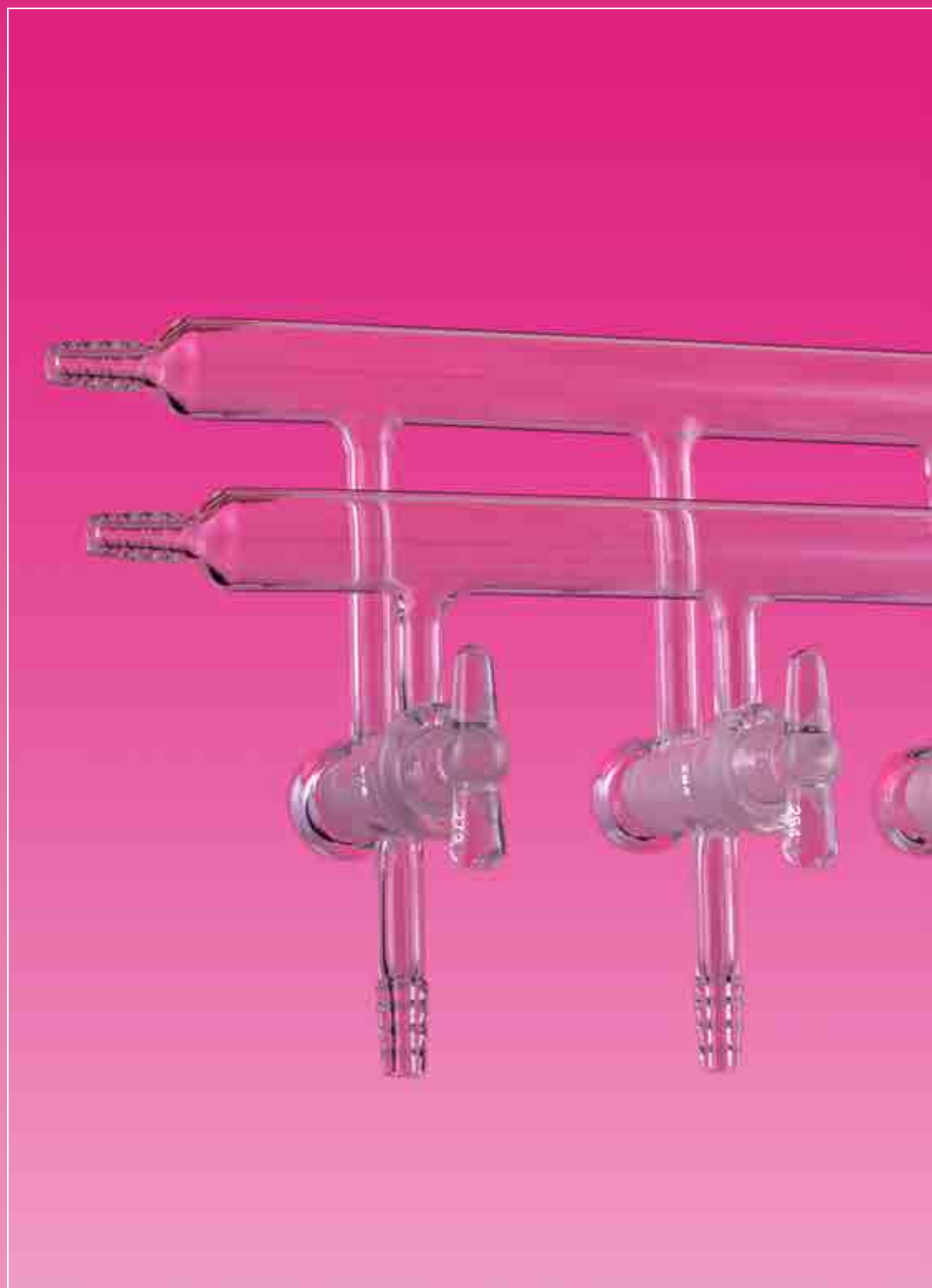


PREMIUM GRADE
LABORATORY GLASSWARE



InterChange





About us

A Plus® is a UK brand of premium laboratory glassware.

This range is inspired by those who perform cutting edge scientific work and appreciate that the best value is found as combination of price and quality.

We really hope that you enjoy using the glassware as much as we imagine you do!

A PLUS INTERCHANGE

www.aplusinterchange.com

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General Instructions

Glass Properties

All A Plus® glass products meets ASTM Specification E438, Type I, Class A “standard Specification for Glasses in Laboratory Apparatus”, or ISO specifications, as is appropriate. Borosilicate 3.3, ISO 3585, with its low linear coefficient of expansion is the ideal choice for fabricating laboratory glassware.

Annealing Point 560°C

Linear Coefficient of Expansion..... $32 \times 10^{-7}/^{\circ}\text{C}$

Softening Point..... 820°C

Trade Marks

Registered trademarks found in this catalogue.

Teflon® E.I. DuPont.

Viton® E.I. DuPont.

Nylon® E.I. DuPont.

Rodaviss® S.A.V. France

Shortage or Breakage

In case the quantity or material received does not agree with the items ordered or items are broken, please notify us within 5 working days from the date they are received.

Dimensions for Stopcocks

Stopcocks with Glass Plugs

Stopcocks with Glass Plugs
Single Straight-Bore Stopcocks

Stopcock Size (Designation and Bore of Hole in Plug mm)	Diameter of Plug at Centerline of Bore mm	Length of Shell ±0.5 mm
I-m (1mm)	7	30
1	12	30
1-1/2	12	30
2	12	30
3	17	40
4	17	40
5	20	40
6	20	44
8	25	52
10	35	56

T-Bore 120° Bore Stopcocks

Stopcock Size (Designation and Bore of Hole in Plug mm)	Diameter of Plug at Centerline of Bore mm	Length of Shell ±0.5 mm
1	17	40
1-1/2	17	40
2	17	40
3	20	44
4	20	44

Single Oblique-Bore Stopcocks

Stopcock Size (Designation and Bore of Hole in Plug mm)	Diameter of Plug at Opening Nearest Large End mm (Gauging Point)	Distance of Gauging Point From Large end mm	Length of Shell ±0.5 mm
1	12.60	14.0	40
1-1/2	12.60	14.0	40
2	12.60	14.0	40
3	17.35	16.5	50
4	17.35	16.5	50

Double Oblique-Bore Stopcocks

Stopcock Size (Designation and Bore of Hole in Plug mm)	Diameter of Plug at Gauging Point (Center of Plug) mm	Distance Gauging Point From Centerline of Hole nearest Large End mm	Length of Shell ±0.5 mm
1	14.5	12.5	50
1-1/2	14.5	12.5	50
2	14.5	12.5	50
3	16.2	14.0	56
4	16.2	14.0	56

Sinterware

We have tried to be all things to all people and use the terms sinter and fritted disc interchangeably. Different regions of the world use different terminology. Furthermore, porosities change from one house to the next. We have tried to solve this by offering a selection of sinter / frit providers, hopefully covering your particular favourite. Please specify what type of sinter best suits your requirements.

We have used Extra Coarse (micron 100-200), Coarse (micron 10-20), Medium (micron 20-35) and Fine (5 -10) as basic definitions, but we can go further than that and talk about porosity scales as below:

Porosity	Micron Size
00	250-500
0	150-250
1	90-150
2	40-90
3	15-40
4	5-15
5	max of 2

Porosity 0 and 1

Grades 0 and 1 are used for the rough filtration of very coarse precipitates, for the dispersion of gases in liquids in various kinds of wash bottles, and the distribution of liquid extractors.

Porosity 2

Grade 2 is used for the filtration of somewhat finer precipitates than the above, and for still finer types of gas washers.

Porosity 3

Grade 3 is used wherever possible for all kinds of filtration, particularly in quantitative work, gas washers where exceptionally fine dispersions are required, and where a high back pressure is permissible, and for the removal of dust and bacteria from dry gas streams.

Porosity 4

Grade 4 is the finest of the ordinary grades. It is used for the filtration of the finest precipitates. It is naturally distinctly slower in operation than the grade 3, which would be used as a default standard.

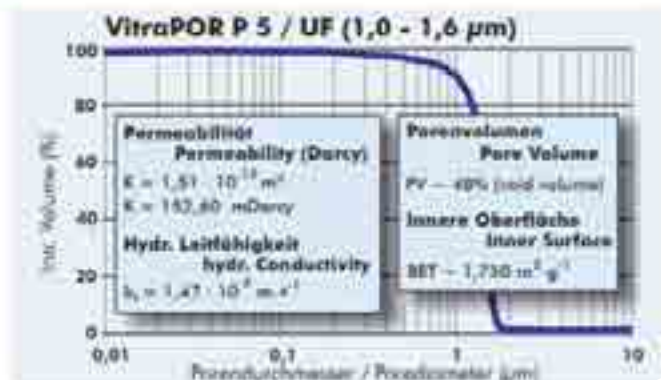
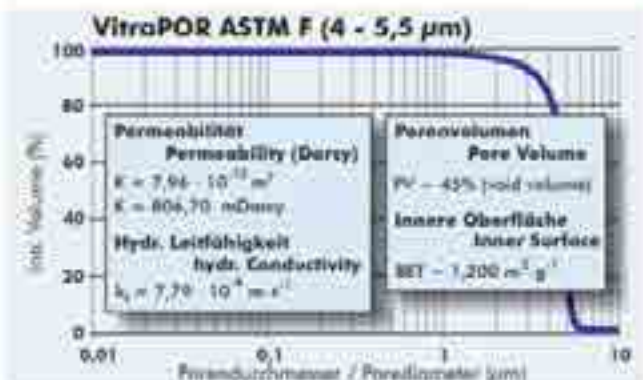
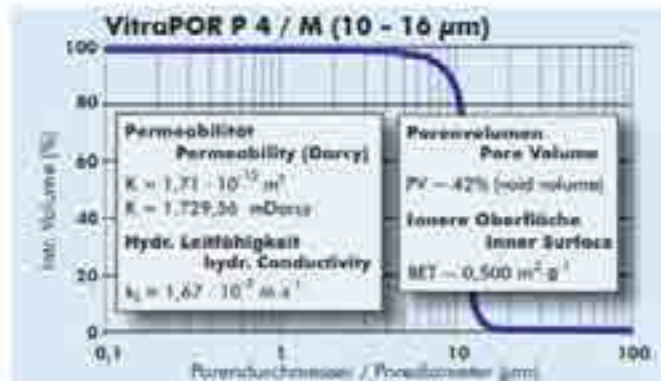
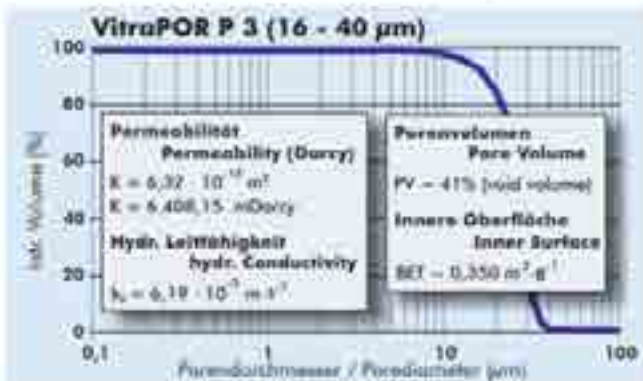
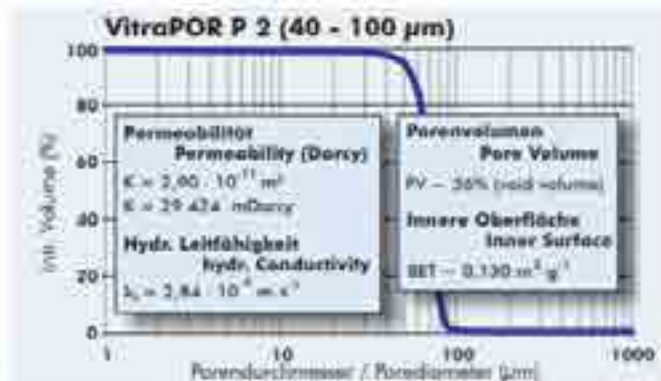
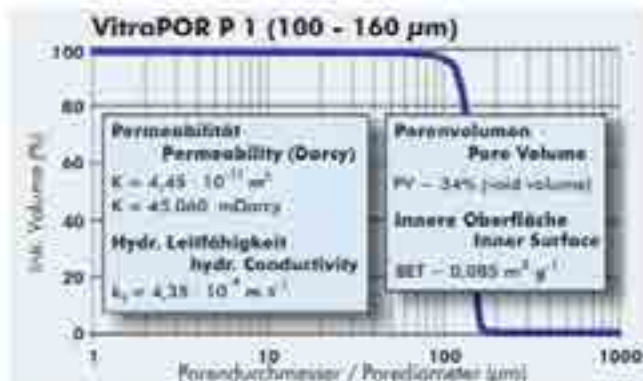
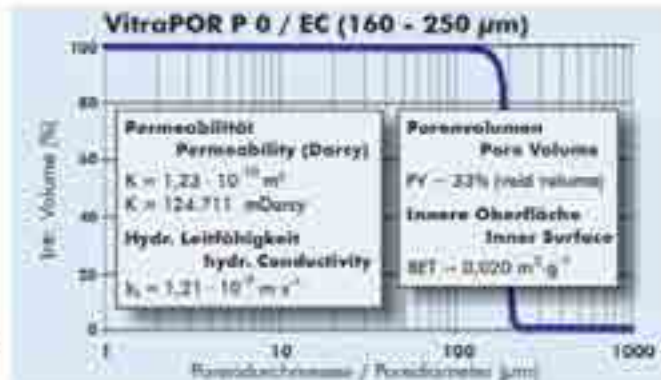
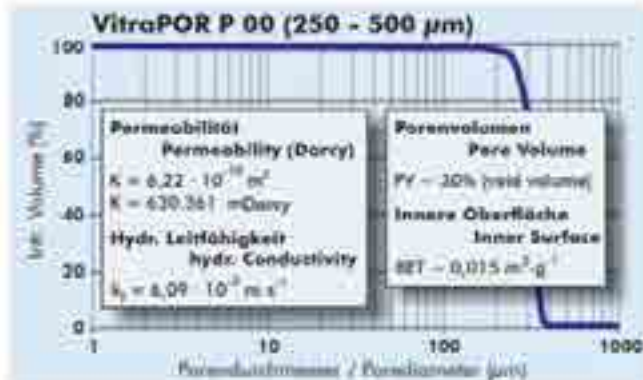
Porosity 5

Grade 5 is a compound disc consisting of a thin layer of grade 5 supported by a grade 3 disc, the whole being fired into a single unit with the grade 5 surface uppermost. This is used entirely for bacterial filtration, replacing many types of ceramic filters. It is suggested that the bulk of solids be removed from the solution first by passing through a grade 3 or 4.

But we also use other sinters / frits, produced by ROBU in Germany. Their data sheet is below and is slightly different again. Prices also change depending upon sinter used, so please do specify which type you have as a preference.

Poreneigenschaften

Pore Properties



Die Graphen und Daten sind nur approximativ maßgebend!
Graphs and data are only of approximate value!

Dimensions for Stopcocks

Stopcocks with Teflon Plugs

Stopcocks with Teflon® Plugs
Single Straight-Bore Stopcocks

Stopcock Size (Designation and Bore of Hole in Plug mm)	Diameter of Plug at Centerline of Bore mm	Length of Shell ±0.5 mm
1	11	25
2	11	25
3	15.2	30
4	15.2	30
6	16	35

T-Bore 120° Bore Stopcocks

Stopcock Size (Designation and Bore of Hole in Plug mm)	Diameter of Plug at Centerline of Bore mm	Length of Shell ±0.5 mm
1	15.2	30
2	15.2	30
4	16	35

Single Oblique-Bore Stopcocks

Stopcock Size (Designation and Bore of Hole in Plug mm)	Diameter of Plug at Opening Nearest Large End mm (Gauging Point)	Distance of Gauging Point Form Large end mm	Length of Shell ±0.5 mm
2	15.9	11.5	30

Double Oblique-Bore Stopcocks

Stopcock Size (Designation and Bore of Hole in Plug mm)	Diameter of Plug at Opening Nearest Large End mm (Gauging Point)	Distance of Gauging Point Form Large end mm	Length of Shell ±0.5 mm
1	12.9	9.4	44
2	12.9	9.4	44
3	14.4	10.4	44
4	14.4	10.4	44

0-Ring-Organic Solvent Compatibility Chart

Organic Solvents	Viton®	Chemraz®505	Chemraz®514 White
Acetic Acid, Glacial	D	A	B
Acetic Anhydride	B	A	B
Acetone	D	A	A
Acetonitrile	A	A	A
Ammonia, Anhydrous Liquid	D	A	B
Benzene	A	A	A
Benzyl Chloride	A	A	A
Bromine	A	A	A
Butane	A	A	A
Carbon Tetrachloride	A	B	B
Chloroform	A	A	A
Cyclohexane	A	A	A
Decane	A	A	A
Diethyl Ether	D	A	A
Ethanol	C	A	A
Ethyl Acetate	D	A	A
Gasoline	A	A	A
n-Hexane	A	A	A
Isobutyl Alcohol	A	A	A
Kerosene	A	A	A
Methanol	D	A	A
Methyl Ethyl Ketone	D	A	A
Pentane	A	A	A
Propane	A	A	A
Pyridine	D	A	A
Tetrahydrofuran	D	A	A
Toluene	D	A	A

- A - Excellent. Volumetric swell is less than 10% after exposure.
- B - Good. Limited exposure is recommended.
- C - Fair. Volumetric swell is between 20% - 40% after exposure. Limited exposure and frequent O-ring replacements may be necessary.
- D - Poor. Not suitable for this type of reaction / condition.

1. We can not be responsible for use of the above data in specific applications. Immersion testing under actual conditions is always recommended..
2. Fluorinated products should never be exposed to molten or gaseous alkali metals such as sodium or potassium, since vigorous exothermic reaction may occur.

All items are individually boxed and barcoded



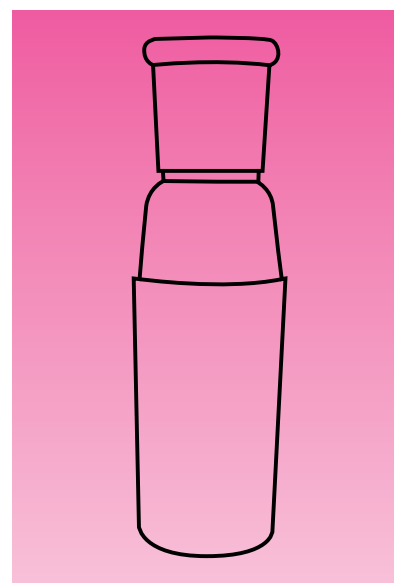
InterChange

ADAPTERS

ADAPTER, REDUCING

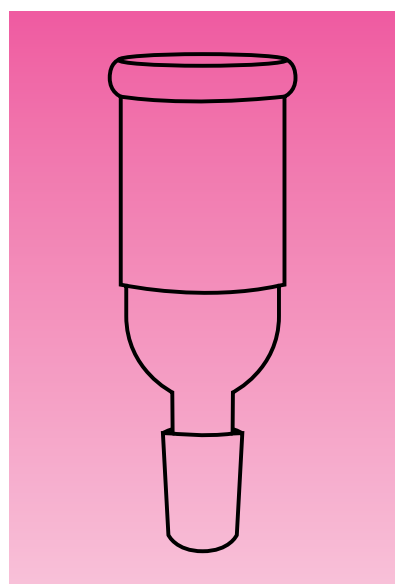
With joints at top and bottom.

Code	Top Joint	Bottom Joint	Price (each)
AP-102-02	10/30	24/29	
AP-102-04	14/23	19/26	
AP-102-06	14/23	24/29	
AP-102-08	19/26	24/29	
AP-102-10	24/29	29/36	
AP-102-12	24/29	34/35	
AP-102-14	24/29	45/40	



ADAPTER, ENLARGING

With joints at top and bottom.



Code	Top Joint	Bottom Joint	Price (each)
AP-104-02	19/26	14/23	
AP-104-04	24/29	14/23	
AP-104-06	24/29	19/26	
AP-104-08	29/36	14/23	
AP-104-10	29/36	24/29	
AP-104-12	34/35	24/29	
AP-104-14	40/38	24/29	
AP-104-16	45/40	29/36	

Adapter, inlet

For use with gas inlet tubes or plain stem thermometers.
Supplied with one holed rubber adaptor



InterChange

Adapter, Reducing

Code	Top Joint	Bottom Joint
AP-102-04	14/23	19/26
AP-102-06	14/23	24/29
AP-102-08	19/26	24/29
AP-102-10	24/29	29/32
AP-102-12	24/29	34/35



Adapter, Enlarging

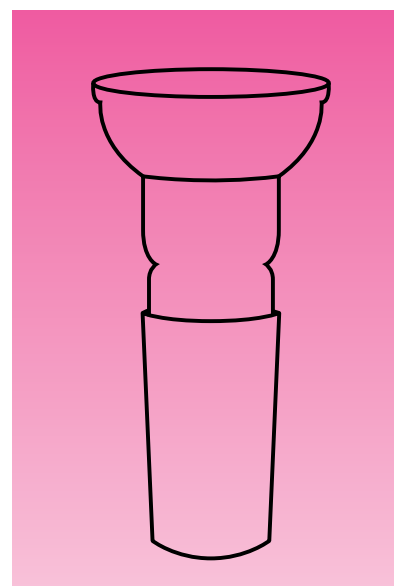
Code	Top Joint	Bottom Joint
AP-104-02	19/26	14/23
AP-104-04	24/29	14/23
AP-104-06	24/29	19/26
AP-104-08	29/32	14/23
AP-104-10	29/32	24/29



ADAPTER, WITH BALL SOCKET

With top spherical socket joint and lower standard taper inner joint.

Code	Top Joint	Bottom Joint	Price (each)
AP-106-02	35/20	14/23	
AP-106-04	35/20	24/29	



ADAPTER, INLET

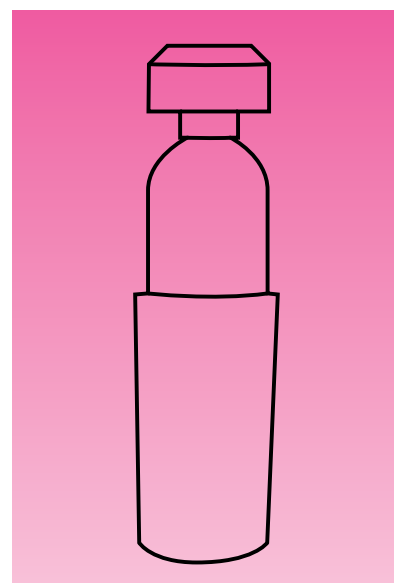
For use with gas inlet tubes or plain stem thermometers. Supplied with one holed rubber adapter.

Code	Joint	Price (each)
AP-108-02	14/23	
AP-108-04	19/26	
AP-108-06	24/29	
Accessory:		
AP-110-02	Replacement rubber adapter	

ADAPTER, INLET OR THERMOMETER

With a compression cap and Viton® 0-ring to form a vacuum tight seal. To use it as a syringe port, simply replace the 0-ring with Teflon® -lined septum. Cap accommodates 5.0 - 7.5mm O.D. thermometer. Supplied with one Nylon® cap and one Viton® 0-ring.

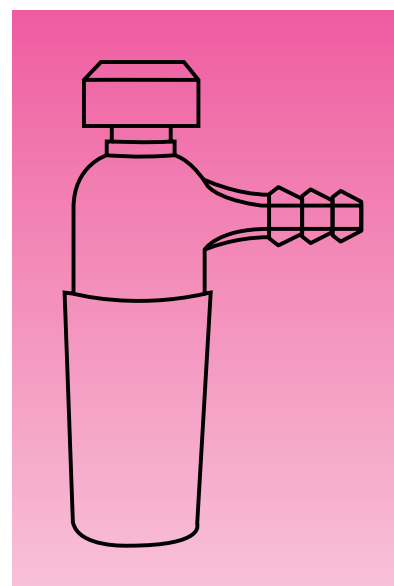
Code	Joint	Price (each)
AP-112-02	14/23	
AP-112-04	19/26	
AP-112-06	24/29	
Accessory:		
AP-664-04	Nylon® caps	
AP-384-20	Replacement Viton® 0-rings, Size 107	



ADAPTER, INLET, WITH HOSE CONNECTION

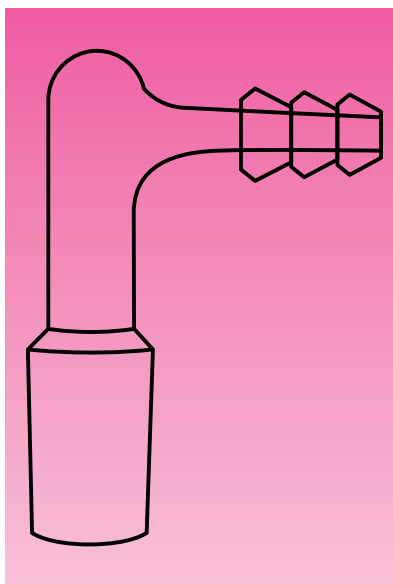
Same as above but with 8mm or 10mm hose connection for N₂/Ar introduction or vacuum. Supplied with one Nylon® cap and one Viton® O-ring.

Code	Joint	Price (each)
AP-I 14-02	14/23	
AP-I 14-04	24/29	
Accessory:		
AP-664-04	Nylon® caps	
AP-384-20	Replacement Viton® O-rings, Size 107	

**ADAPTER, VACUUM OR ARGON**

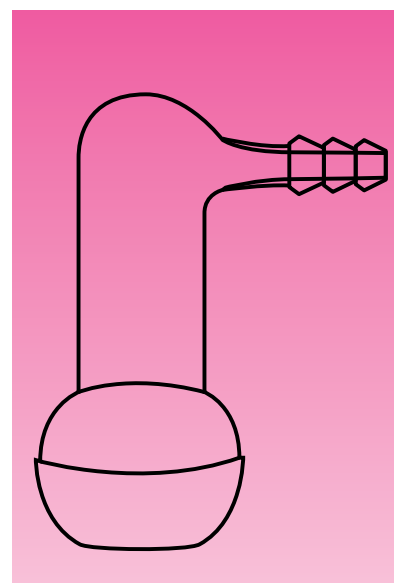
With hose connection on the side and male joint.

Code	Joint	Hose O.D. (mm)	Price (each)
AP-I 16-02	14/23	8	
AP-I 16-04	19/26	8	
AP-240-04	24/29	10	
AP-I 16-08	29/36	10	

**ADAPTER, VACUUM/GAS, BALL JOINT**

With 35/20 ball joint and 10mm Hose connection.

Code	Joint	Price (each)
AP-I 18-02	35/20	24.15



Adapter, Vacuum/Inert Gas, 90°

Code	Joint	Hose O.D. (mm)
AP-I22-02	14/23	8
AP-I22-04	19/26	8
AP-I22-06	24/29	10

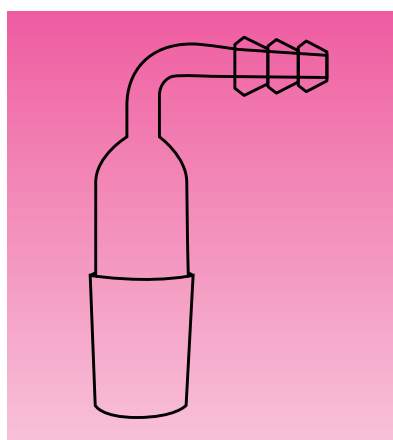
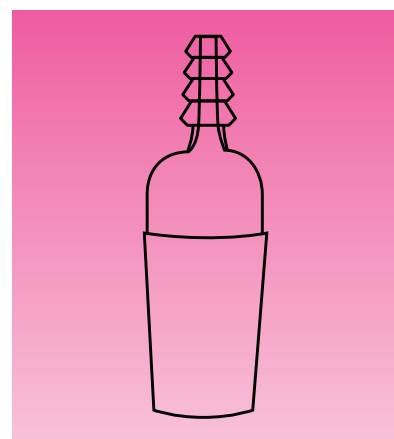


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ADAPTER, VACUUM OR ARGON (NITROGEN)

With hose connection on the top and male joint.

Code	Joint	Hose O.D. (mm)	Price (each)
AP-308-12	14/23	8	
AP-120-04	19/26	8	
AP-120-06	24/29	10	
AP-120-08	24/29	10	

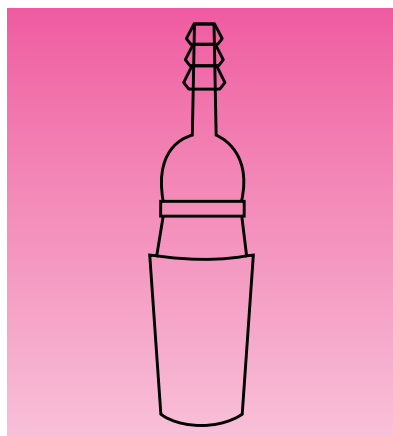
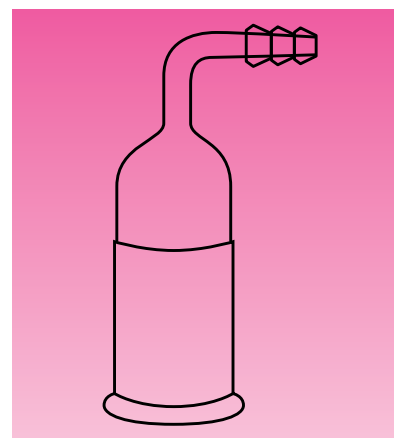


ADAPTER, VACUUM/INERT GAS, 90°

Code	Joint	Hose O.D. (mm)	Price (each)
AP-122-02	14/23	8	
AP-122-04	19/26	8	
AP-122-06	24/29	10	

ADAPTER, VACUUM, 90° OUTER JOINT

Code	Joint	Hose O.D. (mm)	Price (each)
AP-124-02	14/23	8	
AP-124-04	19/26	8	



ADAPTER, INLET

With an extra coarse disc to prevent solids from being introduced into reaction system during liquid transfer.

Code	Joint	Hose O.D. (mm)	Price (each)
AP-126-02	14/23	65	
AP-126-04	19/26	67	
AP-126-06	24/29	95	

Adapter, vacuum with 1:5 Teflon® stopcock

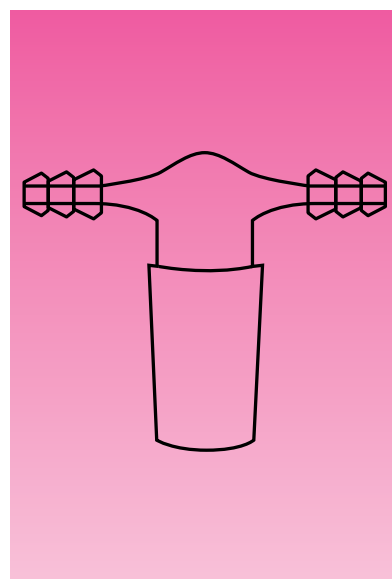
With 8mm or 10mm O.D hose connection and 2mm Teflon® stopcock



ADAPTER, TWIN CONNECTING HOSE

Adapter has two hose connections 180° from one another to permit a flow of inert gas over the apparatus.

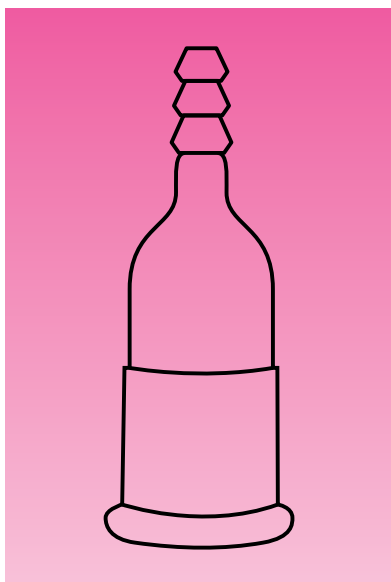
Code	Joint	Hose O.D. (mm)	Price (each)
AP-128-02	14/23	8	
AP-128-04	19/26	8	
AP-128-06	24/29	10	
AP-128-08	29/36	10	



ADAPTER, VACUUM, OUTER JOINT

Ideal for use as a vent or for the introduction of pressure/vacuum.

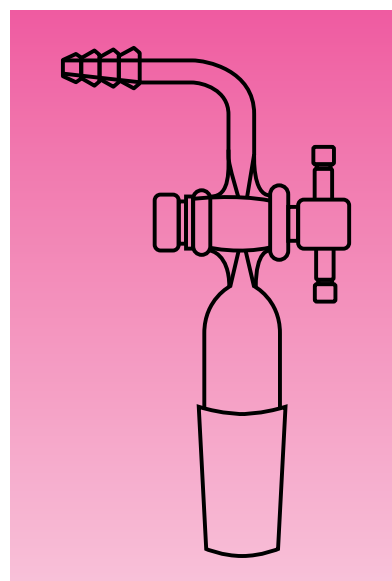
Code	Joint	Hose O.D. (mm)	Price (each)
AP-130-02	14/23	8	
AP-130-04	24/29	10	



ADAPTER, VACUUM, WITH 1:5 TEFLON® STOPCOCK

With 8mm or 10mm O.D. hose connection and 2mm Teflon® stopcock.

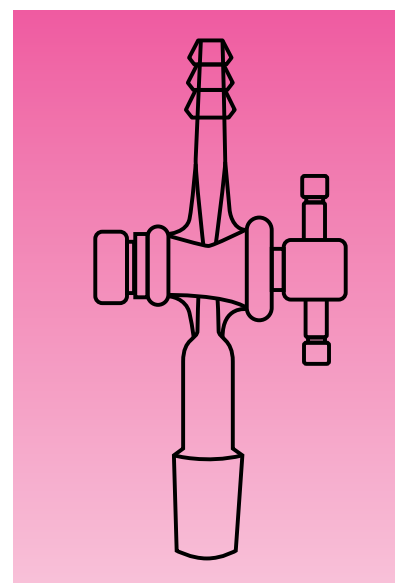
Code	Joint	Price (each)
AP-132-02	14/23	
AP-132-04	19/26	
AP-132-06	24/29	
Accessory:		
AP-682-02	Replacement 2mm Teflon® Plug Only	



ADAPTER, VACUUM, PTFE STOPCOCK

Used to regulate the flow of gases or liquids into reaction systems. Teflon® stopcock has a bore of 2mm. With standard taper inner joint.

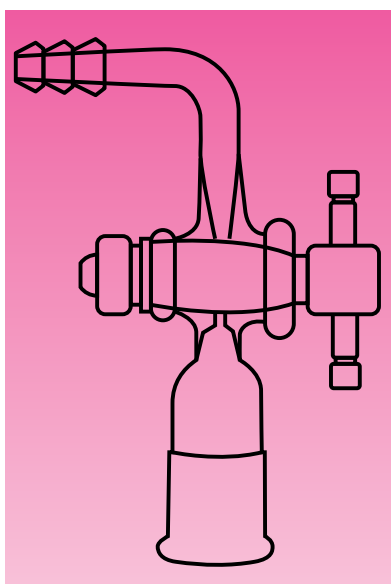
Code	Joint	Stopcock Bore (mm)	Price (each)
AP-134-02	14/23	2	
AP-134-04	19/26	2	
AP-134-06	24/29	2	
Accessory:			
AP-682-02	Replacement 2mm Teflon® Plug Only		



ADAPTER, OUTER JOINT, PTFE STOPCOCK

For regulating the flow of gases or liquids into reaction systems. Stopcock has a bore of 2mm. With standard taper outer joint.

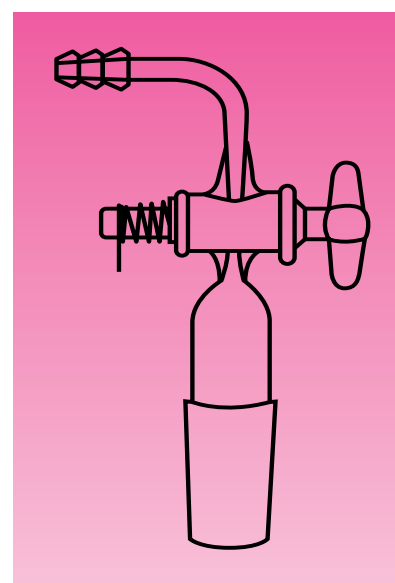
Code	Joint	Stopcock Bore (mm)	Price (each)
AP-136-02	14/23	2	
AP-136-04	19/26	2	
AP-136-06	24/29	2	
Accessory:			
AP-682-02	Replacement 2mm Teflon® Plug Only		



ADAPTER, VACUUM, GLASS STOPCOCK, 90°

Used to regulate the flow of gases or liquids into reaction systems. Stopcock has a bore of 2mm.

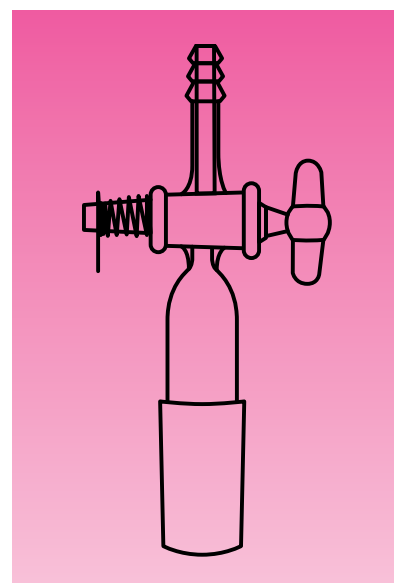
Code	Joint	Stopcock Bore (mm)	Price (each)
AP-138-02	14/23	2	
AP-138-04	19/26	2	
AP-138-06	24/29	2	
Accessories:			
AP-738-06	Replacement 2mm Glass Plug Only		
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock		



ADAPTER, VACUUM, GLASS STOPCOCK

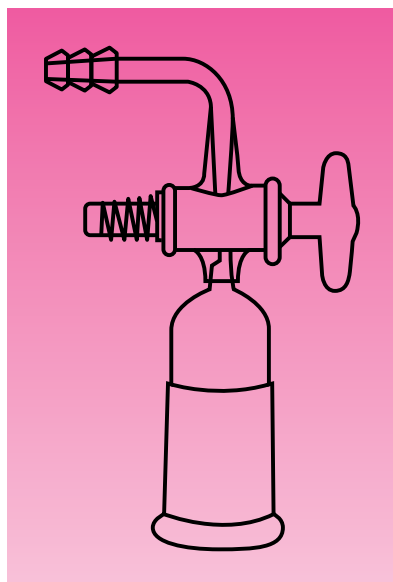
Used to regulate the flow of gases or liquids into reaction systems. Stopcock has a bore of 2mm.

Code	Joint	Stopcock Bore (mm)	Price (each)
AP-140-02	14/23	2	
AP-140-04	19/26	2	
AP-140-06	24/29	2	
Accessories:			
AP-738-06	Replacement 2mm Glass Plug Only		
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock		

**ADAPTER, OUTER JOINT, GLASS STOPCOCK**

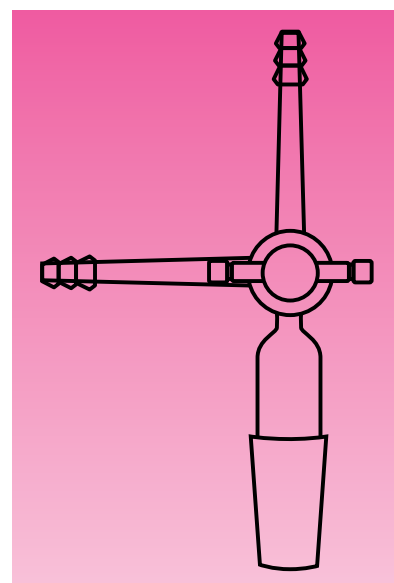
For regulating the input of gases or liquids into reaction systems. With 8mm or 10mm hose connection.

Code	Joint	Stopcock Bore (mm)	Price (each)
AP-142-02	14/23	2	
AP-142-04	24/29	2	
Accessories:			
AP-738-06	Replacement 2mm Glass Plug Only		
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock		

**ADAPTER, FLUSHING**

With 2mm T-bore PTFE stopcock.

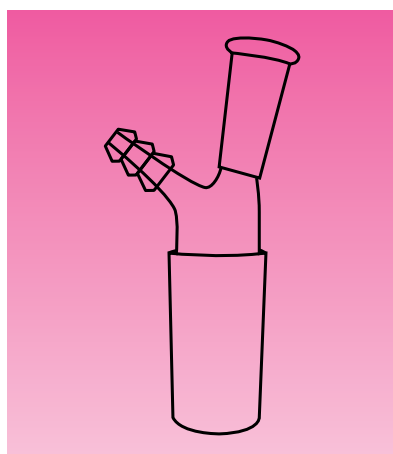
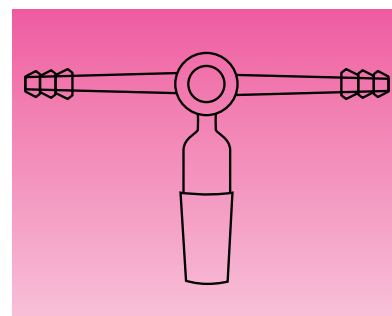
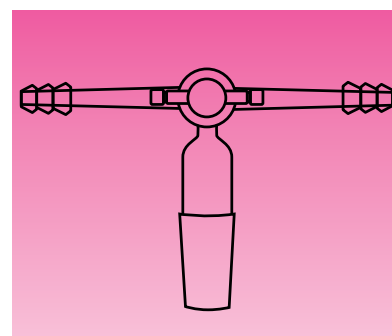
Code	Joint	Price (each)
AP-144-02	14/23	
AP-144-04	19/26	
AP-144-06	24/29	
Accessory:		
AP-688-02	2mm Teflon® "T"-bore Stopcock Plug	



ADAPTER, VACUUM/INERT GAS

With 4mm T-bore glass stopcock having constant pressure retention device or 2mm T-bore 1:5 taper Teflon® plug.

Code	Joint	Stopcock Bore (mm)	Price (each)
AP-146-02	14/23	Glass	
AP-146-04	24/29	Glass	
AP-146-06	14/23	Teflon®	
AP-146-08	24/29	Teflon®	
Accessories:			
AP-700-18	4mm Glass "T"-bore Stopcock Plug		
AP-688-02	2mm Teflon® "T"-bore Stopcock Plug		
AP-702-04	Replacement S.S. Retention for 4mm Glass stopcock		



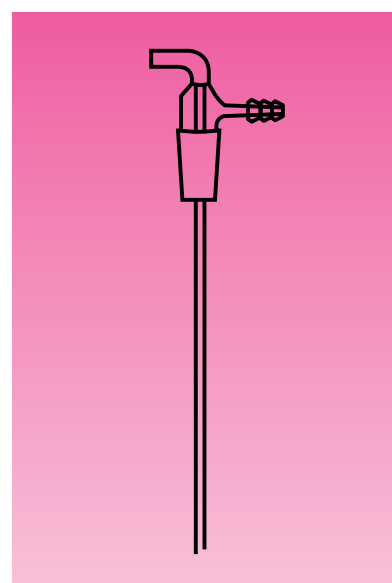
ADAPTER, THERMOMETER

With 10/30 thermometer joint, angled for use in multiple neck flask.

Code	Joint	Price (each)
AP-148-02	24/29	

ADAPTER, INLET

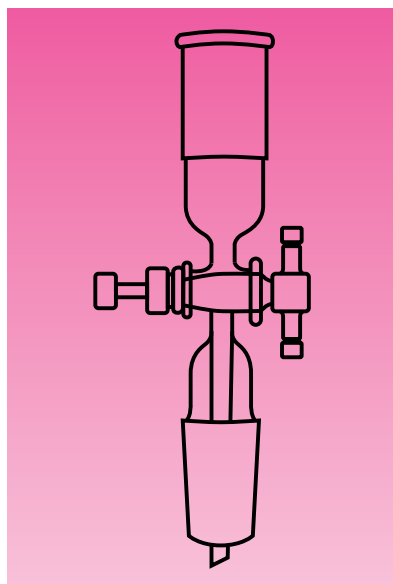
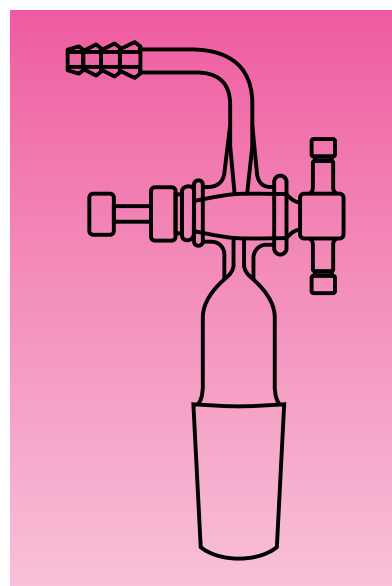
Code	Joint	Hose O.D.(mm)	Tube Length(mm)	Price (each)
AP-150-02	24/29	10	75	
AP-150-04	24/29	10	250	



ADAPTER, FLOW CONTROL, METERING STOPCOCK, 90°

Provides on/off control with the main valve. Allows delivery of preset volumes of gases or liquids to reactions using the needle valve.

Code	Joint	Stopcock Bore (mm)	Price (each)
AP-152-02	14/23	2	
AP-152-04	19/26	2	
AP-152-06	24/29	2	
Accessories:			
AP-684-02	Replacement 2mm Teflon® Metering Plug		

**ADAPTER, FLOW CONTROL, METERING STOPCOCK**

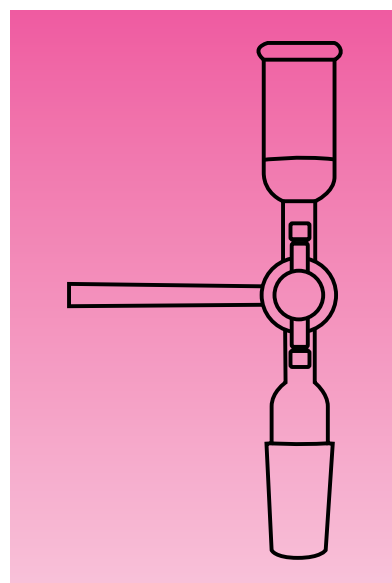
Adapter has a 2mm Teflon® metering stopcock between top outer and lower inner standard taper joints to permit flow control of fluids between apparatus.

Code	Joint	Stopcock Bore (mm)	Price (each)
AP-154-02	24/29	2	
Accessories:			
AP-684-02	Replacement 2mm Teflon® Metering Plug		

ADAPTER, FLUSHING

With 2mm T-bore PTFE stopcock.

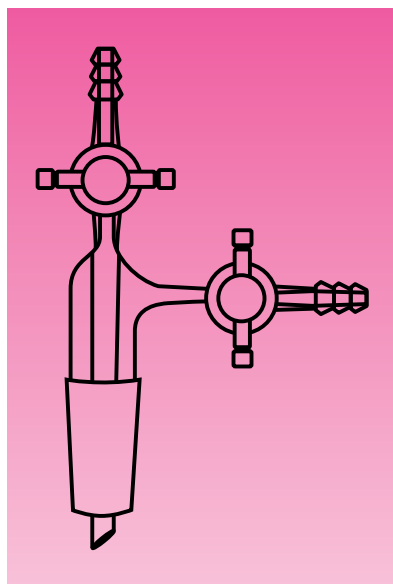
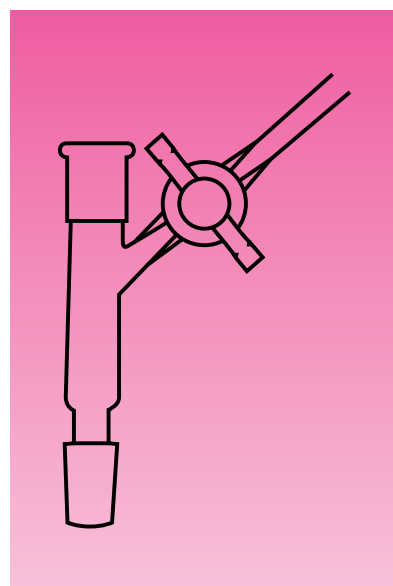
Code	Joint	Price (each)
AP-156-02	14/23	
AP-156-04	24/29	
Accessory:		
AP-688-02	2mm Teflon® "T"-bore Stopcock Plug	



ADAPTER, CONNECTING

With 2mm Teflon® stopcock. Converts standard vessels to airless applications.

Code	Joint	Price (each)
AP-158-02	24/29	
Accessory:		
AP-682-02	Replacement 2mm Teflon® Plug Only	



ADAPTER, VACUUM TRANSFER

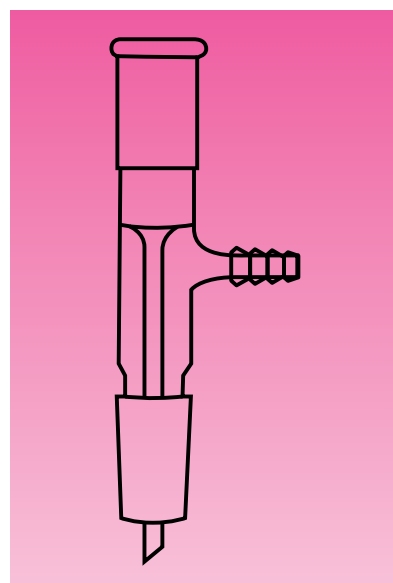
With 2mm Teflon® stopcock. For transfer of sensitive and hazardous solutions.

Code	Joint	Price (each)
AP-160-02	14/23	
AP-160-04	19/26	
AP-160-06	24/29	
Accessory:		
AP-682-02	Replacement 2mm Teflon® Plug Only	

ADAPTER, INLET WITH HOSE CONNECTION

With vacuum take-off and drip tip.

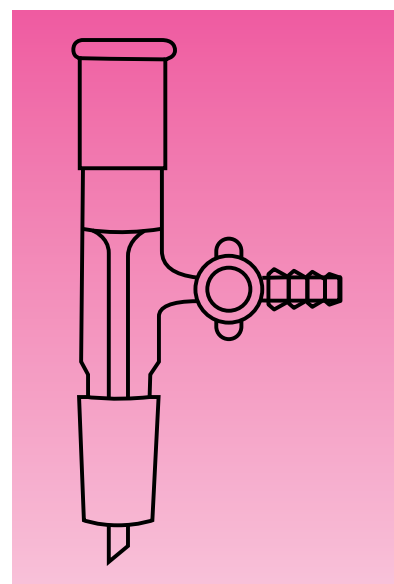
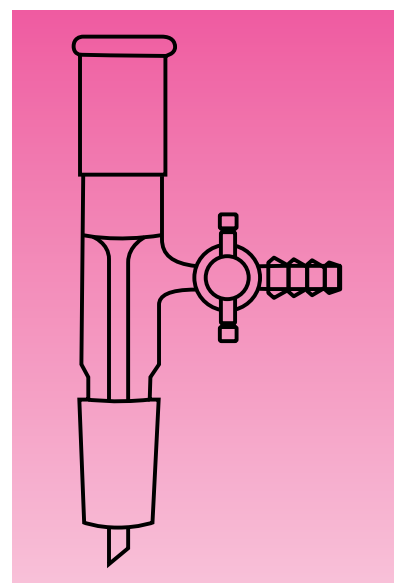
Code	Joint	Hose O.D. (mm)	Price (each)
AP-162-02	14/23	8	
AP-162-04	19/26	8	
AP-162-06	24/29	10	



ADAPTER, VACUUM

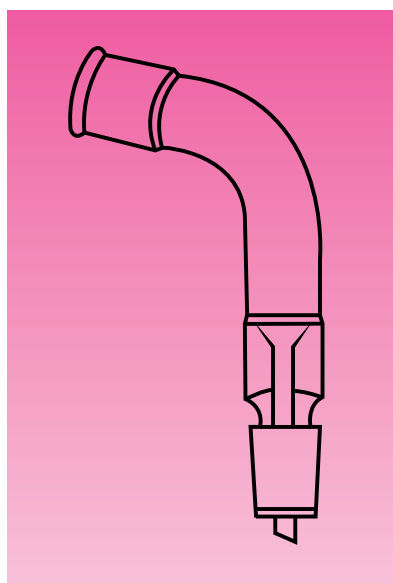
With 2mm straight-bore PTFE or Glass stopcock.

Code	Joint	Stopcock Bore (mm)	Price (each)
AP-612-08	14/23	Teflon®	
AP-164-04	19/26	Teflon®	
AP-164-06	24/29	Teflon®	
AP-164-08	14/23	GLASS	
AP-164-10	19/26	GLASS	
AP-164-12	24/29	GLASS	
Accessories:			
AP-682-02	Replacement 2mm Teflon® Plug Only		
AP-738-06	Replacement 2mm Glass Plug Only Interchangeable		
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock		

**ADAPTER, DISTILLATION, BENT, 105°**

Also used as rotary evaporator washer. When filled with ethanol or acetone and suddenly with finger released, the mashing solvent is sprayed into the Rotavapor Condenser and thus cleans the entire system very simple and handy.

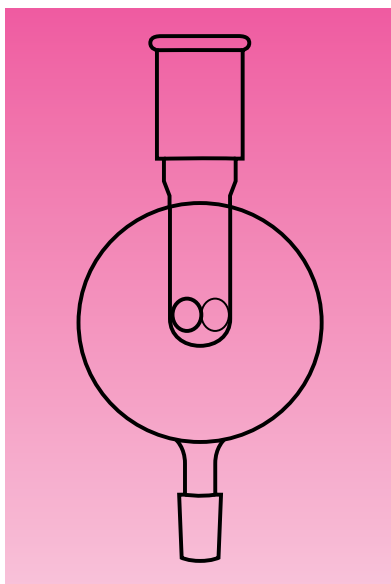
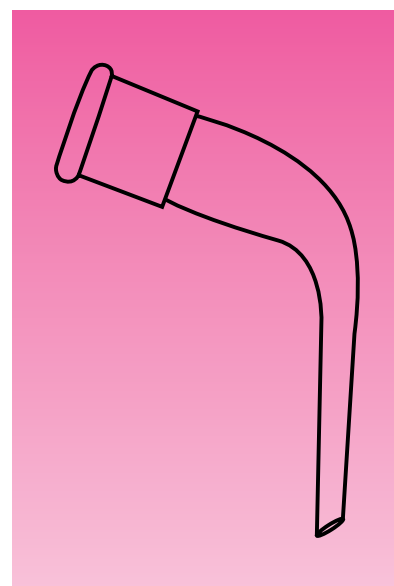
Code	Joint	Price (each)
AP-166-02	24/29	



ADAPTER, DISTILLING, 105°

With an outer joint at top. Tapered drip tube extends into open receivers.

Code	Joint	Height x Width, (mm)	Price (each)
AP-168-02	19/26	90x60	
AP-168-04	24/29	141 x105	



ADAPTER, ANTI-CLIMB

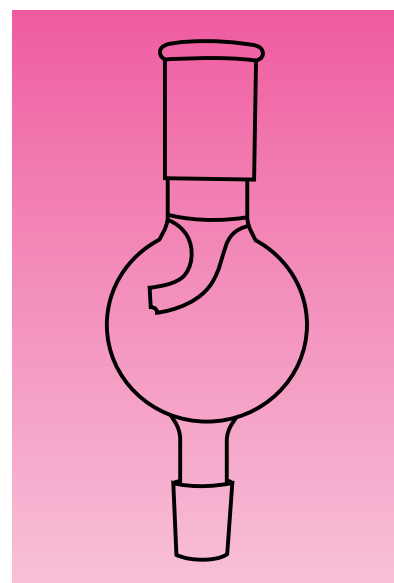
Trap provides expanded volume for reactions that have a tendency to foam excessively. The inner vapour tube is sealed to the top of the trap to prevent entry into the condenser.

Code	Top Joint	Bottom Joint	Capacity (ml)	Price (each)
AP-170-02	24/29	14/23	100	
AP-170-04	24/29	19/26	100	
AP-170-06	24/29	24/29	100	
AP-170-08	24/29	14/23	250	
AP-170-10	24/29	24/29	250	
AP-170-12	29/36	24/29	250	

ADAPTER, DISTILLING TRAP

Adapter is placed above flask to prevent carry-over of reactions which have a tendency to foam.

Code	Upper Joint	Lower Joint	Capacity (ml)	Price (each)
AP-172-02	24/29	14/23	100	
AP-172-04	24/29	19/26	100	
AP-172-06	24/29	24/29	100	



Adapter, Anti-splash

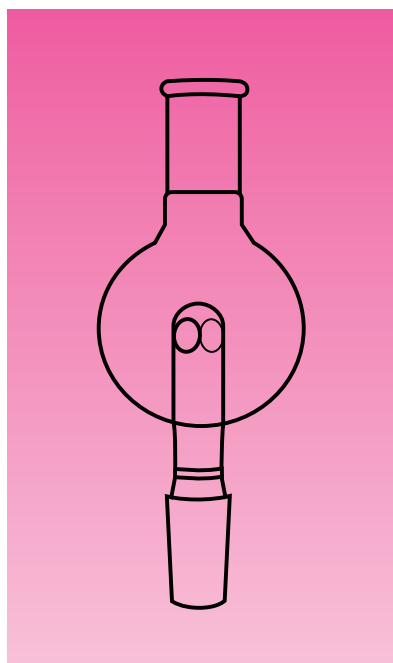
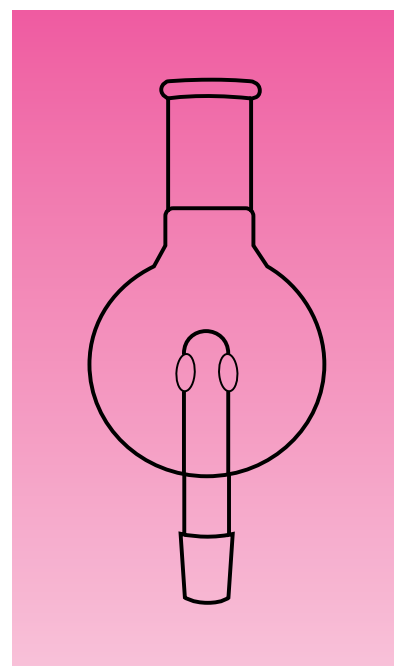
Code	Upper Joint	Lower Joint	Capacity (mL)
AP-174-08	29/32	14/23	100
AP-174-10	29/32	24/29	100



ADAPTER, ANTI-SPLASH

This design prevents possible contamination from rotary evaporator.

Code	Upper Joint	Lower Joint	Capacity (ml)	Price (each)
AP-174-02	24/29	14/23	100	
AP-174-04	24/29	19/26	100	
AP-174-06	24/29	24/29	100	
AP-174-08	29/36	14/23	100	
AP-174-10	29/36	24/29	100	
AP-174-12	24/29	14/23	250	
AP-174-14	24/29	19/26	250	
AP-174-16	24/29	24/29	250	
AP-174-18	29/36	24/29	250	
AP-174-20	29/36	29/36	250	



ADAPTER, ANTI-SPLASH, WITH FRITTED/SINTERED DISC

Similar to AP-174 except with extra coarse fritted disc sealed above lower inner joint. Frit reduces foam from being carryover.

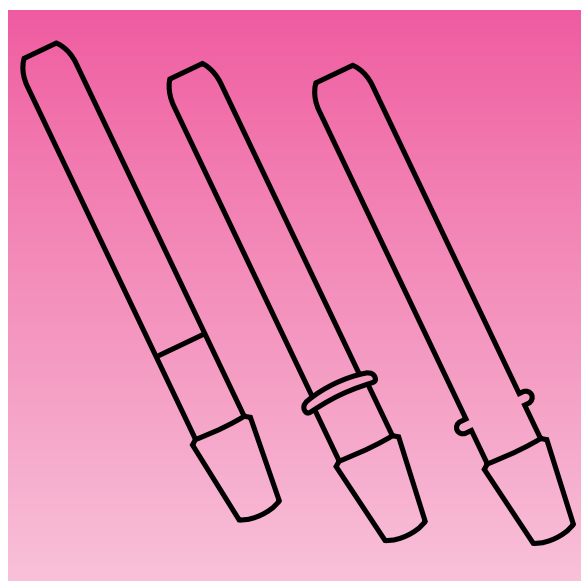
Code	Upper Joint	Lower Joint	Capacity (ml)	Price (each)
AP-176-02	24/29	14/23	100	
AP-176-04	24/29	19/26	100	
AP-176-06	24/29	24/29	100	
AP-176-08	24/29	14/23	250	
AP-176-10	24/29	24/29	250	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

VAPOUR DUCT, ROTARY EVAPORATOR

Precision ground and polished. Meets manufacturer's standards. Please call with your rotary evaporator model.

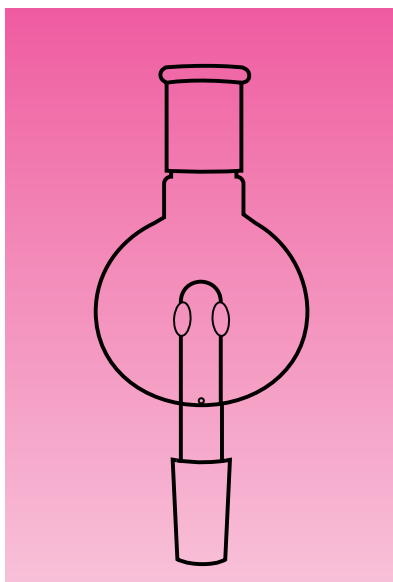
Code	Joint	Price (each)
AP-178-02	24/29	
AP-178-04	24/29	
AP-178-06	24/29	



ADAPTER, ANTI-SPLASH, MODIFIED

With two 4mm drain holes at the base of the inner tube to allow solvent to drain back into the evaporation flask.

Code	Upper Joint	Lower Joint	Capacity (ml)	Price (each)
AP-180-02	24/29	14/23	100	
AP-180-04	24/29	19/26	100	
AP-180-06	24/29	24/29	100	
AP-180-08	29/36	14/23	100	
AP-180-10	29/36	24/29	100	
AP-180-12	24/29	14/23	250	
AP-180-14	24/29	24/29	250	

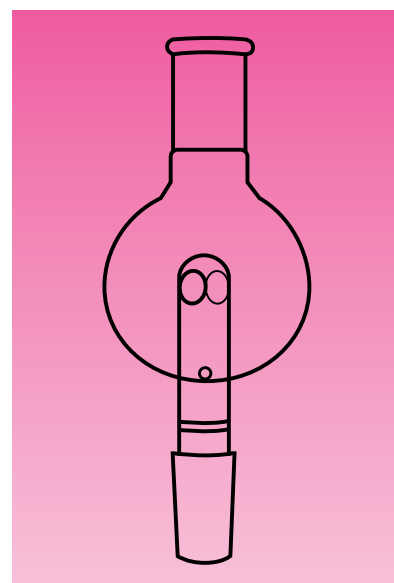


ADAPTER, ANTI-SPLASH, WITH FRITTED/SINTERED DISC

Similar to AP-180 except with extra coarse fritted disc sealed above lower inner joint. Frit reduces foam overflow from being drawn into the condenser.

Code	Upper Joint	Lower Joint	Capacity (ml)	Price (each)
AP-182-02	24/29	14/23	100	
AP-182-04	24/29	24/29	100	
AP-182-06	24/29	14/23	250	
AP-182-08	24/29	24/29	250	

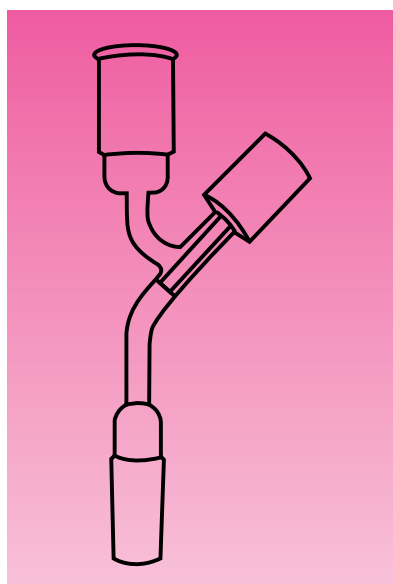
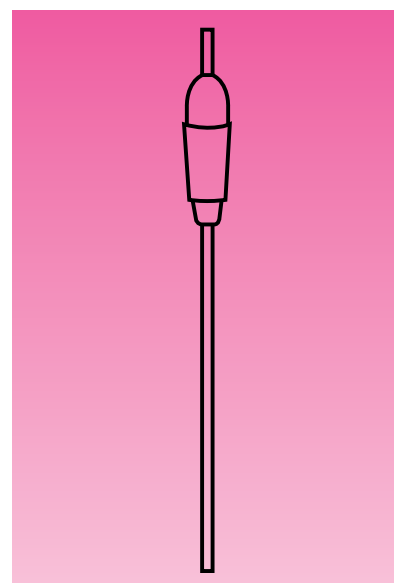
Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



GROUND JOINT, REDUCED DIAMETER, EXTENDED, DRIP TUBE

Inner joint with a sealed on lower tube extending 15cm below the grind, having the same O.D. tubing on both ends of the grind.

Code	Joint	Length below Joint (mm)	Tubing O.D. (mm)	Price (each)
AP-184-02	19/26	153	8	
AP-184-04	24/29	153	10	
AP-184-06	24/29	153	12	



ADAPTER, TRANSFER VALVE

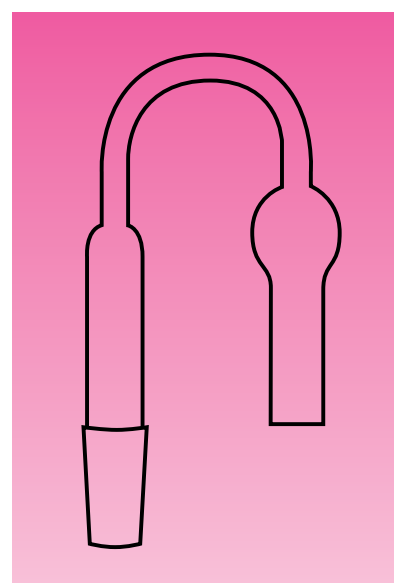
The 0-4mm high vacuum valves have two Viton® 0-rings on the shaft and an integral PTFE 0-ring on the tip.

Code	Joints	Overall Height x Width, (mm)	Price (each)
AP-186-02	14/23	150x75	
AP-186-04	24/29	180x75	
Accessories:			
AP-734-34	0-4mm high vacuum plug and control knob. (PTFE 0-ring at tip)		

ADAPTER, DRYING TUBE, "U" SHAPED

With joint. Cotton is usually used to contain drying agent.

Code	Joint	Price (each)
AP-188-02	14/23	
AP-188-04	19/26	
AP-188-06	24/29	



Adapter, Distillation connecting

Code	Top Joint	Bottom Joint	Side Joint
AP-194-08	14/23	14/23	14/23
AP-194-10	19/26	19/26	19/26
AP-194-12	24/29	24/29	24/29
AP-194-16	14/23	24/29	19/26

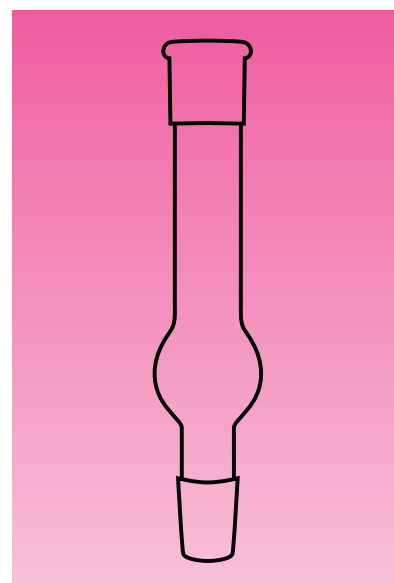


InterChange

ADAPTER, DRYING TUBE, STRAIGHT

With top and bottom joints.

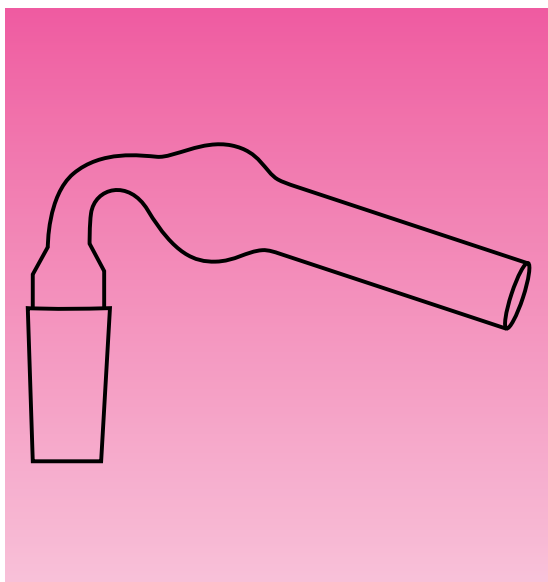
Code	Joint	Price (each)
AP-190-02	14/23	
AP-190-04	19/26	
AP-190-06	24/29	



ADAPTER, DRYING TUBE, 75°

Angled at 75° to avoid desiccant contact with reactions.

