# Honeywell | Backflow Preventers

# **RV277**

# Controllable anti-pollution check valve EA type

Add-on for pressure reducing valves and filters

# **APPLICATION**

Check valves of this type are particularly suitable for integral use with pressure reducing valves, filters and filter combinations of all types.

Check valves are safety devices for independent prevention of water backflow, for example from drinking water appliances back into the central water supply system.

They can also be used for industrial, commercial and similar systems where back pressure, back flow and back syphonage must be prevented.

The classic fications of appliances to meet these requirements are specified in EN 1717.

#### **APPROVALS**

DVGW

#### **SPECIAL FEATURES**

- Universal application
- Easy installation
- Quiet operation
- Creates no shock pressure loadings
- Suitable for installation in any position
- Low pressure loss
- All materials are UBA conform

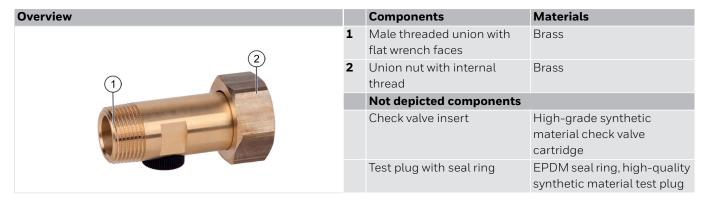




# **TECHNICAL DATA**

Media							
Medium:	Drinking water						
Connections/Sizes							
Connection size:	Male threaded union $\frac{1}{2}$ " - 2"						
	Female threaded union $1" - 2^1/2"$						
Pressure values							
Opening pressure:	approx. 0.01 bar						
Max. inlet pressure:	25.0 bar						
Operating temperatures							
Max. operating temperature	65 °C accord. DIN EN 13959						
medium:	(short term operation up to 90 °C)						
Specifications							
Liquid category:	2 (no hazardous materials)						

#### CONSTRUCTION



## **METHOD OF OPERATION**

Spring loaded check valves have a moving seal disc which is lifted off the seat by a greater or lesser amount depending on the flow rate through the valve. If the flow falls towards zero, then the spring pushes the disc back onto the seat and seals the waterway.

To ensure continuing correct function it is recommended that check valves be regularly checked and maintained (as specified in EN 1717).

#### 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:	5°C
Max. ambient temperature:	55 °C
Min. ambient relative humidity:	25 % *
Max. ambient relative humidity	85 % *

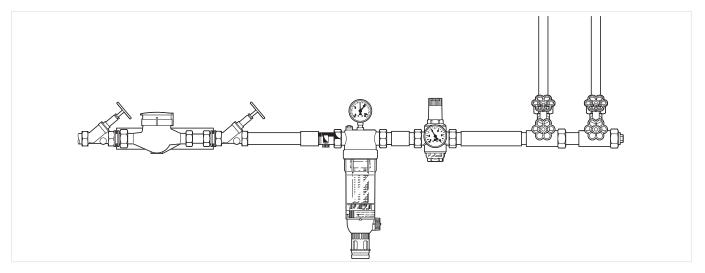
<sup>\*</sup>non condensing

#### INSTALLATION GUIDELINES

#### Setup requirements

- Install in horizontal pipework with test and drain plug downwards
  - This position is best for draining
- Install shut-off valves
  - Shut-off valves provide optimal serviceability
- Ensure good access
  - Simplifies maintenance and inspection

## **Installation Example**



# **TECHNICAL CHARACTERISTICS**

#### kvs-Values

Connection sizes:	15	20	25	32	40	50
$k_{vs}$ -value (m <sup>3</sup> /h):	6.0	10.0	15.0	28.0	41.0	70.0

# Pressure drop characteristics

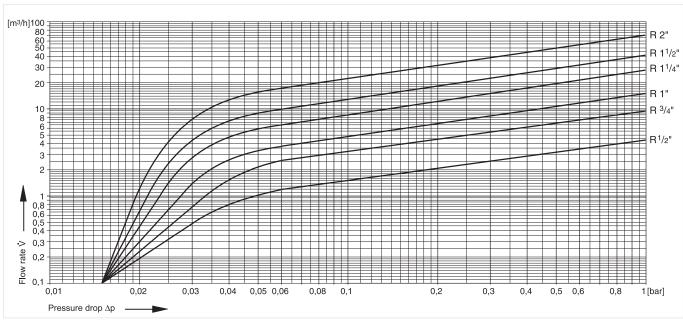
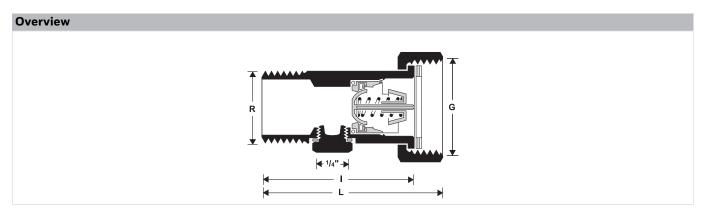


Fig. 1 Pressure drop within the valve in dependency of the flow rate and the used connection size

## **DIMENSIONS**



Parameter	Values						
Connection size:	R	1/2"*	3/4"	1"	11/4"	11/2"	2"
Nominal size diameter:	G	1"	1"	11/4"	11/2"	2"	21/2"
Test and drain plug:	R	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Weight:	kg	0.2	0.22	0.35	0.52	0.86	1.56
Dimensions:	L	69	74	82.5	94	103.5	121
	1	57	63	69.5	80	90	106
Nominal flow rate at $\Delta p = 0.15$ bar	m <sup>3</sup> /h	1.8	3.8	5.8	10.8	15.9	27.1
DIN/DVGW Registration No.:	NW - 6312 AS 2269						

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

- standard
- not available

		RV277A
Connection type:	External thread	•

Note: ... = space holder for connection size

Note: Ordering number example for 1": RV277-1A

<sup>\*</sup> The RV277-1/2A not suitable for D06F-1/2A

#### **Spare Parts**

Inlet check valve RV277, from 1994 onwards

Overview		Description	Dimension	Part No.	
_	1	1 Union seal washer (10 pcs.)			
(3)			1/2" - 3/4"	0901444	
T			1"	0901445	
			11/4"	0901446	
			11/2"	0901447	
			2"	0901448	
	2	Blanking plug with O-ring R <sup>1</sup> / <sub>4</sub> " (5 pcs.)			
				S06K-1/4	
	3	Check valve			
			1/2"	2166200	
			3/4"	2110200	
			1"	2164400	
			11/4"	2164500	
			11/2"	2164600	
			2"	2164700	

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Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Technologies Sàrl, Z.A. La Pièce 16, 1180 Rolle, Switzerland by its Authorised Representative Honeywell GmbH ENOH-1200GE23 R0417 Subject to change © 2017 Honeywell GmbH

