



# GIEBEL

## Adsorber®

...setting standards in aeration!

## VENT PA

**GIEBEL Adsorber®** of the VENT PA series are characterised by their modular build up. They are useful in several kind of applications.

Available for the ventilation of food in accordance to the declaration of conformity regarding to regulations (EG) No. 1935/2004.

Available for usage according to the corrosiveness category C5-M.



GIEBEL Adsorber®  
designed & produced  
in Germany

## APPLICATIONS



Hydraulics



Electronics



Gears



Shipping



PU(R)-Systems



Pneumatics



Transformers



Laboratory applications



Bulk storage



Drums & IBC

## ADSORBENTS

Silica gel



Orange → Colorless



Orange → Green

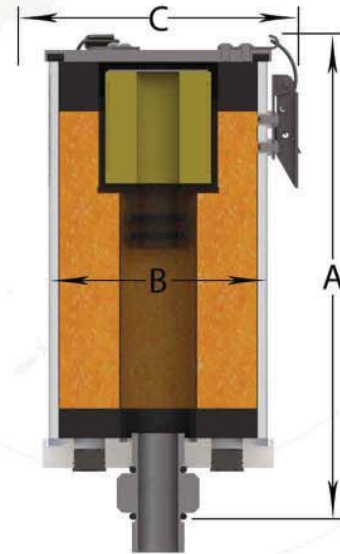
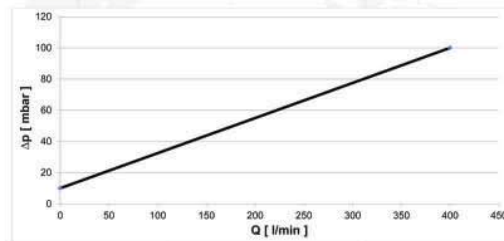


## TECHNICAL DATA

ADSORBER	USE	AIR FLOW RATE [l/min]	TOTAL WEIGHT [kg]	ADSORBENTS [kg]	SIZE A [mm]	SIZE B [mm]	SIZE C [mm]	CONNECTION	VALVES [I-O]
varioVENT 120-PA	Not refillable	1	0,2	0,1	105	60	65	G 3/8" a (SW19)	0-0 (1-1)
varioVENT 140-PA	Not refillable	2	0,3	0,2	145	60	65	G 3/8" a (SW19)	0-0 (1-1)
varioVENT 130-PA	Refillable	1	0,2	0,1	110	60	65	G 3/8" a (SW19)	1-1 (0-0)
varioVENT 150-PA	Refillable	2	0,3	0,2	150	60	65	G 3/8" a (SW19)	1-1 (0-0)
varioVENT 200-PA	Not refillable	5	0,9	0,3	160	90	96	G 1/2" a (SW27)	0-0 (1-1)
varioVENT 220-PA	Not refillable	10	1,2	0,5	220	90	96	G 1/2" a (SW27)	0-0 (1-1)
varioVENT 210-PA	Refillable	5	1,0	0,3	190	90	125	G 1/2" a (SW27)	1-1 (0-0)
varioVENT 230-PA	Refillable	10	1,3	0,5	230	90	125	G 1/2" a (SW27)	1-1 (0-0)
varioVENT 300-PA	Not refillable	20	1,7	0,8	230	110	115	G 3/4" a (SW27)	0-0 (2-2)
varioVENT 320-PA	Not refillable	40	2,4	1,4	330	110	115	G 3/4" a (SW27)	0-0 (2-2)
varioVENT 310-PA	Refillable	20	1,9	0,8	240	110	140	G 3/4" a (SW27)	2-2 (0-0)
varioVENT 330-PA	Refillable	40	2,6	1,4	340	110	140	G 3/4" a (SW27)	2-2 (0-0)
varioVENT 500-PA	Not refillable	100	3,4	2,0	250	150	155	G 1" a (SW36)	0-0 (3-3)
varioVENT 520-PA	Not refillable	180	5,0	3,0	370	150	155	G 1" a (SW36)	0-0 (3-3)
varioVENT 510-PA	Refillable	100	3,7	2,0	260	150	180	G 1" a (SW36)	3-3 (0-0)
varioVENT 530-PA	Refillable	180	5,3	3,0	380	150	180	G 1" a (SW36)	3-3 (0-0)

