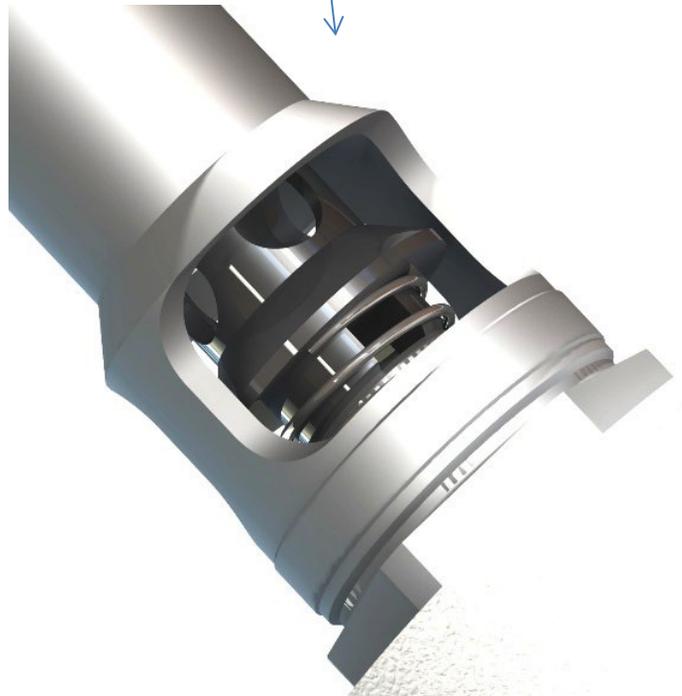
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FAULT FINDING – STEP 2. CHECKING THE FLOAT IS SEATED CORRECTLY.



1. Manually open and closed the float valve (whilst being held vertically) to ensure it moves freely and returns to the closed position unassisted.

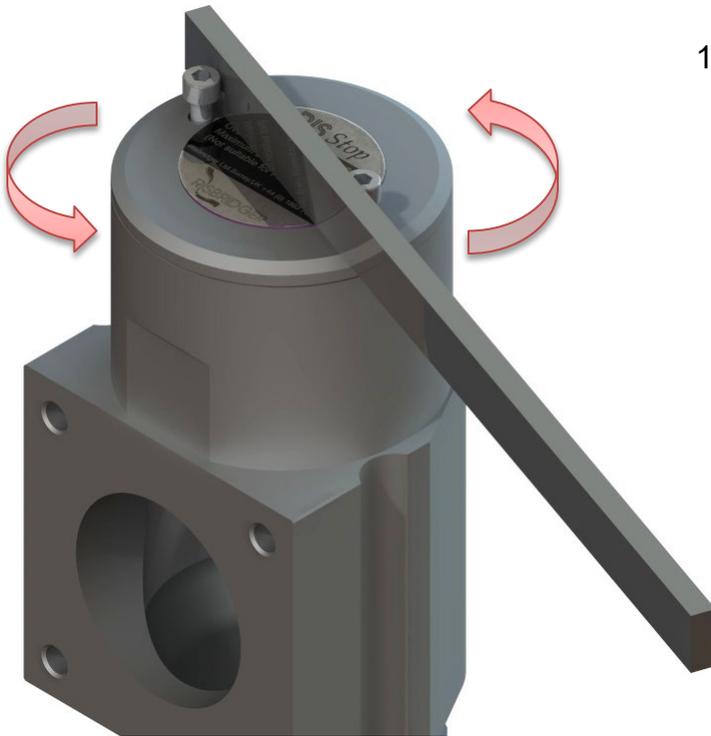
2. Open the float valve and inspect for any dirt. Any dirt or sticking resulting in the valve being off its seat will not allow the valve to open as it is effectively in an 'overflow and shutoff' status. Clear with an airline if available then apply aerosol lubrication to the moving parts. **DO NOT USE OIL** (eg 3 in 1 oil) as this can result in sticking the valve on its seat.



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FAULT FINDING – STEP 3.

CHECKING THE VALVE MOVES FREELY WHEN CONNECTED TO PIPEWORK.



