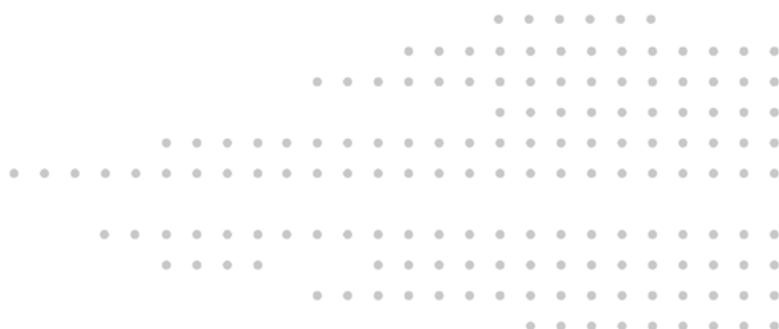


# CATALOGUE

# 2020

valid from 01.01.2020

inter@ctive




“Come back to our website...

...and discover our new categories like 'examples from the practice' or 'White Papers'.


Do you already use the favourites list?

Do you have any more questions? Then send us a call-back request. We will contact you within 24 hours.

► [www.wittgas.com](http://www.wittgas.com)



www.wittgas.com




[Products](#) [Applications](#) [Consulting & Service](#) [Company](#) [Jobs](#) [Downloads](#) [News](#) [Contact](#)

[Home](#) / [Applications](#) / [Process Examples](#) / [Gas mixers for laser cutting](#)

### Applications

- Welding & Cutting
- Food Industry
- Beverage Industry
- Glass Industry
- Medical Applications
- Thermal Processing
- Laser Technology
- Diving Technology
- Helium Leak Test
- Biogas
- Hydrogen Applications
- Pharmaceutical Industry
- Customer Designed Solutions

### Gas mixers for laser cutting



LIGNE ENDS 3015 (vrmade 2018)

#### AMADA RELIES ON WITT GASMIKERS


**Process gases for optimal laser cutting**

Laser technology has been the method of choice in sheet metal processing for many years. The laser delivers first-class cutting results regardless of the type and thickness of the material. In laser cutting, process gases play an important role in cutting quality. The desired results can only be achieved if the quality of the cutting gas remains constant. AMADA GmbH, one of the leading suppliers of high-quality laser cutting machines, achieves optimum process results by equipping its machines with WITT gas mixers.

Only a few companies have a similar wealth of experience in the field of laser technology as AMADA, the pioneer in the field of laser cutting. Founded in Japan, the company presented the world's first industrially used cutting laser for sheet metal processing back in 1980. The German AMADA GmbH was founded in 1973 as a subsidiary of AMADA Holdings Co. Ltd. and today has its headquarters in Haan near Düsseldorf and in Echting near Landshut. The company's laser cutting systems have been continuously developed over the past 40 years and enable excellent cutting performance with maximum precision.

High-quality process gases are used for consistent, first-class cutting results. The cutting gas or a cutting gas mixture is supplied to the cutting process via a nozzle system. This shields the cutting area from negative influences from the ambient air, and also expels molten material is expelled from the cut.

AMADA prefers a mixture of nitrogen and oxygen for cutting certain materials. The nitrogen serves as a flushing gas and at the same time has the function of cooling the surroundings of the laser beam; the oxygen in turn promotes the actual cutting process.



# 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
- Individual solutions for your applications



## Our product range

In this catalogue 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!



Tel: +49 (0)2302 8901-0

Fax: +49 (0)2302 8901-3

[witt@wittgas.com](mailto:witt@wittgas.com)

Our front desk will connect you directly to the person in charge.

## Gas Control Equipment

1. Gas mixers for non-flammable gases .....	6
2. Gas flow control systems for non-flammable gases.....	12
3. Gas mixers for flammable gases .....	13
4. Gas mixers for medical applications .....	15
5. Mixed gas receivers .....	16
6. Gas analysers .....	18
7. Leak detection equipment.....	24
8. Data logger .....	25


## Gas Safety Equipment


9. Flashback arrestors for pressure regulators, outlet points and pipelines .....	26
10. Flashback arrestors for torches .....	30
11. Flashback arrestors for cutting machines .....	33
12. Flashback arrestors for high flows .....	34
13. Flashback arrestors for central acetylene supply .....	36
14. Quick couplings .....	38
15. Non-return valves .....	41
16. Safety relief valves .....	44
17. Stainless steel devices .....	46
18. Pressure regulators .....	52
19. Mobile pressure regulating stations .....	58
20. Stationary pressure regulating stations .....	59
21. Outlet points .....	60
22. Test rigs .....	62
23. Equipment for oxygen lancing .....	63
24. Gas filters .....	65
25. Metering valves.....	66
26. Ball valves .....	67
27. Safety hose reels .....	69
28. Accessories .....	70


## Miscellaneous


Training .....	76
Certification, documentation and instruction manuals .....	76
Conversion of units of measurements .....	76
WITT support material - overview .....	77

# 1. GAS MIXERS for non-flammable gases


KM20 ECO		2 gases   small flows
	<p><b>Small Gas mixer especially for dispensing equipment</b></p> <ul style="list-style-type: none"><li>• variable mixture output</li><li>• pre-set gas blends</li><li>• various flow capacities</li></ul>	<p><b>KM20 ECO</b></p> <p>KM 20-1 ECO with one outlet</p> <p>KM 20-2 ECO with two outlets</p>
KM20 ECO		


M M		2 gases   small to medium flows
	<p><b>Compact Gas mixer for different applications</b></p> <ul style="list-style-type: none"><li>• adjustable mixing valve</li><li>• mixed gas flow dependent on inlet pressures</li><li>• various flow capacities</li></ul>	<p><b>MM-2</b></p> <p>MM-2K</p> <p>MM-2G</p>
MM-2		


M M - Flex		2 gases   small to medium flows
	<p><b>Ultra compact gas mixer for different applications, e.g. welding</b></p> <ul style="list-style-type: none"><li>• adjustable mixing valve</li><li>• adjustable metering valve</li><li>• adjustable pressure</li></ul>	<p><b>MM-Flex</b></p> <p>MM-Flex</p>
MM-Flex		


B M		2 gases   small flows
	<p><b>Gas mixer for direct cylinder connection (high pressure)</b></p> <ul style="list-style-type: none"><li>• constant output</li><li>• infinitely variable gas blending</li><li>• infinitely variable metering</li><li>• no additional pressure regulator required</li><li>• various flow capacities</li></ul>	<p><b>BM-2</b></p> <p>BM-2M (200 bar)</p> <p>BM-2M (300 bar)</p>
BM-2M		

# 1. GAS MIXERS for non-flammable gases



KM10-2 Flex		2 gases   small flows
 <p>KM10-2 Flex</p>	<p><b>Small gas mixer especially for low gas consumption, e.g. in laboratory applications</b></p> <ul style="list-style-type: none"> <li>• variable mixture output</li> <li>• variable gas blending</li> <li>• various flow capacities</li> <li>• new mixing technology, mixed gas receiver is not required</li> </ul>	<p><b>KM10-2 Flex</b></p> <p>KM10-2 Flex</p>

MG Fix		2 or 3 gases   medium to high flows
 <p>MG Fix</p>	<p><b>Pre-set 2 or 3 components gas mixers</b></p> <ul style="list-style-type: none"> <li>• variable mixture output</li> <li>• mixing range dependent on type of gas</li> <li>• new mixing technology, mixed gas receiver is not required</li> </ul>	<p><b>MG-2 Fix for 2 gases</b></p> <p>MG 25-2 capacity range up to approx. 22 Nm<sup>3</sup>/h</p> <p>MG 45-2 capacity range up to approx. 46 Nm<sup>3</sup>/h</p> <p>MG 75-2 capacity range up to approx. 68 Nm<sup>3</sup>/h</p> <p>MG 95-2 capacity range up to approx. 90 Nm<sup>3</sup>/h</p> <p>MG 125-2 capacity range up to approx. 135 Nm<sup>3</sup>/h</p>
		<p><b>MG-3 Fix for 3 gases</b></p> <p>MG 45-3 capacity range up to approx. 46 Nm<sup>3</sup>/h</p> <p>MG 95-3 capacity range up to approx. 90 Nm<sup>3</sup>/h</p> <p>MG 125-3 capacity range up to approx. 135 Nm<sup>3</sup>/h</p>
		<p><b>options:</b></p> <p>inlet pressure monitoring with alarm module AM3</p>



MG Flex		2 gases   medium to high flows
 <p>MG Flex</p>	<p><b>Adjustable 2 components gas mixers for welding applications</b></p> <ul style="list-style-type: none"> <li>• variable mixture output</li> <li>• mixing range dependent on type of gas</li> <li>• new mixing technology, mixed gas receiver is not required</li> </ul>	<p><b>MG-2 Flex</b></p> <p>MG 25-2 capacity range up to approx. 22 Nm<sup>3</sup>/h</p> <p>MG 45-2 capacity range up to approx. 46 Nm<sup>3</sup>/h</p> <p>MG 75-2 capacity range up to approx. 68 Nm<sup>3</sup>/h</p> <p>MG 95-2 capacity range up to approx. 90 Nm<sup>3</sup>/h</p> <p>MG 125-2 capacity range up to approx. 135 Nm<sup>3</sup>/h</p>
		<p><b>options:</b></p> <p>inlet pressure monitoring with alarm module AM3</p>

KM		2 or 3 gases   small to medium flows
 <p>KM20-2</p>	<p><b>Mixing system for different technical applications</b></p> <ul style="list-style-type: none"> <li>• constant output</li> <li>• infinitely variable gas blending</li> <li>• infinitely variable metering</li> <li>• various flow capacities</li> </ul>	<p><b>KM-2 for 2 gases</b></p> <p>KM 20-2</p> <p>KM 30-2</p> <p>KM 60-2</p> <p>KM 100-2</p>
		<p><b>KM-3 for 3 gases</b></p> <p>KM 20-3</p> <p>KM 30-3</p> <p>KM 60-3</p> <p>KM 100-3</p>

# 1. GAS MIXERS for non-flammable gases



KM - M		2 or 3 gases   medium to high flows
 <p>KM100-2M</p> <p>KM100/200-M KM300/600-M</p>	<p><b>Gas mixer especially for MAP-packaging and flow-pack machines</b></p> <p>Features - see model KM (above) plus:</p> <ul style="list-style-type: none"> <li>regulation of outlet pressure</li> <li>monitoring of gas supply</li> <li>integrated inlet pressure monitoring (alarm module AM3)</li> </ul>	<p><b>KM-2M for 2 gases</b></p> <p>KM 100-2M KM 200-2M KM 300-2M KM 600-2M</p> <p><b>KM-3M for 3 gases</b></p> <p>KM 100-3M KM 200-3M KM 300-3M KM 600-3M</p> <p>optional: automatic shut-off of O<sub>2</sub> when going below the limit</p>
	 <p>for food-grade gases, conforms to 1935/2004</p>	


KM - ME		2 or 3 gases   low to very high flows
 <p>KM100-2ME on steel receiver</p> <p>Picture shows optional equipment</p> <p><b>Powerful gas mixer especially for highly fluctuating mixing gas output quantities</b></p> <ul style="list-style-type: none"> <li>adjustable mixing valve</li> <li>with receiver pressure management for use with mixed gas receiver</li> <li>also for central gas supply installations</li> <li>various flow capacities</li> <li>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.</li> </ul>		<p><b>KM-2ME for 2 gases</b></p> <p>KM100-2ME KM100-2ME mounted on 20 l / 10 bar steel receiver KM100-2ME mounted on 20 l / 10 bar stainless steel receiver KM100-2ME mounted on 100 l / 10 bar steel receiver KM100-2ME mounted on 100 l / 10 bar stainless steel receiver</p> <p><b>KM-3ME for 3 gases</b></p> <p>KM100-3ME KM100-3ME mounted on 20 l / 10 bar steel receiver KM100-3ME mounted on 20 l / 10 bar stainless steel receiver KM100-3ME mounted on 100 l / 10 bar steel receiver KM100-3ME mounted on 100 l / 10 bar stainless steel receiver</p> <p><b>options:</b></p> <p>inlet pressure monitoring with alarm module AM3 surcharge for analogue pressure transmitter for 2 inlet gases surcharge for analogue pressure transmitter for 3 inlet gases</p>

KM - M +		2 or 3 gases   medium to high flows
 <p>KM100-2M+</p>	<p><b>Gas mixer especially for MAP-packaging and flow-pack machine</b></p> <p>Features - see model KM-M (above) plus:</p> <ul style="list-style-type: none"> <li>communication by serial Interface (e.g. PLC, PC or 4-20mA/0-10V)</li> <li>incl. communication software via PC</li> </ul>	<p><b>KM-2M+ for 2 gases</b></p> <p>KM 100-2M+ KM 200-2M+</p> <p><b>KM-3M+ for 3 gases</b></p> <p>KM 100-3M+ KM 200-3M+</p> <p><b>option:</b></p> <p>operation via touch-screen display coupling socket set</p>
	 <p>for food-grade gases, conforms to 1935/2004</p>	



# 1. GAS MIXERS for non-flammable gases

KM - Flow		2 or 3 gases   medium to high flows
 <p>KM-Flow with analyser</p>	<p><b>Gas mixer especially for MAP-packaging and flow-pack machines</b></p> <ul style="list-style-type: none"><li>• electronic Mass Flow Controller (MFC)</li><li>• touchscreen</li><li>• measured data storage</li><li>• may be combined with analysis MAPY LE</li><li>• for up to 1000/1500 l/min</li></ul>	<p><b>KM1000-2 Flow for 2 gases</b></p> <p>KM1000-2 Flow for flow-pack machines KM1000-2 Flow for vacuum machines</p>
		<p><b>KM1500-3 Flow for 3 gases</b></p> <p>KM1500-3 Flow for flow-pack machines KM1500-3 Flow for vacuum machines</p>
 <p>for food-grade gases, conforms to 1935/2004</p>		

MG-2ME		2 gases   low to very high flows
 <p>MG50-2ME on steel receiver</p> <p>MG50/100-ME</p> <p>MG200-ME</p> <p>Picture shows optional equipment</p>	<b>MG-2ME</b>	
	MG50-2ME	
	MG50-2ME mounted on 100 l / 10 bar steel receiver	
	MG50-2ME mounted on 100 l / 10 bar stainless steel receiver	
	MG100-2ME	
MG100-2ME mounted on 250 l / 11 bar steel receiver		
MG100-2ME mounted on 250 l / 11 bar stainless steel receiver		
MG200-2ME (see option "external filter")		
<b>options:</b>		
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 for analogue pressure transmitter for 2 inlet gases		

**“Did you know that WITT exhibits at more than 30 exhibitions every year worldwide?”**



You'll find WITT at various international trade fairs for food and packaging technologies, process engineering and welding and cutting.

In 2019 for example, WITT presented the latestest gas mixers, gas analysers and leak detectors at the ExpoPack in Mexico.

All current exhibition dates at:  
► [www.wittgas.com/news/exhibitions](http://www.wittgas.com/news/exhibitions)

# 1. GAS MIXERS for non-flammable gases

## MG-3ME

3 gases | low to very high flows



MG50-3ME



alarm module AM3

### MG-3ME

MG50-3ME

MG50-3ME mounted on 100 l / 10 bar steel receiver

MG50-3ME mounted on 100 l / 10 bar stainless steel receiver

MG100-3ME

MG100-3ME mounted on 250 l / 11 bar steel receiver

MG100-3ME mounted on 250 l / 11 bar stainless steel receiver

MG200-3ME (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 for analogue pressure transmitter for 3 inlet gases

**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.

## KM-MEM

2 or 3 gases | low to high flows



KM100-2MEM



KM100-3MEM

### KM-2MEM for 2 gases

KM100-2MEM

KM100-2MEM mounted on 20 l / 10 bar steel receiver

KM100-2MEM mounted on 20 l / 10 bar stainless steel receiver

KM200-2MEM

KM200-2MEM mounted on 20 l / 10 bar steel receiver

KM200-2MEM mounted on 20 l / 10 bar stainless steel receiver

### KM-3MEM for 3 gases

KM100-3MEM

KM100-3MEM mounted on 20 l / 10 bar steel receiver

KM100-3MEM mounted on 20 l / 10 bar stainless steel receiver

KM200-3MEM

KM200-3MEM mounted on 20 l / 10 bar steel receiver

KM200-3MEM mounted on 20 l / 10 bar stainless steel receiver

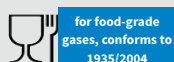
### option:

automatic shut-off e.g. of O<sub>2</sub> when going below the limit

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

Features - see model ME (above) plus:

- integrated inlet pressure monitoring (alarm module AM3)
- monitoring of gas supply
- to be used with mixed gas receiver, incl. inlet pressure monitoring



# 1. GAS MIXERS for non-flammable gases

## KM - MEM +

2 or 3 gases | low to high flows



KM100-2MEM+

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

Features - see model KM-MEM (above) plus:

- communication by serial Interface (e.g. PLC, PC or 4-20mA/0-10V)
- to be used with mixed gas receiver, incl. inlet pressure monitoring



### KM-2MEM+ for 2 gases

- KM100-2MEM+
- KM100-2MEM+ mounted on 20 l / 10 bar steel receiver
- KM100-2MEM+ mounted on 20 l / 10 bar stainless steel receiver
- KM200-2MEM+
- KM200-2MEM+ mounted on 20 l / 10 bar steel receiver
- KM200-2MEM+ mounted on 20 l / 10 bar stainless steel receiver

#### option:

- operation via touch-screen display
- coupling socket set

### KM-3MEM+ for 3 gases

- KM100-3MEM+
- KM100-3MEM+ mounted on 20 l / 10 bar steel receiver
- KM100-3MEM+ mounted on 20 l / 10 bar stainless steel receiver
- KM200-3MEM+
- KM200-3MEM+ mounted on 20 l / 10 bar steel receiver
- KM200-3MEM+ mounted on 20 l / 10 bar stainless steel receiver

#### option:

- operation via touch-screen display
- coupling socket set

product video: this is how our electronic gas mixer works

## MG - MEM +

2 or 3 gases | higher flows



MG50-2MEM+

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

Features - see model KM-MEM+ (above)



### MG-2MEM+ for 2 gases

- MG50-2MEM+
- MG50-2MEM+ mounted on 100 l / 10 bar steel receiver
- MG50-2MEM+ mounted on 100 l / 10 bar stainless steel receiver
- MG50-2MEM+ mounted on 250 l / 11 bar steel receiver
- MG50-2MEM+ mounted on 250 l / 11 bar stainless steel receiver

#### option:

- operation via touch-screen display
- coupling socket set


### MG-3MEM+ for 3 gases

- MG50-3MEM+
- MG50-3MEM+ mounted on 100 l / 10 bar steel receiver
- MG50-3MEM+ mounted on 100 l / 10 bar stainless steel receiver
- MG50-3MEM+ mounted on 250 l / 11 bar steel receiver
- MG50-3MEM+ mounted on 250 l / 11 bar stainless steel receiver



#### option:

- operation via touch-screen display
- coupling socket set

## 2. GASFLOW CONTROL SYSTEMS for non-flammable gases

KD		gas flow controller with O <sub>2</sub> -analysis
	<b>Electronical flow control systems for modified atmospheres in the food industry</b> <ul style="list-style-type: none"><li>• with integrated zirconia cell for O<sub>2</sub>-measurement</li><li>• integrated PID control loop for automatic gas flow control</li><li>• potential free contacts for min./ max. alarms</li></ul>	<b>KD</b>
		KD500-1A MAPY ZRL
		<b>options:</b>
		sample testing via needle
		additional electrochemical sensor for sample testing
heater and thermostat, only electro-chemical sensors		



KM-MAPY ZRL		gas mixer and meterer
  KM100-2M MAPY ZRL	<b>2-components gas mixers with integrated O<sub>2</sub> analysis</b>	<b>KM-2M MAPY ZRL</b>
	Features - see model KD plus: <ul style="list-style-type: none"><li>• MAPY-analysis (see p. 20)</li><li>• potential free contacts</li></ul>	KM100-2M MAPY ZRL
		KM200-2M MAPY ZRL
		KM300-2M MAPY ZRL
		KM600-2M MAPY ZRL
	<b>options:</b>	
	gas mixer with M+ (remote control)	
	surcharge for helium gas mixers	
	for food-grade gases, conforms to 1935/2004	



**“In our brochure you can read everything you always wanted to know about WITT Gas Mixers.**

Gas mixers offer maximum 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](http://www.wittgas.com)



### 3. GAS MIXERS for flammable gases

KM10-2 Flex		2 gases   small flows
 <p>KM10-2 Flex</p>	<b>Small gas mixer especially for little gas consumption, e.g. in laboratory applications</b> <ul style="list-style-type: none"> <li>• variable mixture output</li> <li>• variable gas blending</li> <li>• various flow capacities</li> <li>• new mixing technology, mixed gas receiver is not required</li> </ul>	<b>KM10-2 Flex</b> KM10-2 Flex

KM		2 or 3 gases   small to medium flows
 <p>KM100-3</p>	<b>Gas mixing systems for different applications, e.g. for welding applications</b> <ul style="list-style-type: none"> <li>• infinitely variable gas blending</li> <li>• variable mixture output</li> <li>• various flow capacities</li> <li>• certified in accordance to ATEX</li> </ul>	<b>KM-2 for 2 gases (1 gas flammable)</b> KM 20-2 KM 30-2 KM 60-2 KM 100-2  <b>KM-3 for 3 gases (max. 2 flammable gases)</b> KM 20-3 KM 30-3 KM 60-3 KM 100-3

KM-ME Ex		2 or 3 gases   low to very high flows
 <p>KM100-3ME Ex</p>	<b>Powerful gas mixers especially for highly fluctuating mixing gas output quantities</b> <p>For features - see KM (above) plus:</p> <ul style="list-style-type: none"> <li>• separate electrical control panel</li> <li>• 5 m cable between control unit and mixing device</li> <li>• certified in accordance to ATEX</li> <li>• model A with integrated analysis, LC-display, 4-20 mA signal and min./max. alarms (further information in section 6 „Gas analysers“)</li> <li>• 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.</li> </ul>	<b>KM-2ME Ex for 2 gases</b> KM100-2ME Ex KM100-2ME Ex A, with integrated analysis (see section „Gas analysers“) KM100-2ME Ex mounted on 20 l / 10 bar steel receiver KM100-2ME Ex mounted on 20 l / 10 bar stainless steel receiver KM100-2ME Ex mounted on 100 l / 10 bar steel receiver KM100-2ME Ex mounted on 100 l / 10 bar stainless steel receiver  <b>KM-3ME Ex for 3 gases</b> KM100-3ME Ex KM100-3ME Ex mounted on 20 l / 10 bar steel receiver KM100-3ME Ex mounted on 20 l / 10 bar stainless steel receiver KM100-3ME Ex mounted on 100 l / 10 bar steel receiver KM100-3ME Ex mounted on 100 l / 10 bar stainless steel receiver  <b>options:</b> inlet pressure monitoring with alarm module AM3 (for Ex) surcharge for analogue pressure transmitters Ex, 2 inlet gases surcharge for analogue pressure transmitters Ex, 3 inlet gases

### 3. GAS MIXERS for flammable gases

#### MG-ME Ex

2 or 3 gases | low to very high flows



MG100-ME Ex

MG200-ME Ex

#### Powerful gas mixers especially for highly fluctuating mixing gas output quantities

Features - see KM (above) plus:

- 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 see section 6 „Gas analysers“)
- 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.

