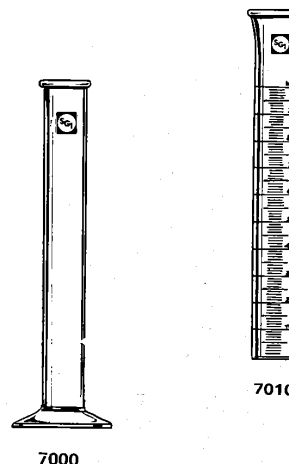


Cylinders

7000 CYLINDER

Plain heavy glass cylinder with pouring lip and base. Used for hydrometer jars.

Code	Capacity mm.	Dia. mm.	Height mm.
A	50	25	150
B	100	29	250
C	250	38	340
D	500	50	390
E	1000	64	460
F	2000	85	530
G	4000	115	600



7010 CYLINDER

Graduated cylinder with pouring lip. Made to Class B volumetric tolerances but without base. Calibrated to deliver.

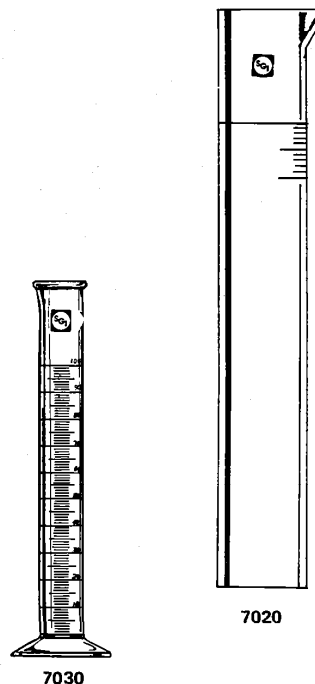
Code	Capacity ml.	Subdiv. ml.
A	50	1.0
B	100	1.0
C	250	2.0
D	500	5.0

7020 CYLINDER, RECEIVER FOR AUTOMATIC DISTILLATION

This receiver was designed for use with the Precision Scientific Company Automatic Distillation Apparatus (ADA-II).

The capacity of the Automatic Receiver is standardized to 100 ml. so that accurate measurements can be taken time and again.

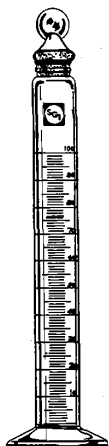
As the receivers are fabricated from precision bore tubing there is no variation in capacity or readings between any of them.



7030 CYLINDER, LABORATORY

Laboratory grade graduated cylinder with pouring lip and base. Calibrated to deliver.

Code	Capacity ml.	Subdiv. ml.
A	5	0.1
B	10	0.2
C	25	0.5
D	50	1.0
E	100	1.0
F	200	2.0
G	250	2.0
H	500	5.0
I	1000	10.0
J	2000	20.0
K	4000	50.0

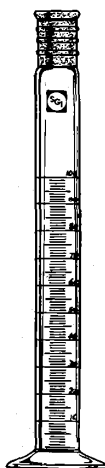


7040

7040 CYLINDER, § LABORATORY

Laboratory grade mixing cylinder with § stopper and base. Calibrated to contain.

Code	Capacity ml.	Subdiv. ml.	Stopper
A	10	0.2	9
B	25	0.5	13
C	50	1.0	16
D	100	1.0	16
E	250	2.0	22
F	500	5.0	27
G	1000	10.0	32
H	2000	20.0	38
I	4000	50.0	38

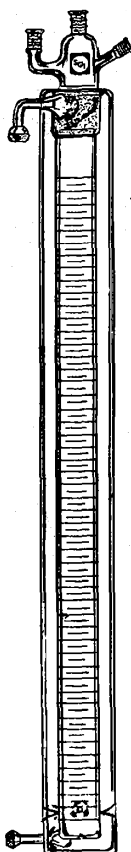


7050

7050 CYLINDER, LABORATORY

Laboratory grade receiving cylinder with outer § joint or § socket joint and base. Calibrated to contain.

