

The background of the cover features a close-up, slightly blurred view of a gas chromatography column. The column is a metal mesh tube with numerous thin, parallel orange-colored wires or fibers running through it. The lighting is soft, highlighting the texture of the metal and the color of the internal wires. The overall aesthetic is clean and technical.

Heliflex AT[®]+

&

EconoCap EC[®]+

GC Columns
CATALOG
2020

Heliflex AT[®] - and Econo-Cap EC[®] - GC Capillary Columns Families

We offer two lines of capillary columns to suit every application and budget; Heliflex AT[®]- and Econo-Cap EC[®]-.

Regardless of the capillary line you choose, every manufactured capillary column has a guarantee of column performance.

Heliflex AT[®]- Capillary Columns

- High-performance individually tested columns
- 7" (or 5") rugged cage
- Most complete selection of phases
- Custom columns available to suit your specific application
- FAST GC columns available to speed up your analysis

Heliflex AT[®]- Capillary Columns are manufactured from the highest quality polyimide coated synthetic fused silica. They are mounted on a rugged wear-resistant cage. Each Heliflex AT[®]- Column is individually tested to guarantee column performance and comes with a test chromatogram, instruction manual, capillary end caps, and a free ceramic column cutter.

Note: column nuts and ferrules are not included. If the column you need is not available in our standard offering, request a custom Heliflex AT[®]- Column made to your individual specifications.

Econo-Cap EC[®]- Capillary Columns

- Best value in capillary columns anywhere
- Batch tested to dramatically reduce price
- Ideal for aggressive applications
- Available in the most popular phases

We've taken our most popular capillary columns and perfected the manufacturing procedure to the point that reproducibility is assured, producing them one-by-one and carefully following each step of the production.

This allows us to test these columns in batches instead of individually, while still offering a guarantee. Batch testing significantly reduces cost in production without sacrificing quality.

Each Econo-Cap EC[®]- Capillary Column comes with a copy of the batch test results, an instruction manual, capillary end caps and a free ceramic column cutter.

Note: column nuts and ferrules are not included.

| Available Heliflex AT [®] - Phases | |
|---|------|
| Phase | Page |
| Heliflex AT [®] -1ms+ | 3 |
| Heliflex AT [®] -1ht+ | 3 |
| Heliflex AT [®] -1+ | 4 |
| Heliflex AT [®] -5ms+ | 5 |
| Heliflex AT [®] -5+ | 5 |
| Heliflex AT [®] -20+ | 6 |
| Heliflex AT [®] -50+ | 6 |
| Heliflex AT [®] -1301+ | 6 |
| Heliflex AT [®] -35+ | 7 |
| Heliflex AT [®] -35ms+ | 7 |
| Heliflex AT [®] -210+ | 8 |
| Heliflex AT [®] -1701+ | 8 |
| Heliflex AT [®] -WAX+ | 9 |
| Heliflex AT [®] -WAXms+ | 9 |
| Heliflex AT [®] -AquaWax+ | 10 |
| Heliflex AT [®] -AquaWax DA+ | 10 |
| Heliflex AT [®] -1000+ | 11 |
| Heliflex AT [®] -502.2+ | 11 |
| Heliflex AT [®] -624+ | 12 |
| Heliflex AT [®] -225+ | 12 |
| Heliflex AT [®] -SILAR-90+ | 13 |
| Heliflex AT [®] -SILAR-100+ | 13 |
| Heliflex AT [®] -3710+ | 14 |
| Heliflex AT [®] -Petro+ | 14 |
| Heliflex AT [®] -Sulfur+ | 14 |

In this catalog only the most common stationary phases and GC column types are reported.
Contact us for other items and custom products.

| Available Econo-Cap EC [®] - Phases | |
|--|------|
| Phase | Page |
| Econo-Cap EC [®] -1+ | 4 |
| Econo-Cap EC [®] -5+ | 6 |
| Econo-Cap EC [®] -WAX+ | 10 |
| Econo-Cap EC [®] -1000+ | 11 |

tech tip

Temperature limits

Our GC capillary columns are temperature rated. In some cases, we list two maximum operating temperatures; the lower one is for isothermal condition and the higher one for temperature-programmed condition.

Capillary Column Phase Cross Reference

Use the chart below to cross reference manufacturers' stationary phases as well as USP method designations to Heliflex AT[®]- and Econo-Cap EC[®]-equivalent columns. Slight variations in selectivity may result between different manufacturers' columns.

Standard Phase Cross Reference

| Standard Phase Cross Reference | | | |
|---|--|------------------------------|--|
| Composition | Heliflex, Econo-Cap Brand | USP Designation | Similar Phases |
| 100% Dimethylpolysiloxane | AT [®] -1ms+ | G1, G2, G38 | DB-1ms, HP-1ms, Rtx [®] -1ms, MEGA-1 MS, CP-Sil 5CB low-bleed/ms |
| 100% Dimethylpolysiloxane | AT [®] -1ht+, AT [®] -1+ EC [®] -1+ | G1, G2, G38 | 007-1, CP-Sil 5CB, DB-1, DB-1ht, HP-1, HP-101, MEGA-1, MEGA-1 HT OV [™] -1, RSL-150, RSL-160, Rtx [®] -1, SE-30 [™] , SPB [™] -1, SPB [™] -Sulfur, ULTRA-1, SP-2100, BP-1, DC-200, PE-1, ZB-1 |
| 5% Phenyl equivalent Polysilphenylene-Siloxane | AT [®] -5ms+ | | DB-5ms, Rtx [®] -5 Sil ms, BPX [™] -5, 007-5ms, MEGA-5 MS, MEGA-5 MS Xil, HP-5ms |
| 5% Phenyl - 95% Methylpolysiloxane | AT [®] -5+ EC [®] -5+ | G27, G36 | 007-2, CP-Sil 8CB, DB-5, DB-5.625, DB-5ht, HP-5, MEGA-5, HP-5ms, OV [™] -5, PTE-5, PTE-5QTM, PAS-5, RSL-200, Rtx [®] -5, Rtx [®] -5ms, SAC-5, SE [™] -54, SPB [™] -5, ULTRA-2, XTI-5, SE [™] -52, BP-5, PE-2, ZB-5 |
| 20% Phenyl - 80% Methylpolysiloxane | AT [®] -20+ EC [®] -20+ | G28, G32 | 007-7, Rtx [®] -20, SPB [™] -20, VOCOL [™] , MEGA-20, PE-7 |
| 35 Phenyl - 65% Methylpolysiloxane | AT [®] -35ms+ AT [®] -35+ | G42 | DB-35ms, Rtx [®] -35, SPB [™] -35, SUP-HERB [™] , MDN-35, BPX [™] -35, MEGA-35, 007-11, DB-35, DB-35ms, HP-35, RSL-300, Rtx [®] -35, SPB [™] -35, SPB [™] -608, OV [™] -11, PE-35, SUP-HERB [™] , MEGA-35 MS |
| 50 Phenyl - 50% Methylpolysiloxane | AT [®] -50+ | G3 | DB-17ms, H5-50+, Rtx [®] -50, SP-2250, SPB [™] -50, SPB [™] -17, BPX [™] -50, Rtx [®] -65TG, BPX [™] -50, CP-TAB-CB, MEGA-17, MEGA-17 MS, MEGA-17 HT 007-17, DB-17, DB-17ht, HP-17, HP-50+, Rtx [®] -50, SP-50, SP-2250, SPB [™] -50, CP-Sil 24CB, PE-17, ZB-50 |
| 6% Cyanopropylphenyl - 94% Methylpolysiloxane | AT [®] -624+ AT [®] -1301+ | G43 | 007-1301, DB-624, DB-1301, HP-1301, HP-624, MEGA-624, MEGA-1301, Rtx [®] -1301, Rtx [®] -624, SPB [™] -1301, SPB [™] -624, 007-624, ZB-624 |
| 14% Cyanopropylphenyl - 86% Methylpolysiloxane | AT [®] -1701+ | | 007-1701, CP-Sil 19CB, DB-1701, HP-1701, OV [™] -1701, MEGA-1701, PAS-1701, Rtx [®] -1701, SPB [™] -1701, BP-10, ZB-1701 |
| Trifluoropropyl - Methylpolysiloxane | AT [®] -210+ | G6 | DB-210, RSL-400, Rtx [®] -200, OV [™] -202, OV [™] -210, OV [™] -215, MEGA-200, QF-1, SP-2401 |
| 50% Cyanopropylphenyl - 50% Methylpolysiloxane | AT [®] -225+ | G7 | 007-225, CP-Sil 43CB, DB-225, HP-225, OV [™] -225, RSL-500, Rtx [®] -225, MEGA-225, BP-225, PE-225 |
| Poly 90% biscyanopropyl - 10% Cyanopropylphenyl siloxane | AT [®] -SILAR-90+ | G8 | DB-23, CP-Sil 84, Rtx [®] -2330, SP-2330 |
| Polybiscyanopropylsiloxane | AT [®] -SILAR-100+ | G5 | CP-Sil 88, Rtx [®] -2330, MEGA-10, SP-2340 |
| Polyethyleneglycol | AT [®] -WAXms+ AT [®] -WAX+ AT [®] -AquaWax+ EC [®] -WAX+ | G14, G15 G16, G20, G39 | DB-WAX, Rtx [®] -WAX, Supelcowax [™] -10, MEGA-WAX, MEGA-WAX MS, MEGA-WAX Plus, 007-CW, Carbowax [®] 20M, CP-Wax 52CB, DB-WAXetr, DB-WAX, Rtx [®] -WAX, HP-20M, HP-Wax, Innowax [™] , Omegawax [™] , Stabilwax [®] , Supelcowax [®] -10, Superox [®] II, BP-20, ZB-WAX |
| Polyethyleneglycol Acid Modified | AT [®] -1000+ EC [®] -1000+ AT [®] -AquaWax DA+ | G25, G35 | 007-FFAP, CP-Wax 58CB, DB [™] -FFAP, HP [™] -FFAP, Nuko [™] , MEGA-FFAP EXT MEGA-ACID (FFAP), OV [™] -351, SP-1000, Stabilwax [®] -DA, Superox [®] -FA, BP-21 |
| Polyethyleneglycol Base Modified | AT [®] -CAM+ | | Stabilwax [®] -DB, CAM, Carbowax [®] Amine, MEGA-WAX BA, CP Wax 51 |
| PONA Analysis | AT [®] -Petro+ | | 007-1-100-0.5F, CP-Sil PONA CB, DB-Petro100, Petrocol [™] DH, PONA, MEGA-1 PONA, Ttx-1PONA, HP-PONA |

