# Super Clean™ Gas Filters

## CLICK-ON INLINE FILTERS

96%

EP-B 04774871.0
U.S. Patent Pending 10/567,949

**SGT**
SCIENTIFIC GLASS TECHNOLOGY

**2015**

WWW.SGT-NL.COM

- Ultra-high capacity
- High-purity output ensures 99.9999% Pure gas
- Click-On fittings for easy, leak-tight cartridge changes
- Glass inside to prevent diffusion, plastic outside for safety
- Easy to read indicators

## ABOUT CLICK-ON INLINE TRAPS

Click-On Inline Super-Clean™ Traps are inline traps designed with Click-On adaptor connectors which allows inline cartridges to be exchanged without introducing oxygen. Spring loaded check valves seal when a filter is removed and open only when a new filter has been locked in place. There is no need for loosening and tightening fittings every time a trap is changed and your system will not become contaminated during the process.

## WHY GAS PURITY IS IMPORTANT

Carrier gas should contain less than 1ppm of oxygen, moisture, or other trace contaminants, to prevent column degradation, increase column lifetime, and decrease stationary phase bleed. The expense of using high-purity gases in combination with carrier gas line purifiers will be offset by longer column lifetime and less GC maintenance.

Contaminants cause ghost peaks to appear during temperature programming and degrade the validity of analytical data. Make-up gas also should be contaminant-free, or baseline fluctuations and excessive detector noise can occur; detector gases should be free of water and hydrocarbons, or excessive baseline noise can result. Gas purifiers remove these contaminants from gas sources, thereby improving system performance.

## CLICK-ON INLINE TRAP SYSTEM COMPONENTS

### Click-On Connectors

Re-usable In- and outlet adapter connectors which allows inline cartridges to be exchanged without introducing contaminants.

Spring loaded check valves seal when a filter is removed and open only when a new filter has been locked in place.

### Click-On Inline Trap

The Click-On Inline Traps are made out of stainless steel, or out of glass with a protective plastic cover.

The seals at each side of the trap will only be punctured when the Click-On connector is locked in place.

### Wall Mount Clamps

Optional wall mounting clamps to mount an Click-On Inline trap to a wall or surface.
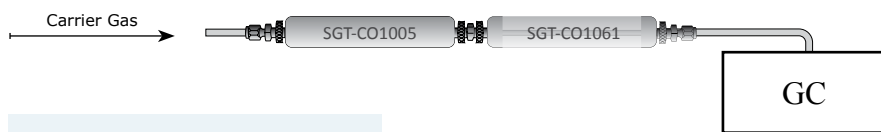
### Electronic Indicator

Optional Electronic Maintenance Indicator device warns when scheduled replacement or maintenance is due.
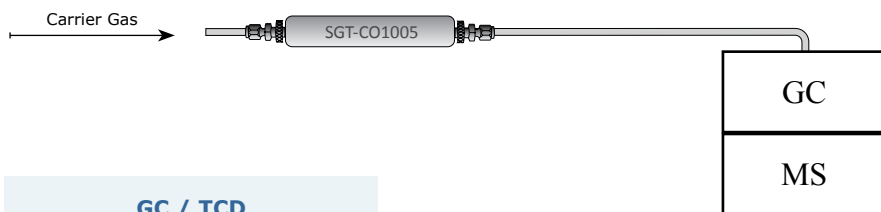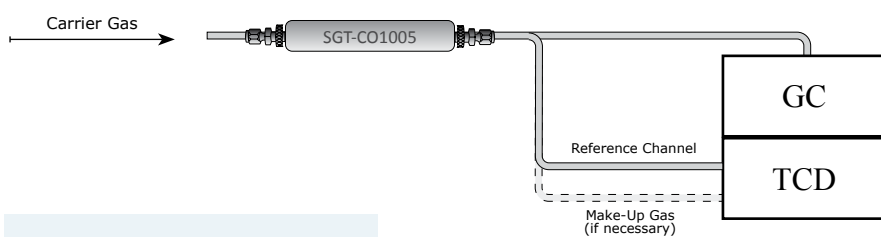
**Optional Indicator for Carrier Gas Lines**

Carrier Gas    SGT-CO1005    SGT-CO1061    GC

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple Trap | SGT-CO1005 * | 1 |
| Click-On Glass Triple Indicator | SGT-CO1061 | 1 |
| Click-On Connector Set | ** | 1 |
| Click-On Double Connector | CO2020 | 1 |

**GC / MS (ITD/MSD)**

Carrier Gas    SGT-CO1005    GC / MS

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple Trap | SGT-CO1005 * | 1 |
| Click-On Connector Set | ** | 1 |

**GC / TCD**

Carrier Gas    SGT-CO1005    GC / TCD

Reference Channel

Make-Up Gas (if necessary)

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple Trap | SGT-CO1005 * | 1 |
| Click-On Connector Set | ** | 1 |

**GC / ECD**

Carrier Gas    SGT-CO1005

Nitrogen    SGT-CO1004    GC / ECD

Make-Up Gas

Anode Purge Gas
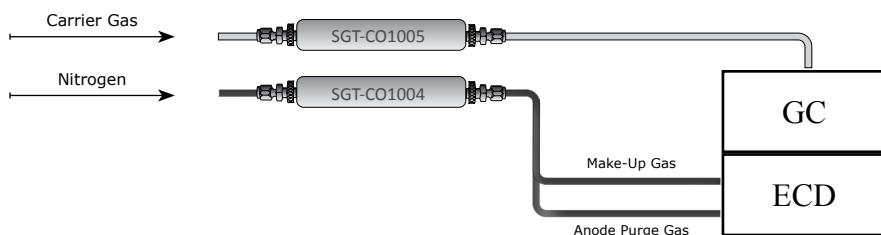
| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple Trap | SGT-CO1005 * | 1 |
| Click-On Oxygen/Moisture Trap | SGT-CO1004 | 1 |
| Click-On Connector Set | ** | 2 |

