



Vacuum Equipment

■ Manifolds

- *Easy to assemble with "Ace-Safe" connectors*
- *Added safety and versatility*
- *Compact*

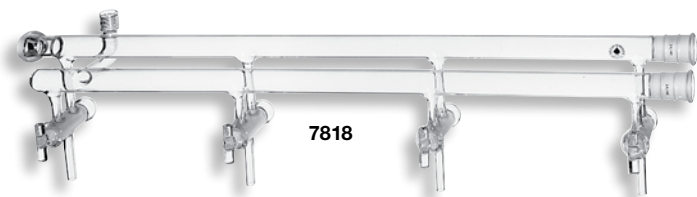


ACE GLASS
INCORPORATED

aceglass.com

Adapters ■ Traps ■ Gauges

Vacuum Manifolds



7818

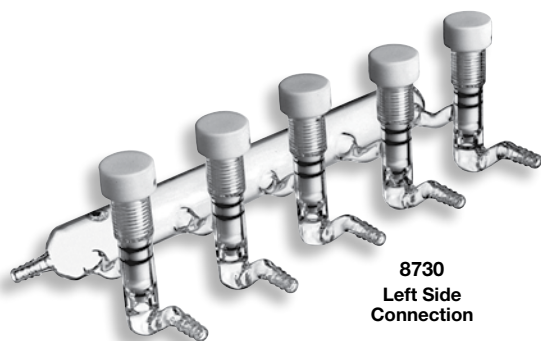
8729-54
Five Ports

8729 Manifold Double Tube, with Threaded Stopcocks ♠

Greaseless vacuum/gas manifold with 0-4 mm high-vacuum, Easy Action PTFE three-way stopcocks for takeoffs. One end of bottom and top manifold tube has a #7 Ace-Thred for easy cleaning. Ends are supplied with 5846-04 Nylon stopper/plugs with FETFE O-Rings. Port connections are 8 mm O.D.; vacuum and gas connections are 1/2" O.D.

Distance between takeoffs is 100 mm. For replacement plugs, order **8194-266**.

No. of Ports	Approx. overall Distance, mm	Order Code	COMPLETE
3	300	8729-50	529.65
5	500	8729-54	717.50

8730
Left Side Connection

Complete system bakeable when ordered with PTFE plug handles

7818 Manifold Double Tube ♠

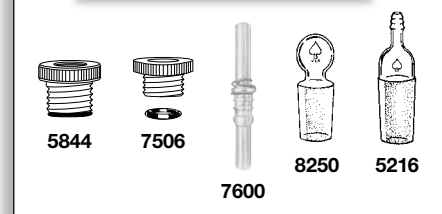
Double tube manifold with four double oblique high-vacuum glass stopcocks, 4 mm bore.

Takeoff ports are 10 mm O.D. Two 24/40 outer joints on right end for easy cleaning. Upper manifold tube has a 35/25 ball joint for connection to trap, supplemental vacuum manifold with McLeod Gauge (available from ACE), or vacuum. Lower tube has a #11 Ace-Thred extending toward the rear and bent 90° to the vertical for connecting a 10 mm O.D. gas line using 7506-02 Bushing with FETFE O-Ring or using 5844-60 Adapter to connect 14034 Vacuum Gauge, on page 7. Manifold NOT supplied with bushing or O-Ring or 24/40 stoppers and clamps. For bushing and O-Ring, order **7506-02**; for stoppers, order **8250-12**; for stopper clamps, order **7600-25**. Distance between ports, 200 mm; overall length, approximately 670 mm.

	Order Code	Each
Manifold, only	7818-24	1,086.45
Accessories:		
Adapter, PTFE, #11-1/8" FPT	5844-60	47.73
Bushing, Nylon, #11, w/O-Ring	7506-02	9.31
Clamp, S-S, 24/40 , Pkg/12	7600-25	★ 151.78
Stopper, 24/40	8250-12	17.38
Adapter, Conn. Hose 24/40	5216-10	19.29

Systems made to order
Choose more or fewer take-offs, joints or Ace-Thred connections.

ACCESSORIES



Note! 5844 can be used to connect 14034 Vacuum Gauge (page 7) to #15 Ace-Thred on 7818 Manifold.

8730 Manifold Vacuum ♠

All-glass-and-PTFE vacuum manifold with three, four or five stopcock ports. Each port is a variable opening, 0-10 mm, high vacuum threaded stopcock. Plugs are PTFE with Nylon or PTFE handles and FETFE O-Rings. Ultimate vacuum of 10^{-7} can be realized with O-Rings as supplied. In the event you need to bake the entire system, order bakeable plugs with PTFE handles. Hose connections on stopcocks and vacuum line are size E for 13-15 mm O.D. tubing. For replacement plugs, order **8194-270** or **8194-97**. Available left side connection (illustration) or right side connection.

