

/ TECHNOLOGY FOR GASES /

CATALOG USA 2024 | 01

Quality products from WITT

Benefits to you:

- 100% quality inspection of all products leaving our factory
- Certificates: DIN EN ISO 9001, DIN EN ISO 22000 as well as PED 2014/68/EU,
 ATEX 2014/34/EU, Directive 93/42/EWG
- State-of-the-art technologies and elaborate quality assurance systems
- Easy, intuitive operation, ergonomics, integration capabilities and cost effectiveness
- Engineered products tailored exactly to your needs





































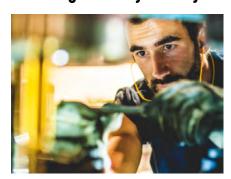




Our product range

In this catalog you will find our main models and series. Furthermore we offer special custom-designed products, to your individual specifications.

Engineering services included. Working closely with you.



Adopting our gas technology to the requirements of the customers is our daily business. Because gas applications are as different and varied as technical gases and gas mixtures. Our decades of experience and extensive know-how will give you the safety you need: for your employees, your material and your processes.

Please talk to us about your requirements - we can help you for sure!

Any other questions? We provide you with expert answers!

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KM 20 ECO

2 gases | small flows



Small Gas mixer especially for dispensing equipment

- variable mixture output
- pre-set gas blends
- various flow capacities

model

KM 20 ECO

KM 20-1 ECO with one outlet KM 20-2 ECO with two outlets

MM

2 gases | small to medium flows



Compact Gas mixer for different applications

- adjustable mixing valve
- mixed gas flow dependent on inlet pressures
- various flow capacities

model

MM-2

MM-2K

MM-2G



MM FLEX

2 gases | small to medium flows



Ultra compact gas mixer for different applications, e.g. welding

- adjustable mixing valve adjustable metering valve
- adjustable pressure

model

MM FLEX

BM

2 gases | small flows



Gas mixer for direct cylinder connection (high pressure)

- constant output
- infinitely variable gas blending infinitely variable metering
- no additional pressure regulator required
- various flow capacities

model

BM-2 BM-2M (200 bar) BM-2M (300 bar)



KM10-2 FLEX

2 gases | small flows



Small gas mixer especially for low gas consumption, e.g. in laboratory applications

- variable mixture output
- · variable gas blending
- various flow capacities
- new mixing technology, mixed gas receiver is not required

model

KM10-2 Flex

MG Fix

2 or 3 gases | medium to high flows



Pre-set 2 or 3 components gas mixers

- variable mixture output
- mixing range dependent on type of gas
- new mixing technology, mixed gas receiver is not required

model

MG-2 Fix for 2 gases

MG 25-2 capacity range up to approx. 22 Nm³/h MG 45-2 capacity range up to approx. 46 Nm³/h MG 75-2 capacity range up to approx. 68 Nm³/h MG 95-2 capacity range up to approx. 90 Nm³/h MG 125-2 capacity range up to approx. 135 Nm³/h

MG-3 Fix for 3 gases

MG 45-3 capacity range up to approx. 46 Nm³/h MG 95-3 capacity range up to approx. 90 Nm³/h MG 125-3 capacity range up to approx. 135 Nm³/h

options:

Inlet pressure monitoring with alarm module AM3



MG Flex

2 gases | medium to high flows

Adjustable 2 components gas mixers for welding applications

- variable mixture output
- mixing range dependent on type of gas
- new mixing technology, mixed gas receiver is not required



model

MG-2 Flex

MG 25-2 capacity range up to approx. 21 Nm³/h MG 45-2 capacity range up to approx. 48 Nm³/h MG 75-2 capacity range up to approx. 65 Nm³/h MG 95-2 capacity range up to approx. 96 Nm³/h MG 125-2 capacity range up to approx. 135 Nm³/h

inlet pressure monitoring with alarm module AM3

KM

2 or 3 gases | small to medium flows

Mixing system for different technical applications



- infinitely variable gas blending
- infinitely variable metering
- · various flow capacities



model

KM-2 for 2 gases

KM 20-2 KM 30-2

KM 60-2

KM 100-2

KM-3 for 3 gases

KM 20-3

KM 30-3

KM 60-3

KM 100-3



KM-M

2 or 3 gases | medium to high flows

Gas mixer especially for MAP-packaging and flow-pack machines



- infinitely variable gas blending
- infinitely variable metering
- various flow capacities
- regulation of outlet pressure
- monitoring of gas supply
- integrated inlet pressure monitoring (alarm module AM3)



model

KM-2M for 2 gases

KM 100-2M

KM 200-2M

KM 300-2M

KM 600-2M

KM-3M for 3 gases

KM 100-3M

KM 200-3M

KM 300-3M

KM 600-3M

option:

optional: automatic shut-off of O2 when going below the limit



In our brochure you can read everything you always wanted to know about WITT gas mixers

Gas mixers offer mximum mixing quality, flexibility and economy. But which model is the best for your specific application?

Looking for the right mixer, a lot of questions come up, e.g.

- Which advantages offer the different mixing technologies and mixing valves, such as mechanical, pneumatical or electrical?
- Which design fits best in my installation: compact, mobile or stationary?
- What kind of components are available: pressure monitoring, inline gas analysis, tanks, explosion protection?

Find answers, discover technologies and have a look at our models overview in the new WITT gas mixers brochure.

Download at www.wittgas.com



KM-ME



KM100-2MF on steel receiver

2 or 3 gases | low to very high flows

Powerful gas mixer especially for highly fluctuating mixing gas output quantities

- adjustable mixing valve
- with receiver pressure management for use with mixed gas receiver
- also for central gas supply installations
- various flow capacities
- alarm module AM3 (optional): integrated inlet pressure monitoring with digital display for pressure (with analogue pressure transmitters) plus optical alarm, adjustable alarm limits, alarm acknowledgement required, protection of alarms, interfaces for controlling external alarms etc.

model

KM-2ME for 2 gases

KM 100-2ME

mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver

KM-2ME for 3 gases

KM 100-3ME

mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver

inlet pressure monitoring with alarm module AM3 surcharge analogue pressure transmitters 2 inlet gases surcharge analogue pressure transmitters 3 inlet gases



KM-M+

2 or 3 gases | medium to high flows



K € 100 M+

Electronic gas mixer with motor-driven mixing valve especially for MAPpackaging and flow-pack machine

- · constant output
- infinitely variable gas blending
- infinitely variable metering
- various flow capacities
- regulation of outlet pressure
- monitoring of gas supply
- communication via serial interface (e.g. PLC, PC or 4-20mA/0-10V)
- for operation with mixed gas receiver
- integrated inlet pressure monitoring (alarm module AM3)



KM-2M+ for 2 gases

KM 100-2M+ KM 200-2M+

KM-3M+ for 2 gases

KM 100-3M+ KM 200-3M+

options:

operation via touch-screen display coupling socket set

KM-FLOW

KM-Flow with analysis

2 or 3 gases | medium to high flows

Gas mixer especially for MAP-packaging and flow-pack machines

- electronic Mass Flow Controller (MFC)
- touchscreen
- · measured data storage
- may be combined with analysis MAPY LE
- for up to 1000/1500 l/min

model

KM1000-2 FLOW for 2 gases

KM 1000-2 FLOW for flow-pack machines KM 1000-2 FLOW for vacuum machines

KM1500-3 FLOW for 3 gases

KM 1500-3 FLOW for flow-pack machines KM 1500-3 FLOW for vacuum machines



MG-2ME

WITT

MG50-2ME on steel receiver

2 gases | low to very high flows

Powerful gas mixer especially for high flows and highly fluctuating mixing gas output quantities

- · adjustable mixing valve
- various flow capacities
- with receiver pressure management for use with mixed gas receiver
- also for central gas supply installations
- alarm module AM3 (optional): integrated inlet pressure monitoring with digital display for pressure (with analogue pressure transmitters) plus optical alarm, adjustable alarm limits, alarm acknowledgement required, protection of alarms, interfaces for controlling external alarms etc.

model

MG 50-2ME

mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver

MG 100-2ME

mounted on 250 l / 11 bar steel receiver mounted on 250 l / 11 bar stainless steel receiver

MG 200-2ME (see option "external filter")

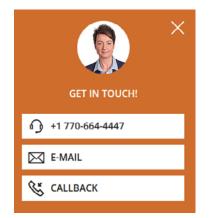
options:

inlet pressure monitoring with alarm module AM3 external filter as additional protection for each gas inlet recommended for MG 50 and MG 100; mandatory for MG 200 surcharge analogue pressure transmitters 2 inlet gases

⊙ Do you need advice?

Our team of experts is there for you: Click on the contact banner on the WITT website and choose whether you want to call us directly, send us an e-mail or have us call you back.

This way you can quickly clarify your question - free of charge, of course.





MG-3ME

3 Gase | low to very high flows



MG50-3ME

Powerful gas mixer especially for high flows and highly fluctuating mixing gas output quantities

- · adjustable mixing valve
- various flow capacities
- with receiver pressure management for use with mixed gas receiver
- also for central gas supply installations
- alarm module AM3 (optional): integrated inlet pressure monitoring with digital display for pressure (with analogue pressure transmitters) plus optical alarm, adjustable alarm limits, alarm acknowledgement required, protection of alarms, interfaces for controlling external alarms etc.

model

MG 50-3ME

mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver

MG 100-3ME

mounted on 250 l / 11 bar steel receiver mounted on 250 l / 11 bar stainless steel receiver

MG 200-3ME (see option "external filter")

options:

inlet pressure monitoring with alarm module AM3 external filter as additional protection for each gas inlet recommended for MG 50 and MG 100; mandatory for MG 200 surcharge analogue pressure transmitters 3 inlet gases



alarm module AM3

Do you already know the WITT YouTube channel?

Here you will find over 25 videos in 9 languages on the topics of mixing and analysing gases, leak testing and gas safety.

Subscribe to our channel and be among the first to be informed about new videos.



KM-MEM





KM100-2MEM



KM100-3MEM

2 or 3 gases | low to high flows

Powerful gas mixer especially for MAP- and vacuum-packaging machines and highly fluctuating mixing gas output quantities

- adjustable mixing valve
- various flow capacities
- with receiver pressure management for use with mixed gas receiver
- also for central gas supply installations
- alarm module AM3 (optional): integrated inlet pressure monitoring with digital display for pressure (with analogue pressure transmitters) plus optical alarm, adjustable alarm limits, alarm acknowledgement required, protection of alarms, interfaces for controlling external alarms etc.
- integrated inlet pressure monitoring (alarm module AM3)
- monitoring of gas supply
- to be used with mixed gas receiver, incl. inlet pressure monitoring

model

KM-2MEM for 2 gases

KM 100-2MEM

mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver

KM 200-2MEM

mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver

KM-3MEM for 3 gases

KM 100-3MEM

mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver

KM 200-3MEM

mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver

options:

automatic shut-off e.g. of O2 when going below the limit



KM-MEM+



2 or 3 gases | low to high flows

Electronic gas mixing system with motor-driven mixing valve especially for MAP- and vacuum packaging machines

- adjustable mixing valve
- various flow capacities
- with receiver pressure management for use with mixed gas receiver
- also for central gas supply installations
- monitoring of gas supply
- communication by serial Interface (e.g. PLC, PC or 4-20mA/0-10V)
- to be used with mixed gas receiver, incl. inlet pressure monitoring



model

KM-2MEM+ for 2 gases

KM 100-2MEM+ mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver

KM 200-2MEM+ mounted on 20 l / 10 bar steel receiver mounted on 20 l/10 bar stainless steel receiver

KM-3MEM+ for 3 gases

KM 100-3MEM+ mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver

KM 200-3MEM+ mounted on 20 l / 10 bar steel receiver mounted on 20 l / 10 bar stainless steel receiver

options:

operation via touch-screen display coupling socket set interface modules (hardware, assembly, testing) module Profinet module Analog 0-10V module RS232

• Packaging in a modified atmosphere: why and how?

Modified Atmosphere Packaging (MAP) ensures a longer shelf life and an improved impression of freshness in taste, colour and shape. Modified atmosphere counteracts the growth of microbiological organisms and biochemical reactions and thus the spoilage of the product. Our videos tell you everything you need to know to get started. And, of course, how you can optimize your quality control.

Part 1 - Basics

Part 2 - system components



MG-MEM+



S 7 7 8

2 or 3 gases | higher flows

Electronic gas mixing system with motor-driven mixing valve especially for MAP- and vacuum packaging machines with higher flows

- adjustable mixing valve
- various flow capacities
- with receiver pressure management for use with mixed gas receiver
- also for central gas supply installations
- monitoring of gas supply
- communication by serial Interface (e.g. PLC, PC or 4-20mA/0-10V)
- to be used with mixed gas receiver, incl. inlet pressure monitoring

model

MG-2MEM+ for 2 gases

MG 50-2MEM+

mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver mounted on 250 l / 11 bar stainless steel receiver mounted on 250 l / 11 bar stainless steel receiver

MG-3MEM+ for 3 gases

MG 50-3MEM+

mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver mounted on 250 l / 11 bar stainless steel receiver mounted on 250 l / 11 bar stainless steel receiver

options:

operation via touch-screen display coupling socket set interface modules (hardware, assembly, testing) module Profinet module Analog 0-10V module RS232



N2 / CO2 /CO mixers



KM100-3ME PvDu

3 gases | special application

Gas mixer for special application: low CO trimix for food processing

- KM100, MG100, MG200 gas mixing technology (see previous page) especially for mixing CO for food processing
- mounted on receiver
- including inlet pressure monitoring

model

KM series

KM 100-3 PvDu A N2/CO2/CO-N2 PREMIX mounted on 100 liter steel receiver

KM 100-3 PvDu A N2/CO2/CO with CO monitor mounted on 100 liter steel receiver

MG series

MG 100-3 PvDu A N2/CO2/CO with CO monitor mounted on 250 l steel receiver

MG 200-3 PvDu A N2/CO2/CO with CO monitor (requires 500 liter receiver-not included)

GASFLOW CONTROL SYSTEMS for non-flammable gases



KD

gas flow controller with 02 analysis



Electronical flow control systems for modified atmospheres in the food industry

- with integrated zirconia cell for O2-measurement
- integrated PID control loop for automatic gas flow control
- potential free contacts for min./ max. alarms



model

KD 500-1A MAPY ZRL

options:

sample testing via needle additional electrochemical sensor for sample testing heater and thermostat, only electro-chemical sensors

KM-MAPY ZRL



gas mixer and meterer

2-components gas mixers with integrated O2 analysis

- with integrated zirconia cell for O2-measurement
- integrated PID control loop for automatic gas flow control
- potential free contacts for min./ max. alarms
- MAPY-analysis



model

KM 100-2M MAPY ZRL KM 200-2M MAPY ZRL KM 300-2M MAPY ZRL KM 600-2M MAPY ZRL

options:

gas mixer M+ (remote control)



KM10-2 FLEX

2 gases | small flows



Small gas mixer especially for low gas consumption, e.g. in laboratory applications

- variable mixture output
- · variable gas blending
- various flow capacities
- new mixing technology, mixed gas receiver is not required

model

KM10-2 FLEX

KM

2 or 3 gases | small to medium flows



Mixing system for different technical applications, e.g. for welding applications

- infinitely variable gas blending
- variable mixture output
- various flow capacities
- certified in accordance to ATEX

model

KM-2 for 2 gases (1 gas flammable)

KM 20-2

KM 30-2

KM 60-2

KM 100-2

KM-3 for 3 gases (max. 2 flammable gases)

KM 20-3

KM 30-3

KM 60-3

KM 100-3



KM-ME Ex

2 or 3 gases | low to very high flows



KM 100-3ME Ex on steel receiver

Powerful gas mixers especially for highly fluctuating mixing gas output quantities

- infinitely variable gas blending
- variable mixture output
- various flow capacities
- separate electrical control panel
- 5 m cable between control unit and mixing device
- certified in accordance to ATEX
- model A with integrated analysis, LC-display, 4-20 mA signal and min./max. alarms (further information in section 6 "Gas analyzers") alarm module AM3 (optional): integrated inlet pressure monitoring with
- digital display for pressure (with analogue pressure transmitters) plus optical alarm, adjustable alarm limits, alarm acknowledgement required, protection of alarms, interfaces for controlling external alarms etc.

model

KM-2ME Ex for 2 gases

KM 100-2ME Ex

A, with integrated analysis

mounted on 20 l / 10 bar steel receiver

mounted on 20 l / 10 bar stainless steel receiver

mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver

KM-2ME Ex for 3 gases

KM 100-3ME Ex

mounted on 20 l / 10 bar steel receiver

mounted on 20 l/10 bar stainless steel receiver

mounted on 100 l / 10 bar steel receiver

mounted on 100 l / 10 bar stainless steel receiver

options:

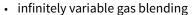
inlet pressure monitoring with alarm module AM3 (for Ex) surcharge analogue pressure transmitters 2 inlet gases surcharge analogue pressure transmitters 3 inlet gases



MG-ME Ex

2 or 3 gases | low to very high flows

Powerful gas mixers especially for highly fluctuating mixing gas output quantities



- variable mixture output
- various flow capacities
- separate electrical control panel
- 5 m cable between control unit and mixing device
- certified in accordance to ATEX
- model A with integrated analysis, LC-display, 4-20 mA signal and min./max. alarms (further information in section 6 "Gas Analyzers")
- alarm module AM3 (optional): integrated inlet pressure monitoring with digital display for pressure (with analogue pressure transmitters) plus optical alarm, adjustable alarm limits, alarm acknowledgement required, protection of alarms, interfaces for controlling external alarms etc.