## SPECIFICATIONS

Color change:	Orange → Green / Colorless
Assembly:	vertical
Operation:	pressureless
Temperature range:	-40 - +70°C
Material:	Acrylic glass & Aluminium
Sealing:	NBR (FKM)
Adsorbents:	Silica gel & Activated carbon (Molecular sieves, DrySorbent)
Filter:	3µm



## REPLACEMENT PARTS

Adsorber parts optional:

- disposable adsorber parts or
- reusable adsorber parts

with removable cap to change the Adsorbents and the particel filter

ADSORBER	ADSORBER PART	REGENERATION SET	SPARE PARTS KIT
varioVENT 120-PA	Adsorber part vV 121-PA		
varioVENT 140-PA	Adsorber part vV 141-PA		
varioVENT 130-PA		Regenerations set 132	Spare parts kit vV 133-PA
varioVENT 150-PA		Regenerations set 152	Spare parts kit vV 153-PA
varioVENT 200-PA	Adsorber part vV 201-PA		
varioVENT 220-PA	Adsorber part vV 221-PA		
varioVENT 210-PA		Regenerations set 212	Spare parts kit vV 213-PA
varioVENT 230-PA		Regenerations set 232	Spare parts kit vV 233-PA
varioVENT 300-PA	Adsorber part vV 301-PA		
varioVENT 320-PA	Adsorber part vV 321-PA		
varioVENT 310-PA		Regenerations set 312	Spare parts kit vV 313-PA
varioVENT 330-PA		Regenerations set 332	Spare parts kit vV 333-PA
varioVENT 500-PA	Adsorber part vV 501-PA		
varioVENT 520-PA	Adsorber part vV 521-PA		
varioVENT 510-PA		Regenerations set 512	Spare parts kit vV 513-PA
varioVENT 530-PA		Regenerations set 532	Spare parts kit vV 533-PA

## PROCESS



### DRYING OF SUPPLY AIR ADSORPTION

- Fill level inside the system drops
- Moist air will be sucked in
- Valves open at 5 mbar
- Consistent perfusion
- Supply air will be dried, silica gel changes color to green/colorless
- Supply air will be cleaned pending to 3µm

Dry and clean supply air!



### REGENERATION ADSORBENTS DESORPTION

- Fill level inside the system rises
- Dry, oily exhaust air crushed out
- Activated carbon absorbs oil vapor
- Dry, oil-free exhaust air regenerates the desiccant
- Silica gel changes color partially back to orange

Selfregeneration and oil-free exhaust air!

## BUILD UP AND ADDED VALUE



### SELF REGENERATION

Multiple extended period of use.

### DESICCANT

Efficient desiccant with harmless color indicator with change from orange to green or colorless.



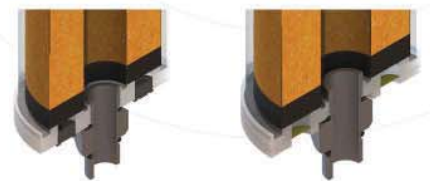
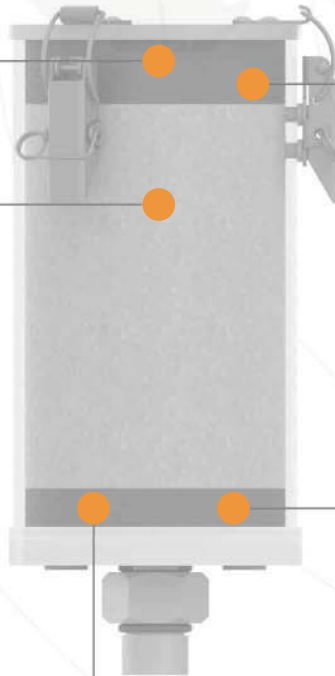
### OPTIONAL X-VERSION

Longer durability owing to special hygroscopic disc.



### FILTER

Clean supply air owing to integrated 3 µm filter.



### VALVES OR MEMBRANE

Protected against needless loading ensures long period of use.

### REFILLABLE

Easy refilling for favourable operating costs.



GIEBEL FilTec GmbH

Carl-Zeiss-Str. 5 | D-74626 Bretzfeld-Schwabbach | Germany

+49 (0) 7946 944401-0 +49 (0) 7946 944401-29

info@giebel-adsorber.de | www.giebel-adsorber.de

