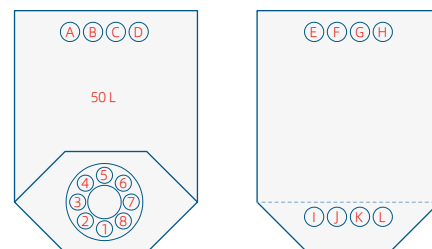


Data Sheet of Cobetter Lifecask™ RG Single-use Bioreactor Bag Configuration

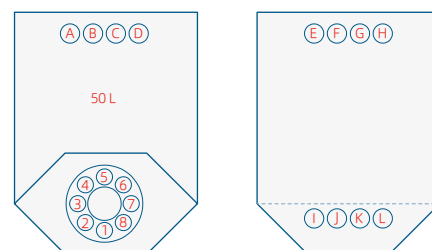


KRG50LS2L30 50L Bag (Macro sparger: 0.5mm)



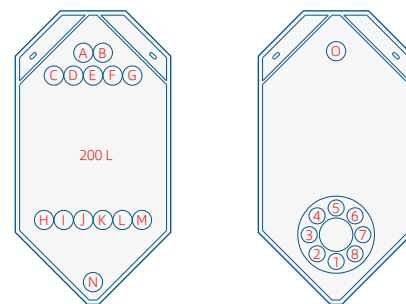
Working Volume	Minimum: 22L;Maximum: 50L;Headspace volume: 13L	
Impeller	3 pieces, 8.5" diameter, 40°	
A+G+H (Liquid in)	120 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
B+D (Liquid in)	120 cm 1/4"× 7/16" TPE Tubing + Tubing Plug + Clamp	
C (Gas out)	T-Fitting + 30 cm 3/8"× 5/8" TPE Tubing + F03SSAPBBG1P Filter+ (AQG Aseptic Connector) + Clamp	
E (Liquid in)	150 cm 3/8"× 5/8" Pt-cured Silicone Tubing + 50 cm 3/8"× 5/8" TPE Tubing + AQG Aseptic Connector + Clamp	
F (Head sparger)	Pressure Sensors + 30 cm 1/4"× 7/16" TPE Tubing + V5DAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
L (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing +Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve) + Clamp	
J+K (Probe)	Electrode Port+ Tubing +Kleenpak™ Aseptic Connector (Female)+ Clamp	
I (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing + Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
Sparger	"2"、"5"	20µm Sparger Hole——Assembled to V5DAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"4"、"6"、"8"	2µm + 5x0.5 mm Sparger Hole——Assembled to V5DAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Easy Connector + Clamp
	"1"、"3"、"7"(Drainage)	Without Sparger Hole——Assembled to 200 cm 1/4"× 7/16" TPE Tubing + Tubing Plug + Clamp

KRG50LS2B30 50L Bag (Macro sparger : 1mm)



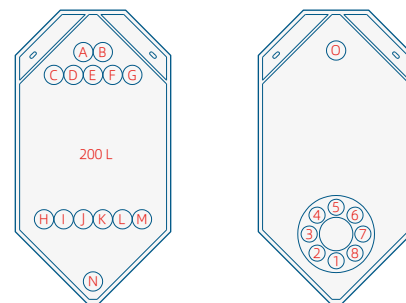
Working Volume	Minimum: 22L;Maximum: 50L;Headspace volume: 13L	
Impeller	3 pieces, 8.5" diameter, 40°	
A+G+H (Liquid in)	120 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
B+D (Liquid in)	120 cm 1/4"× 7/16" TPE Tubing + Tubing Plug + Clamp	
C (Gas out)	T-Fitting + 30 cm 3/8"× 5/8" TPE Tubing + F03SSAPBBG1P Filter+ (AQG Aseptic Connector)+ Clamp	
E (Liquid in)	150 cm 3/8"× 5/8" Pt-cured Silicone Tubing + 50 cm 3/8"× 5/8" TPE Tubing + AQG Aseptic Connector + Clamp	
F (Head sparger)	Pressure Sensors + 30 cm 1/4"× 7/16" TPE Tubing + V5DAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
L (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing +Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
J+K (Probe)	Electrode Port + Tubing + Kleenpak™ Aseptic Connector (Female) + Clamp	
I (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing + Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
Sparger	"2"、"5"	20µm Sparger Hole——Assembled to V5DAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"4"、"6"、"8"	2µm + 5x1 mm Sparger Hole——Assembled to V5DAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Easy Connector + Clamp
	"1"、"3"、"7"(Drainage)	Without Sparger Hole——Assembled to 200 cm 1/4"× 7/16" TPE Tubing + Tubing Plug + Clamp

