ULTRADYN Capillary Membranes
Products summary

Form No.: TB-002
Rev. 2408

MANN+HUMMEL

Product summary

Type	Article No.	MWCO [kDa]	Mem.	Inner Cap. Ø [mm]	Nom. Mem. Area [m²]	Housing Material	Potting Material	Standard Preservative	Length [mm]	Ø [mm]	Connections feed/conc. permeate	Max Temp Operation [°C]	Max Temp Sanitization [°C]	pH Range [-]	Max feed pressure[b] [bar]	Max. TMP [bar]	Expected Water Flux[a] [l/h]	Standard feed flow[c] [l/h]
FS10 module size with PES membrane (inside-out filtration) and ferrule (tri-clamp) connections																		
FS10-FC-FUST653	1000000893	6	PES	0.5	7.8	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	4300	3800
FS10-FS-FUST653	1000000899	6	PES	0.5	7.8	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	4300	3800
FS10-FC-FUS0181	1000000706	10	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	2000	3800
FS10-FS-FUS0181	1000000699	10	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	2000	3800
FS10-FC-FUS0353	1000000710	30	PES	0.5	7.8	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	4300	3800
FS10-FS-FUS0353	1000000700	30	PES	0.5	7.8	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	4300	3800
FS10-FC-FUS0382	1000000712	30	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	2300	3800
FS10-FS-FUS0382	1000000715	30	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	2300	3800
FS10-FC-FUS1582	1000000711	150	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	5300	3800
FS10-FS-FUS1582	1000000701	150	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	5300	3800
FS10-FC-FUS5082	1000000713	500	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	5300	3800
FS10-FS-FUS5082	1000021777	500	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1129	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	5300	3800
FS10 module size with PES membrane (inside-out filtration) and ferrule (tri-clamp) connection, same connection size on concentrate/feed and permeate																		
FS10-LFC-FUS0181	1000000727	10	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1155	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	2000	3800
FS10-LFC-FUS0382	1000000729	30	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1155	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	2300	3800
FS10-LFC-FUS1582	1000000723	150	PES	0.8	5	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1155	89	2S Ferrule 1S Ferrule	60[1]	98	1-13	6	3	5300	3800

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FS10 module size with PAN/CTA membrane (inside-out filtration) and ferrule (tri-clamp) connections

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FS10-FS-FUY03A1	1000000747	30	PAN	1	4.2	Polysulfone	Epoxy Resin	Pure Water (sterilized with NaOCl)	1129	89	2S Ferrule 1S Ferrule	45	-	2-11	6	3	1300	3800
FS10-FC-FUC1582	1000000714	150	CTA	0.8	5	Polysulfone	Epoxy Resin	Glycacil 200mg/L	1129	89	2S Ferrule 1S Ferrule	40	-	4 - 8	6	3	2500	3800

FG10 module size with PES membrane (outside-in filtration) and V band coupling

FG10-FC-FUS1041	1000002939	100	PES	0.4	15.3	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	1126	89	V band Coupling/ 25 A	60[1]	98	1-13	6	3	3700	-

FS03 module size with PES/CTA/PAN membrane and ferrule (tri-clamp) connections

FS03-FC-FUST653	1000000730	6	PES	0.5	2.1	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	407	92	1S Ferrule G1/2	60[1]	98[2]	1-13	6	3	720	3700
FS03-FC-FUS0181	1000000704	10	PES	0.8	1.4	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	407	92	1S Ferrule G1/2	60[1]	98[2]	1-13	6	3	470	3700
FS03-FC-FUS0353	1000000705	30	PES	0.5	2.1	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	407	92	1S Ferrule G1/2	60[1]	98[2]	1-13	6	3	720	3700
FS03-FC-FUS0382	1000000706	30	PES	0.8	1.4	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	407	92	1S Ferrule G1/2	60[1]	98[2]	1-13	6	3	560	3800
FS03-FC-FUS03C1	1000000703	30	PES	1.2	1	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	407	92	1S Ferrule G1/2	60[1]	98[2]	1-13	6	3	310	3900
FS03-FC-FUS1582	1000000707	150	PES	0.8	1.4	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	407	92	1S Ferrule G1/2	60[1]	98[2]	1-13	6	3	720	3800
FS03-FC-FUC1582	1000000708	150	CTA	0.8	1.4	Polysulfone	Epoxy Resin	Glycacil 200mg/L	407	92	1S Ferrule G1/2	40	-	4-8	5	2	650	3700
FS03-FC-FUY03A1	1000028917	30	PAN	1	1.1	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	407	92	1S Ferrule G1/2	45	-	2-11	6	3	280	3800

