# resideo Actuators for Filters

# Braukmann Z11AS

# Reverse rinsing actuator

for fully automatic filter cleaning

#### **APPLICATION**

The Z11AS automatic reverse rinsing actuator provides fully automatic cleaning for all reverse rinsing filters, filter combinations, water supply units and water distributor units. The reverse rinsing intervals are adjustable in sixteen steps between four minutes and three months. The Z11AShas an emergency running function in the event of power failure (only when batteries are fitted) and offers the possibility of manual operation of the reverse rinsing function. Connection options are available for differential pressure switching, remote control and remote monitoring.

## **SPECIAL FEATURES**

- Push buttons give easy setting of intervals
- Push button for manual operation of reverse rinsing
- Digital indicator of time interval set
- Digital indicator of number of reverse rinsing cycles carried out
- Facility to indicate time remaining before next programmed reverse rinsing cycle
- Reset button enables resetting of counter
- Settings are maintained even when electrical power fails
- Set during manufacture to 45 day interval
- Can be set to 16 different reverse rinsing intervals
- Automatic battery  $^{1)}$  run-on if mains supply fails
- Manufactured with integral electrical suppression
- Additional PG 9 cable entry for connection of remote operation, remote monitoring or differential pressure control
- Can be connected for differential pressure switch, remote operation or remote monitoring



## **TECHNICAL DATA**

Operating temperatures	
Operating temperatures	
Max. water temperature:	70 °C
Specifications	
Mains cable:	1.5 metres
Batteries:	Four LR6-1.5 V-Mignon/AA size alkali-manganese batteries <sup>1)</sup>
Battery life:	Approximately 3 years
Time intervals:	4 minutes to 3 months
Ambient conditions:	5 - 90 % relative humidity, 0 - 60 °C
Protection class:	DIN VDE 0700-T1/EN 60335-1
Protection type:	IP 55 sprayed water

<sup>&</sup>lt;sup>1)</sup> Batteries are not supplied with the appliance. Batteries are not necessary if automatic run-on in the event of power failure is not required. When batteries are fitted, the appliance should not be left unplugged for long periods.

### **CONSTRUCTION**

Overview		Components	Materials
	1	Ball valve	Nickel-plated brass
	2	Housing	High-quality synthetic material
	3	Mains cable	-

#### **METHOD OF OPERATION**

The Z11ASopens or closes the ball valve according to the set time interval. The opening of the ball valve causes a differential pressure within the filter which activates the reverse rinsing function. The ball valve closes again at the end of the reverse rinsing period. Four batteries (not supplied) provide back-up protection. The batteries close the ball valve if power fails during reverse rinsing function, thus preventing unwanted water loss.

#### **REVERSE RINSING**

Reverse rinsing duration when mains electrical operation approximately 25 sec.

Reverse rinsing quantity at 4.0 bar operating pressure.

Filter size	Drain connection	Reverse rinsing quantity (litres)
1/2" + 3/4"	DN50	12
1" + 1 <sup>1</sup> /4"	DN70	15
$1^{1}/_{2}" + 2"$	DN70	18
DN65 - DN100	DN100	150

#### TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

Parameter	Value
Environment:	clean, dry and dust free
Min. ambient temperature:	0 °C
Max. ambient temperature:	60 °C
Min. ambient relative humidity:	5 % *
Max. ambient relative humidity:	90 % *

<sup>\*</sup>non condensing

#### **INSTALLATION GUIDELINES**

#### Setup requirements

- In case the mains supply fails during the backwash the batteries (if they are fitted) provide the energy for closing the backwash ball valve. The battery charge should be checked regularly. At the latest after two years exchange the batteries with new ones
- In order to avoid flooding, it is recommended to arrange a permanent, professionally dimensioned wastewater connection

#### Installation Example

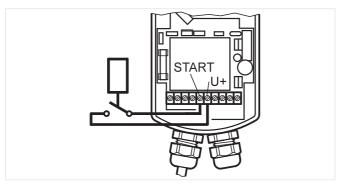


Fig. 1 Remote control analogous

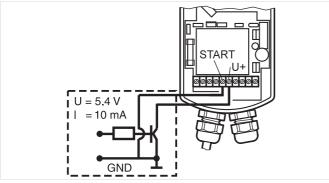


Fig. 2 Remote control digital

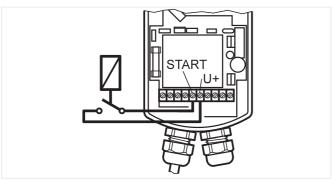


Fig. 3 Differential pressure switch

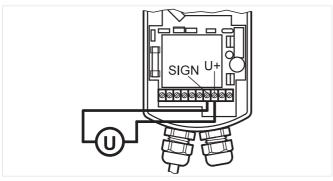


Fig. 4 Remote monitoring

#### **Additional connection options**

The Z11AS can be remotely actuated by:

