

Introduction



GPE Scientific Limited is the exclusive manufacturer of the J Young brand.

J Young high vacuum greaseless stopcocks, synonymous the world over for their high quality incorporate three Viton O-ring seals (one encapsulated in PTFE) on a standard PTFE piston.

Glass pistons are available for low temperature work -20°C to 200°C (15mm Variant only) and where greater chemical resistance is required we offer Perfluoro 0-rings.

A Vacuum level of 1 x 10-6 mbar can be achieved with this valve. Internal positive pressure rating = 1 bar (14.7 PSI)

Our stopcocks are available with a choice of two types of threads, fine threads reference POR (yellow) and fast threads reference PTT (white).

The POR range has alternative coloured caps available upon request.

Please note that the PTFE used complies with the requirements of FDA 21 CFR 177.1550 and USP class VI and is free from animal components BSE/TSE.

For additional component technical data please see our web page https://www.gpescientific.co.uk/glassware/gpe-scientific-glassware/j-young-products

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NEW High Performance (HP)
J Young Valves



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NEW High Performance (HP) J Young valves - Choose between our standard J Young valves or the HP variant.

The HP variant features a reinforced sealing area (Where the PTFE piston makes the vacuum tight seal) providing extra strength for more demanding applications, key features as below

- New robust design
- Improved interchangeability
- Reinforced sealing area

Dual Bank Schlenk Line



GPE Dual Bank Manifold with J Young High Vacuum PTFE Valves. The main tubes are 24mm OD with serrated 9mm end connections. Available with 3, 4 or 5 ports.

| Product Code | Number of ports | J Y Valve Size (mm) | Approx Overall Width (mm) |
|--------------|-----------------|---------------------|---------------------------|
| 90010 | 3 | 0-10 | 300 |
| 90011 | 4 | 0-10 | 400 |
| 90012 | 5 | 0-10 | 500 |
| 90010/HP | 3 | 0-10 | 300 |
| 90011/HP | 4 | 0-10 | 400 |
| 90012/HP | 5 | 0-10 | 500 |

Option of the additional flange for mounting the vacuum gauge for each manifold

Just add the suffix -NW16 to the product code listed

Dual Bank Schlenk Line with Glass Stopcocks



GPE Dual Bank Manifold with Glass Stopcocks. The main tubes are 24mm 0D with B19 socket ends. Available with 3, 4 or 5 ports.

| Product Code | Number of ports | Valve Size (mm) | Approx Overall Width (mm) |
|--------------|-----------------|-----------------|---------------------------|
| 90013 | 3 | 4 | 300 |
| 90014 | 4 | 4 | 400 |
| 90015 | 5 | 4 | 500 |
| 90013/HP | 3 | 0-10 | 300 |
| 90014/HP | 4 | 0-10 | 400 |
| 90015/HP | 5 | 0-10 | 500 |
| | | | |

Option of the additional flange for mounting the vacuum gauge for each manifold

Just add the suffix -NW16 to the product code listed

For B19 cone adapters please see product code JYA/2 (page 14).

General Purpose Single Bank Manifold



General Purpose Single Bank Vacuum Manifold with J Young High Vacuum PTFE Valves.
The main tube is 16mm OD with serrated 9mm end connections.
Available with 3, 4 or 5 ports.

| Product Code | Number of ports | J Y Valve Size (mm) | Approx Overall Width (mm) |
|--------------|-----------------|---------------------|---------------------------|
| 90001 | 3 | 0-10 | 300 |
| 90002 | 4 | 0-10 | 400 |
| 90003 | 5 | 0-10 | 500 |
| 90001/HP | 3 | 0-10 | 300 |
| 90002/HP | 4 | 0-10 | 400 |
| 90003/HP | 5 | 0-10 | 500 |

Also available with custom ports and blanked banks, contact us for more information sales@gpescientific.co.uk

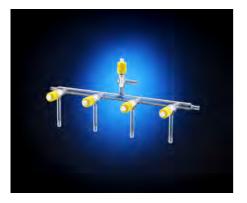
RELATED PRODUCTS

For vacuum traps, see page 6

For bubblers, see page 6

Custom options available, with e.g. banks blanked off, custom widths between ports, custom port sizing and built in cold traps Different taps colours are available, contact us for more details on $+44(0)1525\ 382277$ or info@gpescientific.co.uk

General Purpose Single Bank Manifold with Vacuum Gauge

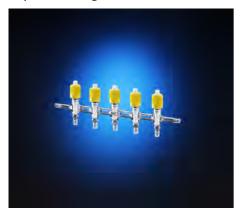


General Purpose Single Bank Vacuum Manifold with J Young High Vacuum PTFE Valves and vacuum gauge port.

The main tube is 16mm OD with serrated 9mm end connections. Available with 3, 4 or 5 ports.

| Product Code | Number of ports | J Y Valve Size (mm) | Approx Overall Width (mm) |
|--------------|-----------------|---------------------|---------------------------|
| 90004 | 3 | 0-10 | 300 |
| 90005 | 4 | 0-10 | 400 |
| 90006 | 5 | 0-10 | 500 |
| 90004/HP | 3 | 0-10 | 300 |
| 90005/HP | 4 | 0-10 | 400 |
| 90006/HP | 5 | 0-10 | 500 |

Space Saving Manifold

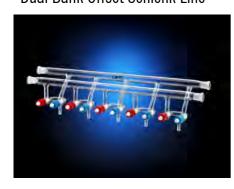


General Purpose Space Saving Vacuum Manifold with J Young High Vacuum PTFE Valves.

