

Cjcarpga_j Bce_qqg l e Bctgac **GAS-EX**



EN

02

Operation & Maintenance Instructions

Read these operation and maintenance instructions before start up!
To be held for future reference.

General

Why using a degassing device?

Metering pumps with small flow rates of up to 50 l/h often work imprecisely or must be vented manually if larger amounts of gas or air have entered the metering head.

Air can appear in the head when switching tanks (i.e. when transferring from one tank to the other). Gas bubbles are produced when metering effervescent media, such as bleaching lye or hydrogen peroxide.

Function

The GAS-EX degassing device ensures that the pump can be easily vented in settable intervals, because it returns the medium pressurelessly to the supply tank. If no metering stroke is carried out during the venting phase, gas which may have been present can still appear due to relaxation. If no gas was present, only little or no liquid is returned to the supply tank; this is because liquid cannot expand.

The design has an optimized clearance value so that even small pumps will re-attain full operating pressure right after venting. A nonreturn valve prevents medium from flowing backwards from the pressurized line during the venting phase.

The unit can be set to open every 30 seconds to 45 minutes. The opening duration can be set between 0.5 and 10 seconds. We recommend 2 seconds. Depending on the stroke frequency of the pump, up to three venting strokes can be performed during this time, returning the medium to the supply tank. When operating at full stroke frequency and with venting every 60 seconds, the capacity of the metering pump is reduced by approx. 3 %; this must be taken into account when dimensioning the pump. A separate start key which opens the degassing valve for as long as the key is pressed allows the pump to start metering very quickly.

Between the venting phases, the operation of the metering pump is not impaired. 100 % of the medium is led to the metering outlet.

Control

Using the timer, the venting phase can be set to occur between every 30 seconds and every 45 minutes. However, it is also possible to replace the timer with a standard end head in order to allow external control equipment or e.g. a PLC to influence control. It is thus possible to control the venting of the metering pump in dependence of the process and also to chose venting periods of any desired duration and/or to discontinue degassing during the metering process. For instance, gas which accumulated in the system during an idle period on



the weekend can be eliminated in a longer venting phase and the normal metering process then be resumed with periodic degassing.

Design

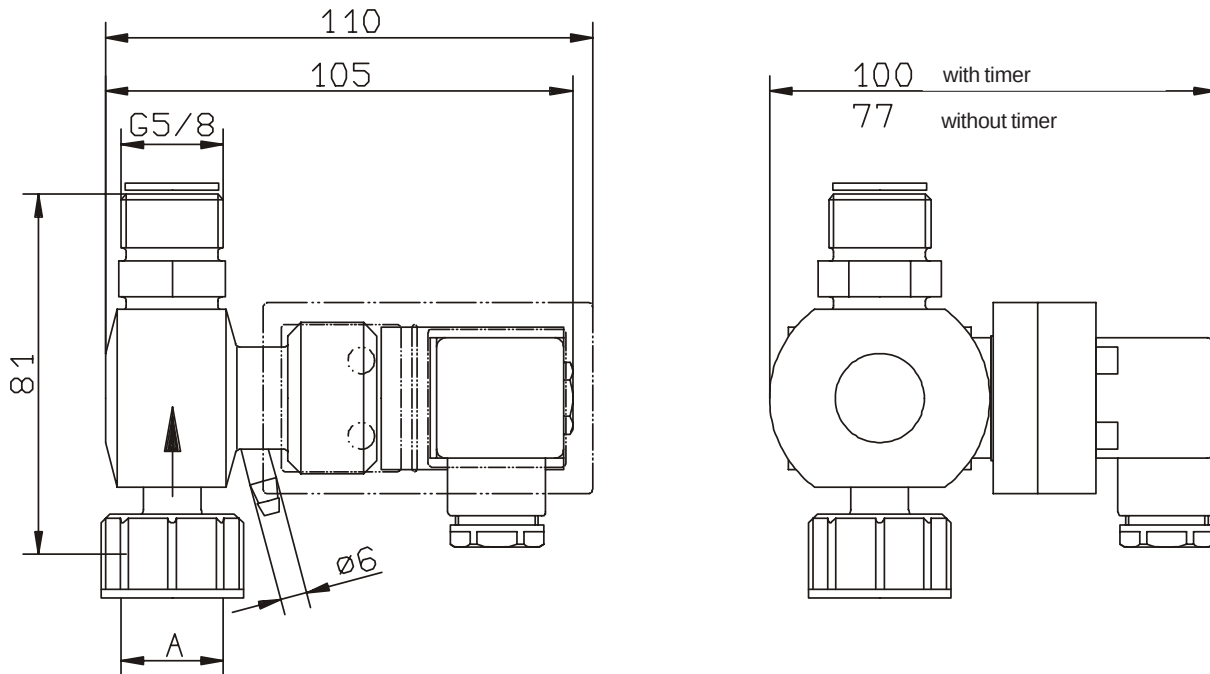
The device can be chosen with a housing made of PVC and transparent acrylic (PMMA). A flow indicator in the form of a white ball which jumps with every metering stroke is located in the connection nozzle.

