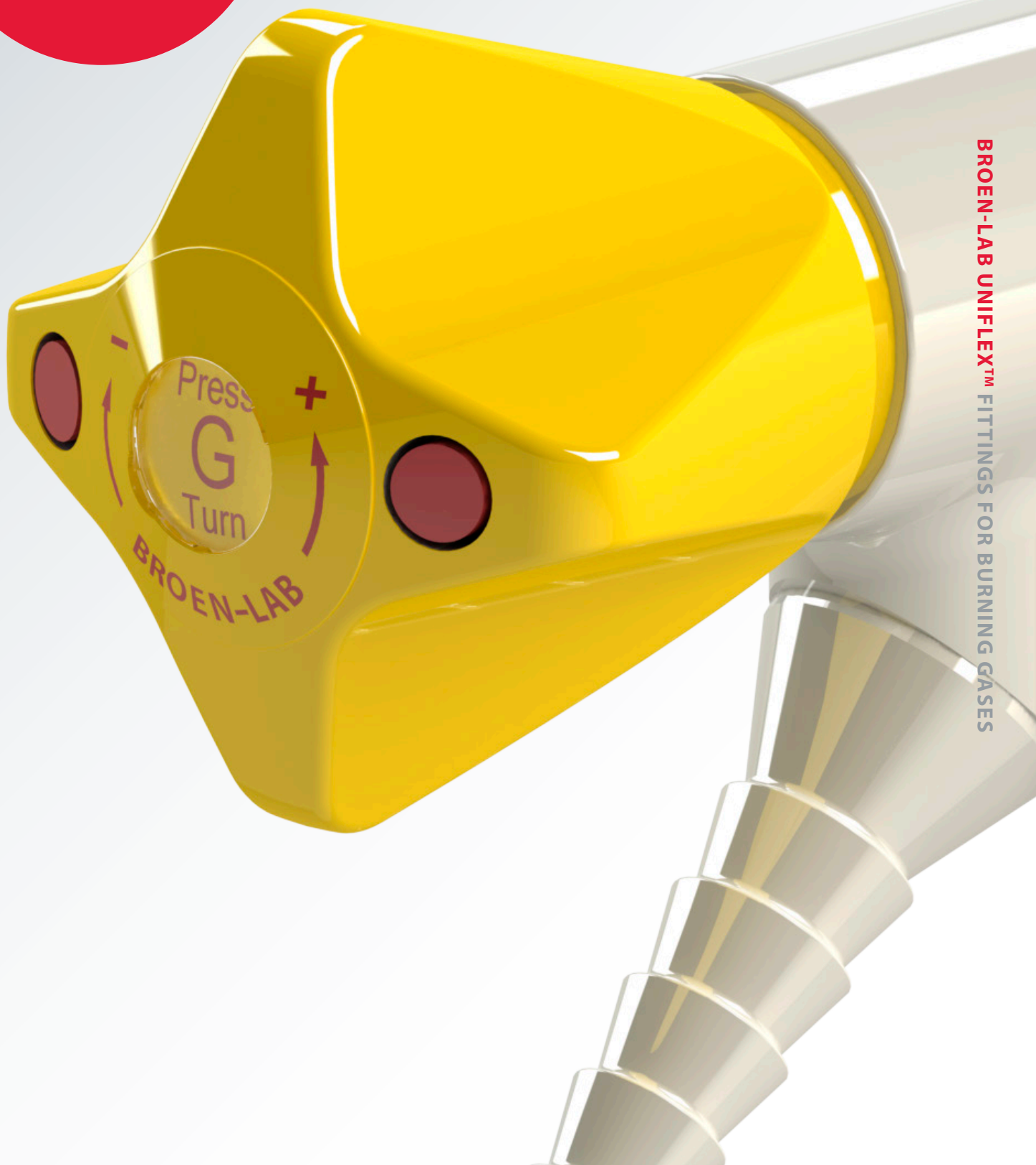


**BROEN-LAB
UNIFLEX™
FITTINGS FOR
BURNING
GASES**

BROEN-LAB UNIFLEX™ FITTINGS FOR BURNING GASES

BROEN-LAB UNIFLEX™ FITTINGS FOR BURNING GASES















Metal handle

BROEN-LAB

Content	Page
Table of Content	2
Product Overview	3
BROEN-LAB UniFlex™	4-5

Fittings for Burning Gases

Turret Fittings	 6-7
Suspended Fittings with 90° Valves	 8-9
Suspended Fittings with 45° Valves	 10-11
Double Wall Fittings with 90° Valves	 12
Double Wall Fittings with straight Valves	 13
Wall Mounted Fittings with 90° Valves for Exposed Piping	 14
Wall Mounted Fittings with Straight Valves for Exposed Piping	 15
Suspended/Wall-Mounted Straight Fittings with Lead-In	 16
Wall/Bench Mounted Fittings with 90° Valves with Lead-In	 17
Wall/Bench Mounted Fittings with 45° valves with Lead-In	 18
Single Straight Valve with Rear Wall Connection (RWC)	 19
Single 90° Valve with Rear Wall Connection (RWC)	 20