The main tube is 13mm 0D with serrated 10mm end connections. Available with 3, 5 or 8 ports.

| Product Code | Number of ports | J Y Valve Size (mm) | Approx Overall Width (mm) |
|--------------|-----------------|---------------------|---------------------------|
| 90007 | 3 | 0-10 | 225 |
| 90008 | 5 | 0-10 | 305 |
| 90009 | 8 | 0-10 | 420 |
| 90007/HP | 3 | 0-10 | 225 |
| 90008/HP | 5 | 0-10 | 305 |
| 90009/HP | 8 | 0-10 | 420 |
| | | | |

Dual Bank Offset Schlenk Line



GPE Dual Bank Offset Schenk Line with front control J Young High Vacuum PTFE Valves.
The main tubes are 24mm OD with B19 socket ends. Available with 3, 4 or 5 ports.

| Product Code | Number of ports | J Y Valve Size (mm) | Approx Overall Width (mm) |
|--------------|-----------------|---------------------|---------------------------|
| 90001 | 3 | 0-10 | 300 |
| 90002 | 4 | 0-10 | 400 |
| 90003 | 5 | 0-10 | 500 |
| 90001/HP | 3 | 0-10 | 300 |
| 90002/HP | 4 | 0-10 | 400 |
| 90003/HP | 5 | 0-10 | 500 |

Option of the additional flange for mounting the vacuum gauge for each manifold

Just add the suffix /KF to the product code

For B19 cone adapters please see product code JYA/1 (page 5).

RELATED PRODUCTS

For vacuum traps, see page 6

For bubblers, see page 6

Accessories and Recommended Products



Option of the additional flange for mounting the vacuum gauge for each manifold

Just add the suffix /KF to the product code listed

Vacuuview extended



Vacuuview





E30.016010.132.816 - Clamp





RZ 2.5 Pump



Vacuum Pump

Trolley



Rubber Tubing



E34.016035.123.616 - Seal

B19 Cone Adaptor with Glass Stopcock



For use with manifolds 90013, 90014, 90015.

Product Code JYA/2

B19 Cone Adaptor with J Young Valve



For use with manifolds 90019, 90020, 90021.

Product Code JYA/1

RELATED PRODUCTS

For vacuum traps, see page 6

For bubblers, see page 6



Vac Line Cold Trap



Basic Vac Line Cold Trap with glass key on the inlet. Glass key on the outlet also available.

| Product Code | Body Diameter (mm) | Body Length (mm) | Inner Tube Diameter (mm) | Hose Connection Diameter |
|--------------|--------------------|------------------|--------------------------|--------------------------|
| JYT/1 | 44 | 280 | 13 | 15 |

Vac Line Cold Trap



Basic Vac Line Cold Trap with glass key on the outlet. Glass key on the inlet also available With B40 socket and high vacuum glass key on the outlet.

| Product Code | Body Diameter (mm) | Body Length (mm) | Inner Tube Diameter (mm) | Hose Connection Diameter |
|--------------|--------------------|------------------|--------------------------|--------------------------|
| JYT/2 | 44 | 280 | 13 | 15 |

Vac Line Cold Trap



High quality Rodaviss Joint with removable cap with Viton O-Rings.Can be custom designed.

With B45 Rodaviss joint and JY bleed valve.

| Product Code | Body Diameter (mm) | Body Length (mm) | Inner Tube Diameter (mm) | Hose Connection Diameter |
|--------------|--------------------|------------------|--------------------------|--------------------------|
| JYT/3 | 50 | 240 | 13 | 15 |

Vac Line Bubbler



For use with Schlenk Lines and Vacuum Manifolds.

| Product Code | Capacity (ml) | Overall Length (mm) | Diameter (mm) |
|--------------|---------------|---------------------|---------------|
| JYB/1 | 20 | 130 | 30 |

see our website for dewar options



RELATED PRODUCTS

For manifolds & shlenk lines, see pages 3-4



JY NMR Valve with Tube Attached



Handle your NMR sample without flame sealing your tubes.

Teflon covered O-Ring eliminates material incompatibilities.

Completely greaseless Teflon assembly which is easy to use and to disassemble for cleaning. Includes female joint for quick attachment to your vacuum rack.

| Product Code | Description | NMR Tube length (inches) | MHz |
|---------------|--|-----------------------------|-----|
| S-5-200-JY-7 | Norell Select Series NMR Tube with 5mm NMR Valve | 7 | 200 |
| S-506-PP-JY-7 | Wilmad Precision NMR Tube with 5mm NMR Valve | 7 | 200 |
| S-5-200-JY-8 | Norell Select Series NMR Tube with 5mm NMR Valve | 8 | 200 |
| S-506-PP-JY-8 | Wilmad Precision NMR Tube with 5mm NMR Valve | 8 | 200 |
| S-5-300-JY-7 | Norell Select Series NMR Tube with 5mm NMR Valve | 7 | 300 |
| S-507-PP-JY-7 | Wilmad Precision NMR Tube with 5mm NMR Valve | 7 | 300 |
| S-5-300-JY-8 | Norell Select Series NMR Tube with 5mm NMR Valve | 8 | 300 |
| S-507-PP-JY-8 | Wilmad Precision NMR Tube with 5mm NMR Valve | 8 | 300 |
| S-5-400-JY-7 | Norell Select Series NMR Tube with 5mm NMR Valve | 7 | 400 |
| S-527-PP-JY-7 | Wilmad Precision NMR Tube with 5mm NMR Valve | 7 | 400 |
| S-5-400-JY-8 | Norell Select Series NMR Tube with 5mm NMR Valve | 8 | 400 |
| S-527-PP-JY-8 | Wilmad Precision NMR Tube with 5mm NMR Valve | 8 | 400 |
| S-5-500-JY-7 | Norell Select Series NMR Tube with 5mm NMR Valve | 7 | 500 |
| S-528-PP-JY-7 | Wilmad Precision NMR Tube with 5mm NMR Valve | 7 | 500 |
| S-5-500-JY-8 | Norell Select Series NMR Tube with 5mm NMR Valve | 8 | 500 |
| S-528-PP-JY-8 | Wilmad Precision NMR Tube with 5mm NMR Valve | 8 | 500 |
| S-5-600-JY-7 | Norell Select Series NMR Tube with 5mm NMR Valve | 7 | 600 |
| S-535-PP-JY-7 | Wilmad Precision NMR Tube with 5mm NMR Valve | 7 | 600 |
| S-5-600-JY-8 | Norell Select Series NMR Tube with 5mm NMR Valve | 8 | 600 |
| S-535-PP-JY-8 | Wilmad Precision NMR Tube with 5mm NMR Valve | 8 | 600 |
| S-5-800-JY-7 | Norell Select Series NMR Tube with 5mm NMR Valve | 7 | 800 |
| S-541-PP-JY-7 | Wilmad Precision NMR Tube with 5mm NMR Valve | 7 | 800 |
| S-5-800-JY-8 | Norell Select Series NMR Tube with 5mm NMR Valve | 8 | 800 |
| S-541-PP-JY-8 | Wilmad Precision NMR Tube with 5mm NMR Valve | 8 | 800 |
| S-5-900-JY-7 | Norell Select Series NMR Tube with 5mm NMR Valve | 7 | 900 |
| S-542-PP-JY-7 | Wilmad Precision NMR Tube with 5mm NMR Valve | 7 | 900 |
| S-5-900-JY-8 | Norell Select Series NMR Tube with 5mm NMR Valve | 8 | 900 |
| S-542-PP-JY-8 | Wilmad Precision NMR Tube with 5mm NMR Valve | 8 | 900 |

