



Scientific Glassware CATALOGUE

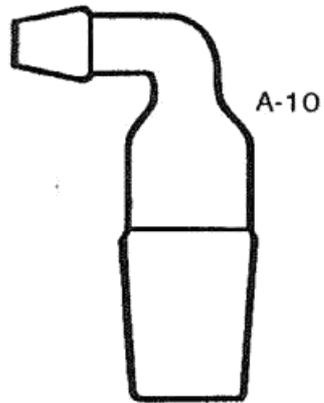
Made in New Zealand
by
TECHNICAL GLASS PRODUCTS



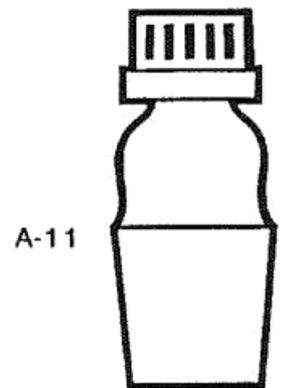
**GENERAL LABORATORY APPARATUS,
JOINTED WARE**

CAT NO.

- A-10- Cone to Tubing Adapter, bent
Cone size
-1 14/23
-2 19/26
-3 24/29
-4 29/32



- A-11 Cone/Screw Thread Adapter to accept 6-7mm
Thermometer or Leak Tube. Will also hold
injection septum.
Cone size
-1 14/23
-2 19/26
-3 24/29
-4 29/32

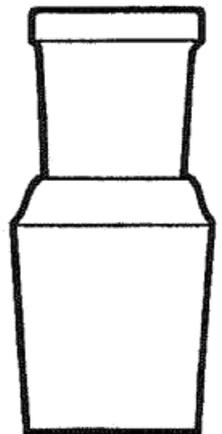


- A-13- Adapters. Expansion and reduction

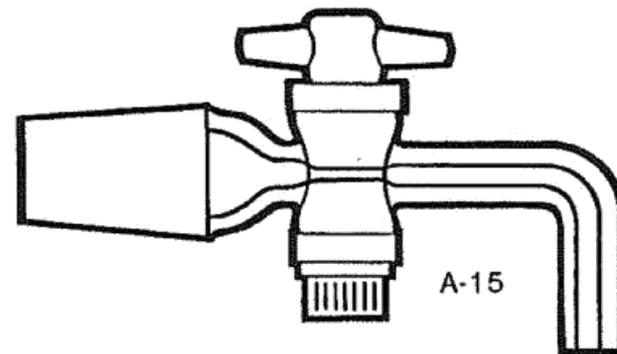
	Socket	Cone
-1	14/23	19/26
-2	14/23	24/29
-3	14/23	29/32
-4	19/26	14/23
-5	19/26	24/29
-6	19/26	29/32
-7	24/29	34/35
-8	24/29	14/23
-9	24/29	19/26
-10	24/29	29/32
-11	29/32	14/23
-12	29/32	19/26
-13	29/32	24/29
-14	29/32	34/35
-15	34/35	24/29



A-13



- A-15 Aspirator Stopcock
* Suffix G for glass key stopcock
T for Teflon™ key stopcock
Cone size Stopcock bore
-1-* 29/32 6mm
-2-* 29/32 8mm



A-15

- A-19- Weighing Boat
-1 Nominal volume, 3ml
-2 Nominal volume, 6ml
-3 Nominal volume, 10ml



A-19



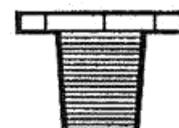
Minimum order 5x

Stopper, Hollow Glass

- MD-4044 14/23
MD-4045 19/26
MD-4046 24/29
MD-4047 29/32
MD-4048 34/35

Polyethylene Stopper

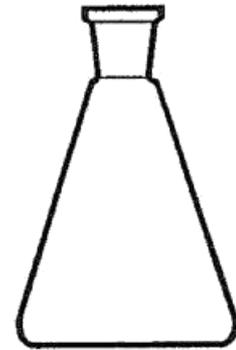
- GW 911574064 14/23
GW 911574072 19/26
GW 911574089 24/29
GW 911574097 29/32
GW 911574118 34/35



