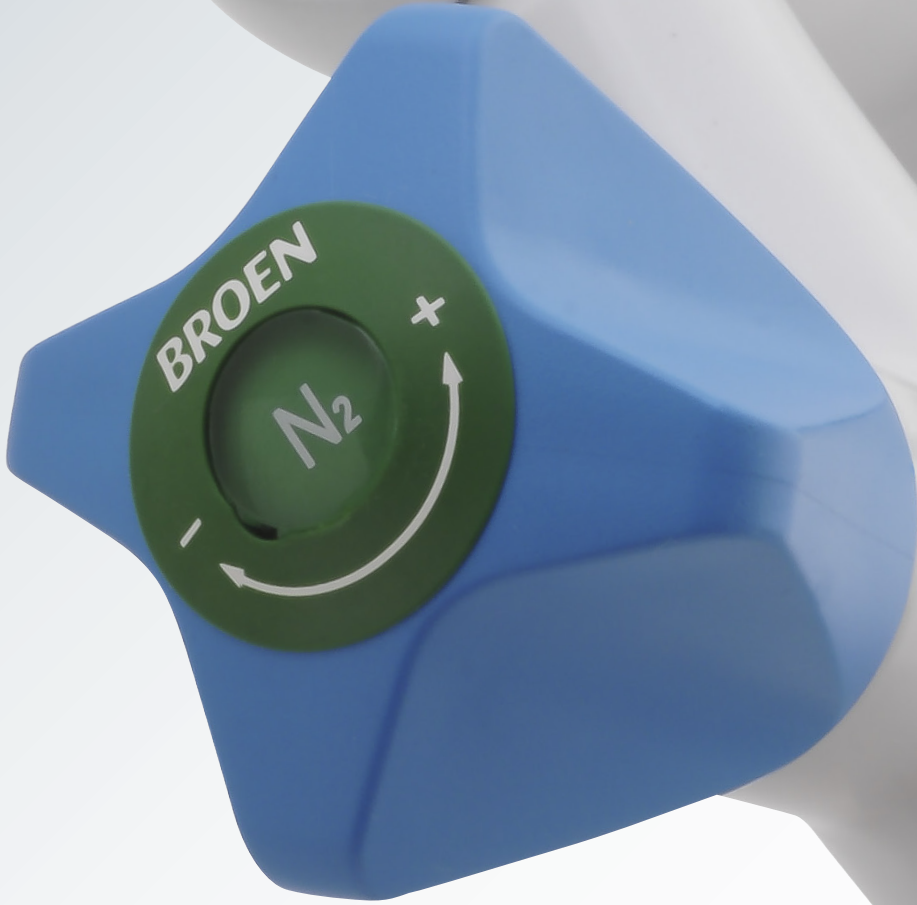


**BROEN-LAB
UNIFLEX™
FITTINGS FOR
NON-BURNING
2.0 GASES /
VACUUM**

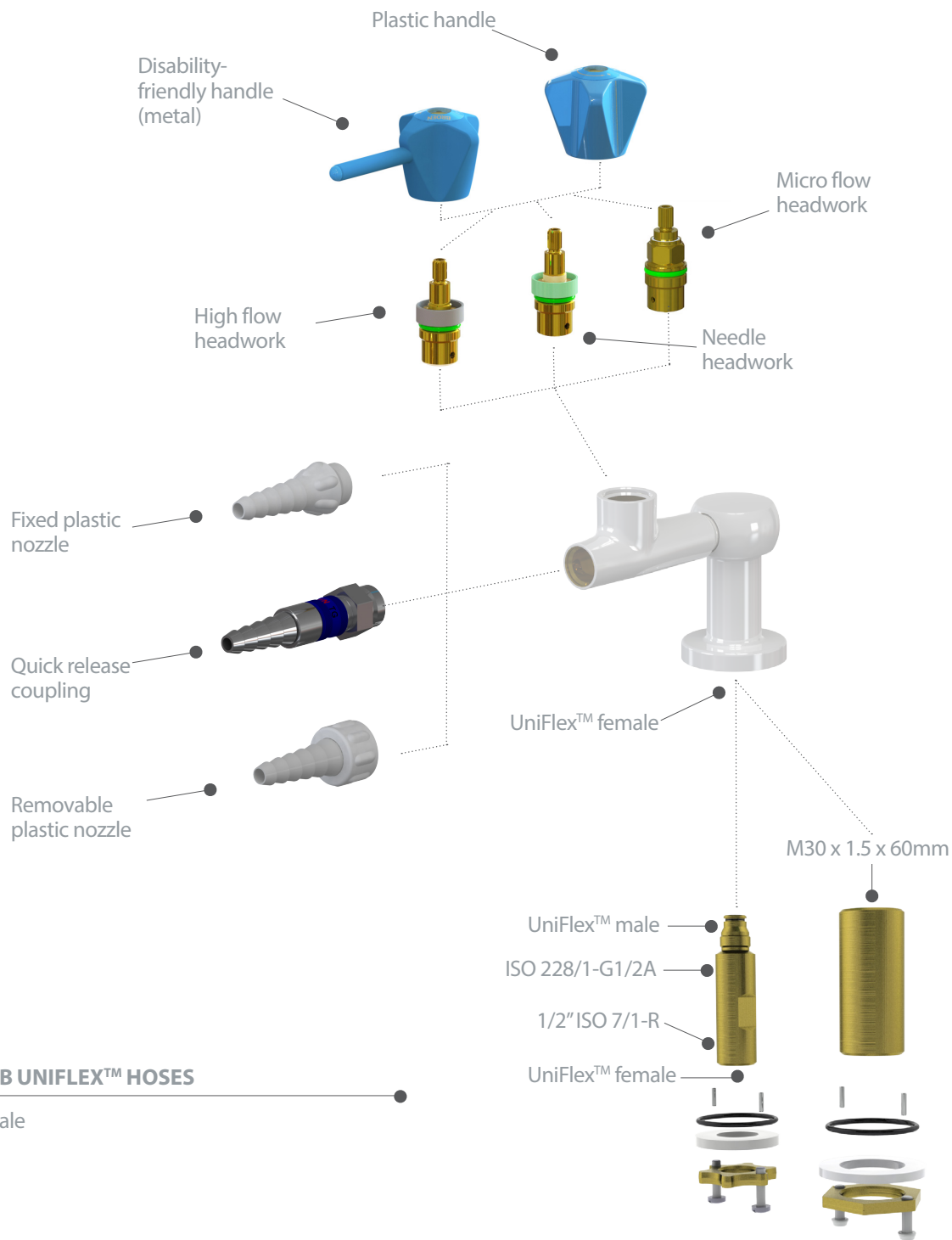
BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

