COMPACT RISER CHECK VALVE

Model RS/VR-300-G Grooved Swing Riser Check Valve
2", 2 ½", 3", 4", 5", 6" & 8".

Technical data sheet 0321 Rev. R01

Updated document

Features

The AG Fire Sprinkler compact riser check valve, model RS/VR-300-G, consists of a check valve rated for a working pressure of 300 psi and a compact trim kit for use in fire protection systems. The check valve's function is to allow water flow in one direction and prevent it in the opposite one. To achieve this, it is equipped with a spring-loaded check valve with an elastomeric joint that ensures a watertight seal and non-stick operation that minimizes water hammer.

The RS/VR-300-G compact riser check valve is supplied with grooved connections according to AWWA C606 or metric at its ends. The check valve is supplied with two plugs that retain the check valve shaft in position, and when servicing or replacing, they can be removed, allowing extraction through the valve's top connection. The valve body also has 2 ¼" NPT threaded ports on one side for connecting 2 pressure gauges to check the pressure at both points, and a ½" NPT plug for other uses. The RS/VR-300-G compact riser check valve must be installed vertically with the flow direction arrow pointing upward. Both the check valve and the trim components must undergo periodic inspection and testing to ensure proper functioning.

Damaged parts should be replaced appropriately.

The check valve and the AG Fire Sprinkler trim kit with a water flow detector can provide an electrical alarm and is a cost-effective alternative to an alarm valve in installations that do not require a mechanical alarm.

Assembly

To install the RS/VR-300-G compact riser check valve, follow these steps:

1. Position the valve in the piping system in a vertical position ensuring that the flow arrow points upwards.

2. Secure the valve in place and install the necessary trim kit. The advantage of this configuration is that the gauges can be oriented in the most convenient direction.

3. Check that the riser check has been installed correctly by opening the water supply with the angle valve open so that it drains through there.

4. If everything works correctly, close the water supply completely and when the angle valve stops draining, close it completely.

Technical information

- **Model:** RS/VR-300-G
- **Rated working Pressure:** 300 psi (20,7 bar)
- **Factory hydrostatic test pressure:** 600 psi (41,4 bar)
- **Working temperature:** 32ºF to 176ºF (0ºC to 80ºC)
- **Available sizes:** 2" DN50, 2 ½" DN65, 3" DN80, 4" DN100, 6" DN150, 8" DN200, 10" DN250 & 12" DN300.
- **Connections:** standard groove end according to ANSI/AWWA C606 or metric.
- **Coating:** interior and exterior epoxy-coated via electrostatic spray.
- **Finishing:** Red RAL 3000
- **Installation:** Vertical.

Approvals

FM APPROVED

UL LISTED



1. Listed by Underwriters Laboratories, Inc.
2. Approved by Factory Mutual Research Corp.

Disassembly

1. Close the water supply and drain the system.

2. Remove the riser check and then the clapper by first removing the safety nuts, then the shaft with the spring, and finally the clapper, taking it out through the top of the valve.

3. Inspect all components, especially the clapper and its seat.

4. If any noticeable damage is found, replace the component.

Care and maintenance

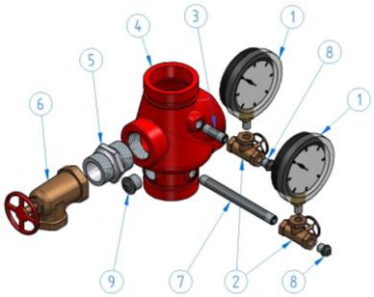
The RS/VR-300-G compact riser check valve must be kept free of foreign matter and away from icy environments, corrosive atmospheres, contaminated water supplies, and any conditions that may damage the device or impair its operation.

Before interrupting the operation of any fire protection system by shutting off its main water supply, the necessary permit must be obtained, and the competent authorities, as well as all personnel who may be affected, must be notified.

The owner is responsible for the inspection, testing, and maintenance of both the fire protection system as a whole and the devices outlined in this document.

It is recommended that such inspections, tests, and maintenance be performed by a qualified inspection service in accordance with local regulations and/or national laws.