**ICP-OES / ICP-MS**

Plasma Gas = Nebulizer Gas

Supply Gas    Parallel    SGT-CO1004    SGT-CO1004    ICP-MS / ICP-OES
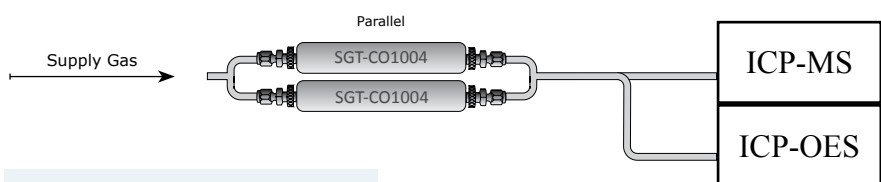
| Product | Part No. | Qty |
|---|---|---|
| Click-On Oxygen/Moisture Trap | SGT-CO1004 | 2 |
| Click-On Connector Set | ** | 2 |

**ICP-OES**

Different Optic Flush Gas

Supply Gas    Parallel    SGT-CO1004    SGT-CO1004    ICP-OES

Optic Flush Gas    SGT-CO1004
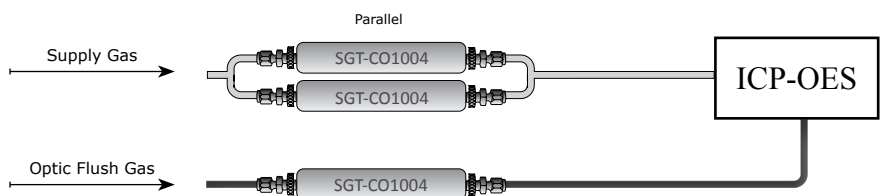
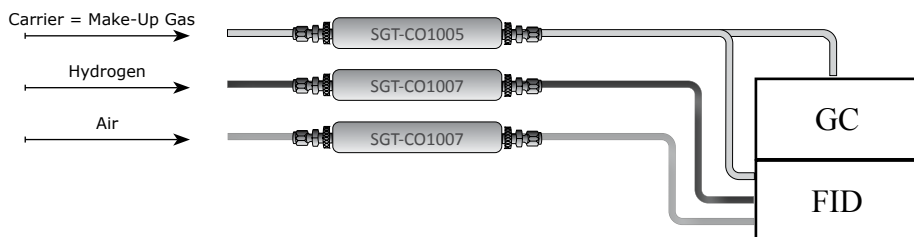| Product | Part No. | Qty |
|---|---|---|
| Click-On Oxygen/Moisture Trap | SGT-CO1004 | 3 |
| Click-On Connector Set | ** | 3 |

\*   SGT-CO1006 - Helium Specific
\*   SGT-CO1008 - Hydrogen Specific

**   CO2002 - Click-On Connector Set 1/8 " Brass
**   CO2001 - Click-On Connector Set 1/4" Brass
**   CO2011 - Click-On Connector Set 1/8" Stainless Steel
**   CO2010 - Click-On Connector Set 1/4" Stainless Steel

## GC / FID

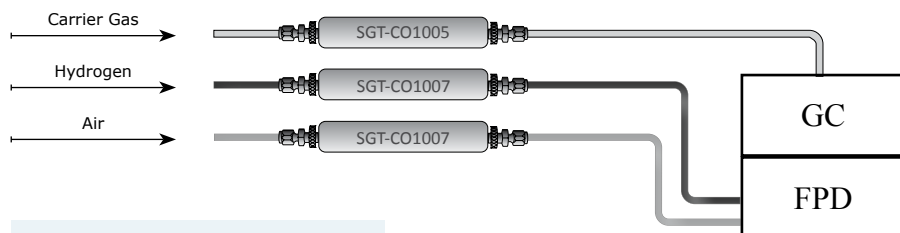GC/FID Solution 1 (Carrier Gas = Make-Up Gas)



| Product | Part No. | Qty |
|---------|----------|-----|
| Click-On Triple Trap | SGT-CO1005 * | 1 |
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1007 | 2 |
| Click-On Connector Set | ** | 3 |

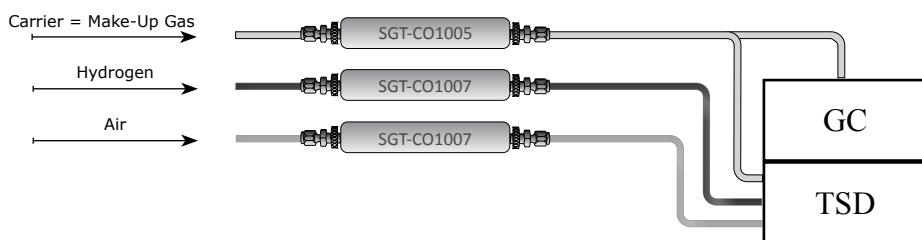GC/FID Solution 2 (Carrier Gas differs from Make-Up Gas)



| Product | Part No. | Qty |
|---------|----------|-----|
| Click-On Triple Trap | SGT-CO1005 * | 1 |
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1007 | 3 |
| Click-On Connector Set | ** | 4 |

## GC (FPD / PFPD)



| Product | Part No. | Qty |
|---------|----------|-----|
| Click-On Triple Trap | SGT-CO1005 * | 1 |
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1007 | 2 |
| Click-On Connector Set | ** | 3 |

