

Gas chromatography consumables ordering guide

Proven consumables for optimum system performance

Select the right GC consumable for your GC system

Optimize your gas chromatography (GC) system's performance by selecting the proper GC consumables.

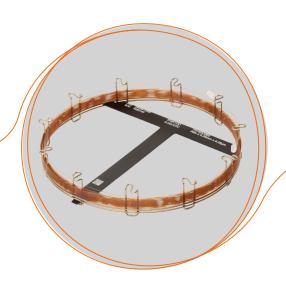
Reference the compatibility and recommended use when ordering your consumables for the following systems:

- Thermo Scientific™ TRACE™ 1300 and TRACE™ 1600 Series Gas Chromatographs
- Thermo Scientific[™] Al/AS 1310 and Al/AS 1610 Liquid Autosamplers
- Thermo Scientific™ TriPlus™ RSH and TriPlus™ RSH SMART Autosamplers
- Thermo Scientific[™] TriPlus[™] 500 Headspace Autosampler



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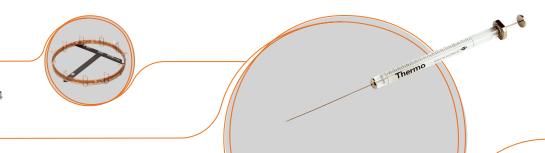




Thermo Scientific™ syringes for AI/AS autosamplers

| Volume (μL) | Gauge | Needle type | Tip style | Gas tight | Compatibility | Quantity | Cat. no. |
|---------------------|-------|----------------------|-----------|-----------|---|----------|-----------------|
| 0.5 | 23 | Plunger-in needle | Cone | _ | All Al/AS autosamplers for SSL injection with focus/precision liner (453A1255 or 453A1255-UI) | Each | <u>36504045</u> |
| 5 | 26 | Fixed | Cone | No | | Each | <u>36500505</u> |
| 5 | 23 | Fixed | Cone | No | | Each | 365C3701 |
| 10 | 23 | Fixed | Cone | No | - | Each | 36520060 |
| 10 | 23 | Fixed | Cone | No | | 6/pack | 365D2971 |
| 10 | 26 | Fixed | Cone | Yes | | Each | 365D2977 |
| 10 | 26 | Fixed | Cone | Yes | All Al/AS autosamplers for SSL or PTV injection | 6/pack | 365D2976 |
| 10 | 23 | Fixed | Cone | Yes | a del or r v injection | Each | 365D3741 |
| 10 | 25 | Fixed | Cone | No | | Each | 36500525 |
| 10 | 26 | Fixed | Cone | No | | Each | 365D3711 |
| 10 | 26 | Fixed | Cone | No | | 6/pack | 365D1856 |
| 10 | 23-26 | Fixed | Cone | No | - | Each | 36500580 |
| 10 | 26 | Fixed | Bevel | No | All Al/AS autosamplers for | Each | 365D1091 |
| 10 | 26 | Fixed | Bevel | No | PTV injection of polar solvent | 6/pack | 365D1096 |
| 50 | 23 | Removable | Cone | Yes | Al/AS1610 Autosampler for SSL or PTV with the needle 36550040 | Each | 365G1503 |
| 100 | 23 | Removable | Side hole | Yes | Al/AS1610 Autosampler for PTV or SSL with the needle 36566485 | Each | 36520050 |
| _ | 23 | _ | Side hole | _ | Replacement needle for syringe 365G1503 or 36520050 | 2/pack | 36550040 |
| _ | 23 | _ | Cone | _ | Replacement needle for syringe 365G1503 or 36520050 | 5/pack | <u>36566485</u> |
| Nicho Miccello Inc. | | | | | | | |

Note: Needle length is 50 mm



continued



Thermo Scientific™ SMART syringes for TriPlus RSH SMART and TriPlus RSH autosamplers

| Volume (μL) | Needle length (mm) | Gauge | Tip style | Gas tight | Recommended use | Quantity | Cat. no. |
|----------------|-----------------------|-------|--------------|--------------|---|----------|--------------------|
| 5 | 57 | 26s | Cone | No | PTV or SSL all injection modes | Each | 365C0251-SM |
| 10 | 57 | 23s | Cone | No | PTV or SSL all injection modes, or injector with Merlin adaptor | Each | 365D0271-SM |
| 10 | 57 | 26s | Cone | No | PTV or SSL all injection modes | Each | 365D0291-SM |
| 10 | 57 | 26s | Bevel | No | PTV injection of polar solvent | Each | 365D0391-SM |
| 10 | 57 | 23s | Cone | Yes | PTV or SSL all injection modes, or injector with Merlin adaptor particularly suitable for volatile solvents or corrosive samples | Each | 365D0311-SM |
| 10 | 85 | 26s | Cone | No | On-column injection, SSL on TSI injector | Each | 365D0281-SM |
| 25 | 57 | 23s | Cone | Yes | PTV or SSL all injection modes | Each | 365F2441-SM |
| 50 | 57 | 23s | Cone | Yes | Large volume splitless with SSL, or PTV (with packed liner 45322056) | Each | 365G2311-SM |
| 100 | 57 | 23s | Cone | Yes | Large volume splitless with SSL, or PTV (with packed liner 45322056) | Each | 365H2141-SM |
| 100 | 57 | 23 | Side hole | Yes | Large volume PTV (with sintered lining liner 45352060) with or without Merlin adaptor | Each | <u>365H2181-SM</u> |
| 250 | 57 | 26 | Cone | Yes | Large volume splitless with SSL | Each | 365I2331-SM |
| 250 | 57 | 23 | Side hole | Yes | Large volume PTV (with sintered lining liner 45352060) with or without Merlin adaptor | Each | 365I2351-SM |
| 500 | 57 | 23 | Side hole | Yes | Large volume PTV (with sintered lining liner 45352060) with or without Merlin adaptor | Each | 365J2441-SM |
| 2500 | 65 | 23 | Side hole | Yes | Headspace | Each | 365L2321-SM |
| 1000 | 57 | 22 | LC | Yes | Sample preparation, i.e. dilution, derivatization, liquid-liquid extraction, micro-SPE | Each | 365K2811-SM |
| 10000 | 57 | 19 | LC | Yes | Sample preparation, i.e. dilution, derivatization, liquid-liquid extraction | Each | 365N2721-SM |