Installation

The degassing device should be mounted directly on the discharge valve of metering pumps with flow rates of up to 2 l/h. Thus the line volume which has to re-attain operating pressure after venting is kept small. If pumps are integrated in a closed control loop, it is also possible to mount the degassing device on a tank or to vertical walls using an adapter.

The return tubing should preferably be directed downwards below the level of the supply tank.

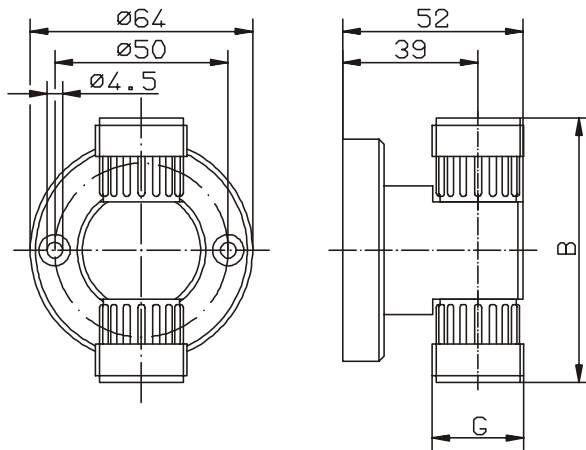
Dimensions



GAS-EX degassing device

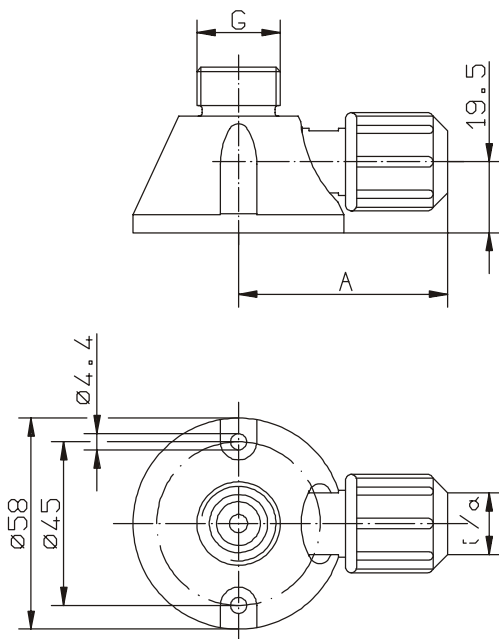
Connection A	Material		Voltage V/Hz		Timer	Part No.
	PVC	PMMA	230/50/60	115/50/60		
G 5/8	X		X		X	13300022
		X	X		X	13300012
	X			X	X	13300023
		X		X	X	13300013
	X		X			13300020
		X	X			13300010
	X			X		13300021
		X		X		13300011
G 3/4	X		X		X	13300018
	X		X			13300019