BROEN-LAB UniFlex™ Hoses & Flexible Pipes for Burning Gases 21-23

Headworks

Press/Turn Headwork	24
Needle Headwork	24

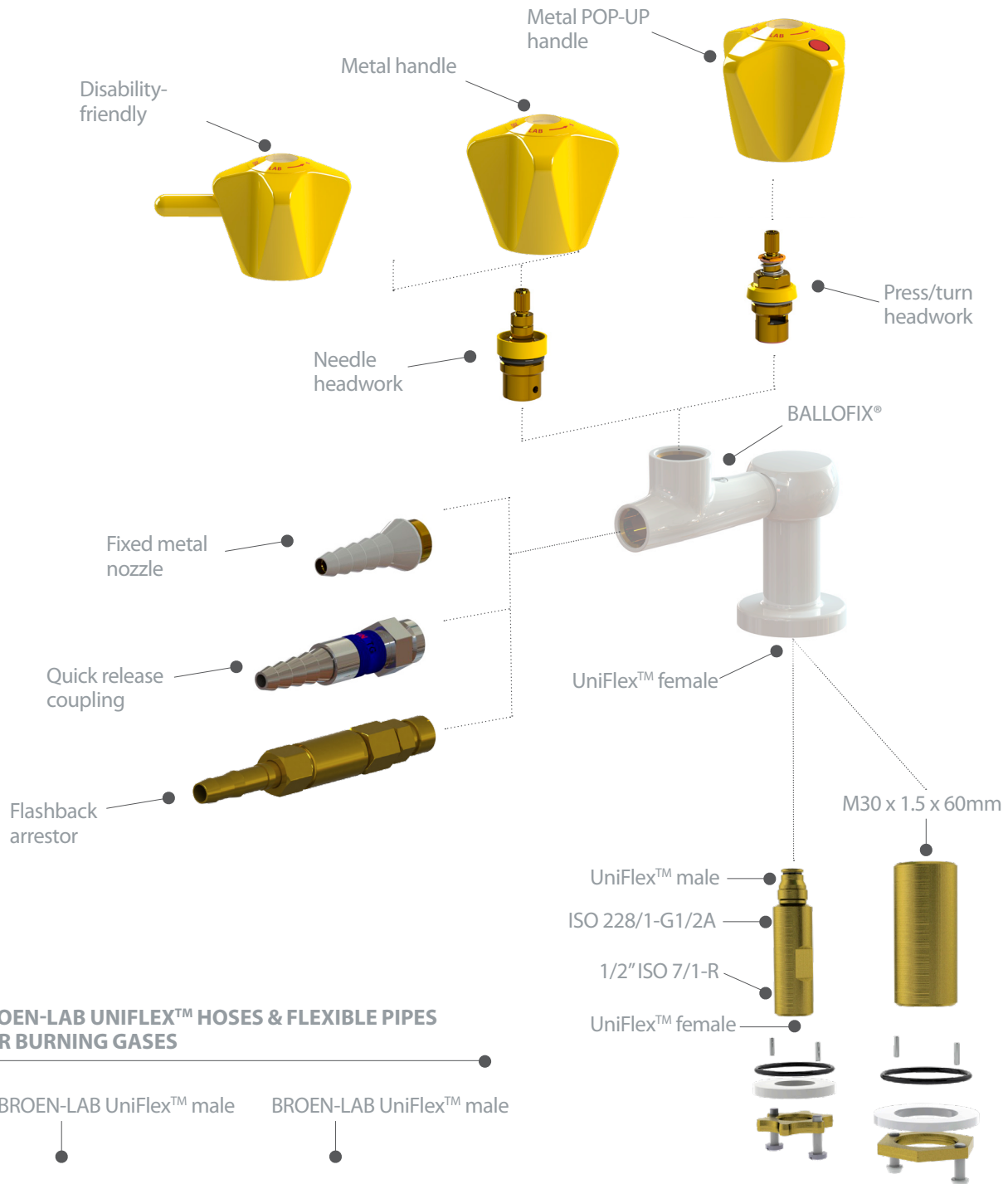
Accessories / Spare Parts

25

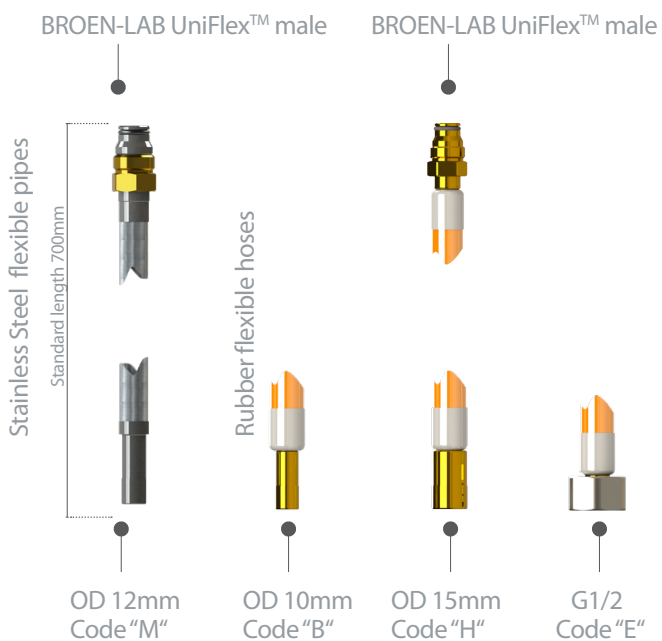
Ordering Information

27

PRODUCT OVERVIEW



BROEN-LAB UNIFLEX™ HOSES & FLEXIBLE PIPES FOR BURNING GASES



THIS IS BROEN-LAB UNIFLEX™

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



BROEN-LAB UniFlex™ fittings for burning gases 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 POLY-COAT 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™ fittings are delivered with a powder coated with "POP-UP" indication buttons that make it possible visually to observe if the valve is open. Media indication is according to EN13792. Ceramic press/turn headwork prevents from unintentional opening of the valve.

All BROEN-LAB UniFlex™ fittings for burning gases 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 or a quick release coupling 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 BURNING GAS?

Burning or flammable gases are gases that burn or explode in presence of air or oxygen.

BROEN-LAB UniFlex™ fittings for burning gases can be used for natural gas (G), liquefied petroleum gas (LPG) as well as low pressure bottle gases such as:

- propane
- butane
- methane
- acetylene
- hydrogen

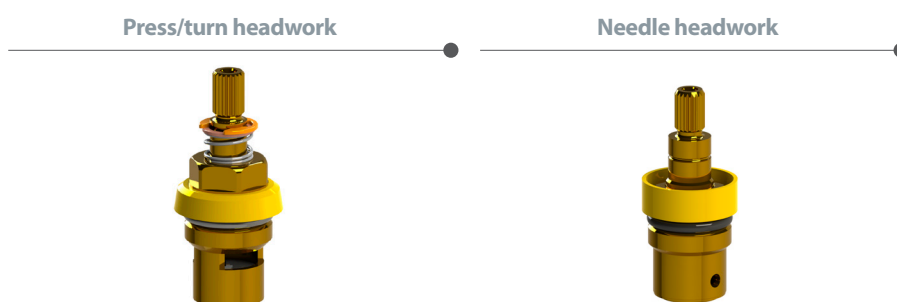
These gases are typically commercially manufactured and sold to be used in applications within:

- laboratory and instrumentation
- chemical and petrochemical industry
- semiconductor industry
- welding, etc.

Please always refer to local regulations when installing the products for burning gases!

OUR HEADWORKS

BROEN-LAB UniFlex™ fittings for burning gases can be delivered with 2 different types of headworks depending on the requirements set by applications with regards to safety and/or regulation of media flow.



As standard all BROEN-LAB UniFlex™ fittings for burning gases are delivered with a ceramic press/turn safety headwork with 90° opening/closing function, which prevents unintentional opening of the valve.

If there is a need for fine regulation of media flow then it is possible to get a fitting with a needle headwork that has 3x360° opening/closing function.

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

FLASHBACK ARRESTOR

Flashback arrestor ensures reliable protection against dangerous gas backflow and flashback. It is recommended to use a flashback arrestor for burning gases, such as Acetylene, Town gas, Methane, LPG, etc.

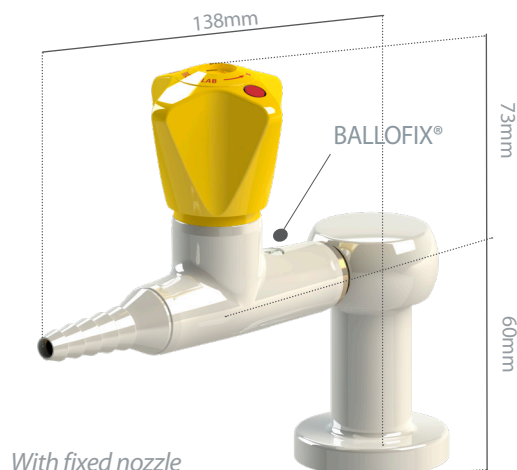
Please always refer to local regulations when installing the products for burning gases.

