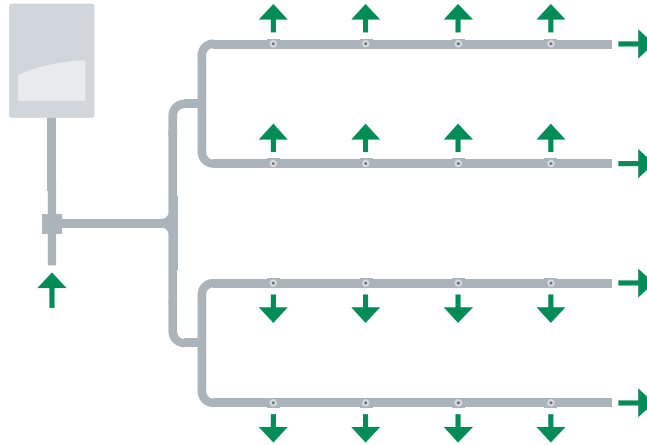


Pipe cleaning

An air purge system is used for cleaning the pipe system and/or sampling points in areas that are difficult to access:

- In very dusty applications, the deposits forming in the pipe system are blown out with overpressure via the non-return valves at the sampling branch ends.
- In cold storage areas, the sampling points are de-iced with short bursts of compressed air. Plastic clips enable icing to be blown off in this case.



Depending on how often a pipe system has to be purged, the use of a manual air purge system or an automatic air purge system is recommended.

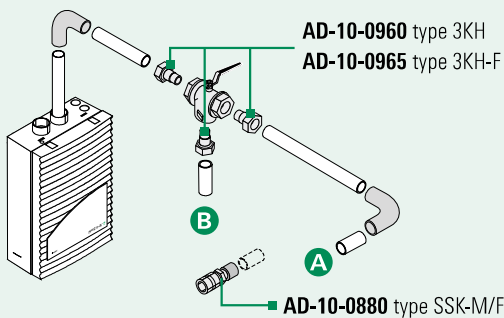
Important:

When using an air purge system in a cold storage area, ABS piping must be used in any case.

Manual air purge system

(sample setup; project planning must be performed in accordance with the manual.)

Connections: A – compressed air supply, B – pipe system



Purging of the pipe system by operating a three-way ball valve

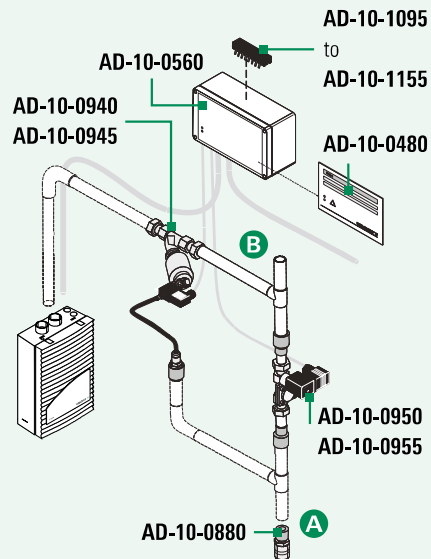
Aspiration reductions for air purging:

- 01-10-9750 type AK-C
- 01-10-9580 to 01-10-9740

Automatic air purge system

(sample setup; project planning must be performed in accordance with the manual.)

Connections: A – compressed air supply, B – pipe system



Automatic purging via a microcontroller-commanded device – particularly for frequent purging in case of heavy soiling or icing up

Aspiration reductions for air purging:

- 01-10-9750
- 01-10-9580 to 01-10-9740

For valve control performance characteristics, please refer to the microcontroller specifications

Valve control

Accessories for establishing a valve control for automatically controlling the purging process. Various microcontrollers are available for different purging and settling times

Article no. **AD-10-0561**



Performance characteristics:

- Enables air purging of two separate pipe systems
- Device prepared for accommodating a micro-controller that is adapted to the operating conditions

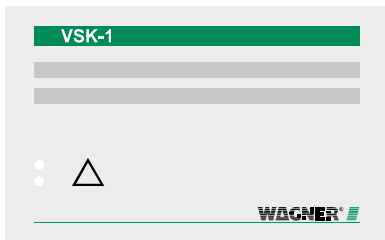
**Valve control
Type VSK1/c**

For automatic purging of iced up or soiled pipe systems

Data sheet excerpt:

