

\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_

ADAPTER, 75 DEGREES, INNER JOINTS EACH END

H-1731



JOINT  
SIZE      CODE

14/20      -1  
19/22      -2

ADAPTER, 105 DEGREES

H-1732



INNER OR OUTER JOINT WITH DRIP TIP

JOINT  
SIZE      CODE

14/20      -1  
19/22      -2  
18/9       -3

ADAPTER, 105 DEGREES, SEALED DRIP TUBE

H-1733



JOINT  
SIZE      CODE

14/20      -1  
19/22      -2

ADAPTER, 105 DEGREES, VACUUM

H-1734

SEALED IN DELIVERY TUBE AND SIDE  
HOSE CONNECTION FOR VACUUM.



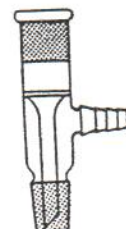
JOINT  
SIZE      CODE

14/20      -1  
19/22      -2

ADAPTER, STRAIGHT, VACUUM

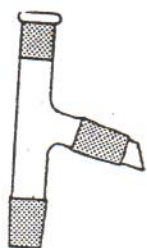
H-1735

SEALED IN DELIVERY TUBE AND SIDE  
HOSE CONNECTION FOR VACUUM.



JOINT  
SIZE      CODE

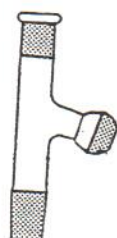
14/20      -1  
19/22      -2



H-1741 ADAPTER, THREE-WAY

TOP JOINT 10/18 OUTER FOR THERMOMETER  
1" IMMERSION. SIDE TUBE AT 75 DEGREES.  
SIDE AND BOTTOM JOINTS SAME SIZE.

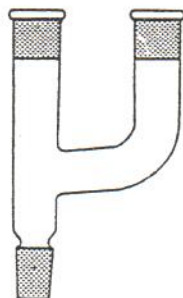
JOINT SIZE	CODE
14/20	-1
19/22	-2



H-1742 ADAPTER, THREE-WAY

TOP JOINT 10/18 OUTER FOR THERMOMETER  
1" IMMERSION. SIDE TUBE AT 75 DEGREES.  
SIDE JOINT 18/9 BALL JOINT.

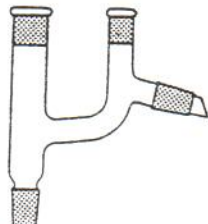
JOINT SIZE	CODE
14/20	-1
19/22	-2



H-1743 ADAPTER, THREE-WAY, CLAISEN

VERTICAL SIDE ARM.  
SIDE AND UPPER TUBE OUTER JOINTS.  
BOTTOM TUBE INNER JOINT.

JOINT SIZE	CODE
14/20	-1
19/22	-2



H-1744 ADAPTER, CLAISEN

SAME SIZE JOINTS ON MAIN TUBE WITH OUTER  
TOP AND INNER BOTTOM. SIDE TUBE HAS 10/18  
OUTER ON TOP AND 18/9 BALL JOINT ON TAKE  
OFF. SIDE TUBE WILL ACCEPT 1" IMMERSION  
THERMOMETER.

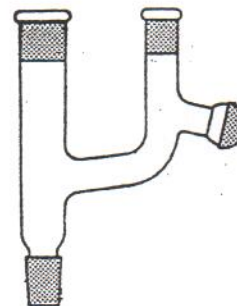
JOINT SIZE	CODE
14/20	-1
19/22	-2

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ADAPTER, CLAISEN

H-1751

SAME SIZE JOINTS ON MAIN TUBE  
WITH OUTER TOP AND INNER BOTTOM.  
SIDE TUBE HAS 10/18 OUTER ON TOP  
AND 18/9 BALL JOINT ON TAKE OFF.  
SIDE TUBE WILL ACCEPT 1"  
IMMERSION THERMOMETER.



JOINT SIZE	CODE
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14/20	-1
19/22	-2

ADAPTER, STRAIGHT CONNECTING

H-1752

24/40 OUTER TOP AND INNER BOTTOM.

