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
- PP-H and EPDM or FPM, for compliance with water, drinking water and other food substances regulations
- Can be maintained with the valve body installed

VR DN 15/80 PP-H

Suitable Applications & Approvals:

WRAS APPROVED PRODUCT

EU MANUFACTURER: FIP

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 105÷ 80
Nominal Pressure	**DN 10÷50:** PN 10 with water at 20 °C **DN 65:** PN 6 with water at 20 °C **DN 80÷100:** PN 4 with water at 20 °C
Operating Temperature	0 °C ÷ 100 °C
Coupling Standards	**Solvent welding:** EN ISO 15494. Can be coupled to pipes according to EN ISO 15494 **Thread:** ISO 228-1, DIN 2999 **Flanging system:** ISO 7005-1, EN 1092-1, EN ISO 15494, EN 558-1, DIN 2501, ANSI B.16.5 cl. 150
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	PP-H
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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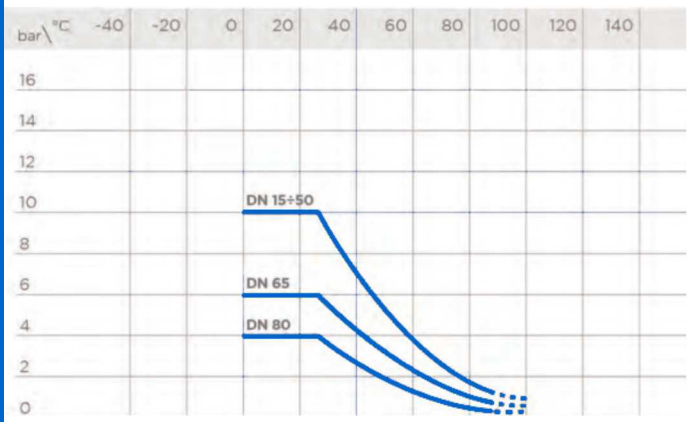
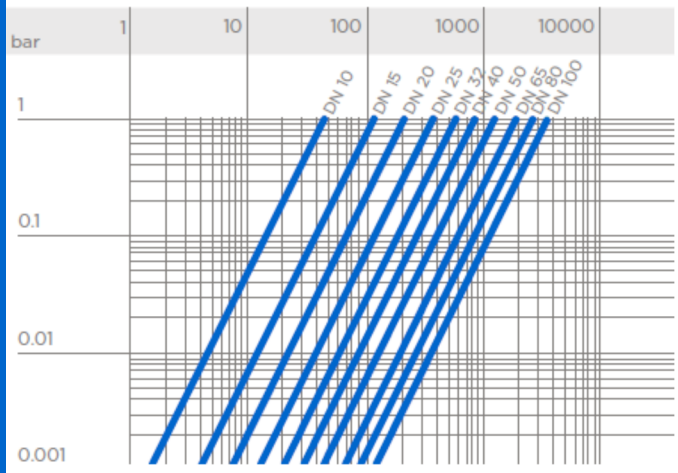
PRESSURE v TEMP



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 Δp= 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)

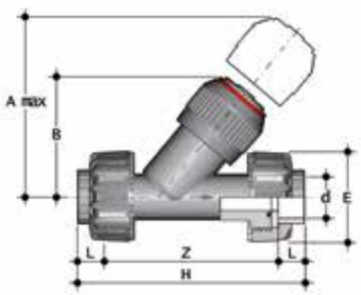
DN	10	15	20	25	32	40	50	65	80	100
mm H_2O	150	150	200	350	350	350	350	350	350	350

PRODUCT DIMENSIONS

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

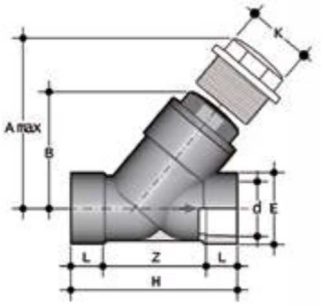
d	DN	PN	A_{max}	B	E	H	L	Z	g
20	15	10	125		55	138		109	165
25	20	10	145		66	157		125	227
32	25	10	165		75	179		143	380
40	32	10	190		87	205		164	645
50	40	10	210		100	244		197	915
63	50	10	240		120	294		239	1555