Specialty Columns Cross Reference

| Specialty Phases Cross Reference | | |
|----------------------------------|--------------------------|--|
| EPA Method 502.2 | AT [®] -502.2+ | 007-624, 007-502, DB-502.2, DB-VRX, HP-624, HP-VOC, MST-502.2, MXT-624, MXT-Volatiles, OV [™] -624, Rtx [®] -502.2, Rtx [®] -624, Rtx [™] -Volatiles, VOCOL [™] |
| Sulfur Analysis | AT [®] -Sulfur+ | SPB [™] -1 Sulfur |

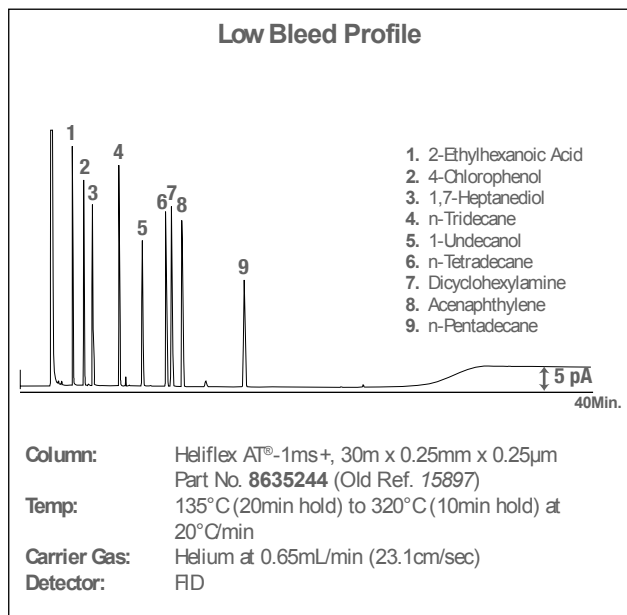
In this catalog only the most common stationary phases and GC column types are reported. Contact us for other items and custom products.

Heliflex AT[®]-1ms+

- Guaranteed low-bleed characteristics
- Specifically designed for mass spec analysis
- Highly inert
- Similar to DB-1ms, HP-1ms, Rtx[®]-1ms, MEGA-1 MS, CP-Sil 5CB low-bleed/MS, MDN-1

AT[®]-1ms+ is a line of high-performance low bleed non-polar columns designed specifically for use with mass spectrometers. They are ideal for pharmaceutical, environmental, petrochemical, and food and fragrance analysis, or any GC/MS analysis requiring a 100% dimethylpolysiloxane-type polarity capillary column.

| Heliflex AT [®] -1ms+ Specifications | |
|---|--|
| Phase: | 100% Dimethylpolysiloxane |
| Polarity: | Non-polar |
| Max. Temp.: | 330/350°C* |
| USP Designation: | G1, G2, G38 |
| Ideal For: | Mass Spec Analysis for Environmental, PAH, CLP Pesticides, Steroids, and Drugs |



Heliflex AT[®]-1ms+ Capillary Columns

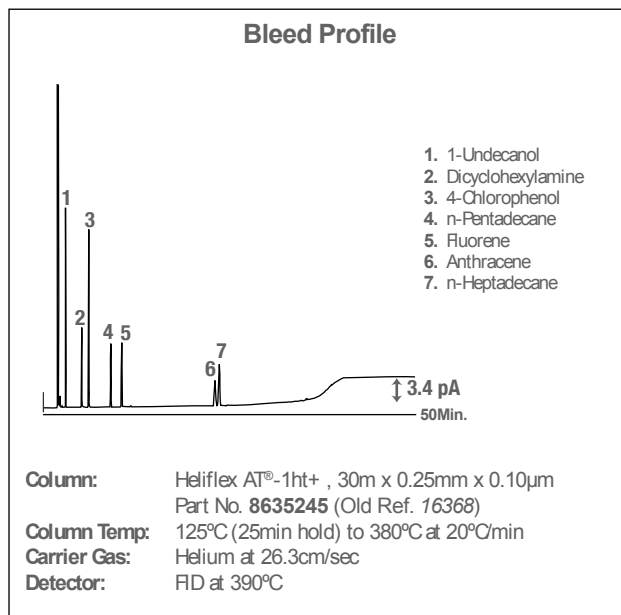
| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.10µm | -60–340/350°C | 15884 | 8635243 |
| | 0.25mm | 0.25µm | -60–330/350°C | 15897 | 8635244 |
| | 0.32mm | 0.25µm | -60–330/350°C | 15938 | 8635273 |
| 60m | 0.25mm | 0.25µm | -60–330/350°C | 15941 | 8635354 |
| | 0.32mm | 0.25µm | -60–330/350°C | 15944 | 8635377 |

Heliflex AT[®]-1ht+

Shorten Your Analysis Time with High-Temperature/Low-Bleed Columns

- Faster analysis time for high boiling compounds
- Better peak detection at lower concentrations
- Individually bleed tested at 380°C
- Similar to 007-1, CP-Sil 5CB, DB-1, DB-1ht, HP-1, HP-101, OV[™]-1, RSL-150, RSL-160, Rtx[®]-1, SE-30[™], SPB[™]-1, SPB[™]-Sulfur, ULTRA-1, SP-2100, BP-1, DC-200, MEGA-1 HT, PE-1, ZB-1

| Heliflex AT [®] -1ht+ Specifications | |
|---|---|
| Phase: | 100% Dimethylpolysiloxane |
| Polarity: | Non-polar |
| Max. Temp.: | 380/400°C* |
| USP Designation: | G1, G2, G38 |
| Ideal For: | High Boiling Compounds Waxes, Crude Oils, and Triglycerides |



Heliflex AT[®]-1ht+ GC Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|-------|----------------------------|---------------|----------------|
| 15m | 0.25mm | 0.1µm | -60–400°C | 16367 | 8635143 |
| 30m | 0.25mm | 0.1µm | -60–400°C | 16368 | 8635245 |
| 60m | 0.25mm | 0.1µm | -60–400°C | 16369 | 8635355 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Custom Capillary Coiling Available
 Custom Capillary Column Dimensions Available
 Custom Capillary Column with Integral Guard Available
 FAST-GC narrow-bore Column Dimensions Available