#### MG-2ME Ex for 2 gases

- MG50-2ME Ex
- MG50-2ME Ex A, with integrated analysis (see section „Gas analysers“)
- MG50-2ME Ex mounted on 100 l / 10 bar steel receiver
- MG50-2ME Ex A, with integr. analysis, mounted on 100 l/10 bar steel receiver
- MG50-2ME Ex mounted on 100 l / 10 bar stainless steel receiver
- MG50-2ME Ex A, with integr. analysis, mounted on 100 l/10 bar stainl. steel rec.
- MG100-2ME Ex
- MG100-2ME Ex A, with integrated analysis
- MG100-2ME Ex mounted on 250 l / 11 bar steel receiver
- MG100-2ME Ex mounted on 250 l / 11 bar stainless steel receiver
- MG200-2ME Ex (see option „external filter“)
- MG200-2ME Ex A, with integrated analysis (see option „external filter“)

#### MG-3ME Ex for 3 gases

- MG50-3ME Ex
- MG50-3ME Ex mounted on 100 l / 10 bar steel receiver
- MG50-3ME Ex mounted on 100 l / 10 bar stainless steel receiver
- MG100-3ME Ex
- MG100-3ME Ex mounted on 250 l / 11 bar steel receiver
- MG100-3ME Ex mounted on 250 l / 11 bar stainless steel receiver
- MG200-3ME Ex (see option „external filter“)

#### 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 for analogue pressure transmitters Ex, 2 inlet gases
- surcharge for analogue pressure transmitters Ex, 3 inlet gases

10/12/2019

“We can do big, too.

Adopting our gas technical solutions to meet the needs of customers is our daily business. Hence we offer a wide range of special mixers, e.g.



- with flows up to 2000 Nm<sup>3</sup>/h
- from very small mixing ranges (0-5%) up to very big ones (0-100%)
- with integrated gas analysis
- with numerous safety features such as monitoring of inlet pressures and temperatures, alarm function with automatic switch or cut off, heating for mixer and control unit, filter in the gas inlet, lockable doors, etc.

Please contact us. Together we will identify a WITT solution specific to your requirements.

For an overview of our support material see p. 77-78



## 4. GAS MIXERS for medical applications

### MED-MG

for synthetic air



MG50-2ME GB A

#### Worldwide and long-term proven gas mixing system for the production of synthetic air for medical applications

- in accordance with DIN EN ISO 7396-1 section 3.27
- medical product class IIb, CE identification marking according to EG 93/42/EWG
- various flow capacities
- to be used with mixed gas receiver, incl. inlet pressure monitoring
- also for central gas supply installations
- integrated oxygen analyser, redundant design
- various system surveillances
- housing IP55

#### MED-MG

MED-MG 50-2ME GB A  
MED-MG 100-2ME GB A  
MED-MG 200-2ME GB A  
MED-MG 500-2ME GB A  
each with 2 gas filters 077 and printed operation manual

#### options:

automatic calibration  
heating (for low ambient temperatures)

#### MED-stainless steel gas receiver (coated) incl. safety devices and connections:

volume	pressure	design	blow-off output SV*
100 litres	10 bar	vertical	382 Nm <sup>3</sup> /h
250 litres	11 bar	vertical	417 Nm <sup>3</sup> /h
500 litres	11 bar	vertical	795 Nm <sup>3</sup> /h
1,000 litres	11 bar	vertical	795 Nm <sup>3</sup> /h
2,000 litres	11 bar	vertical	2,234 Nm <sup>3</sup> /h
4,000 litres	11 bar	vertical	2,234 Nm <sup>3</sup> /h

\* blow-off output of the safety relief valve, different rates on demand (surcharge)

## “Further evolution:

### From alarm module to compact all-rounder



The new AM3 processes signals in the 4-20 mA range and can manage up to 8 alarms. Current values are displayed on the TFT display and important events are saved by the integrated data logger. In addition to its alarm function, the AM3 can also monitor external control systems.

And since we have not changed the installation dimensions, the AM3 can easily be retrofitted onto any WITT gas mixer with alarm module.

More information at ► [www.wittgas.com](http://www.wittgas.com)

For an overview of our support material see p. 77-78

## 5. MIXED GAS RECEIVERS

### Steel receivers



steel receiver, vertical,  
without safety devices and connections

**Receivers 20 - 250 l: ground coated and pickled**  
**Receivers 500 - 2,000 l: powder coated**

- internally degreased and oil-free
- use of humid gases or oxygen may cause corrosion
- certificate of CE-conformity conforms to PED for receivers
- operation temperatures -15°C up to +100°C

### without safety devices and connections

volume	pressure	design
20 litres	10 bar	horizontal
20 litres	16 bar	horizontal
100 litres	10 bar	horizontal
100 litres	21 bar	horizontal
250 litres	11 bar	horizontal
500 litres	11 bar	vertical
1,000 litres	11 bar	vertical
1,000 litres	16 bar	vertical
2,000 litres	11 bar	vertical
2,000 litres	16 bar	vertical

### Stainless steel receivers



stainless steel receiver, horizontal,  
without safety devices and connections

**Stainless steel, not coated**

- internally degreased and oil-free
- recommended especially for high oxygen concentrations (>21%)
- certificate of CE-conformity conforms to PED for receivers
- operation temperatures -196°C up to +50°C

### without safety devices and connections

volume	pressure	design
20 litres	10 bar	horizontal
20 litres	16 bar	horizontal
100 litres	10 bar	horizontal
100 litres	16 bar	horizontal
100 litres	21 bar	horizontal
250 litres	11 bar	horizontal
250 litres	16 bar	horizontal
250 litres	21 bar	horizontal
500 litres	11 bar	vertical
500 litres	16 bar	vertical
1,000 litres	11 bar	vertical
1,000 litres	16 bar	vertical
2,000 litres	11 bar	vertical
2,000 litres	16 bar	vertical



## 5. MIXED GAS RECEIVERS

### Steel receivers



steel receiver, vertical,  
incl. safety devices and connections

#### With ground coat, pickled, passivated

- internally degreased and oil-free
- use of humid gases or oxygen may cause corrosion
- incl. safety relief valve
- up to 250l available as a unit with gas mixer
- certificate of CE-conformity conforms to PED for receivers
- operation temperatures -15°C up to +100°C
- operation temperatures of safety relief valve -10°C up to +50°C

#### incl. safety devices and connections

volume	pressure	design	blow-off output SV*
20 litres	10 bar	horizontal	117 Nm <sup>3</sup> /h
20 litres	16 bar	horizontal	181 Nm <sup>3</sup> /h
100 litres	10 bar	horizontal	117 Nm <sup>3</sup> /h
100 litres	21 bar	horizontal	181 Nm <sup>3</sup> /h
250 litres	11 bar	horizontal	523 Nm <sup>3</sup> /h
500 litres	11 bar	vertical	523 Nm <sup>3</sup> /h
1,000 litres	11 bar	vertical	1,880 Nm <sup>3</sup> /h
1,000 litres	16 bar	vertical	1,750 Nm <sup>3</sup> /h
2,000 litres	11 bar	vertical	2,490 Nm <sup>3</sup> /h
2,000 litres	16 bar	vertical	3,265 Nm <sup>3</sup> /h

\* blow-off output of the safety relief valve, different rates on demand (surcharge)

surcharge for gas mixer mounted on receiver (up to max. 250 litres)

**option** for receiver-gas mixer-units:  
TÜV approval conforms to PED 2014/68/EU, module G

### Stainless steel receivers



Stainless steel receiver, horizontal  
incl. safety devices and connections

#### Stainless steel, not coated

- internally degreased and oil-free
- recommended for high oxygen concentrations (>21%)
- incl. safety relief valve
- up to 250l available as a unit with gas mixer
- certificate of CE-conformity conforms to PED for receivers
- operation temperatures -196°C up to +50°C
- operation temperatures of safety relief valve depend on model

#### incl. safety devices and connections

volume	pressure	design	blow-off output SV*
20 litres	10 bar	horizontal	117 Nm <sup>3</sup> /h
20 litres	16 bar	horizontal	181 Nm <sup>3</sup> /h
100 litres	10 bar	horizontal	117 Nm <sup>3</sup> /h
100 litres	16 bar	horizontal	181 Nm <sup>3</sup> /h
100 litres	21 bar	horizontal	276 Nm <sup>3</sup> /h
250 litres	11 bar	horizontal	523 Nm <sup>3</sup> /h
250 litres	16 bar	horizontal	741 Nm <sup>3</sup> /h
250 litres	21 bar	horizontal	276 Nm <sup>3</sup> /h
500 litres	11 bar	vertical	523 Nm <sup>3</sup> /h
500 litres	16 bar	vertical	741 Nm <sup>3</sup> /h
1,000 litres	11 bar	vertical	1,880 Nm <sup>3</sup> /h
1,000 litres	16 bar	vertical	1,750 Nm <sup>3</sup> /h
2,000 litres	11 bar	vertical	2,490 Nm <sup>3</sup> /h
2,000 litres	16 bar	vertical	3,265 Nm <sup>3</sup> /h

\* blow-off output of the safety relief valve  
Different blow-off rates and safety relief valves for specific temperatures  
(-196° up to +50°C)

Surcharge for gas mixer mounted on receiver (up to max. 250 litres)

**option** for receiver-gas mixer-units:  
TÜV approval conforms to PED 2014/68/EU, module G

## 6. GAS ANALYSERS

### OXYBABY® M+

#### portable O<sub>2</sub> / CO<sub>2</sub> gas analyser - basic model



**Compact handheld O<sub>2</sub> / CO<sub>2</sub> analyser e.g. for sample testing of MAP-packages (basic model)**

- 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



#### OXYBABY® M+

OXYBABY® M+	for O <sub>2</sub>
OXYBABY® M+	for O <sub>2</sub> / CO <sub>2</sub>

#### options:

connector tube with Luer-Lok-connection

### OXYBABY® 6.0

#### portable O<sub>2</sub> / CO<sub>2</sub> gas analyser - premium model



**Compact handheld O<sub>2</sub> / CO<sub>2</sub> analyser e.g. for sample testing of MAP-packages (premium model)**

features see above, plus:

- minimum sample gas requirement (approx. 2ml)
- minimised response time
- measurement of pressure
- USB-interface
- data-log of 500 results
- comfort operation
- integrated needle and filter checks



#### OXYBABY® 6.0

OXYBABY® 6.0	for O <sub>2</sub>
OXYBABY® 6.0	for O <sub>2</sub> / CO <sub>2</sub>

#### options:

connector tube with Luer-Lok-connection  
integrated barcode reader  
bluetooth (e.g. for separate tabletop printer)  
further accessories: see p. 19 and 21



product video and further information see  
▶ [www.oxybaby.com](http://www.oxybaby.com)

### OXYBABY® M+ P

#### basic gas analyser for pressurised pipelines



**Mobile O<sub>2</sub> / CO<sub>2</sub> 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

#### OXYBABY® M+ P

OXYBABY® M+ P	for O <sub>2</sub>
OXYBABY® M+ P	for CO <sub>2</sub>
OXYBABY® M+ P	for O <sub>2</sub> / CO <sub>2</sub>

### OXYBABY® 6.0 P

#### premium gas analyser for pressurised pipelines



**Mobile O<sub>2</sub> / CO<sub>2</sub> sample analysis in pressurised pipelines, mainly in welding technology (premium model)**

features see above, plus:

- data-log of 500 results (analysis values, date, time of measurement)
- administration of up to 25 users
- comfort operation
- simplified menu navigation etc.

#### OXYBABY® 6.0 P

OXYBABY® 6.0 P	for O <sub>2</sub>
OXYBABY® 6.0 P	for CO <sub>2</sub>
OXYBABY® 6.0 P	for O <sub>2</sub> / CO <sub>2</sub>

## 6. GAS ANALYSERS

### OXYBABY® MED



#### Compact handheld O<sub>2</sub>/CO<sub>2</sub> analyser for checking medical gases

- quick and precise
- data log of last 500 measurements
- administration of users applications and allocations
- hygienic and low maintenance

portable O<sub>2</sub>/CO<sub>2</sub> gas analyser for medical applications

#### OXYBABY® MED

OXYBABY® MED	for O <sub>2</sub>
OXYBABY® MED	for O <sub>2</sub> /CO <sub>2</sub>

#### options:

- data cable
- set of adapter for various connections
- bluetooth (e.g. for separate printer)

### OXYBABY®-Accessories



e.g. for the use of the OXYBABY® as a tabletop unit

#### Accessory for all OXYBABY® models:

- table rack

#### Accessories for the OXYBABY® 6.0 premium models:

- documentation software OBCC
- integrated barcode reader
- bluetooth printer

#### OXYBABY®-Accessories

- Table rack for OXYBABY®
- connector tube with Luer-Lok-connection
- integrated barcode reader
- tabletop bluetooth printer

OBCC software for the documentation of analysis results\*

\*further information see p. 21

### OXYBABY®-Accessories



Canpiercer



Aquacheck

Image exemplary  
Oxybaby® and bottle not included

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 O<sub>2</sub> and CO<sub>2</sub> analysis of mini packages, e.g. capsules

for cans, bottles and mini packages

#### OXYBABY®-Accessories

#### Order no.

**Canpiercer** for cans and bottles (with set for head space analysis)

**for cans without overpressure/gas** (e.g. juice)\*

for max. piercing height of 270 mm, needle length 5,5 mm 590000156

**for cans and bottles with overpressure/gas**, incl. bottle adapter\*

for max. piercing height of 270 mm, needle length 8,5 mm 590000165

for max. piercing height of 390 mm, needle length 8,5 mm 590000166

for max. piercing height of 390 mm, needle length 18,5 mm 590000325

**for cans with high overpressure/gas** (strongly sparkling drinks)

incl. calibration module and flow control\*

for max. piercing height of 270 mm, needle length 5,5 mm 590000239

**for cans and bottles, pressure measurement only**, incl. bottle adapter\*

for max. piercing height of 390 mm, needle length 5,5 mm 590000341

\*other versions on request

Canpiercer-module (for refitting):  
bottle adapter

#### Aquacheck

equipment for the gas analysis of mini packages

#### Aquacheck Plus

Aquacheck incl. water container

## 6. GAS ANALYSERS

### OXYBEAM



#### laser gas analyser for O<sub>2</sub> or CO<sub>2</sub> for non-destructive sample testing of packages

- state-of-the-art laser technology
- avoids waste costs
- for packaging from 5 mm height with transparent film area

non-destructive sample gas analyser for O<sub>2</sub> or CO<sub>2</sub>

#### OXYBEAM

OXYBEAM	for O <sub>2</sub>
OXYBEAM	for CO <sub>2</sub>

### PA 7.0



#### Compact tabletop analyser 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 O<sub>2</sub> for quicker measurements



for food-grade  
gases, conforms to  
1935/2004

tabletop O<sub>2</sub> / CO<sub>2</sub> gas analyser

#### PA 7.0

PA 7.0 for O <sub>2</sub>	version P or L
PA 7.0 for CO <sub>2</sub>	version P or L
PA 7.0 for O <sub>2</sub> /CO <sub>2</sub>	version P or L
PA 7.0 for O <sub>2</sub>	version S
PA 7.0 for O <sub>2</sub>	version S and L
PA 7.0 for O <sub>2</sub> /CO <sub>2</sub>	version S
PA 7.0 for O <sub>2</sub> /CO <sub>2</sub>	version S and L

#### options:

handle  
coupling socket set (output signals; alarm contacts)  
analysis software OBCC  
integration of the analysing system in the mixer housing  
zirconia measuring cell for O<sub>2</sub>  
O<sub>2</sub> measurement in ppm-range (surcharge calibration)  
heating and thermostat, only electro-chemical sensors  
paramagnetic sensor

### MAPY 4.0 / MAPY LE



MAPY 4.0 - inclined display  
for use in laboratory



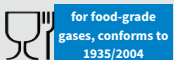
reddot design award



MAPY LE - vertical display  
for use as inline analyser

#### Premium gas analyser 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 O<sub>2</sub> for quicker measurements
- MAPY LE: ideal also for inline analysis of flow packaging machines; minimisation of gas consumption by combination with the gas mixer KM-FLOW or the KD gas meterer



for food-grade  
gases, conforms to  
1935/2004

O<sub>2</sub> / CO<sub>2</sub> gas analyser, sample + inline

#### MAPY

MAPY 4.0 / MAPY LE	O <sub>2</sub>	version P or L
MAPY 4.0 / MAPY LE	CO <sub>2</sub>	version P or L
MAPY 4.0 / MAPY LE	O <sub>2</sub> /CO <sub>2</sub>	version P or L
MAPY 4.0 / MAPY LE	O <sub>2</sub>	version S
MAPY 4.0 / MAPY LE	O <sub>2</sub>	version S and L
MAPY 4.0 / MAPY LE	O <sub>2</sub> /CO <sub>2</sub>	version S
MAPY 4.0 / MAPY LE	O <sub>2</sub> /CO <sub>2</sub>	version S and L

#### options:

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

## 6. GAS ANALYSERS

### MAPY VAC



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

- measures the O<sub>2</sub> or O<sub>2</sub>/CO<sub>2</sub> 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

### O<sub>2</sub> / CO<sub>2</sub> gas analyser, for traysealers and thermoformers

#### MAPY VAC

MAPY VAC O<sub>2</sub> Zr  
MAPY VAC O<sub>2</sub> Zr BB  
MAPY VAC O<sub>2</sub>/CO<sub>2</sub> Zr  
MAPY VAC O<sub>2</sub>/CO<sub>2</sub> Zr BB  
MAPY VAC O<sub>2</sub> Zr, incl. buffer analysis  
MAPY VAC O<sub>2</sub> Zr BB, incl. buffer analysis  
MAPY VAC O<sub>2</sub>/CO<sub>2</sub> Zr, incl. buffer analysis  
MAPY VAC O<sub>2</sub>/CO<sub>2</sub> Zr BB, incl. buffer analysis

### Inline gas analysis



GC 50

#### Gas Analysers for H<sub>2</sub>, He, etc. to be combined with WITT gas mixers

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

### integrated with gas mixer

#### gas analysis for gas mixers

analyser system H<sub>2</sub> (Ex, Thermal Conductivity Sensors)  
analyser system H<sub>2</sub> (Ex, Thermal Conductivity Sensors) with additional cut-off valve for flammable gases  
analyser system He (Thermal Conductivity Sensors)  
analyser system O<sub>2</sub> (chemical)  
zirconia measuring cell for analyser system O<sub>2</sub> (chemical)  
analyser system O<sub>2</sub> (paramagnetic)  
analyser system CO<sub>2</sub> (infrared)  
analyser system O<sub>2</sub>/CO<sub>2</sub> (chemical/infrared)  
analyser system O<sub>2</sub>/CO<sub>2</sub> (paramagnetic/infrared)  
integration of the analysing system in the mixer housing (MG 200 without surcharge)

### Options



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

#### Additional functions for optimising the process

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

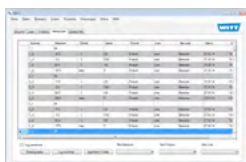
### for WITT gas analysers

#### options for WITT gas analysers (except MAPY and MFA)

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 analysers

### OBCC



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

- Measurement data recording and storage for quality assurance with

### documentation software for OXYBABY® 6.0 and PA

#### Software

OBCC full version  
incl. USB- connection cable

## 6. GAS ANALYSERS

### MFA 9000

#### multigas-analyser



MFA 9000

**Portable multigas-analyser especially for maintenance and service**

- for analysis of up to 14 different combinations of gases
- continuous analysis
- 4-20 mA output signal
- digital display

**MFA 9000**

MFA 9000

### HYDROBABY

#### mobile moisture measurement



HYDROBABY

**Mobile device for analysing moisture in gases**

- short response times
- dewpoint from -110° up to 20°C
- latest sensor technology
- easy navigation
- large display
- USB interface for data export

**HYDROBABY**

HYDROBABY

**options:**

pressure compensation  
4-20 mA outlet

### MFA H<sub>2</sub>O

#### stationary moisture measurement



MFA H<sub>2</sub>O

**Table-top device for analysing moisture in gases**

Features - see HYDROBABY plus:

- overpressure design with metering valve and flow meter
- USB interface for data export

**MFA H<sub>2</sub>O**

MFA H<sub>2</sub>O

**options:**

pressure compensation  
4-20 mA outlet  
integrated vacuum pump with battery and external charger

### RLA100

#### ambient air monitoring



RLA100

**Compact ambient air monitor for the detection of CO<sub>2</sub>**

- 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

**RLA100**

RLA100



## 6. GAS ANALYSERS

### RLA compact



**Compact ambient air monitoring system for the detection of O<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub> etc, incl. gas monitor, transmitter and transmitter cable**

- simultaneous 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

### ambient air monitor

#### RLA compact

- gas monitor 1-channel
- every additional transmitter channel (max. 4)
- transmitter for O<sub>2</sub>
- transmitter for CO<sub>2</sub> - not Ex
- transmitter for O<sub>2</sub> Zircor - not Ex
- transmitter for combustible gases H<sub>2</sub>, 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



**Compact ambient air monitoring system for the detection of O<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub> etc, incl. gas monitor, transmitter and transmitter cable**

- simultaneous monitoring of different gas inlets
- freely adjustable limits
- intuitive menu design
- exceeding the limits generates alarm and triggers a potential free contact

### ambient air monitor

#### RLA multichannel

- 4-channel gas monitor with alarm
- additional channel (up to 16 channels possible)
- transmitter for O<sub>2</sub>
- transmitter for CO<sub>2</sub> - not Ex
- transmitter for O<sub>2</sub> Zircor - not Ex
- transmitter for combustible gases H<sub>2</sub>, 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

**For continuous inlet pressure monitoring for maximum process safety**

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

### with alarm module AM3

#### Inlet pressure monitoring

- separate
- for flammable gases as Ex-version with separate control housing
- options:
- data cable
- ALARM CONTROL software
- surcharge for analogue pressure transmitters, 2 inlet gases
- surcharge for analogue pressure transmitters, 3 inlet gases
- surcharge for analogue pressure transmitters Ex, 2 inlet gases
- surcharge for analogue pressure transmitters Ex, 3 inlet gases
- LED warning light with signal-horn



**“WITT gas analysers for MAP applications: Technique, performance, practice.**

From the handy Oxybaby® via the compact PA up to the award-winning MAPY: In our special brochure you will find detailed information about our O<sub>2</sub>/ CO<sub>2</sub> gas analysers.