JOINT SIZE	CODE
---------------	------

/20	-1
19/22	-2



ADAPTER, STRAIGHT CONNECTING

H-1753

BOTTOM JOINT 18/9 BALL.

JOINT SIZE	CODE
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14/20	-1
19/22	-2



ADAPTER, STRAIGHT CONNECTING

H-1754

18/9 SOCKET ON TOP. INNER BOTTOM.

JOINT SIZE	CODE
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/20	-1
19/22	-2



\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_

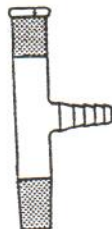
H-1761 ADAPTER, REDUCING, BUSHING STYLE



OUTER JOINT INSIDE OF BUSHING.  
INNER JOINT OUTSIDE OF BUSHING.

<u>JOINT</u> <u>OUTSIDE</u>	<u>JOINT</u> <u>INSIDE</u>	<u>CODE</u>
14/20	10/18	-1
19/22	10/18	-2
19/22	14/20	-3

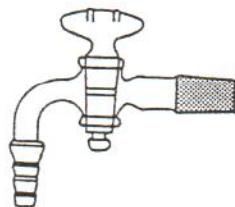
H-1762 ADAPTER, STRAIGHT



OUTER TOP, INNER BOTTOM. WITH SIDE  
TUBE FOR VACUUM OR INTRODUCTION OF GAS.

<u>JOINT</u> <u>SIZE</u>	<u>CODE</u>
14/20	-1
19/22	-2

H-1763 ADAPTER, STOPCOCK



INNER BOTTOM. WITH 2mm GLASS STOPCOCK  
SEALED AT TOP AND BENT AT 90 DEGREES.

<u>JOINT</u> <u>SIZE</u>	<u>CODE</u>
14/20	-1
19/22	-2

H-1764 ADAPTER



INNER BOTTOM. WITH SIDE TUBE FOR VACUUM  
OR INTRODUCTION OF GAS.

<u>JOINT</u> <u>SIZE</u>	<u>CODE</u>
14/20	-1
19/22	-2



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ADAPTER, STRAIGHT CONNECTING

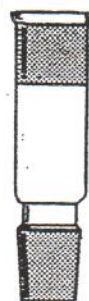
H-1771

OUTER TOP AND INNER BOTTOM.

JOINT SIZE	CODE
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14/20	-1
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19/22	-2
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ADAPTER, OFF SET CONNECTING

H-1772

OUTER TOP AND INNER BOTTOM.

JOINT SIZE	CODE
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14/20	-1
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19/22	-2
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18/9	-3
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ADAPTER, WITH KJELDAHL TRAP

H-1773

OUTER TOP AND INNER BOTTOM.

JOINT SIZE	CODE
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14/20	-1
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19/22	-2
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18/9	-3
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CONDENSER, LIEBIG

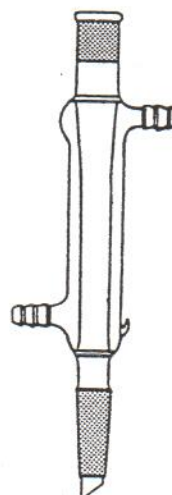
H-1791

OUTER TOP JOINT. INNER BOTTOM  
JOINT. JACKET LENGTH 110mm.

JOINT SIZE	CODE
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14/20	-1
-------	----

19/22	-2
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CONDENSER, ALLIHN

H-1792

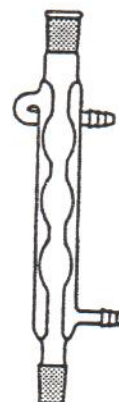
OUTER OR SOCKET TOP JOINT.  
INNER OR BALL BOTTOM JOINT.  
JACKET LENGTH APPROX. 110mm.

JOINT SIZE	CODE
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14/20	-1
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19/22	-2
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18/9	-3
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CONDENSER, REFLUX COIL TYPE

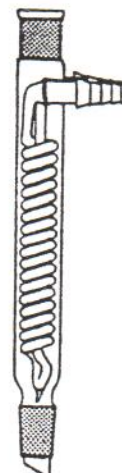
H-1793

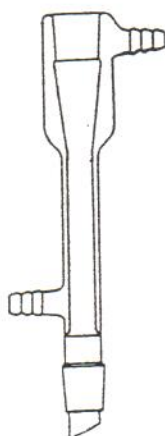
OUTER TOP JOINT, INNER BOTTOM  
JOINT. COIL LENGTH APPROX. 100mm.

