



Filter Selection Kit



For Constant Pressure

Filter selection is a key area of concern in formulation development labs as filters can not only impact drug product stability and /or its impurity profile but also affect the process economy depending on the throughput a typical final filter or combination of pre-filter/final filter can deliver.

Scientists work with different membrane disc filters and pre-filters of different materials of construction (MOC) from different manufacturers in order to establish the most suitable filter/filter train for their drug formulation. However, this is a highly time consuming process which involves a large number of throughput studies to start with and once the filters are shortlisted, accelerated stability studies are conducted. Also the disc filters do not represent all the materials of construction of large filter devices (capsule or cartridge filters).

MDI Filter Selection Kit

MDI offers a specially designed filter selection kit for users in formulation and process development labs in the pharmaceutical and bio pharmaceutical industries.

It offers five or ten different types of 50mm inline filters ranging from 0.2 µm sterilizing grade filters of different membrane material of construction (MOC) to microglassfiber and polypropylene pre filters. These ready to use devices are scalable to 30" capsule filter with 1.8m² effective filtration area with similar material of construction.

The 50mm vented inline filters are available with sanitary flange end connection to be used with MDI FilterMax which is an automated filter selection and sizing equipment. The 25mm sanitary flange connection fits on a specially designed pressure vessel for throughput studies at constant pressure.

However, 50 mm filter devices are also available with 1/4"-3/8" stepped hose barb connections in case MDI FilterMax is not available with the user.

Ordering Information

Kit with 5 filter types : FSK05XXXXXXXXX1

Kit with 10 filter types : FSK10XXXXXXXXX1

Unique Advantages

- 0.2 µm sterilizing grade filters with wide range of materials of construction (MOC)
- Throughput data recording, processing and report generation is done automatically

Kit Components

The user can choose 5 or 10 different filters from the following options:

Filter Type	Pore Size	Catalog No.	
		with FilterMax	without FilterMax
Microglassfiber filter	0.7 µm	VGSX1041SSXX102	VGSX1041BBXX102
Microglassfiber filter	2 µm	VGSX1015SSXX102	VGSX1015BBXX102
Microglassfiber filter	6 µm	VGSX1025SSXX102	VGSX1025BBXX102
PP Membrane filter	1 µm	VPFX1005SSXX102	VPFX1005BBXX102
PP Membrane filter	2.5 µm	VPFX1006SSXX102	VPFX1006BBXX102
PP Membrane filter	5 µm	VPFX1007SSXX102	VPFX1007BBXX102
PP Membrane filter	10 µm	VPFX1008SSXX102	VPFX1008BBXX102
PES Membrane filter with Microglassfiber prefilter	0.2 µm	VGKX1001SSXX102	VGKX1001BBXX102
PES Membrane filter with Microglassfiber prefilter	0.5 µm	VGKX1004SSXX102	VGKX1004BBXX102
PES Membrane filter	0.2 µm	VKSX1001SSXX102	VKSX1001BBXX102
Nylon Membrane filter	0.2 µm	VNSX1001SSXX102	VNSX1001BBXX102
Hydrophilic PVDF Membrane filter	0.2 µm	VWSX1001SSXX102	VWSX1001BBXX102

Applications

- For selection of most efficient filtration train and most effective combination of serial filtration layers at R&D and process development stage.
- To calculate the most optimum filter size for a process fluid fulfilling the desired process parameters.
- Improving existing filtration systems for better economies and increased throughput.
- To test the filterability of incoming raw materials to ensure desired throughputs from established filtration systems.