Download at ► [www.wittgas.com](http://www.wittgas.com)

## 7. LEAK DETECTION EQUIPMENT

### LEAK-MASTER® EASY



LEAK-MASTER® EASY 3



control unit PLUS (optional)

**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)

### bubble-test

#### LEAK-MASTER® EASY 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 35 x 525 x 360	
EASY 4	320 x 625 x 500
EASY 5	340 x 760 x 500

option:	order no.
vacuum-set	956.992700
electrical vacuum pump	
vacuum holding valve	800961000
calibrated manometer	800942100

control unit PLUS	5901LME-Z-001
options for control unit:	
barcode reader IP 65	957099400
analysis software GASCONTROL CENTER	



product video and further information see

► [www.leak-master.net](http://www.leak-master.net)

### LEAK-MASTER® PRO



**Fast, non-destructive detection of even the smallest leaks in MAP-packages, CO<sub>2</sub>-based**

- without using expensive helium or hydrogen
- data transfer via ethernet
- measuring range 0 ppm - 5.000 ppm
- suction capacity 50 mbar abs.

### CO<sub>2</sub>-based

#### LEAK-MASTER® PRO chamber size in approx. mm (HxWxD)

LM 4.4.1	90 x 345 x 280
LM 5.2.2	100 x 460 x 305
LM 12.2	140 x 680 x 500
LM 12.1	230 x 680 x 500

options:	order no.
WIFI	966042600
barcode reader IP 65	957099400
connection for rinsing air	966042500
analysis software GASCONTROL CENTER	



product video and further information see

► [www.leak-master.net](http://www.leak-master.net)



## 7. LEAK DETECTION EQUIPMENT

### LEAK-MASTER® MAPMAX

inline



MAPMAX

MAPMAX compact

**Uniquely quick and precise inline-leak detection of packages containing CO<sub>2</sub> directly from the packaging machine**  
for trays/thermoform packaging or secondary packages respectively boxes (vacuum layout optionally)

features see LEAK-MASTER® PRO, plus:

- 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: W x D x H (the width „W“ refers to the moving direction of the conveyor-belt). The height includes the alarm lamp.

LEAK-MASTER® MAPMAX	size in approx. mm (WxDxH)
MAPMAX Type 400 compact max. product dimensions 600 x 400 x 380 mm up to 14 cycles per minute	1167 x 1408 x 2200
MAPMAX Type 400 max. product dimensions 600 x 400 x 380 mm up to 15 cycles per minute	1840 x 1130 x 2200
MAPMAX Type 700 compact max. product dimensions 600 x 680 x 220 mm up to 14 cycles per minute	1167 x 1408 x 2200
MAPMAX Type 700 max. product dimensions 600 x 680 x 220 mm up to 15 cycles per minute	1840 x 1130 x 2200
options:	
WIFI	
barcode reader IP 65	
analysis software GASCONTROL CENTER	
MINK vacuum pump	
central vacuum layout (control valve central vacuum)	
surface pressurisation (incl. motorisation)	
e.g. to speed up and improve the measurements for packages with a low gas volume	

product video and further information see  
► [www.leak-master.net](http://www.leak-master.net)

### Accessories

for WITT leak detectors



barcode reader



GASCONTROL CENTER

**For process optimisation with models EASY PLUS, PRO and MAPMAX**

- quick registration of user-, product- and process data
- digital documentation
- comfortable data transfer

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

## 8. DATA LOGGER

### PATBOX

data logger



**Compact logger for pressure and temperature**

- highly mobile and accurate
- extremely small size
- high process reliability
- simple transmission of data via NFC
- operation via Android App

PATBOX

## 9. FLASHBACK ARRESTORS for pressure regulators, outlet points and pipelines

### RF53N



**Acetylene max. 13 m³/h**  
**Fuel gases max. 68 m³/h**  
**Oxygen max. 187 m³/h**

DIN EN ISO 5175-1

FA NV TV

also available in stainless steel, see p. 46

connection	inlet → outlet	order no.
for fuel gases:		
G 1/4 LH	MG → AGS	145-009
G 3/8 LH	MG → AGS	145-012
G 1/2 LH	MG → AGS	145-016
9/16" LH	MG → AGS	145-017
for oxygen:		
G 1/4 RH	MG → AGS	145-021
G 3/8 RH	MG → AGS	145-022
G 1/2 RH	MG → AGS	145-023
9/16" RH	MG → AGS	145-025
for fuel gases or oxygen:		
1/4" NPT	IG → IG	145-197
3/8" NPT	IG → IG	145-205
G 1/4 RH	IG → IG	145-125

### RF53DN



**Acetylene max. 11,5 m³/h**  
**Fuel gases max. 105 m³/h**  
**Oxygen max. 56 m³/h**

DIN EN ISO 5175-1

with pressure relief valve

FA NV TV

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	MG → AGS	145-041
G 1/2 LH	MG → AGS	145-043
9/16" LH	MG → AGS	145-044
for oxygen:		
G 1/4 RH	MG → AGS	145-048
G 3/8 RH	MG → AGS	145-049
G 1/2 RH	MG → AGS	145-050
9/16" RH	MG → AGS	145-051

### RF53NSK



**Acetylene max. 13 m³/h**  
**Fuel gases max. 68 m³/h**  
**Oxygen max. 187 m³/h**

DIN EN ISO 5175-1

with integrated coupling  
body according EN 561

FA NV TV

suitable probes see p. 38f

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	MG → coupling body	145SK-002
9/16" LH	MG → coupling body	145SK-004
for oxygen:		
G 1/4 RH	MG → coupling body	145SK-008
G 3/8 RH	MG → coupling body	145SK-001
9/16" RH	MG → coupling body	145SK-003

## 9. FLASHBACK ARRESTORS for pressure regulators, outlet points and pipelines

### 85-10



Acetylene max. 22 m³/h  
Fuel gases max. 235 m³/h  
Oxygen max. 310 m³/h

DIN EN ISO 5175-1

FA NV TV

also available in stainless steel, see p. 46

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	MG → AGS	143-002
G 1/2 LH	MG → AGS	143-008
9/16" LH	MG → AGS	143-009
for oxygen:		
G 1/4 RH	MG → AGS	143-013
G 3/8 RH	MG → AGS	143-016
G 1/2 RH	MG → AGS	143-019
9/16" RH	MG → AGS	143-022
for fuel gases or oxygen:		
1/4" NPT	IG → IG	143-323
3/8" NPT	IG → IG	143-105
G 3/8 RH	IG → IG	143-227

### 85-20



Acetylene max. 45 m³/h  
Fuel gases max. 324 m³/h  
Oxygen max. 333 m³/h

DIN EN ISO 5175-1

FA NV TV

also available in stainless steel, see p. 47

connection	inlet → outlet	order no.
for fuel gases:		
G 3/4 LH	MG → AGS	149-001
for oxygen:		
G 3/4 RH	MG → AGS	149-014
for fuel gases or oxygen:		
G 1/2 RH	IG → IG	149-002
1/2" NPT	IG → IG	149-003
G 3/4 RH	IG → IG	149-005
3/4" NPT	IG → IG	149-006
G 1 RH	IG → IG	149-004
1 NPT	IG → IG	149-017

### 85-30



Acetylene max. 70 m³/h  
Fuel gases max. 675 m³/h  
Oxygen max. 860 m³/h

DIN EN ISO 5175-1

FA NV TV


also available in stainless steel, see p. 47


connection	inlet → outlet	order no.
for fuel gases:		
G 3/4 LH	MG → AGS	147-001
G 1 LH	MG → AGS	147-003
for oxygen:		
G 3/4 RH	MG → AGS	147-065
G 1 RH	MG → AGS	147-068
for fuel gases or oxygen:		
3/4" NPT	IG → IG	147-081
G 1 1/2 RH	IG → IG	147-069
1" NPT	IG → IG	147-072
1/2" NPT	IG → IG	147-083


FA = flame arrestor NV = non-return valve TV = temperature controlled cut-off valve PV = pressure controlled cut-off valve


Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order. For some gases, special seals may be required. Special designs, higher flow capacities or different pressures on demand. Explanations of thread types, conversion of units of measurement see p. 75-76.

## 9. FLASHBACK ARRESTORS for pressure regulators, outlet points and pipelines

Safety group 645/85-30		2- or 4-fold		
 <p><b>Parallel connection of 2 or 4 flashback arrestors model 85-30, ideal for high consumption and high flows</b></p> <p><b>Acetylene max. 392 m³/h</b> <b>Fuel gases max. 2740 m³/h</b> <b>Oxygen max. 1850 m³/h</b></p> <p>DIN EN ISO 5175-1</p> <p>FA NV TV</p> <p>also available in stainless steel, see p. 47</p>		connection	inlet → outlet	order no.
		for fuel gases:		
		DN 50 (2fold)	flange DIN 2633	182-023
		DN 50 (4fold)	flange DIN 2633	182-007
		2" NPT (4fold)	IG → IG	182-030
		for oxygen:		
		DN 50 (2fold)	flange DIN 2633	182-027
		DN 50 (4fold)	flange DIN 2633	182-008

Safety group 645/623N		4- or 5-fold		
 <p><b>Parallel connection of 4 or 5 flashback arrestors model 623N, ideal for high consumption and high flows</b></p> <p><b>Town gas / Natural gas max. 1010 m³/h</b></p> <p>DIN EN ISO 5175-1</p> <p>FA NV TV</p>		connection	inlet → outlet	order no.
		for town gas/natural gas:		
		DN 65/PN16 (4fold)	flange DIN 2633	182-014
		DN 65 /PN16 (5fold)	flange DIN 2633	182-018

Super 55				
 <p><b>Acetylene max. 10 m³/h</b> <b>Fuel gases max. 60 m³/h</b> <b>Oxygen max. 95 m³/h</b></p> <p>DIN EN ISO 5175-1</p> <p>with pressure controlled cut-off valve</p> <p>FA NV TV PV</p>		connection	inlet → outlet	order no.
		for fuel gases:		
		G 3/8 LH	MG → AGS	146-025
		9/16" LH	MG → AGS	146-029
		for oxygen:		
		G 1/4 RH	MG → AGS	146-027
		G 3/8 RH	MG → AGS	146-026
		9/16" RH	MG → AGS	146-030

Super 85				
 <p><b>Acetylene max. 19 m³/h</b> <b>Fuel gases max. 169 m³/h</b> <b>Oxygen max. 119 m³/h</b></p> <p>DIN EN ISO 5175-1</p> <p>with pressure controlled cut-off valve</p> <p>FA NV TV PV</p>		connection	inlet → outlet	order no.
		for fuel gases:		
		G 3/8 LH	MG → AGS	148-002
		9/16" LH	MG → AGS	148-009
		for oxygen:		
		G 1/4 RH	MG → AGS	148-013
		G 3/8 RH	MG → AGS	148-016
		9/16" RH	MG → AGS	148-022

FA = flame arrestor NV = non-return valve TV = temperature controlled cut-off valve PV = pressure controlled cut-off valve

Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order. For some gases, special seals may be required. Special designs, higher flow capacities or different pressures on demand. Explanations of thread types, conversion of units of measurement see p. 75-76.

## 9. FLASHBACK ARRESTORS for pressure regulators, outlet points and pipelines

### Super 90



**Acetylene max. 11 m³/h**  
**Fuel gases max. 128 m³/h**  
**Oxygen max. 62 m³/h**

DIN EN ISO 5175-1

with pressure controlled  
cut-off valve

FA NV TV PV

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	MG → AGS	125-029
9/16" LH	MG → AGS	125-032
for oxygen:		
G 1/4 RH	MG → AGS	125-030
G 3/8 RH	MG → AGS	125-031
9/16" RH	MG → AGS	125-033

### Super 78



**Acetylene max. 11 m³/h**  
**Fuel gases max. 128 m³/h**  
**Oxygen max. 62 m³/h**

DIN EN ISO 5175-1

with pressure controlled cut-  
off valve and pressure relief  
valve (RV)

FA NV TV PV RV

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	MG → AGS	125-010
9/16" LH	MG → AGS	125-012
for oxygen:		
G 1/4 RH	MG → AGS	125-016
G 3/8 RH	MG → AGS	125-017
9/16" RH	MG → AGS	125-019

### Super 66



**Acetylene max. 20 m³/h**  
**Fuel gases max. 225 m³/h**  
**Oxygen max. 105 m³/h**

DIN EN ISO 5175-1

with pressure controlled cut-  
off valve and pressure relief  
valve (RV)

FA NV TV PV RV

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

### F53N/HHO



**Air max. 20 m³/h**

for hydrogen-oxygen-mix-  
tures according to DIN 32508  
No. 5.8.2 and 5.8.3

for electrolysis devices

FA TV

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

## 10. FLASHBACK ARRESTORS for torches

### E 460 - 1



Acetylene max. 9 m³/h  
Fuel gases max. 82 m³/h  
Oxygen max. 119 m³/h

DIN EN ISO 5175-1

[FA] [NV]

connection	inlet → outlet	order no.
for fuel gases:		
4.0 mm - G 3/8 LH	nozzle → MG	135-002
6.3 mm - G 3/8 LH	nozzle → MG	135-005
8.0 mm - G 3/8 LH	nozzle → MG	135-009
9.0 mm - G 3/8 LH	nozzle → MG	135-013
for oxygen:		
4.0 mm - G 1/4 RH	nozzle → MG	135-014
6.3 mm - G 1/4 RH	nozzle → MG	135-017
6.3 mm - G 3/8 RH	nozzle → MG	135-018
8.0 mm - G 3/8 RH	nozzle → MG	135-022

### E 460 - 2



Acetylene max. 9 m³/h  
Fuel gases max. 82 m³/h  
Oxygen max. 119 m³/h

DIN EN ISO 5175-1

[FA] [NV]

connection	inlet → outlet	order no.
for fuel gases:		
4.0 mm - 4.0 mm	nozzle → nozzle	135-029
6.3 mm - 6.3 mm	nozzle → nozzle	135-031
8.0 mm - 8.0 mm	nozzle → nozzle	135-032
9.0 mm - 9.0 mm	nozzle → nozzle	135-034
for oxygen:		
4.0 mm - 4.0 mm	nozzle → nozzle	135-037
6.3 mm - 6.3 mm	nozzle → nozzle	135-038
8.0 mm - 8.0 mm	nozzle → nozzle	135-039

### E 460 - 3



Acetylene max. 9 m³/h  
Fuel gases max. 82 m³/h  
Oxygen max. 119 m³/h

DIN EN ISO 5175-1

[FA] [NV]

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	AGS → MG	135-042
9/16" LH	AGS → MG	135-045
for oxygen:		
G 1/4 RH	AGS → MG	135-046
G 3/8 RH	AGS → MG	135-094
9/16" RH	AGS → MG	135-048

### E 460SK



Acetylene max. 9 m³/h  
Fuel gases max. 82 m³/h  
Oxygen max. 119 m³/h

DIN EN ISO 5175-1

[FA] [NV]

suitable coupling body:  
SK100-9, see p. 31

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	probe → MG	135SK-114
9/16" LH	probe → MG	135SK-117
for oxygen:		
G 1/4 RH	probe → MG	135SK-115
G 3/8 RH	probe → MG	135SK-124
9/16" RH	probe → MG	135SK-121



## 10. FLASHBACK ARRESTORS for torches

### E460SKU



Acetylene max. 13 m³/h  
Fuel gases max. 68 m³/h  
Oxygen max. 187 m³/h

DIN EN ISO 5175-1

with integrated coupling  
body: EN 561

FA NV

suitable coupling probes: see  
section 14 "Quick couplings"

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

### SK100-9



Coupling body for E460SK  
(see p. 30) without non-re-  
turn valve, part of the WITT  
coupling system SK100

EN 561 / ISO 7289

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

### RF53NU



Acetylene max. 13 m³/h  
Fuel gases max. 68 m³/h  
Oxygen max. 187 m³/h

DIN EN ISO 5175-1

FA NV TV

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
for oxygen:		
G 1/4 RH	AGS → MG	145-036
G 3/8 RH	AGS → MG	145-037
G 1/2 RH	AGS → MG	145-038
9/16" RH	AGS → MG	145-235

### 85-10NU



Acetylene max. 22 m³/h  
Fuel gases max. 235 m³/h  
Oxygen max. 310 m³/h

DIN EN ISO 5175-1

FA NV TV

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	AGS → MG	143-039
G 1/2 LH	AGS → MG	143-231
9/16" LH	AGS → MG	143-245
for oxygen:		
G 3/8 RH	AGS → MG	143-041
9/16" RH	AGS → MG	143-244

FA = flame arrestor NV = non-return valve TV = temperature controlled cut-off valve PV = pressure controlled cut-off valve

Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order. For some gases, special seals may be required. Special designs, higher flow capacities or different pressures on demand. Explanations of thread types, conversion of units of measurement see p. 75-76.

## 10. FLASHBACK ARRESTORS for torches

### 85-10NU (Exzenter)



Acetylene max. 22 m³/h  
Fuel gases max. 235 m³/h  
Oxygen max. 310 m³/h

eccentric outlet

DIN EN ISO 5175-1

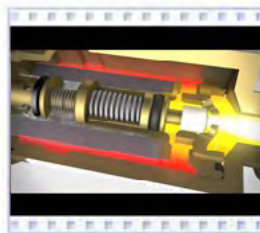
FA NV

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	AGS → MG (eccentric)	143-217
G 1/2 LH	AGS → MG (eccentric)	143-148
9/16" LH	AGS → MG (eccentric)	143-131
for oxygen:		
G 1/4 RH	AGS → MG (eccentric)	143-215
G 3/8 RH	AGS → MG (eccentric)	143-216
G 1/2 RH	AGS → MG (eccentric)	143-152
9/16" RH	AGS → MG (eccentric)	143-132

10/12/2019

## “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.



## 11. FLASHBACK ARRESTORS for cutting machines

### E 460-3



Acetylene max. 9 m³/h  
Fuel gases max. 82 m³/h  
Oxygen max. 119 m³/h

DIN EN ISO 5175-1

FA NV

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	AGS → MG	135-042
for oxygen:		
G 1/4 RH	AGS → MG	135-046
G 3/8 RH	AGS → MG	135-052

### RF53U



Acetylene max. 13 m³/h  
Fuel gases max. 68 m³/h  
Oxygen max. 187 m³/h

DIN EN ISO 5175-1

FA NV

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	AGS → MG	145-003
9/16" LH	AGS → MG	145-145
for oxygen:		
G 1/4 RH	AGS → MG	145-004
G 3/8 RH	AGS → MG	145-005
G 1/2 RH	AGS → MG	145-006
9/16" RH	AGS → MG	145-144

### 85-10U




Acetylene max. 22 m³/h  
Fuel gases max. 235 m³/h  
Oxygen max. 310 m³/h


DIN EN ISO 5175-1

FA NV

connection	inlet → outlet	order no.
for fuel gases:		
G 3/8 LH	AGS → MG	143-223
G 1/2 LH	AGS → MG	143-040
for oxygen:		
G 3/8 RH	AGS → MG	143-133
G 1/2 RH	AGS → MG	143-042

## 12. FLASHBACK ARRESTORS for high flows

RF53N/30			
	<b>Fuel gases 16 m³/h</b> <b>Air 12 m³/h</b>	<b>connection</b>	<b>inlet → outlet</b>
	DIN EN ISO 5175-1	with non-return valve: G 3/8 LH	MG → AGS
	FA NV TV	without non-return valve: G 3/8 LH	MG → AGS
	for very low pressures with- out non-return valve: FA TV (order no. 145-136)		order no. 145-120 145-136

85-10/30			
	<b>Fuel gases 30 m³/h</b> <b>Air 21 m³/h</b>	<b>connection</b>	<b>inlet → outlet</b>
	DIN EN ISO 5175-1	with non-return valve: G 3/8 LH	MG → AGS
	FA NV TV	G 1/2 LH	MG → AGS
	for very low pressures with- out non-return valve: FA TV (order no. 143-200 and 143-168)	1/4" NPT	IG → IG

270N/NU			
		<b>connection</b>	<b>inlet → outlet</b>
		<b>270N</b>	<b>order no.</b>
		G 3/4 RH	AGS → MG
		G 1 RH	AGS → MG
		G 1.1/4 RH	AGS → MG
		G 1.1/2 RH	AGS → MG
		G 1/2 RH	IG → IG
		G 1 RH	IG → IG
		<b>270NU (reverse flow)</b>	
		G 3/4 RH	MG → AGS
		G 3/4 LH	MG → AGS
		G 1 RH	MG → AGS
		G 1 LH	MG → AGS
		G 1.1/4 RH	MG → AGS
		G 1.1/4 LH	MG → AGS
		G 1.1/2 RH	MG → AGS
		G 1.1/2 LH	MG → AGS

**Fuel gases (without acetylene): max. 371 m³/h**  
**Air 164 m³/h**

DIN EN ISO 5175-1

FA NV TV

pipeline fittings see next page

FA = flame arrestor NV = non-return valve TV = temperature controlled cut-off valve PV = pressure controlled cut-off valve

Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order. For some gases, special seals may be required. Special designs, higher flow capacities or different pressures on demand. Explanations of thread types, conversion of units of measurement see p. 75-76.