 $Note: More information on SMART syringes and tool compatibility is available from the \underline{SMART Chromatography Syringes User \underline{Guide}. \\$

continued



Thermo Scientific™ SMART SPME Arrows for TriPlus RSH SMART and TriPlus RSH autosamplers

| Description | Outer diameter (mm) | Phase thickness (µm) | Color code | Cat. no. (1/pack) | Cat. no. (3/pack) |
|---------------|--|-------------------------|-------------------|----------------------|----------------------|
| PDMS | 1.1 | 100 | Red | 36SA10P1-SM | 36SA10P3-SM |
| PDMS | 1.5 | 250 | Black | 36SA25P1-SM | 36SA25P3-SM |
| Polyacrylate | 1.1 | 100 | Gray | 36SA10A1-SM | 36SA10A3-SM |
| Carbon WR | 1.1 | 120 | Light blue | 36SA12B1-SM | 36SA12B3-SM |
| DVB/PDMS | 1.1 | 120 | Violet | 36SA12E1-SM | 36SA12E3-SM |
| C-WR/DVB/PDMS | 1.1 | 120 | Dark grey | 36SA11T1-SM | 36SA11T3-SM |
| Description | | | Cat. no. (5/pack) | | |
| | erent SMART SPME A ght blue, DVB/PDMS-v | | 36SA10M5-SM | | |

Note: fiber length is 20 mm



Thermo Scientific™ SMART SPME Fibers for TriPlus RSH SMART and TriPlus RSH autosamplers

| Description | Outer diameter (mm) | Phase thickness (µm) | Color code | Cat. no. (1/pack) | Cat. no. (3/pack) |
|----------------|---|-------------------------|-------------------|----------------------|----------------------|
| PDMS | 0.6 | 7 | Green | 36SP01P1-SM | 36SP01P3-SM |
| PDMS | 0.6 | 30 | Golden | 36SP03P1-SM | 36SP03P3-SM |
| PDMS | 0.6 | 100 | Red | 36SP10P1-SM | 36SP10P3-SM |
| Polyacrylate | 0.6 | 85 | Gray | 36SP08A1-SM | 36SP08A3-SM |
| Carbon WR/PDMS | 0.6 | 95 | Dark blue | 36SP09C1-SM | 36SP09C3-SM |
| DVB/C-WR/ PDMS | 0.6 | 50/30 | Dark grey | 36SP05T1-SM | 36SP05T3-SM |
| DVB/PDMS | 0.6 | 65 | Violet | 36SP06E1-SM | 36SP06E3-SM |
| Description | | | Cat. no. (5/pack) | | |
| | erent SMART SPME fil lark blue, DVB/carbon | 36SP08M5-SM | | | |

Note: fiber length is 20 mm

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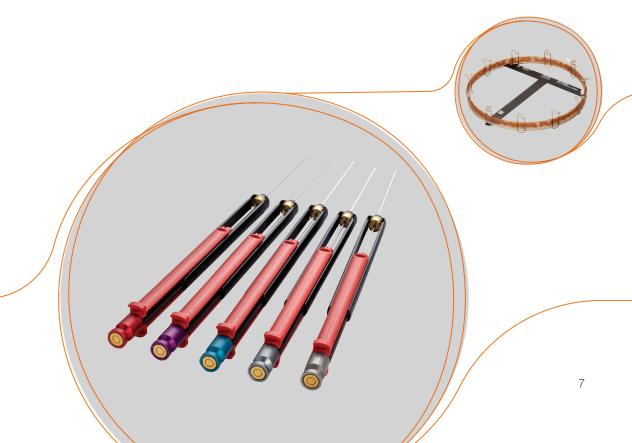


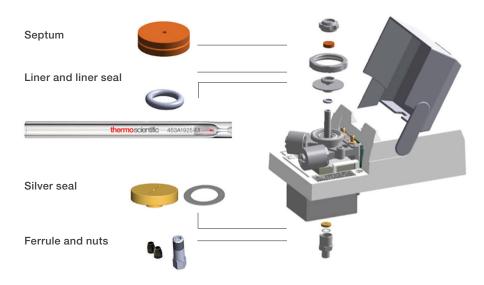
Thermo Scientific[™] manual syringes

| Volume (μL) | Gauge | Needle type | Gas tight | Cat. no. |
|----------------|-------|-------------|-----------|----------------|
| 5 | 26 | Fixed | No | 365C0741 (1PK) |
| 10 | 26 | Removable | No | 365D1171 (1PK) |
| 10 | 26 | Fixed | No | 365D1091 (1PK) |

Note: Needle length is 50 mm.