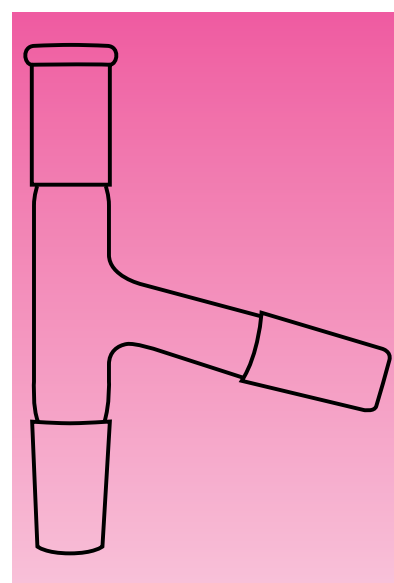
Code	Joint	Price (each)
AP-192-02	14/23	
AP-192-04	19/26	
AP-192-06	24/29	



ADAPTER, DISTILLATION CONNECTING

For use as a component in atmospheric or vacuum distillations.

Code	Upper Joint	Lower Joint	Side Joint	Immersion (Bottom of top joint to bottom of side hole) (mm)	Price (each)
AP-194-02	10/19	14/23	14/23	50	
AP-194-04	10/19	19/26	19/26	50	
AP-194-06	10/19	24/29	24/29	76	
AP-194-08	14/23	14/23	14/23	-	
AP-194-10	19/26	19/26	19/26	-	
AP-194-12	24/29	24/29	24/29	-	
AP-194-14	14/23	24/29	24/29	-	
AP-194-16	14/23	24/29	19/26	-	



Adapter, Drying Tube 75°

Code	Joint	
AP-192-02	14/23	
AP-192-04	19/26	

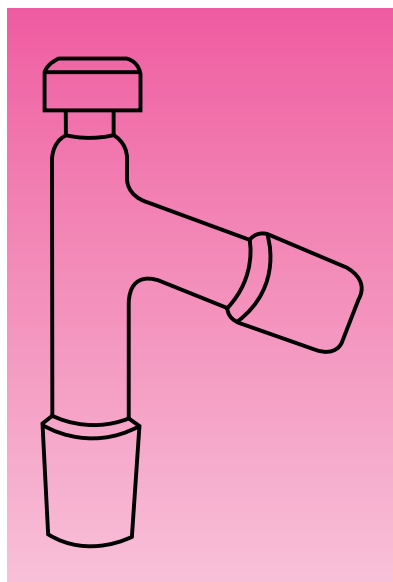
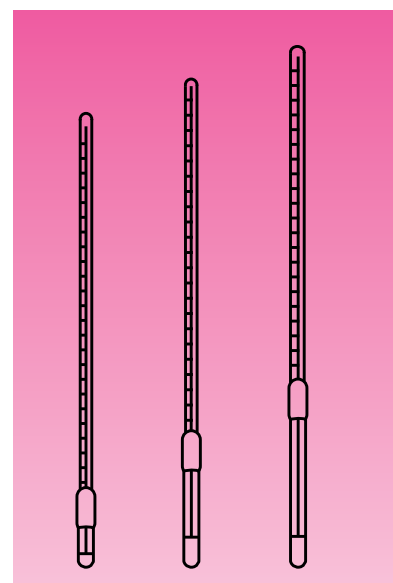


InterChange

THERMOMETER, WITH 10/19 JOINT

Immersion length is measured from the bottom of 10/19 joint to lower end of mercury bulb. Accuracy is $\pm 1^{\circ}\text{C}$.

Code	Immersion (mm)	Range ($^{\circ}\text{C}$)	Price (each)
AP-196-02	25	-20 to 110	
AP-196-04	25	-20 to 250	
AP-196-06	25	-20 to 320	
AP-196-08	50	-20 to 110	
AP-196-10	50	-20 to 250	
AP-212-04	50	-20 to 320	



ADAPTER, DISTILLING, 75°

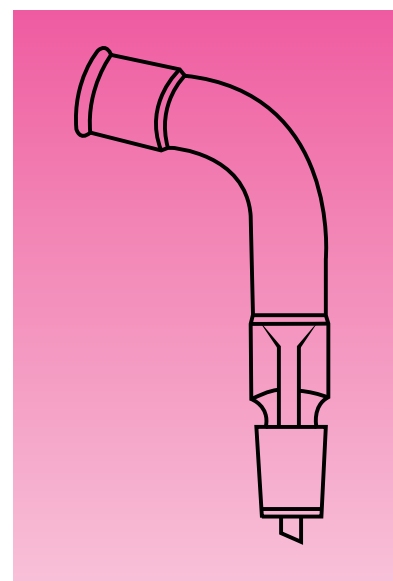
With compression cap (AP-664-04) and Viton® O-ring for forming a vacuum tight seal of plain thermometer.

Code	Joints	Overall Height x Width, (mm)	Price (each)
AP-198-02	14/23	110x55	
AP-198-04	19/26	110x55	
AP-198-06	24/29	155x100	
Accessories:			
AP-664-04	Nylon® cap		
AP-384-20	Replacement Viton® O-rings, size 107		

ADAPTER, DISTILLING, BENT, 105°

With an inner drip joint at the bottom and an outer joint at the top.

Code	Top Joint	Bottom Joint	Price (each)
AP-200-02	14/23	14/23	
AP-200-04	19/26	19/26	
AP-200-06	24/29	24/29	



Adapter, vacuum take-off short stem

With a hose connection and drip tip

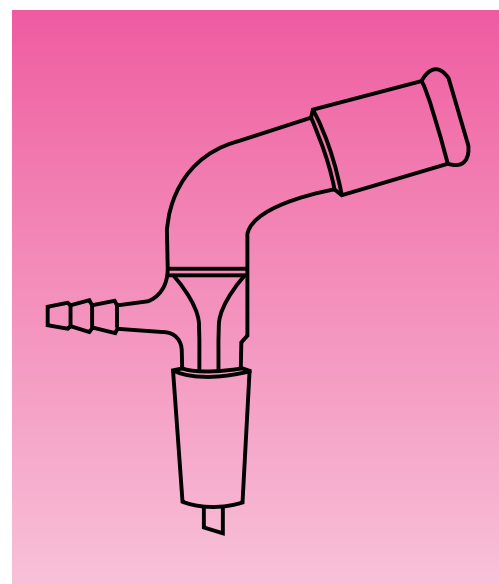
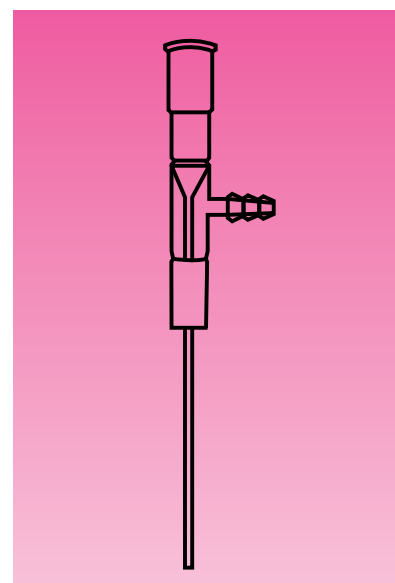


InterChange

ADAPTER, INLET, LONG STEM

With standard taper top outer and lower inner joints with sealed in lower tube extending below inner joint.

Code	Joints	Tube Length Below Joint(mm)	Price (each)
AP-202-02	14/23	100	
AP-202-04	24/29	200	



ADAPTER, VACUUM TAKE-OFF, SHORT STEM

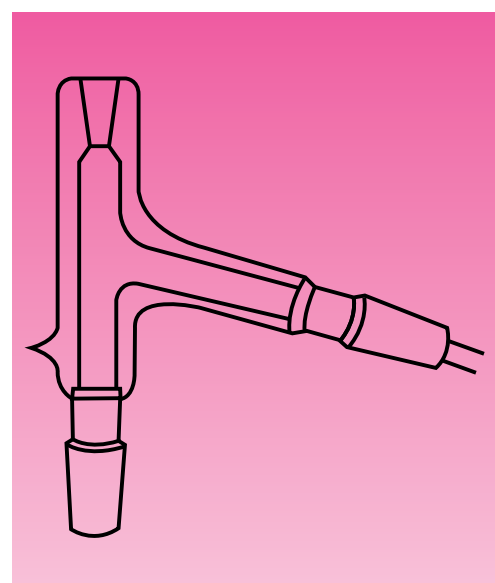
With a hose connection and a drip tip.

Code	Joints	Hose connection (mm)	Price (each)
AP-204-02	14/23	8	
AP-204-04	19/26	8	
AP-204-06	24/29	10	
AP-204-08	29/36	10	

ADAPTER, DISTILLATION HEAD

Vacuum jacketed. The 10/19 top joint accommodates a 76mm immersion thermometer.

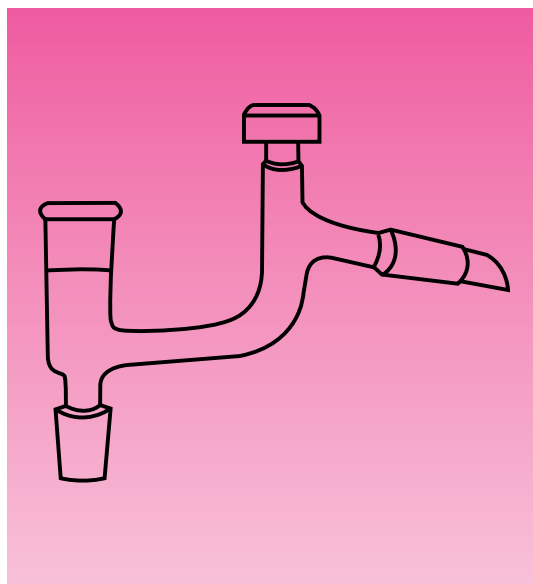
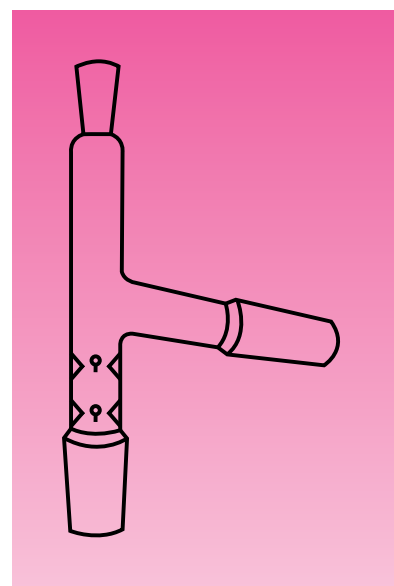
Code	Top Joint	Other Joints	Price (each)
AP-206-02	10/19	24/29	
Accessories:			
AP-212-04	76mm Immersion thermometer -20 °C to 250 °C		



ADAPTER, DISTILLATION CONNECTING, VIGREUX

Accommodate a 76mm immersion thermometer.

Code	Top Joint	Other Joint	Side Joint	Price (each)
AP-208-02	10/19	24/29	24/29	
Accessories:				
AP-212-04	76mm Immersion thermometer -20 °C to 250 °C			

**ADAPTER, DISTILLATION**

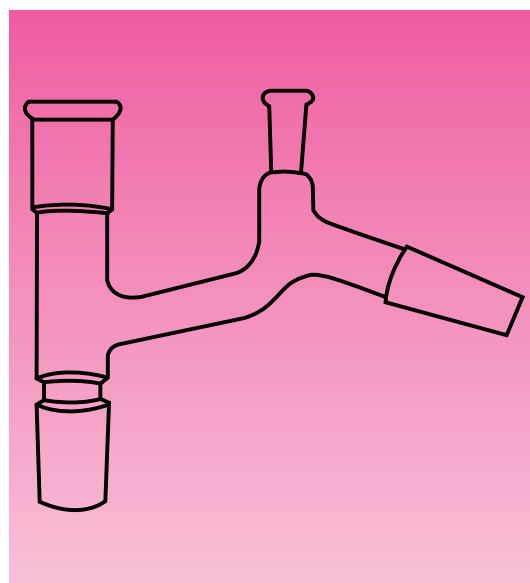
With threaded thermometer port, supplied complete with Nylon® cap (AP-664-04) and Viton® O-ring to (AP-384-20) accommodate 6-7.5mm O.D. plain thermometer.

Code	Joint	Price (each)
AP-210-02	14/23	
AP-210-04	19/26	
AP-210-06	24/29	
Accessories:		
AP-664-04	Nylon® cap	
AP-384-20	Replacement Viton® O-rings, size 107	

ADAPTER, DISTILLATION

With a 10/19 joint on the vertical side tube for a 76mm immersion thermometer.

Code	All Joints	Thermometer Joint	Price (each)
AP-212-02	24/29	10/19	
Accessories:			
AP-212-04	76mm Immersion thermometer -20 °C to 250 °C		



Adapter, Claisen

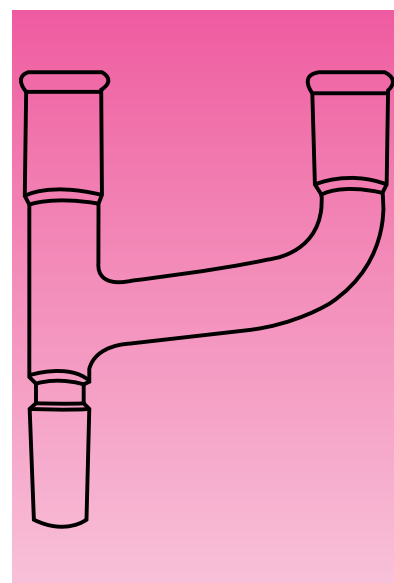
Code	Joints	
AP-214-02	14/23	



ADAPTER, CLAISEN

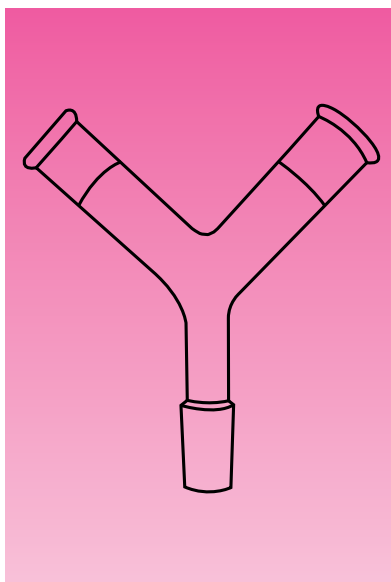
Provides dual entry into a variety of flasks.

Code	Joint	Price (each)
AP-214-02	14/23	
AP-214-04	19/26	
AP-214-06	24/29	
AP-214-08	29/36	

**ADAPTER, CONNECTING**

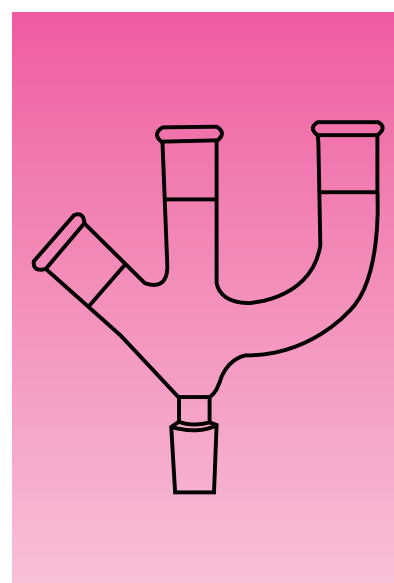
Three-arm design for the assembly of three vessels.

Code	Joint	Price (each)
AP-216-02	14/23	
AP-216-04	24/29	

**ADAPTER, CLAISEN**

Three-inlet type for multiple entries into a single neck flask. One side joint is at a 45° angle.

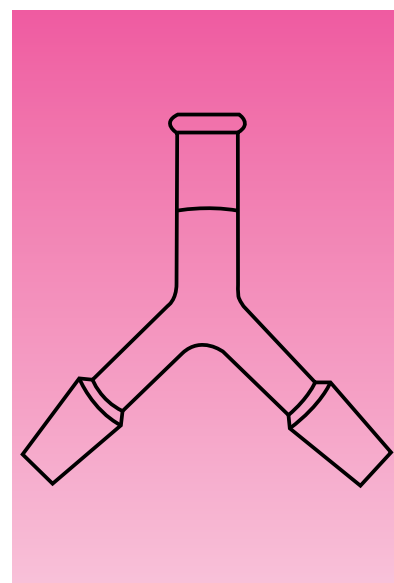
Code	Joint	Price (each)
AP-218-02	14/23	
AP-218-04	24/29	



ADAPTER, CONNECTING

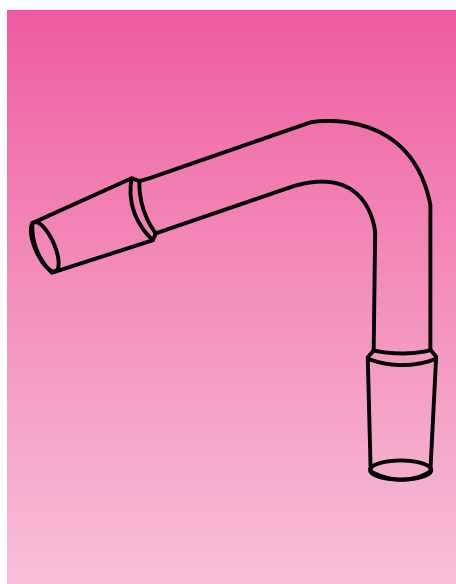
Three-arm design for the assembly of three vessels.

Code	Joint	Price (each)
AP-220-02	14/23	
AP-220-04	24/29	



ADAPTER, BENT, 75°

With inner joints at each end.

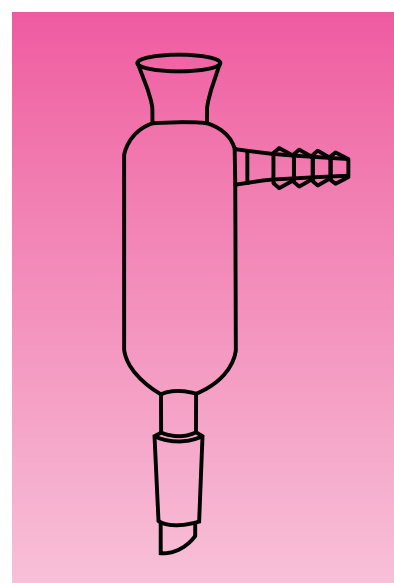


Code	Joint	Price (each)
AP-222-02	14/23	
AP-222-04	19/26	
AP-222-06	24/29	

ADAPTER, VACUUM FILTRATION

Used with plain stem Buchner funnels and pluro-stopper. Hose connection has an O.D of 10mm at the largest serration. Order pluro-stoppers below separately.

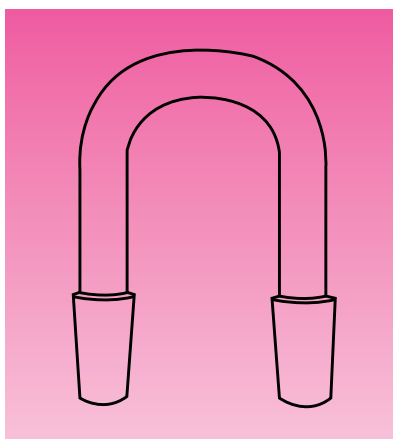
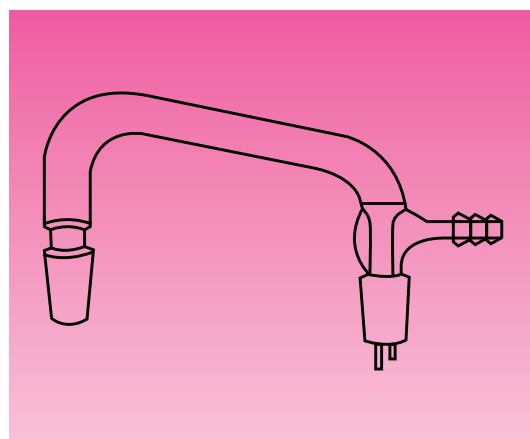
Code	Lower joint	Pluro-stopper size	Fits Funnel Capacity (ml)	Price (each)
AP-224-02	14/23	#1	2 to 30	
AP-224-04	24/29	#3	15 to 150	
AP-224-06	24/29	#5 or #6	350 to 3000	



ADAPTER, VACUUM DISTILLING

Distance between joints is 100mm. Useful in the sub-boiling separation of mixtures having volatile components.

Code	Joints	Hose O.D. (mm)	Price (each)
AP-228-02	14/23	8	

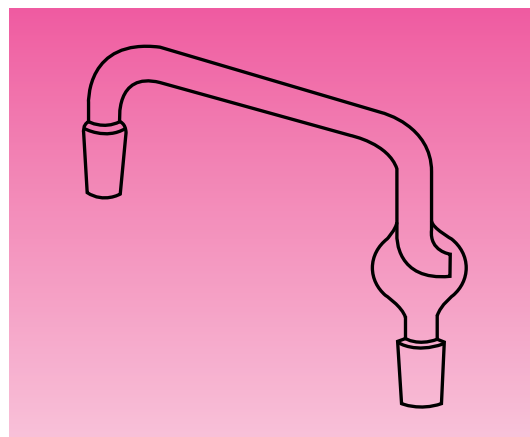
**ADAPTER, U-SHAPE**

Code	Joint	Price (each)
AP-229-01	14/23	

ADAPTER, KJELDAHL TRAP

Distance between center of joints is approximate 200mm.

Code	Joint	Price (each)
AP-230-02	24/29	



BUBBLER

Bubbler, Mineral Oil

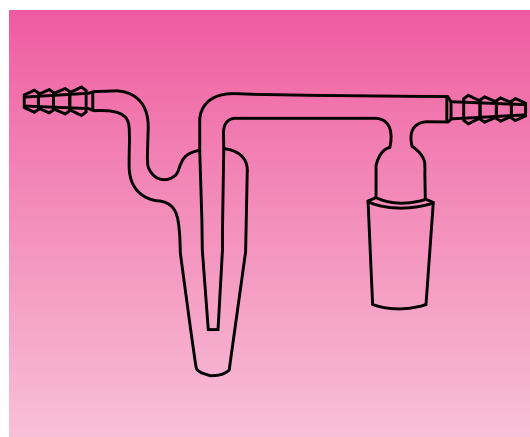
Code	OD (mm)	H (mm)	W (mm)
AP-232-02	26	185	80



ADAPTER, WITH MINERAL OIL BUBBLER

With 10mm O.D. hose connection.

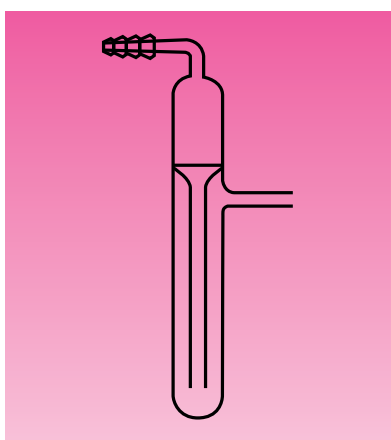
Code	Joint	Price (each)
AP-226-02	24/29	



BUBBLER, MINERAL OIL

With 10mm O.D. hose connection.

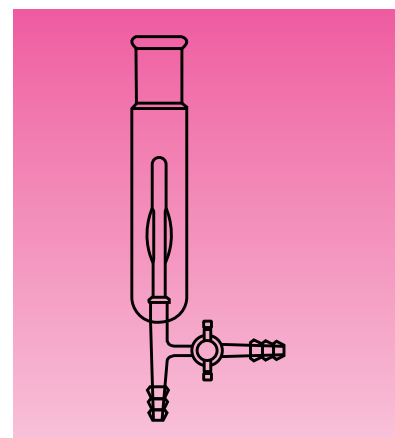
Code	Body O.D. (mm)	Overall Height x Width (mm)	Price (each)
AP-232-02	26	185x80	
AP-232-04	26	500x80	



BUBBLER

With small ball joints to prevent mineral oil being sucked back under sudden negative pressure in the system.

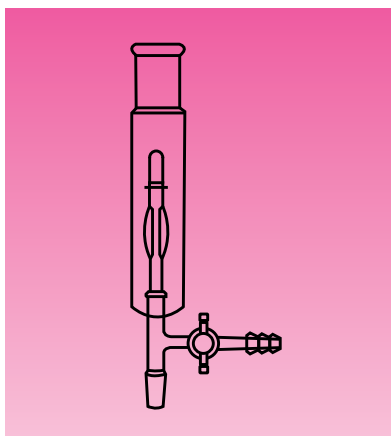
Code	Top Joint	Bottom Joint	Length (mm)	Price (each)
AP-234-02	29/36	14/23	157	
AP-234-04	29/36	24/29	157	
Accessory:				
AP-682-02	Replacement 2mm Teflon® Plug Only			



BUBBLER

With small ball joints to prevent mineral oil being sucked back under sudden negative pressure in the system.

Code	Top Joint	Bottom 10mm Hose connection	Length (mm)	Price (each)
AP-236-02	29/36		157	
Accessory:				
AP-682-02	Replacement 2mm Teflon® Plug Only			



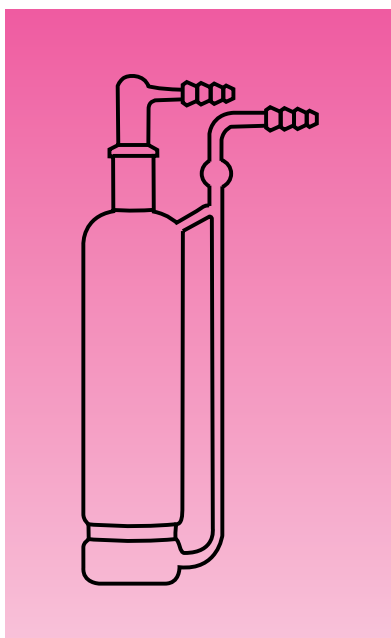
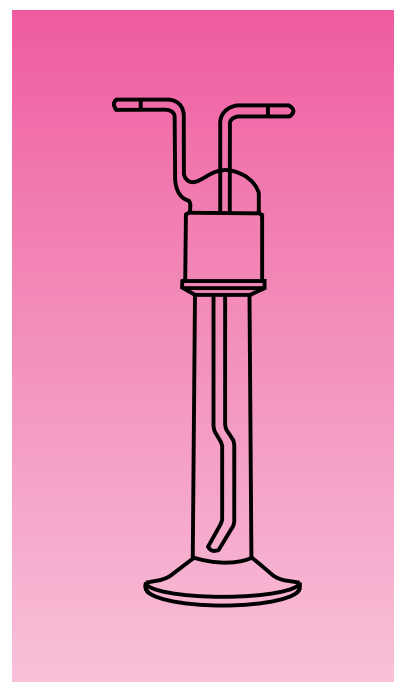
BOTTLE, GAS WASHING

BOTTLE, GAS WASHING, FRITTED/SINTERED DISC

Gas washing bottle with standard taper 45/40 cap style stopper and sintered disc angled at 15° for even distribution of gas throughout absorbing material. Available with a coarse or extra coarse fritted disc. Order plastic clip separately. (not supplied)

Code	Capacity (ml)	Approx. Height (mm)	Porosity	Price (each)
AP-238-02	125	290	C	
AP-238-04	125	290	XC	
AP-238-06	250	305	C	
AP-238-08	500	380	C	
AP-238-10	500	380	XC	
Accessory:				
AP-648-12	Plastic Clamp, 45/40			

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



BOTTLE, GAS WASHING, FRITTED/SINTERED DISC

Gas washing bottle with an extra large diameter (60mm) sintered disc sealed into the bottom of the bottle to enable increased gas throughput and uniform gas distribution. Available with coarse fritted disc. The 24/29 standard taper top outer joint accepts a AP-40 gas inlet adapter which is supplied with bottle.

Code	Capacity (ml)	Approx. Height (mm)	Porosity	Price (each)
AP-240-02	350	250	C	
Replacement Components:				
Code	Description			Price (each)
AP-240-04	Adapter, 24/29 Gas Inlet Adapter, 8mm hose connection			
AP-648-06	24/29 Joint clip, plastic			

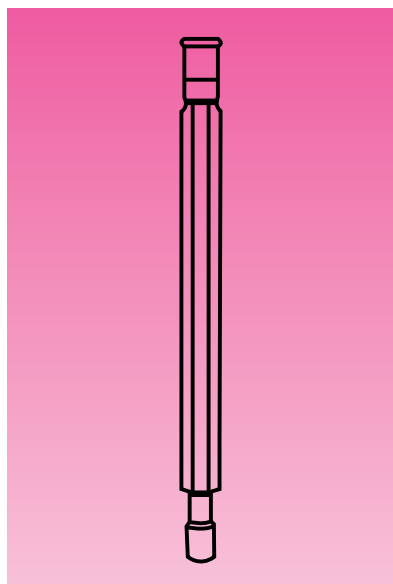
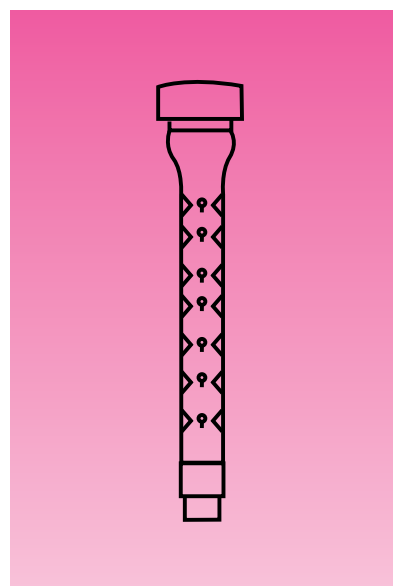
Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

CONDENSER

COLUMN, DISTILLING, VIGREUX

Column length is measured from the highest to lowest indent in the column.

Code	Indentation Length (mm)	Upper Joint	Lower Joint	Price (each)
AP-242-02	75	14/23	14/23	
AP-242-04	100	14/23	14/23	
AP-242-06	120	14/23	14/23	
AP-242-08	120	19/26	19/26	
AP-242-10	130	19/26	19/26	
AP-242-12	120	24/29	24/29	
AP-242-14	150	24/29	24/29	
AP-242-16	200	24/29	24/29	
AP-242-18	300	24/29	24/29	



CONDENSER, DISTILLATION, VACUUM JACKETED

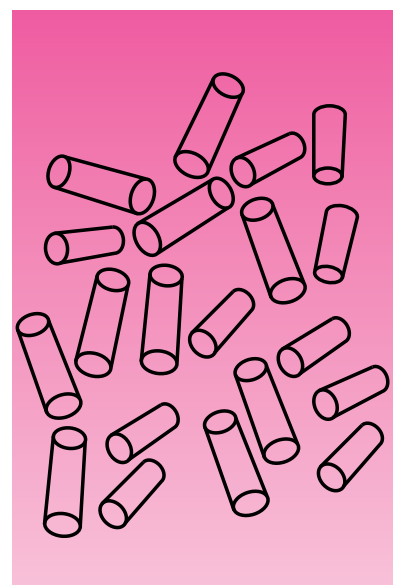
With 12mm I.D. indentations to support packing material. Vacuum jacketed to improve performance.

Code	Joints	Jacket Height (mm)	Price (each)
AP-244-02	14/23	130	
AP-244-04	24/29	250	

DISTILLING COLUMN PACKING

Rashig ring/particle type mini-glass coils packing and can be “poured” into any laboratory or pilot scale column. Easily removed for replacement or cleaning.

Code	Material	Size O.D.xL(mm)	Price (500g/Pak.)
AP-246-02	Glass	4x12	



Condenser, Distillation



Code	Top Joint	Jacket Height (mm)	Column Overall Height (mm)
AP-250-04	14/23	200	280
AP-250-06	19/26	110	200
AP-250-08	24/29	200	300

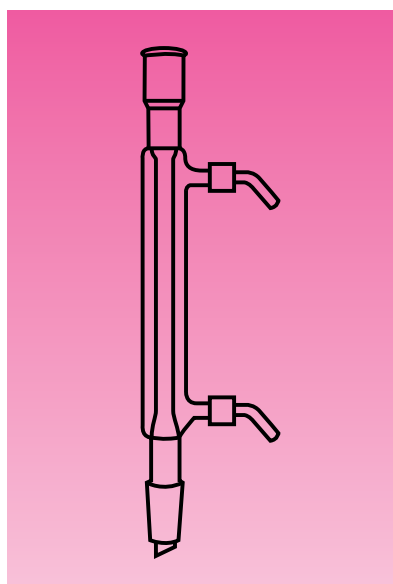
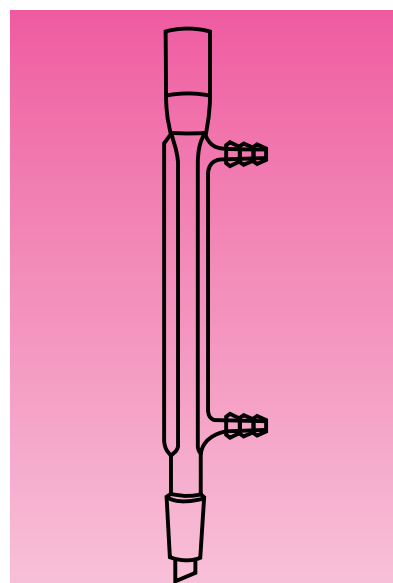


InterChange

CONDENSER, DISTILLATION

Indentations at the bottom for supporting packing material. Jacket permits the column to be used as a condenser.

Code	Joints	Jacket Height (mm)	Column Overall Height(mm)	Price(each)
AP-248-02	14/23	110	180	
AP-248-04	14/23	200	280	
AP-248-06	19/26	110	200	
AP-248-08	19/26	200	280	
AP-248-10	24/29	200	330	



CONDENSER, DISTILLATION, REMOVABLE HOSE CONNECTIONS

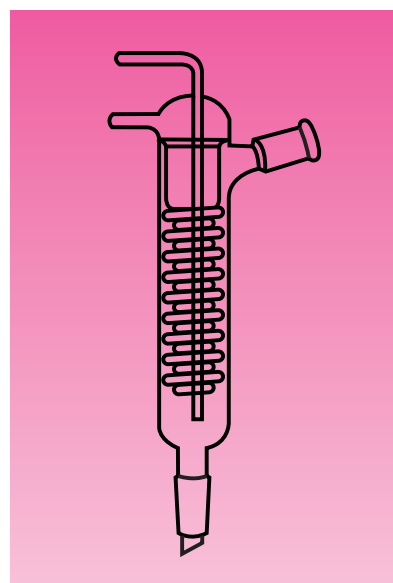
Indentations at the bottom for supporting packing material. Jacket permits the column to be used as a condenser.

Code	Joints	Jacket Height (mm)	Column Overall Height(mm)	Price(each)
AP-250-02	14/23	110	180	
AP-250-04	14/23	200	280	
AP-250-06	19/26	110	200	
AP-250-08	24/29	200	330	
Accessories:				
AP-288-10	#14 Nylon® cap with 9.5mm hole			
AP-668-02	Replacement hose connection-Straight			

CONDENSER, FRIEDRICHS, WITH 24/29 JOINT

With a joint at 15° angle.

Code	Top Joint	Bottom Joint	Over Height (mm)	Price(each)
AP-252-02	24/29	24/29	330	
AP-252-04	24/29	45/40	340	



Condenser, cold finger, with drip tip

Extended offset lower tip for drop control

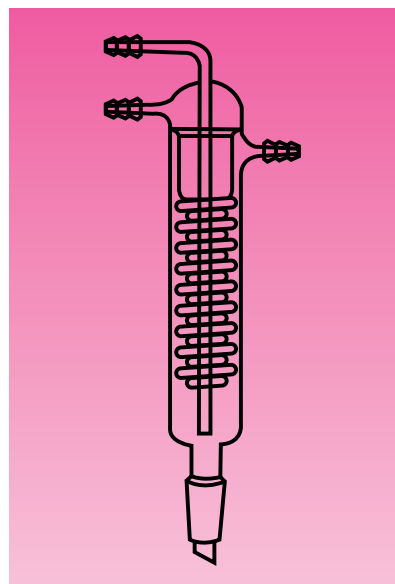
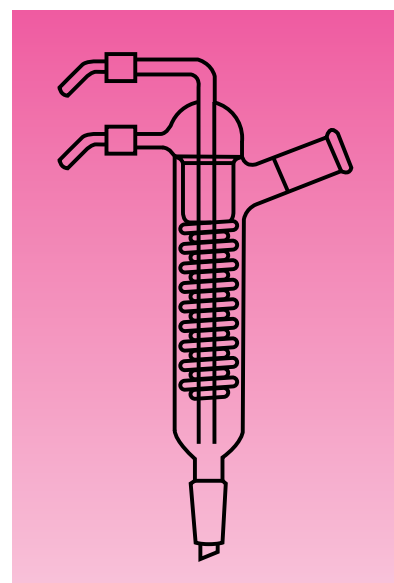


InterChange

CONDENSER, FRIEDRICHS, REMOVABLE HOSE CONNECTIONS

With a joint at 15° angle. Supplied completely with Nylon® cap and hose connections.

Code	Top Joints	Bottom Joints	Over Height (mm)	Hose Connection (mm)	Price(each)
AP-254-02	24/29	24/29	330	10	
Accessories:					
AP-288-10	#14 Nylon® cap with 9.5mm hole				
AP-668-02	Replacement hose connection-Straight				



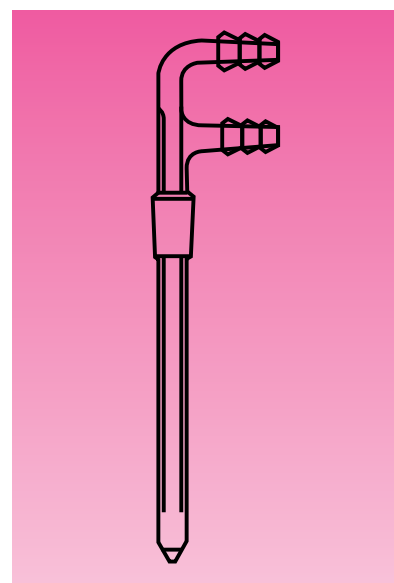
CONDENSER, FRIEDRICHS

Code	Joints	Over Height (mm)	Hose Connection (mm)	Price(each)
AP-256-02	24/29	330	10	

CONDENSER, COLD FINGER, WITH DRIP TIP

Extended offset lower tip for drop control.

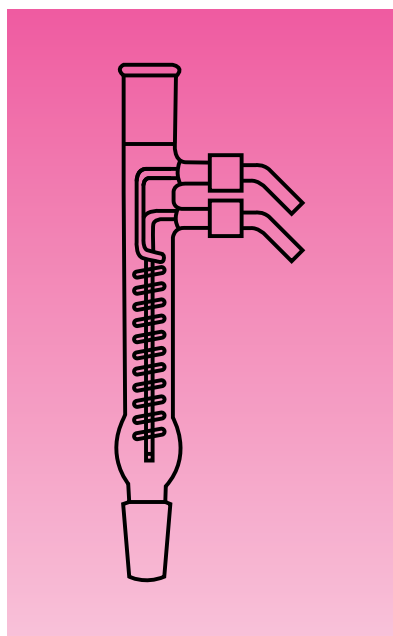
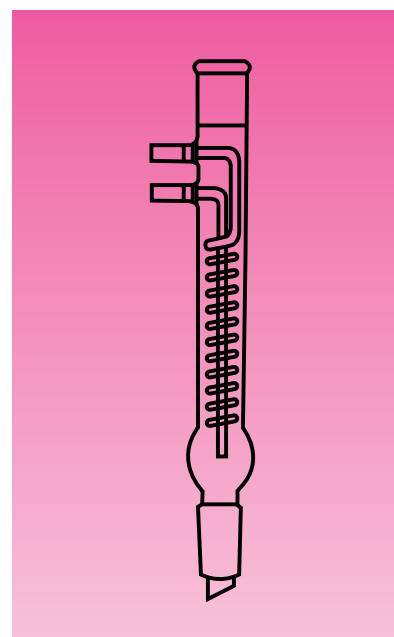
Code	Joints	Length Below Joint(mm)	Hose O.D.(mm)	Price(each)
AP-258-02	14/23	100	8	
AP-258-04	24/29	150	10	
AP-258-06	24/29	200	10	
AP-258-08	24/29	250	10	



CONDENSER, REFLUX

Coil style reflux condenser with tightly wrapped coil providing maximum cooling. Excellent for use with volatile solvents. Condenser has a top outer standard taper joint and lower inner drip tip joint. Hose connections have an O.D. of 8mm or 10mm at the middle serration.

Code	Jacket Length (mm)	Joints	Overall Height (mm)	Hose Connection (mm)	Price(each)
AP-260-02	100	14/23	205	8	
AP-260-04	180	14/23	305	8	
AP-260-06	125	19/26	205	8	
AP-260-08	125	24/29	275	10	
AP-260-10	175	24/29	325	10	
AP-260-12	225	24/29	375	10	
AP-260-14	275	24/29	425	10	



CONDENSER, REFLUX, REMOVABLE HOSE CONNECTIONS

Coil style reflux condenser with tightly wrapped coil providing maximum cooling. Excellent for use with volatile solvents. Condenser has a top outer standard taper joint and lower inner drip tip joint.

Code	Jacket Length (mm)	Joints	Overall Height (mm)	Hose Connection (mm)	Price(each)
AP-262-02	100	14/23	210	8	
AP-262-04	180	14/23	305	8	
AP-262-06	125	24/29	285	10	
AP-262-08	175	24/29	335	10	
AP-262-10	225	24/29	375	10	
Accessories:					
AP-288-10	#14 Nylon® cap with 9.5mm hole				
AP-668-02	Replacement hose connection-Straight				

Condenser, Graham

Code	Joints	Jacket Length (mm)	O.D. Hose Connection (mm)
AP-268-08	24/29	250	10
AP-268-10	24/29	300	10

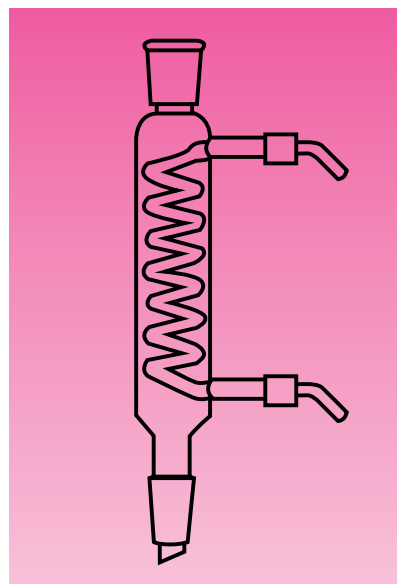
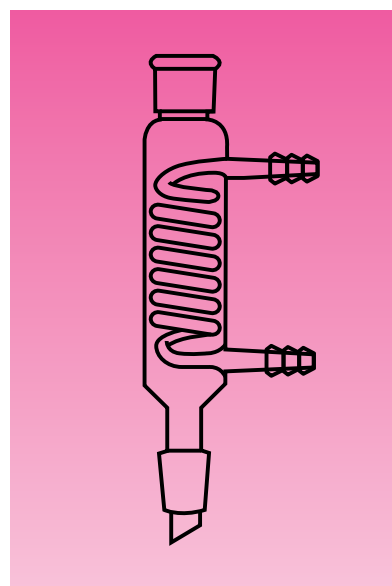


InterChange

CONDENSER, COILED

With joints at top and bottom.

Code	Jacket Length (mm)	Joints	O.D. Hose Connection (mm)	Price(each)
AP-264-02	100	14/23	8	
AP-264-04	120	14/23	8	
AP-264-06	200	19/26	8	
AP-264-08	200	24/29	10	
AP-264-10	300	24/29	10	
AP-264-12	400	24/29	10	

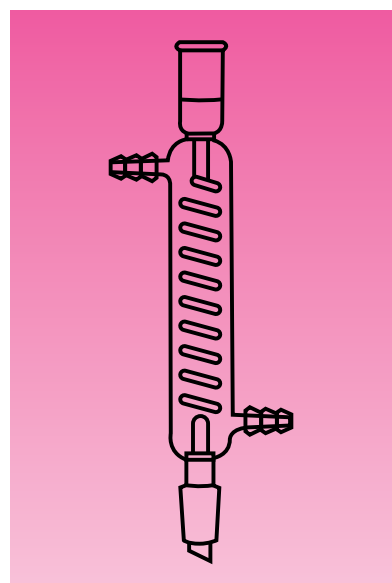
**CONDENSER, COILED, REMOVABLE HOSE CONNECTIONS**

With joints at top and bottom.

Code	Jacket Length (mm)	Joints	O.D. Hose Connection (mm)	Price(each)
AP-266-02	200	24/29	8	
AP-266-04	300	24/29	8	
AP-266-06	400	24/29	8	
AP-266-08	300	29/36	8	
Accessories:				
AP-288-10	#14 Nylon® cap with 9.5mm hole			
AP-668-02	Replacement hose connection-Straight			

CONDENSER, GRAHAM

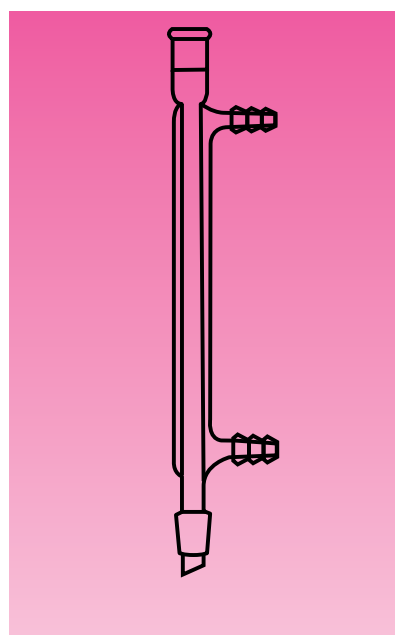
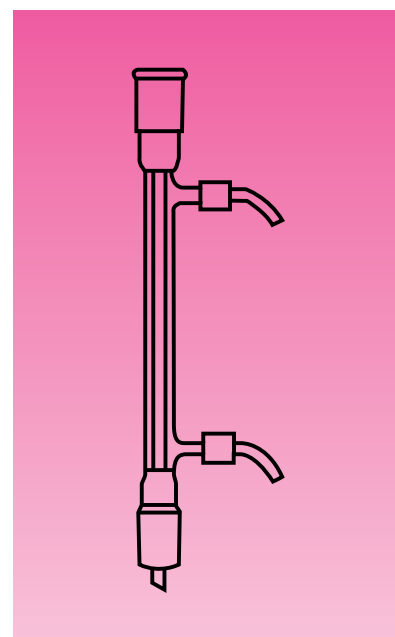
Code	Jacket Length (mm)	Joints	O.D. Hose Connection (mm)	Price(each)
AP-268-02	14/23	120	8	
AP-268-04	19/26	200	8	
AP-268-06	24/29	200	8	
AP-268-08	24/29	250	10	
AP-268-10	24/29	300	10	
AP-268-12	24/29	400	10	



CONDENSER WEST, REMOVABLE HOSE CONNECTIONS

With narrow inner space for high cooling efficiency.

Code	Joints	Jacket Length (mm)	Price(each)
AP-270-02	14/23	110	
AP-270-04	14/23	190	
AP-270-06	24/29	100	
AP-270-08	24/29	190	
AP-270-10	24/29	200	
AP-270-12	24/29	300	
Accessories:			
AP-288-10	#14 Nylon® cap with 9.5mm hole		
AP-668-02	Replacement hose connection-Straight		



CONDENSER WEST

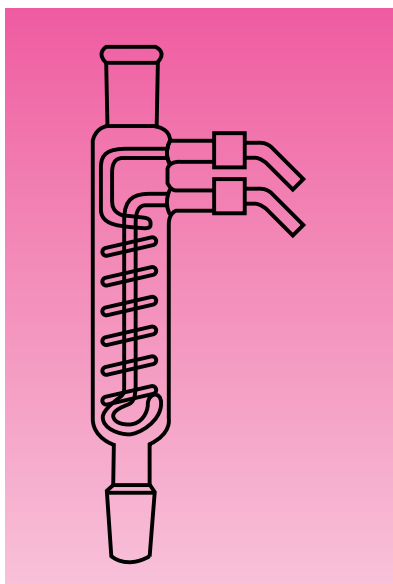
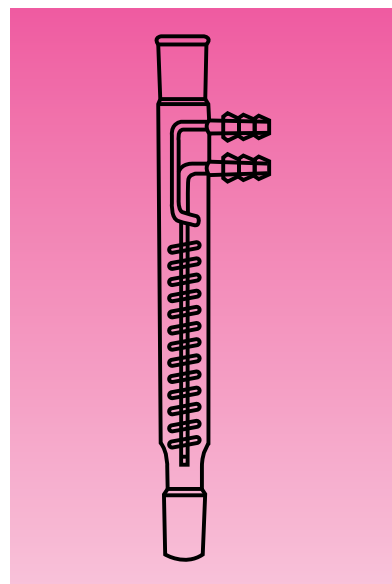
With narrow inner space for fast coolant speed, thus high cooling efficiency.

Code	Joints	Jacket Length (mm)	Price(each)
AP-272-02	14/23	110	
AP-272-04	14/23	190	
AP-272-06	14/23	200	
AP-272-08	19/26	190	
AP-272-10	19/26	200	
AP-272-12	24/29	100	
AP-272-14	24/29	190	
AP-272-16	24/29	200	
AP-272-18	24/29	300	

CONDENSER, REFLUX, LARGE COOLING CAPACITY

Jacket has an O.D. of 40mm while coil O.D. is 8mm to provide maximum cooling capacity.

Code	Coil Length (mm)	Joints	Overall Height (mm)	Hose Connection (mm)	Price(each)
AP-274-02	125	24/29	300	10	
AP-274-04	175	24/29	350	10	

**CONDENSER, REFLUX, LARGE COOLING CAPACITY, REMOVABLE HOSE CONNECTIONS**

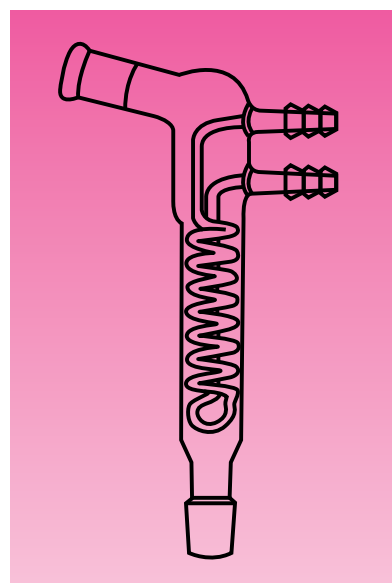
Jacket has an O.D. of 40mm while coil O.D. is 8mm to provide maximum cooling capacity.

Code	Coil Length (mm)	Joints	Overall Height (mm)	Hose Connection (mm)	Price(each)
AP-276-02	125	24/29	300	8	
Accessories:					
AP-288-10		#14 Nylon® cap with 9.5mm hole			
AP-668-02		Replacement hose connection-Straight			

CONDENSER, REFLUX

Coil section is 100mm in height.

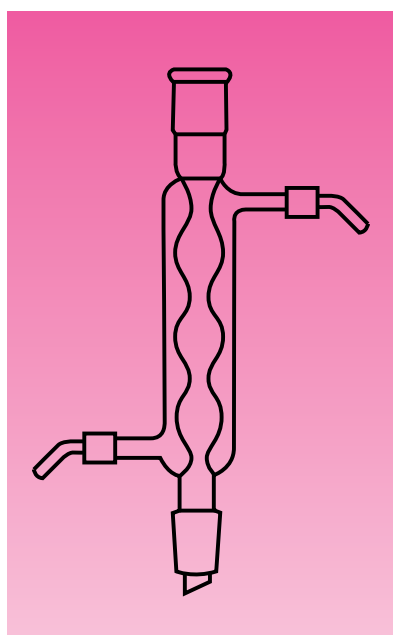
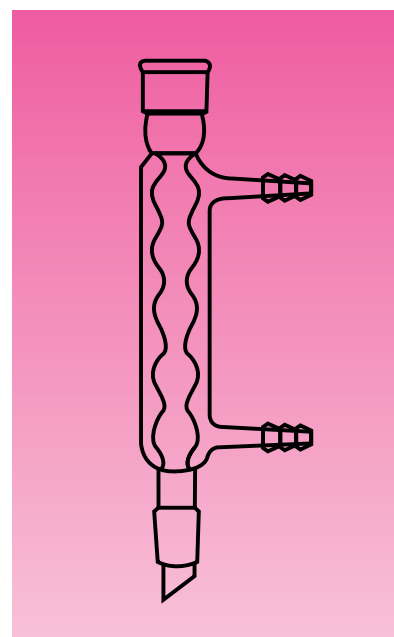
Code	Joint	Price (each)
AP-278-02	14/23	
AP-278-04	19/26	



CONDENSER, ALLIHN

With joints at the top and the bottom.

Code	Jacket Length (mm)	Joints	O.D. Hose Connection (mm)	Price(each)
AP-280-02	120	14/23	8	
AP-280-04	200	19/26	8	
AP-280-06	300	19/26	8	
AP-280-08	200	24/29	10	
AP-280-10	300	24/29	10	
AP-280-12	400	24/29	10	
AP-280-14	300	29/36	10	
AP-280-16	400	29/36	10	



CONDENSER, ALLIHN, REMOVABLE HOSE CONNECTIONS

With joints at the top and the bottom.

Code	Jacket Length (mm)	Joints	O.D. Hose Connection (mm)	Price(each)
AP-282-02	120	14/23	8	
AP-282-04	200	24/29	8	
AP-282-06	300	24/29	8	
AP-282-08	400	24/29	8	
AP-282-10	300	29/36	8	
Accessories:				
AP-288-10	#14 Nylon® cap with 9.5mm hole			
AP-606-10	Replacement hose connection-Straight			

Condenser, liebigh



Code	Top Joint	Jacket Height (mm)	Column Overall Height (mm)
AP-248-04	14/23	200	280
AP-248-10	24/29	200	330

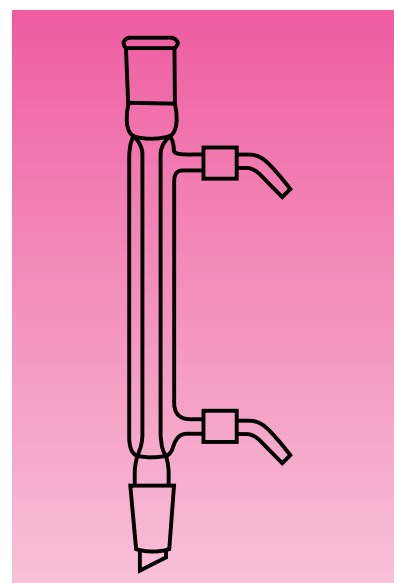


InterChange

CONDENSER, LIEBIG, REMOVABLE HOSE CONNECTIONS

With joints at the top and the bottom.

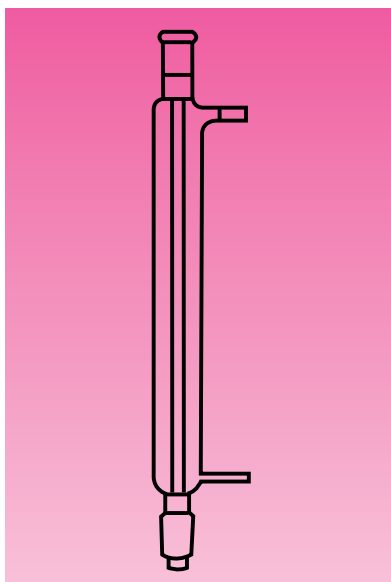
Code	Jacket Length (mm)	Joints	O.D. Hose Connection (mm)	Price(each)
AP-284-02	120	14/23	8	
AP-284-04	180	19/26	8	
AP-284-06	300	19/26	8	
AP-284-08	200	24/29	8	
AP-284-10	250	24/29	8	
AP-284-12	300	24/29	8	
AP-284-14	400	24/29	8	
AP-284-16	500	24/29	8	
Accessories:				
AP-288-10	#14 Nylon® cap with 9.5mm hole			
AP-668-02	Replacement hose connection-Straight			



CONDENSER, LIEBIG

With joints at the top and the bottom.

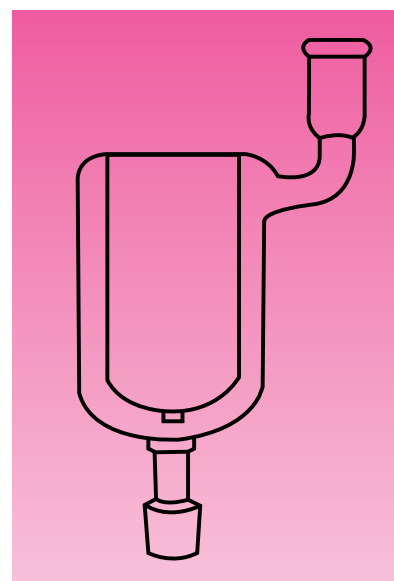
Code	Jacket Length (mm)	Joints	O.D. Hose Connection (mm)	Price(each)
AP-286-02	120	14/23	8	
AP-286-04	180	19/26	8	
AP-286-06	300	19/26	8	
AP-286-08	100	24/29	10	
AP-286-10	200	24/29	10	
AP-286-12	250	24/29	10	
AP-286-14	300	24/29	10	
AP-286-16	400	24/29	10	
AP-286-18	500	24/29	10	



CONDENSER, DEWAR, MICRO

Side joint is at 90° angle.

Code	Inside Depth(mm)	I.D.(mm)	Joints	Price(each)
AP-288-02	90	31	14/23	



Condenser, for rotary evaporator, upright style

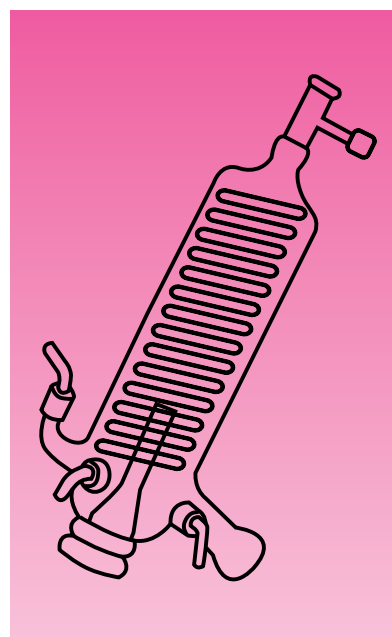


InterChange

CONDENSER, FOR ROTARY EVAPORATORS

Double coil condenser for use with rotary evaporators for cooling with tap water in a diagonal position. A 19/38 top valve. With 35/20 spherical ball joint.

Code	Description	Price(each)
AP-288-06	Rotary Evaporator Condenser, diagonal style	
Accessories:		
AP-288-08	Inlet feed tube	
AP-288-10	Nylon® cap for water inlet/outlet	
AP-606-10	Replacement Nylon® hose connection-straight, with O-ring (used with RC14 cap)	
AP-288-14	Thread Cap for GL10	
AP-652-26	O Ring.ID4.5mm *Width 1.78mm	



CONDENSER, FOR ROTARY EVAPORATOR, UPRIGHT STYLE

For vertical style of.

Code	Description	Price (each)
AP-288-20	Rotary Evaporator Condenser, vertical style	
Accessories:		
AP-288-22	Inlet feed tube, 19/38 joint	
AP-288-10	Nylon® cap	
AP-668-02	Replacement hose connection-straight	
AP-668-08	Nylon® cap for vacuum	
AP-288-12	Replacement Nylon® hose connection-straight, with O-ring (used with RC18 cap)	

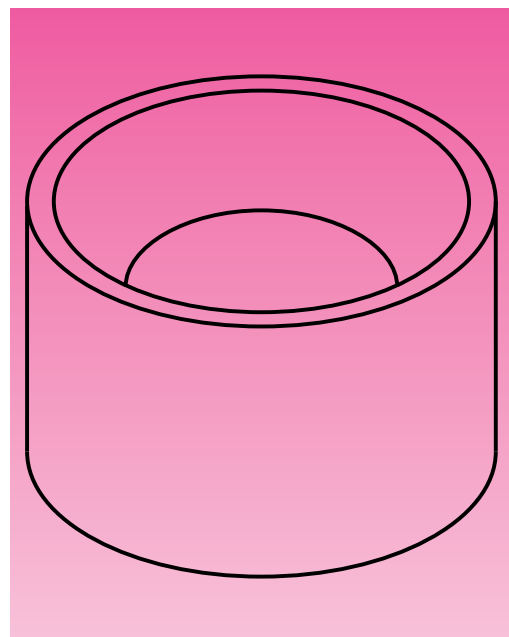
DEWAR FLASK

FLASK, DEWAR, LOW FORM, HEMISPHERICAL

Flask size shown is the maximum capacity flask that will fit inside the Dewar. With Aluminium housing to transfer magnetic field.

Code	Fits Flask Sizes (ml)	Interior Dimensions, Depthx Diameter (mm)	Price (500g/Pak.)
AP-288-34	100	65x80	
AP-288-36	250	75x100	
AP-288-38	500	85x123	
AP-288-40	1000	100x143	

*Due to extra high vacuum, the Dewar flasks still have a rare possibility to explode, so working behind a safety shield in hood and always wearing goggles are strongly recommended.

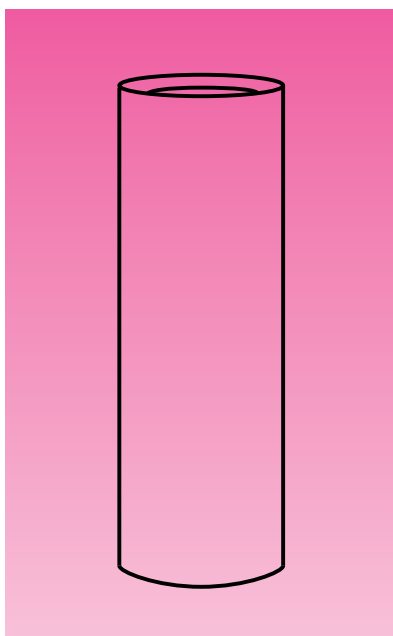


FLASK, DEWAR, WIDE MOUTH, METAL HOUSING

Dewar flask with weighted metal base for stability and with a full-length aluminium housing which extends to the top rim for added protection.

Code	Overall Capacity (ml)	Exterior Dimensions in HeightxWidth (mm)	Interior Dimensions in DepthxDiameter (mm)	Price (500g/Pak.)
AP-290-02	350	157x86	125x70	
AP-290-04	665	241x86	195x70	
AP-290-06	1000	337x86	302x70	
AP-290-08	1900	252x160	190x120	
AP-290-10	3500	337x160	302x120	
AP-290-12	4300	365x178	305x143	

*Due to extra high vacuum, the Dewar flasks still have a rare possibility to explode, so working behind a safety shield in hood and always wearing goggles are strongly recommended.



CHROMATOGRAPHY

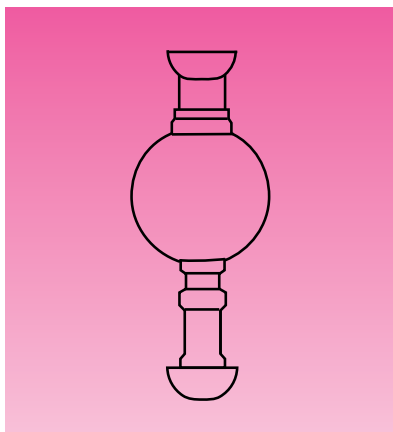
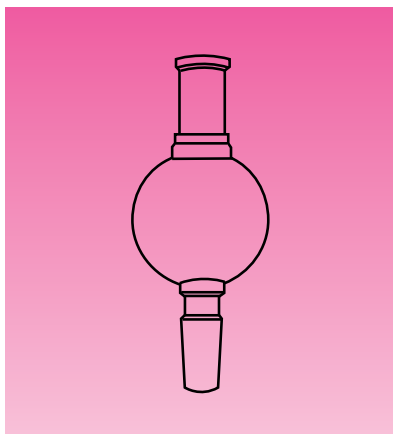
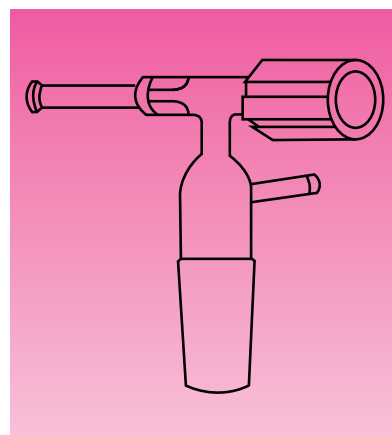
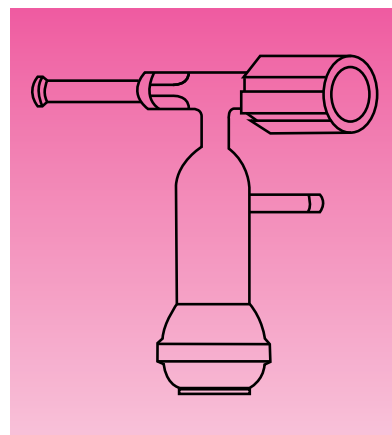
CHROMATOGRAPHY FLOW CONTROL ADAPTER

0-4mm high vacuum valve with metering tip to adjust air pressure. With standard taper joint. Order pinch type clamps with screw-locking device for ball joints.

For replacement O-rings on high vacuum plug shaft, order AP-652. The O-rings on the high vacuum PTFE valve are completely encapsulated with thin layer of PTFE, making them inert to chemicals.

Code	Joint Size	Price(each)
AP-292-02	35/20	
AP-292-04	24/29	
Accessories:		
AP-734-08	0-4mm high vacuum metering plug and control knob. (PTFE O-ring at tip)	
AP-652-28	Replacement Viton® O-rings, size O10 for 0-4mm high vacuum plug shaft O-ring	
AP-566-08	Clamps for 35/20 or 35/25 ball joint	
AP-648-06	Plastic clamp for 24/29 joint	

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.



CHROMATOGRAPHY RESERVOIR

For flash chromatography.

Code	Joints	Capacity(mL)	Price(each)
AP-294-02	24/29	100	
AP-294-04	24/29	250	
AP-294-06	24/29	500	
AP-294-08	35/20	250	
AP-294-10	35/20	500	
Accessories:			
AP-566-08	S.S. Clamps for 35/20 or 35/25 ball joint		
AP-648-06	Plastic clamp for 24/29 joint		

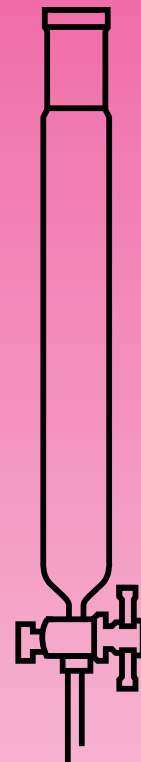
CHROMATOGRAPHY COLUMN, HEAVY WALL DESIGN

General purpose column has a Teflon® stopcock and a top outer joint.

For flash chromatography. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	Joint	Stopcock Bore (mm)	Price (each)
AP-294-68	17	13.4	8(203)	24/29	2	
AP-294-70	17	13.4	10(254)	24/29	2	
AP-294-72	17	13.4	12(305)	24/29	2	
AP-294-74	26	20.0	8(203)	24/29	2	
AP-294-76	26	20.0	10(254)	24/29	2	
AP-294-78	26	20.0	12(305)	24/29	2	
AP-294-80	26	20.0	18(457)	24/29	2	
AP-294-82	32	26.0	8(203)	24/29	2	
AP-294-84	32	26.0	10(254)	24/29	2	
AP-294-86	32	26.0	12(305)	24/29	2	
AP-294-88	32	26.0	18(457)	24/29	2	
AP-294-90	46	40.0	8(203)	24/29	2	
AP-294-92	46	40.0	10(254)	24/29	2	
AP-294-94	46	40.0	12(305)	24/29	2	
AP-294-96	46	40.0	18(457)	24/29	2	
AP-294-100	60	53.0	12(305)	24/29	4	
AP-294-102	60	53.0	18(457)	24/29	4	
AP-294-104	60	53.0	24(610)	24/29	4	
Accessories:						
AP-374-12	Plastic clamp for 24/29 joint					
AP-682-02	Replacement 2mm Teflon® Plug Only					
AP-682-04	Replacement 4mm Teflon® Plug Only					

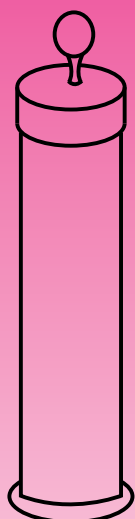
* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.



TLC DEVELOPING TANKS - CYLINDRICAL

Made of glass with lid. Compact size offers good plate visibility and minimal solvent use.

Code	OD*H (mm)	Joint	Price(each)
AP-294-62	65*105	60/12	
AP-294-64	65*205	60/12	



CHROMATOGRAPHY COLUMN, HEAVY WALL DESIGN

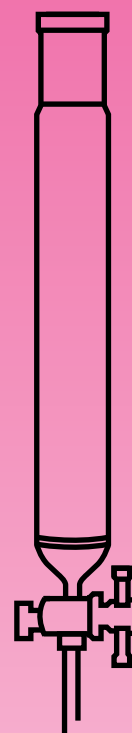
General purpose column has a Teflon® stopcock and a top outer joint.

