

»How important is safe gas supply?«

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Rely on WITT for
gas safety technology.



CENTRAL GAS SUPPLY SYSTEMS INCREASE SAFETY AND PRODUCTIVITY!

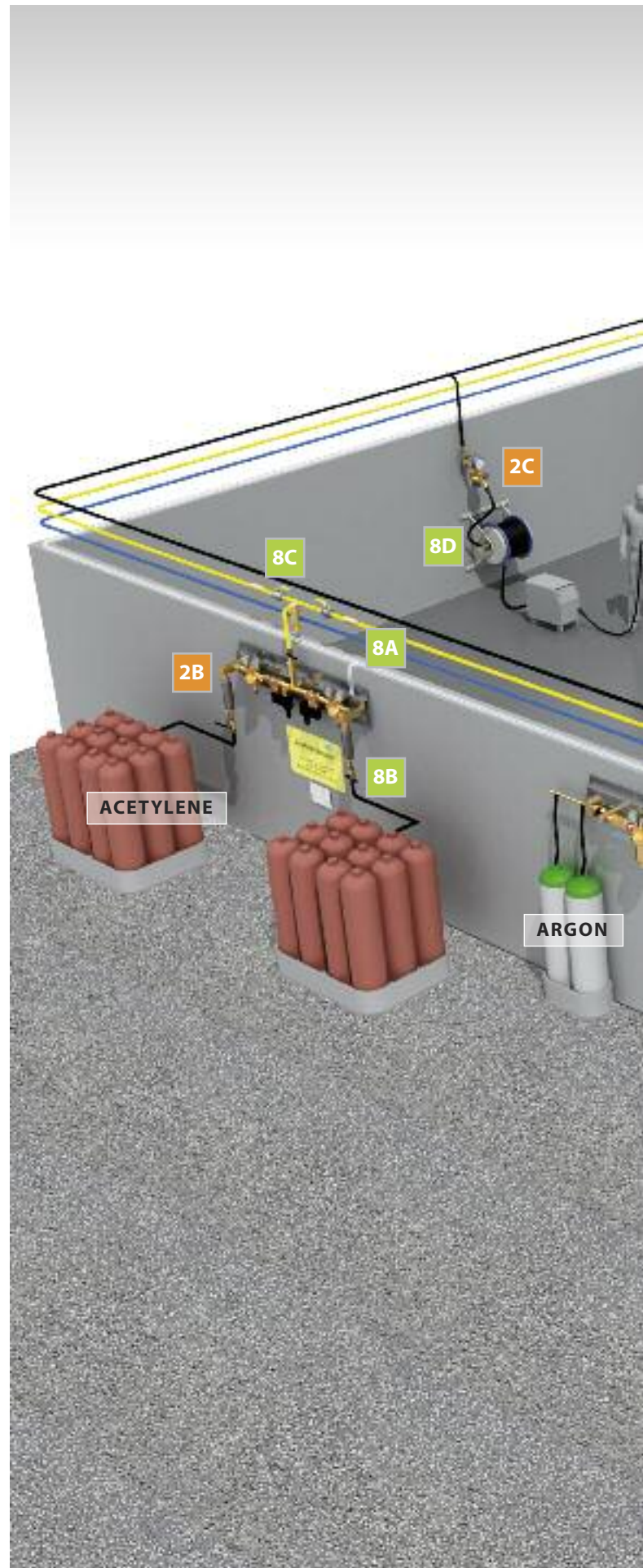
Continuous gas supply, improved safety by less transportation of gas cylinders, more space at the point of use, flexibility and expandability – central gas supply systems offer numerous benefits. Field-proven solutions by WITT ensure the optimal realisation from gas inlet to outlet point, from conception to implementation.