KRG200S4L40 200L Bag(Macro sparger: 0.5mm,Macro: Micro=4:4)



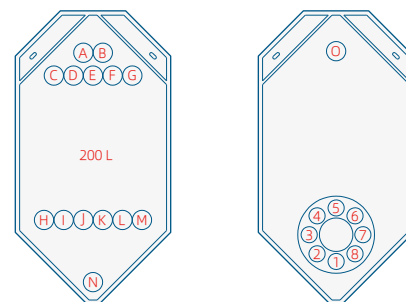
Working Volume	Minimum: 40L;Maximum: 200L;Headspace volume: 60L	
Impeller	3 pieces, 8.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting + 12 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing + C02BBAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve) + Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing + Kleenpak™ Aseptic Connector (Female) + Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"1", "3", "5", "7"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"2", "4", "6", "8"	2µm + 5x0.5 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG200S4B40 200L Bag(Macro sparger: 1 mm,Macro: Micro=4:4)



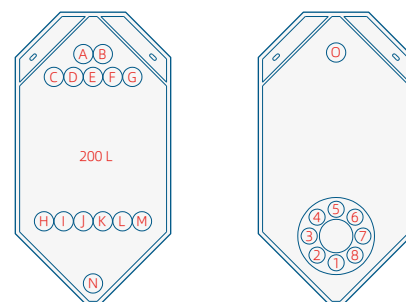
Working Volume	Minimum: 40L;Maximum: 200L;Headspace volume: 60L	
Impeller	3 pieces, 8.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting + 12 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector)+ Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing + C02BBAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port+ Tubing +Kleenpak™ Aseptic Connector (Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"1", "3", "5", "7"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"2", "4", "6", "8"	2µm + 5x1 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG200S6L20 200L Bag(Macro sparger: 0.5mm,Macro: Micro=2:6)



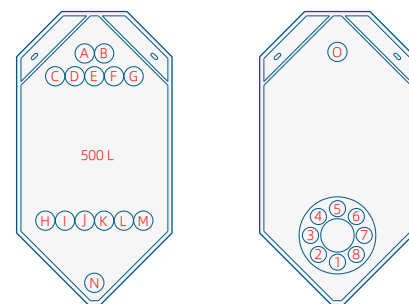
Working Volume	Minimum: 40L;Maximum: 200L;Headspace volume: 60L	
Impeller	3 pieces, 8.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting +12 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector)+ Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing +C02BBAPBBG1P Filter +Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing +Kleenpak™Aseptic Connector(Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"2", "3", "4", "6", "7", "8"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"1", "5"	2µm + 5x0.5 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG200S6B20 200L Bag(Macro sparger: 1 mm,Macro: Micro=2:6)



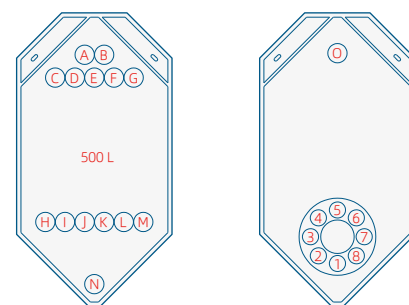
Working Volume	Minimum: 40L;Maximum: 200L;Headspace volume: 60L	
Impeller	3 pieces, 8.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting + 12 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector)+ Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing +C02BBAPBBG1P Filter +Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing +Kleenpak™Aseptic Connector(Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"2", "3", "4", "6", "7", "8"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"1", "5"	2µm + 5x1 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG500S4L40 500L Bag(Macro sparger: 0.5mm,Macro: Micro=4:4)