Contact us for more info

Heliflex AT[®]-1+

- Excellent general purpose columns
- Similar to DB-1, Rtx[®]-1, SPB[™]-1, SPB[™]-Sulfur, SP-2100, HP-1, HP-101, ULTRA-1, BP-1, CP-Sil 5CB, 007-1, OV-1, SE[™]-30, DC-200, RSL-150, RSL-160, MEGA-1, PE-1, ZB-1

Heliflex AT[®]-1+ Specifications

| | |
|------------------|----------------------------------|
| Phase: | 100% Dimethylpolysiloxane |
| Polarity: | Non-polar General Purpose Column |
| USP Designation: | G1, G2, G38 |
| Ideal For: | General Purpose |

Heliflex AT[®]-1+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. | |
|--------|--------|--------|----------------------------|---------------|----------------|----------------|
| 10m | 0.25mm | 0.20µm | -60–330/350°C | 932510 | 8635081 | |
| | 0.32mm | 0.10µm | -60–330/350°C | 16868 | 8635090 | |
| | 0.32mm | 0.25µm | -60–330/350°C | 13755 | 8635089 | |
| | 0.32mm | 0.30µm | -60–330/350°C | 933210 | 8635091 | |
| | 0.53mm | 0.25µm | -60–330/350°C | 16840 | 8635106 | |
| | 0.53mm | 1.20µm | -60–320/330°C | 935110 | 8635105 | |
| | 0.53mm | 2.65µm | -60–300°C | 16849 | 8635104 | |
| | 0.53mm | 5.00µm | -60–300°C | 16842 | 8635103 | |
| | 15m | 0.25mm | 0.10µm | -60–330/350°C | 13649 | 8635121 |
| | | 0.25mm | 0.25µm | -60–330/350°C | 13753 | 8635123 |
| 0.25mm | | 1.00µm | -60–320/330°C | 13653 | 8635122 | |
| 0.32mm | | 0.10µm | -60–330/350°C | 13673 | 8635147 | |
| 0.32mm | | 0.25µm | -60–330/350°C | 13757 | 8635150 | |
| 0.32mm | | 1.00µm | -60–320/330°C | 13698 | 8635148 | |
| 0.32mm | | 5.00µm | -60–300°C | 16836 | 8635151 | |
| 0.53mm | | 0.15µm | -60–330/350°C | 13945 | 8635187 | |
| 0.53mm | | 1.20µm | -60–320/330°C | 935115 | 8635188 | |
| 0.53mm | | 1.50µm | -60–320/330°C | 13905 | 8635181 | |
| 0.53mm | | 3.00µm | -60–300°C | 13893 | 8635184 | |
| 0.53mm | | 5.00µm | -60–300°C | 16851 | 8635183 | |
| 25m | | 0.25mm | 0.20µm | -60–330/350°C | 932525 | 5123485 |
| | | 0.32mm | 0.30µm | -60–330/350°C | 933225 | 8635901 |
| 30m | 0.25mm | 0.10µm | -60–330/350°C | 13663 | 8635233 | |
| | 0.25mm | 0.25µm | -60–330/350°C | 13638 | 8635235 | |
| | 0.25mm | 1.00µm | -60–320/330°C | 13639 | 8635236 | |
| | 0.32mm | 0.25µm | -60–330/350°C | 13640 | 8635254 | |
| | 0.32mm | 0.30µm | -60–330/350°C | 933230 | 8635257 | |
| | 0.32mm | 1.00µm | -60–320/330°C | 13641 | 8635255 | |
| | 0.32mm | 3.00µm | -60–300°C | 13702 | 8635256 | |
| | 0.32mm | 5.00µm | -60–300°C | 16838 | 8635253 | |
| | 0.53mm | 0.50µm | -60–330/350°C | 14038 | 8635302 | |
| | 0.53mm | 1.00µm | -60–320/330°C | 13515 | 8635304 | |
| | 0.53mm | 1.20µm | -60–320/330°C | 935130 | 8635307 | |
| | 0.53mm | 1.50µm | -60–320/330°C | 13908 | 8635305 | |
| | 30m | 0.53mm | 2.65µm | -60–300°C | 16876 | 8635303 |
| | | 0.53mm | 3.00µm | -60–300°C | 13897 | 8635301 |
| | | 0.53mm | 5.00µm | -60–300°C | 16843 | 8635306 |
| | 50m | 0.25mm | 0.20µm | -60–330/350°C | 932550 | 8635322 |
| 60m | 0.25mm | 0.25µm | -60–330/350°C | 13666 | 8635334 | |
| | 0.25mm | 1.00µm | -60–320/330°C | 13667 | 8635336 | |
| | 0.32mm | 0.10µm | -60–330/350°C | 13700 | 8635363 | |
| | 0.32mm | 1.00µm | -60–320/330°C | 13669 | 8635362 | |
| | 0.32mm | 3.00µm | -60–300°C | 13703 | 8635364 | |
| | 0.32mm | 5.00µm | -60–300°C | 13704 | 8635365 | |
| | 0.53mm | 3.00µm | -60–300°C | 13902 | 8635390 | |
| | 0.53mm | 5.00µm | -60–300°C | 13810 | 8635392 | |
| | 100m | 0.25mm | 0.25µm | -60–330/350°C | 13972 | 8635902 |

Econo-Cap EC[®]-1+

- Batch tested to dramatically reduce price

Econo-Cap EC[®]-1+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.25µm | -60–330/350°C | 19652 | 8635041 |
| | 0.32mm | 0.25µm | -60–330/350°C | 19651 | 8635047 |
| | 0.32mm | 1.00µm | -60–320/330°C | 19660 | 8635048 |
| | 0.53mm | 1.20µm | -60–320/330°C | 19656 | 8635057 |

Econo-Cap EC[®]-1+ Capillary Columns, Six Pack

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.25µm | -60–330/350°C | 196526 | 5122228 |
| 30m | 0.32mm | 0.25µm | -60–330/350°C | 196516 | 8635903 |
| 30m | 0.53mm | 1.20µm | -60–320/330°C | 196566 | 8635904 |

best value

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Contact us for more info

Custom Capillary Coiling **Available**
 Custom Capillary Column Dimensions **Available**
 Custom Capillary Column with Integral Guard **Available**
 FAST-GC narrow-bore Column Dimensions **Available**

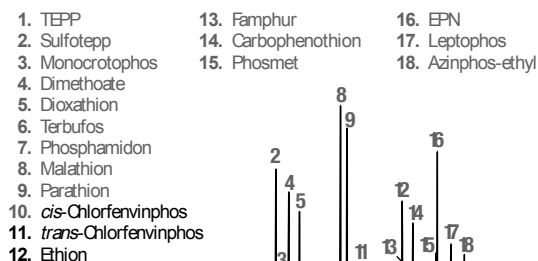
Heliflex AT[®]-5ms+

- Similar to DB-5ms, Rtx[®]-5 Sil ms, MEGA-5 MS, MEGA-5 MS Xil, HP-5ms, BPX[™]-5, 007-5ms

The Heliflex AT[®]-5ms + capillaries are ideal for environmental, pharmaceutical, and petrochemical analysis, or any GC/MS analysis requiring a 5% phenyl-type polarity capillary column.

| Heliflex AT [®] -5ms+ Specifications | |
|---|--|
| Phase: | 5% Phenyl equivalent Polysilphenylene-Siloxane |
| Polarity: | Non-polar |
| USP Designation: | G27, G36 |
| Ideal For: | Mass Spec Analysis—General Application |

Organophosphorus Pesticides



Column: Heliflex AT[®]-5ms+, 30m x 0.25mm x 0.25µm
Part No. **8635225** (Old Ref. 15807)
Temp: 120°C (3min hold) to 285°C at 5°C/min (4min hold)
Carrier Gas: Helium, 26cm/sec
Detector: MSD

Heliflex AT[®]-5ms+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 15m | 0.25mm | 0.25µm | -60–330/350°C | 15801 | 8635142 |
| 30m | 0.25mm | 0.10µm | -60–330/350°C | 15806 | 8635224 |
| | 0.25mm | 0.25µm | -60–330/350°C | 15807 | 8635225 |
| | 0.25mm | 0.50µm | -60–330/350°C | 15808 | 8635226 |
| | 0.25mm | 1.00µm | -60–320/330°C | 15809 | 8635227 |
| | 0.32mm | 0.25µm | -60–330/350°C | 15894 | 8635270 |
| 60m | 0.32mm | 1.00µm | -60–320/330°C | 15895 | 8635271 |
| | 0.25mm | 0.10µm | -60–330/350°C | 15879 | 8635351 |
| | 0.25mm | 0.25µm | -60–330/350°C | 15891 | 8635353 |
| | 0.25mm | 1.00µm | -60–320/330°C | 15892 | 8635352 |
| | 0.32mm | 0.25µm | -60–330/350°C | 15896 | 8635379 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Heliflex AT[®]-5+