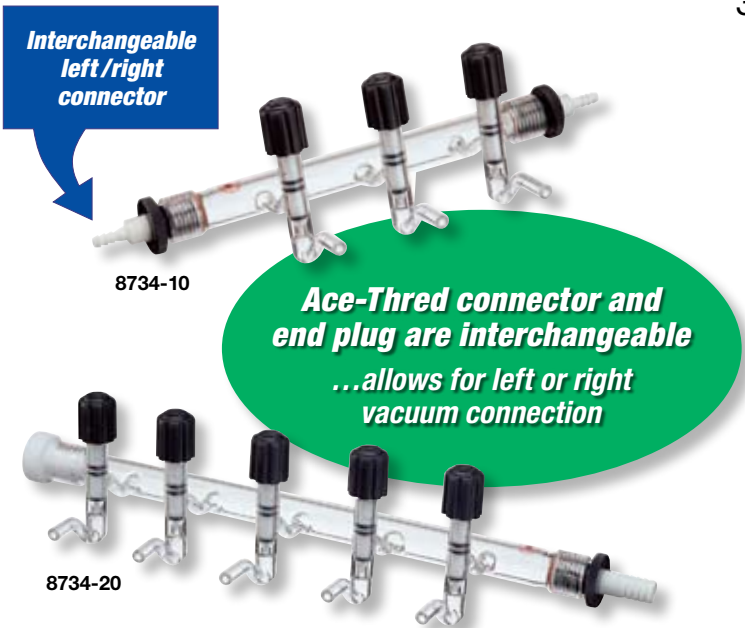
Left Side Connection					Right Side Connection				
Plug Handle Material	No. of Ports	Approx. End to End Lgth, mm	Order Code	Each	Plug Handle Material	No. of Ports	Approx. End to End Lgth, mm	Order Code	Each
UHDPE*	3	235	8730-12	590.39	UHDPE	3	235	8730-27	590.39
PTFE	3	235	8730-14	660.37	PTFE	3	235	8730-29	660.37
UHDPE	4	320	8730-16	648.30	UHDPE	4	320	8730-31	648.30
PTFE	4	320	8730-18	733.61	PTFE	4	320	8730-33	733.61
UHDPE	5	375	8730-20	682.18	UHDPE	5	375	8730-35	682.18
PTFE	5	375	8730-22	813.11	PTFE	5	375	8730-37	813.11

*UHDPE — Ultra High Density Polyethylene, max. temperature limit, 130°C.

NOTE: 8730 Manifold can be altered to your special needs, i.e. joint or thread on takeoff, more or fewer takeoffs, etc. Ask for quotation.

8734 Manifold Vacuum, Dual ♠

Glass Manifold with #15 Ace-Thred at either end to allow switching 5853 vacuum connection to left or right side. Supplied with three or five 0-4 mm high-vacuum, Easy Action stopcocks for sample ports (additional ports can be ordered). Plugs are PTFE with Nylon hooded handles and FETFE O-Rings. Ultimate vacuum of 10⁻⁷ can be realized with standard three O-Rings. Overall length of glass manifold is: 9 1/8" (232 mm) for three ports; 13 5/8" (346 mm) for five ports. Supplied with "Ace-Safe" Serrated Connector for one end to connect vacuum line. Complete item consists of 8734 Glass Manifold, 5846-48 End Plug with FETFE O-Ring, and 5853 "Ace-Safe" Connectors with bushing for 1/4" or 1/2" tubing connection.



	Three Ports		Five Ports	
	Order Code	Each	Order Code	Each
Glass Manifold, only	8734-07	273.65	8734-14	453.42
End Plug, PTFE with O-Ring	5846-48	30.46	5846-48	30.46
Connector, with O-Ring, for 1/4"	5853-18	9.34	5853-18	9.34
Connector, with O-Ring, for 1/2"	5853-21	10.06	5853-21	10.06
Connector Bushing	7506-05	9.97	7506-05	9.97
COMPLETE	8734-10	333.48	8734-20	513.25

Replacement O-Rings:

for 5853, **7855-210**; for 5846, **7855-716**

8737 Manifold Double Tube, O-Ring Joint Connections ♠

#15 O-Ring joint connections at each end. Three or four ports with 4 mm bore glass double oblique stopcocks and standard taper inner joints or #15 O-Ring joint connections off each port. The distance between ports is 210 mm, which will accept flasks up to 3000 mL.