model

MG-2ME Ex for 2 gases

MG 50-2ME Ex*

mounted on 100 l / 10 bar steel receiver A, with integrated analysis mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver A, with integrated analysis, mounted on 100 l / 10 bar stainless steel receiver

MG 100-2ME Ex*A, with integrated analysis mounted on 250 l / 11 bar steel receiver mounted on 250 l/11 bar stainless steel receiver MG 200-2ME Ex* A, with integrated analysis

MG-2ME Ex for 3 gases

MG 50-3ME Ex*

mounted on 100 l / 10 bar steel receiver mounted on 100 l / 10 bar stainless steel receiver MG 100-3ME Ex* mounted on 250 l / 11 bar steel receiver

mounted on 250 l / 11 bar stainless steel receiver MG 200-3ME Ex*

options:

inlet pressure monitoring with alarm module AM3 (for Ex) *external filter as additional protection for each gas inlet recommended for MG 50 and MG 100; mandatory for MG 200 surcharge analogue pressure transmitters 2 inlet gases surcharge analogue pressure transmitters 3 inlet gases





OXYBABY® M+



portable 02 / CO2 gas analyzer - basic model

Compact handheld O2 / CO2 analyzer e.g. for sample testing of MAPpackages

- quick and precise
- data log of 100 results (measurement, date, time, product/line no.)
- administration of product data and product names
- · incl. carrying case, spare needles and filters

model

OXYBABY® M+ for O2 OXYBABY® M+ for O2/CO2

option:

connector tube with Luer-Lok-connection

OXYBABY® 6.0



portable 02 / CO2 gas analyzer - premium model

Compact handheld O2 / CO2 analyzer e.g. for sample testing of MAPpackages (premium model)

- quick and precise
- data log of 500 measurements
- administration of product data and product names
- incl. carrying case, spare needles and filters
- minimum sample gas requirement (approx. 2ml)
- minimized response time
- measurement of pressure
- USB-interface
- · data-log of 500 results
- comfort operation
- integrated needle and filter checks

model

OXYBABY® 6.0 for O2 OXYBABY® 6.0 for O2/CO2

connector tube with Luer-Lok-connection

further accessories: see p. 29 OBCC software see p. 29

22



OXYBABY® M+ P



basic gas analyzer for pressurised pipelines

Mobile O2/ CO2 sample analysis in pressurised pipelines, mainly in welding technology (basic model)

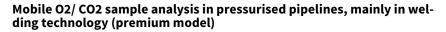
- · fast and precise
- battery operation
- integrated memory for the last measurements
- including carrying case and G 1/4 AG connection

model

OXYBABY® M+ P for O2/CO2

OXYBABY® 6.0 P





- fast and precise
- data-log of 500 results (analysis values, date, time of measurement)
- including carrying case and G 1/4 AG connection
 administration of up to 25 users
- comfort operation
- simplified menu navigation etc.

model

OXYBABY® 6.0 P for O2/CO2

OXYBABY® Accessories

diverse



Accessories for using the OXYBABY® as a table stand and for premium functions

- for versatile use
- practical and smart

model

table stand for OXYBABY® connector tube with Luer-Lok-connection

OBCC software see p. 29



OXYBABY® Accessories



Canpiercer



Aquacheck

for cans, bottles and mini packages

Special packages are hardly controllable by standard analysis devices. Therefore WITT offers a special construction which is suitable for all OXYBABY® models.

- for head space analysis of cans and bottles, with or without overpressure/gas
- for O2 and CO2 analysis of mini packages, e.g. capsules

model

CANPIERCER for cans and bottles

(with set for head space analysis):

for cans without overpressure/gas (z.B. juice)* for max. height 270 mm, needle length 5.5 mm order no. 590000156

for cans with overpressure/gas, incl. bottle adapter* for max. height 270 mm, needle length 8.5 mm order no. 590000165 for max. height 390 mm, needle length 8.5 mm order no. 590000166 for max. height 390 mm, needle length 18.5 mm order no. 590000325

for cans with high overpressure/gas (strongly sparkling drinks) incl. calibration module and flow control* for max. height 270 mm, needle length 5.5 mm order no. 590000239

for cans and bottles, pressure measurement only,

incl. bottle adapter for max. height 390 mm, needle length 5.5 mm order no. 590000341

Canpiercer-module (for refitting): bottle adapter

* other versions on request

AQUACHECK

equipment for the gas analysis of mini packages

AQUACHECK Plus

Aquacheck incl. water container



OXYPAD





tabletop and mobile 02 / CO2 gas analyzer

Mobile desktop O2 / CO2 analyzer e.g. for sample testing of MAP-packages - innovative design

- fast, precise and reliable measurement results
- large 7" touch-screen with graphical user interface for intuitive operation
- needle casing keeps the needle clean and safe
- ergonomic needle pen for precise and safe handling
- low weight, ergonomic form and battery

model

OXYPAD for O2 **OXYPAD** for CO2 **OXYPAD** for O2 and CO2

OXYPAD: the new device class for QM

The new OXYPAD from WITT offers a range of innovative details that make your work in quality management more pleasant, faster and more efficient:







tabletop 02 / CO2 gas analyzer

Compact tabletop analyzer for sample- and continuous testing of food packages (MAP) and for welding applications

- different designs: P (pressure), L (lance) and S (sample)
- connector set (output and alarm signals)
- with zirconia measuring cell for O2 for
- quicker measurements



model

PA 7.0 for O2 Version P or L PA 7.0 for CO2 Version P or L PA 7.0 for O2/CO2 Version P or L PA 7.0 for O2 Version S PA 7.0 for O2 Version S and L PA 7.0 for O2/CO2 Version S PA 7.0 for O2/CO2 Version S and L

options:

handle

coupling socket set (output signals; alarm contacts) integration of the analysing system in the mixer housing zirconia measuring cell for O2 O2 measurement in ppm-range (surcharge calibration) heating and thermostat, only electro-chemical sensors paramagnetic sensor

OBCC software for the documentation of analysis results: see p. 29



Your questions - our answers

The new FAO section will soon be available on our website. Here you will find lots of questions about our products, technical details and maintenance from all product areas.

Feel free to browse through the sections and see what new information you find. Or search for your specific topic by entering your search term.

Do you have specific questions that you would like to see answered? Write to us with your question - we will be happy to take up your suggestion.



MAPY 4.0 / MAPY





MAPY 4.0 - inclined display for use in laboratory



MAPY LE - vertical display for use as inline analyzer

02 / CO2 gas analyzer, sample + inline

Premium gas analyzer for sample- and continuous testing of food packages (MAP)

- for use in laboratory (housing with inclined display) and in production line (housing with vertical display)
 different designs: P (pressure), L (lance) and S (sample)

- connector set (output and alarm signals)
 optional: zirconia measuring cell for O2 for quicker measurements
 MAPY LE: ideal also for inline analysis of flow packaging machines; minimization of gas consumption by combination with the gas mixer KM-FLOW or the KD gas meterer

model

MAPY 4.0 / MAPY LE	02	Version P or L
MAPY 4.0 / MAPY LE	CO2	Version P or L
MAPY 4.0 / MAPY LE	02/C02	Version P or L
MAPY 4.0 / MAPY LE	02	Version S
MAPY 4.0 / MAPY LE	02	Version S and L
MAPY 4.0 / MAPY LE	02/C02	Version S
MAPY 4.0 / MAPY LE	02/C02	Version S and L

options:

zirconia measuring cell paramagnetic measuring cell (incl. larger housing) external barcode reader coupling socket set fully automatic calibration 1 channel fully automatic calibration 2 channels O2 measurement in ppm-range (surcharge calibration) heating and thermostat, only electro-chemical sensors different Ethernet cables (only for MAPY in vertical housing)



MAPY VAC

02 / CO2 gas analyzer, for traysealers and thermoformers

Inline gas analyzer for continuous control of modified atmospheres in traysealers and thermoformers

- measures the O2 or O2/CO2 concentration before sealing the package
- with touchscreen or as black box version (BB)
- option: analysis of buffer tank
- ideal in combination with a WITT gas mixer



MAPY VAC with touchscreen

model

MAPY VAC O2 Zr
MAPY VAC O2 Zr BB
MAPY VAC O2/CO2 Zr
MAPY VAC O2/CO2 Zr BB
MAPY VAC O2 Zr, incl. buffer analysis
MAPY VAC O2 Zr BB, incl. buffer analysis
MAPY VAC O2/CO2 Zr, incl. buffer analysis
MAPY VAC O2/CO2 Zr, incl. buffer analysis
MAPY VAC O2/CO2 Zr BB, incl. buffer analysis

option:

cover IP45



MAPY VAC black box version

Inline gas analysis

integrated with gas mixer

Gas Analyzers for H2, He, etc. to be combined with WITT gas mixers



GC 50

- gas mixer and analyzer as a compact unit
- integrated analysis with LCD display touchscreen
- min./max. alarms
- for flammable gases certified to ATEX

model

analyzer system H2 (Ex, Thermal Conductivity Sensors) analyzer system H2 (Ex, Thermal Conductivity Sensors) with additional cut-off valve for flammable gases analyzer system He (Thermal Conductivity Sensors) analyzer system O2 (chemical) zirconia measuring cell for analyzer system O2 (chemical) analyzer system O2 (paramagnetic) analyzer system CO2 (infrared) analyzer system O2 / CO2 (chemical/infrared) analyzer system O2 / CO2 (paramagnetic/infrared) integration of the analysing system in the mixer housing (MG 200 without surcharge)



Options



Back-purging device for inline gas analyzers against blocked filters on gas inlets

for WITT gas analyzers

Additional functions for optimizing the process (except for MAPY and MFA)

- data export and analysis
- automatic calibration
- alarm function
- · error advice
- back-purging device against blocked filters

option

digital paperless chart recorder, 3 channels integration chart recorder in mixer LED-warning light with horn digital chart-recorder (only GC 50) data logger (only GC 50) implementation of USB interface on the back or the front of the housing analysis of the flow measurement (4-20mA), without flow-sensor automatic calibration (not for PA), 1 channel automatic calibration (not for PA), 2 channels automatic calibration in Ex-version (not for PA), 1 channel automatic calibration in Ex-version (not for PA), 2 channels error advice via e-mail (only in combination with data logger (GC50)

back-purging device for inline gas analyzers



documentation software for OXYBABY® 6.0 and PA

Windows software for the documentation of analysis measuring results. For OXYBABY® 6.0, P 6.0, Med and PA 7.0

- modern, intuitive interface
- graphic representation of the measured data, verifiable PDF reports
- comfortable data management with import and export function

OBCC full version incl. updates

licence for 1 year licence for 2 years





MFA 10.0



multi gas analyzer

Portable multi gas analyzer especially for maintanance and service

- for analysis of up to 15 different combinations of gases
- easy to use 7" colour touchscreen
- · continuous analysis
- no calibration necessary after changing gas combination
- 4-20 mA output signal

model

MFA 10.0

RLA 100



ambient air monitoring

Compact ambient air monitor for the detection of CO2

- 2 alarm limits
- 4-digit display and 4 LEDs for visual control of gas concentration
- gas measuring computer with integrated alarm device (light and horn)
- easy wall-mounting

model

RLA 100



RLA compact

ambient air monitoring

Compact ambient air monitoring system for the detection of O2, CO2, H2 etc, incl. gas monitor, transmitter and transmitter cable

- simultanous monitoring of up to four gas inlets
- freely adjustable limits per software
- data logger
- exceeding the limits generates alarm and triggers a potential free contact



models / versions

gas monitor 1-channel every additional transmitter channel (max. 4) transmitter for O2 transmitter for CO2- not Ex transmitter for CO2 Zircox - not Ex transmitter for combustible gases H2, methane, ethylene, propane (under explosion limit -0..50/100% UEG) - Atex: Zone 2, Cat. 3G transmitter for CO flow adapter (recommended for calibration) transmitter cable per meter and transmitter

RLA multichannel

ambient air monitoring

Compact ambient air monitoring system for the detection of O2, CO2, H2 etc, incl. gas monitor, transmitter and transmitter cable

- simultanous monitoring of up to four gas inlets
- freely adjustable limits per software
- data logger
- exceeding the limits generates alarm and triggers a potential free



models / versions

4-channel gas monitor with alarm additional channel (up to 16 channels possible) transmitter for O2 transmitter for CO2- not Ex transmitter for CO2 Zircox - not Ex transmitter for combustible gases H2, methane, ethylene, propane (under explosion limit -0..50/100% UEG) - Atex: Zone 2, Cat. 3G transmitter for CO flow adapter (recommended for calibration) transmitter cable per meter and transmitter



Inlet pressure monitoring



separate inlet pressure monitoring

with alarm module AM3

For continuous inlet pressure monitoring for maximum process safety

- simultanous monitoring of up to 3 gas inlets
- freely adjustable limits
- intuitive menu design
- exceeding the limits generates alarm and triggers a potential free contact

Inlet pressure monitoring

separate for flammable gases as Ex-version with separate control housing

options: data cable ALARM CONTROL software surcharge analogue pressure transmitters, 2 inlet gases surcharge analogue pressure transmitters, 3 inlet gases surcharge analogue pressure transmitters Ex, 2 inlet gases surcharge analogue pressure transmitters Ex, 3 inlet gases LED warning light with signal-horn



LEAK-MASTER® EASY



LEAK-MASTER® EASY 3



control unit PLUS (optional)

bubble-test

For the detection of even the smallest leaks, without operating with trace gas

- for all flexible and stable types of packages, also without modified atmosphere
- easy, intuitive handling
- visual principle of measurement, reveals the position of the leak administration and documentation of user and product data (only with control unit PLUS)

model	chamber size in approx. mm (HxWxD)
EASY 0.5	115 x 305 x 195
EASY 1	165 x 305 x 195
EASY 1.5	145 x 505 x 310
EASY 2	205 x 505 x 310
EASY 3	275 x 625 x 360
EASY 4	320 x 760 x 500
EASY 5	340 x 760 x 500

version with electric vacuum pump instead of compressed air (not retrofittable)

options:	order no.
vacuum-set	956.992700
vacuum holding valve	800961000
calibrated manometer	800942100
ASTM F2096 testing set	966129800
_	

control unit PLUS 5901LME-Z-003

options for control unit:

barcode reader IP 65 957099400





LEAK-MASTER® PRO 2



model 2.1

LEAK-MASTER® PRO 2 model 2.2

CO2-based

Fast, non-destructive detection of even the smallest leaks in MAPpackages, CO2-based

- non-destructive sample leak testing at a strong price-performance ratio
- without using expensive helium or hydrogen
 detects even the smallest of leaks from 10 µm (depending on the product and the test conditions) with highly sensitive and ultra-fast CO2 sensor
- housing made of acrylic glass
- visual indication of tést résults (LED lighting)
- 4 chamber sizes for single packages or small boxes
- measuring range 0 ppm 5.000 ppm user and product administration and documenation
- data transfer via ethernet

models chamber size in approx. mm (HxWxD) LM 2.1 42 x 310 x 200

LM 2.2 174 x 310 x 200 100 x 460 x 305 LM 2.3 LM 2.4 150 x 380 x 380

options: order no.: barcode reader IP 65 957099400

version with electric vacuum pump instead of compressed air (not retrofittable)



34



LEAK-MASTER® PRO



CO2-based, for large packages

Fast, non-destructive detection of even the smallest leaks in MAP-packages, CO2-based

- for large packages and E2-boxes
- detects even the smallest leaks
- measurig range 0 ppm 5.000 ppm
- user and product administration and documenation
- data transfer via ethernet

models chamber size in approx. mm (LxWxH)

LM 12.2 140 x 680 x 500 LM 12.2 230 x 680 x 500

options: order no.: 966042600 barcode reader IP 65 connection for rinsing air 966042500

Leak testing methods in comparison

Many industrial products have to be leak-tight. For example, food, cosmetics or pharmaceutical packaging, but also products such as lights in the automotive industry, electronics or plastic components.

But how can manufacturers test the leak-tightness of their products?

In this interview, Geert Elie from WITT gives an overview of the possibilities and explains the advantages and disadvantages in this interview.