- Excellent general purpose column
- Similar to DB-5, Rtx[®]-5, SPB[™]-5, HP-5, MEGA-5, ULTRA-2, BP-5, CP-Sil 8CB, 007-2, OV[™]-5, SE[™]-52, SE[™]-54, RSL-200, ZB-5

| Heliflex AT [®] -5+ Specifications | |
|---|------------------------------------|
| Phase: | 5% Phenyl - 95% Methylpolysiloxane |
| Polarity: | Non-polar |
| Max. Temp.: | 330/350°C * |
| USP Designation: | G27, G36 |
| Ideal For: | General Applications |

Heliflex AT[®]-5+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 10m | 0.53mm | 2.65µm | -60–300°C | 16853 | 8635102 |
| | 15m | 0.25mm | 0.25µm | -60–330/350°C | 13758 |
| 15m | 0.25mm | 1.00µm | -60–320/330°C | 13706 | 8635126 |
| | 0.32mm | 0.25µm | -60–330/350°C | 13887 | 8635157 |
| | 0.32mm | 1.00µm | -60–320/330°C | 13710 | 8635156 |
| | 0.53mm | 1.20µm | -60–320/330°C | 955115 | 8635203 |
| | 0.53mm | 1.50µm | -60–320/330°C | 13906 | 8635201 |
| 25m | 0.25mm | 0.20µm | -60–330/350°C | 952525 | 5123553 |
| 30m | 0.25mm | 0.10µm | -60–330/350°C | 13707 | 8635221 |
| | 0.25mm | 0.25µm | -60–330/350°C | 13656 | 8635222 |
| | 0.25mm | 0.50µm | -60–330/350°C | 13309 | 8635220 |
| | 0.25mm | 1.00µm | -60–320/330°C | 13657 | 8635223 |
| | 0.32mm | 0.25µm | -60–330/350°C | 13658 | 8635260 |
| | 0.32mm | 1.00µm | -60–320/330°C | 13659 | 8635261 |
| | 0.53mm | 0.50µm | -60–330/350°C | 14045 | 8635311 |
| | 0.53mm | 1.00µm | -60–320/330°C | 13798 | 8635309 |
| | 0.53mm | 1.20µm | -60–320/330°C | 955130 | 8635314 |
| | 0.53mm | 1.50µm | -60–320/330°C | 13909 | 8635310 |
| | 0.53mm | 2.65µm | -60–300°C | 16857 | 8635312 |
| | 0.53mm | 5.00µm | -60–300°C | 16859 | 8635313 |
| | 60m | 0.25mm | 0.25µm | -60–330/350°C | 13676 |
| 0.32mm | | 0.25µm | -60–330/350°C | 13678 | 8635369 |
| 0.32mm | | 1.00µm | -60–320/330°C | 13679 | 8635366 |
| 0.53mm | | 1.00µm | -60–320/330°C | 14076 | 8635397 |
| 0.53mm | | 1.20µm | -60–320/330°C | 13820 | 8635396 |
| 100m | 0.53mm | 5.00µm | -60–300°C | 13829 | 8635394 |
| | 0.32mm | 0.25µm | -60–330/350°C | 14011 | 8635905 |

Contact us
for more info

Custom Capillary Coiling **Available**
 Custom Capillary Column Dimensions **Available**
 Custom Capillary Column with Integral Guard **Available**
 FAST-GC narrow-bore Column Dimensions **Available**

Econo-Cap EC[®]-5+

- Batch tested to dramatically reduce price

Econo-Cap EC[®]-5+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 15m | 0.53mm | 1.20µm | -60–320/330°C | 19645 | 8635034 |
| 30m | 0.25mm | 0.25µm | -60–330/350°C | 19647 | 8635042 |
| | 0.32mm | 0.25µm | -60–330/350°C | 19646 | 8635050 |
| | 0.53mm | 1.00µm | -60–320/330°C | 19671 | 8635058 |
| | 0.53mm | 1.20µm | -60–320/330°C | 19657 | 8635059 |

Econo-Cap EC[®]-5+ Capillary Columns, Six Pack

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.25µm | -60–330/350°C | 196476 | 5122223 |
| | 0.32mm | 0.25µm | -60–330/350°C | 196466 | 5122221 |
| | 0.53mm | 1.20µm | -60–320/330°C | 196576 | 5122237 |

best
value

Heliflex AT[®]-50+

- General purpose column
- Similar to DB-17, DB-17ht, Rtx[®]-50, BPX[™]-50, SPB[™]-50, SP-2250, HP-50+, HP-17, 007-17, MEGA-17, OV[™]-17, CP-Sil 24CB, PE-17, ZB-50

Heliflex AT[®]-50+ Specifications

| | |
|-------------------|---|
| Phase: | 50% Phenyl - 50% Methylpolysiloxane |
| Polarity: | Intermediate Polarity |
| USP Code: | G3 |
| Ideal For: | Pesticides, Herbicides, Phthalate Esters, Free Phenols, and Basic Drugs |

Heliflex AT[®]-50+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 15m | 0.25mm | 0.25µm | 40–320/340°C | 13837 | 8635137 |
| | 0.53mm | 1.00µm | 40–280/300°C | 13876 | 8635196 |
| 30m | 0.25mm | 0.25µm | 40–320/340°C | 13839 | 8635241 |
| | 0.32mm | 0.25µm | 40–320/340°C | 13858 | 8635280 |
| | 0.53mm | 0.50µm | 40–300/320°C | 13991 | 8635316 |
| | 0.53mm | 1.00µm | 40–280/300°C | 13878 | 8635315 |

Heliflex AT[®]-20+

- Unique polarity between non-polar and mid-range
- Similar to 007-7, Rtx[®]-20, SPB[™]-20, VOCOL[™], PE-7, MEGA-20

Heliflex AT[®]-20+ Specifications

| | |
|-------------------------|-------------------------------------|
| Phase: | 20% Phenyl - 80% Methylpolysiloxane |
| Polarity: | Intermediate Polarity |
| USP Designation: | G28, G32 |
| Ideal For: | Volatile Compounds and Solvents |

Heliflex AT[®]-20+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 15m | 0.25mm | 0.25µm | -20–320/340°C | 13838 | 8635138 |
| 30m | 0.25mm | 0.25µm | -20–320/340°C | 13857 | 8635242 |
| | 0.53mm | 1.00µm | -20–300/320°C | 13882 | 8635299 |
| | 0.53mm | 1.20µm | -20–300/320°C | 13932 | 8635300 |

Heliflex AT[®]-1301+

- Unique polarity makes it ideal for a range of applications
- Similar to BP624, DB-1301, Rtx[®]-1301, Rtx[®]-624, HP-1301, HP-624, DB-624, 007-624, 007-1301, MEGA-1301, SPB[™]-1301, SPB[™]-624, ZB-624

Heliflex[®] AT[™]-1301 Specifications

| | |
|-------------------|--|
| Phase: | 6% Cyanopropylphenyl - 84% Methylpolysiloxane |
| Polarity: | Intermediate Polarity |
| USP Code: | G43 |
| Ideal For: | Volatile Organics, Pharmaceuticals, and EPA Method 612 |

Heliflex AT[®]-1301+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|-----------------|
| 30m | 0.53mm | 1.00µm | -20–240/260°C | 13970 | M8635565 |
| | 0.53mm | 3.00µm | -20–240/260°C | 15562 | M8635544 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Custom Capillary Coiling **Available**
 Custom Capillary Column Dimensions **Available**
 Custom Capillary Column with Integral Guard **Available**
 FAST-GC narrow-bore Column Dimensions **Available**