More manual syringes are available. Find out more at thermofisher.com/gcparts and the GC columns and accessories catalog.





iConnect SSL injector module

Thermo Scientific[™] inlet septa for Thermo Scientific[™] iConnect[™] Split/Splitless (SSL) Injector Module

| Description | ID (mm) | Recommended use | Quantity | Cat. no. |
|-------------|------------|---|-----------------|-------------|
| BTO | -1-1 | Low bleed at high temperature, ideal for GC-MS. | 50/blister pack | 31303233-BP |
| BTO 11 | 11 | Maximum temperature 400 °C | 50/glass jar | 31303233 |
| TD | 11 | Lour caring Maximum tamparatura 250 °C | 50/blister pack | 313G3230-BP |
| TR-green | | Low coring. Maximum temperature 350 °C | 50/glass jar | 313G3230 |
| Marathon | 11 | Highly durable, ideal for SPME. | 50/blister pack | 313P3233-BP |
| Maramon | | Maximum temperature 350 °C | 50/glass jar | 313P3233 |
| TR-blue | 11 | General purpose. Maximum temperature 250 °C | 50/glass jar | 313B3233 |



continued

Thermo Scientific™ liners for iConnect SSL injector module

| Description | ID (mm) | Packing | Recommended use | Quantity | Cat. no. (standard) | Quantity | Cat. no. (LinerGOLD) |
|-----------------------|--------------------|---------|---|----------|------------------------|-------------|-------------------------|
| Straight | 4 | Quartz | Split injection | 5/pack | 453A2265 | 5/pack | 453A2265-UI |
| | 4 | wool | Split Injection | 25/pack | 453A1262 | 25/pack | 453A1262-UI |
| Focus/precision liner | | Quartz | Split injection with high | 5/pack | 453A1255 | 5/pack | 453A1255-UI |
| | 4 | wool | repeatability, or injection with nano volume syringes | 25/pack | 453A1252 | 25/pack | 453A1252-UI |
| Straight, split cyclo | 4 | No | Split injection with high repeatability, ideal for components interact with wool or wool can't be used | _ | _ | 5/pack | 453A1375-UI |
| Direct straight liner | 1.2 | No | Headspace, SPME Fiber, Purge-and-trap | 5/pack | <u>453A1335</u> | 5/pack | 453A1335-UI |
| Direct straight liner | 1.7 | No | SPME Arrow | 3/pack | 453A0415 | 5/pack | 453A0415-UI |
| Single taper | 1 | Quartz | Splitless injection with high | 5/pack | 453A1925 | 5/pack | 453A1925-UI |
| | wool repeatability | | 25/pack | 453A2295 | 25/pack | 453A2922-UI | |
| Single taper | | | Splitless injection, ideal for | 5/pack | 453A1345 | 5/pack | 453A1345-UI |
| | 4 N | No | components interact with wool or wool can't be used | 25/pack | 453A2342 | 25/pack | 453A2342-UI |

Note: Liner length is 78.5 mm

More liner types are available. Find out more at thermofisher.com/gcparts and the GC columns and accessories catalog.

Thermo Scientific[™] liner seal for iConnect SSL injector module

| Description | Quantity | Cat. no. |
|---|----------|----------------|
| Liner sealing ring for SSL injector module | 5/pack | 29001320 |
| Liner sealing ring for SSL purge and trap adapter | Each | MI-290AA1-0001 |





continued

Thermo Scientific[™] base seals with washers for iConnect SSL injector module

| Description | ID (mm) | Recommended use | Quantity | Cat. no. |
|-----------------------|------------|---|----------|----------|
| Gold plated | 0.8 | Single column installation. Splitless injection | 10/pack | 290GA081 |
| Gold plated | 0.0 | Single column installation. Splittess injection | 2/pack | 290GA082 |
| 0-1-1-1-1-1-1 | 0.8 | Single column Installation. | 10/pack | 290GA084 |
| Gold plated, cross | | Split, splitless, SPME, P&T and headspace | 2/pack | 290GA083 |
| Ciltaly two ato al | 0.8 | Cincel and was installation Calible a injection | 10/pack | 290GA091 |
| Siltek-treated | | Single column installation. Splitless injection | 2/pack | 290GA092 |
| Siltek-treated, cross | 0.8 | Single column installation. Split, splitless, SPME, P&T and headspace | 10/pack | 290GA094 |

