



ColorTech BT Fume Cupboard Fittings



WaterSaver Faucet Co. is celebrating seventy years of service to the laboratory industry. From humble origins, we have grown to become the largest worldwide manufacturer of taps, valves, safety equipment and related products for use in science laboratories.

We are in our third generation of family ownership and management, but continue to execute the strategy established by our founders: never compromise on quality, respond to the needs of our customers and treat people with dignity and respect. We are as dedicated to these values today as the day we started.

All WaterSaver product are manufactured in Chicago, Illinois USA in two state-of-the-art manufacturing plants. Both facilities are Gold certified by the U.S. Green Building Council under the 'Leadership in Energy and Environmental Design" (LEED) program for environmental sustainability and energy efficiency.

This ColorTech BT Fume Cupboard Fitting catalog (CTBT-FCF-0619) presents an overview of our ColorTech BT range of fume cupboard fittings. The models shown here are representative of the over 1,000 models in this product range. For further information, please visit our website (wsflab.com) or consult with our sales offices.

All WaterSaver products are designed and manufactured to meet or exceed industry standards, including Scientific Equipment and Furniture Association standard SEFA 7-2007 "Recommended Practice for Laboratory Service Fixtures."

We owe our success to the contributions of dedicated employees and the loyalty of our customers. For seventy years, we have devoted ourselves to fulfilling the confidence placed in us by those who buy and use our products. We are dedicated to continuing that tradition for generations to come.

Ativen Ueste

Steven A. Kersten President

Table Of Contents

1.0 Engineering Information	1
2.0 Fume Cupboard Valves	7
3.0 Fume Cupboard Outlets	23
4.0 Fume Cupboard Gooseneck Fittings	34
5.0 Fume Cupboard Fittings - Plastic-Lined	38
6.0 Flexible Hose Connectors	
6.1 Selection Guidelines	44
6.2 Materials	45
6.3 End Connections	48
6.4 Ordering Guide	50
6.5 Installation/Maintenance	54
7.0 Fume Cupboard Fittings - Custom Kits	56

Additional Resources

In addition to the products shown in this catalog, WaterSaver offers the following catalogs highlighting additional segments of our product line:

Product Finishes Laboratory Service Fittings Pressure Regulator Fittings Flexible Lab Fittings Laboratory Safety Equipment Installation, Operation and Maintenance Guide



Standard Product Line

FEATURES:

- Styling traditionally used in the U.S. market.
- Polished chrome plated finish is standard. Options for polished chrome with clear epoxy coating and satin finishes.
- Product engineering, including indexing, inlet connections and threads, based on U.S. standards.

PRODUCT RANGE:

- Laboratory Service Fixtures
- Fume Hood Fittings
- Electrical Fixtures
- Pressure Regulator Fixtures
- Vandal-Resistant Products
- Laboratory Safety Equipment
- Installation, Operation and Maintenance Products



ColorTech Product Line

FEATURES:

- Sleek, streamlined "European" styling.
- White epoxy powder coated finish is standard. Options for additional colors, polished chrome and satin finishes.
- Product engineering, including indexing, inlet connections and threads, based on U.S. standards.

PRODUCT RANGE:

- Laboratory Service Fixtures
- Fume Hood Fittings
- Electrical Fixtures
- Pressure Regulator Fixtures
- Vandal-Resistant Products
- Laboratory Safety Equipment
- Installation, Operation and Maintenance Products



ColorTech BT Product Line

FEATURES:

- Sleek, streamlined "European" styling.
- White powder coated finish is standard. Options for additional colors, polished chrome and satin finishes.
- Product engineering, including indexing, inlet connections and threads, based on international norms and standards.

PRODUCT RANGE:

- Laboratory Service Fittings
- Fume Cupboard Fittings
- Pressure Regulator Fittings
- Laboratory Safety Equipment
- Installation, Operation and Maintenance Products

Flexible Lab Fittings

FEATURES:

- Fittings for flexible/reconfigurable laboratories.
- Polished chrome plated finish.
- Product engineering, including indexing, inlet connections and threads, complies with U.S. and international norms and standards.

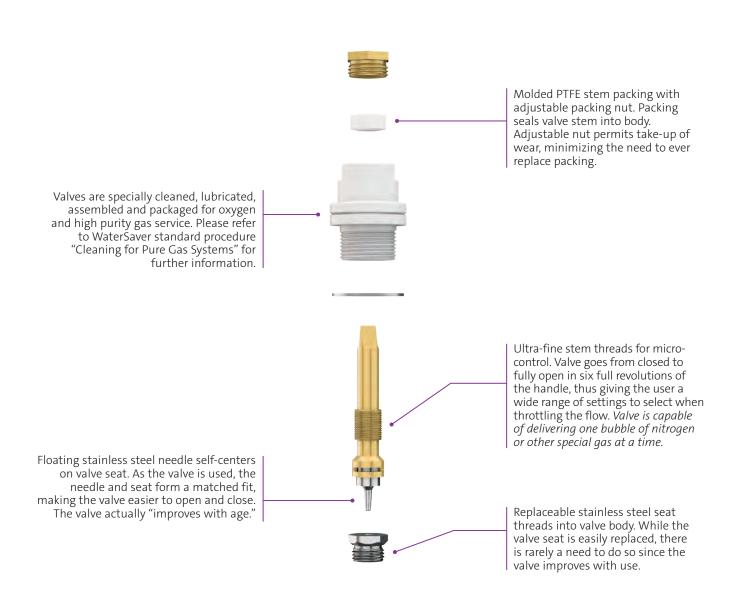
PRODUCT RANGE:

- Quick Connects
- Flexible Hose Connectors
- Service Manifolds
- Modular Panel Systems





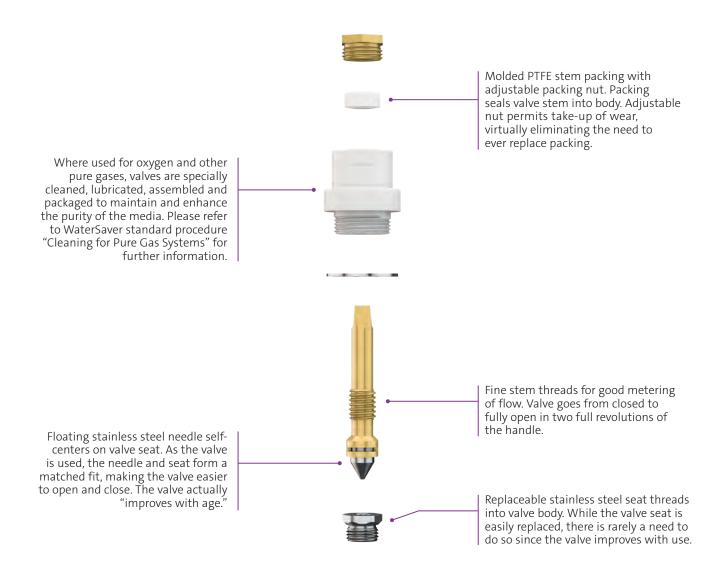
Fine control needle valves provide precise flow control of all laboratory gases. They are used where precision metering of flow and higher working pressures are involved. Valves are individually tested at 25 bar (375 PSI) nitrogen pressure and are rated for use at working pressures up to 17 bar (250 PSI). Fine control needle valves are cleaned for high purity gas as standard. All fine control needle valves meet the requirements of SEFA-7 "Recommended Practices for Laboratory Service Fixtures." Features of these valves include:



Engineering Information Needle Valves



Standard needle valves provide excellent flow control of all laboratory gases. They are the most versatile and widely used WaterSaver valve, well suited for almost every laboratory application. Valves are certified by CSA International to comply with ANSI Z21.15 and CGA 9.1 for use on natural gas systems at pressures up to 1/2 PSI. Valves are individually tested at 17 bar (250 PSI) nitrogen pressure and are rated for use at working pressures up to 10 bar (150 PSI). All needle valves meet the requirements of SEFA-7 "Recommended Practices for Laboratory Services Fixtures." Features of these valves include:





WaterSaver Faucet Co. offers a wide selection of valves for use with laboratory gases. The selection of a valve for any particular application depends upon many factors, including the working pressure of the gas, the degree of metering or control desired and the characteristics (including the corrosiveness) of the gas. This Valve Selection Guide is presented to assist in selecting the most appropriate valve for an application. However, care must be taken in selecting valves and WaterSaver cannot be responsible for the results obtained from using any particular valve in any particular application. In particular, reference must be made to applicable plumbing and piping codes, life safety standards and project specifications when selecting valves.

	Fine Control Needle Valve	Standard Needle Valve	Push/Turn Valve
Models	BT749FCN, BT750FCN, etc.	BT749N, BT750N, etc.	BT749GI, BT750GI, etc.
Construction	Needle Point	Needle Point	Ceramic Disc
Control	Precise Metering	Good Metering	On/Off
Body Material	Brass or St Steel	Brass or St Steel	Brass
Handle	Hooded Nylon	Hooded Nylon	Hooded Metal or Nylon
Test Pressure/Media	25 bar (375 PSI)/Nit	17 bar (250 PSI)/Nit	10 bar (150 PSI)/Air
Maximum Working Pressure	17 bar (250 PSI)	10 bar (150 PSI)	7 bar (100 PSI)
CSA Certified for Natural Gas	No	Yes	Yes
Use with Pressure Regulator	Yes	No	No
Cleaned for High Purity Gas	Standard	When Ordered	No

Gas Compatibility by Service

···· ··· ··· ··· ··· ···			
Air	Yes	Yes	No
Ammonia	Yes (St Steel only)	Yes (St Steel only)	No
Acetylene	Yes (St Steel only; 1 bar max)	Yes (St Steel only; 1 bar max)	No
Argon	Yes	Yes	No
Butane	Yes	Yes	Yes
Carbon Dioxide	Yes	Yes	No
Carbon Monoxide	Yes	Yes	No
Compressed Air	Yes	Yes	No
Cylinder Gas <i>(Note 1)</i>	Yes	Yes	No
Natural Gas	Yes	Yes	Yes
Helium	Yes	Yes	No
High Vacuum	Yes	Yes	No
Hydrogen	Yes	Yes (Specially Clean)	No
Low Vacuum	Yes	Yes	No
Methane	Yes	Yes	Yes
Nitrogen	Yes	Yes	No
Oxygen	Yes	Yes (Specially Clean)	No
Propane	Yes	Yes	Yes
Special Gas (Note 1)	Yes	Yes	No
Steam <i>(Note</i> 2)	No	No	No
Vacuum	Yes	Yes	No

Note

1. For gases not specifically listed here, please refer to the WaterSaver website (wsflab.com).

2. Steam service requires a valve with specialized internal construction only. Refer to the WaterSaver website (wsflab.com) for information.



Except for water taps with wrist blade handles, ColorTech BT fittings are furnished with handles that are color coded and indexed per EN 13792 "Colour Coding of Taps and Valves for Use in Laboratories." Wrist blade handles are finished in the same color as the tap body. The index disc color matches the "Disc Color" shown below.

Set forth below is a list of services, handle colors and index symbols prescribed by EN 13792:

Water	Symbol	Handle Color	Ring Color	Disc Color
Cooling Tower/ Sprinkling Water	WCS	Green	Green	Yellow
Potable Water, Hot	WPH	Green	Green	Red
Potable Water, Cold	WPC	Green	Green	Blue
Spring Water	WSP	Green	Yellow	Yellow
Non-Potable Water, Hot	WNH	Green	Yellow	Red
Non-Potable Water, Cold	WNC	Green	Yellow	Blue
Steam	WST	Green	Red	Red
Condensate	WCO	Green	Red	Blue
Super-Clean Water, Hot	WCH	Green	Red	White
Super-Clean Water, Cold	WCC	Green	Blue	White
Coolant Water Feed	WCF	Green	Blue	Blue
Coolant Water Return	WCR	Green	Blue	Red
Surface Water, Hot	WSH	Green	Black	Red
Surface Water, Cold	WSC	Green	Black	Blue
Deionised Water, Hot	WDH	Green	Gray	Red
Deionised Water, Cold	WDC	Green	Gray	Blue
River Water, Hot	WRH	Green	White	Red
River Water, Cold	WRC	Green	White	Blue
Distilled Water	WDI	Green	White	White

Flammable Gaseous Hydrocarbons	Symbol	Handle Color	Ring Color	Disc Color
Natural Gas	G	Yellow	Yellow	Yellow
Propane/Butane (liquefied gases)	LPG	Yellow	Red	Yellow
Methane	CH ₄	Yellow	Blue	Yellow
Propane	C ₃ H ₈	Yellow	Blue	Red
Butane	C ₄ H ₁₀	Yellow	Blue	Blue
Ethene	C_2H_4	Yellow	Black	Green
Propene	C ₃ H ₆	Yellow	Black	Red
Butene	C ₄ H ₈	Yellow	Black	Blue
Acetylene	C_2H_2	Yellow	White	Green

Other Combustible Gases and Gas Mixtures	Symbol	Handle Color	Ring Color	Disc Color
Argon/Methane	AR/CH ₄	Red	Yellow	Gray
Hydrogen/Nitrogen	H_2/N_2	Red	Red	Green
Hydrogen	H ₂	Red	Red	Red
Silane	SiH ₄	Red	Red	Black
Hydrogen/Helium	H ₂ /He	Red	Red	Gray
Deuterium	D ₂	Red	Red	White