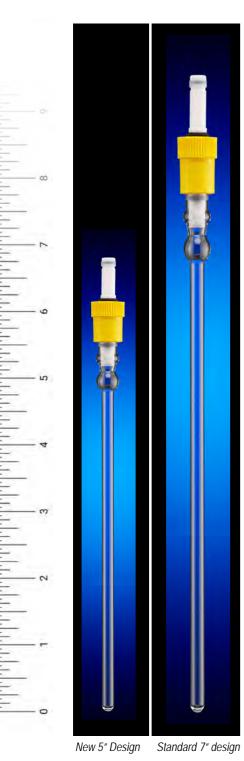
Available in Beige, Blue, Green, Orange, Red and Yellow.

RELATED PRODUCTS

For NMR Valve Evacuation Manifold, see page 9

J Young

NEW - Reduced Length JY NMR Valve with Tube Attached



Reduced Length J Young NMR Tubes - A perfect solution..

The NEW Reduced length J Young NMR tube fits easily below the Spectrometer safety barrier.

Reduced Mass: No need to adjust spectrometer gas flow

No tube ejection issues

Additional Benefits: No excessive movement

Lower centre of gravity

| Product Code | Description | NMR Tube length (inches) | MHz |
|---------------|--|-----------------------------|-----|
| S-5-200-JY-5 | Norell Select Series NMR Tube with 5mm NMR Valve | 5 | 200 |
| S-506-PP-JY-5 | Wilmad Precision NMR Tube with 5mm NMR Valve | 5 | 200 |
| S-5-300-JY-5 | Norell Select Series NMR Tube with 5mm NMR Valve | 5 | 300 |
| S-507-PP-JY-5 | Wilmad Precision NMR Tube with 5mm NMR Valve | 5 | 300 |
| S-5-400-JY-5 | Norell Select Series NMR Tube with 5mm NMR Valve | 5 | 400 |
| S-527-PP-JY-5 | Wilmad Precision NMR Tube with 5mm NMR Valve | 5 | 400 |
| S-5-500-JY-5 | Norell Select Series NMR Tube with 5mm NMR Valve | 5 | 500 |
| S-528-PP-JY-5 | Wilmad Precision NMR Tube with 5mm NMR Valve | 5 | 500 |
| S-5-600-JY-5 | Norell Select Series NMR Tube with 5mm NMR Valve | 5 | 600 |
| S-535-PP-JY-5 | Wilmad Precision NMR Tube with 5mm NMR Valve | 5 | 600 |
| S-5-800-JY-5 | Norell Select Series NMR Tube with 5mm NMR Valve | 5 | 800 |
| S-541-PP-JY-5 | Wilmad Precision NMR Tube with 5mm NMR Valve | 5 | 800 |
| S-5-900-JY-5 | Norell Select Series NMR Tube with 5mm NMR Valve | 5 | 900 |
| S-542-PP-JY-5 | Wilmad Precision NMR Tube with 5mm NMR Valve | 5 | 900 |

Different taps colours are available, contact us for more details on $+44(0)1525\ 382277$ or info@gpescientific.co.uk

RELATED PRODUCTS For NMR Valve Evacuation Manifold, see page 9



NMR Valve Evacuation Manifold

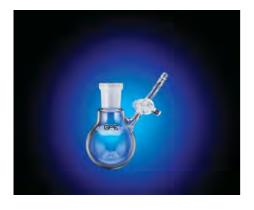




Supplied as a separate component.

| Product Code | JY Valve Size (mm) | Overall Length (mm) Including cap | Hose Connection Diameter (mm) |
|--------------|--------------------|--------------------------------------|-------------------------------|
| 50150 | 10 | 110 | 9 |

Schlenk Flask, Round Bottom with Glass Key and Socket



For use with Vacuum Manifolds and Schlenk Lines

| Product Code | Capacity (ml) | Joint Size |
|--------------|---------------|------------|
| SRG/25 | 25 | 14 |
| SRG/50 | 50 | 19 |
| SRG/100 | 100 | 24 |
| SRG/250 | 250 | 24 |
| SRG/500 | 500 | 24 |
| SRG/1000 | 1000 | 29 |

Finger Schlenk Tube with Fast Thread Tap



For use with Schlenk Lines and Vacuum Manifolds, available in various capacities.