Please contact your BROEN-LAB sales representative for ordering information.

HOSES & FLEXIBLE PIPES

BROEN-LAB UniFlex™ fittings for burning gases can be delivered either with stainless steel flexible pipes or rubber hoses depending on the type of application and customer requirements. For more information about hoses please refer to pages 21-23 in this catalogue.

TURRET FITTINGS



SPECIFICATIONS

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

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass, SS AISI 316L (flexible SS pipe)

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

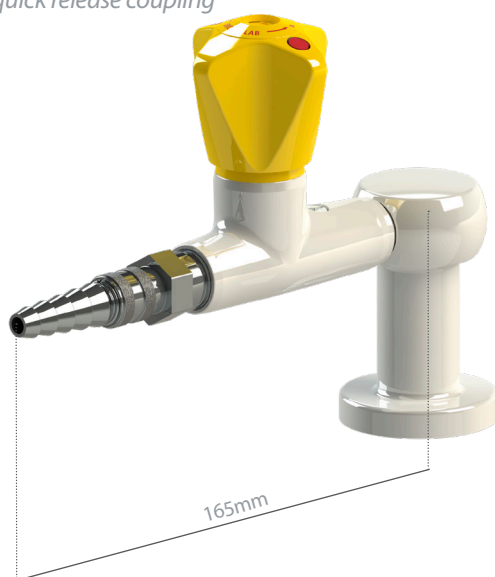
ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- disability-friendly handle (for needle headwork only)
- alternative hose type and inlet connection
- other inlet options (type, length)
- national approvals

With quick release coupling



TURRET FITTINGS

Model: with fixed nozzle

					
Media		1-valve	2-valve 90°	2-valve 180°	4-valve
 Natural gas		2532 026 1010-52M	2532 034 1010-52M	2532 030 1010-52M	2532 038 1010-52M
 Liquefied petroleum gas		2532 026 1012-52M	2532 034 1012-52M	2532 030 1012-52M	2532 038 1012-52M
 Butane		2532 026 1014-52M	2532 034 1014-52M	2532 030 1014-52M	2532 038 1014-52M
 Propane		2532 026 1016-52M	2532 034 1016-52M	2532 030 1016-52M	2532 038 1016-52M
 Acetylene		2532 026 1018-52M	2532 034 1018-52M	2532 030 1018-52M	2532 038 1018-52M
 Hydrogen		2532 026 1020-52M	2532 034 1020-52M	2532 030 1020-52M	2532 038 1020-52M
 Methane		2532 026 1046-52M	2532 034 1046-52M	2532 030 1046-52M	2532 038 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 or contact your local BROEN-LAB representative.

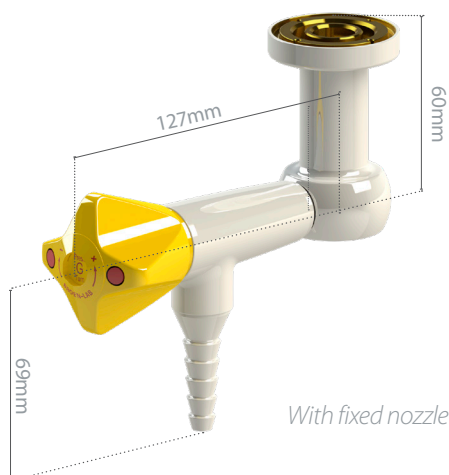
Model: with quick release coupling

					
Media		1-valve	2-valve 90°	2-valve 180°	4-valve
 Natural gas		2532 070 1010-52M	2532 095 1010-52M	2532 096 1010-52M	2532 097 1010-52M
 Liquefied petroleum gas		2532 070 1012-52M	2532 095 1012-52M	2532 096 1012-52M	2532 097 1012-52M
 Butane		2532 070 1014-52M	2532 095 1014-52M	2532 096 1014-52M	2532 097 1014-52M
 Propane		2532 070 1016-52M	2532 095 1016-52M	2532 096 1016-52M	2532 097 1016-52M
 Acetylene		2532 070 1018-52M	2532 095 1018-52M	2532 096 1018-52M	2532 097 1018-52M
 Hydrogen		2532 070 1020-52M	2532 095 1020-52M	2532 096 1020-52M	2532 097 1020-52M
 Methane		2532 070 1046-52M	2532 095 1046-52M	2532 096 1046-52M	2532 097 1046-52M

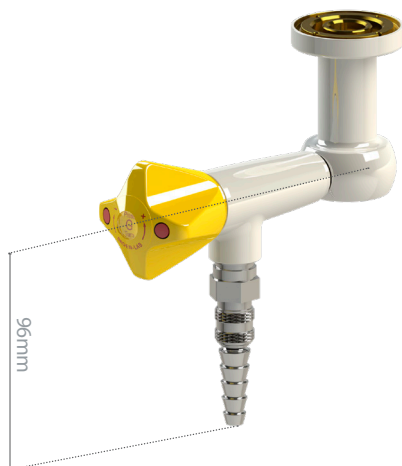
Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 or contact your local BROEN-LAB representative.

SUSPENDED FITTINGS WITH 90° VALVES



With quick release coupling



SPECIFICATIONS

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

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass, SS AISI 316L (flexible SS pipe)

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- alternative hose type and inlet connection
- other inlet options (type, length)
- national approvals

SUSPENDED FITTINGS WITH 90° VALVES

Model: with fixed nozzle




Media

1-valve

2-valve 90°

2-valve 180°

4-valve

	Natural gas	2530 041 1010-52M	2530 077 1010-52M	2530 036 1010-52M	2530 137 1010-52M
	Liquefied petroleum gas	2530 041 1012-52M	2530 077 1012-52M	2530 036 1012-52M	2530 137 1012-52M
	Butane	2530 041 1014-52M	2530 077 1014-52M	2530 036 1014-52M	2530 137 1014-52M
	Propane	2530 041 1016-52M	2530 077 1016-52M	2530 036 1016-52M	2530 137 1016-52M
	Acetylene	2530 041 1018-52M	2530 077 1018-52M	2530 036 1018-52M	2530 137 1018-52M
	Hydrogen	2530 041 1020-52M	2530 077 1020-52M	2530 036 1020-52M	2530 137 1020-52M
	Methane	2530 041 1046-52M	2530 077 1046-52M	2530 036 1046-52M	2530 137 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 or contact your local BROEN-LAB representative.