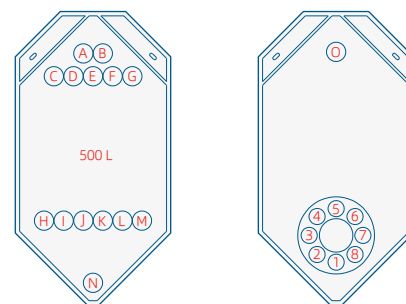
Working Volume	Minimum: 100L;Maximum: 500L;Headspace volume: 125L	
Impeller	3 pieces, 10.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting + 12 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing + C02BBAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve) + Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing + Kleenpak™ Aseptic Connector (Female) + Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"1", "3", "5", "7"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"2", "4", "6", "8"	2µm+5x0.5 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG500S4B40 500L Bag(Macro sparger: 1 mm,Macro: Micro=4:4)



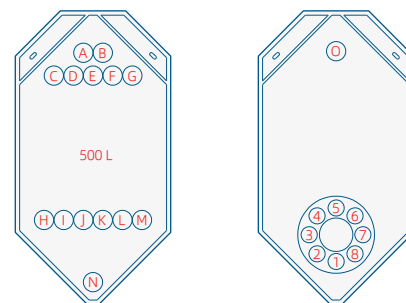
Working Volume	Minimum: 100L;Maximum: 500L;Headspace volume: 125L	
Impeller	3 pieces, 10.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting +12 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing +C02BBAPBBG1P Filter +Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing +Kleenpak™Aseptic Connector(Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"1", "3", "5", "7"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"2", "4", "6", "8"	2µm + 5x0.5 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG500S6L20 500L Bag(Macro sparger: 0.5mm,Macro: Micro=2:6)



Working Volume	Minimum: 100L;Maximum: 500L;Headspace volume: 125L	
Impeller	3 pieces, 10.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting +12 cm 3/4"× 1"TPE Tubing + F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing + C02BBAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve) + Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing + Kleenpak™ Aseptic Connector (Female) + Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"2", "3", "4", "6", "7", "8"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"1", "5"	2µm+5x0.5 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

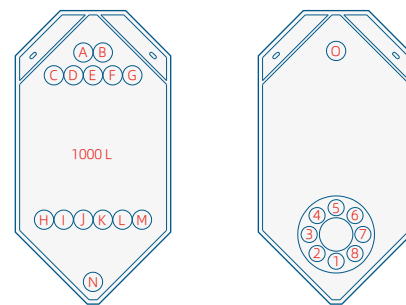
KRG500S6B20 500L Bag(Macro sparger: 1 mm,Macro: Micro=2:6)



Working Volume	Minimum: 100L;Maximum: 500L;Headspace volume: 125L	
Impeller	3 pieces, 10.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting +12 cm 3/4"× 1"TPE Tubing + F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing + C02BBAPBBG1P Filter +Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing +Kleenpak™Aseptic Connector(Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"2", "3", "4", "6", "7", "8"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"1", "5"	2µm + 5x1 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG10XS4L40

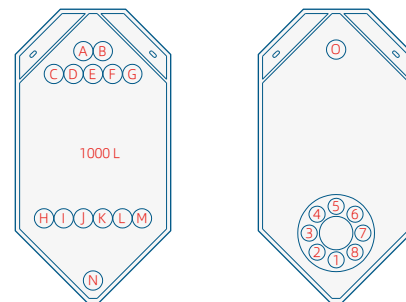
1000L Bag(Macro sparger: 0.5mm,Macro: Micro=4:4)



Working Volume	Minimum: 200L;Maximum: 1000L;Headspace volume: 210L	
Impeller	3 pieces, 12.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting + 15 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing +C02BBAPBBG1P Filter +Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve) + Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing + Kleenpak™ Aseptic Connector (Female) + Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"1", "3", "5", "7"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"2", "4", "6", "8"	2µm+5x0.5 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG10XS4B40

