

## ASSEMBLE QUICK AND COMPACT MANIFOLDS WITH IRRITEC® SOLENOID VALVES

**Irritec**® solenoid valves with swivel nut allow you to quickly create compact and easy-to-maintain manifolds. The **VDN** model includes 2 opposing and through 1" valves to allow installation in series, while the **VTN** model integrates the manifold allowing the valves to be installed in series.



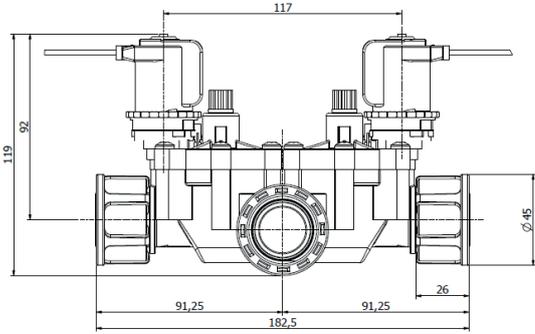
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## SOLENOID VALVES / VDN SERIES

VPN consists of two solenoid valves with an integrated manifold in-between, a unique innovation. Thanks to the 1" nut, the VDN valves can be installed in series, screwed by hand, without the use of tools, additional fittings, or Teflon. In a PSZ Jumbo box, it is possible to install up to 6 VDN, i.e., 12 solenoid valves! It is recommended not to mount more than 24 solenoid valves in a single manifold.



Ref.	Measure	Connections	Voltage
IAVDN100C14	1"	1" nut F x 1" M x 1" nut F	24 Vac
IAVDN100C19G	1"	1" nut F x 1" M x 1" nut F	9 Vdc latch



### VDN - Dimension

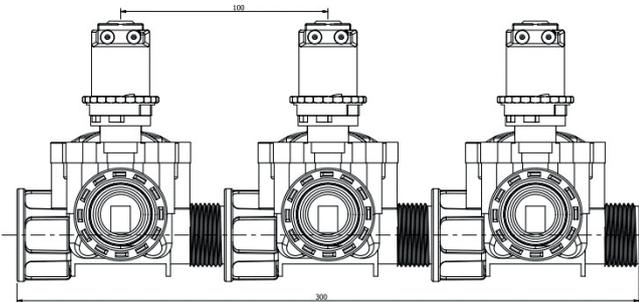
Connection	Height mm	Length mm	Width mm
-			
1"	119,00	182,50	95,00

## SOLENOID VALVES / VTN SERIES

The VTN solenoid valves integrate a T-fitting with a 1" nut into the valve body, allowing the valves to be installed in series, screwed by hand, without the use of tools or Teflon.

### VTN - Dimension

Connection	Height mm	Length mm	Width mm
-			
1"	119,50	111,50	95,00



Ref.	Measure	Connections	Voltage
IAVTN100C14	1"	1" nut F x 1" M x 1" nut F	24 Vac
IAVTN100C19G	1"	1" nut F x 1" M x 1" nut F	9 Vdc latch



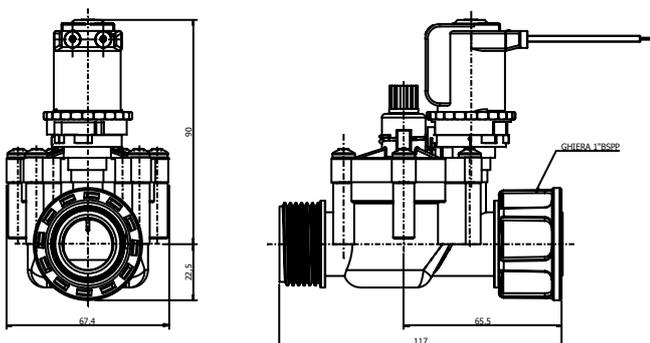
## SOLENOID VALVES / VMN SERIES

The inline solenoid valves of the VMN series are characterized by a male thread inlet and a 1" nut outlet for faster installation.

### VMN - Dimension

Connection	Height mm	Length mm	Width mm
-			
1"	112,50	117,00	67,40

Ref.	Measure	Connections	Voltage
IAVMN100MC14	1"	1" M x 1" nut F	24 Vac
IAVMN100MC19G	1"	1" M x 1" nut F	9 Vdc latch



## SOLENOID VALVES / VPN - VBN SERIES

It all starts here! VPN valves are available in a wide range of sizes and are recognized for their strength and reliability. They are suitable for residential, public irrigation systems, and agricultural applications. The VBN series has brass female threads, making it suitable for metal fittings.