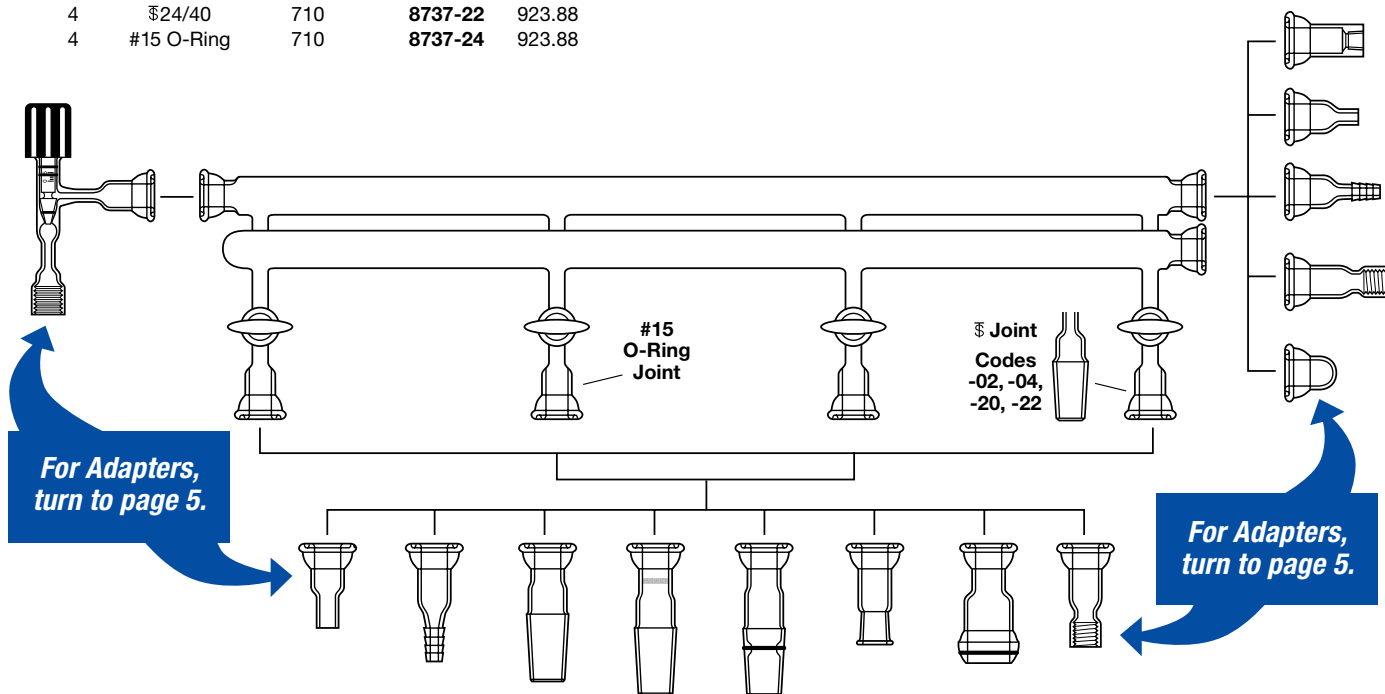
Number of Ports	Port Joints	Overall Length, mm	Order Code	Each
3	§14/20	500	8737-02	878.21
3	§24/40	500	8737-04	878.21
3	#15 O-Ring	500	8737-06	878.21
4	§14/20	710	8737-20	923.88
4	§24/40	710	8737-22	923.88
4	#15 O-Ring	710	8737-24	923.88

7669 CLAMP Pinch Type ★

All-stainless-steel pinch-type clamp for use with ball and socket or O-Ring joints. With screw locking feature.

Size No.	8	35	#15
Joint Size	28/15	35/20	—
Order Code	7669-12	7669-14	7669-12
Each	14.75	16.50	14.75

Replacement FETFE O-Ring for #15 Joint
Order Code: 7855-726

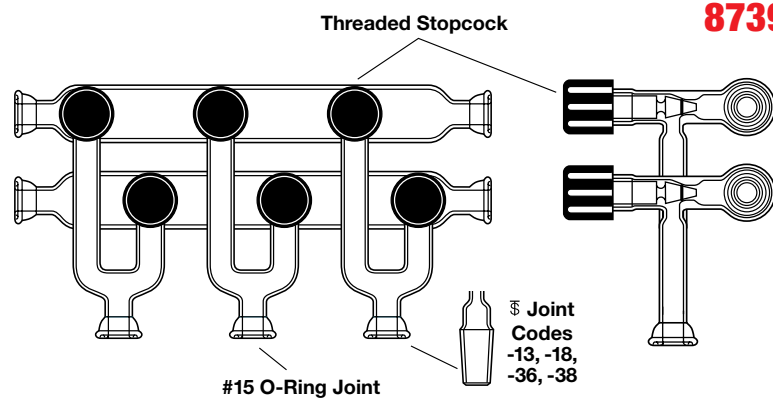
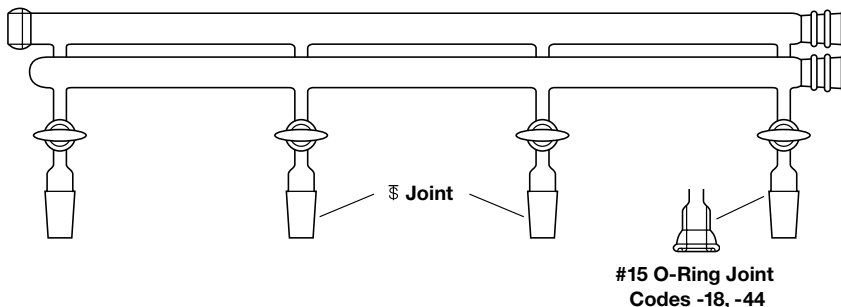


