

Our depth cartridges FR-N Series are designed to obtain a high efficiency and filtration of various liquids having impurity. Using only 100% pure polypropylene they are manufactured through state of the art technology. They are generally used in applications that require extremely high quality filtration. During the manufacturing process, the polypropylene is mixed with compressed hot air. Then it is stratified on a rigid polypropylene core through a continuous and constant rotating movement. This process infuses and intersects the polypropylene fibres amongst themselves.

This creates the so called "Depth Cartridge" guaranteeing a uniform filtration along all the surface of the cartridge. The Polypropylene fibres used are always and only of first choice which processed at high temperatures welds them together eliminating any possibility of losing particles or residuals.

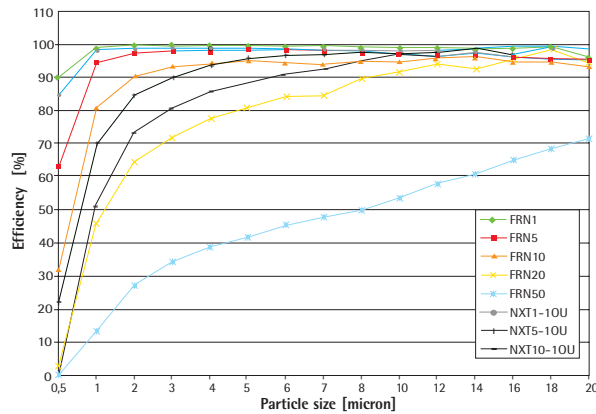
The range vary from 1 to 90 micron and standard lengths are 9"3/4 to 40". The cartridges are made up as one whole piece no matter what length.

**PECULIAR CHARACTERISTICS:**

- High Depth Filtration
- Constant filtration on all surface
- High Yield
- High resistance to compression
- High Stability
- Lower pressure drop
- No residual or particle loss

**FILTER EFFICIENCY:**

The FR-N Cartridges are fully tested to achieve at least 95% filtration efficiency. This means



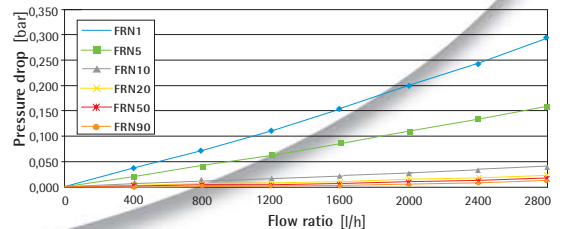
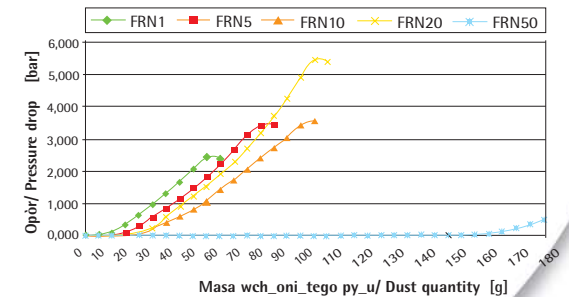
that a 10 micron FR-N Cartridge will filter 95% of particles having a diameter of 10 micron or more. The extraordinary filtration capability of the FR-N cartridges is obtained thanks to its wide filtering surface and compactness which is distributed along all the surface of the cartridge itself. The cartridges need to be changed when a loss in pressure drop is detected or in any case when the specific filtering application requires it.

**APPLICATIONS:**

The FR-N cartridges can be used as end-line filtration or as pre-filtration.

Applications:

- Water treatment
- Electronic/Nuclear
- Biotechnology/Fine chemicals
- Food/Beverage
- Coatings/Resins
- General Industrial
- Pharmaceutical/Cosmetics
- Bulk chemicals/Petrochemicals
- Galvanic



**FLOW RATE (lt/h)**

MICRON		9"3/4	20"	23"	30"	40"
1	FRN	800	1400		2000	2600
5	FRN	1500	2700		3800	4800
10	FRN	2000	3600		5000	6400
20	FRN	2500	4500		6200	8000
30	FRN	2600	4600		6500	8000
50	FRN	2600	4600		6500	8000
90	FRN	2700	4800		6800	8000
1-10	FRN-DG	900	1500		2100	2700
5-20	FRN-DG	1600	2800		3900	4900
20-50	FRN-DG	2600	4600		6300	8100
1	FRN-BIG	800	1400			
5	FRN-BIG	1500	2700			
20	FRN-BIG	2500	4500			
50	FRN-BIG	2600	4600			
1-10	FRN-BIG-DG	800	1600		2400	
5-20	FRN-BIG-DG	1800	3200		4800	
20-50	FRN-BIG-DG	2700	4800		6000	
1-10	FON			8000		16000
5-20	FON			15000		30000
20-50	FON			20000		40000
50-90	FON			25000		50000
1	CL		6000			12000
5	CL		12000			24000
10	CL		15000			30000
20	CL		18000			36000
40	CL		25000			50000
70	CL		25000			50000
90	CL		25000			50000
5-20	CL		13000			26000
20-50	CL		20000			40000

FR-N line  
depth cartridges

# FR-N

## TECHNICAL FEATURES

	FR-N	FR-N-DG
Raw material:	100% PP	100% PP
Core:	100% PP	100% PP
Outer cage:	—	—
End caps:	DOE, 3, 8, 7F, 7	DOE, 3, 8, 7F, 7
O-Ring / Gasket:	—	—
Length:	9"3/4-10"-20"-30"-40"	9"3/4-10"-20"-30"-40"
Inner diameter:	28 mm	28 mm
Outer diameter:	63 mm	68 mm
Micron rating:	1/3/5/10/20/30/50/90	1-10/5-20/20-50
Efficiency:	95%	95%
<b>Pressure:</b>		
Max working pressure:	6 bar	6 bar
Max differential pressure:	0,8 bar	0,8 bar
<b>Temperature:</b>		
Max working temperature:	80°C	80°C