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



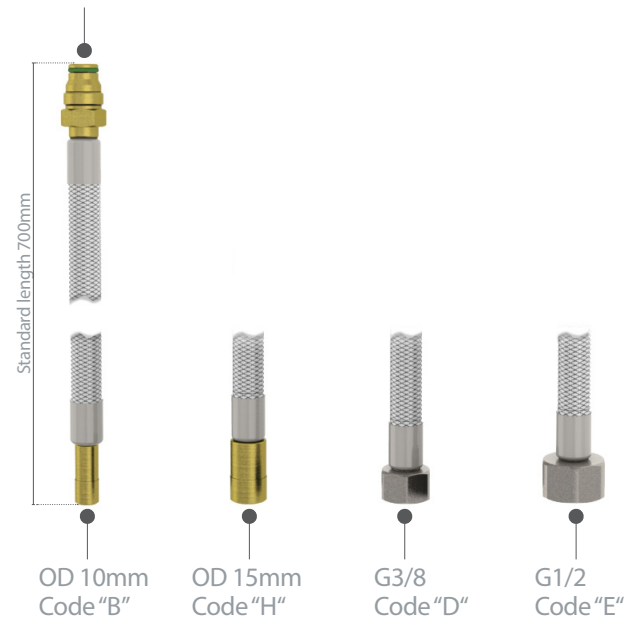
BROEN-LAB

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BROEN-LAB UNIFLEX™ HOSES

UniFlex™ male

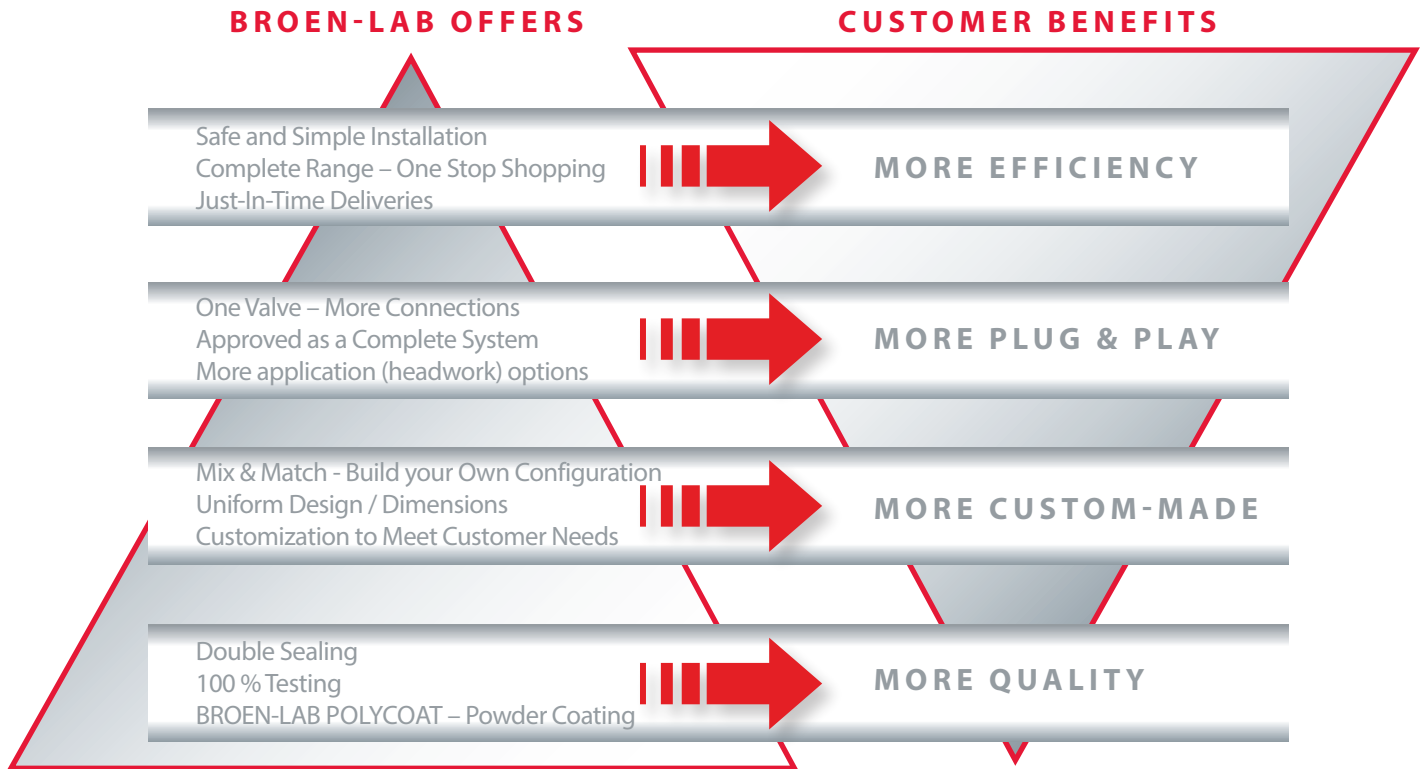


BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

THIS IS BROEN-LAB UNIFLEX™ BASIC

BROEN-LAB UniFlex™ BASIC line offers a very high quality and durability combined with the complete program, which adds up to low LCC (Life Cycle Costs).