## 12. FLASHBACK ARRESTORS for high flows

### 623N/NU



**Fuel gases 406 m³/h  
Air 335 m³/h**

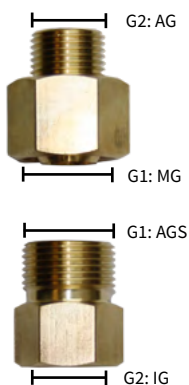
DIN EN ISO 5175-1

FA NV TV

pipeline fittings see below

connection	inlet → outlet	order no.
<b>623N</b>		
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
<b>623NU (reverse flow)</b>		
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



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

connection G1	connection G2	order no.
G 3/4 RH	G 1/2 RH	043000000
G 1 RH	G 3/4 RH	043000100
G 1.1/4 RH	G 1 RH	043000200
G 1.1/2 RH	G 1.1/4 RH	043000300

10/12/2019

## “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.



You can find our stainless steel products starting on page 46.  
Further information on [www.wittgas.com](http://www.wittgas.com) and in our "Stainless steel" brochure.

# 13. FLASHBACK ARRESTORS for central acetylene supply

## FN12 / FN40

### decomposition arrestor



**Stops dangerous decomposition of acetylene in low pressure pipelines**

**Up to 1.5 bar**

FN12 Q= ca. 76 m³/h  
FN40 Q= ca. 140 m³/h

DIN EN ISO 5175-1  
DIN EN ISO 14114

FA TV

connection	inlet → outlet	order no.
<b>FN12</b> G 1.1/2 RH	IG → IG	021-001

<b>FN40</b> (double flow capacity) G 1.1/2 RH	IG → IG	021-003
--	---------	---------

## Safety group 645/FN40

### 4- or 5-fold



**Stops dangerous decomposition of acetylene in low pressure pipelines**

**Up to 1.5 bar**

FN40 Q= ca. 140 m³/h

DIN EN ISO 5175-1

FA TV

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

## HDS17

### shut-off device



**Stops dangerous decomposition of acetylene in the high pressure pipes of acetylene installations via pressure controlled quick acting piston valve**

**Up to 25 bar**

TRAC 206

DIN EN ISO 15615  
DIN EN ISO 14114

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

## Bundle connection

### with non-return valve RV 650



**For the direct connection to a bundle**

**Up to 25 bar**

DIN EN ISO 15615  
DIN EN ISO 14114

connection	inlet → outlet	order no.
<b>„Linde“</b> M 28x1.5 LH - M 24x1.5 RH	IG → MG	210000011
<b>„Messer“</b> M 28x1.5 LH - M 24x1.5 RH	IG → MG	210000020

### 13. FLASHBACK ARRESTORS for central acetylene supply

#### MGN



**Stops dangerous decomposition of acetylene in high pressure pipes in bottling plants**

**Up to 25 bar**

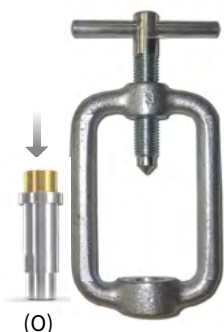
DIN EN ISO 15615  
DIN EN ISO 14114  
EIGA Acetylene IGC DOC 123/4

☐ FA  
optional: ☐ NV

#### decomposition arrestor

connection	inlet → outlet	order no.
<b>MGN</b>		
G 1/2 RH - W21.8x1/14	AG → AG	022-014
G 1/4 RH	AGS → IG	022-011

#### HD - NV



**High pressure non-return valve to be wound onto the gas cylinder by using a bow in accordance with DIN 477, part 1, no. 3**

**Up to 25 bar**

EN ISO 15615

☐ NV

#### non-return valve for bows according DIN 477

connection	inlet → outlet (O)	order no.
<b>HD-NV</b>	DIN → G 1/4 RH AGS	210000022
<b>HD-NV incl. bow</b>	DIN → G 1/4 RH AGS	210000022B

**“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 certifications at:

► [www.wittgas.com/company/quality-made-in-germany.html](http://www.wittgas.com/company/quality-made-in-germany.html)

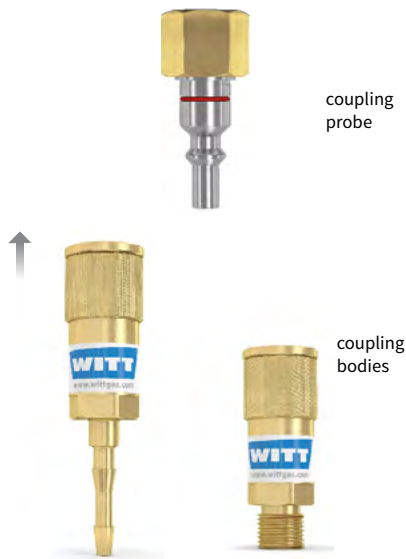
For an overview of our support material see p. 77-78

☐ FA = flame arrestor ☐ NV = non-return valve ☐ TV = temperature controlled cut-off valve ☐ PV = pressure controlled cut-off valve

Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order. For some gases, special seals may be required. Special designs, higher flow capacities or different pressures on demand. Explanations of thread types, conversion of units of measurement see p. 75-76.

## 14. QUICK COUPLINGS

### SK100-1



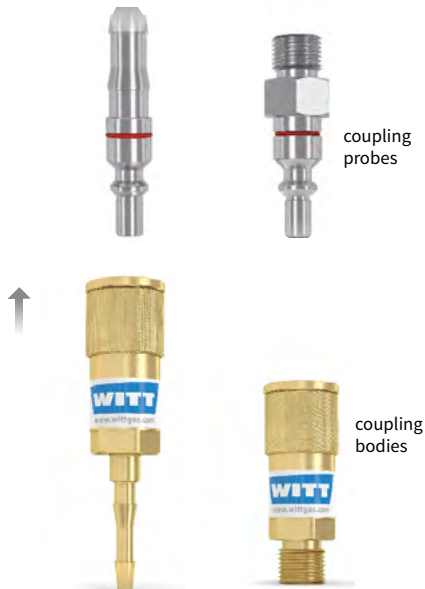
**Coupling bodies with non-return valve and automatic gas cut-off valve**

EN 561 / ISO 7289

### for torches

connection	inlet → outlet	order no.
<b>• coupling probes</b>		
for fuel gases:		
G 3/8 LH	probe → MG	151-001
for oxygen:		
G 1/4 RH	probe → MG	151-003
G 3/8 RH	probe → MG	151-004
for other gases:		
G 1/4 RH	probe → MG	151-005
<b>• coupling bodies (also for SK100-2)</b>		
for fuel gases:		
4.0 mm	nozzle → coupling body	150-001
6.3 mm	nozzle → coupling body	150-003
8.0 mm	nozzle → coupling body	150-004
9.0 mm	nozzle → coupling body	150-005
G 3/8 LH	AGS → coupling body	150-064
for oxygen:		
4.0 mm	nozzle → coupling body	150-007
6.3 mm	nozzle → coupling body	150-009
8.0 mm	nozzle → coupling body	150-010
G 1/4 RH	AGS → coupling body	150-061
G 3/8 RH	AGS → coupling body	150-060
for other gases:		
6.3 mm	nozzle → coupling body	150-013
G 1/4 RH	AGS → coupling body	150-063
G 3/8 RH	AGS → coupling body	150-062

### SK100-2



**Coupling bodies with non-return valve and automatic gas cut-off valve**

EN 561 / ISO 7289

### for hoses

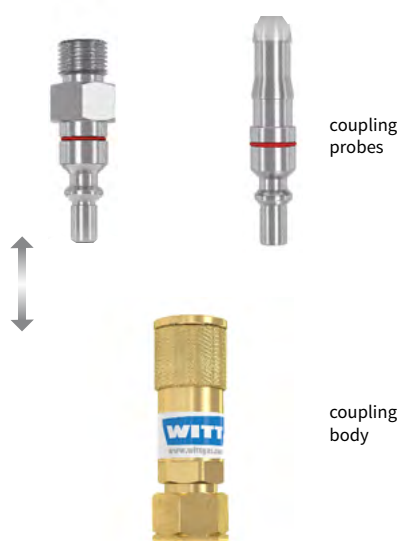
connection	inlet → outlet	order no.
<b>• coupling probes (also for SK100-3)</b>		
for fuel gases:		
4.0 mm	probe → nozzle	151-007
6.3 mm	probe → nozzle	151-009
8.0 mm	probe → nozzle	151-010
9.0 mm	probe → nozzle	151-011
G 3/8 LH	probe → AGS	151-048
for oxygen:		
4.0 mm	probe → nozzle	151-013
6.3 mm	probe → nozzle	151-015
8.0 mm	probe → nozzle	151-016
G 1/4 RH	probe → AGS	151-045
G 3/8 RH	probe → AGS	151-044
for other gases:		
6.3 mm	probe → nozzle	151-021
G 1/4 RH	probe → AGS	151-047
G 3/8 RH	probe → AGS	151-046

**• coupling bodies**  
see SK100-1

## 14. QUICK COUPLINGS

### SK100-3

for outlet points



coupling probes

coupling body

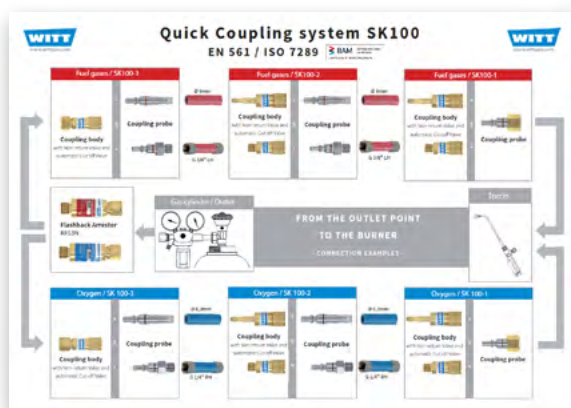
Coupling bodies with automatic gas cut-off valve

EN 561 / ISO 7289

connection	inlet ⇌ outlet	order no.
• probes see SK100-2		
• coupling bodies		
for fuel gases: G 3/8 LH	MG ⇌ coupling body	150-015
for oxygen: G 1/4 RH	MG ⇌ coupling body	150-017
G 3/8 RH	MG ⇌ coupling body	150-018
for other gases: G 1/4 RH	MG ⇌ coupling body	150-019
G 3/8 RH	MG ⇌ coupling body	150-028

## “Which coupling at which point? An overview.

Use our practical overview of the WITT coupling system SK100. Here you find:



- every module, from the gas outlet point to the torch
- all connections at a glance
- for fuel gases and oxygen
- on demand: editable pdf, to fill in your own order numbers

download at: ► [www.wittgas.com](http://www.wittgas.com)

For an overview of our support material see p. 77-78



## 14. QUICK COUPLINGS

### Keymark coupling



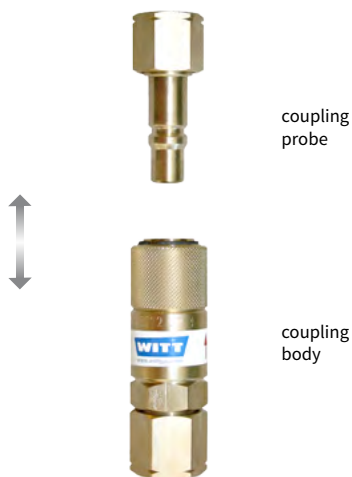
Keymark couplings protect outlet points from unauthorised access: only the owner of the keymark is able to take gas from the outlet point

EN 561 / ISO 7289

### for outlet points

connection	inlet ⇌ outlet	order no.
<b>• coupling bodies</b>		
for fuel gases: G 3/8 LH	MG ⇌ coupling body	150-029
for other gases: G 1/4 RH	MG ⇌ coupling body	150-033
<b>• keymark</b>		801836700
<b>• coupling probes</b>		
for fuel gases: 4.0 mm	probe ⇌ nozzle	151-007
6.3 mm	probe ⇌ nozzle	151-009
8.0 mm	probe ⇌ nozzle	151-010
9.0 mm	probe ⇌ nozzle	151-011
G 3/8 LH	probe ⇌ AGS	151-048
for other gases: 6.3 mm	probe ⇌ nozzle	151-021
G 1/4 RH	probe ⇌ AGS	151-047
G 3/8 RH	probe ⇌ AGS	151-046

### 735 / 736




Hose couplings for higher flows


DIN 8544


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




## 15. NON-RETURN VALVES

NV 654				
	<p><b>Up to 60 bar</b> (O<sub>2</sub> up to 30 bar)</p> <p><b>Air max. 130 m³/h</b></p> <p><b>NV</b></p> <p>DIN EN ISO 5175-2</p> <p>also available in stainless steel, see p. 48</p>	<b>connection</b>	<b>inlet → outlet</b>	<b>order no.</b>
		G 1/8 RH	IG → AG	120003037

NV 100				
	<p><b>Up to 25 bar</b></p> <p><b>Air max. 130 m³/h</b></p> <p><b>NV</b></p> <p>DIN EN ISO 5175-2</p>	<b>connection</b>	<b>inlet → outlet</b>	<b>order no.</b>
		G 1/8 RH	IG → IG	100145001
		G 1/4 RH	IG → IG	100145002
		G 3/8 RH	IG → IG	100145003
		1/4" NPT	IG → IG	100145005
		3/8" NPT	IG → IG	100145007

Ultra 10				
	<p><b>Flow-optimised valve system causes very low pressure drop at minimal noise emission</b></p> <p><b>Up to 16 bar</b></p> <p><b>Air max. 800 m³/h</b></p> <p><b>NV</b></p> <p>DIN EN ISO 5175-2</p> <p>also available in stainless steel, see p. 48</p>	<b>connection</b>	<b>inlet → outlet</b>	<b>order no.</b>
		G 1/2 RH	IG → IG	034-003

NV 200				
	<p><b>Up to 16 bar</b></p> <p><b>Air max. 1,900 m³/h</b></p> <p><b>NV</b></p> <p>DIN EN ISO 5175-2</p> <p>also available in stainless steel, see p. 48</p>	<b>connection</b>	<b>inlet → outlet</b>	<b>order no.</b>
		G 1/2 RH	IG → IG	200037008
		G 3/4 RH	IG → IG	200037009
		G 1 RH	IG → IG	200037010
		1/2" NPT	IG → IG	200037069
		3/4" NPT	IG → IG	200037075
		1" NPT	IG → IG	200037068

**FA** = flame arrestor **NV** = non-return valve **TV** = temperature controlled cut-off valve **PV** = pressure controlled cut-off valve

Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order. For some gases, special seals may be required. Special designs, higher flow capacities or different pressures on demand. Explanations of thread types, conversion of units of measurement see p. 75-76.

## 15. NON-RETURN VALVES

### Ultra 20



Flow-optimised valve system causes very low pressure drop at minimal noise emission

Up to 16 bar

Air max. 2,300 m³/h

☐ NV

DIN EN ISO 5175-2

also available in stainless steel, see p. 49

connection	inlet → outlet	order no.
G 3/4 RH	IG → IG	on request
G 1 RH	IG → IG	on request

### NV 600H



Up to 40 bar

☐ NV

DIN 8521-2

also available in stainless steel, see p. 49

connection	inlet → outlet	order no.
G 1/2 RH	IG → IG	037-042
G 3/4 RH	IG → IG	037-035
G 1 RH	IG → IG	037-039
1/2" NPT	IG → IG	037-085
1" NPT	IG → IG	037-082

### NV 70 / 70U



Up to 16 bar

Air max. 1,220 m³/h

☐ NV

DIN EN ISO 5175-2

pipeline fittings see p. 35

connection	inlet → outlet	order no.
<b>70</b>		
G 3/4 RH	AGS → MG	123-009
G 1 RH	AGS → MG	123-012
G 1.1/4 RH	AGS → MG	123-014
G 1.1/2 RH	AGS → MG	123-015
<b>70U (reverse flow):</b>		
G 3/4 RH	MG → AGS	123-016
G 1 RH	MG → AGS	123-018
G 1.1/4 RH	MG → AGS	123-056
G 1.1/2 RH	MG → AGS	123-045

### NV 300



Up to 16 bar

Air max. 3,260 m³/h

☐ NV

DIN 8521-2

also available in stainless steel, see p. 49

connection	inlet → outlet	order no.
G 1 RH	IG → IG	300038002
G 1.1/4 RH	IG → IG	300038031
1" NPT	IG → IG	300038058
1.1/4" NPT	IG → IG	300038065
DN 32 / PN 40	loose flange (with O-ring)	300038A009

## 15. NON-RETURN VALVES

### NV 400



Up to 16 bar

Air max. 8,100 m³/h

**NV**

DIN EN ISO 5175-2

also available in stainless steel, see p. 49

connection	inlet → outlet	order no.
G 1.1/2 RH	IG → IG	400038024
G 2 RH	IG → IG	400038008
1.1/2" NPT	IG → IG	400038062
2" NPT	IG → IG	400038045
DN 40 / PN 40	loose flange (with O-ring)	400038A005
DN 50 / PN 40	loose flange (with O-ring)	400038A006
DN 65 / PN 40	loose flange (with O-ring)	400038A007
DN 80 / PN 40	loose flange (with O-ring)	400038A008

### NV 400



**Non-return Valve NV 400 for up to 16 bar, completely with intermediate welding neck flange set for easy installation and removal**

Air max. 8,100 m³/h

**NV**

DIN EN ISO 5175-2

also available in stainless steel, see p. 49

#### intermediate flange version

connection	inlet → outlet	order no.
DN40	flange	400S-040MS
DN50	flange	400S-050MS

### NV 800



Up to 10 bar

Air max. 14,000 m³/h

**NV**

DIN 8521-2

connection	inlet → outlet	order no.
DN 80 / PN 16	flange	090-001

### NV 2000



Up to 10 bar

Air max. 26,800 m³/h

**NV**

DIN 8521-2

to be mounted vertically in bottom-up flow direction

connection	inlet → outlet	order no.
DN 80 / PN 16	flange	2000119002
DN 100 / PN 16	flange	2000119003
DN 125 / PN 16	flange	2000119004
DN 150 / PN 16	flange	2000119006
DN 200 / PN 16	flange	2000119007

## SV 805



Option: adapter for ventilation pipe

**For the safe relief of over-pressure (gases and vapours) from receivers, piping and other process units up to 45 bar**

- CE 0045
- certified by TÜV as Category IV (Modules B & D) safety devices as per European Pressure Equipment Directive (PED) 2014/68/EU
- also available: „smart-option“ for connected manufacturing
- also available in stainless steel, see p. 50

### SV 805

### order no.

pressure settings:

> 0.5 ≤ 45 bar

various connections available

200- \_ \_ \_

(in accordance with pressure-setting)

special sealing compound, surcharge

„smart-option“, surcharge

transmitting, if valve is open or closed

**Adapter to connect venting pipes and safety relief valve SV 805, including o-ring**

M 24x1 AG → 1/2" NPT IG

801413600K

M 24x1 AG → G 1/2 AGS

802069800K

M 24x1 AG → 3/4" NPT IG

802124900K

## SV 805A



**For the safe relief of over-pressure (gases and vapours) from receivers, piping and other process units**

**- manual ventilation-**

**up to 45 bar**

- CE 0045
- certified by TÜV as Category IV (Modules B & D) safety devices as per European Pressure Equipment Directive (PED) 2014/68/EU

- also available in stainless steel, see p. 50

### SV 805A

### order no.

with venting tool for manual ventilation, outlet: 1/2 NPT IG

pressure settings:

> 0.5 ≤ 45 bar

various connections available

200A- \_ \_ \_

(in accordance with pressure-setting)

special sealing compound, surcharge

## AV 815



**Safety relief valve for acetylene - only to be used in connection with manifold pressure regulators conform to DIN EN ISO 7291**

### outlet pressure blow-off flow

### opening pressure

### order no.

0.6 bar

50 m³/h

0.75 bar

200-277

0.7 bar

60 m³/h

0.95 bar

200-353

0.8 bar

65 m³/h

1.25 bar

200-354

0.9 bar

70 m³/h

1.25 bar

200-355

1.1 bar

72 m³/h

1.55 bar

200-356

1.5 bar

75 m³/h

1.90 bar

200-278

2.0 bar

90 m³/h

2.50 bar

200-279

connections:

G 1/2 AG → M24 x 1 IG

## AV 319



**For blowing-off gases and vapours from receivers, pipelines and other parts of the installation**

brass

also available in stainless steel, see p. 51

### pressure settings

10 - 80 mbar

### order no.

120- \_ \_ \_

(according to pressure-setting)

individual TÜV approval for the set opening pressure

connections:

G 1/8 RH AG-IG

### AV 619



**For the safe relief of overpressure (gases and vapours) from receivers, piping and other process units**

also available in stainless steel, see p. 51

#### pressure settings

5 - 500 mbar

#### order no.

300-\_\_ \_\_  
(in accordance with pressure-setting)

individual TÜV approval for the set opening pressure

#### connections:

G1/2, G3/4, G1 RH IG

NPT 1/2", 3/4", 1" IG

### AV 919



**For the safe relief of overpressure (gases and vapours) from receivers, piping and other process units**

aluminum anodised

also available in stainless steel, see p. 51

#### pressure settings

5 - 500 mbar

#### order no.

400-\_\_ \_\_  
(in accordance with pressure-setting)

individual TÜV approval for the set opening pressure

#### connections:

G2 RH IG

NPT 2" IG

10/12/2019

## “The most effective protection against overpressure from 5 mbar to 45 bar

For operators of pressurised systems and components they are the last line of defense before excess pressure becomes a disaster: Safety relief valves.