Note: Max flow rate at 20°C and differential pressure 0,15 bar

## MELT BLOWN CARTRIDGES series FR-N

COD	MICRON	LENGTH	QUANTITY	Kg	VOLUME
			box	box	package
A4240250	1	9"3/4	75	12,00	0,093
A4240260	3	9"3/4	75	12,00	0,093
A4240270	5	9"3/4	75	12,00	0,093
A4240280	10	9"3/4	75	12,00	0,093
A4240290	20	9"3/4	75	12,00	0,093
A4240300	30	9"3/4	75	12,00	0,093
A4240310	50	9"3/4	75	14,00	0,093
A4240320	90	9"3/4	75	14,00	0,093
A4240330	1	10"	75	12,00	0,093
A4240340	3	10"	75	12,00	0,093
A4240350	5	10"	75	12,00	0,093
A4240360	10	10"	75	12,00	0,093
A4240370	20	10"	75	12,00	0,093
A4240380	30	10"	75	12,00	0,093
A4240390	50	10"	75	14,00	0,093
A4240400	90	10"	75	14,00	0,093
A4240410	1	20"	30	12,70	0,093
A4240420	3	20"	30	12,70	0,093
A4240430	5	20"	30	12,70	0,093
A4240440	10	20"	30	12,70	0,093
A4240450	20	20"	30	12,70	0,093
A4240460	30	20"	30	12,70	0,093
A4240470	50	20"	30	14,00	0,093
A4240480	90	20"	30	14,00	0,093
A4240490	1	30"	15	7,50	0,061
A4240500	3	30"	15	7,50	0,061
A4240510	5	30"	15	7,50	0,061
A4240520	10	30"	15	7,50	0,061
A4240530	20	30"	15	7,50	0,061
A4240540	30	30"	15	7,50	0,061
A4240550	50	30"	15	9,00	0,061
A4240560	90	30"	15	7,50	0,061
A4240570	1	40"	15	11,00	0,076
A4240580	3	40"	15	11,00	0,076
A4240590	5	40"	15	11,00	0,076
A4240600	10	40"	15	11,00	0,076
A4240610	20	40"	15	11,00	0,076
A4240620	30	40"	15	11,00	0,076
A4240630	50	40"	15	14,50	0,076
A4240640	90	40"	15	11,00	0,076

## MELT BLOWN CARTRIDGES series FR-N-DG

COD	MICRON	LENGTH	QUANTITY	Kg	VOLUME
			box	box	package
A424025D	1-10	9"3/4	75	12,00	0,093
A424027D	5-20	9"3/4	75	12,00	0,093
A424029D	20-50	9"3/4	75	12,00	0,093
A424033D	1-10	10"	75	12,00	0,093
A424035D	5-20	10"	75	12,00	0,093
A424037D	20-50	10"	75	12,00	0,093
A424041D	1-10	20"	30	12,70	0,093
A424043D	5-20	20"	30	12,70	0,093
A424045D	20-50	20"	30	12,70	0,093
A424049D	1-10	30"	15	7,50	0,061
A424051D	5-20	30"	15	7,50	0,061
A424053D	20-50	30"	15	7,50	0,061
A424057D	1-10	40"	15	11,00	0,076
A424059D	5-20	40"	15	11,00	0,076
A424061D	20-50	40"	15	11,00	0,076

# FR-N AQUA BIG

TECHNICAL FEATURES	FR-N BIG	FR-N BIG (dual grad.)
Raw material:	100% PP	100% PP
Core:	100% PP	100% PP
Outer cage:	—	—
End caps:	DOE	DOE
O-Ring / Gasket:	—	—
Length:	9"3/4-20"	9"3/4-20"-30"
Inner diameter:	28 mm	28 mm-38 mm
Outer diameter:	114 mm	120 mm
Micron rating:	1/5/20/50	1-10/5-20/20-50
Efficiency:	95%	95%
<b>Pressure:</b>		
Max working pressure:	6 bar	6 bar
Max differential pressure:	0,8 bar	0,8 bar
<b>Temperature:</b>		
Max working temperature:	80°C	80°C

Note: Max flow rate at 20°C and differential pressure 0,15 bar



## MELT BLOWN CARTRIDGES series FR-N AQUA BIG

COD	MICRON	LENGTH	QUANTITY	Kg	VOLUME	
			box	box	package	
A4270100	1	9"3/4	8	4,50	0,036	
A4270120	5	9"3/4	8	4,50	0,036	
A4270140	20	9"3/4	8	4,50	0,036	
A4270150	50	9"3/4	8	4,50	0,036	
A4270110	1	20"	4	3,60	0,036	
A4270200	5	20"	4	3,60	0,036	
A4270220	20	20"	4	3,60	0,036	
A4270230	50	20"	4	3,60	0,036	
A427010D	1-10	9"3/4	8	6,00	0,036	
A427012D	5-20	9"3/4	8	4,50	0,036	
A427014D	20-50	9"3/4	8	4,50	0,036	
A427011D	1-10	20"	4	5,00	0,036	
A427020D	5-20	20"	4	3,60	0,036	
A427022D	20-50	20"	4	3,60	0,036	
A427009S	1-10	30" ø 38 mm	4	7,50	0,054	
A427005S	5-20	30" ø 38 mm	4	5,40	0,054	
A427006S	20-50	30" ø 38 mm	4	5,40	0,054	