Non-Flammable Gases, including Combustion- Enhancing Gases	Symbol	Handle Color	Ring Color	Disc Color
Nitrogen	N ₂	Blue	Green	Green
Dinitrogen Monoxide	N ₂ 0	Blue	Green	Blue
Air, Synthetic, 80/20	SA	Blue	Blue	Green
Compressed Air	CA	Blue	Blue	Yellow
Oxygen	O ₂	Blue	Blue	Blue
Carbon Dioxide	CO ₂	Blue	Blue	Black
Regulated Air	RA	Blue	Blue	Gray
Breathing Air	BA	Blue	Blue	White
Carbogen (CO2 + O2)	CB	Blue	Black	Blue
Krypton	Kr	Blue	Gray	Yellow
Xenon	Xe	Blue	Gray	Red
Neon	Ne	Blue	Gray	Black
Argon	Ar	Blue	Gray	Gray
Helium	He	Blue	Gray	White

Toxic Gases	Symbol	Handle Color	Ring Color	Disc Color
Ammonia	NH ₃	Black	Green	Red
Nitrogen Dioxide	NO ₂	Black	Green	Blue
Nitrogen Monoxide	NO	Black	Green	Black
Hydrogen Sulphide	H ₂ S	Black	Red	Yellow
Arsine	AsH_3	Black	Red	Black
Phosphine	PH_3	Black	Red	Gray
Hydrogen Chloride	HCI	Black	Red	White
Sulphur Dioxide	SO ₂	Black	Blue	Yellow
Carbon Monoxide	CO	Black	Blue	Black
Phosgene	COCl ₂	Black	Black	White
Chlorine	Cl ₂	Black	White	White

Vacuum	Symbol	Handle Color	Ring Color	Disc Color
Low Vacuum (1,000 – 1mbar)	V	Gray	Gray	Black
Fine Vacuum	VF	Gray	Gray	Gray
High Vacuum	VH	Gray	Gray	White

Miscellaneous	Symbol	Handle Color	Ring Color	Disc Color
Formaldehyde Solution	CH ₂ O	White	Red	Green
Propanol	C ₃ H ₈ O	White	Red	Yellow
Methanol	CH ₄ O	White	Red	Blue
Acetone	C ₃ H ₆ O	White	Red	Gray
Trichloroethylene	C ₂ HCl ₃	White	Red	White
Perchloric acid	HCIO ₄	White	White	Red





Pipe Sizing and Material

Requirements for the size and material of supply piping are generally covered by applicable plumbing codes. Reference should be made to such codes when laying out piping for service fittings and safety equipment. Pipe sizing is also affected by the number of valves or outlets installed on a run. However, typical piping standards for single fittings and outlets are as follows:

. . . .

Service	Piping Material	Minimum Pipe Size
Natural Gas	Black Iron or Stainless Steel	3/8"
Inert Gases	Copper	3/8"
Special Gases	Copper or Stainless Steel	3/8"
Water	Copper	1/2"
Distilled, Deionised and Purified Water	PVC/ Polypropylene/ PVDF	1/2"
Emergency Showers	Copper	1"
Eye, Eye/Face Wash and Drench Hose Units	Copper	1/2"
Safety Stations	Copper	1-1/4"

Inlet Shanks/Hole Sizing

WaterSaver fittings are furnished with standard size inlet shanks to penetrate the bench or wall surface. Minimum hole sizes for these shanks are listed below:

Inlet Shank	Minimum Hole Size
G1/2 Mounting Shank	22mm (7/8")
1-3/16" diameter Mounting Shank (ex: BT400 series mixer taps)	32mm (1-1/4")
G1 Mounting Shank (ex: BTEW1022 eyewash/drench hose unit)	35mm (1 -3/8")

Locator Pins

Except for fume cupboard outlet fittings, all ColorTech BT fittings are furnished with (2) locator pins to prevent the fitting from turning on the counter or panel. Pins are 3.2mm diameter x 2.4mm exposed length. When drilling countertops or panels, provide holes in the required locations for the locator pins.

Locator pins are pressed into the base of the fitting. If the pins are not required, they are easily removed with pliers.

Installation Procedures

Installing WaterSaver laboratory taps, valves and safety equipment requires the use of common plumbing installation techniques. Observing the following guidelines will help to assure trouble-free installation:

- 1. Thoroughly clean and flush supply lines prior to installing taps and valves. Pipe shavings, scale, tape and other debris can be carried through a pipe and into a tap or valve when the system is activated. This debris can damage valve components and interfere with the proper operation of the tap or valve.
- 2. When placing a tap or valve on a laboratory countertop or wall, secure the fitting using the lockwasher and locknut provided. Tighten the locknut sufficiently to secure the fitting to the counter or wall. Do not overtighten.
- **3.** ColorTech BT fittings are furnished with either (i) G inlet threads in accordance with ISO 228-1 or (ii) plain tube ends in metric sizes. For fittings with G inlet threads, a PTFE gasket is supplied for the inlet of the thread to be used with a mating fitting. Since a pressure-tight joint is not made on the thread, there should be no need to use pipe or thread sealant. If sealant is used, do not apply the sealant in a way that will permit it to enter into the tap or valve.
- 4. Observe the maximum test and working pressures for taps and valves. Testing or using a valve at pressures for which it is not designed can result in leakage or failure. Refer to the Valve Selection Guide on page 11 for information on maximum test and working pressures.
- 5. Do not use valves for services and applications for which they are not intended. In particular:
 - Valves for oxygen service and high purity gases must be specially cleaned, lubricated, assembled and packaged. Valves that have not been specially cleaned are not acceptable.
 - Needle valves should be used for gas services only. They are not suitable for water or steam services.
 - Push/turn valves should be used for burning gas services only. They are not recommended for use with other gases.
 - Valves for ammonia and acetylene must be stainless steel.
- 6. To prevent surface damage, use caution when applying a wrench or other tool to the exterior of a tap or valve.
- 7. Every ColorTech BT fitting is fully assembled and pressure tested at the factory. Full assembly enables us to inspect and test the fitting as a complete assembly. Fittings are tagged when testing is complete. If a fitting is received without an inspection tag, please notify the factory.
- 8. Clean fittings using a soft cloth and soapy water. Do not use abrasives, detergents or other cleaners that can damage the finish on the fitting. In particular, do not use any solvent in or near a tap or valve. Solvents can dissolve the lubricants used in the valve mechanism.

Fume Cupboard Valves



BT749FCN

Valve for Laboratory Gases, Fine Control Needle Valve

BT749N

Valve for Laboratory Gases, Needle Valve



Application: Panel mounted valve for laboratory gases. Valve has 40mm dia. body. For use with flexible hose connectors or tubing on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 41mm (1-5/8") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

Valve Body: 40mm (1-19/32") diameter brass bar stock.

Headwork:

BT749FCN: Replaceable self-centering stainless steel needle and replaceable stainless steel seat. Needle is finely tapered for precise metering of flow. *Valve is capable of delivering one bubble of nitrogen gas at a time*. Valve is specially cleaned, lubricated and packaged for use with high purity gases. **BT749N:** Replaceable self-centering stainless steel needle and replaceable stainless steel seat. When ordered, valve is specially cleaned, lubricated and packaged for use with high purity gases.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: Select from options below.

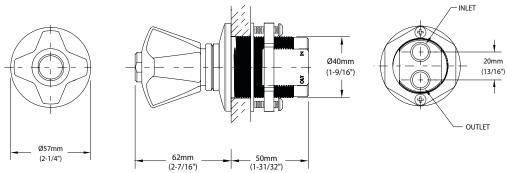
Quality Assurance: Valve is fully assembled and factory tested prior to shipment. BT749FCN has 25 bar (375 PSI) nitrogen test pressure and 17 bar (250 PSI) maximum working pressure. BT749N has 17 bar (250 PSI) nitrogen test pressure and 10 bar (150 PSI) maximum working pressure.

Inlet/Outlet Options

BT749FCN-2F

BT749N-2F

1/4 NPT Female



G1/4 Female

BT749FCN-G2F

BT749N-G2F

Ordering Information

Valve Construction

Fine control needle valve with replaceable self-centering tapered stainless steel needle and replaceable stainless steel seat. Cleaned for pure gas service.

Needle valve with replaceable self-centering stainless steel needle and replaceable stainless steel seat

Product Finish

Product Fillish					
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating		
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating		
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating		
STM	Starburst metallic powder coated finish				

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Media

10mm Push/Fit Tube

BT749FCN-M10PF

BT749N-M10PF



BT749GI Valve for Burning Gases, Push/Turn



Application: Panel mounted valve for burning gases, including natural gas, propane and bottled gas. Valve has 40mm dia. body. For use with flexible hose connectors or tubing on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 41mm (1-5/8") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

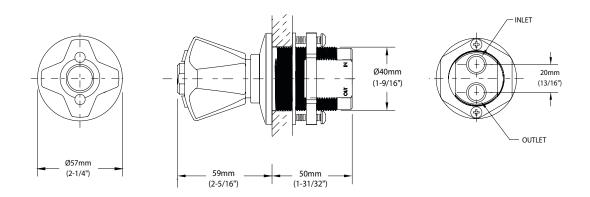
Valve Body: 40mm (1-19/32") diameter brass bar stock.

Headwork: Self-contained push/turn cartridge with rotating ceramic discs. Valve locks in closed position.

Handle: Forged brass handle with index disc and pop-up indicator buttons. Handle locks in closed position. Handle must be pushed down to unlock and open valve. Red pop-up buttons indicate if valve is open or closed. Handle and index disc are color coded and marked per EN 13792.

Inlet/Outlet: Select from options below.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.



Ordering Information

		Inlet/Outlet Optio	ns
Valve Construction	G1/4 Female	1/4 NPT Female	10mm Push/Fit Tube
Push/turn ceramic disc cartridge	BT749GI-G2F	BT749GI-2F	BT749GI-M10PF

Note: If red pop-up indicator buttons are not required, delete suffix "I". Valve will be furnished with molded nylon handle.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Fume Cupboard Valves

BT749W

Water Valve, Compression Construction

BT749WC

Water Valve, Ceramic Disc Construction





Application: Panel mounted valve for water. Valve has 40mm dia. body. For use with flexible hose connectors or tubing on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 41mm (1-5/8") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

Valve Body: 40mm (1-19/32") diameter forged brass.

Headwork:

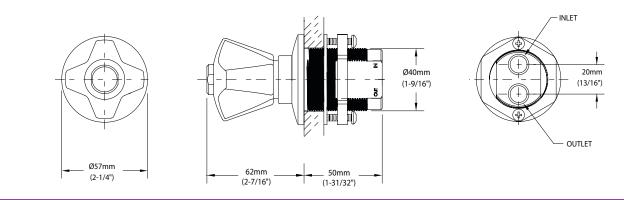
BT749W has WaterSaver compression valve construction with replaceable stainless steel seat.

BT749WC has self-contained replaceable ceramic disc cartridge.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: Select from options below.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.



Ordering Information

		Inlet/Outlet Options				
Valve Construction	G1/4 Female	1/4 NPT Female	10mm Push/Fit Tube			
Compression valve with replaceable stainless steel seat	BT749W-G2F	BT749W-2F	BT749W-M10PF			
Ceramic disc cartridge	BT749WC-G2F	BT749WC-2F	BT749WC-M10PF			
Product Finich						

rioduct misin					
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating		
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating		
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating		
STM	Starburst metallic powder coated finish				

Note: Refer to "Product Finishes" catalog for complete information on finishes.



BT749WTL Pure Water Valve, Tin-Lined



Application: Panel mounted valve for distilled, deionised or reverse osmosis water. All components in contact with water have interior lining of pure tin. Valve has 40mm dia. body. For use with flexible hose connectors or tubing on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 41mm (1-5/8") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

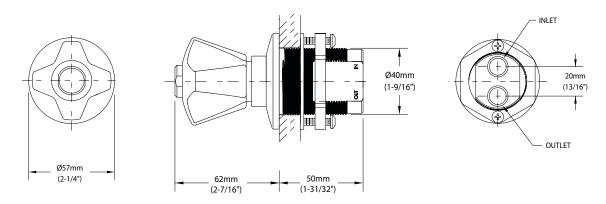
Valve Body: 40mm (1-19/32") diameter brass bar stock.

Headwork: WaterSaver tin-lined compression valve construction with replaceable stainless steel seat.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: Select from options below.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.



Ordering Information

	Options
1/4 NPT Female	10mm Push/Fit Tube
TL-G2F BT749WTL-2F	BT749WTL-M10PF
	1/4 NPT Female TL-G2F BT749WTL-2F

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating	
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating	
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating	
STM	Starburst metallic powder coated finish			

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Media

14

wsflab.com

Fume Cupboard Valves



BT750FCN

Valve for Laboratory Gases, Fine Control Needle Valve



Valve for Laboratory Gases, Needle Valve



Application: Panel mounted valve for laboratory gases. Valve has 10mm OD brazed copper tubes on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 36mm (1-7/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

Valve Body: 35mm (1-3/8") diameter brass bar stock.

Headwork:

BT750FCN: Replaceable self-centering stainless steel needle and replaceable stainless steel seat. Needle is finely tapered for precise metering of flow. *Valve is capable of delivering one bubble of nitrogen gas at a time*. Valve is specially cleaned, lubricated and packaged for use with high purity gases.