## GC (TSD / TID) / NPD / PND



| Product | Part No. | Qty |
|---------|----------|-----|
| Click-On Triple Trap | SGT-CO1005 * | 1 |
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1007 | 2 |
| Click-On Connector Set | ** | 3 |

| | | | |
|---|---|---|---|
| * | SGT-CO1006 - Helium Specific | ** | CO2002 - Click-On Connector Set 1/8 " Brass |
| * | SGT-CO1008 - Hydrogen Specific | ** | CO2001 - Click-On Connector Set 1/4" Brass |
| | | ** | CO2011 - Click-On Connector Set 1/8" Stainless Steel |
| | | ** | CO2010 - Click-On Connector Set 1/4" Stainless Steel |

## LC / MS

### LC/MS Solution 1

Parallel

Supply Gas

SGT-CO1003
SGT-CO1003

LC

MS
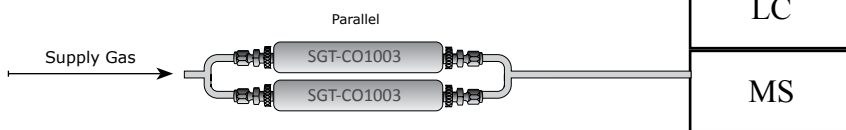
| Product | Part No. | Qty |
|---|---|---|
| Click-On Hydrocarbon Trap | SGT-CO1003 | 2 |
| Click-On Connector Set | ** | 2 |

### LC/MS Solution 2

Parallel

Supply Gas

SGT-CO1001
SGT-CO1001

LC

MS
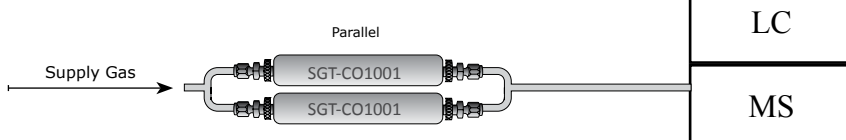
| Product | Part No. | Qty |
|---|---|---|
| Click-On Moisture Trap | SGT-CO1001 | 2 |
| Click-On Connector Set | ** | 2 |

### LC/MS Solution 3

Parallel

Supply Gas

SGT-CO1007
SGT-CO1007

LC

MS

| Product | Part No. | Qty |
|---|---|---|
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1007 | 2 |
| Click-On Connector Set | ** | 2 |

## TOC-Analyzer

### TOC Solution 1

Carrier Gas

SGT-CO1010

TOC Analyzer

| Product | Part No. | Qty |
|---|---|---|
| Click-On $CO_2$ / Moisture Trap | SGT-CO1010 | 1 |
| Click-On Connector Set | ** | 1 |

### TOC Solution 2

Carrier Gas

SGT-CO1009
SGT-CO1001

TOC Analyzer

| Product | Part No. | Qty |
|---|---|---|
| $CO_2$ Trap | SGT-CO1009 | 1 |
| Moisture Trap | SGT-CO1001 | 1 |
| Click-On Connector Set | ** | 1 |
| Click-On Double Connector | CO2020 | 1 |

## Zero-Air Generator

### Zero-Air Generator Solution 1

Carrier Gas

SGT-CO1010

Zero-Air Generator

| Product | Part No. | Qty |
|---|---|---|
| $CO_2$ / Moisture Trap | SGT-CO1010 | 1 |
| Click-On Connector Set | ** | 1 |

### Zero-Air Generator Solution 2

Carrier Gas

SGT-CO1009
SGT-CO1001

Zero-Air Generator

| Product | Part No. | Qty |
|---|---|---|
| $CO_2$ Trap | SGT-CO1009 | 1 |
| Moisture Trap | SGT-CO1001 | 1 |
| Click-On Connector Set | ** | 1 |
| Click-On Double Connector | CO2020 | 1 |

** CO2002 - Click-On Connector Set 1/8 " Brass
** CO2001 - Click-On Connector Set 1/4" Brass
** CO2011 - Click-On Connector Set 1/8" Stainless Steel
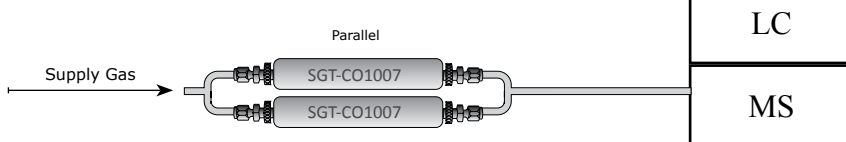** CO2010 - Click-On Connector Set 1/4" Stainless Steel

| Catalog No. | SGT-CO1001 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.6 Kg |
| **Estimated Lifetime** | 3 - 5 years |

### MOISTURE TRAP

Moisture in carrier gas lines will prematurely degrade oxygen and hydrocarbon traps and increase detector noise. As a precaution, we highly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

| **Capacity** | |
|---|---|
| $H_2O$ | 21 g |

| Catalog No. | SGT-CO1002 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.6 Kg |
| **Estimated Lifetime** | 3 - 5 years |

### OXYGEN TRAP

Oxygen is column killer. It is present even in UHP gases, as minutes leaks at fittings allow oxygen to influx against the concentration gradient. Because oxygen can enter a gas line at any fitting or during gas bottle exchange, the oxygen trap should be the last connection before the gas line enters the chromatograph.
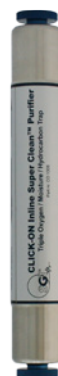
| **Capacity** | |
|---|---|
| $O_2$ | 450 mL |

| Catalog No. | SGT-CO1003 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.6 Kg |
| **Estimated Lifetime** | 3 - 5 years |

