



Main Features:-

- ◆ Connection for solvent weld, threaded and flanged joints
- ◆ No metal parts in contact with the fluid
- ◆ Piston with counterweight to work with high intensity fluid
- ◆ PVC-U and EPDM or FPM, for compliance with water, drinking water and other food substances regulations
- ◆ Can be maintained with the valve body installed

Suitable Applications & Approvals:



VR DN 10/100 uPVC

EU MANUFACTURER:



The VR is an angle seat check valve with weighted PVC piston that allows the passage of fluid in one direction only.

TECHNICAL SPECIFICATIONS

Construction	Angle seat check valve
Size Range	DN 10 ÷ 100
Nominal Pressure	DN 10÷50: PN 16 with water at 20 °C DN 65: PN 10 with water at 20 °C DN 80÷100: PN 6 with water at 20 °C
Operating Temperature	0 °C ÷ 60 °C
Coupling Standards	Solvent welding: EN ISO 1452, EN ISO 15493, BS 4346-1, DIN 8063, NF T54-028, ASTM D 2467, JIS K 6743. Can be coupled to pipes according to EN ISO 1452, EN ISO 15493, DIN 8062, NF T54-016, ASTM D 1785, JIS K 6741 Thread: ISO 228-1, DIN 2999, ASTM D 2464, JIS B 0203 Flanging system: ISO 7005-1, EN ISO 1452, EN ISO 15493, EN 558-1 (DN 10÷50), DIN 2501, ANSI B.16.5 cl.150, JIS B 2220
Reference Standards	Construction criteria: EN ISO 16137, EN ISO 1452, EN ISO 15493 Test methods and requirements: ISO 9393 Installation criteria: DVS 2204, DVS 2221, UNI 11242
Valve Material	PVC-U
Seal Material	EPDM or FPM

This product is NOT compatible for mounting with standard pneumatic or electric actuators that use standard ISO5211 profiles.



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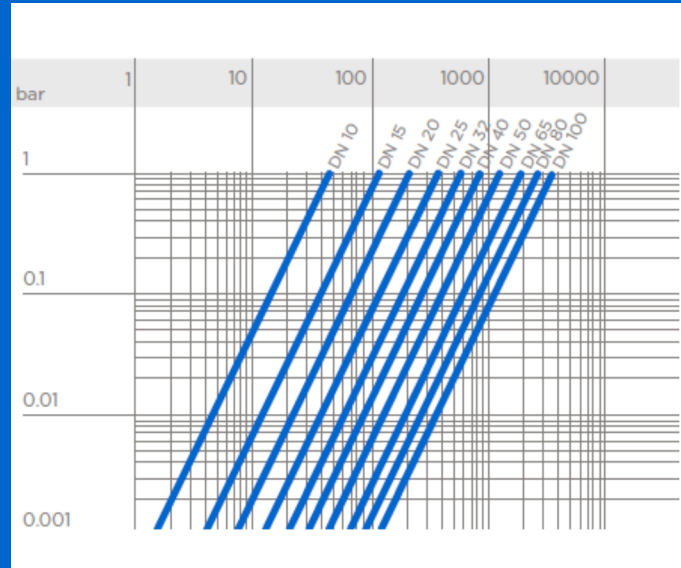
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PRESSURE v TEMP



PRESSURE DROP



FLOW

DN	10	15	20	25	32	40	50	65	80	100
Kv100 l/min	47	110	205	375	560	835	1300	1950	2600	3500

The Kv100 flow coefficient is the Q flow rate of litres per minute of water at a temperature of 20°C that will generate $\Delta p = 1$ bar pressure drop at a certain valve position.

*The Kv100 values shown in the table are calculated with the valve completely open.

PRESSURES

MINIMUM PRESSURE REQUIRED TO LIFT THE PISTON

DN	10	15	20	25	32	40	50	65	80	100
bar	0.008	0.008	0.009	0.014	0.017	0.018	0.021	0.022	0.022	0.024

MINIMUM SEALING PRESSURE (PISTON IN CLOSED POSITION)

DN	10	15	20	25	32	40	50	65	80	100
mm H ₂ O	150	150	200	350	350	350	350	350	350	350



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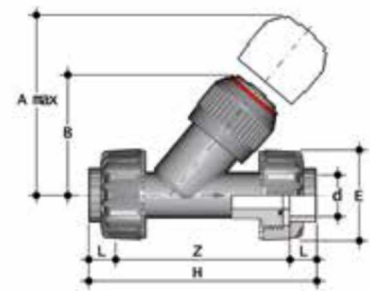
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VRUIV Check valve with female union ends for solvent welding, metric series