Product Code Capacity (ml)

JFF/5 5

RELATED PRODUCTS

For NMR Valves, see pages 7, 8

For schlenk lines, see pages 3-4



JY Needle Valve O-Ring Tap



The Needle Valve Tap incorporates the same O-Ring sealing method as our standard taps but with a PTFE needle shut off point

Calibrations on the barrel give an indication of flow to enable repetition

| Product Code | Side Arm ID (mm) | Side Arm OD (mm) |
|--------------|------------------|------------------|
| POR/NV/1 | 1 mm Capillary | 6 |
| POR/NV/2 | 2 mm Capillary | 6 |
| POR/NV/3 | 3 mm Capillary | 6 |
| POR/NV/4 | 4 mm Capillary | 7 |
| POR/NV/6 | 6 mm Capillary | 9 |
| POR/NV/9 | 9 mm Capillary | 12 |

JY Air Inlet Valve



Many vacuum techniques require the system to be led down to air. This valve fulfills this requirement simply by turning the screw cap which releases a PTFE piston giving a fine control

| Product Code | Item Description |
|--------------|---|
| ALS/1 | Air Inlet Valve, 5mm Bore, with fine thread |

JY Vacuum/Schlenk Flask with O-Ring Tap and Plain Arm

For schlenk lines, see pages 3-4



For use with Schlenk Lines and Vacuum Manifold, available in various capacities.

| Product Code | Capacity (ml) | |
|--------------|---------------|--|
| CSB/25 | 25 | |
| CSB/50 | 50 | |
| CSB/100 | 100 | |
| Product Code | Capacity (ml) | |
| CSB/250 | 250 | |
| CSB/500 | 500 | |
| CSB/1000 | 1000 | |

JY Vacuum/Schlenk Flask with O-Ring Tap and Cold Finger Plain Arm



For use with Schlenk Lines and Vacuum Manifolds, available in various capacities.

| Product Code | Capacity (ml) |
|--------------|---------------|
| CSY/25 | 25 |
| CSY/50 | 50 |
| CSY/100 | 100 |
| Product Code | Capacity (ml) |
| CSY/250 | 250 |
| CSY/500 | 500 |
| CSY/1000 | 1000 |



JY Vacuum/Schlenk Flask with O-Ring Tap and O-Ring Ball Joint Cup



For use with Schlenk Lines and Vacuum Manifolds, available in various capacities

| Product Code | Capacity (ml) | Joint Size |
|-----------------------------|-----------------|----------------|
| CSR/25 CSR/50 CSR/100 | 25 50 100 | 19 19 19 |
| 631/100 | 100 | 19 |
| Product Code | Capacity (ml) | Joint Size |
| CSR/250 | 250 | 29 |
| CSR/500 CSR/1000 | 500 1000 | 29 29 |

JY Gas Sample Tube with O-Ring Taps



Available in various capacities

| Product Code | Capacity (ml) |
|--------------|---------------|
| GST/100 | 100 |
| GST/125 | 125 |
| GST/250 | 250 |
| Product Code | Capacity (ml) |
| GST/500 | 500 |
| GST/1000 | 1000 |

JY Gas Sample Tube with O-Ring Taps & Septum



Available in various capacities

| Product Code | Capacity (ml) | | |
|---------------------------------|---------------------|--|--|
| GSS/100 GSS/125 GSS/250 | 100 125 250 | | |
| Product Code | Capacity (ml) | | |
| GSS/500 GSS/1000 GSS/2000 | 500 1000 2000 | | |

Different taps colours are available, contact us for more details on $+44(0)1525\ 382277$ or info@gpescientific.co.uk

RELATED PRODUCTS

For schlenk lines, see pages 3-4



Custom options available, contact us for more information

Sample Flask, Cylindrical, with Fine Thread Tap



For use with Vacuum Manifolds and Schlenk Lines.

| | | High Performance | (HP) Variant |
|--------------|---------------|------------------|---------------|
| Product Code | Capacity (ml) | Product Code | Capacity (ml) |
| JCF/25 | 25 | JCF/25/HP | 25 |
| JCF/50 | 50 | JCF/50/HP | 50 |
| JCF/100 | 100 | JCF/100/HP | 100 |
| JCF/250 | 250 | JCF/250/HP | 250 |
| JCF/500 | 500 | JCF/500/HP | 500 |
| JCF/1000 | 1000 | JCF/1000/HP | 1000 |

Sample Flask, Cylindrical, with Fine Thread Tap and B14 Socket

For schlenk lines, see pages 3-4



For use with Vacuum Manifolds and Schlenk Lines.

| Product Code | Capacity (ml) | Joint Size | Product Code | Capacity (ml) | Joint Size |
|--------------|---------------|------------|--------------|---------------|------------|
| JCS/25 | 25 | 14 | JCS/25 | 25 | 14 |
| JCS/50 | 50 | 14 | JCS/50 | 50 | 14 |
| JCS/100 | 100 | 14 | JCS/100 | 100 | 14 |
| JCS/250 | 250 | 14 | JCS/250 | 250 | 14 |
| JCS/500 | 500 | 14 | JCS/500 | 500 | 14 |
| JCS/1000 | 1000 | 14 | JCS/1000 | 1000 | 14 |

Schlenk Flask, Round Bottom with Fine Thread Tap and Socket



For use with Vacuum Manifolds and Schlenk Lines.

| | | | High Performance | e (HP) Variant | |
|--------------|---------------|------------|------------------|----------------|------------|
| Product Code | Capacity (ml) | Joint Size | Product Code | Capacity (ml) | Joint Size |
| JRF/25 | 25 | 14 | JRF/25/HP | 25 | 14 |
| JRF/50 | 50 | 19 | JRF/50/HP | 50 | 19 |
| JRF/100 | 100 | 24 | JRF/100/HP | 100 | 24 |
| JRF/250 | 250 | 24 | JRF/250/HP | 250 | 24 |
| JRF/500 | 500 | 24 | JRF/500/HP | 500 | 24 |
| JRF/1000 | 1000 | 29 | JRF/1000/HP | 1000 | 29 |

