

Ni-NTA Superflow Cartridge Specifications

	1 ml Cartridge	5 ml Cartridge
Support	Superflow (highly cross-linked 6% agarose)	
Bead diameter	60–169 μm	
Column dimensions (mm i.d.)	6.7 mm x 28.0 mm	14.7 mm x 29.8 mm
Maximum pressure*	5 bar, 0.5 MPa	5 bar, 0.5 MPa
Typical back pressure (Buffer NPI-10, 10% glycerol)	1.0 bar, 0.1 MPa (1 ml/min)	2.0 bar, 0.2 MPa (5 ml/min)
Recommended flow rate	1 ml/min (155 cm/h)	5 ml/min (170 cm/h)
Maximum flow rate[†]	10 ml/min (1560 cm/h)	40 ml/min (1360 cm/h)
pH stability short term ($\leq 2\text{h}$)	2–14	2–14
pH stability long term ($> 2\text{h}$)	3–12	3–12
Binding capacity[‡]	At least 20 mg (up to 1 μmol @ 20 kDa)	At least 100 mg (up to 5 μmol @ 20 kDa)
System compatibility	Automated chromatography systems (e.g., ÄKTA, FPLC, BioLogic, BioCAD, Vision workstation)	
Cartridge body material	Polypropylene	
Connectors	1/16" (inlet); M6 (outlet)	

* The maximum pressure usable with the Superflow matrix itself is 10 bar. However, stability of the Cartridges is only guaranteed up to 5 bar.

[†] High flow rates may lead to reduced recovery of 6xHis-tagged protein.

[‡] Determined for a monomeric 30 kDa globular 6xHis-tagged protein. Binding capacity may vary from protein to protein.