LEAK-MASTER® MAPMAX



CO2-based, 100% inline solution

Fast, non-destructive detection of even the smallest leaks in MAP-packages, CO2-based

- for large packages and E2-boxes
- detects even the smallest leaks
- measurig range 0 ppm 5.000 ppm
- user and product administration and documenation
- data transfer via ethernet
- integration in the packaging process
- automatic product positioning
- automatic product transport to the following process
- up to 15 cycles per minute

The prices refer to the standard version of the machines. All sizes imply: LxWxH (the width "W" refers to the moving direction of the conveyorbelt). The height includes the alarm lamp.

models size in approx. mm (LxWxH)

MAPMAX Typ 400 1840 x 1130 x 2200 max. product dimensions 600 x 400 x 380 mm up to zu 15 cycles per minute

MAPMAX Typ 700 1840 x 1130 x 2200 max. product dimensions 600 x 680 x 220 mm up to zu 15 cycles per minute

options:

WLAN (WIFI)
barcode reader IP 65
MINK vacuum pump
central vacuum layout (control valve central vacuum)
surface pressurization (incl. motorization)
e.g. to speed up and improve the measurements
for packages with a low gas volume

Accessories





barcode reader

For process optimization with models EASY PLUS, PRO and MAPMAX

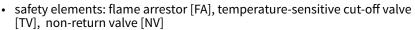
WIFI (not for Control Unit PLUS) barcode reader IP 65 Test-Leak (60µ) for the inspection of measuring and testing equipment (only for LEAK-MASTER® MAPMAX and PRO)



RF53N

connections 1/4", 3/8", 1/2"

Universal flashback arrestors certified to DIN EN ISO 5175-1, our best-



- every arrestor 100% tested
- BAM certified
- 25.5 X 82 mm, 191 g
- acetylene max. 13 m³/h fuel gases max. 68 m³/h
- oxygen max. 187 m³/h

Also available in stainless steel

connection	inlet → outlet	order no.
G 3/8 LH G 1/2 LH	MG → AGS MG → AGS MG → AGS	145-012 145-016
G 3/8 RH G 1/2 RH	MG → AGS MG → AGS MG → AGS	145-022 145-023
3/8" NPT	oxygen: IG → IG IG → IG IG → IG	145-205

RF53DN

connections G 1/4", G 3/8", G 1/2"

Universal flashback arrestors certified to DIN EN ISO 5175-1 with pressure relief valve [RV]

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV]
- every arrestor 100% tested
- BAM certified
- 25.5 X 101 mm, 260 g
- acetylene max. 11.5 m³/h
- fuel gases max. 105 m³/h
- oxygen max. 56 m³/h

Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order.

For some gases, special seals may be required. Explanations of thread types, conversion of units of measurement see p. 108/109.

connection	n inlet → outlet	order no.
for fuel gas	es:	
	MG → AGS	145-041
	MG → AGS	
9/16" LH	MG → AGS	145-044
for oxygen:		
G 1/4 RH	MG → AGS	145-048
	MG → AGS	
G 1/2 RH	MG → AGS	145-050
9/16" RH	MG → AGS	145-051



RF53NSK

connections 1/4", 3/8"

Flashback arrestors certified to DIN EN ISO 5175-1 with integrated coupling body

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet
- every arrestor 100% tested

- BAM certified
 25.5 X 110 mm, 248 g
 acetylene max. 13 m³/h
 fuel gases max. 68 m³/h
- oxygen max. 187 m³/h

connectio	n inlet -	→ outlet	order no) .
for fuel gas G 3/8 LH 9/16" LH	MG →	coupling body	/ 145SK-00	02 04
G 3/8 RH	MG → MG →	coupling body coupling body coupling body	/ 145SK-0	01

85-10

connections 1/4", 3/8", 1/2"

Standard flashback arrestor, certified to DIN EN ISO 5175-1 for higher flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet
- every arrestor 100% tested
- BAM certified
- 34 X 106 mm, 434 g
- acetylene max. 22 m³/h
- fuel gases max. 235 m³/h
- oxygen max. 310 m³/h

Also available in stainless steel



connection	inlet → outlet	order no.	
G 1/2 LH 9/16" LH 9/16-18 UN	es: MG → AGS MG → AGS MG → AGS F LN 165 PSI H2 IG → IG 55 PSI H2 IG → IG	143-008 143-009 143-123	
G 3/8 RH G 1/2 RH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	143-016 143-019	
1/4" NPT 3/8" NPT	es or oxygen: IG → IG IG → IG IG → IG	143-105	



85-20

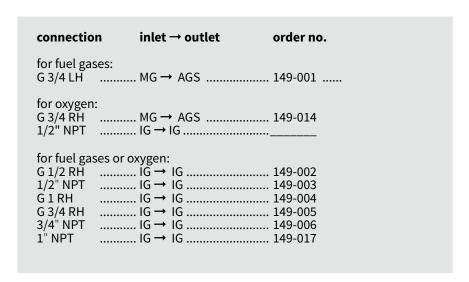
WITT

connections 3/4", 1/2", 1"

Standard flashback arrestor, certified to DIN EN ISO 5175-1 for higher

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV]
- every arrestor 100% tested
- 62 X 131/137 mm, 1400-1500 g acetylene max. 45 m³/h
- fuel gases max. 324 m³/h
- oxygen max. 333 m³/h

Also available in stainless steel



⊙ Already a classic: our most seen video

Get to know how flashback arrestors work, and learn everything about the relevant safety elements and their operation in an impressive 3D animated video.

And see the dramatic consequences of cutting costs on safety technology in this video.

WITT



85-30

connections 3/4", 1", 1.1/2"

Flashback arrestors certified to DIN EN ISO 5175-1, standard for maximum flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet
- every arrestor 100% tested
- 84 X 162/188 mm, 4.580 g
- acetylene max. 70 m³/h
- fuel gases max. 675 m³/h
- oxygen max. 860 m³/h

Also available in stainless steel



connection	inlet → outlet	order no.	
G 3/4 LH G 1 LH 1" NPT 165 PSI	xcept acetylene): MG → AGS MG → AGS H2 IG → IG SI H2 IG → IG	147-003 147-058	
G 1 ['] RH	MG → AGS	147-068	
3/4" NPT 1/2" NPT G 1.1/2 RH	xcept acetylene) or oxyg IG → IG IG → IG IG → IG IG → IG	147-081 147-083 147-069	
1/2" NPT	ly (EPDM sealing ring): IG → IG IG → IG	147-119 147-121	

Every flashback arrestor 100% tested

WITT stands for the highest quality, made in Germany. In addition to setting engineering standards, we use the best materials, excellent workmanship and a seamless quality assurance system.

We developed our own testing equipment and procedures for testing every single flashback arrestor before delivery. Safe as it gets.

The WITT Company is certified for quality management system DIN EN ISO 9001:2008.

Information on our product certifications and testing can be found on the data sheet. You can also find a list of all WITT <u>certifications</u> at our website.





Safety group 645/85-30



connections DN 50 (2- or 4-fold)

Parallel connection of 2 or 4 flashback arrestors model 85-30, ideal for high consumption and high flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV]
- every arrestor 100% tested
- 285 X 430 mm, 44 kg (2-fold), 53 kg (4-fold) acetylene max. 392 m³/h
- fuel gases max. 2.740 m³/h
- oxygen max. 1.850 m³/h

This model (4-fold) is also available in stainless steel.

connection	inlet → outlet	order no.
DN 50 (4-fold)	flange DIN 2633 flange DIN 2633 IG → IG	182-007
for oxygen: DN 50 (2-fold) DN 50 (4-fold)	flange DIN 2633flange DIN 2633	182-027 182-008

Safety group 645/623N



connections DN 65 (4- or 5-fold)

Parallel connection of 4 or 5 flashback arrestors model 623N, ideal for high consumption and high flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV]
- every arrestor 100% tested
- 260 X 384 mm, 44 kg (4-fold), 31/46 kg (5-fold)
- town gas / natural gas max. 1.010 m³/h

connection	inlet → outlet	order no.
for town gas / natura DN 65/PN16 (4-fold) DN 65/PN16 (5-fold)	l gas: flange DIN 2633 flange DIN 2633	182-014 182-018



SUPER 55



connections 3/8", 1/4"

Resettable Flashback arrestor, certified to DIN EN ISO 5175-1 with pressure sensitive cut-off valve [PV] and visual warning

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet and pressure sensitive cut-off valve [PV]
- stops supply of fuel gas in case of flashback and shows warning signal, easy recommissioning
- every arrestor 100% tested
- BAM certified
- 27.5 X 124 mm
- acetylene max. 10 m³/h
- fuel gases max. 60 m³/h
- oxygen max. 95 m³/h

connection	inlet → outlet	order no.
	MG → AGS MG → AGS	
G 3/8 RH	$\begin{array}{l} MG \to AGS & \dots \\ MG \to AGS & \dots \\ MG \to AGS & \dots \end{array}$	146-026

SUPER 78



connections 3/8", 1/4"

Resettable Flashback arrestor, certified to DIN EN ISO 5175, with pressure sensitive cut-off valve [PV] and visual warning, and maximum number of safety elements

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet, pressure sensitive cut-off valve [PV]
- stops supply of fuel gas in case of flashback and shows visual warning that flashback has occured, easy to reset
- every arrestor 100% tested
- BAM certified
- 63 X 120 mm, 650g
- acetylene max. 11 m³/h
- fuel gases max. 128 m³/h
- oxygen max. 62 m³/h

connection	inlet → outlet	order no.	
for fuel gases: G 3/8 LH 9/16" LH	MG → AGS MG → AGS	125-010 125-012	
G 3/8 RH	MG → AGS MG → AGS MG → AGS	125-017	



SUPER 66



connections 3/8", 1/4"

Resettable Flashback arrestor, certified to DIN EN ISO 5175, with pressure sensitive cut-off valve [PV] and visual warning, and maximum number of safety elements

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet, pressure sensitive cut-off
- stops supply of fuel gas in case of flashback and shows visual warning that flashback has occured, easy to reset
- every arrestor 100% tested
- 63 X 160 mm, 1.104 g acetylene max. 20 m³/h
- fuel gases max. 225 m³/h
- oxygen max. 105 m³/h

connection	inlet → outlet	order no.
for fuel gases: G 3/8 LH	. MG → AGS	125-002
for oxygen: G 1/4 RH G 3/8 RH	MG → AGS MG → AGS	125-006 125-007

F53N/HHO

connections 1/4"



Universal flashback arrestor brass for hydrogen-oxygen-mixture, certified to DIN 32508 n° 5.8.2 and 5.8.3, suitable for chlorinators

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV]
- every arrestor 100% tested
- 25 X 68 mm, 172 g
- up to max. 0.5 bar
- air max. 13 Nm³/h

connection	inlet → outlet	order no.	
for HHO: G 1/4 RH	MG → AGS	145-276	

O Did you know? Most of our products are suitable for hydrogen

If you find the "H2 READY" logo on a product page on our website, you can be sure: This product is suitable for your hydrogen application.

If you miss it somewhere - just ask. Perhaps we can help you anyway. You can reach our specialists here: witt @wittgas.com

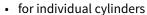




E460-1

connections 3/8"

Flashback arrestors certified to DIN EN ISO 5175-1 with nozzle connection



- safety elements: flame arrestor [FA], non-return valve [NV]
- every arrestor 100% tested
- BAM certified

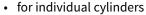
- 86 mm height, 99 g acetylene max. 9 m³/h fuel gases max. 82 m³/h
- oxygen max. 119 m³/h

connection	inlet → outlet	order no.
6.3 mm - G 3/8 LH 8.0 mm - G 3/8 LH	nozzle → MG nozzle → MG nozzle → MG nozzle → MG	135-005 135-009
6.3 mm - G 1/4 RH 6.3 mm - G 3/8 RH	nozzle → MG nozzle → MG nozzle → MG nozzle → MG	135-017 135-018

E460-2

connections 4 up to 9 mm

Flashback arrestors certified to DIN EN ISO 5175-1 for hose mounting



- safety elements: flame arrestor [FA], non-return valve [NV] every arrestor 100% tested
- BAM certified

- 99 mm height, 93 g acetylene max. 9 m³/h fuel gases max. 82 m³/h
- oxygen max. 119 m³/h

minute formation (\$450) size will be within to \$100,000,000	matrica furnisher 1460 natus in the sept 5175-1

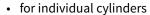
connection	inlet → outlet	order no.
6.3 mm - 6.3 mm 8.0 mm - 8.0 mm	nozzle → nozzle nozzle → nozzle nozzle → nozzle nozzle → nozzle	135-031 135-032
6.3 mm - 6.3 mm	nozzle → nozzle nozzle → nozzle nozzle → nozzle	135-038



E460-3

connections 1/4", 3/8"

Flashback arrestors certified to DIN EN ISO 5175-1 with thread connection for torch or cutting machine



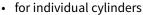
- safety elements: flame arrestor [FA], non-return valve [NV] every arrestor 100% tested
- BAM certified
- 65 mm height, 107 g acetylene max. 9 m³/h
- fuel gases max. 82 m³/h
- oxygen max. 119 m³/h

connection	$inlet \rightarrow outlet$	order no.
	. AGS → MG . AGS → MG	
G 3/8 RH	. AGS → MG . AGS → MG . AGS → MG	135-094

E460-SK

connections 1/4", 3/8"

Flashback arrestors certified to DIN EN ISO 5175-1 with integrated coupling nipple



- safety elements: flame arrestor [FA], non-return valve [NV]
- every arrestor 100% tested
- can be used in conjunction with WITT-coupling system SK100 for quick hose connection / disconnection
- 86 mm height, 112 g acetylene max. 9 m³/h
- fuel gases max. 82 m³/h
- oxygen max. 119 m³/h

suitable: coupling body SK100-9

connection	inlet → outlet	order no.
	probe → MG probe → MG	
G 3/8 RH	probe → MG probe → MG probe → MG	135SK-124





E460-SKU

connections 6.3 and 8 mm, 3/8", 1/4"



- for individual cylinders
- safety elements: flame arrestor [FA], non-return valve [NV]
- every arrestor 100% tested
- can be used in conjunction with WITT-coupling system SK100 for quick hose connection / disconnection 85 mm height, 145 g acetylene max. 13 m³/h fuel gases max. 68 m³/h

- oxygen max. 187 m³/h

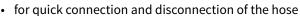
suitable coupling probes: see quick couplings

connection	inlet → outlet	order no.
for fuel gases: 6.3 mm 8.0 mm G 3/8 LH	nozzle → coupling body nozzle → coupling body AGS → coupling body	135SK-001 135SK-004 135SK-128
for oxygen: 6.3 mm G 1/4 RH	nozzle → coupling body AGS → coupling body	135SK-002 135SK-127

SK100-9

connections 6.3 and 8 mm, 3/8", 1/4"

Coupling body without non-return valve and coupling probe, accessory for E460SK and E460SKU



coupling body for coupling to E460SK

- coupling probe SK100-1 for coupling to E460SKU
- in accordance with EN 561 / ISO 7289

connection	inlet → outlet	order no.	
for fuel gases 6.3 mm 8.0 mm 9.0 mm G 3/8 LH	: nozzle ≒ coupling body nozzle ≒ coupling body nozzle ≒ coupling body AGS ≒ coupling body	150-021 150-039 150-023 150-081	
for oxygen: 6.3 mm 8.0 mm G 1/4 RH G 3/8 RH	nozzle ≒ coupling body nozzle ≒ coupling body AGS ≒ coupling body AGS ≒ coupling body	150-024 150-040 150-080 150-079	
other gases: 6.3 mm	nozzle ≒ coupling body	150-077	









RF53NU

connections 1/4", 3/8", 1/2"

Flashback arrestors certified to DIN EN ISO 5175-1 for high-performance torches

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet
- every arrestor 100% tested
- 25.5 X 82 mm, 191 g acetylene max. 13 m³/h
- fuel gases max. 68 m³/h
- oxygen max. 187 m³/h

connection	inlet → outlet	order no.	
for fuel gases:			
G 3/8 LH	AGS → MG	145-034	
G 1/2 LH	AGS → MG	145-035	
9/16" LH	AGS → MG	145-236	
G 3/8 RH G 1/2 RH	AGS → MG AGS → MG AGS → MG	145-037 145-038	

85-10NU

connections 3/8", 1/2"

Flashback arrestors certified to DIN EN ISO 5175-1 for high-performance torches

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet
- every arrestor 100% tested
- 34 X 106 mm, 434 g
- acetylene max. 22 m³/h
- fuel gases max. 235 m³/h
- oxygen max. 310 m³/h

stantition of these 85-10NU	Water Arrestor 85-10NU
11.5 bar, CMPE 5 bar, 4 4.5 on co is6 5175-1 (1) (2)	(6.75 July 1995) 175-1 (1.75 July 1995)

connection	inlet –	→ outlet	order no.	
for fuel gases	S:			
G 3/8 LH .	AGS →	MG	143-039	
G 1/2 LH .	AGS →	MG	143-231	
9/16" LH	AGS →	· MG	143-245	
	AGS →	· MG		



85-10NU (eccentric)



connections 3/8", 1/4", 1/2"

Flashback arrestors certified to DIN EN ISO 5175-1 for high-performance torches, off-centre connection

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet
- every arrestor 100% tested

- 34 X 99-118 mm, 417 g acetylene max. 22 m³/h fuel gases max. 23 m³/h
- oxygen max. 310 m³/h

connect	ion inlet -	→ outlet	order no.
G 1/2 LH	AGS – AGS –	→ MG (eccentric) → MG (eccentric) → MG (eccentric)	143-148
G 1/2 RH	I AGS — I AGS — I AGS —	→ MG (eccentric) → MG (eccentric) → MG (eccentric) → MG (eccentric)	143-216 143-152

Which safety device at which point? An overview.

Find the right products for your welding application.

