



HPLC COLUMNS

Product Details:

Column Name	Particle Size (µm)	Diameter (mm)	Length (mm)	Pore Size (Å)	End-Cap	Pore Volume (ml/g)	Carbon Content %	pH Range	Temperature Range (°C)
Athena C18-WP	3, 5	2.1, 4.6	50, 100, 150, 200, 250	100	Yes	1.1	17	1.5 to 10	20-60
Athena C18	5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	17	2 to 8	20-60
Athena C18-BIO	5	2.1, 4.6	50, 100, 150, 200, 250	300	Yes	0.9	8	1.5 to 11	20-60
Athena C8	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	10	2 to 8	20-60
Athena C4	5	2.1, 4.6	50, 100, 150, 200, 250	300	Yes	0.9	3	2 to 8	20-60
Athena C30	3, 5	4.6	150, 250	120	Yes	1.0	20	2 to 8	20-60
Athena Phenyl	5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	11	2 to 8	20-60
Athena Silica	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	0	2 to 8	20-60
Athena NH2	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	4	2 to 8	20-60
Athena CN	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	7.5	2 to 8	20-60
Athena Diol	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	8.8	2 to 8	20-60
Athena SAX	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	16	2 to 8	20-60
Athena SCX	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	11	2 to 8	20-60
Athena HILIC	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	8.6	1.5 to 8	20-60
Athena HILIC (2)	3, 5	2.1, 4.6	50, 100, 150, 200, 250	120	Yes	1.0	8	1.5 to 8	20-60
Athena HILIC (3)	5	2.1, 4.6	150, 250	120	Yes	1.0	16	1.5 to 8	20-60



Polymer matrix analytical columns

Column Name	Particle Size (µm)	Diameter (mm)	Length (mm)	Pore Size (Å)	End-Cap	Pore Volume (ml/g)	Carbon Content %	pH Range	Temperature Range (°C)
CNWSep Reverse Phase	5, 10	2.1, 4.6, 7.8	50, 100, 150, 250	300	Yes	1.0	17	2 to 8	60

CNWSep sugar and organic acids columns

Column Name	Particle Size (µm)	Diameter (mm)	Length (mm)	End-Cap	pH Range	Temperature Range (°C)
CNWSep H-L	5, 10	4.6, 7.8	250, 300	Yes	1 to 3	85
CNWSep H-M	5, 10	4.6, 7.8	100, 150, 250, 300	Yes	1 to 3	85
CNWSep H-H	5, 10	4.6, 7.8	250, 300	Yes	1 to 3	85
CNWSep Ca-L	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85
CNWSep Ca-M	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85
CNWSep Ca-H	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85
CNWSep Pb-L	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85
CNWSep Pb-M	5, 10	4.6, 7.8	100, 250, 300	Yes	5 to 9	85
CNWSep Pb-H	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85
CNWSep K-L	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85
CNWSep K-M	5, 10	4.6, 7.8	100, 250, 300	Yes	5 to 9	85
CNWSep K-H	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85
CNWSep Na-L	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85
CNWSep Na-M	5, 10	4.6, 7.8	100, 250, 300	Yes	5 to 9	85
CNWSep Na-H	5, 10	4.6, 7.8	250, 300	Yes	5 to 9	85

CNWSep ion exchange columns

Column Name	Particle Size (µm)	Diameter (mm)	Length (mm)	End-Cap	pH Range
CNWSep SAX	3, 5, 10	2.1, 4.6	50, 100, 150, 250	Yes	2 to 12
CNWSep WAX	3, 5, 10	2.1, 4.6	50, 100, 150, 250	Yes	2 to 12
CNWSep SCX	3, 5, 10	2.1, 4.6	50, 100, 150, 250	Yes	2 to 12
CNWSep WCX	3, 5, 10	2.1, 4.6	50, 100, 150, 250	Yes	2 to 12