BT750N: Replaceable self-centering stainless steel needle and replaceable stainless steel seat. When ordered, valve is specially cleaned, lubricated and packaged for use with high purity gases.

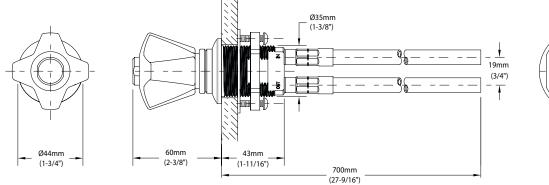
Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: 10mm copper tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. BT750FCN has 25 bar (375 PSI) nitrogen test pressure and 17 bar (250 PSI) maximum working pressure. BT750N has 17 bar (250 PSI) nitrogen test pressure and 10 bar (150 PSI) maximum working pressure.

INLET

OUTI FI



Ordering Information

Inlet/Outlet

10mm OD Tube

Valve Construction

Fine control needle valve with replaceable self-centering tapered stainless steel needle and replaceable stainless steel seat. Cleaned for pure gas service.

Needle valve with replaceable self-centering stainless steel needle and replaceable stainless steel seat.

BT750N-M10T

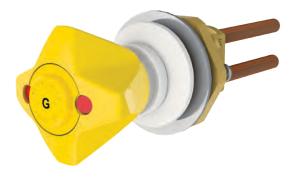
BT750FCN-M10T

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT750GI Valve for Burning Gases, Push/Turn



Application: Panel mounted valve for burning gases, including natural gas, propane and bottled gas. Valve has 10mm OD brazed copper tubes on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 36mm (1-7/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

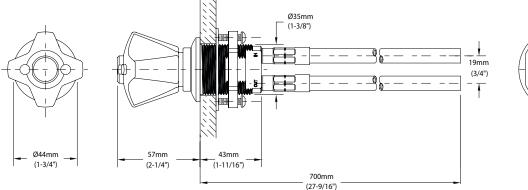
Valve Body: 40mm (1-3/8") diameter brass bar stock.

Headwork: Self-contained push/turn cartridge with rotating ceramic discs. Valve locks in closed position.

Handle: Forged brass handle with index disc and pop-up indicator buttons. Handle locks in closed position. Handle must be pushed down to unlock and open valve. Red pop-up buttons indicate if valve is open or closed. Handle and index disc are color coded and marked per EN 13792.

Inlet/Outlet: 10mm copper tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.





Ordering Information

	Inlet/Outlet 10mm OD Tube	
Valve Construction		
Push/turn ceramic disc cartridge	BT750GI-M10T	

Note: If red pop-up indicator buttons are not required, delete suffix "I". Valve will be furnished with molded nylon handle.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Fume Cupboard Valves



BT750W

Water Valve, Compression Construction

BT750WC

Water Valve, Ceramic Disc Construction



Application: Panel mounted valve for water. Valve has 10mm OD brazed copper tubes on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 36mm (1-7/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

Valve Body: 35mm (1-3/8") diameter brass bar stock.

Headwork:

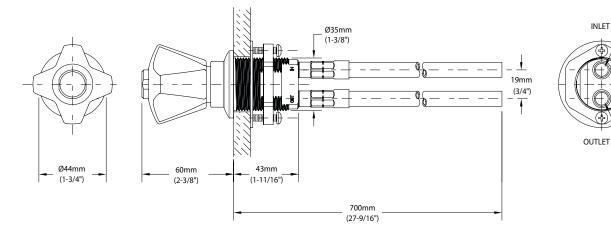
BT750W has WaterSaver compression valve construction with replaceable stainless steel seat.

BT750WC has self-contained replaceable ceramic disc cartridge.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: 10mm copper tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.



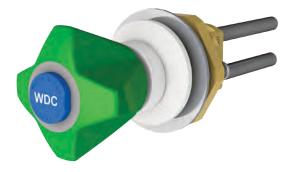
Ordering Information

	Inlet/Outlet
Valve Construction	10mm OD Tube
Compression valve with replaceable stainless steel seat	BT750W-M10T
Ceramic disc cartridge	BT750WC-M10T
Product Finish	
WHT Gloss white powder coated finish	PCL Polished chrome plated finish with clear epoxy coating
GRY Gloss light gray powder coated finish	SCC Satin chrome plated finish with clear epoxy coating
GRD Gloss dark gray powder coated finish	SNC Satin nickel plated finish with clear epoxy coating
STM Starburst metallic powder coated finish	

Note: Refer to "Product Finishes" catalog for complete information on finishes.



BT750WTL Pure Water Valve, Tin-Lined



Application: Panel mounted valve for distilled, deionised or reverse osmosis water. All components in contact with water have interior lining of pure tin. Valve has 10mm OD brazed stainless steel tubes on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 36mm (1-7/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

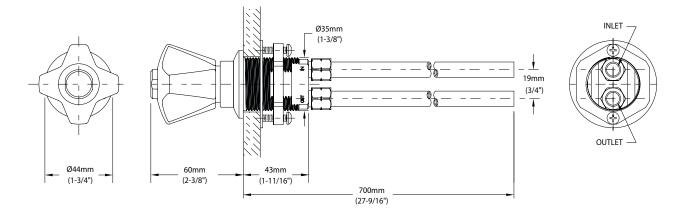
Valve Body: 35mm (1-3/8") diameter brass bar stock.

Headwork: WaterSaver tin-lined compression valve construction with replaceable stainless steel seat.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: 10mm stainless steel tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.



Ordering Information

Valve Construction

In	let/	0	utl	let

10mm OD Tube BT750WTL-M10T

Tin-lined compression valve with replaceable stainless steel seat

Product Finish					
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating		
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating		
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating		
STM	Starburst metallic powder coated finish				

Note: Refer to "Product Finishes" catalog for complete information on finishes.



Valve for Laboratory Gases, Fine Control Needle Valve



Valve for Laboratory Gases, Needle Valve



Application: Panel mounted valve for laboratory gases. Valve has 35mm dia. body. Valve has 10mm OD brazed copper tubes on inlet and outlet.

WaterSaver ColorTech BT

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 36mm (1-7/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

Valve Body: 35mm (1-3/8") diameter forged brass.

Headwork:

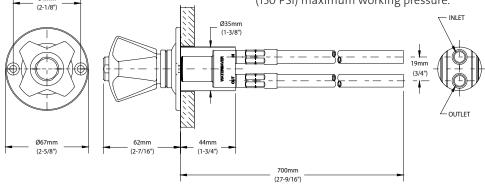
BT753FCN: Replaceable self-centering stainless steel needle and replaceable stainless steel seat. Needle is finely tapered for precise metering of flow. *Valve is capable of delivering one bubble of nitrogen gas at a time*. Valve is specially cleaned, lubricated and packaged for use with high purity gases.

BT753N: Replaceable self-centering stainless steel needle and replaceable stainless steel seat. When ordered, valve is specially cleaned, lubricated and packaged for use with high purity gases.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: 10mm copper tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. BT753FCN has 25 bar (375 PSI) nitrogen test pressure and 17 bar (250 PSI) maximum working pressure. BT753N has 17 bar (250 PSI) nitrogen test pressure and 10 bar (150 PSI) maximum working pressure.



Inlet/Outlet

10mm OD Tube

Ordering Information

Valve Construction

Fine control needle valve with replaceable self-centering tapered stainless steel needle and replaceable stainless steel seat. Cleaned for pure gas service.

Needle valve with replaceable self-centering stainless steel needle and replaceable stainless steel seat

BT753N-M10T

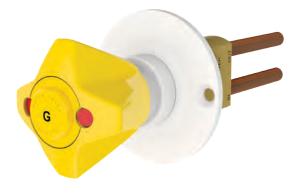
BT753FCN-M10T

Product Finish

riouucciii	ingu .		
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT753GI Valve for Burning Gases, Push/Turn



Application: Panel mounted valve for burning gases, including natural gas, propane and bottled gas. Valve has 35mm dia. body. Valve has 10mm OD brazed copper tubes on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 36mm (1-7/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

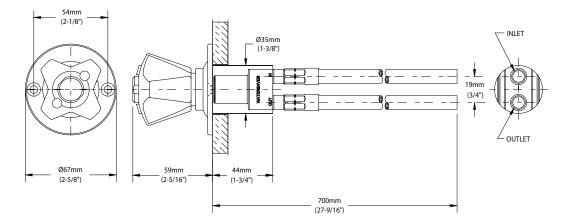
Valve Body: 35mm (1-3/8") diameter forged brass.

Headwork: Self-contained push/turn cartridge with rotating ceramic discs. Valve locks in closed position.

Handle: Forged brass handle with index disc and pop-up indicator buttons. Handle locks in closed position. Handle must be pushed down to unlock and open valve. Red pop-up buttons indicate if valve is open or closed. Handle and index disc are color coded and marked per EN 13792.

Inlet/Outlet: 10mm copper tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.



Ordering Information

	Inlet/Outlet 10mm OD Tube	
Valve Construction		
Push/turn ceramic disc cartridge	BT753GI-M10T	

Note: If red pop-up indicator buttons are not required, delete suffix "I". Valve will be furnished with molded nylon handle.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Fume Cupboard Valves



Water Valve, Compression Construction

BT753WC

Water Valve, Ceramic Disc Construction





Application: Panel mounted valve for water. Valve has 35mm dia. body. Valve has 10mm OD brazed copper tubes on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 36mm (1-7/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

Valve Body: 35mm (1-3/8") diameter forged brass.

Headwork:

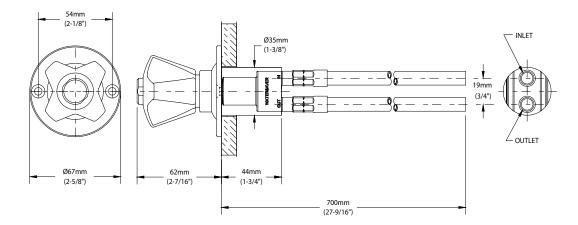
BT753W has WaterSaver compression valve construction with replaceable stainless steel seat.

BT753WC has self-contained replaceable ceramic disc cartridge.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: 10mm copper tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.



Ordering Information

	Inlet/Outlet		
Valve Construction	10mm OD Tube		
Compression valve with replaceable stainless steel seat	BT753W-M10T		
Ceramic disc cartridge	BT753WC-M10T		

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating		
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating		
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating		
STM	Starburst metallic powder coated finish				

Note: Refer to "Product Finishes" catalog for complete information on finishes.



BT753WTL Pure Water Valve, Tin-Lined



Application: Panel mounted valve for distilled, deionised or reverse osmosis water. All components in contact with water have interior lining of pure tin. Valve has 35mm dia. body. Valve has 10mm OD stainless steel tubes on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 36mm (1-7/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

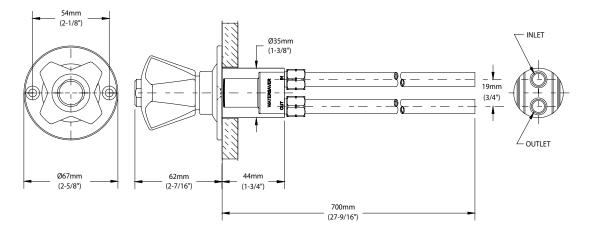
Valve Body: 35mm (1-3/8") diameter brass bar stock.

Headwork: WaterSaver tin-lined compression valve construction with replaceable stainless steel seat.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: 10mm stainless steel tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.



Ordering Information

	Inlet/Outlet				
Valve Construction	10mm OD Tube				
Tin-lined compression valve with replaceable stainless steel seat	BT753WTL-M10T				
Product Finish					
WHT Gloss white powder coated finish	PCL Polished chrome plated finish with clear epoxy coating				
GRY Gloss light gray powder coated finish	SCC Satin chrome plated finish with clear epoxy coating				
GRD Gloss dark gray powder coated finish	SNC Satin nickel plated finish with clear epoxy coating				
STM Starburst metallic powder coated finish					

Note: Refer to "Product Finishes" catalog for complete information on finishes.



Valve for Laboratory Gases, Fine Control Needle Valve



Valve for Laboratory Gases, Needle Valve





Application: Panel mounted valve for laboratory gases. Valve has 44mm dia. body. For use with flexible hose connectors or tubing on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 46mm (1-13/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

Valve Body: 44mm (1-3/4") diameter forged brass.

Headwork:

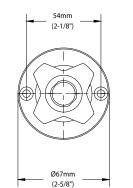
BT754FCN: Replaceable self-centering stainless steel needle and replaceable stainless steel seat. Needle is finely tapered for precise metering of flow. *Valve is capable of delivering one bubble of nitrogen gas at a time*. Valve is specially cleaned, lubricated and packaged for use with high purity gases. **BT754N:** Replaceable self-centering stainless steel needle and replaceable stainless steel seat. When ordered, valve is specially cleaned, lubricated and packaged for use with high purity gases.

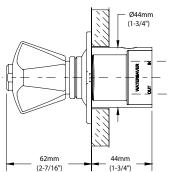
Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

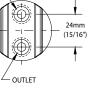
Inlet/Outlet: Select from options below.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. BT754FCN has 25 bar (375 PSI) nitrogen test pressure and 17 bar (250 PSI) maximum working pressure. BT754N has 17 bar (250 PSI) nitrogen test pressure and 10 bar (150 PSI) maximum working pressure.

