

Volume Range	Length	Packaging	Low Retention	Purity Level*	Presterilised	Qty/unit	Order No.
● 100-5000 µl	150 mm	Single Tray	●	●	●	50	780304
		Single Tray				50	780305
		Bulk in Box				100	780300
		Bulk in Carton				1000	780308



● 1-10 ml	155 mm	Single Tray	●	●	●	35	LH-780314
		Bulk in Bag				250	LH-780316



Note: The ordering information for 10 ml tip for MidiPlus can be found on page 69. NOTE! Tip compatibility with pipettes are shown in the Tip Selection Guides at Electronic Pipettes, page 25, and Mechanical Pipettes, pages 42 - 43.

Purity Level* : Free of RNase, DNase, endotoxins

□ Safety Space™ Filter Tips

Volume Range	Length	Packaging	Low Retention	Purity Level*	Presterilised	Qty/unit	Order No.
● 0.1-10 µl	32 mm	Single Tray	●	●	●	10x96	790011F
		Single Tray					LH-LF 790011
● 0.5-200 µl	51 mm	Single Tray	●	●	●	10x96	790021F
		Single Tray					LH-LF 790021
● 2-120 µl	51 mm	Single Tray	●	●	●	10x96	790101F
		Single Tray					LH-LF 790101
● 5-200 µl	52.5 mm	Single Tray	●	●	●	10x96	790201F
		Single Tray					LH-LF 790201
● 5-300 µl	52.5 mm	Single Tray	●	●	●	10x96	790301F
		Single Tray					LH-LF 790301
● 50-1000 µl	78 mm	Single Tray	●	●	●	10x96	791001F
		Single Tray					LH-LF 791001
● 50-1200 µl	90 mm	Single Tray	●	●	●	10x96	791211F
		Single Tray					LH-LF 791211
● 100-5000 µl	150 mm	Single Tray	●	●	●	10x96	LH-795001F

For your guidance the tips are illustrated in the actual size. Filter tips are not recommended to be used simultaneously with Safe-Cone Filters

Purity Level* : Free of RNase, DNase, endotoxins

■ Minisart® Syringe Filter Selection Guide

1 Sample Composition

Aqueous		Solvents		
All Aqueous Solutions ✓ Buffers, Protein Analysis	All Aqueous Solutions ✓ Tissue Culture Media	Hydrophilic ✓ Aqueous/Solvent Mixtures/ Solvents	Hydrophilic ✓ Solvent Mixtures/Solvents NY Polyamide, Nylon	Hydrophobic ✓ Solvents/Gases/ Acids/Bases
SFCA Surfactant-Free Cellulose Acetate	PES Polyethersulfone	RC Regenerated Cellulose		PTFE Polytetra fluoroethylene

2 Sample Volumes

Claristep for up to 0.6 ml	4 mm for up to 1 ml	15 mm for up to 15 ml	25-28 mm for up to 100 ml
0.06-0.6 ml Syringeless	0.1-1 ml	0.5-15 ml	5-100 ml

3 Pore Sizes

Sterilization		Sample Preparation Clarification Particle Removal					Prefiltration
0.1 µm Small Bacteria Mycoplasma Colloids >0.1	0.2 µm UHPCL, etc. (Columns < 3µm Particles) Bacteria	0.45 µm HPLC, etc. (Columns > 3µm Particles) Particles	0.65 µm Particles Yeast Cells	0.8 µm Particles Yeast Cells	1.2 µm Particles Yeast Cells Platelets	5 µm Large Particles Rubber Grit Cells	GF (Glass Fibre) Glass Prefilter Glass+Membrane Highly Particleladen Samples

Applications

Type of Filtration	1st Choice	Rec. Alternatives
HPLC UHPLC LCMS IC GC - Sample Preparation	RC	PTFE / NY
Undiluted Organic Solvents	RC / PTFE	NY
Protein Analysis Samples with Biomolecules Buffers	SFCA	RC / PES
Tissue Culture Media	PES	SFCA / RC
Highly Particle-laden Samples Organic Solvents	GF / NY	-
Highly Particle-laden Samples Aqueous Solutions	GF / SFCA	GF / NY

pH 1-14: PTFE/GF pH 3-14: RC/NY/PTFE/GF pH 3-12: RC/PES/NY/PTFE/GF pH 4-8: SFCA/RC/PES/NY/PTFE/GF*

*Compatibility tested with a contact time of 24 hours at 20°C

■ Minisart® Syringe Filters

Sample Preparation Chromatography



Minisart® RC 4



Minisart® RC 15



Minisart® RC 25

□ Minisart® RC (Regenerated Cellulose)