JOINTED FLASKS

J-34- Flask, Erlenmeyer, with standard ground socket

	Capacity (ml)	Socket size
-1	100	24/29
-2	250	24/29
-3	500	24/29
-4	500	29/32
-5	1000	24/29
-6	1000	29/32

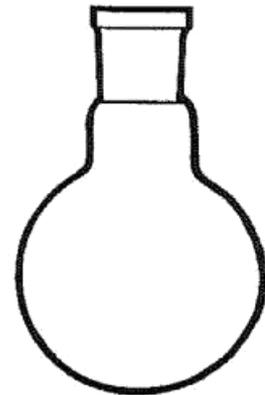


J-34

Other sizes to order

J-35 Flask, round bottom, short neck, with standard ground socket*

	Capacity (ml)	Socket size
1	25	14/23
2	25	19/26
3	50	14/23
4	50	19/26
5	50	24/29
7	100	14/23
8	100	19/26
9	100	24/29
10	100	29/32
11	250	24/29
12	250	29/32
13	500	24/29
14	500	29/32
15	1000	24/29
16	1000	29/32
17	2000	29/32
12/34	250	34/35
14/34	500	34/35
16/34	1000	34/35
17/34	2000	34/35



J-35

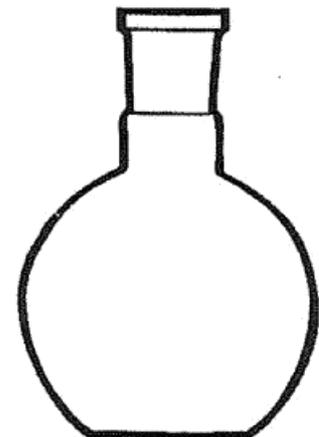
* for medium neck add suffix M

for long neck add suffix L

Other sizes to order

J-37 Flasks, flat bottom, short neck, with standard ground socket*

	Capacity (ml)	Socket Size
-1	50	19/26
-2	50	24/29
-4	100	19/26
-5	100	24/29
-6	100	29/32
-7	250	24/29
-8	250	29/32
-9	500	24/29
-10	500	29/32
-11	1000	24/29
-12	1000	29/32
-13	2000	29/32



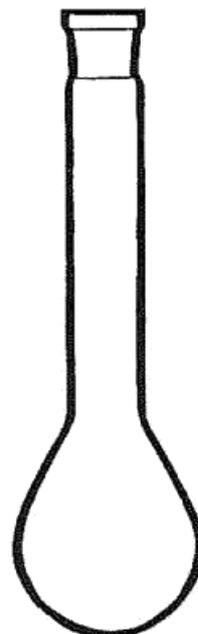
J-37

* for medium neck add suffix M

for long neck add suffix L

Other sizes to order

J-39-1 Flask, Kjeldahl with standard ground socket
500ml with 24/29 socket
Other sizes to order



J-39

J-40- Multiple neck round bottom flask
Flask, round bottom, short neck, with two
standard ground sockets.
Side neck angled (as shown). For parallel
side neck, add suffix P to Cat. No.

	Capacity (ml)	Centre Socket	Side Socket
-3	250ml	24/29	14/23
-4	250ml	24/29	19/26
-5	500ml	24/29	14/23
-6	500ml	24/29	19/26
-7	500ml	24/29	24/29
-8	1000ml	24/29	19/26
-9	1000ml	24/29	24/29

Other sizes to order

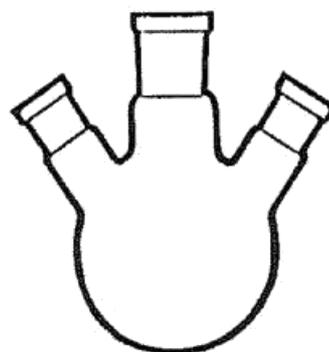
J-41- Flasks, round bottom, short neck, with 3
standard ground sockets.
Side necks angled (as shown). For parallel
necks add suffix P to Cat. No.