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



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

As standard BROEN-LAB UniFlex™ BASIC fittings are delivered with a fixed plastic nozzle (can be unscrewed by hand if needed) or a quick release coupling (hexagon coded) for easy and immediate connection and safe disconnection. As an option a removable plastic nozzle can be used.

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 or 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™ BASIC 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.

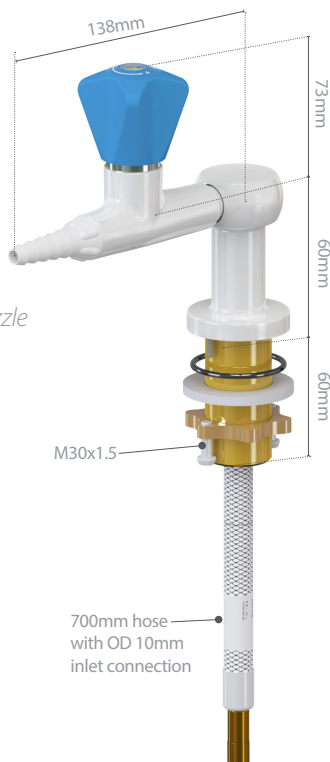


As standard all BROEN-LAB UniFlex™ BASIC fittings for non-burning 2.0 gases are delivered with a needle headwork that allows fine regulation of media flow and the valve is fully opened after 3 x 360° rotations of a handle.

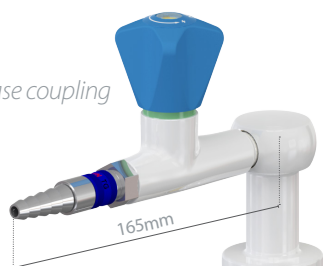
As standard all BROEN-LAB UniFlex™ BASIC fittings for vacuum are delivered with a high flow headwork. If there is a need for high flow of other media than vacuum, or a valve should function as a shut-off, then it is possible to get a fitting with a high flow headwork for 2.0 non-burning gases.

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 20-21 in this catalogue.



With fixed nozzle



With quick release coupling

SPECIFICATIONS

Handle: Plastic, media indication according to EN13792
Hose nozzle: Plastic, fixed (can be unscrewed by hand, thread: male G3/8)

NON-BURNING 2.0 GASES	VACUUM / HIGH FLOW
Headwork: Needle	Headwork: High flow
Opening/closing function: 3 x 360°	Opening/closing function: 1.5 x 360°
Max. working pressure: 16 bar / 232 psi	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, PP, SPX (hose)
- Sealing:** FKM
- Lubricant:** Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

- Other options:
- different media
 - removable plastic 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.

Model: with fixed nozzle



Media	1-valve	2-valve 90°	2-valve 180°	4-valve
Compressed air	2532 001 1021-52B	2532 014 1021-52B	2532 008 1021-52B	2532 020 1021-52B
Nitrogen	2532 001 1023-52B	2532 014 1023-52B	2532 008 1023-52B	2532 020 1023-52B
Carbon dioxide	2532 001 1024-52B	2532 014 1024-52B	2532 008 1024-52B	2532 020 1024-52B
Argon	2532 001 1025-52B	2532 014 1025-52B	2532 008 1025-52B	2532 020 1025-52B
Helium	2532 001 1026-52B	2532 014 1026-52B	2532 008 1026-52B	2532 020 1026-52B
Low vacuum (1000 to 1 mbar)	2532 002 1028-52B	2532 015 1028-52B	2532 009 1028-52B	2532 021 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

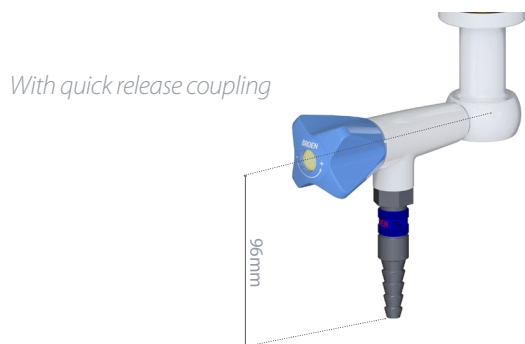
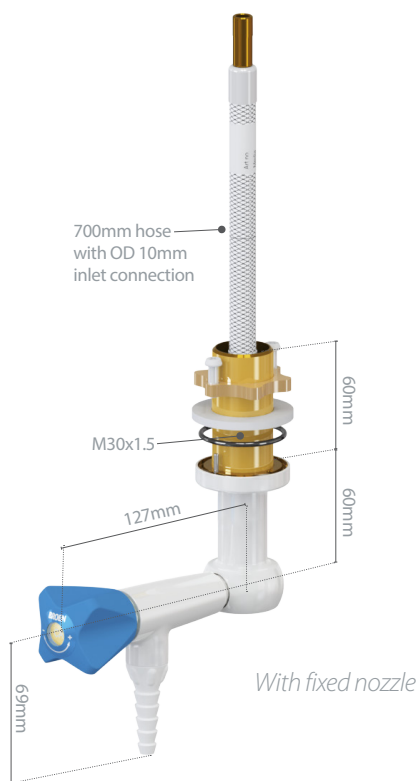
Model: with hexagon coded quick release coupling



Media	1-valve	2-valve 90°	2-valve 180°	4-valve
Compressed air	2532 003 1021-52B	2532 016 1021-52B	2532 010 1021-52B	2532 122 1021-52B
Nitrogen	2532 003 1023-52B	2532 016 1023-52B	2532 010 1023-52B	2532 122 1023-52B
Carbon dioxide	2532 003 1024-52B	2532 016 1024-52B	2532 010 1024-52B	2532 122 1024-52B
Argon	2532 003 1025-52B	2532 016 1025-52B	2532 010 1025-52B	2532 122 1025-52B
Helium	2532 003 1026-52B	2532 016 1026-52B	2532 010 1026-52B	2532 122 1026-52B
Low vacuum (1000 to 1 mbar)	2532 108 1028-52B	2532 124 1028-52B	2532 107 1028-52B	2532 123 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.
For other options please refer to page 23 or contact your local BROEN-LAB representative.





