



Glass Expansion Glass Concentric Nebulizer

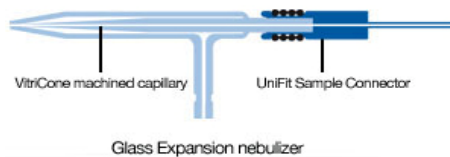


U-Series Glass Concentric Nebulizers

with UniFit sample connector which slides easily over the sample arm

The benefits of the U-Series nebulizer are:

- :: Resists blockage: The sample channel is uniform from the entry point to the tip, so there is nowhere for particulates to be trapped.
- :: Fast washout: Since there is nowhere for sample to be trapped, the fastest possible washout and highest sample throughput is achieved.
- :: Simple to use: Our proprietary UniFit connector slides easily over the sample arm and creates an excellent seal.
- :: Full length VitriCone construction: With the VitriCone design, the sample channel is constructed from heavy glass capillary which is machined to very high tolerances.



All Glass Expansion concentric glass nebulizers use the unique VitriCone channel which is constructed from heavy glass capillary which is machined to very high tolerances.

The benefits of the VitriCone construction are:

- The sample channel is guaranteed uniform and thus resistant to clogging.
- The rugged precision machined capillary resists vibration and delivers the best possible precision.
- The industry's tightest tolerances ensure that each nebulizer will perform to the same high standards as the previous one.

Understanding Nebulizer Part Numbers

AR xx - yy - ZZ nnn E

AR ...

Argon gas operated nebulizer

xx ...

the nominal Argon pressure in psig (30, 35, 40...)

yy ...

the Argon flow at nominal pressure, in NL/min

(NL = norm liter at 1013mbar)

ZZ ...

nebulizer model type:

UC =

Conikal nebulizer fitted with UniFit

UM =

MicroMist nebulizer fitted with UniFit

US =

Slurry nebulizer fitted with UniFit

USS =

SeaSpray nebulizer fitted with UniFit

QV =

Quartz **VeeSpray** V-groove nebulizer

CV =

Ceramics **VeeSpray** V-groove nebulizer

CP =

PolyCon Polyimide nebulizer

PFA =





OpalMist PFA nebulizer

nnn ...

aspirated uptake at nominal pressure, in mL/min

E

with the EzyLok gas connector






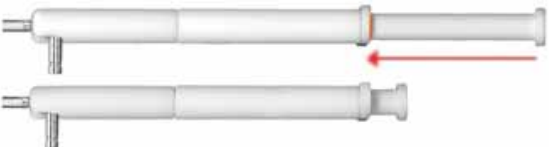

	at 30psig (2,1bar)	GE ID- no.	part no.	€each
Conikal for routine aqueous and organic applications				
 <ul style="list-style-type: none"> ■ low RSD's due to highly accurate manufacturing <p>:: TDS tolerance up to 5%</p> <p>:: particulates tolerance up to 75µm</p>	1 mL/min	AR35 - 1- UC1E	504 - 70	297,00
	1 mL/min	AR40 - 1- UC1E	504 - 79	297,00
	1 mL/min	AR50 - 1- UC1E	504 - 78	297,00
	2 mL/min	AR35 - 07- UC2E	504 - 82	297,00
	2 mL/min	AR30 - 07- UC2E	504 - 80	297,00
	3 mL/min	AR30 - 1 - UC3E	504 - 72	297,00
	3 mL/min	AR27- 075- UC3E	504 - 73	297,00
	3 mL/min	AR30- 07- UC3E	504 - 81	297,00
MicroMist for limited sample volume				
 <ul style="list-style-type: none"> ■ high performance for limited sample volumes <p>:: TDS tolerance up to 1%</p> <p>:: Low RSD's due to highly accurate construction</p>	50µL/min	AR40 - 1- UM005E	504 - 50	526,00
	50µL/min	AR35 - 1- UM005E	504 - 60	526,00
	100µL/min	AR40 - 1 - UM01E	504 - 51	409,00
	100µL/min	AR35 - 1 - UM01E	504 - 61	409,00
	200µL/min	AR40 - 1- UM02E	504 - 52	409,00
	200µL/min	AR30 - 1 - UM02E	504 - 62	409,00
	400µL/min	AR30 -07- UM04E	504 - 54	356,00
	400µL/min	AR30 - 1 - UM04E	504 - 64	356,00
400µL/min	AR35 - 1 - UM04E	504 - 65	356,00	
SeaSpray for samples with very high total dissolved solids				
 <ul style="list-style-type: none"> ■ significant sensitivity improvements and high tolerance to salts and particulates combined with low RSD's <p>:: TDS tolerance up to ~20%</p> <p>:: tolerance to particulates <75µm</p>	0,4 mL/min	AR40 - 1 - USS04E	504 - 39	452,00
	0,4 mL/min	AR35 - 1 - USS04E	504 - 44	452,00
	1 mL/min	AR40 - 1 - USS1E	504 - 35	452,00
	1 mL/min	AR30 - 1 - USS1E	504 - 45	452,00
	2 mL/min	AR50 - 1 - USS2E	504 - 36	452,00
	2 mL/min	AR30 - 1 - USS2E	504 - 46	452,00
	3 mL/min	AR35 -07 - USS3E	504 - 37	452,00
	3 mL/min	AR30 - 1 - USS3E	504 - 47	452,00
Slurry for slurries or suspensions				
 <ul style="list-style-type: none"> ■ for applications requiring the aspiration of slurries or suspensions ■ wider capillary bore reduces the possibility of particle blockage ■ natural liquid uptake of 6ml/min but operates best between 1,5 - 2,5 mL/min <p>:: TDS tolerance up to ~15%</p> <p>:: particulates tolerance up to 150µm</p>	6 mL/min	AR35-07-US6E	504 - 26	326,00
	6 mL/min	AR30- 1 -US6E	504 - 28	326,00

