# resideo Backflow Preventers



Controllable anti-pollution check valve EA type with internal thread

# **APPLICATION**

Check valves of this type are for use as an independent means of preventing reverse water flow.

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

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

# **SPECIAL FEATURES**

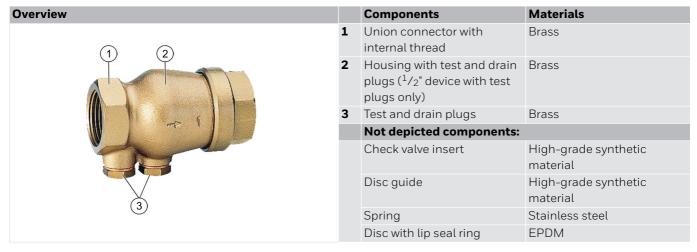
- Universal application
- Suitable for installation in any position
- Creates no shock pressure loadings
- Low pressure loss
- All materials are UBA conform



# **TECHNICAL DATA**

Media	
Medium:	Drinking water
Connections/Sizes	
Connection size:	1/2" - 2"
Pressure values	
Max. operating pressure:	16 bar
Opening pressure:	ca. 0.05 bar
Operating temperatures	
Max. operating temperature	65 °C accord. DIN EN 13959
medium:	(short term 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 % *

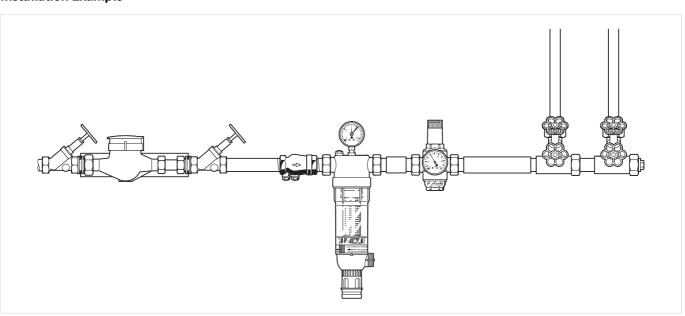
<sup>\*</sup>non condensing

# Installation Example

# **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
- Install right after water meter if applicable
  - Protects against backflow from water systems



# **TECHNICAL CHARACTERISTICS**

#### kvs-Values

Connection sizes:	1/ <sub>2</sub> "*	<sup>3</sup> / <sub>4</sub> "	1"	1 <sup>1</sup> / <sub>4</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2"
$k_{vs}$ -value (m <sup>3</sup> /h):	4.5	9.1	17.0	28.0	38.0	60.0

Note: \* Test plug only

#### Pressure drop characteristics

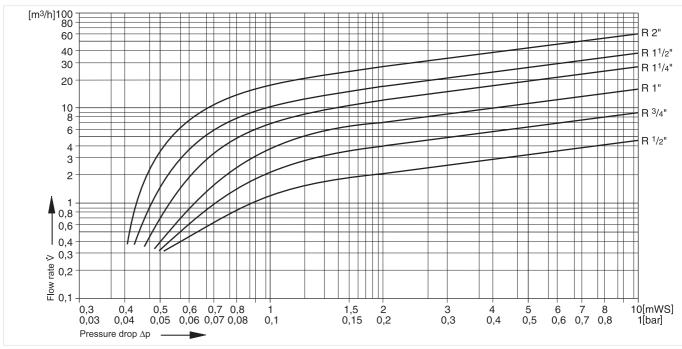
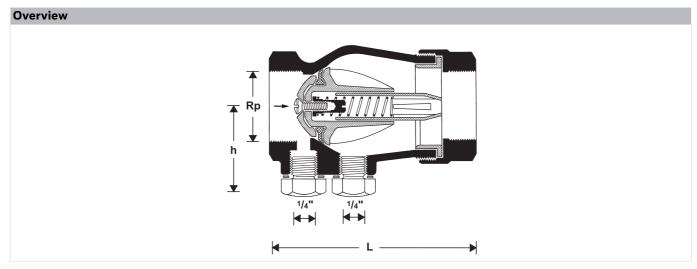


Fig. 1 Pressure drop within the valve in dependency of the flow rate and the used connection size

# **DIMENSIONS**



Parameter		Values					
Connection size:	Rp	1/2"*	3/4"	1"	11/4"	$1^{1}/_{2}$ "	2"
Test and drain plug:	R	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Weight:	kg	0.2	0.3	0.5	0.8	1.0	1.9
Dimensions:	L	65	75	83	110	120	150
	h	29	32	35	43	47	55
	SW	27	32	41	50	55	70
Nominal flow rate at $\Delta p = 0.15$ bar:	m <sup>3</sup> /h	1.7	3.5	6.6	10.8	14.7	23.2

Note: \* Test Plug only

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:  $^{1}/_{2}$ ",  $^{3}/_{4}$ ",  $^{1}/_{4}$ ",  $^{1}/_{4}$ "  $^{1}/_{2}$ " and  $^{2}$ ".

- standard
- not available

Connection type: Internal thread • RV280-...A

Note: ... = space holder for connection size

Note: Ordering number example for 1" RV280-1A

# **Spare Parts**

Inlet check valve RV280, from 1966 onwards

Overview		Description	Dimension	Part No.		
	1	Disc guide				
3 2			1/2"	5534900		
			3/4"	5535100		
			1"	5531500		
			11/4"	5535300		
000000			11/2"	5535500		
			2"	5535700		
	2	Spring				
			1/2"	2061400		
			3/4"	2061500		
			1"	2061600		
(4)			11/4"	2061700		
			$1^{1}/2$ "	2062000		
			2"	2062400		
	3	Valve disc complete				
			1/2"	0900356		
			3/4"	0900357		
			1"	0900358		
			$1^{1}/4$ "	0900359		
			11/2"	0900360		
			2"	0900361		
	4	Hexagon-plug with cop	per sealing-ri	ng R <sup>1</sup> / <sub>4</sub> " (5 pcs.)		
				S06M-1/4		

