

# STyLUX®

## SM0.4 Cartridge

### Description

The STyLUX® SM0.4 hydrophilic filter capsule is manufactured using high quality components that are nontoxic and biologically inert.

### Materials of Construction

All components of the STyLUX® filter capsule are either animal component free or in compliance with EMEA/410/01 Rev. 3 (EDQM 5.2.8 07/2011:50208), and US Code of Federal Regulations 9 CFR 94.18 and 21 CFR 189.5. These materials are listed for food contact use in the Code of Federal Regulations (CFR), Title 21, as below:

Membrane:	Polyethersulfone	CFR Title 21, 177.2440
Upstream support	Polypropylene	CFR Title 21, 177.1520
Downstream support:	Polypropylene	CFR Title 21, 177.1520
Outer guard:	Polypropylene	CFR Title 21, 177.1520
Core:	Polypropylene	CFR Title 21, 177.1520
End caps:	Polypropylene	CFR Title 21, 177.1520
O-rings:	Typically silicone	CFR Title 21, 177.2600
Sealing method:	Thermal bonding	

**Minimum Bubble Point** 32 psi (2,2 bar), water

**Maximum Diffusion Rate** 25 mL/min per 10" @ 25 psi, water (25 mL min<sup>-1</sup> per 25 cm @ 1,7 bar, water)

**Typical Water Flow Rate** 0.13 psid/gpm per 10" (4,2 L min<sup>-1</sup> at Δp 10 mbar per 25 cm)

### Operating Characteristics

100°F @ 80 psid (38°C @ Δp 5,5 bar)	150°F @ 60 psid (66°C @ Δp 4,1 bar)	180°F @ 30 psid (82°C @ Δp 2,1 bar)
--	--	--

### Bacterial Retention

>10<sup>7</sup> per cm<sup>2</sup> removal of *Serratia marcescens* per modified ASTM F838-05

### Sterilization

Autoclave: 121 to 135°C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles. Water wet membrane prior to autoclaving.  
Steam in place: 121 to 135°C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles, water wet membrane first.

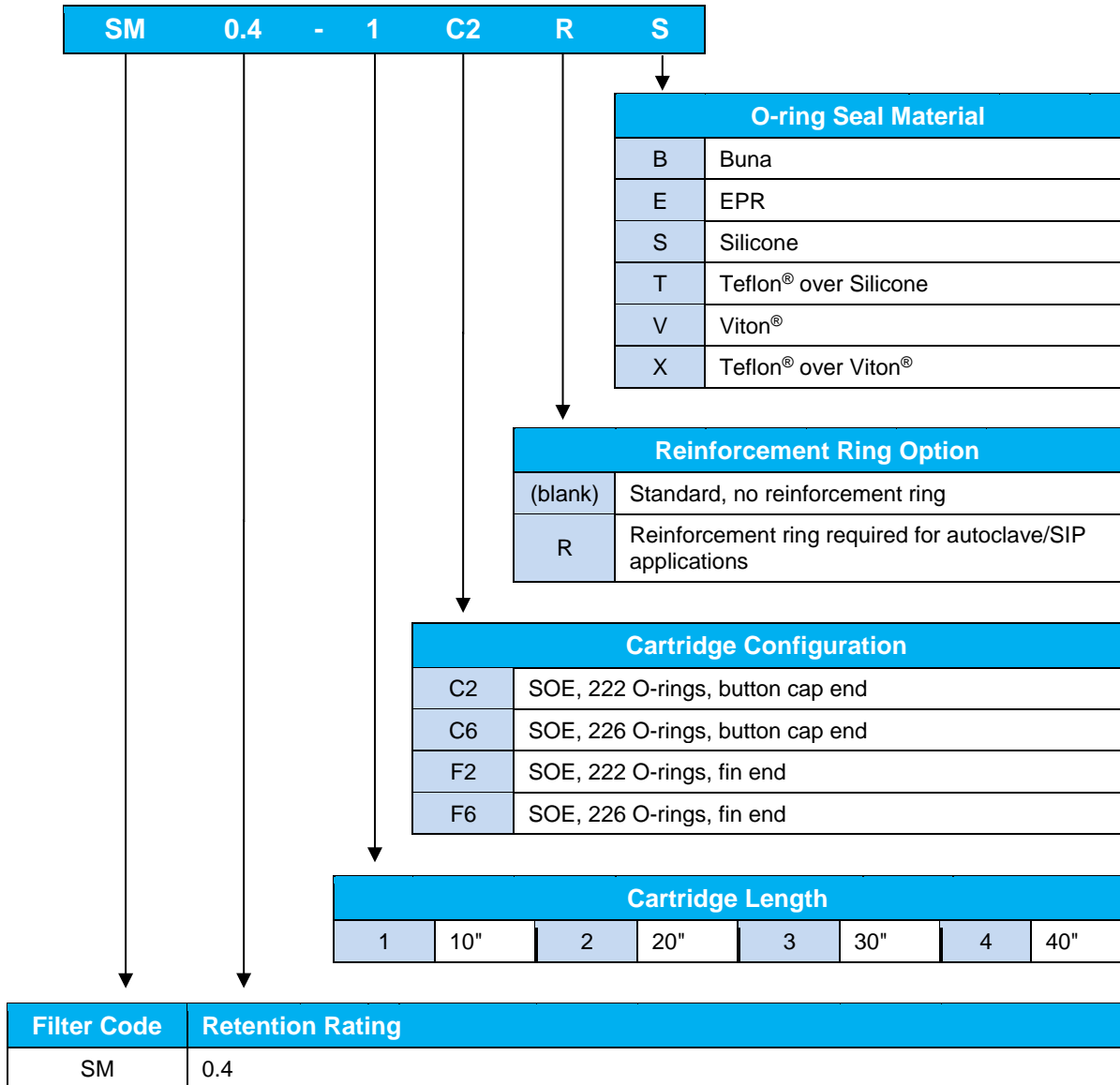
### Biological Safety

STyLUX® filters meet the requirements as specified in the current USP Class VI plastics, physicochemical, oxidizable substances, and cytotoxicity tests. Bacterial endotoxin levels in aqueous extracts of STyLUX® filters are less than 0.5 EU/mL, as determined using the *Limulus* amoebocyte lysate (LAL) test. No binders, adhesives or surfactants are used in the construction of STyLUX® filters. Filters comply with Commission Regulation (EU) No 10/2011.

### Quality Assurance

STyLUX® filters comply with the Food and Drug Administration Code of Federal Regulations, Title 21, Parts 210 and 211. Product is manufactured and packaged in a cleanroom facility that, through voluntary compliance, meets or exceeds FDA Good Manufacturing Practice Standards. To ensure product reliability, Meissner's Quality Assurance staff continually audits the manufacturing process for conformance to its Quality Management System. Each STyLUX® filter is integrity tested during manufacture and is clearly marked with filter type and lot number.

## Ordering Guide



Additional information about STyLUX® filter products is available in the Green Docs document which is viewable at <http://www.meissner.com/downloads/stylux-gd001-2.0.pdf>

Viton and Teflon are registered trademarks of DuPont Dow Elastomers L.L.C. & The DuPont Company