SPECIFICATIONS

Handle: Plastic, media indication according to EN13792

Hose nozzle: Plastic, fixed (can be unscrewed by hand, thread: male G3/8)

NON-BURNING 2.0 GASES VACUUM / HIGH FLOW

Headwork: Needle

Headwork: High flow

Opening/closing function: 3 x 360°

Opening/closing function: 1.5 x 360°

Max. working pressure: 16 bar / 232 psi

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, PP, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable plastic 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 075 1021-52B	2530 080 1021-52B	2530 042 1021-52B	2530 203 1021-52B
Nitrogen	2530 075 1023-52B	2530 080 1023-52B	2530 042 1023-52B	2530 203 1023-52B
Carbon dioxide	2530 075 1024-52B	2530 080 1024-52B	2530 042 1024-52B	2530 203 1024-52B
Argon	2530 075 1025-52B	2530 080 1025-52B	2530 042 1025-52B	2530 203 1025-52B
Helium	2530 075 1026-52B	2530 080 1026-52B	2530 042 1026-52B	2530 203 1026-52B
Low vacuum (1000 to 1 mbar)	2530 074 1028-52B	2530 082 1028-52B	2530 052 1028-52B	2530 204 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connecton.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

Model: with hexagon coded quick release coupling

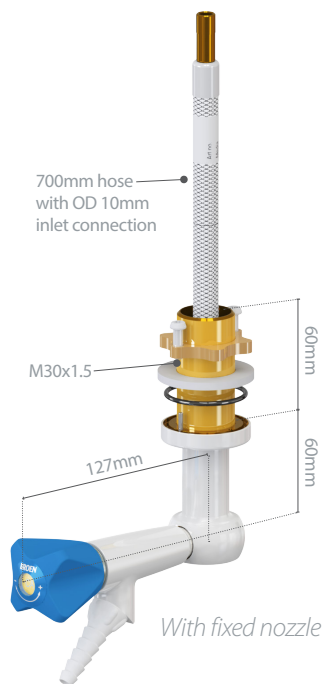


Media	1-valve	2-valve 90°	2-valve 180°	4-valve
Compressed air	2530 205 1021-52B	2530 207 1021-52B	2530 209 1021-52B	2530 211 1021-52B
Nitrogen	2530 205 1023-52B	2530 207 1023-52B	2530 209 1023-52B	2530 211 1023-52B
Carbon dioxide	2530 205 1024-52B	2530 207 1024-52B	2530 209 1024-52B	2530 211 1024-52B
Argon	2530 205 1025-52B	2530 207 1025-52B	2530 209 1025-52B	2530 211 1025-52B
Helium	2530 205 1026-52B	2530 207 1026-52B	2530 209 1026-52B	2530 211 1026-52B
Low vacuum (1000 to 1 mbar)	2530 206 1028-52B	2530 208 1028-52B	2530 210 1028-52B	2530 212 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connecton.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

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

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



With fixed nozzle

With quick release coupling



SPECIFICATIONS

Handle: Plastic, media indication according to EN13792

Hose nozzle: Plastic, fixed (can be unscrewed by hand, thread: male G3/8)

NON-BURNING 2.0 GASES **VACUUM / HIGH FLOW**

Headwork: Needle

Headwork: High flow

Opening/closing function: 3 x 360°

Opening/closing function: 1.5 x 360°

Max. working pressure: 16 bar / 232 psi

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, PP, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable plastic 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)



SUSPENDED FITTINGS WITH 45° VALVES



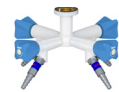
Model: with fixed nozzle



Media	1-valve	2-valve 90°	2-valve 180°	4-valve
Compressed air	2530 189 1021-52B	2530 191 1021-52B	2530 065 1021-52B	2530 193 1021-52B
Nitrogen	2530 189 1023-52B	2530 191 1023-52B	2530 065 1023-52B	2530 193 1023-52B
Carbon dioxide	2530 189 1024-52B	2530 191 1024-52B	2530 065 1024-52B	2530 193 1024-52B
Argon	2530 189 1025-52B	2530 191 1025-52B	2530 065 1025-52B	2530 193 1025-52B
Helium	2530 189 1026-52B	2530 191 1026-52B	2530 065 1026-52B	2530 193 1026-52B
Low vacuum (1000 to 1 mbar)	2530 190 1028-52B	2530 192 1028-52B	2530 062 1028-52B	2530 194 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connecton.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

Model: with hexagon coded quick release coupling



Media	1-valve	2-valve 90°	2-valve 180°	4-valve
Compressed air	2530 195 1021-52B	2530 197 1021-52B	2530 199 1021-52B	2530 201 1021-52B
Nitrogen	2530 195 1023-52B	2530 197 1023-52B	2530 199 1023-52B	2530 201 1023-52B
Carbon dioxide	2530 195 1024-52B	2530 197 1024-52B	2530 199 1024-52B	2530 201 1024-52B
Argon	2530 195 1025-52B	2530 197 1025-52B	2530 199 1025-52B	2530 201 1025-52B
Helium	2530 195 1026-52B	2530 197 1026-52B	2530 199 1026-52B	2530 201 1026-52B
Low vacuum (1000 to 1 mbar)	2530 196 1028-52B	2530 198 1028-52B	2530 200 1028-52B	2530 202 1028-52B

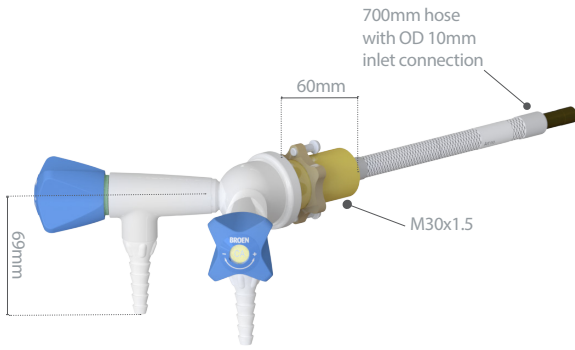
Fittings are delivered with a 700mm SPX hose with OD10mm inlet connecton.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

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

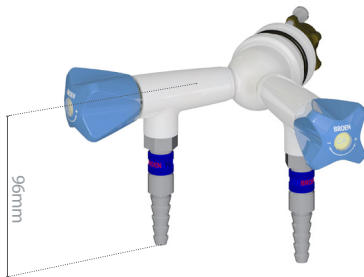


For further information and mounting instructions please refer to www.BROEN-LAB.com or contact your local BROEN-LAB representative.