INLET







Ordering Information

				Inlet/Outlet Option	15
Valve Cons	truction	G1/4 Fem	ale	1/4 NPT Female	10mm Push/Fit Tube
Fine control needle valve with replaceable self-centering tapered stainless steel needle and replaceable stainless steel seat. Cleaned for pure gas service.		BT754FCN-G2F		BT754FCN-2F	BT754FCN-M10PF
Needle valve with replaceable self-centering stainless steel needle and replaceable stainless steel seat		BT754N-G2F		BT754N-2F	BT754N-M10PF
Product Fir	iish				
WHT	Gloss white powder coated finish	PCL	Polished chro	ome plated finish with clea	ar epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome	e plated finish with clear e	poxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel p	lated finish with clear epo	oxy coating
STM	Starburst metallic powder coated finish				

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Media

WaterSaver Faucet Co.

BT754GI Valve for Burning Gases, Push/Turn



Application: Panel mounted valve for burning gases, including natural gas, propane and bottled gas. Valve has 44mm dia. body. For use with flexible hose connectors or tubing on inlet and outlet.

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 46mm (1-13/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

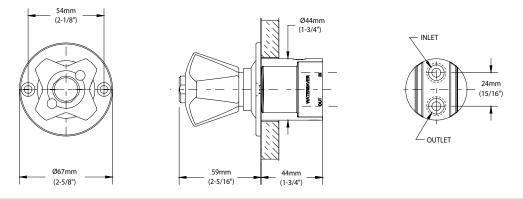
Valve Body: 44mm (1-3/4") diameter forged brass.

Headwork: Self-contained push/turn cartridge with rotating ceramic discs. Valve locks in closed position.

Handle: Forged brass handle with index disc and pop-up indicator buttons. Handle locks in closed position. Handle must be pushed down to unlock and open valve. Red pop-up buttons indicate if valve is open or closed. Handle and index disc are color coded and marked per EN 13792.

Inlet/Outlet: Select from options below.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.



Ordering Information

	Inlet/Outlet Options			
Valve Construction	G1/4 Female	1/4 NPT Female	10mm Push/Fit Tube	
Push/turn ceramic disc cartridge	BT754GI-G2F	BT754GI-2F	BT754GI-M10PF	

Note: If red pop-up indicator buttons are not required, delete suffix "I". Valve will be furnished with molded nylon handle.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Fume Cupboard Valves



Water Valve, Compression Construction

BT754WC

Water Valve, Ceramic Disc Construction



Application: Panel mounted valve for water. Valve has 44mm dia. body. For use with flexible hose connectors or tubing on inlet and outlet.

WaterSaver ColorTech BT

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 46mm (1-13/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

Valve Body: 44mm (1-3/4") diameter forged brass.

Headwork:

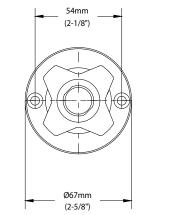
BT754W has WaterSaver compression valve construction with replaceable stainless steel seat.

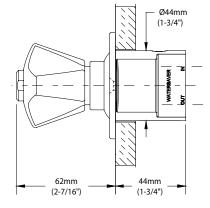
BT754WC has self-contained replaceable ceramic disc cartridge.

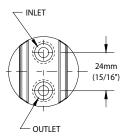
Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: Select from options below.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.







Ordering Information

		Inlet/Outlet Optio	ins
Valve Construction	G1/4 Female	1/4 NPT Female	10mm Push/Fit Tube
Compression valve with replaceable stainless steel seat	BT754W-G2F	BT754W-2F	BT754W-M10PF
Ceramic disc cartridge	BT754WC-G2F	BT754WC-2F	BT754WC-M10PF

Product Finish

- Todace - Hish					
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating		
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating		
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating		
STM	Starburst metallic powder coated finish				

Note: Refer to "Product Finishes" catalog for complete information on finishes.



BT754WTL Pure Water Valve, Tin-Lined



Application: Panel mounted valve for distilled, deionised or reverse osmosis water. All components in contact with water have interior lining of pure tin. Valve has 44mm dia. body. For use with flexible hose connectors or tubing.

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 46mm (1-13/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

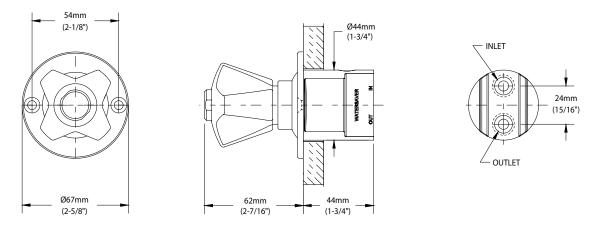
Valve Body: 44mm (1-3/4") diameter brass bar stock.

Headwork: WaterSaver tin-lined compression valve construction with replaceable stainless steel seat.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: Select from options below.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.



Ordering Information

	Inlet/Outlet Options			
Valve Construction	G1/4 Female	1/4 NPT Female	10mm Push/Fit Tube	
Tin-lined compression valve with replaceable stainless steel seat	BT754WTL-G2F	BT754WTL-2F	BT754WTL-M10PF	

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Media

26

Fume Cupboard Outlets



WaterSaver ColorTech BT fume cupboard fittings are unique in the laboratory industry in two respects. First, fittings are available in a choice of finishes and colors, including powder coated finishes and satin finishes with clear epoxy coating. Please refer to a WaterSaver "Product Finishes" catalog for information on available finishes. Second, fittings are supplied with a three-color escutcheon that is color coded and marked per EN 13792. The color and marking of the outlet fitting exactly match the handle of the valve. The media is therefore easily identifiable inside the fume cupboard.



Hydrogen/Helium

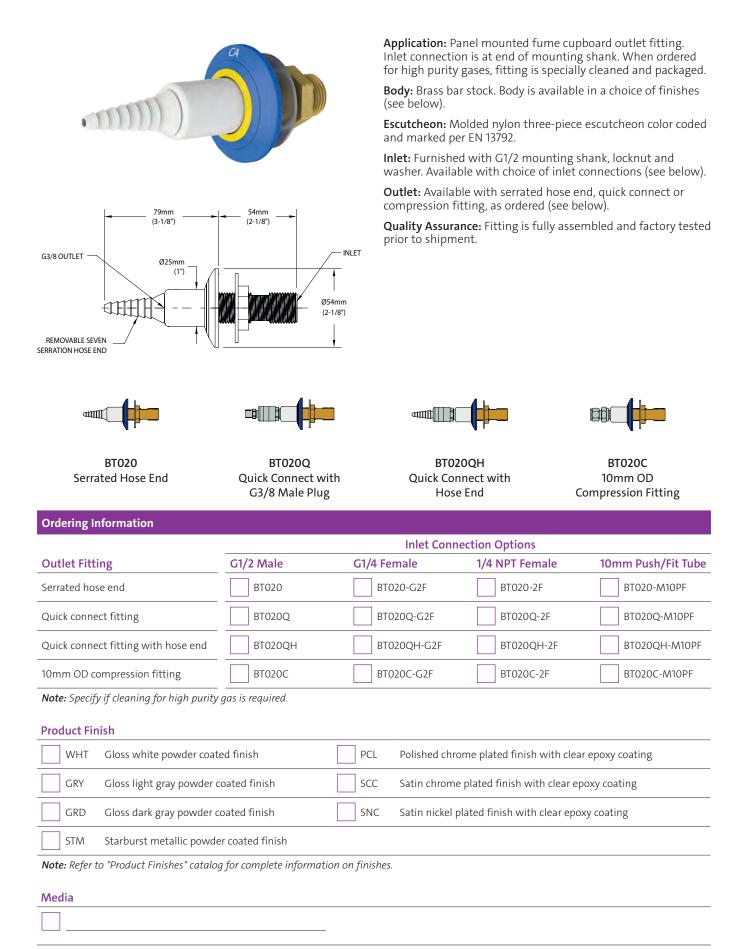
Hydrogen/Nitrogen

Steam

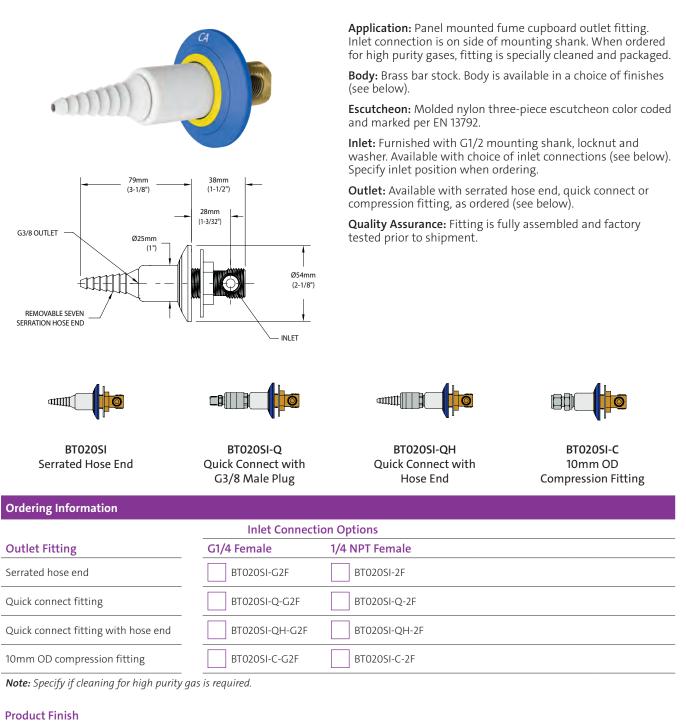
Ammonia

Hydrogen

BT020 Outlet Fitting, Panel Mounted, Back Inlet



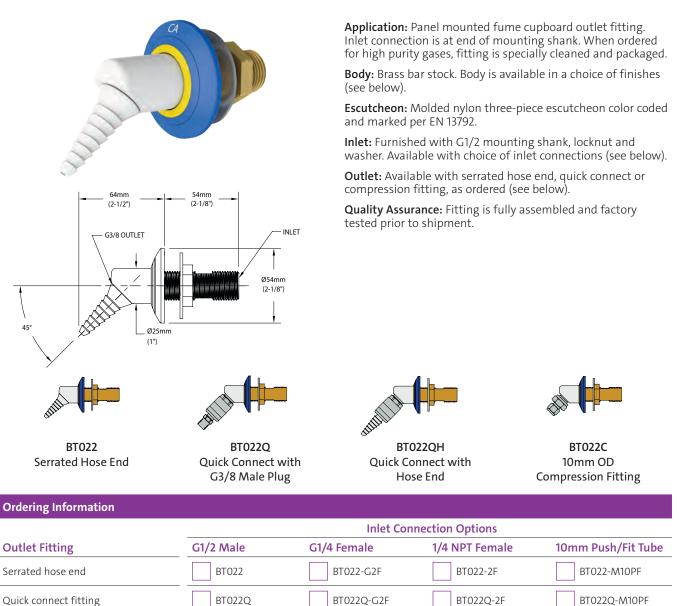
BT020SI Outlet Fitting, Panel Mounted, Side Inlet



WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT022 Outlet Fitting, Panel Mounted, Back Inlet



Ū.				
Quick connect fitting with hose end	BT022QH	BT022QH-G2F	BT022QH-2F	
10mm OD compression fitting	BT022C	BT022C-G2F	BT022C-2F	

Note: Specify if cleaning for high purity gas is required.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

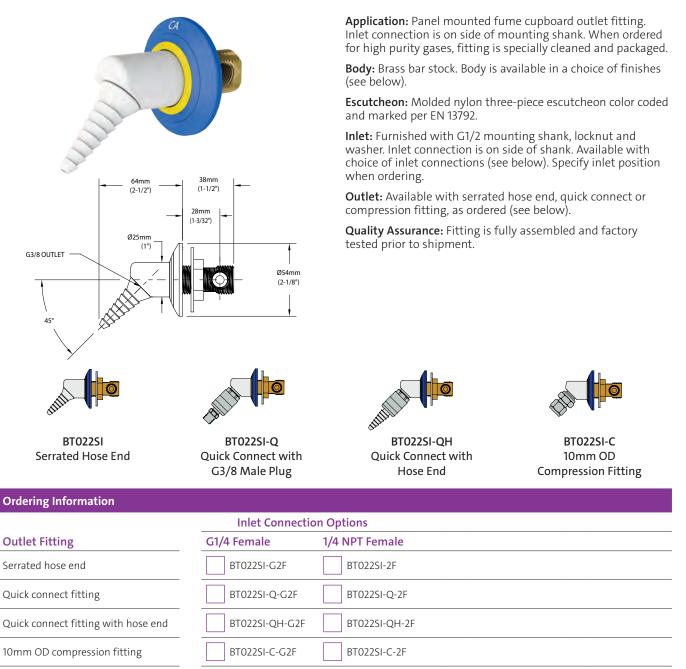
Note: Refer to "Product Finishes" catalog for complete information on finishes.