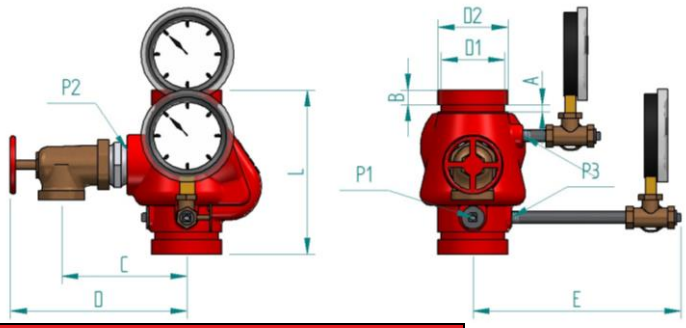
Trim description



Nº	Part name	Quant.
1	¼" Pressure gauge	2
2	3-way valve	2
3	¼" x 50 mm Nipple	1
4	Swing check valve	1
5	Adapter	1
6	Angle valve	1
7	¼" x 50 mm Nipple	1
8	¼" Plug	2
9	½" Plug	1

C/Alfoz de Bricia nº4 |.P.I. Villalonquéjar |. 09001 Burgos (Spain) |.Tlfno: +34 947 28 11 08 |.www.agfiresprinkler.com

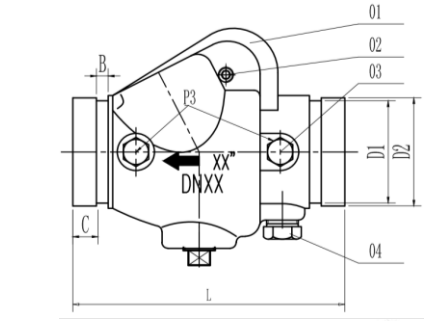
Dimensions

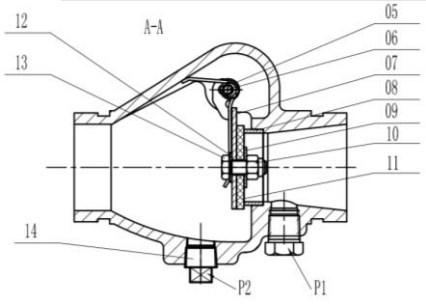


Size		Dimensions (mm)							
Inch	DN	C	D	L	E	P1	P2	P3	Weight (kg)
2"	50	135,3	235,3	171	190,15	1/2"	1"	3/8"	3,3
2,5"	65	148	248	184	196,5	1/2"	1 1/4"	3/8"	3,65
2,5"	65	151,1	251,1	184	198,5	1/2"	1 1/4"	3/8"	3,65
3"	80	163,9	263,9	197	204,45	1/2"	1 1/4"	3/8"	4,71
4"	100	189,3	289,3	210	217,15	1/2"	2"	1/2"	7,66
5"	125	214,7	314,7	248	229,85	1/2"	2"	1/2"	10,08
5"	125	216,3	316,3	248	230,65	1/2"	2"	1/2"	10,08
6"	150	240,1	340,1	324	242,55	1/2"	2"	1/2"	16,38
6"	150	243,3	343,3	324	244,15	1/2"	2"	1/2"	16,38
8"	200	314,1	414,1	371	269,55	1/2"	2"	1/2"	27,18

Body description

Nº	Part name	Quant..	Material
1	Valve body	1	DI, ASTM A536 Grade 65-45-12
2	Bolt	2	1045, ASTM A29
3	Plug	2	1045, ASTM A29
4	Plug	1	1045, ASTM A29
5	Spring	1	SS304, ASTM A276
6	Hinge pin	1	SS304, ASTM A276
7	Clapper	1	S.S.304, ASTM A276 o DI, ASTM A536 Grade 65-45-12
8	Seat	1	C95400, ASTM B148
9	Clamping ring	1	S.S.304, ASTM A276 o DI, ASTM A536 Grade 65-45-12
10	Locknut	1	SS304, ASTM A276
11	Facing seal	1	EPDM, ASTM D2000
12	Gasket	1	EPDM, ASTM D2000
13	Bolt	1	S.S.304, ASTM A276
14	Plug	1	1045, ASTM A29





Ordering information

	ASSEMBLED VALVE	COMPONENTS		
VALVE SEAT		SWING CHECK VALVE	TRIM ONLY	ASSEMBLY
2" DN50	PHRC050RR0	VHRC050RR0	TRPHRC050	MYPTRIMRC
2 ½" DN65	PHRC065RR0/1	VHRC065RR0/1	TRPHRC065080	
3" DN80	PHRC080RR0	VHRC080RR0		
4" DN100	PHRC100RR0	VHRC100RR0	TRPHRC100200	
5" DN125	PHRC125RR0/1	VHRC125RR0/1		
6" DN150	PHRC150RR0	VHRC150RR0		
8" DN200	PHRC200RR0	VHRC200RR0		

The equipment presented in this data sheet is to be installed in accordance with the latest published Standards of the national fire protection association (NFPA), FM Global, LPCB, VdS or other similar organizations, also with the provisions of governmental codes or ordinances whenever applicable.
This documentation is not contractual. AG Fire Sprinkler reserves the right to any kind of change without notice

C/Alfoz de Bricia nº4 | P.I. Villalonquéjar | 09001 Burgos (Spain) | Tlfno: +34 947 28 11 08 | www.agfiresprinkler.com