Custom options available, contact us for more information

Schlenk Flask, Cylindrical with Fine Thread Tap and Cone



For use with Vacuum Manifolds and Schlenk Lines

| | | | High Performance | (HP) Variant | |
|--------------|---------------|------------|------------------|---------------|------------|
| Product Code | Capacity (ml) | Joint Size | Product Code | Capacity (ml) | Joint Size |
| JCC/25 | 25 | 19 | JCC/25/HP | 25 | 19 |
| JCC/50 | 50 | 19 | JCC/50/HP | 50 | 19 |
| JCC/100 | 100 | 24 | JCC/100/HP | 100 | 24 |
| JCC/250 | 250 | 24 | JCC/250/HP | 250 | 24 |
| JCC/500 | 500 | 24 | JCC/500/HP | 500 | 24 |
| JCC/1000 | 1000 | 29 | JCC/1000/HP | 1000 | 29 |

Schlenk Flask, Cylindrical with Glass Tap and Cone

For schlenk lines, see pages 3-4



For use with Vacuum Manifolds and Schlenk Lines.

| Product Code | Capacity (ml) | Joint Size |
|--------------|---------------|------------|
| SCG/25 | 25 | 19 |
| SCG/50 | 50 | 19 |
| SCG/100 | 100 | 24 |
| SCG/250 | 250 | 24 |
| SCG/500 | 500 | 24 |
| SCG/1000 | 1000 | 29 |

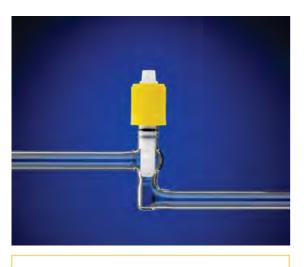
Schlenk Cap



For use with Vacuum Manifolds and Schlenk Lines.

| Product Code | Joint Size |
|--------------|------------|
| SC/19 | 19 |
| SC/24 | 19 |
| SC/29 | 24 |

JY Straight Through Taps



J Young Straight through taps are made in various Stopcock Sizes and thread types.

These can be custom adapted to meet your needs and are also available with glass pistons.

JY In Line Taps



J Young In Line taps are made in various Stopcock Sizes and thread types.

> These can be custom adapted to meet your needs and are also available with glass pistons.

15mm J Young Valves also available with glass pistons. To order add suffix/glass to catalogue number.

| | → High \ | /acuum Gre | easeless Sto | pcocks |
|---|---|---|--|--|
| Product Code | Stopcock Size (mm) | Side Arm ID (mm) | Side Arm OD (mm) | Thread Type |
| POR/1 POR/2 POR/3 POR/4 POR/5 POR/6 POR/8 POR/10 POR/15 POR/20 POR/25 | 1 2 3 4 5 6 8 10 15 20 25 | 1.1 2.2 3 4 5 6 8 10 15.4 19 24 | 7 7 9 7 8 9 11 13 19 24 28 | Fine Fine Fine Fine Fine Fine Fine Fine |
| PTT/1 PTT/2 PTT/3 PTT/4 PTT/5 PTT/6 PTT/8 PTT/10 | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast |
| POR/1/HP POR/2/HP POR/3/HP POR/4/HP POR/5/HP POR/6/HP POR/8/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 | Fine Fine Fine Fine Fine Fine Fine |
| PTT/1/HP PTT/2/HP PTT/3/HP PTT/4/HP PTT/5/HP PTT/6/HP PTT/8/HP PTT/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast |
| Product Code | topcock Size (mm) | Side Arm ID (mm) | Side Arm OD (mm) | Thread Type |
| SPOR/1 SPOR/2 | 1 | 1.1 2.2 | 7 7 | Fine Fine |

| , 20, | 20 | | | |
|--|---|---|--|--|
| Product Code | topcock Size (mm) | Side Arm ID (mm) | Side Arm OD (mm) | Thread Type |
| SPOR/1 SPOR/2 SPOR/3 SPOR/4 SPOR/5 SPOR/6 SPOR/8 SPOR/10 SPOR/15 SPOR/20 SPOR/25 | 1 2 3 4 5 6 8 10 15 20 25 | 1.1 2.2 3 4 5 6 8 10 15.4 19 | 7 7 9 7 8 9 11 13 19 24 28 | Fine Fine Fine Fine Fine Fine Fine Fine |
| SPTT/1 SPTT/2 SPTT/3 SPTT/4 SPTT/5 SPTT/6 SPTT/8 SPTT/10 | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 8 6 8 10 | 7 7 9 7 5 9 11 13 | Fast Fast Fast Fast Fast Fast Fast Fast |
| SPOR/1/HP SPOR/2/HP SPOR/3/HP SPOR/4/HP SPOR/5/HP SPOR/6/HP SPOR/8/HP SPOR/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 | Fine Fine Fine Fine Fine Fine Fine Fine |
| SPTT/1/HP SPTT/2/HP SPTT/3/HP SPTT/4/HP SPTT/5/HP SPTT/6/HP SPTT/8/HP SPTT/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast Fast |

High Vacuum Greaseless Stopcocks

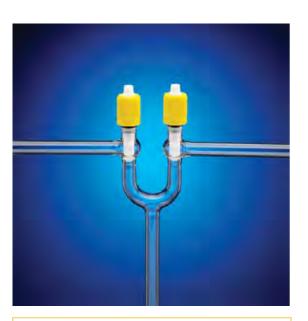
JY T Shape Taps



J Young T Shape taps are made in various Stopcock Sizes and thread types.

These can be custom adapted to meet your needs and are also available with glass pistons.

JY T-Bore Taps



J Young T Bore taps are made in various Stopcock Sizes and thread types.

These can be custom adapted to meet your needs and are also available with glass pistons.