JOINT SIZE	CODE
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14/20	-1
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19/22	-2
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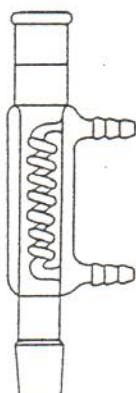




H-1801 CONDENSER, LIEBIG

OUTER TOP JOINT WATER COOLED,  
FOR EXTRA 25mm IN COOLING SECTION.  
JACKET LENGTH 150mm.

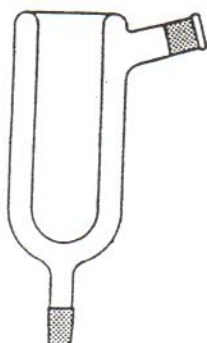
JOINT SIZE	CODE
14/20	-1
19/22	-2



H-1802 CONDENSER, DOUBLE COOLING

OUTER JACKET SURROUNDS VAPOR TUBE.  
COIL SEALED INSIDE.  
JACKET LENGTH IS APPROX. 80mm.

JOINT SIZE	CODE
14/20	-1
19/22	-2



H-1803 CONDENSER, LIEBIG

INSIDE DEPTH 90mm.  
INSIDE DIAMETER 13 36mm.  
BOTTOM AND TOP JOINTS SAME SIZE.

JOINT SIZE	CODE
14/20	-1
19/22	-2



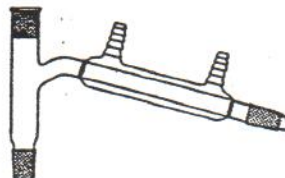
\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_

STILLING HEAD

H-1811

TOP JOINT IS 10/18 FOR 1" IMMERSION  
THERMOMETER. BOTTOM AND SIDE JOINT  
ARE THE SAME SIZE. CONDENSER LENGTH 110mm.

JOINT SIZE	CODE
14/20	-1
19/22	-2

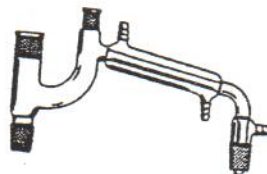


DISTILLING HEAD

H-1812

TOP JOINT IS 10/18 FOR 1" IMMERSION  
THERMOMETER. BOTTOM AND TAKE-OFF JOINT  
ARE THE SAME SIZE. CONDENSER LENGTH 100mm.

JOINT SIZE	CODE
14/20	-1
19/22	-2

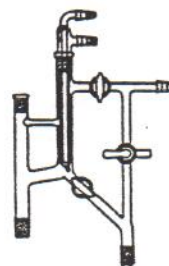


DISTILLING HEAD, COLD FINGER

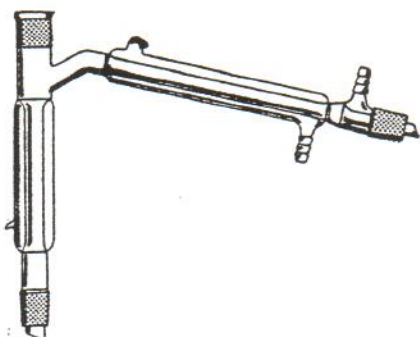
H-1813

FOR VACUUM OR ATMOSPHERIC DISTILLATIONS.  
TOP JOINT IS 10/18 FOR 1" IMMERSION  
THERMOMETER. BOTTOM JOINTS ARE THE  
SAME SIZE.

JOINT SIZE	CODE
14/20	-1
19/22	-2



H-1821 DISTILLING HEAD



TOP JOINT ON SIDE TUBE IS 10/18 FOR 1" IMMERSION THERMOMETER. COLUMN SECTION IS VACUUM JACKETED AND IS 100mm IN LENGTH. CONDENSER LENGTH IS 110mm. BOTTOM JOINT AND CONDENSER END HAVE SAME JOINT.