Safety relief valves from WITT provide effective protection against overpressure by blowing off vapours and gases from pipes, pressure vessels and system components.

Read about all of our models, their functions and benefits in our brochure.

Download brochure „Safety Relief Valves“  
at ► [www.wittgas.com](http://www.wittgas.com)

## 17. STAINLESS STEEL DEVICES

### Series RF53N-ES



**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

FA TV  
FA NV TV  
FA NV TV

DIN EN ISO 5175-1

### flashback arrestor

connection	inlet → outlet	order no.
------------	----------------	-----------

#### F53N-ES

for fuel gases (e.g. hydrogen up to 3 bar) or oxygen:

1/4" NPT	IG → IG	145-227
----------	---------	---------

#### F53N/H-ES

for fuel gases (e.g. hydrogen up to 10 bar):

1/4" NPT	IG → IG	145-106
----------	---------	---------

#### RF53N-ES

for fuel gases (e.g. hydrogen up to 3 bar) or oxygen:

1/4" NPT	IG → IG	145-262
3/8" NPT	IG → IG	145-024
3/8" LH	MG → AGS	145-246
7/8" - 14 UNF VCR	AG → AG	145-142

#### RF53N/H-ES

for fuel gases (e.g. hydrogen up to 10 bar):

1/4" NPT	IG → IG	145-107
3/8" NPT	IG → IG	145-121
3/8" LH	MG → AGS	145-232

### Series RF85-10N-ES



**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

FA TV  
FA NV TV  
FA NV TV

DIN EN ISO 5175-1

### flashback arrestor

connection	inlet → outlet	order no.
------------	----------------	-----------

#### F85-10N-ES

for fuel gases (e.g. hydrogen up to 4 bar) or oxygen:

1/4" NPT	IG → IG	143-149
----------	---------	---------

#### F85-10N/H-ES

for fuel gases (e.g. hydrogen up to 10 bar):

1/4" NPT	IG → IG	143-100
----------	---------	---------

#### RF85-10N-ES

for fuel gases (e.g. hydrogen up to 4 bar) or oxygen:

1/4" NPT	IG → IG	143-061
3/8" NPT	IG → IG	143-119
9/16" - 18 UNF VCR	AG → AG	143-163
7/8" - 14 UNF VCR	AG → AG	143-134
3/8" LH	MG → AGS	143-054

#### RF85-10N/H-ES

for fuel gases (e.g. hydrogen up to 10 bar):

1/4" NPT	IG → IG	143-077
3/8" NPT	IG → IG	143-087
7/8" - 14 UNF VCR	AG → AG	143-076
3/8" LH	MG → AGS	143-078

### RF85-20N-ES



Air max. 360 m³/h

FA NV TV

DIN EN ISO 5175-1

### flashback arrestor

connection	inlet → outlet	order no.
------------	----------------	-----------

for fuel gases (e.g. acetylene up to 2 bar) or oxygen:

1/2" NPT	IG → IG	149-009
3/4" NPT	IG → IG	149-031
1" NPT	IG → IG	149-029

## Series RF85-30N-ES



**RF85-30N-ES:**  
**Air max. 1,150 m³/h**  
FA NV TV

**RF85-30N/H-ES:**  
**Air max. 310 m³/h**  
FA NV TV

DIN EN ISO 5175-1

## flashback arrestor

connection	inlet → outlet	order no.
<b>RF85-30N-ES</b>		
for fuel gases (e.g. hydrogen up to 4 bar) or oxygen:		
3/4" NPT	IG → IG	147-071
1" NPT	IG → IG	147-092
<b>RF85-30N/H-ES</b>		
for fuel gases (e.g. hydrogen up to 11 bar):		
1 NPT	IG → IG	147-047
3/4" NPT	IG → IG	147-039

## Safety Group 645



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

**Acetylene max. 392 m³/h**  
**Fuel gases max. 2740 m³/h**  
**Oxygen max. 1850 m³/h**

DIN EN ISO 5175-1

FA NV TV

## RF85-30N-ES (2- or 4-fold)

connection	inlet → outlet	order no.
for fuel gases or oxygen:		
DN 50 (2fold)	flange DIN 2633	182-045
DN 50 (4fold)	flange DIN 2633	182-042

## F100N-ES



**Air max. 32 m³/h**  
FA TV

DIN EN ISO 5175-1

## flashback arrestor

connection	inlet → outlet	order no.
for hydrogen (up to 17 bar):		
1/2" NPT	IG → IG	210000012
7/8" - 14 UNF VCR	AG → AG	210000019

## F53



**As flame arrestor ideal for mounting in pipelines up to DN 10 and to protect appliances, e.g. gas analysers.**

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

FA

DIN EN ISO 16852

## detonation/deflagration flame arrestor and volume protection

connection	inlet → outlet	order no.
detonation and deflagration flame arrestor F53:		
G 1/4"	IG → IG	145-258
detonation and deflagration volume protection device F53:		
G 1/4" - M12	IG → AG	145-250



## 17. STAINLESS STEEL DEVICES

### 654-ES



**Up to 60 bar**  
(O<sub>2</sub> up to 30 bar)

**Air max. 130 m³/h**

**NV**

DIN EN ISO 5175-2

#### non-return valve

connection	inlet → outlet	order no.
G 1/8 RH	IG → AG	120.403033

### NV 100



**Up to 25 bar**

**Air max. 130 m³/h**

**NV**

DIN EN ISO 5175-2

#### non-return valve

connection	inlet → outlet	order no.
G 1/4 RH	IG → IG	145GRS-009

### Ultra 10



**Flow-optimised valve system causes very low pressure drop at minimal noise emission**

**Up to 16 bar**

**Air max. 800 m³/h**

**NV**

DIN EN ISO 5175-2

#### non-return valve

connection	inlet → outlet	order no.
G 1/2 RH	IG → IG	034-004

### NV 200



**Up to 16 bar**

**Air max. 1,900 m³/h**

**NV**

DIN EN ISO 5175-2

#### non-return valve

connection	inlet → outlet	order no.
G 1/2 RH	IG → IG	037-017
G 3/4 RH	IG → IG	037-033
G 1 RH	IG → IG	037-018
3/4" NPT	IG → IG	037-074

## 17. STAINLESS STEEL DEVICES

### Ultra 20



**Flow-optimised valve system causes very low pressure drop at minimal noise emission**

**Up to 16 bar**

**Air max. 2,300 m³/h**

**NV**

**DIN EN ISO 5175-2**

#### non-return valve

connection	inlet → outlet	order no.
G 3/4 RH	IG → IG	on request
G 1 RH	IG → IG	on request

### NV 600 H



**Up to 40 bar**

**DIN 8521-2**

**NV**

#### non-return valve

connection	inlet → outlet	order no.
G 1/2 RH	IG → IG	037-064
G 3/4 RH	IG → IG	037-065
G 1 RH	IG → IG	037-048
1" NPT	IG → IG	037-084

### NV 300



**Up to 16 bar**

**Air max. 3.260 m³/h**

**NV**

**DIN 8521-2**

#### non-return valve

connection	inlet → outlet	order no.
G 1 RH	IG → IG	038-064
G 1.1/4 RH	IG → IG	038-072
1.1/4" NPT	IG → IG	038-061

10/12/2019

“Why



## Stainless Steel?

The decision between Brass and Stainless Steel for Gas Safety Devices is not only an economic one. Stainless Steel has some decisive advantages that fit perfectly to special production situations:

- effectively resists leaks
- works reliably in larger temperature and pressure ranges
- shows high corrosion resistance

**FA** = flame arrestor **NV** = non-return valve **TV** = temperature controlled cut-off valve **PV** = pressure controlled cut-off valve

Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order. For some gases, special seals may be required. Special designs, higher flow capacities or different pressures on demand. Explanations of thread types, conversion of units of measurement see p. 75-76.

## 17. STAINLESS STEEL DEVICES

### NV400

#### non-return valve



Up to 16 bar

Air max. 8.100 m³/h

**NV**

DIN EN ISO 5175-2

also available as intermediate flange version, completely with intermediate welding neck flange set for easy installation and removal

connection	inlet → outlet	order no.
G 1.1/2 RH	IG → IG	038-014
G 2 RH	IG → IG	038-022
intermediate flange version:		
DN40	flange	038S-040ES
DN50	flange	038S-050ES

### NV800-ES

#### non-return valve



Up to 300 bar

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

### SV 805-ES

#### safety relief valve



**For the safe relief of overpressure (gases and vapours) from receivers, piping and other process units**

up to 45 bar

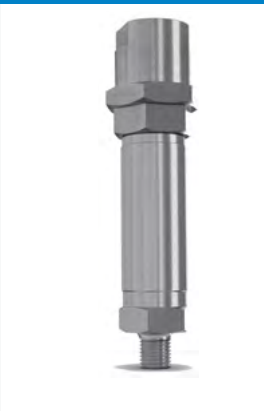
optional: adapter for ventilation pipe

**CE0045**

SV 805-ES	order no.
pressure settings:	
> 0.5 ≤ 45 bar	200- _ _ _
with standard connection, stainless steel 1.4541	
with standard connection, stainless steel 316L/1.4404	
with VCR connection, stainless steel 1.4541	
with VCR connection, stainless steel 316L/1.4404	
special sealing compound, surcharge	
<b>Adapter to connect venting pipes to SV 805-ES</b>	
connections M 24x1 AG → 1/2" NPT IG, st. steel 1.4541	801727800K
connections M 24x1 AG → 1/2" NPT VCR AG, st. steel 1.4404	801693000K

### SV 805A-ES

#### safety relief valve



**For the safe relief of overpressure (gases and vapours) from receivers, piping and other process units**


- manual ventilation -


up to 45 bar


**CE0045**


SV 805A-ES	order no.
with venting tool for manual ventilation, outlet: 1/2 NPT IG	
pressure settings:	
> 0.5 ≤ 45 bar	200A- _ _ _
with standard connection, stainless steel 1.4541	
with VCR connection, stainless steel 1.4541	
special sealing compound, surcharge	

## 17. STAINLESS STEEL DEVICES

SV 811 L		safety relief valve	
	<p><b>Spring loaded, direct acting pressure relief valve for hydrogen-powered motor vehicles in accordance with the European regulation (EC) No. 79/2009, as implemented by regulation (EC) No. 406/2010</b></p> <p>up to 45 bar</p>	<b>pressure settings</b>	<b>order no.</b>
		> 4.5 - 45 bar	200AU-L_ _ _ (in accordance with pressure-setting)
		adapter for the connection to ventilation pipe at the outlet	
		diff. connections	

AV 319-ES		safety relief valve	
	<p><b>For the safe relief of overpressure (gases and vapours) from receivers, piping and other process units</b></p>	<b>pressure settings</b>	<b>order no.</b>
		10 - 80 mbar	120- _ _ _ (depending on pressure-setting)
		individual TÜV approval for the set opening pressure	
		connections: G 1/8 RH IG	

AV 619-ES		safety relief valve	
	<p><b>For the safe relief of overpressure (gases and vapours) from receivers, piping and other process units</b></p> <p>up to 500 mbar</p>	<b>pressure settings</b>	<b>order no.</b>
		5 - 500 mbar	300- _ _ _ (depending on pressure-setting)
		individual TÜV approval for the set opening pressure	
		connections: G1/2, G3/4, G1 RH IG      IG → IG 1/2", 3/4", 1" NPT      IG → IG	

AV 919-ES		safety relief valve	
	<p><b>For the safe relief of overpressure (gases and vapours) from receivers, piping and other process units</b></p> <p>up to 500 mbar</p>	<b>pressure settings</b>	<b>order no.</b>
		5 - 500 mbar	400- _ _ _ (depending on pressure-setting)
		individual TÜV approval for the set opening pressure	
		connections: G2 RH IG NPT 2" IG	

## 18. PRESSURE REGULATORS

### Pressure regulator



**To be connected directly to the outlet point**

- displays pressure and flow via manometer and/or variable area flow meter
- inlet MG, outlet AGS

for outlet points

connections	manometer display	order no.
G 3/8 LH → G 3/8 LH	acetylene 0-1.5 bar	044112900
G 3/8 RH → G 1/4 RH	oxygen 0-10 bar	044226300
G 3/8 LH → G 3/8 LH	fuel gas 0-10 bar	044315000
G 3/8 RH → G 1/4 RH	nitrogen/air 0-10 bar	044526000
<b>flow display (manometer)</b>		
<b>argon, mixed gases and CO<sub>2</sub></b>		
G 3/8 RH → G 1/4 RH	0 - 30 l/min	044524100
<b>flow display (variable area flow meter)</b>		
<b>argon, mixed gases and CO<sub>2</sub></b>		
G 3/8 RH → G 1/4 RH	0 - 30 l/min	044524000

### Pressure regulator



**To be connected directly to the cylinder (200 bar), single-level**

- displays pressure and flow via manometer and/or variable area flow meter
- inlet DIN 477, outlet AGS

for cylinders

connections	manometer display	order no.
clamp → G 3/8 LH	acetylene 0-1.5 bar	044113400
DIN 477 → G 1/4 RH	oxygen 0-10 bar	044227500
DIN 477 → G 1/4 RH	nitrogen 0-10 bar	044525500
DIN 477 → G 1/4 RH	argon or CO <sub>2</sub> 0-10 bar	044525600
<b>flow display (manometer)</b>		
<b>argon, mixed gases and CO<sub>2</sub></b>		
DIN 477 → G 1/4 RH	0 - 30 l/min	044525700
<b>flow display (variable area flow meter)</b>		
<b>argon, mixed gases and CO<sub>2</sub></b>		
DIN 477 → G 1/4 RH	0 - 30 l/min	044525800

### ADR 150



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

- optimal emptying of the bundle because of very low pressure difference
- extremely stable outlet pressure
- integrated blow-off valve
- flow capacity up to 150 m<sup>3</sup>/h

manifold pressure regulator for acetylene

connections	inlet pressure	outlet pressure	order no.
DN 25 (DIN 3861) → flange DN 50/PN 40 (DIN 2656)	25 bar	1.5 bar	210-002
special edition up to 2 bar outlet pressure available (on demand)			

### ADR 150 F



**Spring loaded dome pressure regulator for acetylene for the regulation of high flows on manifolds and bundles**

Features - see ADR150, except: no pilot gas required

manifold pressure regulator for acetylene

connections	inlet pressure	outlet pressure	order no.
DN 25 (DIN 3861) → flange DN 50/PN 40 (DIN 2656)	25 bar	1.5 bar	210-010

## 18. PRESSURE REGULATORS

### Dome Pressure Regulators

#### series 737LE

connections    max. inlet pressure\*    outlet pressure    order no.

BRASS

##### model 737LE (brass), without pilot pressure regulator

G 3/4" IG    60 bar    0.5-10 bar    278-091

##### model 737LE/S (brass), set

G 3/4" IG    60 bar    0.5-10 bar    292-0006

3/4" NPT IG    60 bar    0.5-10 bar    292-0072

STAINLESS STEEL

##### model 737LE-ES (stainless steel), without pilot pressure regulator

G 3/4" IG    60 bar    0.5-10 bar    278-108

##### model 737LE/S-ES (stainless steel), set

G 3/4" IG    60 bar    0.5-10 bar    292-0046

3/4" NPT IG    60 bar    0.5-10 bar    292-0096

replacement filter Stainless steel (1.4301) 100 µm    956.504300

#### series 737LE-HD (high pressure model)

BRASS

##### model 737LE-HD (brass), without pilot pressure regulator

G 3/4" IG - 1" IG    300 bar    0.5-60 bar    278-116

##### model 737LE-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 737LE-HD/S (brass), set - especially for CO<sub>2</sub>

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

STAINLESS STEEL

##### model 737LE-HD-ES (stainless steel), without pilot pressure regulator

G 3/4" IG - 1" IG    300 bar    0.5-60 bar    278-117

##### model 737LE-HD/S-ES (stainless steel), set (for O<sub>2</sub> max. up to Pv 30 bar)

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

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

replacement filter Bronze 100 µm    953.00030



737LE

737LE-ES

737LE/S

737LE/S-ES



737LE-HD

737LE-HD-ES

737LE-HD/S

737LE-HD/S-ES

**Pressure regulators for medium flows, with maximum pressure stability. Complete solution for installation in pipelines, universal model and high pressure model**

- pilot pressure regulator, inlet and outlet pressure gauges and connections included
- different mounting parts available (maintenance kit see p. 57)
- easy to install and to be integrated into the process
- 1: 1 interchangeable with the previous version (please specify if desired)

\*depending on type of gas

## “Maximum precision and unparalleled consistency: see how WITT Dome-loaded Pressure Regulators work



Whenever the highest pressure stability is required, even with fluctuating inlet pressures and flowrates, WITT dome pressure regulators are the best choice.

Watch our new video and learn why they show such a unique performance. Find out about highly diverse application and customization possibilities.

See also:

► [www.domepressureregulators.com](http://www.domepressureregulators.com)

## 18. PRESSURE REGULATORS

### Dome Pressure Regulators

#### series 747LE



747LE



747LE-ES



747LE/S



747LE/S-ES

Universal pressure regulators for high flows, with maximum pressure stability. Complete solution for installation in pipelines.

- pilot pressure regulator, inlet and outlet pressure gauges and connections included
- different mounting parts available (maintenance kit see p. 57)
- easy to install and to be integrated into the process

BRASS

STAINLESS STEEL

connections      max. inlet pressure\*      outlet pressure      order no.