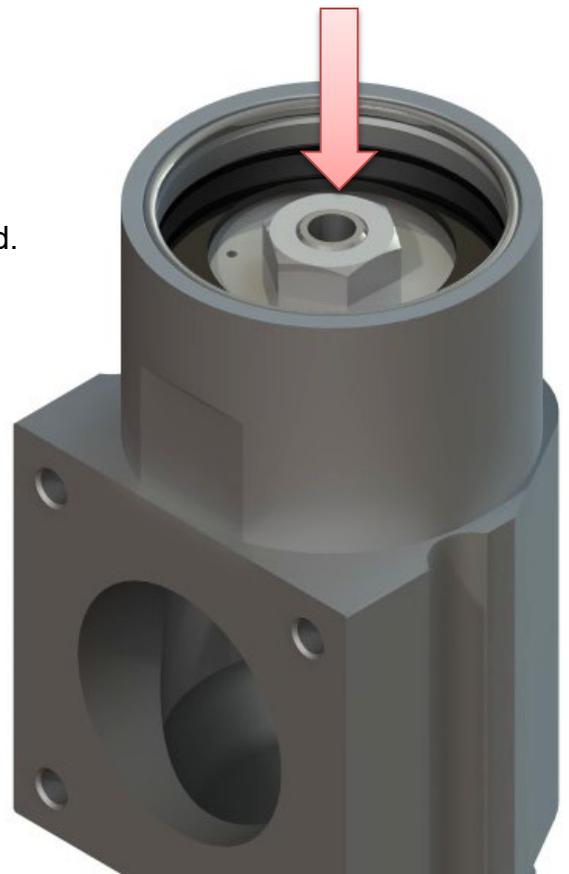
1. Ensure the line is not under pressure and leave all pipework connected to the valve. Remove the cap using the correct tool (adjustable pin spanner, as shown below), if not available in an emergency 2 x M5 bolts placed in the holes and a flat bar can be used, as shown to the left.

Adjustable Pin Spanner;



2. By pressing on the top piston, manually open the valve to ensure it moves freely and returns to the closed position unassisted.

IF THE VALVE DOES NOT MOVE FREELY, WHEN CONNECTED TO PIPEWORK, BUT DOES MOVE FREELY WHEN PIPEWORK IS REMOVED, THEN THE PIPEWORK NEEDS RE-ALIGNING OR A FLEX CONNECTOR NEEDS TO BE INSTALLED ON THE FACE OF THE VALVE TO RELIEVE STRESS ON THE VALVE. ENSURE THE PIPEWORK IS IN-LINE AND DOES NOT REQUIRE FORCE TO BE ALIGNED. EXCESSIVE FORCE FROM THE INLET PIPEWORK WILL TWIST THE VALVE AND PREVENT IT FROM OPERATING CORRECTLY.



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FOR REFERENCE.

Risbridger Ltd offer a range of tools specifically designed for Risbridger products. For further details please contact Risbridger or alternatively,

For installation details of the products supplied with a RIS-STOP-2SF-R and maintenance instructions, please see the following documents enclosed with the products or view on our website:

- INST-RIS-STOP-2SFR-EXTENSION-KIT
- RIS-STOP-2SF-R INSTALLATION INSTRUCTIONS:
 - DOC.RIS_STOP_2SF-R-03.002 (For oil Version)
 - DOC.RIS_STOP_2SF_R.002 (Diesel Version)

WARRANTY.

All RISBRIDGER Ltd products are guaranteed against defects in material and workmanship for a period of 12 months from the date of purchase subject to normal use and service. The sole obligation under this warranty is limited to repair or replacement, at the option of RISBRIDGER Ltd any product found to be defective upon examination provided that such product will be returned for inspection carriage paid, within three months of installation. Liability is strictly limited to replacement of defective parts manufactured by RISBRIDGER Ltd and no liability can be accepted for any loss or consequential damages arising from the installation or use of any products supplied by RISBRIDGER Ltd whatsoever the cause. This warranty shall not apply to any product subject to abuse, negligence, accident, misapplication or any alteration by others.

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