



We manufacture a wide range of standard PTFE jointware to facilitate and improve the use of standard taper ground glass jointware.

PTFE used in the manufacture of COWIE® Jointware is pure, virgin material which conforms to FDA and USP Class VI requirements.

- **Chemically inert**
- **Prevent sticking**
- **Grease free**
- **Eliminate contamination**
- **High vacuum**
- **Safety**

Send us your enquiry for custom designed jointware to meet your exact requirements.

JOINT CLAMPS

Safe • Reliable • Long Life • Exceptional Value

Joint Clamps are unaffected by all chemical reagents. Totally encapsulated steel spring maintains strength to 280°C. Adjust simply by compression-extension by hand.

Ref No.	Joint
030.010.1	10/-
.012.1	12/-
.014.1	14/-
.019.1	19/-
.024.1	24/-
.029.1	29/-
.034.1	34/-
.040.1	40/-
.045.1	45/-



A COWIE® Original Design

THIN WALL JOINT SLEEVES

Thin Wall Joint Sleeves are inserted between standard taper ground glass joints to eliminate the use of grease and prevent sticking. Sleeves have a wall thickness of about 0.05mm and will withstand low to medium vacuum.

FULL LENGTH 'A' TYPE

Ref No.	Joint
019.007	7/25
.010	10/30
.012	12/30
.014.1	14/20
.014	14/35
.019.1	19/22
.019	19/38
.024	24/40
.029	29/42
.034	34/45
.040	40/50
.045	45/50
.050	50/50
.055	55/50
.060	60/50
.070	71/60

MEDIUM LENGTH 'B' TYPE

Ref No.	Joint
019.107	7/16
.110	10/19
.112	12/21
.114	14/23
.119	19/26
.124	24/29
.129	29/32
.134	34/35
.140	40/38
.145	45/40
.150	50/42
.155	55/44
.160	60/46
.170	71/51



RIGID JOINT SLEEVES



A COWIE® Original Patent

Rigid Sleeves and Joint Adapters are grease-free, high vacuum seals for standard taper ground glass joints, with substantial shoulder for ease of handling and repeated use. High vacuum performance (leakage rate is less than 1×10^{-4} torr, litre, sec.⁻¹) is attained using transverse sealing rings. Wall thickness of rigid sleeves is 0.5mm.

FULL LENGTH 'A' TYPE

Ref No.	Joint
020.110	10/30
.114.1	14/20
.119.1	19/22
.124	24/40
.129	29/42
.134	34/45
.145	45/50
.155	55/50

MEDIUM LENGTH 'B' TYPE

Ref No.	Joint
020.010	10/19
.014	14/23
.019	19/26
.024	24/29
.029	29/32
.034	34/35
.040	40/38
.045	45/40
.055	55/44

JOINT ADAPTERS



FULL LENGTH 'A' TYPE

Ref No.	Socket	Cone
021.01014	10/30	14/35
.01019	10/30	19/38
.01419	14/35	19/38
.01424	14/35	24/40
.01924	19/38	24/40
.01929	19/38	29/42
.01934	19/38	34/45
.02429	24/40	29/42
.02434	24/40	34/45
.02445	24/40	45/50
.02934	29/42	34/45
.02945	29/42	45/50
.03445	34/45	45/50

MEDIUM LENGTH 'B' TYPE

Ref No.	Socket	Cone
021.1014	10/19	14/23
.1019	10/19	19/26
.1419	14/23	19/26
.1424	14/23	24/29
.1924	19/26	24/29
.1929	19/26	29/32
.1934	19/26	34/35
.2429	24/29	29/32
.2434	24/29	34/35
.2445	24/29	45/40
.2934	29/32	34/35
.2945	29/32	45/40
.3445	34/35	45/40

STANDARD TAPER COMPRESSION FITTINGS

Compression Fittings fit standard taper ground glass joints to hold items such as temperature probes and sampling tubes securely in place.

Compression fittings are manufactured from pure PTFE with a PEEK olive to give a secure grip.

PTFE Plugs are available to seal compression fittings without removing the fitting - see page 51 for sizes.

To define the Reference Number of the required part add the bore size suffix to the required taper reference using the table below.

Example:

A fitting with a 19/38 taper and 8mm bore is -
PC704.1938.08



FULL LENGTH 'A' TYPE - METRIC BORE

Ref No.	Taper	Bore Size (mm)							
		3	6	8	12	14	16	19	25
PC704.1938.XX	19/38	.03	.06	.08	.12				
.2440.XX	24/40		.06	.08	.12	.14	.16		
.2942.XX	29/42				.12	.14	.16	.19	
.3445.XX	34/45				.12	.14	.16	.19	.25
.4550.XX	45/50				.12	.14	.16	.19	.25