- a) A volt-free switching circuit
- b) Via an open-collector output

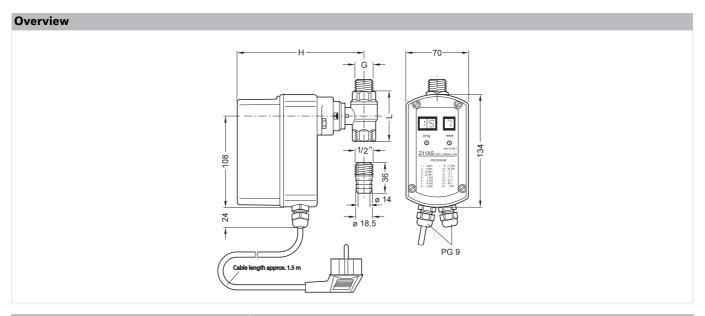
In both cases the minimum holding period is one second. Reverse rinsing occurs when the inputs "Start" and "U+" have been separated.

The reverse rinsing function can be actuated according to demand using the DDS76 differential pressure switch with voltage free switching. It is recommended that the differential pressure be set to 1.0 bar. Operation occurs when the inputs "Start" and "U+" have been separated, that is, after the differential pressure has fallen below the set value. Through this it is guaranteed that a maximum quantity of water is available for reverse rinsing. If reverse rinsing starts immediately irrespective of the duration of the differential pressure signal, then the inputs should be connected instead to "U+" and "SIGN".

The DDS76 differential pressure switch can only be used where F76 / F76S / F76S-F fine filters are also installed.

For remote monitoring of the open/closed position of the ball valve the installation of a building management system with 0 to 10 V input is recommended. The maximum current is 10 mA. With a current of 0.5 V the ball valve is open and with a value between 5 V and 6 V the ball valve is closed.

#### **DIMENSIONS**



Parameter		Values			
Filter size:	R	R <sup>1</sup> / <sub>2</sub> " - R2"	DN65 - DN100		
Dimensions:	G	1/2"	1"		
	Н	150	160		
	L	59	81		
Weight:	kg	1.2	1.7		

Note: All dimensions in mm unless stated otherwise.

#### **ORDERING INFORMATION**

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

#### Options

The actuator is available in the following sizes:  $\frac{1}{2}$ ,  $\frac{3}{4}$ ,  $\frac{1}{7}$ ,  $\frac{1}{4}$ ,  $\frac{1}{7}$  and  $\frac{2}{7}$ .

- standard
- not available

#### For filters and filter combinations HS10, F76, F76C, FK76C, FKN76C, FN76C and FN09 (up to 1996):

		Z11AS-1/2A	Z11AS-1/2B	Z11AS-1/2Z
Connection type:	230V, 50/60Hz, 10W with moulded Schuko electrical plug	•	-	-
	24 V, 50/60 Hz, 10 W without electrical plug	-	•	-
	230V, 50/60Hz, 10W with moulded Type $12electrical$ plug	-	-	•
	for Switzerland			

Note: From 1997 onwards: Use reverse rinsing actuator Z11AS for filters and filter combinations HS10S, F76S, F76CS, FK76CS, FK76CS, FN76CS and FN09S.

#### For filters with flanges F76-F and F76S-F:

		Z11AS-1A	Z11AS-1B	Z11AS-1Z
Connection type: 230 V, 50/60 Hz, 10 W with moulded Schuko electrical plug		•	-	-
	24 V, 50/60 Hz, 10 W without electrical plug	-	•	-
	230V, 50/60Hz, 10W with moulded Type 12 electrical plug for Switzerland	-	-	•



Manufactured for and on behalf of Pittway Sàrl, Z.A., La Pièce 4, 1180 Rolle, Switzerland by its authorised representative Ademco 1 GmbH

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