

Hypersil BDS and Hypersil Classical HPLC Columns

Exceptionally reliable and reproducible general purpose columns

Exceptionally reliable robust columns that guarantee you have the same results time after time, even after changing your column. Chemistries available for a variety of applications.

- **Excellent Reproducibility**
Manufactured to the highest standards
- **Very Robust and Rugged**
Rigorous quality control under certified processes
- **Long Column Lifetimes**
Ideal for QA/QC labs



The Hypersil BDS/Classical web page contains the latest news, applications and downloads for the Hypersil BDS/Classical HPLC column range. Visit www.thermoscientific.com/columns

Hypersil BDS

A good choice for robust, general purpose columns

Hypersil BDS

Particle Size (µm)	Format	Length (mm)	ID (mm)	C18	C8	Phenyl	CN	
2.4	Drop-in Guard (4/pk)	10	2.1	28102-012101	28202-012101	-	-	
			4.0/4.6	28102-014001	28202-014001	-	-	
		50	2.1	28102-052130	28202-052130	-	-	
			4.6	28102-054630	-	-	-	
		100	2.1	28102-102130	28202-102130	-	-	
			4.6	28102-104630	28202-104630	-	-	
	150	4.6	-	28202-154630	-	-		
	3	Drop-in Guard (4/pk)	10	2.1	28103-012101	28203-012101	-	-
				3.0	28103-013001	28203-013001	-	-
				4.0/4.6	28103-014001	28203-014001	28903-014001	28803-014001
HPLC Column		30	2.1	28103-032130	-	-	-	
			50	2.1	28103-052130	28203-052130	-	-
			3.0	28103-053030	-	-	-	
			4.6	28103-054630	28203-054630	-	-	
		100	2.1	28103-102130	-	-	-	
			3.0	28103-103030	-	-	-	
			4.0	28103-104030	-	-	-	
			4.6	28103-104630	28203-104630	-	-	
		150	2.1	28103-152130	-	-	-	
			3.0	28103-153030	28203-153030	-	-	
			4.0	28103-154030	-	-	-	
			4.6	28103-154630	28203-154630	28903-154630	28803-154630	
5		Drop-in Guard (4/pk)	10	2.1	28105-012101	28205-012101	-	-
				3.0	28105-013001	28205-013001	-	-
				4.0/4.6	28105-014001	28205-014001	28905-014001	28805-014001
		HPLC Column	50	2.1	28105-052130	28205-052130	-	-
				3.0	28105-053030	28205-053030	-	-
	4.6			28105-054630	28205-054630	-	-	
	100			2.1	28105-102130	28205-102130	-	-
	100		3.0	28105-103030	-	-	-	
			4.0	28105-104030	-	-	-	
			4.6	28105-104630	28205-104630	-	-	
	125		3.0	28105-123030	-	-	-	
			4.0	28105-124030	-	-	-	
			4.6	28105-124630	-	-	-	
	150		2.1	28105-152130	-	-	-	
			3.0	28105-153030	-	-	-	
			4.0	28105-154030	28205-154030	-	-	
			4.6	28105-154630	28205-154630	28905-154630	28805-154630	
	250		2.1	28105-252130	-	-	-	
			3.0	28105-253030	-	-	-	
			4.0	28105-254030	28205-254030	28905-254030	-	
4.6		28105-254630	28205-254630	28905-254630	28805-254630			

Format	Length (mm)	ID (mm)	Cat. No.
UNIGUARD Guard Cartridge Holder	10	1.0	851-00
		2.1	852-00
		3.0	852-00
		4.0/4.6	850-00

Hypersil Classical

A global standard for many existing methods

Hypersil ODS

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.			
3	Drop-in Guard (4/pk)	10	2.1	30103-012101			
			3.0	30103-013001			
			4.0/4.6	30103-014001			
	HPLC Column	50	50	3.0	30103-053030		
				4.6	30103-054630		
				100	2.1	30103-102130	
		100	100	3.0	30103-103030		
				4.0	30103-104030		
				4.6	30103-104630		
		125	125	4.0	30103-124030		
				4.6	30103-124630		
		150	150	150	2.1	30103-152130	
					3.0	30103-153030	
					4.0	30103-154030	
			250	250	250	4.6	30103-154630
						2.1	30103-252130
						3.0	30103-253030
		5	Drop-in Guard (4/pk)	10	2.1	30105-012101	
3.0	30105-013001						
4.0/4.6	30105-014001						
HPLC Column	50		50	3.0	30105-053030		
				4.6	30105-054630		
				100	2.1	30105-102130	
	100		100	100	3.0	30105-103030	
					4.0	30105-104030	
					4.6	30105-104630	
	125		125	125	3.0	30105-123030	
					4.0	30105-124030	
					4.6	30105-124630	
	150	150	150	2.1	30105-152130		
				3.0	30105-153030		
				4.0	30105-154030		
		200	200	200	4.6	30105-154630	
					2.1	30105-202130	
					4.0	30105-204030	
	250	250	250	4.6	30105-204630		
				2.1	30105-252130		
				3.0	30105-253030		
4.0				30105-254030			
			4.6	30105-254630			