Order No.	Diameter	Membrane	Pore Size	Connector Outlet	Color/ Printing	Sterile*	Qty/Pk
17764 - ACK	25 mm	RC	0.2 µm	Male Luer Slip	White, Printed	Yes	50
17764 - K	25 mm	RC	0.2 µm	Male Luer Slip	White, Printed	No	50
17764 - Q	25 mm	RC	0.2 µm	Male Luer Slip	White, Printed	No	500
17765 - K	25 mm	RC	0.45 µm	Male Luer Slip	White, Printed	No	50
17765 - Q	25 mm	RC	0.45 µm	Male Luer Slip	White, Printed	No	500
17761 - ACK	15 mm	RC	0.2 µm	Male Luer Slip	White, Printed	Yes	50
17761 - K	15 mm	RC	0.2 µm	Male Luer Slip	White, Printed	No	50
17761 - Q	15 mm	RC	0.2 µm	Male Luer Slip	White, Printed	No	500
17762 - K	15 mm	RC	0.45 µm	Male Luer Slip	White, Printed	No	50
17762 - Q	15 mm	RC	0.45 µm	Male Luer Slip	White, Printed	No	500
17821 - K	4 mm	RC	0.2 µm	Male Luer Slip	Blue Tray	No	50
17821 - Q	4 mm	RC	0.2 µm	Male Luer Slip	Blue Tray	No	500
17822 - K	4 mm	RC	0.45 µm	Male Luer Slip	Yellow Tray	No	50
17822 - Q	4 mm	RC	0.45 µm	Male Luer Slip	Yellow Tray	No	500

□ Minisart® SRP (Hydrophobic PTFE)

Order No.	Diameter	Membrane	Pore Size	Connector Outlet	Color/ Printing	Sterile*	Qty/Pk
S7575 - FXOSK	25 mm	PTFE	0.2 µm	Male Luer Slip	White, Printed	Yes	50
17575 - K	25 mm	PTFE	0.2 µm	Male Luer Slip	White, Printed	No	50
17575 - Q	25 mm	PTFE	0.2 µm	Male Luer Slip	White, Printed	No	500
17576 - K	25 mm	PTFE	0.45 µm	Male Luer Slip	White, Printed	No	50
17576 - Q	25 mm	PTFE	0.45 µm	Male Luer Slip	White, Printed	No	500
17558 - K	15 mm	PTFE	0.2 µm	Male Spike	White, Printed	No	50
17558 - Q	15 mm	PTFE	0.2 µm	Male Spike	White, Printed	No	500
17573 - ACK	15 mm	PTFE	0.2 µm	Male Luer Slip	White, Printed	Yes	50
17573 - K	15 mm	PTFE	0.2 µm	Male Luer Slip	White, Printed	No	50
17573 - Q	15 mm	PTFE	0.2 µm	Male Luer Slip	White, Printed	No	500
17559 - K	15 mm	PTFE	0.45 µm	Male Spike	White, Printed	No	50
17559 - Q	15 mm	PTFE	0.45 µm	Male Spike	White, Printed	No	500
17574 - K	15 mm	PTFE	0.45 µm	Male Luer Slip	White, Printed	No	50
17574 - Q	15 mm	PTFE	0.45 µm	Male Luer Slip	White, Printed	No	500
17844 - Q	4 mm	PTFE	0.2 µm	Male Luer Slip	Blue Tray	No	500
17820 - K	4 mm	PTFE	0.45 µm	Male Luer Slip	Yellow Tray	No	50
17820 - Q	4 mm	PTFE	0.45 µm	Male Luer Slip	Yellow Tray	No	500

□ Minisart® NY (Nylon) & NY25 Plus (Glass Fiber 1.2 µm + Nylon)

Order No.	Diameter	Membrane	Pore Size	Connector Outlet	Color/ Printing	Sterile*	Qty/Pk
17845 - ACK	25 mm	Nylon	0.2 µm	Male Luer Slip	White, Printed	Yes	50
17845 - Q	25 mm	Nylon	0.2 µm	Male Luer Slip	White, Printed	No	500
17846 - ACK	25 mm	Nylon	0.45 µm	Male Luer Slip	White, Printed	Yes	50
17846 - Q	25 mm	Nylon	0.45 µm	Male Luer Slip	White, Printed	No	500
1776B - K	15 mm	Nylon	0.2 µm	Male Luer Slip	White, Printed	No	50
1776B - Q	15 mm	Nylon	0.2 µm	Male Luer Slip	White, Printed	No	500
1776C - K	15 mm	Nylon	0.45 µm	Male Luer Slip	White, Printed	No	50
1776C - Q	15 mm	Nylon	0.45 µm	Male Luer Slip	White, Printed	No	500
1784B - K	25 mm	Nylon+GF	0.2 µm	Male Luer Slip	White, Printed	No	50
1784B - Q	25 mm	Nylon+GF	0.2 µm	Male Luer Slip	White, Printed	No	500
1784C - K	25 mm	Nylon+GF	0.45 µm	Male Luer Slip	White, Printed	No	50
1784C - Q	25 mm	Nylon+GF	0.45 µm	Male Luer Slip	White, Printed	No	500