### HYDROCARBON TRAP

Use a hydrocarbon trap if your gas has a potential source of hydrocarbon contaminants or if you suspect you are observing carrier gas ghost peaks.
Install the hydrocarbon trap after the moisture trap, to prevent moisture from degrading the hydrocarbon-trapping ability of the activated carbon in the hydrocarbon trap.

| **Capacity** | |
|---|---|
| HC | 36 g (as *n*-butane) |

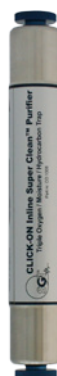| Catalog No. | SGT-CO1009 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.6 Kg |
| **Estimated Lifetime** | 3 - 5 years |

### CARBON DIOXIDE TRAP

Removes carbon dioxide and sulfur from gas streams. Always use in combination with a Moisture Trap.

| **Capacity** | |
|---|---|
| $CO_2$ | 36 g |

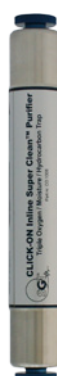| Catalog No. | SGT-CO1007 |
| --- | --- |
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.6 Kg |
| **Estimated Lifetime** | 2 - 3 years |

### COMBI (MOISTURE/ HYDROCARBON) TRAP

The Fuel Gas Inline trap is perfect for purifying flame ionization detector (FID) fuel gases, removing both **moisture** and **hydrocarbons**. Using the Fuel Gas Filter for FID Hydrogen and air will produce a stable baseline, improving overall reproducibility and sensitivity.

| Capacity | |
| --- | --- |
| $H_2O$ | 10 g |
| HC | 18 g (as *n*-butane) |

| Catalog No. | SGT-CO1004 |
| --- | --- |
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.6 Kg |
| **Estimated Lifetime** | 2 - 3 years |

### COMBI (OXYGEN/MOISTURE) TRAP

This Combi trap is ideal for purifying carrier gas. It contains **oxygen** and **moisture** scrubbers in one easy to change economical cartridge.

| Capacity | |
| --- | --- |
| $H_2O$ | 10 g |
| $O_2$ | 225 mL |

| Catalog No. | SGT-CO1010 |
| --- | --- |
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.6 Kg |
| **Estimated Lifetime** | 2 - 3 years |

### COMBI (CARBON DIOXIDE / MOISTURE) TRAP

This Combi Trap is ideal for TOC-Analyzers and Zero-Air Generators. Removes carbon dioxide, sulfur and moisture from gas streams.

| Capacity | |
| --- | --- |
| $H_2O$ | 10 g |
| $CO_2$ | 18 g |

| Catalog No. | SGT-CO1005 |
| --- | --- |
| | SGT-CO1006 (Helium Specific) |
| | SGT-CO1008 (Hydrogen Specific) |
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.6 Kg |
| **Estimated Lifetime** | 2 - 3 years |

### TRIPLE TRAP
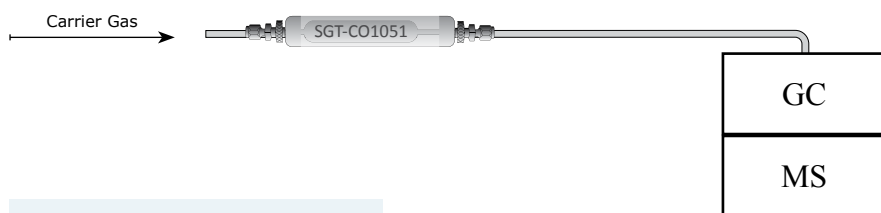
The Triple trap is ideal for purifying carrier gas. It contains oxygen, moisture and hydrocarbon scrubbers in one easy to change economical cartridge.
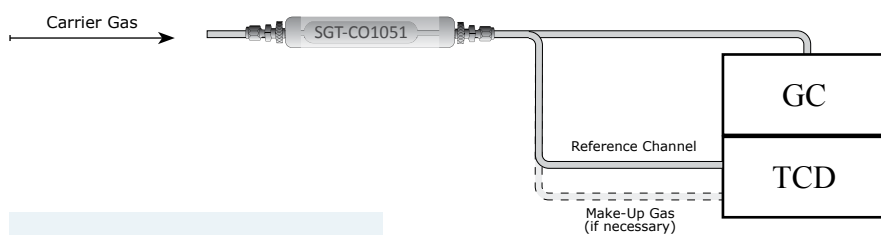
| Capacity | |
| --- | --- |
| $H_2O$ | 6 g |
| $O_2$ | 150 mL |
| HC | 12 g (as *n*-butane) |

## GC/MS (ITD/MSD)

Carrier Gas → SGT-CO1051 → GC / MS

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple He Trap | SGT-CO1051 * | 1 |
| Click-On Connector Set | ** | 1 |

## GC / TCD

Carrier Gas → SGT-CO1051 → GC / TCD

Reference Channel

Make-Up Gas
(if necessary)

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple He Trap | SGT-CO1051 * | 1 |
| Click-On Connector Set | ** | 1 |