CruxPoly & ElfPoly Polymer Matrix SEC Columns

Column Name	Particle Size (µm)	Diameter (mm)	Length (mm)	Pore Size (Å)	End-Cap	pH Range	Temperature Range (°C)
CruxPoly T100	5, 10	4.6, 7.8	50, 300	100	Yes	1 to 14	145
CruxPoly T300	5, 10	4.6, 7.8	50, 300	300	Yes	1 to 14	145
CruxPoly T500	5, 10	4.6, 7.8	50, 300	500	Yes	1 to 14	145
CruxPoly T1000	5, 10	4.6, 7.8	50, 300	1000	Yes	1 to 14	145
CruxPoly TMIX	5, 10	4.6, 7.8	50, 300	100–1000	Yes	1 to 14	145

ElfPoly:

ElfPoly Z300	5	4.6, 7.8	50, 300	500	Yes	1 to 14	250
ElfPoly Z500	5	4.6, 7.8	50, 300	1000	Yes	1 to 14	250
ElfPoly Z1000	5	4.6, 7.8	50, 300	1000	Yes	1 to 14	250
ElfPoly Z1000	5	4.6, 7.8	50, 300	1000	Yes	1 to 14	250
ElfPoly ZMIX	5	4.6, 7.8	50, 300	300–2000	Yes	1 to 14	250

CruxPoly & ElfPoly Polymer Matrix SEC Columns

Column Name	Particle Size (µm)	Diameter (mm)	Length (mm)	Pore Size (Å)	End-Cap	pH Range	Temperature Range (°C)
CNWGel X3010	3	4.6, 7.8	50, 150, 250, 300	100	Yes	2 to 8.5	80
CNWGel X3015	3	4.6, 7.8	50, 150, 250, 300	150	Yes	2 to 8.5	80
CNWGel X3030	3	4.6, 7.8	50, 150, 250, 300	300	Yes	2 to 8.5	80
CNWGel X5010	5	4.6, 7.8	50, 150, 250, 300	100	Yes	2 to 8.5	80
CNWGel X5015	5	4.6, 7.8	50, 150, 250, 300	150	Yes	2 to 8.5	80
CNWGel X5100	5	4.6, 7.8	50, 150, 250, 300	1000	Yes	2 to 8.5	80
CNWGel X5200	5	4.6, 7.8	50, 150, 250, 300	2000	Yes	2 to 8.5	80
CNWGel S3010	3	4.6, 7.8	50, 150, 250, 300	100	Yes	2 to 8.5	80
CNWGel S3015	5	4.6, 7.8	50, 150, 250, 300	150	Yes	2 to 8.5	80
CNWGel S3030	5	4.6, 7.8	50, 150, 250, 300	300	Yes	2 to 8.5	80
CNWGel S5015	5	4.6, 7.8	50, 150, 250, 300	150	Yes	2 to 8.5	80
CNWGel S5030	5	4.6, 7.8	50, 150, 250, 300	300	Yes	2 to 8.5	80
CNWGel S5050	5	4.6, 7.8	50, 150, 250, 300	500	Yes	2 to 8.5	80



CNW preparative columns and semi-preparative columns have a variety of packings, particle size as 5 and 10 μm .