Media

BT022QH-M10PF

BT022C-M10PF

BT022SI Outlet Fitting, Panel Mounted, Side Inlet



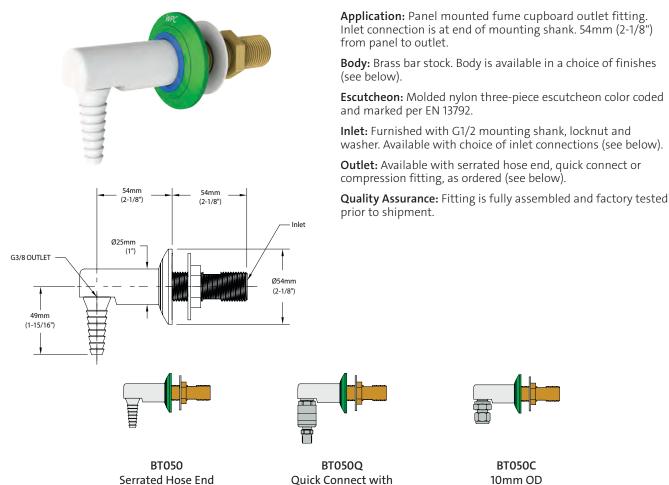
Note: Specify if cleaning for high purity gas is required.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT050 Outlet Fitting, Panel Mounted, Back Inlet



G3/8 Male Plug

Compression Fitting

Ordering Information

		Inlet Co	nnection Options	
Outlet Fitting	G1/2 Male	G1/4 Female	1/4 NPT Female	10mm Push/Fit Tube
Serrated hose end	BT050	BT050-G2F	BT050-2F	BT050-M10PF
Quick connect fitting	BT050Q	BT050Q-G2F	BT050Q-2F	BT050Q-M10PF
10mm OD compression fitting	BT050C	BT050C-G2F	BT050C-2F	BT050C-M10PF

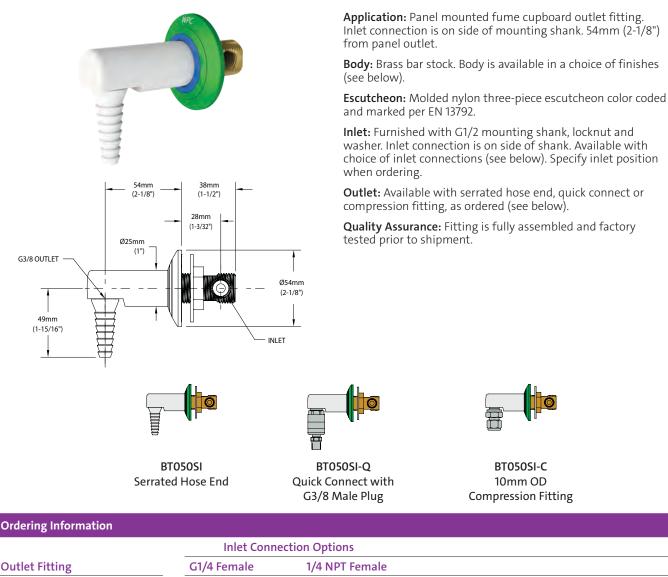
Note: Specify if cleaning for high purity gas is required.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT050SI Outlet Fitting, Panel Mounted, Side Inlet



	iniet connect	
Outlet Fitting	G1/4 Female	1/4 NPT Female
Serrated hose end	BT050SI-G2F	BT050SI-2F
Quick connect fitting	BT050SI-Q-G2F	BT050SI-Q-2F
10mm OD compression fitting	BT050SI-C-G2F	BT050SI-C-2F

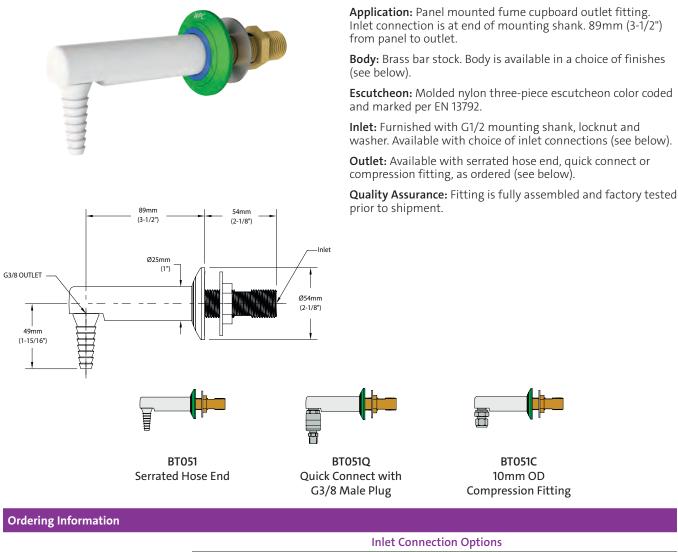
Note: Specify if cleaning for high purity gas is required.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT051 Outlet Fitting, Panel Mounted, Back Inlet



		Inlet Co	nnection Options	
Outlet Fitting	G1/2 Male	G1/4 Female	1/4 NPT Female	10mm Push/Fit Tube
Serrated hose end	BT051	BT051-G2F	BT051-2F	BT051-M10PF
Quick connect fitting	BT051Q	BT051Q-G2F	BT051Q-2F	BT051Q-M10PF
10mm OD compression fitting	BT051C	BT051C-G2F	BT051C-2F	BT051C-M10PF

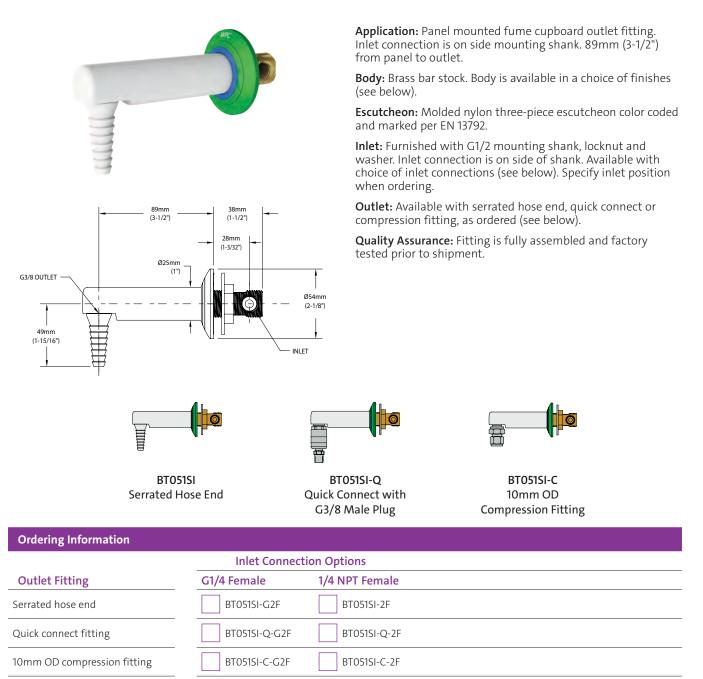
Note: Specify if cleaning for high purity gas is required.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT051SI Outlet Fitting, Panel Mounted, Side Inlet



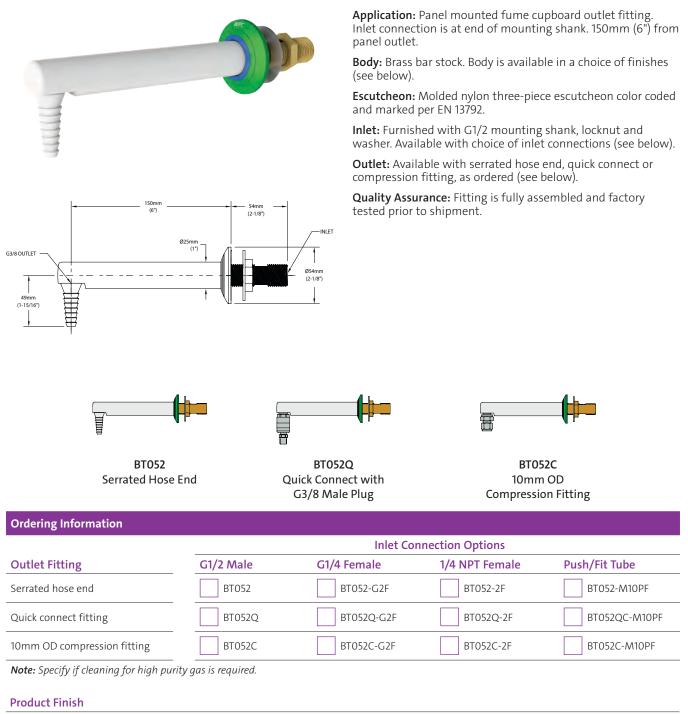
Note: Specify if cleaning for high purity gas is required.

Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT052 Outlet Fitting, Panel Mounted, Back Inlet



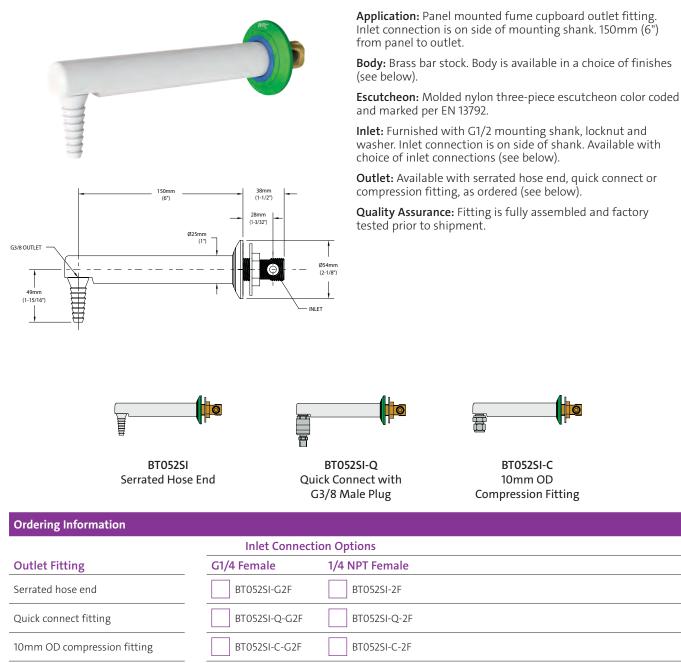
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Fume Cupboard Outlets



BT052SI Outlet Fitting, Panel Mounted, Side Inlet



Note: Specify if cleaning for high purity gas is required.

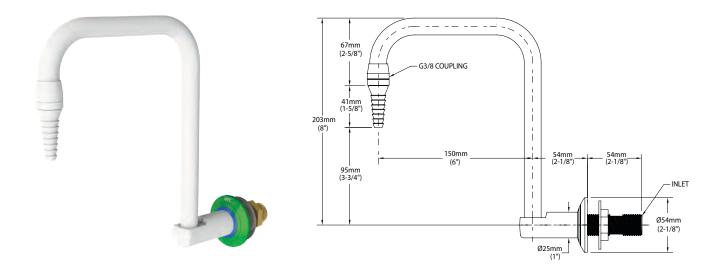
Product Finish

WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT071 Panel Mounted Gooseneck Fitting, Rigid Gooseneck

BT074 Panel Mounted Gooseneck Fitting, Rigid/Swing Gooseneck



Application: Panel mounted gooseneck fitting for water.

Body: Brass bar stock (BT071) or forged brass (BT074).

Gooseneck: 150mm (6") brass. BT071 has rigid gooseneck. BT074 has convertible rigid/swing gooseneck.

Escutcheon: Molded nylon three-piece escutcheon color coded and marked per EN 13792.

Inlet: Furnished with G1/2 mounting shank, locknut and washer. Available with choice of inlet connections (see below).

Outlet: G3/8 female outlet with removable anti-splash serrated hose end.

Quality Assurance: Fitting is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.

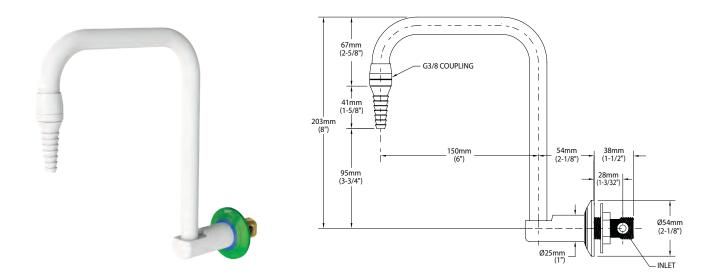
A			
Ora	ering	Information	

		Inlet Connection Options				
		G1/2 Male	G1/4 Fem	ale	1/4 NPT Female	10mm Push/Fit Tube
Rigid Gooseneck		BT071	BT071-G2F		BT071-2F	BT071-M10PF
Rigid/Swing Gooseneck		BT074	BT074-G2F		BT074-2F	BT074-M10PF
Product Finis	h					
WHT C	Gloss white powder coa	ated finish	PCL	Polished chro	ome plated finish with clear	r epoxy coating
GRY C	Gloss light gray powder	coated finish	SCC	Satin chrome	e plated finish with clear ep	poxy coating
GRD C	Gloss dark gray powder	coated finish	SNC	Satin nickel p	plated finish with clear epo	xy coating
STM S	itarburst metallic powe	der coated finish				
Note: Pefer to "	"Product Einishes" catal	og for complete informat	ion on finishes			

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT071SI Fume Cupboard Gooseneck Fitting, Rigid Gooseneck, Side Inlet

BT074SI Fume Cupboard Gooseneck Fitting, Rigid/Swing Gooseneck, Side Inlet



Application: Panel mounted fume cupboard gooseneck fitting for water. Inlet connection is on side of mounting shank.

Body: Brass bar stock (BT071SI) or forged brass (BT074SI).