Vacuum Manifolds

8738 Manifold Double Tube, Ground Joint Connections ♦

With $\text{§}35/20$ ball joint at one end, $\text{§}24/40$ outer standard taper joints at opposite end. Three or four ports with **4 mm bore glass double oblique stopcocks** and standard taper inner joints or #15 O-Ring joint connections off each port. The distance between ports is 210 mm, which will accept flasks up to 3000 mL.

Number of Ports	Port Joints	Overall Length, mm	Order Code	Each
3	$\text{§}14/20$	520	8738-14	877.04
3	$\text{§}24/40$	520	8738-16	877.04
3	#15 O-Ring	520	8738-18	877.04
4	$\text{§}14/20$	730	8738-40	913.34
4	$\text{§}24/40$	730	8738-42	913.34
4	#15 O-Ring	730	8738-44	913.34



8739 Manifold Double Tube, O-Ring Joint Connections ♦

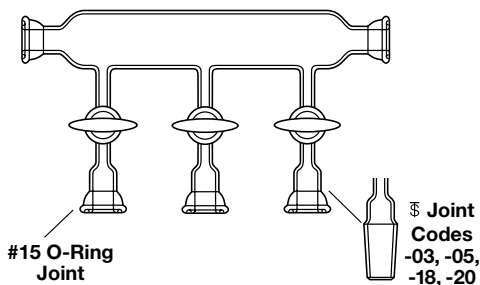
#15 O-Ring joint connections at each end. Three or four ports with **Easy Action 0-10 mm threaded stopcocks** and standard taper inner joints or #15 O-Ring joint connections off each port. The distance between ports is 100 mm, which will accept flasks up to 250 mL.

Number of Ports	Port Joints	Overall Length, mm	Order Code	Each
3	$\text{§}14/20$	355	8739-13	913.34
3	$\text{§}24/40$	355	8739-18	913.34
3	#15 O-Ring	355	8739-21	913.34
4	$\text{§}14/20$	455	8739-36	930.89
4	$\text{§}24/40$	455	8739-38	930.89
4	#15 O-Ring	455	8739-40	930.89

8740 Manifold Single Tube, O-Ring Joint Connections ♦

#15 O-Ring joint connections at each end. Three or four ports with **4 mm bore glass high-vacuum stopcocks** and standard taper inner joints or #15 O-Ring joint connections off each port. The distance between ports is 95 mm, which will accept flasks up to 250 mL.

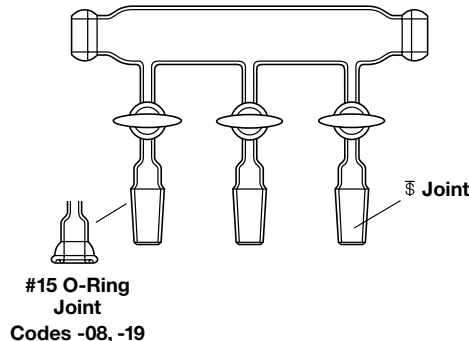
Number of Ports	Port Joints	Overall Length, mm	Order Code	Each
3	$\text{§}14/20$	310	8740-03	327.87
3	$\text{§}24/40$	310	8740-05	327.87
3	#15 O-Ring	310	8740-07	327.87
4	$\text{§}14/20$	405	8740-18	418.02
4	$\text{§}24/40$	405	8740-20	418.02
4	#15 O-Ring	405	8740-22	418.02



8743 Manifold Single Tube, Ground Joint Connections ♦

With $\text{§}35/20$ ball joint connections at each end. Three or four ports with **4 mm bore glass high-vacuum stopcocks** and standard taper inner joints or #15 O-Ring joint connections off each port. The distance between ports is 95 mm, which will accept flasks up to 250 mL.