Model: with quick release coupling



Media

1-valve

2-valve 90°

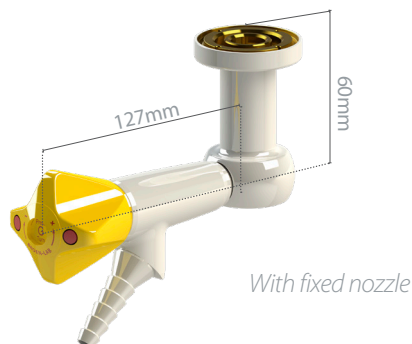
2-valve 180°

4-valve

	Natural gas	2530 138 1010-52M	2530 139 1010-52M	2530 140 1010-52M	2530 141 1010-52M
	Liquefied petroleum gas	2530 138 1012-52M	2530 139 1012-52M	2530 140 1012-52M	2530 141 1012-52M
	Butane	2530 138 1014-52M	2530 139 1014-52M	2530 140 1014-52M	2530 141 1014-52M
	Propane	2530 138 1016-52M	2530 139 1016-52M	2530 140 1016-52M	2530 141 1016-52M
	Acetylene	2530 138 1018-52M	2530 139 1018-52M	2530 140 1018-52M	2530 141 1018-52M
	Hydrogen	2530 138 1020-52M	2530 139 1020-52M	2530 140 1020-52M	2530 141 1020-52M
	Methane	2530 138 1046-52M	2530 139 1046-52M	2530 140 1046-52M	2530 141 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 or contact your local BROEN-LAB representative.



SPECIFICATIONS

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

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass, SS AISI 316L (flexible SS pipe)

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- alternative hose type and inlet connection
- other inlet options (type, length)
- national approvals

With quick release coupling



SUSPENDED FITTINGS WITH 45° VALVES

Model: with fixed nozzle







Media

1-valve

2-valve 90°

2-valve 180°

4-valve

 Natural gas	2530 127 1010-52M	2530 148 1010-52M	2530 043 1010-52M	2530 143 1010-52M
 Liquefied petroleum gas	2530 127 1012-52M	2530 148 1012-52M	2530 043 1012-52M	2530 143 1012-52M
 Butane	2530 127 1014-52M	2530 148 1014-52M	2530 043 1014-52M	2530 143 1014-52M
 Propane	2530 127 1016-52M	2530 148 1016-52M	2530 043 1016-52M	2530 143 1016-52M
 Acetylene	2530 127 1018-52M	2530 148 1018-52M	2530 043 1018-52M	2530 143 1018-52M
 Hydrogen	2530 127 1020-52M	2530 148 1020-52M	2530 043 1020-52M	2530 143 1020-52M
 Methane	2530 127 1046-52M	2530 148 1046-52M	2530 043 1046-52M	2530 143 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 or contact your local BROEN-LAB representative.

Model: with quick release coupling






Media

1-valve

2-valve 90°

2-valve 180°

4-valve

 Natural gas	2530 144 1010-52M	2530 142 1010-52M	2530 145 1010-52M	2530 146 1010-52M
 Liquefied petroleum gas	2530 144 1012-52M	2530 142 1012-52M	2530 145 1012-52M	2530 146 1012-52M
 Butane	2530 144 1014-52M	2530 142 1014-52M	2530 145 1014-52M	2530 146 1014-52M
 Propane	2530 144 1016-52M	2530 142 1016-52M	2530 145 1016-52M	2530 146 1016-52M
 Acetylene	2530 144 1018-52M	2530 142 1018-52M	2530 145 1018-52M	2530 146 1018-52M
 Hydrogen	2530 144 1020-52M	2530 142 1020-52M	2530 145 1020-52M	2530 146 1020-52M
 Methane	2530 144 1046-52M	2530 142 1046-52M	2530 145 1046-52M	2530 146 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 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.

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass, SS AISI 316L (flexible SS pipe)

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- disability-friendly handle (for needle headwork only)
- alternative hose type and inlet connection
- other inlet options (type, length)
- national approvals

Models



Media

with fixed nozzle

with quick release coupling

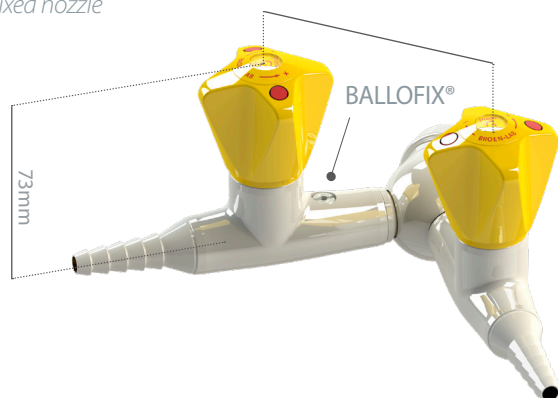
	Natural gas	2530 040 1010-52M	2530 147 1010-52M
	Liquefied petroleum gas	2530 040 1012-52M	2530 147 1012-52M
	Butane	2530 040 1014-52M	2530 147 1014-52M
	Propane	2530 040 1016-52M	2530 147 1016-52M
	Acetylene	2530 040 1018-52M	2530 147 1018-52M
	Hydrogen	2530 040 1020-52M	2530 147 1020-52M
	Methane	2530 040 1046-52M	2530 147 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 or contact your local BROEN-LAB representative.

DOUBLE WALL FITTINGS WITH STRAIGHT VALVES

With fixed nozzle



SPECIFICATIONS

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

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

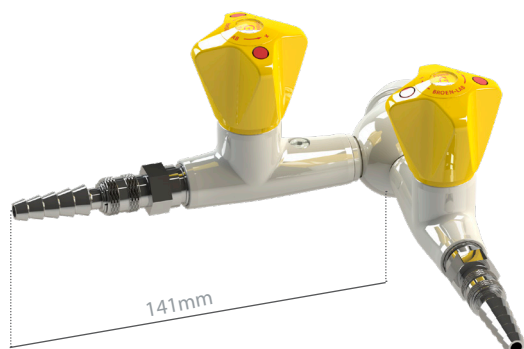
Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

With quick release coupling



MATERIALS WITH MEDIA CONTACT

Metals: Brass, SS AISI 316L (flexible SS pipe)

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- alternative hose type and inlet connection
- other inlet options (type, length)
- national approvals








Models



with fixed nozzle



with quick release coupling

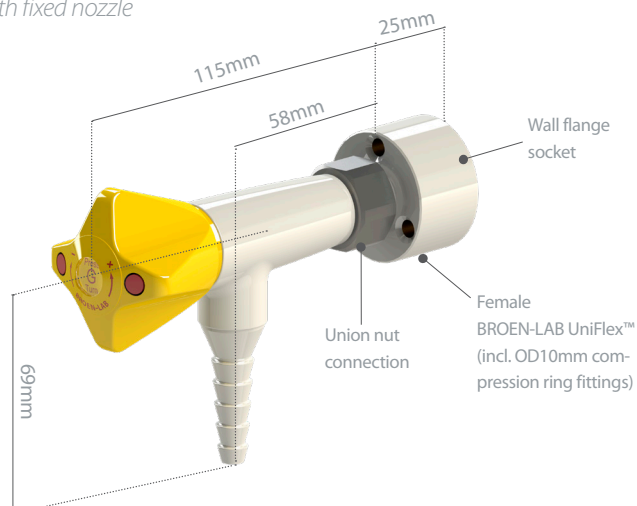
Media		with fixed nozzle	with quick release coupling
 Natural gas		2532 065 1010-52M	2532 098 1010-52M
 Liquefied petroleum gas		2532 065 1012-52M	2532 098 1012-52M
 Butane		2532 065 1014-52M	2532 098 1014-52M
 Propane		2532 065 1016-52M	2532 098 1016-52M
 Acetylene		2532 065 1018-52M	2532 098 1018-52M
 Hydrogen		2532 065 1020-52M	2532 098 1020-52M
 Methane		2532 065 1046-52M	2532 098 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connector.