JOINT SIZE	CODE
14/20	-1
19/22	-2

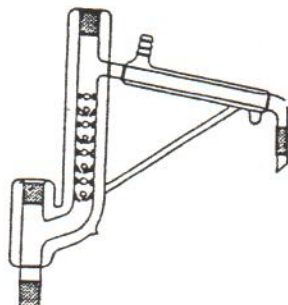
H-1822 DISTILLING HEAD, VIGREUX



TOP JOINT ON SIDE TUBE IS 10/18 FOR 1" IMMERSION THERMOMETER. ALL OTHER JOINTS ARE THE SAME SIZE. THE VIGREUX SECTION LENGTH IS 100mm.

JOINT SIZE	CODE
14/20	-1
19/22	-2

H-1823 DISTILLING HEAD, VIGREUX, VACUUM JACKETED



TOP JOINT ON SIDE TUBE IS 10/18 FOR 1" IMMERSION THERMOMETER. ALL OTHER JOINTS ARE THE SAME SIZE. THE VIGREUX SECTION LENGTH IS 100mm. CONDENSER JACKET LENGTH IS 110mm.

JOINT SIZE	CODE
14/20	-1
19/22	-2

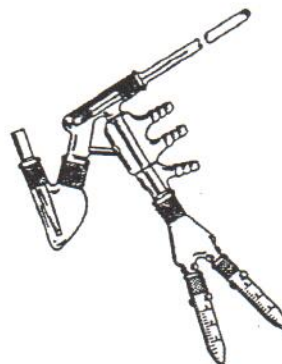
\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_

DISTILLING APPARATUS, SHORT PATH

H-1831

ALL JOINTS ARE 14/20 EXCEPT THE 10/18  
GAS INLET TUBE AND THERMOMETER JOINTS.  
THERMOMETER SERVES AS THE COLUMN PACKING.

<u>ITEM</u>	<u>CODE</u>
COMPLETE	-1
DISTILLING HEAD	-2
DISTILLING FLASK (10ml)	-3
GAS INLET TUBE	-4
DISTRIBUTING ADAPTER	-5
RECEIVER TUBE (4) (3ML)	-6
THERMOMETER	-7

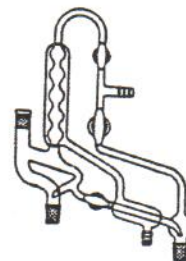


DISTILLING HEAD

H-1832

FOR ATMOSPHERIC AND VACUUM DISTILLATIONS.  
TOP JOINT IS 10/18 FOR 1" IMMERSION  
THERMOMETER. TWO BOTTOM JOINTS ARE  
THE SAME SIZE.

<u>JOINT SIZE</u>	<u>CODE</u>
14/20	-1
19/22	-2



DISTILLING APPARATUS, SHORT PATH

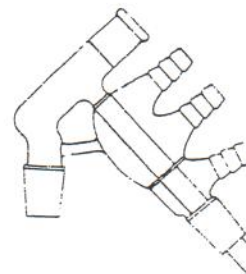
H-1833

HEAD HAS SHORT CONDENSER WITH VACUUM  
CONNECTIONS.

14/20 INNER JOINTS ON SIDE AND BOTTOM.

10/8 OUTER JOINT ON TOP HOLDS A  
THERMOMETER.

BULB AND STEM ON THERMOMETER ACT AS  
COLUMN PACKING.





H-1841 DISTILLING COLUMN

STRAIGHT DISTILLING COLUMN WITH SAME JOINTS AT TOP AND BOTTOM. EFFECTIVE COLUMN 110mm. PACKING SUPPORT AT BOTTOM.

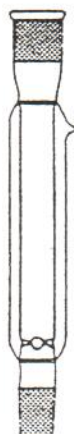
JOINT SIZE	CODE
14/20	-1
19/22	-2
18/9	-3



H-1842 DISTILLING COLUMN, VIGREUX SECTION.

STRAIGHT DISTILLING COLUMN WITH SAME JOINTS AT TOP AND BOTTOM. EFFECTIVE COLUMN 110mm. PACKING SUPPORT AT BOTTOM.

