

# brownall Labtap®

## Handle colour coding

### Water fittings



Water potable, cold (WPC)



Water potable, hot (WPH)



Water non-potable, cold (WNC)



Water non-potable, hot (WNH)

### Lift/turn fittings



Natural gas (G)



Liquefied petrol gas (LPG)

## General informations

### Materials

Laboratory fittings from **brownall Labtap®** are manufactured of the highest quality materials, primarily brass. Stainless steel is also used where required. The surfaces of all fittings are finished in chemically resistant polyester-powder coat.

### Installation and technical tables

Special requirements of your local Water and Gas board should be checked before commencing installation. All pipe work should be purged to ensure cleanliness before fitting. Filters should be fitted if medium used is impure. Technical information is located in the following pages, including working pressures and description of materials used.

### Special advantages

The laboratory fittings from **brownall Labtap®** are designed and manufactured with the requirements of a modern laboratory in mind. The hallmarks of these fittings are good performance, durability, easy operation, flexibility and streamlined design, along with an easy-to-clean and attractive appearance. Fittings from **brownall Labtap®** are ideal for all types of laboratories, and are delivered with easy-to-mount fixing items/mounting kit, that will keep the fitting fully locked in its position when installed. Consequently, the fitting will not turn unintentionally, which would result in leaks.

### Pressure conversion

	bar	Pa	psi
<b>1 bar =</b>	1	1x10 <sup>5</sup>	14.5
<b>1 Pa =</b>	1x10 <sup>-5</sup>	1	1.45x10 <sup>-4</sup>
<b>1 psi =</b>	6.9x10 <sup>-2</sup>	6.9x10 <sup>3</sup>	1

Example:  $67 \text{ psi} = 67 \times (6.9 \times 10^{-2}) = 4.6 \text{ bar}$

## Technical information

### Water fittings

The range of water fittings have been designed to meet the requirements of EN 200 (Specification for the performance of draw off taps with metal bodies for water service).

#### SPECIFICATION

Brass with sealing in EPDM and PVDF. Wrist operated fittings have ceramic headwork's made of Al-oxide.

Most water fittings are delivered with plastic (PP) hose nozzles.

Handles of chemical resistant polypropylene, coloured to match the service medium in accordance with BS EN 13792:2002.

All fittings are protected by a surface treatment of Polyester powder coat which is highly resistant to most chemicals.

#### Outlets

Serrated plastic nozzles (fixed or removable) suitable for 8 mm to 13 mm ID rubber tubing or aerator are fitted on request.

#### Inlet connections

See overview on page 25

#### Installation

Installation of fittings can be done either with flexible hoses or compression ring fittings. Please request documents 99G0005 and 99G0004 for more information.

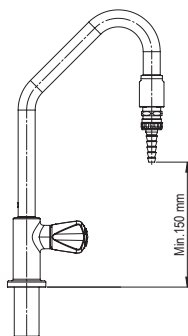
It is a condition of Approval of the XL range of Labtaps that the following information is given to our customers: "Supply shall be by gravity from a cistern by means of a distributing pipe which does not supply any other fitting at a lower level" (IRN 105) (Byelaws 22 and 25)

All water systems should be thoroughly flushed before use.

All fittings are delivered with easy-to-mount anti-rotational mounting kit.

#### AUK3 regulations

Check with local water board their requirements regarding AUK3 back flow prevention regulations. It is required that a minimum of 150 mm be maintained between the lowest point of the air aperture of the DC device and free discharge of spillover level.



#### Testing

All fittings are tested and inspected before dispatch.

Maximum design working pressure is 1000 kPa (10 bar).

The maximum installation test pressure is 1000 kPa (10 bar).

#### Single Water Fittings

All swanneck fittings are supplied with a fixed plastic nozzle with exception for those with pipe interrupter, which are delivered with a removable hose nozzle.

All fittings coded according to EN13792-2002 (please refer to page 3 for media coding).