■ Minisart® Syringe Filters

Preparation of Aqueous Liquids



Male Luer Lock



Male Luer Slip

*Sterilized Minisarts are individually packaged. If not stated otherwise, Minisarts are sterilized by ethylene oxide. #-Mark indicates sterilization by gamma irradiation. Minisarts NOT presterilized: PES, SFCA, GF+SFCA and GF can be sterilized by ethylene oxide or gamma irradiation.

□ Minisart® High Flow (PES - Polyethersulfone)

Order No.	Diameter	Membrane	Pore Size	Connector Outlet	Color/ Printing	Sterile*	Qty/Pk
16553 - K	28 mm	PES	0.1 µm	Male Luer Lock	Dark Red	Yes	50
16532 - K	28 mm	PES	0.2 µm	Male Luer Lock	Royal Blue	Yes	50
16541 - K	28 mm	PES	0.2 µm	Male Luer Slip	Royal Blue	Yes	50
16532 - Q	28 mm	PES	0.2 µm	Male Luer Lock	Royal Blue	No	500
16541 - Q	28 mm	PES	0.2 µm	Male Luer Slip	Royal Blue	No	500
16537 - K	28 mm	PES	0.45 µm	Male Luer Lock	Amber	Yes	50
16537 - Q	28 mm	PES	0.45 µm	Male Luer Lock	Amber	No	500
16533 - K	28 mm	PES	0.45 µm	Male Luer Slip	Amber	Yes	50
16533 - Q	28 mm	PES	0.45 µm	Male Luer Slip	Amber	No	500

□ Minisart® NML (SFCA - Surfactant-free Cellulose Acetate)

Order No.	Diameter	Membrane	Pore Size	Connector Outlet	Color/ Printing	Sterile*	Qty/Pk
S6534 - FMOSK	28 mm	SFCA	0.2 µm	Male Luer Lock	Blue	Yes	50
S6534 - FM-Q	28 mm	SFCA	0.2 µm	Male Luer Lock	Blue	No	500
S7597 - FXOSK	28 mm	SFCA	0.2 µm	Male Luer Slip	Blue	Yes	50
S7597 - FX-Q	28 mm	SFCA	0.2 µm	Male Luer Slip	Blue	No	500
S6555 - FMOSK	28 mm	SFCA	0.45 µm	Male Luer Lock	Yellow	Yes	50
S6555 - FM-Q	28 mm	SFCA	0.45 µm	Male Luer Lock	Yellow	No	500
S7598 - FMOSK	28 mm	SFCA	0.45 µm	Male Luer Slip	Yellow	Yes	50
S7598 - FX-Q	28 mm	SFCA	0.45 µm	Male Luer Slip	Yellow	No	500
16569 - K	28 mm	SFCA	0.65 µm	Male Luer Slip	Pink	Yes	50
16592 - K	28 mm	SFCA	0.8 µm	Male Luer Lock	Green	Yes	50
16592 - Q	28 mm	SFCA	0.8 µm	Male Luer Lock	Green	No	500
17593 - K	28 mm	SFCA	1.2 µm	Male Luer Lock	Red	Yes	50
17593 - Q	28 mm	SFCA	1.2 µm	Male Luer Lock	Red	No	500
S7594 - FMOSK	28 mm	SFCA	5 µm	Male Luer Lock	Brown	Yes	50
17594 - Q	28 mm	SFCA	5 µm	Male Luer Lock	Brown	No	500

□ Minisart® NML Plus (Glass Fiber 1.2 µm + SFCA)

Order No.	Diameter	Membrane	Pore Size	Connector Outlet	Color/ Printing	Sterile*	Qty/Pk
17823 - K	28 mm	GF+SFCA	0.2 µm	Male Luer Loc	Blue	Yes	50
17823 - Q	28 mm	GF+SFCA	0.2 µm	Male Luer Loc	Blue	No	500
17829 - K	28 mm	GF+SFCA	0.45 µm	Male Luer Loc	Yellow	Yes	50
17829 - Q	28 mm	GF+SFCA	0.45 µm	Male Luer Loc	Yellow	No	500
17825 - Q	28 mm	GF+SFCA	1.2 µm	Male Luer Loc	Red	No	500
17824 - K	28 mm	GF	1.2 µm	Male Luer Loc	White	No	50
17824 - Q	28 mm	GF	1.2 µm	Male Luer Loc	White	No	500
17856 - Q	28 mm	GF	1.2 µm	Male Luer Slip	White	No	500