Contact us for more info

Heliflex AT[®]-35ms+

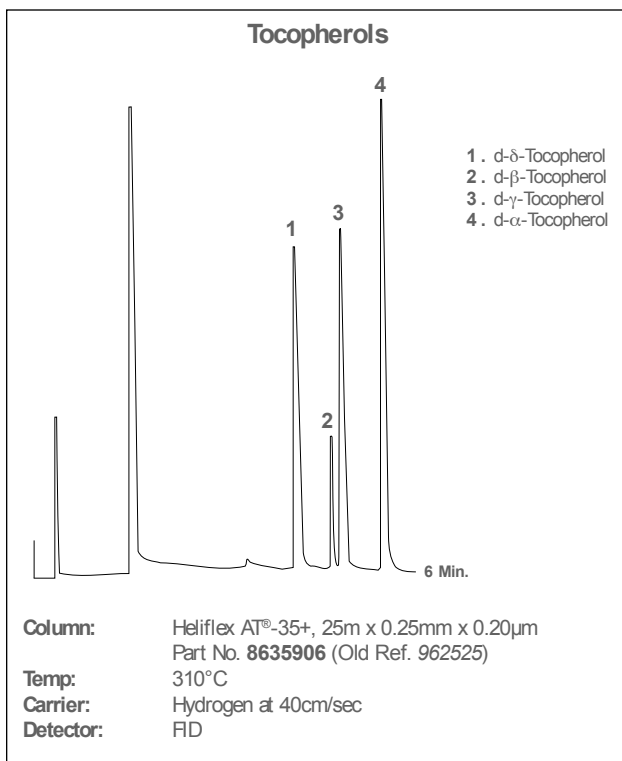
- Guaranteed low-bleed
- Specifically designed for mass spec analysis
- Similar to DB-35ms, Rtx[®]-35, SPB[™]-35, SUP-HERB[™], MEGA-35 MS, MDN-35, BPX[™]-35

Heliflex AT[®]-35ms+ Specifications

| | |
|-------------------------|--|
| Phase: | 35% Phenyl - 65% Methylpolysiloxane |
| Polarity: | Intermediate Polarity |
| USP Designation: | G42 |
| Ideal For: | Pesticides, Herbicides, Drugs, Aromatics |

Heliflex AT[®]-35ms+ Capillary Column

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.25µm | -40–320/340°C | 12589 | 8635213 |
| 60m | 0.25mm | 0.25µm | -40–320/340°C | 12590 | 8635332 |



Heliflex AT[®]-35+

- Ideal column for conformational analysis
- Similar to DB-35, DB-35ms, Rtx[®]-35, BPX[™]-35, SPB[™]-35, SPB[™]-608, HP-35, 007-11, OV[™]-11, MEGA-35, RSL-300, PE-35, SUP-HERB[™], ZB-35

Heliflex AT[®]-35+ Specifications

| | |
|-------------------------|--|
| Phase: | 35% Phenyl - 65% Methylpolysiloxane |
| Polarity: | Intermediate Polarity |
| USP Designation: | G42 |
| Ideal For: | Pesticides, Herbicides, Drugs, Aromatics |

Heliflex AT[®]-35+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 10m | 0.53mm | 1.20µm | -40–300°C | 965110 | 8635108 |
| | 0.53mm | 2.65µm | -40–280/300°C | 16877 | 8635109 |
| 15m | 0.53mm | 1.20µm | -40–300°C | 965115 | 8635193 |
| 25m | 0.53mm | 1.20µm | -40–300°C | 965125 | 8635212 |
| | 0.25mm | 1.00µm | -40–300/320°C | 13796 | 8635218 |
| 30m | 0.25mm | 0.25µm | -40–320/340°C | 13642 | 8635216 |
| | 0.32mm | 0.25µm | -40–320/340°C | 13644 | 8635249 |
| | 0.32mm | 0.50µm | -40–320/330°C | 13645 | 8635250 |
| | 0.53mm | 1.00µm | -40–300°C | 14001 | 8635296 |
| 60m | 0.53mm | 1.20µm | -40–300°C | 965130 | 8635297 |
| | 0.53mm | 2.65µm | -40–280/300°C | 16878 | 8635298 |
| 60m | 0.25mm | 0.25µm | -40–320/340°C | 13682 | 8635341 |
| | 0.53mm | 1.00µm | -40–320/340°C | 14070 | 8635399 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Contact us for more info

Custom Capillary Coiling **Available**
 Custom Capillary Column Dimensions **Available**
 Custom Capillary Column with Integral Guard **Available**
 FAST-GC narrow-bore Column Dimensions **Available**

Heliflex AT[®]-210+

- Similar to DB- 210, Rtx[®]-200, OV[™]-202, MEGA-200, OV[™]-210, OV[™]-215, QF-1, SP-2401, RSL-400

| Heliflex AT [®] -210+ Specifications | |
|---|--|
| Phase: | Trifluoropropyl Methylpolysiloxane |
| Polarity: | Polar |
| USP Code: | G6 |
| Ideal For: | Ketones, Aldehydes, Silanes, Glycols, Nitro Aromatics, Herbicides, and Method 8140 and 609 |

Heliflex AT[®]-210+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|------------------|----------------|
| 15m | 0.53mm | 1.00µm | 40–240°C | 13127 | 8635189 |
| | 0.53mm | 1.20µm | 40–240°C | 985115 | 8635190 |
| 30m | 0.53mm | 1.00µm | 40–240°C | 13136 | 8635293 |
| | 0.53mm | 1.20µm | 40–240°C | 985130 | 8635294 |

Heliflex AT[®]-1701+

- Similar to DB-1701, OV[™]-1701, SPB[™]-1701, Rtx[®]-1701, 007-1701, PAS-1701, CP-Sil 19CB, MEGA-1701, HP-1701, BP-10, ZB-1701

| Heliflex AT [®] -1701+ Specifications | |
|--|--|
| Phase: | (14% Cyanopropylphenyl)-86% Methylpolysiloxane |
| Polarity: | Intermediate Polarity |
| USP Code: | n/a |
| Ideal For: | Pesticides, PCB's, Drugs, Herbicides, and TMS Sugars |

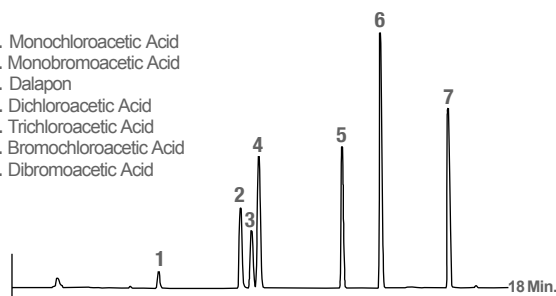
Heliflex AT[®]-1701+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|------------------|-----------------|
| 15m | 0.25mm | 0.25µm | -20–280°C | 13881 | M8635566 |
| | 0.32mm | 0.25µm | -20–280°C | 13762 | M8635567 |
| 30m | 0.25mm | 0.25µm | -20–280°C | 13686 | M8635558 |
| | 0.25mm | 1.00µm | -20–260/280°C | 13687 | M8635568 |
| | 0.32mm | 0.25µm | -20–280°C | 13690 | 5121863 |
| | 0.32mm | 1.00µm | -20–260/280°C | 13691 | M8635517 |
| 60m | 0.53mm | 1.00µm | -20–260/280°C | 13795 | M8635569 |
| | 0.53mm | 1.20µm | -20–260/280°C | 13830 | 8635M405 |
| | 0.25mm | 0.25µm | -20–280°C | 13688 | M8635570 |
| | 0.25mm | 1.00µm | -20–260/280°C | 13689 | M8635571 |
| | 0.32mm | 0.25µm | -20–280°C | 13692 | M8635572 |
| | 0.32mm | 1.00µm | -20–260/280°C | 13693 | M8635573 |
| | 0.53mm | 1.00µm | -20–260/280°C | 14131 | M8635574 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

EPA Method 552.1: Haloacetic Acids

1. Monochloroacetic Acid
2. Monobromoacetic Acid
3. Dalapon
4. Dichloroacetic Acid
5. Trichloroacetic Acid
6. Bromochloroacetic Acid
7. Dibromoacetic Acid



Column: Heliflex AT[®]-1701+, 30m x 0.32mm x 0.25µm
Part No. **5121863** (Old. Ref. 13690)
Temp: 50°C (10min hold) to 120°C at 10°C/min
Carrier Gas: Helium at 35cm/sec
Detector: ECD

Contact us for more info

Custom Capillary Coiling **Available**
Custom Capillary Column Dimensions **Available**
Custom Capillary Column with Integral Guard **Available**
FAST-GC narrow-bore Column Dimensions **Available**

Heliflex AT[®]-WAX+

- Similar to DB-WAX, DB-WAXetr, Rtx[®]-WAX, MEGA-WAX Plus Stabilwax[®], Carbowax[®] 20M, Supelcowax[™]-10, Innowax[™], HP-20M, HP-Wax, BP-20, CP-Wax 52-CB, 007-CW, Superox[®] II, OmegaWAX[™], ZB-WAX