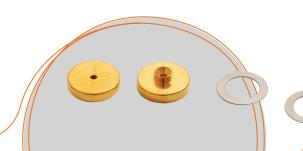
Thermo Scientific[™] ferrules and nuts for iConnect SSL injector module and Thermo Scientific[™] iConnect[™] FID, TCD, ECD, NPD, FPD Detectors

| Description | Recommended use | Quantity | Cat. no. (ferrule) | Quantity | Cat. no. (nut) |
|-----------------------------|------------------------|----------|-----------------------|----------|-------------------|
| Graphite ferrule | 0.1-0.32 mm ID column | 10/pack | 290GA139 | 5/pack | 35050458 |
| | 0.45-0.53 mm ID column | 10/pack | 290GA140 | 5/pack | 35050458 |
| | 0.1-0.25 mm ID column | 10/pack | 290VA191* | 5/pack | 35050458 |
| Graphite/ vespel ferrule | 0.32 mm ID column | 10/pack | 290VA192* | 5/pack | 35050458 |
| vesperientale | 0.53 mm ID column | 10/pack | 290VA193* | 5/pack | 35050458 |
| SCP-5000 | 0.1-0.25 mm ID column | 5/pack | 290VT221* | 5/pack | 35050458 |

^{*}Compatible with Spring Loaded Transfer Nut (Cat. no. 1R120434-0010) for MS interface line

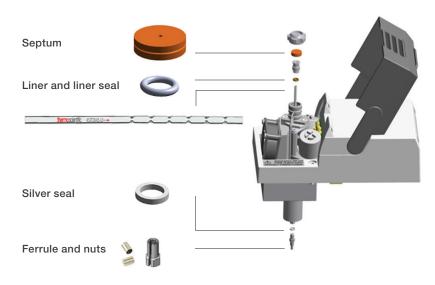
Thermo Scientific[™] ferrules and nuts for iConnect SSL injector module with Thermo Scientific[™] HeSaver-H₂Safer[™] Kit

| Description | Recommended use | Quantity | Cat. no. (ferrule) | Quantity | Cat. no. (nut) |
|---|---------------------|----------|-----------------------|----------|-------------------|
| SilTite FingerTite ferrules 0.35 mm ID | ≤ 0.25 mm ID column | 10/pack | 29063465 | 2/pack | 290SF303 |
| SilTite FingerTite ferrules 0.4 mm ID | 0.25 mm ID column | 10/pack | <u>29063466</u> | 2/pack | 290SF303 |
| SilTite FingerTite ferrules | 0.32 mm ID column | 10/pack | 29063467 | 2/pack | 290SF303 |
| SilTite FingerTite PRE-SWAGE tool | All ferrules above | _ | _ | Each | MI-311AE1-0001 |





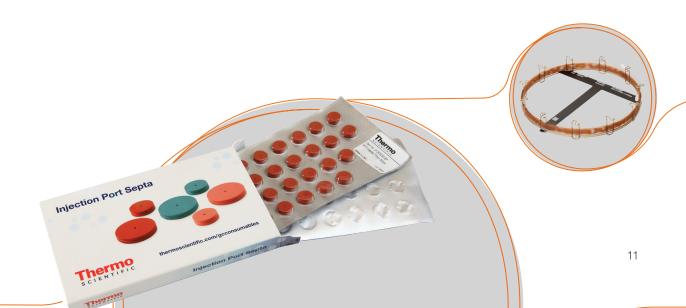
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iConnect PTV injector module

Thermo Scientific[™] inlet septa for Thermo Scientific[™] iConnect[™] Programmable Temperature Vaporizer (PTV) Injector Module

| Description | ID (mm) | Recommended use | Quantity | Cat. no. |
|--|--|---|-----------------|-----------------|
| BTO Low bleed at high temperature, ideal for GC-MS. Maximum temperature 400 °C | | Low bleed at high temperature, ideal for GC-MS. | 50/blister pack | 31303233-BP |
| | | 50/glass jar | 31303233 | |
| TR-green 11 | Low coring. Maximum temperature 350 °C | 50/blister pack | 313G3230-BP | |
| | 11 | Low coring. Maximum temperature 350 C | 50/glass jar | <u>313G3230</u> |
| Marathon | -1-1 | Highly durable, ideal for SPME. | | 313P3233-BP |
| Marathon 11 | 11 | Maximum temperature 350 °C | 50/glass jar | 313P3233 |
| TR-blue | 11 | General purpose. Maximum temperature 250 °C | 50/glass jar | 313B3233 |



continued

Thermo Scientific[™] liners for iConnect PTV injector module

| Liner type | ID (mm) | Packing | Recommended use | Quantity | Cat. no. |
|-----------------------|------------|---------|---|----------|-----------------|
| Concentric baffle | 2 | No | PTV splitless injection (< 2 µL). General applications, pesticides analysis | 5/pack | 453T2845-UI |
| Five baffles | 1 | No | PTV splitless/split Injection (< 2 µL). Active compounds. Medium/high boiling point solvent | 5/pack | 453T2171-UI |
| Siltek baffle | 2 | No | PTV splitless injection (< 2 µL). Active compounds | 5/pack | 453T2120 |
| Recessed gooseneck | 2 | Wool | PTV splitless/split injection (< 2 µL) for polar solvents, (<10 µL) for apolar solvents | 5/pack | 45352070 |
| Straight liner | 1 | No | PTV splitless injection (< 1 µL). High molecular weight compounds | 5/pack | 45352054 |
| Siltek straight metal | 2 | No | PTV splitless injection (< 1 µL) high temp applications (350-450 °C), i.e. SIMDIST | 2/pack | 45322044 |
| Siltek straight metal | 2 | Wool | Large volume injection (> 10 μL) | 2/pack | <u>45322056</u> |
| Sintered lining | 1 | No | Large volume injection (> 10 μL). Active compounds, thermally labile compounds | 5/pack | 45352060 |
| Silcosteel for OC | 1 | No | On-column injection. Thermally labile compounds, wide boiling point compounds | 2/pack | 45322052 |