Gooseneck: 150mm (6") brass. BT071SI has rigid gooseneck. BT074SI has convertible rigid/swing gooseneck.

Escutcheon: Molded nylon three-piece escutcheon color coded and marked per EN 13792.

Inlet: Furnished with G1/2 mounting shank, locknut and washer. Available with choice of inlet connections (see below). Specify inlet position when ordering.

Outlet: G3/8 female outlet with removable anti-splash serrated hose end.

Quality Assurance: Fitting is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.

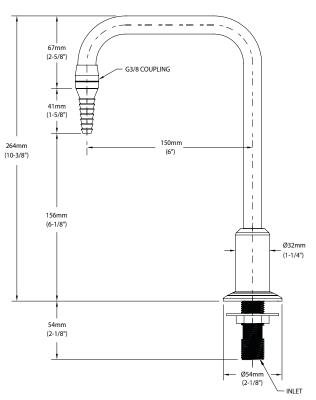
	Inlet Connec	ection Options	
	G1/4 Female	1/4 NPT Female	
Rigid Gooseneck	BT071SI-G2F	BT071SI-2F	
Rigid/Swing Gooseneck	BT074SI-G2F	BT074SI-2F	
Product Finish			
WHT Gloss white powder	coated finish	PCL Polished chrome plated finish with clear epoxy coating	
GRY Gloss light gray powder coated finish		SCC Satin chrome plated finish with clear epoxy coating	
GRD Gloss dark gray pow	der coated finish	SNC Satin nickel plated finish with clear epoxy coating	

Note: Refer to "Product Finishes" catalog for complete information on finishes.

BT081 Bench Mounted Gooseneck Fitting, Rigid Gooseneck

BT084 Bench Mounted Gooseneck Fitting, Rigid/Swing Gooseneck





Application: Bench or countertop mounted gooseneck fitting for water.

Body: Brass bar stock.

Gooseneck: 150mm (6") brass. BT081 has rigid gooseneck. BT084 has convertible rigid/swing gooseneck.

Escutcheon: Molded nylon three-piece escutcheon color coded and marked per EN 13792.

Inlet: Furnished with G1/2 mounting shank, locknut and washer. Available with choice of inlet connections (see below).

Outlet: G3/8 female outlet with removable anti-splash serrated hose end.

Quality Assurance: Fitting is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.

		Inlet Connection Options					
	G1/2 Male	G1/4 Female	1/4 NPT Female	10mm Push/Fit Tube			
Rigid Gooseneck	BT081	BT081-G2F	BT081-2F	BT081-M10PF			
Rigid/Swing Gooseneck	BT084	BT084-G2F	BT084-2F	BT084-M10PF			
Product Finish							
WHT Gloss white powder coa	ted finish	PCL Polished chro	me plated finish with clea	ar epoxy coating			
GRY Gloss light gray powder	coated finish	SCC Satin chrome	plated finish with clear e	poxy coating			
GRD Gloss dark gray powder	coated finish	SNC Satin nickel p	lated finish with clear epo	oxy coating			
STM Starburst metallic powd	er coated finish						

Media

40

wsflab.com

BT081SI Fume Cupboard Gooseneck Fitting, Rigid Gooseneck, Side Inlet

BT084SI Fume Cupboard Gooseneck Fitting, Rigid/Swing Gooseneck, Side Inlet

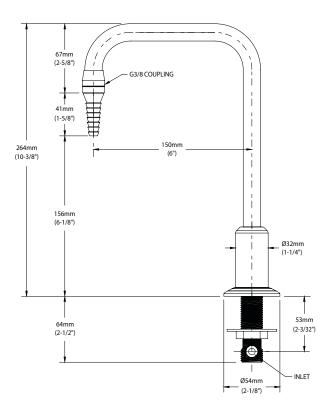


Application: Bench or countertop mounted fume cupboard gooseneck fitting for water. Inlet connection is on side of mounting shank.

Body: Brass bar stock.

Gooseneck: 152mm (6") brass. BT081SI has rigid gooseneck. BT084SI has convertible rigid/swing gooseneck.

Escutcheon: Molded nylon three-piece escutcheon color coded and marked per EN 13792.



Inlet: Furnished with G1/2 mounting shank, locknut and washer. Available with choice of inlet connections (see below). Specify inlet position when ordering.

Outlet: G3/8 female outlet with removable anti-splash serrated hose end.

Quality Assurance: Fitting is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and maximum working pressure.

Ordering Information		
	Inlet Conne	ction Options
Outlet Fitting	G1/4 Female	1/4 NPT Female
Rigid Gooseneck	BT081SI-G2F	BT081SI-2F
Rigid/Swing Gooseneck	BT084SI-G2F	BT084SI-2F
Product Finish		
WHT Gloss white powder coat	ed finish	PCL Polished chrome plated finish with clear epoxy coating
GRY Gloss light gray powder of	coated finish	SCC Satin chrome plated finish with clear epoxy coating
GRD Gloss dark gray powder o	oated finish	SNC Satin nickel plated finish with clear epoxy coating
STM Starburst metallic powde	er coated finish	

Note: Refer to "Product Finishes" catalog for complete information on finishes.



- **BT7750W** Pure Water Valve, Polypropylene-Lined
- BT7750W-PVDF Pure Water Valve, PVDF-Lined



Application: Panel mounted valve for distilled, deionised or reverse osmosis water. All components in contact with pure water are inert polypropylene or polyvinylidene fluoride (PVDF), as ordered. Pure water comes in contact only with inert plastic.

Mounting: Valve is installed on front face of cupboard and secured from behind panel with locknut and set screws. Provide a 46mm (1-13/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

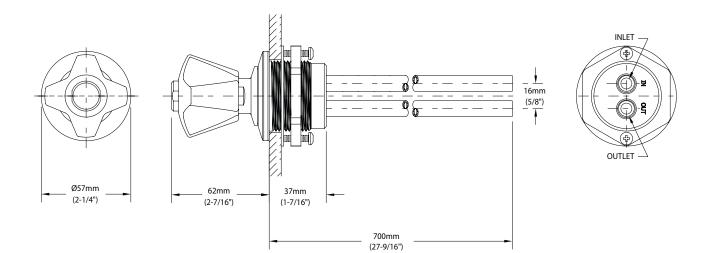
Valve Body: 44.5mm (1-3/4") diameter brass bar stock.

Headwork: Diaphragm-type valve. Brass valve stem and bonnet with inert PTFE diaphragm.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: 10mm OD polypropylene or PVDF tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.



Ordering Information

Product Fir	nish		
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.



BT7753W Pure Water Valve, Polypropylene-Lined **BT7753W-PVDF** Pure Water Valve, PVDF-Lined



Application: Panel mounted valve for distilled, deionised or reverse osmosis water. All components in contact with pure water are inert polypropylene or polyvinylidene fluoride (PVDF), as ordered. Pure water comes in contact only with inert plastic.

Mounting: Valve is installed on front face of cupboard and secured with screws. Provide a 46mm (1-13/16") diameter hole. Maximum panel thickness is 25mm (1"). All working components of valve are accessible from front exterior face of cupboard.

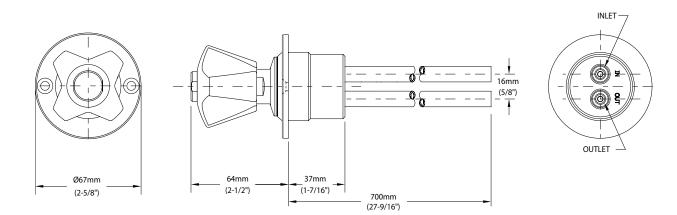
Valve Body: 44.5mm (1-3/4") diameter brass bar stock.

Headwork: Diaphragm-type valve. Brass valve stem and bonnet with inert PTFE diaphragm.

Handle: Molded nylon hooded style handle with index disc. Handle and index are color coded and marked per EN 13792.

Inlet/Outlet: 10mm OD polypropylene or PVDF tubes.

Quality Assurance: Valve is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.



Ordering Information

Product Fir	nish		
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.



- **BT7051** Outlet Fitting for Pure Water, Polypropylene-Lined
- BT7051PVDF Outlet Fitting for Pure Water, PVDF-Lined



Application: Panel mounted fume cupboard outlet fitting for pure water. Fitting has an exterior brass casing. All components in contact with pure water are either inert polypropylene or polyvinylidene fluoride (PVDF), as ordered. 89mm (3-1/2") from panel to outlet.

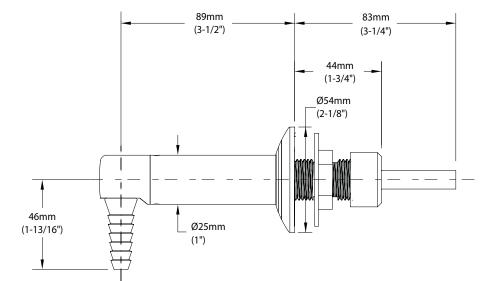
Body: Brass bar stock. Body is available in a choice of finishes (see below).

Escutcheon: Molded nylon three-piece escutcheon color coded and marked per EN 13792.

Inlet: Furnished with G1/2 mounting shank, locknut and washer. Pure water inlet is 10mm OD plastic tube.

Outlet: Removable polypropylene or PVDF serrated hose end.

Quality Assurance: Fitting is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.



Ordering Information

Product Fir	nish		
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.



BT7052 Outlet Fitting for Pure Water, Polypropylene-Lined

BT7052PVDF Outlet Fitting for Pure Water, PVDF-Lined



Application: Panel mounted fume cupboard outlet fitting for pure water. Fitting has an exterior brass casing. All components in contact with pure water are either inert polypropylene or polyvinylidene fluoride (PVDF), as ordered. 150mm (6") from panel to outlet.

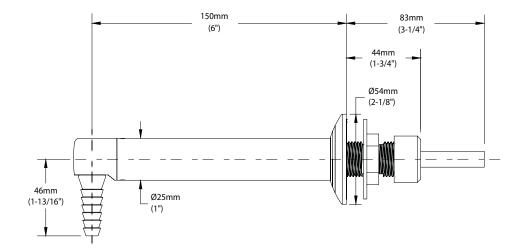
Body: Brass bar stock. Body is available in a choice of finishes (see below).

Escutcheon: Molded nylon three-piece escutcheon color coded and marked per EN 13792.

Inlet: Furnished with G1/2 mounting shank, locknut and washer. Pure water inlet is 10mm OD plastic tube.

Outlet: Removable polypropylene or PVDF serrated hose end.

Quality Assurance: Fitting is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.



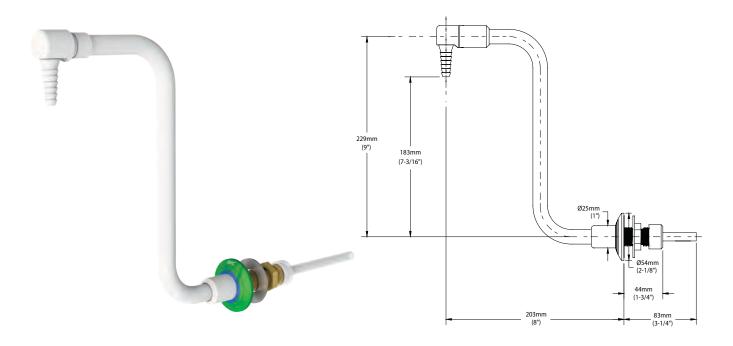
Ordering Information

Product Fi	nish		
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		

Note: Refer to "Product Finishes" catalog for complete information on finishes.



- **BT7071** Gooseneck Fitting for Pure Water, Polypropylene-Lined
- **BT7071PVDF** Gooseneck Fitting for Pure Water, PVDF-Lined



Application: Panel mounted fume cupboard gooseneck fitting for pure water. Fitting has an exterior brass casing. All components in contact with pure water are either inert polypropylene or polyvinylidene fluoride (PVDF), as ordered.

Body: Brass bar stock.

Gooseneck: 150mm (6") rigid brass gooseneck.

Escutcheon: Three-piece escutcheon color coded and marked per EN 13792.

Inlet: Furnished with G1/2 mounting shank, locknut and washer. Pure water inlet is 10mm OD plastic tube.

Outlet: Polypropylene or PVDF serrated hose end.

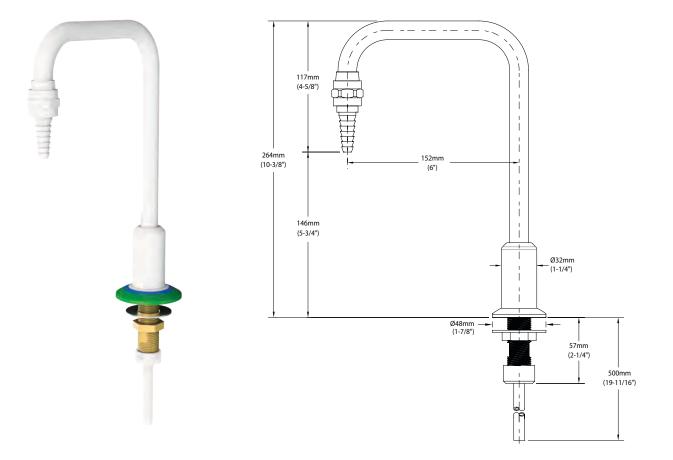
Quality Assurance: Fitting is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.