### VPN

Ref.	Connections	24 Vac	9 Vdc latch
1/2"	F/F	IAVPN050F14	IAVPN050F19G
3/4"	F/F	IAVPN075F14	IAVPN075F19G
3/4"	M/M	IAVPN075M14	IAVPN075F19G
1"	M/M	IAVPN100M14	IAVPN100F19G
1"	F/F	IAVPN100F14	IAVPN100F19G
1 1/4"	F/F	IAVPN120F14	IAVPN120F19G
1 1/2"	F/F	IAVPN150F14	IAVPN150F19G
2"	F/F	IAVPN200F14	IAVPN200F19G
3"	M/M	IAVPN300M14	IAVPN300M19G



### VBN

Ref.	Connections	24 Vac	9 Vdc latch
3/4"	F/F OTTONE	IAVBN075F14	IAVBN075F19G
1"	F/F OTTONE	IAVBN100F14	IAVBN100F19G
1 1/4"	F/F OTTONE	IAVBN120F14	IAVBN120F19G
1 1/2"	F/F OTTONE	IAVBN150F14	IAVBN150F19G
2"	F/F OTTONE	IAVBN200F14	IAVBN200F19G



### VPN - VBN - Dimension

Connection	Height	Length	Width
-	mm	mm	mm
1/2" F	110	114	68
3/4" F	110	114	68
3/4" M	110	114	68
1" F	128	128	90
1" M	110	100	68
1 1/4" F	128	128	90
1 1/2" F	145	137	90
2" F	180	165	120
3" M	180	170	120

## SOLENOID VALVES / VLN - VSN SERIES

The VLN series is characterized by operation at very low pressure; 0.05 bar. Only 50 cm of water column. Suitable for draining tanks and reservoirs or for gravity systems. Maximum pressure 1 bar.

Ref.	Measure	Connections	Voltage
I AVLN100F14	1"	F/F	24 Vac
I AVLN100F19G	1"	F/F	9 Vdc latch



### VLN - Dimension

Connection	Height	Length	Width
-	mm	mm	mm
1"	128	128	90

The VSN series offers small diameter valves suitable for drip irrigation systems for balconies, terraces, and vertical gardens.

Ref.	Measure	Connections	Voltage
I AVSN050M14	1/2"	M/M	24 Vac
I AVSN050M16	1/2"	M/M	6-9 Vdc latch
I AVSN075M14	3/4"	M/M	24 Vac
I AVSN075M16	3/4"	M/M	6-9 Vdc latch



### VSN - Dimension

Connection	Height	Length	Width
-	mm	mm	mm
1/2" o 3/4"	65	45	40

## SOLENOID VALVES / VDN - VTN - VMN SERIES

### Pressure drop diagram in bar

Flow Rate l/m	Line 1"
25	0,17
40	0,34
60	0,50
70	0,67
85	0,84
95	1,00

## SOLENOID VALVES / VPN - VBN SERIES

### Pressure drop diagram in bar

Flow Rate m³/h	Flow Rate l/m	Connection						
		3/4" M	1" M	1" F	1 1/4" F	1 1/2" F	2" F	3" M
1	16,7	-	-	-	-	-	-	-
2	33,3	0,17	-	-	-	-	-	-
3	50,0	0,21	0,17	-	-	0,17	-	-
4	66,7	0,31	0,21	0,11	0,11	0,21	-	-
5	83,3	0,43	0,31	0,13	0,13	0,31	-	-
6	100,0	0,60	0,43	0,16	0,16	0,43	-	-
7	116,7	0,74	0,60	0,22	0,22	0,60	0,10	-
8	133,3	0,93	0,74	0,25	0,25	0,74	0,11	-
9	150,0	1,08	0,93	0,32	0,32	0,93	0,12	0,10
11	183,3	-	1,08	0,50	0,50	1,08	0,14	0,12
13	216,7	-	-	0,71	0,71	-	0,16	0,14
15	250,0	-	-	1,01	1,01	-	0,20	0,16
18	300,0	-	-	-	-	-	0,25	0,20
22	366,7	-	-	-	-	-	0,31	0,23
28	466,7	-	-	-	-	-	0,42	0,30
36	600,0	-	-	-	-	-	0,72	0,42
44	733,3	-	-	-	-	-	-	0,63
50	833,3	-	-	-	-	-	-	0,82

## SOLENOID VALVES / VSN SERIES

### Pressure drop diagram in bar

Flow Rate l/m	Connection 1"
1	-
3	0,09
5	0,13
7	0,18
10	0,25
15	0,49
20	0,86
25	1,10
30	1,38

## SOLENOID VALVES / VLN SERIES

### Pressure drop diagram in bar

Flow Rate l/m	Connection 1"
66,7	0,11
88,3	0,13
100,0	0,16
116,7	0,22
133,3	0,25
150,0	0,32

### Technical Features common to all models

- Valve body: polyamide - 30% fiberglass
- Membrane: NBR (Buna-N)
- Flow regulator
- Operating pressure: 0.5 - 10 bar (VLN Series 0.05 bar - 1.00 bar)
- Manual opening: 45° rotation of the solenoid
- IP 55 waterproof solenoid
- Solenoid absorption 24VAC (inrush/holding) 330-210 mA
- Stainless steel solenoid core