Wall holder



Part No.	G	B
34563	G 5/8	72
34564	G 3/4	76

Base

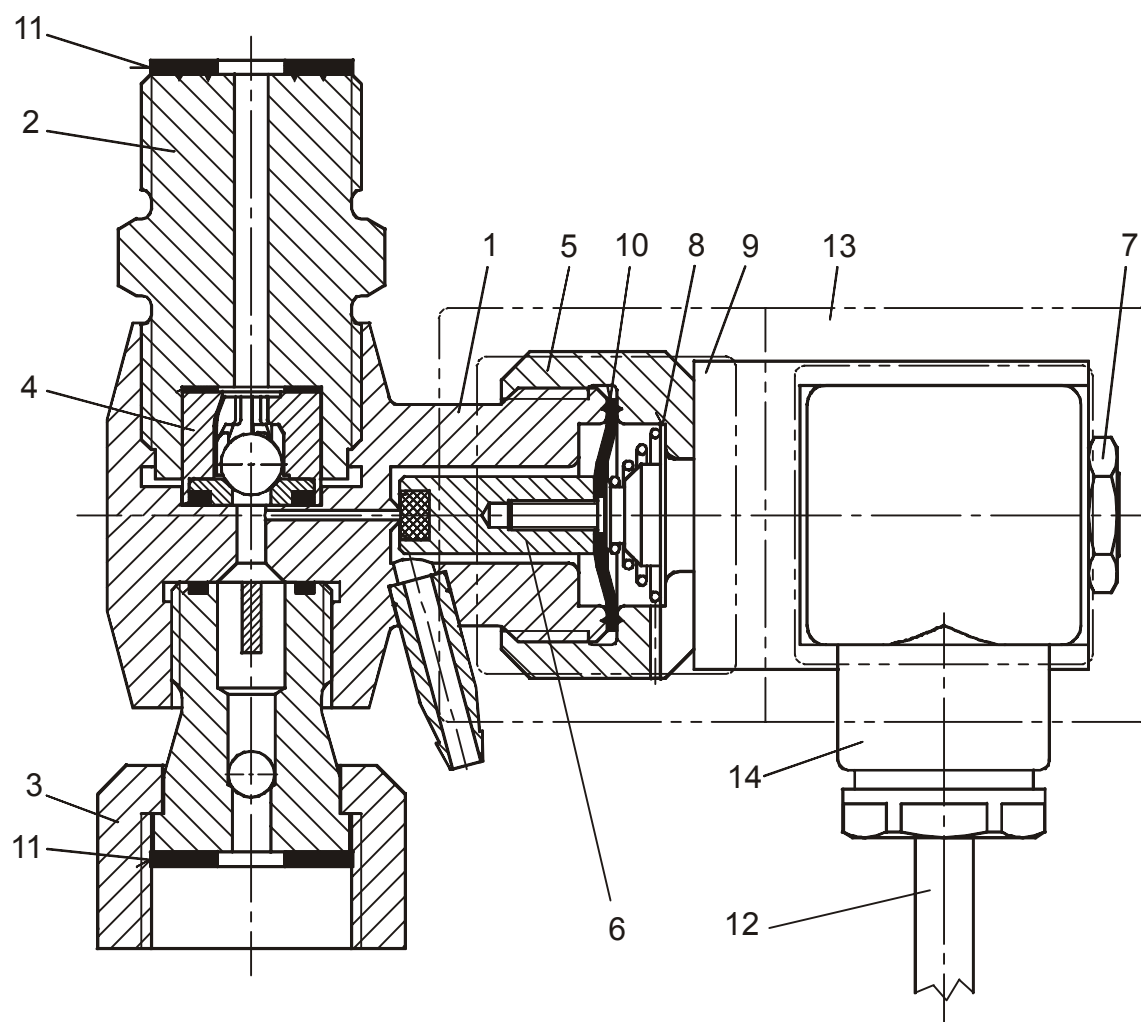


Part No.	G	i/a	A
34560	G 5/8	4/6	45
34561		6/12	58
34562	G 3/4	6/12	58

Technical data

Material	Housing other liquid-end parts	transparent PMMA, PVC grey glass, ceramic, PVDF, Viton
Flow rate	- with pulsating flow: - with smoothed flow:	15 l/h 50 l/h
Temperature		max. 35° C
Coil		8 Watt, 230 V / 50/60 Hz or 115 V / 50/60 Hz, Protection Class IP 65, 100 % duration of connection
Timer		24 to 240 V 50/60 Hz Protection Class IP 65
Connecting cable		1.5 m with safety plug

Degassing Device GAS-EX



Item	Description	Qty	Part No.
1	PMMA/PVC housing	1	34447
	PVC housing	1	34766
2	Adapter	1	34448
3	Visual flow indicator assembly	1	34452
4	Nonreturn valve	1	34450
5	Union nut	1	34446
6	Armature assembly	1	34449
7	Hexagonal nut	1	34707
8	Guide for armature	1	34453
9	Valve coil 230V~	1	34454
	Valve coil 115V~	1	34456
10	Gasket	1	81730
11	Gasket	1	81371
12	Mains plug with cable 230V~	1	77868
	Mains plug with cable 115V~	1	78833
13	Timer 24...240V~ 50/60 Hz	1	77160
14	Coupler socket	1	37049

Warranty



Please copy and send with the device.

If the device breaks down within the period of warranty,
please return it in a cleaned condition with the complete warranty application, filled out.

Sender

Company:..... Phone:..... Date:.....

Address:.....

Contact person:

Manufacturer order-no.: Delivery date:.....

Device type:..... Serial no.:

Nominal capacity/nominal pressure:

Description of fault:

.....

Type of fault:

1. Mechanical fault

- ☐ premature wear
- ☐ wear parts
- ☐ breakage/other damage
- ☐ damage in transit

2. Electrical fault

- ☐ loose connections such as plug connector or cable
- ☐ operating elements (e.g.. switches/buttons)
- ☐ electronics - corrosion

3. Leaks

- ☐ connections
- ☐ dosing head

4. No or inadequate function

- ☐ defective diaphragm
- ☐ other

Service conditions of the device

Point of use / system designation:.....

Accessories used (Suction line, etc.):.....

.....

.....

Commissioning (date):

Duty period (approx. operating hours):

Please describe the specifics of the installation and provide a simple diagram with details of the material, diameter, length and levels.

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Declaration of harmlessness	
(please fill out a separate form for each appliance)	
We forward the following device for repairs:	
Type of device:	_____
Part-no.:	_____
Order-no.:	_____
Delivery date:	_____
Reason for repair:	_____ _____
Medium used:	_____ Properties: irritant: yes/no corrosive: yes/no
We hereby certify that the machine has been thoroughly cleaned inside and out before its dispatch and that it is free from health risk chemical, biological and radioactive materials as well as having been drained of oil. *)	
<i>If the manufacturer find it necessary to carry out further cleaning work, we accept the charge will be made to us.</i>	
We certify that the aforementioned information is correct and complete and that the unit is dispatched in compliance with legal requirements.	
Company / address:	Phone: Fax: E-Mail:
Customer-number:	
Contact person:	
_____	_____
Date	Signature / stamp
*) If not applicable please cross out!	