## GC / ECD

Carrier Gas → SGT-CO1051

Nitrogen → SGT-CO1041 → GC / ECD

Make-Up Gas

Anode Purge Gas
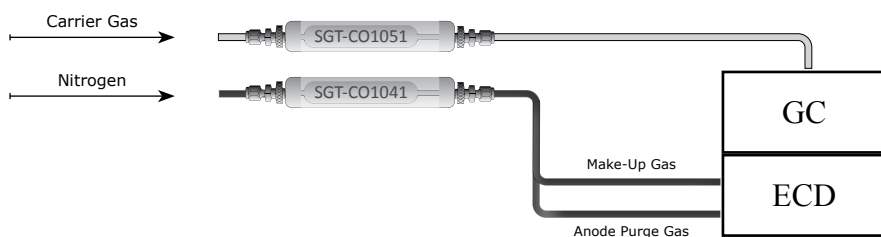
| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple He Trap | SGT-CO1051 * | 1 |
| Click-On Oxygen/Moisture Trap | SGT-CO1041 | 1 |
| Click-On Connector Set | ** | 2 |

## ICP-OES / ICP-MS

Plasma Gas = Nebulizer Gas

Parallel

Supply Gas → SGT-CO1041 / SGT-CO1041 → ICP-MS / ICP-OES
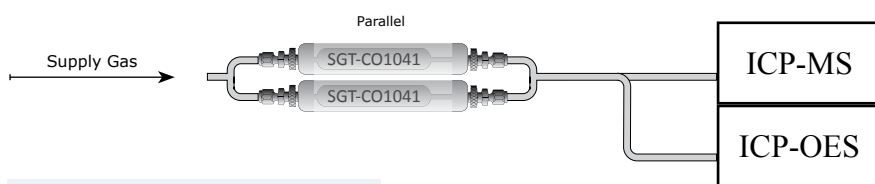
| Product | Part No. | Qty |
|---|---|---|
| Click-On Oxygen/Moisture Trap | SGT-CO1041 | 2 |
| Click-On Connector Set | ** | 2 |

## ICP-OES

Different Optic Flush Gas

Parallel

Supply Gas → SGT-CO1041 / SGT-CO1041 → ICP-OES

Optic Flush Gas → SGT-CO1041

| Product | Part No. | Qty |
|---|---|---|
| Click-On Oxygen/Moisture Trap | SGT-CO1041 | 3 |
| Click-On Connector Set | ** | 3 |

\*    SGT-CO1081 - Hydrogen Specific

\*\*    CO2002 - Click-On Connector Set 1/8 " Brass
\*\*    CO2001 - Click-On Connector Set 1/4" Brass
\*\*    CO2011 - Click-On Connector Set 1/8" Stainless Steel
\*\*    CO2010 - Click-On Connector Set 1/4" Stainless Steel

# COMMON CONNECTIONS AND APPLICATIONS - GLASS

## GC / FID

GC/FID Solution 1 (Carrier Gas = Make-Up Gas)

Carrier = Make-Up Gas → SGT-CO1051

Hydrogen → SGT-CO1071

Air → SGT-CO1071

GC

FID

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple He Trap | SGT-CO1051 * | 1 |
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1071 | 2 |
| Click-On Connector Set | ** | 3 |

GC/FID Solution 2 (Carrier Gas differs from Make-Up Gas)

Carrier Gas → SGT-CO1051

Make-Up Gas → SGT-CO1071

Hydrogen → SGT-CO1071

Air → SGT-CO1071

GC

FID

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple He Trap | SGT-CO1051 * | 1 |
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1071 | 3 |
| Click-On Connector Set | ** | 4 |

## GC (FPD / PFPD)

Carrier Gas → SGT-CO1051

Hydrogen → SGT-CO1071

Air → SGT-CO1071

GC

FPD

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple He Trap | SGT-CO1051 * | 1 |
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1071 | 2 |
| Click-On Connector Set | ** | 3 |

## GC (TSD / TID) / NPD / PND

Carrier = Make-Up Gas → SGT-CO1051

Hydrogen → SGT-CO1071

Air → SGT-CO1071

GC

TSD

| Product | Part No. | Qty |
|---|---|---|
| Click-On Triple He Trap | SGT-CO1051 * | 1 |
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1071 | 2 |
| Click-On Connector Set | ** | 3 |

*     SGT-CO1081 - Hydrogen Specific

**     CO2002 - Click-On Connector Set 1/8 " Brass
**     CO2001 - Click-On Connector Set 1/4" Brass
**     CO2011 - Click-On Connector Set 1/8" Stainless Steel
**     CO2010 - Click-On Connector Set 1/4" Stainless Steel

## LC/MS

LC/MS Solution 1

Supply Gas → Parallel [SGT-CO1031] [SGT-CO1031] → LC / MS

| Product | Part No. | Qty |
|---|---|---|
| Click-On Hydrocarbon Trap | SGT-CO1031 | 2 |
| Click-On Connector Set | ** | 2 |

LC/MS Solution 2

Supply Gas → Parallel [SGT-CO1011] [SGT-CO1011] → LC / MS
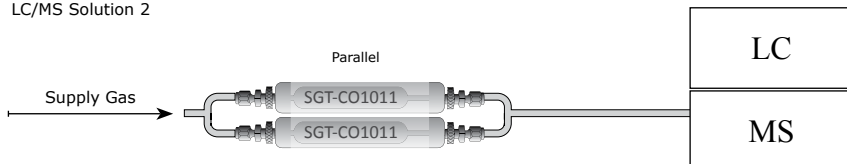
| Product | Part No. | Qty |
|---|---|---|
| Click-On Moisture Trap | SGT-CO1011 | 2 |
| Click-On Connector Set | ** | 2 |

LC/MS Solution 3

Supply Gas → Parallel [SGT-CO1071] [SGT-CO1071] → LC / MS

| Product | Part No. | Qty |
|---|---|---|
| Click-On Hydrocarbon/ Moisture Trap | SGT-CO1071 | 2 |
| Click-On Connector Set | ** | 2 |