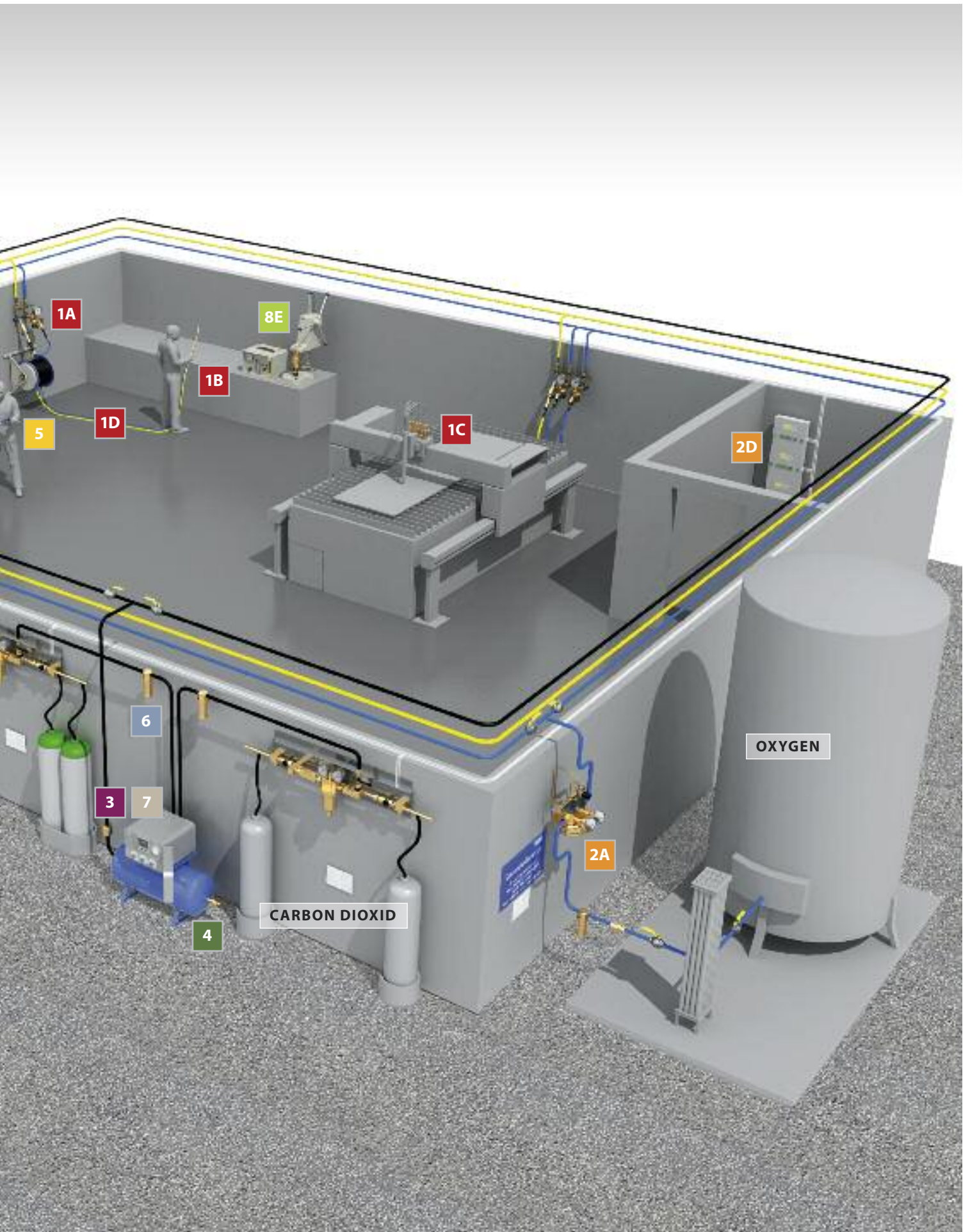
As market leader with longtime experience WITT offers all components for central gas supply systems – gas mixers, pressure regulator stations, flashback arrestors, outlet points, electronic control and special equipment. Complete systems by WITT meet the most challenging requirements ensuring best quality, high flow rates and minimum pressure loss.

Our BAM-tested and certified products set standards. Rely on German quality and contact persons globally.

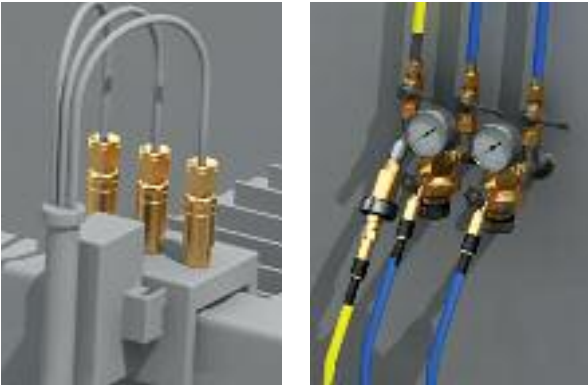
WITT – CENTRAL GAS SUPPLY SYSTEMS FROM A SINGLE SOURCE!

