

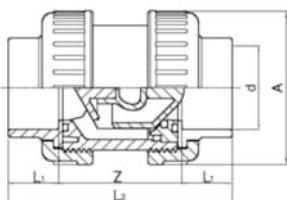
# Catalogue Check Valves

April 2010

Pressure Piping Systems  
for Water Applications



# PVC-U one flow direction Valves & spare parts



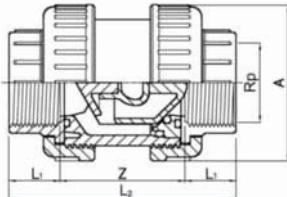
PF 2 02 961 010

## Check valve ISO PVC-U With solvent cement sockets

### Model:

- Rubber spring
- Standards:ISO 727, EN 1452, DIN 8063, NF T54-028, BS 4346/1
- (\*)Body and dimensions = 3"

d [mm]	d [inch]	PN	DN [mm]	EPDM Code	SP	GP	kg	A [mm]	X [mm]	L1 [mm]	Z [mm]	L2 [mm]	
16		16	10	VRO21I160	32	-	0.100	50	42	14	48	76	
20		16	15	VRO21I200	32	-	0.100	50	42	16	48	80	
25		16	20	VRO21I250	32	-	0.175	59	48	19	53	91	
32		16	25	VRO21I320	20	-	0.245	68	54	22	58	102	
40		16	32	VRO21I400	15	-	0.375	80	62	26	68	120	
50		16	40	VRO21I500	6	-	0.580	94	72	31	78	140	
63		16	50	VRO21I630	4	-	1.000	115	86	38	93	169	
* 75	2 ½	10	65	VRO21I750	2	-	2.950	168	110	44	118	206	
		90	10	VRO21I900	2	-	3.000	168	128	51	140	242	



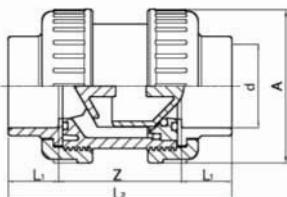
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## Check valve B.S.P. PVC-U With threaded sockets Rp

### Model:

- Rubber spring
- Standards:UNI ISO 228/1, DIN 2999, BS21
- (\*)Body and dimensions = 3"

Rp [inch]	DN [mm]	PN	EPDM Code	SP	GP	kg	A [mm]	X [mm]	L1 [mm]	Z [mm]	L2 [mm]	
3/8	10	16	VRO21F160	32	-	0.110	50	42	14	48	76	
1/2	15	16	VRO21F200	32	-	0.110	50	42	16	48	80	
3/4	20	16	VRO21F250	32	-	0.175	59	48	19	53	91	
1	25	16	VRO21F320	20	-	0.245	68	54	22	58	102	
1 1/4	32	16	VRO21F400	15	-	0.370	80	62	24	68	116	
1 1/2	40	16	VRO21F500	6	-	0.565	94	72	24	78	126	
2	50	16	VRO21F630	4	-	0.995	115	86	28	93	149	
* 2 ½	65	10	VRO21F750	2	-	2.845	168	128	33	118	184	
3	80	10	VRO21F900	2	-	2.960	168	128	36	140	212	



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## Air release/foot valve ISO PVC-U With solvent cement sockets

- Standards:ISO 727, EN 1452, DIN 8063, NF T54-028, BS 4346/1
- (\*)Body and dimensions = 3"

d [mm]	d [inch]	DN [mm]	PN	EPDM Code	SP	GP	kg	A [mm]	L1 [mm]	Z [mm]	L2 [mm]	
16		10	16	VRV21I160	32	-	0.110	50	14	48	76	
20		15	16	VRV21I200	32	-	0.110	50	16	48	80	
25		20	16	VRV21I250	32	-	0.175	59	19	53	91	
32		25	16	VRV21I320	20	-	0.245	68	22	58	102	
40		32	16	VRV21I400	15	-	0.375	80	26	68	120	
50		40	16	VRV21I500	6	-	0.575	94	31	78	140	
63		50	16	VRV21I630	4	-	0.990	115	38	93	169	
* 75	2 ½	65	10	VRV21I750	2	-	2.845	168	44	118	206	
		90	10	VRV21I900	2	-	2.900	168	51	140	242	



## Air release/foot valve B.S.P. PVC-U With threaded sockets Rp

- Standards: UNI ISO 228/1, DIN 2999, BS21
- (\*) Body and dimensions = 3"