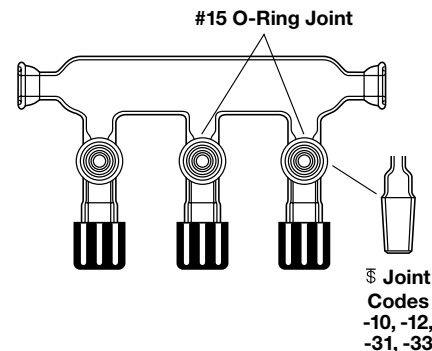
Number of Ports	Port Joints	Overall Length, mm	Order Code	Each
3	$\text{§}14/20$	310	8743-04	331.37
3	$\text{§}24/40$	310	8743-06	331.37
3	#15 O-Ring	310	8743-08	331.37
4	$\text{§}14/20$	405	8743-15	421.53
4	$\text{§}24/40$	405	8743-17	421.53
4	#15 O-Ring	405	8743-19	421.53



8745 Manifold Single Tube, O-Ring Joint Connections ♦

#15 O-Ring joint connections at each end. Three or four ports with **Easy Action 0-10 mm threaded stopcocks** and standard taper joints or #15 O-Ring joint connections off each port. The distance between ports is 95 mm, which will accept flasks up to 250 mL.

Number of Ports	Port Joints	Overall Length, mm	Order Code	Each
3	$\text{§}14/20$	310	8745-10	415.68
3	$\text{§}24/40$	310	8745-12	415.68
3	#15 O-Ring	310	8745-14	415.68
4	$\text{§}14/20$	405	8745-31	556.20
4	$\text{§}24/40$	405	8745-33	556.20
4	#15 O-Ring	405	8745-35	556.20

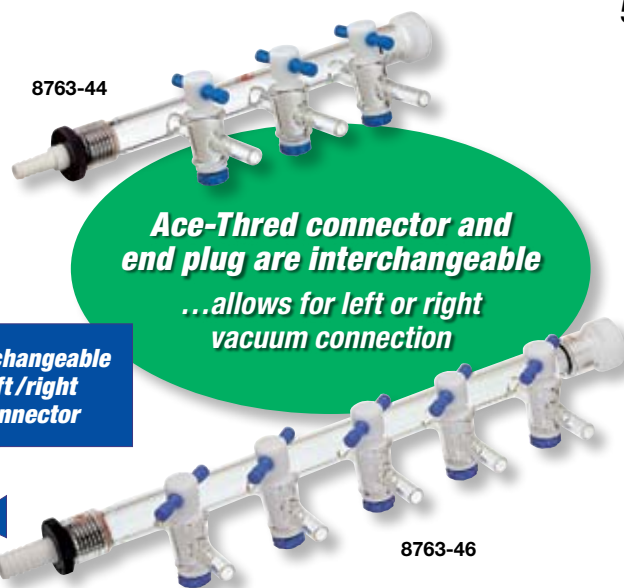


8763 Manifold Vacuum, Dual ♦

Glass Manifold with #15 Ace-Thred at either end to allow switching 5853 vacuum connection to left or right side. Supplied with three or five 4 mm straight bore PTFE stopcock sampling ports. (Additional ports can be ordered.) Overall length of glass manifold is 230mm.

Complete item consists of 8763 Glass Manifold, 5846-48 End Plug with FETFE O-Ring, and 5853-18 and 5853-21 "Ace-Safe" Connector with bushing for 1/4" or 1/2" tubing connection.

	Three Ports		Five Ports	
	Order Code	Each	Order Code	Each
Glass Manifold, only	8763-14	308.51	8763-16	488.82
End Plug, PTFE with O-Ring	5846-48	30.46	5846-48	30.46
Connector, with O-Ring, for 1/4"	5853-18	9.34	5853-18	9.34
Connector, with O-Ring, for 1/2"	5853-21	10.06	5853-21	10.06
Connector Bushing	7506-05	9.97	7506-05	9.97
COMPLETE	8763-44	368.34	8763-46	548.65