Hypersil ODS-2

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
3	Drop-in Guard (4/pk)	10	4.0/4.6	31603-014001
	HPLC Column	50	4.6	31603-054630
		100	4.0	31603-104030
			4.6	31603-104630
		150	4.6	31603-154630
5	Drop-in Guard (4/pk)	10	4.0/4.6	31605-014001
	HPLC Column	50	4.6	31605-054630
		100	4.6	31605-104630
		150	4.6	31605-154630
		250	4.0	31605-254030
			4.6	31605-254630

Hypersil MOS (C8)

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
5	Drop-in Guard (4/pk)	10	4.0/4.6	30205-014001
	HPLC Column	50	4.6	30205-054630
		100	4.6	30205-104630
		150	4.6	30205-154630
		250	4.0	30205-254030
	4.6	30205-254630		

Hypersil MOS-2 (C8)

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
5	Drop-in Guard (4/pk)	10	4.0/4.6	30305-014001
	HPLC Column	150	4.6	30305-154630
		250	4.0	30305-254030
			4.6	30305-254630

Hypersil SAS (C1)

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
5	Drop-in Guard (4/pk)	10	4.0/4.6	30505-014001
	HPLC Column	150	4.6	30505-154630
		250	4.6	30505-254630

Hypersil Phenyl

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
5	Drop-in Guard (4/pk)	10	4.0/4.6	30905-014001
	HPLC Column	50	4.6	30905-054630
		150	4.6	30905-154630
		250	4.0	30905-254030
			4.6	30905-254630

Hypersil Phenyl-2

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
5	Drop-in Guard (4/pk)	10	4.0/4.6	31905-014001
	HPLC Column	150	4.6	31905-154630
		250	4.6	31905-254630

Hypersil CPS

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
3	Drop-in Guard (4/pk)	10	4.0/4.6	30803-014001
	HPLC Column	150	4.6	30803-154630
5	Drop-in Guard (4/pk)	10	4.0/4.6	30805-014001
	HPLC Column	150	4.6	30805-154630
		250	4.0	30805-254030
			4.6	30805-254630

Hypersil CPS-2

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
5	Drop-in Guard (4/pk)	10	4.6	31805-014001
	HPLC Column	150	4.6	31805-254630
		250	4.6	31805-254630

Hypersil APS-2

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.	
3	Drop-in Guard (4/pk)	10	2.1	30703-012101	
			4.6	30703-014001	
	HPLC Column	50	4.6	30703-054630	
			100	2.1	30703-102130
			150	2.1	30703-152130
			4.6	30703-154630	
5	Drop-in Guard (4/pk)	10	3.0	30705-013001	
			4.0/4.6	30705-014001	
	HPLC Column	100	3.0	30705-103030	
			4.6	30705-104630	
			4.6	30705-154630	
			150	4.6	30705-154630
			250	4.0	30705-254030
	4.6	30705-254630			

Hypersil Silica

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.	
3	Drop-in Guard (4/pk)	10	2.1	30003-012101	
			3.0	30003-013001	
			4.0/4.6	30003-014001	
	HPLC Column	50	2.1	30003-052130	
			4.6	30003-054630	
			150	4.6	30003-154630
5	Drop-in Guard (4/pk)	10	3.0	30005-013001	
			4.0/4.6	30005-014001	
	HPLC Column	50	4.6	30005-054630	
			100	4.6	30005-104630
			150	4.6	30005-154630
			250	4.0	30005-254030
				4.6	30005-254630

Hypersil Classical *continued*

Hypersil SAX

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
5	Drop-in Guard (4/pk)	10	3.0	34105-013001
			4.6	34105-014001
	HPLC Column	250	3.0	34105-253030
			4.6	34105-254630

Hypersil Green PAH

Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
3	Guard Cartridge	10	2.1	31103-012101
			3.0	31103-013001
			4.6	31103-014001
	HPLC Column	100	2.1	31103-102130
			3.0	31103-103030
			4.6	31103-104630
	HPLC Column	150	2.1	31103-152130
			4.6	31103-154630
5	Guard Cartridge	10	4.6	31105-014001
	HPLC Column	100	4.6	31105-104630
		150	4.6	31105-154630
		250	4.6	31105-254630

IonPac NS1 and NS2

Polymeric reversed-phase column ideal for the separation of hydrophobic, ionizable compounds

- Excellent resolution
- Good peak shape
- Ideal for separation of large molecules that carry localized charges, such as surfactants
- Compatible with acids, bases, and solvent from pH 0 to 14
- Can also be used for traditional polymeric reversed-phase applications
- Utilize ion-pair chromatography for difficult separations

Thermo Scientific™ IonPac™ NS1-10 μ m and NS1-5 μ m columns are packed with a neutral, macroporous, high-surface-area, ethylvinylbenzene polymer crosslinked with 55% divinylbenzene. This resin makes the NS1 resistant to solvents, acids, and bases, and permits the use of eluent from pH 0 to 14. The Dionex IonPac NS1 column is the column of choice for routine ion pair chromatography.

