

## 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 classifications 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 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 medium:	65 °C accord. DIN EN 13959 (short term operation up to 90 °C)
Specifications	
Liquid category:	2 (no hazardous materials)

CONSTRUCTION

Overview		Components	Materials
	1	Male threaded union with flat wrench faces	Brass
	2	Union nut with internal thread	Brass
	Not depicted components		
		Check valve insert	High-grade synthetic material check valve cartridge
		Test plug with seal ring	EPDM seal ring, high-quality synthetic material test plug

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 % *

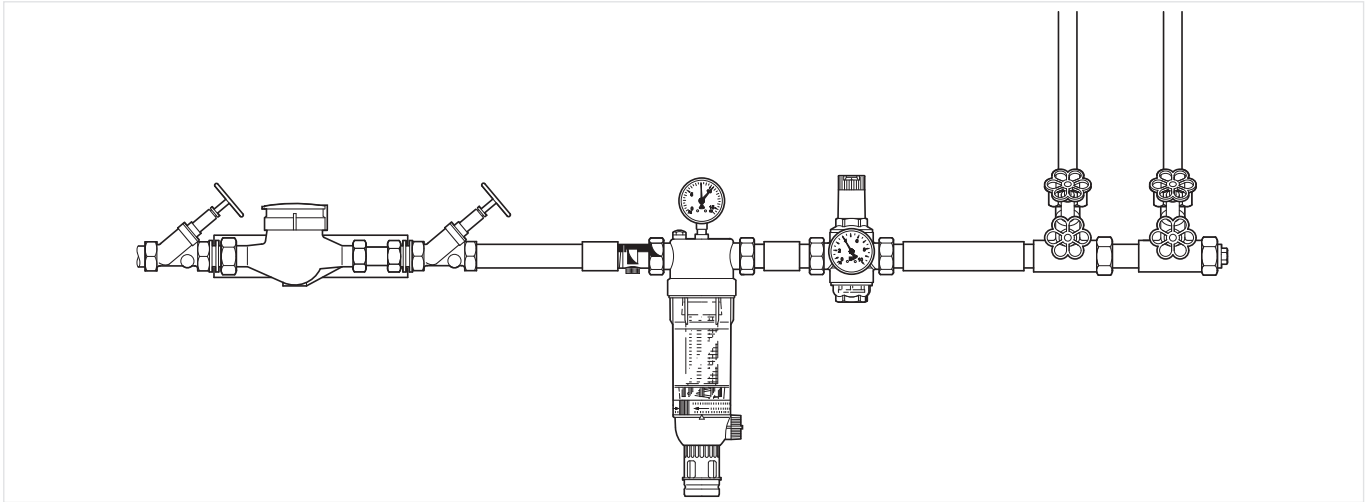
\*non condensing

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

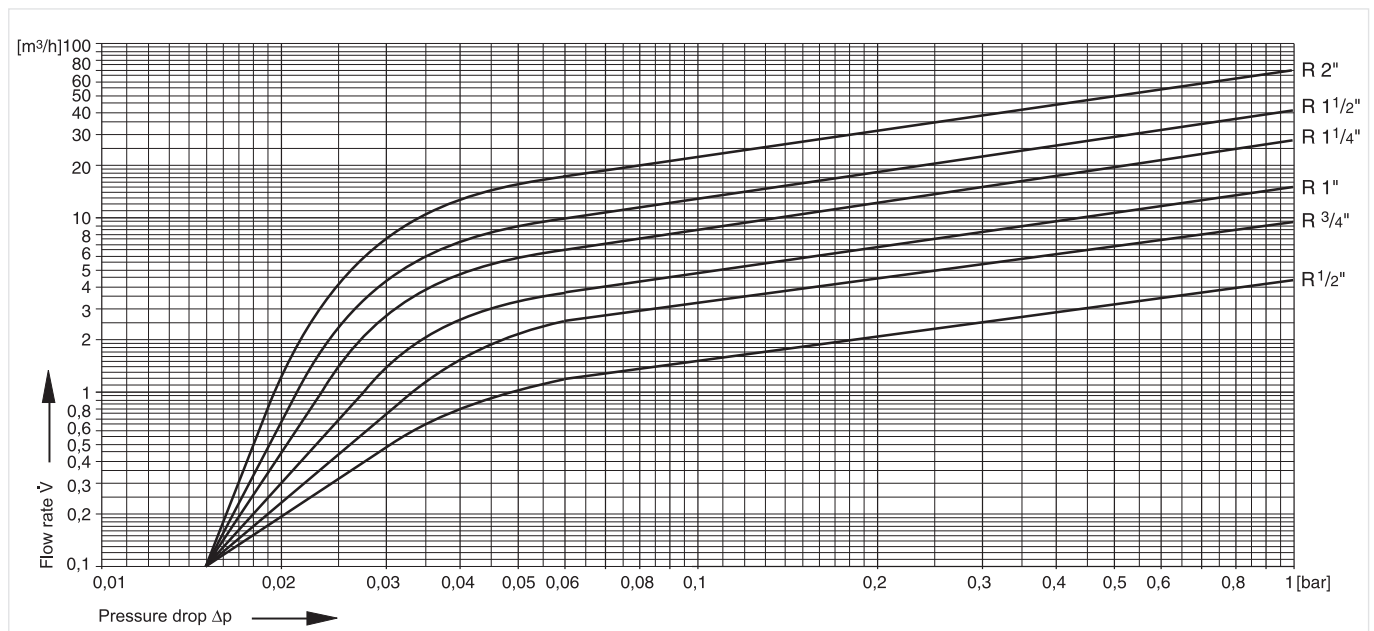
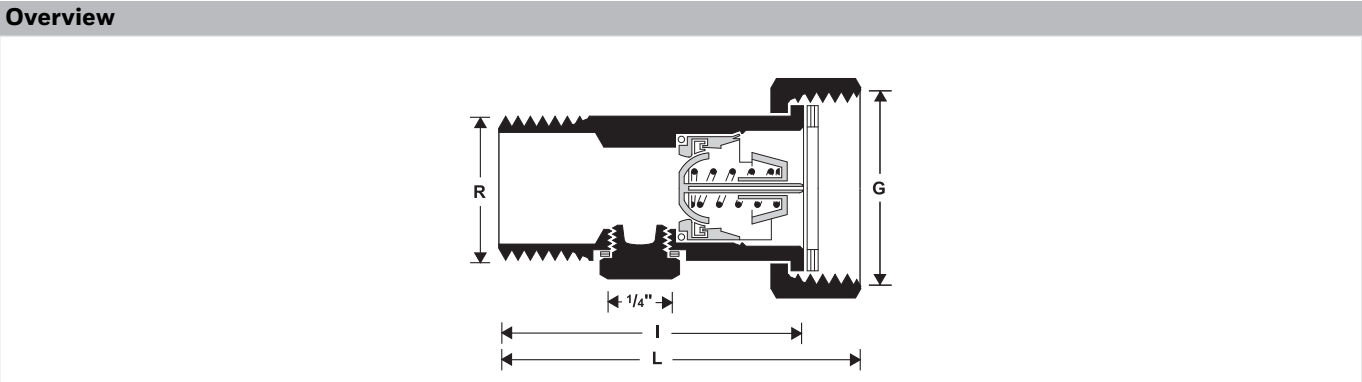