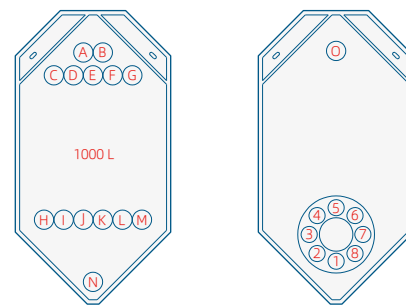
1000L Bag(Macro sparger: 1mm,Macro: Micro=4:4)



Working Volume	Minimum: 200L;Maximum: 1000L;Headspace volume: 210L	
Impeller	3 pieces, 12.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting +15 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing +C02BBAPBBG1P Filter +Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing +Kleenpak™Aseptic Connector(Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"1", "3", "5", "7"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"2", "4", "6", "8"	2µm + 5x0.5 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG10XS6L20

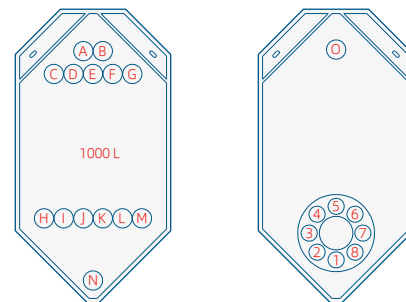
1000L Bag(Macro sparger: 0.5mm,Macro: Micro=2:6)



Working Volume	Minimum: 200L;Maximum: 1000L;Headspace volume: 210L	
Impeller	3 pieces, 12.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting + 15 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing +C02BBAPBBG1P Filter +Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve) + Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing + Kleenpak™ Aseptic Connector (Female) + Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"2", "3", "4", "6", "7", "8"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"1", "5"	2µm+5x0.5 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG10XS6B20

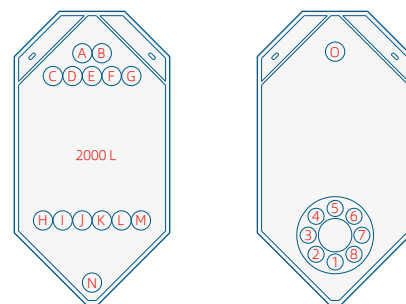
1000L Bag(Macro sparger: 1mm,Macro: Micro=2:6)



Working Volume	Minimum: 200L;Maximum: 1000L;Headspace volume: 210L	
Impeller	3 pieces, 12.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting +15 cm 3/4"× 1"TPE Tubing +F03SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16"TPE Tubing +C02BBAPBBG1P Filter +Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing +Kleenpak™Aseptic Connector(Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"2", "3", "4", "6", "7", "8"	20µm Sparger Hole——Assembled to C02BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"1", "5"	2µm + 5x1 mm Sparger Hole——Assembled to C02BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG20XS4L40

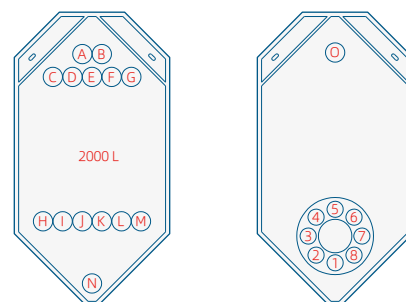
2000L Bag(Macro sparger: 0.5mm,Macro: Micro=4:4)



Working Volume	Minimum: 400L;Maximum: 2000L;Headspace volume: 500L	
Impeller	3 pieces, 12.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting + 15 cm 3/4"× 1" TPE Tubing + F10SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16" TPE Tubing + C03BBAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve) + Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing + Kleenpak™ Aseptic Connector (Female) + Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"1", "3", "5", "7"	20µm Sparger Hole——Assembled to C03BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"2", "4", "6", "8"	2µm+5x0.5 mm Sparger Hole——Assembled to C03BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG20XS4B40