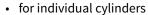
FLASHBACK ARRESTORS for cutting machines



E460-3

connections 1/4", 3/8"

Flashback arrestors certified to DIN EN ISO 5175-1 with thread connection for torch or cutting machine



- safety elements: flame arrestor [FA], non-return valve [NV] every arrestor 100% tested
- BAM certified
- 65 mm height, 107 g acetylene max. 9 m³/h
- fuel gases max. 82 m³/h
- oxygen max. 119 m³/h

connection	inlet → ou	tlet o	order no.
for fuel gase G 3/8 LH	es: AGS → MG	j 1	35-042
	AGS → MG		

RF53U

connections 1/4", 3/8", 1/2"

Flashback arrestors certified to DIN EN ISO 5175-1 for high-performance cutting machines - without temperature-sensitive cut-off valve [TV]

- safety elements: flame arrestor [FA], non-return valve [NV], filter on the gas
- every arrestor 100% tested
- 25.5 X 82 mm, 191 g
- acetylene max. 13 m³/h
- fuel gases max. 68 m³/h
- oxygen max. 187 m³/h



connection	inlet → outlet	order no.
	AGS → MG AGS → MG	
G 3/8 RH G 1/2 RH	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	145-005 145-006

FLASHBACK ARRESTORS for cutting machines



85-10U

connections 3/8", 1/2"



Flashback arrestors certified to DIN EN ISO 5175-1 afor high-performance cutting machines - without temperature-sensitive cut-off valve

- safety elements: flame arrestor [FA], non-return valve [NV], filter on the gas inlet
- every arrestor 100% tested
- 34 X 106 mm, 434 g
- acetylene max. 22 m³/h
- fuel gases max. 235 m³/h
- oxygen max. 310 m³/h

connection	$inlet \rightarrow outlet$	order no.
	. AGS → MG . AGS → MG	
G 3/8 RH G 1/2 RH	.AGS → MG . AGS → MG . AGS → MG .AGS → MG	143-133 143-042

Perfect for cutting machines: Dome pressure regulators from WITT

Correct gas dosing is of crucial importance for flame cutting machines.

Dome pressure regulators from WITT are predestined for this with their advanced technology: The constant working pressure ensures a constant gas concentration and thus the quality of the downstream processes.

Read the article "The design makes the difference" from our news section.



FLASHBACK ARRESTORS for high flows



RF53N/30

connections 3/8"

Flashback arrestors certified to DIN EN ISO 5175-1 for higher flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV] (for low pressure applications without nonreturn valve)
- every arrestor 100% tested
- 25.5 X 82 mm, 191 g
- 65 mm height, 107 g fuel gases 16 m3/h
- air 12 m3/h

connection	inlet → outlet	order no.	
with non-retu G 3/8 LH	ırn valve: MG → AGS	145-120	
without non-i G 3/8 RH	return valve: MG → AGS	145-136	

RF53N/30

connections 1/4", 3/8", 1/2"



• safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV] (for low pressure applications without nonreturn valve)

Flashback arrestors certified to DIN EN ISO 5175-1 for higher flows

- every arrestor 100% tested
- 25.5 X 82 mm, 191 g
- 65 mm height, 107 g fuel gases 30 m3/h
- air 21 m3/h

connectio	n inlet → outlet	order no.
with non-r	eturn valve:	
G 3/8 LH	MG → AGS	143-118
	MG → AGS	
	IG → IG	
without no		
without no	on-return valve: MG → AGS	1/13-200

FLASHBACK ARRESTORS for high flows



270N/NU



connections 3/4" up to 1.1/2"

Flashback arrestors certified to DIN EN ISO 5175-1 for very high flows

- safety elements: flame arrestor [FA], non-return valve [NV] temperature-sensitive cut-off valve [TV] every arrestor 100% tested 62 X 131-160 mm, 1.400-1.700 g acetylene max. 22 m³/h

- fuel gases (without acetylene) max. 371 m³/h
- air max. 164 m³/h

Pipeline fittings see page 53

onnection	inlet \rightarrow outlet	order no.
270N		
3/4 RH	AGS → MG	123-038
61RH	AGS → MG	123-041
6 1.1/4 RH	AGS → MG	123-039
6 1.1/2 RH	AGS → MG	123-040
3 1/2 RH	IG → IG	123-054
31RH	IG → IG	123-057
270N (reverse f	•	
	\dots MG \rightarrow AGS \dots	
	MG → AGS	
61RH	MG → AGS	123-047
61LH	MG → AGS	123-051
6 1.1/4 RH	MG → AGS	123-048
6 1.1/4 LH	MG → AGS	123-052
6 1.1/2 RH	MG → AGS	123-049
6 1.1/2 LH	MG → AGS	123-053

FLASHBACK ARRESTORS for high flows

623N / 623NU





623N / 623NU



Flashback arrestors certified to DIN EN ISO 5175-1 for maximum flows

- safety elements: flame arrestor [FA], non-return valve [NV] temperature-sensitive cut-off valve [TV]
- every arrestor 100% tested
- 62 X 184-195 mm, 1.800-2.001 g
- fuel gases max. 406 m³/h air max. 335 m³/h

connection	n inlet	: → outlet	order no.	
623N				
G 3/4 RH	AGS	→ MG	189-006	
G 1 RH	AGS	→ MG	189-008	
G 1.1/4 RH	AGS	→ MG	189-009	
G 1.1/2 RH	AGS	→ MG	189-007	
G 1 RH	IG →	· IG	189-017	
623N (reve	rse flow)			
G 3/4 LH	MG -	→ AGS	189-013	
G 1 LH	MG -	→ AGS	189-012	
G 1.1/4 LH	MG -	→ AGS	189-014	
G 1.1/2 LH	MG -	→ AGS	189-015	

Pipeline fittings

connections 3/4" up to 1.1/2"

For flashback arrestors models 70, 270N/NU and 623N/NU





connection	G1	connection G2	order no.
G 1 RH G 1.1/4 RH		G 1/2 RH G 3/4 RH G 1 RH G 1.1/4 RH	043000100 043000200

FLASHBACK ARRESTORS for central acetylene supply



FN 12 / FN 40





Decomposition arrestor, stops dangerous decomposition of acetylene in low-pressure pipelines - up to 1.5 bar

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV]
- stops the explosive decomposition of acetylene via pressure-controlled quick-acting piston valve
- every arrestor 100% tested
- BAM certified
- **DIN EN ISO 14114**
- 70 X 160/200 mm, 3.091-3.846 g FN12 Q= ca. 76 m³/h FN40 Q= ca. 140 m³/h

connection	inlet \rightarrow outlet	order no.	
F12 G 1.1/2 RH	IG → IG	021-001	
F40 (double flo G 1.1/2 RH	w capacity) G → G	021-003	

Safety group 645 / FN 40





Parallel bundle of 2 or 4 decomposition arrestors FN4, to protect against dangerous decomposition of acetylene in low-pressure pipelines, for high flow rates - up to 1.5 bar

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV]
- stops the explosive decomposition of acetylene
- every arrestor 100% tested
- DIN EN ISO 5175-1
- 470 X 260 mm, 46 kg
- $Q = ca. 560 \text{ m}^3/\text{h}$

connection	inlet → outlet	order no.
DN 50 (2-fold)	flange DIN 2633	182-001
DN 50 (4-fold)	flange DIN 2633	182-002

FLASHBACK ARRESTORS for central acetylene supply



HDS17

connections 3/4"



Shut-off device stops dangerous decomposition of acetylene in the high-pressure pipelines - up to 25 bar

- stops the explosive decomposition of acetylene via pressure-controlled quick-acting piston valve
- every arrestor 100% tested
- BAM certified
- **TRAC 206**
- **DIN EN ISO 15615**
- **DIN EN ISO 14114**
- 50 X 152 mm, 1.797 g
- up to 25 bar working pressure

connection	inlet → outlet	order no.
G 3/4 RH	IG → IG	. 017-001

HRV 650

connections 1.1/2"



Bundle connection with non-return valve, for direct connection to a cylinder bundle

- with non-return valve certified to EN ISO 14114
- tested in accordance with DIN EN ISO 15615
- every arrestor 100% tested
- for a rapid, easy and thus safe replacement of the acetylene cylinder bundle[']
- no tools required
- dimensions: 172 mm, 865 g
- up to 25 bar working pressure

M 28x1.5 LH - M 24x1.5 RH IG → MG 210000011 "Messer"	connection inlet → outlet or	rder no.
	"Linde" M 28x1.5 LH - M 24x1.5 RH IG → MG 210	10000011
M 28x1.5 LH - M 24x1.5 RH IG → MG 210000020	"Messer" M 28x1.5 LH - M 24x1.5 RH IG → MG 21	10000020

FLASHBACK ARRESTORS for central acetylene supply



MGN

connections 1/2", 1/4"

Decomposition arrestor stops dangerous decomposition of acetylene in the high-pressure pipes of bottling plants - up to 25 bar

- safety elements: flame arrestor [FA], optional: non-return valve [NV]
- opening pressure approx. 60 mbar every arrestor 100% tested
- **DIN ÉN ISO 14114**
- EIGA acetylene IGC DOC 123/4 29.5 X 88.5 mm, 385-412 g
- up to 25 bar

connection	inlet → outlet	order no.
G 1/2 RH - W 21.8x1/14	AG → AG	022-014
G 1/4 RH - G 1/4	AGS → IG	022-011
1/4" NPT - 1/4" NPT	IG → IG	022-015
1/4" NPT - 1/4" NPT (FA)	IG → IG	022-016
1/4" NPT - 1/4" NPT (FA	NV) AG → IG	022-020

HD-NV

connections 1/4"

High-pressure non-return valve to be screwed onto the gas cylinder by using a bow - up to 25 bar

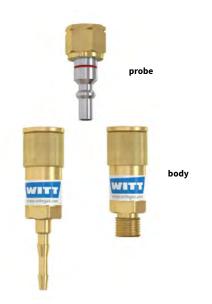
- for bows according to DIN 477, part 1, no. 3
- every arrestor 100% tested
- EN IŚO 15615
- up to 25 bar

JIII.	4	
M		
111		

connection	inlet → outlet	order no.
HD-NV	DIN → G $1/4$ RH AGS	210000022
HD-NV incl. bow.	DIN \rightarrow G 1/4 RH AGS	210000022B



SK100-1



for torches

- rapid connection and disconnection of the hose
- simple and robust colour-coding of body and nipple
- nipple with non-return valve and self-acting gas lock coupling nipple made of durable stainless steel certified to DIN EN 561/ISO 7289

- every hose coupling 100% tested

connection inlet → outlet probe	order no.
for fuel gases: G 3/8 LHprobe → MG	151-001
for oxygen: G 1/4 RHprobe → MG G 3/8 RHprobe → MG 9/16-18UNF RH probe → MG	151-003 151-004 151-029
for other gases: G 1/4 RH probe → MG	151-005
body (also for SK100-2)	
for fuel gases: 4.0 mm	150-001
for oxygen: 4.0 mm	150-007 150-009 150-010 150-061 150-060
for other gases: 6.3 mmnozzle → coupling body G 1/4 RHAGS → coupling body G 3/8 RHAGS → coupling body	150-013 150-063 150-062

⊙ Small differences with a big effect

What makes WITT quick couplings so special?

Watch our video to find out what features our quick couplings have and how they benefit you as a customer.



SK100-2





- rapid connection and disconnection of the hose
- simple and robust colour-coding of body and nipple
- flexible extension of hose if required
- nipple with non-return valve and self-acting gas lock
- coupling nipple made of durable stainless steel
- certified to DIN EN 561/ ISO 7289
- every hose coupling 100% tested

connection	$inlet \rightarrow outlet$	order no.
probe (also for SK	100-3)	
6.3 mm 8.0 mm 9.0 mm	probe → nozzle probe → nozzle probe → nozzle probe → nozzle probe → AGS	151-009 151-010 151-011
8.0 mm G 1/4 RH	probe → nozzle . probe → nozzle . probe → nozzle . probe → AGS	151-015 151-016 151-045
for other gases: 6.3 mm G 1/4 RH G 3/8 RH	probe → nozzle . probe → AGS probe → AGS	151-021 151-047 151-046
body		
see SK100-1		

⊙ Which coupling for which position? An overview.

Use our practical overview of the WITT SK100 coupling system.

Here you will find:

- all modules from the tapping point up to the handle
- all connections at a glance
- all WITT article numbers for fuel gases and for oxygen



SK100-3

body





for outlet points

- rapid connection and disconnection of the hose simple and robust colour-coding of body and nipple
- nipple with self-acting gas lock coupling nipple made of durable stainless steel certified to DIN EN 561 / ISO 7289 every hose coupling 100% tested

connection	inlet ≒ outlet	order no.	
probe see SK100-2			
body			
for fuel gases: G 3/8 LH 9/16 LH	MG ≒ coupling body MG ≒ coupling body	150-015 150-016	
G 3/8 RH	MG ≒ coupling body MG ≒ coupling body MG ≒ coupling body	150-017 150-018 150-036	
for other gases: G 1/4 RH G 3/8 RH	MG ≒ coupling body MG ≒ coupling body	150-019 150-028	



Key Mark Coupling



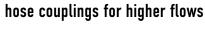
for the protection of outlet points

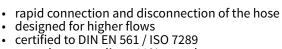
- rapid connection and disconnection of the hose simple and robust colour-coding of body and nipple coupling nipple made of durable stainless steel
- only the owner of the designated key mark can extract gas certified to DIN EN 561 / ISO 7289 every hose coupling 100% tested

connection body	inlet ≒ outlet	order no.
for fuel gases: G 3/8 LH	. MG ≒ coupling body	. 150-029
for other gases: G 1/4 RH	. MG ≒ coupling body	. 150-033
keymark	•	. 801836700
probe		
6.3 mm 8.0 mm 9.0 mm	probe ≒ nozzle probe ≒ nozzle probe ≒ nozzle probe ≒ AGS	. 151-009 . 151-010 . 151-011
G 1/4 RH	. probe	. 151-047



735 / 736





• every hose coupling 100% tested



connection	inlet ≒ outlet	order no.
model 735		
coupling bodies for fuel gases: G 3/8 LH	MG ≒ coupling body	. 041327500
for oxygen: G 3/8 RH	MG ≒ coupling body	. 041227500
probes for fuel gases: G 3/8 LH	probe ≒ MG	. 041328700
for oxygen: G 3/8 RH	probe ≒ MG	. 041228700
model 736		
coupling bodies for fuel gases: G 1/2 LH	MG ≒ coupling body	. 041327200
for oxygen: G 1/2 RH	MG ≒ coupling body	. 041227200
probes for fuel gases: G 1/2 LH	probe ≒ MG	. 041328200
for oxygen: G 1/2 RH	probe ≒ MG	. 041228200



ULTRA 10



connections 1/2"

Ultra performance protection against gas return: compact, quiet, ideal for low pressure applications

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- according to DIN EN ISO 5175-1 / DIN EN ISO 5175-2
- ultra-low opening pressures (4 mbar), ultra-low pressure drop
- compact and light: 35 X 60 mm, 221 g
- minimal noise emission
- dirt filter (100 µm) on gas inlet
- up to 16 bar

Also available in stainless steel

connection	n inlet → ou	tlet or	der no.
design (sta filter: yes	andard): seal o-ring: NBR	seal valve: CR	housing: brass

ULTRA 12



connections 1/2"

Based on ULTRA 10 - your customized design: multiple combinations of housing and seal materials, with or without filter

- free combination of material for housing (brass, stainless steel, aluminum) and seal (NBR/CR, FPM/FKM, EPDM/FFKM), with or without filter
- for special requirements e.g. corrosive environments, acetylene, lightweight construction, temperatures above 70 °C/158 °F

based on ULTRA 11 including:

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- DIN ÉN ISO 5175-2
- ultra-low opening pressures (4 mbar), ultra-low pressure drop compact and light: 35 X 60 mm, 221 g
- minimal noise emission
- up to 16 bar

connection	$inlet \rightarrow outlet$	order no.
G 1/2 RH	IG → IG	
design (modular : (filter/seal o-ring/s no/NBR/CR/brass yes/NBR/CR/alum yes/FPM/FKM/bras	seal valve/housing) inum	034-001 034-005 034-006



ULTRA 20



connections 1/2", 3/4", 1"

Ultra-performance protection against gas return: compact, quiet, ideal for low pressure applications

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- according to DIN EN ISO 5175-1 / DIN EN ISO 5175-2
- ultra-low opening pressures (4 mbar), ultra-low pressure drop
- compact and light: 52 X 67.5 mm, 510 g
- minimal noise emission
- dirt filter (100 μm) on gas inlet
- ideal for applications where low pressures are used e.g. thermal processing, biogas etc.
- up to 16 bar

Also available in stainless steel

connection	n inlet → outlet	order no.	
G 1/2 RH G 3/4 RH G 1 RH 1/2" NPT 3/4" NPT 1" NPT	$\begin{array}{c} IG \rightarrow IG \dots \\ IG \rightarrow IG \dots \end{array}$	036-014 036-015 036-024 036-020	
design (sta filter: yes		ıl valve: CR housing: brass	

⊙ Why ULTRA?

WITT has achieved a leap in performance in non-return valves. Read all about our latest successful model in this brochure.

ULTRA performance

New valve design - flow optimized Maximum flow, minimal nominal size

ULTRA low opening pressure

From 4 mbar - ideal for low pressure applications When every mbar counts

ULTRA compact

Small and lightweight Perfect for compact plant designs

ULTRA silent

No fluttering - lowest noise emission Less wear - longer service life

ULTRA flexible

Free combination of materials on request Exactly suitable for your requirements

ULTRA safe

Reliably stops gas backflow and flashback

63

IN EN ISO 5175-2 NV



ULTRA 22

connections 1/2", 3/4", 1"

Based on ULTRA 20 - your customized design: multiple combinations of housing and seal materials, with or without filter

- free combination of material for housing (brass, stainless steel, aluminum) and seal (NBR/CR, FPM/FKM, EPDM/FFKM), with or without filter
- for special requirements e.g. corrosive environments, acetylene, lightweight construction, temperatures above 70 °C/158 °F

based on ULTRA 20 including:

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- DIN EN ISO 5175-2
- ultra-low opening pressures (4 mbar), ultra-low pressure drop compact and light: 52 X 67.5 mm, 510 g $\,$
- minimal noise emission
- up to 16 bar

connection	inlet → outlet	order no.
G 1 RH	IG → IG	
no/EPDM/EPDM no/NBR/CR/bra yes/NBR/CR/al	ng/séal valve/housing) M/brass ass	
G 1/2 RH	IG → IG	
design (modul (filter/seal o-rir yes/FPM/FPM/I	ng/seal valve/housing)	036-013

What are the typical areas of application?