Manifold Adapters

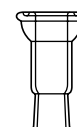
Description	Order Code	Each ♦
#15 O-Ring Joint to Cap (Stopper)	8273-05	14.44
#15 O-Ring Joint to 14/20 Outer Joint	5127-04	30.72
#15 O-Ring Joint to 19/22 Outer Joint	5127-06	31.02
#15 O-Ring Joint to 24/40 Outer Joint	5127-20	32.20
#15 O-Ring Joint to 14/20 Inner Joint	5128-07	30.41
#15 O-Ring Joint to 19/22 Inner Joint	5128-11	31.02
#15 O-Ring Joint to 24/40 Inner Joint	5128-26	32.20
#15 O-Ring Joint to #7 Ace-Thred	5129-07	47.57
#15 O-Ring Joint to #11 Ace-Thred	5129-11	50.97
#15 O-Ring Joint to #15 Ace-Thred	5129-15	50.97
#15 O-Ring Joint to #25 Ace-Thred	5129-25	55.50
#15 O-Ring Joint to Size F Hose Connection (1/2" Tube)	5218-10	18.13
#15 O-Ring Joint to Straight 3/8" Tube ¹	5131-30	20.05
#15 O-Ring Joint to Straight 1/2" Tube ¹	5131-40	20.05
#15 O-Ring Joint to 0-5mm Valve with #7 Ace-Thred	15428-28	90.01
#15 O-Ring Joint to 0-5mm Valve with #11 Ace-Thred	15428-33	90.01
#15 O-Ring Joint to 14/20 O-Ring Joint	5132-06	38.71
#15 O-Ring Joint to 24/40 O-Ring Joint	5132-09	39.31
#15 O-Ring Joint to 28/15 O-Ring Ball Joint	5132-34	71.26
#15 O-Ring Joint to 35/20 O-Ring Ball Joint	5132-37	71.26
#15 O-Ring Joint to 14/20 Inner Joint with Porosity B Frit	5117-18	47.70
#15 O-Ring Joint to 19/22 Inner Joint with Porosity B Frit	5117-21	47.94
35/20 Socket Joint to Size F Hose Connection (1/2" Tube)	5217-40	22.87
35/20 Socket Joint to Straight 3/8" Tube	5219-23	24.77
35/20 Socket Joint to Straight 1/2" Tube	5219-26	24.77
35/20 Socket Joint to 0-5 mm Valve with #7 Ace-Thred	15429-17	94.62
35/20 Socket Joint to 0-5 mm Valve with #11 Ace-Thred	15429-20	94.62
#15 O-Ring Joint to 1/8" Female NPT, 316 Stainless Steel	8877-14	★ 118.02
Firestone Purge Valve with #15 O-Ring Joint ²	8766-30	230.57

¹ Sized for use with Cajon® or Swagelok® Compression Fittings

² Use with Vacuum Gauge Sensing Head



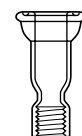
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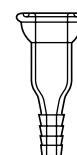
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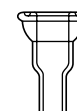
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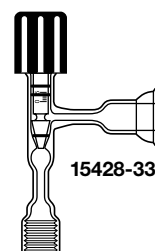
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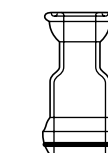
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5131-40



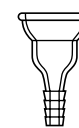
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5132-37



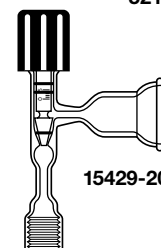
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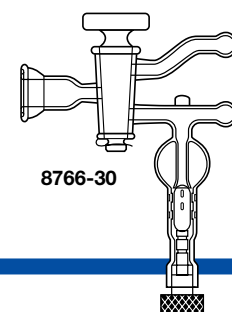
5217-40



5219-23



15429-20

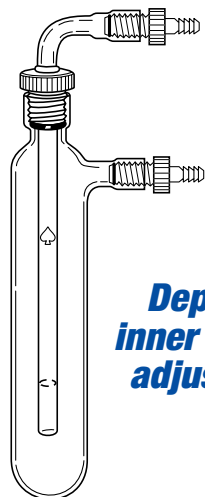


8766-30

Special adapters available

Vacuum Traps

8746 Vacuum Trap Threaded Body, with Ace-Threds on Inlet/Outlet ♦



Depth of inner tube is adjustable

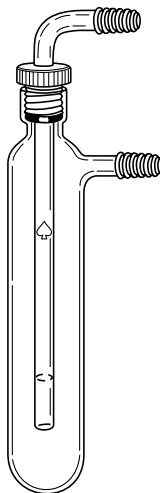
Consists of Body with Ace-Thred that accepts an adjustable Inner Tube secured by a Nylon Bushing and FETFE O-Ring. Unit has been modified with the addition of #15 Ace-Threds on the inlet and outlet for use with PTFE "Ace-Safe" Tubing Connectors, 5853, to make an easy, safe connect/disconnect of tubing. Simply attach tubing to the connector and tighten connector in Ace-Thred with 7506-05 Bushing to compress silicone O-Ring, supplied with connector, to make a leak-tight seal. Use 7506-06 Bushing to secure inner tube in codes -11 thru -44; use 7506-10 in code -60. Complete item consists of body, inner tube, (2) 7506-05, (2) 5853-21, and one 7506-06 or 7506-10.

