

# nO-Ring®

## Innovative Cartridge Seal Adapter

The nO-Ring® seal is an innovative adapter for sealing cartridge filters into 222- and 226-style filter housings. The patented nO-Ring® design provides the security of a double O-ring seal, without the use of elastomeric O-rings. This seal is ideal for use in critical pharmaceutical, semiconductor and chemical applications, which would otherwise require the use of expensive fluoropolymeric or perfluoroelastomeric O-rings. Typical applications include filtration of high purity chemicals such as DI water, acids, bases, solvents, photochemicals, developers, etchants and rinses.

The patented nO-Ring® design eliminates the need to select and use expensive chemically resistant O-rings for aggressive chemical or solvent applications. This reduces material costs for each batch or process line. By eliminating the extra O-ring materials, total filter extractables are reduced. Filter installation and removal concerns associated with O-ring durometer and/or deterioration in service are also eliminated.

### Design Features

- All-polypropylene construction provides wide chemical compatibility, while reducing extractables
- Unique adapter design easily distinguishes nO-Ring™ cartridges from other cartridges, which may have identically colored and textured O-rings, but differing chemical compatibilities



## Specifications

### Materials of Construction

Upstream & Downstream  
 Support: Polypropylene  
 Outer Cage: Polypropylene  
 Core: Polypropylene  
 End Caps: Polypropylene  
 Sealing Method: Thermal bonding

### Filtration Media:

#### Hydrophilic Membranes

SteriLUX® PVDF  
 STyLUX® Polyethersulfone  
 EverLUX® Polyethersulfone

#### Hydrophobic Membranes

Steridyne® PVDF  
 Chemdyne® Polypropylene  
 Ultradyne® PTFE

#### Microfiber

ALpHA® Polypropylene  
 Vanguard® Polypropylene  
 Protec® RF Borosilicate glass  
 Protec® RM Borosilicate glass  
 + PVDF membrane  
 DeltaMax® Polypropylene depth

### Filtration Ratings:

0.04 µm - 99 µm

### Cartridge Length (Nominal)

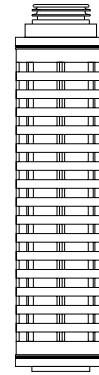
10", 20", 30" or 40"  
 (25 cm, 50 cm, 75 cm or 100 cm)

### Maximum Operating Temperatures & Pressures

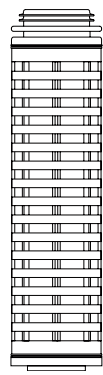
Δp 80 psi @ 100 °F  
 (Δp 5,5 bar @ 38 °C)

Δp 60 psi @ 150 °F  
 (Δp 4,1 bar @ 66 °C)

Δp 30 psi @ 180 °F  
 (Δp 2,1 bar @ 82 °C)



222-style nO-Ring®  
 filter cartridge (C1)



226-style nO-Ring®  
 filter cartridge (C5)



## Ordering Information

Filter Media	Removal Rating (µm)	Cartridge Length	End Cap Configuration
<i>MF</i>	<i>5</i>	<i>1</i>	<i>F5</i>
VMH = SteriLUX®	0.1, 0.2, 0.4, 0.6	1 = 10"	C1 = SOE; -222 nO-Ring®, button cap end
SM = STyLUX®	0.04, 0.1, 0.2, 0.4, 0.6	2 = 20"	F1 = SOE; -222 nO-Ring®, fin end
SMH = EverLUX®	0.2, 0.4, 0.6	3 = 30"	C5 = SOE; -226 nO-Ring®, button cap end
VMV = Steridyne®	0.2	4 = 40"	F5 = SOE; -226 nO-Ring®, fin end
PM = Chemdyne®	0.04, 0.1, 0.2		
TM = Ultradyne®	0.05, 0.1, 0.2, 0.4, 1.0, 5		
MF = ALpHA®	0.45, 0.6, 0.8, 1.2, 2.4, 5, 7, 10, 20, 30, 40, 70		
MN = Vanguard®	0.1, 0.2, 0.4, 1, 3, 5, 10, 30, 60, 99 (nominal)		
RF = Protec®	0.5		
RM = Protec® +	0.2, 0.3, 0.5		
DMG = DeltaMax®	0.5, 1, 3, 5, 10, 20, 40, 70		