Note: Liner length is 120 mm

 $More\ liner\ types\ are\ available.\ Find\ out\ more\ at\ thermofisher.com/gcparts\ and\ the\ \underline{GC\ columns\ and\ accessories\ catalog}.$





continued

Thermo Scientific[™] liner seals for iConnect PTV injector module

| Description | Quantity | Cat. no. |
|-------------------------------------|----------|----------|
| Liner sealing ring for PTV injector | Each | 29001318 |

Thermo Scientific[™] seals for iConnect PTV injector module

| Description | Recommended use | Quantity | Cat. no. |
|-------------|----------------------------|----------|----------|
| Silver seal | Single column installation | 2/pack | 29013820 |

Thermo Scientific[™] ferrules and nuts for iConnect PTV injector module

| Description | Recommended use | Quantity | Cat. no. (ferrule) | Quantity | Cat. no. (nut) |
|-------------------------------|-----------------------|----------|-----------------------|----------|-------------------|
| | 0.1-0.25 mm ID column | 10/pack | 29053488 | 5/pack | 35053221 |
| Encapsulated graphite ferrule | 0.32 mm ID column | 10/pack | 29053487 | 5/pack | 35053221 |
| | 0.53 mm ID column | 10/pack | 29053486 | 5/pack | 35053221 |

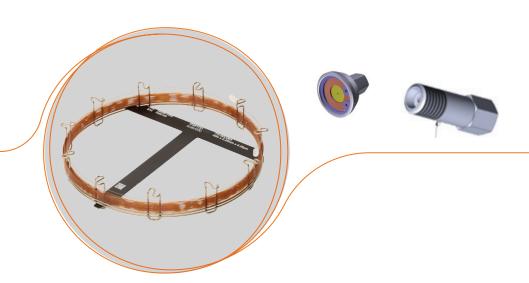
Note: Ferrules and nuts are compatible with TSI injector



Mass spectrometer transfer line connections

Thermo Scientific[™] ferrules and nuts for MS interface line

| Description | Recommended use | Quantity | Cat. no. (ferrule) | Quantity | Cat. no. (nut) |
|-------------------------|-------------------------------------|----------|-----------------------|----------|-------------------|
| | 0.1-0.25 mm ID column | 10/pack | 290VA191 | Each | 1R120434-0010 |
| Graphite/vespel ferrule | 0.32 mm ID column | 10/pack | 290VA192 | Each | 1R120434-0010 |
| | 0.53 mm ID column | 10/pack | 290VA193 | Each | 1R120434-0010 |
| SCP-5000 | 0.1-0.25 mm ID column for high temp | 5/pack | 290VT221 | Each | 1R120434-0010 |
| Craphita/vaanal farrula | 0.1-0.25 mm ID column | 10/pack | 29033496 | 5/pack | 290BT240 |
| Graphite/vespel ferrule | 0.32 mm ID column | 10/pack | 29033497 | 5/pack | 290BT240 |



Gas management

Thermo Scientific™ Super Clean™ Cartridge Gas Filters

| Description | Recommended use | Base included | Quantity | Cat. no. |
|---|---|---------------|----------|-----------|
| Indicating triple filter Moisture, oxygen, hydrocarbons | GC, GC-MS (carrier gas) | No | Each | 60180-824 |
| Indicating triple filter Moisture, oxygen, hydrocarbons | GC, GC-MS (carrier gas) | Yes | Each | 60180-830 |
| Indicating triple filter Moisture, oxygen, hydrocarbons-helium preconditioned | GC-MS, GC Eliminate stabilization time when using helium as carrier gas | No | Each | 60180-825 |
| Indicating triple filter Moisture, oxygen, hydrocarbons-helium preconditioned | GC-MS, GC Eliminate stabilization time when using helium as carrier gas | Yes | Each | 60180-829 |
| Single base | Easy and fast replacement of super clean cartridge filters | _ | Each | 60180-814 |
| Indicating filter kit (1× triple filter for carrier gas and make-up gas; 2× combi moisture/hydrocarbons filters for H ₂ and air) | GC-FID/NPD/FPD (PFPD) | Yes | Each | 60180-828 |
| Indicating triple filter with baseplate | GC-TCD, GC-ECD* | Yes | Each | 60180-830 |

 $^{^*}$ 2× 60180-830 is required for GC-ECD if the carrier gas and make-up gas are different.