With a coarse porosity fritted disc to support column packing. The section below disc is carefully minimized to prevent re-mixing of components already separated. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	Joint	Stopcock Bore (mm)	Price (each)
AP-294-68	17	13.4	8(203)	24/29	2	
AP-294-70	17	13.4	10(254)	24/29	2	
AP-294-72	17	13.4	12(305)	24/29	2	
AP-294-74	26	20.0	8(203)	24/29	2	
AP-294-76	26	20.0	10(254)	24/29	2	
AP-294-78	26	20.0	12(305)	24/29	2	
AP-294-80	26	20.0	18(457)	24/29	2	
AP-294-82	32	26.0	8(203)	24/29	2	
AP-294-84	32	26.0	10(254)	24/29	2	
AP-294-86	32	26.0	12(305)	24/29	2	
AP-294-88	32	26.0	18(457)	24/29	2	
AP-294-90	46	40.0	8(203)	24/29	2	
AP-294-92	46	40.0	10(254)	24/29	2	
AP-294-94	46	40.0	12(305)	24/29	2	
AP-294-96	46	40.0	18(457)	24/29	2	
AP-294-98	60	53.0	10(254)	24/29	4	
AP-294-100	60	53.0	12(305)	24/29	4	
AP-294-102	60	53.0	18(457)	24/29	4	
AP-294-104	60	53.0	24(610)	24/29	4	
Accessories:						
AP-374-12	Plastic clamp for 24/29 joint					
AP-682-02	Replacement 2mm Teflon® Plug Only					
AP-682-04	Replacement 4mm Teflon® Plug Only					

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

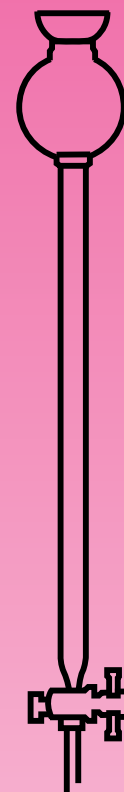


COLUMN, CHROMATOGRAPHY WITH RESERVOIR

With 24/29 outer joint at top. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	Joint	PTFE Stopcock Bore (mm)	Capacity of Reservoir (mL)	Price (each)
AP-294-114	17	13.4	8(203)	24/29	2	100	
AP-294-116	17	13.4	12(305)	24/29	2	100	
AP-294-118	17	13.4	18(457)	24/29	2	250	
AP-294-120	26	20.0	8(203)	24/29	2	250	
AP-294-122	26	20.0	10(254)	24/29	2	250	
AP-294-124	26	20.0	12(305)	24/29	2	250	
AP-294-126	26	20.0	18(457)	24/29	2	500	
AP-294-128	32	26.0	8(203)	24/29	2	500	
AP-294-130	32	26.0	10(254)	24/29	2	500	
AP-294-132	32	26.0	12(305)	24/29	2	500	
AP-294-134	32	26.0	18(457)	24/29	2	500	
AP-294-136	46	40.0	8(203)	24/29	2	500	
AP-294-138	46	40.0	10(254)	24/29	2	500	
AP-294-140	46	40.0	12(305)	24/29	2	500	
AP-294-142	46	40.0	18(457)	24/29	2	500	
AP-294-144	60	53.0	10(254)	24/29	4	500	
AP-294-146	60	53.0	12(305)	24/29	4	1000	
AP-294-148	60	53.0	18(457)	24/29	4	1000	
AP-294-150	80	73.0	8(203)	24/29	4	1000	
AP-294-152	80	73.0	18(457)	24/29	4	1000	
Accessories:							
AP-374-12	Plastic clamp for 24/29 joint						
AP-682-02	Replacement 2mm Teflon® Plug Only						
AP-682-04	Replacement 4mm Teflon® Plug Only						

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.



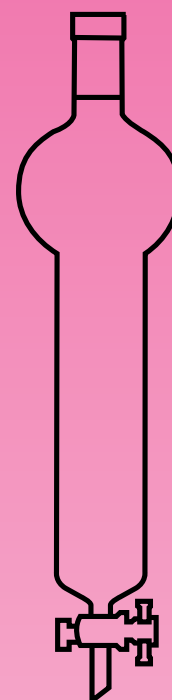
COLUMN, CHROMATOGRAPHY WITH RESERVOIR, FRITTED/SINTERED DISC

With a coarse porosity sealed in fritted disc to support column packing. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	Joint	PTFE Stopcock Bore (mm)	Capacity of Reservoir (mL)	Price (each)
AP-294-162	17	13.4	8(203)	24/29	2	100	
AP-294-164	17	13.4	12(305)	24/29	2	100	
AP-294-166	17	13.4	18(457)	24/29	2	250	
AP-294-168	26	20.0	8(203)	24/29	2	250	
AP-294-170	26	20.0	10(254)	24/29	2	250	
AP-294-172	26	20.0	12(305)	24/29	2	250	
AP-294-174	26	20.0	18(457)	24/29	2	500	
AP-294-176	32	26.0	8(203)	24/29	2	500	
AP-294-178	32	26.0	10(254)	24/29	2	500	
AP-294-180	32	26.0	12(305)	24/29	2	500	
AP-294-182	32	26.0	18(457)	24/29	2	500	
AP-294-184	46	40.0	8(203)	24/29	2	500	
AP-294-186	46	40.0	10(254)	24/29	2	500	
AP-294-188	46	40.0	12(305)	24/29	2	500	
AP-294-190	46	40.0	18(457)	24/29	2	500	
AP-294-192	60	53.0	8(203)	24/29	4	500	
AP-294-194	60	53.0	10(254)	24/29	4	500	
AP-294-196	60	53.0	12(305)	24/29	4	1000	
AP-294-198	60	53.0	18(457)	24/29	4	1000	
AP-294-200	60	53.0	24(610)	24/29	4	1000	
AP-294-202	80	73.0	8(203)	24/29	4	1000	
AP-294-204	80	73.0	10(254)	24/29	4	1000	
AP-294-206	80	73.0	12(305)	24/29	4	1000	
AP-294-208	80	73.0	24(610)	24/29	4	1000	
Accessories:							
AP-648-06	Plastic clamp for 24/29 joint						
AP-690-04	Stopcock, PTFE, double oblique 4mm bore						
AP-296-30	Replacement 4mm Teflon® Plug Only						

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



CHROMATOGRAPHY COLUMN, SPHERICAL JOINTS

Spherical joint used with pinch clamp makes quick and tight connection under pressure for flash chromatography. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	Joint	PTFE Stopcock Bore (mm)	Price (each)
AP-294-218	17	13.4	12(305)	35/20	2	
AP-294-220	26	20.0	18(457)	35/20	2	
AP-294-222	32	26.0	12(305)	35/20	2	
AP-294-224	32	26.0	18(457)	35/20	2	
AP-294-226	46	40.0	18(457)	35/20	2	
Accessories:						
AP-566-08	Clamps for 35/20 ball joint					
AP-682-02	Replacement 2mm Teflon® Plug Only					



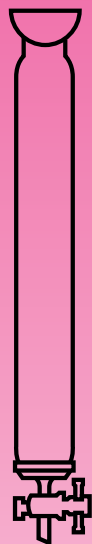
CHROMATOGRAPHY COLUMN, FRITTED/SINTERED DISC, SPHERICAL JOINTS

With a coarse porosity fritted disc to support packing material. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	Joint	PTFE Stopcock Bore (mm)	Price (each)
AP-294-234	17	13.4	8(203)	35/20	2	
AP-294-236	17	13.4	10(254)	35/20	2	
AP-294-238	17	13.4	12(305)	35/20	2	
AP-294-240	26	20.0	10(254)	35/20	2	
AP-294-242	26	20.0	18(457)	35/20	2	
AP-294-244	32	26.0	12(305)	35/20	2	
AP-294-246	32	26.0	18(457)	35/20	2	
AP-294-248	46	40.0	12(305)	35/20	2	
AP-294-250	46	40.0	18(457)	35/20	2	
Accessories:						
AP-652-12	Clamps for 35/20 ball joint					
AP-690-04	Stopcock, PTFE, double oblique 4mm bore					

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

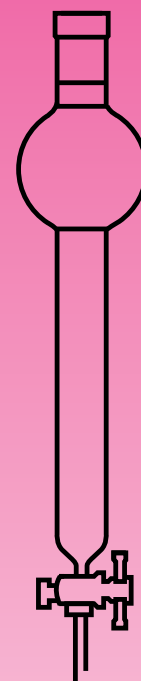


COLUMN, CHROMATOGRAPHY WITH RESERVOIR

With 35/20 spherical joint.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	Joint	PTFE Stopcock Bore (mm)	Capacity of Reservoir (mL)	Price (each)
AP-296-02	17	13.4	8(203)	35/20	2	100	
AP-296-04	17	13.4	12(305)	35/20	2	100	
AP-296-06	17	13.4	18(457)	35/20	2	250	
AP-296-08	26	20.0	8(203)	35/20	2	250	
AP-296-10	26	20.0	10(254)	35/20	2	250	
AP-296-12	26	20.0	12(305)	35/20	2	250	
AP-296-14	26	20.0	18(457)	35/20	2	500	
AP-296-16	32	26.0	8(203)	35/20	2	500	
AP-296-18	32	26.0	10(254)	35/20	2	500	
AP-296-20	32	26.0	12(305)	35/20	2	500	
AP-296-22	32	26.0	18(457)	35/20	2	500	
AP-296-24	46	40.0	12(305)	35/20	2	500	
AP-296-26	46	40.0	18(457)	35/20	2	500	
Accessories:							
AP-652-12	Clamps for 35/20 ball joint						
AP-690-04	Stopcock, PTFE, double oblique 4mm bore						

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.



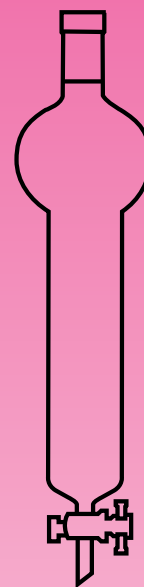
COLUMN, CHROMATOGRAPHY WITH RESERVOIR, FRITTED/SINTERED DISC

With a coarse porosity fritted disc to support packing, with 35/20 spherical joint. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	Joint	PTFE Stopcock Bore (mm)	Capacity of Reservoir (mL)	Price (each)
AP-298-02	17	13.4	8(203)	35/20	2	100	
AP-298-04	17	13.4	12(305)	35/20	2	100	
AP-298-06	17	13.4	18(457)	35/20	2	250	
AP-298-08	26	20.0	8(203)	35/20	2	250	
AP-298-10	26	20.0	10(254)	35/20	2	250	
AP-298-12	26	20.0	12(305)	35/20	2	250	
AP-298-14	26	20.0	18(457)	35/20	2	500	
AP-298-16	32	26.0	8(203)	35/20	2	500	
AP-298-18	32	26.0	10(254)	35/20	2	500	
AP-298-20	32	26.0	12(305)	35/20	2	500	
AP-298-22	32	26.0	18(457)	35/20	2	500	
AP-298-24	46	40.0	12(305)	35/20	2	500	
AP-298-26	46	40.0	18(457)	35/20	2	500	
Accessories:							
AP-652-12	Clamps for 35/20 ball joint						
AP-690-04	Stopcock, PTFE, double oblique 4mm bore						

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

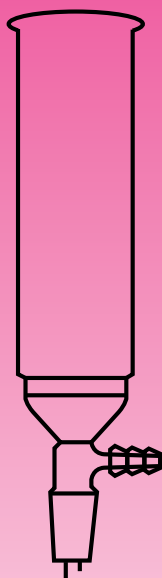


CHROMATOGRAPHY COLUMN, MODIFIED

Short column with lower 24/29 joint and hose connection for vacuum. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Length*(mm)	Porosity	Price (each)
AP-300-02	40	200	Coarse	
AP-300-04	40	300	Coarse	
AP-300-06	40	300	Medium	
AP-300-08	60	400	Coarse	
AP-300-10	90	300	Coarse	
AP-300-12	90	400	Coarse	

* Length above fritted disc.

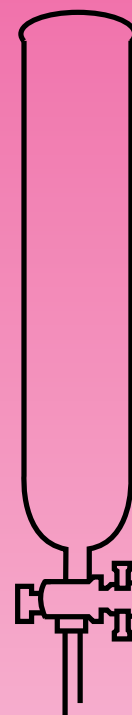


COLUMN, CHROMATOGRAPHY, TEFLON® STOPCOCK

With reinforced beaded top. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length Inch (mm)	PTFE Stopcock Bore (mm)	Price (each)
AP-302-02	13	10.0	8(203)	2	
AP-302-04	13	10.0	12(305)	2	
AP-302-06	13	10.0	16(406)	2	
AP-302-08	17	13.4	8(203)	2	
AP-302-10	17	13.4	10(254)	2	
AP-302-12	17	13.4	12(305)	2	
AP-302-14	26	20.0	8(203)	2	
AP-302-16	26	20.0	10(254)	2	
AP-302-18	26	20.0	12(305)	2	
AP-302-20	26	20.0	18(457)	2	
AP-302-22	32	26.0	10(254)	2	
AP-302-24	46	40.0	18(457)	2	
AP-302-26	60	53.0	12(305)	4	
AP-302-28	60	53.0	18(457)	4	
AP-302-30	60	53.0	24(610)	4	
AP-302-32	80	73.0	12(305)	4	
Accessories:					
AP-690-04	Stopcock, PTFE, double oblique 4mm bore				
AP-296-30	Replacement 4mm Teflon® Plug Only				

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.



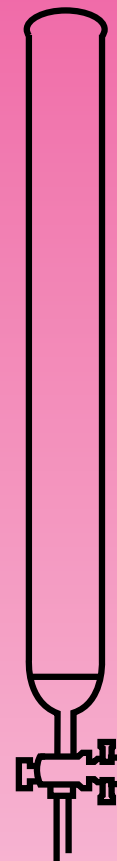
COLUMN, CHROMATOGRAPHY, TEFLON® STOPCOCK, FRITTED /SINTERED DISC

With reinforced beaded top, coarse porosity fritted disc to support column packing. All A Plus® columns are heavy wall designed to increase safety.

Code	Column O.D. (mm)	Column I.D. (mm)	Effective Length (mm)	PTFE Stopcock Bore (mm)	Price (each)
AP-304-02	17	13.4	203	2	
AP-304-04	17	13.4	254	2	
AP-304-06	17	13.4	305	2	
AP-304-08	17	13.4	457	2	
AP-304-10	26	20.0	203	2	
AP-304-12	26	20.0	254	2	
AP-304-14	26	20.0	305	2	
AP-304-16	26	20.0	457	2	
AP-304-18	32	26.0	254	2	
AP-304-20	32	26.0	305	2	
AP-304-22	32	26.0	457	2	
AP-304-24	46	40.0	203	2	
AP-304-26	46	40.0	254	2	
AP-304-28	46	40.0	305	2	
AP-304-30	46	40.0	457	2	
AP-304-32	60	53.0	457	4	
AP-304-34	60	53.0	610	4	
AP-304-36	80	73.0	305	4	
Accessories:					
AP-690-04	Stopcock, PTFE, double oblique 4mm bore				
AP-296-30	Replacement 4mm Teflon® Plug Only				

* Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

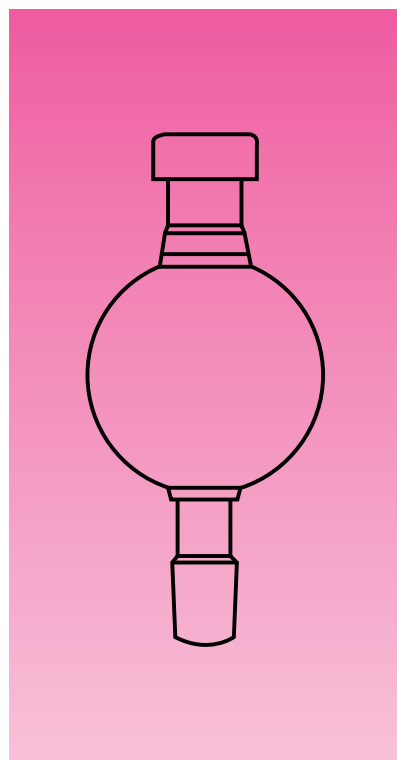
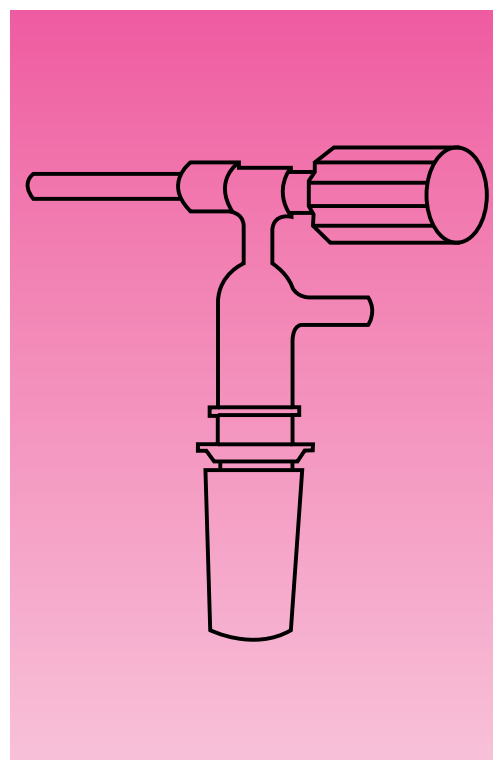


FLOW CONTROL ADAPTER, CHROMATOGRAPHY, RODAVISS® JOINT

Flow control adapter for use with column with 24/29 or 45/40 inner Rodaviss® joint. Supplied complete with open top screw cap, loosening cap and O-ring. Adapter has a 0-4mm metering plug.

Code	Joint	Price (each)
AP-306-02	24/29	
Accessories:		
AP-306-20	24/29 Open Top Screw Cap	
AP-288-30	24/29 Loosening Ring	
AP-734-28	#221 O-Rings for 24/29 Rodaviss® Joint	
AP-734-08	0-4mm high vacuum metering plug and control knob. (PTFE O-ring at tip)	
AP-652-26	Replacement Viton® O-rings, size 010	

*Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.



RESERVOIR, CHROMATOGRAPHY, RODAVISS® JOINT

Reservoir has a top 24/29 or 45/40 Rodaviss® outer joint for use with flow controller, and the listed size lower inner joint. Supplied complete with open top cap, Viton® O-ring and loosening ring.

Code	Capacity (mm)	Lower Inner Joint Size	Price (each)
AP-794-12	250	24/29	
AP-306-16	500	24/29	
AP-306-18			
AP-306-20	24/29 Open Top Screw Cap		
AP-306-22	24/29 Loosening Ring		
AP-652-52	#221 O-Rings for 24/29 Rodaviss® Joint		

*Since the chromatography column is used with positive air pressure, it's highly recommended that operator uses column behind a safety shield.

Reservoir, chromatography, Rodaviss® joint

Reservoir has a top 24/40 or larger Rodaviss® outer joint for use with flow controller, and lower inner joint. Supplied complete with open top cap, Vilton® O-ring and loosening ring



InterChange

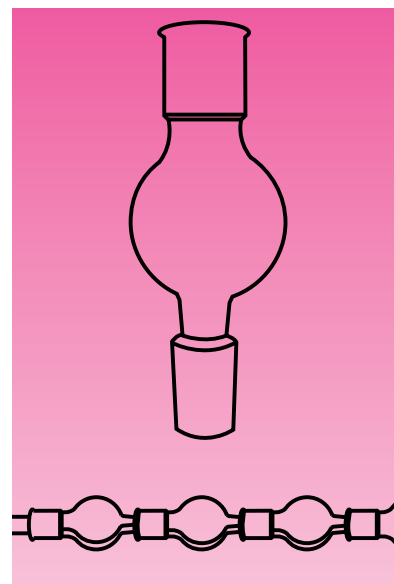
DISTILLATION

DISTILLING BULB, KUGELROHR

Used in distillation of very small amount of distillate at lower temperature with high efficiency. Kugelrohr machine required but not supplied.

For the vacuum adapter, see AP-130

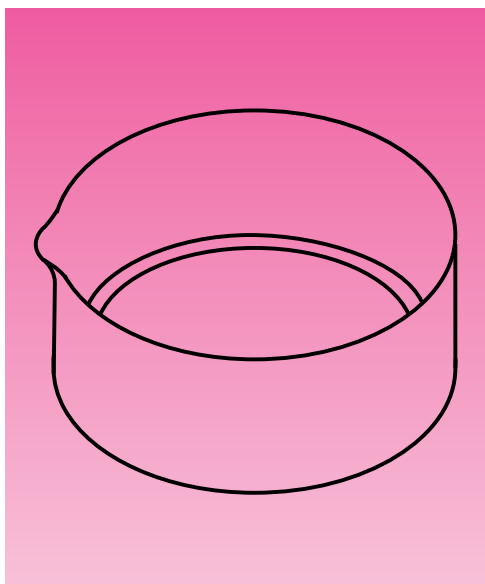
Code	Capacity (mm)	Joints	Bulb O.D. (mm)	Overall Height (mm)	Price (each)
AP-308-02	5	14/23	25	80	
AP-308-04	10	14/23	31	85	
AP-308-06	15	14/23	35	90	
AP-308-08	25	14/23	42	98	
AP-308-10	50	14/23	48	105	
Accessories:					
AP-308-12	14/23 vacuum adapter with 8mm hose connection				



DISH, CRYSTALLISING, WITH SPOUTS

Top of each dish is reinforced and fire polished to reduce chipping.

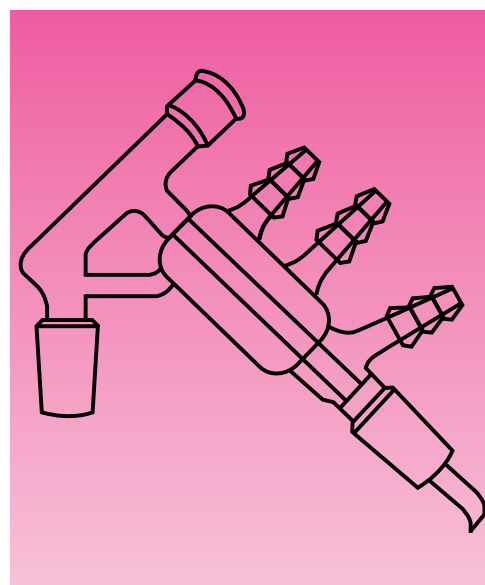
Code	Approx. Dia.xHeight (mm)	Approx. Capacity (ml)	Price (each)
AP-310-02	80x45	150	
AP-310-04	115x65	500	
AP-310-06	140x75	900	



DISTILLATION APPARATUS, MICROSCALE

Short-path design for microscale application, used with 25mm immersion thermometer, and AP-314 distillation receiver.

Code	Thermometer Joint	Joint	Price (each)
AP-312-02	10/19	14/23	
AP-312-04	10/19	19/26	



Distillation apparatus, microscale, Vigreux

With Vigreux indentations, used with 25mm immersion thermometer distillation receiver.



InterChange

Distillation receiver, without hose connection

With the outer and inner joint at 135° angle, used with short-path or microscale distillation apparatus



InterChange

Distillation,
receiver, with hose connection

Code	Joints	
AP-340-02	14/23	
AP-340-04	19/26	

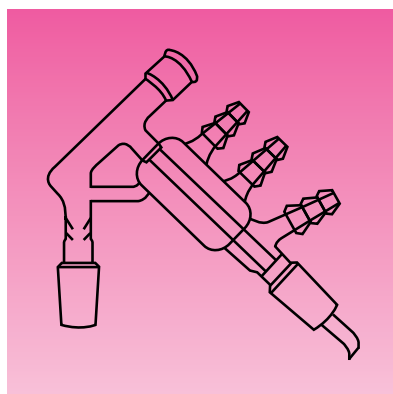
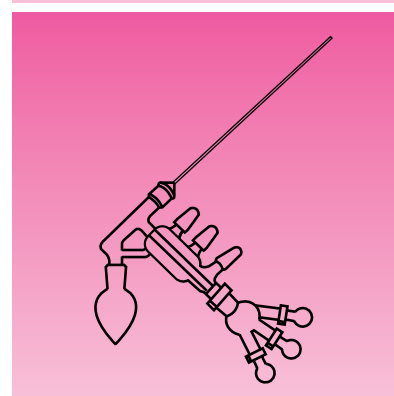
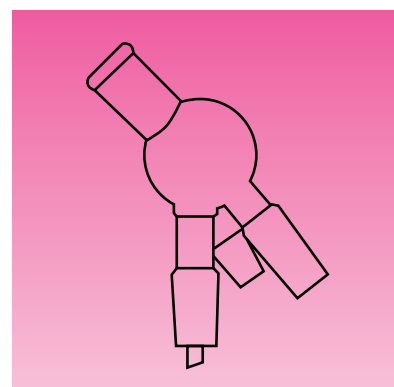


InterChange

DISTILLATION RECEIVER, WITHOUT HOSE CONNECTION

With the outer and inner joint.

Code	Joints	Price (each)
AP-314-02	14/23	
AP-314-04	24/29	

**DISTILLATION APPARATUS, MICROSCALE, VIGREUX**

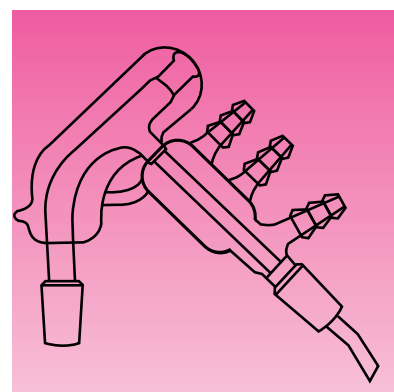
With Vigreux Indentations, used with 25mm immersion thermometer, and AP-314 distillation receiver.

Code	Thermometer Joint	Joint	Price (each)
AP-316-02	10/19	14/23	
AP-316-04	10/19	19/26	

DISTILLATION APPARATUS, SHORT PATH, VACUUM JACKETED

Vacuum jacketed design for more efficiency. When a thermometer is inserted in the top of this apparatus, the bulb and stem serve as column packing. The close coupled condenser and vacuum connection offer an extremely short condensate travel path. Used with 25mm immersion thermometer, and AP-314 distillation receiver.

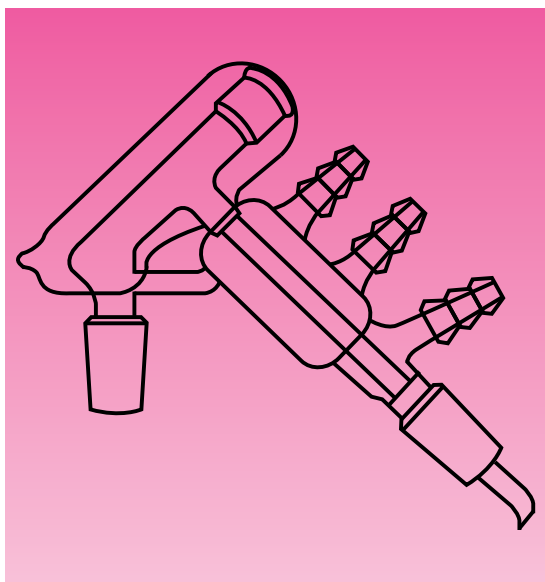
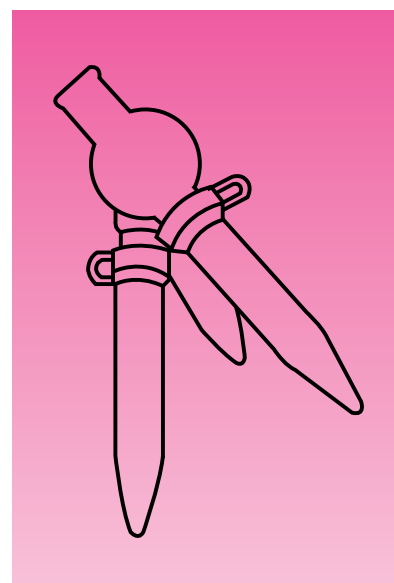
Code	Thermometer Joint	Joint	Price (each)
AP-318-02	10/19	14/23	



DISTILLING RECEIVER

Supplied with distribution adapter, three 12ml receiver tubes and three plastic joint clips. With 135 ° angle between top outer joint and lower inner joint.

Code	Lower Inner Joint Size	Price (each)
AP-320-02	14/23	
Accessories:		
AP-336-02	Receiver Tube, 14/23, 12ml	
AP-648-02	Plastic clamp for 14/23 joint	



DISTILLATION APPARATUS, SHORT PATH,VACUUM JACKETED

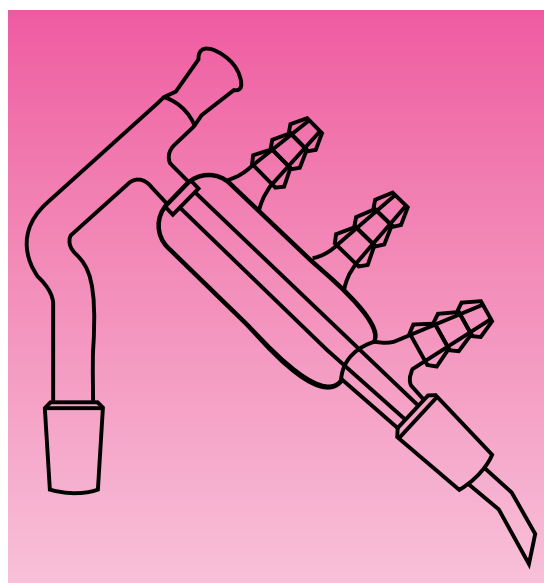
Used with 25mm immersion thermometer, and AP-314 distillation receiver.

Code	Thermometer Joint	Joint	Price (each)
AP-322-02	10/19	14/23	

DISTILLATION, SHORT PATH WITH 24/29 JOINT

One-piece design for easy set-up. For the best result, use AP-314 distillation receiver. To be used with 25mm immersion thermometer.

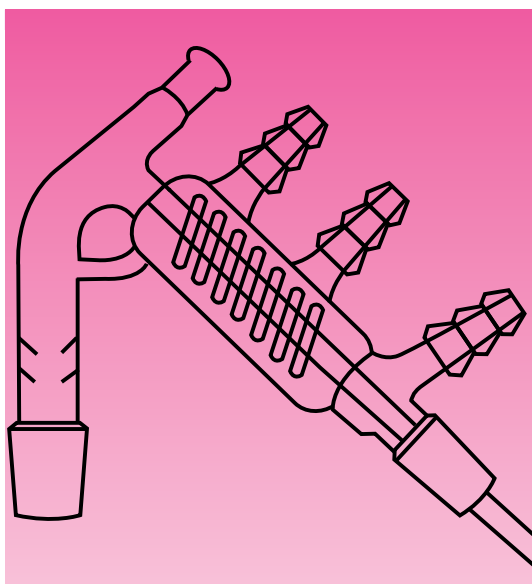
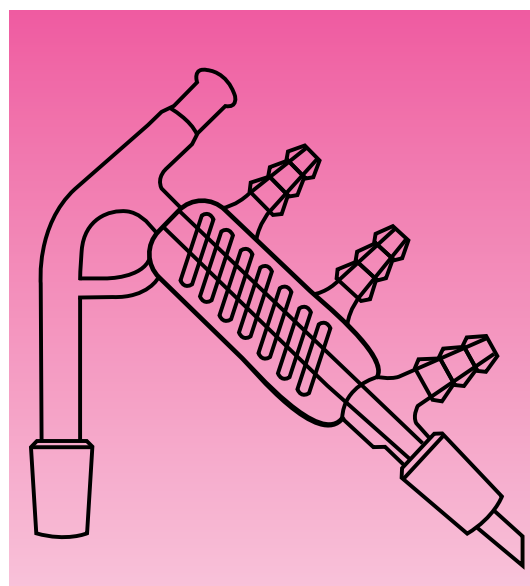
Code	Thermometer Joint	Joint	Price (each)
AP-324-02	10/19	24/29	



DISTILLING HEAD, SHORT PATH, FOR VOLATILE SOLVENTS

With the condenser being a combination of a cold coil and Leibig. Top outer joint is a 10/19 for use with a 50mm immersion thermometer. For best result, use AP-314.

Code	Lower Inner Joint Size	Top Thermometer Joint	Price (each)
AP-326-02	24/29	10/19	



R VOLATILE DISTILLANTS

Same as above, but with Vigreux Indentations. Top outer joint is a 10/19 for use with a 50mm immersion thermometer.

Code	Lower Inner Joint Size	Top Thermometer Joint	Price (each)
AP-328-02	24/29	10/19	



Distilling cow receiver, graduated

Tubes are graduated from 0-3mL subdivisions

Pressure vessel, heavy wall*

Heavy wall round bottom vessels have an internal thread for use with a 15mm Teflon® bushing as a pressure seal. This unique design allows hand tightening and loosening for easy access into the vessel.

The O- ring is positioned on the bushing above the thread for improved sealing. The vessels are useful for pressure reactions and applications such as polymerisation and the analysis of halogens by thermal decomposition in the presence of lime. Complete apparatus is supplied with vessel, Teflon® bushing and Viton® O-ring.

*Important warning for pressurised glassware

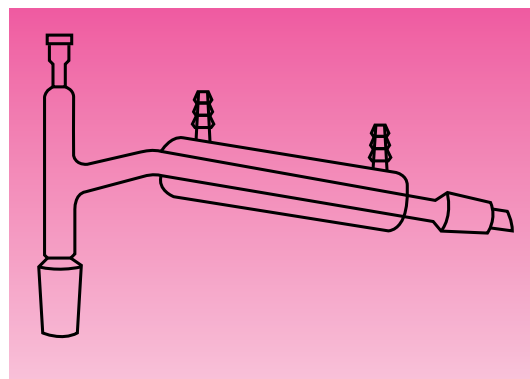
Due to varying conditions, we cannot guarantee glass vessels from breakage under pressure. Always work behind a safety shield.



DISTILLING HEAD

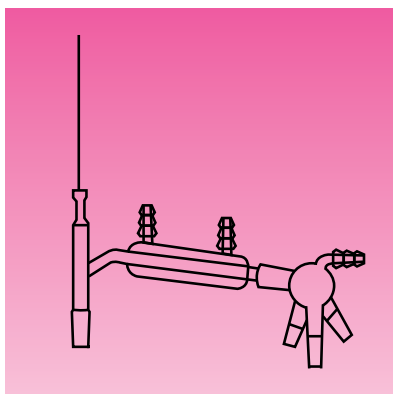
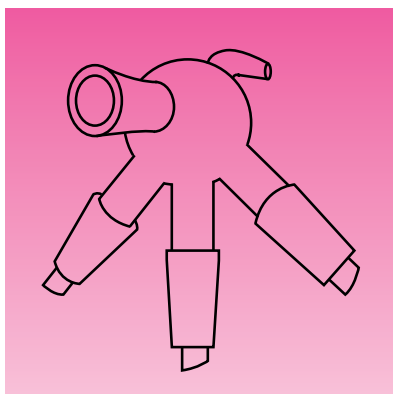
Thermometer joint is 10/19 for 76mm immersion thermometer. Side arm is at 75° angle.

Code	Lower Inner Joint Size	Top Thermometer Joint	Jacket Length (mm)	Price (each)
AP-330-02	24/29	10/19	150	
AP-330-04	24/29	10/19	250	
AP-330-06	24/29	10/19	400	

**DISTILLATION RECEIVER, WITH HOSE CONNECTION**

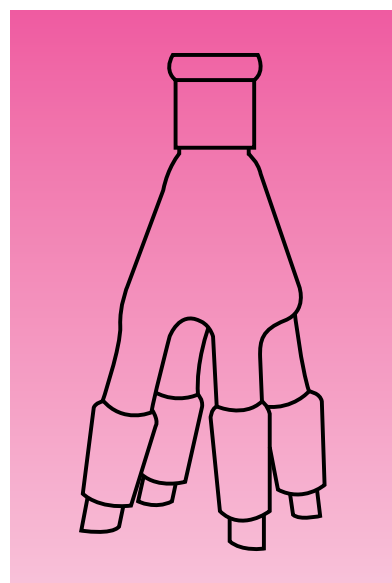
Cow-type design having three receivers spaced 40° apart. 105° angle between top outer joint and lower inner joints.

Code	Joint	Price (each)
AP-332-02	14/23	
AP-332-04	19/26	
AP-332-06	24/29	

**DISTILLATION COW RECEIVER**

Designed for microscale application. With one female joint and four drip-tip male joints.

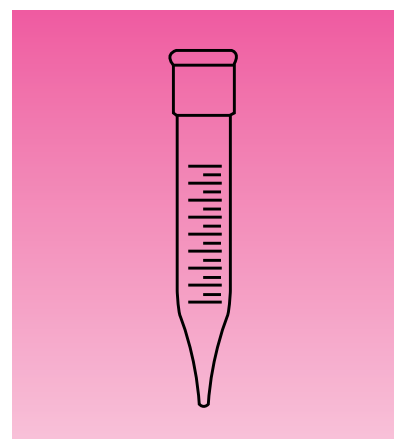
Code	Joint	Price (each)
AP-334-02	14/23	



DISTILLING RECEIVER, GRADUATED, WITH HOOKS

Centrifuge tube shaped receiver with an upper standard taper joint.

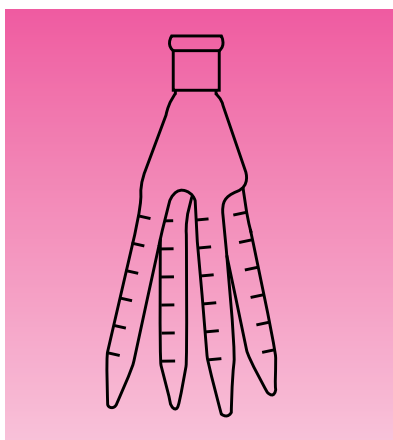
Code	Joints	Capacity(mL)	Price (each)
AP-336-02	14/23	12	
AP-336-04	14/23	15	



DISTILLING, COW RECEIVER, GRADUATED

Tubes are graduated from 0-3mL in 0.2mL subdivisions.

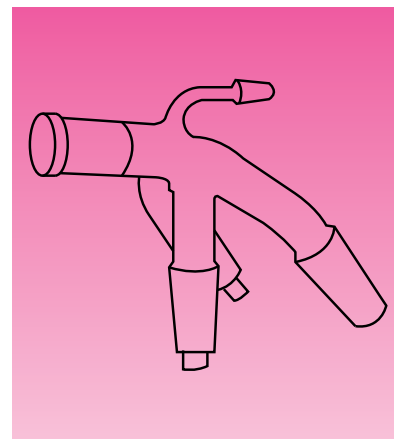
Code	Joint	Price (each)
AP-338-02	14/23	



DISTILLATION RECEIVER, WITH HOSE CONNECTION

Cow-type design having three receivers spaced 40° apart. 105° angle between top outer joint and lower inner joints.

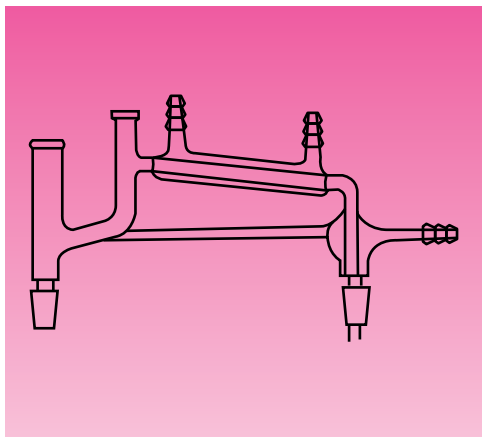
Code	Joints	Price (each)
AP-340-02	14/23	
AP-340-04	19/26	
AP-340-06	24/29	



DISTILLATION APPARATUS, VACUUM

10/19 joint on side tube accommodates 25mm immersion thermometer.

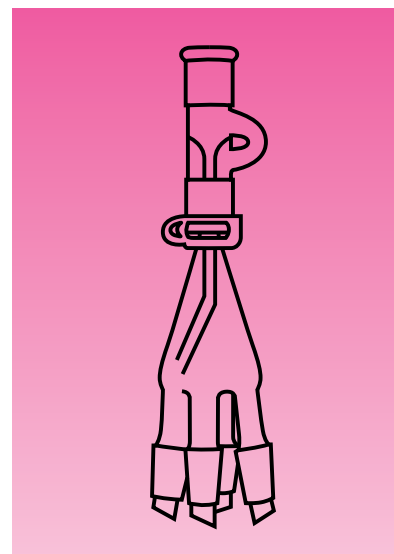
Code	Joints	Other Joints	Price (each)
AP-342-02	10/19	14/23	
AP-342-04	10/19	19/26	
AP-342-06	14/23	14/23	



DISTILLATION RECEIVING SET

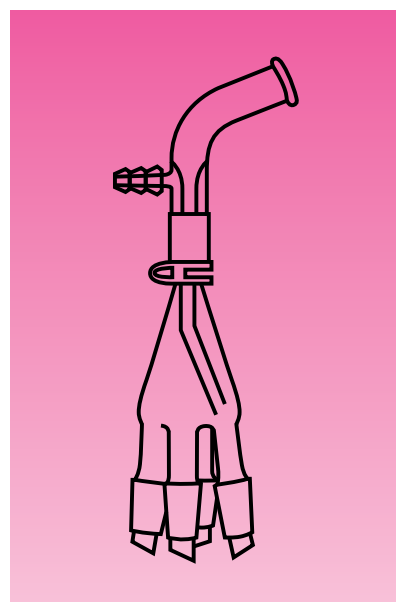
Designed without hose connection to be used with A-342 distillation apparatus.

Code	Item Type	Joints	Price (each)
AP-344-02	Vacuum Adapter	14/23	
AP-346-04	Cow Receiver	14/23	
AP-344-06	Vacuum Adapter	19/26	
AP-346-08	Cow Receiver	19/26	
Accessories:			
AP-648-02	Plastic clamp for 14/23 joint		
AP-648-04	Plastic clamp for 19/26 joint		



DISTILLATION RECEIVING SET

Rotating cow receiver allows four flasks to be progressively filled.

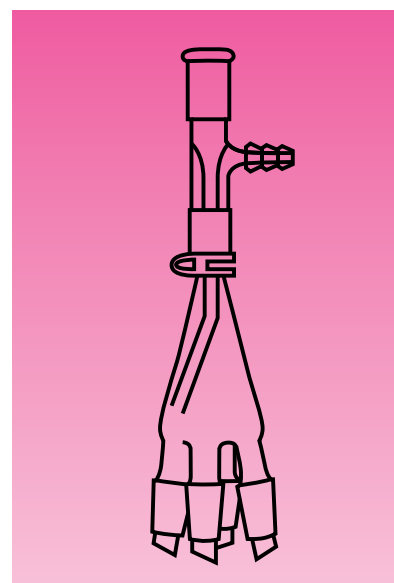


Code	Item Type	Joints	Price (each)
AP-346-02	Distribution Adapter	14/23	
AP-346-04	Cow Receiver	14/23	
AP-346-06	Distribution Adapter	19/26	
AP-346-08	Cow Receiver	19/26	
AP-346-10	Distribution Adapter	24/29	
AP-348-04	Cow Receiver	24/29	
Accessories:			
AP-648-02	Plastic clamp for 14/23 joint		
AP-648-04	Plastic clamp for 19/26 joint		
AP-648-06	Plastic clamp for 24/29 joint		

DISTRIBUTION RECEIVER, VERTICAL ORIENTATION

Rotating distillation receiver allows four fractions to be collected. Vacuum adapter has a vertical orientation.

Code	Item Type	Joints	Price (each)
AP-348-02	Vacuum Adapter	24/29	
AP-348-04	Cow Receiver	24/29	
Accessories:			
AP-648-06	Plastic clamp for 24/29 joint		

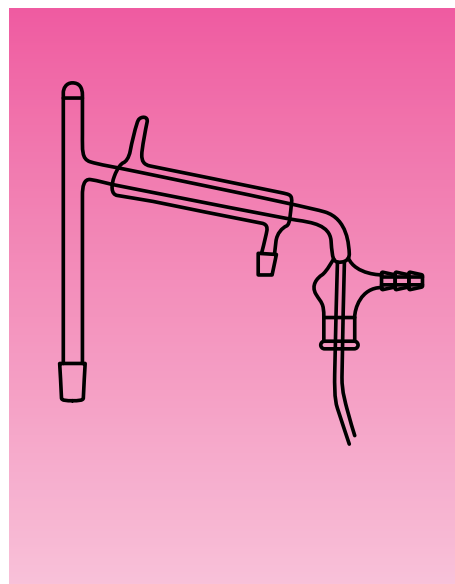


DISTILLATION HEAD,VIGREUX, MICRO

Distillation head with condenser sealed to a Vigreux column.

Vacuum adapter has an outer joint and accepts a distribution adapter (AP-346-04).To be used with a 25mm immersion thermometer

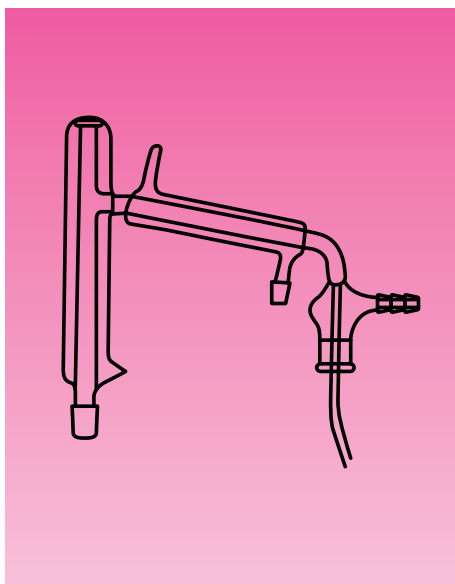
Code	Joint Size	Thermometer joint	Approx. HeightxWidth (mm)	Price (each)
AP-350-02	14/23	10/19	195x185	



DISTILLATION HEAD,JACKETED,VIGREUX, MICRO

Similar with the Vigreux column vacuum jacketed to improve distillation performance.To be used with AP-346-04 distribution adapter.

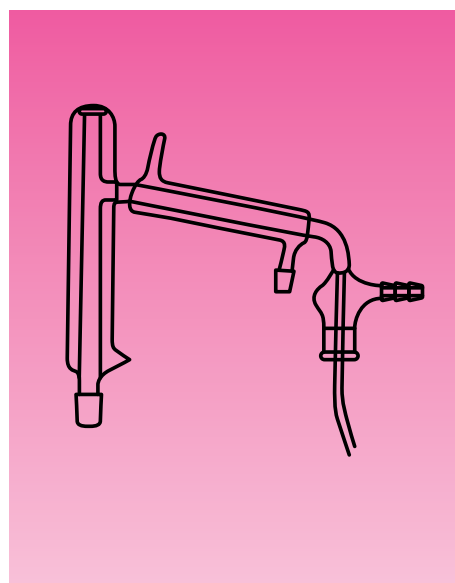
Code	Joint Size	Thermometer joint	Approx. HeightxWidth (mm)	Price (each)
AP-352-02	14/23	10/19	195x190	



DISTILLATION HEAD,VIGREUX, JACKETED

Vacuum jacketed Vigreux distillation head having a sealed on condenser, braced for strength.Vacuum adapter has an inner joint and a sealed in drip tip.To be used with a 25mm immersion thermometer

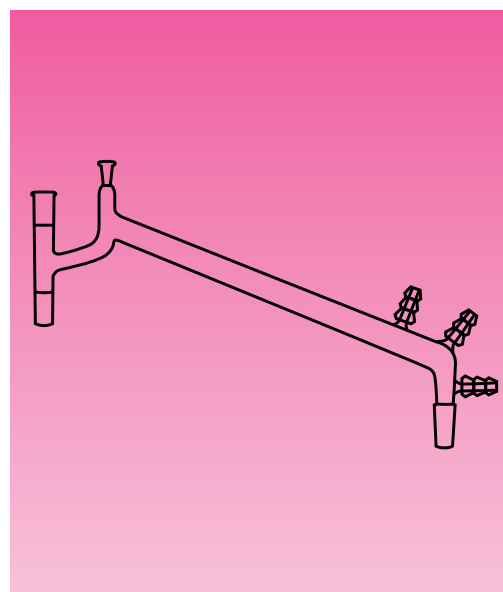
Code	Joints	Column Height (mm)	Thermometer joint	Approx. HeightxWidth (mm)	Price (each)
AP-354-02	14/23	100	10/19	200x180	
AP-354-04	14/23	150	10/19	250x180	
AP-354-06	24/29	200	10/19	325x350	
AP-354-08	24/29	300	10/19	425x350	



DISTILLATION APPARATUS, LARGE SCALE

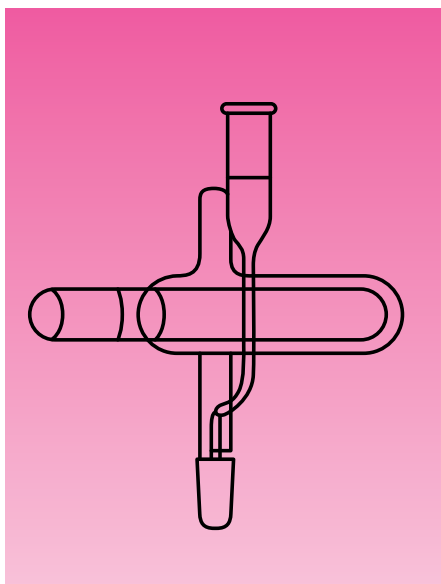
One-piece design. With 10/19 thermometer joint and high efficiency cooling jacket. To be used with 50mm immersion thermometer with 10/19 joint.

Code	Joint	Price (each)
AP-356-02	24/29	

**DRYING CHAMBER, ABDERHALDEN**

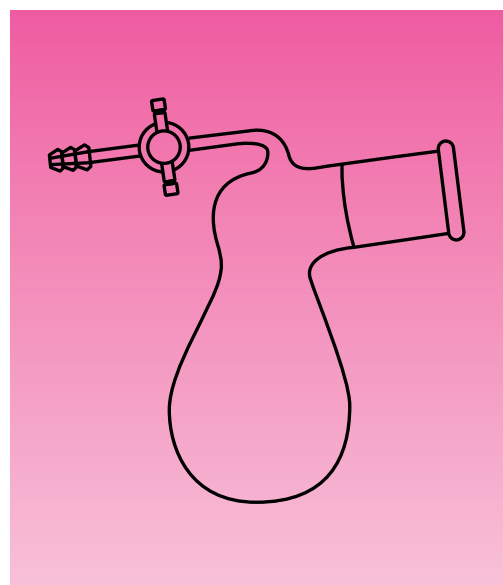
Drying samples for elemental analysis. Sample is placed in a vial which is placed into drying chamber. Under vacuum and gentle heat created by refluxing in outer jacket of low boiling point solvents.

Code	Upper Joint	Lower Joint	Drying Chamber Joint	Price (each)
AP-358-02	24/29	24/29	34/35	

**DESICCANT FLASK**

Choice of Teflon® stopcock.

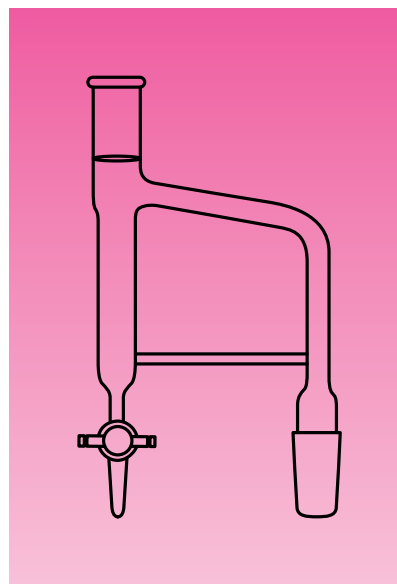
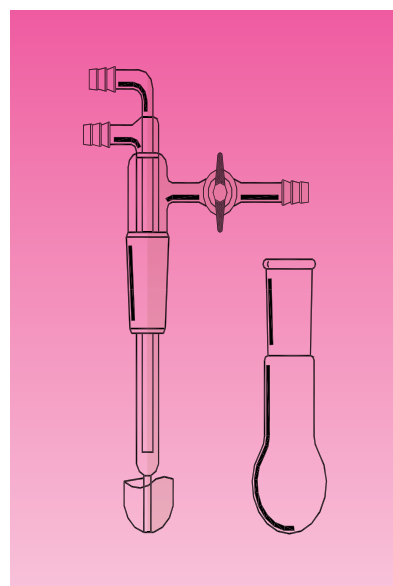
Code	Joint	Stopcock	Price (each)
AP-360-02	34/35	2mm (PTFE)	
AP-682-02			
AP-682-02	Replacement 2mm Teflon® Plug Only		



DISTILLATION HEAD, MICROSCALE

With 2mm glass stopcock and 24/29 joint. Supplied with a special 25ml long-neck flask for small volume efficiency.

Code	Joints	Hose O.D. mm	Price (each)
AP-362-02	24/29	10	
Accessories:			
AP-738-04	Flask, round bottom, long neck 25ml		
AP-738-06	Replacement 2mm Glass Plug Only		



DISTILLATION RECEIVER, DEAN STARK

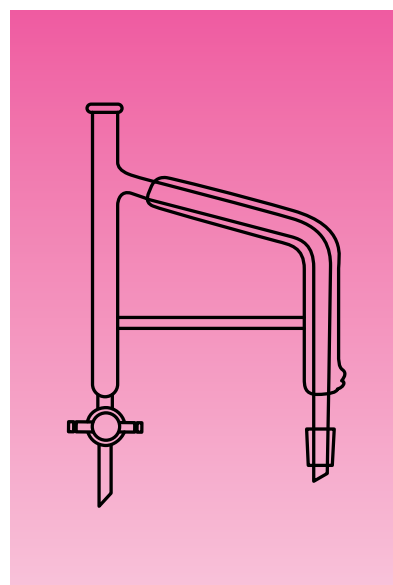
For easy separation of water from reaction or distillation system. Graduated with 2mm Teflon® stopcock or 2mm glass stopcock.

Code	Capacity (mm)	Joints	Stopcock ((mm)	Approx. HeightxWidth (mm)	Price (each)
AP-364-02	5	14/23	2,PTFE	205x65	
AP-364-04	10	14/23	2,PTFE	190x65	
AP-364-06	10	19/26	2,PTFE	190x75	
AP-364-08	10	24/29	2,PTFE	275x95	
AP-364-10	20	24/29	2,PTFE	325x95	
AP-364-12	10	29/36	2,PTFE	275x95	
AP-364-14	20	29/36	2,PTFE	325x95	
Accessories:					
AP-682-02	Replacement 2mm Teflon® Plug Only				

DISTILLATION RECEIVER, DEAN STARK

Similar to above but with the uptake tube vacuum jacketed to improve distillation performance. The jacket eliminates the possibility of condensation or recrystallization of distillate in the sidearm. With 2mm PTFE stopcock.

Code	Capacity (mm)	Joints	Stopcock (mm)	Approx. HeightxWidth (mm)	Price (each)
AP-366-02	5	14/23	2,PTFE	205x65	
AP-366-04	10	14/23	2,PTFE	190x65	
AP-366-06	10	24/29	2,PTFE	275x95	
AP-366-08	20	24/29	2,PTFE	275x95	
Accessories:					
AP-682-02	Replacement 2mm Teflon® Plug Only				



Distillation receiver, Dean Stark

For easy separation of water from reaction or distillation system. Graduated with 2mm Teflon® stopcock or 2mm glass stopcock.

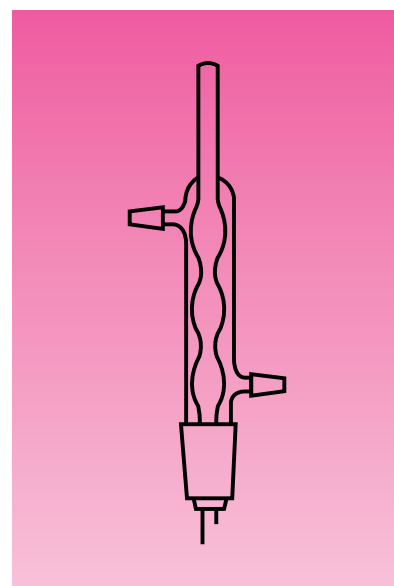


EXTRACTOR, SOXHLET

CONDENSER, FOR SOXHLET EXTRACTORS

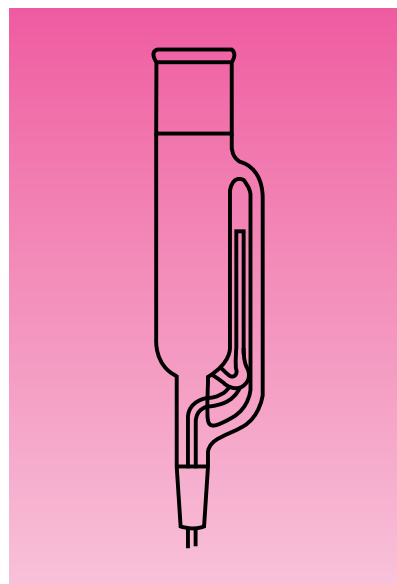
Allihn reflux condenser with a water cooled inner drip joint at bottom.

Code	Jacket Length (mm)	Joint	Overall Height (mm)	Price (each)
AP-368-02	190	34/35	275	
AP-368-04	260	45/40	365	
AP-368-06	300	55/50	405	



EXTRACTOR, SOXHLET

Extractor body only.



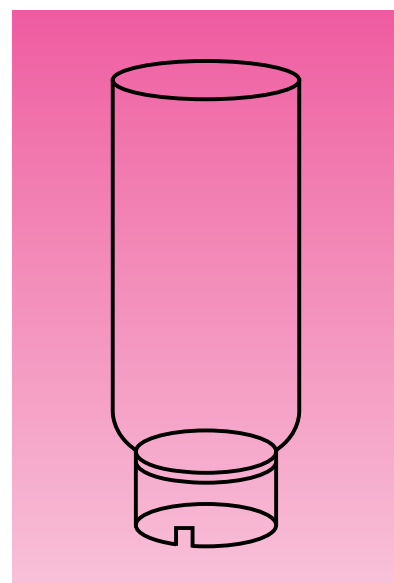
Code	Upper Joint	Lower Joint	Price (each)
AP-370-02	34/35	24/29	
AP-370-04	45/40	24/29	
AP-370-06	55/50	24/29	

EXTRACTION THIMBLE, GLASS

All glass extraction thimble permits viewing extraction process and subsequent weighing. C-Coarse, XC-Extra Coarse. Small thimble is used with **AP-368-02** and **AP-370-02**; Medium thimble is used with **AP-368-04** and **AP-370-04**; Large thimble is used with **AP-368-06** and **AP-370-06**.

Code	Fits Extractor Size	O.D.X Height (mm)	Porosity	Price (each)
AP-372-02	Small	25x85	C	
AP-372-04	Small	25x85	XC	
AP-372-06	Medium	35x90	C	
AP-372-08	Medium	35x90	XC	
AP-372-10	Large	45x130	C	
AP-372-12	Large	45x130	XC	

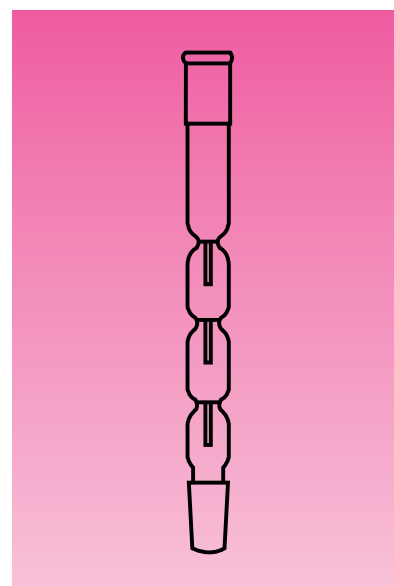
Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



SNYDER DISTILLATION COLUMN

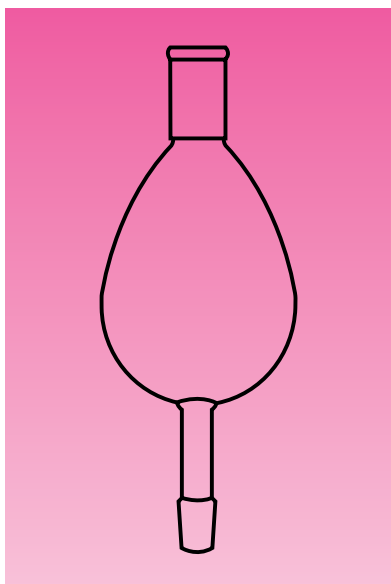
For use with Kuderna-Danish flask.

Code	Joint	Column Height (mm)	Overall Height (mm)	Price (each)
AP-374-02	24/29	150	300	



KUDERNA-DANISH FLASK

Top joint is a 24/29 outer while the lower joint is a 19/26 inner.

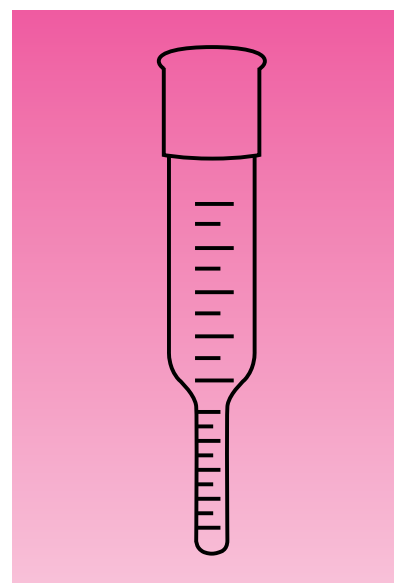


Code	Flask Capacity (ml)	Price (each)
AP-374-06	250	
AP-374-08	500	
Accessories:		
AP-648-04	Plastic clamp for 19/26 joint	
AP-648-04	Plastic clamp for 24/29 joint	

CONCENTRATOR TUBE, GRADUATED

Graduated concentrator tubes for use with Kuderna-Danish evaporative set-ups. Tube can be stoppered for storage. Overall height is 100mm for 10ml, and 170mm for the 25ml.

Code	Capacity (ml)	Joint size	Subdivisions (mm)	Price (each)
AP-376-02	10	19/26	0 to 1ml in 0.1, 2 to 10ml in 1.0	
AP-376-04	25	19/26	0 to 1ml in 0.1, 2 to 25ml in 1.0	



FLASK

Flask, Round bottom, single neck

Code	Joints Capacity (mm)	Jacket Length (mm)
AP-378-02	5	14/23
AP-378-04	10	14/23
AP-378-08	25	14/23
AP-378-10	25	19/26
AP-378-12	25	24/29
AP-378-14	50	14/23
AP-378-16	50	19/26
AP-378-18	50	24/29
AP-378-20	100	14/23
AP-378-22	100	19/26
AP-378-24	100	24/29
AP-378-26	100	29/32
AP-378-34	250	19/26
AP-378-36	250	24/29
AP-378-38	250	29/32
AP-378-46	500	19/26
AP-378-48	500	24/29
AP-378-50	500	29/32
AP-378-54	1000	24/29



InterChange

FLASK, ROUND BOTTOM, SINGLE NECK

Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

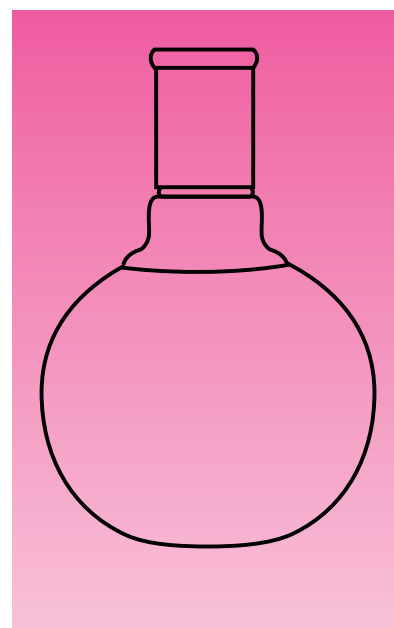
Code	Capacity (ml)	Joints	Price (each)
AP-378-02	5	14/23	
AP-378-04	10	14/23	
AP-378-06	10	19/26	
AP-378-08	25	14/23	
AP-378-10	25	19/26	
AP-378-12	25	24/29	
AP-378-14	50	14/23	
AP-378-16	50	19/26	
AP-378-18	50	24/29	
AP-378-20	100	14/23	
AP-378-22	100	19/26	
AP-378-24	100	24/29	
AP-378-26	100	29/36	
AP-378-28	200	14/23	
AP-378-30	200	19/26	
AP-378-32	200	24/29	
AP-378-34	250	19/26	
AP-378-36	250	24/29	
AP-378-38	250	29/36	
AP-378-40	300	14/23	
AP-378-42	300	19/26	
AP-378-44	300	24/29	
AP-378-46	500	19/26	
AP-378-48	500	24/29	
AP-378-50	500	29/36	
AP-378-52	500	34/35	
AP-378-54	1000	24/29	
AP-378-56	1000	29/36	
AP-378-58	2000	24/29	
AP-378-60	2000	29/36	
AP-378-62	2000	45/40	



FLASK, FLAT BOTTOM

Heavy wall single neck, flat bottom flask with an outer joint. Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

Code	Capacity (ml)	Joints	Price (each)
AP-380-02	50	24/29	
AP-380-04	100	24/29	
AP-380-06	125	24/29	
AP-380-08	250	24/29	
AP-380-10	300	24/29	
AP-380-12	500	24/29	
AP-380-14	1000	24/29	
AP-380-16	1000	29/36	



FLASK, ROUND BOTTOM, SPHERICAL JOINT

Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

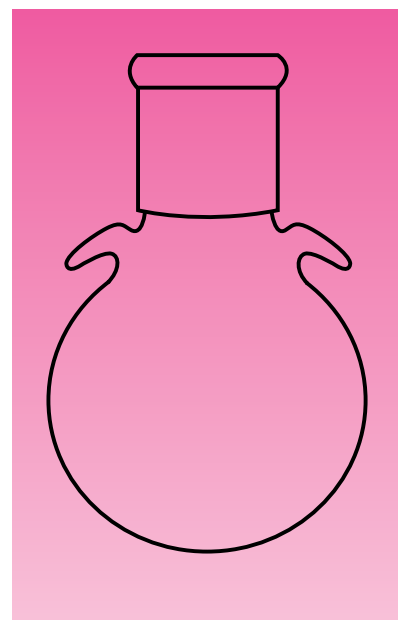
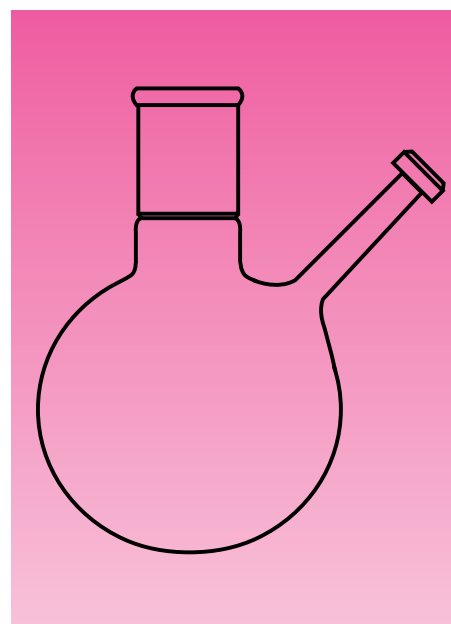
Code	Capacity (ml)	Joints	Price (each)
AP-382-02	500	35/20	
AP-382-04	1000	35/20	
AP-382-06	2000	35/20	



FLASK, ROUND BOTTOM, THREADED INLET

With a threaded side port for insertion of thermometer or bleed tubes, having an O.D. between 5mm and 7.5mm. Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

Code	Capacity (ml)	Joints	Price (each)
AP-384-02	25	14/23	
AP-384-04	50	14/23	
AP-384-06	100	19/26	
AP-384-08	100	24/29	
AP-384-10	250	14/23	
AP-384-12	250	19/26	
AP-384-14	250	24/29	
AP-384-16	500	24/29	
Accessory:			
AP-664-04	Nylon® caps		
AP-384-20	Replacement Viton® O-rings, Size 107		

**FLASK, ROUND BOTTOM WITH HOOKS**

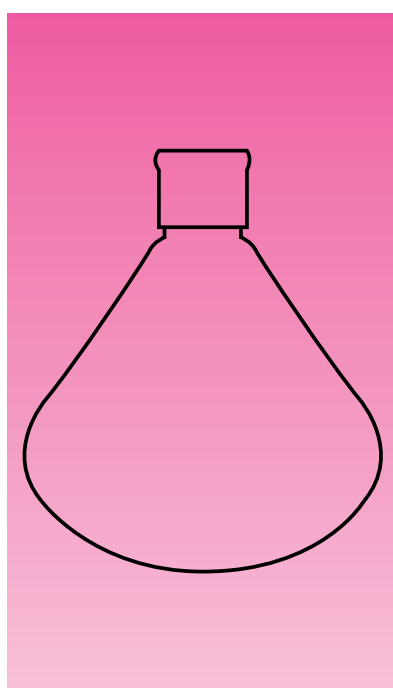
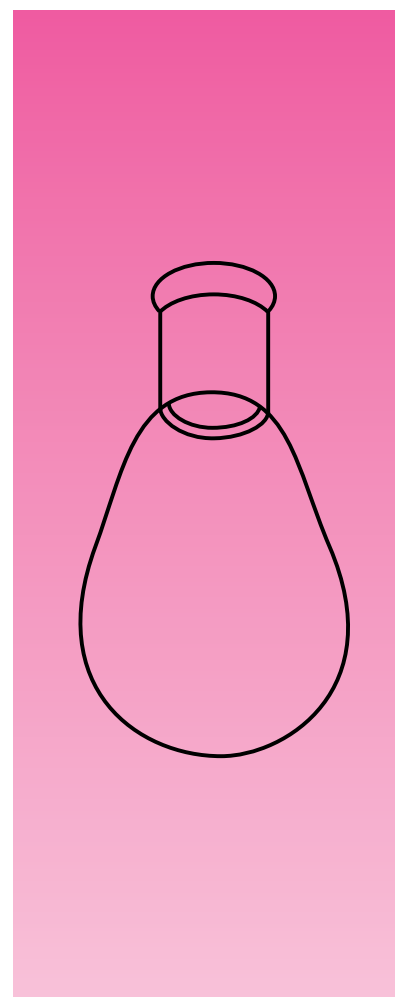
Heavy wall design.