Heliflex AT[®]-WAX+ Specifications

| | |
|-------------------|--|
| Phase: | 100% Polyethyleneglycol |
| Polarity: | Polar |
| USP Code: | G14, G15, G16, G39 |
| Ideal For: | FAMEs, Polar Solvents, BTEX, Flavor and Fragrances, Glycols, Alcohols, and Aromatics |

Heliflex AT[®]-WAX+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|-----------------|
| 10m | 0.53mm | 1.20µm | 40–250/260°C | 9951102 | 8635111 |
| 15m | 0.25mm | 0.50µm | 40–250/260°C | 137302 | 8635116 |
| | 0.32mm | 0.50µm | 40–250/260°C | 137352 | 8635162 |
| | 0.32mm | 1.00µm | 40–250/260°C | 137362 | 8635163 |
| 15m | 0.53mm | 0.50µm | 40–250/260°C | 14109 | 8635174 |
| | 0.53mm | 1.00µm | 40–250/260°C | 13904 | 8635177 |
| | 0.53mm | 1.20µm | 40–250/260°C | 9951152 | 8635179 |
| 25m | 0.25mm | 0.20µm | 40–250/270°C | 9925252 | M8635502 |
| | 0.32mm | 0.30µm | 40–250/270°C | 9932252 | M8635545 |
| | 0.53mm | 1.20µm | 40–250/260°C | 9951252 | 8635211 |
| 30m | 0.25mm | 0.20µm | 40–250/270°C | 9925302 | 8635229 |
| | 0.25mm | 0.25µm | 40–250/270°C | 136462 | 8635230 |
| | 0.25mm | 0.50µm | 40–250/260°C | 136472 | 8635231 |
| | 0.32mm | 0.25µm | 40–250/270°C | 136482 | 8635275 |
| | 0.32mm | 0.30µm | 40–250/270°C | 9932302 | 8635274 |
| | 0.32mm | 0.50µm | 40–250/260°C | 136522 | 8635276 |
| | 0.32mm | 1.00µm | 40–250/260°C | 137382 | 8635277 |
| | 0.53mm | 0.50µm | 40–250/260°C | 14111 | 8635291 |
| | 0.53mm | 1.00µm | 40–250/260°C | 13907 | 8625290 |
| | 0.53mm | 1.20µm | 40–250/260°C | 9951302 | 8635292 |
| 50m | 0.32mm | 0.30µm | 40–250/270°C | 9932502 | 8635324 |
| | 0.53mm | 1.20µm | 40–250/260°C | 13946 | 8635329 |
| 60m | 0.25mm | 0.20µm | 40–250/270°C | 9925602 | 8635349 |
| | 0.25mm | 0.25µm | 40–250/270°C | 136942 | 8635350 |
| | 0.32mm | 0.25µm | 40–250/270°C | 136962 | 8635372 |
| | 0.32mm | 0.30µm | 40–250/270°C | 9932602 | 8635373 |
| | 0.32mm | 0.50µm | 40–250/260°C | 136972 | 8635374 |
| | 0.53mm | 1.00µm | 40–250/260°C | 13929 | 8635383 |
| | 0.53mm | 1.20µm | 40–250/260°C | 13850 | 8635381 |

Heliflex AT[®]-WAXms+

- Designed to provide low MS bleed
- Similar to DB-WAX, Rtx[®]-WAX, Supelcowax[™]-10, MEGA-WAX MS

Heliflex AT[®]-WAXms+ Specifications

| | |
|-------------------|-------------------------|
| Phase: | 100% Polyethyleneglycol |
| Polarity: | Polar |
| USP Code: | G14, G15, G16, G39 |
| Ideal For: | Mass Spec Analysis |

Heliflex AT[®]-WAXms+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.25µm | 40–250/270°C | 12604 | 8635232 |
| | 0.32mm | 0.25µm | 40–250/270°C | 12607 | 8635248 |
| 60m | 0.25mm | 0.25µm | 40–250/270°C | 12605 | 8635356 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Contact us for more info

Custom Capillary Coiling **Available**
 Custom Capillary Column Dimensions **Available**
 Custom Capillary Column with Integral Guard **Available**
 FAST-GC narrow-bore Column Dimensions **Available**

Econo-Cap EC[®]-WAX+

- Batch tested to dramatically reduce price
- For phase specifications, see Heliflex AT[®] version

Econo-Cap EC[®]-WAX+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 15m | 0.53mm | 1.20µm | 40–250/260°C | 19653 | 8635038 |
| 30m | 0.25mm | 0.25µm | 40–250/270°C | 19655 | 8635044 |
| | 0.32mm | 0.25µm | 40–250/270°C | 19654 | 8635053 |
| | 0.53mm | 1.20µm | 40–250/260°C | 19659 | 8635064 |

Econo-Cap EC[®]-WAX+ Six-Pack Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.25µm | 40–250/270°C | 196556 | 5122233 |
| | 0.32mm | 0.25µm | 40–250/270°C | 196546 | 5122231 |
| | 0.53mm | 1.20µm | 40–250/260°C | 196596 | 5122240 |

best value

Heliflex AT[®]-AquaWax+

- Designed and tested for aqueous injections
- Similar to DB-Wax, DB-Waxer, Rtx[®]-WAX, Stabilwax[®], HP-Wax, HP-20M, HP-Innowax, MEGA-WAX Plus, ZB-Wax, and Supelcowax[™]-10

Heliflex AT[®]-AquaWax+ Specifications

| | |
|-------------------|----------------------------|
| Phase: | 100% Polyethyleneglycol |
| Polarity: | Polar |
| USP Code: | N/A |
| Ideal For: | Food and Beverage Analysis |

Heliflex AT[®]-AquaWax+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.25µm | 40–250/260°C | 12437 | 5121748 |
| | 0.32mm | 0.25µm | 40–250/260°C | 12439 | 5121750 |
| 60m | 0.25mm | 0.25µm | 40–250/260°C | 12447 | 5121751 |
| | 0.32mm | 0.25µm | 40–250/260°C | 12449 | 5121752 |

Heliflex AT[®]-AquaWax DA+

- Designed and tested for aqueous injections
- Eliminates the need for derivatization of acidic organic compounds
- Similar to DB-FFAP, Stabilwax[®], HP-FFAP-DA, ZB-FFAP, SPB[™]-1000, and NukoI[™], MEGA-FFAP EXT

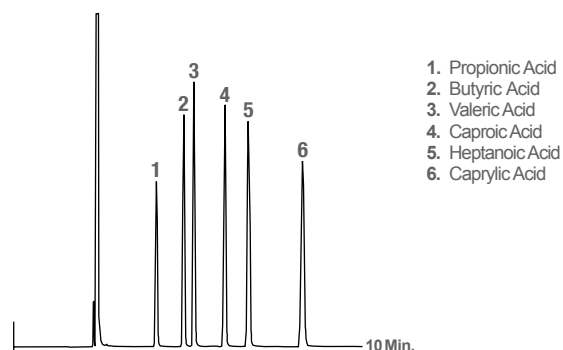
Heliflex AT[®]-AquaWax DA+ Specifications

| | |
|-------------------|---|
| Phase: | 100% Polyethyleneglycol - Acid Modified |
| Polarity: | Polar |
| USP Code: | N/A |
| Ideal For: | Analysis of Acidic Organic Compounds and Free Fatty Acids |

Heliflex AT[®]-AquaWax DA+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 0.25µm | 40–250/260°C | 14537 | 5122065 |
| | 0.32mm | 0.25µm | 40–250/260°C | 14539 | 5122066 |
| | 0.53mm | 1.00µm | 40–250/260°C | 14543 | 5122067 |
| 60m | 0.25mm | 0.25µm | 40–250/260°C | 14547 | 5122068 |

Free Fatty Acids



Column: Heliflex AT[®]-AquaWax DA+, 30m x 0.25mm x 0.25µm
Part No. **5122065** (Old Ref. 14537)

Temp: 180°C

Carrier Gas: Helium at 22cm/sec

Detector: FID

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Custom Capillary Coiling **Available**
 Custom Capillary Column Dimensions **Available**
 Custom Capillary Column with Integral Guard **Available**
 FAST-GC narrow-bore Column Dimensions **Available**