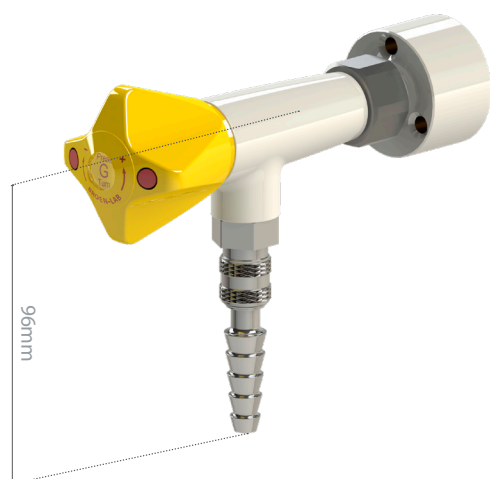
For other options please refer to page 27 or contact your local BROEN-LAB representative.

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.

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION








For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- disability-friendly handle (for needle headwork only)
- other inlet options (compression ring fittings, flexible SS pipe / rubber hose)
- wall flange socket for built-in installation
- national approvals

Models



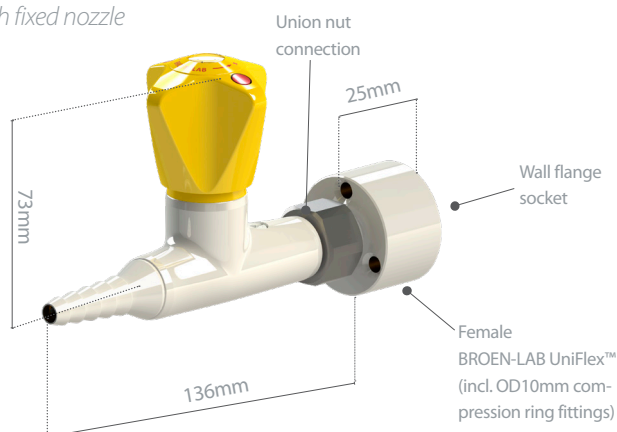
Media	with fixed nozzle	with quick release coupling
 Natural gas	2530 149 1010-T	2530 150 1010-T
 Liquefied petroleum gas	2530 149 1012-T	2530 150 1012-T
 Butane	2530 149 1014-T	2530 150 1014-T
 Propane	2530 149 1016-T	2530 150 1016-T
 Acetylene	2530 149 1018-T	2530 150 1018-T
 Hydrogen	2530 149 1020-T	2530 150 1020-T
 Methane	2530 149 1046-T	2530 150 1046-T

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

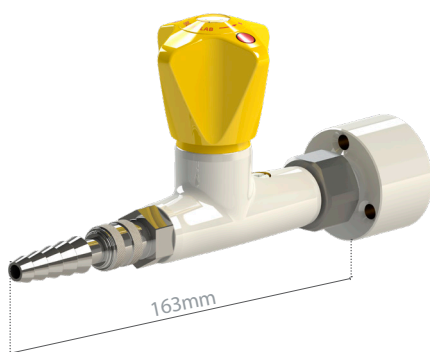
For other options please refer to page 27 or contact your local BROEN-LAB representative.

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.

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION








For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- disability-friendly handle (for needle headwork only)
- other inlet options (compression ring fittings, flexible SS pipe / rubber hose)
- wall flange socket for built-in installation
- national approvals

Models



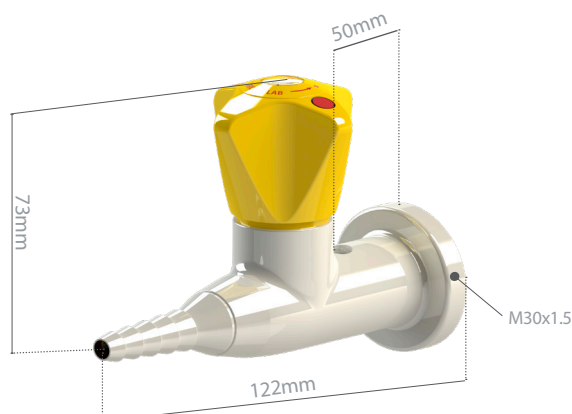
Media	with fixed nozzle	with quick release coupling
 Natural gas	2532 105 1010-T	2532 106 1010-T
 Liquefied petroleum gas	2532 105 1012-T	2532 106 1012-T
 Butane	2532 105 1014-T	2532 106 1014-T
 Propane	2532 105 1016-T	2532 106 1016-T
 Acetylene	2532 105 1018-T	2532 106 1018-T
 Hydrogen	2532 105 1020-T	2532 106 1020-T
 Methane	2532 105 1046-T	2532 106 1046-T

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

For other options please refer to page 27 or contact your local BROEN-LAB representative.

SUSPENDED/WALL MOUNTED STRAIGHT FITTINGS WITH LEAD-IN

With fixed nozzle



With quick release coupling



SPECIFICATIONS

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

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass, SS AISI 316L (flexible SS pipe)

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- disability-friendly handle (for needle headwork only)
- alternative hose type and inlet connection
- other inlet options (type, length)
- national approvals

Models










with fixed nozzle



with quick release coupling

Media

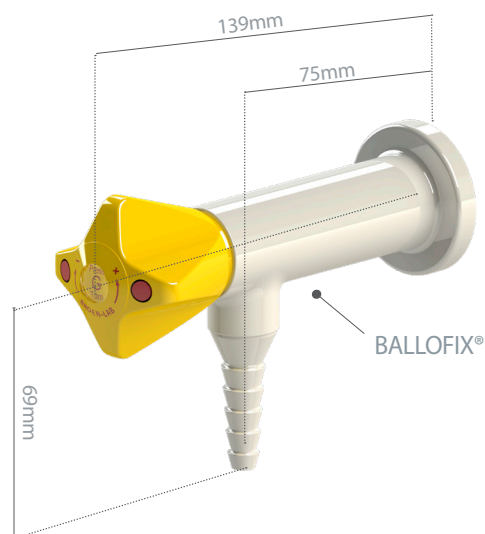
	Natural gas	2532 173 1010-52M	2532 202 1010-52M
	Liquefied petroleum gas	2532 173 1012-52M	2532 202 1012-52M
	Butane	2532 173 1014-52M	2532 202 1014-52M
	Propane	2532 173 1016-52M	2532 202 1016-52M
	Acetylene	2532 173 1018-52M	2532 202 1018-52M
	Hydrogen	2532 173 1020-52M	2532 202 1020-52M
	Methane	2532 173 1046-52M	2532 202 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