Ordering I	nformation		
Product Fir	nish		
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating
STM	Starburst metallic powder coated finish		
Note: Refer	to "Product Finishes" catalog for complete inforn	nation on finishes	



BT7081 Gooseneck Fitting for Pure Water, Polypropylene-Lined

BT7081PVDF Gooseneck Fitting for Pure Water, PVDF-Lined



Application: Bench or countertop mounted fume cupboard gooseneck fitting for pure water. Fitting has an exterior brass casing. All components in contact with pure water are either inert polypropylene or polyvinylidene fluoride (PVDF), as ordered.

Body: Brass bar stock.

Gooseneck: 150mm (6") rigid brass gooseneck.

Escutcheon: Three-piece escutcheon color coded and marked per EN 13792.

Inlet: Furnished with G1/2 mounting shank, locknut and washer. Pure water inlet is 10mm OD plastic tube.

Outlet: Polypropylene or PVDF serrated hose end.

Quality Assurance: Fitting is fully assembled and factory tested prior to shipment. 10 bar (150 PSI) test pressure and 7 bar (100 PSI) maximum working pressure.

Ordering Information					
Product Fir	nish				
WHT	Gloss white powder coated finish	PCL	Polished chrome plated finish with clear epoxy coating		
GRY	Gloss light gray powder coated finish	SCC	Satin chrome plated finish with clear epoxy coating		
GRD	Gloss dark gray powder coated finish	SNC	Satin nickel plated finish with clear epoxy coating		
STM	Starburst metallic powder coated finish				
		1: C · · I			

Note: Refer to "Product Finishes" catalog for complete information on finishes.

Flexible Hose Connectors Selection Guidelines



WaterSaver offers the industry's widest selection of flexible hose connectors for use in fume cupboards. Connectors are available in a wide variety of materials, lengths and end connections to meet every application and requirement. Some connectors are also available in a selection of colors to designate the media being delivered.

When selecting, specifying and ordering a flexible hose connector, we recommend taking the following considerations into account:

Media

Determine the system media and the environment to which the connector will be exposed. These considerations are important factors when determining the materials of construction best suited to the application. Consider the material of both the hose and the end connections.

Pressure

Identify the minimum and maximum system pressures or vacuum to which the hose connector will be exposed. Take into consideration any cycles or spikes that may occur. Observe the maximum working pressures specified for each type of hose connector.

Temperature

Identify the minimum and maximum temperatures to which the hose connector will be exposed. As the temperature to which an assembly is exposed increases (both internally and externally), the strength of the hose assembly decreases. Please note that all WaterSaver flexible hose connectors are designed for interior applications only.

Movement

Determine the movement to which the hose connector may be subject. Note that flexible hose connectors for fume cupboard applications are designed strictly for static applications in which, after installation, the hose is stationary and does not move in any plane. Excessive movement of a flexible hose connector can cause fatigue in the braided metal cover or reinforcement and lead to fraying and/or failure.

Length

Determine the required length of the hose assembly, taking into consideration system configuration (the route the hose will take), pressurization, thermal expansion and other factors. Use of elbows and other fittings may help accommodate tight turns and space constraints. Refer to local codes for possible maximum limits on the length of a hose connector. Installation of a hose connector that lacks sufficient length to accommodate these factors may reduce hose life.

End Connections

Determine the type and material of end connection most appropriate for the application. WaterSaver offers a wide variety of end connections in both metric and Imperial sizes and a choice of materials. Refer to local codes to determine what type of connections may be required for particular media and applications.

Cleaning

Identify whether the hose connector will require special cleaning, such as cleaning for high purity gases and oxygen.

Permeation/Effusion

Polyvinylchloride (PVC), cross-linked polyethylene (PEX), polytetrafluoroethylene (PTFE) and synthetic rubber are permeable materials. It is therefore possible for gases, vapors and liquids to migrate through hoses manufactured from these materials. The rate of permeation is affected by many application-specific factors, including system media and pressure. Please consult with a WaterSaver sales representative for additional information.

Corrosive Environments

Determine if the hose connector will be exposed to a corrosive environment. Exposure to a corrosive environment can damage the hose connector and lead to premature failure.

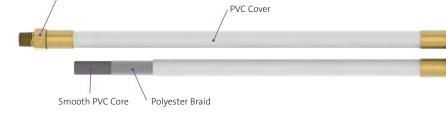
Local Codes and Standards

Always refer to local codes and standards for the types of flexible hose connectors that are acceptable for a particular application and system.

HP2 Flexible Hose Connector, Reinforced PVC



- Polyester braid
- Color coded PVC cover
- For water, pure water, inert gases and vacuum
- 20 bar (290 PSI) working pressure



Brass or Stainless Steel End Fittings

Application: Flexible hose connector for fume cupboard valves and outlets. Reinforced PVC construction.

Media: For use with water, pure water, inert gases and vacuum.

Construction: Inner core is smooth polyvinyl chloride (PVC). Braided polyester reinforcement and PVC outer cover. Available in white or color coded per service.

End Connections: End fittings are brass or stainless steel, as ordered. Fittings are permanently attached to hose with crimped connection. Fittings swivel for ease of installation and to prevent binding.

Dimensions: Inside diameter is 6.3mm(1/4"), outside diameter is 12.7mm(1/2") and wall thickness is 3.2mm(1/8"). Length as ordered.

Pressure Rating: 82 bar (1,200 PSI) burst pressure. Maximum working pressure is 20 bar (290 PSI).

Temperature Rating: Maximum working temperature is 80°C (175°F).

Minimum Bend Radius: 50mm (2").

Quality Assurance: Hose connector is fully assembled and factory tested prior to shipment.

HRN Flexible Hose Connector, Reinforced Rubber

- NBR (nitrile) inner core
- Polyester braid
- SBR cover
- · For burning gases
- 10 bar (150 PSI) working pressure

re Smooth Nitrile Core Polyester Braid

Application: Flexible hose connector for fume cupboard valves and outlets. Reinforced synthetic rubber construction.

Media: For use with burning gases, including natural gas, propane and bottled gas.

Construction: Inner core is smooth NBR (nitrile/BUNA-N). Braided polyester reinforcement and orange SBR outer cover.

End Connections: End fittings are brass or stainless steel, as ordered. Fittings are permanently attached to hose with crimped connection. Fittings swivel for ease of installation and to prevent binding.

Dimensions: Inside diameter is 6.0mm (.236"), outside diameter is 13.3mm (.524") and wall thickness is 3.5mm (.137"). Length as ordered.

Pressure Rating: 60 bar (900 PSI) burst pressure. Maximum working pressure is 10 bar (150 PSI).

Temperature Rating: Maximum working temperature is 80°C (175°F).

Minimum Bend Radius: 75mm (2.95").

Quality Assurance: Hose connector is fully assembled and factory tested prior to shipment.

Flexible Hose Connectors Materials



HSP Flexible Hose Connector, Soft PEX with Stainless Steel Braid

- Soft PEX inner core
- Stainless steel braid
- For water, pure water, inert gases and vacuum
- 20 bar (290 PSI) working pressure

Soft PEX Core

Brass or Stainless Steel End Fittings

Application: Flexible hose connector for fume cupboard valves and outlets. Cross-linked polyethylene (PEX) construction with stainless steel braid.

Media: For use with water, pure water, inert gases and vacuum.

Construction: Inner core is smooth cross-linked flexible polyethylene (PEX). Outer cover is Type 304 braided stainless steel.

End Connections: End fittings are brass or stainless steel, as ordered. Fittings are permanently attached to hose with crimped connection. Fittings swivel for ease of installation and to prevent binding.

Dimensions: Inside diameter is 8.0mm (5/16"), outside diameter is 11.3mm (.445") and wall thickness is 1.6mm (1/16"). Length as ordered.

Pressure Rating: 100 bar (1,470 PSI) burst pressure. Maximum working pressure is 20 bar (290 PSI).

Temperature Rating: Maximum working temperature is 85°C (185°F).

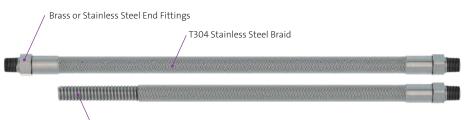
Minimum Bend Radius: 120mm (4 3/4").

T304 Stainless Steel Braid

Quality Assurance: Hose connector is fully assembled and factory tested prior to shipment.

HSS Flexible Hose Connector, Welded Stainless Steel with Stainless Steel Braid

- Welded stainless steel inner core
- Stainless steel braid
- For burning gases, helium, hydrogen and high purity gases
- 132 bar (1,900 PSI) working pressure



T316L Stainless Steel Convoluted Core

Application: Flexible hose connector for fume cupboard valves and outlets. Corrugated stainless steel construction with stainless steel braid.

Media: For use with burning gases, helium, hydrogen and high purity gases.

Construction: Inner core is welded corrugated Type 316 stainless steel. Outer cover is Type 304 braided stainless steel.

End Connections: End fittings are brass or stainless steel, as ordered. Fittings are permanently attached to hose with crimped connection. Fittings swivel for ease of installation and to prevent binding.

Dimensions: Inside diameter is 8.2mm (.323") and outside diameter is 13.6mm (.535). Length as ordered.

Pressure Rating: 528 bar (7,658 PSI) burst pressure. Maximum working pressure is 132 bar (1,900 PSI).

Temperature Rating: Maximum working temperature is 100°C (212°F).

Minimum Bend Radius: 124mm (4-7/8").

Quality Assurance: Hose connector is fully assembled and factory tested prior to shipment.



HST Flexible Hose Connector, PTFE with Stainless Steel Braid

Brass or Stainless Steel End Fittings

Smooth PTFF Core

- PTFE inner core
- Stainless steel braid
- For water, pure water, inert gases, pure gases and vacuum
- 20 bar (290 PSI) working pressure

Dimensions: Inside diameter is 8.0mm (5/16"), outside diameter is 11.3mm (.445") and wall thickness is 1.6mm (1/16"). Length as ordered.

T304 Stainless Steel Braid

and outlets. Polytetrafluoroethylene (PTFE) construction with stainless steel braid. **Media:** For use with water, pure water, inert gases and vacuum.

Application: Flexible hose connector for fume cupboard valves

Construction: Inner core is smooth PTFE. Outer cover is Type 304 braided stainless steel.

End Connections: End fittings are brass or stainless steel, as ordered. Fittings are permanently attached to hose with crimped connection. Fittings swivel for ease of installation and to prevent binding.

Pressure Rating: 100 bar (1,470 PSI) burst pressure. Maximum working pressure is 20 bar (290 PSI).

Temperature Rating: Maximum working temperature is 100°C (212°F).

Minimum Bend Radius: 131mm (5").

Quality Assurance: Hose connector is fully assembled and factory tested prior to shipment.

Flexible Hose Connectors End Connections



WaterSaver flexible hose connectors are available with a wide array of end connections to fit every requirement:

- End fittings may be supplied in brass, chrome plated brass or stainless steel depending on the application and media.
- Connections are available in both metric and Imperial dimensions, including both G and NPT threads.
- All fittings swivel freely for ease of installation and to prevent the hose from twisting or binding.

Select the connection from the list below and use the code number when configuring the hose connector.

End Connections – Metric Size

53 G1/4 Female



54 G1/4 Male



55 G1/4 Male at 45° Angle



56 G1/4 Male at 90° Angle



57 G3/8 Female



58 G3/8 Male





82 12mm OD Tube End



83 15mm OD Tube End





End Connections – Imperial Size

03 1/4" NPT Female



04 1/4" NPT Male



05 1/4" NPT Male at 45° Angle



06 1/4" NPT Male at 90° Angle



07 3/8" NPT Female



08 3/8" NPT Male



10 1/2" NPT Female



11 1/2" NPT Male



12 1/2" NPT Female at 90° Angle



31 3/8" OD Tube End



32 1/2" OD Tube End

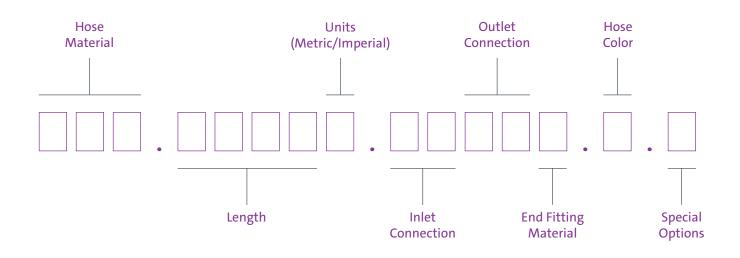


33 5/8" OD Tube End





Flexible hose connectors are ordered by a creating a 15-digit model number. By following five simple steps, the user can create the model number for the hose that is required. The model number is structured as follows:



To order a flexible hose connector, please follow the five steps listed below:

- **Step 1** Choose the hose material.
- **Step 2** Choose the hose length and measurement units.
- **Step 3** Choose the end fitting style and material.
- **Step 4** Choose the hose color (PVC hoses).
- Step 5 Choose special options (as required).



Step 1 – Choose the Material

First, choose the hose material from the table below. The first three boxes of the item number are reserved for the hose material. In the example below, selected is a hose with a PTFE inner core and a braided stainless steel cover.