Thermo Scientific™ Click-On™ Inline Gas Filters

| Description | Recommended use | Quantity | Cat. no. |
|--|---|--|---------------------------|
| Triple filter Moisture, oxygen, hydrocarbons | ICP-MS, GC | Each | 60180-805 |
| Triple filter Moisture, oxygen, hydrocarbons- helium preconditioned | GC-MS, GC Eliminate stabilization time when using helium as carrier gas | Each | <u>60180-806</u> |
| Combi Moisture, hydrocarbons | ICP-MS | Each | 60180-843 |
| Steel end fitting, 0.125 in. (1/8") | Easy and fast replacement of Click-On inline filter | 2/pack | 60180-810 |
| Description | Recommended use | Cat. no. (filter) | Cat. no (end fitting)* |
| 1x triple filter for carrier gas and 3x combi moisture/hydrocarbons filters for H ₂ , air and make-up gas | GC-FID/NPD/FPD (PFPD) | 1× <u>60180-805</u> 3× <u>60180-843</u> | 4x <u>60180-809</u> ** |
| 1× triple filter | GC-TCD, GC-ECD (carrier gas and make-up gas are the same) | 1× <u>60180-805</u> | 1× <u>60180-809</u> |
| 1× triple filter for carrier gas and 1× combi moisture/oxygen filter for make-up gas | GC-ECD (carrier gas and make-up gas are different) | 1× <u>60180-805</u> 1× <u>60180-804</u> | 2× <u>60180-809</u> |

^{*}End fittings are reusable

Equipment and kit

| Description | Quantity | Cat. no. |
|--|----------|-----------|
| Thermo Scientific™ GFM Pro Gas Flowmeter | Each | 66002-010 |
| Thermo Scientific™ GLD Pro Gas Leak Detector | Each | 66002-004 |
| GC installation kit | Each | 60180-888 |

^{** 1/8&}quot; brass. More end fittings and gas filters are available. Find out more at thermofisher.com/gcparts and the GC columns and accessories catalog.

GC columns

Thermo Scientific™ application-specific GC columns

| Description | ID (mm) | Length (m) | Film thickness (µm) | Cat. no. |
|-----------------|------------|----------------|------------------------|-------------------|
| TG-PBDE | 0.25 | 15 | 0.10 | <u>26061-0350</u> |
| TG-PAH | 0.25 | 60 | 0.10 | <u>26055-0120</u> |
| TG-Dioxin | 0.25 | 60 | 0.25 | 26066-1540 |
| TR-PCB 8MS | 0.25 | 50 | 0.25 | 26AJ148P |
| TR-Pesticide II | 0.25 | 30 + 5 (guard) | 0.25 | 26RD142F |
| TG-VMS GC | 0.18 | 20 | 1.00 | 26080-4950 |
| TG-VVOC B | 0.32 | 60 | 5.00 | 26058-5180 |
| TR-FAME | 0.25 | 100 | 0.20 | 260M238P |
| TR-FFAP | 0.25 | 30 | 0.25 | 260N142P |
| TR-DoA5 | 0.25 | 15 | 0.25 | 26AF130P |
| TG-ALC Plus I | 0.32 | 30 | 1.80 | 26063-3390 |
| TG-OCP I | 0.32 | 30 | 0.32 | 26078-5760 |
| TG-OPP I | 0.32 | 30 | 0.50 | 26076-2240 |
| TG-Mineral Oil | 0.32 | 15 | 0.15 | 26069-5230 |

More phases, dimensions, lengths, and film thicknesses are available. Find out more about application-specific GC columns.

Thermo Scientific[™] non-polar GC columns

| Description | ID (mm) | Length (m) | Film thickness (μm) | Cat. no. |
|----------------|------------|---------------|------------------------|------------|
| TG-1MS | 0.25 | 30 | 0.25 | 26099-1420 |
| TG-1MS | 0.32 | 30 | 0.25 | 26099-1430 |
| TG-1MT (metal) | 0.53 | 5 | 0.10 | 26M99-4130 |

More phases, dimensions, lengths, and film thicknesses are available. Find out more about non-polar GC columns.

Thermo Scientific™ low-polar GC columns

| Description | ID (mm) | Length (m) | Film thickness (μm) | Cat. no. |
|----------------|------------|----------------|------------------------|-------------------|
| TG-5SilMS | 0.25 | 30 | 0.25 | <u>26096-1420</u> |
| TG-5SilMS | 0.25 | 30 + 5 (Guard) | 0.25 | <u>26096-1425</u> |
| TG-5MS | 0.32 | 30 | 0.25 | <u>26098-1430</u> |
| TG-5MT (metal) | 0.25 | 30 | 0.25 | 26M98-1420 |
| TG-5MS AMINE | 0.25 | 30 | 0.25 | 26097-1420 |
| TG-XLBMS | 0.25 | 30 | 0.25 | 26079-1420 |

 $\label{thm:model} \mbox{More phases, dimensions, lengths, and film thicknesses are available. Find out more about $$\underline{low-polar\ GC\ columns.}$$$

GC columns continued

Thermo Scientific[™] mid-polar GC columns

| Description | ID (mm) | Length (m) | Film thickness (μm) | Cat. no. |
|-------------|------------|---------------|------------------------|------------|
| TG-1701MS | 0.25 | 30 | 0.25 | 26090-1420 |
| TG-1701MS | 0.32 | 30 | 0.25 | 26090-1430 |
| TG-17SilMS | 0.25 | 30 | 0.25 | 26072-1420 |
| TG-624SilMS | 0.32 | 30 | 1.80 | 26059-3390 |
| TG-624SilMS | 0.25 | 30 | 1.40 | 26059-3320 |
| TG-1301MS | 0.25 | 30 | 0.25 | 26091-1420 |
| TG-35MS | 0.25 | 30 | 0.25 | 26094-1420 |
| TG-225MS | 0.25 | 30 | 0.25 | 26083-1420 |

More phases, dimensions, lengths, and film thicknesses are available. Find out more about mid-polar GC columns.