Code	Capacity (ml)	Joints	Price (each)
AP-386-02	5	14/23	
AP-386-04	10	14/23	
AP-386-06	25	14/23	
AP-386-08	50	14/23	
AP-386-10	100	19/26	
Accessory:			
AP-386-12	S.S. Springs, 18mm		

FLASK, RECOVERY

Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

Code	Capacity (ml)	Joints	Price (each)
AP-388-02	5	14/23	
AP-388-04	10	14/23	
AP-388-06	10	19/26	
AP-388-08	25	14/23	
AP-388-10	25	19/26	
AP-388-12	25	24/29	
AP-388-14	50	14/23	
AP-388-16	50	19/26	
AP-388-18	50	24/29	
AP-388-20	100	14/23	
AP-388-22	100	19/26	
AP-388-24	100	24/29	
AP-388-26	100	29/36	
AP-388-28	200	14/23	
AP-388-30	200	24/29	
AP-388-32	250	14/23	
AP-388-34	250	19/26	
AP-388-36	250	24/29	
AP-388-38	250	29/36	
AP-388-40	500	24/29	
AP-388-42	500	29/36	
AP-388-44	1000	24/29	
AP-388-46	1000	29/36	



FLASK, EVAPORATION

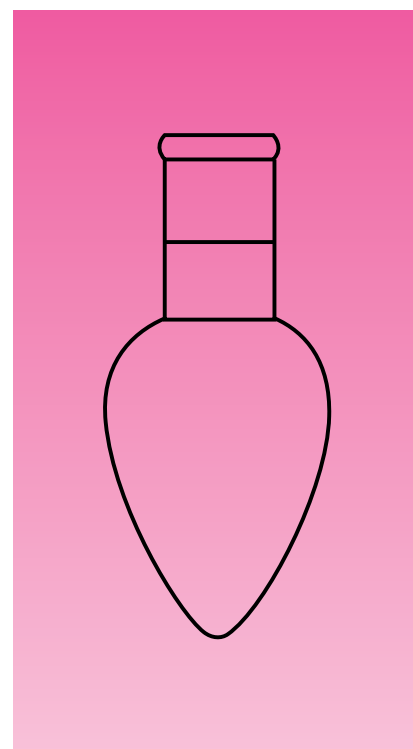
Low profile design sits upright on bench and also provides for easy product access with a spatula. The unique flask shape is excellent for the controlled evaporation of foaming solvents such as toluene or xylene on a rotary evaporator.

Code	Capacity (ml)	Joints	Price (each)
AP-390-02	50	14/23	
AP-390-04	100	14/23	
AP-390-06	100	24/29	
AP-390-08	200	24/29	
AP-390-10	250	14/23	
AP-390-12	250	24/29	
AP-390-14	250	29/36	
AP-390-16	500	24/29	
AP-390-18	1000	24/29	

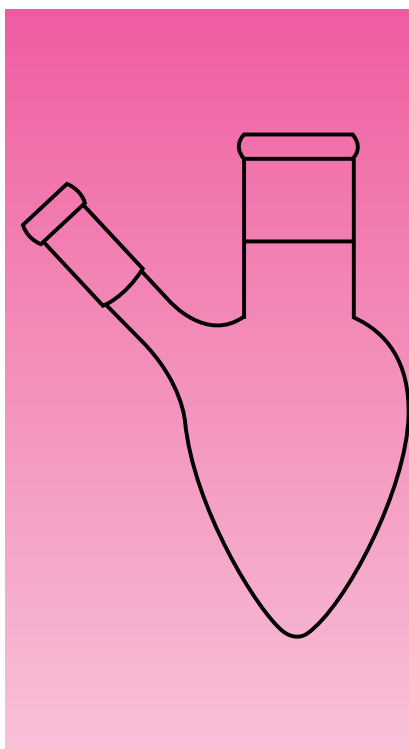
FLASK, PEAR SHAPED, SINGLE NECK

Heavy wall design.

Code	Capacity (ml)	Joints	Price (each)
AP-392-02	5	14/23	
AP-392-04	10	14/23	
AP-392-06	15	14/23	
AP-392-08	25	14/23	
AP-392-10	25	19/26	
AP-392-12	50	14/23	
AP-392-14	50	19/26	
AP-392-16	50	24/29	
AP-392-18	100	14/23	
AP-392-20	100	19/26	
AP-392-22	100	24/29	
AP-392-24	200	14/23	
AP-392-26	200	24/29	

**FLASK, TWO NECK, PEAR SHAPED**

Pear shape with joints. Heavy wall design.

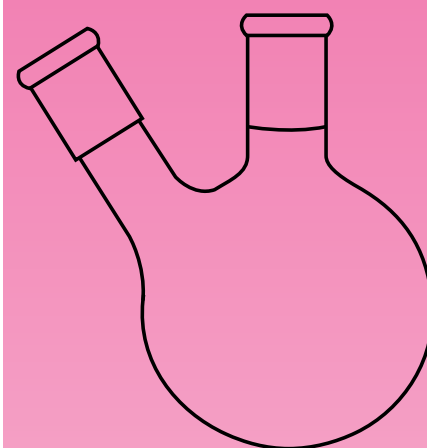


Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-394-02	5	14/23	14/23	
AP-394-04	10	14/23	14/23	
AP-394-06	15	14/23	14/23	
AP-394-08	25	14/23	14/23	
AP-394-10	50	14/23	14/23	
AP-394-12	100	14/23	14/23	
AP-394-14	200	14/23	14/23	

FLASK, TWO NECK, ANGLED

Round bottom with joints. Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

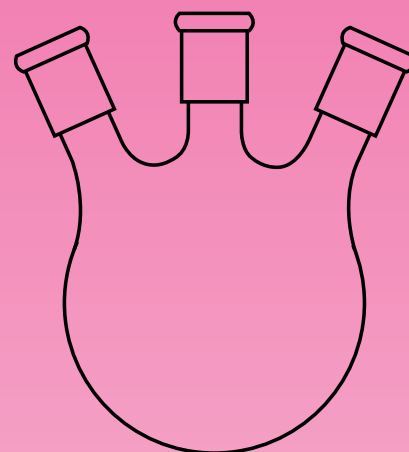
Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-396-02	10	14/23	14/23	
AP-790-04	25	14/23	14/23	
AP-396-06	25	19/26	14/23	
AP-396-08	25	19/26	19/26	
AP-396-10	50	14/23	14/23	
AP-396-12	50	19/26	19/26	
AP-396-14	50	24/29	14/23	
AP-396-16	50	24/29	24/29	
AP-396-18	100	14/23	14/23	
AP-396-20	100	19/26	14/23	
AP-396-22	100	19/26	19/26	
AP-396-24	100	24/29	14/23	
AP-396-26	100	24/29	19/26	
AP-396-28	100	24/29	24/29	
AP-396-30	250	14/23	14/23	
AP-396-32	250	19/26	14/23	
AP-396-34	250	19/26	19/26	
AP-396-36	250	24/29	14/23	
AP-396-38	250	24/29	19/26	
AP-396-40	250	24/29	24/29	
AP-396-42	500	19/26	14/23	
AP-396-44	500	24/29	14/23	
AP-396-46	500	24/29	24/29	
AP-396-48	500	29/36	24/29	
AP-396-50	500	29/36	29/36	
AP-396-52	1000	24/29	14/23	
AP-396-54	1000	24/29	19/26	
AP-396-56	1000	24/29	24/29	
AP-396-58	1000	29/36	29/36	



FLASK, THREE NECK, ANGLED

Round bottom with joints. Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-398-02	10	14/23	14/23	
AP-398-04	25	14/23	14/23	
AP-398-06	25	19/26	19/26	
AP-398-08	50	14/23	14/23	
AP-398-10	50	19/26	14/23	
AP-398-12	50	19/26	19/26	
AP-398-14	50	24/29	14/23	
AP-398-16	50	24/29	19/26	
AP-398-18	50	24/29	24/29	
AP-398-20	100	14/23	14/23	
AP-398-22	100	19/26	14/23	
AP-398-24	100	19/26	19/26	
AP-398-26	100	24/29	14/23	
AP-398-28	100	24/29	19/26	
AP-398-30	100	24/29	24/29	
AP-398-32	250	14/23	14/23	
AP-398-34	250	19/26	14/23	
AP-398-36	250	19/26	19/26	
AP-398-38	250	24/29	19/26	
AP-398-40	250	24/29	24/29	
AP-398-42	500	14/23	14/23	
AP-398-44	500	19/26	19/26	
AP-398-46	500	24/29	19/26	
AP-398-48	500	24/29	24/29	
AP-398-50	500	45/40	24/29	
AP-398-52	1000	24/29	24/29	
AP-398-54	1000	45/40	24/29	
AP-398-56	2000	24/29	24/29	
AP-398-58	2000	45/40	24/29	



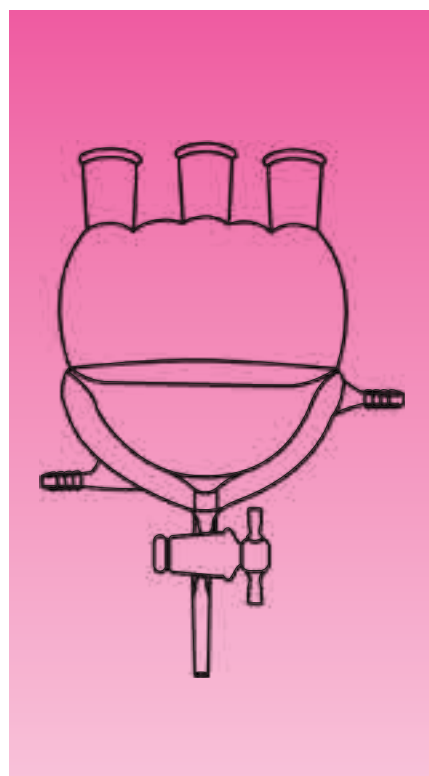
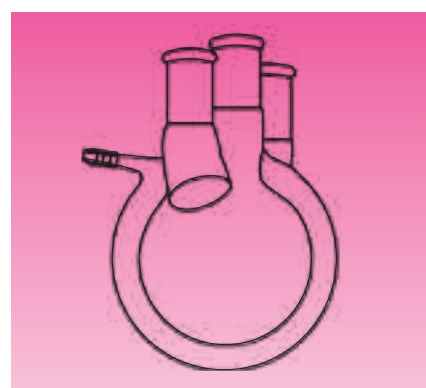
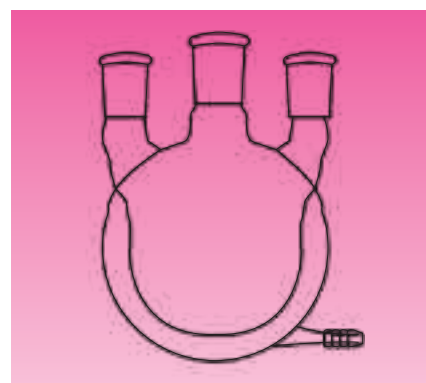
Semi jacketed 3 neck flask,
with long joints and hi-vac stopcock



FLASK, ROUND BOTTOM, 3-NECK, FULL JACKET

Round bottom flask with standard taper outer joints on the center and vertical side necks. Heavy wall design. Entire flask body is jacketed and has two hose connections for circulation of heating or cooling liquid.

Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-399-02	500	24/40	24/40	
AP-399-04	500	29/42	24/40	
AP-399-06	1000	24/40	24/40	
AP-399-08	1000	29/42	24/40	



FLASK, ROUND BOTTOM, 3-NECK, HALF JACKETED, WITH STOPCOCK DRAIN

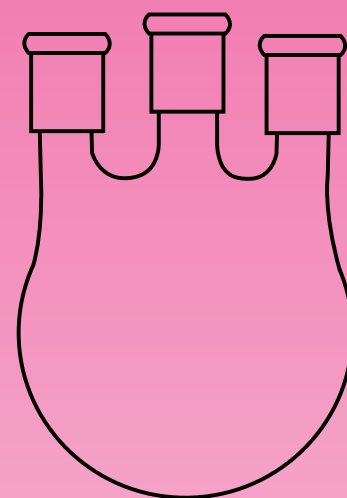
Round bottom flask with standard taper outer joints on the center and vertical side necks. Heavy wall design. Lower half of the flask is jacketed with two hose connections for circulation of heating or cooling liquid. Lower outlet has a 2mm straight bore glass or PTFE stopcock.

Code	Capacity (ml)	Center Joints	Side Joints	Stopcock Type	Price (each)
AP-401-02	500	24/40	24/40	Glass	
AP-401-04	500	29/42	24/40	Glass	
AP-401-06	1000	24/40	24/40	Glass	
AP-401-08	1000	29/42	24/40	Glass	
AP-401-10	500	24/40	24/40	Teflon®	
AP-401-12	500	29/42	24/40	Teflon®	
AP-401-14	1000	24/40	24/40	Teflon®	
AP-401-16	1000	29/42	24/40	Teflon®	
Accessories:					
AP-700-04	Replacement 4mm Glass Plug Only				
AP-738-08	Replacement S.S. Retention for 2mm Glass Stopcock				
AP-682-02	Replacement 2mm Teflon® Plug Only				

FLASK, THREE NECK, VERTICAL

Round bottom with joints. Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

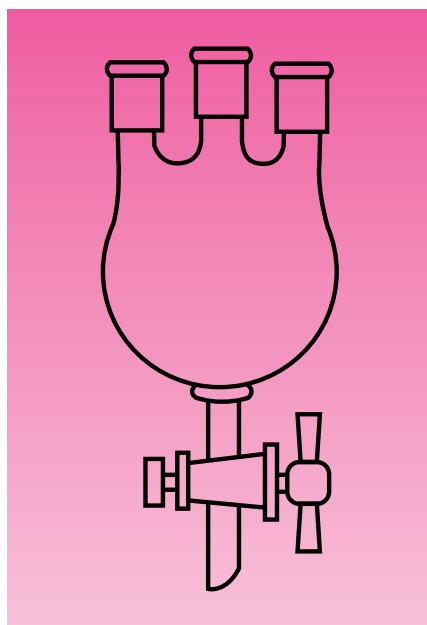
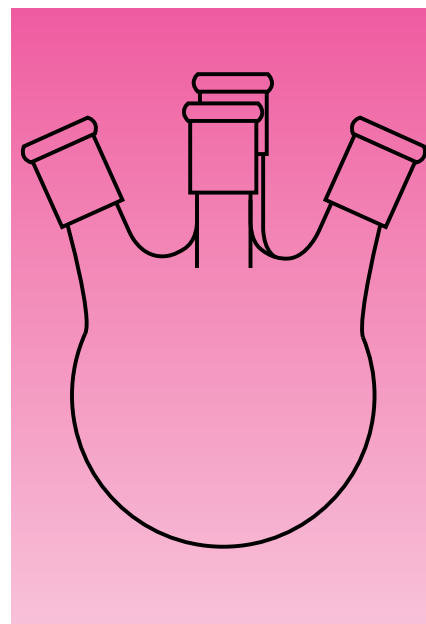
Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-400-02	50	14/23	14/23	
AP-400-04	50	19/26	19/26	
AP-400-06	100	14/23	14/23	
AP-400-08	100	19/26	14/23	
AP-400-10	100	19/26	19/26	
AP-400-12	100	24/29	14/23	
AP-400-14	100	24/29	19/26	
AP-400-16	100	24/29	24/29	
AP-400-18	250	14/23	14/23	
AP-400-20	250	24/29	19/26	
AP-400-22	250	24/29	24/29	
AP-400-24	500	14/23	14/23	
AP-400-26	500	19/26	19/26	
AP-400-28	500	24/29	19/26	
AP-400-30	500	24/29	24/29	
AP-400-32	500	29/36	24/29	
AP-400-34	500	29/36	29/36	
AP-400-36	1000	24/29	24/29	
AP-400-38	1000	29/36	24/29	
AP-400-40	1000	34/35	24/29	
AP-400-42	1000	45/40	24/29	
AP-400-44	2000	24/29	24/29	
AP-400-46	2000	29/36	24/29	
AP-400-48	2000	29/36	29/36	
AP-400-50	2000	34/35	24/29	
AP-400-52	2000	45/40	24/29	



FLASK, ROUND BOTTOM, 4-NECK, ANGLED

Heavy wall design. All sizes listed below are hand-blown from tubing to ensure uniform wall thickness.

Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-404-02	25	14/23	14/23	
AP-404-04	50	14/23	14/23	
AP-404-06	100	14/23	14/23	
AP-404-08	250	14/23	14/23	
AP-404-10	250	24/29	24/29	
AP-404-12	500	14/23	14/23	
AP-404-14	500	24/29	24/29	
AP-404-16	500	29/36	24/29	
AP-404-18	1000	24/29	24/29	

**FLASK, ROUND BOTTOM, 3-NECK BOTTOM OUTLET**

Lower outlet is a 4mm straight bore Teflon® stopcock.

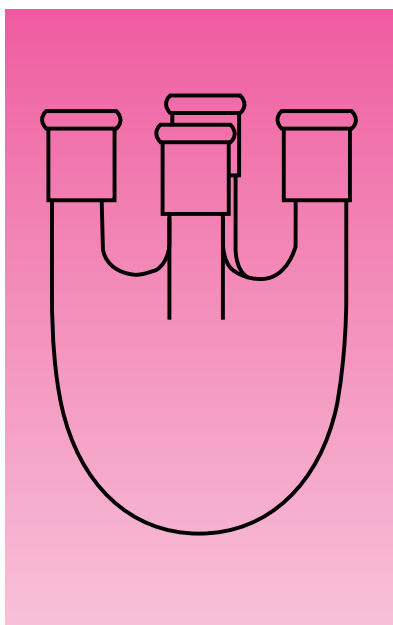
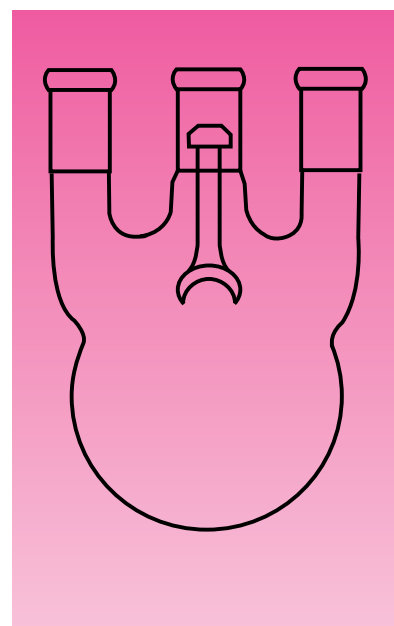
Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-406-02	500	24/29	24/29	
AP-406-04	1000	24/29	24/29	
AP-406-06	2000	24/29	24/29	
AP-406-08	2000	45/40	24/29	
Accessories:				
AP-682-04	Replacement 4mm Teflon® Plug Only			

FLASK, ROUND BOTTOM 4-NECK, WITH THREADED SIDE ARM

Round bottom, four-neck flask with standard taper outer joints and a thermometer joints. Supplied complete with a compression cap and Viton® O-ring. For insertion of plain thermometers or bleed tubes having an O.D. between 5.0-7.0 mm.

Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-410-02	500	24/29	24/29	
AP-410-04	1000	24/29	24/29	
AP-410-06	2000	29/36	24/29	
AP-410-08	2000	45/40	24/29	
Accessories:				
AP-664-04	Nylon® caps			
AP-384-20	Replacement Viton® O-rings, Size 107			

* All sized including 2L flasks are hand-blown from tubing to ensure heavy and uniform wall.



FLASK, ROUND BOTTOM, 4-NECK

With identical vertical side joints.

Code	Capacity (ml)	Center Joints	Side Joints	Price (each)
AP-412-02	250	24/29	24/29	
AP-412-04	500	24/29	24/29	
AP-412-06	500	29/36	24/29	
AP-412-08	500	29/36	29/36	
AP-412-10	1000	24/29	24/29	
AP-412-12	1000	29/36	24/29	
AP-412-14	2000	29/36	24/29	
AP-412-16	2000	34/35	24/29	

*All sizes including 2L flasks are hand-blown from tubing to ensure heavy and uniform wall.

Flask, Erlenmeyer

Code	Joint	Capacity (ml)
AP-414-06	14/23	25
AP-414-08	14/23	50
AP-414-10	19/26	50
AP-414-12	24/29	50
AP-414-22	24/29	250
AP-414-26	24/29	500



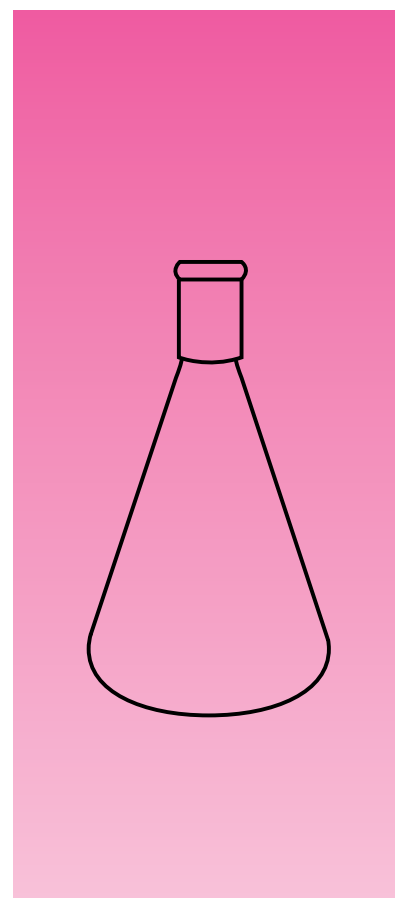
InterChange

FLASK, ERLENMEYER

With joint. Stopper is not supplied.

Code	Joint	Capacity (ml)	Price (each)
AP-414-02	14/23	5	
AP-414-04	14/23	10	
AP-414-06	14/23	25	
AP-414-08	14/23	50	
AP-414-10	19/26	50	
AP-414-12	24/29	50	
AP-414-14	29/36	50	
AP-414-16	14/23	125	
AP-414-18	19/26	125	
AP-414-20	24/29	125	
AP-414-22	24/29	250	
AP-414-24	29/36	250	
AP-414-26	24/29	500	
AP-414-28	29/36	500	
AP-414-30	24/29	1000	
AP-414-32	29/36	1000	

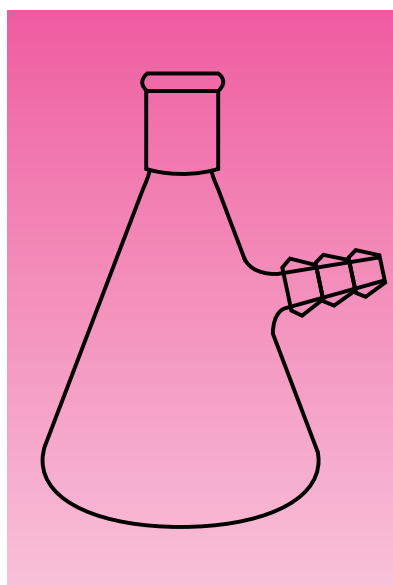
*All sizes including 1L flasks are hand-blown from tubing to ensure heavy and uniform wall.



FLASK, FILTERING, WITH JOINT

Heavy wall design made from tubing to ensure excellent quality with 10 mm hose connection

Code	Capacity (ml)	Joint	Price (each)
AP-416-02	250	24/29	
AP-416-04	500	24/29	
AP-416-06	1000	24/29	



SCHLENK TUBE

Storage Tube, High vacuum valve

Supplied with high vacuum valve with PTFE O-ring at tip and PTFE wiper ('umbrella') to protect Viton® O-ring on shaft.

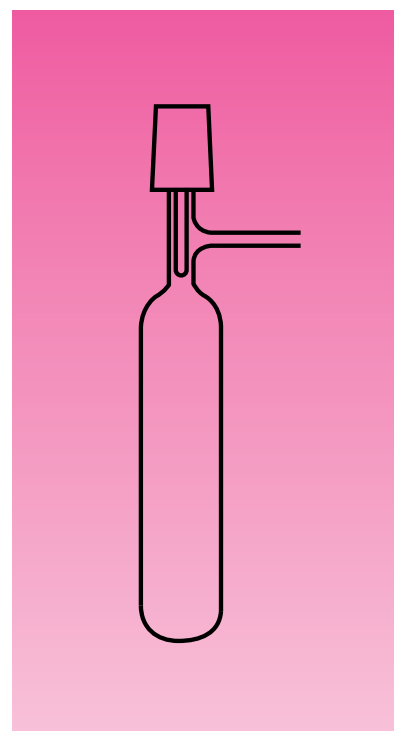


InterChange

TUBE, STORAGE, HIGH VACUUM VALVE

Supplied with high vacuum valve with PTFE O-ring at tip and PTFE wiper ("umbrella") to protect Viton® O-ring on shaft.

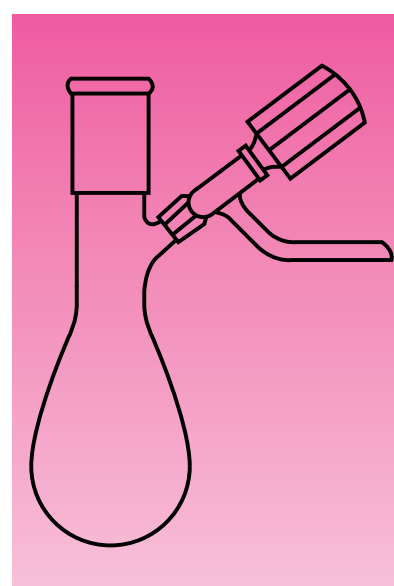
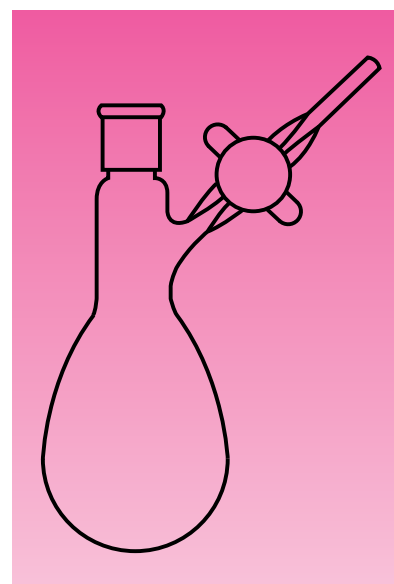
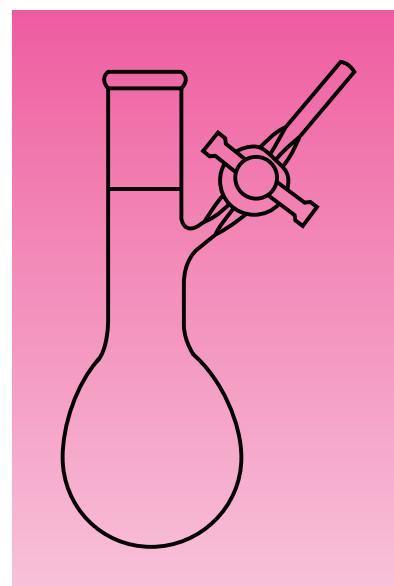
Code	Capacity (ml)	Valve Size	Side Joints	Price (each)
AP-416-10	25	0-4mm	26x110	
AP-416-12	25	0-8mm	26x110	
AP-416-14	50	0-4mm	28x120	
AP-416-16	50	0-8mm	28x120	
AP-416-18	100	0-4mm	40x165	
AP-416-20	100	0-8mm	40x165	
AP-416-22	250	0-8mm	60x185	
Accessories:				
AP-724-02	Replacement 0-4mm high vacuum plug and control knob. (PTFE O-ring at tip)			
AP-416-24	Replacement 0-8mm high vacuum plug and control knob. (PTFE O-ring at tip)			
AP-652-26	Viton® O-ring for 0-4mm high vacuum plug shaft			
AP-716-12	Viton® O-ring for 0-8mm high vacuum plug shaft			



FLASK, MODIFD SCHLENK TUBE

Choice of either 2mm glass stopcock, 2mm Teflon® stopcock or 0-4mm high vacuum valve.

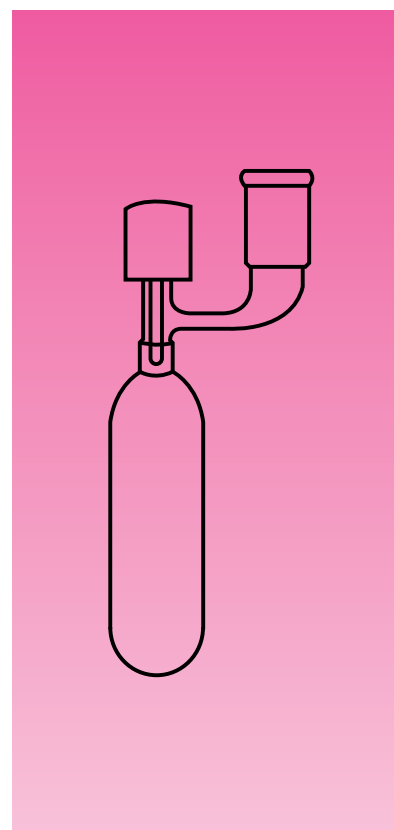
Code	Capacity (ml)	Joint	Stopcock Type	Price (each)
AP-418-02	10	14/23	Teflon®	
AP-418-04	25	14/23	Teflon®	
AP-418-06	50	14/23	Teflon®	
AP-418-08	50	19/26	Teflon®	
AP-418-10	50	24/29	Teflon®	
AP-418-12	100	14/23	Teflon®	
AP-418-14	100	19/26	Teflon®	
AP-418-16	100	24/29	Teflon®	
AP-418-18	200	14/23	Teflon®	
AP-418-20	200	19/26	Teflon®	
AP-418-22	200	24/29	Teflon®	
AP-418-24	500	24/29	Teflon®	
AP-418-26	1000	24/29	Teflon®	
AP-418-28	10	14/23	Glass	
AP-418-30	25	14/23	Glass	
AP-418-32	50	14/23	Glass	
AP-418-34	50	19/26	Glass	
AP-418-36	50	24/29	Glass	
AP-418-38	100	14/23	Glass	
AP-418-40	100	19/26	Glass	
AP-418-42	100	24/29	Glass	
AP-418-44	200	14/23	Glass	
AP-418-46	200	24/29	Glass	
AP-418-48	500	24/29	Glass	
AP-418-50	1000	24/29	Glass	
AP-418-52	25	14/23	HVValve	
AP-418-54	50	14/23	HVValve	
AP-418-56	50	19/26	HVValve	
AP-418-58	50	24/29	HVValve	
AP-418-60	100	14/23	HVValve	
AP-418-62	100	19/26	HVValve	
AP-418-64	100	24/29	HVValve	
AP-418-66	200	14/23	HVValve	
AP-418-68	200	19/26	HVValve	
AP-418-70	200	24/29	HVValve	
AP-418-72	500	24/29	HVValve	
AP-418-74	1000	24/29	HVValve	
Accessories:				
AP-682-02	Replacement 2mm Teflon® Plug Only			
AP-738-06	Replacement 2mm Glass Plug Only			
AP-738-08	Replacement S.S. Retention for 2mm Glass			
AP-734-34	0-4mm high vacuum plug and control knob. (PTFE 0-ring at tip)			
AP-652-28	Vilton® 0-ring for 0-4mm high vacuum plug shaft			



TUBE, STORAGE WITH OUTER JOINT

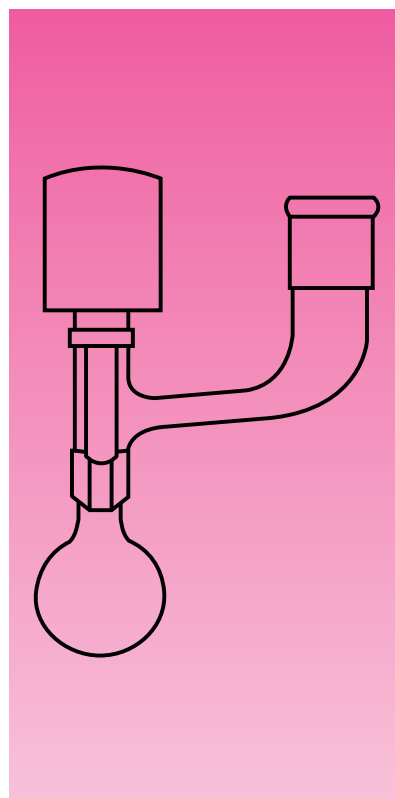
Supplied with high vacuum valve with PTFE O-ring at tip.

Code	Capacity (ml)	Joint	Valve Size	Tube O.D.xLength (mm)	Price (each)
AP-420-02	25	14/23	0-4mm	26x110	
AP-420-04	50	14/23	0-4mm	28x120	
AP-420-06	50	24/29	0-4mm	28x120	
AP-420-08	100	14/23	0-4mm	40x165	
AP-420-10	100	24/29	0-4mm	40x165	
AP-420-12	100	14/23	0-8mm	40x165	
AP-420-14	100	24/29	0-8mm	40x165	
AP-420-16	250	24/29	0-8mm	60x185	
AP-420-18	350	24/29	0-8mm	70x200	
Accessories:					
AP-734-34	0-4mm high vacuum plug and control knob. (PTFE O-ring at tip)				
AP-736-16	0-8mm high vacuum plug and control knob. (PTFE O-ring at tip)				
AP-652-28	Viton® O-ring for 0-4mm high vacuum plug shaft				
AP-652-40	Viton® O-ring for 0-8mm high vacuum plug shaft				



FLASK, STORAGE WITH OUTER JOINT

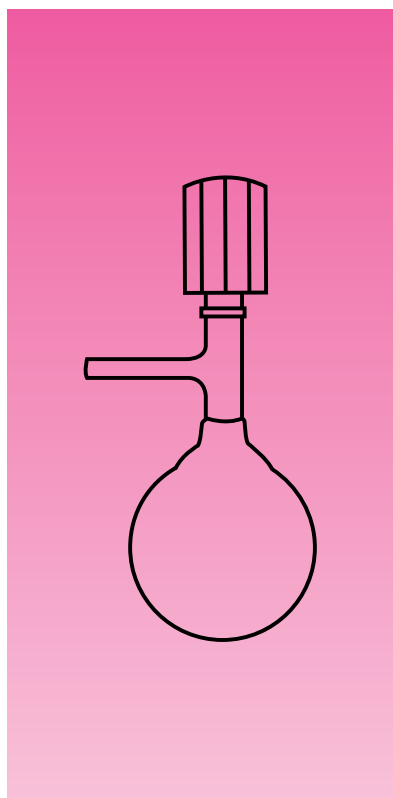
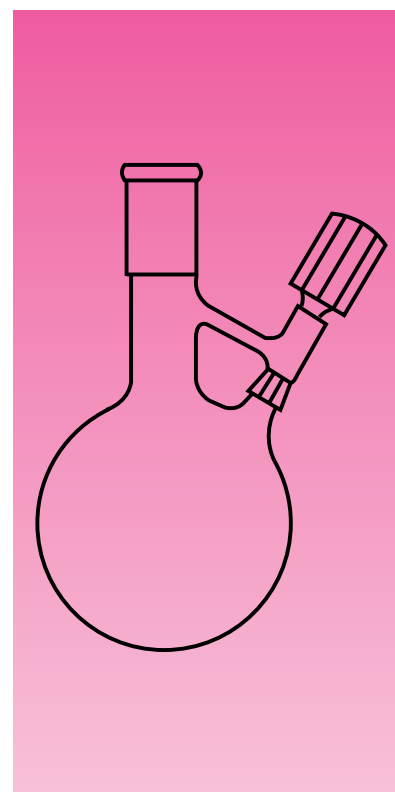
Supplied with high vacuum valve with PTFE O-ring at tip.



Code	Capacity (ml)	Joint	Valve Size	Price (each)
AP-422-02	10	14/23	0-4mm	
AP-422-04	25	14/23	0-4mm	
AP-422-06	50	14/23	0-4mm	
AP-422-08	100	14/23	0-4mm	
AP-422-10	100	24/29	0-4mm	
AP-422-12	250	14/23	0-4mm	
AP-422-14	250	24/29	0-4mm	
AP-422-16	500	14/23	0-4mm	
AP-422-18	500	24/29	0-4mm	
AP-422-20	500	24/29	0-8mm	
AP-422-22	1000	24/29	0-8mm	
Accessories:				
AP-734-34	0-4mm high vacuum plug and control knob. (PTFE O-ring at tip)			
AP-736-16	0-8mm high vacuum plug and control knob. (PTFE O-ring at tip)			

FLASK, SOLVENT TRANSFER/STORAGE

Code	Capacity (ml)	Joint	Valve Size	Price (each)
AP-424-02	250	24/29	0-4mm	
AP-424-04	250	24/29	0-8mm	
AP-424-06	500	14/23	0-4mm	
AP-424-08	500	24/29	0-4mm	
AP-424-10	500	24/29	0-8mm	
AP-424-12	1000	24/29	0-4mm	
AP-424-14	1000	24/29	0-8mm	
Accessories:				
AP-734-34	0-4mm high vacuum plug and control knob. (PTFE 0-ring at tip)			
AP-736-16	0-8mm high vacuum plug and control knob. (PTFE 0-ring at tip)			
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft			
AP-652-40	Viton® 0-ring for 0-8mm high vacuum plug shaft			



FLASK, HIGH VACUUM VALVE

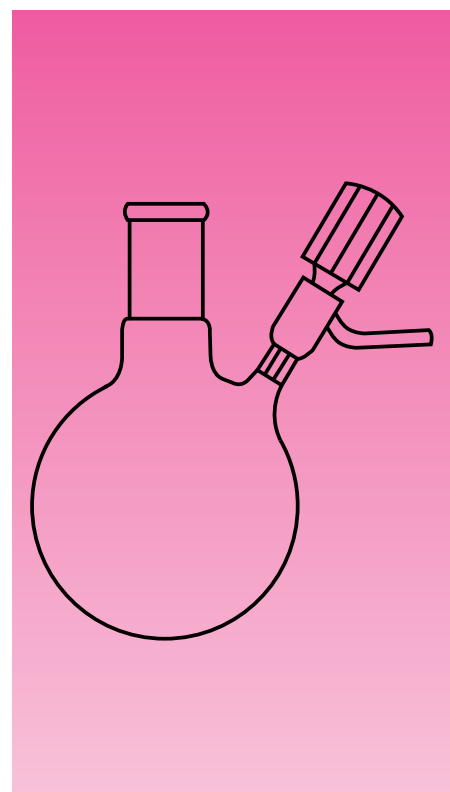
Supplied with high vacuum valve with PTFE 0-ring at tip and PTFE wiper ("umbrella") to protect Viton® 0-ring on shaft..

Code	Capacity (ml)	Valve Size	Price (each)
AP-426-02	10	0-4mm	
AP-426-04	50	0-4mm	
AP-426-06	100	0-4mm	
AP-426-08	250	0-4mm	
AP-426-10	250	0-8mm	
AP-426-12	500	0-4mm	
AP-426-14	1000	0-8mm	
Accessories:			
AP-734-34	0-4mm high vacuum plug and control knob. (PTFE 0-ring at tip)		
AP-736-16	0-8mm high vacuum plug and control knob. (PTFE 0-ring at tip)		
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft		
AP-652-40	Viton® 0-ring for 0-8mm high vacuum plug shaft		

FLASK, REACTION, HIGH VACUUM VALVE

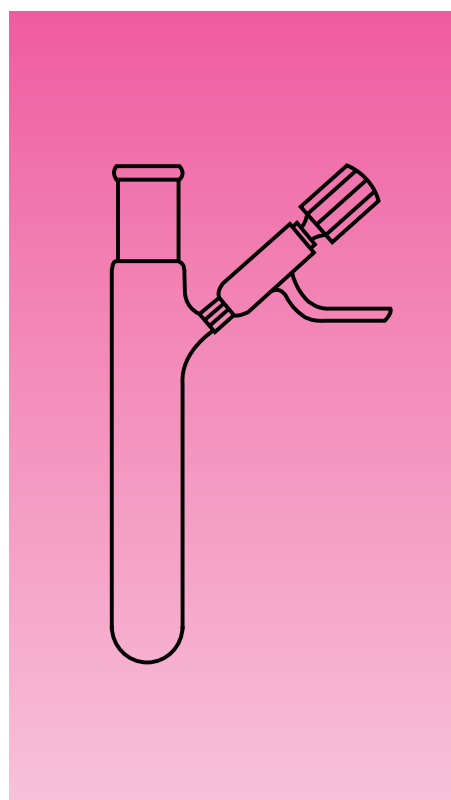
Supplied with high vacuum valve with PTFE O-ring at tip and PTFE wiper to protect Viton® O-ring on shaft.

Code	Capacity (ml)	Joint	Valve Size	Price (each)
AP-428-02	50	14/23	0-4mm	
AP-428-04	50	19/26	0-4mm	
AP-428-06	100	14/23	0-4mm	
AP-428-08	100	19/26	0-4mm	
AP-428-10	100	24/29	0-4mm	
AP-428-12	250	14/23	0-4mm	
AP-428-14	250	19/26	0-4mm	
AP-428-16	250	24/29	0-4mm	
AP-428-18	500	24/29	0-4mm	
AP-428-20	1000	24/29	0-4mm	
Accessories:				
AP-734-34	0-4mm high vacuum plug and control knob. (PTFE O-ring at tip)			



FLASK, REACTION TUBE, HIGH VACUUM VALVE

Supplied with high vacuum valve with PTFE a-ring at tip and PTFE wiper ("umbrella") to protect Viton® O-ring on shaft.

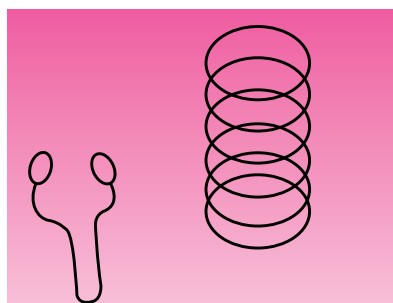
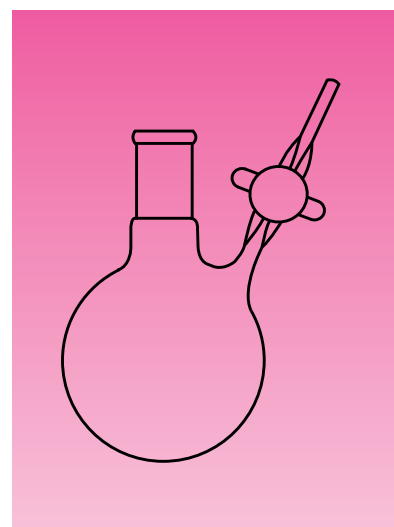


Code	Capacity (ml)	Joint	Valve Size	Price (each)
AP-430-02	25	14/23	0-4mm	
AP-430-04	50	14/23	0-4mm	
AP-430-06	100	14/23	0-4mm	
AP-430-08	100	24/29	0-4mm	
AP-430-10	250	24/29	0-4mm	
AP-430-12	350	24/29	0-4mm	
Accessories:				
AP-734-34	0-4mm high vacuum plug and control knob. (PTFE O-ring at tip)			
AP-652-28	Viton® O-ring for 0-4mm high vacuum plug shaft			

FLASK, REACTION, WITH GLASS STOPCOCK

With 2mm glass stopcock. With spring retention device for smooth turning purpose.

Code	Capacity (ml)	Joint	Price (each)
AP-432-02	50	14/23	
AP-432-04	100	14/23	
AP-432-06	100	19/26	
AP-432-08	100	24/29	
AP-432-10	250	14/23	
AP-432-12	250	24/29	
AP-432-14	500	24/29	
Accessories:			
AP-738-06	Replacement 2mm Glass Plug Only		
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock		



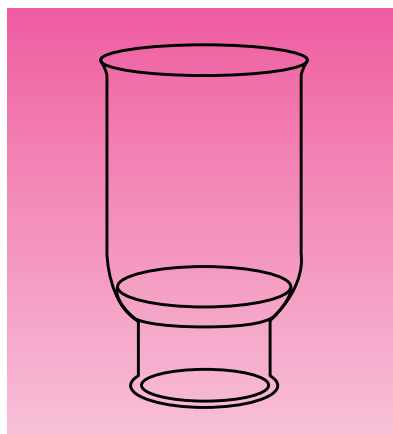
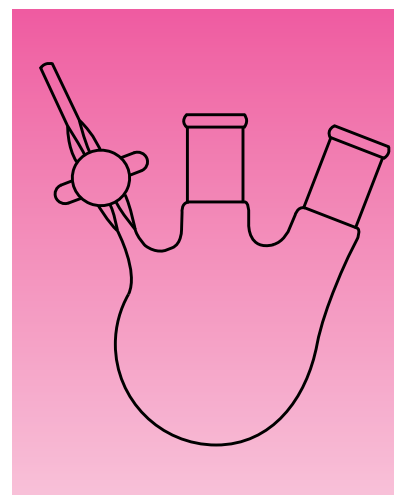
REPLACEMENT STAINLESS STEEL RETENTION KIT

Code	Plug Size(mm)	Price (each)
AP-738-08	12/30	
AP-536-06	16.2/56	
AP-702-04	17/40	

FLASK, REACTION, 2-NECK

With a 2mm glass stopcock having a constant pressure retention device.

Code	Capacity (ml)	Joint	Price (each)
AP-436-02	50	14/23	
AP-436-04	100	14/23	
AP-436-06	100	19/26	
AP-436-08	100	24/29	
AP-436-10	250	24/29	
AP-436-12	500	24/29	
Accessories:			
AP-738-06	Replacement 2mm Glass Plug Only		
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock		



CRUCIBLE, GOOCH, LOW FORM

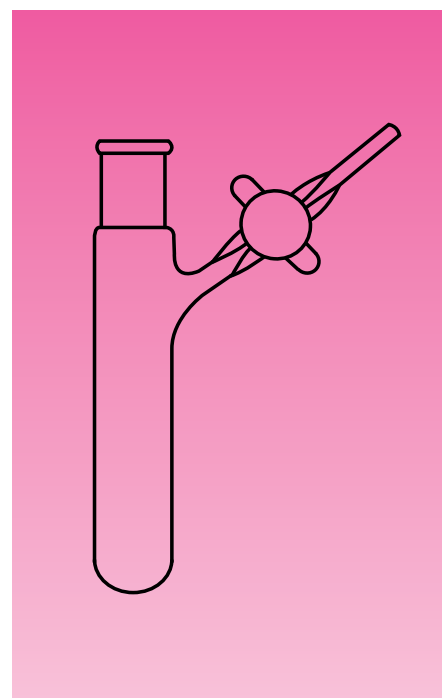
Code	Capacity (ml)	Fritted Disc O.D. (mm)	Porosity	Price (each)
AP-438-02	15	20	medium	
AP-438-04	30	30	coarse	
AP-438-06	30	30	medium	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

FLASK, REACTION TUBE

With an outer joint and 2mm glass stopcock having a constant pressure retention device.

Code	Capacity (ml)	Joint	Price (each)
AP-440-02	10	14/23	
AP-440-04	25	14/23	
AP-440-06	50	14/23	
AP-440-08	50	19/26	
AP-440-10	50	24/29	
AP-440-12	100	14/23	
AP-440-14	100	24/29	
AP-440-16	200	24/29	
AP-440-18	250	24/29	
Accessories:			
AP-630-10	Replacement 2mm Glass Plug Only		
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock		



FUNNELS / FILTRATION

FILTRATION APPARATUS, 47MM FRITTED/SINTERED, 40/35

Using 47mm membranes for filtering corrosive solutions, particulate removal from HPLC solvents, and filtration analysis with solid phase extraction disks. Support base has a sealed-in coarse porosity fritted disc. Complete assembly includes a 300ml graduated funnel, aluminium clamp, support base and 1 liter

Code	Capacity (ml)	Price (each)
AP-376-20	Complete Support Assembly	
Replacement Components:		
AP-376-10	Funnel, 47mm, 300ml Graduated	
AP-376-12	Clamp, 47mm aluminum	
AP-376-14	Base, 47mm Fritted Support, 40/35	
AP-376-16	Flask, 1L Filtering, 40/35	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

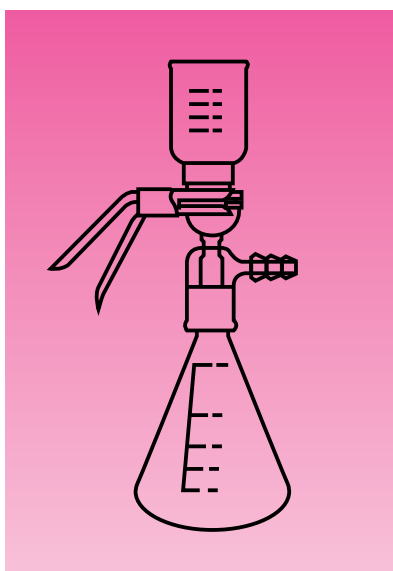
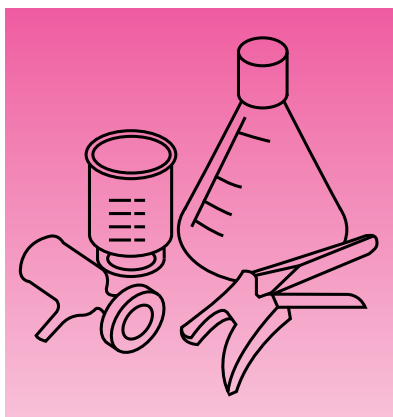


FILTRATION APPARATUS, 47MM STAINLESS STEEL, 40/35

Using 47mm membranes for filtering corrosive solutions, particulate removal from HPLC solvents, and filtration analysis with solid phase extraction disks. Support base has removable 47mm stainless steel support screen for use with viscous or proteinaceous solutions. Complete assembly includes a 300ml graduated funnel, aluminium clamp, support base and 1 liter filtering flask.

Code	Capacity (ml)	Price (each)
AP-376-20	Complete Support Assembly	
Replacement Components:		
AP-372-12	Funnel, 47mm, 300ml Graduated	
AP-376-22	Clamp, 47mm aluminium	
AP-376-24	Base, 47mm SS Screen Support	
AP-376-26	Flask, 1L Filtering, 40/35	
AP-376-30	Stainless Steel Screen for base support	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

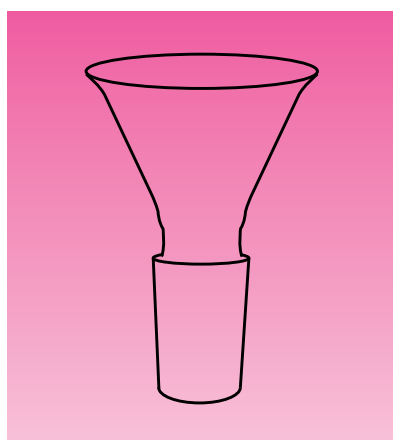
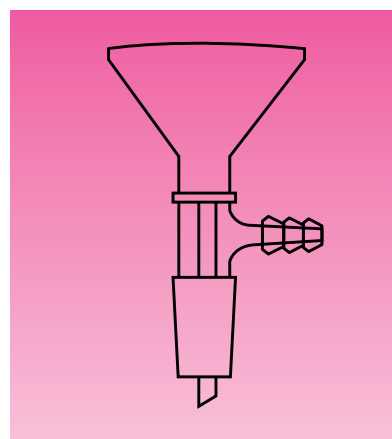


FILTER FUNNEL

O.D. of Disc is 24mm.

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

Code	Joint	O.D. (mm)	Porosity	Price (each)
AP-446-02	24/29	50	C	
AP-446-04	24/29	50	M	
AP-446-06	24/29	75	C	
AP-446-08	24/29	75	M	
AP-446-10	24/29	90	C	
AP-446-12	24/29	90	M	


FUNNEL, POWDER

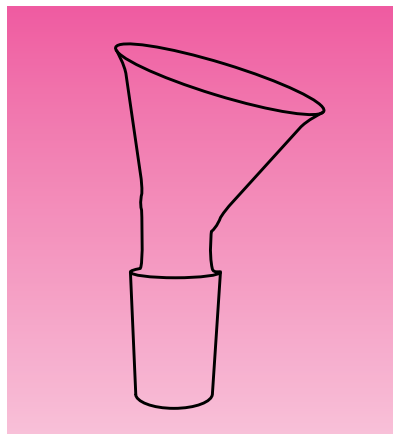
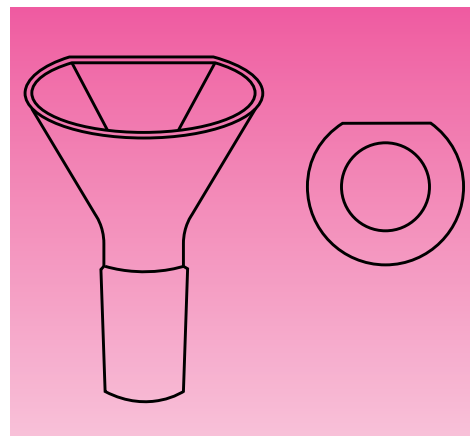
Funnels have 60° side angle and a standard taper inner joint.

Code	Top Dia. (mm)	Joint Size	Price (each)
AP-448-02	50	24/29	
AP-448-04	75	24/29	
AP-448-06	100	24/29	
AP-448-08	100	29/36	

FUNNEL, POWDER, FLATTENED SIDE

Funnels have 60° angled side with a standard taper inner joint.

Code	Top Dia. (mm)	Joint Size	Price (each)
AP-450-02	50	14/23	
AP-450-04	50	19/26	
AP-450-06	75	24/29	
AP-450-08	75	29/36	
AP-450-10	100	24/29	
AP-450-12	100	29/36	


FUNNEL, POWDER, 60° OFFSET

For use with multi-neck flasks.

Code	Joint	Approx. Diameter at Top (mm)	Price (each)
AP-452-02	24/29	75	
AP-452-04	24/29	100	

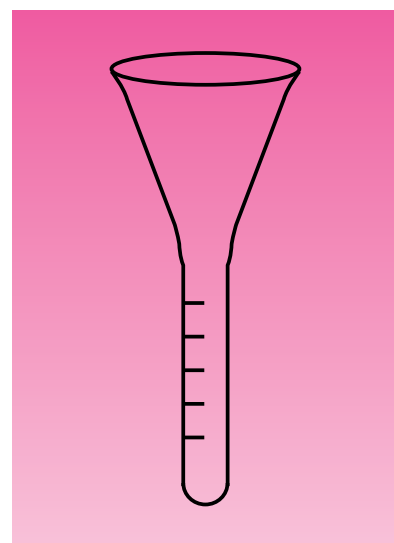
FUNNEL, SOLVENT ADDITION

Design of funnel permits addition of solvents to flash chromatography columns without disturbing the silica-gel/packing layer. Lower end of the funnel is closed and the stem has a series of small holes through which the solvent drains. Top of the funnel is 90mm in diameter with the stem size as listed.

Code	Stem O.D.x length (mm)	Price (each)
AP-452-08	12x75 *	
AP-452-10	12x100 *	
AP-452-12	19x75 *	
AP-452-14	19x100 *	
AP-452-16	28x100 **	
AP-452-18	28x125 **	

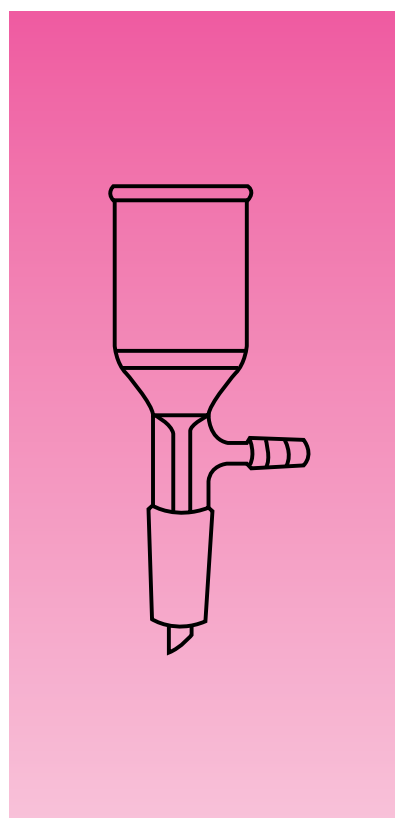
* Fit column with 24/29 joint or 35/20 joint.

** Fit column with large joint like 45/40 standard or 50/30 spherical joint.



FILTER FUNNEL, BUCHNER, INNER JOINT

Not recommended for filtration where pressure would exceed 15psi.



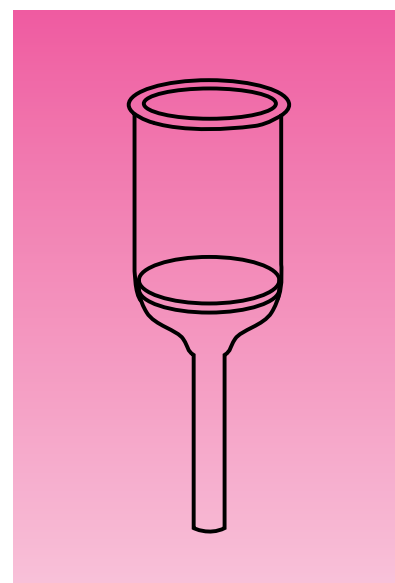
Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

Code	Disc. Dia. (mm)	Joint	Opening Required (mm)	Porosity	Price (each)
AP-454-02	15	14/23	20	C	
AP-454-04	15	14/23	20	M	
AP-454-06	15	19/26	20	C	
AP-454-08	15	19/26	20	M	
AP-454-10	15	24/29	20	C	
AP-454-12	15	24/29	20	M	
AP-454-14	30	14/23	30	C	
AP-454-16	30	14/23	30	M	
AP-454-18	30	19/26	30	C	
AP-454-20	30	19/26	30	M	
AP-454-22	30	24/29	30	C	
AP-454-24	30	24/29	30	M	
AP-454-26	60	14/23	40	C	
AP-454-28	60	14/23	40	M	
AP-454-30	60	19/26	40	C	
AP-454-32	60	19/26	40	M	
AP-454-34	60	24/29	40	C	
AP-454-36	60	24/29	40	M	
AP-454-38	150	24/29	60	C	
AP-454-40	150	24/29	60	M	
AP-454-42	150	29/36	60	C	
AP-454-44	150	29/36	60	M	
AP-454-46	350	24/29	80	C	
AP-454-48	350	24/29	80	M	
AP-454-50	600	24/29	90	C	
AP-454-52	600	24/29	90	M	

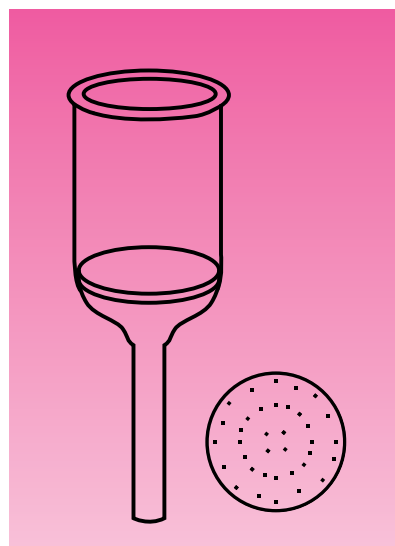
FILTER FUNNEL, BUCHNER

With sealed-in glass disc of the listed porosity. Not recommended for filtration where pressure would exceed 15psi. XC-extra coarse, C-Coarse, M-Medium, F-Fine porosity.

Code	Disc. Dia. (mm)	Opening Required (mm)	Porosity	Price (each)
AP-456-02	2	10	C	
AP-456-04	2	10	M	
AP-456-06	2	10	F	
AP-456-08	15	20	C	
AP-456-10	15	20	XC	
AP-456-12	15	20	M	
AP-456-14	15	20	F	
AP-456-16	30	30	XC	
AP-456-18	30	30	C	
AP-456-20	30	30	M	
AP-456-22	30	30	F	
AP-456-24	60	40	XC	
AP-456-26	60	40	C	
AP-456-28	60	40	M	
AP-456-30	60	40	F	
AP-456-32	150	60	XC	
AP-456-34	150	60	C	
AP-456-36	150	60	M	
AP-456-38	150	60	F	
AP-456-40	350	80	XC	
AP-456-42	350	80	C	
AP-456-44	350	80	M	
AP-456-46	350	80	F	
AP-456-48	600	90	C	
AP-456-50	600	90	M	
AP-456-52	600	90	F	



Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



FUNNEL, FILTER, BUCHNER, PERFORATED PLATE

With sealed-in perforated glass disc to support filter media. Pressure may be used but should not exceed 15 psi. This design solves the contamination problem with fritted disc and also the blindness problem with ceramic Buchner funnel.

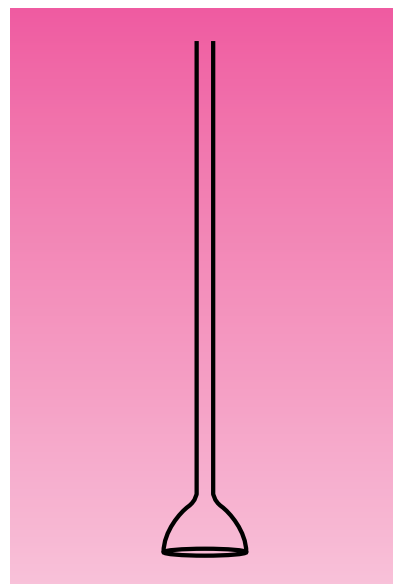
Code	Glass Disc Size (mm)	Capacity (ml)	Price (each)
AP-458-02	42	60	
AP-458-04	60	150	
AP-458-06	80	350	
AP-458-08	90	600	

GAS DISPERSION TUBE, FRITTED

Stem is 8mm O.D x150mm length, XC stands for extra coarse porosity.

Code	Disc. Dia. (mm)	Porosity	Price (each)
AP-460-02	10	XC	
AP-460-04	10	C	
AP-460-06	10	M	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

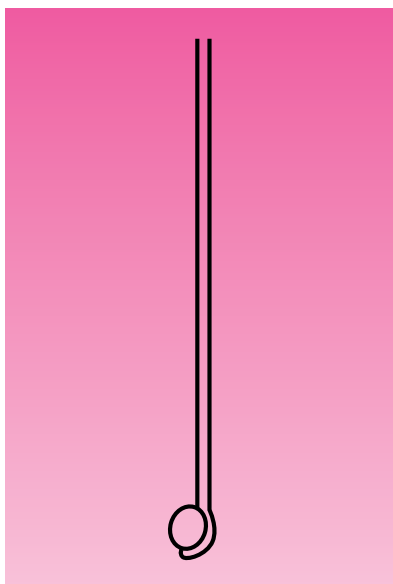


GAS DISPERSION TUBE, FRITTED/SINTERED, 15° ANGLE

The 15° angle permits tube to be inserted into vessels where a large opening is not available. Stem is 8mm O.D.x150mm length, XC stands for extra coarse porosity.

Code	Disc. Dia. (mm)	Opening Required (mm)	Porosity	Price (each)
AP-462-02	10	18	M	
AP-462-04	20	25	C	
AP-462-06	20	25	M	
AP-462-08	30	35	XC	
AP-462-10	40	45	M	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

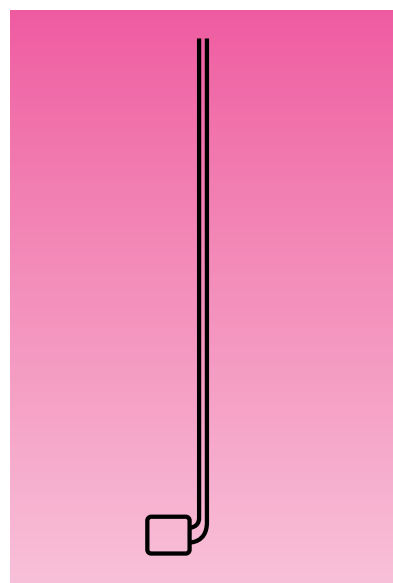


GAS DISPERSION TUBE, FRITTED/SINTERED, 90° ANGLE

The 90° angle permits bubbles to be spread over a large area. Stem is 8mm O.D.x150 Length; XC stands for extra coarse porosity

Code	Disc. Dia. (mm)	Opening Required (mm)	Porosity	Price (each)
AP-464-02	20	35	M	
AP-464-04	30	45	C	
AP-464-06	40	60	XC	
AP-464-08	40	60	C	
AP-464-10	40	60	M	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

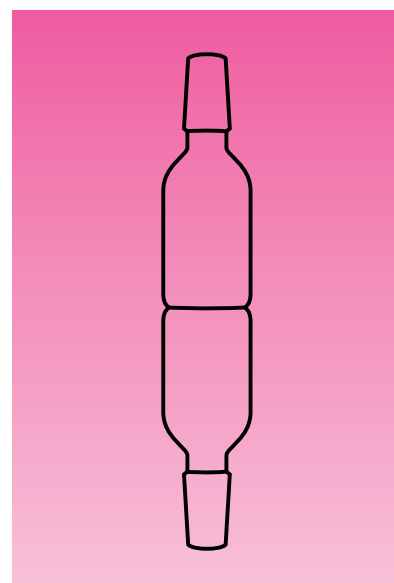


FILTER, TUBE, FRITTED/SINTERED DISC

Available with a choice of coarse or medium porosity fritted discs.

Code	Joints	Approximate Frit O.D. (mm)	Porosity	Price (each)
AP-466-02	14/23	20	C	
AP-466-04	14/23	20	M	
AP-466-06	14/23	30	C	
AP-466-08	14/23	30	M	
AP-466-10	24/29	36	C	
AP-466-12	24/29	36	M	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

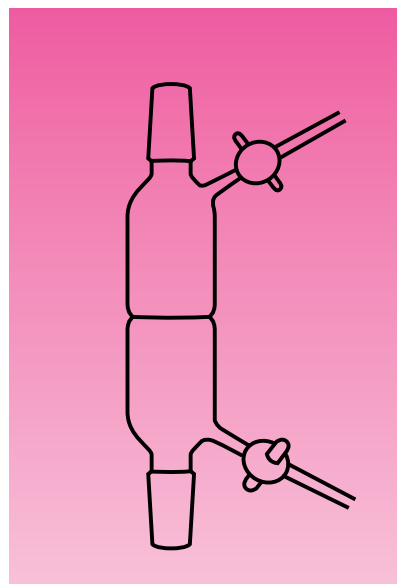


FILTER, TUBE, FRITTED/SINTERED DISC

With two 2mm glass stopcocks having constant pressure retention devices.

Code	Joints	Approximate Frit O.D. (mm)	Porosity	Price (each)
AP-468-02	14/23	30	C	
AP-468-04	14/23	30	M	
AP-468-06	24/29	36	C	
AP-468-08	24/29	36	M	
Accessories:				
AP-738-06	Replacement 2mm Glass Plug Only			
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock			

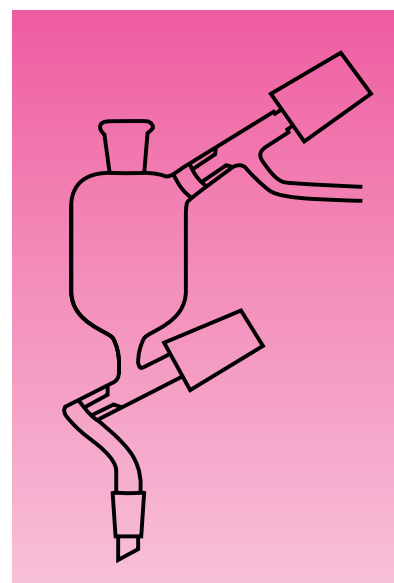
Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



FUNNEL, ADDITION, HIGH VACUUM VALVE

Supplied with high vacuum valve with PTFE O-ring at tip and PTFE wiper to protect Viton® O-ring on shaft.