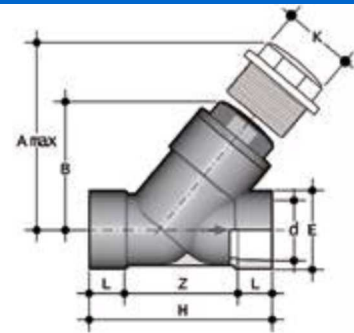
d	DN	PN	A _{max}	B	E	H	L	Z	Fig.	g
16	10	16	125	72	55	135	14	107	A	218
20	15	16	125	72	55	135	16	103	A	226
25	20	16	145	84	66	158	19	120	A	388
32	25	16	165	95	75	176	22	132	A	606
40	32	16	190	111	87	207	26	155	A	923
50	40	16	210	120	100	243	31	181	A	1335
63	50	16	240	139	120	298	38.2	221.6	A	2313



**also available with standard ANSI, BS and JIS connections*

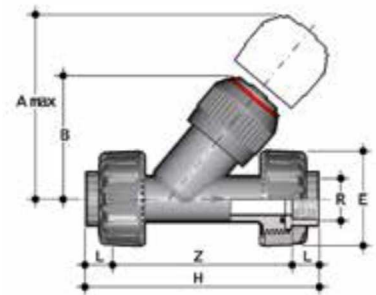
VRIV Check valve with female ends for solvent welding, metric series

d	DN	PN	A _{max}	B	E	H	K	L	Z	Fig.	g
75	65	10	300	179	104	243	96	44	155	B	3485
90	80	6	325	182	116	262	105	51	160	B	4530
110	100	6	385	231	138	325	-	61	203	C	7170



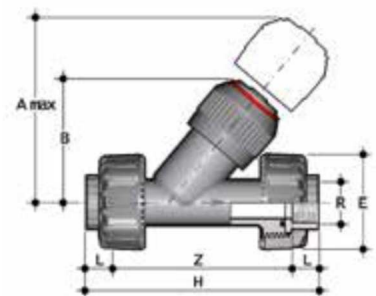
VRUFV Check valve with BSP threaded female union ends

R	DN	PN	A _{max}	B	E	H	L	Z	Fig.	g
3/8"	10	16	125	72	55	135	11.4	112.2	A	221
1/2"	15	16	125	72	55	143	15	113	A	230
3/4"	20	16	145	84	66	160	16.3	127.4	A	390
1"	25	16	165	95	75	183	19.1	144.8	A	602
1 1/4"	32	16	190	111	87	214	21.4	171.2	A	932
1 1/2"	40	16	210	120	100	235	21.4	192.2	A	1341
2"	50	16	240	139	120	285	25.7	233.6	A	2348



VRUFV Check valve with BSP threaded female union ends

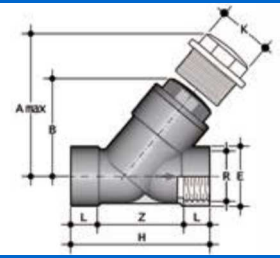
R	DN	PN	A _{max}	B	E	H	L	Z	Fig.	g
3/8"	10	16	125	72	55	135	11.4	112.2	A	221
1/2"	15	16	125	72	55	143	15	113	A	230
3/4"	20	16	145	84	66	160	16.3	127.4	A	390
1"	25	16	165	95	75	183	19.1	144.8	A	602
1 1/4"	32	16	190	111	87	214	21.4	171.2	A	932
1 1/2"	40	16	210	120	100	235	21.4	192.2	A	1341
2"	50	16	240	240	120	285	25.7	233.6	A	2348





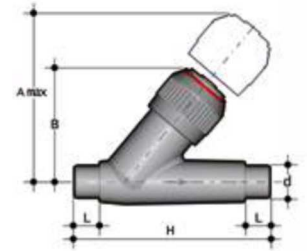
VRFV Check valve with BSP threaded female ends

d	DN	PN	A _{max}	B	E	H	L	Z	Fig.	g
2½"	65	10	300	179	104	243	30.2	182.6	B	3485
3"	80	6	325	192	116	262	33.3	195.4	B	4520
4"	100	6	385	231	138	325	39.3	246.4	C	6965



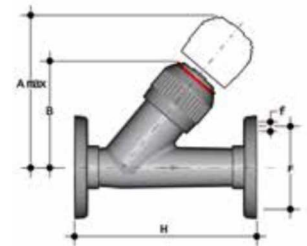
VRDV Check valve with male ends for solvent welding, metric series

d	DN	PN	A _{max}	B	H	L	Fig.	g
16	10	16	125	72	114	14	A	125
20	15	16	125	72	124	16	A	135
25	20	16	145	84	144	19	A	225
32	25	16	16	95	154	22	A	360
40	32	16	190	11	174	26	A	590
50	40	16	210	120	194	31	A	835
63	50	16	139	139	224	38	A	1420