#### Mixer Fittings

A balanced tank storage water supply for BOTH hot and cold services is required for all non-divided flow mixer fittings.

Direct mains cold water supply and non-pressurized hot water tanks may ONLY be used with the XL36155 and the XL36154 (divided flow) mixer.

NOTE: Maximum Test Pressure: 1000 kPa (10 bar).

Maximum Working Pressure: 1000 kPa (10 bar).

## Technical information

### Lift/turn fittings

#### SPECIFICATION

##### Outlet Connections:

Fixed serrated metal nozzles suitable for 8 mm to 13 mm ID rubber tubing.

##### Inlet Connections:

See page 25

##### Installation

Installation can be done either with flexible hoses or compression ring fittings.

Please request documents 99G0005 and 99G0004 for more information.

##### Construction:

Brass body.

##### Connection:

Fitting connection is a 1/4" BSP male threaded shank 65 mm long. The connection end of the shank is designed to fit 8 mm BS 27871 Table X tubing using a compression nut.

NOTE: The use of compression fittings, if used for domestic gas or LPG, should be in accordance with gas board regulations.

##### Seals:

Nitrile.

##### Testing

All fittings are tested and inspected before dispatch.

Maximum design Test Pressure: 1000 kPa (10 bar).

Maximum design Working Pressure: 700 kPa (7 bar).

### Drop lever fittings

#### SPECIFICATION

Outlet Connections: Fixed serrated nozzles suitable for 8 mm to 13 mm ID rubber hose.

##### Construction:

Fire safe plug cocks of brass constructed using grease suitable for Natural Gas and LPG.

##### Installation

Supply pressure should be in the range from 1.5 kPa to 5 kPa.

A qualified installer should be used. LPG supplies should be regulated locally in order to prevent pressure surges.

NOTE: The maximum possible pressure should never exceed 5 kPa.

##### Connection:

Fitting connection is a 1/4" BSP male threaded shank 65 mm long. The connection end of the shank is designed to fit 8 mm BS 27871 Table X tubing using a compression nut.

NOTE: The use of compression fittings, if used for domestic gas or LPG, should be in accordance with gas board regulations.

##### Testing

All drop lever gas cocks components are tested at 135 kPa before despatch (based on BS 1552). Finally assembled drop lever gas cocks are tested at 13,8 kPa.

Installation test pressures on systems incorporating drop lever gas cocks should NOT EXCEED 13,8 kPa otherwise the lubricant will be blown out and the cocks may leak.

A competent Gas Engineer should always test Natural Gas installations.

Leakage should be checked using soap and water or trapped pressure drop over 15 minutes.

## - headworks

### 1977000

#### Water

#### Compress headwork

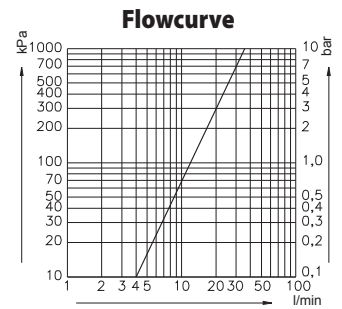
**Headwork for potable water.**  
 Open/closing function: 2 x 360°.  
 Maximum test pressure without function of the valve: 10 bar.  
 Temperature: Max. 90°C.  
 Leak rate: 15 mm<sup>3</sup>/sec. at 6 bar compressed air (differential pressure method).



#### Maximum working pressures:

kPa	bar	psi
1000	10	145

*Pressure in relation to atmospheric pressure.*



### 1976400 / 1976500

#### Water

#### Ceramic headwork

**Headwork used for wrist operated fittings for potable water.**

**1976400 - left turn closing**  
**1976500 - right turn closing**

Open/closing function: 90° (right or left hand).

Maximum test pressure without function of the valve: 10 bar.

Temperature: Max. 90°C.