	Capacity (ml)	Centre Socket	Side Socket
-3	250ml	24/29	14/23
-4	250ml	24/29	19/26
-5	500ml	24/29	14/23
-6	500ml	24/29	19/26
-7	500ml	24/29	24/29
-8	1000ml	24/29	14/23
-9	1000ml	24/29	19/26
-10	1000ml	24/29	24/29
-11	1000ml	29/32	19/26

Other sizes to order



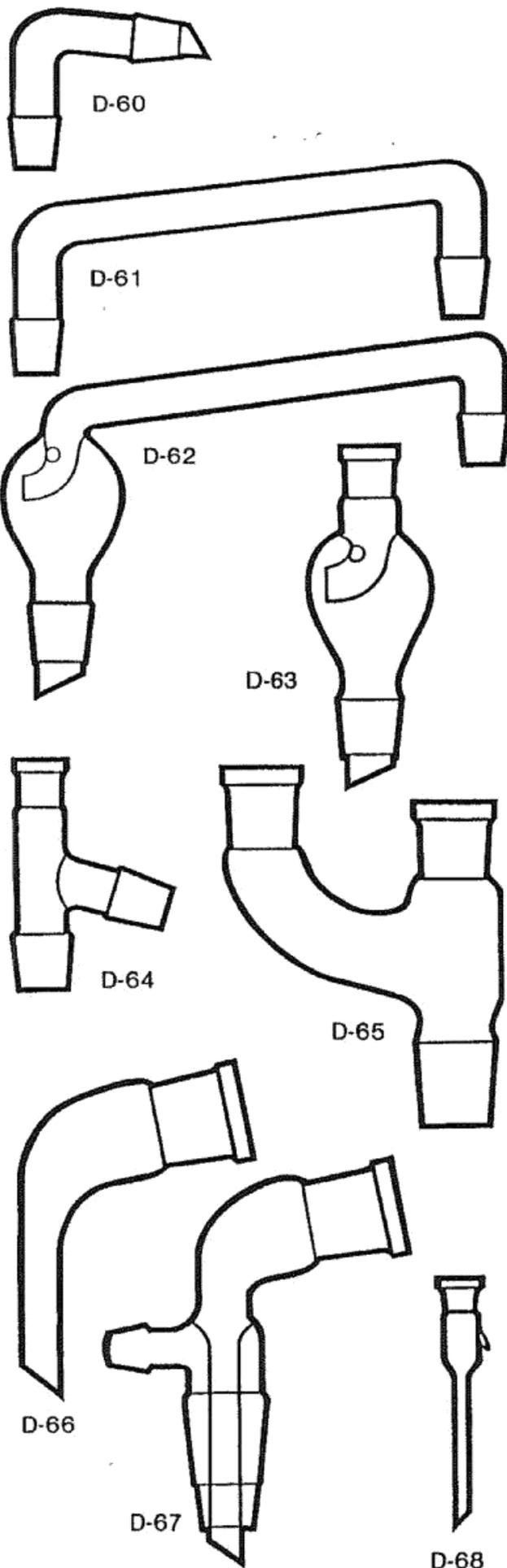
J-40



J-41

DISTILLATION

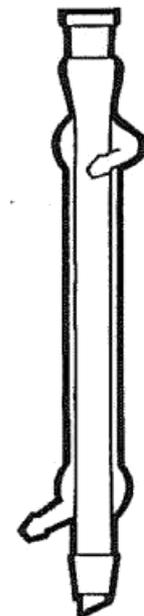
D-60-	Recovery bend		
	Cone size		
-1	14/23		
-2	19/26		
-3	24/29		
-4	29/32		
D-61-	Recovery adapter (distilling link)		
	Cone size		
-1	14/23		
-2	19/26		
-3	24/29		
D-62-	Recovery adapter (distilling link) with splash head		
	Cone size		
-1	19/26		
-2	24/29		
D-63-	Splash Head		
	Cone size	Socket size	
-1	19/26	19/26	
-2	24/29	24/29	
D-64-	Stillhead		
	Cone size	Socket size	
-5	14/23	14/23	
-6	19/26	14/23	
-7	24/29	14/23	
-8	29/32	14/23	
D-65-	Multiple Adapter		
	Cone size	Socket size	
-1	24/29	19/26	
-2	24/29	24/29	
D-66-	Receiver adapter, bent		
	Socket size		
-1	14/23		
-2	19/26		
-3	24/29		
-4	29/32		
D-67-	Receiver adapter, bent, with vacuum connection		
	Cone size	Socket size	
-1	24/29	24/29	
D-68-	Receiver adapter, straight		
	Socket size		
-1	19/26		
-2	24/29		