Code	Capacity (ml)	GL thread size	Price (each)
AP-470-02	14/23	100	
AP-470-04	24/29	250	
Accessories:			
AP-734-34	0-4mm high vacuum plug and control knob.(PTFE O-ring at tip)		
AP-652-28	Viton® O-ring for 0-4mm high Vacuum plug shaft		

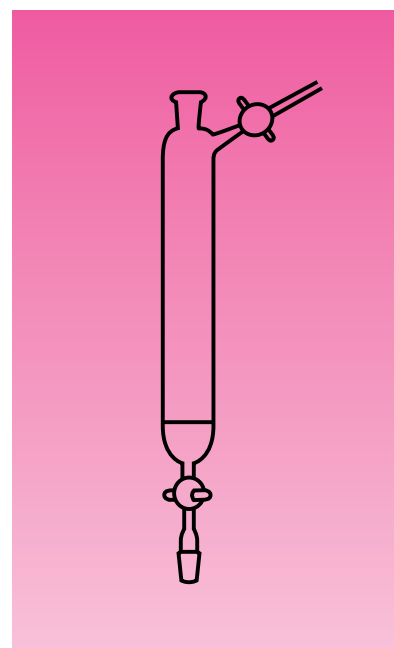


FUNNEL, FILTER, FRITTED/SINTERED DISC

With two 2mm glass stopcocks

Code	Joints	Frit O.D. (mm)	Porosity	Capacity (ml)	Price (each)
AP-484-16	14/23	30	Coarse	60	
AP-484-18	14/23	30	Medium	60	
AP-484-20	24/29	30	Coarse	60	
AP-484-22	24/29	30	Medium	60	
Accessories:					
AP-738-06	Replacement 2mm Glass Plug only				
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock				

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

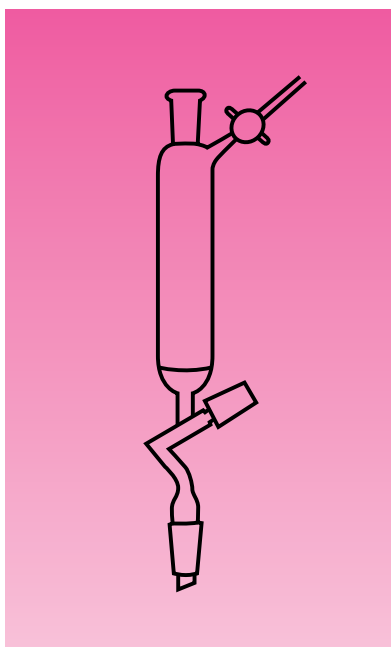


FUNNEL, FILTER, FRITTED/SINTERED DISC

With a 0-4mm high vacuum valve and a 2mm glass stopcock having constant pressure retention device.

Code	Joints	Frit O.D. (mm)	Porosity	Capacity (ml)	Price (each)
AP-486-02	14/23	30	medium	60	
AP-486-04	24/29	40	coarse	200	
AP-486-06	24/29	40	medium	200	
Accessories:					
AP-738-06	Replacement 2mm Glass Plug only				
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock				
AP-734-34	0-4mm high vacuum plug and control knob(PTFE O-ring at tip and PTFE wiper to protect Viton® O-ring on shaft				
AP-652-28	Viton® O-ring for 0-4mm high vacuum plug shaft				

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



Funnel, Separatory

Code	Capacity (mL)	Joints	Stopcock (mm)	Stopper
AP-486-32	50	19/26	2	GLASS
AP-486-38	100	19/26	2	GLASS
AP-486-62	250	24/29	4	GLASS

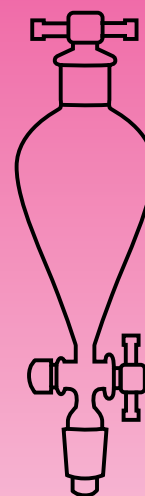


InterChange

FUNNEL, SEPARATORY

With 2mm Teflon® stopcock. Supplied with a glass stopper or PTFE stopper.

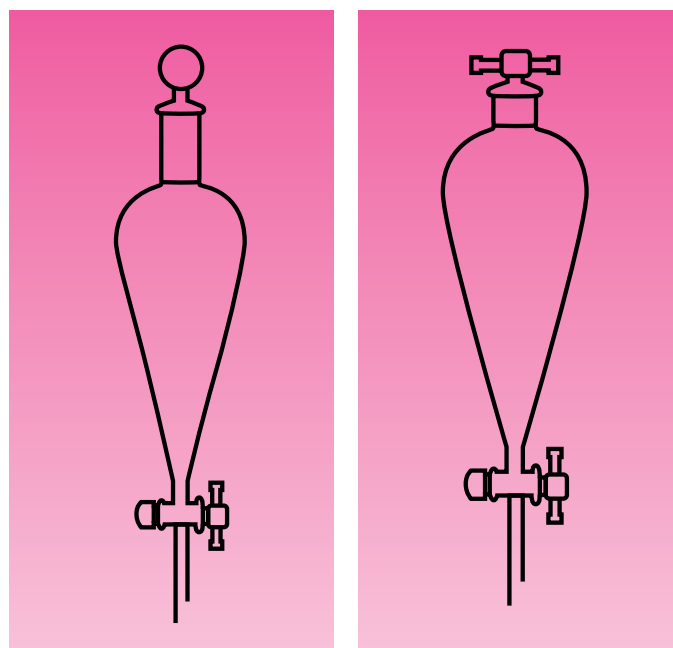
Code	Capacity (ml)	Joint	PTFE Stopcock (mm)	Stopcock	Price (each)
AP-486-18	10	14/23	2	PTFE	
AP-486-20	10	14/23	2	GLASS	
AP-486-22	25	14/23	2	PTFE	
AP-486-24	25	14/23	2	GLASS	
AP-486-26	25	19/26	2	PTFE	
AP-486-28	50	14/23	2	PTFE	
AP-486-30	50	14/23	2	GLASS	
AP-486-32	50	19/26	2	PTFE	
AP-486-34	100	14/23	2	PTFE	
AP-486-36	100	14/23	2	GLASS	
AP-486-38	100	19/26	2	PTFE	
AP-486-40	100	19/26	2	GLASS	
AP-486-42	125	14/23	2	PTFE	
AP-486-44	125	14/23	2	GLASS	
AP-486-46	125	19/26	2	PTFE	
AP-486-48	125	19/26	2	GLASS	
AP-486-50	125	24/29	2	PTFE	
AP-486-52	125	24/29	2	GLASS	
AP-486-54	250	14/23	4	PTFE	
AP-486-56	250	14/23	4	GLASS	
AP-486-58	250	19/26	4	PTFE	
AP-486-60	250	19/26	4	GLASS	
AP-486-62	250	24/29	4	PTFE	
AP-486-64	250	24/29	4	GLASS	
Accessories:					
AP-690-04	Stopcock, PTFE, double oblique 4mm bore				
AP-296-30	Replacement 4mm Teflon® Plug Only				
AP-622-02	14/23 Hollow glass stopper , Penny-head				
AP-488-94	19/26 Hollow glass stopper, Penny-head				
AP-488-96	24/29 Hollow glass stopper , Penny-head				
AP-488-100	14/23 Teflon® stopper				
AP-486-78	19/26 Teflon® stopper				
AP-488-104	24/29 Teflon® stopper				



FUNNEL, SEPARATOR, TEFLON® STOPCOCK

Supplied with a Glass or Teflon® stopper

Code	Capacity (ml)	Joint	PTFE Stopcock (mm)	Stopcock	Price (each)
AP-488-02	10	14/23	2	PTFE	
AP-488-04	25	14/23	2	PTFE	
AP-488-50	25	19/26	2	PTFE	
AP-488-08	30	NO.13	2	PTFE	
AP-488-10	50	14/23	2	PTFE	
AP-488-56	50	19/26	2	PTFE	
AP-488-14	60	NO.16	2	PTFE	
AP-488-16	100	14/23	2	PTFE	
AP-488-62	100	19/26	2	PTFE	
AP-488-20	125	14/23	2	PTFE	
AP-488-66	125	19/26	2	PTFE	
AP-488-24	125	24/29	2	PTFE	
AP-488-26	125	No.22	2	PTFE	
AP-488-72	250	19/26	4	PTFE	
AP-488-30	250	24/29	4	PTFE	
AP-488-32	250	29/36	4	PTFE	
AP-488-34	250	No.22	4	PTFE	
AP-488-36	500	29/36	4	PTFE	
AP-488-38	500	No.27	4	PTFE	
AP-488-40	1000	24/29	4	PTFE	
AP-488-42	1000	No.27	4	PTFE	
AP-422-20	10	14/23	2	GLASS	
AP-488-46	10	19/20	2	GLASS	
AP-488-44	25	14/23	2	GLASS	
AP-488-50	25	19/26	2	GLASS	
AP-488-64	30	NO.13	2	GLASS	
AP-488-48	50	14/23	2	GLASS	
AP-488-56	50	19/26	2	GLASS	
AP-488-52	60	NO.16	2	GLASS	
AP-488-54	100	14/23	2	GLASS	
AP-488-62	100	19/26	2	GLASS	
AP-488-60	125	14/23	2	GLASS	
AP-488-66	125	19/26	2	GLASS	
AP-488-84	125	24/29	2	GLASS	
AP-488-58	125	No.22	2	GLASS	
AP-488-72	250	19/26	4	GLASS	
AP-488-68	250	24/29	4	GLASS	
AP-488-78	250	29/36	4	GLASS	
AP-488-70	250	No.22	4	GLASS	
AP-488-76	500	29/36	4	GLASS	
AP-488-86	500	No.27	4	GLASS	
AP-488-80	1000	24/29	4	GLASS	
AP-488-74	1000	No.27	4	GLASS	

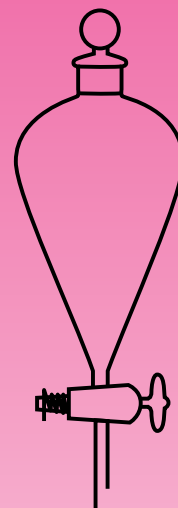

Accessories:

AP-690-04	Stopcock, PTFE, double oblique 4mm bore
AP-296-30	Replacement 4mm Teflon® Plug Only
AP-622-02	14/23 Hollow Glass Stopper, Penny-head
AP-488-94	19/26 Hollow Glass Stopper, Penny-head
AP-488-96	24/29 Hollow Glass Stopper, Penny-head
AP-488-98	29/36 Hollow Glass Stopper, Penny-head
AP-488-100	14/23 Teflon® Stopper
AP-486-78	19/26 Teflon® Stopper
AP-488-104	24/29 Teflon® Stopper
AP-488-106	29/36 Teflon® Stopper
AP-632-12	# 13 Teflon® Stopper
AP-488-108	# 16 Teflon® Stopper
AP-634-06	# 22 Teflon® Stopper
AP-634-08	# 27 Teflon® Stopper
AP-626-02	# 13 Glass Stopper , Penny-head
AP-626-04	# 16 Glass Stopper , Penny-head
AP-626-08	# 22 Glass Stopper , Penny-head
AP-626-10	# 27 Glass Stopper , Penny-head

FUNNEL, SEPARATORY, SQUIBB, GLASS STOPCOCK

Supplied complete with a flask length glass stopper of the listed size

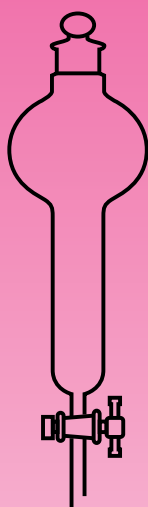
Code	Capacity (ml)	Stopcock size	Stopcock Bore(mm)	Stopcock	Price (each)
AP-488-126	30	#13	2	GLASS	
AP-488-128	60	#16	2	GLASS	
AP-488-130	125	#22	2	GLASS	
AP-488-132	250	#22	4	GLASS	
AP-488-134	500	#27	4	GLASS	
AP-488-136	1000	#27	4	GLASS	
Accessories:					
AP-738-06	Replacement 2mm Glass Plug Only				
AP-700-04	Replacement 4mm Glass Plug Only				
AP-738-08	Replacement S.S. Retention for 2mm Glass stopcock				
AP-702-04	Replacement S.S. Retention for 2mm Glass stopcock				
AP-626-02	# 13 Glass Stopper , Penny-head				
AP-626-04	# 16 Glass Stopper , Penny-head				
AP-626-08	# 22 Glass Stopper , Penny-head				
AP-626-10	# 27 Glass Stopper , Penny-head				



FUNNEL SEPARATORY SURE-GRIP

Globe shaped separatory funnel with a long stopper neck and straight section between the funnel body and stopcock, which provides a secure grip while shaking and also aids in clamping. Available with Teflon® stopcocks. Supplied complete with one listed size Teflon® or glass stopper.

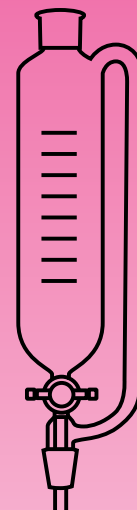
Code	Capacity (ml)	Stopcock size	PTFE Stopcock Bore(mm)	Stopcock	Price (each)
AP-490-02	500	27	4	Glass	
AP-490-08	1000	27	4	Glass	
AP-490-06	1000	27	4	PTFE	
AP-498-10	2000	27	4	Glass	
AP-490-10	2000	27	4	PTFE	
Accessories:					
AP-682-04	Replacement 4mm Teflon® Plug Only				
AP-626-10	# 27 Glass Stopper, Penny-head				
AP-634-08	# 27 Teflon® Stopper				



FUNNEL, PRESSURE EQUALISING

With 1:5 Teflon® stopcock

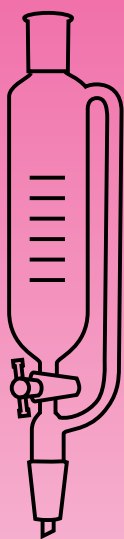
Code	Capacity (ml)	Joints	Stopcock Bore(mm)	Price (each)
AP-492-02	10	14/23	2	
AP-492-04	25	14/23	2	
AP-492-06	25	24/29	2	
AP-492-08	60	14/23	2	
AP-492-10	60	19/26	2	
AP-492-12	60	24/29	2	
AP-492-14	125	14/23	2	
AP-492-16	125	19/26	2	
AP-492-18	125	24/29	2	
AP-492-20	250	19/26	2	
AP-492-22	250	24/29	2	
AP-492-24	500	24/29	4	
AP-492-26	1000	24/29	4	
Accessories:				
AP-682-02	Replacement 2mm Teflon® Plug Only			
AP-682-04	Replacement 4mm Teflon® Plug Only			



FUNNEL, PRESSURE EQUALISING, TEFLON® METERING STOPCOCK

With Teflon® adjustable bore metering plug. Turning the adjustment knob allows flow rate to be controlled from full flow to drop wise. The metering plug completely solves the problems of sudden overflow or non-flow during addition of reagents.

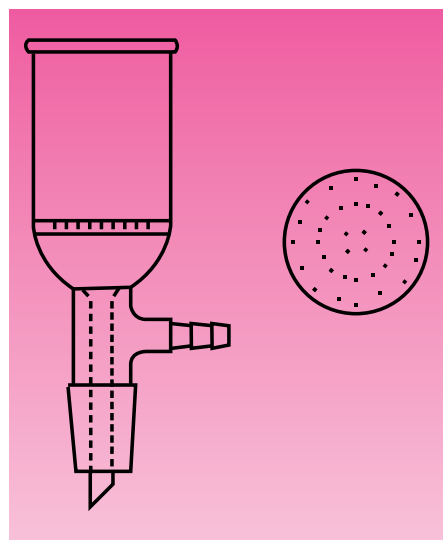
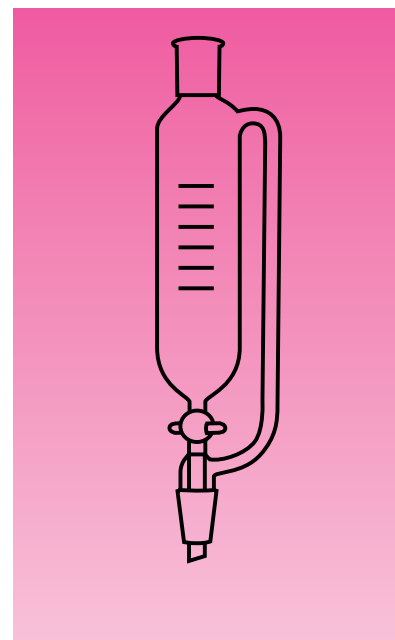
Code	Capacity (ml)	Joints	PTFE Stopcock Bore(mm)	Price (each)
AP-494-02	10	14/23	2	
AP-494-04	25	14/23	2	
AP-494-06	60	14/23	2	
AP-494-08	60	19/26	2	
AP-494-10	60	24/29	2	
AP-494-12	125	24/29	2	
AP-494-14	250	24/29	2	
AP-494-16	500	24/29	4	
AP-494-18				
AP-684-02	Replacement 2mm Teflon® Metering Only			
AP-684-04	Replacement 4mm Teflon® Metering Only			



FUNNEL, PRESSURE EQUALISING, GLASS STOPCOCK

With glass stopcock, graduated.

Code	Capacity	Joints	Stopcock	Price (each)
AP-496-02	10	14/23	2	
AP-496-04	25	14/23	2	
AP-496-06	60	14/23	2	
AP-496-08	60	24/29	2	
AP-496-10	125	14/23	2	
AP-496-12	250	24/29	2	
Accessories:				
AP-630-10	Replacement 2mm Glass Plug Only			
AP-738-08	Replacement S.S. Retention for 2mm Glass Stopcock			



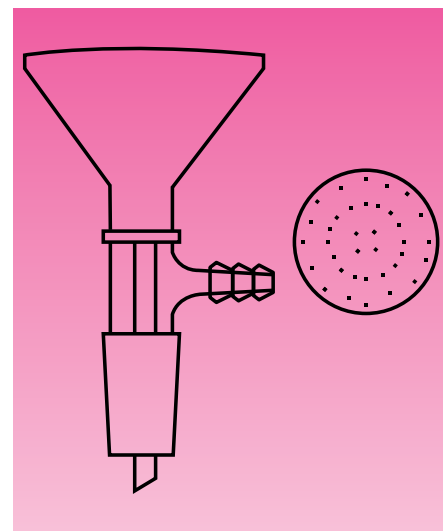
FILTER FUNNEL, BUCHNER, INNER JOINT, PERFORATED PLATE

Code	Glass Disc Size (mm)	Capacity (ml)	Joint	Price (each)
AP-442-02	32	30	14/23	
AP-442-04	32	30	24/29	
AP-442-06	42	60	14/23	
AP-442-08	42	60	24/29	
AP-442-10	60	150	24/29	
AP-442-12	90	600	24/29	

FILTER FUNNEL, PERFORATED PLATE

Disc of O.D. is 24mm.

Code	Joint	O.D. (mm)	Price (each)
AP-444-02	24/29	50	
AP-444-04	24/29	75	
AP-444-06	24/29	90	



Funnel, pressure equalising, Teflon® stopcock

With straight bore Teflon® stopcock in pressure equalising line graduated.

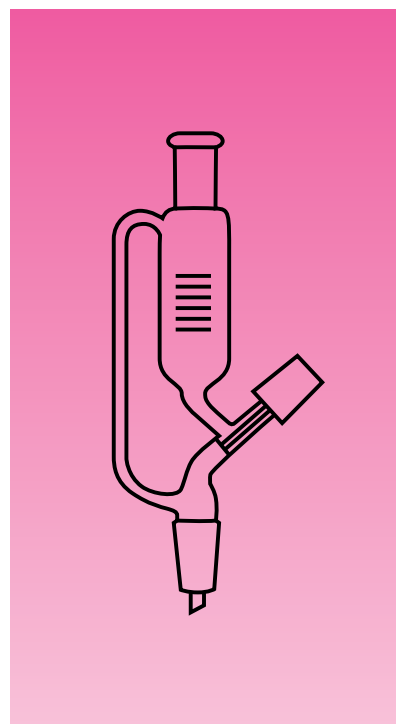
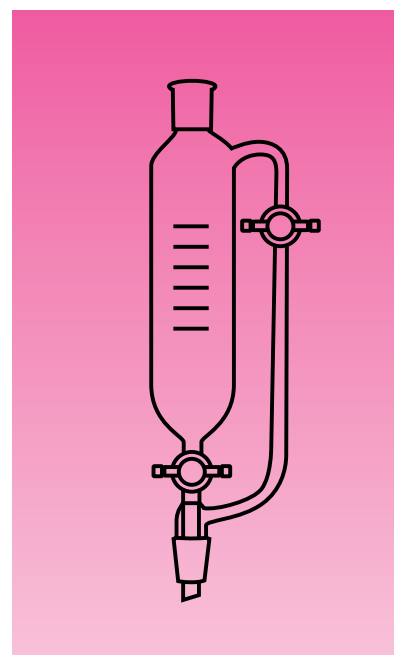


InterChange

FUNNEL, PRESSURE EQUALISING, TEFLON® STOPCOCK

With straight bore Teflon® stopcock in pressure equalising line, graduated

Code	Capacity (ml)	Joints	Stopcock Bore (mm)	Price (each)
AP-498-02	25	14/23	2	
AP-498-04	60	24/29	2	
AP-498-06	125	24/29	2	
AP-498-08	250	24/29	2	
AP-498-10	500	24/29	4	
AP-498-12	1000	24/29	4	
Accessories:				
AP-682-02	Replacement 2mm Teflon® Plug Only			
AP-682-04	Replacement 4mm Teflon® Plug Only			


FUNNEL, PRESSURE EQUALISING, HIGH VACUUM VALVE

With Teflon® extended tip valve for semi-needle valve adjustment.

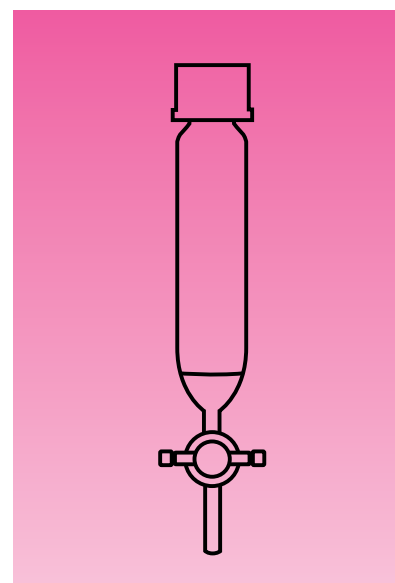
Code	Capacity (ml)	Joints	Valve Orifice (mm)	Price (each)
AP-500-02	25	14/23	0-4	
AP-500-04	60	14/23	0-4	
AP-500-06	60	19/26	0-4	
AP-500-08	60	24/29	0-4	
AP-500-10	125	14/23	0-4	
AP-500-12	125	19/26	0-4	
AP-500-14	125	24/29	0-4	
AP-500-16	250	24/29	0-4	
Accessories:				
AP-734-08	0-4mm high vacuum metering plug and control knob.(PTFE 0-ring at tip and PTFE wiper to protect Viton® 0-ring on shaft.)			
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft			

PEPTIDE / REACTION VESSELS

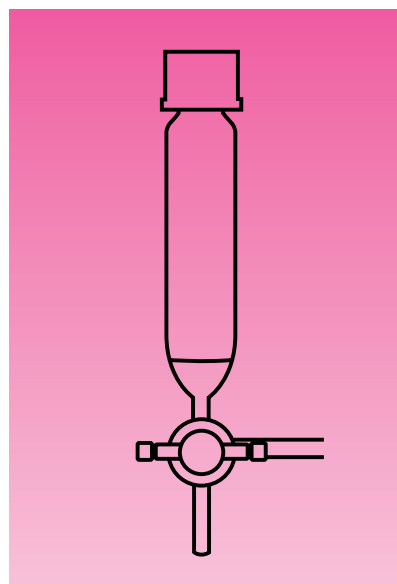
PEPTIDE SYNTHESIS VESSEL, SOLID PHASE

With a fritted disc of coarse or medium porosity to support resin. Top of the vessel has GL thread and a Teflon® lined screw cap. Teflon® stopcock has a 2mm bore with the arm being 8mm O.D.

Code	Capacity (ml)	Fritted Disc O.D. (mm)	GL thread size	Price (each)
AP-470-12	10	15	14	
AP-470-14	10	15	14	
AP-470-16	25	20	25	
AP-470-18	25	20	25	
AP-470-20	50	25	25	
AP-470-22	50	25	25	
Accessories:				
AP-682-02	Replacement 2mm Teflon® Plug Only			
AP-472-34	Nylon® cap 14mm			
AP-478-18	Nylon® cap 25mm			
AP-606-10	PTFE septum 14mm			
AP-476-04	PTFE septum			



Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.

PEPTIDE SYNTHESIS VESSEL, SOLID PHASE T-BORE TEFLON® STOPCOCK

With a fritted disc of coarse or medium porosity to support resin. Top of the vessel has GL thread and a Teflon® lined screw cap. Teflon® stopcock has a 2mm bore with the arm being 8mm O.D.

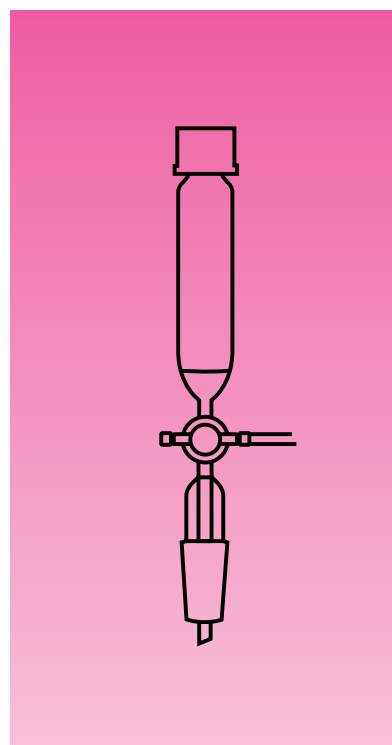
Code	Capacity (ml)	Fritted Disc O.D. (mm)	GL thread size	Price (each)
AP-472-02	10	15	14	
AP-472-04	50	25	25	
AP-472-06	50	25	25	
AP-472-08	100	40	25	
AP-472-10	100	40	25	
Accessories:				
AP-684-04	2mm Teflon® T-bore Stopcock Plug			
AP-472-34	Nylon® cap 14mm			
AP-478-18	Nylon® cap 25mm			
AP-478-22	PTFE septum 14mm			
AP-734-32	PTFE septum			

PEPTIDE SYNTHESIS VESSEL, SOLID PHASE, T-BORE, VACUUM

A connection of 8mm O.D. is sealed on the inner joint for connection to an inner gas. With a fritted disc of coarse or medium porosity to support resin. Top of the vessel has GL thread and a Teflon® lined screw cap. Teflon® stopcock has a 2mm bore with the arm being 8mm O.D.

Code	Capacity (ml)	Fritted Disc O.D. (mm)	GL thread size	Price (each)
AP-472-24	10	15	14	
AP-472-26	25	20	25	
AP-472-28	50	25	25	
AP-472-30	100	40	25	
Accessories:				
AP-688-02	2mm Teflon® T-bore Stopcock Plug			
AP-472-34	Nylon® cap 14mm			
AP-478-18	Nylon® cap 25mm			
AP-606-10	PTFE septum 14mm			
AP-476-04	PTFE septum			

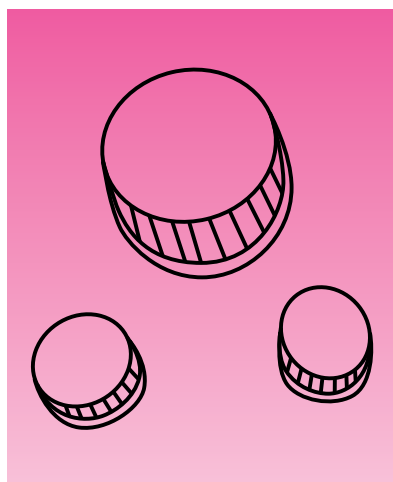
Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



NYLON® CAP WITH PROTECTED SEAL

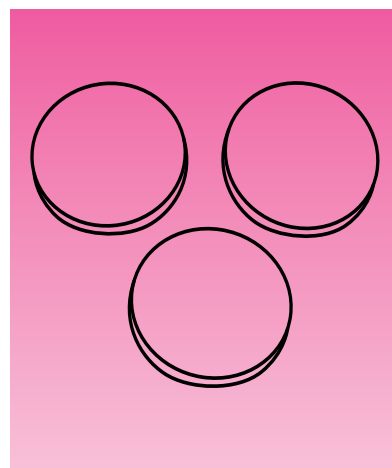
Replacement caps for use with Solid Phase Reaction Vessels, with PTFE protected Silicone Septum.

Code	Size(mm)	Material	Price (each)
AP-472-34	14	Nylon®	
AP-478-18	25	Nylon®	
AP-478-20	32	Nylon®	



SEPTUM, TEFLON®

Code	Size(mm)	Material	Price (each)
AP-606-10	14	PTFE	
AP-476-04	25	PTFE	
AP-476-06	32	PTFE	

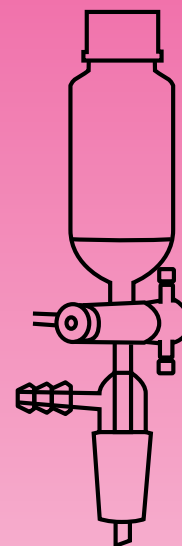


VESSEL, WITH LOWER JOINT AND T-BORE PTFE PLUG

Solid phase peptide synthesis vessels feature 2mm PTFE stopcocks and fritted glass supports for resin beads during operation. The 24/29 inner drip joint can be assembled with other standard glassware. The vessel has a 8mm hose connection for vacuum and the stopcock has an 8mm O.D. sidearm for inert gas introduction. Vessels are supplied with PTFE-faced silicone lined Nylon® cap.

Code	Joints	Frit O.D. (mm)	Porosity	Capacity (ml)	Price (each)
AP-478-02	25	25	M	25	
AP-478-04	50	30	C	25	
AP-478-06	50	30	M	25	
AP-478-08	100	45	M	25	
AP-478-10	250	57	M	32	
AP-478-12	500	80	M	32	
Accessories:					
AP-688-02	2mm Teflon® T-bore Stopcock Plug				
AP-472-34	Nylon® cap 14mm				
AP-478-18	Nylon® cap 25mm				
AP-478-20	Nylon® cap 32mm				
AP-478-22	PTFE septum 14mm				
AP-734-32	PTFE septum 25mm				
AP-478-24	PTFE septum 32mm				

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.





Reaction Vessel, photochemical, internal thread

Reaction Vessel constructed of borosilicate glass to accommodate immersion well. With #50 internal thread at top which accepts a RC50 bushing and Viton® O-ring to form a compression seal with the immersion well, on 14/20 joint for sparger tube, one 24/40 vertical joint for condenser and one #7 internal thread side arm for thermometer. Complete with quartz immersion well, caps and o-ring.

Immersion Well, photochemical, quartz, without joint

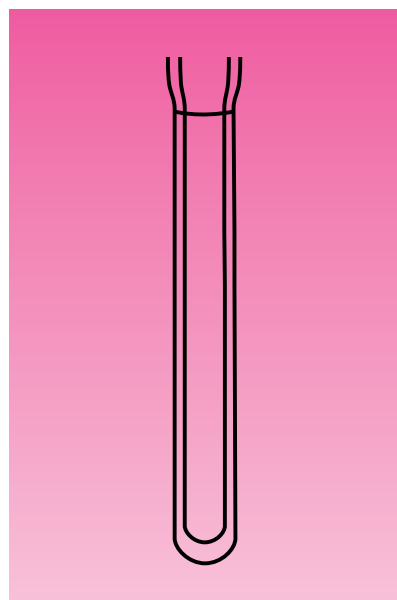
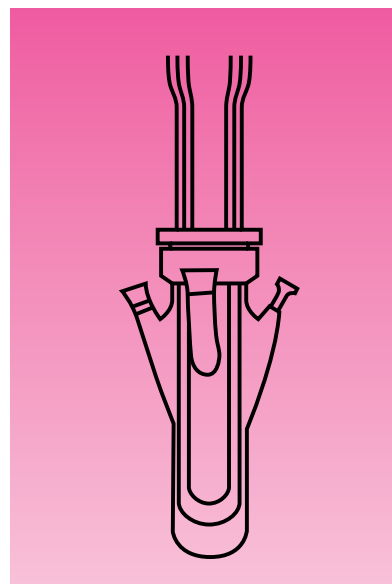
Double-walled quartz immersion well for use with photochemical reaction vessel. A small diameter inner tube extends down the annular space to insure flow of coolant from bottom of well upward to outlet. Well is used with RC50 Nylon® Bushing with Viton® O-ring to form a compression type seal with threaded vessels. Well offers a greaseless connection and can be adjusted to desired height. The lack of the ground joint means easier dismantling since there is no freezing.



REACTION VESSEL, PHOTOCHEMICAL, INTERNAL THREAD

Reaction Vessel constructed of borosilicate glass to accommodate immersion well. With #50 internal thread at top which accepts a AP-478 bushing and Viton® 0-ring to form a compression seal with the immersion well, one 14/23 joint for sparger tube, one 24/29 vertical joint for condenser and one #7 internal thread side arm for thermometer. Complete with quartz immersion well, caps and 0-rings.

Code	Capacity(mL)	Price (each)
AP-478-30	500	
Accessories:		
AP-478-32	Bushing,#50,Nylon® w/o 0-ring, Only	
AP-652-56	0-ring for #50 internal thread	
AP-478-36	Nylon® cap for #7 internal thread	
AP-652-26	0-ring for #7 internal thread	



IMMERSION WELL, PHOTOCHEMICAL, QUARTZ, WITHOUT JOINT

Double-walled quartz immersion well for use with AP-478 reactor and lamp. A small diameter inner tube extends down the annular space to insure flow of coolant from bottom of well upward to outlet. Well is used with AP-478 Nylon® Bushing with Viton® 0-ring to form a compression type seal with threaded vessels. Well offers a greaseless connection and can be adjusted to desired height. The lack of the ground joint means easier dismantling since there is no freezing.

Code	Total Length	Price (each)
AP-480-02	390mm	



Distilling cow receiver, graduated

Tubes are graduated from 0-3mL subdivisions

Pressure vessel, heavy wall*

Heavy wall round bottom vessels have an internal thread for use with a 15mm Teflon® bushing as a pressure seal. This unique design allows hand tightening and loosening for easy access into the vessel.

The O- ring is positioned on the bushing above the thread for improved sealing. The vessels are useful for pressure reactions and applications such as polymerisation

and the analysis of halogens by thermal decomposition in the presence of lime.

Complete apparatus is supplied with vessel, Teflon® bushing and Viton® O-ring.

*Important warning for pressurised glassware

Due to varying conditions, we cannot guarantee glass vessels from breakage under pressure. Always work behind a safety shield.

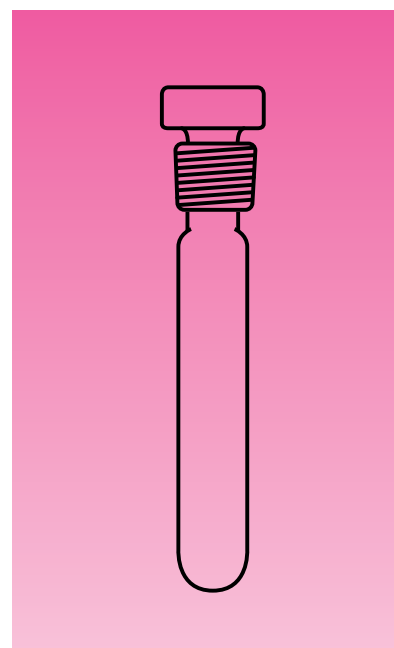


PRESSURE VESSEL, HEAVY WALL*

Heavy wall cylindrical vessels have an internal thread for use with a 15mm Teflon® bushing as a pressure seal. This unique design allows hand tightening and loosening for easy access into the vessel. The O-ring is positioned on the bushing above the thread for improved sealing. The vessels are useful for pressure reactions and applications such as polymerisation and analysis of halogens by thermal decomposition in the presence of lime. Complete apparatus is supplied with vessel, Teflon® bushing and Viton® O-ring.

Code	Capacity (ml)	O.D.xOverall (mm)	GL thread size	Supplied	Price (each)
AP-482-02	15	26x109	15	complete	
AP-482-04	35	26x164	15	complete	
AP-482-06	38	26x174	15	complete	
AP-482-08	48	46x109	15	complete	
AP-482-10	100	46x149	15	complete	
AP-482-12	120	46x169	15	complete	

***Important Warnings for Pressurised Glassware:** Due to varying conditions, we cannot guarantee glass vessels from breakage under pressure. Always work behind a safety shield.



PRESSURE VESSEL, HEAVY WALL*

Heavy wall round bottom vessels have an internal thread for use with a 15mm Teflon® bushing as a pressure seal. This unique design allows hand tightening and loosening for easy access into the vessel. The O-ring is positioned on the bushing above the thread for improved sealing. The vessels are useful for pressure reactions and applications such as polymerisation and analysis of halogens by thermal decomposition in the presence of lime. Complete apparatus is supplied with vessel, Teflon® bushing and Viton® O-ring.

Code	Capacity (ml)	O.D.xOverall (mm)	GL thread size	Supplied	Price (each)
AP-484-02	75	46x129	15	complete	
AP-484-04	75	50x137	25	complete	
AP-484-06	150	60x139	15	complete	
AP-484-08	150	60x147	25	complete	
AP-484-10	350	80x154	15	complete	
AP-484-12	350	80x162	25	complete	

***Important Warnings for Pressurised Glassware:** Due to varying conditions, we cannot guarantee glass vessels from breakage under pressure. Always work behind a safety shield.

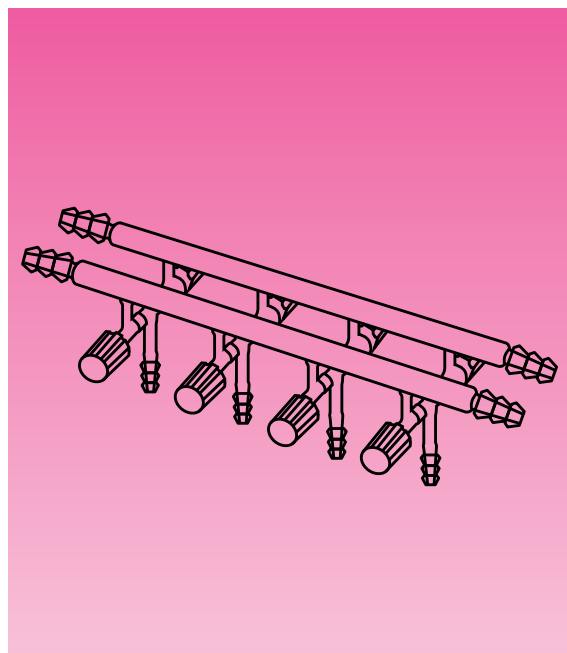


MANIFOLD

MANIFOLD, VACUUM/INERT GAS, DOUBLE

General purpose double bank manifold for use with vacuum and inert gas. Supplied with 0-4mm high vacuum valves for grease-free operation. Both banks are made from 22mm medium wall tubing and have all banks open. Ports are spaced 100mm centre to centre and have an O.D. of 10mm.

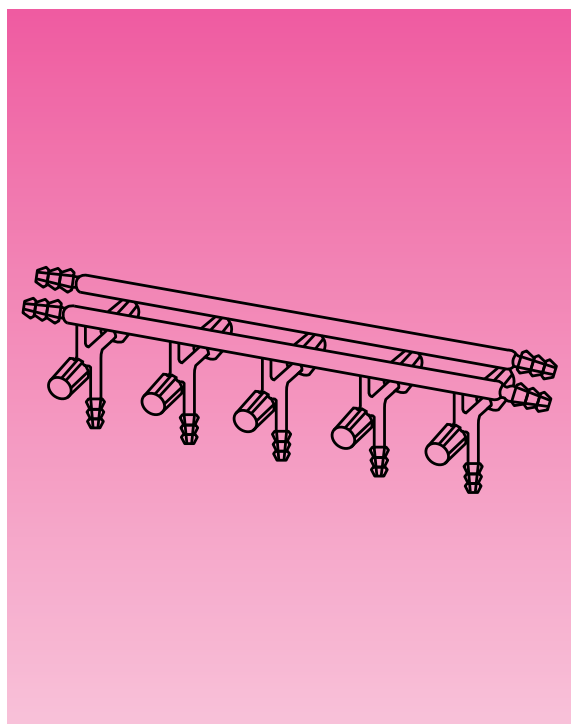
Code	Number of Ports	Overall Width (mm)	Valve Orifice (mm)	Price (each)
AP-502-02	4	450	0-4	
AP-502-04	5	550	0-4	
Accessories:				
AP-720-06	0-4mm high vacuum plug and control knob. (With Viton® 0-ring at tip)			
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft			
AP-652-24	Viton® 0-ring for 0-4mm high vacuum valve tip			



MANIFOLD, VACUUM/INERT GAS, DOUBLE

Same as the manifold above except with front-left and rear-right 10mm hose connections.

Code	Number of Ports	Overall Width (mm)	Valve Orifice (mm)	Price (each)
AP-504-02	5	550	0-4	
Accessories:				
AP-720-06	0-4mm high vacuum plug and control knob. (With Viton® 0-ring at tip)			
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft			
AP-652-24	Viton® 0-ring for 0-4mm high vacuum valve tip			





InterChange

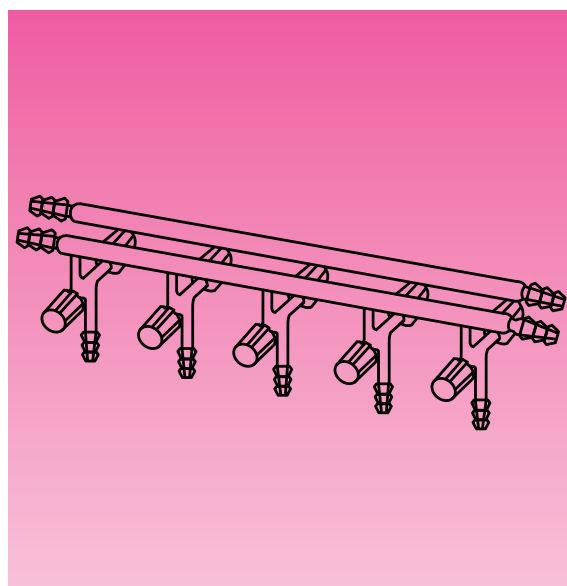


InterChange

MANIFOLD, VACUUM/INERT GAS, DOUBLE

Same as the manifold above except with front-left and rear-right 10mm hose connections.

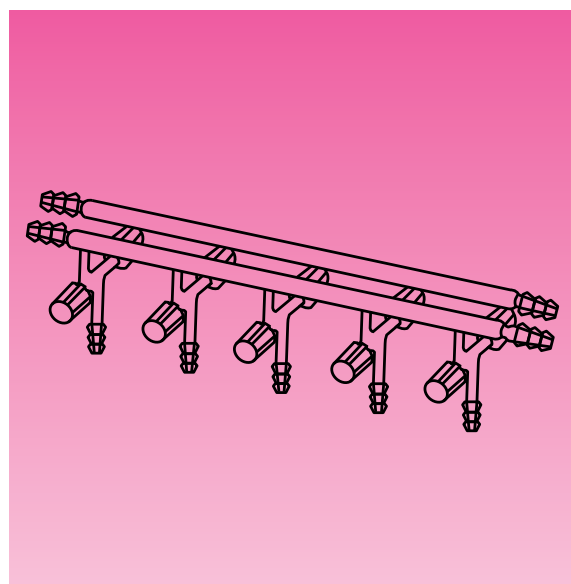
Code	Number of Ports	Overall Width (mm)	Valve Orifice (mm)	Price (each)
AP-506-02	3	350	0-4	
AP-506-04	4	450	0-4	
AP-506-06	5	550	0-4	
Accessories:				
AP-720-06	0-4mm high vacuum plug and control knob. (With Viton® 0-ring at tip)			
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft			
AP-652-24	Viton® 0-ring for 0-4mm high vacuum valve tip			



MANIFOLD, VACUUM/INERT GAS, DOUBLE

Same as the manifold above except with front- right and rear- left 10mm hose connections.

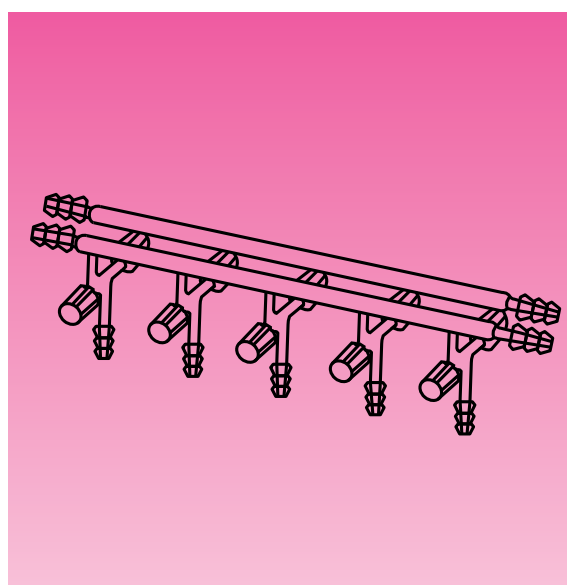
Code	Number of Ports	Overall Width (mm)	Valve Orifice (mm)	Price (each)
AP-508-02	4	450	0-4mm	
AP-508-04	5	550	0-4mm	
Accessories:				
AP-720-06	0-4mm high vacuum plug and control knob. (With Viton® 0-ring at tip)			
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft			
AP-652-24	Viton® 0-ring for 0-4mm high vacuum valve tip			



MANIFOLD, VACUUM/INERT GAS, DOUBLE

Same as the manifold above except with front-left-right and rear-right 10mm hose connections.

Code	Number of Ports	Overall Width (mm)	Valve Orifice (mm)	Price (each)
AP-510-02	4	450	0-4mm	
AP-510-04	5	550	0-4mm	
Accessories:				
AP-720-06	0-4mm high vacuum plug and control knob. (With Viton® 0-ring at tip)			
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft			
AP-652-24	Viton® 0-ring for 0-4mm high vacuum valve tip			



Manifold vacuum/inert gas, double

General purpose double bank manifold for use with vacuum and inert gas. Supplied with 0-4mm high vacuum valves for grease-free operation. Both banks are made from 22mm medium wall tubing and have all banks open. Ports are spaced 100mm centre and have an O.D. of 10mm

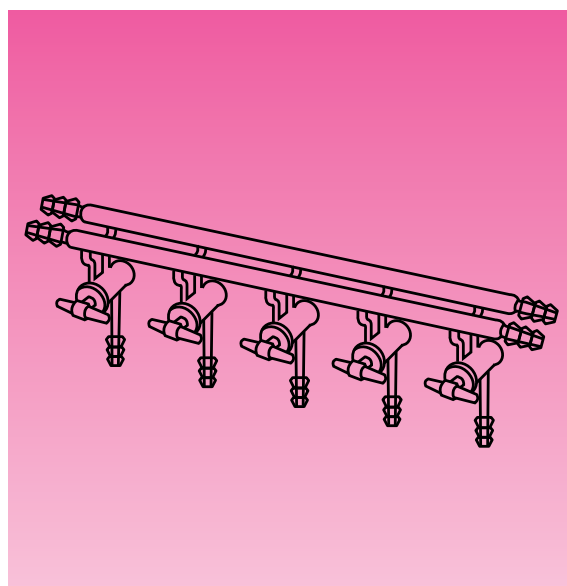


InterChange

MANIFOLD, VACUUM/INERT GAS, ALL GLASS

With 4mm double oblique, high vacuum hollow glass stopcocks precision ground with corresponding numbers on barrel and plug. Lower vacuum chambers on stopcock are evacuated with a separate hole in the plug in order to hold the plug in the stopcock barrels. Beams are 22mm O.D. with front-left-right and rear-left-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

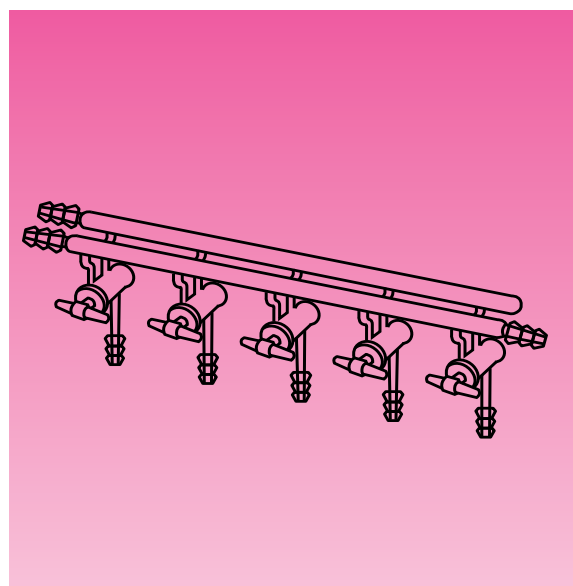
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-512-02	3	300	
AP-512-04	4	375	
AP-512-06	5	450	



MANIFOLD, VACUUM/INERT GAS, ALL GLASS

With 4mm double oblique, high vacuum hollow glass stopcocks precision ground with corresponding numbers on barrel and plug. Lower vacuum chambers on stopcock are evacuated with a separate hole in the plug in order to hold the plug in the stopcock barrels. Beams are 22mm O.D. with front-left and rear-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

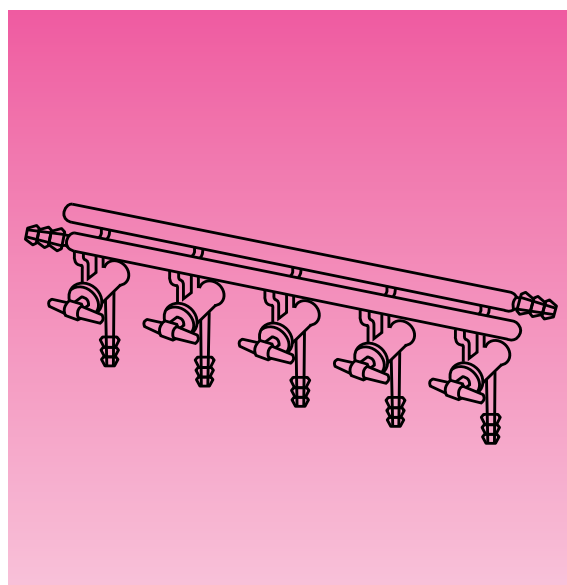
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-514-02	3	300	
AP-514-04	4	375	
AP-514-06	5	450	



MANIFOLD, VACUUM/INERT GAS, ALL GLASS

With 4mm double oblique, high vacuum hollow glass stopcocks precision ground with corresponding numbers on barrel and plug. Lower vacuum chambers on stopcock are evacuated with a separate hole in the plug in order to hold the plug in the stopcock barrels. Beams are 22mm O.D. with front-right and rear-left 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

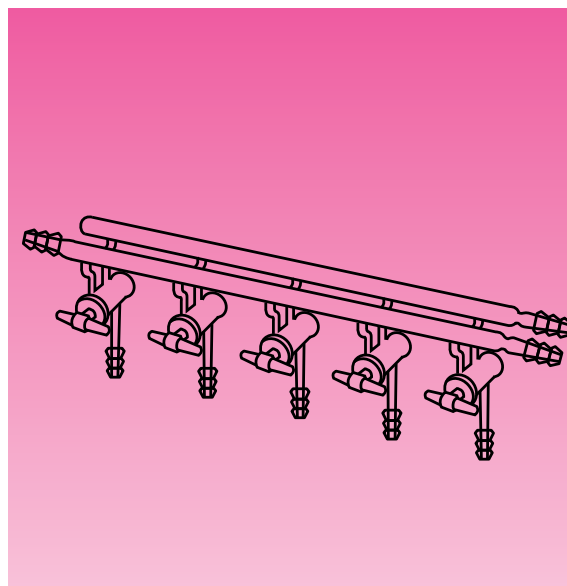
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-516-02	4	375	
AP-516-04	5	450	



MANIFOLD, VACUUM/INERT GAS, ALL GLASS

With 4mm double oblique, high vacuum hollow glass stopcocks precision ground with corresponding numbers on barrel and plug. Lower vacuum chambers on stopcock are evacuated with a separate hole in the plug in order to hold the plug in the stopcock barrels. Beams are 22mm O.D. with front-left-right and rear-left 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

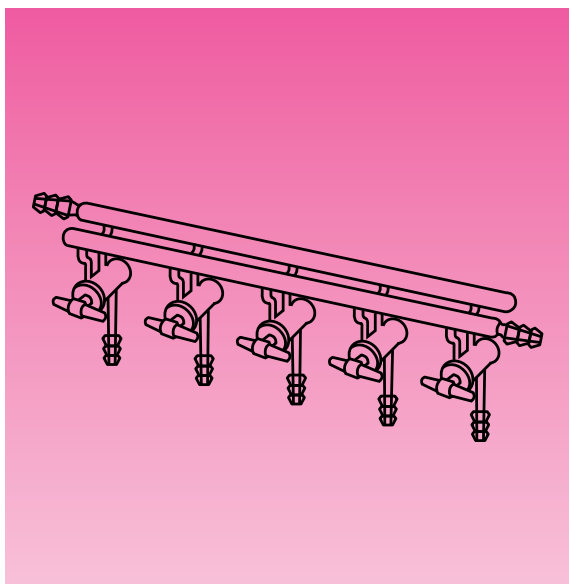
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-518-02	3	300	
AP-518-04	4	375	
AP-518-06	5	450	



MANIFOLD, VACUUM/INERT GAS, ALL GLASS

With 4mm double oblique, high vacuum hollow glass stopcocks precision ground with corresponding numbers on barrel and plug. Lower vacuum chambers on stopcock are evacuated with a separate hole in the plug in order to hold the plug in the stopcock barrels. Beams are 22mm O.D. with front-left and rear-left-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

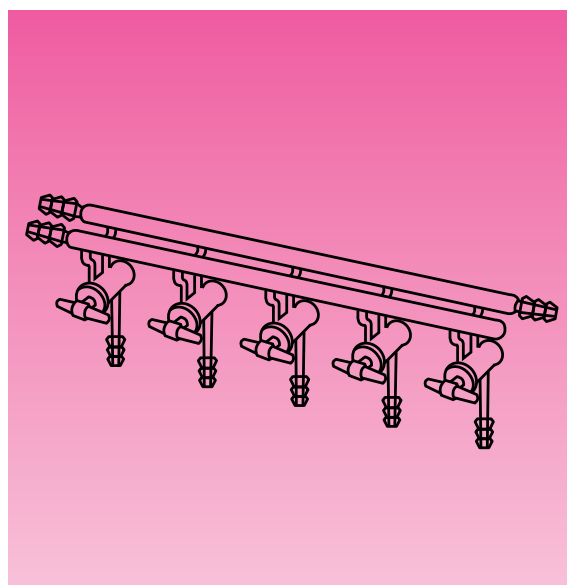
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-520-02	3	300	
AP-520-04	4	375	
AP-520-06	5	450	



MANIFOLD, VACUUM/INERT GAS, ALL GLASS

With 4mm double oblique, high vacuum hollow glass stopcocks precision ground with corresponding numbers on barrel and plug. Lower vacuum chambers on stopcock are evacuated with a separate hole in the plug in order to hold the plug in the stopcock barrels. Beams are 22mm O.D. with front-left-right and rear-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

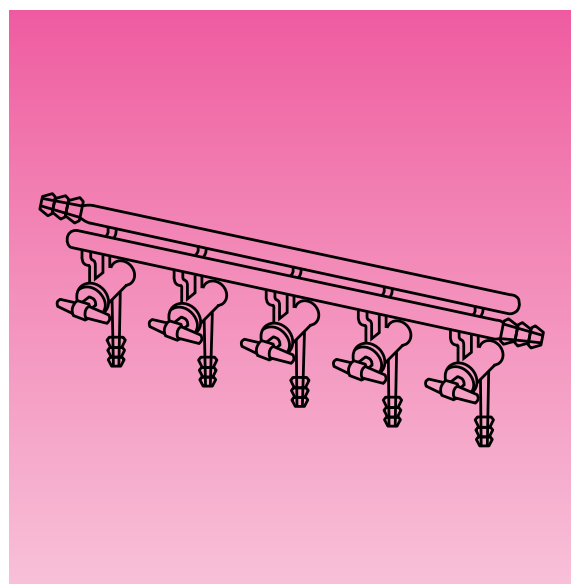
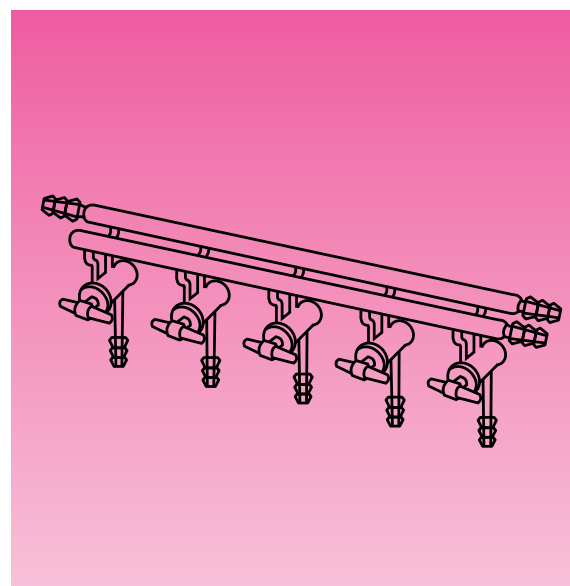
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-522-02	5	450	



MANIFOLD, VACUUM/INERT GAS, ALL GLASS

With 4mm double oblique, high vacuum hollow glass stopcocks precision ground with corresponding numbers on barrel and plug. Lower vacuum chambers on stopcock are evacuated with a separate hole in the plug in order to hold the plug in the stopcock barrels. Beams are 22mm O.D. with front-right and rear-left-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

Code	Number of Ports	Overall Width (mm)	Price (each)
AP-524-02	4	375	
AP-524-04	5	450	



MANIFOLD, HIGH VACUUM SOLID GLASS STOPCOCKS

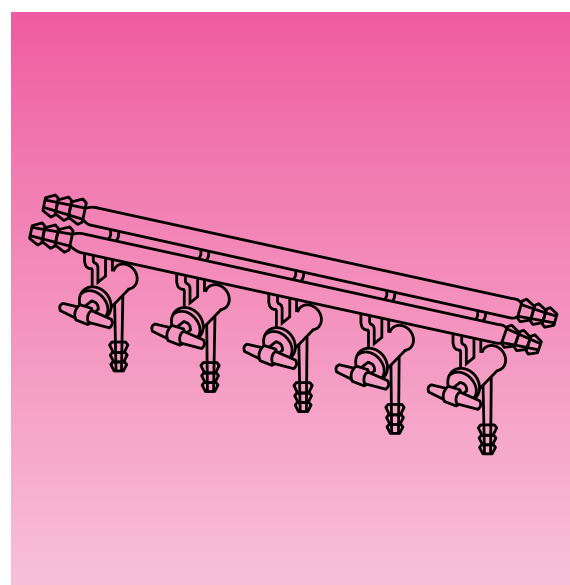
With 4mm double oblique, high vacuum solid glass stopcocks precision ground with corresponding numbers on barrel and plug. Solid glass stopcocks have constant pressure retention devices. Beams are 22mm O.D. with front-left-right and rear-left-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

Code	Number of Ports	Overall Width (mm)	Price (each)
AP-526-02	3	300	
AP-526-04	4	375	
AP-526-06	5	450	
Accessories:			
AP-536-06	Replacement stainless steel retention kit for 16.2/56 glass stopcock		

MANIFOLD, HIGH VACUUM SOLID GLASS STOPCOCKS

With 4mm double oblique, high vacuum solid glass stopcocks precision ground with corresponding numbers on barrel and plug. Solid glass stopcocks have constant pressure retention devices. Beams are 22mm O.D. with front-left and rear-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

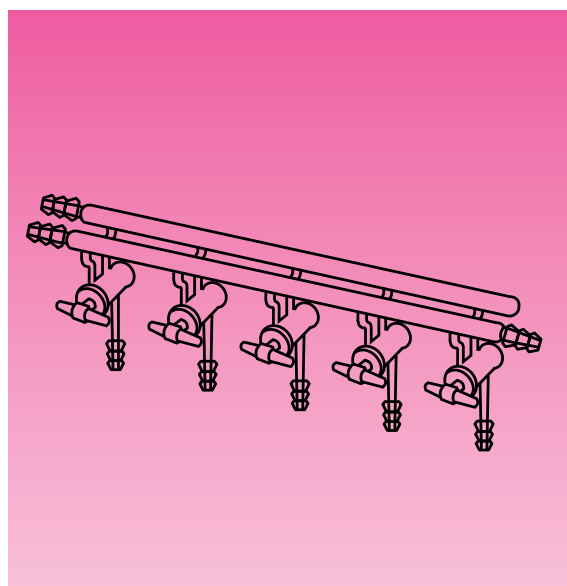
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-528-02	3	300	
AP-528-04	4	375	
AP-528-06	5	450	
Accessories:			
AP-536-06	Replacement stainless steel retention kit for 16.2/56 glass stopcock		



MANIFOLD, HIGH VACUUM SOLID GLASS STOPCOCKS

With 4mm double oblique, high vacuum solid glass stopcocks precision ground with corresponding numbers on barrel and plug. Solid glass stopcocks have constant pressure retention devices. Beams are 22mm O.D. with front-right and rear-left 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

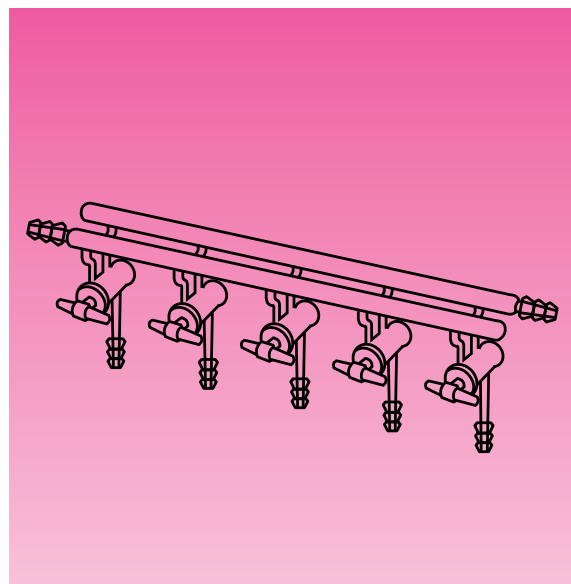
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-530-02	4	375	
Accessories:			
AP-536-06	Replacement stainless steel retention kit for 16.2/56 glass stopcock		



MANIFOLD, HIGH VACUUM SOLID GLASS STOPCOCKS

With 4mm double oblique, high vacuum solid glass stopcocks precision ground with corresponding numbers on barrel and plug. Solid glass stopcocks have constant pressure retention devices. Beams are 22mm O.D. with front-left-right and rear-left 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

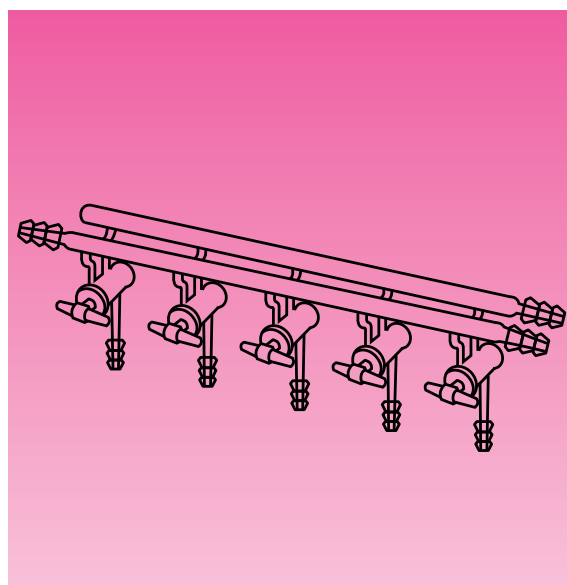
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-532-02	3	300	
AP-532-04	4	375	
AP-532-06	5	450	
Accessories:			
AP-536-06	Replacement stainless steel retention kit for 16.2/56 glass stopcock		



MANIFOLD, HIGH VACUUM SOLID GLASS STOPCOCKS

With 4mm double oblique, high vacuum solid glass stopcocks precision ground with corresponding numbers on barrel and plug. Solid glass stopcocks have constant pressure retention devices. Beams are 22mm O.D. with front-left and rear-left-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

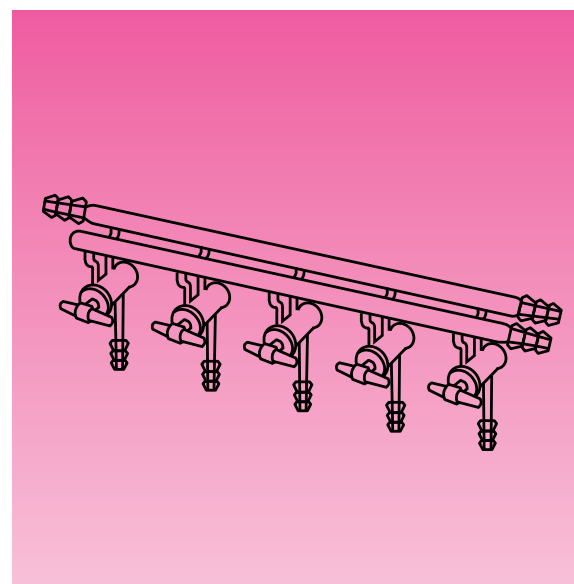
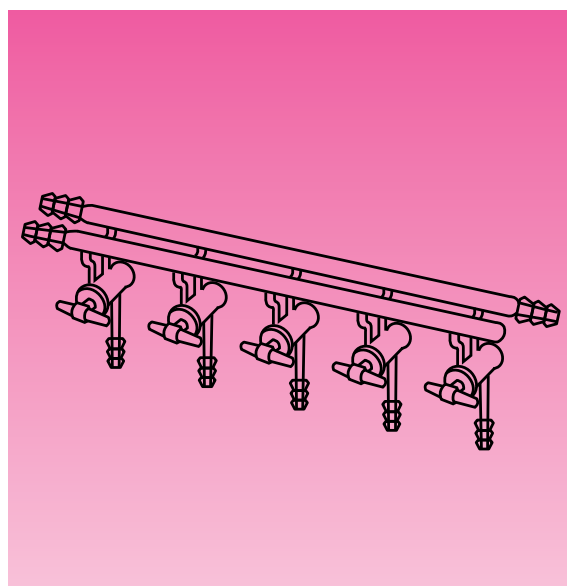
Code	Number of Ports	Overall Width (mm)	Price (each)
AP-534-02	4	375	
AP-534-04	5	450	
Accessories:			
AP-536-06	Replacement stainless steel retention kit for 16.2/56 glass stopcock		



MANIFOLD, HIGH VACUUM SOLID GLASS STOPCOCKS

With 4mm double oblique, high vacuum solid glass stopcocks precision ground with corresponding numbers on barrel and plug. Solid glass stopcocks have constant pressure retention devices. Beams are 22mm O.D. with front-left-right and rear-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

Code	Number of Ports	Overall Width (mm)	Price (each)
AP-536-02	4	375	
AP-536-04	5	450	
Accessories:			
AP-536-06	Replacement stainless steel retention kit for 16.2/56 glass stopcock		



MANIFOLD, HIGH VACUUM SOLID GLASS STOPCOCKS

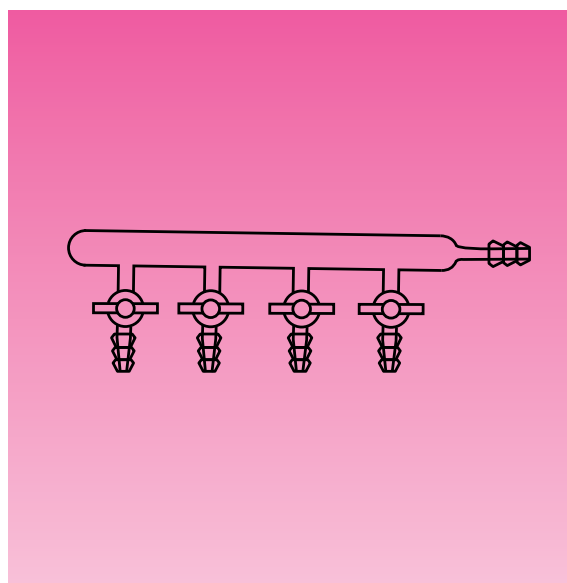
With 4mm double oblique, high vacuum solid glass stopcocks precision ground with corresponding numbers on barrel and plug. Solid glass stopcocks have constant pressure retention devices. Beams are 22mm O.D. with front-right and rear-left-right 10mm hose connections. Distance between stopcocks is 75mm centre to centre.