Silica Gel Matrix	Polymer Matrix	Size Exclusion Chromatography	Preparative & Semi-Preparative Column Dimensions
Athena C18	CNWSep RP1	Athena C18	50mm x 10.0mm
Athena C18-BIO	CNWSep RP3	Athena C18-BIO	100mm x 10.0mm
Athena C8	CNWSep SP	Athena C8	150mm x 10.0mm
Athena C4	CNWSep SAX	Athena C4	250mm x 10.0mm
Athena Phenyl	CNWSep WAX	Athena Phenyl	10mm x 21.2mm
Athena Silica	CNWSep SCX	Athena Silica	50mm x 21.2mm
Athena CN	CNWSep WCX	Athena CN	100mm x 21.2mm
Athena NH2		Athena NH2	150mm x 21.2mm
Athena Diol		Athena Diol	250mm x 21.2mm
Athena HILIC		Athena HILIC	50mm x 30.0mm
Athena HILIC (2)		Athena HILIC (2)	100mm x 30.0mm
Athena HILIC (3)		Athena HILIC (3)	150mm x 30.0mm
Athena SAX		Athena SAX	250mm x 30.0mm
Athena SCX		Athena SCX	50mm x 50.0mm
Athena HILIC (2)		Athena HILIC (2)	150mm x 50.0mm
Athena HILIC (3)		Athena HILIC (3)	250mm x 50.0mm





CNW NEW PRODUCT

Independent R&D, strict quality control

- Resistance extremely alkaline, withstand high-pH
- Good stability, Long-lasting

CNW Athena XPH-C18 is a liquid chromatography column developed independently by ANPEL specially designed for high pH mobile phases and high temperatures. This chromatography column uses a unique hybrid silica gelsynthesis technology and trifunctional bonding technology to withstand the mobile phase pH range of 1-12, and has excellent stability and durability at high pH mobile phase (pH > 7) and high temperature conditions.

Athena XPH-C18 Specification data sheet

Particle size (µm)	Pore size (Å)	Specific surface area(m ² /g)	Carbon loading (%)	PH range	Temperature range	Pressure range.	endcapping
1.7, 2.5, 3, 3.5,5	130	180	18	1-12	80° C(Acid PH) 60° C(Alkaline PH)	5 µm < 45 MPa 2.5, 3, 3.5 µm < 60 MPa 1.7 µm < 100 MPa	Double endcapping

The rigorous life test of on the XPH-C18 chromatographic column, results showed that the CNW Athena XPH-C18 remained above 80% of the initial column efficiency after 500 flushing under the condition of high p H mobile phase (pH 10.0). Furthermore, under conditions of high pH mobile phase (pH 8-10) and high temperature (column temperature 65°C), the column still maintained good separation selectivity after 2000.



● High pH mobile phase flushing test – Lifetime 500h+

1.1 Experimental Method

High pH flushing steps	Performance testing method
Mobile phase for flushing: Acetonitrile: Triethylamine aqueous solution (pH 10.0) =10:90 flushing temperature: 50° C flushing flow rate: 1 mL/min flushing time: 20 hours per flushing cycle Column performance test before and after flushing.	Mobile phase: Acetonitrile: Water = 65:35 Flow rate: 0.9 mL/min Column temperature: 25 ° C Injection volume: 5 µL Column efficiency solution: Uracil 0.004 mg/ml, Toluene 0.5 mg/ml, Naphthalene 0.2 mg / ml Acenaphthene 0.4mg/ml
Test chromatographic column: Athena WPH-C18 4.6 × 150 mm, 5 µm	
The evaluation criteria of the test retention time of Acenaphthene, column efficiency, and tailing factor changes with the flushing time of high pH mobile phase	

1.2 Chromatogram of experiment

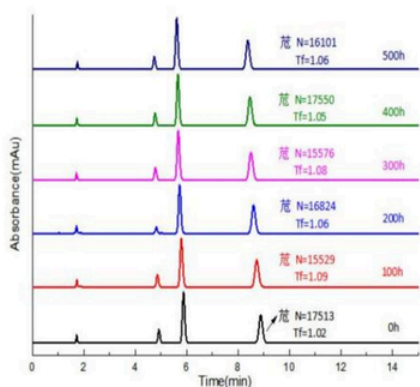


Figure 1. Performance monitoring of Athena XPH-C18
Athena XPH-C18 performance monitoring column effect test after high pH mobile phase flushing for 0, 100, 200, 300, 400 and 500h