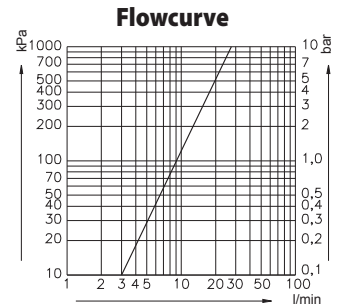
Leak rate: 15 mm<sup>3</sup>/sec. at 6 bar compressed air (differential pressure method).



#### Maximum working pressures:

kPa	bar	psi
1000	10	145

*Pressure in relation to atmospheric pressure.*



### 19152400 / 19152479

#### Special water

#### Diaphragm headwork

**For XL33-models: 19152400 (headwork only)**

**For other models: 19152479 (headwork and handle with media indication)**

**For special water:** distilled, deionized, filtered, reverse-osmosis, etc.

Open/closing function: 1.5 x 360°.

Maximum test pressure without function of the valve: 10 bar.

Temperature: Max. 90°C.

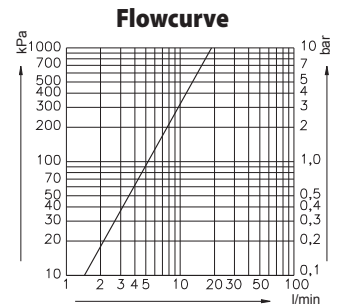
Leak rate: 15 mm<sup>3</sup>/sec. at 6 bar compressed air (differential pressure method).



#### Maximum working pressures:

kPa	bar	psi
1000	10	145

*Pressure in relation to atmospheric pressure.*



## - headworks

**02557300**

**Technical gases**

**Needle headwork**

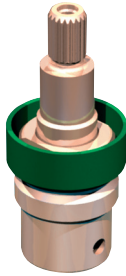
**Green indication ring:**

Headwork for non-toxic, non-corrosive, non-burning 2.0 gases (Air, Nitrogen, Carbon dioxide, Argon, Helium etc.). PVDF sealing.

Open/closing function: 3 x 360°.

Allowable pressure test after installation: 1.5 x max. working pressure without function of the valve.

Leak rate: 15 mm<sup>3</sup>/sec. at 6 bar compressed air (differential pressure method).

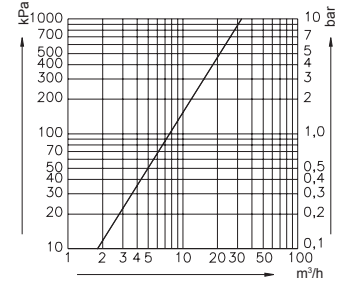


**Maximum working pressures:**

kPa	bar	psi
1600	16	232

*Pressure in relation to atmospheric pressure.*

**Flowcurve**



**19154400**

**Technical gases**

**Micro flow headwork**

Headwork for non-toxic, non-corrosive, non-burning 2.0 gases (Air, Nitrogen, Carbon dioxide, Argon, Helium etc.). PVDF sealing.

The micro flow headwork offers flow regulation characteristics where the flow of gas is close to zero.

Open/closing function: 7.5 x 360°.

Maximum test pressure without function of the valve:

1.5 x working pressure

Leak rate: 15 mm<sup>3</sup>/sec. at 6 bar compressed air (differential pressure method).

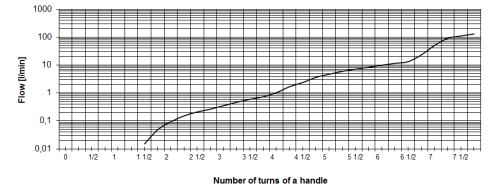


**Maximum working pressures:**

kPa	bar	psi
1600	16	232

*Pressure in relation to atmospheric pressure.*

**Flowcurve**



**Technical 4.0 gases (Oxygen)**

**Needle headwork**

*Not available as a spare part (for safety reasons).*

**Blue indication ring:**

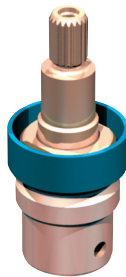
Needle headwork for non-toxic, non-corrosive, non-burning 4.0 gases (Air, Nitrogen, Carbon Dioxide, Argon, Helium etc.) and **Oxygen**

PVDF sealing.