Code	Number of Ports	Overall Width (mm)	Price (each)
AP-538-02	5	450	
Accessories:			
AP-536-06	Replacement stainless steel retention kit for 16.2/56 glass stopcock		

VACUUM MANIFOLD, TEFLON® STOPCOCKS

General purpose manifold with 2mm or 4mm Teflon® stopcocks. Main tube is 22mm O.D. with serrated hose connection (10mm O.D.) at right side. Delivery ports have 10mm serrated hose connections. Distance between stopcocks is 75mm.

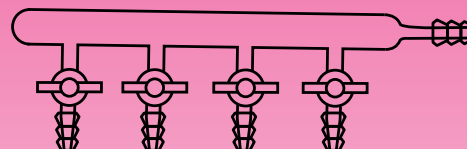
Code	Number of Ports	Stopcock Bore (mm)	Price (each)
AP-540-02	4	2	
AP-540-04	4	4	
AP-540-06	6	4	
Accessories:			
AP-682-02	Replacement 2mm Teflon® Plug Only		
AP-682-04	Replacement 4mm Teflon® Plug Only		



VACUUM MANIFOLD, TEFLON® STOPCOCKS

General purpose manifold with 2mm or 4mm Teflon® stopcocks. Main tube is 22mm O.D. with serrated hose connection(10mm O.D.) at left side. Delivery ports have 10mm serrated hose connections. Distance between stopcocks is 75mm.

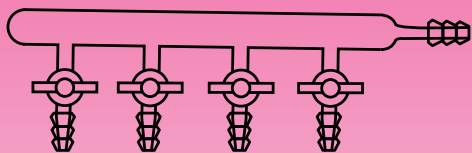
Code	Number of Ports	Stopcock Bore (mm)	Price (each)
AP-542-02	4	4	
AP-542-04	6	4	
Accessories:			
AP-682-04	Replacement 4mm Teflon® Plug Only		



VACUUM MANIFOLD, TEFLON® STOPCOCKS

General purpose manifold with 2mm or 4mm Teflon® stopcocks. Main tube is 22mm O.D. with serrated hose connection(10mm O.D.) at both ends. Delivery ports have 10mm serrated hose connections. Distance between stopcocks is 75mm.

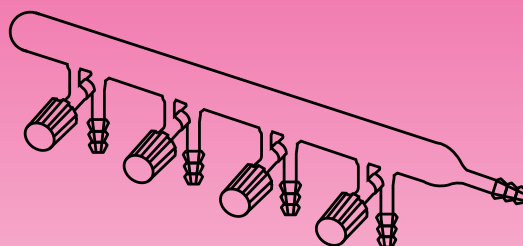
Code	Number of Ports	Stopcock Bore (mm)	Price (each)
AP-544-02	4	2	
AP-544-04	4	4	
AP-544-06	6	2	
AP-544-08	6	4	
Accessories:			
AP-682-02	Replacement 2mm Teflon® Plug Only		
AP-682-04	Replacement 4mm Teflon® Plug Only		



VACUUM MANIFOLD, HIGH VACUUM VALVES

With a serrated hose connection(10mm O.D.) at right hand side. Main tube is 22mm O.D. and the distance between valves is 100mm centre to centre.

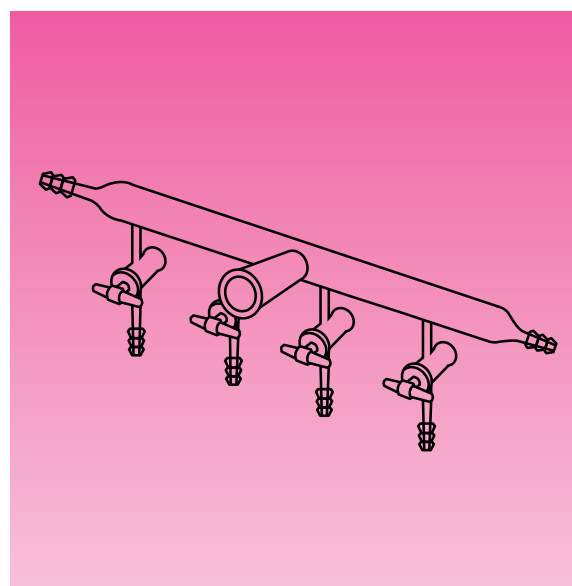
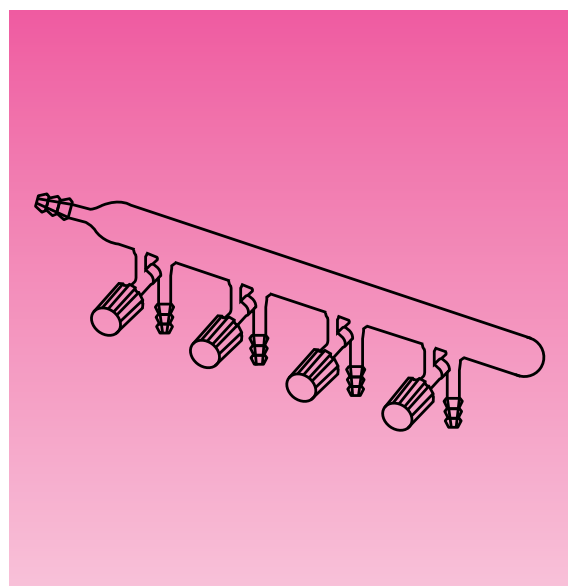
Code	Number of Ports	Stopcock Bore (mm)	Overall Width (mm)	Price (each)
AP-546-02	3	0-4	325	
AP-546-04	4	0-4	425	
AP-546-06	5	0-4	525	
Accessories:				
AP-720-06	0-4mm high vacuum plug and control knob. (With Viton® 0-ring at tip)			
AP-652-28	Viton® 0-ring for 0-4mm high vacuum plug shaft			
AP-652-24	Viton® 0-ring for 0-4mm high vacuum valve tip			



VACUUM MANIFOLD, HIGH VACUUM VALVES

With a serrated hose connection(10mm O.D.) at left hand side. Main tube is 22mm O.D. and the distance between valves is 100mm centre to centre.

Code	Number of Ports	Stopcock Bore (mm)	Overall Width (mm)	Price (each)
AP-548-02	3	0-4	325	
AP-548-04	4	0-4	425	
AP-548-06	5	0-4	525	
Accessories:				
AP-720-06	0-4mm high vacuum plug and control knob. (With Viton® 0-ring at tip)			
AP-652-26	Viton® 0-ring for 0-4mm high vacuum plug shaft			
AP-652-24	Viton® 0-ring for 0-4mm high vacuum valve tip			



MANIFOLD, NITROGEN/ARGON LINE, TEFLON®

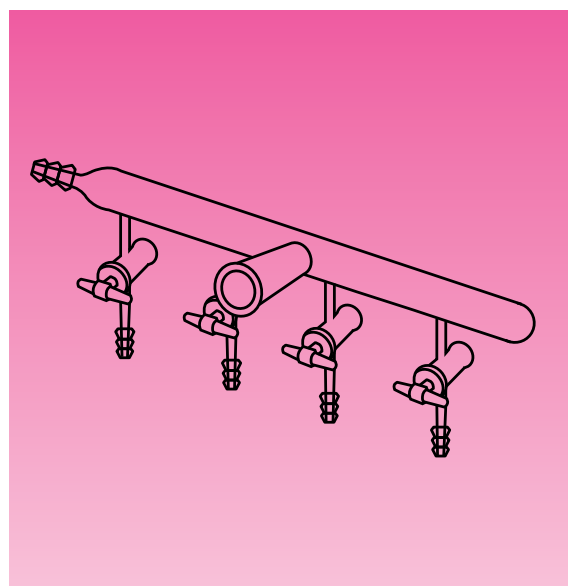
With 14/23 outer joint at the center to fit a rubber septum for keeping syringes under an inert environment cutting down on the number used. Main tube is 22mm O.D. with both ends connections(10mm). Delivery ports have 8mm hose connections.

Code	Number of Ports	Stopcock Bore (mm)	Joint	Price (each)
AP-550-02	4	2	14/23	
AP-550-04	4	4	14/23	
Accessories:				
AP-682-02	Replacement 2mm Teflon® Plug Only			
AP-682-04	Replacement 4mm Teflon® Plug Only			

MANIFOLD, NITROGEN/ARGON LINE, TEFLON®

With 14/23 outer joint at the center to fit a rubber septum for keeping syringes under an inert environment cutting down on the number used. Main tube is 22mm O.D. with left hose connections (10mm). Delivery ports have 8mm hose connections.

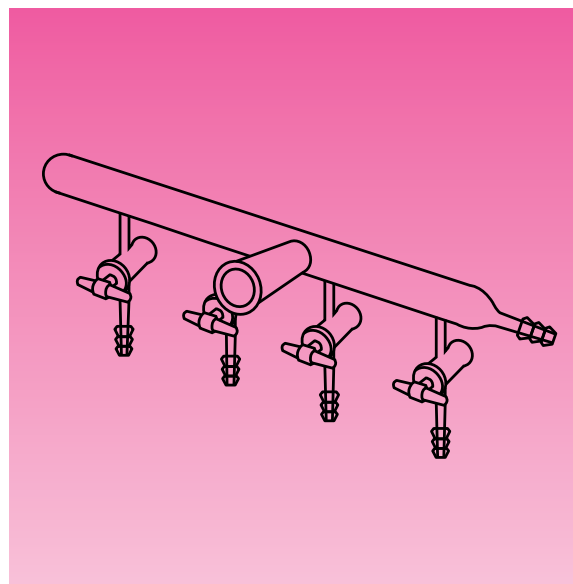
Code	Number of Ports	Stopcock Bore (mm)	Joint	Price (each)
AP-552-02	4	2	14/23	
Accessories:				
AP-690-04	Stopcock, PTFE, double oblique 4mm bore			



MANIFOLD, NITROGEN/ARGON LINE, TEFLON®

With 14/23 outer joint at the center to fit a rubber septum for keeping syringes under an inert environment cutting down on the number used. Main tube is 22mm O.D. with right hose connections (10mm). Delivery ports have 8mm hose connections.

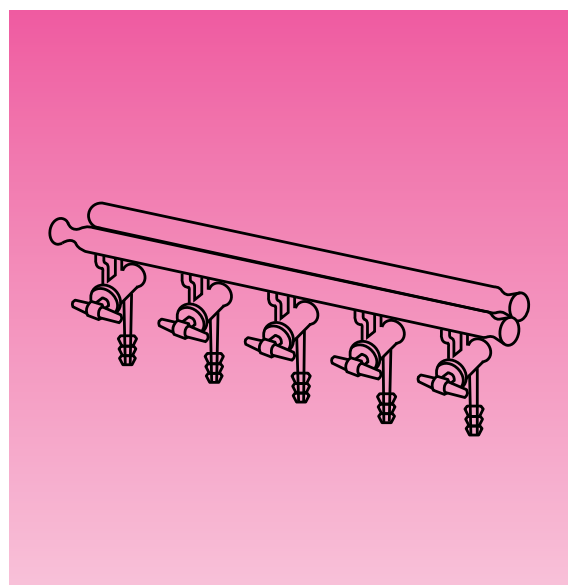
Code	Number of Ports	Stopcock Bore (mm)	Joint	Price (each)
AP-554-02	4	4	14/23	
Accessories:				
AP-682-04	Replacement 4mm Teflon® Plug Only			



MANIFOLD, DOUBLE, HOLLOW GLASS STOPCOCKS, SPHERICAL JOINT

With 35/20 ball joints and 4mm double oblique high vacuum hollow glass stopcocks precision ground with corresponding numbers on barrel and plugs. Lower vacuum chambers on stopcock are evacuated with a separate hole in the plug in order to hold the plug in the stopcock barrels.

Code	Number of Ports	Overall Width (mm)	Glass Stopcock	Price (each)
AP-556-02	4	365	hollow	
AP-556-04	5	450	hollow	



Manifold, Vacuum/Inert gas, all glass

Code	Number of Ports	Overall Width (mm)
AP-512-06	5	450

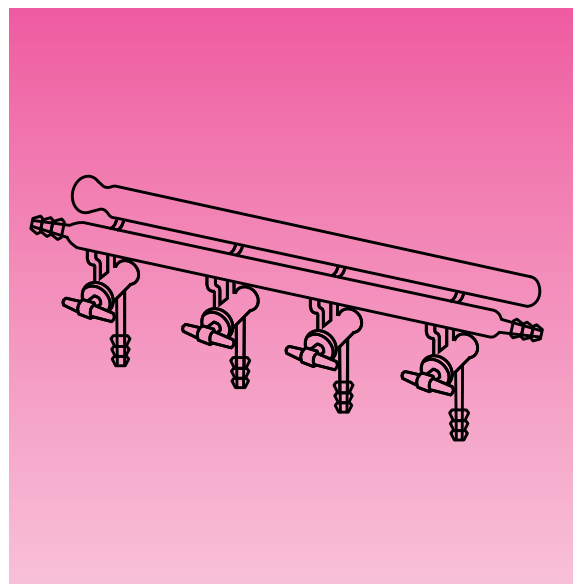
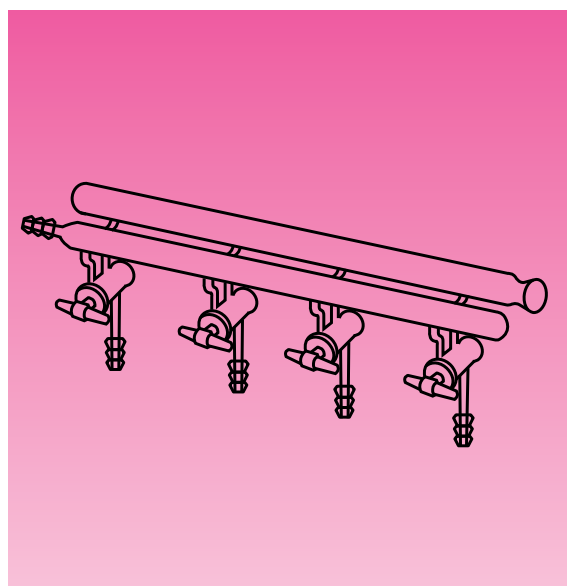


InterChange

MANIFOLD, DOUBLE, HOLLOW GLASS STOPCOCKS, RIGHT HAND SIDE

With high vacuum hollow glass stopcocks. The smaller O.D.(17mm) front tube is for inert gases and the larger O.D.(22mm) back tube is for vacuum, which has a 35/20 spherical socket on the right hand side.

Code	Number of Ports	Hose Connections (mm)	Glass Stopcock	Price (each)
AP-558-02	4	10	Hollow	



MANIFOLD, DOUBLE, HOLLOW GLASS STOPCOCKS, LEFT HAND SIDE

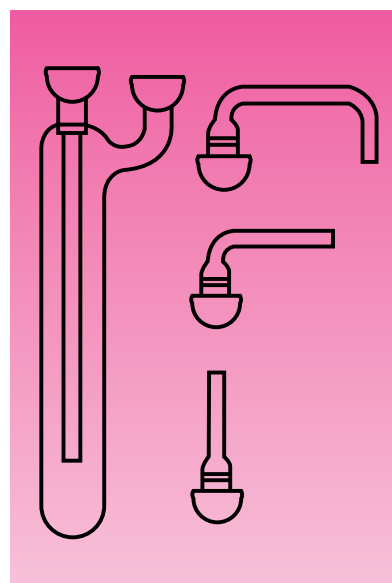
Similar to above manifold, but with the 35/20 spherical socket on the left hand side

Code	Number of Ports	Hose Connections (mm)	Glass Stopcock	Price (each)
AP-560-02	4	10	Hollow	

VACUUM TRAP, SPHERICAL JOINTS

With 35/20 spherical joints for added flexibility. Trap body is 50mm O.D. and 360 mm in length. Please order the three adapters and 35/20 SS pinch clamp separately.

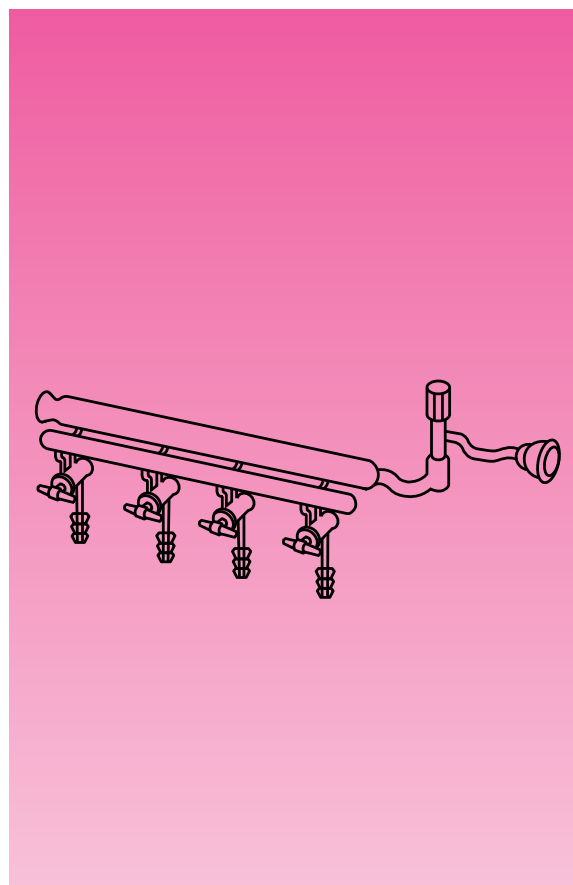
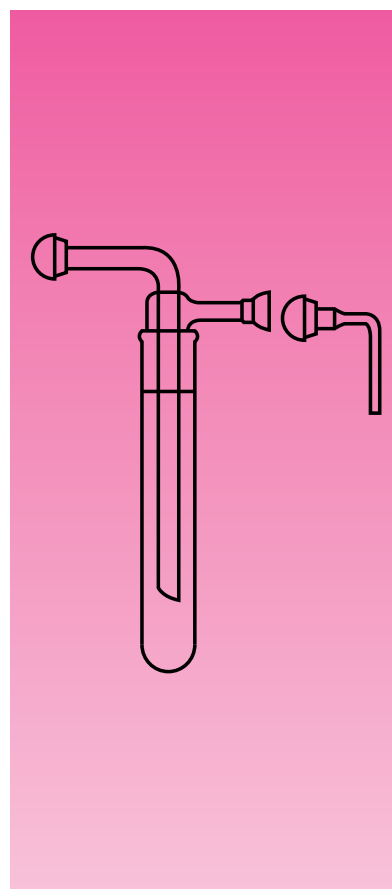
Code	Joints	Description	Price (each)
AP-562-02	35/20	Vacuum Trap body	
AP-562-04	35/20	Top Adapter, 16mm O.D. outlet	
AP-564-04	35/20	Middle adapter/pump Adapter 16mm O.D. outlet	
AP-562-08	35/20	Bottom Adapter, 16mm O.D. outlet	
AP-566-08	35/20	Clamps for 35/20 ball joints	



VACUUM TRAP, 35/20 BALL JOINTS

For use with vacuum manifolds having 35/20 socket joints. Please order the pump adapter and socket clamp separately.

Code	Joint	O.D. Outer Body (mm)	Length, Outer Body Below Joint(mm)	Price (each)
AP-564-02	45/40	50	250	
Accessories:				
AP-564-04	Pump Adapter			
AP-566-08	Clamps for 35/20 ball joint			



MANIFOLD, DOUBLE, HIGH VACUUM VALVE AND 35/20 SPHERICAL JOINT

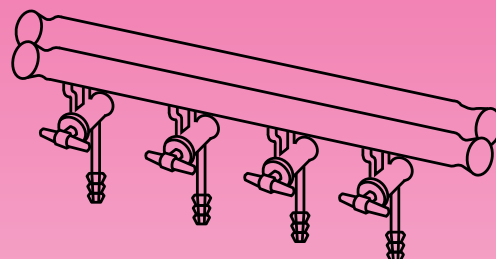
This manifold is designed to incorporate a 0-8mm high vacuum valve as the vacuum shut-off. The front tube is for inert gases (17mm O.D.), with a 10mm hose connection. The rear tube is for vacuum (22mm O.D.), with two 35/20 socket joints. Please order each component separately.

Code	Description	Price (each)
AP-566-02	Vacuum/gas manifold	
Accessories:		
AP-572-04	0-8mm high vacuum plug and control knob Viton® O-ring at tip	
AP-630-10	35# ball stopper	
AP-566-08	Clamps for 35/20 ball joint	
AP-652-38	Tip O-ring for 0-8mm high vacuum valve plug	
AP-652-40	Shaft O-ring for 0-8mm high vacuum valve plug	

MANIFOLD, WITH #15 O-RING JOINTS

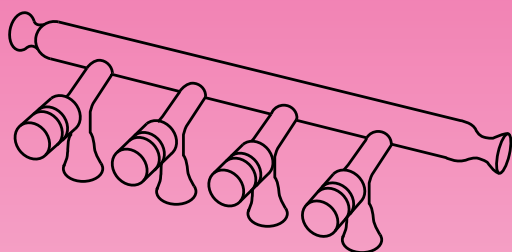
With 4mm double hollow high vacuum stopcocks. This four-port manifold is fitted with two 14/23 and 24/29 inner joints, and is 100mm centre to centre joints. #15 O-ring joint stopper (AP-630-02) and #15 O-ring joint to serrated hose adapter have to be ordered separately. Viton® O-rings can be ordered using item #AP-652-44.

Code	Description	Price (each)
AP-568-02	Vacuum/gas manifold	
Accessories:		
AP-630-04	#15 O-ring joint stainless steel clamp	
AP-652-44	#116 Viton® O-ring	
AP-630-02	#15 O-ring joint stopper	
AP-578-02	10mm O.D. serrated hose connection	
AP-578-04	16mm O.D. serrated hose connection	
M131605	16mm O.D. serrated hose connection	



MANIFOLD, VACUUM, SINGLE, WITH #15 O-RING JOINTS

Four ports are spaced 100mm centre to centre, with 0-8mm high vacuum valves mounted on 45° angle to the operator for easy access. Overall width is 395mm. Standard taper components or stoppers are available below and have to be ordered separately.



Code	Description	Price (each)
AP-570-02	Vacuum manifold, single bank	
Accessories:		
AP-572-04	0-8mm high vacuum plug and control knob Viton® O-ring at tip	
AP-630-04	#15 O-ring joint stainless steel clamp	
AP-652-44	#116 Viton® O-ring	
AP-630-02	#15 O-ring joint stopper	
AP-578-02	10mm O.D. serrated hose connection	
AP-578-04	16mm O.D. serrated hose connection	

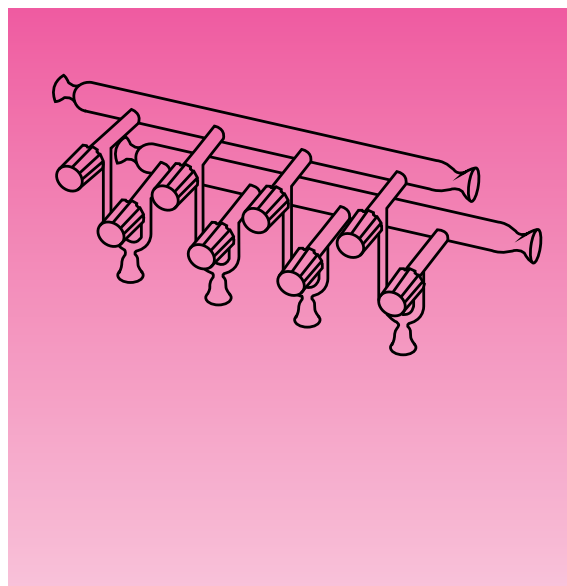


MANIFOLD, DOUBLE BANKLS, WITH #15 O-RING JOINTS

Forward facing 0-8mm high vacuum valves allow easy operation of manifold inside of a fume hood. Main parts are spaced 100mm centre to centre.

Adaptor components or stoppers are available below and have to be ordered separately.

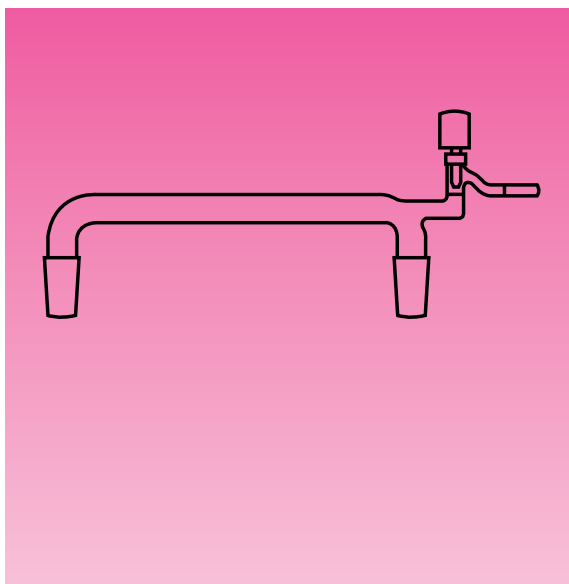
Code	Description	Price (each)
AP-572-02	Vacuum manifold, single bank	
Accessories:		
AP-572-04	0-8mm high vacuum plug and control knob Viton® O-ring at tip	
AP-736-14	#15 O-ring joint stainless steel clamp	
AP-652-44	#116 Viton® O-ring	
AP-630-02	#15 O-ring joint stopper	
AP-580-06	10mm O.D. serrated hose connection	
AP-578-04	16mm O.D. serrated hose connection	



MANIFOLD, SOLVENT TRANSFER

Supplied with high vacuum valve with PTFE O-ring at tip and PTFE wiper to protect Viton® O-ring on shaft.

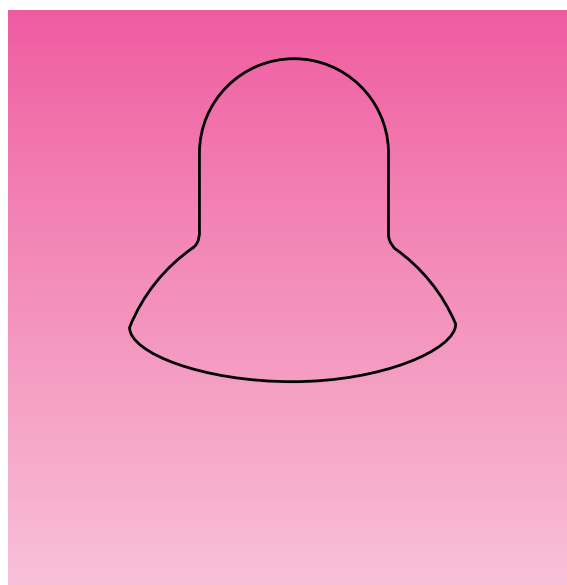
Code	Capacity (ml)	Approx. Height (mm)	Price (each)
AP-574-02	24/29	140*380	
Accessories:			
AP-734-34	0-4mm high vacuum plug and control knob (Teflon® O-ring at tip)		



STOPPER, WITH #15 O-RING JOINT

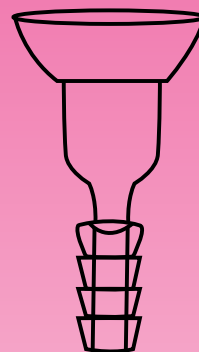
For use with manifolds having #15 O-ring joints. Supplied completely with One #116 (AP-652-44) Viton® O-ring.

Code	Description	Price (each)
AP-630-02	#15 O-ring joint stopper	
Accessories:		
AP-630-04	#15 O-ring joint stainless steel clamp	
AP-652-44	#116 Viton® O-ring	



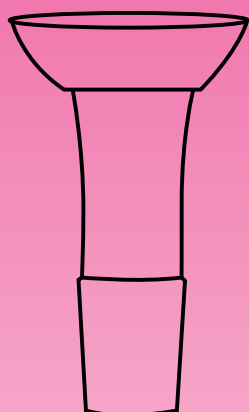
ADAPTER, #15 O-RING JOINT TO SERRATED HOSE CONNECTION

Code	Description	Price (each)
AP-578-02	10mm O.D. serrated hose connection	
AP-578-04	16mm O.D. serrated hose connection	
Accessories:		
AP-630-04	#15 O-ring joint stainless steel clamp	
AP-652-44	#116 Viton® O-ring	



ADAPTER, #15 O-RING JOINT TO INNER JOINT

Code	Description	Price (each)
AP-580-02	From #15 O-ring joint to 14/23 inner joint	
AP-580-04	From #15 O-ring joint to 19/26 inner joint	
AP-580-06	From #15 O-ring joint to 24/29 inner joint	

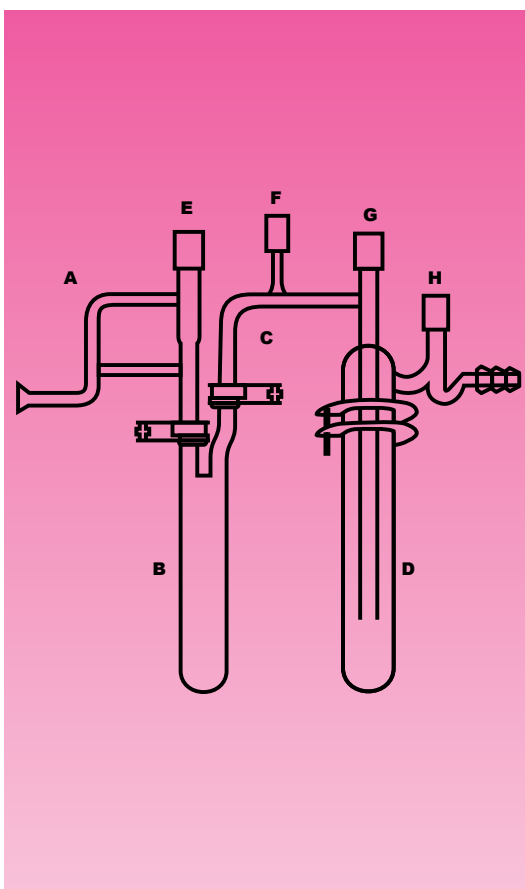


TRAP, VACUUM

DUAL VACUUM TRAP ASSEMBLY, WITH #15 O-RING JOINTS

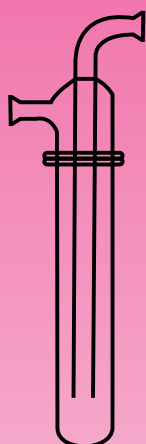
For use with manifolds having #15 O-ring joints on banks (i.e., AP-572 above) (E) and (G) are 0-12mm high vacuum valves as the shut off. (F) is a 0-4mm high vacuum valve having 9mm O.D. tubing towards the back of the drawing. (H) is a 0-8mm high vacuum valve. The pre-trap uses two 28/15 ball joints to add more flexibility to the assembly. The pre-trap uses a 57mm horseshoe clamp (AP-736) and two 57mm O-ring flanges to make quick connection. The #15 O-ring joint at the far-left is used to connect to manifold. The complete assembly comes with one brown Viton® O-ring (AP-652-44), two #15 O-ring clamps, and one 57mm horseshoe clamp.

Code	Description	Price (each)
AP-580-10	Dual trap assembly, complete	
Accessories:		
AP-720-06	0-4mm high vacuum plug and control knob Viton® O-ring at tip	
AP-572-04	0-8mm high vacuum plug and control knob Viton® O-ring at tip	
AP-724-04	0-12mm high vacuum plug and control knob Viton® O-ring at tip	
AP-736-08	57mm horseshoe clamp	
AP-630-04	#15 O-ring joint stainless steel clamp	
AP-652-44	#116 Viton® O-ring	
AP-652-62	#331 Viton® O-ring	



VACUUM TRAP, #15 O-RING JOINT

Supplied with two AP-652-44 Viton® O-rings.

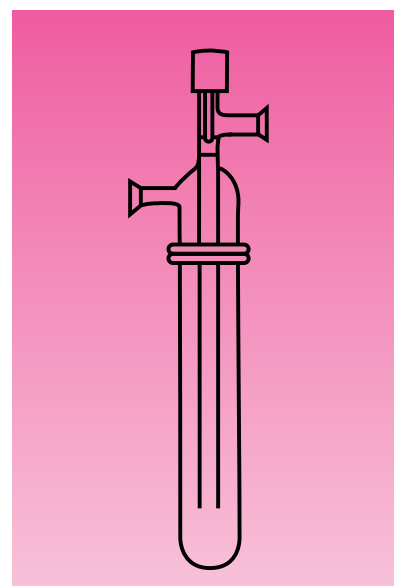


Code	Joint	O.D. Outer Body (mm)	Length, Outer Body Below Joint (mm)	O.D. Inner & Side Tube (mm)	Price (each)
AP-582-02	45/40	50	250	18	
Accessories:					
AP-630-04	#15 O-ring joint stainless steel clamp				
AP-652-44	#116 Viton® O-ring				
AP-582-08	Adapter with #15 O-ring joint, 19mm Outlet, 90° Angle				
AP-582-10	Adapter with #15 O-ring joint, 19mm Outlet, Straight				

VACUUM TRAP,WITH #15 O-RING JOINTS

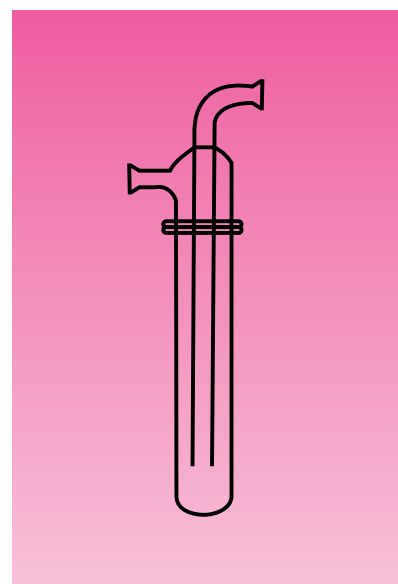
Two-piece design, with a 0-12mm high vacuum valve as the shut off. Connection is made via a 57mm 0-ring flat flange(supplied, item AP-736-08) and a #331 Viton® 0-ring (supplied, item AP-652-62).Outer body length below flange is 300mm. Smaller size tubing adapters are also available below. Please order #15 0-ring joint stainless Steel clamp (AP-630-04) separately.

Code	Description	Price (each)
AP-584-02	Vacuum trap with #15 0-ring joint	
Accessories:		
AP-724-04	0-12mm high vacuum plug and control knob (with Viton® 0-ring at tip)	
AP-736-08	57mm horseshoe clamp	
AP-630-04	#15 0-ring joint stainless steel clamp	
AP-652-44	#116 Viton® 0-ring	
AP-652-62	#331 Viton® 0-ring	



VACUUM TRAP,WITH #15 O-RING JOINT

For use with above manifolds with #15 0-ring joint. The seal between upper and lower parts is made with a 57mm flat 0-ring flange. Trap body is 57mm O.D.x300mm in length. Complete trap assembly comes with AP-736-08 horseshoe clamp, One AP-652-62 Viton® O-ring and two AP-652-44 Viton® O-rings.

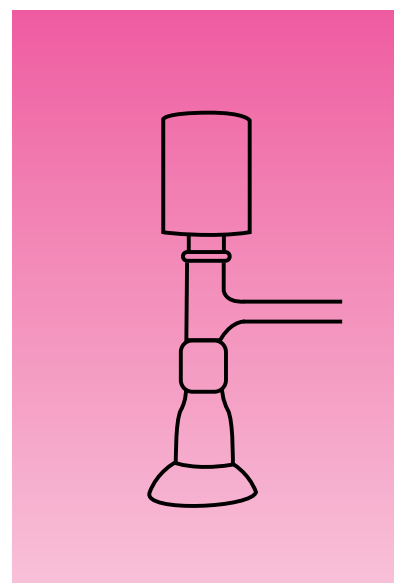


Code	Description	Price (each)
AP-586-02	Vacuum trap assembly, complete	
Accessories:		
AP-736-08	57mm horseshoe clamp	
AP-630-04	#15 0-ring joint stainless steel clamp	
AP-652-44	#116 Viton® 0-ring	
AP-652-62	#331 Viton® 0-ring	

ADAPTER, CONNECTING, INLET

Adapter has a #15 0-ring joint with a 0-4 mm high vacuum valve at a 90° angle connected to a piece of 10mm O.D. medium wall tubing. Overall height is 100mm. Each adapter is supplied completely with one #116 Viton® O-ring.

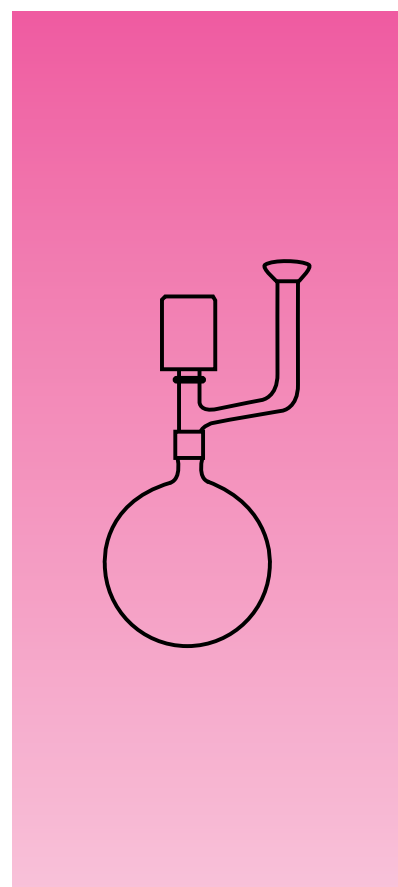
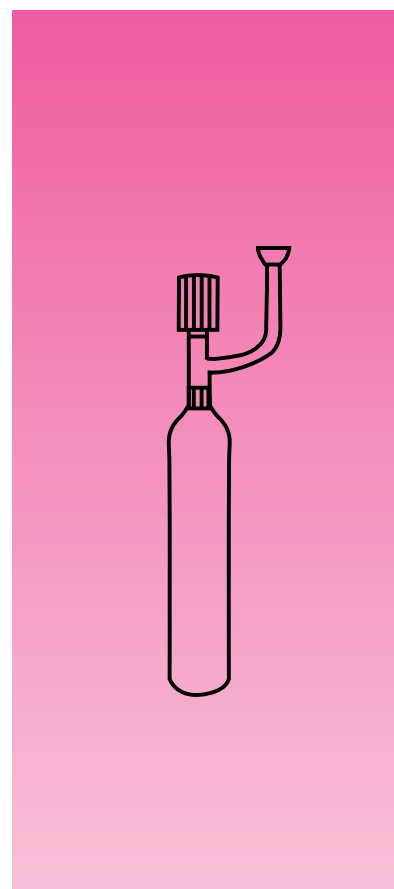
Code	Description	Price (each)
AP-588-02	Adapter, 90°, with #15 0-ring joint	
Accessories:		
AP-720-06	High vacuum valve, with Viton® 0-ring at tip	
AP-630-04	#28 clamp for #15 0-ring joint	
AP-652-44	#116 Viton® 0-ring	



STORAGE VESSEL, #15 O-RING JOINT

Storage vessel with a #15 O-ring joint on the sidearm and a high vacuum valve to control gas or liquid flow into the vessel. Supplied complete with one #116 Viton® O-ring.

Code	Capacity (ml)	Valve Size	Approx. Height (mm)	Price (each)
AP-590-02	50	0-4mm	190	
AP-590-04	100	0-8mm	235	
AP-590-06	350	0-8mm	240	
Replacement Components:				
AP-724-02	0-4mm high vacuum plug and control knob (Teflon® O-ring at tip)			
AP-416-24	0-8mm high vacuum plug and control knob (Teflon® O-ring at tip)			
AP-736-14	#15 O-ring joint stainless steel clamp			
AP-716-18	#116 Viton® O-ring			



STORAGE FLASK, #15 O-RING JOINT

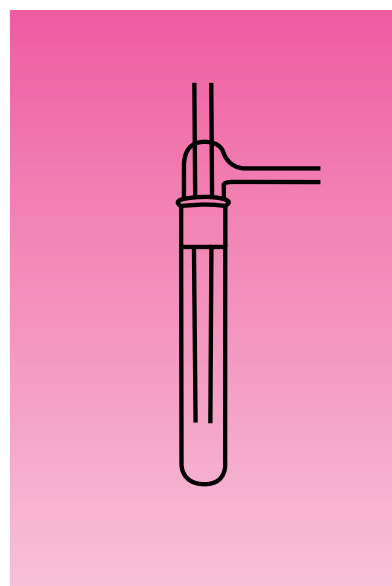
Flask has a #15 O-ring joint on the sidearm and a high vacuum valve to control gas or liquid flow into the vessel. Supplied complete with one #116 Viton® O-ring.

Code	Capacity (ml)	Valve Size	Approx. Height (mm)	Price (each)
AP-592-02	250	0-4mm	160	
AP-592-04	500	0-8mm	190	
AP-592-06	1000	0-8mm	220	
Accessories:				
AP-736-16	0-8mm high vacuum plug and control knob (Teflon® O-ring at tip)			
AP-630-04	#15 O-ring joint stainless steel clamp			
AP-652-44	#116 Viton® O-ring			

VACUUM TRAP

With joints for easy removal of condensate. Body length is measured below the joint. Connections at centre tube is 10mm O.D. while side tube hose connection is 13mm.

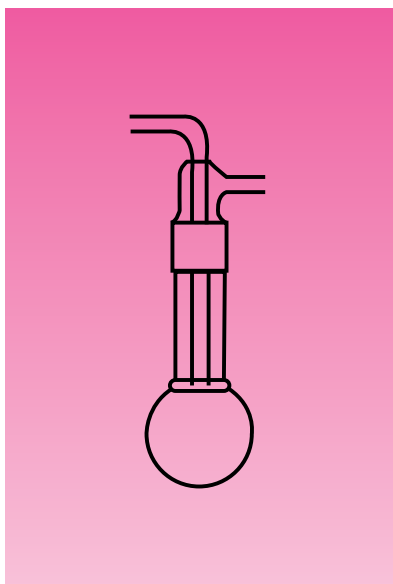
Code	Joint	O.D. Outer Body (mm)	Length, Outer Body Below Joint (mm)	O.D. Inner & Side Tube (mm)	Price (each)
AP-594-02	29/36	32	200	10	
AP-594-04	34/35	40	225	13	
AP-594-06	40/38	50	250	16	
AP-594-08	45/40	50	250	22	
AP-594-10	50/50	55	275	26	
AP-594-12	55/50	60	300	30	



VACUUM TRAP

Trap is designed for large volume solvent removal by vacuum. With 45/40 joint. Connections at centre tube is 12mm O.D. while side tube is 10mm.

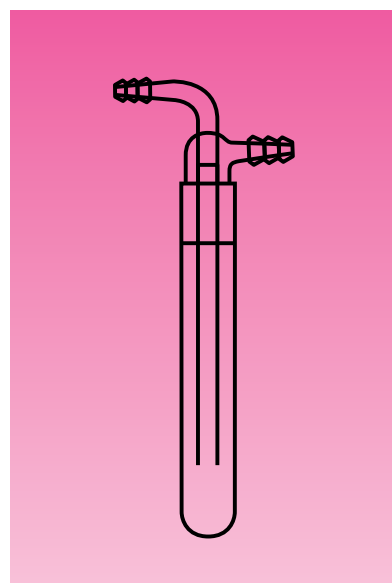
Code	Flask Capacity (mm)	Fits Dewar Flask Size	Approx. Overall Height x Width (mm)	Price (each)
AP-596-02	500	1900 ml	310x130	
AP-596-04	1000	4300 ml	340x130	



VACUUM TRAP

With joints for easy removal of condensate. Serrated hose connections for side tube have an O.D. of 13mm at the smallest serration and 16mm at the largest serration. Centre tube hose connection is always 10mm for easy connection to manifold bank tubes which are also with 10mm hose connection.

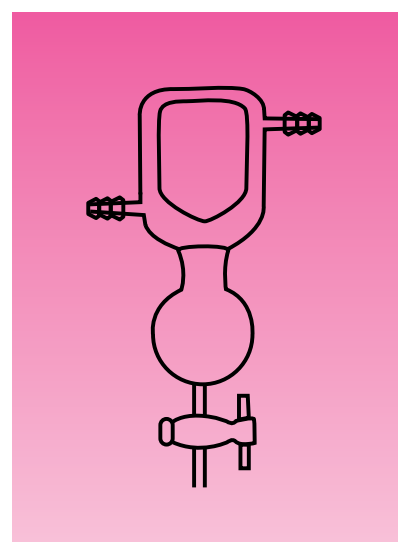
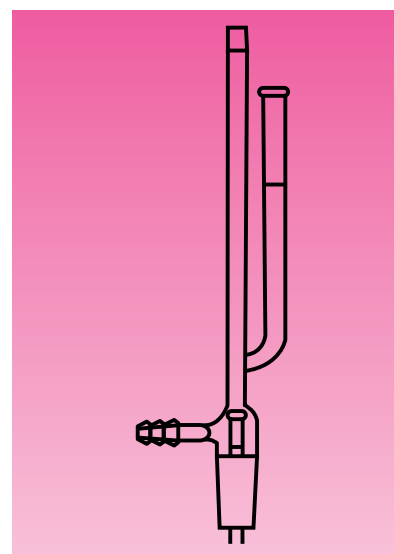
Code	Joint	O.D. Outer Body (mm)	Length, Outer Body Below Joint (mm)	O.D. Inner & Side Tube (mm)	Price (each)
AP-598-02	24/29	30	200	10	
AP-598-04	29/36	32	200	10	
AP-598-06	34/35	40	225	16	
AP-598-08	40/38	45	250	16	
AP-598-10	45/40	50	250	22	
AP-598-12	50/50	55	275	26	
AP-598-14	55/50	60	300	30	



NMR TUBE WASHER

With 24/29 inner joint and 10mm hose connection. For 5mm NMR tube only. The NMR tube is inserted into the tube cleaner with its plastic cap placed on the closed end to provide support and a vacuum seal. The washing solvent is sequentially added through the side tube while a vacuum is applied through the hose connection.

Code	Joint	Price (each)
AP-600-02	24/29	



VACUUM TRAP, MICRO, DEWAR

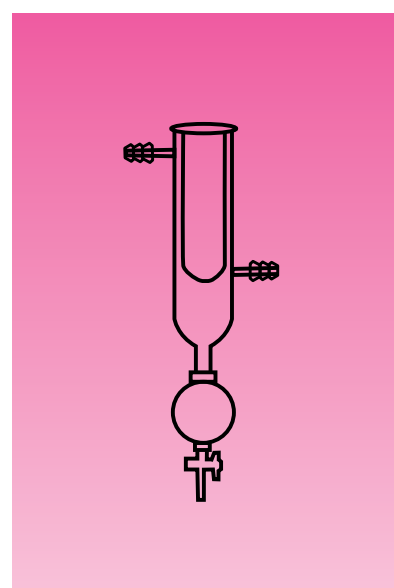
Small scale dry ice, Dewar style trap. The dry-ice chamber is 40mm I.D. x 60mm in length. PTFE stopcock for grease-free operation.

Code	Lower Reservoir (ml)	Stopcock Type	Stopcock Bore	Price (each)
AP-602-02	100	Glass	2	
AP-602-04	100	Teflon®	2	
Accessories:				
AP-682-02	Replacement 2mm Teflon® Plug Only			
AP-738-06	Replacement 2mm Glass Plug Only			
AP-738-08	Replacement S.S. Retention for 2mm Glass Stopcock			

VACUUM TRAP, DEWAR TYPE

Dry ice, Dewar style trap condenser designed for large volume solvent removal. Select either glass stopcock for better vacuum or PTFE stopcock for grease-free operation. With 10mm hose connections.

Code	Lower Reservoir (ml)	Stopcock Type	Stopcock Bore	Inner Chamber I.D.xDepth (mm)	Price (each)
AP-604-02	250	GLASS	4	59x230	
AP-604-04	250	Teflon®	4	59x230	
AP-604-06	500	GLASS	4	75x275	
AP-604-08	500	Teflon®	4	75x275	
AP-604-10	1000	GLASS	4	95x330	
AP-604-12	1000	Teflon®	4	95x330	
Accessories:					
AP-682-04	Replacement 4mm PTFE Plug Only				
AP-700-04	Replacement 4mm Glass Plug Only				
AP-702-04	Replacement S.S. Retention for 4mm Glass Stopcock				

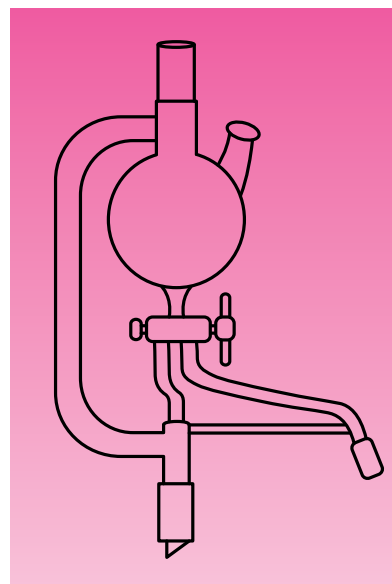


SOLVENT STILL

SOLVENT STILL HEAD, REPURIFICATION (GREASE-FREE)

Head only. Condenser and flasks not supplied. Access port has threaded 1/4" joint to accept a Teflon®-lined silicone septum with a compression cap (supplied). Threaded 1/4" also accept regular 1/4" glass or Teflon® stopper (not supplied).

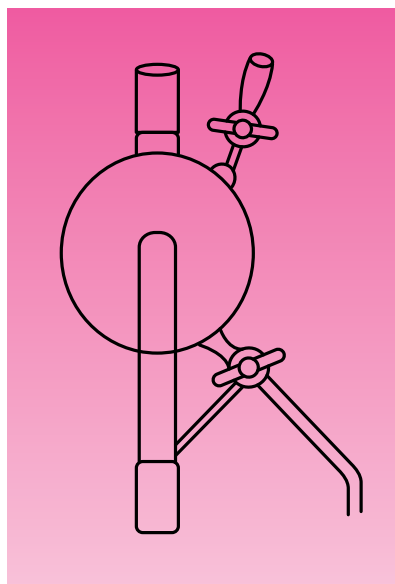
Code	Capacity(mL)	Joints	Price (each)
AP-606-02	250	24/29	
AP-606-04	500	24/29	
Accessories:			
AP-688-04	Replacement 4mm Double Oblique PTFE Plug		
AP-664-06	Replacement Nylon® compression cap		
AP-666-04	Replacement Teflon®-lined silicone septum		



SOLVENT STILL HEAD

Similar to above but with drip tip on the delivery port rather than 1/4" inner joint. With 4mm straight bore stopcock in the upper portion for easy syringe needle access.

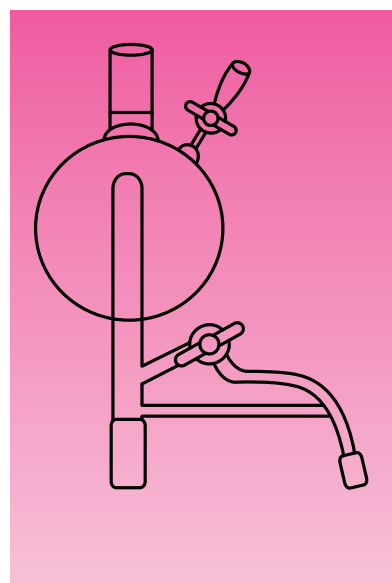
Code	Capacity(mL)	Top Joint	Bottom joint	Price (each)
AP-608-02	500	24/29	24/29	
AP-608-04	1000	24/29	24/29	
Accessories:				
AP-682-04	Replacement 4mm Teflon® Plug Only			
AP-688-02	2mm Teflon® "T"-bore Stopcock Plug			



SOLVENT STILL HEAD

Syringe port has 1/4" outer joint for a rubber septum and a 4mm Teflon® Stopcock. Solvent is drained through 2mm T-bore Teflon® stopcock. The drainage arm has a 1/4" inner joint.

Code	Capacity(mL)	Top Joint	Bottom joint	Price (each)
AP-610-02	500	24/29	24/29	
AP-610-04	1000	24/29	24/29	
AP-610-06	1000	24/29	29/36	
Accessories:				
AP-682-04	Replacement 4mm Teflon® Plug Only			
AP-688-02	2mm Teflon® "T"-bore Stopcock Plug			
AP-612-08	Evacuation/purging adapter, 1/4"			



Solvent still head, high vacuum valves

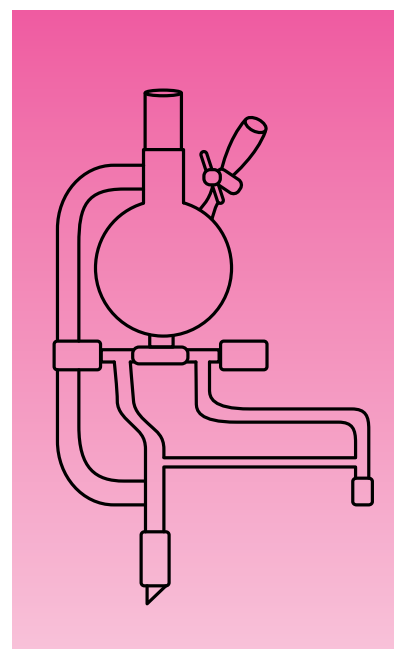
For great solvent/chemical resistance, the two 0-4mm high vacuum valves have Teflon® covers over the two Vilton® O-ring on the shaft and one integral Teflon® O-rings on the tip, without exposing any materials other than Teflon® to any solvents. Syringe port has a 4mm Teflon® stopcock and a 1/4" outer joint. Delivery port has 1/4" inner joint.



SOLVENT STILL HEAD, HIGH VACUUM VALVES

For great solvent/chemical resistance, the two 0-4mm high vacuum valves have Teflon® covers over the two Viton® 0-ring on the shaft and one integral Teflon® 0-rings on the tip, without exposing any material other than Teflon® to any solvents. Syringe port has a 4mm Teflon® stopcock and a 1/4/23 outer joint. Delivery port has 1/4/23 inner joint.

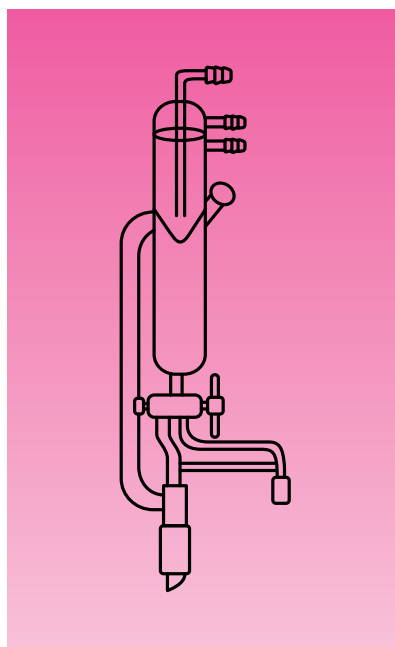
Code	Capacity(mL)	Joints	Price (each)
AP-612-02	250	24/29	
Accessories:			
AP-682-04	Replacement 4mm Teflon® Plug Only		
AP-734-08	0-4mm high vacuum metering plug and control valve (Teflon® protect 0-rings)		
AP-612-08	Evacuation/purging adapter, 1/4/23		



SOLVENT STILL, BUILT-IN CONDENSER

Grease-free design. Same as above with 1/4/10 threaded joint and Teflon®-lined septum for syringe access.

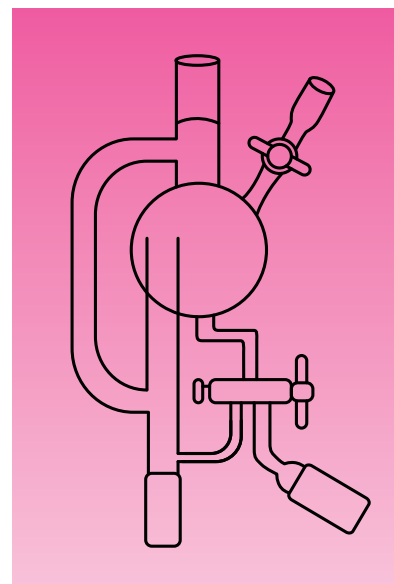
Code	Plug Size	BoreSize(mm)	Stem O.D.(mm)	Price (each)
AP-614-02	24/29	125	2	
Accessories:				
AP-688-04	Replacement 4mm Double Oblique PTFE Plug 27.35			
AP-664-06	Replacement Nylon® compression cap			
AP-666-06	Replacement Teflon®-lined silicone septum			



DISTILLING HEAD, SOLVENT

Upper sampling port has a 4mm Teflon® stopcock with a 14/23 outer joint for use with septa. Lower drain is centered to allow total drainage of storage head..

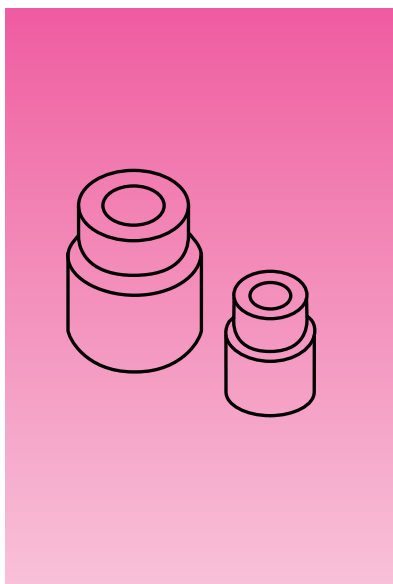
Code	Plug Size	BoreSize(mm)	Stem O.D.(mm)	Price (each)
AP-616-02	14/23	250	2	
AP-616-04	24/29	250	2	
AP-616-06	24/29	500	2	
AP-616-08	24/29	1000	2	
Accessories:				
AP-296-30	Replacement 4mm Teflon® Plug Only			
AP-690-08	Replacement 2mm Double Oblique PTFE Plug			



SEPTUM, STOPPER, SLEEVE TYPE

Flanged type stopper with a hollow plug and sleeve extension that folds down over the neck of vessel, tubing, etc. The diaphragm can be punctured with a syringe needle, resealing after needle is withdrawn.

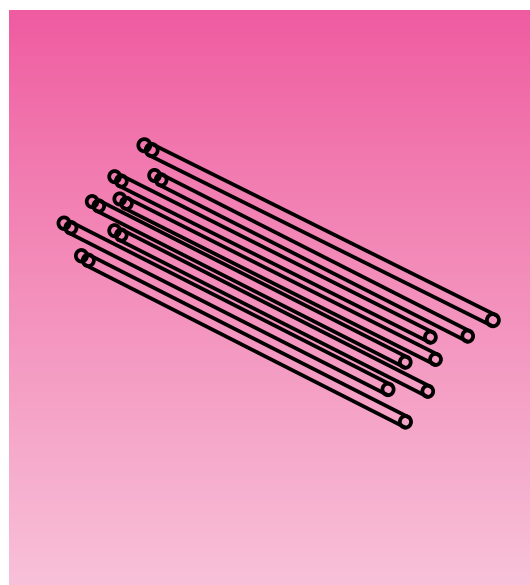
Code	For use with	Price (each)
AP-672-02	14/23 outer joint	
AP-672-04	19/26 outer joint	
AP-672-06	24/29 outer joint	
AP-672-08	29/36 outer joint	



SYRINGE NEEDLE, STAINLESS STEEL

Long needle for solvent retrieval.

Code	O.D.(mm)	Gauge	Length (mm)	Price(each)
AP-620-02	1.2	18	180	
AP-620-04	1.2	18	200	
AP-620-06	1.6	16	300	

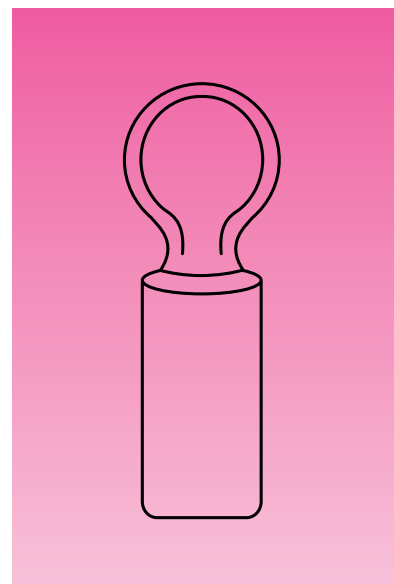


STOPPER

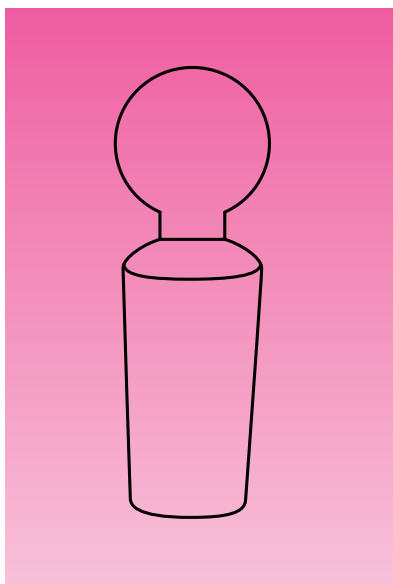
STOPPER, PENNY-HEAD, GLASS, HOLLOW

Heavy wall design.

Code	Joint	Price (each)
AP-622-02	10/19	
AP-622-04	14/23	
AP-488-94	19/26	
AP-488-96	24/29	
AP-488-98	29/36	
AP-622-12	34/35	
AP-622-14	45/40	

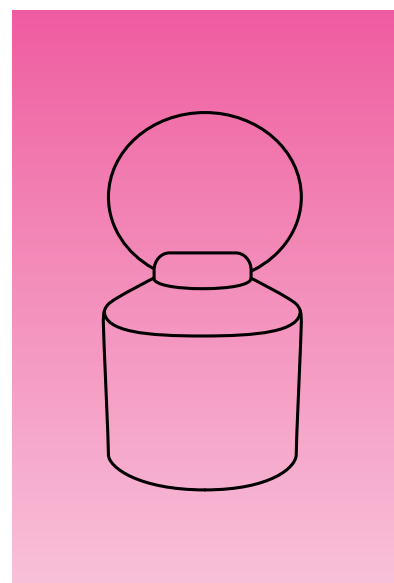
**STOPPER, PENNY-HEAD, GLASS, SOLID**

Code	Joint	Price (each)
AP-624-02	10/19	
AP-624-04	10/30	
AP-624-06	14/23	
AP-624-08	19/26	
AP-624-10	24/29	
AP-624-12	29/36	

**STOPPER, GLASS, FLASK LENGTH, PENNY-HEAD**

Code	Joint*	Price (each)
AP-626-02	# 13	
AP-626-04	# 16	
AP-626-06	# 19	
AP-626-08	#22	
AP-626-10	#27	
AP-626-12	#32	
AP-626-14	#38	

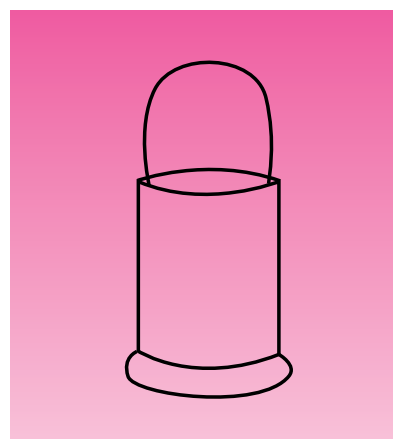
* All sizes are solid except #32 and #38 which are hollow.



STOPPER, CAP DESIGN

For apparatus having an inner opening.

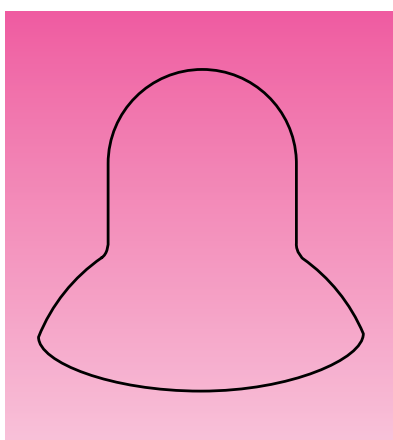
Code	Joint	Price (each)
AP-628-02	14/23	
AP-628-04	24/29	
AP-628-06	29/36	



STOPPER, WITH #15 O-RING JOINT

For use with manifolds having #15 O-ring joints. Supplied complete with One #116(R116) Viton® O-ring.

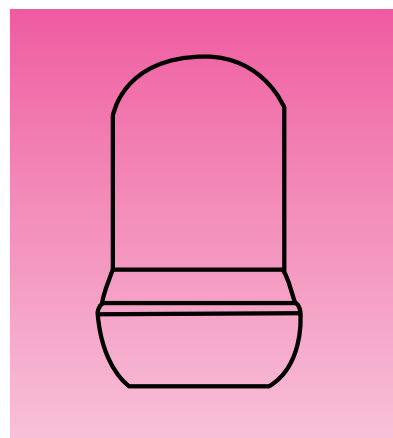
Code	Spherical Size	Price (each)
AP-630-02	#15 O-ring joint stopper	
Accessory:		
AP-630-04	#15 O-ring joint stainless steel clamp	
AP-652-44	#116 Viton® O-ring	



STOPPER, SPHERICAL, PENNY-HEAD

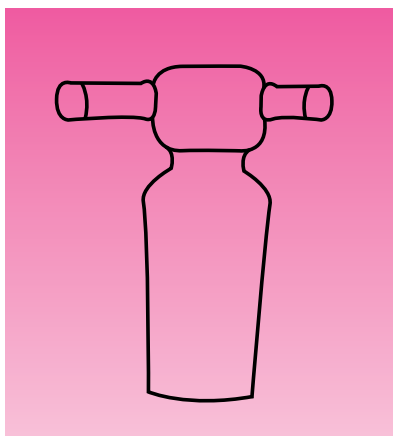
Hollow stopper for use with spherical socket joint.

Code	Spherical Size	Price (each)
AP-630-10	35	
Accessory:		
AP-652-12	Metal clamp for 35/20 or 35/25 spherical joint	



STOPPER, TEFLON®

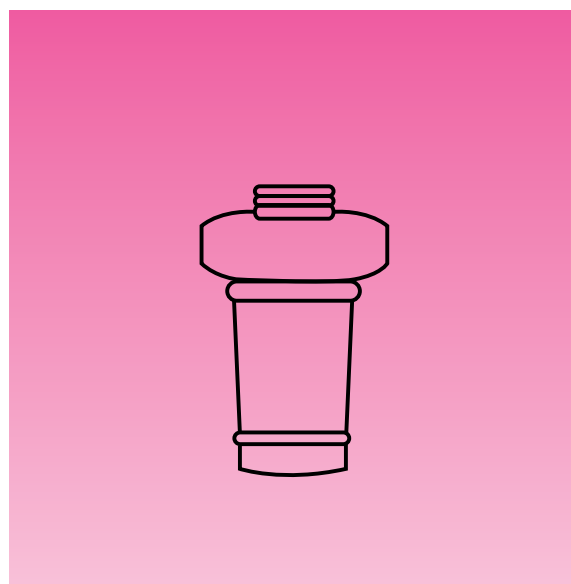
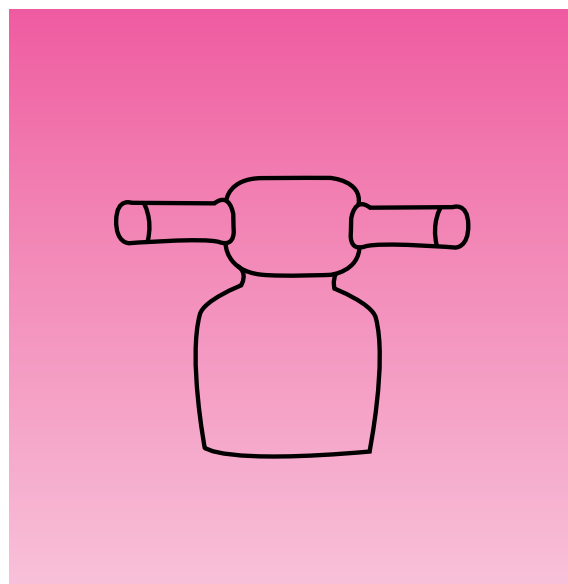
Teflon® handle stoppers for easy gripping.



Code	Joint	Price (each)
AP-488-100	14/23	
AP-486-78	19/26	
AP-632-06	24/25	
AP-488-104	24/29	
AP-488-106	29/36	
AP-632-12	34/35	

STOPPER, TEFLON®, FLASK LENGTH

Code	Joint Size	Price (each)
AP-634-02	# 13	
AP-634-04	#16	
AP-634-06	#22	
AP-634-08	#27	
AP-634-10	#38	



STOPPER, PTFE

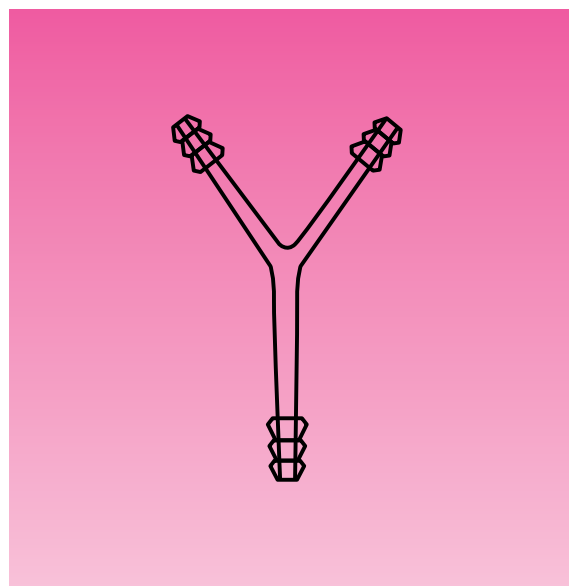
Teflon® stopper has a Nylon® extraction nut permitting easy removal of the stopper from the glass outer joint.