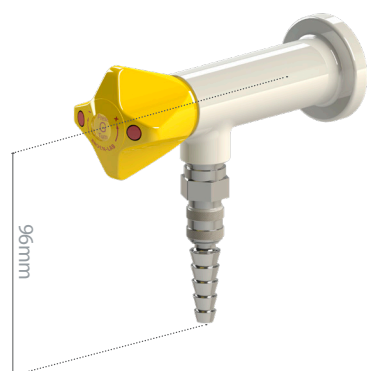
For other options please refer to page 27 or contact your local BROEN-LAB representative.

WALL/BENCH MOUNTED FITTINGS WITH 90° VALVES WITH LEAD-IN

With fixed nozzle



With quick release coupling



SPECIFICATIONS

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

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

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

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass, SS AISI 316L (flexible SS pipe)

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- disability-friendly handle (for needle headwork only)
- alternative hose type and inlet connection
- other inlet options (type, length)
- national approvals

Models



with fixed nozzle



with quick release coupling

Media

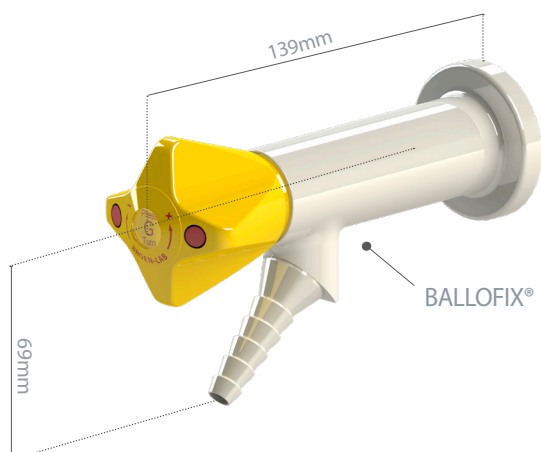
	Natural gas	2530 323 1010-52M	2530 324 1010-52M
	Liquefied petroleum gas	2530 323 1012-52M	2530 324 1012-52M
	Butane	2530 323 1014-52M	2530 324 1014-52M
	Propane	2530 323 1016-52M	2530 324 1016-52M
	Acetylene	2530 323 1018-52M	2530 324 1018-52M
	Hydrogen	2530 323 1020-52M	2530 324 1020-52M
	Methane	2530 323 1046-52M	2530 324 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

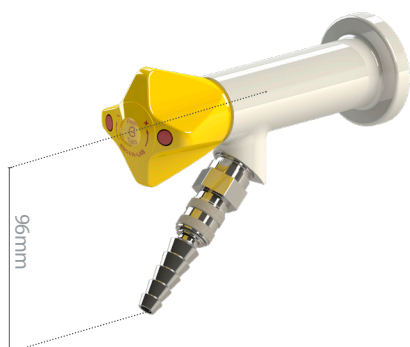
For other options please refer to page 27 or contact your local BROEN-LAB representative.

WALL/BENCH MOUNTED FITTINGS WITH 45° VALVES WITH LEAD-IN

With fixed nozzle



With quick release coupling



SPECIFICATIONS

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

Type of valve: Type 2 (AS4617)

Nominal size of valve: 3/8"

Max. working pressure: 7 bar / 700 kPa / 102 psi

Temperature limits: 5-60° C / 41-140° F

Handle: Metal, "POP-UP", BROEN POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Metal, fixed

Headwork: Ceramic, press/turn

Opening/closing function: 90°

Allowable test pressure after installation:
10 bar without function of the valve

MATERIALS WITH MEDIA CONTACT

Metals: Brass, SS AISI 316L (flexible SS pipe)

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different media
- flashback arrestor
- needle headwork
- disability-friendly handle (for needle headwork only)
- alternative hose type and inlet connection
- other inlet options (type, length)
- national approvals

Models



with fixed nozzle



with quick release coupling
For other options please refer to page 27 or contact your local BROEN-LAB representative.

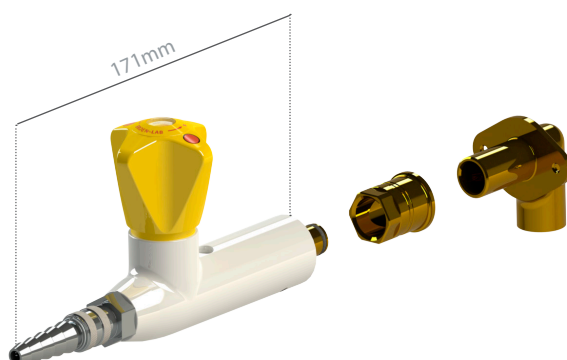
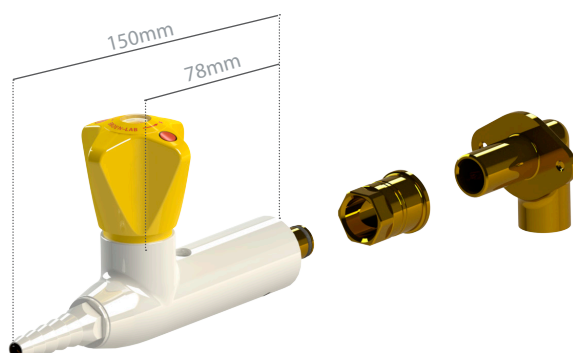
Media

	Natural gas	2530 341 1010-52M	2530 342 1010-52M
	Liquefied petroleum gas	2530 341 1012-52M	2530 342 1012-52M
	Butane	2530 341 1014-52M	2530 342 1014-52M
	Propane	2530 341 1016-52M	2530 342 1016-52M
	Acetylene	2530 341 1018-52M	2530 342 1018-52M
	Hydrogen	2530 341 1020-52M	2530 342 1020-52M
	Methane	2530 341 1046-52M	2530 342 1046-52M

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 or contact your local BROEN-LAB representative.