## TOC Analyzer

**TOC Solution 1**

Carrier Gas → [SGT-CO2010] → TOC Analyzer

| Product | Part No. | Qty |
|---|---|---|
| Click-On $CO_2$ / Moisture Trap | SGT-CO2010 | 1 |
| Click-On Connector Set | ** | 1 |

**TOC Solution 2**

Carrier Gas → [SGT-CO1091] [SGT-CO1011] → TOC Analyzer

| Product | Part No. | Qty |
|---|---|---|
| $CO_2$ Trap | SGT-CO1091 | 1 |
| Moisture Trap | SGT-CO1011 | 1 |
| Click-On Connector Set | ** | 1 |
| Click-On Double Connector | CO2020 | 1 |

## Zero-Air Generator

Zero-Air Generator Solution 1

Carrier Gas → [SGT-CO2010] → Zero-Air Generator

| Product | Part No. | Qty |
|---|---|---|
| $CO_2$ / Moisture Trap | SGT-CO2010 | 1 |
| Click-On Connector Set | ** | 1 |

Zero-Air Generator Solution 2

Carrier Gas → [SGT-CO1091] [SGT-CO1011] → Zero-Air Generator

| Product | Part No. | Qty |
|---|---|---|
| $CO_2$ Trap | SGT-CO1091 | 1 |
| Moisture Trap | SGT-CO1011 | 1 |
| Click-On Connector Set | ** | 1 |
| Click-On Double Connector | CO2020 | 1 |

** CO2002 - Click-On Connector Set 1/8 " Brass
** CO2001 - Click-On Connector Set 1/4" Brass
** CO2011 - Click-On Connector Set 1/8" Stainless Steel
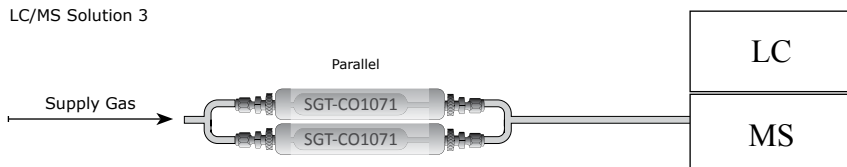** CO2010 - Click-On Connector Set 1/4" Stainless Steel

| Catalog No. | SGT-CO1011 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.25 Kg |
| **Estimated Lifetime** | 2 - 3 years |

## MOISTURE TRAP

Moisture in carrier gas lines will prematurely degrade oxygen and hydrocarbon traps and increase detector noise. As a precaution, we highly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

| Capacity | |
|---|---|
| $H_2O$ | 6 g |

| Catalog No. | SGT-CO1021 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.25 Kg |
| **Estimated Lifetime** | 2 - 3 years |

## OXYGEN TRAP

Oxygen is column killer. It is present even in UHP gases, as minutes leaks at fittings allow oxygen to influx against the concentration gradient. Because oxygen can enter a gas line at any fitting or during gas bottle exchange, the oxygen trap should be the last connection before the gas line enters the chromatograph.

| Capacity | |
|---|---|
| $O_2$ | 130 mL |

| Catalog No. | SGT-CO1031 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.25 Kg |
| **Estimated Lifetime** | 2- 3 years |

## HYDROCARBON TRAP

Use a hydrocarbon trap if your gas has a potential source of hydrocarbon contaminants or if you suspect you are observing carrier gas ghost peaks.
Install the hydrocarbon trap after the moisture trap, to prevent moisture from degrading the hydrocarbon-trapping ability of the activated carbon in the hydrocarbon trap.

| Capacity | |
|---|---|
| HC | 10 g (as *n*-butane) |

| Catalog No. | SGT-CO1091 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.25 Kg |
| **Estimated Lifetime** | 2 - 3 years |

## CARBON DIOXIDE TRAP

Removes carbon dioxide and sulfur from gas streams. Always use in combination with a Moisture Trap.

| Capacity | |
|---|---|
| $CO_2$ | 10 g |

| Catalog No. | SGT-CO1071 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.25 Kg |
| **Estimated Lifetime** | 2 - 3 years |

## COMBI (HYDROCARBON/ MOISTURE) TRAP

The Fuel Gas Inline trap is perfect for purifying flame ionization detector (FID) fuel gases, removing both **moisture** and **hydrocarbons**. Using the Fuel Gas Filter for FID Hydrogen and air will produce a stable baseline, improving overall reproducibility and sensitivity. Ideal for use in combination with a zero air generator.

| Capacity | |
|---|---|
| $H_2O$ | 3 g |
| HC | 5 g (as *n*-butane) |

| Catalog No. | SGT-CO1041 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.25 Kg |
| **Estimated Lifetime** | 2 - 3 years |

## COMBI (OXYGEN/MOISTURE) TRAP

The Combi trap is ideal for purifying carrier gas. It contains oxygen and moisture scrubbers in one easy to change economical cartridge.

| Capacity | |
|---|---|
| $H_2O$ | 3 g |
| $O_2$ | 65 mL |

| Catalog No. | SGT-CO2010 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.25 Kg |
| **Estimated Lifetime** | 2 - 3 years |

## COMBI (CARBON DIOXIDE/ MOISTURE) TRAP

Removes carbon dioxide, sulfur and moisture from gas streams. This combination does not require a separate moisture trap.

| Capacity | |
|---|---|
| $CO_2$ | 5 g |
| $H_2O$ | 3 g |

| Catalog No. | SGT-CO1051 (Helium Specific) SGT-CO1081 (Hydrogen Specific) |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | He |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.25 Kg |
| **Estimated Lifetime** | 2 - 3 years |

## TRIPLE TRAP

The Triple trap is ideal for purifying carrier gas. It contains oxygen, moisture and hydrocarbon scrubbers in one easy to change economical cartridge.

| Capacity | |
|---|---|
| $H_2O$ | 2 g |
| $O_2$ | 32 mL |
| HC | 1.5 g (as *n*-butane) |

| Catalog No. | SGT-CO1061 |
|---|---|
| **Specifications** | |
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 25 L/min. |
| **Usable For** | He |
| **Dimensions** | 20 cm x Ø 3.2 cm |
| **Weight** | 0.2 Kg |
| **Estimated Lifetime** | > 1 year[1] |

[1] In combination with an ultra high capacity inline trap, estimated lifetime will be 2 - 5 years.

