

GC consumables

Click-On Inline Gas Filter Connectors (750 cc big trap)

Product manual

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Installation of the Click-On inline gas filter connectors

Reusable Thermo Scientific™ Click-On™ Inline Gas Filter Connectors are available for 1/8" and 1/4" outer tubing sizes and both sizes are available in stainless steel or brass.



Important information before you start:

- Always use stainless steel Click-On connectors for SS-tubing; use brass Click-On connectors for copper tubing
- Installation of the connector should always be done by trained personnel
- After installation, remember to perform a reliable leak test using an electronic leak detector
- Only use genuine Click-On connector parts
- 1. Switch off the incoming gas
- 2. Disconnect the gas line from the analytical instrument



Figure 1: Cut the gas line using an appropriate metal tubing cutter

Plumb the Click-On connectors into each end of the gas line

When there is no trap connected, the Click-On connector will automatically block the gas stream.

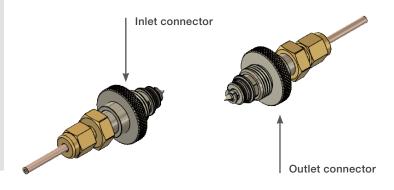


Figure 2: Inlet and outlet connectors

4. Turn the carrier gas on and flush the inlet connector with pure carrier gas

Flush the inlet connector by pushing down the needle valve for approximately 60 seconds.

Please note: Sharp edges. Advised pressure for flushing is 90 psi.



Figure 3: Inlet connector

Installation of a Click-On inline big universal trap



Important information before you start:

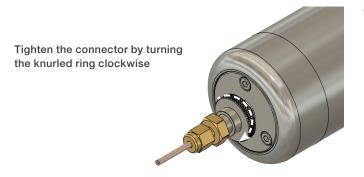
- Never install Thermo Scientific[™] Click-On[™] Inline Big Universal Trap in a gas line for air. It will result in instant saturation
- Installation of a big trap should be done only under low pressure (maximum 1 bar)
- Make sure that the temperature of the replacement trap is more or less identical to the temperature of the (already installed) Click-On connectors on your gas line to avoid any leakage in connections. If temperature is not identical, use at least one hour stabilization time in the same room as the connectors

1. Install the inlet side of the trap

Remove the blue closing plug from the inlet of the big universal trap by turning the plug anticlockwise



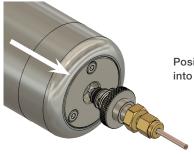




2. Install the outlet side of the big universal trap



Remove the blue closing plug from the outlet of the big universal trap by turning the plug counter clockwise



Position the big universal trap into the outlet connector



Tighten the connector by turning the knurled ring clockwise

For new installation: Flush the trap/whole system for 15 min. with pure carrier gas, advised pressure: 90 psi and then mount the outgoing carrier gas line back to the analytical system.

After installation, remember to perform a reliable leak test using an electronic leak detector.

Installation of a Click-On inline big universal trap (continued)

3. Recommended mounting position

Gas traps should be mounted in a vertical position to ensure proper contact of the gas with the adsorbent.



Gas inlet

Maintenance

1. Replacement of a big universal trap

We recommend to replace big universal traps annually to prevent breaktroughs of contaminants. Follow the steps under 'Installation of aClick-On inline big universal trap'.

2. Click-On connector

Regularly check both the big and small O-rings of the Click-On connectors for hair cracks. The slightest leak may allow moisture, oxygen, and hydrocarbons to enter the system and contaminate the gas.

Disposal



Saturated traps should not be placed in household waste bins. Please check local regulations for information about the disposal of chemical waste in your area.

Never re-condition a big trap. For recycling, please contact you local supplier.





Overview

Click-On big traps are suited for the purification of non-corrosive gases with low contamination concentrations to a better as 6.0 grade (99.99990%) purity.

Click-On big traps are connected to an appropriate genuine Click-On connector which is installed into the gas line.

Safety information

- The maximum concentration of oxygen allowed in the gas is 0.5%. (valid only for each filter packed with O₂-adsorbent and O₂-indicator)
- Maximum Gas-System pressure should never exceed 11 bar (160 psi or 1100 kPa)
- The total system design must be considered to ensure safe, trouble-free performance. Proper installtion, operation, and maintenance are the reposonsibilities of the system designer and user

Technical specifications

Description	
Trap type	Universal
Capacity	1 liter oxygen 35 gram moisture 60 g organic compounds (depending on impurites)
Outlet concentration	Oxygen < 50 ppb Moisture < 100 ppb Organics < 100 ppb

All filter cartridges are packed under argon, except for the heliumspecific or nitrogen-specific filter which are preconditioned under helium or nitrogen.

• Dimensions: 292 mm (length) x 63 mm (diameter)

Weight: 2 kg

Operating temperature: 0 ° to 70 °C

Maximum pressure: 11 bar (160 psi or 1100 kPa)

Maximum flow: 25 L/min

• Gas quality at outlet: > 99.9999%



Ordering information

Туре	Description	Cat. no.	
Installation kits (includes connectors and clamps)			
Thermo Scientific™ Click-On™ Inline Big Universal Trap Kit, 1/4"SS	Triple oxygen/moisture/hydrocarbon, metal, no indicator	60180-895-S4	
Replacement traps			
Thermo Scientific™ Click-On™ Inline Big Universal Trap	Triple, oxygen/moisture/hydrocarbon, metal, no indicator	60180-895	
	Triple, oxygen/moisture/hydrocarbon, Metal, no indicator, N ₂ preconditioned	60180-895N	
Click-On connectors			
Thermo Scientific™ Click-On™ Inline Gas Filter Connectors	1/8" Brass (2 pk)	<u>60180-809</u>	
	1/8" SS (2 pk)	<u>60180-810</u>	
	1/4" Brass (2 pk)	<u>60180-811</u>	
	1/4" SS (2 pk)	60180-812	
Click-On Double Connector		60180-813	
Spare parts			
Replacement O-rings		<u>60180-833</u>	
Devices			
Electronic leak detector	Thermo Scientific™ GLD Pro Gas Leak Detector	<u>66002-004</u>	
Electronic flowmeter	Thermo Scientific™ GFM Pro Gas Flowmeter	<u>66002-010</u>	



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