JOINT SIZE	CODE
14/20	-1
19/22	-2
18/9	-3



H-1843 DISTILLING COLUMN, VACUMN JACKETED

STRAIGHT DISTILLING COLUMN WITH SAME JOINTS AT TOP AND BOTTOM. EFFECTIVE COLUMN 110mm. PACKING SUPPORT AT BOTTOM.

JOINT SIZE	CODE
14/20	-1
19/22	-2
18/9	-3

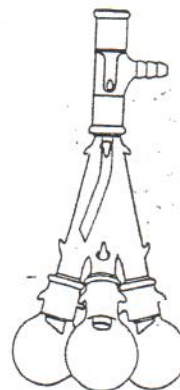


\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_

DISTILLING RECEIVER H-1851

SPRINGS PROVIDED. ALL JOINTS THE SAME SIZE.

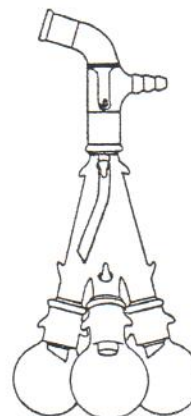
ITEM	14/20 CODE	19/22 CODE
COMPLETE	-1	-5
VACUUM ADAPTER	-2	-6
DISTRIBUTING ADAPTER	-3	-7
15ml. RECEIVING FLASK	-4	-8



DISTILLING RECEIVER, H-1852

105 DEGREE VACUUM ADAPTER.  
SPRINGS PROVIDED. ALL JOINTS THE SAME SIZE.

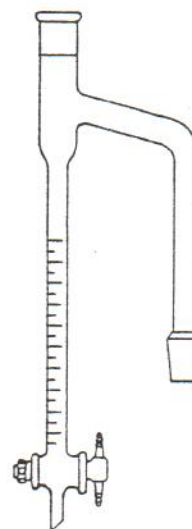
ITEM	14/20 CODE	19/22 CODE
COMPLETE	-1	-5
VACUUM ADAPTER	-2	-6
DISTRIBUTING ADAPTER	-3	-7
15ml. RECEIVING FLASK	-4	-8



DISTILLING RECEIVER, H-1853

JOINTS SAME SIZE. 2ml BURET TYPE  
RECEIVER GRADUATED IN 0.2ml SUBDIVISIONS.

JOINT SIZE	GLASS CODE	TEFLON CODE
14/20	-1	-3
19/22	-2	-4





\_\_\_\_ MICRO WARE \_\_\_\_\_

\_\_\_\_ MICRO WARE \_\_\_\_\_

\_\_\_\_ MICRO WARE \_\_\_\_\_

\_\_\_\_ MICRO WARE \_\_\_\_\_

H-1861

DISTILLING RECEIVER



BULB TYPE VACUUM ADAPTER WITH THREE  
RECEIVING FLASKS. EACH FLASK CAN RECEIVE  
DISTILLATE BY TURNING THE ADAPTER.  
SELECT SIZE OF TOP JOINT BELOW, OTHER  
JOINTS ARE 14/20.

<u>JOINT</u> <u>SIZE</u>	<u>CODE</u>
14/20	-1
19/22	-2

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\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_

EXTRACTION APPARATUS, LIQUID LEVEL.

H-1871

USE WHEN SOLVENTS ARE HEAVIER THAN THE LIQUID FROM WHICH THEY ARE TO BE EXTRACTED. CONDENSATE DROPS ON TOP OF EXTRACTABLE LIQUID AND PASSES THROUGH IT. EXTRACT EXITS THROUGH SIDEARM.

<u>ITEM</u>	<u>CODE</u>
COMPLETE	-1
EXTRACTOR	-2
25ml ERLLENMEYER FLASK	-3
CONDENSER	-4

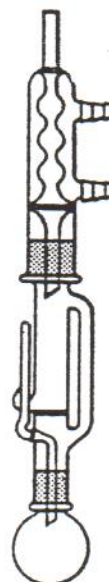


EXTRACTION APPARATUS, SOXHLET

H-1872

ALL JOINTS ARE 19/22. FLASK AND UPPER END OF EXTRACTOR HAVE INNER JOINTS. BOTTOM OF EXTRACTOR AND CONDENSER HAVE OUTER JOINTS.