Would you like to know whether ULTRA nonreturn valves are suitable for your application? suitable for your application?

Ask our specialists and let them advise you.

Request a callback here.



Low pressure pipelines



Thermal processing plants



Hydrogen applications



Biogas plants



ULTRA 30



connections 1.1/2"

Ultra-performance protection against gas return: compact, quiet, ideal for low pressure applications

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- according to DIN EN ISO 5175-1 / DIN EN ISO 5175-2
- ultra-low opening pressures (5 mbar), ultra-low pressure drop
- compact and light: 73.5 X 111 mm, 1.8 kg
- minimal noise emission
- dirt filter (100 µm) on gas inlet
- ideal for applications where low pressures are used
- up to 20 bar

Also available in stainless steel

connection	$inlet \rightarrow outlet$	order no.
	IG → IG IG → IG	
design (standa filter: yes sea		l valve: CR housing: brass

ULTRA 32



connections 1.1/2"

Based on ULTRA 30 - your customized design: multiple combinations of housing and seal materials, with or without filter

- free combination of material for housing (brass, stainless steel, aluminum) and seal (NBR/CR, FPM/FKM, EPDM/FFKM), with or without filter
- for special requirements e.g. corrosive environments, acetylene, lightweight construction, temperatures above 70 °C/158 °F

based on ULTRA 30 including:

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- **DIN EN ISO 5175-2**
- ultra-low opening pressures (5 mbar), ultra-low pressure drop compact and light: 73.5 X 110 mm, 1.8 kg
- minimal noise emission
- up to 20 bar

connection	inlet → outlet	order no.
G 1.1/2 RH	IG → IG	
design (modul (filter/seal o-rin yes/EPDM/EPD yes/NBR/CR/sta	g/seal valve/housing) M/brass	033-009



ULTRA 40



connections 2.1/2"

Ultra-performance protection against gas return: compact, quiet, ideal for low pressure applications

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- according to DIN EN ISO 5175-1 / DIN EN ISO 5175-2
- ultra-low opening pressures (5 mbar), ultra-low pressure drop
- compact and light: 114 X 146 mm, 7.1 kg
- minimal noise emission
- dirt filter (100 μm) on gas inlet
- ideal for applications where low pressures are used
- up to 20 bar

Also available in stainless steel

connection	inlet → ou	tlet or	der no.
	IG → IG IG → IG		
design (star filter: yes	ndard): seal o-ring: NBR	seal valve: CR	housing: brass

ULTRA 42



connections 2.1/2"

Based on ULTRA 40 – your customized design: multiple combinations of housing and seal materials, with or without filter

- free combination of material for housing (brass, stainless steel, aluminum) and seal (NBR/CR, FPM/FKM, EPDM/FFKM), with or without filter
- for special requirements e.g. corrosive environments, acetylene, lightweight construction, temperatures above 70 °C/ 158 °F

based on ULTRA 40 including:

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- DIN ÉN ISO 5175-2
- ultra-low opening pressures (5 mbar), ultra-low pressure drop
- compact and light: 114 X 146 mm, 7.1 kg
- minimal noise emission
- up to 20 bar

connection	inlet → outlet	order no.
G 2.1/2 RH	IG → IG	
design (modula (filter/seal o-rin yes/FPM/FKM/s	g/seal valve/housing)	035-007



NV 654

connections 1/8"

Non-return valve for the prevention of unintended gas mixtures

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- **DIN EN ISO 5175-2**
- ultra-low opening pressures (approx. 30 mbar), ultra-low pressure drop
- small and light: 14 X 42 mm, 39 g up to 60 bar working pressure (O2: up to 30 bar)
- air max. 130 m³/h

Also available in stainless steel

connection	on inlet → outlet	order no.
G 1/8 RH	IG → AG	120003037

NV100

connections 1/8" up to 3/8"



- safety element: non-return valve [NV]
- every non-return valve 100% tested
- **DIN EN ISO 5175-2**
- ultra-low opening pressures (approx. 30 mbar), ultra-low pressure drop
- compact and light: 25 X 71-78 mm, 39 g
- up to 25 bar working pressure
- air max. 130 m³/h

Also available in stainless steel

connectio	n inlet → outlet	order no.
G 1/4 RH G 3/8 RH 1/4" NPT	$\begin{array}{ll}IG \rightarrow IG \\IG \rightarrow$	100145002 100145003 100145005



⊙ Do you already know our examples from practice?

In the Applications/Practical Examples menu item, you will find numerous application reports from a wide range of industries.

Perhaps your topic is also included?

Read for example:

Non-return Valves in Heat Treatment

Non-return Valve

C.M. P. H. O. D 40 bar

600H



NV 600H

connections 1/2" up to 1"

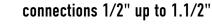
Non-return valve for the prevention of unintended gas mixtures

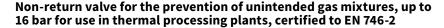
- safety element: non-return valve [NV]
- every non-return valve 100% tested
- DIN 8521-2
- ultra-low opening pressures (approx. 250 mbar)
- 52 X 65 mm, 589-745 g
- up to 40 bar working pressure
- air max. 1900 m³/h

Also available in stainless steel

connection	$inlet \rightarrow outlet$	order no.
G 3/4 RH G 1 RH 1/2" NPT	$\begin{array}{c} & IG \rightarrow IG \dots \\ & IG \rightarrow IG \dots \end{array}$	037-035 037-039 037-085

NV 70 / 70U





- safety element: non-return valve [NV]
- everý non-return valve 100% tested
- DIN 8521-2, DIN EN ISO 5175-2
- ultra-low opening pressures (4 mbar), ultra-low pressure drop
- 62 X 137 X 160 mm, 1.255-1.679 g
- up to 16 bar working pressure
- air max. 1120 m³/h

See also "pipeline fittings" on page 108



23-009
23-009
23-012
23-014
23-015
23-016 23-018 23-056 23-045
2: 2: 2:



NV 300



connections 1" up to DN 32

Non-return valve for the prevention of unintended gas mixtures, up to 16 bar for use in thermal processing plants, certified to EN 746-2

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- ultra-low opening pressures (approx. 3.5 mbar), ultra-low pressure drop
- small and light: 14 X 42 mm, 39 g
- dirt filter (100 μm) on gas inlet
- up to 16 bar
- air max. 3260 m³/h

Also available in stainless steel

connection	n inlet	→ outlet	order no.
1 RH	IG →	IG	300038002
1.1/4 RH	IG →	IG	300038031
		IG	
.1/4" NPT	IG →	IG	300038065
		flange*	

NV 400



connections 1.1/2" up to DN 80

Non-return valve for the prevention of unintended gas mixtures, up to 16 bar for use in thermal processing plants, certified to EN 746-2

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- use is possible for applications according to EN 746-2
- ideal for biogas desulphurization systems
- ultra-low opening pressures (approx. 3 mbar), ultra-low pressure drop
- 90 X 145 mm, 2.789 g
- dirt filter (100 µm) on gas inlet
- up to 16 bar
- air max. 8100 m³/h

Also available in stainless steel

connection	$inlet \to outlet$	order no.
G 2 RH 1.1/2" NPT 2" NPT DN 40 / PN 40 DN 50 / PN 40 DN 65 / PN 40	IG → IG IG → IG IG → IG Ioose flange* loose flange* loose flange*	400038008 400038062 400038045 400038A005 400038A006 400038A007



NV400



intermediate flange version, connections DN 40, DN 50

Non-return valve for the prevention of unintended gas mixtures, up to 16 bar for use in thermal processing plants, certified to EN 746-2

- with welding neck flanges for simple installing and removing
- safety element: non-return valve [NV]
- every non-return valve 100% tested
- ultra-low opening pressures (approx. 3 mbar), ultra-low pressure drop dirt filter (100 µm) on gas inlet
- up to 16 bar
- air max. 8.100 m³/h

Also available in stainless steel

connection	n inlet → outlet	order no.
DN 40 DN 50	flange flange	

NV800





Non-return valve for the prevention of unintended gas mixtures, up to 16 bar for use in thermal processing plants, certified to EN 746-2

- with welding neck flanges for simple installing and removing
- safety element: non-return valve [NV]
- every non-return valve 100% tested
- DIN 8521-2
- ultra-low opening pressures (approx. 6-8 mbar), ultra-low pressure drop
- dirt filter (100 µm) on gas inlet
- up to 10 bar
- air max. 14.000 m³/h

Also available in stainless steel

connection	inlet → outlet	order no.
DN 80 / PN 16	flange	080-001







connections DN 80 up to DN 200

Non-return valve for the prevention of unintended gas mixtures, up to 16 bar for use in thermal processing plants, certified to EN 746-2

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- ultra-low opening pressures (approx. 5 mbar), ultra-low pressure drop
- DIN 8521-2
- dirt filter (100 μm) on gas inlet
- to be mounted in vertical position / orientation
- 320-340 X 393-450 mm, 50 kg
- up to 10 bar
- air max. 26.800 m³/h

connection	$inlet \rightarrow outlet$	order no.
DN 80 / PN 16 DN 100 / PN 16 DN 125 / PN 16 DN 150 / PN 16 DN 200 / PN 16	flange	. 2000119003 . 2000119004 . 2000119006

• Does the product fit into your plant?

You can now find out very easily.

Request a STEP file via the website.

In a short time you will receive it in your e-mail box and can comfortably check the installation possibilities in your CAD program.

SAFETY RELIEF VALVES



SV 805



different connections

Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment

- spring-loaded, direct-acting safety relief valve
- every safety relief valve 100% tested
- with or without venting adapter
- CE 0045
- certified by TÜV as Category IV (Modules B & D) safety devices as per European Pressure Equipment Directive (PED) 2014/68/EU
- certified to PED 2014/68/EC Module H
- set to exactly the opening pressure you specify
- dimensions: 90-148 mm, 260/660 g
- up to 45 bar
- also available as "smart-option" for connected manufacturing

Also available in stainless steel

SV 805	order no.
pressure settings: > 0.5 ≤ 45 bar various connections (depending on press	
special sealing compound	
connections: M 24x1 AG \rightarrow 1/2" NPT IG M 24x1 AG \rightarrow G 1/2 AGS M 24x1 AG \rightarrow 3/4" NPT IG	.802069800K

SV 805A





Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment

- spring- loaded, direct-acting safety relief valve
- every safety relief valve 100% tested
- with venting tool for manual ventilation
- CE 0045
- certified by TÜV as Category IV (Modules B & D) safety devices as per European Pressure Equipment Directive (PED) 2014/68/EU
- certified to PED 2014/68/EC Module H
- · set to exactly the opening pressure you specify
- dimensions: 90-148 mm, 260/660 g
- up to 45 bar

Also available in stainless steel

pressure settings

order no.

with ventiong tool, outlet: 1/2 NPT IG

> 0.5 ≤ 45 bar 200A-___ various connections (depending on pressure-setting)

special sealing compound

72

SAFETY RELIEF VALVES



SV 805 SMART



different connections

Smart Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment

- spring-loaded, direct-acting safety relief valve
- optical signal (red/green diode) directly on the valve, indicates the open or closed condition
- digital signal through an NPN / PNP open collector signal
- every safety relief valve 100% tested
- CE-marked according to PED 2014/68/EU
- set to exactly the opening pressure you specify
- dimensions: 90/95 mm
- up to 45 bar

Also available in stainless steel

SV 805 SMART	order no.
pressure settings: > 0.5 ≤ 45 bar various connections (depending on pre	
signal cable with angled plug (2 m)	850022900
special sealing compound	

AV 815

connections 1/2"

Safety Relief Valve for venting of acetylene-application only in conjunction with manifold pressure regulators

- spring-loaded, direct-acting safety relief valve
- every safety relief valve 100% tested
- 7 different opening pressures and nominal flows available
- protective dust cap
- adapter for connection to ventilation pipe
- dimensions: 91 mm, 260 g

outlet pressure	blow-off flow	opening pressure	order no.
0.6 bar 0.7 bar 0.8 bar 0.9 bar 1.1 bar 1.5 bar 2.0 bar	50 m ³ /h 60 m ³ /h 65 m ³ /h 70 m ³ /h 72 m ³ /h 90 m ³ /h	0.75 bar 0.95 bar 1.25 bar 1.25 bar 1.55 bar 1.90 bar 2.50 bar	200-277 200-353 200-354 200-355 200-356 200-278 200-279
connectio G 1/2 AG →	ns: • M24 x 1 IG		



SAFETY RELIEF VALVES



ULTRAVENT 6



without strainer

ULTRAVENT 6 with strainer

connections 1/8"

Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment - ultra high blow-off performance

- spring-loaded, direct-acting safety relief valve
- flow-optimized valve system for maximum blow-off capacity
- every safety relief valve 100% tested

- TÜV-certification of pressure setting tested according to DIN EN ISO 4126-1 can also be used as a control valve or as a vacuum breaker
- dimensions: 36 x 19 mm
- 5 up to 500 mbar

Also available in stainless steel 1.4404.

ULTRAVENT 6	order no.
pressure settings: 5 - 500 mbar	
options:	
strainer at outlet 100 µm (1.4301)	966.172500
individual TÜV app	oval for the set opening pressure
individual TÜV app in accordance with	oval with manufacturer's certificate DIN EN ISO 4126-1
100 μm filter at gas	inlet (1.4301)
connections: G 1/8 RH IG 1/8" NPT IG	

Revolution in blow-off performance

Compared to conventional safety valves, the new ULTRA-VENT 6 from WITT offers a much higher blow-off performance despite its small size.

The pioneering optimized flow design makes this possible. Let us convince you!

Would you like to find out more about the innovations from WITT?

Then take a look at our website and read our long history of innovation.

SAFETY RELIEF VALVES



AV 619



connections 1/2" up to 1"

Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment

- spring-loaded, direct-acting safety relief valve
- every safety relief valve 100% tested
- individual TÜV approval for the set opening pressure dimensions: 70.5 83.5 mm
- 5 up to 500 mbar

Also available in stainless steel

pressure settings	order no.
5 - 500 mbar	. 300 (depending on pressure-setting)
connections:	pressure seemig,
G1/2, G3/4, G1 RH IG NPT" 1/2, 3/4, 1 IG	
flange DN 25 according to DIN 28403	
option: individual TÜV approval for the set opening pressure	

AV 919

connections 2", DN 40

Safety Relief Valve, aluminium, for venting excess pressure from receivers, pipelines and other equipment

- spring-loaded, direct-acting safety relief valve
- every safety relief valve 100% tested
- individual TÜV approval for the set opening pressure
- set to exactly the opening pressure you specify dimensions: 89.5 X 144-170 mm, 1.500 g
- 5 up to 500 mbar

Also available in stainless steel



pressure settings		order no.
5 - 500 mbar		400 (depending on pressure-setting)
connections:		pressure setting/
G 2 RH IG, 2" NPT IG		
flange DN 40 accord	ing to DIN 28403	
option: individual TÜV appr for the set opening		



series RF53N-ES



connections 1/4", 3/8", 7/8"

Universal-Flashback arrestors certified to DIN EN ISO 5175-1

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV] (except bei F53N-ES)

- every arrestor 100% tested
 25.5 X 82 mm, 191 g
 F53N-ES (for very low working pressure upstream or downstream of the analysis device): air max. 225 m3/h
 RF53N-ES: air max. 180 m³/h
 RF53N/H-ES: air max. 46 m³/h

connection	inlet → outlet	order no.
	g, hydrogen up to 3 bar) IG → IG	
	g, hydrogen up to 10 bar IG → IG	
1/4" NPT 3/8" NPT 3/8 LH	g, hydrogen up to 3 bar) IG → IG	145-262 145-024 145-246
1/4" NPT 3/8" NPT	g, hydrogen up to 10 bar IG → IG	145-107 145-121



series RF85-10N-ES



connections 1/4", 3/8", 9/16", 7/8"

Stainless steel flashback arrestor, certified to DIN EN ISO 5175-1, for higher flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV] (except bei F85-10N-ES), filter on the gas inlet
- every arrestor 100% tested
- also ideal for use with corrosive gases
- 34 X 97 mm, 385 g F85-10N-ES (for very low working pressure upstream or downstream of the analysis device): air max. 390 m3/h
- RF85-10N-ES: air max. 315 m³/h
- RF85-10N/H-ES: air max. 82 m³/h

connection	inlet \rightarrow outlet	order no.	
1/4" NPT	g. hydrogen up to 4 bar IG → IGIG → IG	143-149	
	g. hydrogen up to 10 ba IG → IG		
1/4" NPT 3/8" NPT 9/16" - 18 UNF VC 9/16" - 18 UNF VC (e.g. H2 up to 1 7/8" - 14 UNF VC	g. hydrogen up to 4 bar IG → IG IG → IG CR . AG → AG CR . AG → AG 1 bar or O2) R AG → AG MG → AGS	143-061 143-119 143-163 143-190 143-134	
1/4" NPT 3/8" NPT 7/8" - 14 UNF VCI	g. hydrogen up to 10 ba IG → IG	143-077 143-087 143-076	

series RF85-20N-ES



connections 1/2", 3/4", 1"