SINGLE STRAIGHT VALVE WITH REAR WALL CONNECTION (RWC)



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: Removable metal

Headwork: Ceramic

Opening/closing function: 180° (wrist action lever: 90°)

Temperature range: 0-90°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 2.3 kg

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: POM

Sealing: EPDM

Lubricant: Silicone based

Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

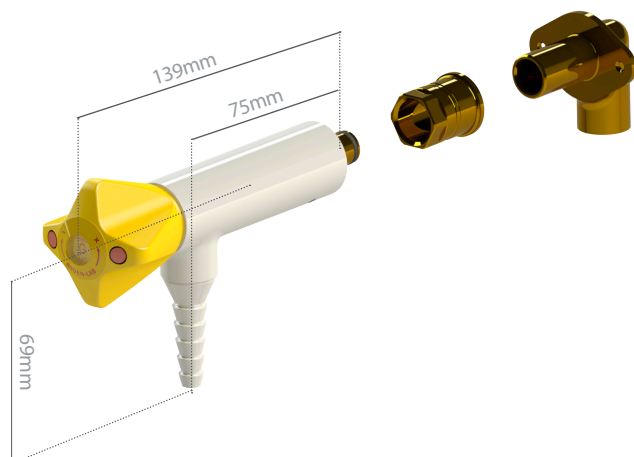
- aerator
- flow restrictor (5 l/min)
- fixed hose nozzle
- integrated non-return valve

Models

Media	with fixed nozzle	with quick release coupling
 Natural gas	2532 250 1010-40	2532 251 1010-40
 Liquefied petroleum gas	2532 250 1012-40	2532 251 1012-40
 Butane	2532 250 1014-40	2532 251 1014-40
 Propane	2532 250 1016-40	2532 251 1016-40
 Acetylene	2532 250 1018-40	2532 251 1018-40
 Hydrogen	2532 250 1020-40	2532 251 1020-40
 Methane	2532 250 1046-40	2532 251 1046-40

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 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: Removable metal

Headwork: Ceramic

Opening/closing function: 180° (wrist action lever: 90°)

Temperature range: 0-90°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 2.3 kg

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Plastics: POM, SPX (hose)

Sealing: EPDM

Lubricant: Silicone based

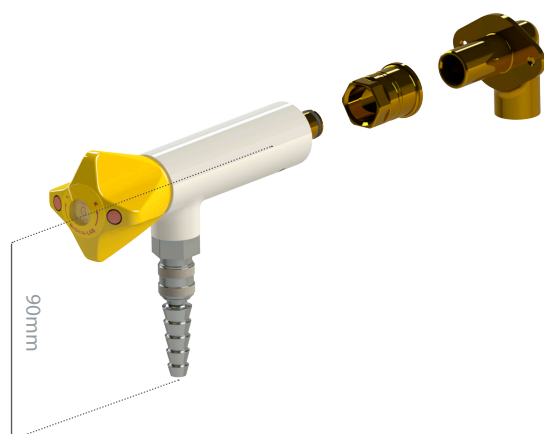
Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- aerator
- flow restrictor (5 l/min)
- fixed hose nozzle
- integrated non-return valve
- angle valve with 45° hose nozzle
- other installation options:
 - flange
 - straight rear wall connection
 - wall thickness 20-40mm
 - additional support in case of a thin panel



Models



Media

with fixed nozzle

with quick release coupling

	Natural gas	2530 431 1010-40	2530 432 1010-40
	Liquefied petroleum gas	2530 431 1012-40	2530 432 1012-40
	Butane	2530 431 1014-40	2530 432 1014-40
	Propane	2530 431 1016-40	2530 432 1016-40
	Acetylene	2530 431 1018-40	2530 432 1018-40
	Hydrogen	2530 431 1020-40	2530 432 1020-40
	Methane	2530 431 1046-40	2530 432 1046-40

Fittings are delivered with a 700mm SS flexible pipe with OD12mm inlet connection.

For other options please refer to page 27 or contact your local BROEN-LAB representative.

BROEN-LAB UNIFLEX™ HOSE / SS FLEXIBLE PIPE SELECTION GUIDE

BROEN-LAB offers BROEN-LAB UniFlex™ hoses and flexible Stainless Steel pipes 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 time and labour - in other words - reduced installation costs.

Select the right product to ensure safe installation and long service life!



The total design of the system must be taken into consideration when selecting the type of BROEN-LAB UniFlex™ flexible hose or pipe for specific media. Only then products will provide safe, trouble-free operation.

Please always check local requirements/regulations regarding installation and maintenance of hoses/flexible pipes!

A very high quality of materials applied for production of hoses and Stainless Steel flexible pipes, which are supplied by BROEN-LAB, and a long-time experience in making installations worldwide, combined with optimal installation conditions, may assure a lifetime for a hose to be more than 10 years. Expected lifetime can only be achieved under normal use and proper installation methods, which are described in technical specifications, i.e. max. working pressure, max. temperature, physical installation methods and other. Any nonconformity to specifications decreases the lifetime of a hose/flexible pipe.

Which hose/flexible pipe to select?

In the table below you find the summary of the factors that are necessary to consider when selecting a BROEN-LAB UniFlex™ flexible hoses/pipes for burning gases.

Factors*	Rubber hose  (polyester reinforced)	Metal flexible pipe 
Inner hose material with media contact	Nitrile (NBR)	Corrugated Stainless Steel AISI 316
Outer hose material / braiding	EPDM (polyester reinforced)	None
Sealing material	Nitrile (NBR)	Nitrile (NBR)
Inside diameter	6.3mm	8.5mm
Outside diameter	12.9mm	12mm
Max. working pressure	10 bar	16 bar, DVGW
Max. working temperature	50°C	50°C
Min. bending radius (inner)	40mm	15mm (single bend) 130 mm (dynamic bend)
UV resistance	+	+++
Range of connections	+++	++

* Values shown in the table are valid for rubber hoses and flexible Stainless Steel pipes only.

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

93Y - BROEN-LAB UNIFLEX™ FLEXIBLE STAINLESS STEEL PIPES FOR BURNING GASES

BROEN-LAB UNIFLEX™ FITTINGS FOR BURNING GASES

INLET CONNECTIONS

93 Y **XX** XX XXXX

OD10mm connection for compression fittings (Code **10**)



OD12mm connection for compression fittings (Code **12**)



OD15mm connection for compression fittings (Code **15**)



OD3/8" connection for compression fittings (Code **09**)



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



3/8" NPT fixed male connection (Code **34**)



1/4" NPT fixed male connection (Code **70**)



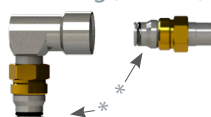
Female G3/8" union nut connection (Code **41**)



Female 1/2" union nut connection (Code **40**)



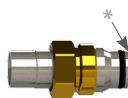
90° BROEN-LAB Uniflex connection with NBR O-ring (Code **30**)



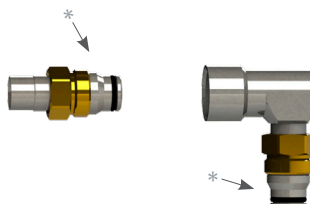
OUTLET CONNECTIONS

93 Y XX **XX** XXXX

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



90° BROEN-LAB Uniflex connection with NBR O-ring (Code **30**)