Body Dia., mm	Body Length, mm	O.D. of inner Tube, mm	Body, only		Inner Tube		Nylon Bushing		COMPLETE	
			Order Code	Each	Order Code	Each	Order Code	Each	Order Code	Each
32	250	14	8746-11	59.57	8746-13	20.74	7506-06	9.35	8746-15	133.09
38	250	14	8746-23	62.65	8746-13	20.74	7506-06	9.35	8746-27	136.17
51	250	14	8746-35	78.58	8746-13	20.74	7506-06	9.35	8746-39	152.10
60	250	14	8746-44	97.89	8746-13	20.74	7506-06	9.35	8746-47	171.41
90	350	24	8746-60	150.57	8746-56	32.47	7506-10	16.03	8746-68	244.51

REPLACEMENT ITEMS

	Order Code	Each
Tubing Connector, 9.5 mm I.D., for 1/2" Tubing	5853-21	10.06
Tubing Connector, 6.4 mm I.D., for 1/4" Tubing (Code -18 is optional, needs to be ordered separately)	5853-18	9.34
Silicone O-Ring, Pkg/12	7855-210	14.31

Depth of inner tube is adjustable



8747 Vacuum Trap Threaded, with Serrated Hose Connections ♦

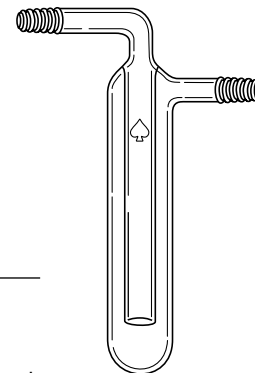
Same as 8746 except adjustable inlet and outlet tubes have six-ring hose connections. O.D. of smallest ring is 14 mm; largest is 16 mm.

Body Dia., mm	Body Length, mm	O.D. of inner Tube, mm	Body, only		Inner Tube		Nylon Bushing		COMPLETE	
			Order Code	Each	Order Code	Each	Order Code	Each	Order Code	Each
51	250	14	8747-33	78.39	8747-11	32.26	7506-06	10.09	8747-37	120.74
60	250	14	8747-39	100.41	8747-11	32.26	7506-06	10.09	8747-43	142.76

8752 Vacuum Trap with Serrated Hose Connections ♦

Used for freezing out undesired vapors in the vacuum system and also for use in conjunction with Dewar flasks. With six-ring hose connections on inlet and outlet tubes. O.D. of smallest ring is 14 mm; largest is 16 mm.

Body Dia., mm	Body Length, mm	O.D. of Inner Tube, mm	Order Code	Each
25	200	10	8752-05	67.41
38	250	18	8752-17	84.19

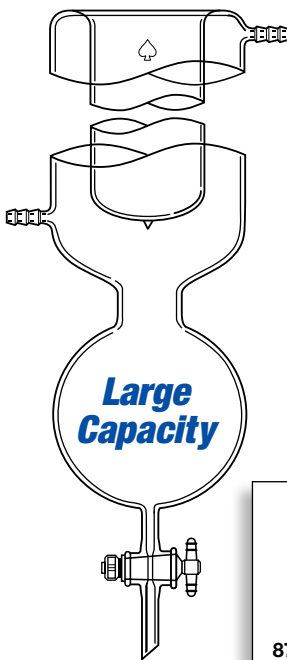


8756 Dry Ice Condenser Trap with Reservoir ♦

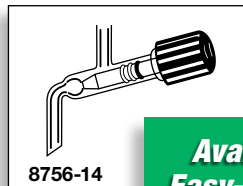
Dry ice condenser-trap that features a 1000 mL reservoir flask with 3 mm bore, 1:5 PTFE stopcock off bottom for easy draining. Chamber body is 125 mm O.D. with 25 mm annular space. Dry ice chamber is 250 mm deep with 9.5 mm (3/8") inlet and outlet connections, size D (3/8") I.D. tubing. Overall height, approximately 54.6 cm (21.5"). Code -14 supplied with easy-action valve.

Plastic coating on trap available by special request.