#### model 747LE (brass), without pilot pressure regulator

connections	max. inlet pressure*	outlet pressure	order no.
G 1" IG	40 bar	0.5-30 bar	278-088

#### model 747LE/S (brass), set

G 1" IG	40 bar	0.5-10 bar	292-0002
G 1" IG	40 bar	0.5-30 bar	292-0009
1" NPT IG	40 bar	0.5-10 bar	292-0102
1" NPT IG	40 bar	0.5-30 bar	292-0031

#### mounting parts (brass):

O-ring	7901-026
gas filter	956.953200
flange connection DIN DN32/PN40 (O-ring sealing)	952.218700
flange DIN DN32/PN40	801.597603
O-ring for flange DN32	7901-132
O-ring for flange G1"	7901-072
gasket for flange	950.026200
double nipple G1" - G 1.1/4"	952.223900
reducing nipple G1" - 1" NPT	953.179500
double nipple G1" - G1"	952.015900
welding nipple AD42 G 1.1/4"	100.015614
fitting G1" - G1"	100.313135
fitting G1" - 1" NPT	100.013283

#### model 747LE-ES (stainless steel), without pilot pressure regulator

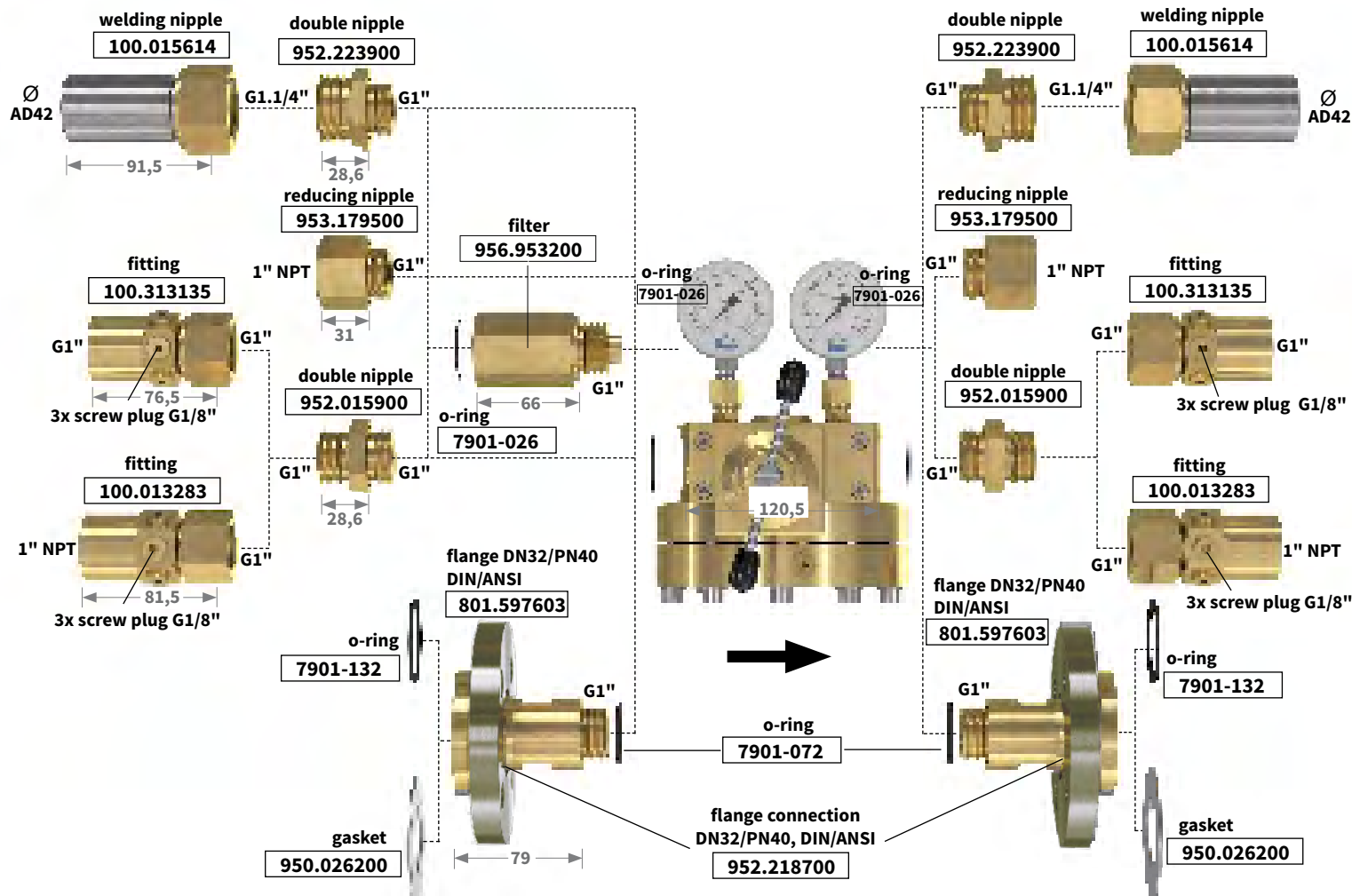
G 1" IG	40 bar	0.5-30 bar	278-099
---------	--------	------------	---------

#### model 747LE/S-ES (stainless steel), set

G 1" IG	40 bar	0.5-10 bar	292-0027
G 1" IG	40 bar	0.5-30 bar	292-0028
1" NPT IG	40 bar	0.5-10 bar	292-0109
1" NPT IG	40 bar	0.5-30 bar	292-0109

stainless steel mounting parts on demand

\*depending on type of gas





## 18. PRESSURE REGULATORS

### Dome Pressure Regulators

#### series 757LE



757LE



757LE-ES



757LE/S



757LE/S-ES

**High performance pressure regulators for high flows, with maximum pressure stability. Complete solution for installation in pipelines.**

- pilot pressure regulator, inlet and outlet pressure gauges and connections included
- different mounting parts available (maintenance kit p.56)
- also available with „smart-option“ for the transmission of pressure, temperature and flow

BRASS

**connections**      **max. inlet pressure\***      **outlet pressure**      **order no.**

**model 757LE (brass), without pilot pressure regulator**

connections	max. inlet pressure*	outlet pressure	order no.
G 2" IG	40 bar	0.5-30 bar	278-089

**model 757LE/S (brass), set**

flange DIN DN 50	40 bar	0.5-10 bar	292-0017
flange DIN DN 50	40 bar	0.5-30 bar	292-0018
G 2" IG	40 bar	0.5-10 bar	292-0003
G 2" IG	40 bar	0.5-30 bar	292-0010
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 G2" - 2" NPT	952.217000
flange connection DIN DN50/PN40 (O-ring sealing)	952.215800
flange DIN DN50/PN40	801.597803
O-ring for flange DN50	7901-130
gasket for flange	950.026200
flange gas filter DIN DN50/PN40	956.923800

**Smart options:**

- 'Standard': includes 4-20 mA signals and display of inlet- & outlet-pressure & temperatures
- 'With Flow' (in Nm³/h): as above, plus 4-20 mA signals and display of flow values
- 'Advanced': as all above, plus customer-specified logic configured into Display and output signals/alarms and/or self-shut-off ability and/or other customised logic

STAINLESS STEEL

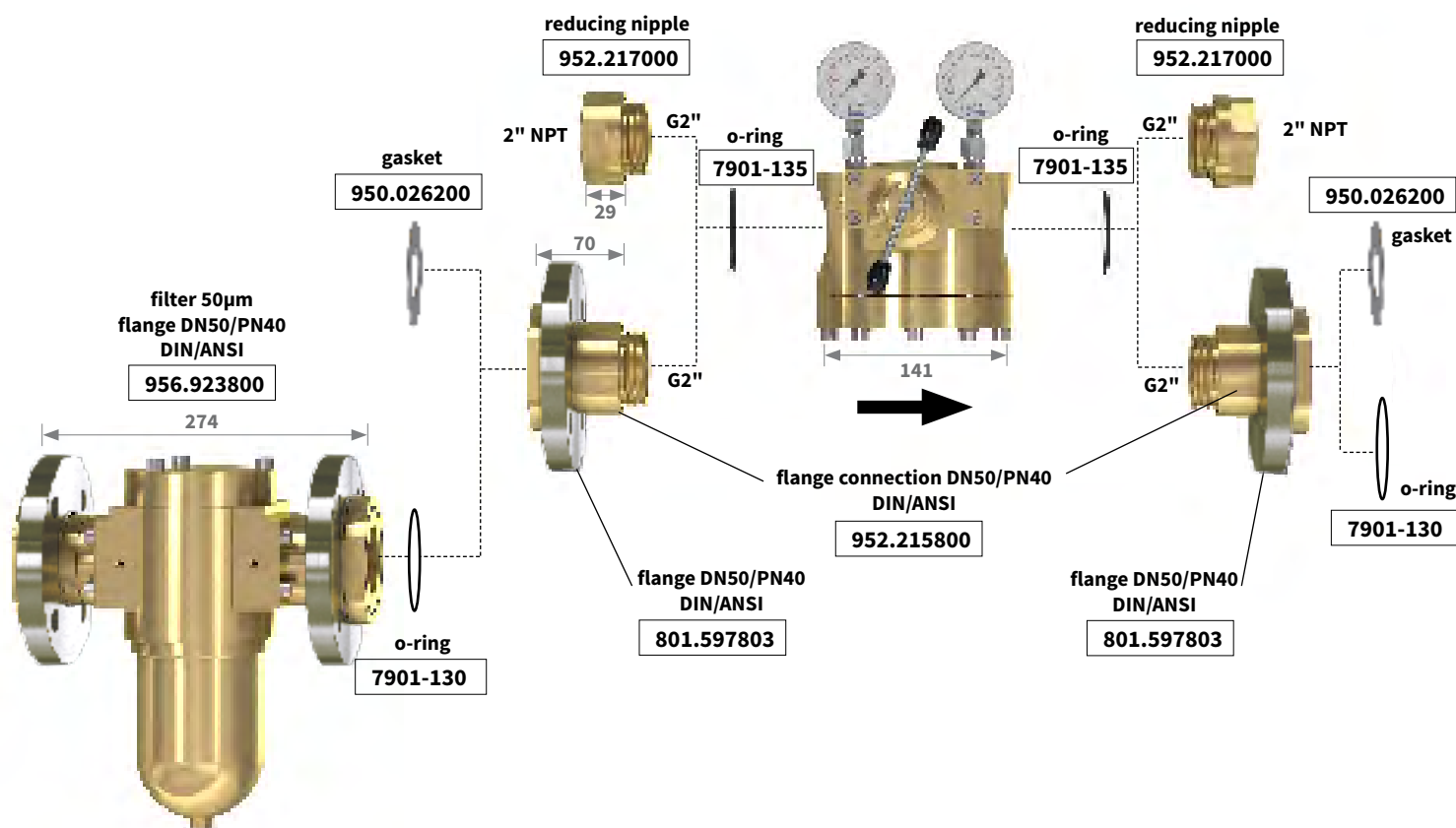
**model 757LE-ES (stainless steel), without pilot pressure regulator**

connections	max. inlet pressure*	outlet pressure	order no.
G 2" IG	40 bar	0.5-30 bar	278-069

**model 757LE/S-ES (stainless steel), set**

flange DIN DN 50	40 bar	0.5-10 bar	292-0037
flange DIN DN 50	40 bar	0.5-30 bar	292-0038
G 2" IG	40 bar	0.5-10 bar	292-0019
G 2" IG	40 bar	0.5-30 bar	292-0020
2" NPT IG	40 bar	0.5-10 bar	292-0061
2" NPT IG	40 bar	0.5-30 bar	292-0026

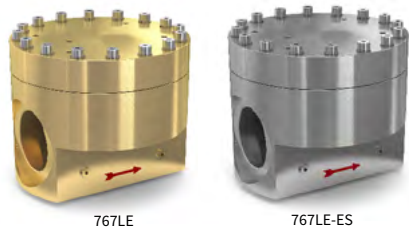
\* depending on type of gas



# 18. PRESSURE REGULATORS

## Dome Pressure Regulators

### series 767LE



High performance pressure regulators for very high flows, with maximum pressure stability. Complete solution for installation in pipelines.

- pilot pressure regulator, inlet and outlet pressure gauges and connections included
- different mounting parts available (maintenance kit see p. 57)
- easy to install and to be integrated into the process
- 1:1 interchangeable with the previous version (please specify if desired)
- "smart-option" - on demand

BRASS

connections      max. inlet pressure\*      outlet pressure      order no.

#### model 767LE (brass), without pilot pressure regulator

connections	max. inlet pressure*	outlet pressure	order no.
G 3" IG	40 bar	0.5-30 bar	278-090

#### model 767LE/S (brass)

flange DIN DN 80	40 bar	0.5-10 bar	292-0008
flange DIN DN 80	40 bar	0.5-30 bar	292-0005
flange DIN DN 100	40 bar	0.5-10 bar	292-0013
flange DIN DN 100	40 bar	0.5-30 bar	292-0066
G 3" IG	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-___

#### mounting parts:

o-ring for flange G3"	7901-098
reducing nipple G3" - 3"NPT	952.222700
flange connection DIN DN80/PN40 (O-ring sealing)	953.206800
flange DIN DN80/PN40	801.598003
o-ring for flange DN100	7901-479
flange connection DIN DN100/PN40 (O-ring sealing)	953.209500
flange DIN DN100/PN40	802.580503
o-ring for flange DN80	7901-136
gasket for flange DN80	950.010300

STAINLESS STEEL

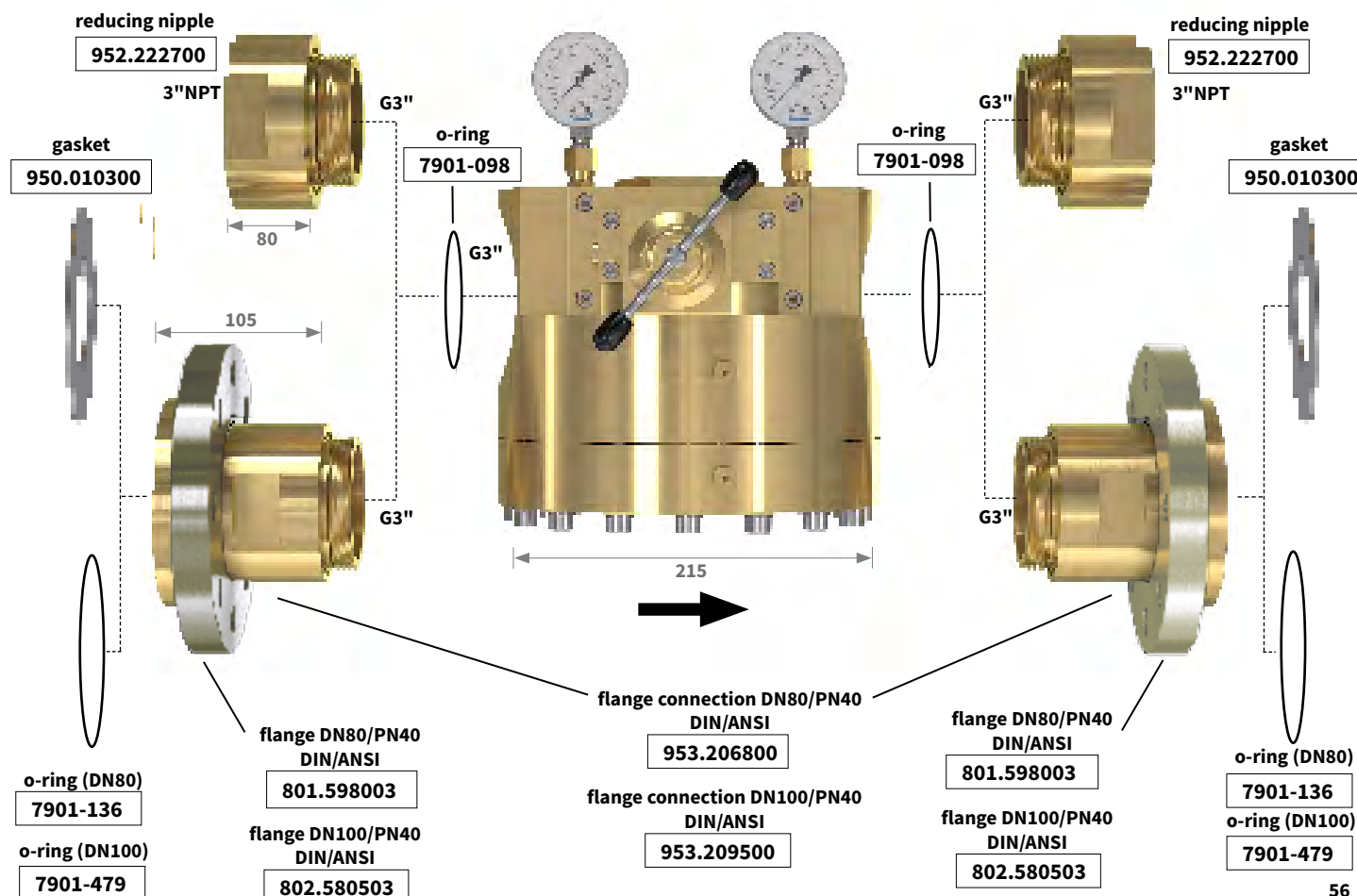
#### model 767LE-ES (stainless steel), without pilot pressure regulator

G 3" IG	40 bar	0.5-30 bar	278-___
---------	--------	------------	---------

#### model 767LE/S-ES (stainless steel)

flange DIN DN 80	40 bar	0.5-10 bar	292-___
flange DIN DN 80	40 bar	0.5-30 bar	292-___
flange DIN DN 100	40 bar	0.5-10 bar	292-___
flange DIN DN 100	40 bar	0.5-30 bar	292-___
G 3" IG	40 bar	0.5-10 bar	292-___
3" IG	40 bar	0.5-30 bar	292-___
3" NPT IG	40 bar	0.5-10 bar	292-___
3" NPT IG	40 bar	0.5-30 bar	292-___

\* depending on type of gas



## 18. PRESSURE REGULATORS

### Dome Backpressure Regulator



BPR 2



BPR 2-ES

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

- integrated connections for pilot gas and manometer
- easy integration into the process

#### BPR 2

connections	adjustable upstream pressure	order no.
<b>model BPR 2 (brass)</b>		
G 2" IG	0.5-20 bar	276-001

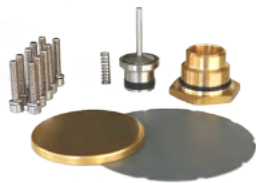
<b>model BPR 2 -ES (stainless steel)</b>		
G 2" IG	0.5-20 bar	276-__

**mounting parts** see model 757LE (p. 54)

### Accessories



lockable spindle cap



maintenance kit

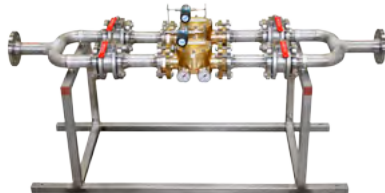
Accessories for WITT dome pressure regulators

- lockable spindle cap prevents unwanted tempering of the pilot pressure
- maintenance kits: pre-mounted, for maintenance and servicing
- stainless steel wall mounting panels

#### for dome pressure regulators

	material	order no.
lockable spindle cap	stainless steel	966061400
maintenance kits:		
for model 737LE/S	brass	962.000085
for model 737LE-HD/S	brass	962.000084
for model 747LE/S	brass	962.000067
for model 757LE/S	brass	962.000065
for model 767LE/S	brass	962.000061
for model 737LE/S-ES	stainless steel	962.000087
for model 737LE-HD/S-ES	stainless steel	962.000088
for model 747LE/S-ES	stainless steel	962.000073
for model 757LE/S-ES	stainless steel	962.000086
for model 767LE/S-ES	stainless steel	962.000116
wall mounting panel for 737LE, 737LE-HD 747LE, 757LE	stainless steel	956.248100
wall mounting panel for 767LE	stainless steel	956.247700

### Dome Pressure Regulators



parallel construction with 757LE/S



757LE/S with flange filter

#### engineering - planning and installation

##### 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 customisations possible, for example central filter, safety valve, other connection sizes, etc.  
Suitable for oxygen, tested and ready for use, short delivery time



**“For cost-effectiveness, process reliability and real-time monitoring: the smart WITT dome pressure regulator**

WITT's dome pressure regulators offer incomparably precise control data. With the smart-option, WITT is now offering electronic transfer of pressure, temperature and flow data in real-time, enabling remote monitoring of the processes - so you can act quickly in the event of a fault.

## 19. MOBILE PRESSURE REGULATING STATIONS

642

pressure regulating station



**Mobile pressure regulating station, completely mounted and tested, ready-to-use**

- for bundles
- with pressure regulator and safety devices

**order no.**

oxygen (300 bar/ 0-20 bar)

190211111

acetylene (25 bar/ 0-1.5 bar)

183112120

643

pressure regulating station



**Mobile pressure regulating station, completely mounted and tested, ready-to-use**

- for bundles with 4-6 integrated outlet points
- including flashback arrestors 85-10
- for oxygen with pressure regulator
- customisations available

**order no.**

4-outlets oxygen (300 bar/ 0-10 bar)

183000044

6-outlets oxygen (300 bar/ 0-10 bar)

183000049

4-outlets acetylene (25 bar/ 0-1.5 bar)

183000045

6-outlets acetylene (25 bar/ 0-1.5 bar)

183000050

Universal 704

distribution station



704 - special edition

**Mobile pressure regulating station, completely mounted and tested, ready-to-use**

- for pipelines or connected to model 642
- including flashback arrestors 85-10
- for oxygen with pressure regulator
- customisations available

**order no.**

4-outlets oxygen (40 bar/ 0-10 bar)  
and acetylene (1.5 bar)

183000030

6-outlets oxygen (40 bar/ 0-10 bar)  
and acetylene (1.5 bar)

183000031

Universal V6

distribution station



**Mobile pressure regulating station, completely mounted and tested, ready-to-use**

- for pipelines or connected to model 642
- including flashback arrestors 85-10
- for oxygen with pressure regulator
- customisations available

**order no.**

6-outlets oxygen (40 bar/ 0-10 bar)

183000153

6-outlets acetylene (1.5 bar)

183000154



## 20. STATIONARY PRESSURE REGULATING STATIONS

### Pressure regulation station

#### acetylene (25 bar)



**For ensuring continuous acetylene supply into a ring pipeline**

DIN EN ISO 14114, acetylene regulation (TRAC)  
Pressure regulators in accordance with ISO 7291

- completely mounted and tested, easy wall-mounting
- option: automatic switch-over (WITT-SWITCH)

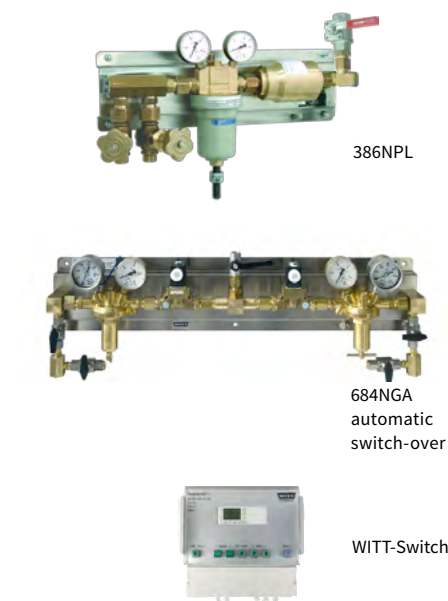
model	connection	flow	order no.
DRS 684NG	single left, +HDS17* (VI)	10 Nm <sup>3</sup> /h	193-015-001
DRS 684NG	single left, +HDS17* (HI)	10 Nm <sup>3</sup> /h	193-016-001
DRS 684NG	single left, no HDS17 (VI)	10 Nm <sup>3</sup> /h	193-001-001
DRS 684NG	single left, no HDS17 (HI)	10 Nm <sup>3</sup> /h	193-006-001
DRS 386NPL	single left (VI)	30 Nm <sup>3</sup> /h	195-001-001
DRS 150NF	single left (VI)	150 Nm <sup>3</sup> /h	190-_____
DRS 684NG	both-sided, +HDS17* (VI)	10 Nm <sup>3</sup> /h	193-003-001
DRS 684NG	both-sided, +HDS17* (HI)	10 Nm <sup>3</sup> /h	193-008-001
DRS 684NG	both-sided, no HDS17 (VI)	10 Nm <sup>3</sup> /h	193-002-001
DRS 684NG	both-sided, no HDS17 (HI)	10 Nm <sup>3</sup> /h	193-007-001
DRS 386NPL	both-sided (VI)	30 Nm <sup>3</sup> /h	195-002-001
DRS 150NF	both-sided (VI)	150 Nm <sup>3</sup> /h	190-_____
DRS 684NGA (compatible with WITT-Switch)			
autom. switch-over, both-sided (VI)		10 Nm <sup>3</sup> /h	193-005-001
autom. switch-over, both-sided (HI)		10 Nm <sup>3</sup> /h	193-010-001
DRS 386NGA (compatible with WITT-Switch)			
autom. switch-over, both-sided (VI)		30 Nm <sup>3</sup> /h	193-012-001
autom. switch-over, both-sided (HI)		30 Nm <sup>3</sup> /h	193-014-001
ZDA, autom. switch-over, both-sided (HI)		30 Nm <sup>3</sup> /h	193-014-003
DRS 150NAFT (including WITT-Switch-Tronic)			
autom. switch-over, both-sided (HI)		150 Nm <sup>3</sup> /h	190-_____

\* shut-off device, see p. 36 (VI) - vertical inlet (HI) - horizontal inlet

**options:** see below

### Pressure regulation station

#### oxygen / other technical gases (300 bar)



model	connection	flow	order no.
DRS 684NG	single left (VI)	75 Nm <sup>3</sup> /h	193-001-___
DRS 684NG	single left (HI)	75 Nm <sup>3</sup> /h	193-006-___
DRS 386NPL	single left (VI)	200 Nm <sup>3</sup> /h	195-001-___
DRS 684NG	both-sided (VI)	75 Nm <sup>3</sup> /h	193-002-___
DRS 684NG	both-sided (HI)	75 Nm <sup>3</sup> /h	193-007-___
DRS 386NPL	both-sided (VI)	200 Nm <sup>3</sup> /h	195-002-___
DRS 684NGA			
autom. switch-over	both-sided (VI)	75 Nm <sup>3</sup> /h	193-004-___
autom. switch-over	both-sided (HI)	75 Nm <sup>3</sup> /h	193-009-___
DRS 386NGA			
autom. switch-over	both-sided (VI)	200 Nm <sup>3</sup> /h	193-011-___
autom. switch-over	both-sided (HI)	200 Nm <sup>3</sup> /h	193-011-___
(VI) - vertical inlet (HI) - horizontal inlet			

**options (valid for acetylene, oxygen and other technical gases):**

WITT Switch:  
control Unit for automatic switch over stations 684NGA and 386NGA  
menu language German 194-019  
menu language English 194-019-01  
menu language French 194-019-02

mandatory sign, conforms to type of gas 194-\_\_\_

instruction plate, conforms to type of gas 194-\_\_\_

Further accessories for higher pressures upstream, e.g.  
hoses for bundle- and bottle-connections etc. on demand.