Open/closing function: 3 x 360°.

Allowable pressure test after installation: 1.5 x max. working pressure without function of the valve.

Leak rate: 15 mm<sup>3</sup>/sec. at 6 bar compressed air (differential pressure method).

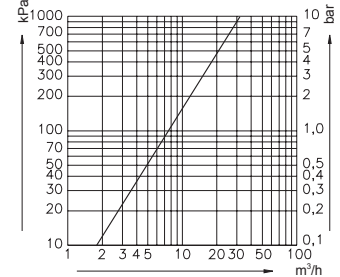


**Maximum working pressures:**

kPa	bar	psi
1600	16	232

*Pressure in relation to atmospheric pressure.*

**Flowcurve**



**02556300**

**Vacuum**

**High flow headwork**

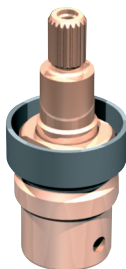
**Grey indication ring:**

Standard headwork for vacuum. Can be also used for other media when there is need for a higher flow.

Headwork function with PVDF sealing.

Open/closing function: 1.5 x 360° with high flow capacity.

Leak rate: 15 mm<sup>3</sup>/sec. at 6 bar compressed air (differential pressure method).

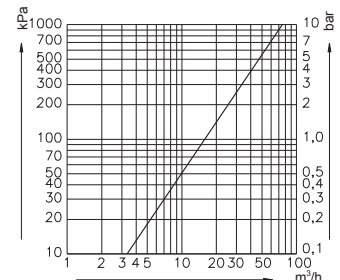


**Working pressures:**

kPa	bar	psi
1x10 <sup>-4</sup>	1x10 <sup>-6</sup>	1.47x10 <sup>-4</sup>

*Absolute pressure.*

**Flowcurve**



## - headworks

### Burning gas

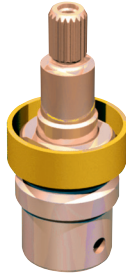
Not available as a spare part (for safety reasons).

Burning gases (Natural gas, Propane, Butane, Acetylene).

3 x 360° open/closing function.

Allowable pressure test after installation: 1.5 x max. working pressure without function of the valve.

Leak rate: 15 mm<sup>3</sup>/sec. at 6 bar compressed air (differential pressure method).



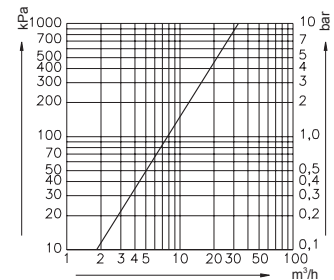
#### Maximum working pressures:

kPa	bar	psi
700	7	100

Pressure in relation to atmospheric pressure.

### Needle headwork

#### Flowcurve



### Burning gas

Valves for burning gases with "lift/turn" safety handles.

The valves are based on a BALLOFIX® ball valve.

Opening/closing function 90° lift/turn.



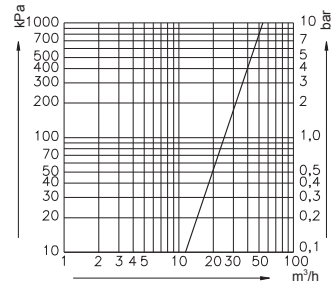
#### Maximum working pressures:

kPa	bar	psi
700	7	100

Pressure in relation to atmospheric pressure.

### "Lift/turn" ball valve

#### Flowcurve



The valves for burning gases can be used for natural, town and low pressure bottle gases as well as vacuum and compressed air.

Allowable pressure test after installation: 1.5 x max. working pressure without function of the valve.

### School gas

Maximum test pressure without function of the valve: 13,8 kPa / 2 psi.

Opening/closing function 90°.



#### Maximum working pressures:

kPa	bar	psi
5	0,05	0,73

Pressure in relation to atmospheric pressure.

### Drop lever

#### Flowcurve