Code	Joint	Price (each)
AP-636-02	10/19	
AP-636-04	14/23	
AP-636-06	19/26	
AP-636-08	24/29	

ACCESSORIES

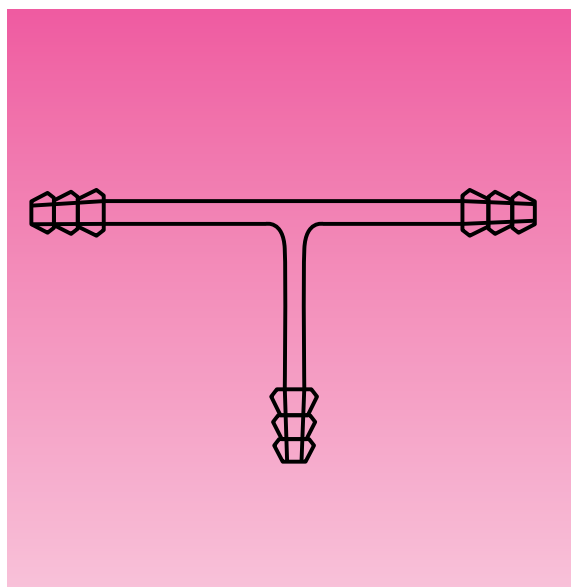
TUBE, CONNECTING, Y-SHAPE

Code	Tubing O.D.(mm)	Price (each)
AP-638-02	8	



TUBE, CONNECTING, T-SHAPE

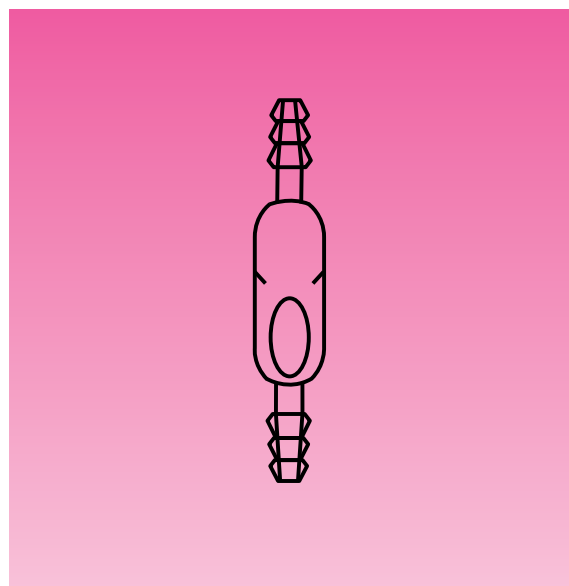
Code	Tubing O.D.(mm)	Price (each)
AP-640-02	8	
AP-640-04	10	



CHECK VALVE

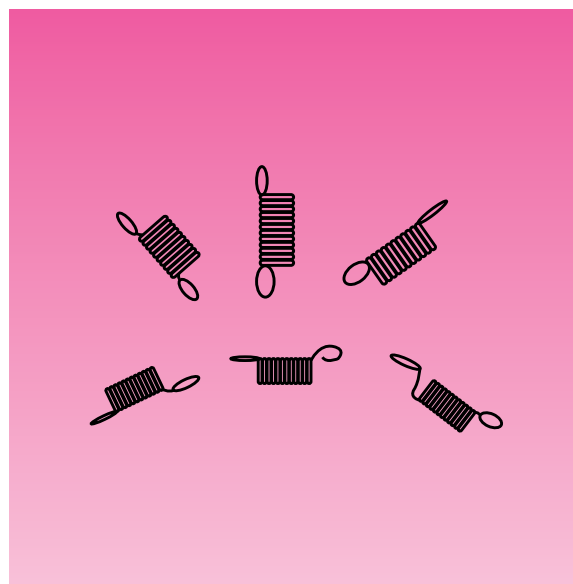
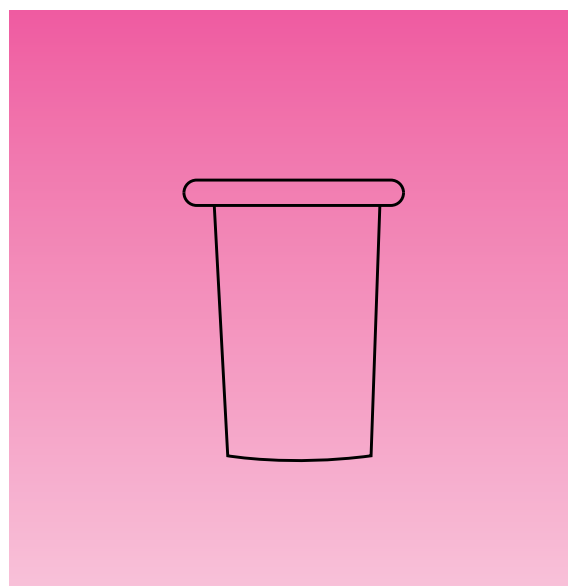
All glass, with ground seat for liquid seal.

Code	Hose Connection(mm)	Price (each)
AP-642-02	8	



SLEEVE, TEFLON®, RIBBED WITH GRIPPING RING

Code	Joint	Price (each)
AP-644-02	14/23	
AP-644-04	19/26	
AP-644-06	24/29	
AP-644-08	29/36	
AP-644-10	34/35	

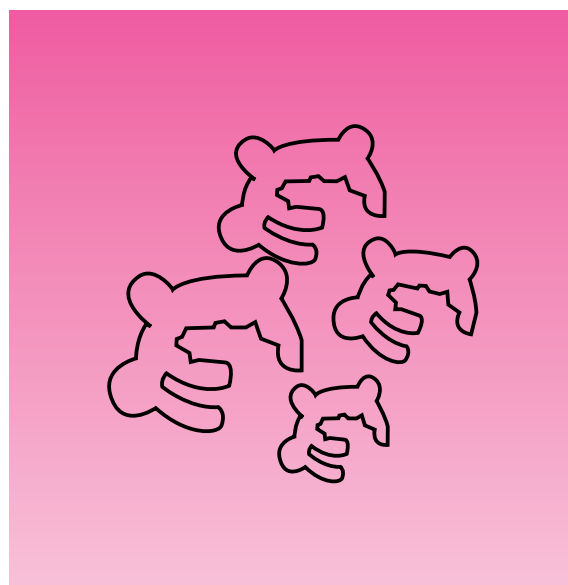

SPRING, STAINLESS STEEL

Code	Length of Coil(mm)	Price (each)
AP-646-02	6.35	
AP-646-04	25.0	
AP-646-06	32.0	

JOINT CLIP, STANDARD TAPER JOINT

Made of plastic.

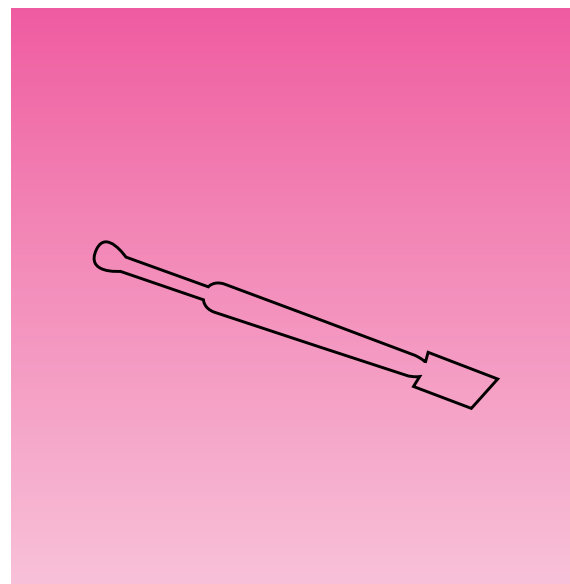
Code	Joint	Price (each)
AP-648-02	14/23	
AP-648-04	19/26	
AP-648-06	24/29	
AP-648-08	29/36	
AP-648-10	34/35	
AP-648-12	45/40	



GLASS CUTTER, NATURAL DIAMOND

With rack on shank for breaking off single or double strength glass. Extra large natural diamond for durability.

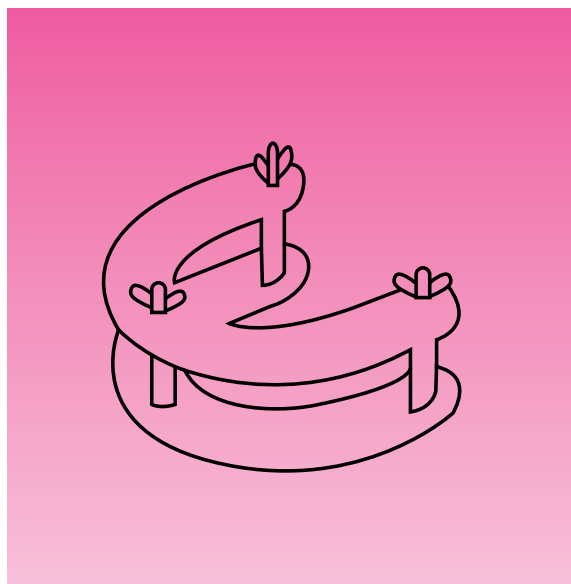
Code	Price (each)
AP-650-02	



CLAMP, HORSESHOE STYLE

Made of aluminum with black epoxy coating.

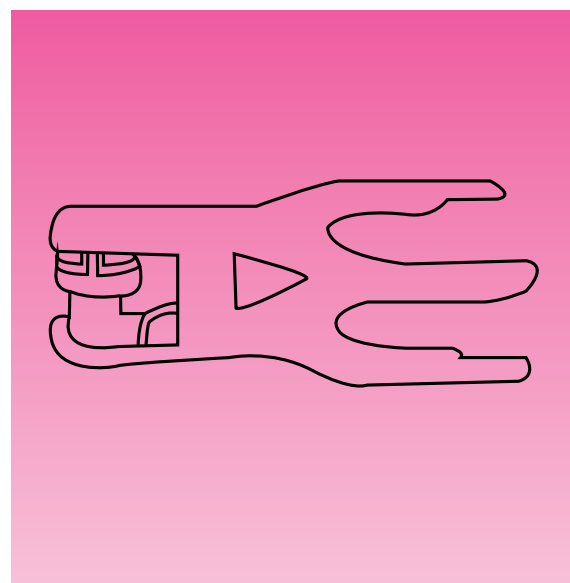
Code	For Flange Size	Price (each)
AP-736-08	57mm	
AP-736-14	80mm	



CLAMP, PINCH, STAINLESS STEEL, SPHERICAL

With a screw type locking nut.

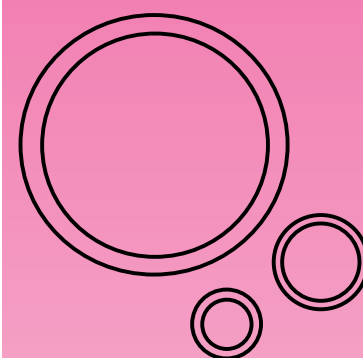
Code	Spherical Joint size/O-ring Joint Size	Price (each)
AP-652-08	12/5 ball joint, or #5 O-ring joint stainless steel clamp	
AP-652-10	18/8 ball joint, or #9 O-ring joint stainless steel clamp	
AP-736-14	28/15 ball joint, or #15 O-ring joint stainless steel clamp	
AP-652-12	35/20,35/25 ball joint, or #25 O-ring joint stainless steel clamp	
AP-652-16	50/30 ball joint, or #30 O-ring joint stainless steel clamp	
AP-734-24	65/40 ball joint, or #40 O-ring joint stainless steel clamp	
AP-734-26	75/50 ball joint, or #50 O-ring joint stainless steel clamp	



O-RING, VITON®

For solvent and chemical compatibility.

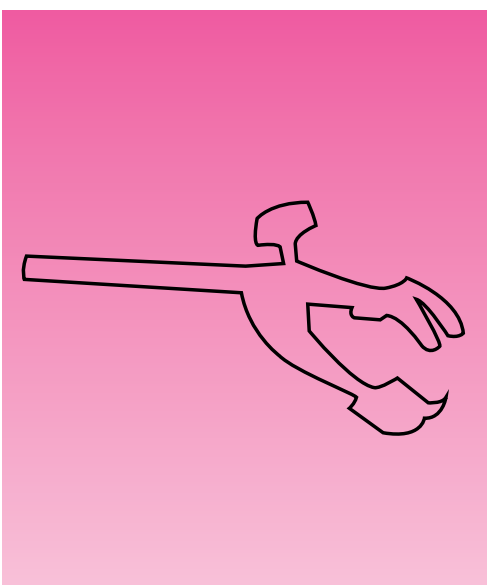
Code	Dimensions(mm)			Possible Application	Price (each)
	Size	I.D.	W		
AP-652-24	7	3.7	1.78	0-4mm high vacuum plug-tip or 5/5 threaded joint	
AP-652-26	8	4.5	1.78	O-ring for #7 internal thread	
AP-652-28	10	6.07	1.78	0-4mm high vacuum plug-shaft 7/10 threaded joint	
AP-652-30	11	7.65	1.88	O-ring, size 011 for S181125 stopcocks	
AP-652-32	13	10.8	1.78	O-ring for 15mm stopper of internal thread	
AP-652-34	14	12.3	1.78	14/10 threaded joints-Microscale	
AP-384-20	107	5.23	2.62	Thermometer/inlet Adapters	
AP-652-38	108	6	2.62	Top O-ring for 0-8mm high vacuum	
AP-652-40	110	9.2	2.62	O-ring for 0-8mm high Vacuum valve plug/0-12mm high vacuum valve tip O-ring	
AP-652-42	112	12.4	2.62	0-12mm high Vacuum valve shaft O-ring	
AP-652-44	116	18.7	2.62	#15 O-ring joint	
AP-652-46	121	26.6	2.62	O-ring for 25mm stopper of internal thread	
AP-652-48	212	21.8	3.5	O-ring for 25mm bushing of internal thread	
AP-734-28	217	29.7	3.5	O-ring for #25 O-ring joint	
AP-652-52	221	21.8	3.5	Replacement #221 O-ring for Rodaviss joint	
AP-652-54	223	40.9	3.5	Replacement #223 O-ring for Rodaviss joint	
AP-652-56	225	4.72	3.5	O-ring for #50 internal thread	
AP-734-30	226	50.4	3.5	O-ring for #40 internal thread	
AP-734-32	229	59.9	3.5	O-ring for #50 internal thread	
AP-652-62	331	56.5	5.33	57mm flat O-ring flange	
AP-736-12	339	81.9	5.33	80mm flat O-ring flange	



FOUR FINGER CLAMP (SHANK)

Die-cast alloy, Ni/Cr plated finish, with cork lined interlocking jaws. Accepts articles up to 80mm in diameter.

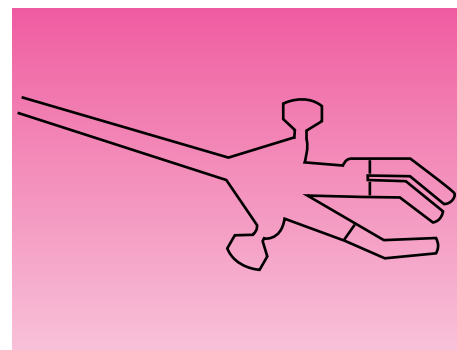
Code	Model	The length of the rod is (mm)	Price (each)
AP-654-02	Chromed	154	



THREE FINGER DOUBLE ADJUST-ABLE CLAMP (LARGE)

Double adjustable, PVC coated prongs, made of chrome-plated Zinc-alloy. Accept objects from Ø to 60mm.

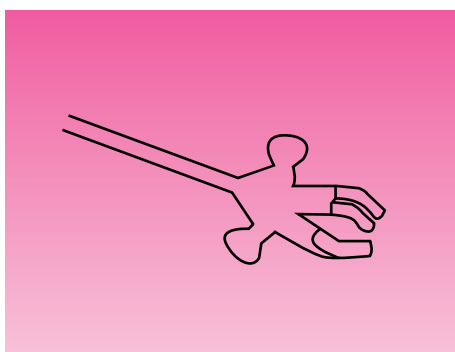
Code	The length of thaerod is (mm)	Price (each)
AP-656-02		



THREE FINGER DOUBLE ADJUST-ABLE CLAMP (SMALL)

Double adjustable, PVC coated prongs, made of chrome-plated Zinc-alloy. Accept objects from Ø to 30mm.

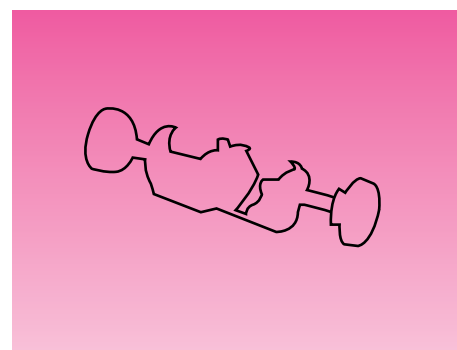
Code	The length of thaerod is (mm)	Price (each)
AP-658-02	154	



BOSSHEAD

Chrome plated finish, plastic headed screws. For rods up to 15mm diameter.

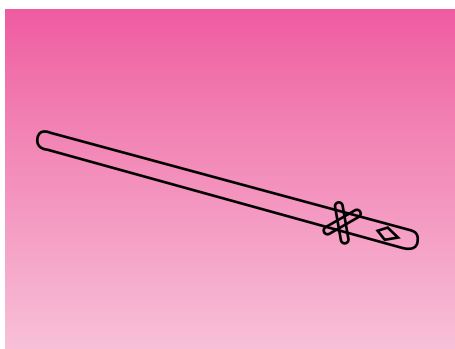
Code	The length of thaerod is (mm)	Price (each)
AP-660-02	154	



CLAMP THERMOMETER EXTENSION

Extension rod 10mm in diameter. Total length: 200mm.

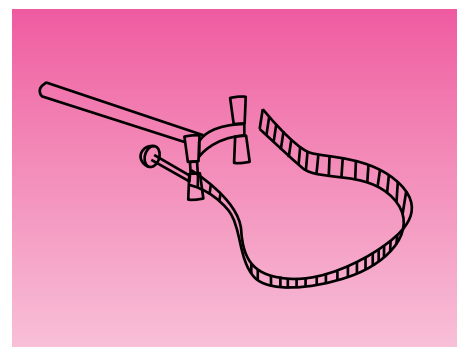
Code	The length of thaerod is (mm)	Price (each)
AP-660-06		



CHAIN CLAMP

With chain and spring, for diameter from 80mm to 150mm.

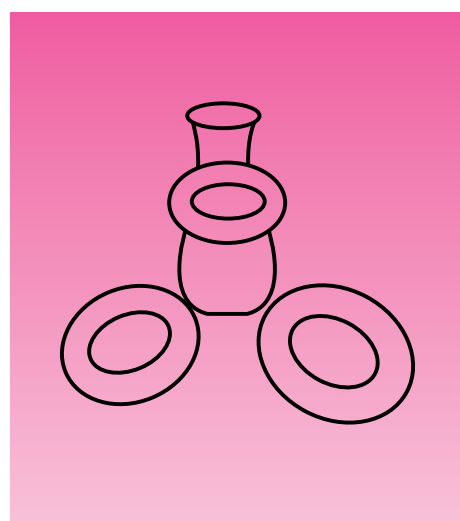
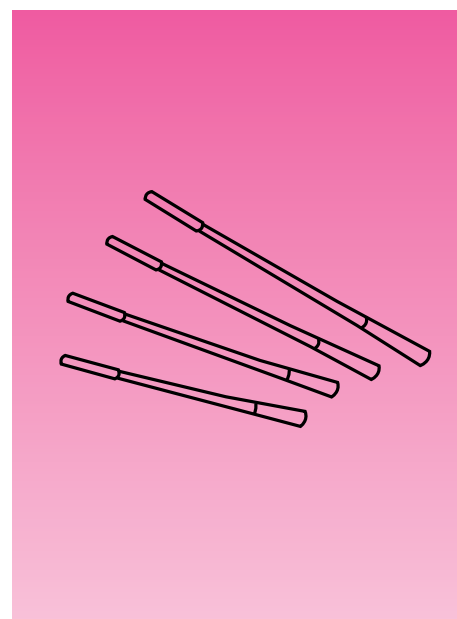
Code	The length of thaerod is (mm)	Price (each)
AP-660-10		



SPATULAS

One end rounded and bend up, one end square.

Code	For use with	Price (each)
AP-662-02	100	
AP-662-04	120	
AP-662-06	125	
AP-662-08	140	
AP-662-10	150	
AP-662-12	160	
AP-662-14	180	
AP-662-16	200	
AP-662-18	220	
AP-662-20	230	



WEIGHT RING

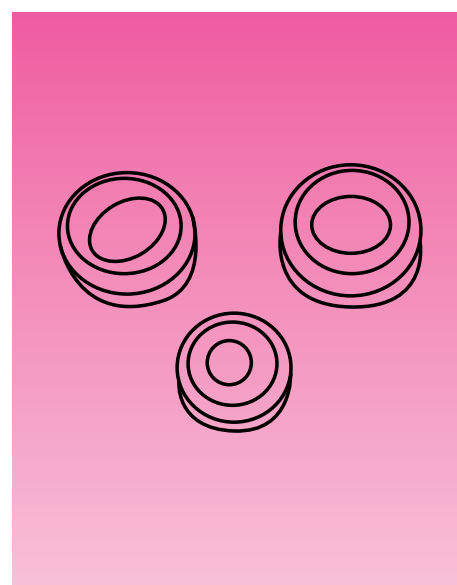
Cast iron, PVC coated rings, for stabilizing Erlenmeyer flasks immersed in water.

Code	Weight (kg)	I.D (mm)	For flasks	Price(each)
AP-663-02	0.22	48	125-700ml	
AP-663-04	0.45	56	250-1000ml	

CAP, COMPRESSION, WITH HOLE

Replacement caps with hole for use with thermometer/inlet adapters or microscale reaction vials.

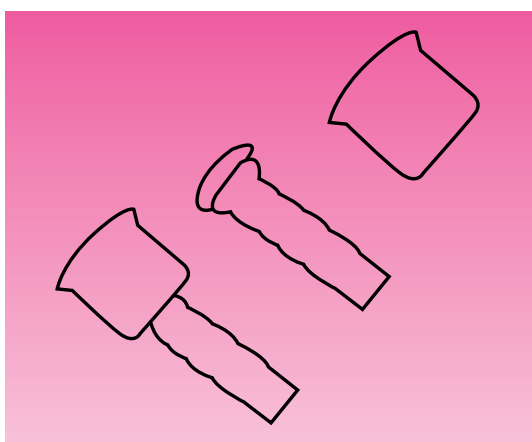
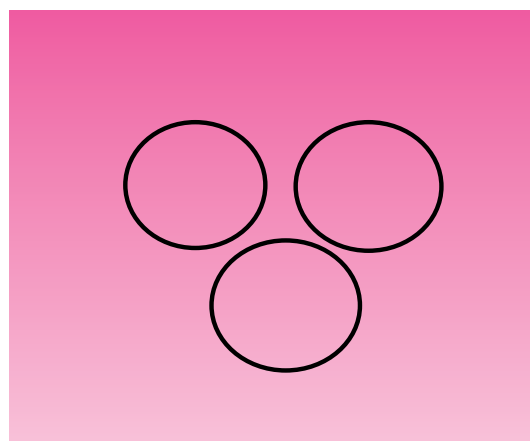
Code	Size (mm)	Possible Application	Material	Price(each)
AP-790-06	8	Side port Hickman still head	Phenolic	
AP-664-04	13	Thermometer/inlet adapters	Nylon®	
AP-664-06	20	14/10 threaded joints-Microscale	Nylon®	
AP-306-20	24	24/29 Rodaviss® Joint	Nylon®	



SEPTUM, TEFLON®-LINED SILICONE RUBBER

Made of silicone rubber with PTFE face.

Code	Size (mm)	Possible Application	Price(each)
AP-666-02	8	Side port-Hickman still head	
AP-666-04	13	Thermometer/inlet adapters	
AP-666-06	20	14/10 threaded joints	



REMOVABLE HOSE CONNECTION, FOR GL THREAD

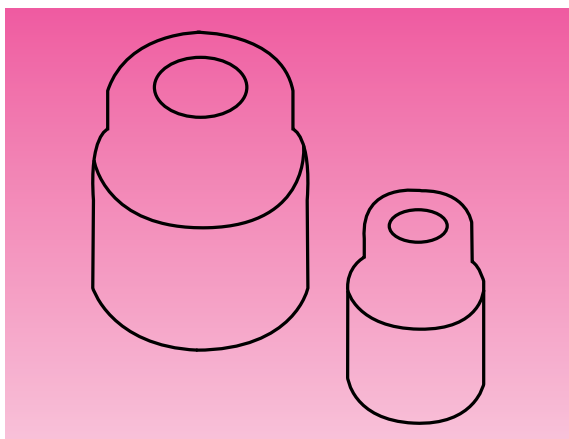
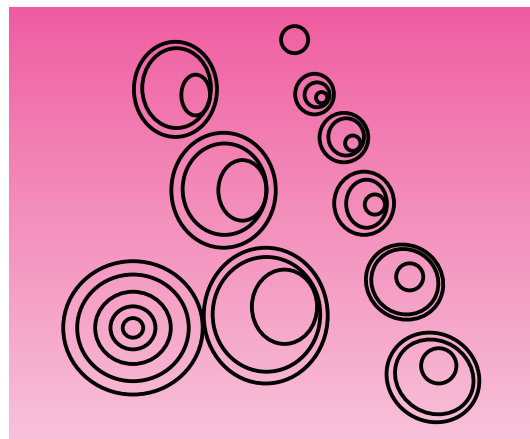
With Caps listed below. Order each part separately.

Code	Size	Style	Price(each)
AP-668-02	14	Straight	
AP-668-04	18	Straight	
AP-288-10	14	#14 Nylon® Cap with 9.5mm hole	
AP-668-08	18	#18 Nylon® Cap with 11mm hole	

PLURO-STOPPER

Used with Buchner and fritted glass funnels.

Code	Size	Top/Bottom O.D. (mm)	Top/Bottom I.D. (mm)	Price (Complete set)
AP-670-02	#1	21 x 11	17x7	
	#3	37x22	31x16	
	#5	58x38	50x30	
	#6	69x45	60x36	



SEPTUM, STOPPER, SLEEVE TYPE

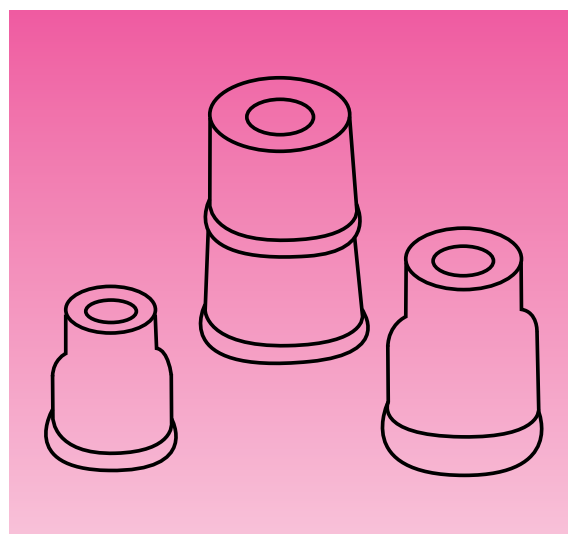
Flanged type stopper with a hollow plug and sleeve extension that folds down over the neck of vessel, tubing, etc. The diaphragm can be punctured with a syringe needle, resealing after needle is withdrawn.

Code	For use with	Price (each)
AP-672-02	14/23 outer joint	
AP-672-04	19/26 outer joint	
AP-672-06	24/29 outer joint	
AP-672-08	29/36 outer joint	

SEPTUM, STOPPER, SLEEVE TYPE THREADED

Stoppers are made from natural white rubber.

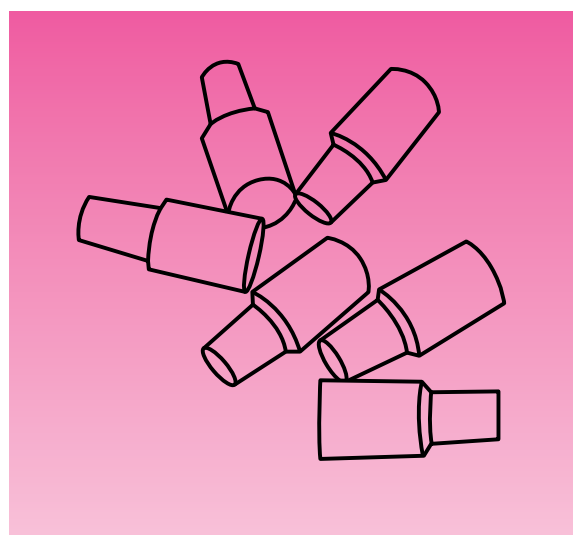
Code	Joint	Price (each)
AP-674-02	14/23	
AP-674-04	19/26	
AP-674-06	24/29	



SEPTUM, STOPPER, SLEEVE TYPE

Stoppers are made from natural white rubber for use with 5mm OD NMR Tubes.

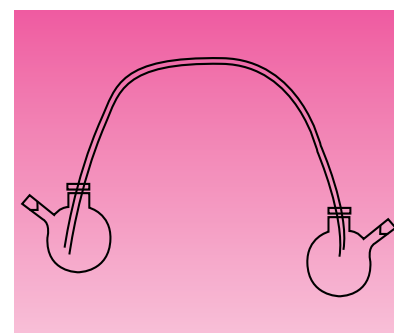
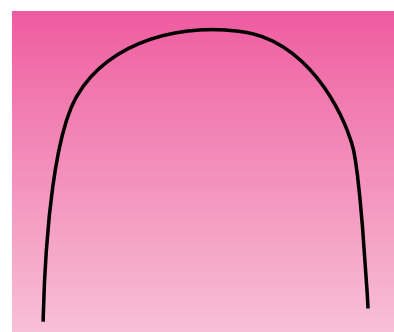
Code	NMR TUBE OD (mm)	Price (each)
AP-676-02	5	



CANNULA, STAINLESS STEEL

For the transfer and handling of air sensitive materials.

Code	Gauge	O.D.(mm)	I.D.(mm)	Needle Length(mm)	Price (each)
AP-678-02	16	1.65	1.20	460	
AP-678-04	16	1.65	1.20	600	
AP-678-06	16	1.65	1.20	900	
AP-678-08	18	1.30	0.80	460	
AP-678-10	18	1.30	0.80	600	
AP-678-12	18	1.30	0.80	900	
AP-678-14	20	0.90	0.60	460	
AP-678-16	20	0.90	0.60	600	
AP-678-18	20	0.90	0.60	900	
AP-678-20	22	0.70	0.40	460	
AP-678-22	22	0.70	0.40	600	
AP-678-24	22	0.70	0.40	900	



STOPCOCK

Stopcock, Teflon® straight bore

Code	Bore (mm)	Plug size	Stem O.D. (mm)
AP-680-02	2	12.5	8
AP-680-04	4	14.5	10

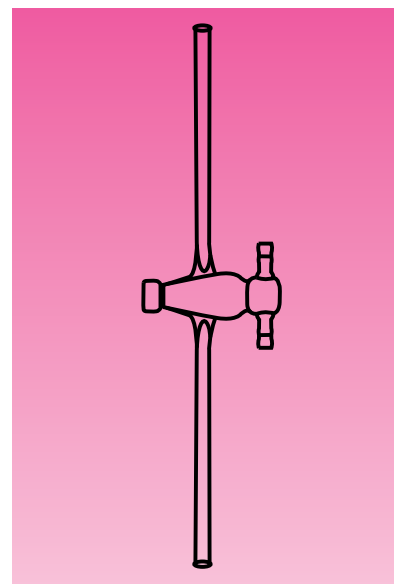


InterChange

STOPCOCK, TEFLON® STRAIGHT BORE

With 1:5 Teflon® plug and a threaded pressure nut. Stopcock barrels are polished to prevent PTFE plug from scratching.

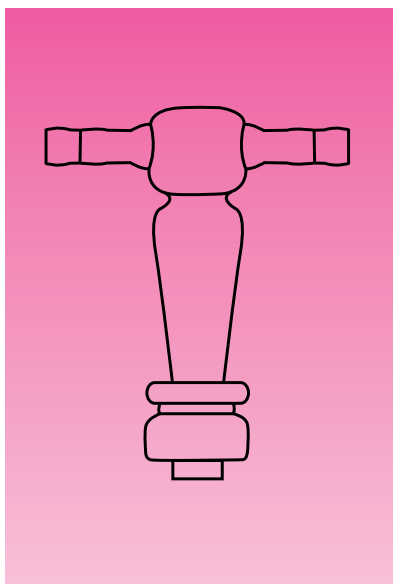
Code	Plug Size	BoreSize(mm)	Stem O.D.(mm)	Price (each)
AP-680-02	2	11/25	8	
AP-680-04	4	15.2/30	10	
AP-680-06	6	16/35	12	
Accessories:				
AP-682-02	Replacement 2mm Teflon® Plug Only			
AP-682-04	Replacement 4mm Teflon® Plug Only			
AP-682-06	Replacement 6mm Teflon® Plug Only			



STOPCOCK REPLACEMENT PLUG, 1:5 TEFLON®, STRAIGHT BORE

This replacement kit is complete with one Teflon® plug (1:5 taper), one Teflon® washer, one O-ring.

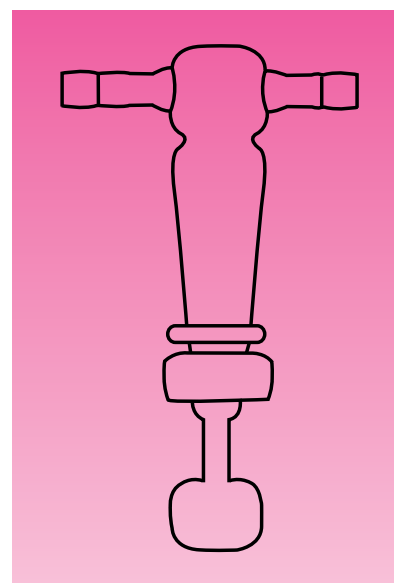
Code	Bore(mm)	Plug Size(mm)	Stopcock Type	Price (each)
AP-682-02	11/25	2	handle and nut	
AP-682-04	15.2/30	4	handle and nut	
AP-682-06	16/35	6	handle and nut	



STOPCOCK REPLACEMENT PLUG, 1:5 TEFLON®, METERING VALVE

With a threaded Teflon® needle valve for the fine control of flow through the bore of the stopcock plug. This replacement kit is complete with all the components.

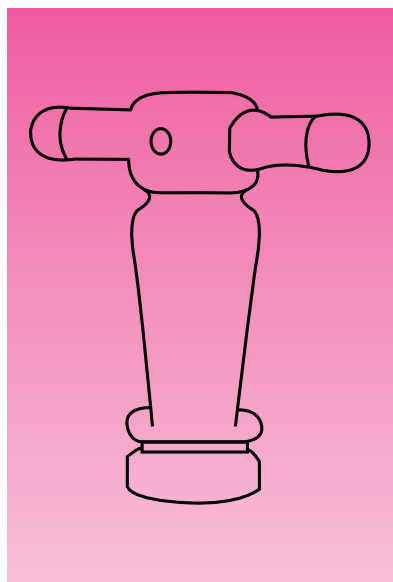
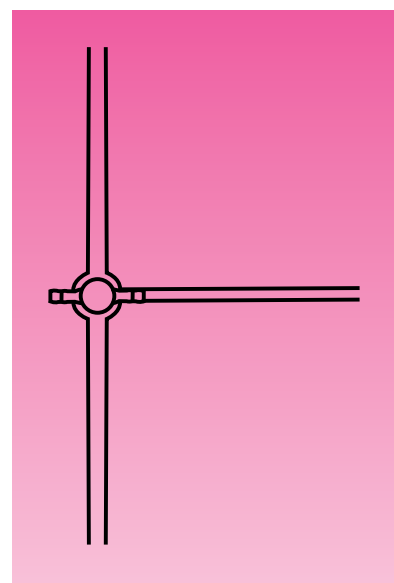
Code	Plug Size	BoreSize(mm)	Price (each)
AP-684-02	11/25	2	
AP-684-04	15.2/30	4	



STOPCOCK, 1:5 TEFLON®, T-BORE

Stopcock with three stems sealed 90° apart. Teflon® Plug has a "T" shape bore to connect any two or all three stems.

Code	Plug Size	BoreSize(mm)	Stem O.D.(mm)	Price (each)
AP-686-02	15.2/30	2	8	
AP-686-04	16/35	4	10	
Accessories:				
AP-688-02	2mm Teflon® "T"-bore Stopcock Plug			
AP-688-04	4mm Teflon® "T"-bore Stopcock Plug			



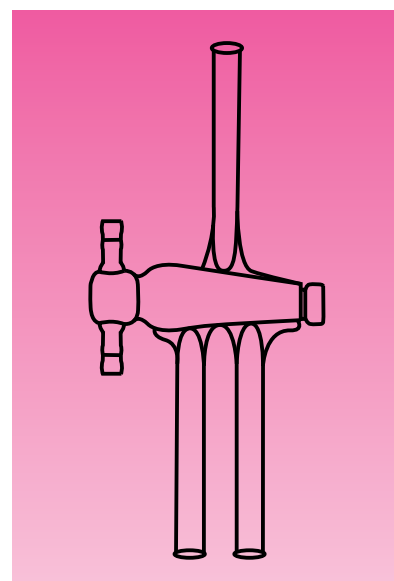
STOPCOCK REPLACEMENT PLUG, 1:5 TEFLON®, T-BORE

Code	Plug Size	BoreSize(mm)	Price (each)
AP-688-02	15.2/30	2	
AP-688-04	16/35	4	

STOPCOCK, 1:5 TEFLON®, DOUBLE OBLIQUE BORE

With polished barrels.

Code	Plug Size	BoreSize(mm)	Stem O.D.(mm)	Price (each)
AP-690-02	12.9/44	2	8	
AP-690-04	14.4/44	4	10	
Accessories:				
AP-690-08	Replacement 2mm Double Oblique PTFE Plug			
AP-688-04	Replacement 4mm Double Oblique PTFE Plug			



Stopcock, glass, high vacuum, straight bore

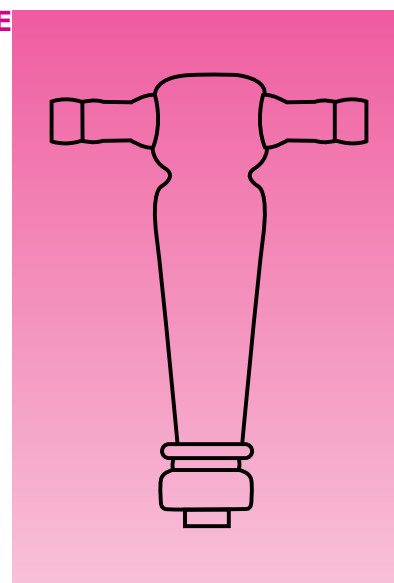
Plug is precision ground and hand-lapped with corresponding numbers on the barrel and plug, 1:10 taper. With constant pressure retention spring and clip.



InterChange

STOPCOCK REPLACEMENT PLUG, 1:5 TEFLON®, DOUBLE OBLIQUE

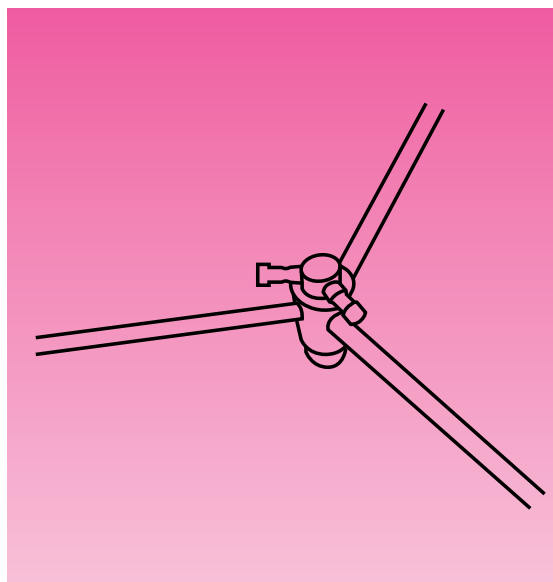
Code	Plug Size	BoreSize(mm)	Price (each)
AP-692-02	12.9/44	2	
AP-692-04	14.4/44	4	



STOPCOCK, TEFLON®, 120° BORE

A 1:5 taper Teflon® stopcock with three sidearms sealed 120° apart Plug has a bore to allow connection of any two arms at once.

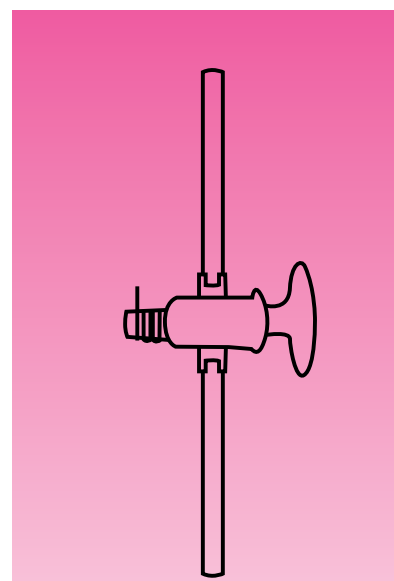
Code	Plug Size	Bore Size (mm)	Stem O.D.(mm)	Price (each)
AP-694-02	15.2/30	2	8	
Accessories:				
AP-694-04	2mm Teflon® 120° Bore Stopcock Plug			



STOPCOCK, GLASS, HIGH VACUUM, STRAIGHT BORE

Plug is precision ground and hand-lapped with corresponding numbers one the barrel and plug, 1:10 taper. With constant pressure retention spring and clip.

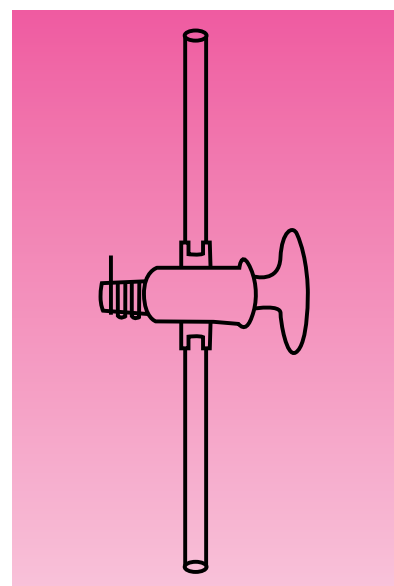
Code	Plug Size	BoreSize(mm)	Stem O.D.(mm)	Price (each)
AP-696-02	12/30	2	8	
AP-696-04	17/40	4	10	
AP-696-06	20/44	6	12	
Accessories:				
AP-738-08	Replacement S.S. Retention for 2mm Glass Stopcock			
AP-702-04	Replacement S.S. Retention for 4mm Glass Stopcock			
AP-702-10	Replacement S.S. Retention for 6mm Glass Stopcock			



STOPCOCK, STRAIGHT BORE, GLASS, INTERCHANGEABLE

Plugs and barrels are ground to be interchangeable, with 1:10 taper.

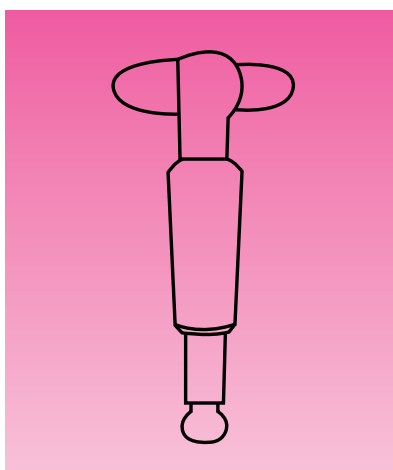
Code	Bore(mm)	Stem O.D.(mm)	Supplied	Price (each)
AP-698-02	2	8	Complete	
AP-698-04	4	10	Complete	
AP-698-06	6	12	Complete	
Accessories:				
AP-738-06	Replacement 2mm Glass Plug Only			
AP-700-04	Replacement 4mm Glass Plug Only			
AP-700-06	Replacement 6mm Glass Plug Only			
AP-734-06	Replacement S.S. Retention for 2mm Glass Stopcock			
AP-702-04	Replacement S.S. Retention for 4mm Glass Stopcock			
AP-702-06	Replacement S.S. Retention for 6mm Glass Stopcock			



STOPCOCK REPLACEMENT PLUG 1:10 GLASS

To be used with constant pressure retention kit.

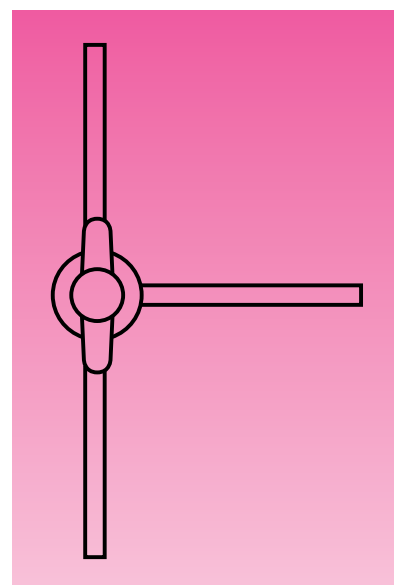
Code	Bore(mm)	Plug Size(mm)	Stopcock Type	Price (each)
AP-738-06	2	11/293	Straight glass	
AP-700-04	4	17/40	Straight glass	
AP-700-06	6	20/44	Straight glass	



STOPCOCK, GLASS, T-BORE

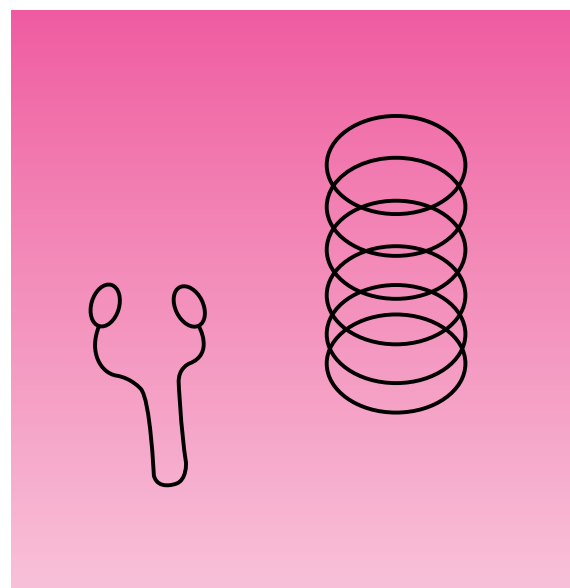
With solid glass plug. With constant pressure retention spring and clip.

Code	Plug Size	BoreSize(mm)	Stem O.D.(mm)	Price (each)
AP-700-10	12/30	2	8	
AP-700-12	17/40	4	10	
AP-700-14	20/44	6	12	
Accessories:				
AP-700-16	Replacement "T"-bore glass plug, 2mm hole			
AP-700-18	4mm Glass "T"-bore Stopcock Plug			
AP-700-20	Replacement T-bore glass plug, 6mm hole			
AP-738-08	Replacement S.S. Retention for 2mm Glass Stopcock			
AP-702-04	Replacement S.S. Retention for 4mm Glass stopcock			
AP-702-10	Replacement S.S. Retention for 6mm Glass Stopcock			



REPLACEMENT STAINLESS STEEL RETENTION KIT

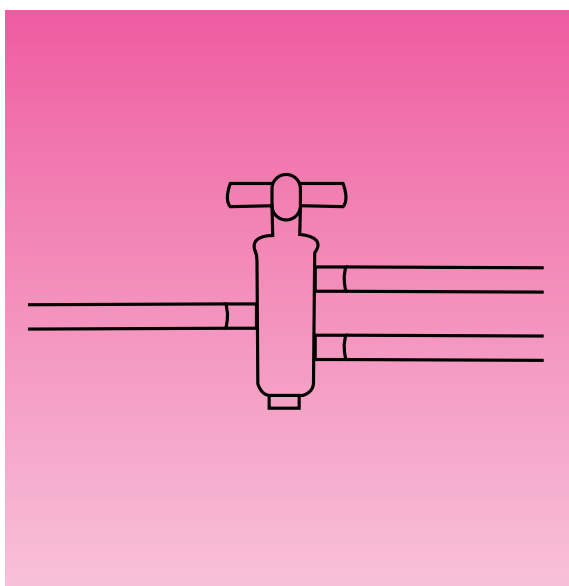
Code	Plug Size	Price (each)
AP-738-08	12/30	
AP-702-04	17/40	
AP-702-06	17.35/50	
AP-536-06	16.2/56	
AP-702-10	20/44	



STOPCOCK, GLASS, HIGH VACUUM, DOUBLE OBLIQUE BORE

With solid glass plug. Barrel and plug are precision ground, hand lapped with corresponding numbers on the barrel and plug. With constant pressure retention spring and clip.

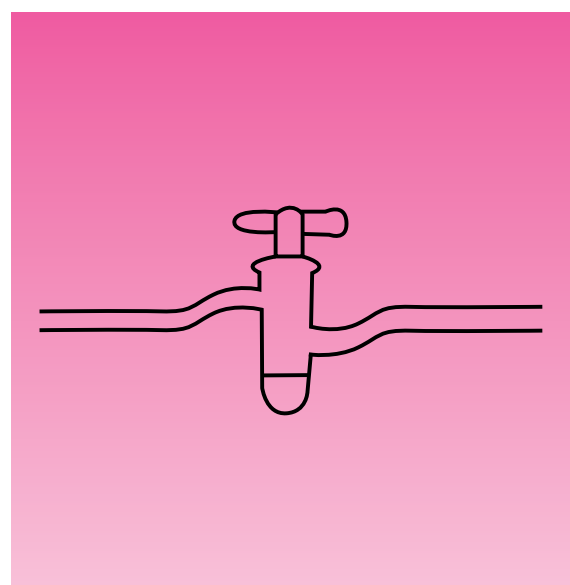
Code	Plug Size	BoreSize(mm)	Sidearm O.D.(mm)	Price (each)
AP-704-02	16.2/56	4	10	
Accessories:				
AP-536-06	Replacement S.S. Retention Kit for 16.2/56 Glass Stopcock			



STOPCOCK, GLASS, HOLLOW PLUG, OBLIQUE, HIGH VACUUM

Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

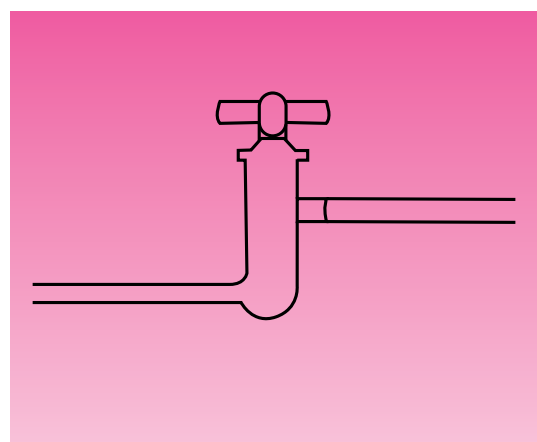
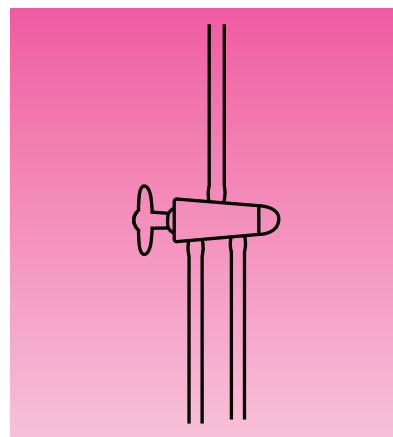
Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-706-02	17.35/50	4	10	
AP-706-04	25/65	8	16	



STOPCOCK, GLASS, HOLLOW PLUG, DOUBLE OBLIQUE, HIGH VACUUM

Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-708-02	16.2/56	4	10	



STOPCOCK, GLASS, HOLLOW PLUG, OFFSET, HIGH VACUUM

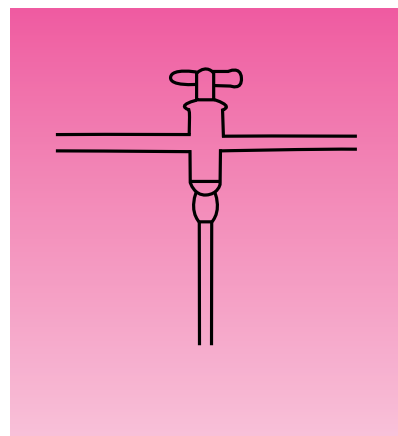
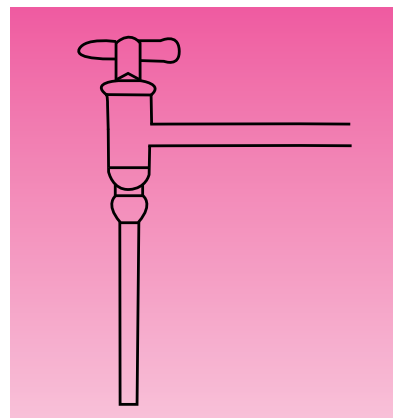
Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-710-02	12.6/40	2	8	
AP-710-04	17.35/50	4	10	
AP-710-06	17.35/50	6	12	

STOPCOCK, GLASS, HOLLOW PLUG, 90°, HIGH VACUUM

Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-712-02	12.6/40	2	8	
AP-712-04	17.35/50	4	10	
AP-712-06	17.35/50	6	12	



STOPCOCK, GLASS, HOLLOW PLUG, T-TYPE, HIGH VACUUM

Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-714-02	12.6/40	2	8	
AP-714-04	17.35/50	4	10	



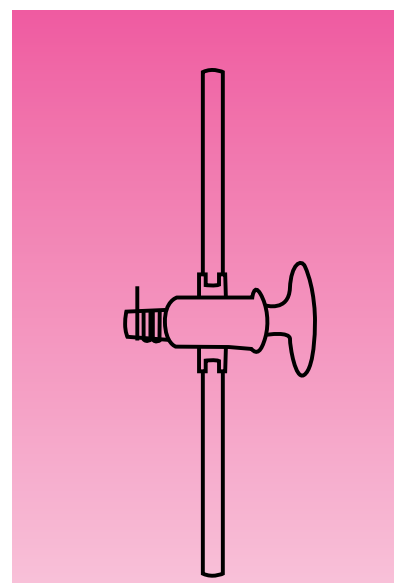
InterChange

HIGH VACUUM VALVE

STOPCOCK, GLASS, HIGH VACUUM, STRAIGHT BORE

Plug is precision ground and hand-lapped with corresponding numbers on the barrel and plug, 1:10 taper. With constant pressure retention spring and clip.

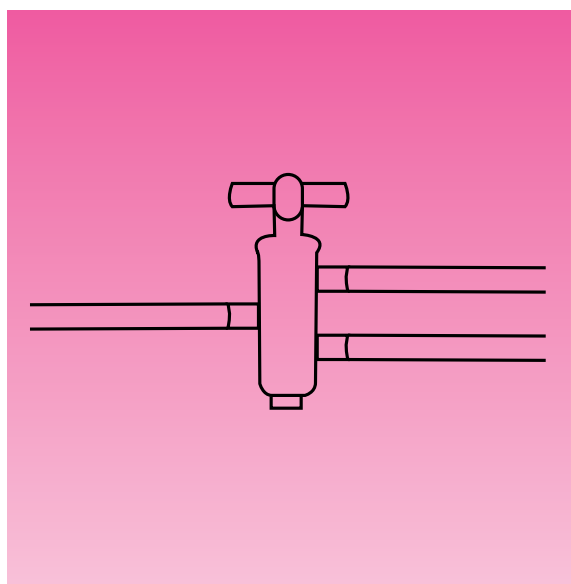
Code	Plug Size	BoreSize(mm)	Stem O.D.(mm)	Price (each)
AP-696-02	12/30	2	8	
AP-696-04	17/40	4	10	
AP-696-06	20/44	6	12	
Accessories:				
AP-738-08	Replacement S.S. Retention for 2mm Glass Stopcock			
AP-702-04	Replacement S.S. Retention for 4mm Glass Stopcock			
AP-702-10	Replacement S.S. Retention for 6mm Glass Stopcock			



STOPCOCK, GLASS, HIGH VACUUM, DOUBLE OBLIQUE BORE

With solid glass plug. Barrel and plug are precision ground, hand lapped with corresponding numbers on the barrel and plug. With constant pressure retention spring and clip.

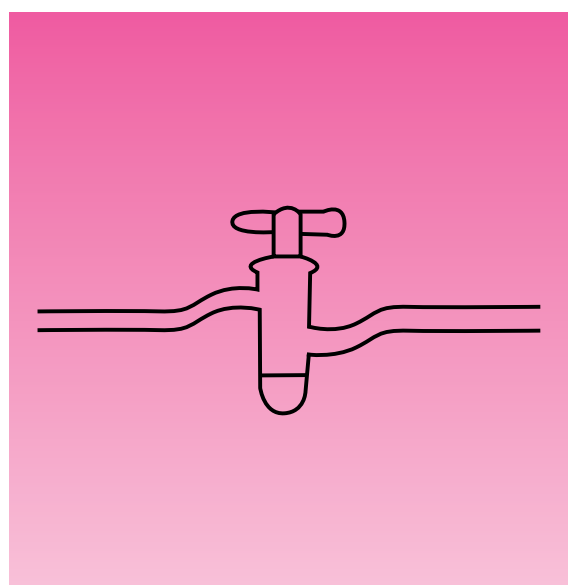
Code	Plug Size	BoreSize(mm)	Sidearm O.D.(mm)	Price (each)
AP-704-02	16.2/56	4	10	
Accessories:				
AP-536-06	Replacement S.S. Retention Kit for 16.2/56 Glass Stopcock			



STOPCOCK, GLASS, HOLLOW PLUG, OBLIQUE, HIGH VACUUM

Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

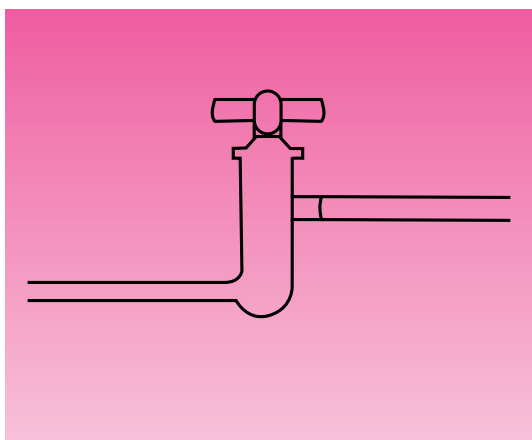
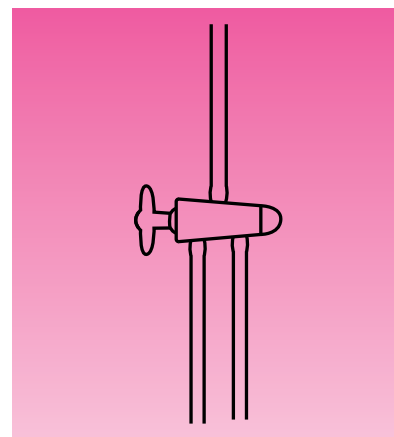
Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-706-02	17.35/50	4	10	
AP-706-04	25/65	8	16	



STOPCOCK, GLASS, HOLLOW PLUG, DOUBLE OBLIQUE, HIGH VACUUM

Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-708-02	16.2/56	4	10	



STOPCOCK, GLASS, HOLLOW PLUG, OFFSET, HIGH VACUUM

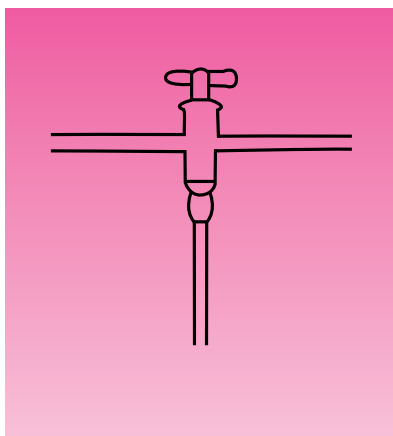
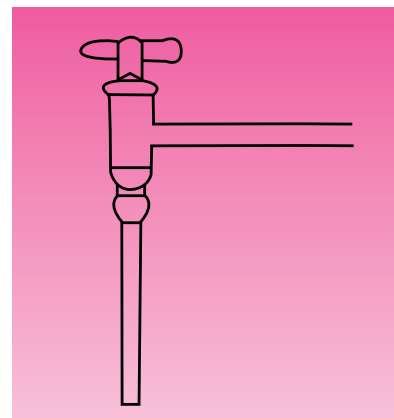
Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-710-02	12.6/40	2	8	
AP-710-04	17.35/50	4	10	
AP-710-06	17.35/50	6	12	

STOPCOCK, GLASS, HOLLOW PLUG, 90°, HIGH VACUUM

Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-712-02	12.6/40	2	8	
AP-712-04	17.35/50	4	10	
AP-712-06	17.35/50	6	12	



STOPCOCK, GLASS, HOLLOW PLUG, T-TYPE, HIGH VACUUM

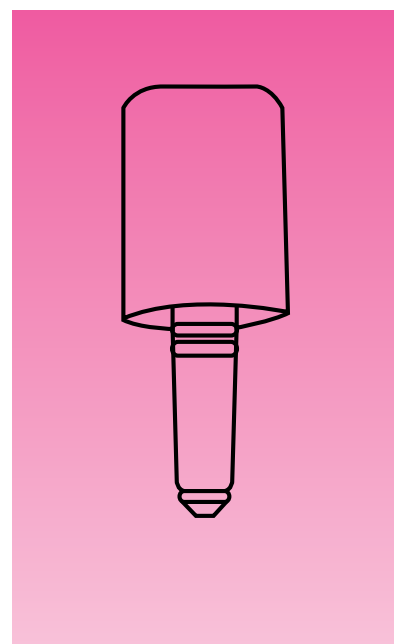
Precision ground with corresponding numbers on the barrel and plug. Lower vacuum chamber is evacuated via a separate 2mm hole in the plug which is not in the line of flow.

Code	Plug Size	Bore(mm)	Stem O.D.(mm)	Price (each)
AP-714-02	12.6/40	2	8	
AP-714-04	17.35/50	4	10	

PLUG, HIGH VACUUM VALVE, PTFE STEM, VITON® 0-RING

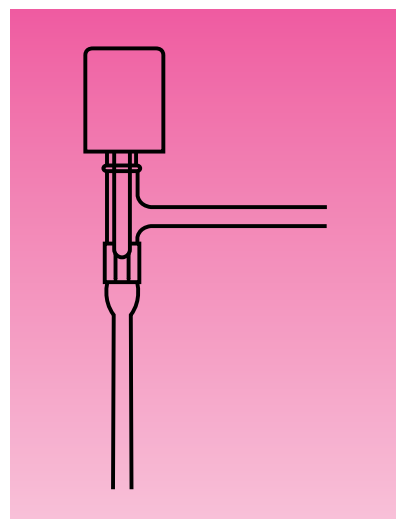
Complete with control knob and PTFE stem having three 0-rings.

Code	Description	Price (each)
AP-720-06	0-4mm high vacuum plug and control knob Viton® 0-ring at tip	
AP-572-04	0-8mm high vacuum plug and control knob Viton® 0-ring at tip	
AP-724-04	0-12mm high vacuum plug and control knob Viton® 0-ring at tip	
Accessory:		
AP-484-12	applicable to the top of AP-720-06	
AP-652-26	applicable to the middle AP-720-06	
AP-384-20	applicable to the top of AP-572-04	
AP-716-12	applicable to the middle AP-572-04	
AP-716-12	applicable to the top of AP-724-04	
AP-716-14	applicable to the middle AP-724-04	



VALVE, HIGH VACUUM, PTFE, 0-RING, 90°

With two 9mm O.D. sidearms sealed to the barrel at a 90° angle to one another. The non-rotating PTFE plug has three 0-rings, the tip 0-ring making the primary seal on the precision formed tapered seat.

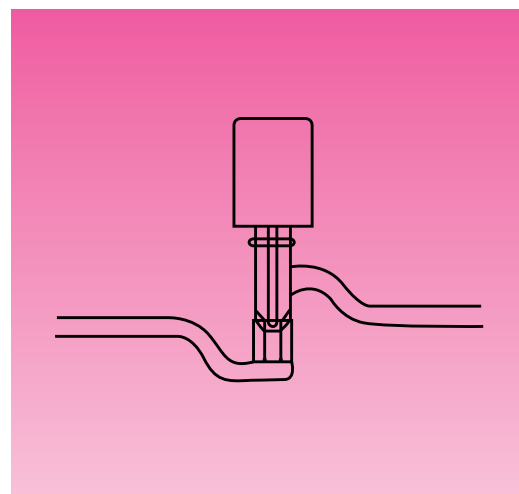


Code	Description	Price(each)
AP-718-02	0-4mm high vacuum valve, 90°, complete	
Accessory:		
AP-720-06	0-4mm high vacuum plug and control knob Viton® 0-ring at tip	

VALVE, HIGH VACUUM, PTFE, 0-RING, 180°

With two 9mm O.D. sidearms sealed to the barrel at a 90° angle to one another. The non-rotating PTFE shaft has three 0-rings, the tip 0-ring making the primary seal on the precision formed tapered seat. For replacement Viton® 0-ring Kit, see AP-720-06, or AP-572-04.

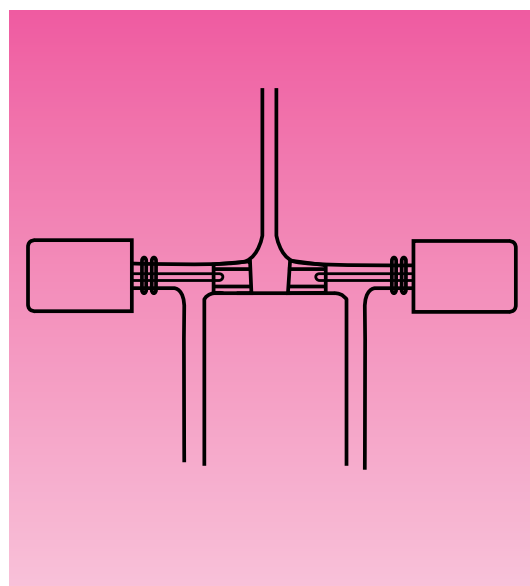
Code	Description	Price(each)
AP-720-02	0-4mm high vacuum valve ,180°	
AP-720-04	0-8mm high vacuum valve ,180°	
Accessory:		
AP-720-06	0-4mm high vacuum plug and control knob Viton® 0-ring at tip	
AP-572-04	0-8mm high vacuum plug and control knob Viton® 0-ring at tip	



VALVE, HIGH VACUUM, PTFE, O-RING, THREE-WAY

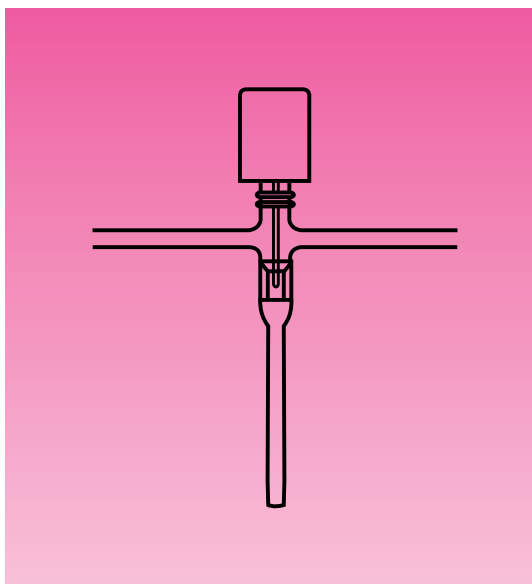
With two 9mm O.D. sidearms sealed to the barrel at a 90° angle to one another. The non-rotating PTFE plug has three O-rings, the tip O-ring making the primary seal on the precision formed tapered seat.

Code	Description	Price(each)
AP-722-02	0-8mm high vacuum valve (3-way)	
AP-722-04	0-12mm high vacuum valve (3-way)	
Accessory:		
AP-572-04	0-8mm high vacuum plug and control knob Viton® O-ring at tip	
AP-724-04	0-12mm high vacuum plug and control knob Viton® O-ring at tip	



VALVE, HIGH VACUUM, PTFE, O-RING, T-TYPE

With two 9mm O.D. sidearms sealed to the barrel at a 90° angle to one another. The non-rotating PTFE shaft has three O-rings, the tip O-ring making the primary seal on the precision formed tapered seat. For replacement Viton® O-ring Kit, see AP-724-04.