Operating voltage	24 V DC (14 to 30 V DC)
Rated voltage	24 V DC
Current draw in stand-by (24 V)	20 mA
Current draw during valve control (24 V)	100 mA
Operating temperature range	-40 °C to +60 °C
Dimensions (W × H × D)	200 × 140 × 80 mm
Housing material	ABS plastics
Housing color	RAL 7035, Light gray
VPE	1 pc
i	Required front film sheet: AD-10-0480
i	Required microcontrollers: see page 106

Article no. **AD-10-0480**



**Front film sheet for valve control
Type FW-VC**

For indicating the operating status of the valve control

VPE	1 pc
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Microcontroller for valve control



Microcontroller for valve control

NEW

Programmed microcontroller for controlling the automatic air purging process of the valve control, for purging soiled or iced-up pipe systems. A fault reported by the aspirating smoke detector is forwarded after two purging cycles if the purging process failed to remedy the fault (e.g. in case of pinched pipes).

Data sheet excerpt:

Performance characteristics

Air purging in case of fault, and optionally also as prophylaxis

VPE 1 pc

i For installation in valve control type VSK1/c

Microcontroller							
Use for	Air purging		Purging time [s]	Settling time [s]	Test time [s]	Article number	Type
	In case of fault	Prophylactic					
Soiling	×	–	1 × 10	20	55	AD-10-1095	MC-VC-R-7
	×	Every 24 h	1 × 10	20	55	AD-10-1105	MC-VC-R-8
	×	Every 24 h	1 × 20	12	55	AD-10-1155	MC-VC-R-11
	×	Every 3 h	1 × 10	20	55	AD-10-1145	MC-VC-R-10
	×	Every 60 min	1 × 10	20	55	AD-10-1135	MC-VC-R-9
Icing up	×	–	3 × 5	10	55	AD-10-1115	MC-VC-F-3
	×	Every 24 h	3 × 5	10	55	AD-10-1125	MC-VC-F-4

Valves for automatic air purge systems

Valves

Valves for compressed air connection, to relieve the pipe system and automatically separate an aspirating smoke detector from the connected pipe system

Article no. **AD-10-0940**

Performance characteristics:

- Pneumatically controlled 2/2-way piston valve (angled seat) with fitted pilot valve (currentless open)
- Prepared for connecting to 25 mm pipe systems

Shutoff valve with pilot valve / fittings
Type AVK-PV

For separating an aspirating smoke detector from the connected pipe system during an automatic air purging process

Data sheet excerpt:

Switching voltage	24 V DC
Operating temperature range	-10 °C to +60 °C
Operating pressure	Max. 16 bar
Control pressure	4 to 10 bar
Material	Red brass
Control cylinder	Stamped brass
Seat gasket	PTFE
Spindle gasket	NBR
VPE	1 pc

Article no. **AD-10-0945**

Performance characteristics:

- Pneumatically controlled 2/2-way piston valve (angled seat) with fitted pilot valve (currentless open)
- Prepared for connecting to 25 mm pipe systems

Shutoff valve with pilot valve / fittings
Type AVK-PV-F

For separating an aspirating smoke detector from the connected pipe system during an automatic air purging process in cold storage areas

Data sheet excerpt:

Switching voltage	24 V DC
Operating temperature range	-40 °C to +60 °C
Operating pressure	Max. 16 bar
Control pressure	4 to 10 bar
Material	Red brass
Control cylinder	Stamped brass
Seat gasket	PTFE
Spindle gasket	EPDM
VPE	1 pc

Article no. **AD-10-0950****Performance characteristics:**

- Servo-controlled seat valve (currentless closed) with diaphragm seal
- Prepared for connecting to 25 mm pipe systems

Compressed air valve including fittings
Type DVK13
For releasing a compressed air supply connected to the pipe system during an automatic air purging process
Data sheet excerpt:

Switching voltage	24 V DC
Operating temperature range	-10 °C to +60 °C
Operating pressure	0.3 to 20 bar
Material	Brass
Control cylinder	Stamped brass
Spindle gasket	NBR

VPE 1 pc
Article no. **AD-10-0955****Performance characteristics:**

- Servo-controlled seat valve (currentless closed) with diaphragm seal
- Prepared for connecting to 25 mm pipe systems