With fixed nozzle



With quick release coupling



SPECIFICATIONS

Handle: Plastic, media indication according to EN13792

Hose nozzle: Plastic, fixed (can be unscrewed by hand, 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, PP, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable plastic 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)

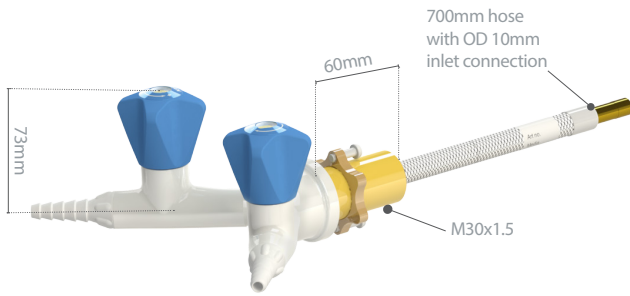
Models



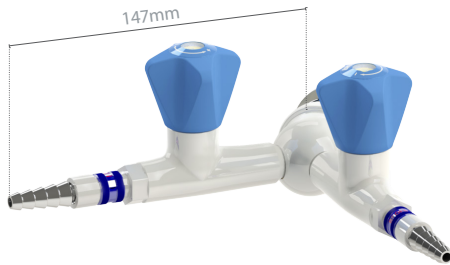
Media	with fixed nozzle	with hexagon coded quick release coupling
Compressed air	2530 185 1021-52B	2530 187 1021-52B
Nitrogen	2530 185 1023-52B	2530 187 1023-52B
Carbon dioxide	2530 185 1024-52B	2530 187 1024-52B
Argon	2530 185 1025-52B	2530 187 1025-52B
Helium	2530 185 1026-52B	2530 187 1026-52B
Low vacuum (1000 to 1 mbar)	2530 186 1028-52B	2530 188 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

With fixed nozzle



With quick release coupling



SPECIFICATIONS

Handle: Plastic, media indication according to EN13792

Hose nozzle: Plastic, fixed (can be unscrewed by hand, thread: male G3/8)

NON-BURNING 2.0 GASES

VACUUM / HIGH FLOW

Headwork: Needle

Headwork: High flow

Opening/closing function: 3 x 360°

Opening/closing function: 1.5 x 360°

Max. working pressure: 16 bar / 232 psi

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, PP, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable plastic 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



Media

with fixed nozzle

with hexagon coded quick release coupling



Compressed air

2532 050 1021-52B

2532 120 1021-52B



Nitrogen

2532 050 1023-52B

2532 120 1023-52B



Carbon dioxide

2532 050 1024-52B

2532 120 1024-52B



Argon

2532 050 1025-52B

2532 120 1025-52B



Helium

2532 050 1026-52B

2532 120 1026-52B



Low vacuum (1000 to 1 mbar)

2532 051 1028-52B

2532 121 1028-52B

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

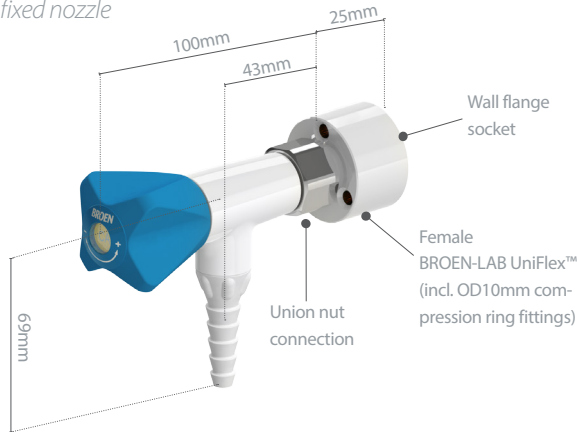
For other options please refer to page 23 or contact your local BROEN-LAB representative.

WALL MOUNTED FITTINGS WITH 90° VALVES FOR EXPOSED PIPING

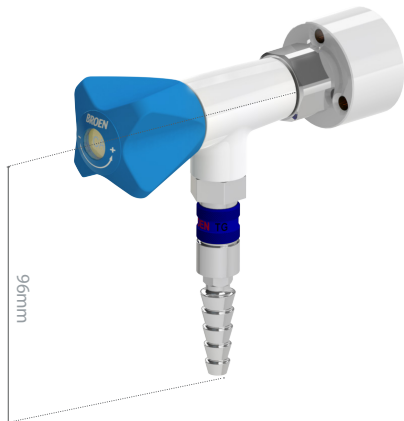


BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

With fixed nozzle



With quick release coupling



SPECIFICATIONS

Handle: Plastic, media indication according to EN13792

Hose nozzle: Plastic, fixed (can be unscrewed by hand, thread: male G3/8)

NON-BURNING 2.0 GASES **VACUUM / HIGH FLOW**

Headwork: Needle

Headwork: High flow

Opening/closing function: 3 x 360°

Opening/closing function: 1.5 x 360°

Max. working pressure: 16 bar / 232 psi

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, PP, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable plastic 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)
- other inlet options (hose or compression ring fittings)
- wall flange socket for built-in installation

Models



Media

with fixed nozzle

with hexagon coded quick release coupling

Compressed air	2530 177 1021-T	2530 179 1021-T
Nitrogen	2530 177 1023-T	2530 179 1023-T
Carbon dioxide	2530 177 1024-T	2530 179 1024-T
Argon	2530 177 1025-T	2530 179 1025-T
Helium	2530 177 1026-T	2530 179 1026-T
Low vacuum (1000 to 1 mbar)	2530 178 1028-T	2530 180 1028-T