Contact us for more info

Heliflex AT[®]-1000+

- Similar to DB[™]-FFAP, Stabilwax[®]-DA, SPB[™]-1000, Nukol[™], HP-FFAP, BP-21, CP-Wax-58-CB, 007-FFAP, OV[™]-351, FFAP, Superox[®]-FA, ZB-FFAP, MEGA-ACID (FFAP)

| Heliflex AT [®] -1000+ Specifications | |
|--|---------------------------------------|
| Phase: | 100% Polyethyleneglycol—Acid Modified |
| Polarity: | High Polarity |
| USP Code: | G25, G35 |
| Ideal For: | Free Fatty Acids |

Heliflex AT[®]-1000+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|-----------------|
| 10m | 0.53mm | 1.20µm | 40–250°C | 975110 | 8635112 |
| 15m | 0.53mm | 1.00µm | 40–250°C | 13873 | 8635191 |
| | 0.53mm | 1.20µm | 40–250°C | 975115 | 8635192 |
| 25m | 0.25mm | 0.20µm | 40–250/260°C | 972525 | 5123576 |
| | 0.32mm | 0.30µm | 40–250/260°C | 973225 | M8635575 |
| 30m | 0.25mm | 0.25µm | 40–250/260°C | 13783 | 8635247 |
| | 0.32mm | 0.25µm | 40–250/260°C | 13785 | 8635266 |
| | 0.32mm | 0.30µm | 40–250/260°C | 973230 | 8635267 |
| | 0.53mm | 1.00µm | 40–250°C | 13877 | 8635284 |
| 50m | 0.53mm | 1.20µm | 40–250°C | 975130 | 8635285 |
| | 0.53mm | 2.00µm | 40–250°C | 13017 | 8635283 |
| | 0.25mm | 0.20µm | 40–250/260°C | 972550 | 8635319 |
| 60m | 0.32mm | 0.30µm | 40–250/260°C | 973250 | 8635327 |
| | 0.25mm | 0.25µm | 40–250/260°C | 13784 | 8635345 |
| 60m | 0.32mm | 0.25µm | 40–250/260°C | 13786 | 8635359 |
| | 0.32mm | 0.30µm | 40–250/260°C | 973260 | 8635360 |
| | 0.32mm | 1.00µm | 40–250°C | 13276 | 8635358 |
| | 0.53mm | 1.00µm | 40–250°C | 13879 | 8635402 |

Econo-Cap EC[®]-1000+

- Batch tested to dramatically reduce price
- For phase specifications, see Heliflex AT[®] version

Econo-Cap EC[®]-1000+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 15m | 0.53mm | 1.20µm | 40–250°C | 19684 | 8635040 |
| 30m | 0.25mm | 0.25µm | 40–250/260°C | 19686 | 8635045 |
| | 0.32mm | 0.25µm | 40–250/260°C | 19685 | 8635054 |
| | 0.53mm | 1.20µm | 40–250°C | 19688 | 8635066 |

Econo-Cap EC[®]-1000+ Six-Pack Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|-----------------|
| 30m | 0.32mm | 0.25µm | 40–250/260°C | 196856 | 5122259 |
| | 0.53mm | 1.20µm | 40–250°C | 196886 | M8635576 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

best value

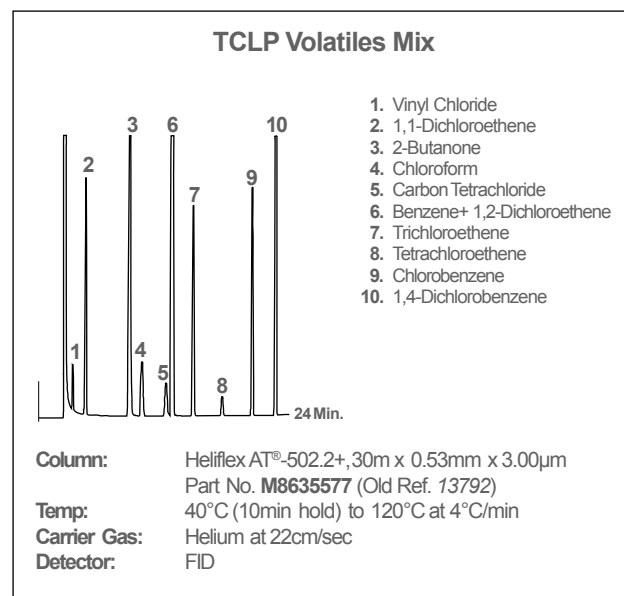
Heliflex AT[®]-502.2+

- Separates early eluting gases at above ambient temperature
- Useful for volatile organics analysis, including EPA Methods 502.2, 524.2, 8260

| Heliflex AT [®] -502.2+ Specifications | |
|---|--|
| Phase: | Proprietary |
| Polarity: | Intermediate |
| USP Code: | n/a |
| Ideal For: | Volatile Organics and EPA Methods 502.2, 524.2, and 8260 |

Heliflex AT[®]-502.2+ Capillary Columns

| Length | i.d. | Film | Temp. Limit* max. | Old Reference | Part No. |
|--------|--------|--------|----------------------|---------------|------------------|
| 60m | 0.25mm | 1.40µm | 280/300°C | 13788 | M86355022 |
| | 0.32mm | 1.80µm | 280/300°C | 13790 | 5121932 |
| | 0.53mm | 3.00µm | 280/300°C | 13793 | 5121935 |
| 105m | 0.32mm | 1.80µm | 280/300°C | 13791 | M8635533 |



Contact us
for more info

Custom Capillary Coiling Available
Custom Capillary Column Dimensions Available
Custom Capillary Column with Integral Guard Available
FAST-GC narrow-bore Column Dimensions Available

Heliflex AT[®]-624+

- Specially tested for EPA Method 624
- Similar to DB[™]-1301, Rtx[®]-1301, MEGA-624, Rtx[®]-624, HP-1301, HP-624, DB[™]-624, 007[™]-624, 007[™]-1301, SPB[™]-1301, SPB[™]-624, ZB-624

Heliflex AT[®]-624+ Specifications

| | |
|-------------------|---|
| Phase: | 6% Cyanopropylphenyl - 94% Methylpolysiloxane |
| Polarity: | Intermediate Polarity |
| USP Code: | G43 |
| Ideal For: | EPA Methods 524, 601, 602, 624, 8240 and 8260, and Solvent Analysis |

Heliflex AT[®]-624+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|----------------|
| 30m | 0.25mm | 1.40µm | -20–240/260°C | 13754 | 8635239 |
| | 0.32mm | 1.80µm | -20–240/260°C | 13756 | 8635278 |
| | 0.32mm | 3.00µm | -20–240/260°C | 13780 | 8635279 |
| | 0.53mm | 3.00µm | -20–240/260°C | 16889 | 8635317 |
| 60m | 0.25mm | 1.40µm | -20–240/260°C | 13503 | 8635333 |
| | 0.32mm | 1.80µm | -20–240/260°C | 13799 | 8635375 |
| | 0.53mm | 3.00µm | -20–240/260°C | 13800 | 8635400 |
| 75m | 0.53mm | 3.00µm | -20–240/260°C | 13937 | 8635403 |

Heliflex AT[®]-225+

- Similar to DB[™]-225, HP-225, Rtx[®]-225, OV[™]-225, RSL-500, 007-225, CP-Sil 43CB, BP-225, PE-225, MEGA-225

Heliflex AT[®]-225+ Specifications

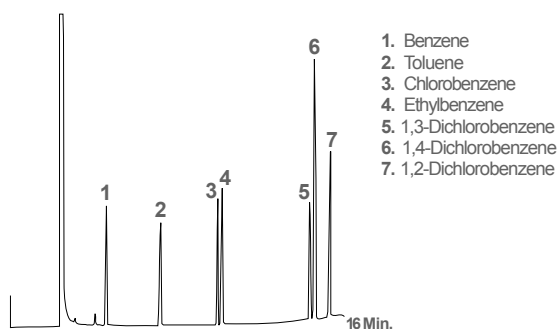
| | |
|-------------------|--|
| Phase: | 50% Cyanopropylphenyl - 50% Methylpolysiloxane |
| Polarity: | Mid to High Polarity |
| USP Code: | G19 |
| Ideal For: | Carbohydrates and Solvents |

Heliflex AT[®]-225+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|-----------------|
| 15m | 0.25mm | 0.25µm | 40–240°C | 13883 | 8635139 |
| 25m | 0.25mm | 0.20µm | 40–240°C | 912525 | M8635537 |
| 30m | 0.25mm | 0.25µm | 40–240°C | 13773 | 8635240 |
| | 0.32mm | 0.25µm | 40–240°C | 13775 | 8635264 |
| | 0.32mm | 0.30µm | 40–240°C | 913230 | 8635265 |
| | 0.53mm | 1.20µm | 40–220°C | 915130 | 8635308 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