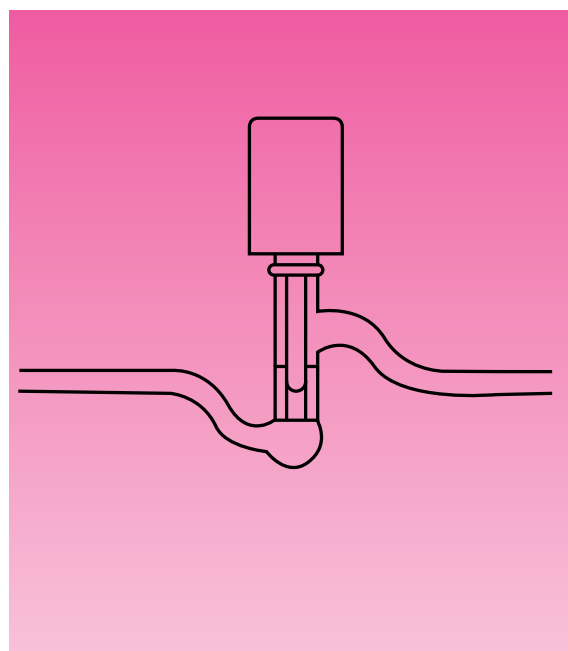


Code	Description	Price(each)
AP-724-02	0-12mm high vacuum valve(T-Type)	
Accessory:		
AP-724-04	0-12mm high vacuum plug and control knob Viton® O-ring at tip	

VALVE, HIGH VACUUM, TEFLON® PROTECTED, 180°

With two 9mm O. D. sidearms sealed to the barrel at a 180° angle to one another. Viton® O-ring on PTFE shaft are protected with precision Teflon® wipers. The plug has a machined-in integral PTFE tip O-ring to make the primary seal. This design provides for an excellent vacuum tight seal without exposing any material other than Teflon® to chemicals.

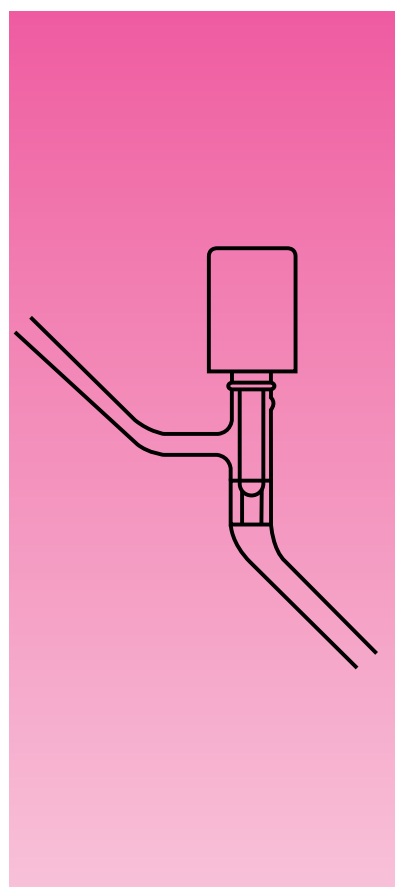
Code	Description	Price(each)
AP-726-10	0-4mm high vacuum valve (180°)	
AP-726-12	0-8mm high vacuum valve (180°)	
AP-726-14	0-12mm high vacuum valve (180°)	
Accessory:		
AP-734-34	0-4mm high vacuum plug and control Knob (Teflon® covered O-ring)	
AP-416-24	0-8mm high vacuum plug and control Knob (Teflon® covered O-ring)	
AP-726-20	0-12mm high vacuum plug and control Knob (Teflon® covered O-ring)	



VALVE, HIGH VACUUM, TEFLON® PROTECTED, LOW HOLD UP

With two 9mm O.D. sidearms bent to minimize hold up of liquids,. Viton® O-ring on PTFE shaft are protected with precision Teflon® wipers. The plug has a machined-in integral PTFE tip O-ring to make the primary seal. This design provides for an excellent vacuum tight seal without exposing any material other than Teflon® to chemicals

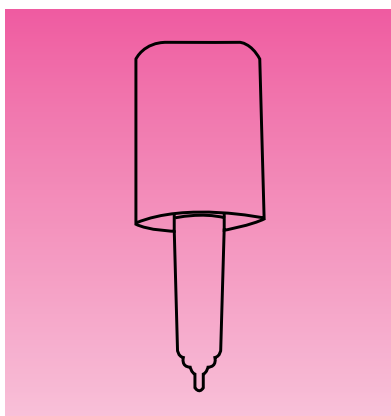
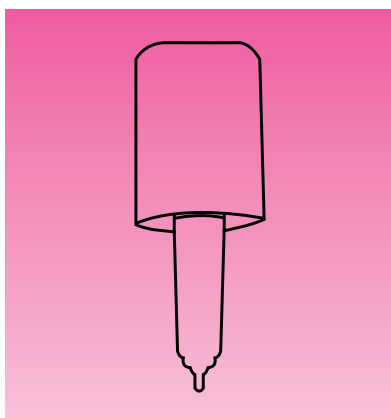
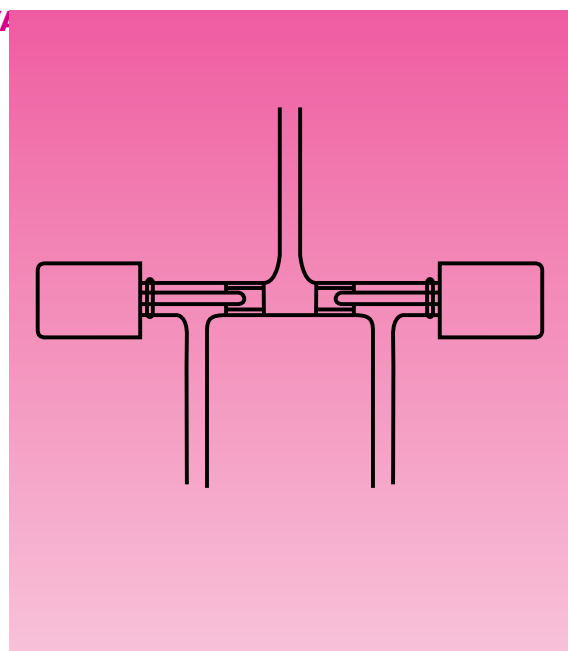
Code	Description	Price(each)
AP-728-02	0-4mm high vacuum valve (Low hold up)	
AP-728-04	0-8mm high vacuum valve (Low hold up)	
AP-728-06	0-12mm high vacuum valve (Low hold up)	
Accessory:		
AP-734-34	0-4mm high vacuum plug and control Knob (Teflon® covered O-ring)	
AP-736-16	0-8mm high vacuum plug and control Knob (Teflon® covered O-ring)	
AP-726-20	0-12mm high vacuum plug and control Knob (Teflon® covered O-ring)	



VALVE, HIGH VACUUM, TEFLON® PROTECTED, THREE-WAY

Viton® 0-ring on PTFE shaft are protected with precision Teflon® wipers. The plug has a machined-in integral PTFE tip 0-ring to make the primary seal. This design provides for an excellent vacuum tight seal without exposing any material other than Teflon® to chemicals.

Code	Description	Price(each)
AP-728-16	0-8mm high vacuum valve (3-way)	
Accessory:		
AP-416-24	0-8mm high vacuum plug and control Knob (Teflon® covered 0-ring)	



PLUG, HIGH VACUUM, TEFLON® PROTECTED, METERING

Complete with control knob. Viton® 0-rings on PTFE shaft are protected with two precision Teflon® wipers (or as shown in the second picture, 0-ring is inside shaft). The plug has a machined-in integral PTFE tip 0-ring to make the primary seal. This design provides for an excellent vacuum tight seal without exposing any material other than Teflon® to chemicals.

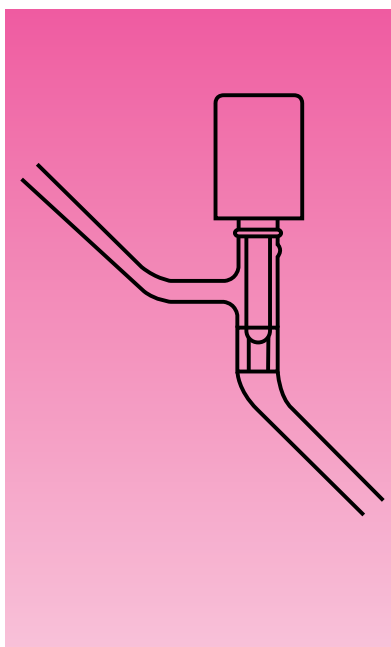
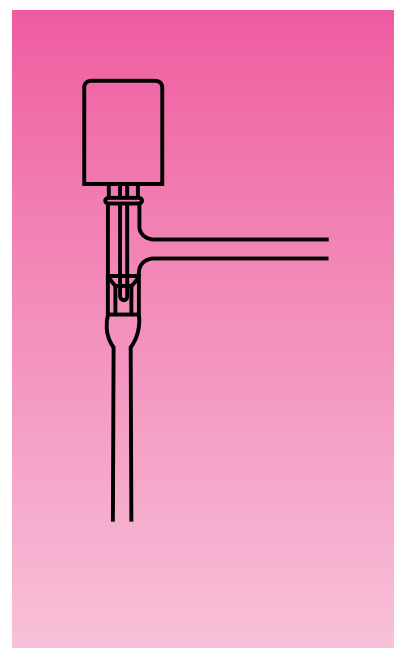
Code	Description	Price(each)
AP-734-08	0-4mm high vacuum metering plug and control Valve (Teflon® half-covered 0-ring)	
AP-734-10	0-8mm high vacuum metering plug and control Valve (Teflon® half-covered 0-ring)	
AP-734-12	0-12mm high vacuum metering plug and control Valve (Teflon® half-covered 0-ring)	

VALVE, HIGH VACUUM, TEFLON® PROTECTED, 90° METERING

Viton® 0-ring on PTFE shaft are protected with precision Teflon® wipers.

The plug has a machined-in integral PTFE tip 0-ring to make the primary seal. This design provides for an excellent vacuum tight seal without exposing any material other than Teflon® to chemicals. The glass portion has two sidearms sealed to the barrel at a 90° angle to one another.

Code	Description	Price(each)
AP-732-02	0-8mm high vacuum valve 90° (Teflon® covered 0-rings)	
Accessories:		
AP-734-10	0-8mm high vacuum metering plug and control Valve (Teflon® half-covered 0-ring)	



VALVE, HIGH VACUUM, TEFLON® PROTECTED, LOW HOLD UP, METERING

Viton® 0-ring on PTFE shaft are protected with precision Teflon® Wipers.

The plug has a machined-in integral PTFE tip 0-ring to make the primary seal. This design provides for an excellent vacuum tight seal without exposing any material other than Teflon® to chemicals. With two 9mm O.D. sidearm bent to minimize hold up of liquids.

Code	Description	Price(each)
AP-734-02	0-4mm high vacuum valve low hold up metering	
AP-734-04	0-8mm high vacuum valve low hold up metering	
AP-734-06	0-12mm high vacuum valve low hold up metering	
Accessories:		
AP-734-08	0-4mm high vacuum metering plug and control valve(Teflon® covered 0-rings)	
AP-734-10	0-8mm high vacuum metering plug and control Valve (Teflon® half-covered 0-ring)	
AP-734-12	0-12mm high vacuum metering plug and control Valve (Teflon® half-covered 0-ring)	

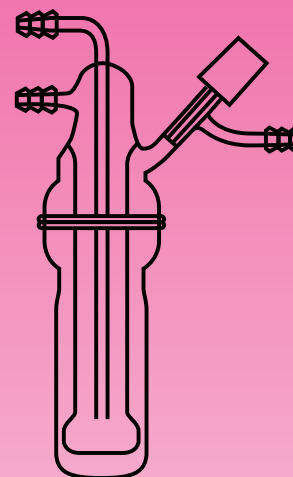
SUBLIMATOR

SUBLIMATOR

A grease-free, two-piece sublimation apparatus consisting of an upper water cooled condenser and lower vessel to hold the material to be sublimed. The sublimate collects on the lower end of the condenser which has a flat bottom.

Condenser is constructed using a grease-free, threaded valve. Connection of the condenser and lower vessel via an O-ring joint enables the two parts to be gently separated for maximum product recovery. Complete apparatus consists of the cold finger condenser, lower vessel, Viton® O-ring and stainless steel pinch clamp.

Code	Description	Capacity	Joint Size	O-Ring Size	Clamp Size	Price (each)
AP-734-16	10ml sublimation Complete	10	25	217	35	
AP-734-18	40ml sublimation Complete	40	40	226	65	
AP-734-20	60ml sublimation Complete	60	50	229	75	
Accessories:		Application				Price(each)
AP-652-12	#35 Stainless steel clamp or #25 O-ring joint					
AP-734-24	#65 Stainless steel clamp or #40 O-ring joint					
AP-734-26	#75 ball joint or #50 O-ring joint					
AP-734-28	#217 Viton® O-ring for #25 O-ring joint					
AP-734-30	#226 Viton® O-ring for #40 O-ring joint					
AP-734-32	#229 Viton® O-ring for #50 O-ring joint					
AP-734-34	0-4mm high vacuum plug and control knob (Teflon® protected O-ring)					





Sublimation Apparatus

Two-piece grease-free sublimer with a flat bottom to enable heating on a hot plate stirrer. Condenser has a large top opening for use with dry ice/acetone or liquid nitrogen. Connection between the flask and condenser is made with a flat O-ring joint permitting parts to be gently separated for maximum product recovery. For capacities of 100ml or 150ml, this refers to below the bottom of the cold finger. Vacuum control is provided by a 0-8mm high vacuum valve. complete apparatus consists of the condenser, flask, Viton® O-ring and horseshoe clamp.

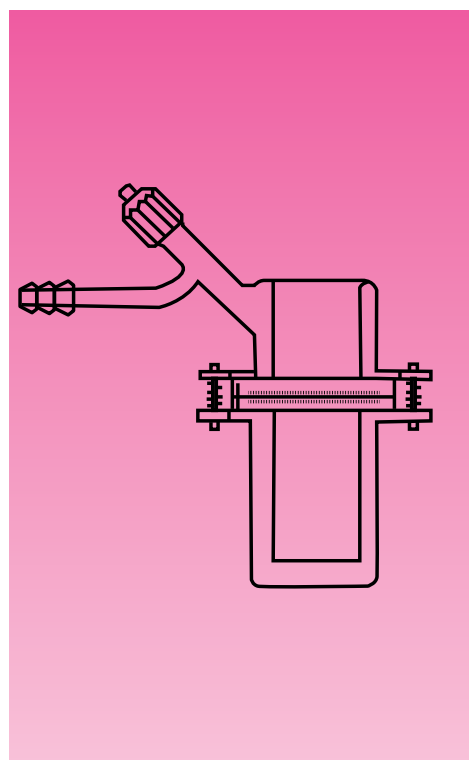


SUBLIMATION APPARATUS

Two-piece grease-free sublimator with a flat bottom to enable heating on a hot plate stirrer. Condenser has a large top opening for use with dry ice/acetone or liquid nitrogen. Connection between the flask and condenser is made with a flat O-ring joint permitting parts to be gently separated for maximum product recovery. The capacity listed is that below the bottom of the cold finger.

Vacuum control is provided by a 0-8mm high vacuum valve. Complete apparatus consists of the condenser, flask, Viton® O-ring and horseshoe clamp.

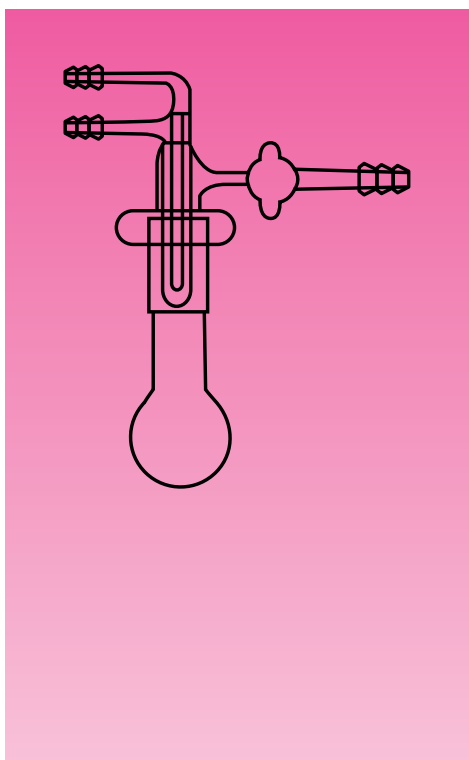
Code	Description	Capacity	O-Ring Size	Flange Size(mm)	Price(each)
AP-736-02	100ml Sublimator Complete	100	331	57	
AP-736-04	150ml Sublimator Complete	150	339	80	
Replacement Components:					
AP-478-26	#331 Viton® O-ring 10.15				
AP-736-08	57mm Horseshoe Clamp 59.40				
AP-736-16	0-8mm PTFE Plug Only 36.10				
AP-736-12	#339 Viton® O-ring 10.35				
AP-736-14	80mm Flange Horseshoe Clamp 72.80				
AP-736-16	0-8mm PTFE Plug Only 36.10				



SUBLIMATOR, WITH 2MM GLASS STOPCOCK

Supplied with a special 25ml long-neck flask for small volume efficiency.

Code	Stopcock	Joint	Price(each)
AP-738-02	2mm Glass	24/29	
Accessories:			
AP-738-04	Flask, round bottom, long neck, 25ml		
AP-738-06	Replacement 2mm Glass Plug Only		
AP-738-08	Replacement S.S. Retention for 2mm Glass stop-cock		

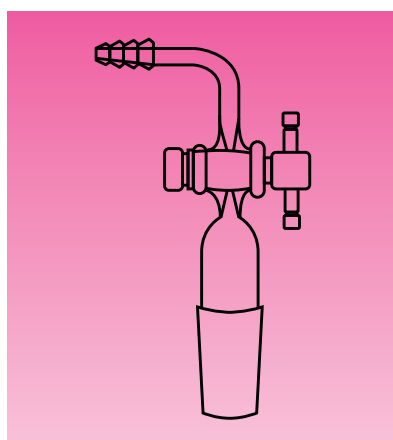
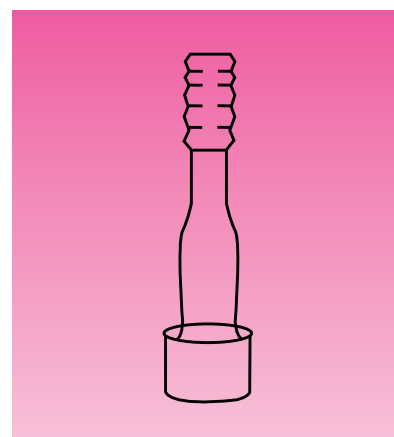


MICROSCALE

ADAPTER, GAS INLET/OUTLET

For microscale applications.

Code	Joint	Hose Connection O.D.(mm)	Price(each)
AP-740-02	14/10	8	



ADAPTER, VACUUM, WITH 1:5 TEFLON® STOPCOCK

For microscale applications.

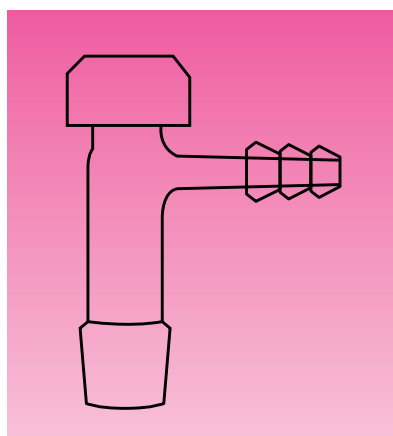
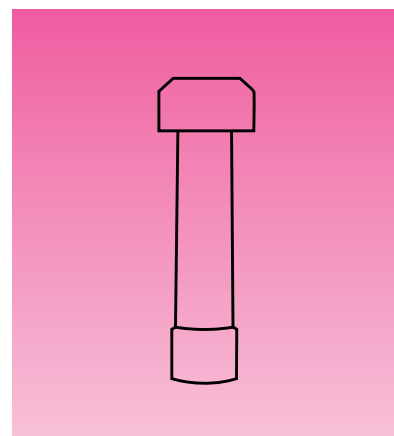
Code	Joint	Stopcock Bore (mm)	Hose Connection (mm)	Price(each)
AP-742-02	14/10	2	8	

ADAPTER, INLET OR THERMOMETER

With a compression cap and Viton® O-ring to form a vacuum tight seal. To use it as syringe port, simply replace the O-ring with Teflon®-lined septum. Cap accommodates 5.0-7.5mm O.D. thermometer.

Supplied with one Nylon® cap (AP-664-04) and one Viton® O-ring.

Code	Joint	Price(each)
AP-744-02	14/10	



ADAPTER, THERMOMETER, WITH HOSE CONNECTION

With a compression cap and Viton® O-ring to form a vacuum tight seal. To use it as syringe port, simply replace the O-ring with Teflon® - lined septum. Cap accommodates 5.0-7.5mm O.D. thermometer.

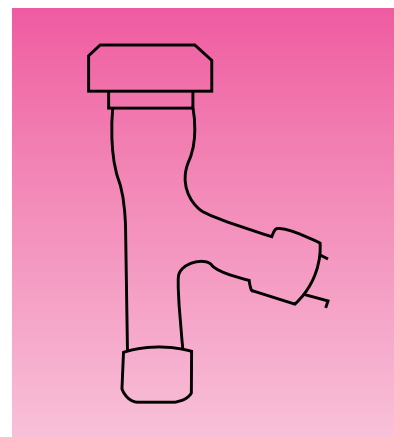
Supplied with one Nylon® cap (AP-664-04) and one Viton® O-ring.

Code	Joint	Price(each)
AP-746-02	14/10	

ADAPTER, DISTILLATION, THREADED

Supplied with one holed compression cap and one Viton® O-ring. For replacement caps, see AP-664-06; for Viton® O-ring, see AP-652-34.

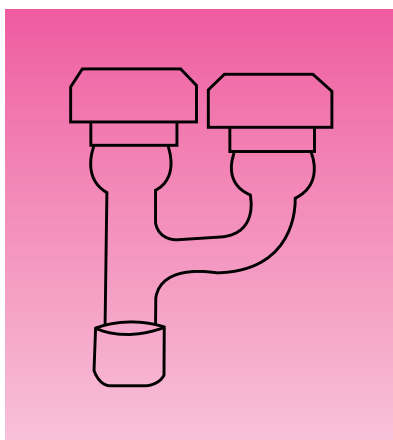
Code	Joint	Price(each)
AP-748-02	14/10	



ADAPTER, CLAISEN, THREADED

Supplied with two holed compression caps, two Viton® O-rings and two Teflon®-lined silicone rubber septa. For replacement caps, see AP-664-06; for Viton® O-rings, see AP-652-34; for septa, see AP-666-06.

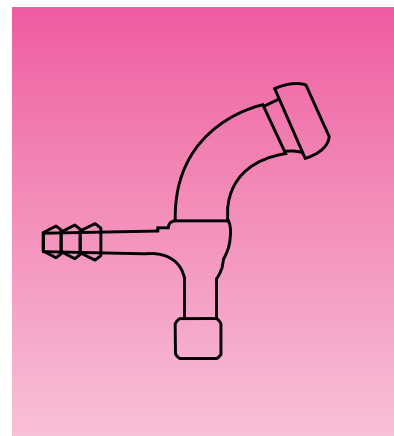
Code	Joint	Price(each)
AP-750-02	14/10	



ADAPTER, VACUUM TAKEOFF, THREADED

Supplied with one holed compression cap and one Viton® O-ring. For replacement caps, see AP-664-06; for Viton® O-ring, see AP-652-34.

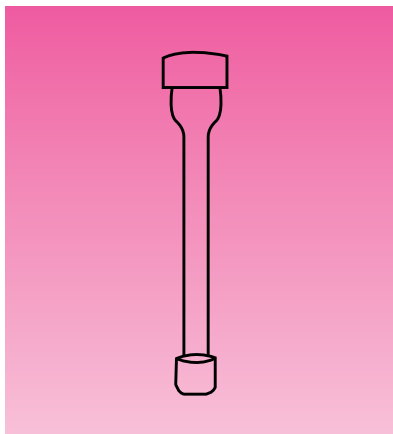
Code	Joint	Price(each)
AP-752-02	14/10	



CONDENSER, AIR REFLUX, THREADED

Supplied with one holed compression cap one Viton® O-ring. For replacement caps, see AP-664-06; for Viton® O-rings, see AP-652-34.

Code	Joint	Effective Length (mm)	Price(each)
AP-754-02	14/10	100	





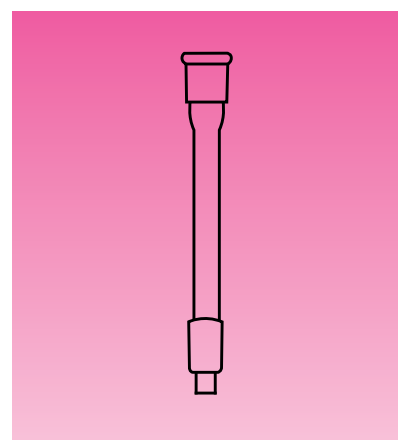
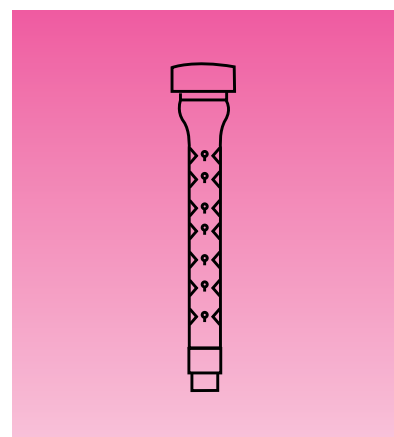
InterChange



COLUMN, DISTILLING, VIGREUX

Supplied with one holed compression cap and one Viton® O-ring. For replacement caps, see AP-664-06; for Viton® O-rings, see AP-652-34.

Code	Joint	Overall Length (mm)	Length Indented Section (mm)	Price(each)
AP-756-02	14/10	122	75	



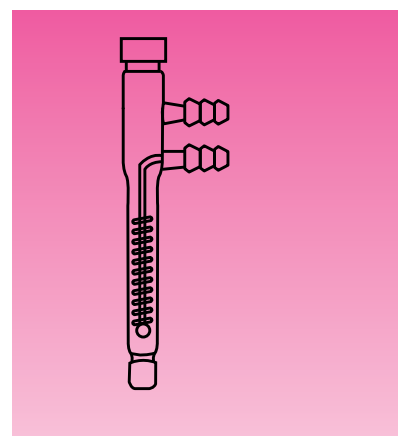
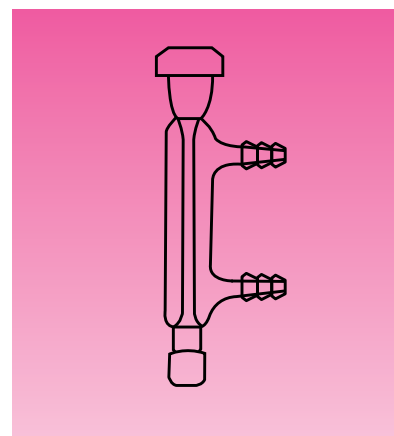
COLUMN, AIR REFLUX, 14/23 JOINT

Code	Joint	Overall Length (mm)	Length between Joint (mm)	Price(each)
AP-758-02	14/23	143	96	

CONDENSER, REFLUX, JACKETED, THREADED

I.D. of inner tube is designed large enough to accept a thermometer. Supplied with one holed compression cap and one Viton® O-ring. For replacement caps, see AP-664-06; for Viton® O-ring, see AP-652-34.

Code	Joint	Jacket Length (mm)	Hose Connection O.D. (mm)	Price(each)
AP-760-02	14/10	80	8	



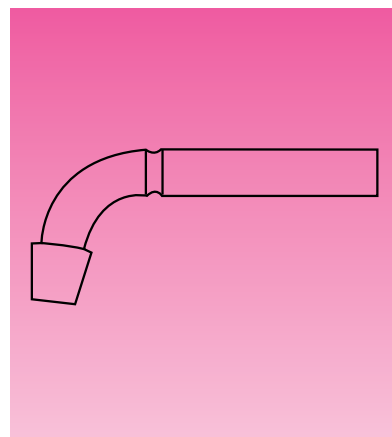
CONDENSER, COIL REFLUX

For low boiling solvents. Supplied with one holed compression cap and one Viton® O-ring. For replacement caps, see AP-664-06; for Viton® O-rings, see AP-652-34; for septa, see AP-666-06.

Code	Joint	Price(each)
AP-762-02	14/10	

TUBE, DRYING, 90° BENT

Code	Joint	Price(each)
AP-764-02	14/10	

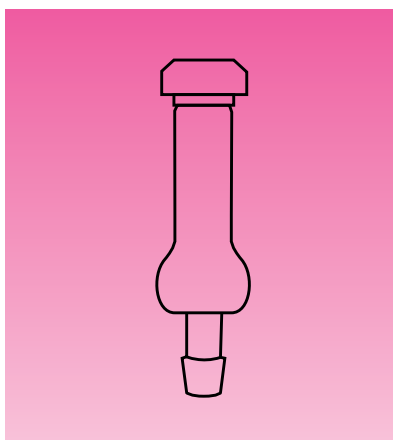


HICKMAN STILL HEAD

Designed for microscale fractional distillation. Supplied with one compression cap, one Viton® O-ring and one Teflon® - faced silicone rubber septum.

For replacement caps, see AP-664-06; for Viton® O-rings, see AP-652-34; for septa, See AP-666-06.

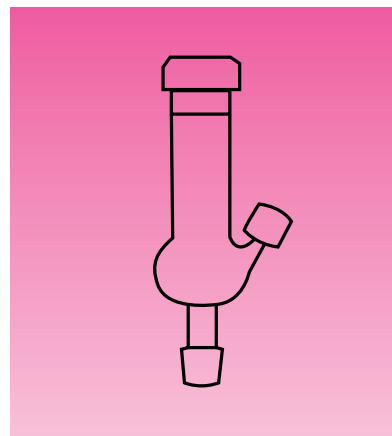
Code	Joint	Price(each)
AP-766-02	14/10	



HICKMAN STILL HEAD, WITH SIDE PORT

Side port with cap and 8mm Teflon®-lined septum for syringe injection or retrieval. Designed for microscale fractional distillation. Supplied with one compression cap, one Viton® O-ring and one Teflon® -faced silicone rubber septum. For replacement caps, see AP-790-06 and AP-664-06; for Viton® O-rings, see AP-652-34; for septa, see AP-666-02 and AP-666-06.

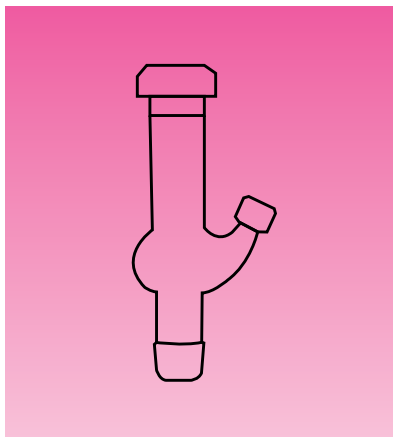
Code	Joint	Price(each)
AP-768-02	14/10	



DISTILLATION HEAD, HICKMAN-HINKLE, WITH SIDE PORT

This head has a threaded side port with septum and cap for easier syringe access to well contents. Supplied with one compression cap, one Viton® O-ring and one Teflon®-faced silicone rubber septum. For replacement caps, see AP-790-06 and AP-664-06; for Viton® O-rings, see AP-652-34; for septa, see AP-666-02 and AP-666-06.

Code	Joint	Price(each)
AP-770-02	14/10	



Vial conical reaction, heavy wall, graduated

Supplied with one holed compression cap, one Vilton® O-ring and one Teflon® faced silicone rubber septum With or without screwthread



InterChange

Tube, Craig recrystallisation

Complete with a glass outer tube and an inner plug 2ml capacity

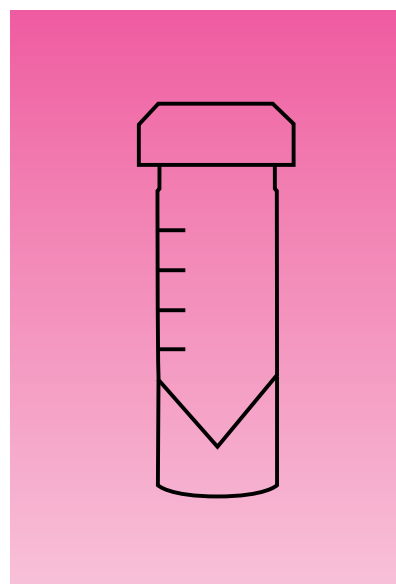
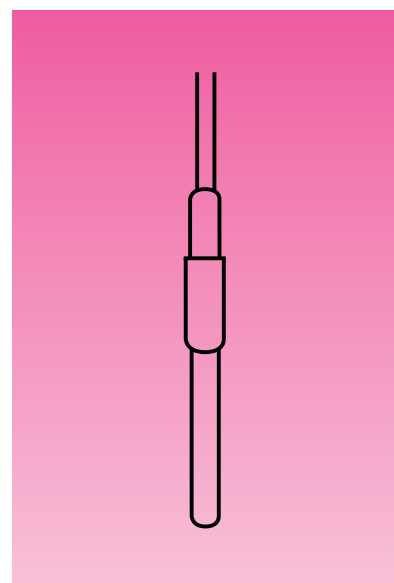


InterChange

TUBE, CRAIG RECRYSTALLIZATION

Complete with a glass outer tube and an inner plug.

Code	Capacity Below Grind	Price(each)
AP-772-02	2ml, Complete	



VIAL, CONICAL REACTION, HEAVY WALL, GRADUATED

Supplied with one holed compression cap, one Viton® O-ring and one Teflon® -faced silicone rubber septum.
For replacement caps, see AP-664-06; For Viton® O-rings, see AP-652-34; for septa, see AP-666-06.

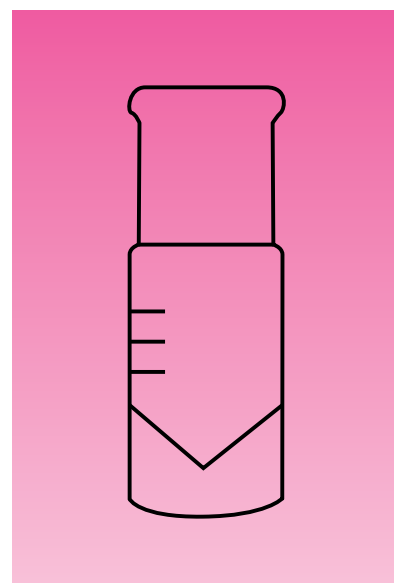
Code	Joint	Capacity (ml)	Price(each)
AP-774-02	5/5*	0.1	
AP-774-04	7/10**	0.1	
AP-774-06	7/10**	1	
AP-774-08	14/10	3	
AP-774-10	14/10	5	
AP-774-12	14/10	8	

*5/5 joint uses AP-790-06 cap, AP-666-02 septa and AP-652-22 O-ring.
**7/10 joint uses AP-664-04 cap, AP-666-04 septa and AP-384-20 O-ring.

CONICAL REACTION VIAL, 14/23, GRADUATED

Heavy wall vials have an internal conical bottom and flat bottom.

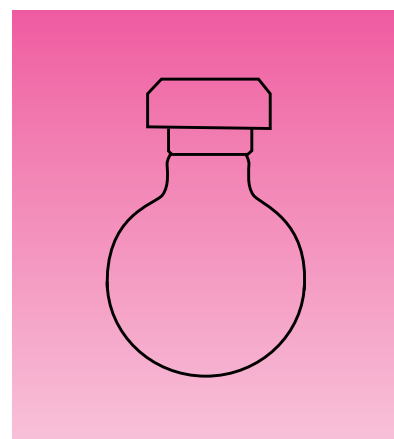
Code	Joint	Capacity (ml)	Price(each)
AP-776-02	14/23	3	
AP-776-04	14/23	5	
AP-776-06	14/23	8	



FLASK, ROUND BOTTOM, THREADED

Supplied with one holed compression caps, one Viton® 0-rings and one Teflon® - faced silicone rubber septum. For replacement caps, see AP-664-06; for Viton® 0-rings, see AP-652-34; for septa, see AP-666-06.

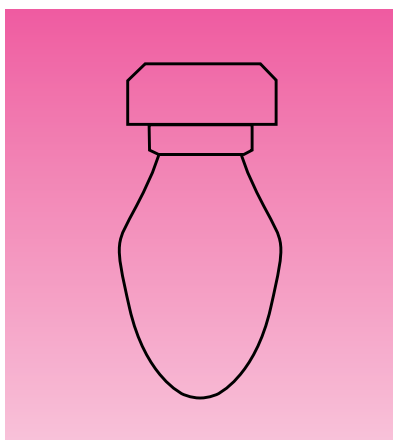
Code	Joint	Capacity (ml)	Price(each)
AP-778-02	14/10	5	
AP-778-04	14/10	10	
AP-778-06	14/10	25	



FLASK, PEAR SHAPE, THREADED

Supplied with one compression cap, one Viton® 0-ring and one Teflon® -faced silicone rubber septum. For replacement caps, see AP-664-06; for Viton® 0-rings, see AP-652-34; for septa, see AP-666-06.

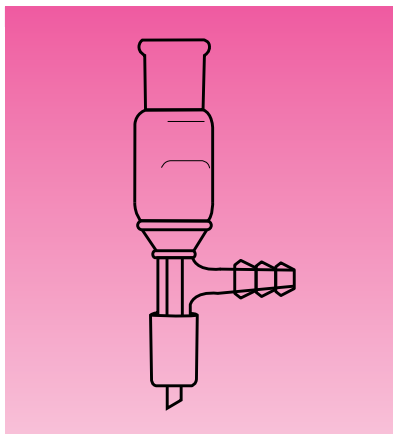
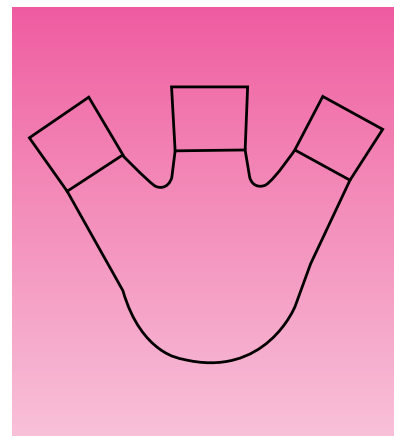
Code	Joint	Capacity (ml)	Price(each)
AP-780-02	14/10	5	
AP-780-04	14/10	10	
AP-780-06	14/10	25	



FLASK, ROUND BOTTOM, 3-NECK

Microscale, round bottom flask with three 14/10 outer ground joints externally threaded. For replacement caps, see AP-664-06; for Viton® 0-rings, see AP-652-34; for septa, see AP-666-06.

Code	Joint	Capacity (ml)	Price(each)
AP-782-02	14/10	25	
AP-782-04	14/10	50	



With 14/23 joints and a 20mm O.D. fritted disc.

Code	Joint	Disc O.D. (mm)	Disc Porosity	Price(each)
AP-784-02	14/23	20	M	

FILER FUNNEL, HIRSCH

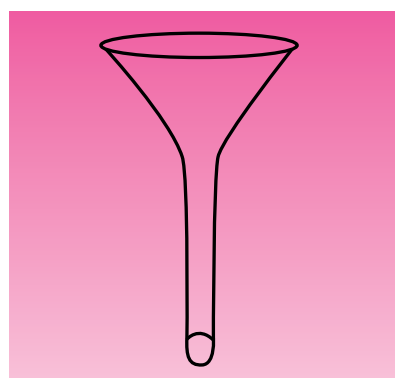
With 10mm O.D. fritted disc of coarse porosity for all microscale application with 14/10 joints. The capacity above disc is approximately 7ml. The O.D. of plain stem is 7mm.

Code	Porosity	Price(each)
AP-786-02	C	

Please see our pages at the start of the catalogue regarding sinter / frit alternatives from 00 through to 5 and the selection of different options available.



FUNNEL, MICRO

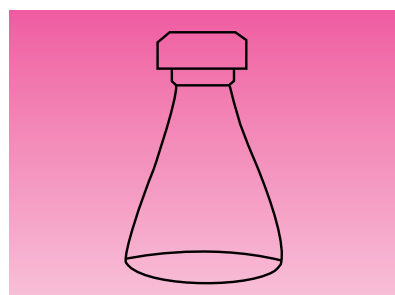
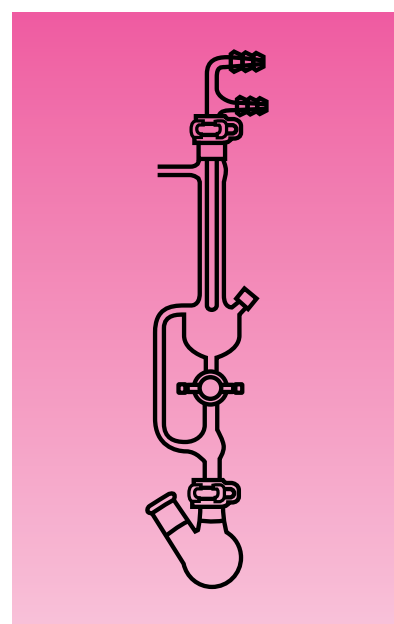


Code	Description	Price(each)
AP-788-02	27mm O.D. on top	

STILL, SOLVENT REFLUX, MICROSCALE

Capacity of collection bulb is 15ml and has side syringe port with cap and septum for removal of solvent. With 2mm Teflon® stopcock and 14/23 Joints.

Code	Description	Price(each)
AP-790-02	Complete, w/o two-neck flask	
AP-790-04	Two neck flask, 14/23, 25ml	
AP-790-06	8mm Side port cap with hole	



FLASK, ERLLENMEYER, THREADED

Supplied with one compression cap, one Viton® O-ring and one Teflon®-faced silicone rubber septum. For replacement caps, see AP-664-06; for Viton® O-rings, see AP-652-34; for septa, see AP-666-06.

Code	Joint	Capacity (ml)	Price(each)
AP-792-02	14/10	5	
AP-792-04	14/10	10	
AP-792-06	14/10	25	

Flask, Filtering, microscale

Code	Capacity (ml)
AP-794-02	25
AP-794-04	50

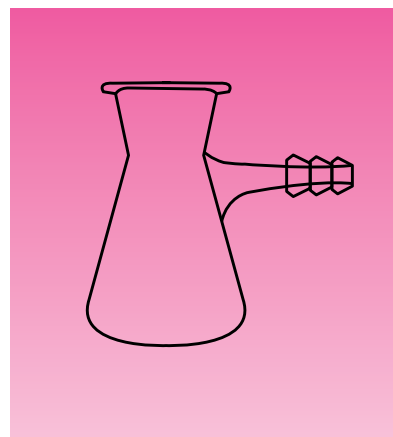


InterChange

FLASK, FILTERING, MICROSCALE

Top is tooled for a #2 neoprene filter adapter or #3 rubber stopper.

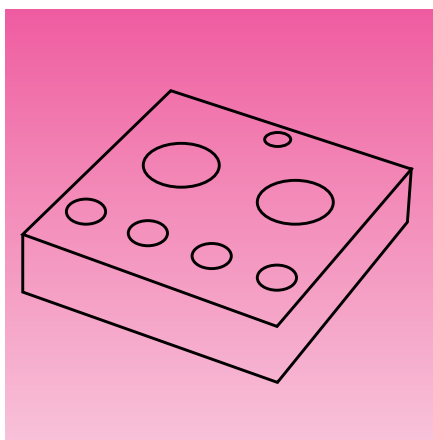
Code	Capacity (ml)	Price(each)
AP-794-02	25	
AP-794-04	50	



HEAT TRANSFER BLOCK FOR MINI VIALS

Aluminum heat transfer block, used in place of a glass sand in microscale experiments. It has holes to hold 3.0 and 5.0ml heavy wall reaction vials and four Craig crystallization tubes, plus one hole for a standard thermometer.

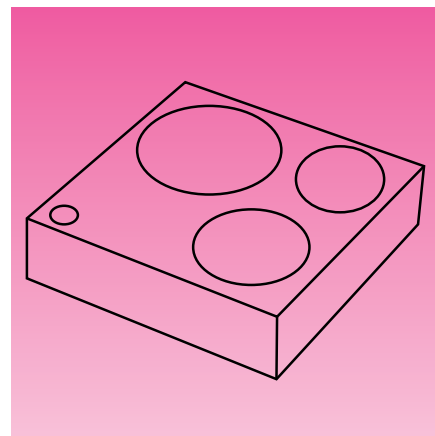
Code	Price (each)
AP-794-08	



HEATING TRANSFER BLOCK FOR ROUND BOTTOM FLASK

Aluminum heat transfer block, used in place of a glass sand in microscale experiments. It will hold 5, 10 and 25ml round bottom flasks, plus one hole for a standard thermometer.

Code	Price (each)
AP-794-12	



KITS

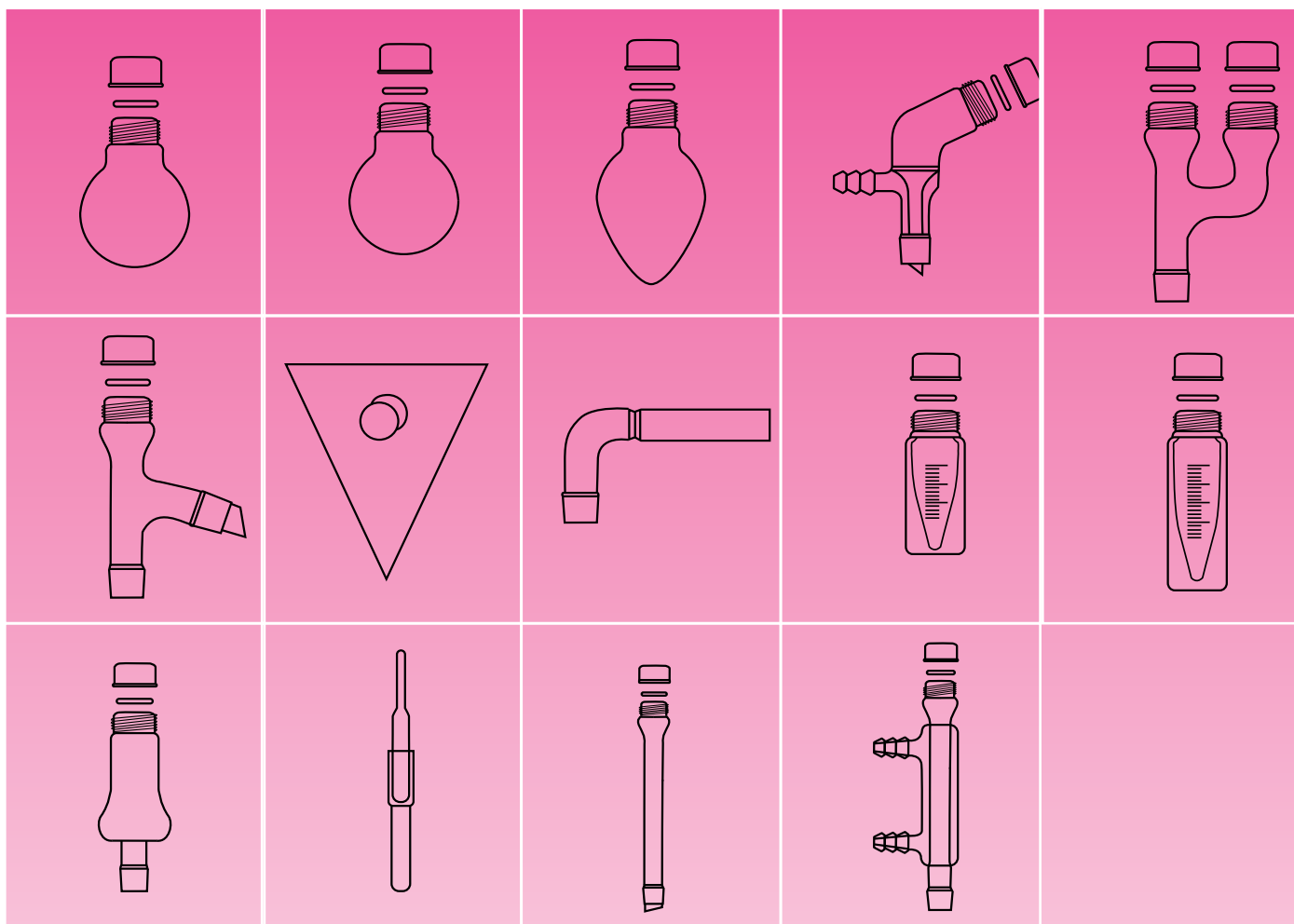
KIT, MICROSCALE, THREADED, 14 PIECES

Due to A Plus®'s packaging flexibility, we can readily customize a kit that includes the specific components you require. Just give us a call and we'll give a quotation within 2 days. This kit contains each of the following components:

Code	Description	Qty	Price
AP-K10	Microscale Kit	1	(w/o case & insert)
AP-K10-002	Claisen adapter	1	
AP-K10-004	Distillation adapter	1	
AP-K10-006	Vacuum take-off adapter	1	
AP-K10-008	Air reflux condenser	1	
AP-K10-010	Jacket condenser	1	
AP-K10-012	Drying tube	1	
AP-K10-014	Hickman still head	1	

Code	Description	Qty	Price
AP-K10-016	Craig recrystallization tube, 2ml	1	
AP-K10-018	Heavy wall conical vial, 3ml	1	
AP-K10-020	Heavy wall conical vial, 5ml	1	
AP-K10-022	Round bottom flask, 10ml	1	
AP-K10-024	Round bottom flask, 25ml	1	
AP-K10-026	Pear shape flask, 10ml	1	
AP-K10-028	Spin vane, Teflon®	1	

Due to A Plus®'s packaging flexibility, we can readily customize a kit that includes the specific components you require. Just give us a call and we'll give a quotation within 2 days. This kit contains each of the following components:





Flask,
round bottom, threaded



Condenser,
air reflux,
threaded



Adapter,
vacuum takeoff, threaded



Condenser,
reflux, jacketed,
threaded

I.D. of inner tube
is designed large
enough to accept
a thermometer.

Microscale threaded and jointed ware

Supplied with one compression cap,
one Viton® O-ring and one Teflon®
– faced silicone rubber septum.



**Hickman
Still Head**

Designed for
microscale
fractional
distillation.



Adapter,
claisen, threaded



Condenser,
distillation, threaded



Flask,
pear shape,
threaded



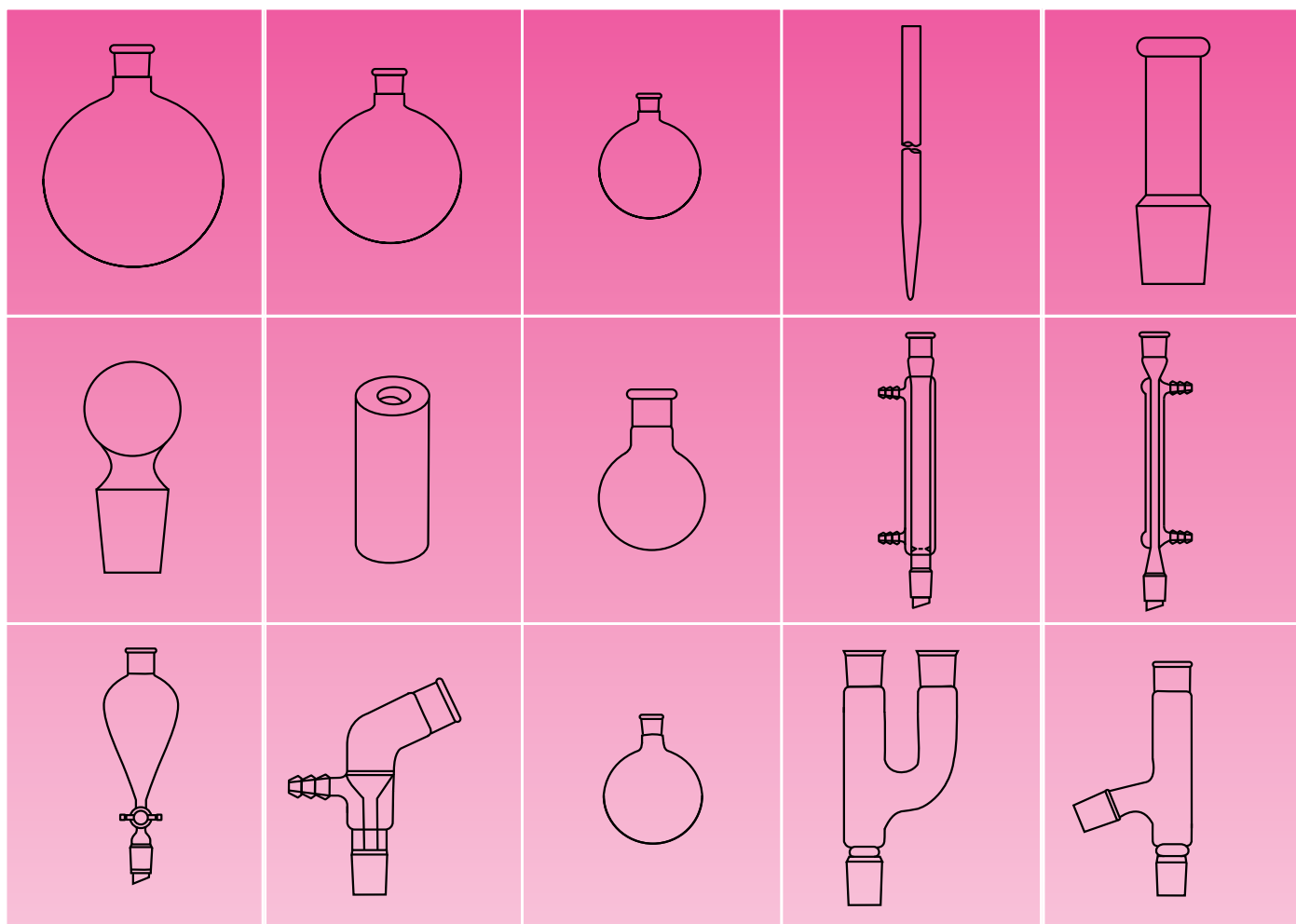
InterChange

KIT, ORGANIC CHEMISTRY, I4/23

For use in college organic laboratory teaching courses. This kit can also be supplied in a cardboard carton as opposed to a plastic case with foam inserts.

Code	Description	Qty	Price
AP-K20	Organic Chemistry Kit, Complete	1	(w/o case & insert)
AP-K20-002	Claisen adapter	1	
AP-K20-004	Distillation adapter, 75° Angle	1	
AP-K20-006	Vacuum takeoff adapter	1	
AP-K20-008	Inlet/Thermometer Adapter	1	
AP-K20-010	West Condenser, 190mm Jacket Length	1	
AP-K20-012	Distillation Column, 200mm Jacket Length	1	
AP-K20-014	Round Bottom Flask, 25mL	1	

Code	Description	Qty	Price
AP-K20-016	Round Bottom Flask, 50mL	1	
AP-K20-018	Round Bottom Flask, 100mL	1	
AP-K20-020	Round Bottom Flask, 250mL	1	
AP-K20-022	Round Bottom Flask, 500mL	1	
AP-K20-024	Separatory Funnel, 125mL	1	
AP-K20-026	Glass Pennyhead stopper	1	
AP-K20-028	Bleed Tube	1	

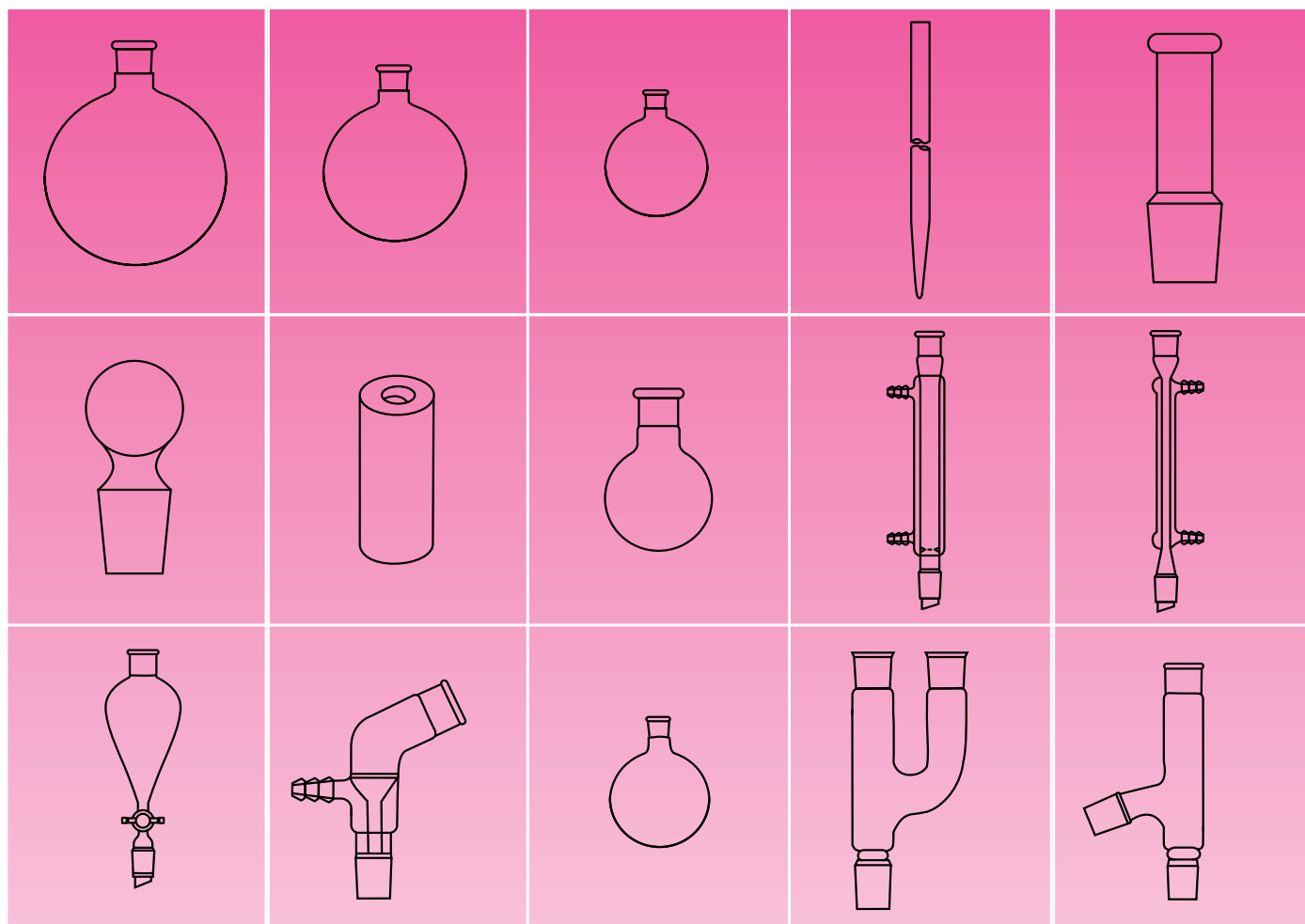


KIT, ORGANIC CHEMISTRY, 19/26

For use in college organic laboratory teaching courses. This kit can also be supplied in a cardboard carton as opposed to a plastic case with foam inserts.

Code	Description	Qty	Price
AP-K30	Organic Chemistry Kit, Complete	1	(w/o case & insert)
AP-K30-002	Claisen adapter	1	
AP-K30-004	Distillation adapter, 75° Angle	1	
AP-K30-006	Vacuum take-off adapter	1	
AP-K30-008	Inlet/Thermometer Adapter	1	
AP-K30-010	West Condenser, 190mm Jacket Length	1	
AP-K30-012	Distillation Column, 200mm Jacket Length	1	
AP-K30-014	Round Bottom Flask, 25mL	1	

Code	Description	Qty	Price
AP-K30-016	Round Bottom Flask, 50mL	1	
AP-K30-018	Round Bottom Flask, 100mL	1	
AP-K30-020	Round Bottom Flask, 250mL	1	
AP-K30-022	Round Bottom Flask, 500mL	1	
AP-K30-024	Separatory Funnel, 125mL	1	
AP-K30-026	Glass Pennyhead Stopper	1	
AP-K30-028	Bleed Tube	1	

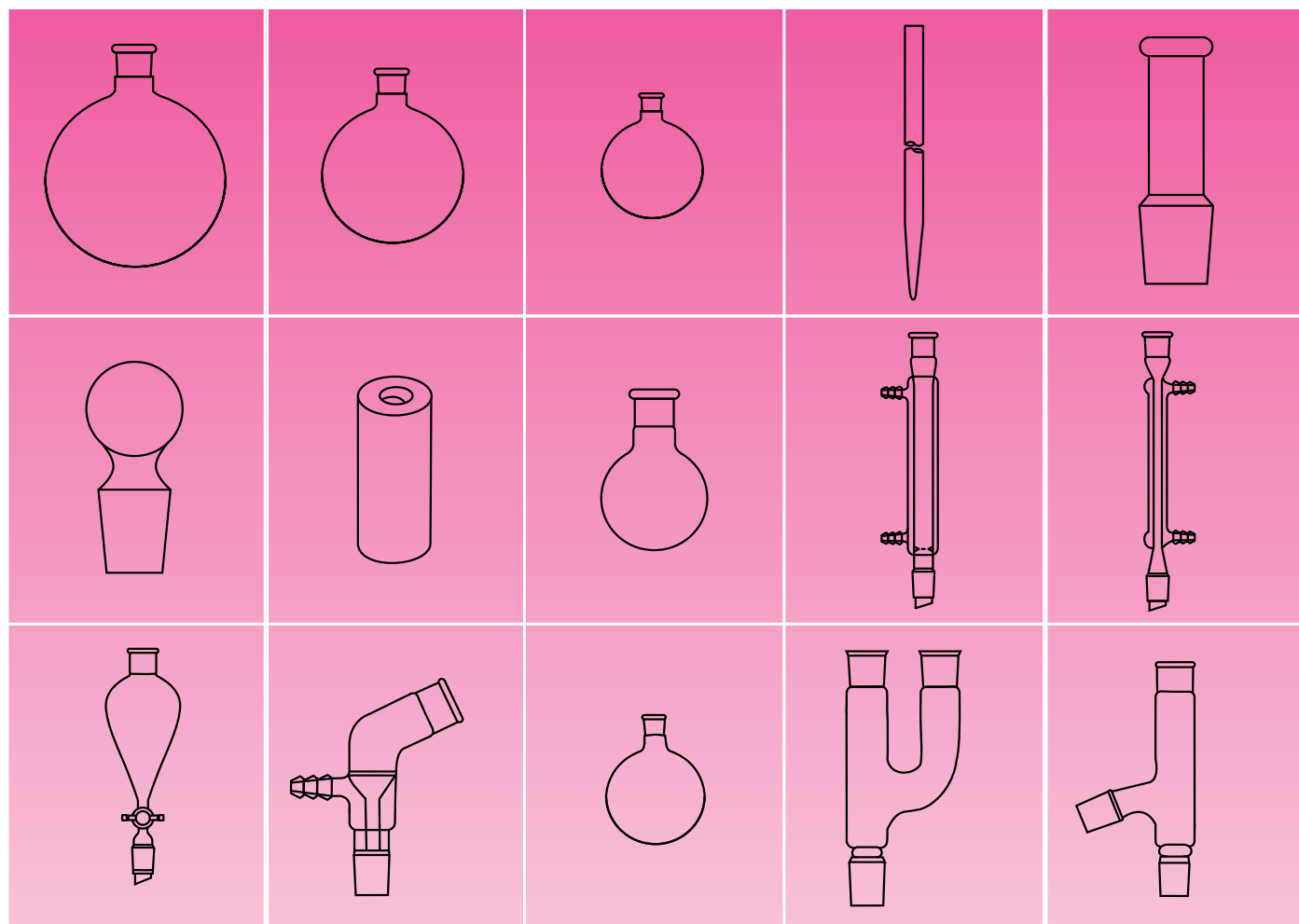


KIT, ORGANIC CHEMISTRY, 24/29

For use in college organic laboratory teaching courses. Considering most labs are equipped with drawers for every student. This kit can also be supplied in a cardboard presentation box as opposed to a plastic case with foam inserts.

Code	Description	Qty	Price
AP-K40	Organic Chemistry Kit, Complete	1	(w/o case & insert)
AP-K40-002	Claisen adapter	1	
AP-K40-004	Distillation adapter, 75° Angle	1	
AP-K40-006	Vacuum take-off adapter	1	
AP-K40-008	Inlet/Thermometer Adapter	1	
AP-K40-010	West Condenser, 190mm Jacket Length	1	
AP-K40-012	Distillation Column, 200mm Jacket Length	1	

Code	Description	Qty	Price
AP-K40-014	Round Bottom Flask, 25mL	1	
AP-K40-016	Round Bottom Flask, 50mL	1	
AP-K40-018	Round Bottom Flask, 100mL	1	
AP-K40-020	Round Bottom Flask, 250mL	1	
AP-K40-022	Round Bottom Flask, 500mL	1	
AP-K40-024	Separatory Funnel, 125mL	1	
AP-K40-026	Glass Pennyhead Stopper	1	
AP-K40-028	Bleed Tube	1	



MUSEUM JAR PRICES : 2016

Jars With Stoppered Lids.

Code	Height (mm)	Jar Diameter (mm)				
		50	80	100	150	200
AP-MJSL-50	50					
AP-MJSL-60	60					
AP-MJSL-80	80					
AP-MJSL-100	100					
AP-MJSL-120	120					
AP-MJSL-150	150					
AP-MJSL-160	160					
AP-MJSL-200	200					
AP-MJSL-250	250					
AP-MJSL-300	300					
AP-MJSL-400	400					
AP-MJSL-500	500					
AP-MJSL-550	550					
AP-MJSL-600	600					
AP-MJSL-700	700					
AP-MJSL-750	750					
AP-MJSL-800	800					
AP-MJSL-1000	1000					
AP-MJSL-1200	1200					
AP-MJSL-1400	1400					



MUSEUM JAR PRICES : 2018

Jars With Stoppered Lids.

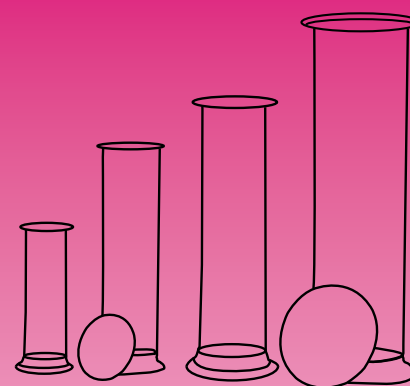
Code	Height (mm)	Jar Diameter (mm)								
		50	80	100	150	200	250	300	350	400
AP-MLFT-100	100									
AP-MLFT-150	150									
AP-MLFT-200	200									
AP-MLFT-250	250									
AP-MLFT-300	300									
AP-MLFT-400	400									
AP-MLFT-550	550									
AP-MLFT-600	600									
AP-MLFT-650	650									
AP-MLFT-700	700									
AP-MLFT-750	750									
AP-MLFT-800	800									
AP-MLFT-850	850									
AP-MLFT-900	900									
AP-MLFT-950	950									
AP-MLFT-1000	1000									
AP-MLFT-1200	1200									

Prices on application

Prices on application

Prices on application

For Flanged Jars, the available diameters over 150mm are:- 160, 170, 180, 190, 200, 250, 270 300, 350, 400. mm. Under 150mm diameter, we can provide so many diameters that it is best to ask.





InterChange

Museum Jar, with Stoppered Lids

Code Visible Jar Height (mm)	Jar Diameter (mm)				
	50	80	100	150	200
AP-MJSL-50					
AP-MJSL-60					
AP-MJSL-80					
AP-MJSL-100					
AP-MJSL-120					
AP-MJSL-150					
AP-MJSL-160					
AP-MJSL-200					
AP-MJSL-250					
AP-MJSL-300					
AP-MJSL-400					
AP-MJSL-500					
AP-MJSL-550					
AP-MJSL-600					
AP-MJSL-700					
AP-MJSL-750					
AP-MJSL-800					
AP-MJSL-1000					
AP-MJSL-1200					
AP-MJSL-1400					



InterChange

Museum Jar, with Flanged Lids

Code Visible Jar Height (mm)	Jar Diameter (mm)								
	50	80	100	150	200	250	300	350	400
AP-MLFT-100									
AP-MLFT-150									
AP-MLFT-200									
AP-MLFT-250									
AP-MLFT-300									
AP-MLFT-400									
AP-MLFT-550									
AP-MLFT-600									
AP-MLFT-650									
AP-MLFT-700									
AP-MLFT-750									
AP-MLFT-800									
AP-MLFT-850									
AP-MLFT-900									
AP-MLFT-950									
AP-MLFT-1000									
AP-MLFT-1200									

For Flanged Jars, the available diameters over 150mm are:- 160, 170, 180, 190, 200, 250, 270 300, 350, 400. mm. Under 150mm diameter, we can provide so many diameters that it is best to ask.



InterChange



InterChange

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