Thermo Scientific[™] polar GC columns

| Description | ID (mm) | Length (m) | Film thickness (μm) | Cat. no. |
|-------------|------------|---------------|------------------------|------------|
| TG-WaxMS | 0.25 | 30 | 0.25 | 26088-1420 |
| TG-WaxMS | 0.32 | 30 | 0.25 | 26088-1430 |
| TG-WaxMS A | 0.25 | 30 | 0.25 | 26087-1420 |
| TG-WaxMS B | 0.25 | 30 | 0.25 | 26086-1420 |
| TG-POLAR | 0.25 | 60 | 0.20 | 26082-5020 |

More phases, dimensions, lengths, and film thicknesses are available. Find out more about polar GC columns.

Thermo Scientific™ TracePLOT™ GC columns

| Description | ID (mm) | Length (m) | Film thickness (μm) | Cat. no. |
|--|------------|---------------|------------------------|-------------------|
| TG-BOND Alumina (Na ₂ SO ₄) | 0.32 | 50 | 5 | <u>26001-6050</u> |
| TG-BOND Q | 0.32 | 30 | 10 | 26004-6030 |
| TG-BOND Q+ | 0.32 | 30 | 10 | 26005-6030 |
| TG-BOND Sieve 5A | 0.32 | 30 | 30 | 26003-6040 |

More phases, dimensions, lengths, and film thicknesses are available. Find out more about <u>PLOT columns</u>.

GC column connectors

Thermo Scientific[™] capillary guard columns

| Description | ID (mm) | Length (m) | Recommended use | Cat. no. |
|---------------------------------------|------------|---------------|--|-------------------|
| Thermo Scientific™ GuardGOLD™ columns | 0.53 | 2 | Protects against the analytical column | <u>26050-0253</u> |
| | 0.32 | 2 | contamination, focuses target analytes for better peak shape | 26050-0232 |
| Thermo Scientific™ HydroGOLD™ columns | 0.53 | 5 | Connecting GC to other devices, i.e. | 26H50-0553 |
| | 0.32 | 5 | purge-and-trap, headspace, TD | 26H50-0532 |

More column dimensions and lengths are available. Find out more from the GC columns and accessories catalog.

Thermo Scientific™ SilFlow™ Devices (Microfluidics)

| Description | Recommended use | Quantity | Cat. no. |
|-----------------------------|---|----------|-----------|
| 5-Port SilFlow MCD | Dean switch, 2D GC | Each | 60201-389 |
| | Backflush with 0.32 mm ID pre-column | Each | 60201-396 |
| 3-Port SilFlow MCD | Backflush with 0.53 mm ID pre-column | Each | 60201-397 |
| | Splitter, i.e. dual detectors | Each | 60201-398 |
| | < or = 0.25 mm ID column | 10/pack | 29063465 |
| SilTite FingerTite ferrules | 0.25 mm ID column | 10/pack | 29063466 |
| | 0.32 mm ID column | 10/pack | 29063467 |
| FingerTite nuts | _ | 10/pack | 290SF302 |
| Deactivated pre-column kit | Backflush with 0.53 mm ID pre-column for 60201-396 microfluidic | Each | 60201-387 |

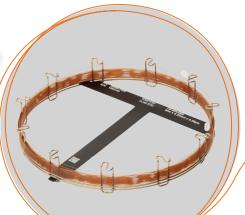
More parts are available. Find out more from the GC columns and accessories catalog.

SilTite unions

| Description | 1 st column ID (mm) | 2 nd column ID (mm) | Recommended use | Cat. no. |
|---------------------|-----------------------------------|-----------------------------------|--|------------|
| | 0.1-0.25 | 0.1-0.25 | Connecting capillary columns | 290SM301 |
| | 0.1-0.25 | 0.32 | Connecting guard column | 290SM302 |
| SilTite μ-Union kit | | 0.32 | to analytical column | 2903101302 |
| | 0.1-0.25 | 0.53 | Connecting guard column to analytical column 290SN | 290SM303 |
| | | 0.55 | | 2903101303 |

More parts are available. Find out more from the $\underline{\mathsf{GC}}$ columns and accessories catalog.





