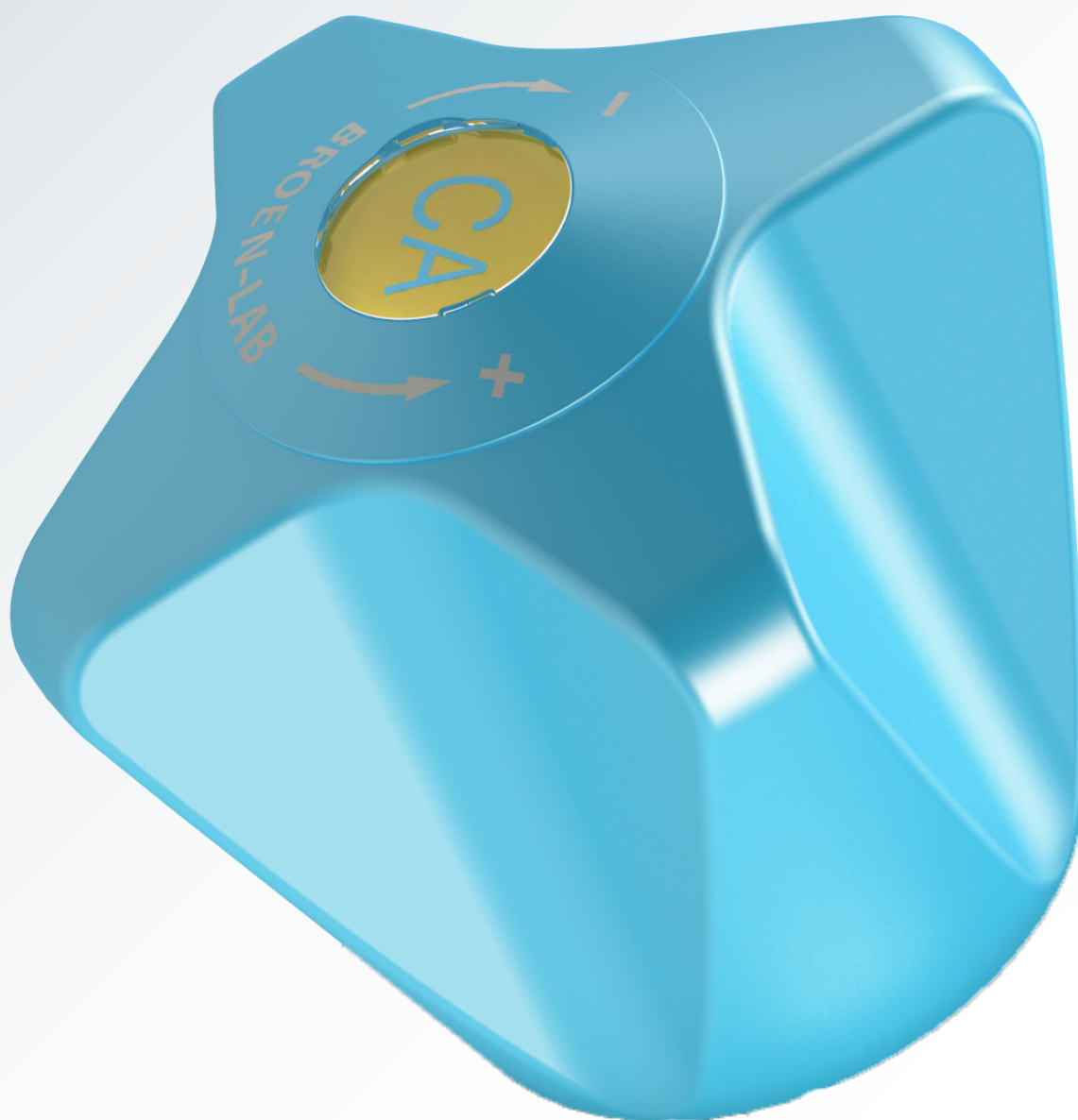


**BROEN-LAB
UNIFLEX™
FITTINGS FOR
NON-BURNING
2.0 GASES /
VACUUM**



BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

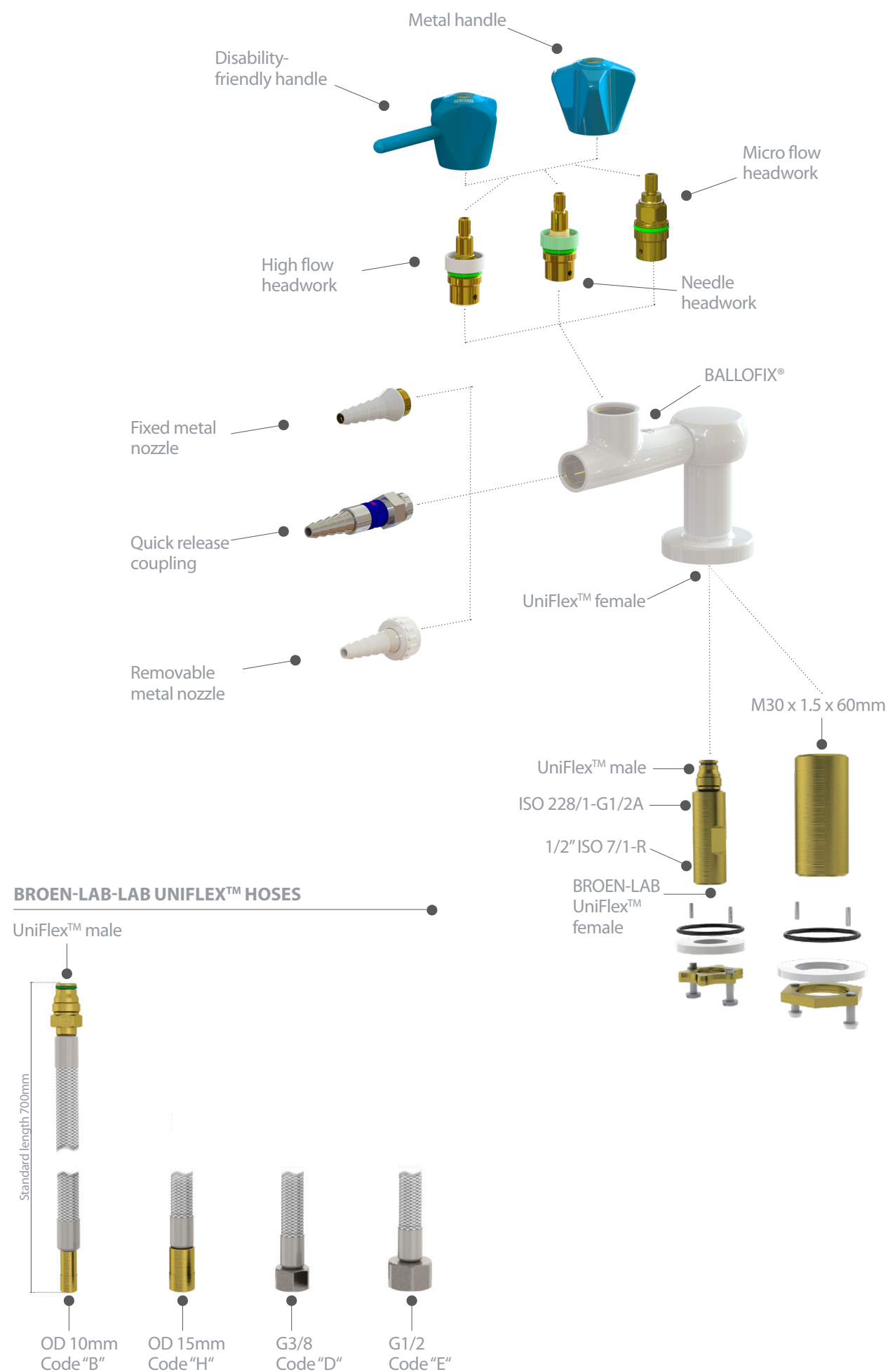
BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