D-81-	Plain Column/Air Condenser		
	Cone & Socket size	Nominal effective length (mm)	
-1	19/26	300	
-2	24/29	300	
-3	24/29	450	
-4	29/32	450	



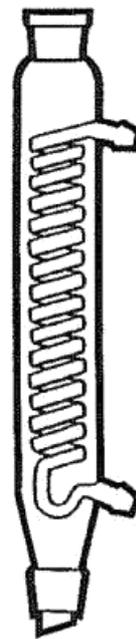
D-81



D-85

D-85-	Leibig Condenser		
	Cone & Socket size.	Effective length (mm)	
-1	14/23	160	
-2	19/26	250	
-3	24/29	250	
-4	29/32	250	
-5	24/29	400	
-6	29/32	400	

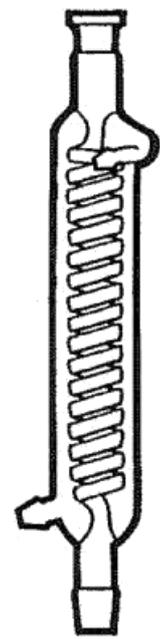
D-86-	Coil Condenser (Graham)		
	Cone & Socket size	Nominal effective length (mm)	
-1	19/26	250	
-2	24/29	250	



D-86



D-87



D-88

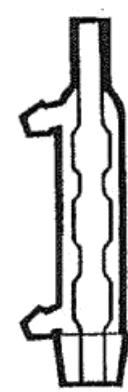
D-87-	Double Surface Condenser		
	Cone & Socket	Nominal effective length (mm)	
-1	19/26	200	
-2	24/29	200	

D-88-	Coil Distillate Condenser		
	Cone & Socket size (mm)	Jacket length	
-1	19/26	250	
-2	24/29	250	

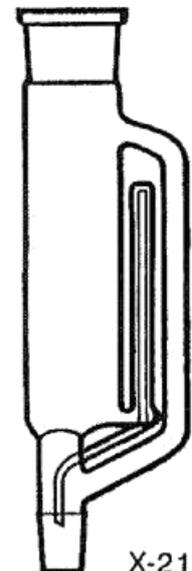
D-89-	Allihn Condenser		
	Cone size	Nominal effective length mm	
-1	24/29	250	
-2	29/32	250	
-3	34/35	250	
-4	40/38	250	

EXTRACTION

X-210-	Soxhlet Extractor			
	Nominal Vol.(ml)	Socket	Cone	
-1	40	29/32	24/29	
-2	60	34/35	24/29	
-3	60	34/35	34/35	
-4	100	34/35	34/35	
-5	100	34/35	24/29	
-6	100	40/38	24/29	



D-89



X-210

SEPARATING FUNNELS

S-220- Separating Funnel, cylindrical. *Suffix G for glass-key stopcock, T for Teflon™-key stopcock.

Capacity (ml)

1-*	50
2-*	100
3-*	250
4-*	500
5-*	1000

S-221- Separating funnel, cylindrical, with standard ground joint on outlet (Dropping Funnel)

* Suffix G for glass-key stopcock, T for Teflon™-key stopcock.

Capacity (ml)

	Capacity (ml)	Cone size
-1-*	50	14/23
-2-*	100	14/23
-3-*	100	19/26
-4-*	250	19/26
-5-*	250	24/29
-6-*	500	24/29
-7-*	500	29/32
-8-*	1000	29/32

S-222- Pressure Equalizing Funnel * Suffix G for glass-key stopcock, T for Teflon™-key stopcock.

Capacity (ml)

	Capacity (ml)	Cone size
-1-*	100	19/26
-2-*	100	24/29
-3-*	250	24/29
-4-*	250	29/32
-5-*	500	24/29
-6-*	500	29/32

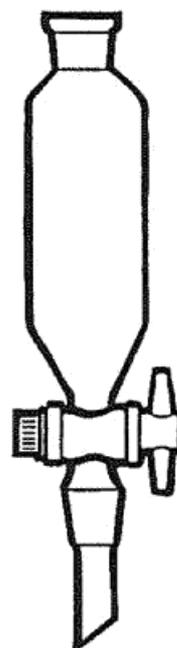
S-223- Separating Funnel, pear shape. *Suffix G for glass-key stopcock, T for Teflon™-key stopcock.