## TRIPLE INDICATOR

Install this indicator after a Click-On inline (steel) trap so there is no confusion about when to replace traps

| Capacity | |
|---|---|
| $H_2O$ | 0.1 g |
| $O_2$ | 100 mL |
| HC | 0.07 g (as *n*-butane) |

## CLICK-ON CONNECTORS

| Catalog No. | CO2002 |
|---|---|
| **Usable for** | |
| 1/8" Brass tubing | |

### 1/8" BRASS
### CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/8" Brass

| Catalog No. | CO2011 |
|---|---|
| **Usable for** | |
| 1/8" Stainless Steel tubing | |

### 1/8" STAINLESS STEEL
### CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/8" SS

| Catalog No. | CO2001 |
|---|---|
| **Usable for** | |
| 1/4" Brass tubing | |

### 1/4" BRASS
### CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/4" Brass

| Catalog No. | CO2010 |
|---|---|
| **Usable for** | |
| 1/4" Stainless Steel tubing | |
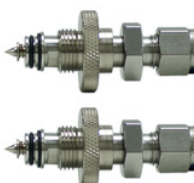
### 1/4" STAINLESS STEEL
### CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/4" SS

| Catalog No. | CO2020 |
|---|---|
| **Usable for** | |
| Click-On Traps | |

### DOUBLE
### CLICK-ON CONNECTOR

A Double Connector to connect two Click-On Traps together

### ELECTRONIC INDICATOR

| Catalog No. | SGT-E0020 |
|---|---|
| **Usable for** | |
| Click-On Traps | |

Electronic Maintenance Indicator for use with Click-On Inline Filters. Includes Electronic Indicator Device, Battery, USB Cable and Mounting clip.

### O-RING REPLACEMENT SET

| Catalog No. | CO3001 |
|---|---|
| **Usable for** | |
| All click-on connectors | |

A set of 10 + 10 Replacement O-rings for Click-On Inline Connectors.

### WALL-MOUNTING CLAMP SET

| Catalog No. | CO3002 |
|---|---|
| **Usable for** | |
| Click-on traps | |

Two wall mount clamps suitable for mounting a Click-On Trap.

### PARTICLE FILTER

| Catalog No. | B0060 |
|---|---|
| **Usable for** | |
| High flow applications | |

Particulate filter for high flow applications.

### PARTICLE FILTER REPLACEMENT CUPS

| Catalog No. | B0065 |
|---|---|
| **Usable for** | |
| Particle Filter | |

0.5 Micron Particle Filter Replacement Cups for use with Particle Filter.

**ORDERING INFORMATION**

## Click-On Inline Super Clean™ Trap and Connector Kits (Steel)

| Part No. * | Description | qty. |
|---|---|---|
| SGT-CO1001-B8 | SGT Click-On Moisture Trap Kit - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Moisture Trap | ea. |
| SGT-CO1002-B8 | SGT Click-On Oxygen Trap Kit - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Oxygen Trap | ea. |
| SGT-CO1003-B8 | SGT Click-On Hydrocarbon Trap Kit - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Hydrocarbon Trap | ea. |
| SGT-CO1009-B8 | SGT Click-On Carbon dioxide Trap Kit - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Carbon dioxide Trap | ea. |
| SGT-CO1007-B8 | SGT Click-On Combi Trap Kit (Hydrocarbon/Moisture) - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Hydrocarbon/Moisture Trap | ea. |
| SGT-CO1004-B8 | SGT Click-On Combi Trap Kit (Oxygen/Moisture) - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Oxygen/Moisture Trap | ea. |
| SGT-CO1010-B8 | SGT Click-On Combi Trap Kit (Carbon dioxide/Moisture) - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Carbon dioxide/Moisture Trap | ea. |
| SGT-CO1005-B8 | SGT Click-On Triple Trap Kit - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Oxygen/Moisture/Hydrocarbon Trap | ea. |
| SGT-CO1006-B8 | SGT Click-On Triple Helium Specific Trap Kit - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Oxygen/Moisture/Hydrocarbon Helium Specific Trap | ea. |
| SGT-CO1008-B8 | SGT Click-On Triple Hydrogen Specific Trap Kit - $1/8$” Brass<br>Includes (2) $1/8$” Brass Connectors and (1) Oxygen/Moisture/Hydrocarbon Hydrogen Specific Trap | ea. |

\* Standard fittings are 1/8 Brass. All Kits are available in 1/4” to 1/8” Brass and Stainless steel fittings.
To order, replace Part No. suffix into '-B4' for 1/4” Brass, '-S8' for 1/8” Stainless steel and '-S4' for 1/4” Stainless steel fittings.