Metal handle

BROEN-LAB

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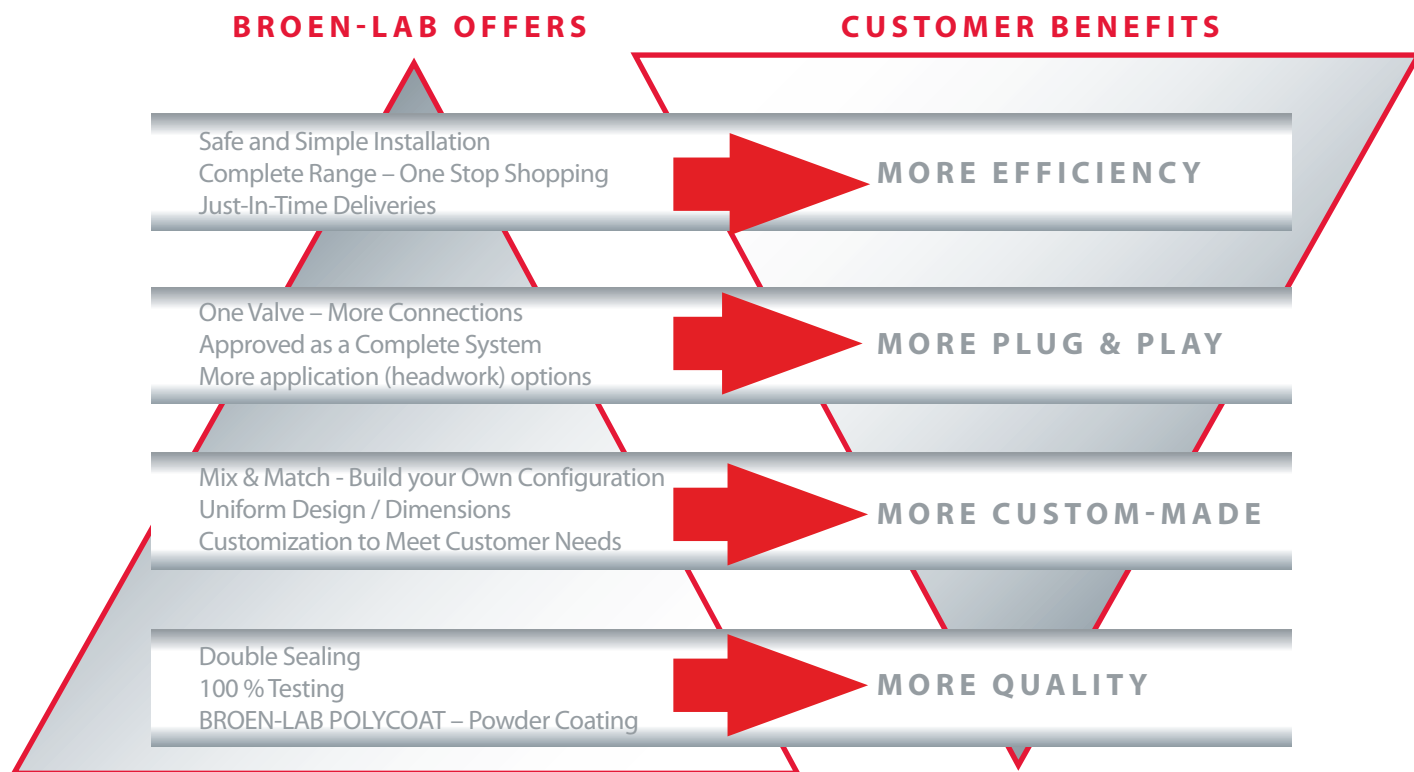
PRODUCT OVERVIEW



THIS IS BROEN-LAB UNIFLEX™ PREMIUM

BROEN-LAB UniFlex™ PREMIUM line offers a very high quality and durability combined with the complete program, which adds up to low LCC (Life Cycle Costs). Our PREMIUM line takes the standards in the market to a higher level.

BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM



BROEN-LAB UniFlex™ PREMIUM fittings for non-burning 2.0 gases/vacuum are designed for laboratory use. The operation and the configuration of the fittings are highly adapted to the requirements of a modern laboratory. The fittings are surface treated with BROEN-LAB POLYCOAT powder coating, which is highly resistant to most chemicals, UV fading and heat (for more information please refer to "BROEN-LAB POLYCOAT" brochure).

All BROEN-LAB UniFlex™ PREMIUM fittings are delivered with a powder coated metal handle with media indication according to EN13792. As an option it is possible to get fittings with disability-friendly handle for easier operation.

BROEN-LAB UniFlex™ PREMIUM fittings for non-burning gases/vacuum incorporate a BALLOFIX® ball valve, which offers a number of advantages such as local shut-off (e.g. in connection with product service) and pre-setting for experimental purposes. As standard fittings are delivered with a fixed metal nozzle (can be removed with Allen key if needed) or a quick release coupling (hexagon coded) for easy and immediate connection and safe disconnection.

THIS IS BROEN-LAB UNIFLEX™

BROEN-LAB UniFlex™ is a unique and patented connection, which allows customers to choose from various connection methods, such as hoses, Cu, PEX of Stainless Steel pipes, without changing the valve itself. It provides unique flexibility, not only for the installer, but also for the end-user. Due to the flexibility of the system, the quick installation and savings on fittings, this system offers lower TIC (Total Installed Costs).

WHAT IS NON-BURNING 2.0 GAS?

Non-burning 2.0 gases are typical industrial and technical gases that are 99% clean.

BROEN-LAB UniFlex™ fittings for non-burning gases can be used for non-toxic, non-corrosive, non-burning 2.0 gases, such as Compressed Air, Nitrogen, Carbon Dioxide, Argon, etc.

These gases are typically commercially manufactured and sold to be used in applications within:

- laboratory and instrumentation
- chemical industry
- cutting and welding
- food processing, etc.

WHAT IS VACUUM?

Vacuum is a volume of space that is essentially empty of matter, such that its gaseous pressure is much less than atmospheric pressure. Vacuum is usually measured by its absolute pressure and is divided into several types (according to EN 13792):

- Low Vacuum: 1000 to 1mbar
- Fine Vacuum : 1 to 10^{-3} mbar
- High Vacuum: 10^{-3} to 10^{-7} mbar

Laboratory applications usually require use of suction. Suction is a flow of media into a partial vacuum, or region with low pressure. It is being used to clear surfaces, containers or tubing of residues or other materials.

OUR HEADWORKS

BROEN-LAB UniFlex™ PREMIUM fittings for non-burning 2.0 gases can be delivered with 3 different types of headworks depending on the requirements set by applications with regards to regulation of media flow.



As a standard all BROEN-LAB UniFlex™ PREMIUM fittings for non-burning 2.0 gases are delivered with a needle headwork that allows fine regulation of media flow and the valve is fully opened after 3 x 360° rotations of a handle.

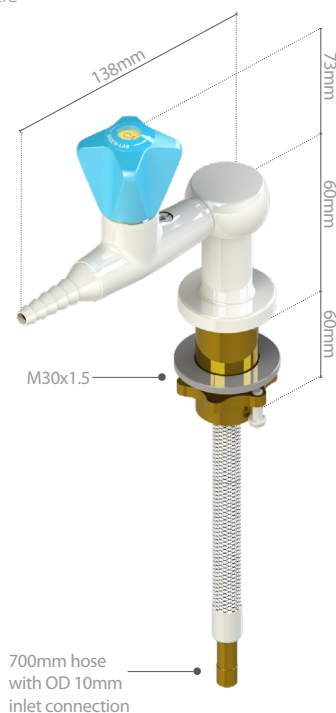
As a standard all BROEN-LAB UniFlex™ PREMIUM fittings for vacuum are delivered with a high flow headwork. If there is a need for high flow of other media than vacuum, or a valve should function as a shut-off, then it is possible to get a fitting with a high flow headwork for 2.0 non-burning gases.

