



The Alltima HP range of HPLC columns was developed by Alltech. Hichrom acquired this range from Grace. Alltima HP columns offer a range of different phase chemistries based on high purity silica. The Alltima HP product family combines the selectivity and performance needed to overcome the most challenging separation needs. The low column bleed makes these columns ideal for microbore applications.

## Key Features

- High purity silica
- Excellent column stability
- Low to no detectable column bleed
- pH stability from 1 to 10
- Multiple selectivity options

## Alltima HP Phase Specifications

Phase	Particle size / $\mu\text{m}$	Endcapped?	Properties	Applications	USP code
C18	3, 5	Yes	Classic reversed-phase retention and selectivity	Routine applications	L1
C18-EPS	3, 5	Yes	Greater retention and enhanced peak symmetry for polar compounds. Alternative selectivity to traditional reversed-phase	Reversed-phase applications where C18 is too retentive	L1
C18-HiLoad	3, 5	Yes	Highest carbon load for superior retention and loadability	High resolution for complex samples	L1
C18-AQ	3, 5	Yes	100% water wettable	Applications requiring high aqueous mobile phases	L1
C18-Amide	3, 5	Yes	Polar-embedded phase with extremely low bleed. Compatible with microbore	Basic compounds in neutral to alkaline pH, MS applications	L1
C8	3, 5	Yes	Lower retention compared to C18 phases	Reversed-phase applications where C18 is too retentive	L7
Cyano	3, 5	Yes	Extremely stable, long life and reproducible	Ideal for basic drug analysis	L10
Silica	3, 5	No	Highly polar phase	General purpose normal phase applications	L3
HILIC	3, 5	–	Hydrophilic Interaction Chromatography uses small amounts of water for increased sensitivity with microbore applications	Very polar analytes that are difficult to retain by reversed-phase	L3

## Ordering Information

### Capillary Columns

#### 3 $\mu\text{m}$

Length / mm	50		100		150	
	0.15	0.3	0.15	0.3	0.15	0.3
C18	22153	22156	22154	22157	22155	22158
C18-HiLoad	22190	22193	22191	22194	22192	22195
C18-AQ	22560	22563	22561	22564	22562	22565
C18-Amide	22255	22258	22256	22259	22257	22260
C8	22479	22482	22480	22483	22481	22484
HILIC	22515	22518	22516	22519	22517	22520

#### 5 $\mu\text{m}$

Length / mm	50		100		150		250
	0.15	0.3	0.15	0.3	0.15	0.3	0.3
C18	22124	22128	22125	22129	22126	22130	22131
C18-HiLoad	22169	22173	22170	22174	22171	22175	22176
C18-AQ	22531	22535	22532	22536	22533	22537	22538
C18-Amide	22236	22240	22237	22241	22238	22242	22243
C8	22460	22464	22461	22465	22462	22466	22467
HILIC	22496	22500	22497	22501	22498	22502	22503

## Analytical Columns

3  $\mu\text{m}$ 

Length / mm	20		50	
i.d. / mm	2.1	4.6	2.1	4.6
C18	87674	87676	87504	87826
C18-EPS	87710	–	87508	87833
C18-HiLoad	87692	87694	87506	87827
C18-AQ	–	87816	–	87832
C18-Amide	87728	–	87510	87829
C8	87746	–	87512	–
Cyano	–	–	87514	87825
Silica	–	–	–	87831
HILIC	–	–	86461	–

Length / mm	100				150			
i.d. / mm	1.0	2.1	3.0	4.6	1.0	2.1	3.0	4.6
C18	22163	87669	87629	87667	22164	87670	87601	87668
C18-EPS	–	87705	–	87703	–	87706	87604	87704
C18-HiLoad	22230	87687	–	87685	22231	87688	87610	87686
C18-AQ	22570	87809	–	87807	22571	87810	–	87808
C18-Amide	22265	87723	–	87721	22266	87724	87607	87722
C8	22490	87741	–	87739	22491	87742	87613	87740
Cyano	–	–	–	–	–	87760	87616	87758
Silica	–	–	–	–	–	87788	87619	87786
HILIC	22525	–	–	–	22526	86463	–	86462

**AHP-3C18H-250D** – Alltima HP C18-HL, 3  $\mu\text{m}$ , 250 x 4.6 mm

5  $\mu\text{m}$ 

Length / mm	50	100		150				250				Guard cartridges (3/pk) <sup>1</sup>	
i.d. / mm	4.6	1.0	2.1	1.0	2.1	3.0	4.6	1.0	2.1	3.0	4.6	For 2.1	For 3.0-4.6
C18	87643	22137	87665	22138	87681	87602	87679	22139	87682	87603	87680	87683/N	87684/N
C18-EPS	–	–	–	–	87717	–	87715	–	87718	87606	87716	87719/N	87623/N
C18-HiLoad	–	22183	–	22184	87699	87611	87697	22185	87700	87612	87698	87701/N	87624/N
C18-AQ	–	22544	–	22545	87821	–	87819	22546	87822	–	87820	87823/N	87824/N
C18-Amide	–	22249	–	22250	87735	87608	87733	22251	87736	87609	87734	87737/N	87625/N
C8	–	22473	–	22474	87753	87614	87751	22475	–	87615	87752	87755/N	87756/N
Cyano	–	–	–	–	87781	–	87769	–	–	87618	87780 <sup>2</sup>	87783/N	87784/N
Silica	–	–	–	–	87799	87620	87797	–	87802	87621	87798	87803/N	87804/N
HILIC	–	22509	–	22510	86465	–	86464	22511	–	–	86466	86479/N	86480/N

<sup>1</sup>To be used with All-Guard cartridge holder (80101/N) and column coupler for All-Guard cartridges (HI-081).

<sup>2</sup>Also available with reversed-phase shipping solvent (87780R)

3  $\mu\text{m}$  – Rocket Columns

Rocket columns are specifically designed for high-throughput and high-speed methods.

Length / mm	33	53
i.d. / mm	7	7
C18	87671	87672
C18-EPS	–	87708
C18-HiLoad	–	87690
C18-AQ	87811	87812
C8	–	87744
Cyano	87761	87762
Silica	87789	87790
HILIC	86469	86470

**Column:** Alltima HP C18-EPS, 5  $\mu\text{m}$ , 150 x 4.6 mm (*p/n*: 87715)

**Mobile phase:** A: 0.03 M Potassium Phosphate, pH 3.2

B: Acetonitrile

**Gradient:**

Time / min	0	2	20
% A	95	95	70
% B	5	5	30

**Flow rate:** 1.0 mL min<sup>-1</sup>

**Detector:** UV at 260 nm

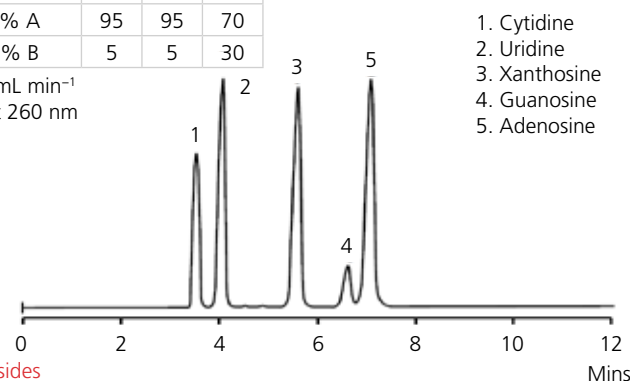


Figure 3. Nucleosides