15mm J Young Valves also available with glass pistons. To order add suffix/glass to catalogue number.

| | O | | ' | |
|---|---|---|--|--|
| Product Code | Stopcock Size (mm) | Side Arm ID (mm) | Side Arm OD (mm) | Thread Type |
| POR/T/1 POR/T/2 POR/T/3 POR/T/4 POR/T/5 POR/T/6 POR/T/8 POR/T/10 POR/T/15 POR/T/20 POR/T/25 | 1 2 3 4 5 6 8 10 15 20 25 | 1.1 2.2 3 4 5 6 8 10 15.4 19 | 7 7 9 7 8 9 11 13 19 24 | Fine Fine Fine Fine Fine Fine Fine Fine |
| PTT/T/1 PTT/T/2 PTT/T/3 PTT/T/4 PTT/T/5 PTT/T/6 PTT/T/8 PTT/T/10 | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast Fast |
| POR/T/1/HP POR/T/2/HP POR/T/3/HP POR/T/4/HP POR/T/5/HP POR/T/6/HP POR/T/8/HP POR/T/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 | Fine Fine Fine Fine Fine Fine Fine Fine |
| PTT/T/1/HP PTT/T/2/HP PTT/T/3/HP PTT/T/4/HP PTT/T/5/HP PTT/T/6/HP PTT/T/8/HP PTT/T/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast |
| | | | | |

| Product Code | topcock Size (mm) | Side Arm ID (mm) | Side Arm OD (mm) | Thread Type |
|---|---|---|--|--|
| POR/W/1 POR/W/2 POR/W/3 POR/W/4 POR/W/5 POR/W/6 POR/W/8 POR/W/10 POR/W/15 POR/W/20 POR/W/25 | 1 2 3 4 5 6 8 10 15 20 25 | 1.1 2.2 3 4 5 6 8 10 15.4 19 | 7 7 9 7 8 9 11 13 19 24 | Fine Fine Fine Fine Fine Fine Fine Fine |
| PTT/W/1 PTT/W/2 PTT/W/3 PTT/W/4 PTT/W/5 PTT/W/6 PTT/W/8 PTT/W/10 | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 8 6 8 10 | 7 7 9 7 5 9 11 13 | Fast Fast Fast Fast Fast Fast Fast Fast |
| POR/W/1/HP POR/W/2/HP POR/W/3/HP POR/W/4/HP POR/W/5/HP POR/W/6/HP POR/W/8/HP POR/W/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fine Fine Fine Fine Fine Fine Fine Fine |
| PTT/W/1/HP PTT/W/2/HP PTT/W/3/HP PTT/W/4/HP PTT/W/5/HP PTT/W/6/HP PTT/W/8/HP PTT/W/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast |

High Vacuum Greaseless Stopcocks

JY Right Angle Taps

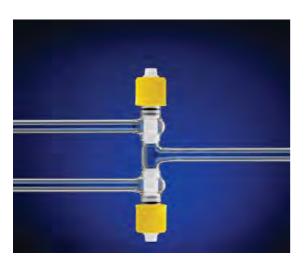


J Young Right Angle taps are made in various Stopcock Sizes and thread types.

These can be custom adapted to meet your needs and are also available with glass pistons

| Product Code | Stopcock Size (mm) | Side Arm ID (mm) | Side Arm OD (mm) | Thread Type |
|--|---|---|--|--|
| POR/1/RA POR/2/RA POR/3/RA POR/4/RA POR/5/RA POR/6/RA POR/8/RA POR/10/RA POR/15/RA POR/20/RA POR/25/RA | 1 2 3 4 5 6 8 10 15 20 25 | 1.1 2.2 3 4 5 6 8 10 15.4 19 | 7 7 9 7 8 9 11 13 19 24 28 | Fine Fine Fine Fine Fine Fine Fine Fine |
| PTT/1/RA PTT/2/RA PTT/3/RA PTT/4/RA PTT/5/RA PTT/6/RA PTT/8/RA PTT/10/RA | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast |
| POR/1/RA/HP POR/2/RA/HP POR/3/RA/HP POR/4/RA/HP POR/5/RA/HP POR/6/RA/HP POR/8/RA/HP POR/10/RA/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 | Fine Fine Fine Fine Fine Fine Fine |
| PTT/1/RA/HP PTT/2/RA/HP PTT/3/RA/HP PTT/4/RA/HP PTT/5/RA/HP PTT/6/RA/HP PTT/8/RA/HP PTT/10/RA/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast Fast |

JY Double Oblique Taps



J Young Double Oblique taps are made in various Stopcock Sizes and thread types.

> These can be custom adapted to meet your needs and are also available with glass pistons

15mm J Young Valves also available with glass pistons. To order add suffix/glass to catalogue number.

| PTT/10/RA/HP | 10 | 10 | 13 | Fast |
|---|--|---|--|--|
| Product Code POR/D/1 POR/D/2 POR/D/3 POR/D/4 POR/D/5 POR/D/6 POR/D/8 POR/D/10 POR/D/15 POR/D/20 POR/D/25 | topcock Size (mm) 1 2 3 4 5 6 8 10 15 20 25 | Side Arm ID (mm) 1.1 2.2 3 4 5 6 8 10 15.4 19 24 | Side Arm OD (mm) 7 7 9 7 8 9 11 13 19 24 | Thread Type Fine Fine Fine Fine Fine Fine Fine Fin |
| PTT/D/1 PTT/D/2 PTT/D/3 PTT/D/4 PTT/D/5 PTT/D/6 PTT/D/8 PTT/D/10 | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 8 6 8 10 | 7 7 9 7 5 9 11 13 | Fast Fast Fast Fast Fast Fast Fast |
| POR/D/1/HP POR/D/2/HP POR/D/3/HP POR/D/4/HP POR/D/5/HP POR/D/6/HP POR/D/8/HP POR/D/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fine Fine Fine Fine Fine Fine Fine Fine |
| PTT/D/1/HP PTT/D/2/HP PTT/D/3/HP PTT/D/4/HP PTT/D/5/HP PTT/D/6/HP PTT/D/8/HP PTT/D/10/HP | 1 2 3 4 5 6 8 10 | 1.1 2.2 3 4 5 6 8 10 | 7 7 9 7 8 9 11 13 | Fast Fast Fast Fast Fast Fast Fast |
| | 16 | | www.gpescient | ific.co.uk |

Spherical Joints

JY Spherical Joint The O-Ring Ball Joint



Improved design, interchangeable and available with Viton or FEP Covered Viton O-Ring.