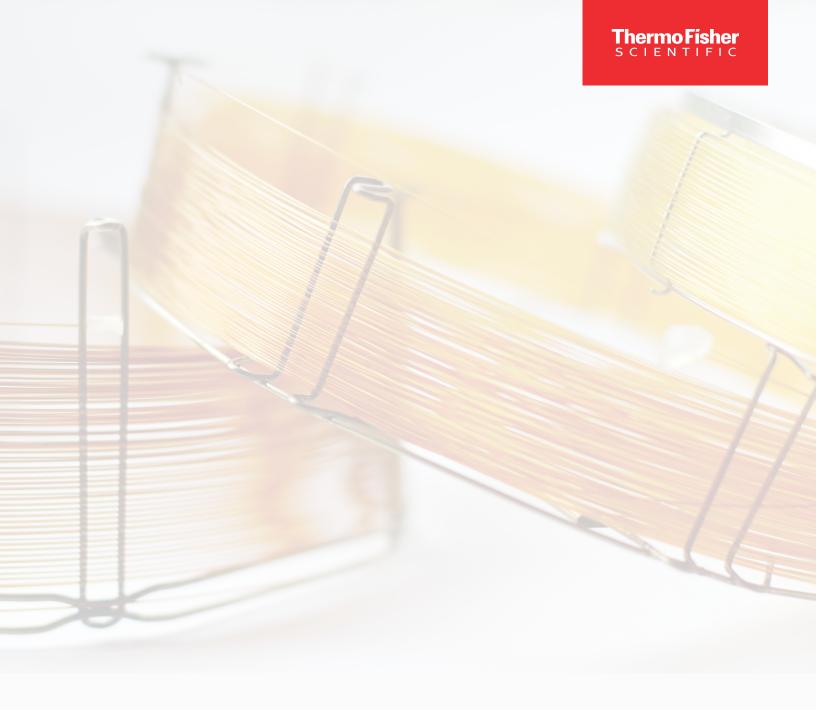


Sample handling

Thermo Scientific™ SureSTART™ vials and caps

| Description | Recommended use | Quantity | Cat. no. |
|---|---|----------|---------------|
| Vials and closures | | | |
| Amber crimp microvial | Low volume liquid injection. Light sensitive samples | 100/pack | 6PCV1103FIVAP |
| Amber screw microvial | Low volume liquid injection. Light sensitive samples | 100/pack | 6PSV9-03FIVAP |
| Amber crimp 2 mL vial | Liquid injection.Light sensitive samples | 100/pack | 6ACV11-2P |
| Amber screw 2 mL vial | Liquid Injection. Light sensitive samples | 100/pack | 6ASV9-2P |
| Thermo Scientific™ SureStop™ amber 2 mL vial | Liquid Injection. Light sensitive samples. High security | 100/pack | 6PSV9-2PSS |
| Clear crimp microvial | Low volume liquid injection | 100/pack | 6PCV11-03FIVP |
| Clear screw microvial | Low volume liquid injection | 100/pack | 6PSV9-03FIVP |
| Clear crimp 2 mL vial | Liquid Injection | 100/pack | 6ACV11-1P |
| Clear screw 2 mL vial | Liquid Injection | 100/pack | 6ASV9-1P |
| SureStop clear 2 mL vial | Liquid Injection. High security | 100/pack | 6PSV9-1PSS |
| Headspace vials | | | |
| Amber crimp 10 mL vial | Headspace. Light sensitive samples | 100/pack | 6ACV10-2R |
| Amber screw 10 mL vial | Headspace. Light sensitive samples | 100/pack | 6ASV10-2 |
| Amber crimp 20 mL vial | Headspace. Light sensitive samples | 100/pack | 6ACV20-2PE |
| Amber screw 20 mL vial | Headspace. Light sensitive samples | 100/pack | 6ASV20-2 |
| Clear crimp 9.5 mL vial | Headspace | 100/pack | 6PCV10-V1 |
| Clear crimp 10 mL vial | Headspace | 100/pack | 6ACV10-1R |
| Clear screw 10 mL vial | Headspace | 100/pack | 6ASV10-1 |
| Clear crimp 20 mL vial | Headspace | 100/pack | 6PCV20-1R |
| Clear screw 20 mL vial | Headspace | 100/pack | 6ASV20-1 |
| Caps | | | |
| Crimp cap, 11 mm | General purpose crimp seals | 100/pack | 6ACC11RT1 |
| Crimp cap, 11 mm | High sensitivity. MS compatible septa | 100/pack | 6PCC11ST101 |
| Thermo Scientific™ AVCS™ screw cap, 9 mm | High sensitivity | 100/pack | 6ASC9ST1 |
| Screw cap, 9 mm | High sensitivity | 100/pack | 6PMSC9ST1 |
| AVCS screw cap, 9 mm | High sensitivity. MS compatible septa | 100/pack | 6PSC9ST101 |
| Headspace caps | | | |
| Crimp cap, 20 mm | Magnetic transfer cap for headspace injection | 100/pack | 6PBCC20-ST3 |
| Screw cap, 18 mm | Magnetic transfer cap for headspace injection | 100/pack | 6PMSC18-ST2 |
| Crimp cap, 20 mm | Magnetic transfer cap. High temperature injection | 100/pack | 6PBCC20-STH |
| Crimp cap, 20 mm | Magnetic transfer cap. Thin seal for SPME injection | 100/pack | 6PBCC20-STME |
| Screw cap, 18 mm | Magnetic transfer cap. High temperature injection | 100/pack | 6PMSC18-STH |
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Learn more at thermofisher.com/chromatographyconsumables

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