Compressed air valve including fittings
Type DVK13-F
For releasing a compressed air supply connected to the pipe system during an automatic air purging process in cold storage areas
Data sheet excerpt:

Switching voltage	24 V DC
Operating temperature range	-40 °C to +60 °C
Operating pressure	0.3 to 20 bar
Material	Brass
Control cylinder	Stamped brass
Spindle gasket	EPDM

VPE 1 pc

The ball valve performance characteristics are assigned to the individual types

Ball valves

Ball valves for separating an aspirating smoke detector manually from the connected air sampling pipe

Article no. **AD-10-0970**



Performance characteristics:

- Incl. three transition screw connections for connecting to a 25 mm pipe system

**2-way ball valve including fittings
Type 2KH**

For separating an aspirating smoke detector manually from the connected pipe system

Data sheet excerpt:

Operating temperature range	-45 °C to +180 °C
Length	188 mm
Operating pressure	Max. 50 bar
Housing material	Stainless steel
Ball material	Stainless steel
Seal	PTFE
Hand lever	Steel, plastic-coated

VPE 1 pc

Article no. **AD-10-0960**



Performance characteristics:

- Incl. three transition screw connections for connecting to a 25 mm pipe system

**3-way ball valve including fittings
Type 3KH**

For separating an aspirating smoke detector manually from the connected pipe system during an air purging process

Data sheet excerpt:

Operating temperature range	-20 °C to +150 °C
Length	194 mm
Operating pressure	Max. 16 bar
Housing material	Brass, nickeled
Ball material	Brass, chromed
Seal	PTFE
Hand lever	Steel, plastic-coated

VPE 1 pc

Article no. **AD-10-0965****Performance characteristics:**

- Incl. three transition screw connections for connecting to a 25 mm pipe system

3-way ball valve including fittings
Type 3KH-F

For separating an aspirating smoke detector manually from the connected pipe system during an air purging process in cold storage areas

Data sheet excerpt:

Operating temperature range	−40 °C to +80 °C
Length	194 mm
Operating pressure	Max. 10 bar
Housing material	Brass, nickeled
Ball material	Brass, chromed
Seal	PTFE
Hand level	Steel, plastic-coated

VPE	1 pc
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Article no. **AD-10-0925****Performance characteristics:**

- Incl. three transition screw connections for connecting to a 25 mm pipe system

3-way ball valve including fittings
Type 3KH-PVC

For separating an aspirating smoke detector manually from the connected pipe system during an air purging process

Data sheet excerpt:

Operating temperature range	0 °C to +50 °C
Length	131 mm
Operating pressure	Max. 10 bar
Material	PVC
Seal	PTFE

VPE	1 pc
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Article no. **AD-10-0915****Performance characteristics:**

- Incl. three transition screw connections for connecting to a 25 mm pipe system

3-way ball valve including fittings
Type 3KH-ABS

For separating an aspirating smoke detector manually from the connected pipe system during an air purging process. Can be used in cold storage areas and/or for halogen-free project planning

Data sheet excerpt:

Operating temperature range	−40 °C to +50 °C
Length	131 mm
Operating pressure	Max. 10 bar
Material	ABS
Seal	PTFE

VPE	1 pc
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Pipe closures for air purge systems

Non-return valve

Valve for cleaning the pipe system by means of bursts of compressed air

Article no. **01-10-9380**



Performance characteristics:

- Installation is done at the end of each piping branch for pipe systems with an air purge system

**Non-return valve, spring-loaded
Type RSV-R25**

For cleaning the pipe system during an air purging process

Data sheet excerpt:

Connection diameter	25 mm
Color	Dark gray
Minimum opening pressure	0.5 bar
Housing material	PVC
Operating temperature range	0 °C to +50 °C

VPE 1 pc

i Not suitable for cold storage applications!

Installation and connection accessories for air purge systems

Accessories

Quick-connect coupling for establishing an air purge system

Article no. **AD-10-0880**



Performance characteristics:

- Incl. transition connection for connecting to a 25 mm pipe system

**Quick-connect coupling with fittings
Type SSK-M/F**

For detachable connection of a compressed air supply to a pipe system

Data sheet excerpt:

Operating temperature range	-20 °C to +80 °C
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VPE 1 pc