Capacity (ml)

-1-*	50
-2-*	100
-3-*	250
-4-*	500



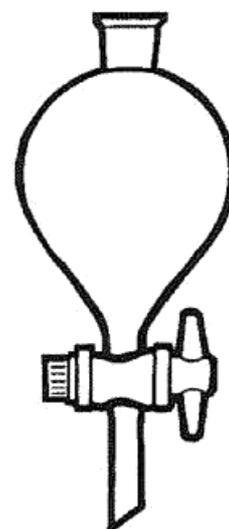
S-220



S-221



S-222



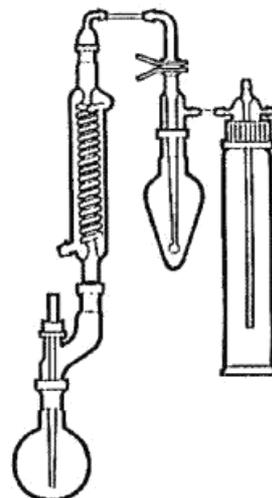
S-223

SULPHUR DIOXIDE APPARATUS

A-25-1 Complete Apparatus as shown.

To order separately, components are:

J-35-8	100ml r.b. flask
A-25-2	Swan neck adapter (with leak tube)
D-88-1	Coil distillate condenser
A-10-2	Cone to Tubing adapter
A-25-3	Ball to Tubing adapter
A-25-4	19/26 Drechsel head
A-25-5	Pear flask, 50ml
A-25-6	Flow Regulator head
A-25-7	Flow Regulator body



A-25-1

FILTRATION AND SINTERED (FRITTED) WARE

(See Technical Specifications at back of catalogue)

- F-113 Hartley 3-piece 90mm Funnel
 -0 Complete assembly
 -1 Reservoir
 -2 Filter plate (acrylic)
 -3 Funnel
 -4 Clips
- 114-7/35 Bung 35mm
- F-114 Glass Filter Holder 47mm
 -1 Reservoir 300ml
 -3 Filter support, plain stemmed
 -4 Filter support, tubulated to fit Schott™ lab. bottle with screw cap
 -5 Filter support, tubulated to fit 40/38 cone
 -6 Clamp
- F-119- Screw Thread Adapter to permit direct filtration from stemmed funnels into Schott lab. bottles.
 -1 For 8-12mm stem
 -2 For 12-16mm stem

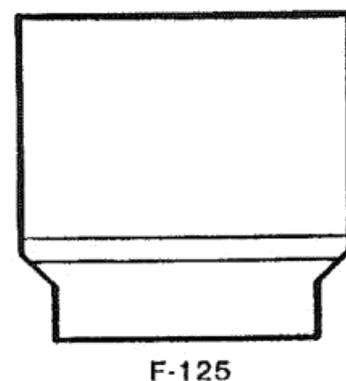
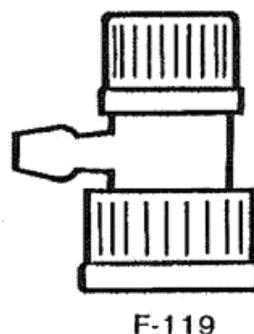
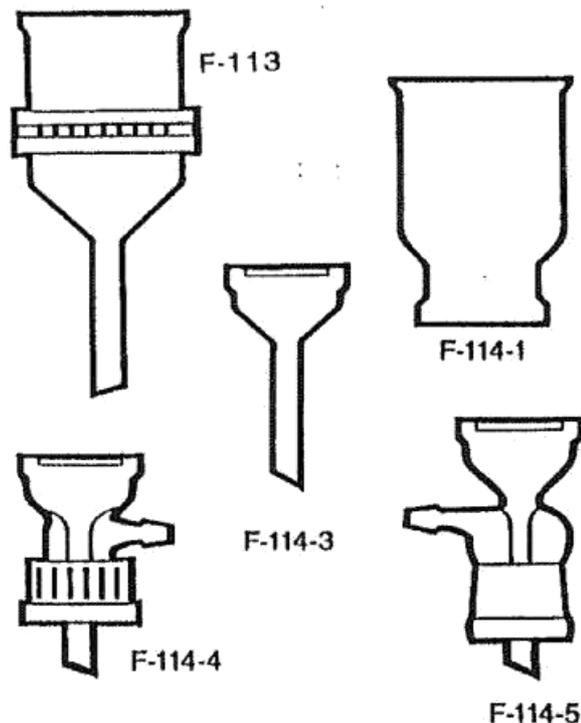
- F-125- Gooch Crucible (available permanently individually numbered if requested).