Code	Capacity ml.	Subdiv. ml.	§ Joint	Code	Capacity ml.	Subdiv. ml.	§ Joint
A	25	0.5	19/38	A-1	50	1.0	28/15
B	25	0.5	24/40	B-1	100	1.0	35/20
C	50	1.0	19/38	C-1	250	2.0	35/20
D	50	1.0	24/40	D-1	500	5.0	35/25
E	100	1.0	19/38	E-1	1000	10.0	38/25
F	100	1.0	24/40	F-1	2000	20.0	50/30
G	250	2.0	24/40	G-1	4000	50.0	65/40
H	500	5.0	24/40				
I	1000	10.0	29/42				
J	2000	20.0	34/45				
K	4000	50.0	40/50				



7100

7100 DENSITY GRADIENT COLUMN*

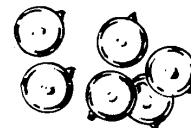
Used for Determination of Densities of materials in liquid form. The column is water jacketed for maintaining constant temperature throughout the entire graduated portion for accurate results. The density tube is graduated in mm for more accurate readings on a Gradient Graph. Length of Graduated Tube is 1000 mm in 2 mm Divisions.

Part	Description
A	Gradient Column
B	Filler Adapter



7110 DENSITY GRADIENT BEADS*

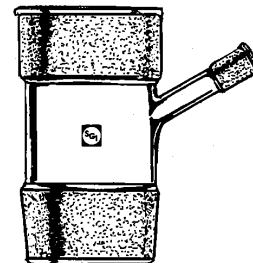
Color	Density
Red	Please specify density and color when ordering.
Blue	
Clear	
Yellow	



7110

7120 DENSITY GRADIENT COLUMN ADAPTER*

Used for inserting thermometer between Filler Adapter and Gradient column, or as a nitrogen inlet tube.



7120

7130 DENSITY GRADIENT COLUMN STOPPER*

Consists of bottom portion of 45/50 ♂ joint and is used for closing out atmosphere where the column is allowed to set for a period of time.



7130



D-1100 DEWAR FLASK, CYLINDRICAL

Capacity, ml.	150	250	330	420	500
Code	A	B	C	D	E

D-1105 DEWAR FLASK, CYLINDRICAL

40 mm. I.D. 51 mm. O.D. For use in geological survey equipment.



D-1100



D-1105

D-1110 DEWAR FLASK, CONSTRICTED NECK, SHIELDED

Code	Capacity	ID of neck	Height mm.
A	1 Pint	32 mm	240
B	1 Quart	28 mm	320



D-1110



D-1115

D-1115 DEWAR FLASK, CYLINDRICAL

50 mm I.D. 70 mm O.D., Shielded. Features rubber impact ring.

Capacity, ml.	150	250	330	420	500
Code	A	B	C	D	E

D-1120 DEWAR FLASK, MICRO

O.D. 35 mm, I.D. 25 mm.

D-1125L DEWAR FLASK, CYLINDRICAL

95 mm I.D., 125 mm O.D.

Capacity, ml.	1250	1550	1900	2250	2600
Code	A	B	C	D	E



D-1120

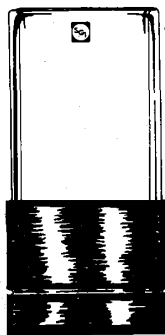


D-1125L
D-1125S

D-1125S DEWAR FLASK, CYLINDRICAL

80 mm I.D., 100 mm O.D.

Capacity, ml.	600	850	1100	1350	1600	1900
Code	A	B	C	D	E	F



D-1130S
D-1130L

D-1130S DEWAR FLASK, CYLINDRICAL

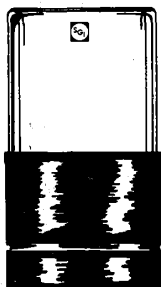
110 mm I.D., 140 mm O.D.

Capacity, ml.	1550	2000	2450	2900	3350
Code	A	B	C	D	E

D-1130L DEWAR FLASK, CYLINDRICAL

120 mm I.D., 150 mm O.D.