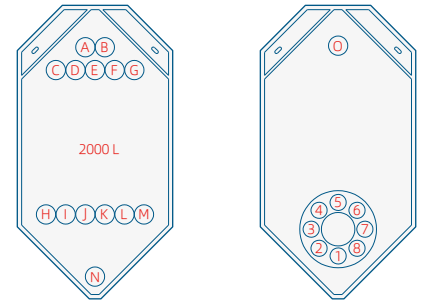
2000L Bag(Macro sparger: 1mm,Macro: Micro=4:4)



Working Volume	Minimum: 400L;Maximum: 2000L;Headspace volume: 500L	
Impeller	3 pieces, 12.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting +15 cm 3/4"× 1" TPE Tubing + F10SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16" TPE Tubing + C03BBAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing +Kleenpak™Aseptic Connector(Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"1", "3", "5", "7"	20µm Sparger Hole——Assembled to C03BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"2", "4", "6", "8"	2µm + 5x0.5mm Sparger Hole——Assembled to C03BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG20XS6L20

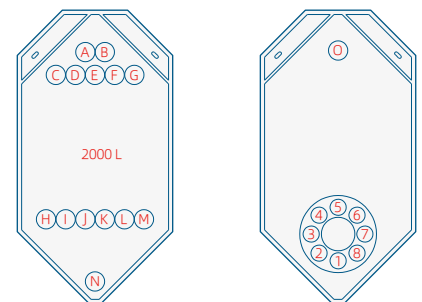
2000L Bag(Macro sparger: 0.5mm,Macro: Micro=2:6)



Working Volume	Minimum: 400L;Maximum: 2000L;Headspace volume: 500L	
Impeller	3 pieces, 12.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting + 15 cm 3/4"× 1" TPE Tubing + F10SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16" TPE Tubing + C03BBAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve) + Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing + Kleenpak™ Aseptic Connector (Female) + Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"2", "3", "4", "6", "7", "8"	20μm Sparger Hole——Assembled to C03BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"1", "5"	2μm+5x0.5 mm Sparger Hole——Assembled to C03BBAPBBG1P Filter+ 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp

KRG20XS6B20

2000L Bag(Macro sparger: 1mm,Macro: Micro=2:6)



Working Volume	Minimum: 400L;Maximum: 2000L;Headspace volume: 500L	
Impeller	3 pieces, 12.5" diameter, 40°	
A+B (Liquid in)	300 cm 1/8"×1/4" TPE Tubing + Tubing Plug + Clamp	
C+D (Liquid in)	300 cm 3/8"× 5/8" TPE Tubing + Tubing Plug + Clamp	
O (Gas Out)	T-Fitting +15 cm 3/4"× 1" TPE Tubing + F10SSAPBBG1P Filter + (AQG Aseptic Connector) + Clamp	
F (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + AQG Aseptic Connector + Clamp	
G (Liquid in)	300 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
E (Head sparger)	Pressure Sensors + 25 cm 1/4"× 7/16" TPE Tubing + C03BBAPBBG1P Filter + Gas Tubing Easy Connector + Clamp	
H (Sampling)	Y-Fitting + 50 cm 1/8"× 1/4" TPE Tubing + Needlefree Swabable Valve + (Check Valve + Needlefree Swabable Valve)+ Clamp	
I+J+K+L (Probe)	Electrode Port + Tubing +Kleenpak™Aseptic Connector(Female)+ Clamp	
M (Thermowell)	(Inside 16.5 cm + outside 4 cm) 3/16"× 5/16" Pt-cured Silicone Tubing+ Opposable Barbs + 6 cm 3/8"× 5/8"Pt-cured Silicone Tubing (Outside) + Support Cable Tie	
N (Drainage)	200 cm 1/2"× 3/4" TPE Tubing + Tubing Plug + Clamp	
Sparger	"2", "3", "4", "6", "7", "8"	20μm Sparger Hole——Assembled to C03BBAPBBG1P Filter + 10 cm 1/4"× 7/16" TPE Tubing + Gas Tubing Easy Connector + Clamp
	"1", "5"	2μm + 5x1 mm Sparger Hole Gas Tubing Easy Connector +