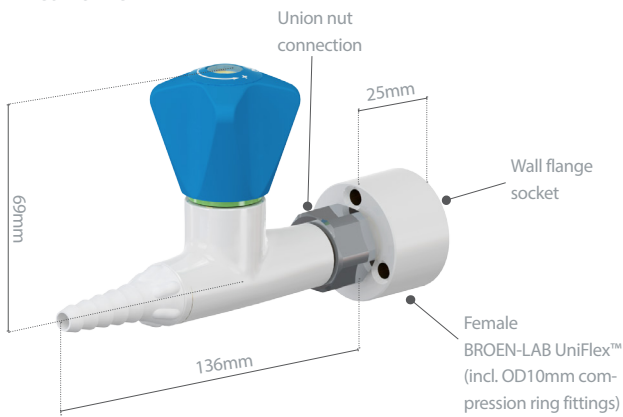
Delivered with wall flange socket and compression ring fitting for OD10mm Cu-pipe

For other options please refer to pages 18-19 or contact your local BROEN-LAB representative.

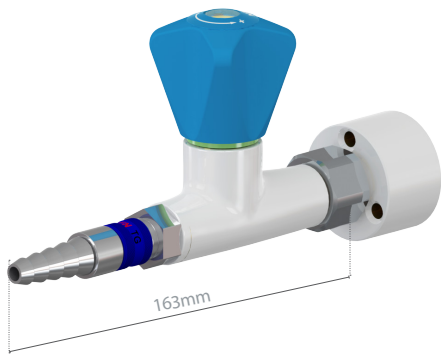
WALL MOUNTED FITTINGS WITH STRAIGHT VALVES FOR EXPOSED PIPING



With fixed nozzle



With quick release coupling



SPECIFICATIONS

Handle: Plastic, media indication according to EN13792

Hose nozzle: Plastic, fixed (can be unscrewed by hand, thread: male G3/8)

NON-BURNING 2.0 GASES **VACUUM / HIGH FLOW**

Headwork: Needle

Headwork: High flow

Opening/closing function: 3 x 360°

Opening/closing function: 1.5 x 360°

Max. working pressure: 16 bar / 232 psi

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, PP, SPX (hose)

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- removable plastic 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)
- other inlet options (hose or compression ring fittings)
- wall flange socket for built-in installation

Models



Media

with fixed nozzle

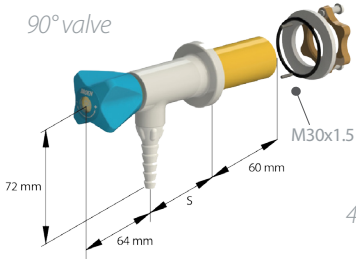
with hexagon coded quick release coupling

Compressed air	2532 110 1021-T	2532 118 1021-T
Nitrogen	2532 110 1023-T	2532 118 1023-T
Carbon dioxide	2532 110 1024-T	2532 118 1024-T
Argon	2532 110 1025-T	2532 118 1025-T
Helium	2532 110 1026-T	2532 118 1026-T
Low vacuum (1000 to 1 mbar)	2532 117 1028-T	2532 119 1028-T

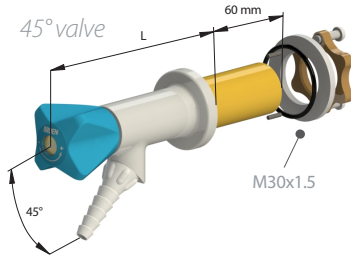
Delivered with wall flange socket and compression ring fitting for OD10mm Cu-pipe
For other options please refer to pages 18-19 or contact your local BROEN-LAB representative.

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

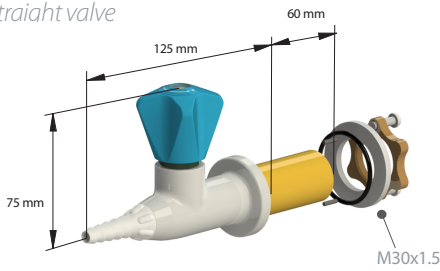
90° valve



45° valve



Straight valve



SPECIFICATIONS

Handle: Plastic with media indication according to EN13792
Hose nozzle: Plastic, fixed (can be unscrewed by hand, 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 **VACUUM / HIGH FLOW**
Headwork: Needle **Headwork:** High flow
Opening/closing function: 3 x 360° **Opening/closing function:** 1.5 x 360°
Max. working pressure: 16 bar / 232 psi **Working pressure:** -1 bar to 16 bar / -14.5 psi to 232 psi

MATERIALS WITH MEDIA CONTACT

Metals: Brass
 Plastics: PVDF, PP (hose nozzle)
 Sealing: FKM
 Lubricant: Perfluoropolyether based

Models: 90° valve, S=50mm



Media

with fixed nozzle

with hexagon coded quick release coupling

Compressed air	2530 311 1021-52B	2530 313 1021-52B
Nitrogen	2530 311 1023-52B	2530 313 1023-52B
Carbon dioxide	2530 311 1024-52B	2530 313 1024-52B
Argon	2530 311 1025-52B	2530 313 1025-52B
Helium	2530 311 1026-52B	2530 313 1026-52B
Low vacuum (1000 to 1 mbar)	2530 312 1028-52B	2530 314 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connector.
 For other options please refer to page 23 or contact your local BROEN-LAB representative.

Models: 90° valve, S=75mm



Media

with fixed nozzle

with hexagon coded quick release coupling

Compressed air	2530 305 1021-52B	2530 308 1021-52B
Nitrogen	2530 305 1023-52B	2530 308 1023-52B
Carbon dioxide	2530 305 1024-52B	2530 308 1024-52B
Argon	2530 305 1025-52B	2530 308 1025-52B
Helium	2530 305 1026-52B	2530 308 1026-52B
Low vacuum (1000 to 1 mbar)	2530 306 1028-52B	2530 309 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connector.
 For other options please refer to page 23 or contact your local BROEN-LAB representative.