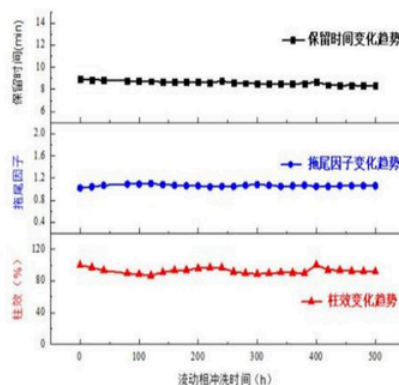


Figure 2: Athena XPH-C18 performance changes after high pH mobile phase flushing

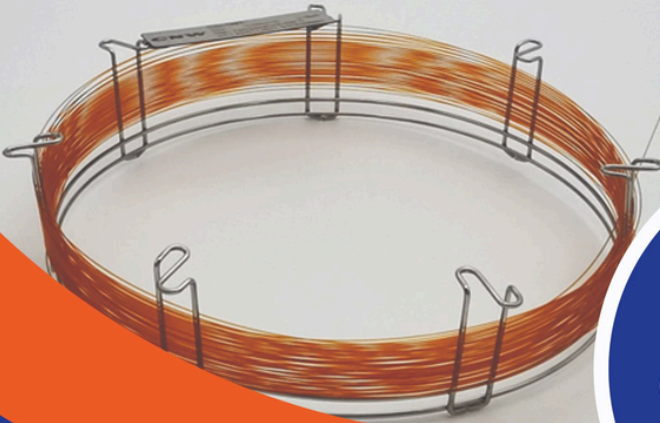


SYRINGE FILTERS

Product Details:

Type of Filter	Pore Size	Dimension	Pack Size	Membrane / Notes
PTFE Syringe	0.45 μm	25 mm	100 / Box	Prefiltration layer & PTFE membrane
PTFE Syringe	0.22 μm	25 mm	100 / Box	Prefiltration layer & PTFE membrane
PTFE Syringe	0.45 μm	25 mm	100 / Box	PTFE membrane
PTFE Syringe	0.22 μm	25 mm	100 / Box	PTFE membrane
PVDF Syringe	0.45 μm	25 mm	100 / Box	PVDF membrane
PVDF Syringe	0.22 μm	25 mm	100 / Box	PVDF membrane
NYLON Syringe	0.45 μm	25 mm	100 / Box	NYLON membrane
NYLON Syringe	0.22 μm	25 mm	100 / Box	NYLON membrane





GC COLUMNS

TYPE OF COLUMNS:

CAPILLARY COLUMNS:

CD WAX:

SIMILAR PHASES: DB-WAX, SUPELCOWAX, HP-WAX, RTX-WAX, HP-INNOWAX, CP-WAX 52 CB, STABILWAX, 007-CW, BP20, AT-WAX, ZB-WAX

TEMP. LIMITS: 20 °C TO 240/250 °C

ID (mm)	Length (m)	Df (µm)
0.25, 0.32, 0.53	15, 30, 60	0.25, 0.5, 1

CD 1701

SIMILAR PHASES: OV-1701, DB-1701, CP-SIL 19 CB, HP-1701, RTX-1701, SPB-1701, 007-1701, BP10, ZB-1701

TEMP. LIMITS: 20 °C TO 280 °C

ID (mm)	Length (m)	Df (µm)
0.25, 0.32, 0.53	15, 30, 60	0.25, 0.5, 1

CD-50

SIMILAR PHASES: OV-17, DB-17, HP-50+, HP-17, SPB-50, SP-2250, RTX-50, CP-SIL 24 CB, 007-17, ZB-50

TEMP. LIMITS: 30 °C TO 310 °C

ID (mm)	Length (m)	Df (µm)
0.25, 0.32, 0.53	15, 30, 60	0.25, 0.5, 1

CD 225

SIMILAR PHASES: DB-225, HP-225, OV-225, RTX-225, CP-SIL 43, 007-225, BP225

TEMP. LIMITS: 40 °C TO 240 °C

ID (mm)	Length (m)	Df (µm)
0.25, 0.32, 0.53	15, 30, 60	0.25, 0.5, 1

CD 1301

SIMILAR PHASES: HP-1301, DB-1301, SPB-1301, RTX-1301, CP-1301, 007-1301

TEMP. LIMITS: -20 °C TO 280 °C

ID (mm)	Length (m)	Df (µm)
0.25, 0.32, .53	15, 30, 60, 100	0.25, 0.5, 1, 1.5, 2.65, 3, 5