When ordering, please advise which gas.

**For safeguarding the continuous central gas supply in a ring pipeline**

Pressure regulators in accordance with ISO 7291

- completely mounted and tested, easy wall-mounting
- option: automatic switch-over (WITT-SWITCH)

## 21. OUTLET POINTS

### Series 610



610 - example

**Outlet point for the supply of technical gases from a ring pipeline, to be mounted at the wall**

- maximum 3 gases
- to be combined individually
- completely with welding and soldering nipples for pipe
- nickel-plated tube with nickel-plated wall screens

#### order no.

#### mounting plate (completely mounted and tested)

610-1 one gas	290-__
610-2 two gases	290-__
610-3 three gases	290-__

#### ball valves

male thread

fuel gases max. 40 bar	G 3/8 RH - G 3/8 LH	198107082
acetylene max. 1.5 bar	G 3/8 RH - G 3/8 LH	198107082
oxygen max. 30 bar	G 3/8 RH	198207072
shielding gas max. 40 bar	G 3/8 RH	198307078

#### outlet point pressure regulators

acetylene max. 1.5 bar	044112900
oxygen max. 10 bar	044226300
shielding gas with manometer (0-30 l/min)	044524100
shielding gas with variable area flow meter (0-30 l/min)	044524000

For optional flashback arrestors and quick couplings see section 9-14

### Series 603



603 - example

**Outlet point for the supply of technical gases from a ring pipeline, to be mounted at the wall, modular and extendable**

- extendable as required
- anti-swiveling fixed pressure regulator/flashback arrestors
- completely with welding and soldering nipples for pipe
- nickel-plated tube with nickel-plated wall screens

#### order no.

#### mounting plate (completely mounted and tested)

603-1 one gas	280-__
603-2 two gases	280-__
603-3 three gases	280-__
603-X extendable at will	

#### ball valves

male thread

fuel gases max. 40 bar	G 3/8 RH - G 3/8 LH	198107082
acetylene max. 1.5 bar	G 3/8 RH - G 3/8 LH	198107082
oxygen max. 30 bar	G 3/8 RH	198207072
shielding gas max. 40 bar	G 3/8 RH	198307078

#### outlet points-pressure regulators

acetylene max. 1.5 bar	044112900
oxygen max. 10 bar	044226300
shielding gas with manometer (0-30 l/min)	044524100
shielding gas with variable area flow meter (0-30 l/min)	044524000

For optional flashback arrestors and quick couplings see section 9-14

## 21. OUTLET POINTS

### Series 503

### for cutting machines



503 - example

#### Outlet point with integrated gas filters for the supply of cutting machines, for fuel gas, heating- and cutting-oxygen

- nickel-plated tube with nickel-plated wall screens
- inlet with fittings and ball valves, incl. gas filter 622, flashback arrestor 85-10
- DIN EN ISO 5175 preventing counter flow and flashback
- completely mounted and tested
- compact design

#### order no.

outlet point 503 3-fold

280030091

1x acetylene, P inlet max. 1.5 bar, max 4.5 m³/h  
(inlet welding nipple OD 21.3mm, ball valve DN 10,  
gas filter 622, pressure regulator, flashback arrestor 85-10,  
outlet G 3/4 LH male with cone)

1x oxygen for heating, P inlet max. 16 bar, max 45 m³/h  
(inlet pipe coupler for pipe 15x1, ball valve DN 10,  
gas filter 622, pressure regulator, flashback arrestor 85-10,  
outlet G 3/4 RH male with cone)

1x oxygen for cutting, P inlet max. 16 bar, max 68 m³/h  
(inlet pipe coupler for pipe 15x1, ball valve DN 10,  
gas filter 622, pressure regulator, flashback arrestor 85-10,  
outlet G 3/4 RH male with cone)

“See our production site...



...and get to know WITT better than before:

See what WITT has achieved in its 70 year history.  
See our production site in Witten, Germany and  
discover our large product range.

Download at ► [www.wittgas.com](http://www.wittgas.com) or Youtube



### Series 722



test rig 722 + clamp 743

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

- 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 demand

product video and further information on  
► [www.wittgas.com](http://www.wittgas.com)

10/12/2019

## “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, O<sub>2</sub>, 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](mailto:witt@wittgas.com) or tel. 0049-(0)2302-89010

## 23. EQUIPMENT FOR OXYGEN LANCING

LK		lance holders		
	<b>Lance holders for oxygen</b> <ul style="list-style-type: none"> <li>for safe and comfortable holding of lance</li> <li>for quick and safe changeover</li> </ul>	<b>model</b>	<b>inlet → outlet (Ø pipe in mm)</b>	<b>order no.</b>
		LK-3	G 3/4 AGS → 1/8" (9.1 - 10.2)	040996500
		LK-4	G 3/4 AGS → 1/4" (12.0 - 13.7)	040996200
		LK-5	G 3/4 AGS → 3/8" (16.0 - 17.2)	040996100
		LK-6	G 3/4 AGS → 1/2" (20.0 - 21.5)	040996300
		LK-7	G 1 AGS → 3/4" (26.0 - 27.3)	040687000
		inlet reducer:		
		G3/8 AGS → G3/4 IG		802339600K
		G1/2 AGS → G3/4 IG		802339700K
		G3/4 AGS → G 1 IG		802418700K

SRV		backfire stop		
	<b>Backfire stop with temperature controlled cut-off valve</b> <ul style="list-style-type: none"> <li>protects against gas return and flashback</li> <li>combinable with WITT oxygen lancing equipment</li> <li>with copper sealing</li> </ul>	<b>model</b>	<b>inlet → outlet</b>	<b>order no.</b>
		SRV-2.1	3/4" AGS → 3/4" IG (up to LK 4)	040996400
		SRV-2.2	3/4" AGS → 3/4" IG (from LK 5)	040686100
		SRV-3	1" AGS → 1" IG (from LK 7)	040686200
		inlet reducer:		
		G3/8 AGS → G3/4 IG		802339600K
		G1/2 AGS → G3/4 IG		802339700K
		G3/4 AGS → G 1 IG		802418700K

GHV		safety lancing valve		
	<b>Safety lancing valve with lever operation</b> <ul style="list-style-type: none"> <li>lever valve for an immediate interruption of gas supply when let go</li> <li>combinable with WITT oxygen lancing equipment</li> </ul>	<b>model</b>	<b>inlet → outlet</b>	<b>order no.</b>
		GHV	G 3/4 AGS → G 3/4 MG	040210200

KLK		lance holder compact		
	<b>Compact lance holder, with integrated lever valve, non-return valve and temperature controlled cut-off valve</b> <ul style="list-style-type: none"> <li>combination of several safety elements in one device</li> <li>compact and ergonomic</li> </ul>	<b>model</b>	<b>inlet → outlet (Ø pipe in mm)</b>	<b>order no.</b>
		KLK-4	G 3/4 AGS → 1/4" (12.0 - 13.7)	040210400
		KLK-5	G 3/4 AGS → 3/8" (16.0 - 17.2)	040210500
		KLK-6	G 3/4 AGS → 1/2" (20.0 - 21.5)	040210600

## 23. EQUIPMENT FOR OXYGEN LANCING

### Shut-off valve



#### Shut-off valve for oxygen

- for the manual interruption of gas supply

model	connection	order no.
cut-off valve	G 3/4 IG	800721400
working-overpressure max. 25 bar		
adapter	G 3/4 AGS → G 3/4 AGS	952023700
adapter	G 3/4 AG → G 3/4 MG	100011116

“From the outlet point to the lance...”

In this overview you will find the whole WITT portfolio of oxygen-lancing equipment, clearly laid out by module.

Download at ► [www.wittgas.com](http://www.wittgas.com)

For an overview of our support material see p. 77-78

6 2 2



Modell C



Modell D



Modell A

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

- broad range of uses
- change of filter possible while installed
- high flowrate
- easy mounting
- increases service life of downstream fittings and equipment

model	connections	order no.
622 A	G3/8 IG - G3/8 RH AGS	186-001
622 A	G3/8 IG - G3/8 LH AGS	186-003
622 C	G1/2 IG - G3/8 LH AGS	186-004
622 D	G1/2 IG - G3/8 LH AGS	186-005
replacement filter		955003000

7 7



**For reliable protection against contamination by ultrafine filtering of particulates and moisture**

- with condensate drain
- increases service life of downstream fittings and equipment
- change of filter possible while installed
- high flowrate

model	connections	order no.
77 (approx. 40 µm)	G 3/4 IG7-001	
replacement filter 3-part		FI-077
77 (approx. 10 µm)	G 3/4 IG7-004	
replacement filter 3-part		FI-078
77 (approx. 50 µm)	G 3/4 IG7-010	
BAM tested for oxygen, with bronze filter		
replacement filter bronze 3-part		FI-077B
77 (approx. 5 µm)	G 3/4 IG7-012	
BAM tested for oxygen, with bronze filter		
replacement filter bronze 3-part		FI-077B8
installation kit		966.0313
enabling active monitoring of filter contamination by means of differential pressure		

6 2 5



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

- with condensate drain
- increases service life of downstream fittings and equipment
- change of filter possible while installed
- high flowrate

model	connections	order no.
625	G 1.1/4 AG	042-001
625	flange DN 25	042-007
625	flange DN 32	042-006
625	flange DN 40	042-015
625	flange DN 50	042-016
625	flange DN 80	042-009
replacement filter 4-part		FI-625

5 7




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


- resistant to corrosion by stainless steel filter inserts
- high flowrate
- increases service life of downstream fittings

pure filter


model	connections	order no.
57	G 3/8 IG - G 3/8 AGS	184007070
replacement filter		FI-057

## 24. GAS FILTERS

807		pure filter		
	<b>For reliable protection against micro-contamination of gases, e.g. in laboratories or burner supplies in the glass industry (approx. 5 µm)</b> <ul style="list-style-type: none"> <li>resistant to corrosion by stainless steel filter inserts</li> <li>high flowrate</li> <li>increases service life of downstream fittings and equipment</li> </ul>	model	connections	order no.
		807 (approx. 5 µm)	1/4" NPT IG	185-002
		replacement filter		956333400

HD		stainless steel filter		
	<b>For reliable protection against micro-contamination of gases, for installation in gas pipelines</b> <ul style="list-style-type: none"> <li>filter inserts in chromium-nickel-steel</li> <li>high flowrate</li> <li>increases service life of downstream fittings and equipment</li> </ul>	model	connections	order no.
		HD (approx. 30 µm)	G 3/4 IG	187-002
		HD (approx. 80 µm)	G 3/4 IG	187-001
		replacement filter 30 µm		FI-187-30
		replacement filter 80 µm		FI-187

## 25. METERING VALVES

PMV		precision metering valve		
	<b>For precise setting of gas volumes, e.g. in laboratory or for burner supply</b> <ul style="list-style-type: none"> <li>for very small gas flow rates</li> <li>resistant to dirt compared to needle valves</li> <li>available with three different degrees of fineness</li> <li>available as mounted block or just as valve cartridge</li> </ul>	model		
		PMV with digital knob and locking ring		
		PMV with standard knob		
		metering valve cartridge		


“The best precision metering valve for very low flow rates


Available as single valve cartridge or in a block with different knobs:


- standard knob with 14 turn spindle
- digital knob with 1499 divisions and locking ring




## 26. BALL VALVES

Ball valves		for acetylene		
 <p>example</p>	<b>PN25</b> up to max. 1.5 bar working pressure  DIN ISO 228/1 <ul style="list-style-type: none"> <li>housing: steel</li> <li>female connections</li> </ul>	DN / connection	length	order no.
		6 / G 1/4	50 mm	198105050
		8 / G 3/8	55 mm	198107071
		12 / G 1/2	75 mm	198109091
		20 / G 3/4	80 mm	198111110
		25 / G 1	90 mm	198113130
		32 / G 1.1/4	110 mm	198115152
		40 / G 1.1/2	120 mm	198117172

Ball valves		for methane, LPG, shielding gas, air		
 <p>example</p>	<b>PN25</b> up to max. 25 bar working pressure  DIN ISO 228/1 <ul style="list-style-type: none"> <li>housing: steel</li> <li>female connections</li> </ul>	DN / connection	length	order no.
		6 / G 1/4	50 mm	198305050
		8 / G 3/8	55 mm	198307070
		12 / G 1/2	75 mm	198309090
		20 / G 3/4	80 mm	198311110
		25 / G 1	90 mm	198313130
		32 / G 1.1/4	110 mm	198315150
		40 / G 1.1/2	120 mm	198317170

Ball valves		for oxygen		
 <p>example</p>	<b>PN10</b> up to max. 10 bar working pressure  DIN ISO 228/1 <ul style="list-style-type: none"> <li>housing: steel</li> <li>female connections</li> </ul>	DN / connection	length	order no.
		6 / G 1/4	50 mm	198205050
		8 / G 3/8	55 mm	198207070
		12 / G 1/2	75 mm	198209090
		20 / G 3/4	80 mm	198211110
		25 / G 1	90 mm	198213130
		32 / G 1.1/4	110 mm	198215151
		40 / G 1.1/2	120 mm	198217170

Ball valves		for oxygen		
 <p>example</p>	<b>PN40 burn out safe</b> up to max. 40 bar working pressure  DIN ISO 228/1 <ul style="list-style-type: none"> <li>housing: brass</li> <li>female connections</li> </ul>	DN / connection	length	order no.
		6 / G 1/4	50 mm	198205052
		8 / G 3/8	55 mm	198207075
		12 / G 1/2	75 mm	198209092
		20 / G 3/4	80 mm	198211112
		25 / G 1	90 mm	198213131
		32 / G 1.1/4	110 mm	198215150
		40 / G 1.1/2	120 mm	198217172

## 26. BALL VALVES

### Ball valves



**PN40**

EN 560

- housing: nickel-plated brass
- male connections

DN / connection	length	order no.
for acetylene (max. 1.5 bar):		
10 / G 3/8 RH AGS - G 3/8 LH AGS	89 mm	198107082
for fuel gases (max. 40 bar):		
10 / G 3/8 RH AGS - G 3/8 LH AGS	89 mm	198107082
for oxygen (max. 30 bar):		
10 / G 3/8 RH AGS - two-sided	89 mm	198207072
for shielding gas (max. 40 bar):		
10 / G 3/8 RH AGS - two-sided	89 mm	198307078

### Flange ball valve



example

**PN25 / PN40**

EN 558-1 (DIN 3202)

- housing: steel

DN	length	order no.
for acetylene (max. 1.5 bar):		
20	150 mm	198150500
25	160 mm	198147470
32	130 mm	198152521
40	140 mm	198153531
50	150 mm	198154542
65	170 mm	198155551
80	180 mm	198156560
100	190 mm	198157570
for air and shielding gas (max. 40 bar):		
20	150 mm	198350502
25	160 mm	198351515
32	130 mm	198252525
40	140 mm	198353533
50	150 mm	198354543
for air and shielding gas (max. 25 bar):		
65	170 mm	198355553
80	180 mm	198356561
100	190 mm	198357571
for oxygen (max. 10 bar):		
20	150 mm	198250500
25	160 mm	198247470
32	130 mm	198252521
40	140 mm	198253532
50	150 mm	198254540
65	170 mm	198255551
80	180 mm	198256561
100	190 mm	198257570

### Flange ball valves



example

**PN40**

up to max. 40 bar working pressure

- housing: stainless steel
- burn-out safe

#### for oxygen

DN	length	order no.
20	150 mm	198250502
25	160 mm	198251510
32	130 mm	198252523
40	140 mm	198253534
50	150 mm	198254543
65	170 mm	198255552
80	180 mm	198256562
100	190 mm	198257571



## 26. BALL VALVES

### High pressure ball valves

for acetylene



**PN320**

**max. 25 bar**

DIN ISO 228/1

- housing: steel
- female connections

DN / connection	length	order no.
6 / G 1/4	50 mm	198105055
6 / G 3/8	72 mm	198107077
10 / G 3/8	55 mm	198107078
10 / G 1/2	72 mm	198109099
10 / G 3/4 LH AG flat	82 mm	198112120
12 / G 1/2	75 mm	198909090
20 / G 3/4	80 mm	198111116

## 27. SAFETY HOSE REELS

### DS Automatic

for fuel gases and oxygen



**Safety hose reel with twin hoses DN 9/6,3**

- drum breaking mechanism prevents strain on hose
- guide rails on both sides ensure neat and strain-free rolling
- various mounting options
- ball-bearing mounted drum

model	length of hose	order no.
DS-08	8 m	060120800
DS-10	10 m	060121000
DS-15	15 m	060121500
DS-20	20 m	060122000
DS-25	25 m	060122500
DS-30	30 m	060123000

“More than standard connections, pressures and performance.

When we say, "

Please specify gas, pressures, temperatures, flows and connections at time of enquiry and order. For some gases, special seals may be required. Special designs, higher flow capacities or different pressures on demand" this is not just a standard text on our data sheets and catalogues, it's our daily work.

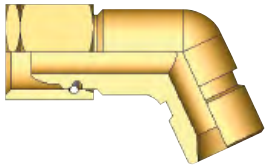
For most models we offer many more options than the standard versions.



## 28. ACCESSORIES

### Angle adapters

connection A



connection B

PN10

EN 560

- A=MG
- angle: 115°
- B=AGS

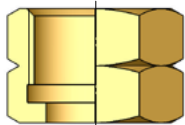
connection A

connection B

order no.

G 1/4 RH	G 1/4 RH	100005059
G 3/8 RH	G 1/4 RH	100107051
G 3/8 RH	G 3/8 RH	100107079
G 3/8 LH	G 3/8 LH	100008089
G 3/8 LH	M 14x1.5 RH	100008651

### Nuts



EN 560

connection

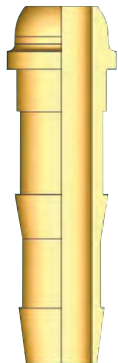
order no.

G 1/4 LH	951001000
G 1/4 RH	951000900
G 3/8 LH	951000800
G 3/8 RH	951000700
G 1/2 LH	951000600
G 1/2 RH	951000500
G 3/4 LH	951001600
G 3/4 RH	951001500
G 1 LH	951001400
G 1 RH	951001300

for nozzle  $\varnothing \geq 12.5$  mm:

G 1/2 RH	951019900
G 1/2 LH	951020000

### Nipples



DN

EN 560

female connection

for nuts

for hose DN

order no.

G 1/4	4.0	952057900
G 1/4	6.3	952022100
G 3/8	4.0	952058000
G 3/8	6.3	952022200
G 3/8	8.0	952028600
G 3/8	9.0	952022300
G 1/2	6.3	952030800
G 1/2	9.0	952035200
G 1/2	11.0	952022400
G 1/2	12.5	952035300
G 3/4	11.0	952022500
G 3/4	16.0	952022600

### Nipples

connection A



DN

EN 560

- A=AGS

male connection

connection A

for hose DN

order no.