Rp [inch]	DN [mm]	PN	EPDM Code	SP	GP	kg	A [mm]	L1 [mm]	Z [mm]	L2 [mm]	
3/8	10	16	VRV21F160	32	-	0.110	50	14	48	76	
1/2	15	16	VRV21F200	32	-	0.110	50	16	48	80	
3/4	20	16	VRV21F250	32	-	0.175	59	19	53	91	
1	25	16	VRV21F320	20	-	0.240	68	22	58	102	
1 1/4	32	16	VRV21F400	15	-	0.370	80	24	68	116	
1 1/2	40	16	VRV21F500	6	-	0.555	94	24	78	126	
2	50	16	VRV21F630	4	-	0.985	115	28	93	149	
* 2 1/2	65	10	VRV21F750	2	-	2.870	168	33	118	184	
3	80	10	VRV21F900	2	-	2.870	168	36	140	212	

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## Foot valve S/W PVC-U with PP screen

d [mm]	DN [mm]	PN	EPDM Code	SP	GP	kg	A [mm]	d [mm]	L1 [mm]	L2 [mm]	
20	15	16	VRF11I200	200	-	0.074	50	23	16	110	
25	20	16	VRF11I250	120	-	0.120	59	30	19	130	
32	25	16	VRF11I320	60	-	0.175	68	38	22	145	
40	32	16	VRF11I400	40	-	0.259	80	48	26	162	
50	40	16	VRF11I500	21	-	0.399	94	57	31	187	
63	50	16	VRF11I630	15	-	0.690	115	71	38	215	
90	80	10	VRF11I900	5	-	2.045	168	110	51	275	

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## Foot valve B.S.P. PVC-U threaded with PP screen

Rp [inch]	PN	EPDM Code	SP	GP	kg	A [mm]	d [mm]	L1 [mm]	L2 [mm]	
1/2	16	VRF11F200	200	-	0.074	50	23	16	110	
1/2	16	VRF11F250	120	-	0.120	59	30	19	130	
1	16	VRF11F320	60	-	0.175	68	38	22	145	
1 1/4	16	VRF11F400	40	-	0.259	80	48	24	160	
1 1/2	16	VRF11F500	21	-	0.399	94	57	24	180	
2	16	VRF11F630	15	-	0.690	115	71	28	205	
3	10	VRF11F900	5	-	2.045	168	110	36	260	

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## Rubber spring

Suitable for VRO

- (\*) Traded items

d [mm]	EPDM Code	SP	GP	
* 20	2MLL01D20	-	-	
* 25	2MLL01D25	-	-	
* 32	2MLL01D32	-	-	
* 40	2MLL01D40	-	-	
* 50	2MLL01D50	-	-	
* 63	2MLL01D63	-	-	
* 75 - 90	2MLL01D90	-	-	



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## Foot valve PP screen

Suitable for VRF

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	
20	1/2	16	<b>ARVSCPF20</b>	-	-	0.010	
25	3/4	16	<b>ARVSCPF25</b>	-	-	0.012	
32	1	16	<b>ARVSCPF32</b>	-	-	0.019	
40	1 1/4	16	<b>ARVSCPF40</b>	-	-	0.030	
50	1 1/2	16	<b>ARVSCPF50</b>	-	-	0.045	
63	2	16	<b>ARVSCPF63</b>	-	-	0.072	
90	3	16	<b>ARVSCPF90</b>	-	-	0.165	



PF 2 02 956 013

## Wafer check valve standard PVC-U Without spring

- Other diameters on request
- (\*) Traded items

d [mm]	DN [mm]	PN	EPDM Code	SP	GP	kg	
* 75	65	10	<b>VVCLP750</b>	30	-	0.406	
* 90	80	10	<b>VVCLP900</b>	24	-	0.468	
* 110	100	10	<b>VVCLP910</b>	15	-	0.660	
* 125	125	10	<b>VVCLP920</b>	15	-	0.850	
* 160	150	10	<b>VVCLP940</b>	5	-	1.250	
* 200	200	10	<b>VVCLP960</b>	4	-	2.230	

# PVC-U Butterfly Valves

## General description

The new VFA Butterfly Valves are designed to guarantee reliability, safety, top level performance and simple operation. The rational, compact shape and the construction concept simplify assembly and routine maintenance operations. The new VFA valves are ideally suited for water and neutral fluids.