Stainless steel flashback arrestor, certified to DIN EN ISO 5175-1, for higher flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV], filter on the gas inlet
- every arrestor 100% tested
- also ideal for use with corrosive gases
- 62 X 131/137 mm, 1.400-1.500 g
- air max. 360 m³/h

connectio	n inlet	→ outlet	order no.
1/2" NPT	IG →	IĞ IG	to 2 bar) or oxygen: 149-009 149-031 149-029



series RF85-30N-ES



connections 3/4", 1", 1.1/2"

Universal-Flashback arrestors certified to DIN EN ISO 5175-1 for maximum flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV]
- every arrestor 100% tested
- also ideal for use with corrosive gases
- 84 X 162/188 mm, 4.455 g RF85-30N-ES: air max. 1.150 m³/h
- RF85-30N/H-ES: air max. 310 m³/h

connection	$inlet \to outlet$	order no.
3/4" NPT	g. hydrogen up to 4 IG → IG	147-071
1" NPT	g. hydrogen up to 11 IG → IG IG → IG	147-047

Safety group 645 /85-30



connections DN 50 (2- or 4-fold)

Parallel connection from 2 or 4 flashback arrestors model RF85-30-ES, ideal for high consumption and high flows

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV], non-return valve [NV]
- every arrestor 100% tested
- also ideal for use with corrosive gases
- 285 X 430 mm, 44 kg (2-fold), 53 kg (4-fold) acetylene max. 392 m³/h (free flow-off) fuel gases max. 2.740 m³/h (free flow-off)

- oxygen max. 1.850 m³/h (free flow-off)

connec	ction	$inlet \to outlet$	d	order no.
DN 50 (DN 50 ((4fold)	.flange DIN 2633 .flange DIN 2633 .IG → IG	1	82-042B
for oxy DN 50 (DN 50 ((2fold)	flange DIN 2633 flange DIN 2633	1	82-0450 82-0420



F100N-ES



connections 1/2", 7/8"

Flashback arrestors certified to DIN EN ISO 5175-1, for hydrogen up to 17

- safety elements: flame arrestor [FA], temperature-sensitive cut-off valve [TV]
- every arrestor 100% tested
- for highest working pressures, e.g. with flame spraying
- 48 X 103 mm, 1.236 g air max. 32 m³/h

connection	inlet → outlet	order no.
	17 bar): IG → IG AG → AG	

Safe and efficient - WITT products for hydrogen applications

The future belongs to hydrogen and with WITT you are H2-READY! Hydrogen (H2) is already widely used as a raw material or process gas in industry in a variety of applications. As ,green hydrogen' based on renewable energies, the gas is even regarded as the energy source of the future.

However, hydrogen is highly flammable, reactive and explosive when mixed with oxygen. The requirements for the necessary equipment and gas safety technology are correspondingly high.

WITT specializes in hydrogen applications and offers you the right gas technology at the highest quality level. In this video Andrew Smart shows you which products WITT offers to support your hydrogen application to the maximum.



F53deto

connections 1/4"



The deflagration volume protection device is ideal for protection of plants and equipment with a volume of max. 4.6 l.

Suitable as a detonation flame arrester ideal for mounting in small pipelines and to protect appliances, for example gas analyzers.

- safety elements: flame arrestor [FA]
- every device 100% testedPTB tested
- DIN ÉN ISO 16852
- 25 X 68 mm, 207 g
- inlet and outlet screw connection, housing: stainless steel 1.4305 / AISI 303
- flame arrestor: stainless steel 1.4404 / AISI 316L

connection inlet \rightarrow outlet order no.

detonation and deflagration flame arrestor F53deto: G 1/4" (o-ring NBR) IG → IG145-258

detonation and deflagration flame arrestor F53deto: G 1/4" - M12 (o-ring NBR) IG → AG145-250

F53Ndeto

connections 1/4" - with cut-off valve



The deflagration volume protection device is ideal for protection of plants and equipment with a volume of max. 4.6 l.

Suitable as a detonation flame arrester ideal for mounting in small pipelines and to protect appliances, for example gas analyzers.

- safety elements: flame arrestor [FA], temperature sensitive cut-off valve [TV]
- every device 100% tested
- PTB tested
- DIN EN ISO 16852 / II G IIC
- designed for short burning with a burning time tBT=4 min
- 25 X 68 mm, 207 g
- inlet and outlet screw connection, housing: stainless steel 1.4305 / AISI 303
- flame arrestor: stainless steel 1.4404 / AISI 316L

connection inlet → outlet order no.

detonation and deflagration flame arrestor F53Ndeto: G 1/4" (o-ring FKM).....IG \rightarrow IG145-337

detonation and deflagration flame arrestor F53Ndeto: G 1/4" (o-ring FFKM)......IG → IG145-336



ULTRA 10



ULTRA 12

DN EN ISO 5175-2 NV

connections 1/2"

Ultra performance protection against gas return: compact, quiet, ideal for low pressure applications

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- according to DIN EN ISO 5175-1 / DIN EN ISO 5175-2
- ultra-low opening pressures (4 mbar), ultra-low pressure drop
- compact and light: 35 X 60 mm, 221 g
- minimal noise emission
- dirt filter (100 µm) on gas inlet
- up to 16 bar

$inlet \to outlet$	order no.	
	G → G G → G s steel 1.4305 (stand	inlet → outlet order no IG → IG

ULTRA 12

connections 1/2"

Based on ULTRA 11 - your customized design: multiple combinations of housing and seal materials, with or without filter

- free combination of material for housing (brass, stainless steel, aluminum) and sealing (NBR/CR, FPM/FKM, EPDM/FFKM), with or without filter
- for special requirements e.g. corrosive environments, acetylene, lightweight construction, temperatures above 70 °C/158 °F



- safety element: non-return valve [NV]
- every non-return valve 100% tested

1厘 顺	 DIN EN ISO 5175-2 ultra-low opening pressures (4 mbar), ultra-low pressure drop compact and light: 35 X 60 mm, 221 g minimal noise emission up to 16 bar 		
	connection	inlet → outlet	order no.
	G 1/2 RH	IG → IG	034-013
		ss steel 1.4305 (modular s l o-ring: FFKM seal valve	

other models see page 62



ULTRA 20



connections 1/2", 3/4", 1"

Ultra performance protection against gas return: compact, quiet, ideal for low pressure applications

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- according to DIN EN ISO 5175-1 / DIN EN ISO 5175-2
- ultra-low opening pressures (4 mbar), ultra-low pressure drop
- compact and light: 52 X 67.5 mm, 510 g
- minimal noise emission
- dirt filter (100 µm) on gas inlet
- ideal for applications where low pressures are used e.g. thermal processing, biogas etc.
- up to 16 bar

connectio	n inlet → outlet	order no.	
G 3/4 RH G 1 RH 1/2" NPT 3/4" NPT	$\begin{array}{c} IG \rightarrow IG \\ \end{array}$	036-016 036-017 036-025 036-018	
	inless steel 1.4305 (stand seal o-ring: NBR seal va		

ULTRA 22

connections 1/2"

Based on ULTRA 20 - your customized design: multiple combinations of housing and seal materials, with or without filter

- free combination of material for housing (brass, stainless steel, aluminum) and sealing (NBR/CR, FPM/FKM, EPDM/FFKM), with or without filter
- for special requirements e.g. corrosive environments, acetylene, lightweight construction, temperatures above 70 °C/158 °F



- safety element: non-return valve [NV]
- every non-return valve 100% tested
- DIN ÉN ISO 5175-2
- ultra-low opening pressures (4 mbar), ultra-low pressure drop compact and light: 52 X 67.5 mm, 510 g $\,$
- minimal noise emission
- up to 16 bar



connection	inlet → outlet	order no.
G 1/2 RH	IG → IG	036-007
	ss steel 1.4305 (modular sy l o-ring: EPDM seal valve: E	
other models s	ee <u>page 64</u>	



ULTRA 30



connections 1.1/2"

Ultra performance protection against gas return: compact, quiet, ideal for low pressure applications

- safety element: non-return valve [NV]
- · every non-return valve 100% tested
- according to DIN EN ISO 5175-1 / DIN EN ISO 5175-2
- ultra-low opening pressures (approx. 5 mbar), ultra-low pressure drop
- compact and light: 73.5 X 111 mm, 1.8 kg
- minimal noise emission
- dirt filter (100 µm) on gas inlet
- ideal for applications where low pressures are used
- up to 20 bar

connection	$inlet \to outlet$	order no.	
	IG → IG IG → IG		
	nless steel 1.4305 (stan seal o-ring: NBR seal		

ULTRA 32





Based on ULTRA 30 - your customized design: multiple combinations of housing and seal materials, with or without filter

- free combination of material for housing (brass, stainless steel, aluminum) and sealing (NBR/CR, FPM/FKM, EPDM/FFKM), with or without filter
- for special requirements e.g. corrosive environments, acetylene, lightweight construction, temperatures above 70 °C/ 158 °F

based on ULTRA 31 including:

- safety element: non-return valve [NV]
- everý non-return valve 100% tested
- DIN ÉN ISO 5175-2
- ultra-low opening pressures (approx. 5 mbar), ultra-low pressure drop
- compact and light: 73.5 X 110 mm, 1.8 kg
- minimal noise emission
- up to 20 bar

connection	inlet → outlet	order no.
G 1.1/2 RH	IG → IG	033-010
	ss steel 1.4305 (modular sy ll o-ring: NBR seal valve: C	
other models s	ee <u>page 65</u>	



ULTRA 40



WITT

ULTRA 42

connections 2.1/2"

Ultra performance protection against gas return: compact, quiet, ideal for low pressure applications

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- according to DIN EN ISO 5175-1 / DIN EN ISO 5175-2
- ultra-low opening pressures (approx. 5 mbar), ultra-low pressure drop compact and light: 114 X 146 mm, 7.1 kg
- minimal noise emission
- dirt filter (100 µm) on gas inlet
- ideal for applications where low pressures are used
- up to 20 bar

connection	inlet → outlet	order no.
G 2.1/2 RH 2.1/2" NPT	IG → IG IG → IG	035-006 035-005
	steel 1.4305 (standar o-ring: NBR seal valv	

ULTRA 42

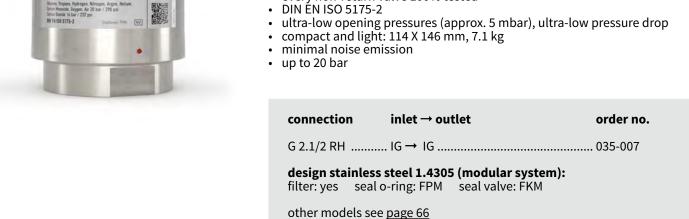


Based on ULTRA 40 - your customized design: multiple combinations of housing and seal materials, with or without filter

- free combination of material for housing (brass, stainless steel, aluminum) and sealing (NBR/CR, FPM/FKM, EPDM/FFKM), with or without filter
- for special requirements e.g. corrosive environments, acetylene, lightweight construction, temperatures above 70 °C/158 °F



- safety element: non-return valve [NV]
- every non-return valve 100% tested





654-ES

connections 1/8"

Non-return valve for the prevention of unintended gas mixtures

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- DIN ÉN ISO 5175-2
- ultra-low opening pressures (approx. 30 mbar), ultra-low pressure drop
- small and light: 14 X 42 mm, 39 g up to 60 bar working pressure (O2: up to 30 bar)
- air max. 130 m³/h

connection	inlet → outlet	order no.
G 1/8 RH	IG → AG	. 120403033

NV 100

connections 1/8" up to 3/8"

Non-return valve for the prevention of unintended gas mixtures

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- **DIN EN ISO 5175-2**
- ultra-low opening pressures (approx. 30 mbar), ultra-low pressure drop
- compact and light: 25 X 71-78 mm, 39 g
- up to 25 bar working pressure
- air max. 130 m³/h





NV 600H

connections 1/2" up to 1"

Non-return valve for the prevention of unintended gas mixtures

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- DIN 8521-2
- · ultra-low opening pressures (approx. 250 mbar)
- 52 X 65 mm, 589-745 g
- up to 40 bar working pressure
- air max. 1900 m³/h

WITT	keep foo i for coppe
Non-return Valve 600H IMPR 0, 0 40 bar	\
	1

connectio	n inlet	→ outlet	order no.
,		IG	
•		IG	
		IG	



NV 300



connections 1" up to 1.1/4"

Non-return valve for the prevention of unintended gas mixtures, up to 16 bar for use in thermal processing plants, certified to EN 746-2

- safety element: non-return valve [NV]
- every non-return valve 100% tested
 ultra-low opening pressures (approx. 3.5 mbar), ultra-low pressure dropsmall and light: 14 X 42 mm, 39 g
- dirt filter (100 µm) on gas inlet
- up to 16 bar
- air max. 3260 m³/h

connection	inlet → outlet	order no.
	IG → IG IG → IG	
	IG → IG	

NV 400



connections 1.1/2" up to DN 80

Non-return valve for the prevention of unintended gas mixtures, up to 16 bar for use in thermal processing plants, certified to EN 746-2

- safety element: non-return valve [NV]
- every non-return valve 100% tested
- **DIN EN ISO 5175-2**
- ultra-low opening pressures (approx. 3.5 mbar), ultra-low pressure drop
- 90 X 145 mm, 2.789 g
- dirt filter (100 µm) on gas inlet
- up to 16 bar
- air max. 8100 m³/h

connection	$inlet \to outlet$	order no.	
	IG → IG		
intermediate fla DN40 DN50	ange-design: flangeflange	038S-040ES 038S-050ES	



800-ES





Non-return valve for the prevention of unintended gas mixtures, up to 16 bar for use in thermal processing plants, certified to EN 746-2

- safety element: non-return valve [NV]
- every non-return valve 100% tested also ideal for use with corrosive gases
- small and light: 17.5 X 70 mm, 730 g
- up to 300 bar

connection	inlet \rightarrow outlet	order no.
1/4" NPT	. AG → AG	311-002

• For specific needs: gas safety devices in stainless steel

Anyone working with hydrogen, corrosive gases or pure gas requires a material that is especially designed for these conditions: stainless steel. Therefore WITT offers a wide range of stainless steel safety devices.

The latest production technologies, high-quality stainless steel (e.g. 1.4305/AISI 303, 1.4404/AISI 316L, 1.4541/AISI 321) and elastomers as well as a sophisticated quality management system guarantee highest quality. As a matter of course, WITT products fulfill all relevant international standards and norms. For your safety.

Further information on www.wittgas.com and in our "Stainless steel" brochure.





SV 805-ES



different connections

Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment

- spring-loaded, direct-acting safety relief valve
- every safety relief valve 100% tested
- with or without venting adapter
- CE 0045
- certified to PED 2014/68/EC Module H
- set to exactly the opening pressure you specify
- dimensions: 90-148 mm, 260/660 g
- up to 45 bar
- also available as "smart-option" for connected manufacturing

SV 8	805-ES		order no.	
	ssure settings: 5 ≤ 45 bar		200	
with with	n standard conne n VCR connection	ction, stainless steel 1 ction, stainless steel 3 , stainless steel 1.454 , stainless steel 316L/	316L/1.4404 1	
spe	cial sealing comp	ound		
con stai con	nections M 24x1 / nless steel 1.4541 nections M 24x1 /	venting pipes to SV8 AG → 1/2" NPT IG, IAG → 1/2" NPT VCR AG	801727800K G,	

SV 805A-ES

different connections



and other equipment

Safety Relief Valve for venting excess pressure from receivers, pipelines

- spring-loaded, direct-acting safety relief valve
- every safety relief valve 100% tested
- with venting tool
- CE 0045
- certified to PED 2014/68/EC Module H
- set to exactly the opening pressure you specify

ш		 dimensions: 90-148 mm, 260/660 g up to 45 bar 	,
	with ventilation tool	SV 805A-ES with venting tool, outlet: 1/2 NPT IG pressure settings: > 0.5 ≤ 45 bar with standard connection, stainless stee with VCR connection, stainless steel 1.45 special sealing compound	
		, , , , ,	



SV 805-ES SMART



different connections

Smarte Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment

- spring- loaded, direct-acting safety relief valve
- optical signal (red/green diode) directly on the valve, indicates the open or closed condition
- digital signal through an NPN / PNP open collector signal
- every safety relief valve 100% tested
- CE-marked according to PED 2014/68/EU
- set to exactly the opening pressure you specify
- dimensions: 90/95 mm
- up to 45 bar

SV 805-ES SMART	order no.
pressure settings: > 0.5 ≤ 45 bar	200SMART
	ection, stainless steel 316L/1.4404 n, stainless steel 316L/1.4404
signal cable with an	gled plug (2 m)850022900
special sealing com	pound
connections M 24x1	x venting pipes to SV805-ES AG → 1/2" NPT VCR AG, 4801693000K

SV 811L





Pressure Relief Valve for hydrogen-powered motor vehicles in accordance with European regulations

- spring- loaded, direct-acting safety relief valveevery safety relief valve 100% tested
- set to exactly the opening pressure you specify von 4.5 up to 45.0 bar
- in stainless steel 1.4404
- adapter for the connection to ventilation pipe
- option: heavy design (model SV811) up to 1600 bar (burst pressure of housing)
- dimensions: 91 mm, 260 g
- up to 45 bar

SV 811L	order no.	
pressure settings: > 4.5 ≤ 45 bar div. connections		
adapter for the connection to ventilation pipe at the outlet on demand		



ULTRAVENT 6

connections 1/8"

Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment - ultra high blow-off performance

- spring-loaded, direct-acting safety relief valve
- flow-optimized valve system for maximum blow-off capacity
- every safety relief valvé 100% tested
- TÜV-certification of pressure setting
- tested according to DIN EN ISO 4126-1
- can also be used as a control valve or as a vacuum breaker
- dimensions: 36 x 19 mm
- 5 up to 500 mbar

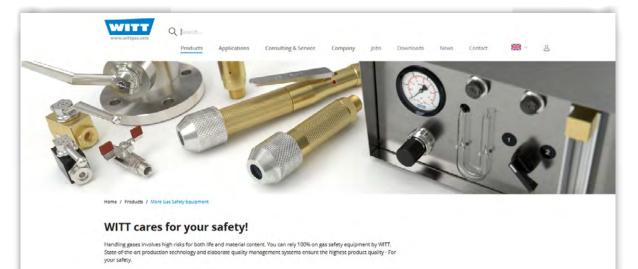
ULTRAVENT 6 231-002 14414 150mber PNI9	ULTR LENT 6 BI SON HANDI BROKEN WILD BROKEN WILD
ULTRAVENT 6	ULTRAVENT 6
without strainer	with strainer

ULTRAVENT 6		order no.
pressure settings: 5 - 500 mbar		231 (depending on pressure-setting)
options:		
strainer at outlet 100 µm (1.4301)		966.172600
individual TÜV appr	oval for the set openi	ng pressure
individual TÜV appr in accordance with I	oval with manufactu DIN EN ISO 4126-1	rer's certificate
100 μm filter at gas	inlet (1.4301)	
connections: G 1/8 RH IG 1/8" NPT IG		

• The whole world of WITT products and services can be found on our website

In addition to our numerous products, we offer you lots of information on applications, practical examples, advice & service, news, an extensive download area, etc.

