



## Pressure multiplier troubleshooting

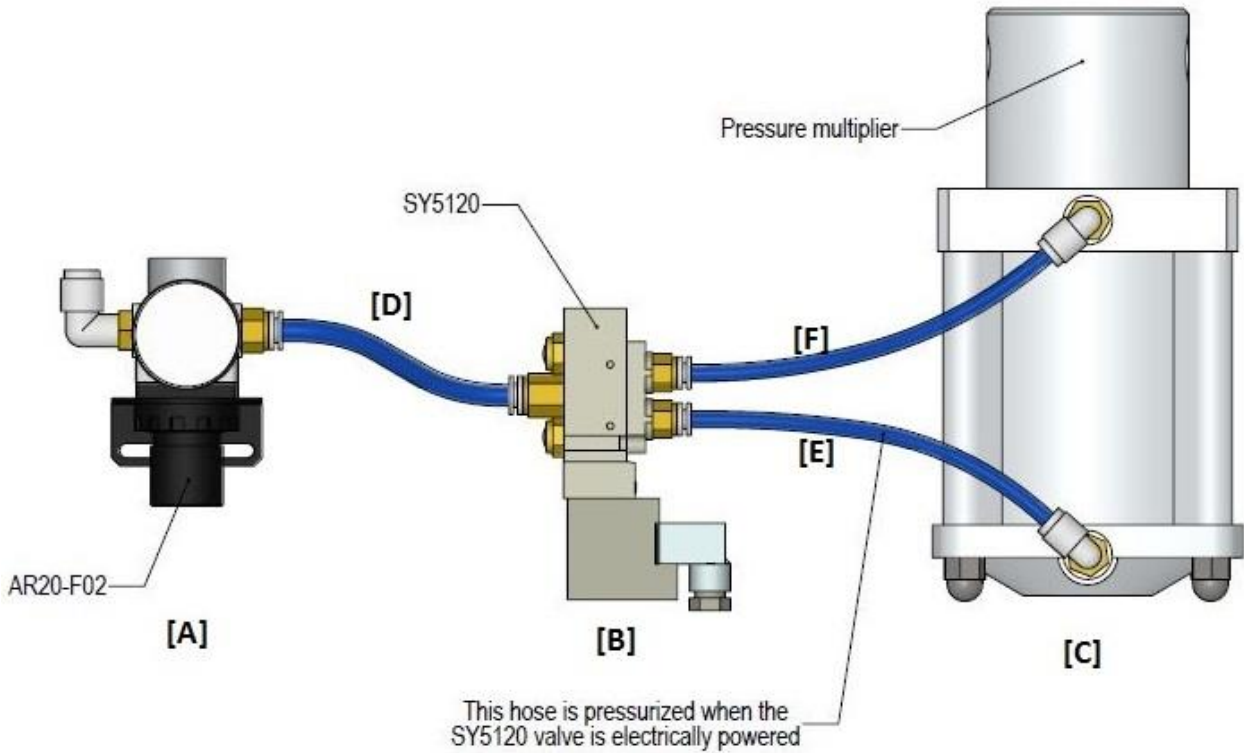


The pressure multiplier is a device used to boost the pressure in a water circuit so to allow the execution of leakage tests at high pressure (for instance 12 bar). If you're experiencing problems with the pressure multiplier, the following troubleshooting might help.

### **Problem A:**

**the pressure multiplier doesn't allow to reach the desired water pressure**

Possible reason	Possible solution
<b>Air is trapped into the water circuit</b>	<ul style="list-style-type: none"> <li>Repeat the water filling operations and make sure the air vent lets air to evacuate from the pipings</li> </ul>
<b>Pressure multiplier air inlet pressure too low</b>	<ul style="list-style-type: none"> <li>Set the air inlet pressure at the correct value on the dedicated air pressure regulator (ref. [A] in the drawing here below). The multiplying factor is 4 therefore if you set 3 bar at the air pressure regulator [A] the leakage test will be executed at 12 bar. <u>Never set air pressure higher than 3.5 bar</u> on air pressure regulator [A]</li> </ul>
<b>One of the pneumatic valves of the water circuit could be broken/leaking</b>	<ul style="list-style-type: none"> <li>When executing the leakage test by increasing pressure with the pressure multiplier [C] - if deactivating electro-valve [B] you measure a pressure drop - the problem can be with the pneumatic valve that separates the pressure multiplier from the appliance under test. If so disassemble the pneumatic valve and remove any dirt or replace the broken/leaking pneumatic valve(s)</li> </ul>
<b>Flexible hoses are too soft (the ones that connect the appliance under test to the test bench)</b>	<ul style="list-style-type: none"> <li>Use harder flexible hoses</li> </ul>
<b>The electro-valve, that supplies air to the pressure multiplier, doesn't work (ref. [B] in the drawing)</b>	<ul style="list-style-type: none"> <li>Check wiring of the electro-valve</li> <li>Ensure air pipe [E] is pressurised when electro-valve [B] is activated</li> <li>Check air pipes [D] [E] [F] that connect air pressure regulator, electro-valve and pressure multiplier</li> <li>Replace the electro-valve [B]</li> </ul>



**Problem B:**

water has flown in the pressure multiplier's air pipes [D] [E] [F]

Possible reason	Possible solution
Compressed air circuit is not dry	<ul style="list-style-type: none"> <li>Compressed air needs to be dehumidified</li> </ul>
The pressure multiplier's internal gaskets are damaged	<ul style="list-style-type: none"> <li>Replace the pressure multiplier</li> </ul>