EPA Method 602 - Purgeable Aromatics



1. Benzene
2. Toluene
3. Chlorobenzene
4. Ethylbenzene
5. 1,3-Dichlorobenzene
6. 1,4-Dichlorobenzene
7. 1,2-Dichlorobenzene

Column: Heliflex AT[®]-624+, 30m x 0.32mm x 1.80µm
Part No. **8635278** (Old Ref. 13756)

Temp: 90°C (7min hold) to 180°C at 10°C/min

Carrier Gas: Helium at 1.1mL/min

Detector: FID

Custom Capillary Coiling **Available**
 Custom Capillary Column Dimensions **Available**
 Custom Capillary Column with Integral Guard **Available**
 FAST-GC narrow-bore Column Dimensions **Available**

Contact us for more info

Heliflex AT[®]-SILAR-90+

- Designed and tested for FAMES
- Similar to DB[™]-23, CP-Sil 84, Rtx[®]-2330, SP-2330

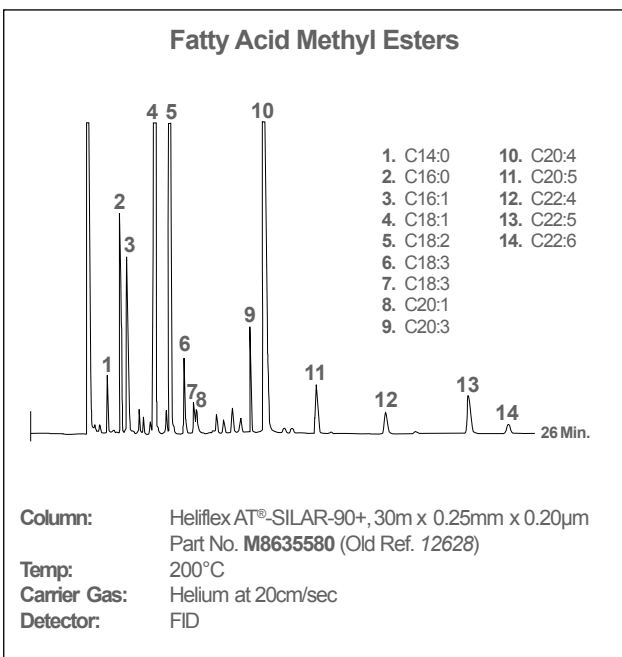
Heliflex AT[®]-SILAR-90+ Specifications

| | |
|-------------------|--|
| Phase: | Poly 90% bis Cyanopropyl -10% Cyanopropylphenyl siloxane |
| Polarity: | High Polarity |
| USP Code: | G8 |
| Ideal For: | Analysis of FAMES |

Heliflex AT[®]-SILAR-90+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|-----------------|
| 15m | 0.25mm | 0.20µm | 60–250°C | 12627 | M8635579 |
| 30m | 0.25mm | 0.20µm | 60–250°C | 12628 | M8635580 |
| | 0.32mm | 0.20µm | 60–250°C | 12630 | M8635581 |

Available also in 60m, 100m and 105m Lengths



tech tip

Tips for Heliflex AT[®]-SILAR-90+ and AT[®]-SILAR-100+; SILAR-90+ and SILAR-100+ are more susceptible to damage by oxygen, moisture, and HCl than other silicone phases. Avoid solvents such as water and methanol when using on-column injection techniques. Columns should not be rinsed.

Heliflex AT[®]-SILAR-100+

- Ideal for high and low temperature separation of samples containing geometric isomers of FAMES
- Similar to CP-Sil 88, Rtx[®]-2330, SP-2340, MEGA-10

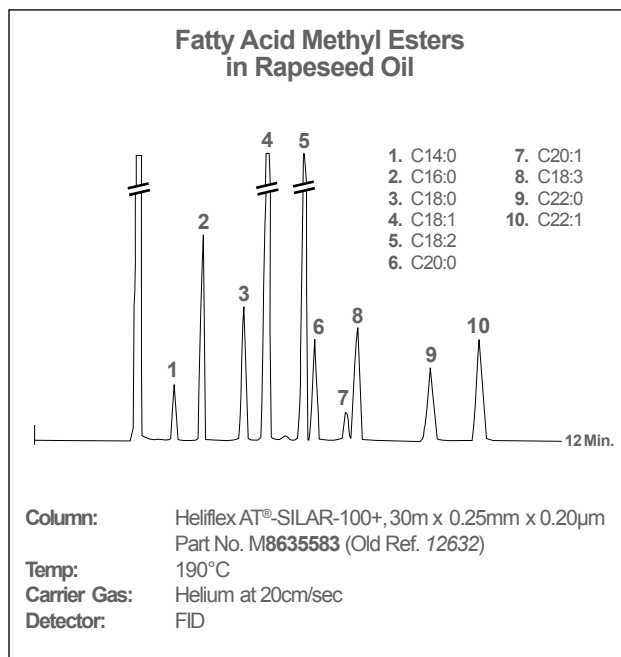
Heliflex AT[®]-SILAR-100+ Specifications

| | |
|-------------------|--|
| Phase: | Polybiscyanopropylsiloxane |
| Polarity: | High Polarity Available |
| USP Code: | G8 |
| Ideal For: | <i>cis/trans</i> Isomers of FAMES, Dioxins, and Furans |

Heliflex AT[®]-SILAR-100+ Capillary Columns

| Length | i.d. | Film | Temp. Limits* min.–max. | Old Reference | Part No. |
|--------|--------|--------|----------------------------|---------------|-----------------|
| 15m | 0.25mm | 0.20µm | 60–250°C | 12631 | M8635582 |
| 30m | 0.25mm | 0.20µm | 60–250°C | 12632 | M8635583 |
| | 0.32mm | 0.20µm | 60–250°C | 12634 | M8635584 |

Available also in 60m, 100m and 105m Lengths



*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Custom Capillary Coiling **Available**
Custom Capillary Column Dimensions **Available**
Custom Capillary Column with Integral Guard **Available**
FAST-GC narrow-bore Column Dimensions **Available**

Contact us for more info

Heliflex AT[®]-3710+

- For boiling range of gasoline samples

| Heliflex AT [®] -3710+ Specifications | |
|--|---------------------------|
| Phase: | 100% Methylpolysiloxane |
| Polarity: | Non-Polar |
| USP Code: | n/a |
| Ideal For: | Boiling Point of Gasoline |

Heliflex AT[®]-3710+ Capillary Column

| Length | i.d. | Film | Temp. Limit* max. | Old Reference | Part No. |
|--------|--------|--------|----------------------|------------------|-----------------|
| 15m | 0.53mm | 5.00µm | 300°C | 13949 | M8635585 |

Heliflex AT[®]-Sulfur+

- Designed for the analysis of volatile sulfur-containing compounds in petroleum distillates

| Heliflex AT [®] -Sulfur+ Specifications | |
|--|---------------------------|
| Phase: | 100% Methylpolysiloxane |
| Polarity: | Non-Polar |
| USP Code: | n/a |
| Ideal For: | Volatile Sulfur Compounds |

Heliflex AT[®]-Sulfur+ Capillary Columns

| Length | i.d. | Film | Temp. Limit* min.–max. | Old Reference | Part No. |
|--------|--------|--------|---------------------------|------------------|-----------------|
| 30m | 0.32mm | 4.00µm | -20–320°C | 14029 | M8635551 |

Heliflex AT[®]-Petro+

- For high resolution of complex hydrocarbon mixtures

| Heliflex AT [®] -Petro+ Specifications | |
|---|-------------------------|
| Phase: | 100% Methylpolysiloxane |
| Polarity: | Non-Polar |
| USP Code: | n/a |
| Ideal For: | hydrocarbon Mixtures |

Heliflex AT[®]-Petro+ Capillary Column

| Length | i.d. | Film | Temp. Limit* max. | Old Reference | Part No. |
|--------|--------|--------|----------------------|------------------|-----------------|
| 100m | 0.25mm | 0.50µm | 330/340°C | 13948 | M8635586 |

*: Maximum Temperature range may change depending on stationary phase film thickness.
In this catalog are reported only the most common GC columns dimensions and part numbers.
Contact us for other items and custom products.

Contact us for more info

Custom Capillary Coiling **Available**
 Custom Capillary Column Dimensions **Available**
 Custom Capillary Column with Integral Guard **Available**
 FAST-GC narrow-bore Column Dimensions **Available**

Econo-Cap
& **Heliflex** GC Columns