CD 35

SIMILAR PHASES: DB-35, RTX-35, SPB-35, AT-35

TEMP. LIMITS: 0 °C TO 300 °C

ID (mm)	Length (m)	Df (µm)
0.25, 0.32, 0.53	15, 30, 60	0.25, 0.5, 1, 1.5



CD-5

SIMILAR PHASES: SE-54, SE-52, DB-5, HP-5, AT-5, ZB-5 ULTRA-2, SPB-5, CP-SIL 8, RTX-5, 007-5, BP5, MDN-5

TEMP. LIMITS: -60 °C TO 320 °C

ID (mm)	Length (m)	Df (µm)
0.25, 0.32, 0.53	15, 30, 60, 100,	0.25, 0.5, 1, 1.5, 2.65, 3, 5

CD 35

SIMILAR PHASES: OV-1, DB-1, SE-30, HP-1, ULTRA-1, SPB-1, CP-SIL 5 CB, RTX-1, 007-1, BPI, MDN-1, AT-1, OV-101

TEMP. LIMITS: -60 °C TO 320 °C

ID (mm)	Length (m)	Df (µm)
0.25, 0.32, 0.53	15, 30, 60, 100	0.25, 0.5, 1, 1.5, 3, 5

PACKED GC COLUMNS:

Soft Copper Refrigeration tube, tubing length × O.D. × I.D.

50 ft × 1/8 in. (3.18 mm) × 0.065 in. (1.65 mm)

15 m



O.D. (in.)	I.D. (in.)	Length (ft)	Art.
1/8	0.065	15	1.603312.0015
1/4	0.19	15	1.603323.0015
1/2	0.436	15	1.603301.0015

GC FERRULES:

- SHORT FERRULE 100% VESPEL – 1/16" × 1.0 MM ID, 100% POLYIMIDE SHORT FERRULES
- SHORT FERRULE 85% VESPEL / 15% GRAPHITE – 1/16" × 0.5 MM ID, 85% POLYIMIDE / 15% GRAPHITE SHORT FERRULES
- SHORT FERRULE 60% VESPEL / 40% GRAPHITE – 1/16" × 0.4 MM ID, 60% POLYIMIDE / 40% GRAPHITE SHORT FERRULES
- 100% GRAPHITE FERRULES – 1/16" × 0.8 MM ID, 100% GRAPHITE SHORT FERRULES



CONSUMABLES

MOBILE PHASE FILTRATION ASSEMBLY:



MOBILE PHASE FILTERS:



Type of Filter	Pore Size	Dimension	Pack Size
PTFE Disc	0.45 μm	25 mm	100 / Box
PTFE Disc	0.45 μm	47 mm	100 / Box
PTFE Disc	0.22 μm	25 mm	100 / Box
PTFE Disc	0.22 μm	47 mm	100 / Box
PVDF Disc	0.45 μm	25 mm	100 / Box
PVDF Disc	0.45 μm	47 mm	100 / Box
PVDF Disc	0.22 μm	25 mm	100 / Box
PVDF Disc	0.22 μm	47 mm	100 / Box
Nylon Disc	0.45 μm	25 mm	100 / Box
Nylon Disc	0.45 μm	47 mm	100 / Box
Nylon Disc	0.22 μm	25 mm	100 / Box
Nylon Disc	0.22 μm	47 mm	100 / Box