<u>ITEM</u>	<u>CODE</u>
COMPLETE	-1
EXTRACTOR	-2
25ml ROUND BOTTOM FLASK	-3
CONDENSER, ALLIHN TYPE	-4



H-1881 EXTRACTION APPARATUS, LIQUID LEVEL

ALL JOINTS ARE 19/22 SIZE.  
USE WHEN SOLVENTS ARE LIGHTER THAN THE  
LIQUID FROM WHICH THEY ARE TO BE  
EXTRACTED. TUBE CATCHES CONDENSATE AND  
DISTRIBUTES IT TO LOWER LAYERS OF  
EXTRACTABLE LIQUID THROUGH PORES OF  
FRITTED CYLINDER SEALED TO THE END OF  
TUBE. EXTRACT RISES TO TOP AND IS  
SIPHONED OFF INTO FLASK.



<u>ITEM</u>	<u>CODE</u>
COMPLETE	-1
EXTRACTOR	-2
25ml ERLENMEYER FLASK	-3
CONDENSER	-4
INNER TUBE WITH FRITTED CYLINDER	-5

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H-1882 EXTRACTION APPARATUS, THIMBLE, FRITTED



FRIT POROSITY IS COARSE.  
LENGTH 50mm.  
DIAMETER 10mm.

\_\_\_\_MICRO WARE\_\_\_\_MICRO WARE\_\_\_\_MICRO WARE\_\_\_\_MICRO WARE\_\_\_\_

# EVAPORATION CONCENTRATOR

H-1891

WITH SMALL SCALE CONCENTRATOR  
AND MICRO COLUMN.

1ml TUBE GRADUATED FROM  
0 TO 1ml IN 0.1 SUBDIVISIONS.

4ml TUBE GRADUATED FROM  
0 TO 2ml IN 0.1 SUBDIVISIONS  
AND LINES AT 3 AND 4ml.

ITEM	14/20	19/22	24/25
	CODE	CODE	CODE
	1ml	4ml	4ml
COMPLETE WITH SPRINGS	-1	-4	-7
SNYDER COLUMN	-2	-5	-8
CONCENTRATOR TUBE	-3	-6	-9



H-1901 FLASK, ROUND BOTTOM, LONG NECK AND OUTER JOINT



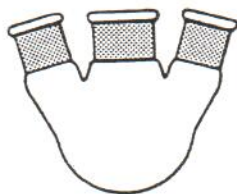
CAPACITY ml	14/20 CODE	19/22 CODE
5	-1	-11
10	-2	-12
15	-3	-13
25	-4	-14
35	-5	-15
50	-6	-16
100	-7	-17
250	-8	-18
300	-9	-19
500	-10	-20

H-1902 FLASK, ROUND BOTTOM, TWO NECK AND OUTER JOINT



CAPACITY ml	CENTER NECK SIZE	10/18 CODE	14/20 CODE	19/22 CODE
15	14/20	-1	-13	-25
15	19/22	-2	-14	-26
25	14/20	-3	-15	-27
25	19/22	-4	-16	-28
55	14/20	-5	-17	-29
55	19/22	-6	-18	-30
100	14/20	-7	-19	-31
100	19/22	-8	-20	-32
250	14/20	-9	-21	-33
250	19/22	-10	-22	-34
500	14/20	-11	-23	-35
500	19/22	-12	-24	-36

H-1903 FLASK, ROUND BOTTOM, THREE NECK AND OUTER JOINT



CAPACITY ml	CENTER NECK SIZE	10/18 CODE	14/20 CODE	19/22 CODE
25	14/20	-1	-11	-21
25	19/22	-2	-12	-22
55	14/20	-3	-13	-23
55	19/22	-4	-14	-24
100	14/20	-5	-15	-25
100	19/22	-6	-16	-26
250	14/20	-7	-17	-27
250	19/22	-8	-18	-28
500	14/20	-9	-19	-29
500	19/22	-10	-20	-30