In cases where media flow (2.0 non-burning gases) is close to zero and when a microscopic flow rate is required then it is an option to choose a micro flow headwork, which provides a very fine regulation of media flow.

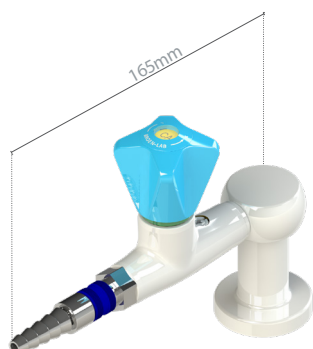
For more information about BROEN-LAB headworks and technical details please refer to pages 24-25 in this catalogue.

TURRET FITTINGS

With fixed nozzle



With quick release coupling



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8)

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function: 3 x 360°

Max. working pressure: 16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function: 1.5 x 360°

Working pressure: -1 bar to 16 bar /
-14.5 psi to 232 psi

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:











- different media
- removable hose nozzle with union nut
- disability-friendly handle (single valve only)
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- alternative hose inlet connection / without a hose
- other inlet options (type, length)



For further information and mounting instructions please refer to www.BROEN-LAB.com or contact your local BROEN-LAB representative.

TURRET FITTINGS


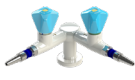

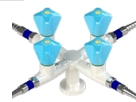






Model: with fixed nozzle

					
Media		1-valve	2-valve 90°	2-valve 180°	4-valve
 Compressed air		2532 023 1021-52B	2532 031 1021-52B	2532 027 1021-52B	2532 035 1021-52B
 Nitrogen		2532 023 1023-52B	2532 031 1023-52B	2532 027 1023-52B	2532 035 1023-52B
 Carbon dioxide		2532 023 1024-52B	2532 031 1024-52B	2532 027 1024-52B	2532 035 1024-52B
 Argon		2532 023 1025-52B	2532 031 1025-52B	2532 027 1025-52B	2532 035 1025-52B
 Helium		2532 023 1026-52B	2532 031 1026-52B	2532 027 1026-52B	2532 035 1026-52B
 Low vacuum (1000 to 1 mbar)		2532 024 1028-52B	2532 032 1028-52B	2532 028 1028-52B	2532 036 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

For other options please refer to page 26 or contact your local BROEN-LAB representative.

Model: with quick release coupling

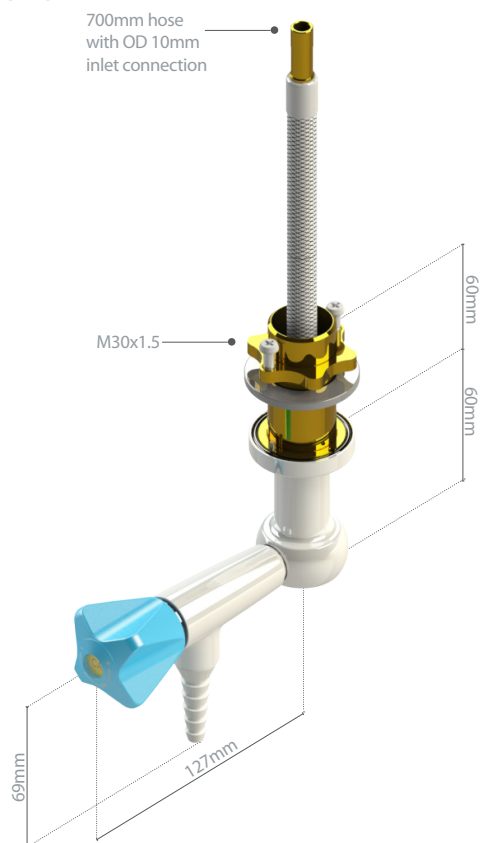
					
Media		1-valve	2-valve 90°	2-valve 180°	4-valve
 Compressed air		2532 056 1021-52B	2532 079 1021-52B	2532 081 1021-52B	2532 083 1021-52B
 Nitrogen		2532 056 1023-52B	2532 079 1023-52B	2532 081 1023-52B	2532 083 1023-52B
 Carbon dioxide		2532 056 1024-52B	2532 079 1024-52B	2532 081 1024-52B	2532 083 1024-52B
 Argon		2532 056 1025-52B	2532 079 1025-52B	2532 081 1025-52B	2532 083 1025-52B
 Helium		2532 056 1026-52B	2532 079 1026-52B	2532 081 1026-52B	2532 083 1026-52B
 Low vacuum (1000 to 1 mbar)		2532 057 1028-52B	2532 080 1028-52B	2532 082 1028-52B	2532 084 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

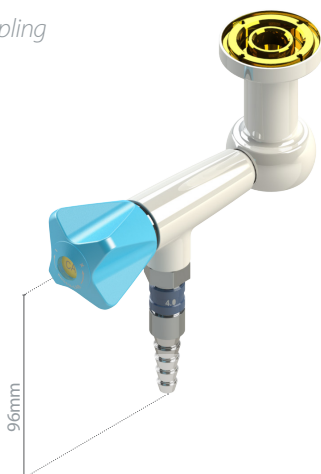
For other options please refer to page 26 or contact your local BROEN-LAB representative.

SUSPENDED FITTINGS WITH 90° VALVES

With fixed nozzle



With quick release coupling



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8)

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function:
3 x 360°

Max. working pressure:
16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function:
1.5 x 360°

Working pressure:
-1 bar to 16 bar /
-14.5 psi to 232 psi

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable hose nozzle with union nut
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- alternative hose inlet connection / without a hose
- other inlet options (type, length)



For further information and mounting instructions please refer to www.BROEN-LAB.com or contact your local BROEN-LAB representative.

SUSPENDED FITTINGS WITH 90° VALVES

Model: with fixed nozzle

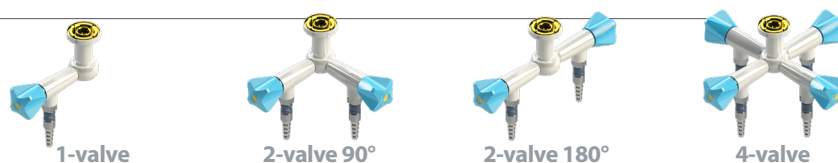


Media	1-valve	2-valve 90°	2-valve 180°	4-valve
Compressed air	2530 090 1021-52B	2530 092 1021-52B	2530 037 1021-52B	2530 094 1021-52B
Nitrogen	2530 090 1023-52B	2530 092 1023-52B	2530 037 1023-52B	2530 094 1023-52B
Carbon dioxide	2530 090 1024-52B	2530 092 1024-52B	2530 037 1024-52B	2530 094 1024-52B
Argon	2530 090 1025-52B	2530 092 1025-52B	2530 037 1025-52B	2530 094 1025-52B
Helium	2530 090 1026-52B	2530 092 1026-52B	2530 037 1026-52B	2530 094 1026-52B
Low vacuum (1000 to 1 mbar)	2530 091 1028-52B	2530 093 1028-52B	2530 039 1028-52B	2530 095 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

For other options please refer to page 26 or contact your local BROEN-LAB representative.