NEBULIZERS HF resistant

	sample uptake at 30 psig (2,1bar)	sample tubing 1,27mm x ID	GE ID- no.	part no.	€each
PolyCon for limited sample volumina and ultra pure solutions					
					<ul style="list-style-type: none"> ■ for high precision analysis involving samples digested in HF ■ favourite in the semi conductor industry, ■ enabled analysts to produce accurate ($r = 0.9998$) calibration curves for low-ppt levels of Na, K, Fe and Ca in 30% hydrogen peroxide
:: physical reproducibility ~ 2%	0,05 mL/min	0,25mm	AR40 -1- CP005	505 - 50	919,00
:: particulates tolerance	0,1 mL/min	0,25mm	AR35 -1- CP01	505 - 61	893,00
up to 75µm depend. on uptake	0,2 mL/min	0,50mm	AR40 -1- CP02	505 - 52	893,00
:: TDS tolerance ~5%	0,4 mL/min	0,50mm	AR35 -1- CP04	505 - 64	840,00
:: Low RSD's due to concentric geometry	1 mL/min	0,75mm	AR30 -1- CP 1	505 - 70	840,00
	2 mL/min	0,75mm	AR30 -1- CP 2	505 - 71	840,00
	2 mL/min	0,75mm	AR50 -1- CP 2	505 - 80	840,00

OpalMist for ultra pure solutions and high acid concentrations					
					<ul style="list-style-type: none"> ■ for high precision analyses requiring chemical resistancy to HF, concentrated acids, alkalis and organics ■ excellent results with lowest blanks and memory effects for ultra trace analysis
	0,1 mL/min	0,25mm	AR40-1-PFA01	506 - 51	893,00
	0,1 mL/min	0,25mm	AR35 -1- PFA01	506 - 61	893,00
:: Strong and consistent self-aspiration	0,2 mL/min	0,50mm	AR40 -1- PFA02	506 - 52	893,00
:: High tolerance to particulates, up to 75µm depending on uptake	0,2 mL/min	0,50mm	AR35 -1- PFA02	506 - 62	893,00
:: TDS tolerance typically up to 30%	0,4 mL/min	0,50mm	AR40 -1- PFA04	506 - 54	840,00
:: Low RSD's due to concentric geometry	1 mL/min	0,75mm	AR40 -1- PFA 1	506 - 79	840,00
	1 mL/min	0,75mm	AR30 -1 -PFA 1	506 - 70	840,00
	2 mL/min	0,75mm	AR30-07-PFA 2	506 - 80	840,00

Ceramic VeeSpray for samples with highest particle and TDS loads					
					<ul style="list-style-type: none"> ■ ideal for HF analyses ■ most robust and abrasion resistant nebulizer ■ the same 6mm diameter as the concentric nebulizer
	1,5 - 2,5 ml/min	0,75mm	AR30-07-CV6	516 - 30	966,00
	1,5 - 2,5 ml/min	0,75mm	AR30 -1- CV6	516 - 31	966,00
:: must be pumped (no self aspiration)					
:: particulates tolerance up to 300µm					
:: TDS tolerance up to 30%					

		GE ID- no.	part no.	€/each
UniFit sample tube connectors (pack of 10 pcs.)				
	<ul style="list-style-type: none"> ■ reduce washout times ■ eliminate dead volume 			
	1,3mm x 0,25mm x 700mm	NFT-025	531 - 13	83,00
	1,3mm x 0,50mm x 700mm	NFT-050	531 - 14	76,00
	1,3mm x 0,75mm x 700mm	NFT-075	531 - 15	69,00
	1/16"(1,55mm) x 0,25mm x 700mm	NFT-16/25	531 - 16	91,00
	1/16"(1,55mm) x 0,50mm x 700mm	NFT-16/50	531 - 17	83,00
	special ID and length of capillary		on request	
EzyLok argon gas connector				
	<ul style="list-style-type: none"> ■ eliminates bonding of argon supply tube to nebulizer side arm ■ can be used with 4mm nylon tubing or standard 6mm soft tubing 			
	EzyLok kit for CGN's with EzyLok side arms (comes standard with MicroMist, SeaSpray, Slurry nebulizers)	EL-1	522 - 11	22,00
	EzyLok connector for 4mm tubing	QSM-4	522 - 14	15,00
	EzyLok 6mm hose adaptor (2 pcs.)	70-808-0735/2	522 - 16	12,00
	Hose clips for OD 6mm/1/4" tubings (10 pcs.)	SNP-1	522 - 20	12,50
ELUO nebulizer cleaning device				
	<ul style="list-style-type: none"> ■ simple and convenient way to cleare of annoying particles and contaminants 			
	ELUO for glass nebulizer	70-ELUO	539 - 56	174,00
	ELUO for HF nebulizer	70-ELUO-OP	539 - 57	176,00
Sample tubings made of PTFE (pack of 10m)				
	1,27mm x 0,25mm	STT-025	527 - 02	54,00
	1,27mm x 0,50mm	STT-050	527 - 05	54,00
	1,27mm x 0,75mm	STT-075	527 - 07	46,00
	1/16" x 0,25mm	STT-16/25	526 - 02	60,00
	1/16" x 0,50mm	STT-16/50	526 - 05	60,00
	1/16" x 0,75mm	STT-16/75	526 - 07	60,00