Models: straight valve



Media	with fixed nozzle	with hexagon coded quick release coupling
Compressed air	2532 192 1021-52B	2532 186 1021-52B
Nitrogen	2532 192 1023-52B	2532 186 1023-52B
Carbon dioxide	2532 192 1024-52B	2532 186 1024-52B
Argon	2532 192 1025-52B	2532 186 1025-52B
Helium	2532 192 1026-52B	2532 186 1026-52B
Low vacuum (1000 to 1 mbar)	2532 178 1028-52B	2532 201 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

Models: 45° valve, L=115mm



Media	with fixed nozzle	with hexagon coded quick release coupling
Compressed air	2530 361 1021-52B	2530 363 1021-52B
Nitrogen	2530 361 1023-52B	2530 363 1023-52B
Carbon dioxide	2530 361 1024-52B	2530 363 1024-52B
Argon	2530 361 1025-52B	2530 363 1025-52B
Helium	2530 361 1026-52B	2530 363 1026-52B
Low vacuum (1000 to 1 mbar)	2530 362 1028-52B	2530 364 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

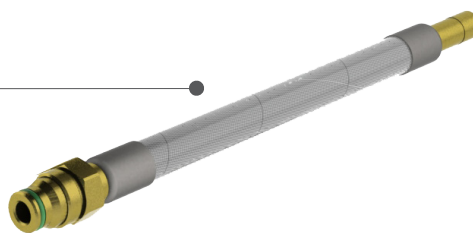
Models: 45° valve, L=140mm



Media	with fixed nozzle	with hexagon coded quick release coupling
Compressed air	2530 357 1021-52B	2530 359 1021-52B
Nitrogen	2530 357 1023-52B	2530 359 1023-52B
Carbon dioxide	2530 357 1024-52B	2530 359 1024-52B
Argon	2530 357 1025-52B	2530 359 1025-52B
Helium	2530 357 1026-52B	2530 359 1026-52B
Low vacuum (1000 to 1 mbar)	2530 358 1028-52B	2530 360 1028-52B

Fittings are delivered with a 700mm SPX hose with OD10mm inlet connection.
For other options please refer to page 23 or contact your local BROEN-LAB representative.

BROEN-LAB UniFlex™ flexible hoses



BROEN-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.

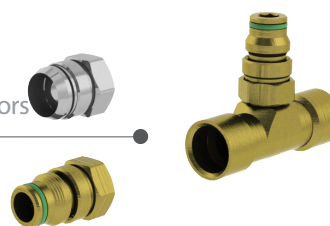
A wide range of fittings and lengths is available for BROEN-LAB UniFlex™ hoses enables customers to choose the perfect hose for their application.

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 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



93T - BROEN-LAB UNIFLEX™ HOSES FOR NON-BURNING 2.0 GASES/VACUUM



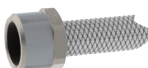
BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM

INLET CONNECTIONS 93 T XX XX XXXX

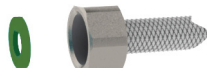
G3/8"A fixed connection (Code 32)



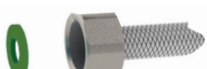
G1/2"A fixed connection (Code 31)



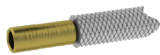
G3/8" union connection (Code 41)



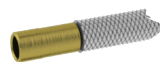
G1/2" union connection (Code 40)



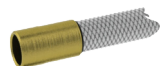
OD10mm connection for compression fittings (Code 10)



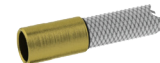
OD12mm connection for compression fittings (Code 12)



OD15mm connection for compression fittings (Code 15)



OD15mm connection for press fittings (Code 65)



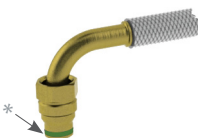
Straight BROEN-LAB UniFlex™ connection with FKM o-ring (Code 20)



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



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

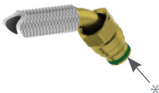


OUTLET CONNECTIONS 93 T XX XX XXXX

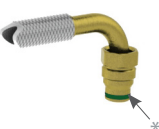
Straight BROEN-LAB UniFlex™ connection with FKM o-ring (Code 20)



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

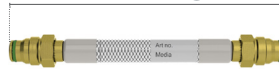
SPX hose with braiding in stainless steel



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
- Hose 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

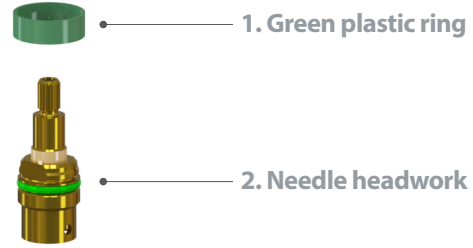
BROEN-LAB UniFlex™ fittings for non-burning 2.0 gases are as a standard delivered with needle headwork for fine regulation of media flow.