Capacity, ml.	1850	2400	2950	3500	4050
Code	A	B	C	D	E



D-1135L
D-1135S

D-1135L DEWAR FLASK, CYLINDRICAL

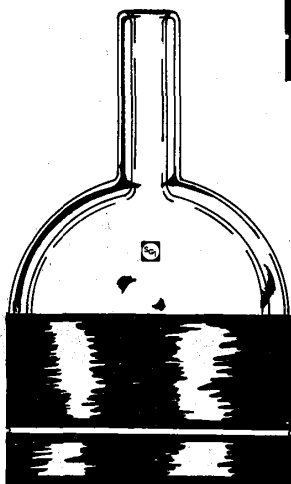
145 mm I.D., 180 mm O.D.

Capacity, ml.	3200	4000	4800	5600	6400
Code	A	B	C	D	E

D-1135S DEWAR FLASK, CYLINDRICAL

135 mm I.D., 165 mm O.D.

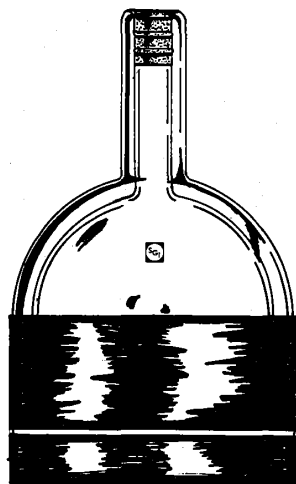
Capacity, ml.	2150	2800	3500	4200	4900
Code	A	B	C	D	E



D-1160

D-1160 DEWAR FLASK, SPHERICAL, SILVERED

Code	capacity ml.	neck I.D. mm	overall height mm
A	200	13	210
B	500	19	260
C	750	25	315
D	1000	28	325
E			
F	1600	31	395
G	2000	35	360
H	5000	50	490
I	12000	65	550



D-1165

D-1165 DEWAR FLASK, SPHERICAL

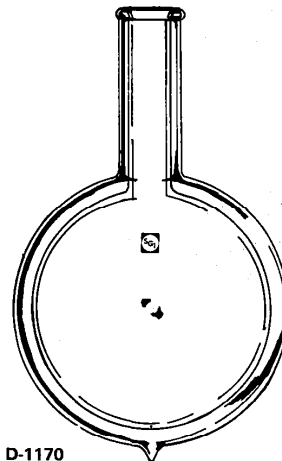
Code	Capacity ml	§ Joint	overall height mm
A	200	24/40	210
B	500	29/42	260
C	750	29/42	315
D	1000	34/45	325
E			
F	1600	34/45	395
G	2000	40/50	395
H	3000	40/50	415
I	5000	50/50	490
J	12000	71/60	550



D-1170 DEWAR FLASK, SPHERICAL

Unsilvered, unevacuated and without base.

Code	capacity ml.	neck I.D. mm	overall height mm
A	200	13	153
B	500	19	203
C	750	25	258
D	1000	28	268
E			
F	1600	31	338
G	2000	35	303
H	5000	50	433
I	12000	65	493



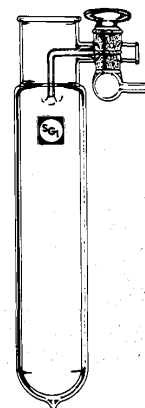
D-1170

D-1190 DEWAR FLASK*

With sidearm stopcock for pump.

SPECIFICATIONS:

Overall length	-	590 mm
Outside diameter	-	110 mm
Inner jacket	-	90 mm O. D.
Depth	-	570 mm



D-1190

D-1195 DEWAR FLASK*

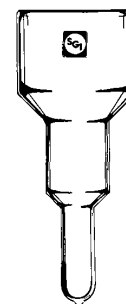
With copper seal and reduced lower section.