| Spherical Ball Joint | Spherical Cup Joint | Shank Bore (mm) | Shank OD (mm) | |
|----------------------|---------------------|-----------------|---------------|--|
| GBM/12/2 | GBF/12/2 | 2 | 7 | |
| GBM/12/5 | GBF/12/5 | 5 | 8 | |
| GBM/18/7 | GBF/18/7 | 7 | 11 | |
| GBM/18/9 | GBF/18/9 | 9 | 12 | |
| GBM/28/12 | GBF/28/12 | 12 | 17 | |
| GBM/28/15 | GBF/28/15 | 15 | 19 | |
| GBM/35/20 | GBF/35/20 | 20 | 24 | |
| GBM/40/25 | GBF/40/25 | 25 | 28 | |
| GBM/51/35 | GBF/51/35 | 35 | 38 | |

JY O-Rings for Spherical Joints



The J Young O Rings suitable for use with the Spherical Joints are available with Viton or PTFE material.

| Product Code | Item Description |
|--------------|--|
| 012/V | Viton O-Ring for use with 12/2 and 12/5 size Spherical Joints |
| 018/V | Viton O-Ring for use with 18/7 and 18/9 size Spherical Joints |
| 028/V | Viton O-Ring for use with 28/12 and 28/15 size Spherical Joints |
| 035/V | Viton O-Ring for use with 35/20 size Spherical Joints |
| 040/V | Viton O-Ring for use with 40/25 size Spherical Joints |
| 051/V | Viton O-Ring for use with 51/35 size Spherical Joints |
| 012/P | PTFE Covered Viton O-Ring for use with 12/2 and 12/5 size Spherical Joints |
| 018/P | PTFE Covered Viton O-Ring for use with 18/7 and 18/9 size Spherical Joints |
| 028/P | PTFE Covered Viton O-Ring for use with 28/12 and 28/15 size Spherical Joints |
| 035/P | PTFE Covered Viton O-Ring for use with 35/20 size Spherical Joints |
| 040/P | PTFE Covered Viton O-Ring for use with 40/25 size Spherical Joints |
| 051/P | PTFE Covered Viton O-Ring for use with 51/35 size Spherical Joints |

JY Clips for Spherical Joints



The J Young Clips are suitable for use with the J Young Spherical Joints.

| Product Code | Item Description |
|--------------|--|
| JC13 | Spring Clip for use with 12/2 and 12/5 size Spherical Joints |
| JC19 | Spring Clip for use with 18/7 and 18/9 size Spherical Joints |
| JC29 | Spring Clip for use with 28/12 and 28/15 size Spherical Joints |
| JC35 | Spring Clip for use with 35/20 size Spherical Joints |
| JC41 | Spring Clip for use with 40/25 size Spherical Joints |
| JC51 | Spring Clip for use with 51/35 size Spherical Joints |
| TJC/13 | Thumb Screw Lock Clip for use with 12/2 and 12/5 size Spherical Joints |
| TJC/19 | Thumb Screw Lock Clip for use with 18/7 and 18/9 size Spherical Joints |
| TJC/29 | Thumb Screw Lock Clip for use with 28/12 and 28/15 size Spherical Joints |
| TJC/35 | Thumb Screw Lock Clip for use with 35/20 size Spherical Joints |
| TJC/41 | Thumb Screw Lock Clip for use with 40/25 size Spherical Joints |



General Purpose O-Ring Taps

For applications where less critical demands apply

- Self retaining keysNo ground surface
- keys Temp range: -18° C rface to $+60^{\circ}$ C
- Only PTFE and glass in flow
- Bore size: 0 5mmNever leaks
- No hold up of fluidsInterchangeable
- No contamination grease
- Never seizes

Straight Through



| Product Code | Side Arm I.D (mm) | Side Arm O.D (mm) | Thread Type |
|--------------|-------------------|-------------------|-------------|
| GP/5 | 5 | 8 | Fast |

Right Angle



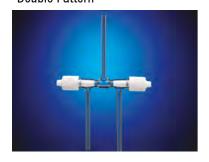
| Product Code | Side Arm I.D (mm) | Side Arm O.D (mm) | Thread Type |
|--------------|-------------------|-------------------|-------------|
| GP/RA | 5 | 8 | Fast |

Burette Single Pattern



| Product Code | Side Arm I.D (mm) | Side Arm O.D (mm) | Thread Type |
|--------------|-------------------|-------------------|-------------|
| GP/N/5 | 2.7 | 7 | Fast |

Double Pattern



| Product Code | Side Arm I.D (mm) | Side Arm O.D (mm) | Thread Type |
|--------------|-------------------|-------------------|-------------|
| GP/D/RA | 5 | 8 | Fast |

Burette Double Pattern



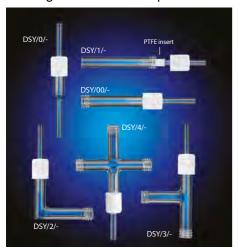
| Product Code | Side Arm I.D (mm) | Side Arm O.D (mm) | Thread Type |
|--------------|-------------------|-------------------|-------------|
| GP/D/10 | 2.7 | 7 | Fast |
| | | | |

15mm J Young Valves also available with glass pistons. To order add suffix/glass to catalogue number.



Sample Flasks and Tubes • High Vacuum O-Ring Joints

PTFE High Vacuum Screw Cap Joints



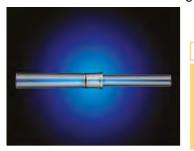
| Product Code | Thread Size (mm) | Tubing I.D (mm) | Tubing O.D (mm) | PTFE Insert Bore (mm) |
|--------------|------------------|-----------------|-----------------|-----------------------|
| DSY/0/1 | 13 | 5 | 8 | 8 |
| DSY/00/1 | 13 | 5 | 8 | 8 |
| DSY/1/1 | 13 | 5 | 8 | 8 |
| DSY/2/1 | 13 | 5 | 8 | 8 |
| DSY/3/1 | 13 | 5 | 8 | 8 |
| DSY/4/1 | 13 | 5 | 8 | 8 |
| DSY/0/2 | 19 | 8 | 11 | 11 |
| DSY/00/2 | 19 | 8 | 11 | 11 |
| DSY/1/2 | 19 | 8 | 11 | 11 |
| DSY/2/2 | 19 | 8 | 11 | 11 |
| DSY/3/2 | 19 | 8 | 11 | 11 |
| DSY/4/2 | 19 | 8 | 11 | 11 |
| | | | | |

These joints are supplied with glass insert tubing and PTFE insert and screw cap.