Register here for our newsletter so that you don't miss anything!

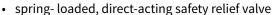




AV 619-ES

connections 1/2" up to 1"

Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment



- every safety relief valve 100% tested
- individual TÜV approval for the set opening pressure
- also available with FDA-approved elastomers (USP class VI)
- also ideal for use with corrosive gases
- 52 X 70.5-83.5 mm, 790 g
- 5 up to 500 mbar



pressure settings order no.

5 - 500 mbar 300-___ (depending on pressure-setting)

stainless steel 1.4305: connections G1/2, G3/4, G1 RH IG, NPT 1/2, 3/4, 1 IG flange DN 25 according to DIN 28403

stainless steel 1.4404: connections G1/2, G3/4, G1 RH IG, NPT 1/2, 3/4, 1 IG

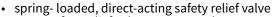
option:

individual TÜV approval for the set opening pressure

AV 919-ES

connections 2", DN 40

Safety Relief Valve for venting excess pressure from receivers, pipelines and other equipment



every safety relief valve 100% tested

- individual TÜV approval for the set opening pressure
- set to exactly the opening pressure you specify
- dimensions: 89.5 X 144-170 mm, 1.500 g
- 5 up to 500 mbar



(depending on pressure-setting)

connections: G 2 RH IG, 2" NPT IG flange DN 40 according to DIN 28403

option:

individual TÜV approval for the set opening pressure

91

DOME PRESSURE REGULATORS - manifold acetylene



ADR 75



up to max. 75 m³/h

Powerful dome pressure regulator for acetylene for the regulation of medium flows on manifolds and bundles

- extremely stable outlet pressure independent of inlet pressure and flow
- ideal control of medium flow rates at cylinder batteries or bundle systems
- due to ultra-low pressure loss, the dynamic pressure of the ADR 75 is as close as possible to 1.5 bar
- for optimum emptying of bundle and trailer systems
 BAM type-approval testing according to DIN EN ISO 7291:2021-03 No. 9.4.6
- complies with the requirements of German TRGS 407 Annex 4 Acetylene

connections	inlet pressure	outlet pressure	order no.
G 3/4 IG →			

G 1 IG 25 bar......1.5 bar.....210-018

special version up to 2 bar outlet pressure (on demand)

92



series 737LE



High-performance dome-loaded pressure regulators. For high and varying flows requiring maximum pressure stability. A complete solution, applicable as a manifold pressure regulator per DIN EN ISO 7291.

- high pressure stability even during flow and temperature fluctuations
- outlet pressure range 0.5-10 bar
- suitable for various technical gases
- ready-to-use

*depending on gas type

- different mounting parts available (maintenance kit see page 101)
- option: lockable spindle hood against unauthorized adjustment



connections	max. inlet pressure*	outlet pressure	order no.
model 727 E /	brass), without pil	ot proceuro roa	ulator
	60 bar		
model 737 LE/S	S (brace) sot		
G 3/4" IG 3/4" NPT IG	60 bar	0.5-10 bar 0.5-10 bar	
del 737 l F /			
	stainless steel), wi		
G 3/4" IG	60 Dar	0.5-10 bar	278-108
model 737 I E/9	S (stainless steel),	cot	
G 3/4" IG			292-0046
3/4" NPT IG	60 bar	0.5-10 bar 0.5-10 bar	292-0040
3/4 111 110	00 bai	0.5 10 501	232 0030
replacement filt	ter stainless steel 10)0 μm 9	56.504300
use for EX zone	(ATEV)		
use for EX ZOITE	(ATEA)		

• Various installation positions for individual customization

User-friendly and standardised connections tions ensure simple and quick integration into the pipework system.

The installation can be carried out indoors or outdoors.

Your WITT consultant will work with you to configure the necessary adaptations.







series 737LE-HD

connections 3/4", 1" / Kv value 1.65 - high pressure model



High-performance dome-loaded pressure regulators for installation in pipelines or as manifold pressure regulator per DIN EN ISO 7291. For high and varying flows requiring maximum pressure stability.

- high pressure stability even during flow and temperature fluctuations
- outlet pressure range 0.5-60 bar
- suitable for high pressures at inlet, up to 300 barg
- burn-out safety for O2 up to 200 bar (BAM report AZ 17055507)
- set includes integrated pilot pressure regulator, and stainless steel pressure gauges, completely assembled and tested
- ready-to-use

- inlet: G 3/4", outlet: G 1" IG option: lockable spindle hood against unauthorized adjustment different mounting parts available (maintenance kit see <u>page 101</u>)
- easy to install and to integrate directly into the process
- 1: 1 interchangeable with the previous version (please specify if desired)



connections	max. inlet pressure*	outlet pressure	order no.
model 737 LE -	HD (brass), with	out pilot press	ure regulator
G 3/4" IG - 1" IC	300 bar	0.5-60 bar	278-116

model 737 LE-HD/S (brass), set

G 3/4" IG - 1" IG 300 bar 0.5-60 bar 292-0004 3/4" NPT IG - 1" NPT IG 300 bar 0.5-60 bar 292-0069

model 737 LE-HD/S (brass), set - especially for CO2

G 3/4" IG - 1" IG 100 bar 0.5-26 bar 292-0058

model 737 LE-HD-ES (stainless steel), without pilot pressure regulator G 3/4" IG - 1" IG 300 bar 0.5-60 bar 278-117

model 737 LE-HD/S-ES (stainless steel), set (for O2 up to Pv max. 30 bar)

G 3/4" IG - 1" IG 0.5-60 bar 292-0056 300 bar 3/4" NPT IG - 1" NPT IG 300 bar 0.5-60 bar 292-0114

replacement filter bronze 100 µm 953.000300

use for EX zone (ATEX)

*depending on gas type

• Your choice: as complete set or without pilot pressure regulator

WITT dome pressure regulators are available in different versions to meet a wide range of requirements. On our website and in the data sheets you will find a range of information on the variants we have on offer.

If you have any further questions, please do not hesitate to contact us.





series 747LE





overview mounting parts:

connections 1" / Kv value 3.6

High-performance dome-loaded pressure regulators for installation in pipelines or as manifold pressure regulator per DIN EN ISO 7291. For high and varying flows requiring maximum pressure stability.

- high pressure stability even during flow and temperature fluctuations outlet pressure range 0.5-30 bar
- ready-to-use
- option: lockable spindle hood against unauthorized adjustment set includes integrated pilot pressure regulator, and stainless steel pressure gauges, completely assembled and tested
- easy to install and to integrate directly into the process
- also as a SMART model for connected manufacturing

connections	max. inlet pressure*	outlet pressure	order no.	
model 747 LE	(brass), withou	t pilot pressure r	egulator	
G 1" IG	40 bar	0.5-30 bar	278-088	
model 747 LE/ G 1" IG G 1" IG 1" NPT IG 1" NPT IG	'S (brass), set 40 bar 40 bar 40 bar 40 bar 40 bar	0.5-10 bar 0.5-30 bar 0.5-10 bar 0.5-30 bar	292-0002 292-0009 292-0102 292-0031	
flange DIN DN3 O-ring for flang O-ring for flang gasket for flang double nipple reducing nippl double nipple	cion DIN DN32/PI 32/PN40 ge DN32 ge G1" ge G1" - G 1.1/4" e G1" - 1" NPT G1" - G1" e AD42 G 1.1/4"0.	N40 (O-ring seal) 015614	7901-026 956.953200 952.218700 801.597603 7901-132 7901-072 950.026200 952.223900 953.179500 952.015900	
model 747 LE- G 1" IG	ES (stainless st 40 bar	eel), without pilo 0.5-30 bar	ot pressure regulator 278-099	
model 747 LE/	S-ES (stainless	steel), set		
G 1" IG G 1" IG	40 bar 40 bar	0.5-10 bar 0.5-30 bar	292-0027 292-0028	
1" NPT IG 1" NPT IG	40 bar 40 bar 40 bar	0.5-30 bar 0.5-10 bar 0.5-30 bar	292-0028 292-0068 292-0109	
stainless steel mounting parts on demand				
use for EX zone (ATEX)				
*depending on gas ty	/pe			



747LE/S SMART





connections 1" / Kv value 3.6

High performance dome-loaded pressure regulator set for inline installation, combined with high-tech sensor technology and electronic components.

- signaling of inlet, outlet and pilot pressure
- signaling of inlet and outlet temperature indication of the instantaneous gas flow rate
- digital display (optional)
- ideal for connected manufacturing

All models of the 747LE/S dome pressure regulator are available as Smart models.

Smart model variations

"Standard"Display, indication of inlet pressure and temperature as well as outlet pressure and temperature

"Standard + P3"

"Standard" features, plus indication of pilot pressure

"Standard + Flow"

"Standard" features, plus indication of flow rate

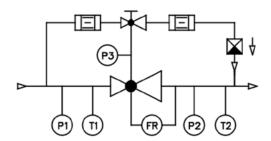
"Standard + P3 + Flow"

"Standard" features, plus indication of pilot pressure and flow rate

signal cable (5 m) order no. 803.172800 (3 cables are required to operate the device)

for mounting parts, options and maintenance kit see model 747LE/S Brass

overview mounting parts:



- P1 inlet pressure
- T1 inlet temperature
- P2 outlet pressure
- T2 outlet temperature
- P3 pilot pressure
- FR flow rate



series 757LE





overview mounting parts:

connections 2", flange DN50 / Kv value 15

High-performance dome-loaded pressure regulators for installation in pipelines or as manifold pressure regulator per DIN EN ISO 7291. For high and varying flows requiring maximum pressure stability.

- high pressure stability even during flow and temperature fluctuations
- outlet pressure range 0.5-30 bar
- ready-to-use
- option: lockable spindle hood against unauthorized adjustment
- set includes integrated pilot pressure regulator, and stainless steel pressure gauges, completely assembled and tested
- easy to install and to integrate directly into the process different mounting parts available (maintenance kit see <u>page 101</u>)
- also as a SMART model for connected manufacturing

connections	max. inlet pressure*	outlet pressure	order no.		
		t pilot pressure r	egulator		
G 2" IG	40 bar	0.5-30 bar	278-089		
model 757 LE/S	(brass), set				
flange DIN DN 50) 40 bar	0.5-10 bar	292-0017		
flange DIN DN 50 G 2" IG	0 40 bar 40 bar	0.5-30 bar 0.5-10 bar	292-0018 292-0003		
G 2" IG	40 bar	0.5-10 bar 0.5-30 bar	292-0003		
2" NPT IG	40 bar	0.5-10 bar	292-0022		
2" NPT IG	40 bar	0.5-30 bar	292-0021		
mounting parts	(brass):				
O-ring for flange	G2"		7901-135		
reducing nipple			952.217000		
flange connection flange DIN DN50	ON DIN DN50/PN	140 (O-ring seal)	952.211000 801.597803		
O-ring for flange			7901-130		
gasket for flange	<u> </u>		950.010300		
flange gas filter	DIN DN50/PN40)	956.923800		
model 757 LE-E	S (stainless st	eel), without pilo	ot pressure regulator		
G 2" IG	`40 bar	0.5-30 bar	278-097		
model 757 LE/S	-FS (stainless	steel), set			
flange DIN DN 50	40 bar	0.5-10 bar	292-0037		
flange DIN DN 50		0.5-30 bar	292		
G 2" IG G 2" IG	40 bar 40 bar	0.5-10 bar 0.5-30 bar	292-0019 292-0122		
2" NPT IG	40 bar	0.5-30 bar	292-0122		
2" NPT IG	40 bar	0.5-30 bar	292-0026		
stainless steel mounting parts on demand					
use for EX zone (ATEX)					
*depending on gas type	*depending on gas type				



757LE/S SMART





connections 2", flange DN50 / Kv value 15

High performance dome-loaded pressure regulator set for inline installation, combined with high-tech sensor technology and electronic components.

- signaling of inlet, outlet and pilot pressure
- signaling of inlet and outlet temperature indication of the instantaneous gas flow rate
- digital display (optional)
- ideal for connected manufacturing

All models of the 757LE/S dome pressure regulator are available as Smart models.

Smart model variations

"Standard"Display, indication of inlet pressure and temperature as well as outlet pressure and temperature

"Standard + P3"

"Standard" features, plus indication of pilot pressure

"Standard + Flow"

"Standard" features, plus indication of flow rate

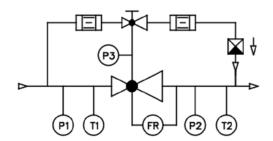
"Standard + P3 + Flow"

"Standard" features, plus indication of pilot pressure and flow rate

signal cable (5 m) order no. 803.172800 (3 cables are required to operate the device)

for mounting parts, options and maintenance kit see model 757LE/S Brass

overview mounting parts:



- P1 inlet pressure
- T1 inlet temperature
- P2 outlet pressure
- T2 outlet temperature
- P3 pilot pressure
- FR flow rate



series 767LE





overview mounting parts:

connections 3", flange DN80/100 / Kv value 30

High-performance dome-loaded pressure regulators for installation in pipelines or as manifold pressure regulator per DIN EN ISO 7291. For high and varying flows requiring maximum pressure stability.

- high pressure stability even during flow and temperature fluctuations
- outlet pressure range 0.5-30 bar
- ready-to-use
- option: lockable spindle hood against unauthorized adjustment
- set includes integrated pilot pressure regulator, and stainless steel pressure gauges, completely assembled and tested
- easy to install and to integrate directly into the process different mounting parts available (maintenance kit see page 101)
- also as a SMART model for connected manufacturing

connections	max. inlet pressure*	outlet pressure	order no.
model 767 LE (brass), without	pilot pressure	regulator
G 3" IG	40 bar	0.5-30 bar	
model 767 LE/S	S (brass), set		
flange DIN DN 8		0.5-10 bar	292-0008
flange DIN DN 8	30 40 bar	0.5-30 bar	292-0005
flange DIN DN 1		0.5-10 bar	292-0013
flange DIN DN 1		0.5-30 bar	292-0066
G 3" ĬG	40 bar	0.5-10 bar	292-0011
G 3" IG	40 bar	0.5-30 bar	292-0012
3" NPT IG	40 bar	0.5-10 bar	292-0108
3" NPT IG	40 bar	0.5-30 bar	292-0302
mounting part	:s:		
o-ring for flange			7901-098
reducing nipple			952.222700
	on DIN DN80/PN	40 (O-ring seal)	
flange DIN DN8			801.598003
o-ring for flange		140/0	7901-479
	on DIN DN100/PN	140 (O-ring seat	
flange DIN DN1 o-ring for flange			802.560503 7901-136
gasket for flang			950.015300
gasket for italig	e DNOO		550.015500
			ot pressure regulator
G 3" IG	40 bar	0.5-30 bar	278
	S-ES (stainless s	teel), set	
flange DIN DN 8		0.5-10 bar	292
flange DIN DN 8		0.5-30 bar	292
flange DIN DN 1		0.5-10 bar	292
flange DIN DN 1		0.5-30 bar	292
G 3" IG	40 bar	0.5-10 bar	292
G 3" IG	40 bar	0.5-30 bar	292
3" NPT IG 3" NPT IG	40 bar 40 bar	0.5-10 bar 0.5-30 bar	292 292
3 INFI IG	40 Dai	0.5-50 bal	232
use for EX zone	(ATEX)		
*depending on gas typ	pe		



767LE/S SMART





connections 3", flange DN80/100 / Kv value 30

High performance dome-loaded pressure regulator set for inline installation, combined with high-tech sensor technology and electronic components.