State numbers required. *Add porosity number 0,1,2,3, suffix to Cat. No.

	Disc dia. (mm)	Nominal capacity (ml)
-1-*	20	8
-2-*	25	15
-3-*	30	30
-4-*	40	50

Sintered (Fritted) Glassware

Porosity No	Pore size (μm)	Uses
0	160-250	Gas distribution, coarse filtration, support for other materials.
1	100-160	Gas distribution, coarse filtration of precipitates and grain materials, filter disc support
2	40-100	Medium filtration, crystalline precipitate filtration gas washing.
3	16-40	Analytical filtration, gas filtration, fine grain materials.
4	10-16	Analytical filtration, filtration of fine precipitates.



Sintered glassware has less resistance to thermal shock than non-porous standard borosilicate glassware. Rapid temperature changes should be avoided especially when wet. The rate of heating should not exceed 2°C/min. Drying to constant weight can be done most effectively at 105-110°C.

Pressure differential should not exceed 100 KN/M2 (15 psi). New filters should be cleaned by suction with hot hydrochloric acid followed by distilled water rinsing.

COLUMN CHROMATOGRAPHY

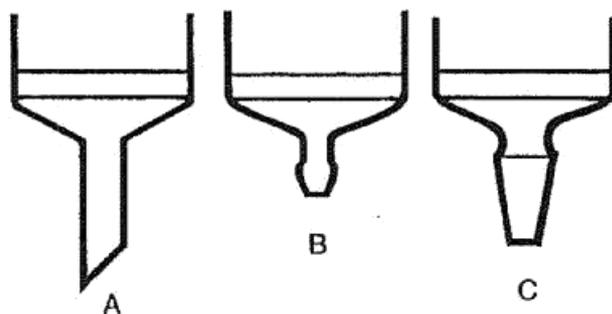
Sci-Tech columns are available in three tip styles:

- A- Mitred tip
- B- 3mm tubulation to accept small bore tubing
- C- Luer tip, to accept luer taper hypodermic needles.

Please state A, B or C tip style with order.

Sintered (fritted) disc columns.

Sci-Tech sintered disc chromatography columns feature minimum dead space below the disc to reduce the possibility of mixing. Porosity 1 sinters are used unless otherwise requested.



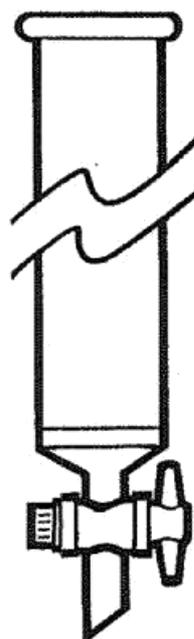
C-393 Sintered column fitted with Teflon™ key stopcock.

*: Suffix required length above sintered disk in mm.

i.d.(mm)

- 10-* 10
- 15-* 14.5
- 20-* 19.6
- 25-* 25.2
- 30-* 31.2
- 40-* 40.8

State tip style required, (A,B orC)



C-393

C-395 Fitted with Teflon™-key stopcock and with standard ground socket at top.

* Suffix required length from sintered disc to bottom of socket in mm.

i.d.(mm)

- 10-* 10
- 15-* 14.6
- 20-* 19.6
- 25-* 25.2
- 30-* 31.2
- 40-* 40.8

Socket size

- 19/26
- 19/26
- 24/29
- 24/29
- 34/35
- 34/35



C-395

C-397 Sintered column fitted with Teflon™-key stopcock and with screw thread joint at top, screw cap and tubulation.

* Suffix required length from sintered disc to bottom of joint in mm.

i.d.(mm)

- 10-* 10
- 15-* 14.6
- 20-* 19.6
- 25-* 25.2
- 30-* 31.2
- 40-* 40.8

Screw thread size (mm)

- 25
- 25
- 25
- 32
- 32
- 45

State tip style required (A,B orC)

Other variations including jacketed columns available on request.