- 1 FLASHBACK ARRESTORS**
- 1A For regulators, outlet points, pipelines
- 1B For torches
- 1C For cutting machines
- 1D For hoses
- 2 PRESSURE REGULATOR STATIONS AND OUTLET POINTS**
- 2A Dome pressure regulators
- 2B Pressure regulator stations
- 2C Outlet points
- 2D Electronic switch and control
- 3 NON-RETURN VALVES**
- 4 SAFETY RELIEF VALVES**
- 5 QUICK COUPLINGS**
(for outlet points, pipelines, torches)
- 6 GAS FILTERS**
- 7 GAS MIXERS**
- 8 SPECIAL EQUIPMENT**
- 8A Decomposition Arrestors
- 8B Automatic slam shut valves
- 8C Ball valves
- 8D Safety hose reels
- 8E Test equipment





PRODUCT PORTFOLIO



1 FLASHBACK ARRESTORS

Protection of single cylinders, outlet points or pipelines against reverse gas flow and flashbacks:

- Combination of all safety elements for optimal protection
- Extinguish dangerous flashbacks or backfire
- Avoid explosive mixtures in the gas supply
- Wide product range for all kinds of applications
- For all technical gases
- Installation independent of the orientation
- Long service life due to protection against dirt – via filter at gas inlet
- All connections available
- Available in brass or stainless steel



3 NON-RETURN VALVES

Protection of equipment, pipelines and outlet points against reverse gas flow:

- Avoid the formation of explosive mixtures in the gas supply
- Varying from 4 mbar–40 bar and flows between 0.01 m³/h–3,000 m³/h with any wanted connection
- For all technical gases – wide range of applications
- Low pressure drops – using complex valve assembly with low opening pressures
- No leaks – using of a spring loaded valve assembly with elastomer sealing
- Installation independent of the orientation
- All connections available
- Available in brass or stainless steel



2 PRESSURE REGULATORS

Constant gas flow and control of central gas supplies:

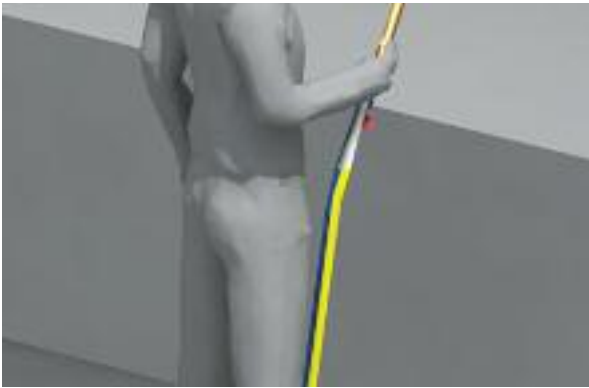
- Continuous gas supply and control of a pipeline
- With manual or automatic change-over
- Completely mounted and tested
- Compact design
- Reduces the risk of accidents



4 SAFETY RELIEF VALVES

Avoiding over-pressure by gas blowdown from pipelines and other equipment:

- Venting of excess pressure to protect down-stream equipment
- Individual opening pressure from 5 mbar to 100 bar
- Compact size
- Installation independent of the orientation
- Protective dust cap
- Range of inlet connections
- Available in brass or stainless steel



5 QUICK COUPLINGS

Safe and quick connection of equipment:

- Lightning fast connection and disconnection of equipment
- Gas-tightness when disconnected
- No build-up of explosive gas-mixtures in the pipe line – because of non-return valve
- No confusion between connections – because of different probes for Oxygen, Fuel and Inert Gases
- Simplest selection of the right body and probe – because of new colour coded probe
- All connections available
- Dirt-filter protects hose coupling and equipment



6 GAS FILTERS

Reliable filtration of the finest dirt particles in gases:

- For pipelines and gas outlet points. Some with condensation outlet
- For particles from 0.3–40 micron
- Diverse applications – useful for many technical gases
- High flow rates
- Extend the service life of downstream equipment – by reliable filtration performance
- Change of filter possible while installed
- Large choice of connections