Model: with quick release coupling



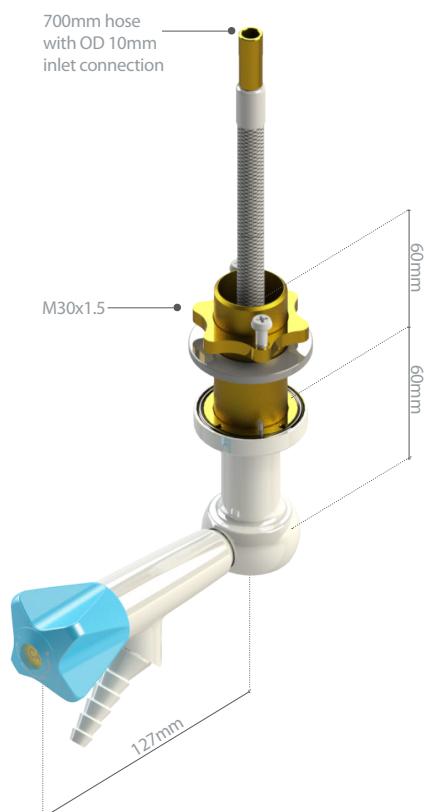
Media	1-valve	2-valve 90°	2-valve 180°	4-valve
Compressed air	2530 096 1021-52B	2530 098 1021-52B	2530 100 1021-52B	2530 102 1021-52B
Nitrogen	2530 096 1023-52B	2530 098 1023-52B	2530 100 1023-52B	2530 102 1023-52B
Carbon dioxide	2530 096 1024-52B	2530 098 1024-52B	2530 100 1024-52B	2530 102 1024-52B
Argon	2530 096 1025-52B	2530 098 1025-52B	2530 100 1025-52B	2530 102 1025-52B
Helium	2530 096 1026-52B	2530 098 1026-52B	2530 100 1026-52B	2530 102 1026-52B
Low vacuum (1000 to 1 mbar)	2530 097 1028-52B	2530 099 1028-52B	2530 101 1028-52B	2530 103 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

For other options please refer to page 26 or contact your local BROEN-LAB representative.

SUSPENDED FITTINGS WITH 45° VALVES

With fixed nozzle



With quick release coupling



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8)

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function:
3 x 360°

Max. working pressure:
16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function:
1.5 x 360°

Working pressure:
-1 bar to 16 bar /
-14.5 psi to 232 psi

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:











- different media
- removable hose nozzle with union nut
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- alternative hose inlet connection / without a hose
- other inlet options (type, length)



For further information and mounting instructions please refer to www.BROEN-LAB.com or contact your local BROEN-LAB representative.

SUSPENDED FITTINGS WITH 45° VALVES











Model: with fixed nozzle

				
Media	1-valve	2-valve 90°	2-valve 180°	4-valve
 Compressed air	2530 104 1021-52B	2530 106 1021-52B	2530 044 1021-52B	2530 108 1021-52B
 Nitrogen	2530 104 1023-52B	2530 106 1023-52B	2530 044 1023-52B	2530 108 1023-52B
 Carbon dioxide	2530 104 1024-52B	2530 106 1024-52B	2530 044 1024-52B	2530 108 1024-52B
 Argon	2530 104 1025-52B	2530 106 1025-52B	2530 044 1025-52B	2530 108 1025-52B
 Helium	2530 104 1026-52B	2530 106 1026-52B	2530 044 1026-52B	2530 108 1026-52B
 Low vacuum (1000 to 1 mbar)	2530 105 1028-52B	2530 107 1028-52B	2530 045 1028-52B	2530 109 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

For other options please refer to page 26 or contact your local BROEN-LAB representative.

Model: with quick release coupling

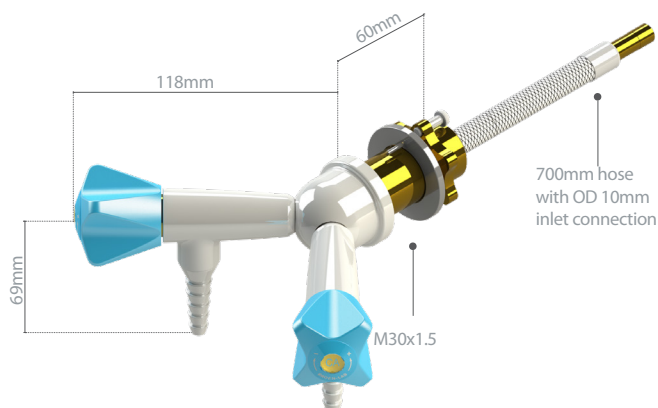
				
Media	1-valve	2-valve 90°	2-valve 180°	4-valve
 Compressed air	2530 110 1021-52B	2530 112 1021-52B	2530 114 1021-52B	2530 116 1021-52B
 Nitrogen	2530 110 1023-52B	2530 112 1023-52B	2530 114 1023-52B	2530 116 1023-52B
 Carbon dioxide	2530 110 1024-52B	2530 112 1024-52B	2530 114 1024-52B	2530 116 1024-52B
 Argon	2530 110 1025-52B	2530 112 1025-52B	2530 114 1025-52B	2530 116 1025-52B
 Helium	2530 110 1026-52B	2530 112 1026-52B	2530 114 1026-52B	2530 116 1026-52B
 Low vacuum (1000 to 1 mbar)	2530 111 1028-52B	2530 113 1028-52B	2530 115 1028-52B	2530 117 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

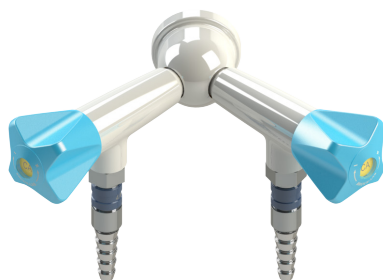
For other options please refer to page 26 or contact your local BROEN-LAB representative.

DOUBLE WALL FITTINGS WITH 90° VALVES

With fixed nozzle



With quick release coupling



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8)

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function: 3 x 360°

Max. working pressure: 16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function: 1.5 x 360°

Working pressure: -1 bar to 16 bar / -14.5 psi to 232 psi

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based







ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable hose nozzle with union nut
- disability-friendly handle
- micro flow headwork (for technical gases)
- high flow headwork (for technical gases)
- alternative hose inlet connection / without a hose
- other inlet options (type, length)

Models

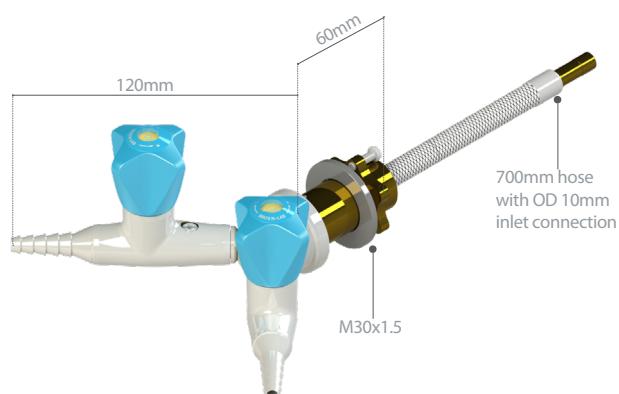
Media	with fixed nozzle	with quick release coupling
 Compressed air	2530 118 1021-52B	2530 120 1021-52B
 Nitrogen	2530 118 1023-52B	2530 120 1023-52B
 Carbon dioxide	2530 118 1024-52B	2530 120 1024-52B
 Argon	2530 118 1025-52B	2530 120 1025-52B
 Helium	2530 118 1026-52B	2530 120 1026-52B
 Low vacuum (1000 to 1 mbar)	2530 119 1028-52B	2530 121 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

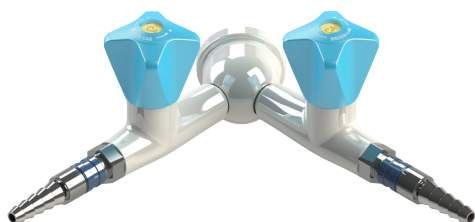
For other options please refer to page 26 or contact your local BROEN-LAB representative.