## Technical features

### Available versions

- Lever-operated
- Handwheel-operated
- Pre-assembled with flanges
- With pneumatic actuators
- With electric actuators

### Dimensions

- All versions from DN65 to DN200

### Body material

- PVC-U

### Gasket material

- EPDM disk gasket - Orings
- SANTOPRENE™ flange gaskets

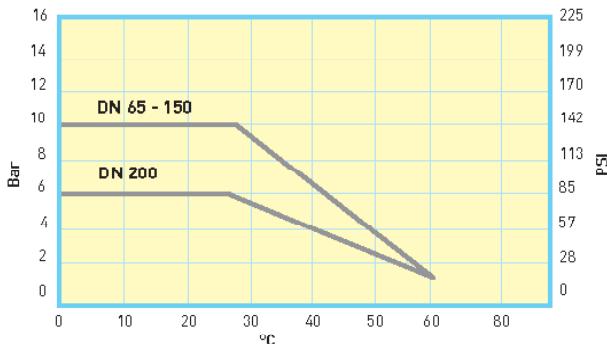
### Stem material

- Zinc plated steel
- Stainless steel (optional)

## Applications

The new VFA Butterfly Valves have been designed to be used mainly in contact with water and neutral fluids in different applications such as public and private swimming pools, water parks, thermal pools, Spa's, irrigation and aquaculture.

## Operating Pressure versus temperature

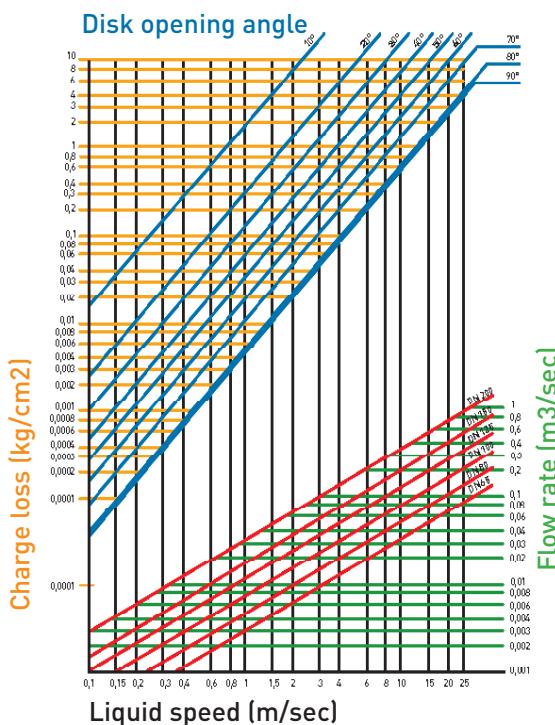


## Functional Features

VALVE SIZE DN Inch	OPERATING TORQUE New Valve at operating PN	TIGHTENING TORQUE (with PVC-U / Metal Flanges)
65 - 2 1/2"	11 Nm *	15 Nm
80 - 3"	14 Nm *	20 Nm
100 - 4"	16 Nm *	23 Nm
125 - 5"	26 Nm *	30 Nm
150 - 6"	35 Nm *	30 Nm
200 - 8"	50 Nm *	50 Nm

\* Reference value: These values can change, depending on the specific application and also over time

## Charge Loss



# PVC-U Butterfly Valves - Assembly instructions



1

1. Insert the bolts, washers and nuts without tightening in the lower part between the flanges. Take the valve out of its package, carefully checking its integrity and that it is perfectly clean.



2

2. Insert the valve in the "CLOSED" position between the flanges until the slots in the lower part of the body rest directly on the bolts, taking care to maintain parallelism with the flanges.



3

3. Insert the remaining bolts, washers and nuts in the upper part between the flanges. Tighten the nuts/bolts in across pattern until the tightening torque indicated is reached. (TAB. A) We recommend that you use a torque wrench.



4



5



6

4-5. Check that:

- the flanges adhere perfectly to the valve body
- correct parallelism is maintained between the valve and the flanges
- an axial position is maintained relative to the pipe.

Operate the valve with no load, checking that movements are smooth and there are no abnormal stresses.

## BUTTERFLY VALVE DISASSEMBLY INSTRUCTIONS

Before proceeding, make sure that:

- All valves upstream and downstream of the one to be worked on are closed.
- The system has been depressurised.
- The pipe has been completely emptied.

Carry out the assembly operations described in reverse order.

**We recommend to clean the internal components of the valve as well as to open and close the valve itself regularly.**

**By complete disassembling of the valve, please pay attention to put the gaskets in the correct positioning**

## TAB. A

VALVE DN	TIGHTENING TORQUE*
65 – 2"1/2	15 Nm
80 – 3"	20 Nm
100 – 4"	23 Nm
125 – 5"	30 Nm
150 – 6"	30 Nm
200 – 8"	50 Nm

\*WITH PVCU/METAL FLANGES