7 GAS MIXERS

High quality mixing systems for 2 or 3 gases particularly for all areas with sharply fluctuating mixed gas flows:

- Easy operation
- A proportional mixing valve or three single mixing valves provide infinitely variable mixture settings
- Gas mixture withdrawal possible from zero to the maximum flow capacity
- High process reliability
- Independent of pressure fluctuations in the gas supply
- Intermittent gas mixture withdrawal possible
- Splash-proof and robust stainless steel housing
- For flammable gases available as EEx-version with separate control cabinet
- Integrated gas analysis for the control and documentation of the gas mixture production
- Monitoring of the gas supply with alarm



8 TEST EQUIPMENT


For the testing of all safety elements including flashback arrestors and non-return valves.

- Cost effective
- Only one test rig for all tests
 - Leak tightness to atmosphere
 - Test of non-return valve against low and high back pressure
 - Function of pressure sensitive gas cut off valve
 - Measurement of flow capacity of safety device
- Clear readings
- Robust design
- Maintenance free







1 FLASHBACK ARRESTORS FOR TORCHES EN 730 / ISO 5175-1




















Material	Image	Model	Remarks	Gases / Max. working pressures / Flows					Safety elements					
				Acetylene (A)	Oxygen (O)	LPG (P)	Hydrogen (H)	Natural Gas (M)	Inlet Gas Filter – depending on connection –	Flame Arrestor (FA)	Non-Return Valve (NV)	Temperature activated Cut-off Valve (TV)	Pressure actuated Cut-off Valve (PV)	Pressure Relief Valve
Brass		E460-1	hose nipple	1.5 bar / 9,3 m³/h	20 bar	5 bar	4 bar	5 bar	X	X	X			
		E460-3		1.5 bar / 9,3 m³/h	20 bar	5 bar	4 bar	5 bar	X	X	X			
		E460SK	quick connect	1.5 bar / 9,3 m³/h	20 bar	5 bar	4 bar	5 bar		X	X			
		E460SKU	quick connect	1.5 bar / 9,3 m³/h	20 bar	5 bar	4 bar	5 bar		X	X			
		RF53NU		1.5 bar / 12 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X	X		
		85-10NU		1.5 bar / 20,3 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X	X		
		85-10NUEX	quick connect	1.5 bar / 20,3 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X	X		
Nickel-plated		RF53NU		1.5 bar / 12 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X	X		
		85-10NU		1.5 bar / 20,3 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X	X		

1 FLASHBACK ARRESTORS FOR HOSES

Brass		E460-2	hose nipple	1.5 bar / 9,3 m³/h	20 bar	5 bar	4 bar	5 bar	X	X	X			
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1 FLASHBACK ARRESTORS FOR REGULATORS, OUTLET POINTS, PIPELINES








Brass		RF53N			30 bar	5 bar	3 bar	5 bar	X	X	X	X		
		RF53DN		1.5 bar / 12 m³/h	10 bar	5 bar	3 bar	5 bar	X	X	X	X		X
		RF53NSK	quick connect	1.5 bar / 9,4 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X	X		
		RF53NSKU	quick connect	1.5 bar / 9,4 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X	X		
		85-10		1.5 bar / 20,3 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X	X		
		85-30		1.5 bar / 66,5 m³/h	30 bar	3,5 bar	4 bar	5 bar	X	X	X	X		