IonPac NS2 is a silica-based column for mobile-phase ion chromatography (MPIC) applications using eluents containing trifluoroacetic acid (TFA), heptafluorobutyric acid (HFBA), or tetrabutylammonium borate (TBAB). It provides high performance analysis for hydrophobic amines and hydrophobic acids using suppressed conductivity detection.

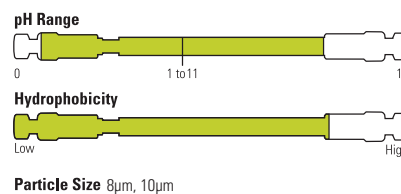
IonPac NS1 and NS2

Description	Particle Size (μ m)	Format	Length (mm)	2.0mm ID	4.0mm ID
IonPac NS1	5	HPLC Column	150	–	039568
	10	Guard Column	35	088763	039567
		HPLC Column	250	088762	035321
IonPac NS2	5	Guard Column	35	–	088788
		HPLC Column	150	–	088787
			250	–	088786

HyperREZ XP

Polymer-based columns for carbohydrate analysis

- Designed for the determination of carbohydrates, saccharides, organic acids, and alcohols
- Efficient and reproducible monodisperse particles
- Stable for long column lifetimes even at low pH and high temperatures



HyperREZ XP

	Particle Size (µm)	Format	Length (mm)	ID (mm)	Cat. No.
HyperREZ XP Carbohydrate H+	8	Guard Cartridge (2/pk)	5	3.0	69008-903027
		Guard Column	50	7.7	69008-057726
		HPLC Column	300	7.7	69008-307780
HyperREZ XP Carbohydrate Ca ²⁺	8	Guard Cartridge (2/pk)	5	3.0	69208-903027
		Guard Column	50	7.7	69208-057726
		HPLC Column	300	7.7	69208-307780
HyperREZ XP Carbohydrate Pb ²⁺	8	Guard Cartridge (2/pk)	5	3.0	69108-903027
		Guard Column	50	7.7	69108-057726
		HPLC Column	300	7.7	69108-307780
HyperREZ XP Carbohydrate Na+	10	Guard Cartridge (2/pk)	5	3.0	69310-903027
		Guard Column	50	7.7	69310-057726
		HPLC Column	300	7.7	69310-307780
HyperREZ XP Organic Acids	8	Guard Cartridge (2/pk)	5	3.0	69008-903027
		HPLC Column	100	7.7	69608-107780
HyperREZ XP Sugar Alcohols	8	Guard Cartridge (2/pk)	5	3.0	69208-903027
		HPLC Column	250	4.0	69708-254080

Format	Length (mm)	ID (mm)	Cat. No.
HyperRez Guard Cartridge Holder	5	3	60002-354

Retention Times of Common Saccharides (min)

Saccharide	H ⁺	Ca ²⁺	Pb ²⁺
Adonitol	11.5	14.9	20.4
Arabinose	11.4	13.6	19.4
Erythritol	12.7	15.6	20.3
Fructose	10.6	13.5	19.3
Fucose	12.2	13.7	17.1
Galactose	1.07	12.2	15.6
Glucose	9.9	11.1	13.9
Glycerol	14.1	16.1	19.5
Lactose	8.6	9.7	12.8
Maltose	8.4	9.5	12.5
Maltotriose	7.7	8.7	11.9
Mannitol	11.0	17.3	28.9
Mannose	1.5	12.5	16.7
Raffinose	8.2	8.6	11.4
Sorbitol	11.1	20.7	N/A
Sucrose	9.8	9.4	11.9
Xylose	10.6	12.0	15.0

HyperREZ Carbohydrate H+ 300 x 7.7mm

HyperREZ Carbohydrate Ca²⁺ 300 x 7.7mm

HyperREZ Carbohydrate Pb²⁺ 300 x 7.7mm

Mobile Phase:	H ₂ O
Flow Rate:	0.6mL/min
Detection:	RI
Temperature:	75°C (H ⁺)
	85°C (Ca ²⁺)
	80°C (Pb ²⁺)

Note: partial hydrolysis may occur with some saccharides using H⁺.