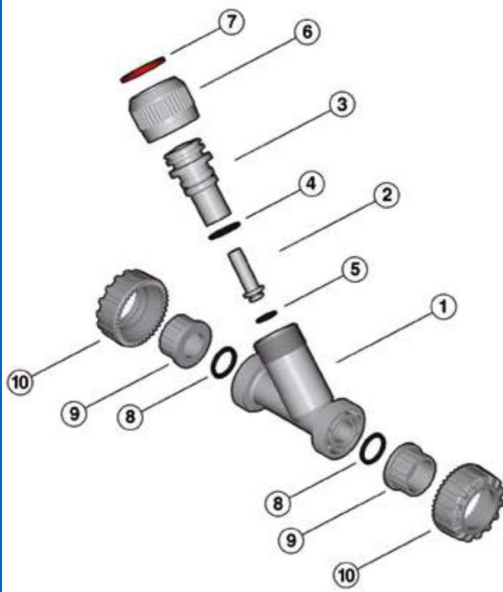
VROV Check valve with fixed flanges, drilled PN10/16

d	DN	PN	A _{max}	B	F	f	H	Fig.	g
20	15	16	125	72	65	14	130	A	280
25	20	16	145	84	75	14	150	A	430
32	25	16	165	95	85	14	160	A	640
4	32	16	190	11	100	18	180	A	1035
50	40	16	210	120	110	18	200	A	1405
63	50	16	240	139	125	18	230	A	2235
75	65	10	300	179	145	17	356	B	4600
90	80	6	325	192	160	17	404	B	6300
110	100	6	385	231	180	17	475	C	9200

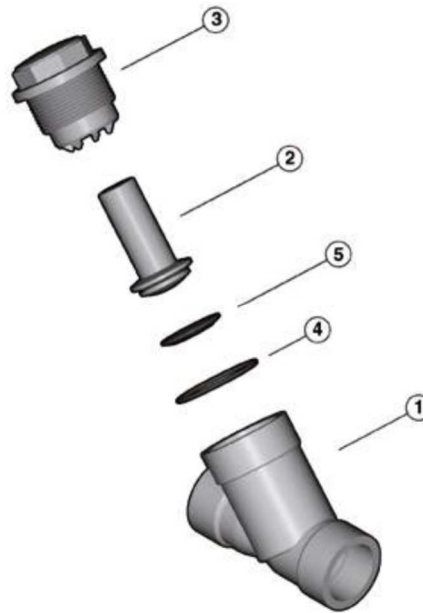


PRODUCT DIMENSIONS

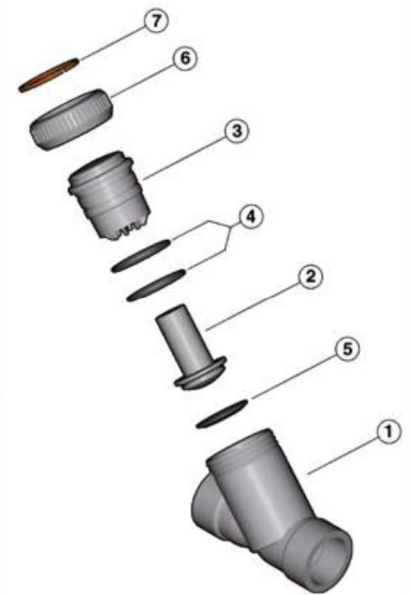




DN 15-50



DN 65-80



DN100

Part	Component	Material
1	Body	PVC-U
2	Piston	PVC-U
3	Bonnet	PVC-U
4	O-Ring	EPDM / FPM
5	Piston flat gasket	EPDM / FPM
6	Union nut	PVC-U
7	Retaining ring	PVC-U
8	Socket seal O-Ring	EPDM / FPM
9	End connector	PVC-U
10	Union nut	PVC-U

INSTALLATION NOTES:

The check valve can be installed on vertical or horizontal axis pipes. The bonnet (3) must however always be turned upwards as the piston works by gravity.

If the valve is installed in a vertical position, if the connection is solvent welded, make sure that the solvent cement does not enter inside the body, as this would damage the seating of the seal.

Install the valve such that the arrow stamped on the body indicates the direction of fluid flow .

Do not used compressed air or other gases to test thermoplastic lines.