Material		Model	Remarks	Gases / Max. working pressures / Flows					Safety elements					
				Acetylene (A)	Oxygen (O)	LPG (P)	Hydrogen (H)	Natural Gas (M)	Inlet Gas Filter - depending on connection -	Flame Arrestor (FA)	Non-Return Valve (NV)	Temperature activated Cut-off Valve (TV)	Pressure activated Cut-off Valve (PV)	Pressure Relief Valve
Nickel-plated		RF53N		1.5 bar / 12 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X	X		
		85-10		1.5 bar / 20.3 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X	X		
Stainless steel		RF53N-ES		1.5 bar / 10.6 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X	X		
		RF53N-ES				8 bar	9 bar	12 bar	X	X	X	X		
		RF85-10N-ES		1.5 bar / 19.7 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X	X		
		RF85-10-ES				5 bar	10 bar	10 bar	X	X	X	X		
		RF85-30N-ES	highest flow in the world	1.5 bar / 66.5 m³/h	30 bar	3.5 bar	4 bar	5 bar	X	X	X	X		
		RF85-30N-ES				5 bar	11 bar	8 bar	X	X	X	X		
Brass		Super 55	resettable	1.5 bar / 8.8 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X	X	X	
		Super 90	resettable	1.5 bar / 10.4 m³/h	10 bar	4 bar	5 bar	5 bar	X	X	X	X	X	
		Super 78	resettable	1.5 bar / 10.4 m³/h	10 bar	4 bar	5 bar	5 bar	X	X	X	X	X	X
		Super 85	resettable	1.5 bar / 17.2 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X	X	X	
		Super 66	resettable	1.5 bar / 20.6 m³/h	10 bar	5 bar	5 bar	5 bar	X	X	X	X	X	X
		RF53N/30				3 bar		4 bar	X	X	X	X		
		85-10N/30				1.5 bar	0.2 bar	1.5 bar	X	X	X	X		
		270N				2 bar	1.5 bar	3 bar		X	X	X		
		623N				2 bar	1.5 bar	4 bar		X	X	X		
Nickel-plated		Super 55	resettable	1.5 bar / 8.8 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X	X	X	
		Super 78	resettable	1.5 bar / 10.4 m³/h	10 bar	4 bar	5 bar	5 bar	X	X	X	X	X	X

1 FLASHBACK ARRESTORS FOR CUTTING MACHINES

Material	Model	Remarks	Gases / Max. working pressures / Flows					Safety elements						
			Acetylene (A)	Oxygen (O)	LPG (P)	Hydrogen (H)	Natural Gas (M)	Inlet Gas Filter – depending on connection –	Flame Arrestor (FA)	Non-Return Valve (NV)	Temperature activated Cut-off Valve (TV)	Pressure actuated Cut-off Valve (PV)	Pressure Relief Valve	
Brass		E460-3		1.5 bar / 9.3 m³/h	20 bar	5 bar	4 bar	5 bar	X	X	X			
		RF53U		1.5 bar / 12 m³/h	30 bar	5 bar	3 bar	5 bar	X	X	X			
		85-10U		1.5 bar / 20.3 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X			
		85-10UEX	off-centre-nut	1.5 bar / 20.3 m³/h	30 bar	5 bar	4 bar	5 bar	X	X	X			








2 PRESSURE REGULATOR STATIONS AND OUTLET POINTS

Application	Model	Remarks	Gases / Max. working pressures / Flows							
			Acetylene (A)	Oxygen (O)	LPG (P)	Hydrogen (H)	Natural Gas (M)	Argon (Ar)	Nitrogen (N2)	
Dome pressure regulator		737 LE HD			Max. inlet pressure 200 bar Outlet pressure 2-45 bar Kv-Value = 1.65		Max. inlet pressure 200 bar Outlet pressure 2-45 bar Kv-Value = 1.65		Max. inlet pressure 200 bar Outlet pressure 2-45 bar Kv-Value = 1.65	Max. inlet pressure 200 bar Outlet pressure 2-45 bar Kv-Value = 1.65
		737 LE / 772 LE			Max. inlet pressure 60 bar Outlet pressure 2-9 bar Kv-Value = 2.4 / 0.7		Max. inlet pressure 60 bar Outlet pressure 2-9 bar Kv-Value = 2.4 / 0.7		Max. inlet pressure 60 bar Outlet pressure 2-9 bar Kv-Value = 2.4 / 0.7	Max. inlet pressure 60 bar Outlet pressure 2-9 bar Kv-Value = 2.4 / 0.7
		737 LE-ND			Max. inlet pressure 5 or 10 bar Outlet pressure 0.1-2 bar or 0.2-2 bar Kv-Value = 3.6	Max. inlet pressure 5 or 10 bar Outlet pressure 0.1-2 bar or 0.2-2 bar Kv-Value = 3.6	Max. inlet pressure 5 or 10 bar Outlet pressure 0.1-2 bar or 0.2-2 bar Kv-Value = 3.6	Max. inlet pressure 5 or 10 bar Outlet pressure 0.1-2 bar or 0.2-2 bar Kv-Value = 3.6	Max. inlet pressure 5 or 10 bar Outlet pressure 0.1-2 bar or 0.2-2 bar Kv-Value = 3.6	Max. inlet pressure 5 or 10 bar Outlet pressure 0.1-2 bar or 0.2-2 bar Kv-Value = 3.6
Outlet points		503 / 603 / 610	light weight design; 1-, 2-, 3-combination	1.5 bar	10 bar / 40 bar	16 bar	16 bar	16 bar	16 bar	16 bar
Manifold pressure regulator		ADR 150	2 bar version available	Max. inlet pressure 25 bar Outlet pressure 0-1.5 bar (2 bar) Max. flow 150 m³/h						
Pressure regulator stations		684 NG	Manual or automatic change-over	Max. inlet pressure 25 bar Outlet pressure 0-1.5 bar Max. flow 10 m³/h	Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 75 m³/h		Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 75 m³/h	Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 75 m³/h	Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 75 m³/h	Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 75 m³/h
		386N		Max. inlet pressure 25 bar Outlet pressure 0-1.5 bar Max. flow 30 m³/h	Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 200 m³/h		Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 200 m³/h	Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 200 m³/h	Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 200 m³/h	Max. inlet pressure 300 bar Outlet pressure 0-20 bar Max. flow 200 m³/h