	Order Code	Each
PTFE Stopcock	8756-12	484.54



Large Capacity



8756-14

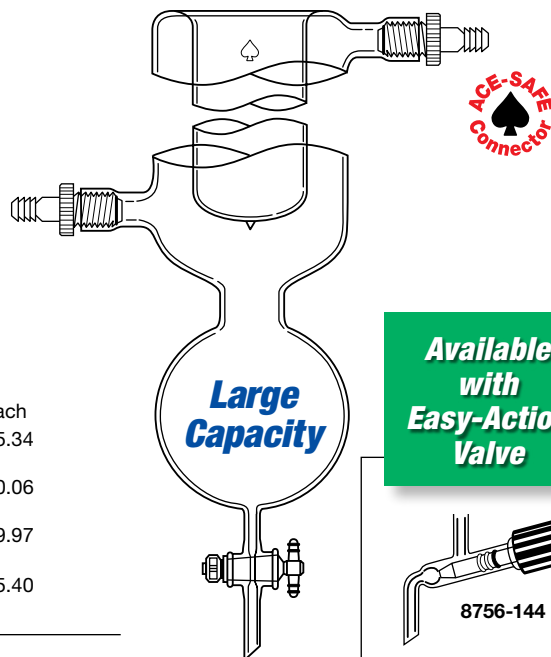
Available with Easy-Action Valve

8756 Dry Ice Condenser Trap with Reservoir & Threaded Inlet/Outlet ♣

Dry ice condenser-trap that features a 1000mL reservoir flask with 3 mm bore, 1:5 PTFE stopcock off bottom for easy draining. Unit has been modified with the addition of #15 Ace-Threds on the inlet and outlet for use with "Ace-Safe" Tubing Connectors, 5853, to make an easy, safe connect/disconnect of tubing. Simply attach 1/2" I.D. tubing to the connector and tighten connector in Ace-Thred with 7506-05 Bushing to compress silicone O-Ring, supplied with connector, to make a leak-tight seal. Chamber body is 125 mm O.D. with 25 mm annular space. Dry ice chamber is 250mm deep. Overall height, approximately 54.6 cm (21.5"). Complete item consists of Body only, (2) 5853 Tubing Connectors, and (2) 7506-05 Bushings. Code -144 supplied with easy-action valve.

Plastic coating on trap available by special request.

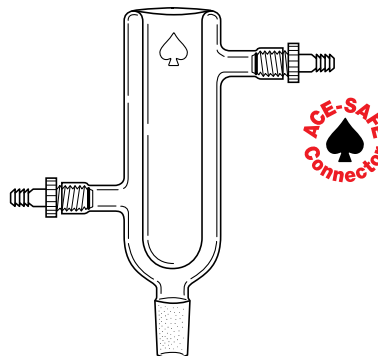
	Order Code	Each		Order Code	Each
Body, only	8756-32	492.89	Body, only	8756-140	515.34
Tubing Connector, w/Silicone O-Ring (2)	5853-21	10.06	Tubing Connector, w/Silicone O-Ring (2)	5853-21	10.06
Bushing, Nylon, #15, without O-Ring (2)	7506-05	9.97	Bushing, Nylon, #15, without O-Ring (2)	7506-05	9.97
COMPLETE with PTFE Stopcock	8756-44	532.95	COMPLETE with Easy-Action Valve	8756-144	555.40



8757 Dry Ice Trap with Threaded Inlet/Outlet ♣

With a 24/40 inner joint at the bottom. Inside diameter of coolant section is 50 mm and length is approximately 250 mm. Unit has been fitted with #15 Ace-Threds on the inlet and outlet for use with "Ace-Safe" Tubing Connectors, 5853, to make an easy, safe connect/disconnect of tubing. Simply attach 1/2" I.D. tubing to the connector and tighten connector in Ace-Thred with 7506-05 Bushing to compress silicone O-Ring, supplied with connector, to make a leak-tight seal. Complete item consists of Body only, (2) 5853 Tubing Connectors, and (2) 7506-05 Bushings.

	Order Code	Each
Body, only	8757-22	213.83
Tubing Connector, with Silicone O-Ring (2)	5853-21	10.06
Bushing, Nylon, #15, without O-Ring (2)	7506-05	9.97
COMPLETE	8757-35	253.89



Mercury-free! ■ Easy-to-read display!

14034 Vacuum Gauge Digital ★

Digital vacuum gauge uses precision current source and solid state electronics for better resolution and accuracy than analog gauges; accuracy: ±.25% of range. Does NOT use mercury. Large, easy-to-read display immune to parallax errors. No moving parts; resistant to dropping and rough handling. Interchangeable tubes; head surfaces are nickel-plated steel, ceramic and platinum alloy. **Note:** can withstand up to 30 psig maximum. Supplied with 10' sensor cable with 1/8" MNPT connection. Gauge includes gauge tube and AC adapter. Replacement gauge tubes listed. Measures 2 1/2" x 5" x 5". Operates at 120VAC, available in 230V.



Type		Type Display	Order Code	Each
TC	Vacuum Gauge, with Tube, Display Range 1. to 1999 μ (1x10 ⁻³)	LCD	14034-25	656.34
TC	Vacuum Gauge, with Tube, Display Range .1 to 199.9 μ (1x10 ⁻⁴)	LCD	14034-34	695.18
TC	Vacuum Gauge, with Tube, Display Range 1 μ to 760 Torr	LED	14034-36	795.64
Transducer	Vacuum Gauge, with Tube, Display Range .1-760 mm	LED	14034-38	773.34
TC	Replacement Gauge Tube, only (for -25, -34 and -36)	—	14034-60	120.34
Transducer	Replacement Gauge Tube, only (for -38)	—	14034-62	151.74
TC	Replacement Gauge Tube, only (for -36)	—	14034-64	157.67

Use only in dry system, i.e., isolate with cold trap and stopcock.