FB02 module size with PES/CTA/PAN membrane and G1/2 connections

FB02-FC-FUST653	1000000740	6	PES	0.5	0.4	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	356	45	G1/2 G1/2	60[1]	98[2]	1-13	4	3	300	710
FB02-FC-FUS0181	1000000739	10	PES	0.8	0.25	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	356	45	G1/2 G1/2	60[1]	98[2]	1-13	4	3	130	690
FB02-FC-FUS0353	1000000736	30	PES	0.5	0.4	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	356	45	G1/2 G1/2	60[1]	98[2]	1-13	4	3	300	710

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FB02-FC-FUS0382	1000000735	30	PES	0.8	0.25	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	356	45	G1/2 G1/2	60[1]	98[2]	1-13	4	3	130	690
FB02-FC-FUS1582	1000000737	150	PES	0.8	0.25	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	356	45	G1/2 G1/2	60[1]	98[2]	1-13	4	3	360	690
FB02-FC-FUS5082	1000000741	500	PES	0.8	0.25	Polysulfone	Epoxy Resin	Pure Water (heat sterilized)	356	45	G1/2 G1/2	60[1]	98[2]	2-11	4	3	390	690
FB02-FC-FUC1582	1000000738	150	CTA	0.8	0.13	Polysulfone	Epoxy Resin	Glycacil 200mg/L	356	45	G1/2 G1/2	40	-	4-8	4	2	75	360
FB02-FC-FUY03A1	1000000746	30	PAN	1	0.2	Polysulfone	Epoxy Resin	Pure Water (sterilized with NaOCl)	356	45	G1/2 G1/2	45	-	2-11	4	3	60	710
FB02-FC-FUY15E1	1000024956	150	PAN	1.4	0.15	Polysulfone	Epoxy Resin	Pure Water (sterilized with NaOCl)	356	45	G1/2 G1/2	45	-	2-11	4	3	60	700
Membrane cartridges with PES/CTA membrane in 1066 mm lenght.																		
FK20-FO-FUS0181	1000000806	10	PES	0.8	17	Polysulfone	Epoxy Resin	Glycacil 1.7wt% (spray on all surface of element)	1066	165	-	60[1]	85	1-13	-	3	6300	13300
FK20-FO-FUS0382	1000001796	30	PES	0.8	17	Polysulfone	Epoxy Resin	Glycacil 1.7wt% (spray on all surface of element)	1066	165	-	60[1]	85	1-13	-	3	7100	13300
FK20-FO-FUS1582	1000000731	150	PES	0.8	17	Polysulfone	Epoxy Resin	Glycacil 1.7wt% (spray on all surface of element)	1066	165	-	60[1]	85	1-13	-	3	28500	-
FN20-VP-FUS5082	1000003035	500	PES	0.8	16	PVC	PUR	Glycacil 1.7wt% (spray on all surface of element)	1066	165	-	40	-	2-12	-	3	23000	-

[a] Initial water flux by dead end filtration with pure water under TMP 0.1 MPa at 25°C.
[b] Standard condition is adjusted to 1 m/sec feed velocity. The optimum velocity is different for each application.
[c] This value is applicable at 25°C.
[d] Maximum pressures depend on operating temperature. See instruction manual for further information.
[*] DAICEN Membrane Systems Ltd. is the manufacturer of the ULTRADYN modules and markets and distributes them under the registered trademark MOLSEP®.
[1] If used at high temperatures, the life of the product may be shortened. Please contact the manufacturer for operating conditions.
[2] The packing of the permeate nozzle must be changed to silicone.

High mechanical strength, backwashable membrane in a wide range of membrane types make ULTRADYN™ hollow fiber modules suitable for all applications requiring a high level of purification and high packing density. ULTRADYN modules are available with polyethersulfone (PES), polyacrylonitrile (PAN) and cellulose tri-acetate (CTA) hollow fiber membrane types and in configurations that can be sterilized with hot water up to 98 °C, eliminating bacterial growth and preventing fouling.

ULTRADYN modules are available with a hollow fiber inner diameter range from 0.5 to 1.4 mm, and module size range from 0.1 m² to 17 m². ULTRADYN hollow fiber modules have proven particularly successful in applications such as pure water filtration, pharmaceuticals, electronics, and surface water treatment.

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