3 NON-RETURN VALVES

Material		Model	Remarks	Gases / Max. working pressures							Connection
				Opening pressure	Acetylene (A)	Oxygen (O)	LPG (P)	Hydrogen (H)	Natural Gas (M)	Nitrogen (N ₂)	
Brass		NV 100		30 mbar	1.5 bar	25 bar	25 bar	25 bar	25 bar	25 bar	G 1/8-G 1/8
		NV 200	CE-marked > DN 25	4 mbar	1.5 bar	16 bar 30 bar 40 bar	16 bar	16 bar 30 bar 40 bar	16 bar	16 bar 30 bar 40 bar	G 1/2-G 1
		NV 70	CE-marked > DN 25	4 mbar		16 bar	16 bar	16 bar	16 bar	16 bar	G 3/4-G 1.1/2
		NV 70U	CE-marked > DN 25	4 mbar		16 bar	16 bar	16 bar	16 bar	16 bar	G 3/4-G 1.1/2
		NV 300	CE-marked > DN 25	4 mbar		16 bar	16 bar	16 bar	16 bar	16 bar	G 1-G 1.1/4
		NV 400	CE-marked > DN 25	4 mbar		16 bar	16 bar	16 bar	16 bar	16 bar	G 1.1/4-G 2
		HD NV 650			20 mbar	25 bar					DIN 477
Steel		NRV 800	CE-marked > DN 25	6-8 mbar		10 bar	10 bar		10 bar	10 bar	Flange DN 80 / DN 100
		NV 2000		5 mbar			10 bar		10 bar	10 bar	Flange DN 80 / DN 100
Stainless steel		600-ES		4 mbar	1.5 bar	16 bar 30 bar 40 bar	16 bar	16 bar 30 bar 40 bar	16 bar	16 bar 30 bar 40 bar	G 1/2-G 1
		338-ES	CE-marked > DN 25	6 mbar		16 bar	16 bar	16 bar	16 bar	16 bar	G 1
		339-ES	CE-marked > DN 25	5 mbar		16 bar	16 bar	16 bar	16 bar	16 bar	G 1.1/2-G 2
		GRS 800			1 bar		240 bar		300 bar	300 bar	1/4" NPT