G 1/4 RH	4.0	952031000
G 1/4 RH	6.3	952027400
G 3/8 RH	6.3	952031400
G 3/8 RH	9.0	952031600
G 3/8 LH	9.0	952027200
G 1/2 RH	9.0	952031800
G 1/2 LH	9.0	952031700
G 1/2 RH	11.0	952031900
G 1/2 LH	11.0	952027000

### Screwed couplings



### male connections

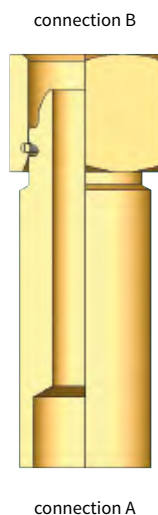
connection A	connection B	order no.
G 1/4 RH	G 1/4 RH	952006000
G 3/8 RH	G 1/4 RH	952007200
G 3/8 LH	G 1/4 RH	952007100
G 3/8 RH	G 3/8 RH	952007000
G 3/8 RH	G 3/8 LH	952007300
G 3/8 LH	G 3/8 LH	952007400
G 3/8 RH	G 1/2 RH	952015800
G 3/8 LH	G 1/2 RH	952006900
G 1/2 RH	G 1/4 RH	952014200
G 1/2 RH	G 1/2 RH	952016700
G 1/2 LH	G 1/2 RH	952016800
G 3/4 RH	G 3/8 RH	952030300
G 3/4 RH	G 3/8 LH	952042800
G 3/4 RH	G 1/2 RH	952035700
G 3/4 RH	G 1/2 LH	952042700
G 3/4 RH	G 3/4 RH	952023700
G 3/4 RH	G 3/4 LH	952023600
G 3/4 LH	G 3/4 LH	952023500
G 1 LH	G 1 RH	952073600
G 1 LH	G 1 LH	952071400
G 1 RH	G 1 RH	952030200

#### Male threads on both sides

EN 560

- A=AGS
- B=AGS

### Soldering nipple



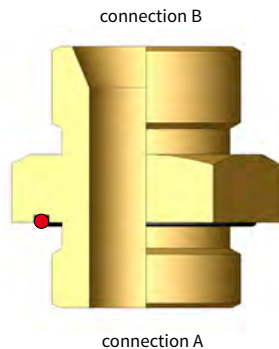
connection A	connection B	order no.
12 mm	G 3/8 RH	100007760
12 mm	G 3/8 LH	100008760
15 mm	G 1/2 RH	100009613
15 mm	G 1/2 LH	100010613
16 mm	G 1/2 RH	100009617
18 mm	G 1/2 RH	100009612
18 mm	G 1/2 LH	100010612
22 mm	G 1/2 RH	100009820
22 mm	G 1/2 LH	100010820
22 mm	G 3/4 RH	100011612
22 mm	G 3/4 LH	100012611
28 mm	G 3/4 RH	100011610
28 mm	G 3/4 LH	100012612
28 mm	G 1 RH	100013611
28 mm	G 1 LH	100014615
35 mm	G 1 RH	100013616
35 mm	G 1 LH	100014614
42 mm	G 1.1/4 RH	100015611
42 mm	G 1.1/4 LH	100016612

#### For pipes, with nut

EN 560

- A=pipe Ø
- B=MG

### Screwed couplings



#### Male thread, O-ring

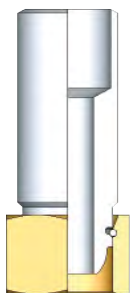
EN 560

- A=AG / O-ring
- B=AGS

connection A	connection B	order no.
G 1/4 RH	G 1/4 RH	952095700K
G 1/4 RH	G 1/4 LH	952095800K
G 1/4 RH	G 3/8 RH	952122400K
G 1/4 RH	G 3/8 LH	952068600K
G 3/8 RH	G 1/4 RH	952059600K
G 3/8 RH	G 3/8 RH	953138500K
G 3/8 RH	G 3/8 LH	952133500K
G 3/8 RH	G 1/2 RH	952103600K
G 3/8 RH	G 1/2 LH	952046500K
G 3/8 RH	G 3/4 LH	952106800K
G 3/8 RH	G 3/4 RH	952130000K
G 1/2 RH	G 1/4 RH	952014000K
G 1/2 RH	G 3/8 RH	952014100K
G 1/2 RH	G 3/8 LH	952013700K
G 1/2 RH	G 1/2 RH	952013800K
G 1/2 RH	G 1/2 LH	952013900K
G 1/2 RH	G 3/4 RH	952017800K
G 1/2 RH	G 3/4 LH	952017700K
G 1/2 RH	G 1 RH	952017500K
G 1/2 RH	G 1 LH	952017600K
G 3/4 RH	G 3/8 RH	952050400K
G 3/4 RH	G 3/8 LH	952064900K
G 3/4 RH	G 1/2 RH	952067600K
G 3/4 RH	G 1/2 LH	952026900K
G 3/4 RH	G 3/4 RH	952015000K
G 3/4 RH	G 3/4 LH	952014300K
G 3/4 RH	G 1 RH	952015100K
G 3/4 RH	G 1 LH	952020300K
G 1 RH	G 3/8 RH	952049700K
G 1 RH	G 3/8 LH	952049800K
G 1 RH	G 1/2 RH	952049600K
G 1 RH	G 1/2 LH	952016200K
G 1 RH	G 3/4 RH	952016100K
G 1 RH	G 3/4 LH	952016000K
G 1 RH	G 1 RH	952015900K
G 1 RH	G 1 LH	952036000K
G 1 RH	G 1 1/4 RH	952048200K
G 1 RH	G 1 1/4 LH	952048300K
G 1 1/4 RH	G 1 RH	952073500K
G 1 1/4 RH	G 1 LH	952093100K
G 1.1/4 RH	G 1.1/4 RH	952073400K
G 1.1/4 RH	G 1.1/4 LH	952070100K
G 1.1/4 RH	G 1.1/2 RH	952101100K
G 1.1/2 RH	G 1/2 RH	952102800K
G 1.1/2 RH	G 3/4 LH	952046300K
G 1.1/2 RH	G 1 RH	952038700K
G 1.1/2 RH	G 1 LH	952036100K
G 1.1/2 RH	G 1.1/4 RH	952028200K
G 1.1/2 RH	G 1.1/4 LH	952023000K
G 1.1/2 RH	G 1.1/2 RH	952060100K

### Welding nipples

connection A



connection B

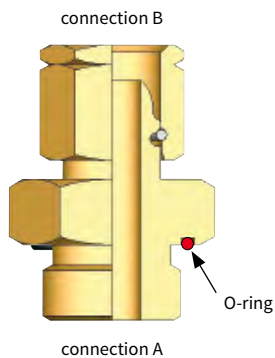
#### For pipes, with nut

EN 560

- A=pipe Ø
- B=MG

connection A	connection B	order no.
21.3 mm	G 3/8 LH	100008810
21.3 mm	G 3/8 RH	100007611
21.3 mm	G 1/2 LH	100010610
21.3 mm	G 1/2 RH	100009610
26.9 mm	G 1/2 LH	100010611
26.9 mm	G 3/4 LH	100012610
26.9 mm	G 3/4 RH	100011611
26.9 mm	G 1 LH	100014610
26.9 mm	G 1 RH	100013610
33.7 mm	G 1 LH	100014612
33.7 mm	G 1 RH	100013614
42.0 mm	G 1.1/4 LH	100016610
42.0 mm	G 1.1/4 RH	100015610

### Male / female couplings



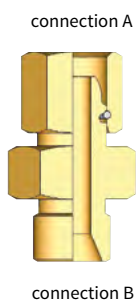
#### Male thread, O-ring and nut

EN 560

- A=AG / O-ring
- B=MG

connection A	connection B	order no.
G 1/4 RH	G 1/4 RH	100005055K
G 1/4 RH	G 1/4 LH	100005060K
G 1/4 RH	G 3/8 RH	100107054K
G 1/4 RH	G 3/8 LH	100008051K
G 3/8 RH	G 3/8 LH	100008073K
G 3/8 RH	G 1/2 LH	100010070K
G 3/8 RH	G 1/2 RH	100009073K
G 3/8 RH	G 3/8 RH	100207071K
G 1/2 RH	G 3/8 RH	100007092K
G 1/2 RH	G 3/8 LH	100008092K
G 1/2 RH	G 1/2 RH	100009094K
G 1/2 RH	G 1/2 LH	100010091K
G 1/2 RH	G 3/4 RH	100111090K
G 1/2 RH	G 3/4 LH	100012090K
G 1/2 RH	G 1 RH	100013096K
G 3/4 RH	G 1/2 RH	100009115K
G 3/4 RH	G 1/2 LH	100010110K
G 3/4 RH	G 3/4 RH	100011116K
G 3/4 RH	G 3/4 LH	100012110K
G 3/4 RH	G 1 RH	100013114K
G 3/4 RH	G 1 LH	100014110K
G 1 RH	G 1/2 LH	100010130K
G 1 RH	G 3/4 RH	100011130K
G 1 RH	G 3/4 LH	100012130K
G 1 RH	G 1 RH	100013135K
G 1 RH	G 1 LH	100014131K
G 1 RH	G 1.1/4 RH	100015130K
G 1 RH	G 1.1/4 LH	100016130K
G 1.1/4 RH	G 1.1/4 RH	100015155K

### Male / female couplings



#### Male thread, nut

EN 560

- A=MG
- B=AGS

connection A	connection B	order no.
G 1/4 RH	G 3/8 RH	100005072
G 1/4 RH	G 3/8 LH	100005081
G 3/8 RH	G 1/4 RH	100107053
G 3/8 RH	G 3/8 LH	100007086
G 3/8 LH	G 3/8 LH	100108081
G 3/8 RH	G 3/8 RH	100107072
G 3/8 LH	G 3/8 RH	100008077
G 3/8 RH	G 1/2 RH	100007095
G 3/8 RH	G 1/2 LH	100007101
G 3/8 LH	G 1/2 RH	100008093
G 3/8 LH	G 1/2 LH	100008106
G 1/2 RH	G 1/2 LH	100009103
G 1/2 RH	G 1/4 RH	100009055
G 1/2 RH	G 3/8 LH	100009080
G 3/4 RH	G 1/2 RH	100011092
G 1 RH	G 3/4 RH	100013116
G 1 RH	G 3/4 LH	100013121
G 1 RH	G 1 LH	100013140

## 28. ACCESSORIES

### Cap with chain

connection A



EN 560

- A=MG

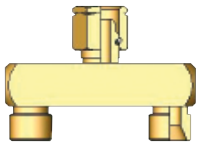
#### connection A

#### order no.

G 1/4 RH	100005000
G 3/8 RH	100007000
G 3/8 LH	100008000
G 1/2 RH	100009000
G 1/2 LH	100010000
G 3/4 RH	100011000
G 3/4 LH	100012000
G 1 RH	100013000
G 1 LH	100014000

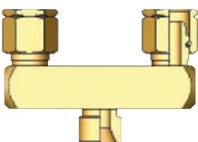
### Distribution block

connection A



connection B

connection A



connection B

EN 560

top:

- A=MG
- B=AGS

lower part:

- A=MG
- B=AGS

#### connection A

#### connection B

#### order no.

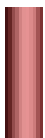
top:

G 1/4 RH	G 1/4 RH AGS	788-003
G 3/8 LH	G 3/8 LH AGS	788-001
G 1/2 LH	G 3/8 LH AGS	788-005
G 1/2 LH	G 1/2 LH AGS	788-007

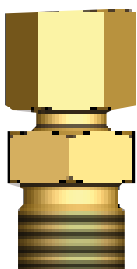
lower part:

G 1/4 RH	G 1/4 RH AGS	788-004
G 3/8 LH	G 3/8 LH AGS	788-002
G 1/2 LH	G 3/8 LH AGS	788-006
G 1/2 LH	G 1/2 LH AGS	788-008

### WITTFIX-pipe couplings



pipe



WITTFIX

nut

connection A

#### pipe Ø mm

#### connection A

#### order no.

6 x 1.0	G 1/8 RH	956608900
6 x 1.0	1/4" NPT	956705200
6 x 1.0	G 1/4 RH	956580300
6 x 1.0	G 3/8 RH	956544100
8 x 1.0	G 1/8 RH	956567300
8 x 1.0	1/4" NPT	956739900
8 x 1.0	G 1/4 RH	956543900
8 x 1.0	G 3/8 RH	956739800
8 x 1.0	G 1/2 RH	956740000
10 x 1.0	1/4" NPT	956683200
10 x 1.0	G 1/4 RH	956940200
10 x 1.0	3/8" NPT	956673500
10 x 1.0	G 3/8 RH	956532000
10 x 1.0	G 1/2 RH	956794700
12 x 1.0	1/4" NPT	956680700
12 x 1.0	G 1/4 RH	956551900
12 x 1.0	G 3/8 RH	956743700
12 x 1.0	1/2" NPT	956553200
12 x 1.0	G 1/2 RH	956668700
15 x 1.0	3/8" NPT	956678400
15 x 1.0	1/2" NPT	956678200
15 x 1.0	G 1/2 RH	956657700
22 x 1.0	G 1 RH	956657800

**For copper- or stainless steel pipes  
max. 25 bar working pressure**

EN 560

- A=AG
- containing: nut, O-ring, pressure ring, screwed coupler, cap nut

### WITTFIX-pipe couplings



pipe Ø mm	connection A	connection B	order no.
6 x 1.0	G 1/4 RH		956725400
6 x 1.0	G 3/8 LH		956659700
6 x 1.0	G 3/8 RH		956725500
6 x 1.0		G 1/4 RH	956745700
6 x 1.0		G 3/8 LH	956659600
6 x 1.0		G 3/8 RH	956741800
8 x 1.0	G 1/4 RH		956753600
8 x 1.0	G 3/8 LH		956723700
8 x 1.0	G 3/8 RH		956746300
8 x 1.0	G 1/2 LH		956725700
8 x 1.0	G 1/2 RH		956725600
8 x 1.0		G 1/4 RH	956746200
8 x 1.0		G 3/8 LH	956740100
8 x 1.0		G 3/8 RH	956623000
8 x 1.0		G 1/2 LH	956753900
8 x 1.0		G 1/2 RH	956754000
10 x 1.0	G 1/4 RH		956753700
10 x 1.0	G 3/8 LH		956725800
10 x 1.0	G 3/8 RH		956725900
10 x 1.0	G 1/2 LH		956726100
10 x 1.0	G 1/2 RH		956726000
10 x 1.0		G 1/4 RH	956648100
10 x 1.0		G 3/8 LH	956753400
10 x 1.0		G 3/8 RH	956718100
10 x 1.0		G 1/2 LH	956754900
10 x 1.0		G 1/2 RH	956755000
12 x 1.0	G 1/4 RH		956755100
12 x 1.0	G 3/8 LH		956677400
12 x 1.0	G 3/8 RH		956717900
12 x 1.0	G 1/2 LH		956726400
12 x 1.0	G 1/2 RH		956726300
12 x 1.0		G 1/4 RH	956754800
12 x 1.0		G 3/8 LH	956668600
12 x 1.0		G 3/8 RH	956717100
12 x 1.0		G 1/2 LH	956697500
12 x 1.0		G 1/2 RH	956697600
15 x 1.0	G 3/8 LH		956678900
15 x 1.0	G 3/8 RH		956678500
15 x 1.0	G 1/2 LH		956679100
15 x 1.0	G 1/2 RH		956678700
15 x 1.0		G 3/8 LH	956679000
15 x 1.0		G 3/8 RH	956678600
15 x 1.0		G 1/2 LH	956679200
15 x 1.0		G 1/2 RH	956678800

For the integration of a safety device into copper or stainless steel pipelines

max. 25 bar working pressure

thread-connection: EN 560

- A=AGS
- B=MG

#### 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



## 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.

Location: WITT headquarter in Witten

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
Printed Operation Manual	998.300011
Declaration of Conformity 'Pressure Devices' (PED) Module G by German TÜV	998.260001
Manufacturer 's Certificate in accordance with DIN EN ISO 22000	998.440005

## General Terms and Conditions

The minimum order value for products, repairs or inspections is € 150.00 .

When ordering please specify order numbers.

### Terms of shipment for Gas mixers, analysers, receivers and their accessories

Prices EXW, plus packaging (seaworthy charged by costs).

### Terms of shipment for safety equipment and their accessories

Prices EXW, standard packaging included.

### Security Fee: 20 € per shipment for third country outside of EU

Due to the national and international regulations checked by the Federal Aviation Authority (LBA) we had to introduce different procedures to get the status of an authorized consignor for airfreight shipments. This saves you time and money as our shipments are marked as "secure". They don't need any additional costly and time-consuming screening at the airport.

The entire text of our General Terms and Conditions may be downloaded at [www.wittgas.com](http://www.wittgas.com)

### Conversion of units of measurement:

**Pressure** all pressure specifications are in barg  
10 bar = 145 psi

**Flow** 10 m<sup>3</sup>/h = 353 scfh

**Temperature** °C \* 1.8 + 32 = °F

**Volume** 10 litres = 21 pints / 2.2 gallons

**Length** 10 mm = 0.3937 inches  
1 m = 39.37 inches

### Please note:



Most of our technical and marketing documents are available in multiple languages, please see [www.wittgas.com](http://www.wittgas.com).

## Brochures

Central gas supply



Stainless steel devices



Dome pressure regulators



Safety relief valves



Overview MAP-portfolio



Gas analysis



Leak detection



MAP for fruit and vegetables



Overview gas mixers

Synthetic-air gas mixer

You can find our brochures and a lot of other information material in the download area of our website, e.g.:

- Overview of accessories for oxygen lancing product range
- Overview Coupling system SK100
- Instructional chart Flashback Arrestors
- WITT company certifications
- White papers etc.

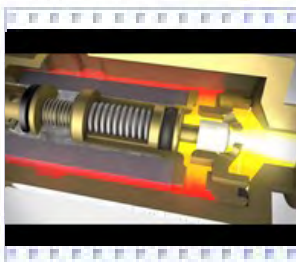
Download at ► [www.wittgas.com](http://www.wittgas.com)

## Product videos

Dome Pressure Regulators

Flashback arrestors

Gas mixer KM-MEM+



OXYBABY 6.0

Leak detection

Inline leak detection



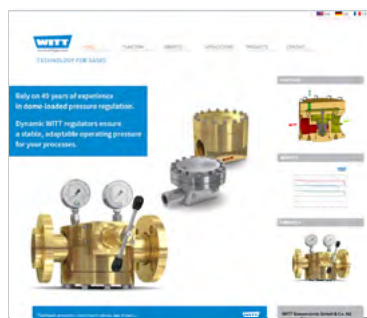
Download at ► [www.wittgas.com](http://www.wittgas.com) or Youtube

## Product specific websites by WITT

Everything about  
WITT leak detection

Everything about  
WITT dome pressure regulators

Everything about  
WITT OXYBABY®



► [www.leak-master.net](http://www.leak-master.net)

► [www.domepressureregulators.com](http://www.domepressureregulators.com)

► [www.oxybaby.com](http://www.oxybaby.com)

## WITT-App

### iGases - Interactive lexicon for technical gases

#### Features:

- important physio-chemical characteristics (density, steam pressure, ignition range, thermal conductivity, safety information)
- unit converter for important values such as pressure, volume (flow), temperature, mass into international units
- direct access to the WITT data sheets
- dialogue tool, giving direct access to WITT specialists
- flow calculation
- gas advisor
- in four languages: English, Spanish, French, German



iGases for  
Apple



iGases for  
Android

Download at google play or at the  
apple app store

## OUR PRODUCT RANGE

### GAS CONTROL EQUIPMENT

Gas mixing systems  
Gas metering systems  
Gas analysers  
Leak detection systems  
Gas pressure vessels  
Engineering of customised systems

### GAS SAFETY EQUIPMENT

Flashback arrestors  
Non-return valves  
Quick couplings  
Safety valves  
Stainless steel devices  
Gas filters  
Pressure regulators  
Lance holders  
Ball valves  
Automatic hose reels  
Test equipment  
Accessories  
Customised safety devices

#### WITT-Gasetechnik GmbH & Co. KG

Salinger Feld 4-8 • 58454 Witten  
Postfach / POB 2550 • 58415 Witten  
Deutschland  
Tel. +49 (0)2302 8901-0  
Fax +49 (0)2302 8901-3  
www.wittgas.com  
witt@wittgas.com

#### Gustus & Partner GmbH

Installation – Service – Wartung  
Alt Salbke 6–10, Geb. 59  
39122 Magdeburg  
Deutschland  
Tel. +49 (0)391 4015246  
Fax +49 (0)391 4013296  
gustus@wittgas.com

#### WITT Tecnología de gas España

C/ Simon Cabarga Nº 2a  
39005 Santander, Cantabria  
España  
Tel. +34 942 835142  
Fax +34 942 835143  
witt-espana@wittgas.com

#### WITT France S.A.R.L.

131 Voie de Compiègne  
91390 Morsang sur Orge  
France  
Tel. +33 (0)160 151779  
Fax +33 (0)160 154782  
witt-france@wittgas.com

#### WITT Gas Techniques Ltd.

Unit 7 Burtonwood Industrial Estate  
Phipps Lane, Burtonwood  
Warrington, Cheshire  
WAS 4HX  
Great Britain  
Tel. +44 (0)1925-234466  
Fax +44 (0)1925-230055  
witt-uk@wittgas.com

#### WITT GAS INDIA PVT. LTD.

855/N, Upen Banerjee Road  
Kolkata 700060  
West Bengal  
India  
Tel. +91 9831319810  
witt-india@wittgas.com

#### WITT Italia Srl.

Via Giovanni XXIII, 18  
24030 Solza (BG)  
Italia  
Tel. +39 035 4933273  
Fax +39 035 4948098  
witt-italia@wittgas.com

#### WITT Polska Sp.z.o.o.

Ul. Bulwar Dedala 16a  
54-130 Wrocław  
Polska  
Tel. +48 (0)71 3522856  
Fax +48 (0)71 3513113  
witt-polska@wittgas.com

#### WITT Gas Controls LP

3080 Northfield Place  
Suite 111  
Roswell, GA 30076  
USA  
Tel. +1 770-664-4447  
Fax +1 770-664-4448  
witt-usa@wittgas.com



Please contact us for partners  
in your country.