\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_ MICRO WARE \_\_\_\_\_

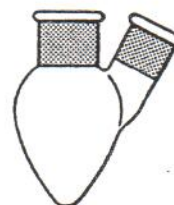
FLASK, PEAR-SHAPED, SHORT NECK, OUTER JOINT H-1911

CAPACITY	14/20	19/22
ml	CODE	CODE
2	-1	-12
5	-2	-13
10	-3	-14
15	-4	-15
20	-5	-16
25	-6	-17
35	-7	-18
50	-8	-19
65	-9	-20
100	-10	-21
250	-11	-22



FLASK, PEAR-SHAPED, TWO NECK, OUTER JOINT H-1912

CAPACITY	CENTER	14/20	19/22
ml	NECK SIZE	CODE	CODE
15	14/20	-1	-11
15	19/22	-2	-12
25	14/20	-3	-13
25	19/22	-4	-14
50	14/20	-5	-15
50	19/22	-6	-16
100	14/20	-7	-17
100	19/22	-8	-18
250	14/20	-9	-19
250	19/22	-10	-20



FLASK, PEAR-SHAPED, THREE NECK, OUTER JOINT H-1913

CAPACITY	CENTER	14/20	19/22
ml	NECK SIZE	CODE	CODE
15	14/20	-1	-11
15	19/22	-2	-12
25	14/20	-3	-13
25	19/22	-4	-14
50	14/20	-5	-15
50	19/22	-6	-16
100	14/20	-7	-17
100	19/22	-8	-18
250	14/20	-9	-19
250	19/22	-10	-20



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H-1921 FLASK, ERLENMEYER, OUTER JOINT



CAPACITY ml	14/20 CODE	19/22 CODE
5	-1	-7
10	-2	-8
15	-3	-9
25	-4	-10
50	-5	-11
100	-6	-12

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MICRO WARE

MICRO WARE

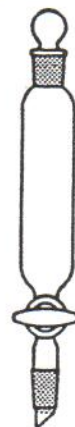
MICRO WARE

MICRO WARE

FUNNEL, SEPARATOR, CYLINDRICAL

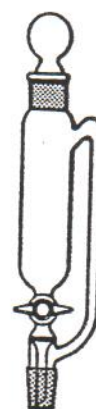
H-1931

CAPACITY	14/20	19/22
ml	CODE	CODE
10	-1	-5
25	-2	-6
50	-3	-7
125	-4	-8

FUNNEL, SEPARATOR, CYLINDRICAL  
WITH PRESSURE EQUALIZING ARM

H-1932

CAPACITY	14/20	19/22
ml	CODE	CODE
10	-1	-5
25	-2	-6
50	-3	-7
125	-4	-8



FUNNEL, SEPARATOR, CYLINDRICAL, GRADUATED

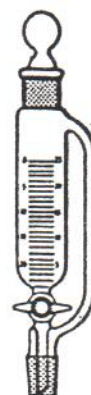
H-1933

CAPACITY	14/20	19/22
ml	CODE	CODE
10	-1	-5
25	-2	-6
50	-3	-7
125	-4	-8

FUNNEL, SEPARATOR, CYLINDRICAL, GRADUATED  
WITH PRESSURE EQUALIZING ARM

H-1934

CAPACITY	14/20	19/22
ml	CODE	CODE
10	-1	-5
25	-2	-6
50	-3	-7
125	-4	-8

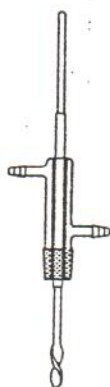


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H-1941 STIRRER, PRECISION, GLASS SLEEVE

JOINT SIZE	CODE
14/20	-1
19/22	-2
STIRRER SHAFT ONLY	-3



H-1942 STIRRER, PRECISION, GLASS SLEEVE  
WATER JACKETED

JOINT SIZE	CODE
14/20	-1
19/22	-2
STIRRER SHAFT ONLY	-3



H-1943 STOPPER

JOINT SIZE	CODE
14/20	-1
19/22	-2
18/9	-3



H-1944 THERMOMETER

10/18 JOINT WITH 1" IMMERSION

DEGREES CENTIGRADE RANGE	CODE
-10 TO +150	-1
-10 TO +250	-2
-10 TO +360	-3