MEDIUM LENGTH 'B' TYPE - METRIC BORE

Ref No.	Taper	Bore Size (mm)							
		3	6	8	12	14	16	19	25
PC704.1926.XX	19/26	.03	.06	.08	.12				
.2429.XX	24/29		.06	.08	.12	.14	.16		
.2932.XX	29/32				.12	.14	.16	.19	
.3435.XX	34/35				.12	.14	.16	.19	.25
.4540.XX	45/40				.12	.14	.16	.19	.25

FULL LENGTH 'A' TYPE - IMPERIAL BORE

Ref No.	Taper	Bore Size (in)							
		1/8"	1/4"	5/16"	1/2"	9/16"	5/8"	3/4"	1"
PC704.1938.XXX	19/38	.125	.250	.312	.500				
.2440.XXX	24/40		.250	.312	.500	.560	.625		
.2942.XXX	29/42				.500	.560	.625	.750	
.3445.XXX	34/45				.500	.560	.625	.750	.1000
.4550.XXX	45/50				.500	.560	.625	.750	.1000

MEDIUM LENGTH 'B' TYPE - IMPERIAL BORE

Ref No.	Taper	Bore Size (in)							
		1/8"	1/4"	5/16"	1/2"	9/16"	5/8"	3/4"	1"
PC704.1926.XXX	19/38	.125	.250	.312	.500				
.2429.XXX	24/40		.250	.312	.500	.560	.625		
.2932.XXX	29/42				.500	.560	.625	.750	
.3435.XXX	34/45				.500	.560	.625	.750	.1000
.4540.XXX	45/50				.500	.560	.625	.750	.1000

PTFE used in the manufacture of COWIE® PTFE Laboratory Products is pure, virgin material which conforms to FDA and USP Class VI requirements.

FLAT HEAD STOPPERS



Flat Head Stoppers fit standard taper ground glass joints. Trapezoidal rings give high vacuum performance and reduce seizure.

FULL LENGTH 'A' TYPE

Ref No.	Joint	Ht (mm)
010.110	10/30	40
.114	14/35	46
.119	19/38	50
.124	24/40	55
.129	29/42	57
.134	34/45	60

MEDIUM LENGTH 'B' TYPE

Ref No.	Joint	Ht (mm)
010.210	10/19	31
.214	14/23	34
.219	19/26	38
.224	24/29	44
.229	29/32	47
.234	34/35	51

SELF RELEASING STOPPERS



Self Releasing Stoppers fit standard taper ground glass joints, with sealing rings and self releasing ring for ease of removal.

FULL LENGTH 'A' TYPE

Ref No.	Joint	Ht (mm)
010.1119	19/38	62
.1124	24/40	65
.1134	34/45	70
.1145	45/50	75

MEDIUM LENGTH 'B' TYPE

Ref No.	Joint	Ht (mm)
010.1219	19/26	50
.1224	24/29	55
.1229	29/32	60
.1234	34/35	62
.1245	45/40	65

PENNY HEAD STOPPERS



PTFE Penny Head Stoppers are hollow, for standard taper joints. No sealing rings.

Ref No.	Size (US)
010.3.09	9
.3.13	13
.3.16	16
.3.19	19
.3.22	22
.3.27	27
.3.32	32

Flexible bellow connectors are machined from pure PTFE and used to correct mis-alignment and relieve stress in glassware assemblies. Connect directly to standard taper ground glass joints where trapezoidal sealing rings give medium to high vacuum performance. Inert and usable to ca. 280°C.

FULL LENGTH 'A' TYPE

Ref No.	Socket	Cone	Ht (mm)
008.1414	14/35	14/35	115
.1919.1	19/22	19/22	90
.1919	19/38	19/38	120
.2424	24/40	24/40	130
.2929	29/42	29/42	140
.3434	34/45	34/45	145
.4545	45/50	45/50	155

MEDIUM LENGTH 'B' TYPE

Ref No.	Socket	Cone	Ht (mm)
008.01414	14/23	14/23	90
.01429	14/23	29/32	110
.01919	19/26	19/26	100
.01924	19/26	24/29	105
.02424	24/29	24/29	110
.02929	29/32	29/32	115
.02934	29/32	34/35	120
.03434	34/35	34/35	120

FLEXIBLE BELLOWS



Round Bottom Flasks have a smooth internal finish, are inert and usable to 280°C. Tapers match standard ground glass joints. Without sealing rings. Other sizes on request.

FULL LENGTH 'A' TYPE

Ref No.	ml	Joint	Ø (mm)
040.0010.19	10	19/38	32
.0025.24	25	24/40	42
.0050.24	50	24/40	52
.0050.29	50	29/42	52
.0100.29	100	29/42	64

MEDIUM LENGTH 'B' TYPE

Ref No.	ml	Joint	Ø (mm)
040.010.14	10	14/23	32
.010.19	10	19/26	32
.025.19	25	19/26	42
.025.24	25	24/29	42
.050.24	50	24/29	52
.050.29	50	29/32	52
.100.29	100	29/32	64

ROUND BOTTOM FLASKS



Please ask for alternative sizes
or customised jointware.