C-397

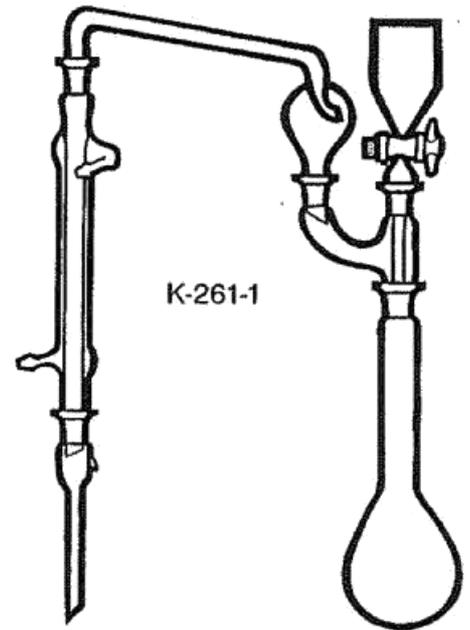
APPARATUS & INSTRUMENT COMPONENTS

Kjeldahl Apparatus

K261-1 Complete apparatus as shown.

To order separately, components are:

- J-39-1 Kjeldahl flask 500ml
- D-65-1 Multiple adapter
- K-180-1 Dropping funnel 50ml
- D-62-1 Recovery adapter with splashhead
- D-85-2 Leibig condenser
- D-68-1 Receiver adapter

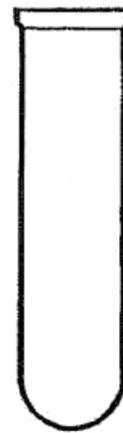


K-270 Digestion tubes for automated digestion apparatus.

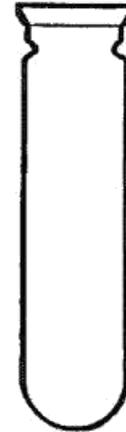
	Capacity (ml)	Diameter (mm)	Overall length (mm)
-1	75	26	255
-2	100	26	300
-3	250	42	300
		To fit 'Tecator'™	
-3G	250	42	300
		To fit Gerhardt™	
-4	250	48	260
		To fit 'Buchi'™	

I-325 Dissolution Pot (to U.S.P.) Fits U.S.P. spec. dissolution apparatus
height
(mm) o.d. (mm) flange o.d. (mm)
165 110 135

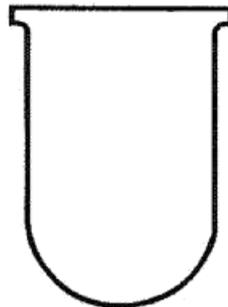
I-326 Hybridization Bottle, to fit Hybaid™ GL45 thread, fitted with PPN screw cap and Nitrile 'o'ring.
i.d.m.m. o.d.m.m. length
-1 35 42 .150
-2 35 42 250
-3 35 42 300
-4 35 42 2x150
(double ended)



K-270-3



K-270-4



I-325

For Orders or Enquires, contact....



TECHNICAL GLASS PRODUCTS LIMITED

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Dunedin, New Zealand

(03) 477 7880
info@tgpglass.co.nz

TECHNICAL SPECIFICATIONS

The glass used in the products in this catalogue is Schott DURAN unless otherwise stated

Coefficient of expansion –
 $33 \times 10^{-7}/^{\circ}\text{C}$ between 20-300°C

Density –
2.23 g/cm⁻³

Refractive Index-
1.473 Sodium D Line

DURAN borosilicate glass is highly resistant to chemical attack, heat and thermal shock. Temporary maximum allowable service temperature 500°C
NB: Cooling from high temperature must be slow and uniform

Conditions of Sale:

PAYMENT – Net on 20th of the month following delivery

CLAIMS – Claims arising from breakage or other discrepancies from outer packaging received in good condition must be made to the supplier within three days of receipt of goods. Claims arising as a result of goods being damaged in transit must be made to the carrier.

GUARANTEE AND SPECIFICATIONS – As Technical Glass Products Limited can make no assumption regarding the actual use of the glassware listed in this catalogue, no specific guarantees can be made or assumed. We do however have every confidence in our products and their ability to perform to the highest standard in laboratory and technical applications. Should any problems arise, do not hesitate to contact us at the address listed.