SPECIFICATIONS

Top section OD	Top section I T O D	Bottom section	Bottom section	Length
64 mm	51 mm OD	38 mm	28 mm OD	600 mm



D-1195

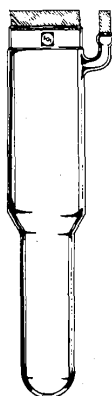


D-1200

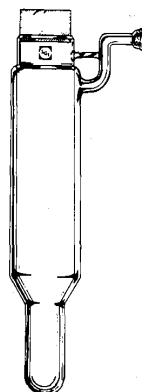
D-1200 DEWAR FLASK, MULTIPLE REDUCED LOWER SECTION*

SPECIFICATIONS

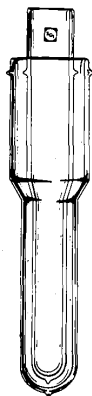
Top Section OD	Top Section ITOD	Center Section OD	Center Section ITOD	Bottom Section OD	Bottom Section ITOD
150 mm	120 mm	100 mm	85 mm	32 mm	22 mm



D-1205



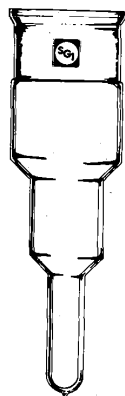
D-1210



D-1215



D-1220



D-1225

D-1205 DEWAR FLASK WITH REDUCED LOWER SECTION AND KOVAR SEAL *

Whether continuously pumped or re-evacuated, a metal seal on the pump-out arm may be desirable to reduce the operating man hours.

SPECIFICATIONS

Top section OD	Top section ITOD	Lower section OD	Lower section ITOD	Length
125 mm OD	100 mm OD	85 mm OD	70 mm OD	600 mm

D-1210 DEWAR FLASK WITH REDUCED LOWER SECTION AND KOVAR SEAL *

When the vacuum jacket arm is connected to a secondary vacuum system, a glass socket joint may be more advantageous than a metal to glass seal.

SPECIFICATIONS

Top section OD	Top section ITOD	Lower section OD	Lower section ITOD	Length
57 mm OD	45 mm OD	19 mm OD	14 mm OD	485 mm

D-1215 DEWAR FLASK SYSTEM*

The preceding were individual units designs of inner and outer vessels. Shown here is a complete cryostat, which is the most common shape used.

SPECIFICATIONS

Outer Dewar				
Top section OD	Top section ITOD	Lower section OD	Lower section ITOD	Length
8½"	7"	5½"	4½"	1040 mm
Inner Dewar				
5"	4"	90 mm	80 mm	1055 mm

D-1220 DEWAR FLASK SYSTEM*

Many methods of support for this type of Dewar have been considered. The bulging effect shown here is the least expensive design. The balance of the supporting problem must be considered for the proper evaluation of your overall design.

SPECIFICATIONS

Outer Dewar				
Top section OD	Top section ITOD	Lower section OD	Lower section ITOD	Length
5" OD	110 mm OD	75 mm OD	65 mm OD	850 mm
Inner Dewar				
75 mm OD	60 mm OD	60 mm OD	51 mm OD	915 mm

D-1225 DEWAR FLASK, MULTIPLE REDUCED SECTION*

This vessel is similar to D-1200 with a 4" standard pipe flange.

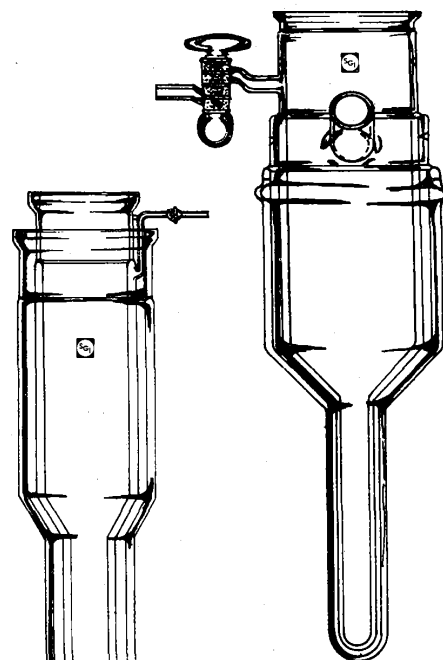


D-1230 DEWAR FLASK SYSTEM, WITH PIPE FLANGE*

SPECIFICATIONS

Outer Dewar				
Top section OD	Top section ITOD	Lower section OD	Lower section ITOD	Length
5½"	4½"	48 mm	41 mm	940 mm
Inner Dewar				
75 mm	64 mm	30 mm	25 mm	955 mm