DOUBLE WALL FITTINGS WITH STRAIGHT VALVES

With fixed nozzle



With quick release coupling



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8)

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function: 3 x 360°

Max. working pressure: 16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function: 1.5 x 360°

Working pressure: -1 bar to 16 bar / -14.5 psi to 232 psi

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable hose nozzle with union nut
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- alternative hose inlet connection / without a hose
- other inlet options (type, length)

Models

Media



Compressed air

with fixed nozzle

2532 062 1021-52B

with quick release coupling

2532 085 1021-52B



Nitrogen

2532 062 1023-52B

2532 085 1023-52B



Carbon dioxide

2532 062 1024-52B

2532 085 1024-52B



Argon

2532 062 1025-52B

2532 085 1025-52B



Helium

2532 062 1026-52B

2532 085 1026-52B



Low vacuum (1000 to 1 mbar)

2532 061 1028-52B

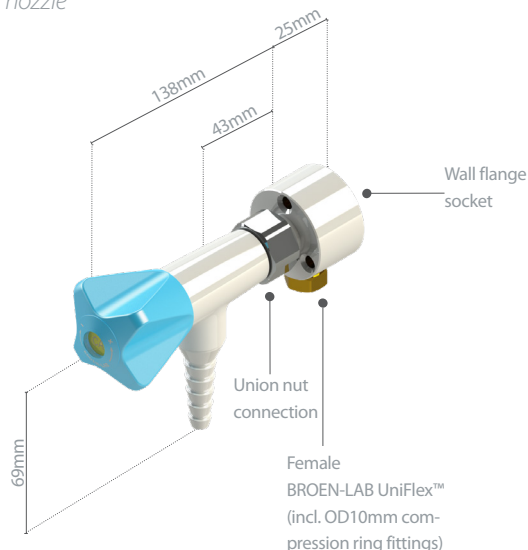
2532 086 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

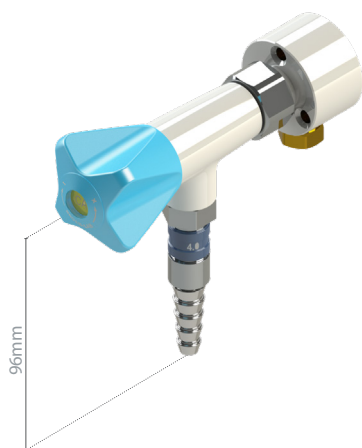
For other options please refer to page 26 or contact your local BROEN-LAB representative.

WALL MOUNTED FITTINGS WITH 90° VALVES FOR EXPOSED PIPING

With fixed nozzle



With quick release coupling



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8)

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function:
3 x 360°

Max. working pressure:
16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function:
1.5 x 360°

Working pressure:
-1 bar to 16 bar /
-14.5 psi to 232 psi

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable hose nozzle with union nut
- disability-friendly handle
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- wall flange socket for built-in installation

Models



with fixed nozzle



with quick release coupling

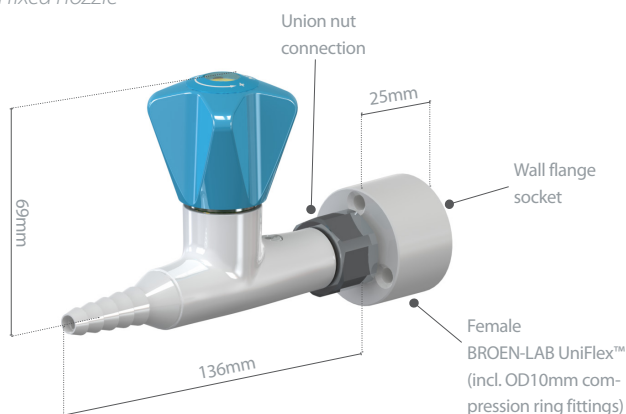
Media		with fixed nozzle	with quick release coupling
Compressed air		2530 128 1021-T	2530 134 1021-T
Nitrogen		2530 128 1023-T	2530 134 1023-T
Carbon dioxide		2530 128 1024-T	2530 134 1024-T
Argon		2530 128 1025-T	2530 134 1025-T
Helium		2530 128 1026-T	2530 134 1026-T
Low vacuum (1000 to 1 mbar)		2530 069 1028-T	2530 135 1028-T

Delivered with wall flange socket and compression ring fitting for OD10mm Cu-pipe

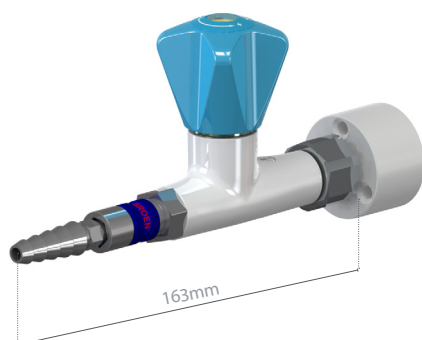
For other options please refer to pages 20-21 or contact your local BROEN-LAB representative.

WALL MOUNTED FITTINGS WITH STRAIGHT VALVES FOR EXPOSED PIPING

With fixed nozzle



With quick release coupling



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8)

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function:
3 x 360°

Max. working pressure:
16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function:
1.5 x 360°

Working pressure:
-1 bar to 16 bar /
-14.5 psi to 232 psi

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

Lubricant: Perfluoropolyether based







ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

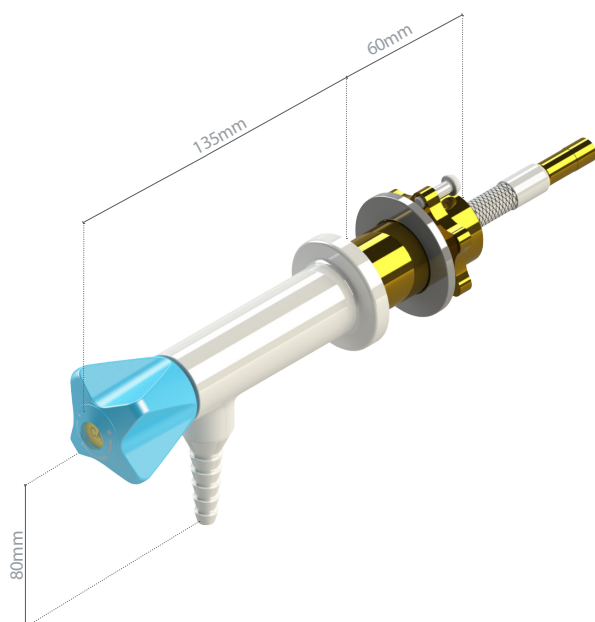
- different media
- removable hose nozzle with union nut
- disability-friendly handle
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- wall flange socket for built-in installation

Models

Media	with fixed nozzle	with quick release coupling
 Compressed air	2532 090 1021-T	2532 092 1021-T
 Nitrogen	2532 090 1023-T	2532 092 1023-T
 Carbon dioxide	2532 090 1024-T	2532 092 1024-T
 Argon	2532 090 1025-T	2532 092 1025-T
 Helium	2532 090 1026-T	2532 092 1026-T
 Low vacuum (1000 to 1 mbar)	2532 074 1028-T	2532 093 1028-T

Delivered with wall flange socket and compression ring fitting for OD10mm Cu-pipe

For other options please refer to pages 20-21 or contact your local BROEN-LAB representative.



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8) or quick release coupling (hexagon coded)

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function:
3 x 360°

Max. working pressure:
16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function:
1.5 x 360°

Working pressure:
-1 bar to 16 bar /
-14.5 psi to 232 psi

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION







For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable hose nozzle with union nut
- disability-friendly handle
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- alternative hose inlet connection / without a hose
- other inlet options (type, length)

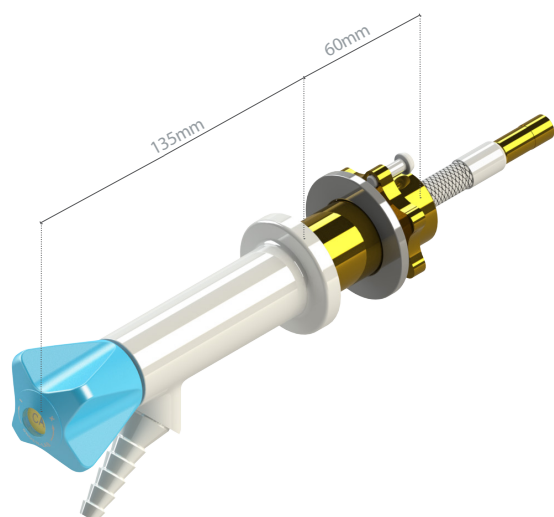
Models: 90° valve



Media	with fixed nozzle	with hexagon coded quick release coupling
 Compressed air	2530 299 1021-52B	2530 302 1021-52B
 Nitrogen	2530 299 1023-52B	2530 302 1023-52B
 Carbon dioxide	2530 299 1024-52B	2530 302 1024-52B
 Argon	2530 299 1025-52B	2530 302 1025-52B
 Helium	2530 299 1026-52B	2530 302 1026-52B
 Low vacuum (1000 to 1 mbar)	2530 300 1028-52B	2530 303 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

For other options please refer to page 26 or contact your local BROEN-LAB representative.



SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8) or quick release coupling (hexagon coded)

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function:
3 x 360°

Max. working pressure:
16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function:
1.5 x 360°

Working pressure:
-1 bar to 16 bar /
-14.5 psi to 232 psi

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION




For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable hose nozzle with union nut
- disability-friendly handle
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- alternative hose inlet connection / without a hose
- other inlet options (type, length)

Models: 45° valve



Media	with fixed nozzle	with hexagon coded quick release coupling
 Compressed air	2530 353 1021-52B	2530 355 1021-52B
 Nitrogen	2530 353 1023-52B	2530 355 1023-52B
 Carbon dioxide	2530 353 1024-52B	2530 355 1024-52B
 Argon	2530 353 1025-52B	2530 355 1025-52B
 Helium	2530 353 1026-52B	2530 355 1026-52B
 Low vacuum (1000 to 1 mbar)	2530 354 1028-52B	2530 356 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

For other options please refer to page 26 or contact your local BROEN-LAB representative.

SUSPENDED OR WALL MOUNTED STRAIGHT FITTINGS WITH LEAD-IN

SPECIFICATIONS

The fitting is delivered with an integrated BALLOFIX® ball valve.

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed (can be unscrewed with Allen key, thread: male G3/8) or quick release coupling (hexagon coded)

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

NON-BURNING 2.0 GASES

Headwork: Needle

Opening/closing function:
3 x 360°

Max. working pressure:
16 bar / 232 psi

VACUUM / HIGH FLOW

Headwork: High flow

Opening/closing function:
1.5 x 360°

Working pressure:
-1 bar to 16 bar /
-14.5 psi to 232 psi

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

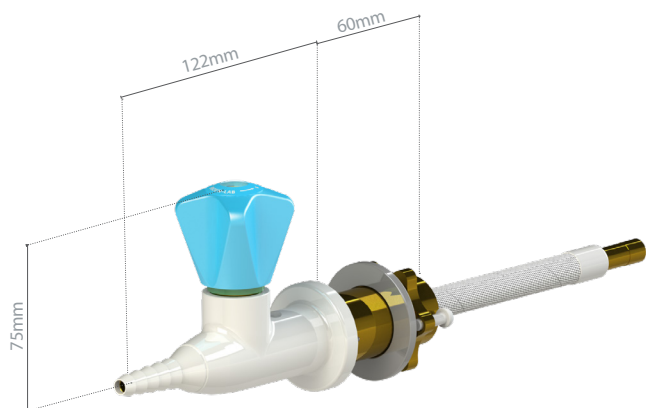
Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:







- different media
- removable hose nozzle with union nut
- micro flow headwork (for 2.0 non-burning gases)
- high flow headwork (for 2.0 non-burning gases)
- alternative hose inlet connection / without a hose
- other inlet options (type, length)



BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

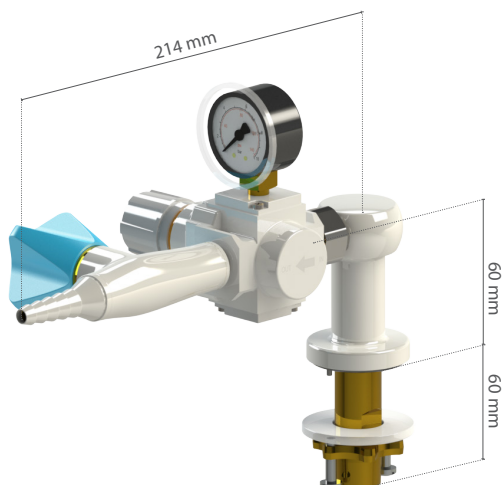
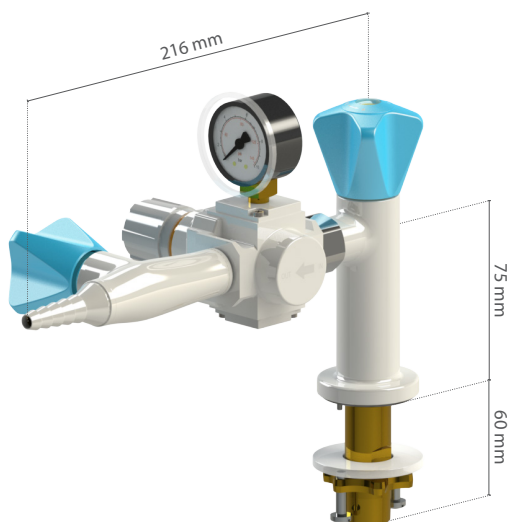
Models: straight valve



Media	with fixed nozzle	with hexagon coded quick release coupling
 Compressed air	2532 164 1021-52B	2532 185 1021-52B
 Nitrogen	2532 164 1023-52B	2532 185 1023-52B
 Carbon dioxide	2532 164 1024-52B	2532 185 1024-52B
 Argon	2532 164 1025-52B	2532 185 1025-52B
 Helium	2532 164 1026-52B	2532 185 1026-52B
 Low vacuum (1000 to 1 mbar)	2532 165 1028-52B	2532 193 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.

For other options please refer to page 26 or contact your local BROEN-LAB representative.



SPECIFICATIONS

Fittings with pressure regulator may only be used for the following non-burning 2.0 (99% pure) gases:

Compressed Air (CA), Nitrogen (N₂), Carbon Dioxide (CO₂) and Argon (Ar).

Not recommended for He.

May NOT be used for Oxygen!

Handle on valves: Metal, BROEN-LAB POLYCOAT powder coated

with media indication according to EN13792

Handle on regulator: Plastic

Max. working pressure: 10 bar / 145 psi

Allowable test pressure after installation:

1.5 x max working pressure without function of the valve

SHUT-OFF VALVE

NEEDLE VALVE

Headwork: High flow

Headwork: High flow

Opening/closing function:

1.5 x 360°

Opening/closing function:

3 x 360°

MATERIALS WITH MEDIA CONTACT

Metals: Brass, zinc

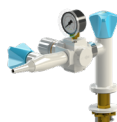
Plastics: PVDF, POM

Sealings:

- FKM (lubricated with perfluoropolyether based lubricant))

- NBR (lubricated with mineral oil based lubricant)

Model:



Shut-off & Regulator & Needle



Regulator & Needle

Item No.

2512 011 1021-14

2512 007 1021-14

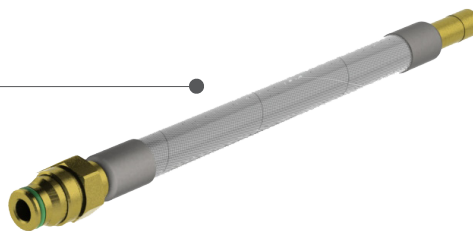
Fittings are delivered with 1/2" ISO 7/1-R and female BROEN-LAB UniFlex™ connection.

If you need another type of inlet please contact your sales representative.

The same item number can be applied to bench, wall or suspended models - just mention on the order how the fitting should be mounted. Fittings can be refitted on site as well.