## Click-On Inline Super Clean™ Trap and Connector Kits (Glass)

| Part No. * | Description | qty. |
|---|---|---|
| SGT-CO1011-B8 | SGT Click-On Glass Moisture Trap Kit - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Moisture Trap | ea. |
| SGT-CO1021-B8 | SGT Click-On Glass Oxygen Trap Kit - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Oxygen Trap | ea. |
| SGT-CO1031-B8 | SGT Click-On Glass Hydrocarbon Trap Kit - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Hydrocarbon Trap | ea. |
| SGT-CO1091-B8 | SGT Click-On Glass Carbon dioxide Trap Kit - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Carbon dioxide Trap | ea. |
| SGT-CO1071-B8 | SGT Click-On Glass Combi Trap Kit (Hydrocarbon/Moisture) - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Hydrocarbon/Moisture Trap | ea. |
| SGT-CO1041-B8 | SGT Click-On Glass Combi Trap Kit (Oxygen/Moisture) - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Oxygen/Moisture Trap | ea. |
| SGT-CO2010-B8 | SGT Click-On Glass Combi Trap Kit (Carbon dioxide/Moisture) - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Carbon dioxide/Moisture Trap | ea. |
| SGT-CO1051-B8 | SGT Click-On Glass Triple Helium Specific Trap Kit - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Oxygen/Moisture/Hydrocarbon Helium Specific Trap | ea. |
| SGT-CO1081-B8 | SGT Click-On Glass Triple Hydrogen Specific Trap Kit - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Oxygen/Moisture/Hydrocarbon Hydrogen Specific Trap | ea. |
| SGT-CO1061-B8 | SGT Click-On Glass Triple Helium Specific Indicator Kit - $1/8$" Brass<br>Includes (2) $1/8$" Brass Connectors and (1) Indicating Oxygen/Moisture/Hydrocarbon Helium Specific Trap | ea. |

## Click-On Inline Super Clean™ Replacement Traps (Steel)

| Part No. | Description | qty. |
|---|---|---|
| SGT-CO1001 | SGT Click-On Moisture Trap | ea. |
| SGT-CO1002 | SGT Click-On Oxygen Trap | ea. |
| SGT-CO1003 | SGT Click-On Hydrocarbon Trap | ea. |
| SGT-CO1009 | SGT Click-On $CO_2$ Trap | ea. |
| SGT-CO1007 | SGT Click-On Combi (Hydrocarbon/Moisture) Trap | ea. |
| SGT-CO1004 | SGT Click-On Combi (Oxygen/Moisture) Trap | ea. |
| SGTCO1010 | SGT Click-On Combi ($CO_2$ / Moisture) Trap | ea. |
| SGT-CO1005 | SGT Click-On Triple (Moisture/Oxygen/Hydrocarbon) Trap | ea. |
| SGT-CO1006 | SGT Click-On Triple (Moisture/Oxygen/Hydrocarbon) He Trap | ea. |
| SGT-CO1008 | SGT Click-On Triple (Moisture/Oxygen/Hydrocarbon) H2 Trap | ea. |

## Click-On Inline Super Clean™ Replacement Traps (Glass)

| Part No. | Description | qty. |
|---|---|---|
| SGT-CO1011 | SGT Click-On Glass Indicating Moisture Trap | ea. |
| SGT-CO1021 | SGT Click-On Glass Indicating Oxygen Trap | ea. |
| SGT-CO1031 | SGT Click-On Glass Hydrocarbon Trap | ea. |
| SGT-CO1091 | SGT Click-On Glass Indicating $CO_2$ Trap | ea. |
| SGT-CO1071 | SGT Click-On Glass Indicating Combi (Hydrocarbon/Moisture) Trap | ea. |
| SGT-CO1041 | SGT Click-On Glass Indicating Combi (Oxygen/Moisture) Trap | ea. |
| SGT-CO2010 | SGT Click-On Glass Indicating Combi ($CO_2$/Moisture) Trap | ea. |
| SGT-CO1051 | SGT Click-On Glass Indicating Triple He Trap | ea. |
| SGT-CO1081 | SGT Click-On Glass Indicating Triple H2 Trap | ea. |
| SGT-CO1061 | SGT Click-On Glass Triple He Indicator | ea. |

\* Standard fittings are 1/8 Brass. All Kits are available in 1/4" to 1/8" Brass and Stainless steel fittings.
   To order, replace Part No. suffix into '-B4' for 1/4" Brass, '-S8' for 1/8" Stainless steel and '-S4' for 1/4" Stainless steel fittings.

## Click-On Connectors

| Part No. | Description | qty. |
|----------|-------------|------|
| CO2001 | Click-On Connector Set - $^1/_4$" Brass<br>Includes (2) $^1/_4$" Brass Click-On Connectors | 2/pk. |
| CO2002 | Click-On Connector Set - $^1/_8$" Brass<br>Includes (2) $^1/_8$" Brass Click-On Connectors | 2/pk. |
| CO2010 | Click-On Connector Set - $^1/_4$" Stainless Steel<br>Includes (2) $^1/_4$" Stainless Steel Click-On Connectors | 2/pk. |
| CO2011 | Click-On Connector Set - $^1/_8$" Stainless Steel<br>Includes (2) $^1/_8$" Stainless Steel Click-On Connectors | 2/pk. |
| CO2020 | Click-On Double Connector Stainless Steel | ea. |

## Accessories

| Part No. | Description | qty. |
|----------|-------------|------|
| CO3002 | Click-On Wall-mounting Clamp Set | 4/pk. |
| CO3001 | Click-On Replacement O-ring Set | 20/ pk |
| SGT-E0020 | Electronic Maintenance Indicator Kit for Click-On Steel and Glass Traps<br>For use with Click-On Inline Filters.<br>Includes Electronic Indicator Device, Battery, USB Cable and Mounting clip. | ea. |

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