DISPOSABLE SYRINGES: DISPOSABLE RUBBER-FREE SYRINGES:



SIZES: 2 ML, 5 ML, 10 ML & 20 ML

DISPOSABLE RUBBER-FREE, LUER SLIP, ECCENTRIC DELIVERY SYRINGES:



SIZES: 2 ML, 5 ML, 10 ML & 20 ML

DISPOSABLE RUBBER-FREE, LUER SLIP, ECCENTRIC DELIVERY SYRINGES:



SIZES: 2 ML, 5 ML, 10 ML & 20 ML

HPLC VIALS (SCREW THREAD VIALS):



COLOUR: AMBER
CAPACITY: 2 ML

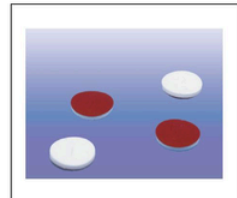


COLOUR: TRANSPARENT
CAPACITY: 2 ML

SCREW THREAD CAPS:



SCREW THREAD SEPTA:

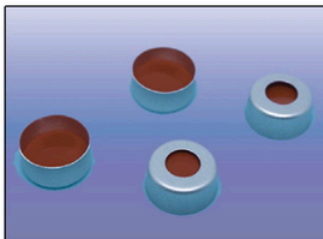


CRIMP NECK VIALS:



COLOUR: AMBER
CAPACITY: 2 ML

SEPTAS FOR CRIMP NECK VIALS:



HEAD SPACE VIALS:

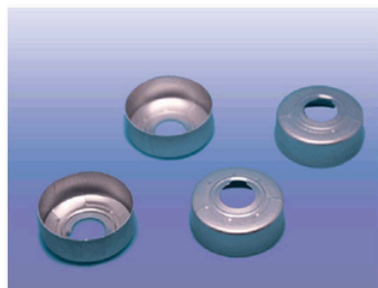


20 MM CRIMP NECK HEADSPACE VIALS, GLASS CLEAR, FLAT BOTTOM, WHITE MAKING SPOT AND CNW LOGO

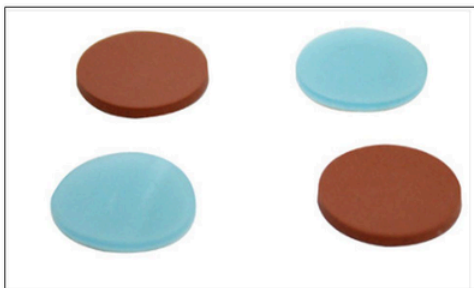
TYPE I CLASS A:

6 ML	38.2 X 22 MM
10 ML	46 X 22.5 MM
20 ML	75.5 X 22.5 MM

ALUMINIUM CAP FOR 20MM CRIMP NECK VIALS, WITHOUT SEPTA, CENTRE HOLE.



SEPTA FOR 20MM CRIMP NECK HEADSPACE VIALS, BUTYL INJECTION STOPPER, GREY



MECHANICAL PIPETTE



Pipette is widely used in today's society. Pipette is very comfortable to use, And it's more humanized. Compared to measuring cylinders, handling hazardous chemicals is safer. Pipette pole It is accurate and can be accurately measured when transporting solutions. Pipette saves time Improve the efficiency of laboratory work. The multi-channel Pipette is a high-precision Ideal for high efficiency and repeatability. It can be used for various liquids, including foam liquid Body, high Vapor pressure liquid and high viscosity liquid. Design with Ergonomic, with a wider range from a minimum of 0.1ul to a maximum of 10ml, and higher accuracy With reliable features, it can better meet the diverse application needs of modern laboratories. Impact resistance Resistant to UV and chemical corrosion, better able to meet long-term stable liquid transfer work, and the nozzle The components are made of specific materials and can be disassembled to support high-temperature and high-pressure sterilization, as well as independent range calibration And so on.