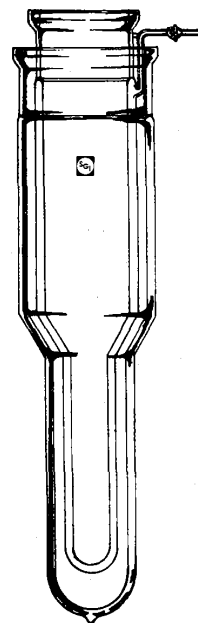
Flange size: Outer Dewar - 4"
Inner Dewar - 2"



D-1231

D-1231 DEWAR FLASK WITH PIPE FLANGE, UNIT CONSTRUCTION*

Alignment problems in mounting a double system are eliminated by sealing both units together.



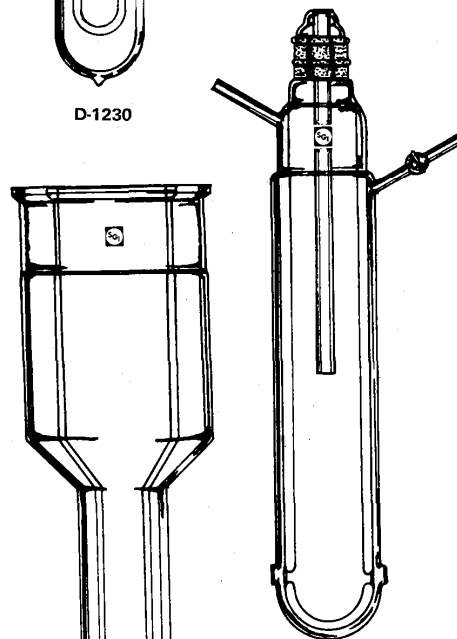
D-1230

D-1235 DEWAR FLASK SYSTEM WITH PIPE FLANGE*

Flange size: Outer Dewar - 4"
Inner Dewar - 2"

SPECIFICATIONS

Outer Dewar				
Top section OD	Top section ITOD	Lower section OD	Lower section ITOD	Length
150 mm	125 mm	60 mm	46 mm	1068 mm
Inner Dewar				
85 mm	65 mm	41 mm	25 mm	1142 mm



D-1235

D-1240

D-1240 DEWAR FLASK, INNER AND OUTER SEALED together*

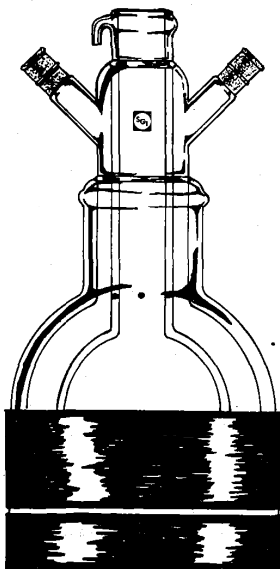
This cell is used to study the absorption spectra of crystals at very low temperatures. Refer to PHYSICAL REVIEW, Vol. 82, page 976, 1951.

⌘ Joint - 50/50

Size of window - 5/8" (optical window plates are extra.)

SPECIFICATIONS

Outer wall OD	Middle wall OD	Inner wall OD	Length
4"	80 mm	60 mm	495 mm



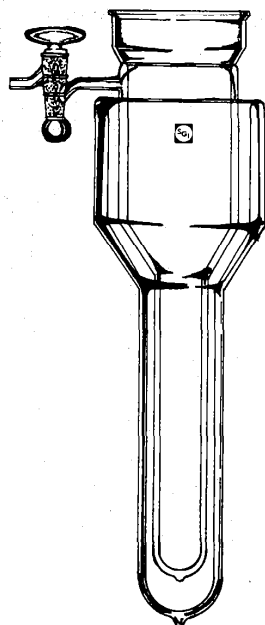
D-1245

D-1245 DEWAR FLASK SYSTEM, FOR TRANSFER OR IMMERSION*

SPECIFICATIONS

Capacity Liters	Flask OD mm	Neck mm	Outer Neck Length mm	Mtd. Neck Length mm
1	225	150	105	50
3	346	205	155	75
5	346	250	200	100