Fig. 1 Pressure drop within the valve in dependency of the flow rate and the used connection size

DIMENSIONS



Parameter		Values					
Connection size:	R	1/2"*	3/4"	1"	1 1/4"	1 1/2"	2"
Nominal size diameter:	G	1"	1"	1 1/4"	1 1/2"	2"	2 1/2"
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
	I	57	63	69.5	80	90	106
Nominal flow rate at Δp = 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.  
\* The RV277-1/2A not suitable for D06F-1/2A

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: 1/2", 3/4", 1", 1 1/4" 1 1/2" and 2".

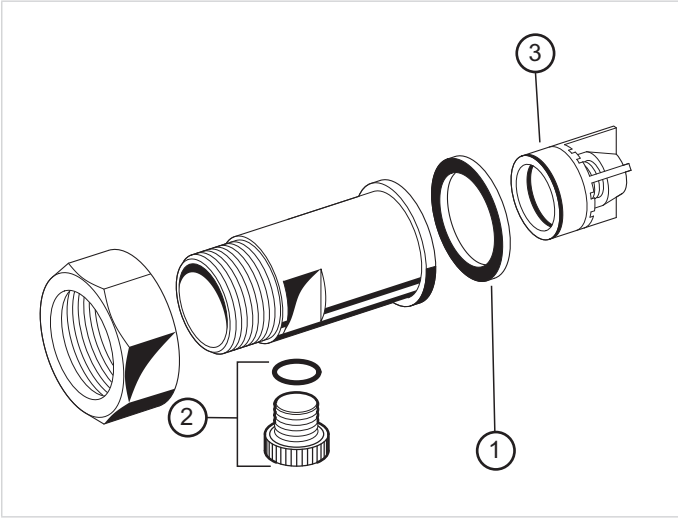
- standard
- not available

		RV277-...A
Connection type:	External thread	•

Note: ... = space holder for connection size  
Note: Ordering number example for 1": RV277-1A

Spare Parts

Inlet check valve RV277, from 1994 onwards

Overview	Description	Dimension	Part No.
	<b>1 Union seal washer (10 pcs.)</b>		
		1/2" - 3/4"	0901444
		1"	0901445
		1 1/4"	0901446
		1 1/2"	0901447
		2"	0901448
	<b>2 Blanking plug with O-ring R1/4" (5 pcs.)</b>		
			S06K-1/4
	<b>3 Check valve</b>		
		1/2"	2166200
		3/4"	2110200
		1"	2164400
		1 1/4"	2164500
		1 1/2"	2164600
		2"	2164700

Environmental & Energy Solutions

Honeywell GmbH  
Hardhofweg  
74821 MOSBACH  
GERMANY  
Phone: (49) 6261 810  
Fax: (49) 6261 81309  
<http://ecc.emea.honeywell.com>

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  
EN0H-1200GE23 R0417  
Subject to change  
© 2017 Honeywell GmbH