BROEN-LAB-LAB UNIFLEX™ HOSES FOR NON-BURNING 2.0 GASES AND VACUUM

BROEN-LAB UniFlex™ flexible hoses



BROEN-LAB LAB offers BROEN-LAB UniFlex™ hoses as an easy way to make the installation in the laboratory where safety and efficiency are required. BROEN-LAB UniFlex™ hoses are the ideal solution where there is a higher requirement for flexibility. Installation with flexible hoses saves you time and labor - in other words reduced installation costs.

BROEN-LAB UniFlex™ hoses for non-burning 2.0 gases and vacuum are manufactured of soft cross-linked polyethylene (SPX). From the outside the hose is secured by a Stainless Steel braiding that ensures long service life and durability.

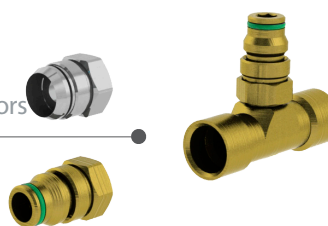
A wide range of fittings and lengths is available for BROEN-LAB UniFlex™ hoses enables customers to choose the perfect hose for their application.

Please request document No. 99G0005 for complete range of BROEN-LAB UniFlex™ hoses and technical specifications.

If you still prefer a standard way of installation with Cu, Stainless Steel, or PEX-pipes, BROEN-LAB LAB offers a wide range of connection fittings and adaptors for pipes of different dimensions.

Please request document No. 99G0004 for a complete range of BROEN-LAB UniFlex™ compression ring fittings.

BROEN-LAB UniFlex™ compression ring fittings and adaptors for Cu, Stainless Steel and PEX pipes





INLET CONNECTIONS

93 T XX XX XXXX

3/8" NPT Swivel connection (Code 61)



Male G1/4" fixed connection (Code 36)



Male G3/8" fixed connection (Code 32)



Male G1/2" fixed connection (Code 31)



3/8" NPT fixed connection (Code 34)



3/8" NPT Swivel connection (Code 35)



90° G3/8" Union nut connection (Code 46)



Female G3/8" union nut connection (Code 41)



Female G1/2" union nut connection (Code 40)



G1/2" 90° union nut connection (Code 45)



OD10mm connection for compression fittings (Code 10)



OD12mm connection for compression fittings (Code 12)



OD1/2" connection for compression fittings (Code 13)



OD15mm connection for compression fittings (Code 15)



OD15mm connection for press fittings (Code 65)



Straight BROEN-LAB UniFlex™ connection with FKM O-ring (Code 20)



45° BROEN-LAB UniFlex™ connection with FKM O-ring (Code 25)



90° BROEN-LAB UniFlex™ connection with FKM O-ring (Code 30)



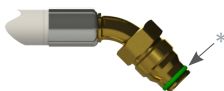
OUTLET CONNECTIONS

93 T XX XX XXXX

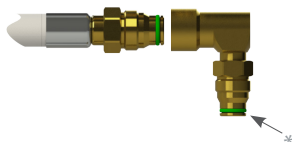
Straight BROEN-LAB UniFlex™ connection with FKM O-ring (Code 20)



45° BROEN-LAB UniFlex™ connection with FKM O-ring (Code 25)



90° BROEN-LAB UniFlex™ connection with FKM O-ring (Code 30)

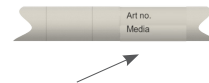


*All O-rings are lubricated with perfluoropolyether based lubricant

HOSE

93 T XX XX XXXX

SPX hose with braiding in stainless steel



Marking for technical gases with Part no. and Media indication

HOSE LENGTHS

Definition of length (L)



Definition of length (L)



If 45° and 90° elbows occur on the same hose, it will as default be mounted in U-form

*Standard lengths of hoses (L):

0500 = 500mm

0700 = 700mm

1000 = 1000mm

1200 = 1200mm

1500 = 1500mm

2000 = 2000mm

2500 = 2500mm

3000 = 3000mm

Length tolerance of hoses:

L = ≤400mm (-0, +10mm)

L = 401mm to 1000mm (-0, +20mm)

L = >1000mm (-0, +30mm)

SPECIFICATIONS

Inner hose material: SPX (soft PEX)

Braiding: Stainless steel with one green stripe

Materials with media contact: PEX, brass, FKM and perfluoropolyether based lubricant

Inside diameter: 8.2mm

Outside diameter: 12mm

Max. working pressure: 16 bar

Max. working temperature: 90°C

Bending radius (inner): ≥ 40mm

Min. length with connections: 160mm

EXAMPLE OF HOSE CONFIGURATION

1200mm hose with OD 12mm inlet connection and straight UniFlex™ outlet connection



93T12201200

* Other lengths are available on request

HEADWORKS

NEEDLE HEADWORK

SPECIFICATIONS

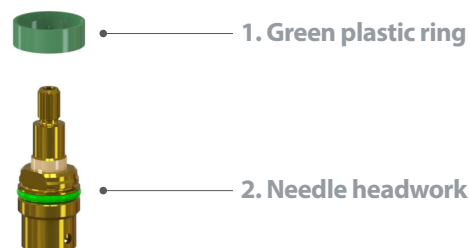
BROEN-LAB UniFlex™ fittings for non-burning 2.0 gases are as a standard delivered with needle headwork for fine regulation of media flow.

Opening/closing function: 3 x 360° turn

Media: Non-burning 2.0 (99% clean) gases

Max. working pressure: 16 bar / 232 psi

Test pressure: 1.5 x working pressure



MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

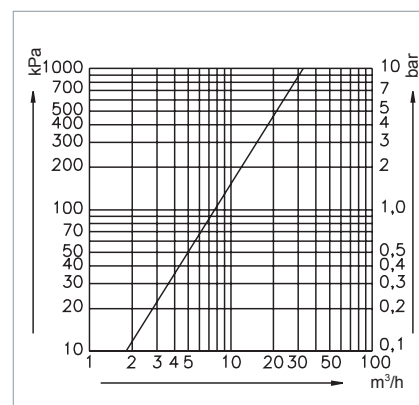
1. Green plastic ring

No. 0255035-5168

2. Needle headwork

No. 02557300

FLOW CHART



HIGH FLOW HEADWORK

SPECIFICATIONS

BROEN-LAB UniFlex™ fittings for vacuum are as a standard delivered with a high flow headwork. This headwork ensures high flow of media and can also be used for other non-burning 2.0 gases.

Opening/closing function: 1.5 x 360° turn

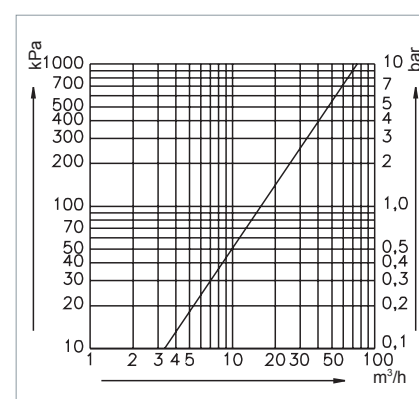
Media: Vacuum and non-burning 2.0 (99% clean) gases

Working pressure: -1 to 16 bar / -14.5 to 232 psi

Test pressure: 1.5 x working pressure



FLOW CHART



MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

1. Grey plastic ring

No. 0255035-2696

2. High flow headwork

No. 02556300

HEADWORKS

MICRO FLOW HEADWORK

SPECIFICATIONS

BROEN-LAB Micro flow headwork ensures very fine regulation of media where flow of gas is close to zero and microscopic flow rates are required.