- signaling of inlet, outlet and pilot pressure
- signaling of inlet and outlet temperature indication of the instantaneous gas flow rate
- digital display (optional)
- ideal for connected manufacturing

All models of the 767LE/S dome pressure regulator are available as Smart models.

Smart model variations

"Standard"Display, indication of inlet pressure and temperature as well as outlet pressure and temperature

"Standard + P3"

"Standard" features, plus indication of pilot pressure

"Standard + Flow"

"Standard" features, plus indication of flow rate

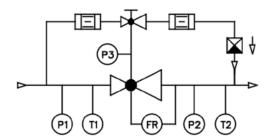
"Standard + P3 + Flow"

"Standard" features, plus indication of pilot pressure and flow rate

signal cable (5 m) order no. 803.172800 (3 cables are required to operate the device)

for mounting parts, options and maintenance kit see model 767LE/S Brass

overview mounting parts:



- P1 inlet pressure
- T1 inlet temperature
- P2 outlet pressure
- T2 outlet temperature
- P3 pilot pressure
- FR flow rate

DOME PRESSURE REGULATORS - Various



Backpressure Regulator BPR 2





connections 2"

Backpressure regulators are used for process gas supply, in which the pressure must be kept or limited, e.g. for regulating the pressure of gas cushions in tanks

- rapid and accurate monitoring of inlet pressure provides process reliability
- ideal e.g. for pressure regulation from gas cushions in tanks
- operating pressure 0,5 20 bar
- available in brass or stainless steel
- ATEX 2014/34/EU with ignition hazard analysis according to EN 1127-1, DIN EN 13463-1 and ZH1/200
- fulfills the requirements of EU Regulations (EC) 1935/2004, and (EC) 2023/2006
- fulfills the requirements of German Food and Feed (LFGB) Law, and is suitable for contact with food gases
- integrated connections for pilot gas and manometer

connections	adjustable upstream pressure	order no.
model BPR 2 (I G 2" IG	brass) 0.5-20 bar	276-001
model BPR 2 -I G 2" IG	ES (stainless steel) 0.5-20 bar	276-002
mounting parts	s see model 757LE (page 97)	

Accessories

for models 737LE, 747LE, 757LE, 767LE



lockable spindle cap



maintenance kit

- ockable spindle cap prevents unwanted tempering of the pilot pressure
- maintenance kits: pre-mounted, for maintenance and servicing
- stainless steel wall mounting panels also suitable for the 757LE/S Smart dome pressure regulator

DOME PRESSURE REGULATORS - Various



Plant engineering



parallel construction with 757LE/S



planning and installation

Individual construction and mounting according to customer requirements

- planning and installation by a WITT specialist
- free of oil and grease
- suitable for oxygen
- tested and ready to use

Individual parallel construction

Example I:

4 ball valves stainless steel DN50/PN40 2 dome pressure regulators 757LE/S manifold DN50, counter-flange, TÜV-testing, CE labeling installation on welded mounting frame

Example II:

dome pressure regulator 757LE/S with flange filter 50 µm filter fineness, for oxygen up to 30 bar with dirt catcher delivery completely assembled and tested

More customizations possible, for example central filter, safety valve, other connection sizes, etc.

Suitable for oxygen, tested and ready for use, short delivery time



series 722



for flashback arrestors and non-return valves

Test rig for the annual testing of flashback arrestors and non-return valves up to DN 50 $\,$

- leak-tightness to atmosphere
- non-return valve against low and high back pressure
- operating pressure of pressure sensitive gas cut off valve
- measuring of flow capacities of flashback arrestors

	order no.	
test set (test rig 722 + clamp 743)	101000013	
test rig 722	101000010	
clamp 743	101000012	
inspection plates	801412700	
measurement liquid 50 ml (U-tube)	956904000	
adapters for other connections on dem	and	

WITT - for your safety and peace of mind

Ever increasing legal requirements plus the moral and financial costs of accidents place an even higher onus on safety.

Therefore, each company dealing with technical gases is well advised to make a realistic risk assessment and be sure to be following best practices. Flashback arrestors and most other components of gas supply (acetylene, O2, other fuel gases, inert gas) should be checked for safety at least annually.

WITT can support you: by providing advice and service as well as suitable test equipment - for your operating and legal certainty.

Talk to us: witt@wittgas.com or tel. 0049-(0)2302-89010





622

for outlet points

For reliable protection against contamination by ultrafine filtering of particulates (approx. 40 µm)

- increases service life of downstream fittings and equipment
- high flowrate for flow optimized design
- filter inserts made of stainless steel
- change of filter possible while installed
- every gas filter 100% tested
- 36 X 71 mm, ca. 40 g

model	connections	order no.
622 622	G3/8 RH IG - G3/8 LH MG G3/8 RH IG - G3/8 RH MG	. 186-012 . 186-011
replaceme	nt filter	.955003000

for pipes

For reliable protection against contamination by ultrafine filtering of particulates and moisture (from 0.5 µm)

- increases service life of downstream fittings and equipment
- high flowrate for flow optimized design ilter inserts in bronze (5/50 $\mu m)$ especially for O2 or in stainless steel $(0,5/7/40 \mu m)$
- with condensate drain
- change of filter possible while installed every gas filter 100% tested
- 72 X 205 mm, ca. 2.8 kg



model connections	order no.
77 (ca. 40 µm) G 3/4 IG replacement filter 3-part	. 077-001 . FI-077
77 (ca. 10 µm) G 3/4 IG replacement filter 3-part	
77 (ca. 50 µm) G 3/4 IGBAM tested for oxygen, with bronze filter replacement filter bronze 3-part	
77 (ca. 5 µm) G 3/4 IG BAM tested for oxygen, with bronze filter replacement filter bronze 3-part	
77 (ca. 0.5 µm) G 3/4 IG with stainless steel filter replacement filter stainless steel 3-part	
installation kitenabling active monitoring of filter contant by means of differential pressure	



625

for very high flow rates

Gas filter for filtering out mechanical impurities and condensate in pipelines

- increases service life of downstream fittings and equipment
- high flowrate for flow optimized design
- filter inserts made of stainless steel (ca. 40 µm)
- with condensate drain
- change of filter possible while installed
- every gas filter 100% tested 190 X 385 mm, ca. 12.2/16.7 kg

model	connections	order no.
625 625 625 625 625	G 1.1/4 AG	042-007 042-006 042-015
eplacem	nent filter 4-part	FI-625



stainless steel filter

HD Gas Filter stainless steel up to 300 bar - for filtering out impurities (30-80 µm), ideal for hydrogen



- high flowrate for flow optimized design filter inserts made of chromium-nickel steel
- ideal for hydrogen and many other technical gases
- change of filter possible while installed
- every gas filter 100% tested
- 79 X 175 mm, ca. 2.7 kg



model	connections	order no.
HD (ca. 30 μm)	G 3/4 IG	187-005
HD (ca. 80 μm)	G 3/4 IG	187-004
replacement filter	30 μm	FI-187-30
replacement filter	80 μm	FI-187

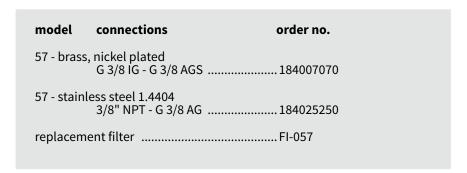


57

pur filter 3 µm

For reliable protection against micro-contamination of gases, e.g. in laboratories or burner supplies in the glass industry (approx. 3 µm)

- increases service life of downstream fittings and equipment
- finest filtering performance eliminates product waste
- high flowrate for flow optimized design
- corrosion resistant filter insert (approx. 3 μm) stainless steel fibre fleece
- every gas filter 100% tested
- 77 X 60 mm, ca. 678 g





pure filter 5 µm

For reliable protection against micro-contamination of gases, e.g. in laboratories or burner supplies in the glass industry (approx. 5 µm)

- increases service life of downstream fittings and equipment
- finest filtering performance eliminates product waste
- high flowrate for flow optimized design
- corrosion resistant filter insert (approx. 5 μm) stainless steel fibre fleece
- every gas filter 100% tested
- 21 X 58 mm, ca. 120 g

III.	81	11	
188	81	8	
108	81		
100	雪川	U.	
		1	
118	B I		
118	B 1	1	
ш	81	1	
U.S.	81	8	
		0	

model connection	order no.
807 - brass, nickel plated 1/4" NPT IG	185-002
807 - stainless steel 1.4404 1/4" NPT IG	185-006
replacement filter	956333400



LE₆

WITT

very high flow rates, DN100 / PN 40

For reliable protection against contamination by ultrafine filtering of particulates and moisture (approx. 15 μ m), heavy unit for very high flow rates

- designed for Oxygen Service in accordance with EIGA, AIGA and CGA
- downstream equipment performance improvement
- can extend service life and reduce maintenance requirements of downstream equipment
- in-line maintenance, saves time and money
- very high flow rates, with low pressure drop
- ideal in combination with dome pressure regulator 767LE (including with smart-option)
- certainty of safety and functionality every filter is 100% tested

model	connections	order no.
LE6	flange DN 100/PN40 pressure monitoring: G 3/8 IG	078-001
replacement filter		. FI-LE6

Our gas filter in a new dimension

Our new gas filter LE6 is the perfect complement to the dome pressure regulator 767LE/S and 767LE/S SMART.

With its 3" connection and a 15 μm filter fineness, it is suitable for up to 40 bar max. operating overpressure (oxygen 30 bar, CO2 25 bar).

The flow-optimized design enables a high flow rate and thus ensures the process quality of even the largest systems.



MISCELLANEOUS



Types of threads



IG simple female thread



AG simple male thread



MG - female thread with ball head, metallic self-sealing



AGS male thread with counterbore

Turning of threads:

RH right-handed

LH left-handed

Conversion of units of measurement

Pressure all pressure specifications are in barg

10 bar = 145 psi

Flow $10 \text{ m}^3/\text{h} = 353 \text{ scfh}$

Temperature $^{\circ}$ C * 1.8 + 32 = $^{\circ}$ F

Volume 10 litres = 21 pints / 2.2 gallons

Length 10 mm = 0.3937 inches

1 m = 393.7 inches

MISCELLANEOUS



Training

Topics:

- Gas safety equipment
- Gas mixing systems
- Gas analysis systems
- Leak detection systems

The training will be tailored to the knowledge of the attendees, with theory and practical elements as required. By request a test can be held at the end of the training.

Daily rate (per person): Including lunch, excluding hotel accommodation on demand Location: WITT headquarter in Witten

Location: WITT headquarter in Wit Minimum attendance: 4 persons Maximum attendance: 8 persons

Documentation, Certification and Instruction manuals

	order no.
Material Certificate in accordance with DIN EN 10204 - 3.1	998.180000
Manufacturer's Certificate in accordance with DIN EN 10204	998.190000
Declaration of Conformity to ATEX	998.440003
Declaration of Conformity to EMV / Low Voltage Directive	998.440004
Declaration of Conformity ,Pressure Devices' (PED)	998.440002
Peclaration of Conformity 1935/2004 (food suitability)	998.440006
rinted Operation Manual	998.300011
eclaration of Conformity ,Pressure Devices' (PED) Module G	
by German TÜV	998.260001
Manufacturer's Certificate in accordance with DIN EN ISO 22000	998.440005



Warranty Information

This equipment is sold by WITT GAS CONTROLS LP, under the warranties set forth in the following paragraphs. Such warranties are extended only with respect to the purchase of this equipment directly from WITT GAS CONTROLS LP or its Authorized Distributors as new merchandise and are extended to the first Buyer thereof other than for the purpose of resale.

For a period of one (1) year from the date of original delivery (90 days in corrosive environment or gas service) to Buyer or to Buyer's order, this equipment is warranted to be free from functional defects in materials and workmanship and to conform to the description of this equipment contained in this manual and any accompanying labels and/or inserts, provided that the same is properly operated under conditions of normal use and that regular periodic maintenance and service is performed or replacements made in accordance with the instructions provided. The foregoing warranties shall not apply if the equipment has been repaired: other than by WITT GAS CONTROLS LP or a designated service facility or in accordance with written instructions provided by WITT GAS CONTROLS LP or altered by anyone other than WITT GAS CONTROLS LP, or if the equipment has been subject to abuse, misuse, negligence, or accident.

WITT GAS CONTROLS LP's sole and exclusive obligation and Buyer's sole and exclusive remedy under the above warranties is limited to repairing or replacing, free of charge, at WITT GAS CONTROLS LP's option, the equipment or part, which is reported to its Authorized Distributor from whom purchased, and which if so advised, is returned with a statement of the observed deficiency and proof of purchase of equipment or part not later than seven (7) days after the expiration date of the applicable warranty, to the nearest designated service facility during normal business hours, transportation charges prepaid, and which upon examination, is found not to comply with the above warranties. Return trip transportation charges for the equipment or part shall be paid by Buyer.

WITT GAS CONTROLS LP SHALL NOT BE OTHERWISE LIABLE FOR ANY DAMAGES INCLUDING BUT NOT LIMITED TO: INCIDENTAL DAMAGES, CONSEQUENTIAL DAMAGES, OR SPECIAL DAMAGES, WHETHER SUCH DAMAGES RESULT FROM NEGLIGENCE, BREACH OF WARRANTY OR OTHERWISE.

THERE ARE NO EXPRESS OR IMPLIED WARRANTIES WHICH EXTEND BEYOND THE WARRANTIES HEREINABOVE



Standard Terms and Conditions

- 1. All items are sold FOB Place of origin (Roswell, Georgia).

 "FOB shipping point" or "FOB Place of origin" means the buyer is at risk and takes ownership of goods once the seller ships the goods. Customer pays all transportation fees from Roswell, GA. For international shipments, customer is also responsible for all customs and related fees and must supply either a UPS or FedEx account number (and associated billing zip code for UPS and FedEx accounts). Witt does not accept requests for DHL or other non-UPS or FedEx accounts.
- 2. Prices are per the latest published price list, currently for year 2023. All prices are subject to change without notice, and orders will be billed at the prices in effect at the time of shipment. Items not in the price list are quoted upon demand.
- 3. Payment terms are Net 30 (for approved customers only; subject to credit check). Net 30 terms are subject to credit approval for each order, even when terms were previously granted. Service charges of 3% will be applied to past-due accounts. Payments may be made in US dollars via ACH or check. Credit card payments and wire transfers are accepted only after the applicable processing fee is added to the invoice.
- 4. Drop shipment orders will incur an additional fee of 10% of the order or \$75.00, whichever is greater.
- 5. Minimum Billing: \$500.00 per order at net prices. Prepaid (PAY IN ADVANCE) orders minimum: \$250.00.
- 6. Warranty on all products is one year from date of sale. Except for items used in corrosive application or environments, 90 days warranty on these items. Consumable items are not under warranty.
- 7. Returned Goods: to be eligible for credit, goods returned to Roswell, GA, must comply with the following requirements:
 - a. Removal of product from original packaging constitutes final sale and product is considered used. Due to the nature of application of this product type, no product can be accepted for return or credit once it has been determined that the item has been used.
 - b. The product(s) must be listed in the current price sheet and must have been purchased within the last 12 months.
 - c. The reason for the return must be clearly stated at the time of the request for return materials authorization (RMA).
 - d. An offsetting order of equal dollar value or more must accompany the returned product(s).
 - e. Transportation charges for the returned product(s) must be prepaid, or the return will not be accepted. Returned goods accepted for credit are subject to a minimum 35% handling charge or \$35.00, whichever is greater. In addition, a reconditioning and repackaging fee, if necessary, will be charged.
 - f. No "made to order" or custom-made products are eligible for credit return. This includes gas mixers, gas analyzers and other custom-made, non-catalog products.
 - g. Cancelled orders will incur a 35% fee for in stock items, order must be cancelled prior to shipment. For non-stock or made to order items 50% fee for non-stock and 75% fee for made to order items will apply.
- 8. WITT GAS CONTROLS LP reserves the right to issue credit on returned goods at purchase price or current price, whichever is lower.
- 9. All in-stock orders will ship within 24 hours (or next business day) upon receipt of a customer order in which all billing, shipping and other information required to process the order has been provided by the customer and approved for processing.
- 10. Same-day shipping of small parcel items only is available for in-stock items upon demand for an additional \$35.00 per order/package. This guarantees same-day shipment of up to five items for orders placed and approved by 3:00 PM EST. For credit card orders, complete billing information and authorization must be provided by 1:30 PM EST to allow for transaction processing. Customer must supply either a UPS or FedEx account number (and associated billing zip code for UPS accounts). WITT GAS CONTROLS is not responsible for carrier delays or damage incurred during transport.

[Ver. 1/1/2024]

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Central gas supply



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WITT SUPPORT MATERIAL - OVERVIEW



Videos Gas Control Equipment

Gas Mixers MG FIX / FLEX Gas Mixers MM-Flex Gas Mixers BM-2M Gas mixers KM-MEM+ Gas mixers series KM- and MG-Gas mixers KM-MEM CO₂ Leak detection Inline leak detection LEAK-MASTER® PRO2 Gas Mixers KM-M LEAK-MASTER® MAPMAX Leak detection based on water Gas analyzer OXYBABY® 6.0 Gas analyzer OXYPAD LEAK-MASTER® EASY

WITT SUPPORT MATERIAL - OVERVIEW



Videos Gas Safety Devices

Quick couplings	Dome Pressure Regulators
Test rig for valves	Non-return Valves ULTRA

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/ TECHNOLOGY FOR GASES /

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