Our PTFE High Vacuum Screw Cap Joints have been made to enable you to connect the various designs of J Young Stopcock sizes POR/5 and POR/8 without glassblowing. The stopcock arm is held rigid but can be adjusted by loosening the screw cap.

Each screwthread is supplied with glass insert tubing, PTFE insert and screw cap. For example, DSY/4/2 is supplied with 4 screw caps, 4 inserts and 4 insert tubes.

Greaseless Conical Joints & O-Ring Tapered Joints



| Cones | | Sockets | | |
|--|--|--|--|--|
| Product Code | Joint Size | Product Code | Joint Size | |
| ORB/10 ORB/14 ORB/19 ORB/24 ORB/29 ORB/34 | B10 B14 B19 B24 B29 B34 | ORS/10 ORS/14 ORS/19 ORS/24 ORS/29 ORS/34 | B10 B14 B19 B24 B29 B34 | |

Spare O-Rings for High Vacuum O-Ring Joints

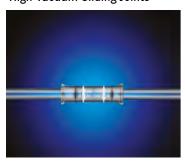
| Product Code | Description |
|-----------------|---|
| 00/5 4//701/ | |
| OS/5/VITON | Viton O-Ring for use with PSJ/2&5 and PCJ/2&5 |
| OS/7/VITON | Viton O-Ring for use with PSJ/10 and PCJ/10 |
| OS/13/VITON | Viton O-Ring for use with PSJ/16 and PCJ/16 |
| OS/5/PERFLUORO | Perfluoro O-Ring for use with PSJ/2&5 and PCJ/2&5 |
| OS/7/PERFLUORO | Perfluoro O-Ring for use with PSJ/10 and PCJ/10 |
| OS/13/PERFLUORO | Perfluoro O-Ring for use with PSJ/16 and PCJ/16 |

Greaseless Conical Joints consist of a clear glass cone fitted with a Viton O-Ring and a clear glass socket.

Vacuum 10-6 Torr.

Order parts separately.

High Vacuum Sliding Joints



| Product Code | Capacity (ml) | Arm Bore (mm) | O-Ring Size (mm) | O-Ring Material |
|--------------|---------------|---------------|------------------|-----------------|
| PSJ/2 | 10 ID | 2 CAP* | 0\$/5 | Viton |
| PSJ/5 | 10 ID | 5 mm | 0\$/5 | Viton |
| PSJ/10 | 14 ID | 10 mm | 0\$/7 | Viton |
| PSJ/16 | 25 ID | 16 mm | 0\$/13 | Viton |

High Vacuum Cylindrical Joints



| Product Code | Capacity (ml) | Arm Bore (mm) | O-Ring Size (mm) | O-Ring Material |
|--------------|---------------|---------------|------------------|-----------------|
| PCJ/2 | 10 ID | 2 CAP* | 0\$/5 | Viton |
| PCJ/5 | 10 ID | 5 mm | 0\$/5 | Viton |
| PCJ/10 | 14 ID | 10 mm | 0\$/7 | Viton |
| PCJ/16 | 25 ID | 16 mm | 0\$/13 | Viton |

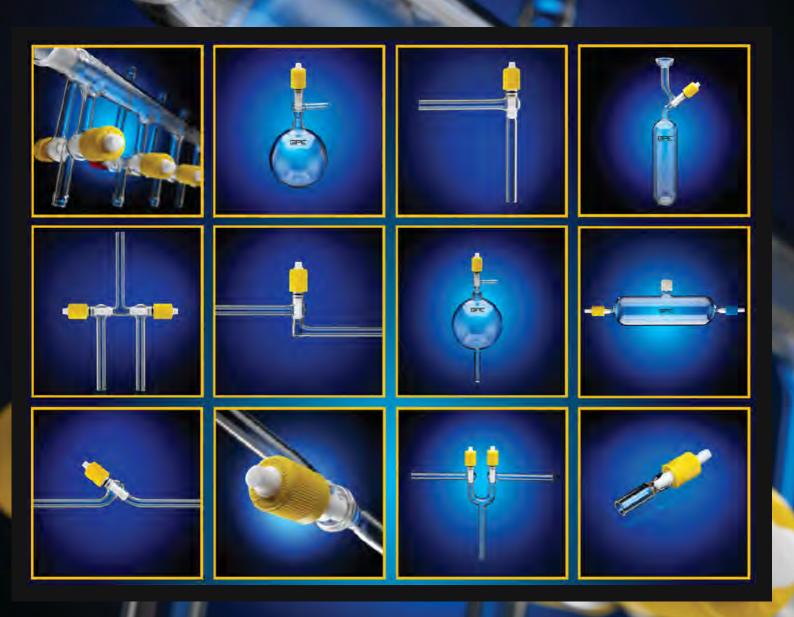
High Vacuum O-Ring Joints consist of a Viton O-Ring seal in a precision bore glass cylinder.

This allows you to assemble in-situ by sliding one way and then another (PSJ/) or with the cylinder joined to one arm (PCJ/).

* 2mm Capillary Tubing

Young

Exclusively Available from GPE Scientific



GPE Scientific Limited, Greaves Way Industrial Estate, Stanbridge Road, Leighton Buzzard, Bedfordshire, LU7 4UB, United Kingdom

T: +44 (0) 1525 382277

F: +44 (0) 1525 382263

sales@gpescientific.co.uk www.gpescientific.co.uk