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

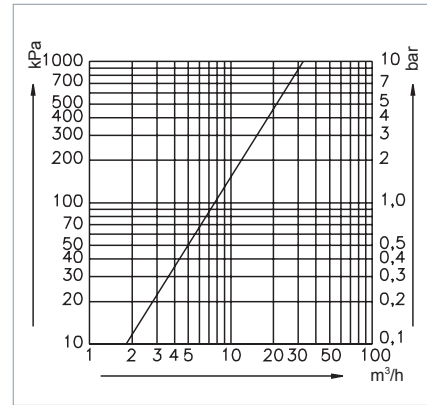
1. Green plastic ring

No. 0255035-5168

2. Needle headwork

No. 02557300

FLOW CHART



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

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



MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: PVDF

Sealing: FKM

Lubricant: Perfluoropolyether based

ORDERING INFORMATION

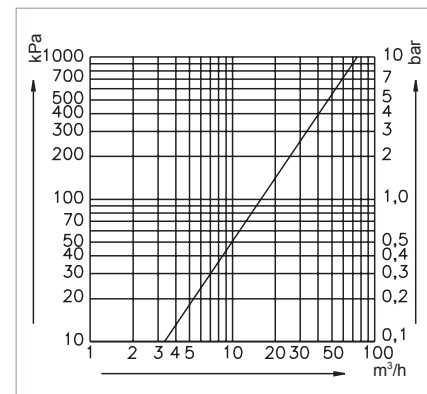
1. Grey plastic ring

No. 0255035-2696

2. High flow headwork

No. 02556300

FLOW CHART



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

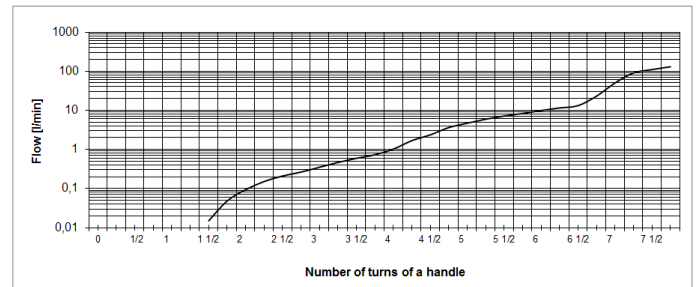
Lubricant: Perfluoropolyether based

ORDERING INFORMATION

Micro flow headwork

No. 19154400

FLOW CHART

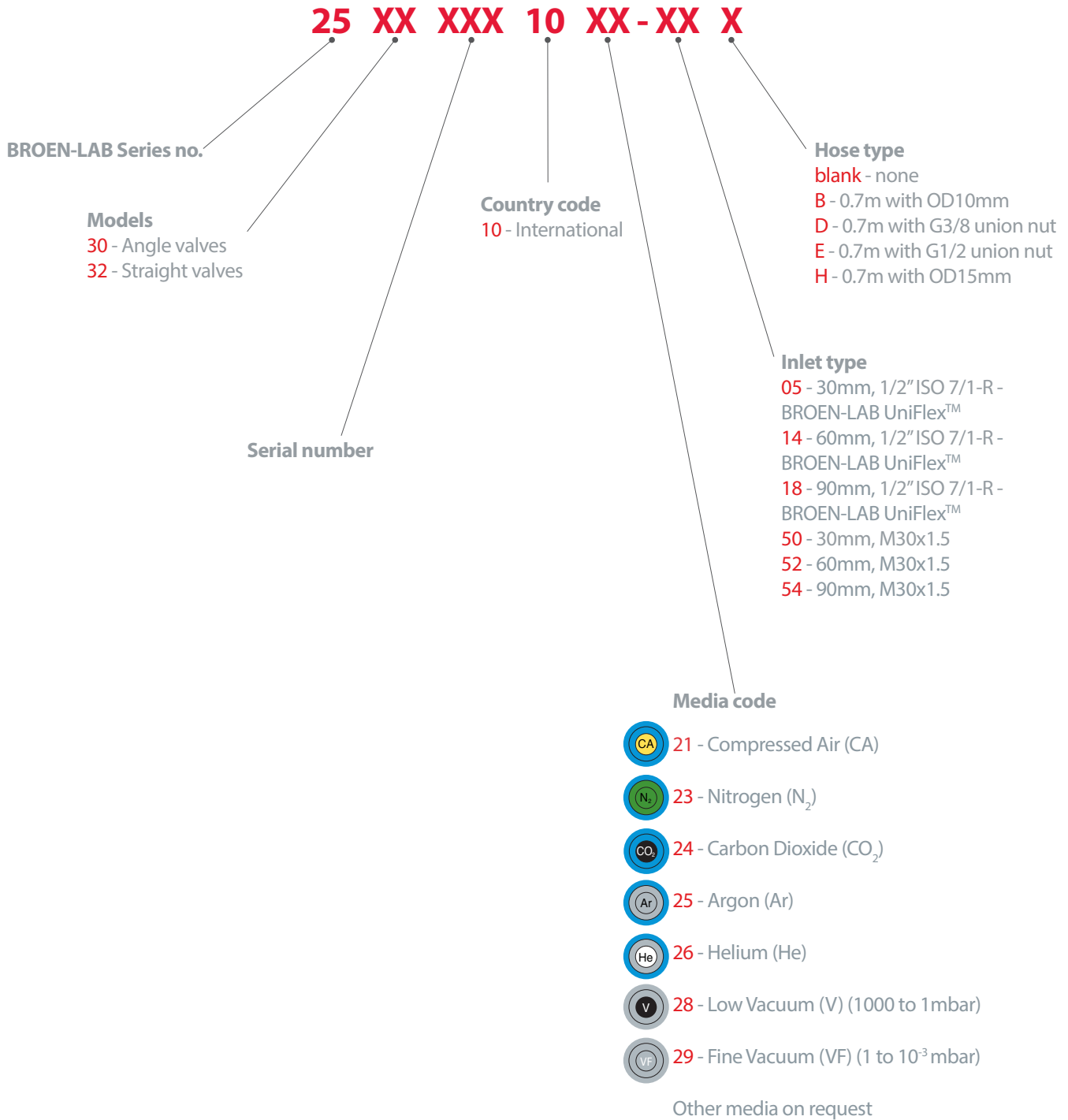


BROEN-LAB UNIFLEX™ FITTINGS FOR NON-BURNING 2.0 GASES / VACUUM



Illustration	Description	BROEN-LAB item No.
	Adaptor for removable plastic nozzle	2539 048 1021
	Removable plastic nozzle	2539 004 1021
	Fixed plastic nozzle	2539 040 1021
	Quick release coupling (hexagon coded)	19 632 00
	Pressure regulator (inlet/outlet: female G3/8 thread)	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
	Plastic handle with media indication according to EN 13792	191501401021 (CA) 191501401023 (N ₂) 191501401024 (CO ₂) 191501401025 (Ar) 191501401026 (He) 191501401028 (V) 191501401029 (VF)

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



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

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.

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 9001:2008. This certification will further contribute to reputation for quality and reliability of BROEN-LAB A/S.

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