Capacity Liters	Mtd. Neck OD mm	Inner Neck OD mm	Joint $\text{\textcircled{S}}$
1	64	20	19/38
3	70	22	24/40
5	80	25	29/42



D-1255

D-1255 DEWAR FLASK SYSTEM WITH PIPE FLANGE*

Combinations of mountings in one cryostat are common. In this system, the helium Dewar has a standard pipe flange; and the nitrogen Dewar has a bulge top.

Size of flange - 4"

SPECIFICATIONS

Outer Dewar				
Top section OD	Top section ITOD	Lower section OD	Lower section ITOD	Length
5" OD	4½" OD	70 mm OD	60 mm OD	745 mm
Inner Dewar				
90 mm OD	75 mm OD	41 mm OD	35 mm OD	825 mm

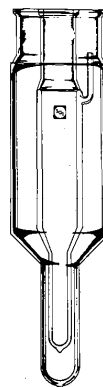


D-1260 DEWAR FLASK SYSTEM WITH PIPE FLANGE*

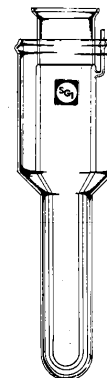
Size of flanges: Outer Dewar - 4", Inner Dewar - 2"

SPECIFICATIONS

Outer Dewar				
Top section OD	Top section ITOD	Bottom section OD	Bottom section ITOD	Length
5½" OD	4½" OD	48 mm OD	41 mm OD	940 mm
Inner Dewar				
Top section OD	Top section ITOD	Bottom section OD	Bottom section ITOD	Length
75 mm OD	64 mm OD	30 mm OD	25 mm OD	890 mm



D-1260



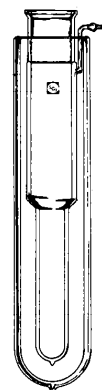
D-1265

D-1265 DEWAR FLASK SYSTEM, WITH PIPE FLANGE*

Pumpout line has a copper to PYREX seal.

SPECIFICATIONS

Outer Dewar				
Top section OD	Top section ITOD	Bottom section OD	Bottom section ITOD	Length
150 mm	125 mm	54 mm	45 mm	1240 mm
Inner Dewar				
Top section	Top section	Bottom section	Bottom section	Length
90 mm	54 mm	38 mm	30 mm	1290 mm



D-1270



D-1275

D-1270 DEWAR FLASK SYSTEM WITH PIPE FLANGE AND KOVAR SEAL, STRIP SILVERED*

SPECIFICATIONS

Outer dewar	Inner dewar
outer wall - 7" OD	flange - 4"
inner wall - 6" OD	outer wall - 5" OD
	inner wall - 100 mm OD
	reduced section - 85 mm OD
	reduced section - 75 mm OD

D-1275 DEWAR FLASK WITH COMMON VACUUM SYSTEM AND FLATTENED LOWER SECTION*

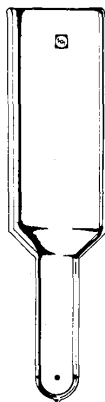
SPECIFICATIONS:

Outer cylinder	- 5" OD
Inner cylinder	- 4" OD
Outer jacket	- 70 mm OD
Inner jacket	- 54 mm OD

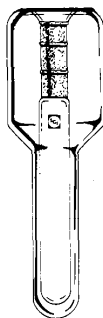


D-1280

D-1280 DEWAR FLASK SYSTEM WITH COMMON VACUUM*



D-1285



D-1290

D-1285 DEWAR FLASK, REDUCED LOWER SECTION*

Although shown as an outer or nitrogen Dewar, this unit could include an exhaust arm making it suitable as an inner or helium Dewar.