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



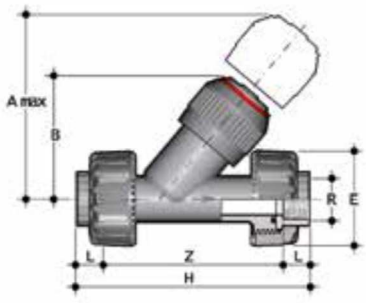
VRIM Check valve with female ends for solvent welding, metric series

d	DN	PN	A_{max}	B	E	H	K	L	Z	g
75	65	6	300	179	103	241	96		179	2450
90	80	4	325	182	115	260	105		189	3130



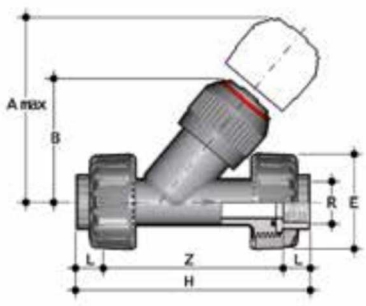
VRUFM Check valve with BSP threaded female union ends

R	DN	PN	A_{max}	B	E	H	L	Z	g
½"	15	10	125	71	55	143		113	165
¾"	20	10	145	83	66	160		127	227
1"	25	10	165	94	75	183		145	380
1¼"	32	10	190	109	87	214		171	645
1½"	40	10	210	119	100	235		192	915
2"	50	10	240	143	120	285		234	1555



VRUFM Check valve with BSP threaded female union ends

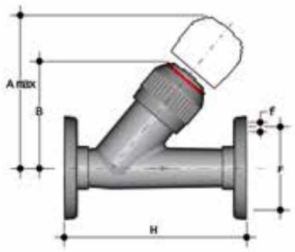
R	DN	PN	A_{max}	B	E	H	L	Z	g
½"	15	10	125	71	55	143		113	165
¾"	20	10	145	83	66	160		127	227
1"	25	10	165	94	75	183		145	380
1¼"	32	10	190	109	87	214		171	645
1½"	40	10	210	119	100	235		192	915
2"	50	10	240	143	120	285		234	1555



DIMENSIONS

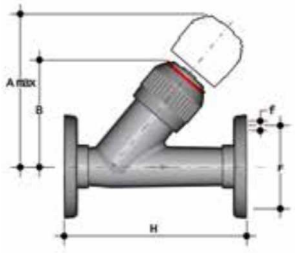
VROM Check valve with fixed flanges, drilled PN10/16

d	DN	PN	A_{max}	B	F	f	H	g
75	65	6	300	179	145	18	356	5990
90	80	4	325	192	160	18	404	7230

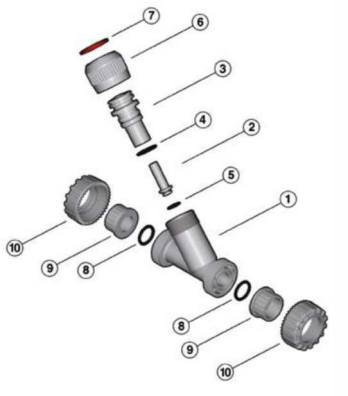


VROAM Check valve with fixed flanges, drilled ANSI B16.5 cl.150 #FF

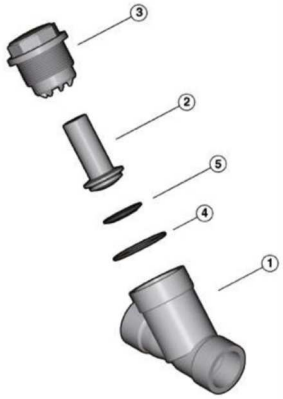
d	DN	PN	A_{max}	B	F	f	H	g
75	65	6	300	179	139.7	18	356	5595
90	80	4	325	192	152.4	18	404	6385



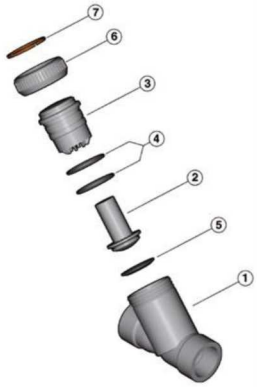
PRODUCT MATERIALS



DN 15-50



DN 65-80



DN100

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

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.