

## Symmetry Columns

Symmetry™ Columns exceed the standards for HPLC column performance. To ensure their optimum performance, they are packed with high-purity silica using stringently controlled manufacturing processes. No other silica-based LC column brand can match the column-to-column and batch-to-batch reproducibility of Symmetry Columns.

- Symmetry C<sub>18</sub> and C<sub>8</sub> Columns deliver maximum reproducibility
- SymmetryShield RP18 and RP8 Columns provide superior peak shape
- Symmetry300 C<sub>18</sub> and C<sub>4</sub> Columns offer high recoveries of peptides and proteins



### Column Characteristics

	Symmetry C <sub>8</sub> and SymmetryPrep C <sub>8</sub>	Symmetry C <sub>18</sub> and SymmetryPrep C <sub>18</sub>	SymmetryShield RP8	SymmetryShield RP18	Symmetry300 C <sub>4</sub>	Symmetry300 C <sub>18</sub>
	HPLC: 3.5, 5, 7 μm	HPLC: 3.5, 5, 7 μm	HPLC: 3.5, 5, 7 μm	HPLC: 3.5, 5, 7 μm	HPLC: 3.5, 5 μm	HPLC: 3.5, 5 μm
Ligand Benefit	General purpose, highly reproducible, similar selectivity to C <sub>18</sub> with slightly less retention	General purpose and highly reproducible, balanced retention for acids, bases, and neutrals	Alternate selectivity compared to straight chain C <sub>18</sub> , particularly with phenolic analytes. Provides reduced silanol activity ("shielding") to improve peak shape and resolution comparably	Alternate selectivity compared to straight chain C <sub>18</sub> , particularly with phenolic analytes. Provides reduced silanol activity ("shielding") to improve peak shape and resolution comparably	Wide-pore particle. Good retention of larger (> 1kD) molecules versus C <sub>18</sub>	Wide-pore particle. Good retention of large molecules (> 1kD)
Particle/Ligand						
Carbon Load*	12%	19%	15%	17%	2.8%	8.5%
Endcapped	Yes	Yes	Yes	Yes	Yes	Yes
USP Class No.	L7	L1	L1	L1	L26	L1
Performance Standards	Neutrals QC Reference Material p/n: <a href="#">186006360</a>	Neutrals QC Reference Material p/n: <a href="#">186006360</a>	Neutrals QC Reference Material p/n: <a href="#">186006360</a>	Neutrals QC Reference Material p/n: <a href="#">186006360</a>	MassPREP Protein Standard Mix p/n: <a href="#">186004900</a>	Cytochrome c Digestion Standard p/n: <a href="#">186006371</a>
Application Standards	Reversed-Phase QC Reference Material p/n: <a href="#">186006363</a>	Reversed-Phase QC Reference Material p/n: <a href="#">186006363</a>	Reversed-Phase QC Reference Material p/n: <a href="#">186006363</a>	Reversed-Phase QC Reference Material p/n: <a href="#">186006363</a>	MassPREP Protein Standard Mix p/n: <a href="#">186004900</a>	Peptide Retention Standard p/n: <a href="#">186006555</a>

\*Expected or approximate value.