*All O-rings are lubricated with mineral oil based lubricant

HOSE

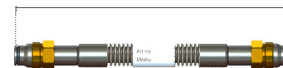
93 Y XX XX **XXXX**

Stainless Steel 1.4404



HOSE LENGTHS

Definition of length (L)



*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:

Stainless Steel 1.4404 similar to AISI 316L

Braiding: None

Materials with media contact:

Stainless Steel 1.4404, NBR (Nitrile) lubricated with mineral oil based lubricant

Inside diameter: 8.5 mm

Outside diameter: 12 mm

Max. working pressure: 16 bar according to DVGW

Max. working temperature: 50°C

Bending radius (inner):

≥ 15 mm (static)

≥ 130 mm (dynamic)

Min. length with connections: 500mm

Max. movements (Bending radius 130mm): 10.000**

Leakage rate: <1x10⁻³ mbar l/s (He)

EXAMPLE OF HOSE CONFIGURATION

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



93Y12201200

* Other lengths are available on request

** In accordance with ISO 10380

INLET CONNECTIONS

93 G XX XX XXXX

Male G3/8" fixed connection (Code 32)



Male G1/2" fixed connection (Code 31)



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



NBR rubber

OD10mm connection for compression fittings (Code 10)



OD12mm connection for compression fittings (Code 12)



OD15mm connection for compression fittings (Code 15)



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



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



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



OUTLET CONNECTIONS

93 G XX XX XXXX

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



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



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



*All O-rings are lubricated with mineral oil based lubricant

HOSE

93 G XX XX XXXX

Rubber hose (polyester reinforced)



Marking for burning 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: Nitrile (NBR)

Outer hose material: EPDM

Materials with media contact:

brass, NBR

Sealing material: Nitrile (NBR) with mineral oil based lubricant

Inside diameter: 6.3mm

Outside diameter: 12.9mm

Max. working pressure: 10 bar

Max. working temperature: 50°C

Bending radius (inner): ≥ 40mm

Min. length with connections: 160mm * Other lengths are available on request

EXAMPLE OF HOSE CONFIGURATION

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



93G12201200

HEADWORKS

PRESS/TURN HEADWORK

SPECIFICATIONS

BROEN-LAB UniFlex™ fittings for burning gases are as a standard delivered with a safety press/turn headwork.

Opening/closing function: 90° turn

Media: Burning gases

Max. working pressure: 7 bar / 700 kPa / 102 psi

Allowable test pressure after installation:

10 bar without function of the valve



Press/turn headwork

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

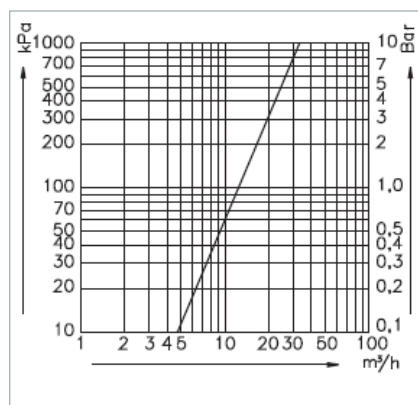
Ceramics: Al₂O₃ 96%

ORDERING INFORMATION

Press/turn headwork

Not available as a spare part (for safety reasons)

FLOW CHART



NEEDLE HEADWORK

SPECIFICATIONS

BROEN-LAB UniFlex™ fittings for burning gases can be also delivered with a needle headwork where fine regulation of flow is required.

Opening/closing function: 3 x 360° turn

Media: Burning gases

Max. working pressure: 16 bar / 1600 kPa / 232 psi

Allowable test pressure after installation:

1.5 x max. working pressure without function of the valve



1. Yellow plastic ring



2. Needle headwork

MATERIALS WITH MEDIA CONTACT

Metals: Brass

Sealing: Nitrile (NBR)

Lubricant: Mineral oil based

ORDERING INFORMATION

1. Yellow plastic ring

No. 0255035-4059

2. Needle headwork

Not available as a spare part (for safety reasons)

FLOW CHART

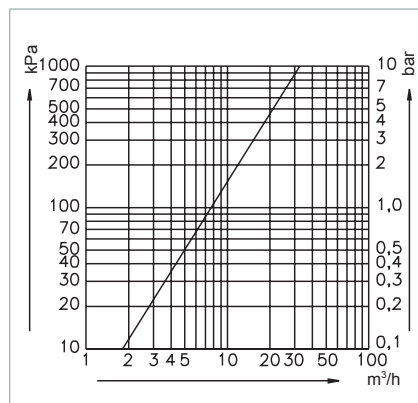



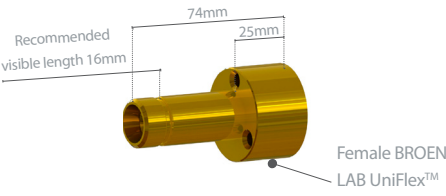



Illustration	Description	BROEN-LAB item No.
	Mounting set for G1/2 connection Mounting set for M30x1.5 connection	19 141 000 19 190 000
	Threaded inlet pipe M30x1,5 L=30mm L=60mm L=90mm	19 190 03 19 190 02 19 190 04
	Wall flange socket (for exposed piping)	02 101 30G
	Wall flange socket (for built-in installation)	02 101 31
	Cover flange for 02 101 31	1492304G
	Hose nozzle for quick release coupling	96C0030

ORDERING INFORMATION

BROEN-LAB UNIFLEX™ FITTINGS

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

25 XX XXX 10 XX-XX X

BROEN-LAB Series no.

Models

- 30 - Angle valves
- 32 - Straight valves

Serial number

*Country code

- 10 - International
- 30 - Japan
- 80 - Denmark
- 81 - Germany
- 82 - UK
- 83 - Benelux
- 84 - Australia






Hose type

- blank - none
- B - rubber hose 0.7m with OD10mm
- H - rubber hose 0.7m with OD15mm
- E - rubber hose 0.7m with G1/2 union nut
- M - flexible SS pipe 0.7m with OD12mm

Inlet type

- 05 - 30mm, 1/2" ISO 7/1-R - BROEN-LAB UniFlex™
- 14 - 60mm, 1/2" ISO 7/1-R - BROEN-LAB UniFlex™
- 18 - 90mm, 1/2" ISO 7/1-R - BROEN-LAB UniFlex™
- 50 - 30mm, M30x1.5
- 52 - 60mm, M30x1.5
- 54 - 90mm, M30x1.5

Media code

-  10 - Natural Gas (G)
-  12 - Liquefied Gases (LPG)
-  14 - Butane (C₄H₁₀)
-  16 - Propane (C₃H₈)
-  18 - Acetylene (C₂H₂)
-  20 - Hydrogen (H₂)
-  46 - Methane (CH₄)

BROEN-LAB UNIFLEX™ FITTINGS FOR BURNING GASES

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.

* For burning gases some national standards may apply, therefore contact your BROEN-LAB representative for more information.

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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