Opening/closing function: 7.5 x 360° turn

Media: Non-burning 2.0 (99% clean) gases

Max. working pressure: 16 bar / 232 psi

Test pressure: 1.5 x working pressure



Micro flow headwork

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

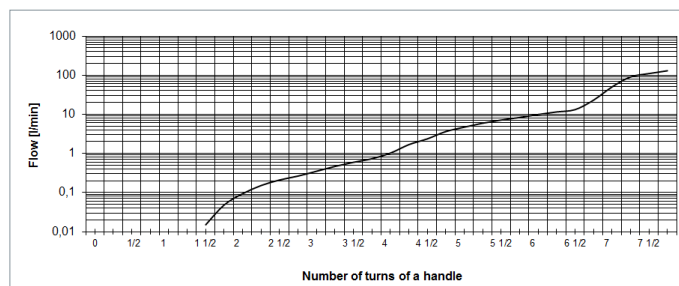
Lubricant: Perfluoropolyether based

ORDERING INFORMATION

Micro flow headwork

No. 19154400

FLOW CHART



1/4-TURN HEADWORK

SPECIFICATIONS

BROEN-LAB LAB UniFlex™ PREMIUM fittings for non-burning 2.0 gases and vacuum can also be delivered with a 1/4-turn headwork (also recommended for disability friendly handle)

Opening/closing function: 90° turn

Media: Vacuum and non-burning 2.0 (99% clean) gases

Working pressure: -1 to 8 bar / -14.5 to 116 psi

Test pressure: 1.5 x working pressure



1/4-turn headwork

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

1/4-turn headwork

No. 19174100



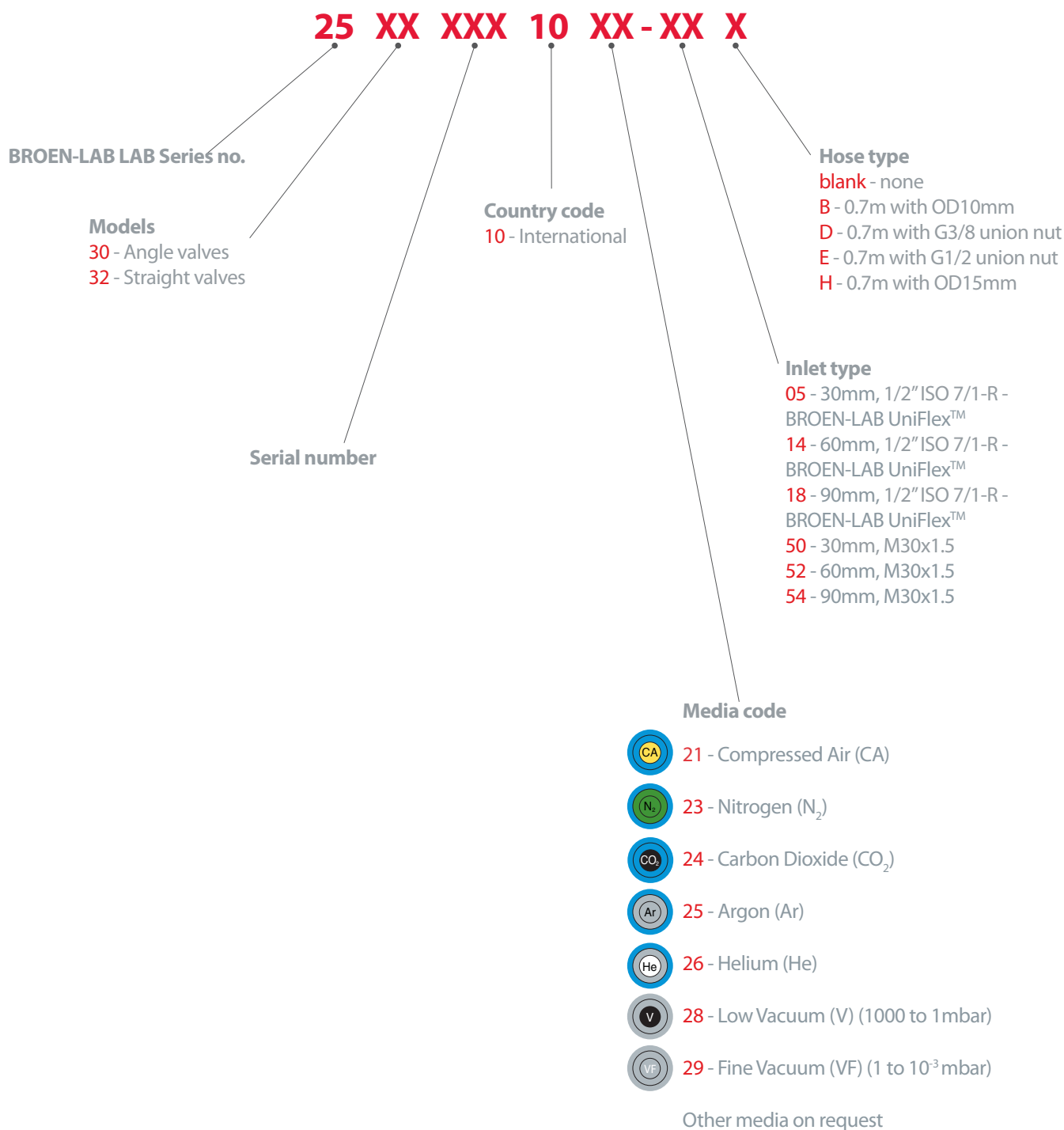
BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

Illustration	Description	BROEN-LAB item No.
	Adaptor for removable metal nozzle	2539 043 1021
	Removable metal nozzle	2539 008 1021
	Fixed metal nozzle	2539 042 1021
	Quick release coupling (hexagon coded)	19 632 00
	Pressure regulator	15 730 009
	Mounting set for G1/2 connection Mounting set for M30x1.5 connection	19 141 000 19 190 000
	G1/2 inlet with female BROEN-LAB UniFlex™ connection (incl. O-ring) L=30mm L=60mm L=90mm	15 504 33T 15 504 12T 15 504 46T
	Threaded inlet pipe M30x1,5 L=30mm L=60mm L=90mm	19 190 03 19 190 02 19 190 04
	Wall flange socket (for exposed piping)	02 101 30G
	Wall flange socket (for built-in installation)	02 101 31
	Cover flange for 02 101 31	1492304G
	Metal handle with media indication according to EN 13792	191601491021 (CA) 191601491023 (N ₂) 191601491024 (CO ₂) 191601491025 (Ar) 191601491026 (He) 191601491028 (V) 191601491029 (VF)

ORDERING INFORMATION

BROEN-LAB UNIFLEX™ FITTINGS

Generally, item number for BROEN-LAB UniFlex fittings has the following structure:



For installation with Cu- and Stainless Steel BROEN-LAB offers a wide range of connection fittings and adapters for pipes of different dimensions. Please request document No. 99G0004 for a complete range of BROEN-LAB UniFlex™ compression ring fittings.

NOTES

BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

BROEN-LAB develops, manufactures and sells Laboratory Fittings, Emergency Shower Systems and Eye Wash Systems into a broad spectrum of laboratories and industrial locations; sectors include Pharmaceutical, Food&Beverage and Academia. Our expertise and product quality ensure optimal solutions compliant to all relevant international norms setting new standards in risk mitigation in modern research and development facilities.

BROEN-LAB offer solutions that ensure the functionality, compliance, hygiene, durability and safety are of the highest priority. For over 50 years our products have been integrated into a wide variety of workplaces, laboratories, hospitals and industrial locations, with features that are assessed and designed to be flexible, durable and compliant offering a broad range of options tailored to each location. This inherent design integrity provides confidence in the solution adopted wherever in the world these are applied.

BROEN-LAB is a collaboration partner in the design and layout of your next laboratory and it's integrated safety solutions.

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BROEN-LAB A/S ISO 9001 certification

In September 1991 BROEN-LAB A/S was certified according to ISO 9001 as one of the first Danish companies. The certification was carried out by Bureau Veritas, Denmark, for our Danish site in Assens. The quality management system of BROEN-LAB A/S now complies with detailed specifications laid down by the internationally acknowledged EN ISO 9001:2015. This certification will further contribute to reputation for quality and reliability of BROEN-LAB A/S.

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