Material

Code	Inner Core	Reinforcement	Outer Cover
HP2	PVC	Polyester braid	PVC (color coded)
HRN	NBR (Nitrile/BUNA-N)	Polyester braid	SBR
HSP	Soft PEX		Braided stainless steel
HSS	Welded stainless steel		Braided stainless steel
HST	PTFE		Braided stainless steel

Step 1 Example



Step 2 – Choose the Length and Measurement Units

Second, choose the hose length and measurement units (Metric or Imperial) from the three tables below. The first four boxes are reserved for the length and the fifth box is for the measurement units. In the example below, selected is a 1000mm hose. Note that length is measured end-to-end, including end fittings (see below).

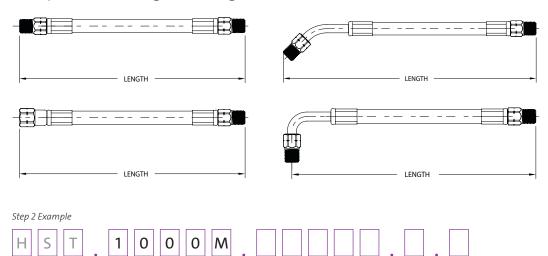
Code Overall Length
0500 500mm
0500 500mm
0700 700mm
1000 1000mm
1200 1200mm
1500 1500mm
2000 2000mm
2500 2500mm
3000 3000mm

Imperial Units

Code	Overall Length
0012	12"
0018	18"
0024	24"
0030	30"
0036	36"
0048	48"
0060	60"
0072	72"
0084	84"
0096	96"

Units	
Code	Units
Μ	Metric
S	Imperial

Examples of measuring overall length:





Step 3 – Choose the End Fitting Style and Material

Third, choose the inlet and outlet end fittings from the three tables below. For each end fitting, you will need to select the style of the fitting (e.g. threaded, tubular, straight, angle), the desired thread and the fitting material. The first two boxes are reserved for the inlet end. The next two boxes are reserved for the outlet end. The fifth box is reserved for the material and finish. In the example below, selected is a hose with a 10mm OD tube inlet and G1/4 male outlet in stainless steel.

End Connections – Metric (M)

Code	Description
53	G1/4 female
54	G1/4 male
55	G1/4 male at 45° angle
56	G1/4 male at 90° angle
57	G3/8 female
58	G3/8 male
60	G1/2 female
61	G1/2 male
62	G1/2 female at 90° angle
81	10mm OD tube end
82	12mm OD tube end
83	15mm OD tube end

End Connections – Imperial (S)	
Code	Description
03	1/4" NPT female
04	1/4" NPT male
05	1/4" NPT male at 45° angle
06	1/4" NPT male at 90° angle
07	3/8" NPT female
08	3/8" NPT male
10	1/2" NPT female
11	1/2" NPT male
12	1/2" NPT female at 90° angle
31	3/8" OD tube end
32	1/2" OD tube end
33	5/8" OD tube end

End Fitting Material and Finish

Code	Finish
0	Brass
1	Chrome plated brass
2	Stainless steel

Step 3 Example



Step 4 – Choose the Hose Color

Fourth, for HP2 reinforced PVC hoses, choose the color of the hose from the table below. For all other hoses, insert "A".

Colors

Code	Color	Code	Color
А	N/A	E	Gray
В	Black	F	Orange
С	Brown	G	White
D	Clear	Н	Yellow

Step 4 Example





Step 5 – Choose Special Options

Fifth, choose any special options that may be required for the hose connector. In the example below, selected is cleaning for high purity gas service.

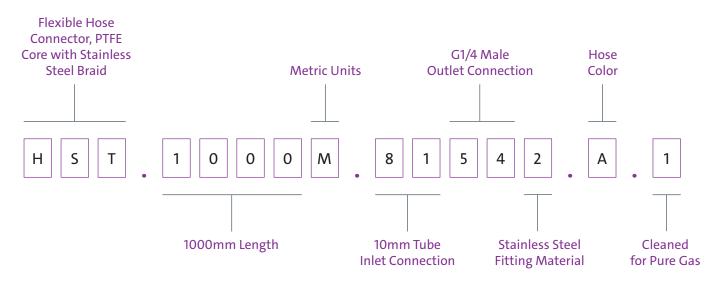
Colors

Code	Special Options
0	None
1	Cleaning for pure gas

Step 5 Example

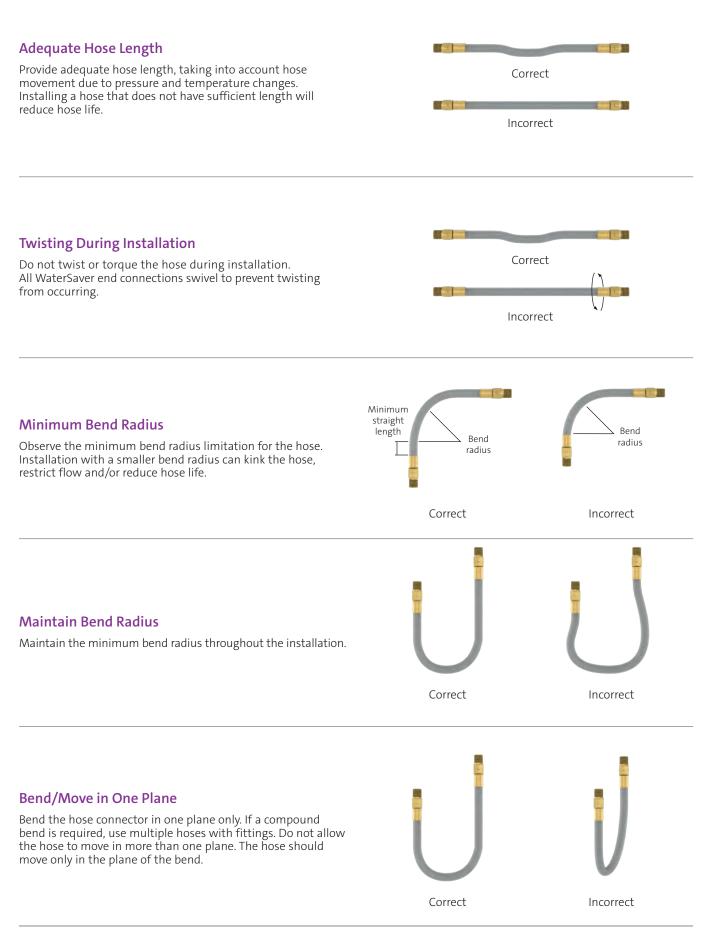


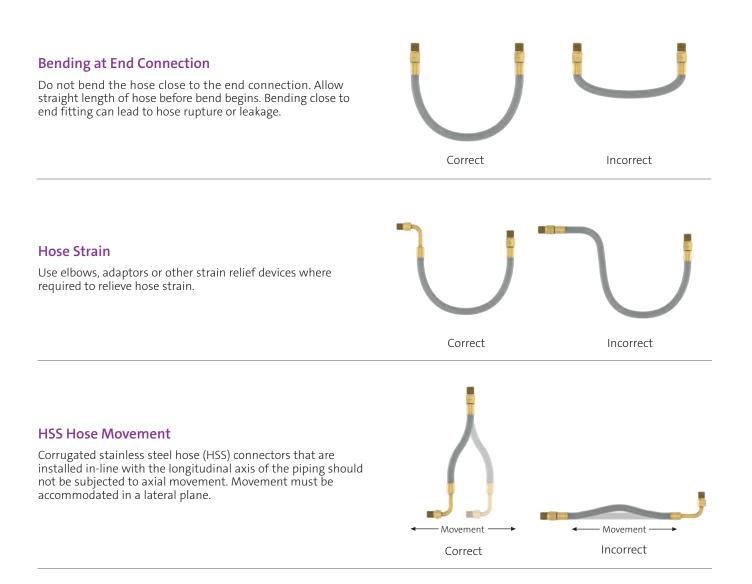
The complete model number for the sample hose is as follows:





Observe the following guidelines when installing and maintaining flexible hose connectors:





Abrasion

Do not expose the hose connector to external rubbing or abrasion. This can weaken the reinforcement and lead to hose rupture or leakage.

Regular Inspection and Maintenance

Every flexible hose connector is subject to wear and deterioration due to age, pressure, thermal cycling, shock, excessive movement, exterior damage and other factors. It is therefore imperative that flexible hose connectors be inspected periodically for indications of wear and potential failure. Facility maintenance personnel should establish a documented inspection program for all flexible hose connectors in the facility. Inspection results should be documented and used to develop a preventive maintenance and replacement program.

Fume Cupboard Fittings - Custom Kits



WaterSaver offers our customers customized kits of valves, outlets and flexible hose connectors. Rather than having to order components individually, each kit includes everything required for a complete installation. Each kit includes:

(1) flexible hose connector for the media supply (from the inlet connection to the valve),

- (1) fume cupboard valve,
- (1) flexible hose connector from the valve to the outlet and
- (1) outlet fitting

All O-rings, seals and other components required for the installation are pre-installed, so there are no components to get lost or misplaced. Installation time is reduced to the absolute minimum.

The kits shown here represent typical applications. However, we prefer to work with the fume cupboard manufacturer or contractor to develop a kit and assign a kit number that is specific to the requirements of the customer. Please contact a WaterSaver sales representative for further information.

FK-XXX-001

Fume Cupboard Kit for Compressed Air

Inlet Hose: HST.1500M.54540.A.0 1500mm braided stainless steel hose with PTFE core, G1/4 male inlet and outlet, brass end fittings

Valve: BT749N Needle valve (CA - Compressed Air)

Outlet Hose: HST.1000M.54560.A.0 1000mm braided stainless steel hose with PTFE core, G1/4 male inlet and outlet, brass end fittings

Outlet Fitting: BT022SI-G2F 45° angle outlet fitting with side inlet (CA – Compressed Air)

FK-XXX-002

Fume Cupboard Kit for Burning Gas

Inlet Hose: HRN.1500M.81540.A.0 1500mm reinforced nitrile hose, 10mm OD tube end inlet, G1/4 male outlet, brass end fittings

Valve: BT749GI Push/turn gas valve (G - Burning Gas)

Outlet Hose: HRN.1000M.54560.A.0 1000mm reinforced nitrile hose, G1/4 male inlet and outlet, brass end fittings

Outlet Fitting: BT050SI-G2F 90° angle outlet fitting with side inlet (G – Burning Gas)







Fume Cupboard Kit for Water

Inlet Hose: HSP.1500M.60540.A.0 1500mm braided stainless steel hose with PEX core, G1/2 female inlet, G1/4 male outlet, brass end fittings

Valve: BT749W Water valve (WPC - Potable Water, Cold)

Outlet Hose: HSP1200M.54620.A.0 1200mm braided stainless steel hose with PEX core, G1/4 male inlet, 90° angle G1/2 female outlet, brass end fittings

Outlet Fitting: BT081 Bench mounted gooseneck fitting (WPC – Potable Water, Cold)

FK-XXX-004

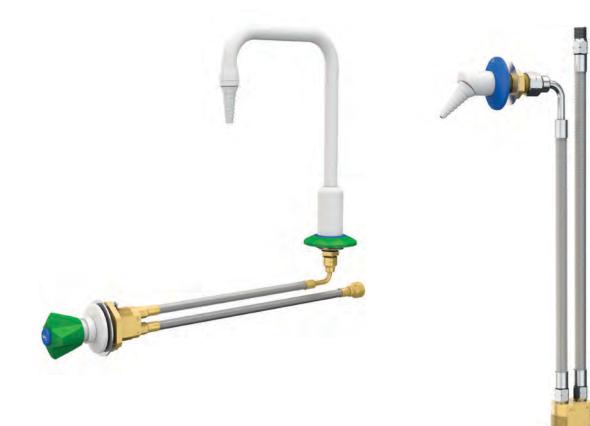
Fume Cupboard Kit for Oxygen

Inlet Hose: HSS.1500M.54542.A.1 1500mm braided stainless steel hose with stainless steel core, G1/4 male inlet and outlet, stainless steel end fittings, cleaned for high purity gas service

Valve: BT749FCN Fine control needle valve (O2 – Oxygen)

Outlet Hose: HSS.1000M.5462.A.1 1000mm braided stainless steel hose with stainless steel core, G1/4 male inlet, G1/2 female outlet, stainless steel end fittings, cleaned for high purity gas service

Outlet Fitting: BT022 45° angle outlet fitting (O2 – Oxygen)





WaterSaver Faucet Co. 701 W Erie Street Chicago, IL 60654 312 666 5500 TELEPHONE 312 666 5501 FACSIMILE WaterSaver Faucet de Mexico SA de CV Calle Octava #1140 Parque Industrial Monterrey Apodaca, NL 66603 52 81 1090 0000 TELEPHONE

WaterSaver LabTaps Ltd

Unit 11 High Carr Network Centre Newcastle-Under-Lyme Staffordshire, England, ST5 7XE 44 01782 576910 TELEPHONE 44 01782 576911 FACSIMILE



WaterSaver Sales Asia Pte Ltd 30 Petain Road 208099 Singapore 65 6883 2105 TELEPHONE 65 6883 2509 FACSIMILE WaterSaver (Shanghai) Trading Co. Ltd. Rm 205, Bldg No. 1 No. 456 Xiao Mu Qiao Rd, Xu Hui District 200032 Shanghai City, China +86 21 3183 9266/8 TELEPHONE
 Ila GmbH

 Otto-Hahn Str 10

 64579 Gernsheim Germany

 49 6258 9495 0

 TELEPHONE

 49 6258 9495 10