4 SAFETY RELIEF VALVES

Material	Image	Model	Remarks	Technical information					Features		
				Opening pressure	Inlet-connection	Outlet-connection	With condensation outlet	Inlet filter (optional)	Manual ventilation	Manufactured and certified according to EN ISO 4126-1 AD 2000 bulletin A2 and VdTUV-bulletin 100	Single certification (Modul F)
Brass		SV 805 SV 809	CE-marked according to PED 97/23/EG CE0045	0.5 bar–45 bar 45 bar–100 bar	G 1/4–G 3/4 1/4" NPT–3/4" NPT	M24 x 1	X			X	X
		SV 808 SV 810	CE-marked according to PED 97/23/EG CE0045	0.5 bar–45 bar 45 bar–100 bar	G 1/4–G 3/4 1/4" NPT–3/4" NPT	M24 x 1	X		X	X	X
		AV 619.2		0.005 bar–< 0.5 bar	G 1/2 – G 1	G 1/2 – G 1	X	X	X	X	X
Aluminium anodized		AV 339	CE-marked according to PED 97/23/EG CE0045	0.040 bar–0.08 bar	G 2	G 2					X
Stainless steel		SV 805-ES SV 809-ES	CE-marked according to PED 97/23/EG CE0045	0.5 bar–45 bar 45 bar–100 bar	G 1/4–G 3/4 1/4" NPT–3/4" NPT	M24 x 1	X			X	X
		SV 808-ES SV 810-ES	CE-marked according to PED 97/23/EG CE0045	0.5 bar–45 bar 45 bar–100 bar	G 1/4–G 3/4 1/4" NPT–3/4" NPT	M24 x 1	X		X	X	X
		AV 619-ES		0.005 bar–< 0.5 bar	G 1/2 – G 1	G 1/2 – G 1		X			X



5 QUICK COUPLINGS EN 561 / ISO 7289

Application	Image	Model	Remarks	Gases / Max. working pressures /Flows					Safety elements	
				Acetylene (A)	Oxygen (O)	LPG (P)	Hydrogen (H)	Natural Gas (M)	Inlet Gas Filter – depending on connection	Non-Return Valve (NV)
Couplings for torch, hose, outlet point		SK100-1/-2 body	With automatic cut-off valve	1.5 bar / 12.5 m³/h	20 bar	20 bar	20 bar	20 bar	X	X
		SK100-3 body	With automatic cut-off valve	1.5 bar / 12.5 m³/h	20 bar	20 bar	20 bar	20 bar		
		SK100-1 probe		1.5 bar / 12.5 m³/h	20 bar	20 bar	20 bar	20 bar		
		SK100-2/-3 probe		1.5 bar / 12.5 m³/h	20 bar	20 bar	20 bar	20 bar		





6 GAS FILTERS

Application	Image	Model	Remarks	Gases / Max. working pressures / Flows				
				Acetylene (A)	Oxygen (O)	LPG (P)	Hydrogen (H)	Natural Gas (M)
Gas Filter for outlet points		622		1.5 bar / 62 m³/h	16 bar	16 bar	16 bar	16 bar
Gas Filter for pipelines		77	Condensat outlet	1.5 bar / 312 m³/h	40 bar	16 bar	16 bar	16 bar
		625	Condensat outlet	1.5 bar / 458 m³/h	10 bar	16 bar	16 bar	16 bar

7 GAS MIXERS

Application	Image	Model	Remarks	For all technical gases				
				Minimum inlet pressure	Maximum inlet pressure	Maximum flow capacity	Mixing range	Mixing precision
Gas mixers		KM 100	For 2 or 3 Gases. Option: mounted on buffer tank	2 bar	20 bar	43 Nm³/h	0-100 %	better + / - 1 %
		MG 50 - MG 500		3 bar	20 bar	100 Nm³/h- 940 Nm³/h	0-25 % or 0-100 %	better + / - 1 %

8 SPECIAL EQUIPMENT

Application	Image	Model	Remarks	Gases / Max. working pressures / flows					Safety elements	
				Acetylene (A)	Oxygen (O)	LPG (P)	Hydrogen (H)	Natural Gas (M)	Flame Arrestor (FA)	Temperature activated Cut-off Valve (TV)
Automatic slam shut valve		HDS 17		25 bar / 195 m³/h						
Decomposition Arrestors		FN12 / FN40		1.5 bar / 63.4 m³/h 1.5 bar / 119 m³/h					X	X
Ball valve		DN6 - DN100		1.5 bar / 25 bar	10 bar, 40 bar	25 bar	25 bar	25 bar		
Test equipment		722 / 743	For flashback arrestors and non-return valves							

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 couplers
- Safety valves
- Stainless steel devices
- Gas filters
- Pressure regulators
- Lance holders
- Ball valves
- Automatic hose reels
- Test equipment
- Accessories
- Customised safety equipment



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