SPECIFICATIONS

Top OD	Top ITOD	Bottom OD	Bottom ITOD	Length
127 mm	95 mm	51 mm	34 mm	680 mm

D-1290 DEWAR FLASK, MICRO, WITH GROUND JOINT*

- size joint - 14/35 ♂
- outer jacket - 17 mm OD
- inner tube - 13 mm OD
- lower 2" of flask is free of silver

D-1295 DEWAR FLASK, REDUCED LOWER SECTION*

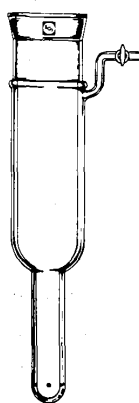
A basic design flask, for free radical research, incorporating a large reservoir for prolonged studies.

SPECIFICATIONS

Upper section OD	Upper section ID	Lower section OD	Lower section ID
100 mm	70 mm	17 mm	9 mm



D-1295



D-1300

D-1300 DEWAR FLASK, REDUCED LOWER SECTION*

With pumpout stopcock sidearm and standard pipe flange.

This design is equipped with a large pumpout arm entering the helium chamber to attain temperatures below 4.2 degrees K. by reducing vapor pressures.

- size flange - 4"
- outer jacket - 90 mm OD
- inner tube - 75 mm OD
- length - 830 mm
- reduced section - 51 mm OD
- reduced section - 41 mm OD

D-1305 EVACUATED JACKET, PLAIN

Length mm.	ID mm. 10 to 25	ID mm. 31 to 34	ID mm. 41 to 50
400	A	A-1	A-2
500	B	B-1	B-2
600	C	C-1	C-2
700	D	D-1	D-2
800	E	E-1	E-2
900	F	F-1	F-2
1000	G	G-1	G-2
1200	H	H-1	H-2
1400	I	I-1	I-2
1600	J	J-1	J-2
1800	K	K-1	K-2

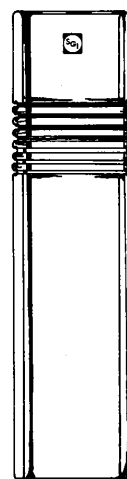


D-1305



D-1310 EVACUATED JACKET WITH INTERNAL BELLOWS

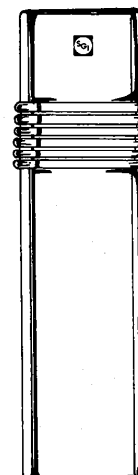
Length mm.	ID mm. 10 to 25	ID mm. 31 to 34	ID mm. 41 to 50
400	A	A-1	A-2
500	B	B-1	B-2
600	C	C-1	C-2
700	D	D-1	D-2
800	E	E-1	E-2
900	F	F-1	F-2
1000	G	G-1	G-2
1200	H	H-1	H-2
1400	I	I-1	I-2
1600	J	J-1	J-2
1800	K	K-1	K-2



D-1310

D-1315 EVACUATED JACKET, WITH EXTERNAL BELLOWS

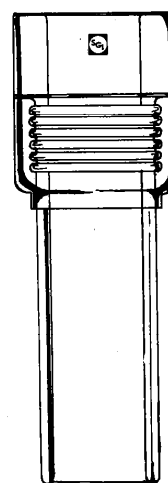
Length mm.	ID mm. 10 to 31	ID mm. 36 to 41	ID mm. 44 to 55
400	A	A-1	A-2
500	B	B-1	B-2
600	C	C-1	C-2
700	D	D-1	D-2
800	E	E-1	E-2
900	F	F-1	F-2
1000	G	G-1	G-2
1200	H	H-1	H-2
1400	I	I-1	I-2
1600	J	J-1	J-2
1800	K	K-1	K-2



D-1315

D-1320 EVACUATED JACKET, WITH SHIELDED EXTERNAL BELLOWS

Length mm.	ID mm. 10 to 31	ID mm. 36 to 41	ID mm. 44 to 55
400	A	A-1	A-2
500	B	B-1	B-2
600	C	C-1	C-2
700	D	D-1	D-2
800	E	E-1	E-2
900	F	F-1	F-2
1000	G	G-1	G-2
1200	H	H-1	H-2
1400	I	I-1	I-2
1600	J	J-1	J-2
1800	K	K-1	K-2



D-1320