One-way In
One-way Out
Non Slam

Multi-Functional One Piece Component

Function #1 **One-way In**

One-way in, the shaft and spring are above the disc. The disc of the check valve is normally in the closed position, not allowing air discharge. When the negative differential pressure across the check valve is higher that the force of the spring, the check valve opens, allowing air intake into the air valve
(Available in sizes 1/4", 3/8", 1½", 2", 3", 4")

Fig. 1

Function #2 **One-way Out**

One-way out, the disc is on top, with the shaft and spring below. The disc of the check valve is normally closed, and opens only when the differential pressure across the check valve is higher than the force of the spring, allowing air to discharge from the valve. The check valve does not open for air intake.
(Available in sizes 1/4", 3/8", 1½", 2", 3", 4")

Fig. 2

Function #3 **Non-Slam** (Three-stage Capacity Air Discharge)

1½" NS Component
Non-Slam, the disc (Fig. 1) has one permanent hole (orifice) that is not adjustable. Air discharge capacity is controlled by the discharge of air through the single orifice.

2", 3", 4" NS Component
Non-Slam, the disc (Fig. 2) has three small holes (orifices) that can be closed or opened / or the disc (Fig.2) has three or more holes that are permanently open.
Air discharge capacity is controlled by partially or fully opening one or more of the three orifices (Fig. 1) or with all the holes permanently open (Fig. 3) - reducing potential surge.

Fig. 3

At water column separation, drainage, pipe burst, sudden closure of the isolating valve, pump trip, etc., the check valve and air valve open, allowing large volumes of air into the system. When the water column returns, air is discharged through the small orifices (one orifice - 1½" model), at a rate determined by the orifice opening setting (set manually by the user). This way, air discharge is controlled, greatly reducing the effects of slam.

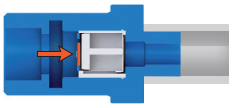
One-way In /Out /Non Slam

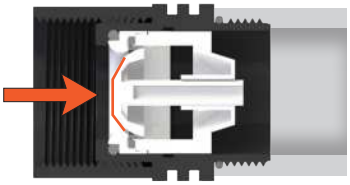
1/4" , 3/8"

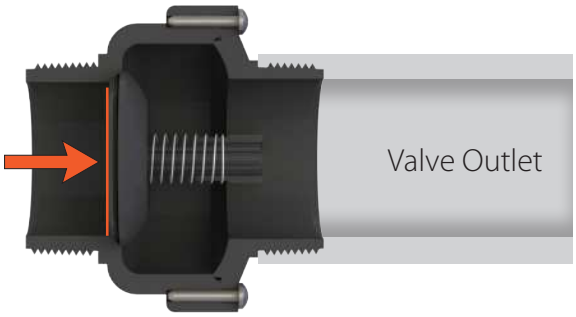
1 ½"

2", 3", 4"

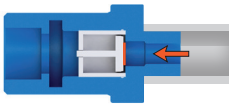
One-way In

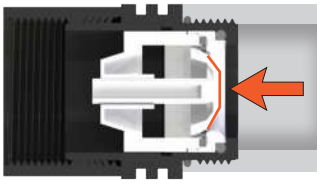


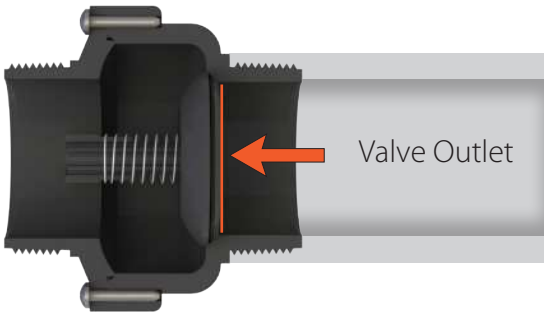




One-way Out

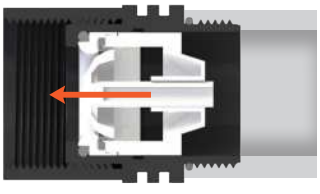


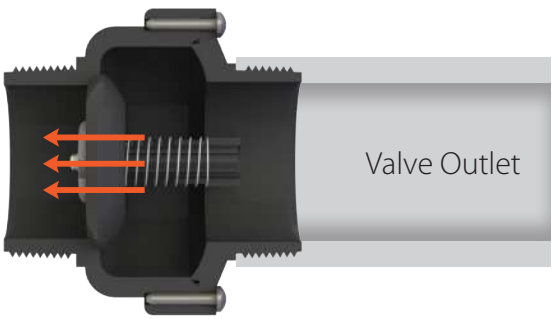




* One-way In & One-way Out (valve has been rotated to the closed position)

Non-Slam





One-way In /Out /Non Slam

A.R.I.

Non-Slam Orifice Data Table

Nominal Size	Number of orifices	Discharge orifice (mm)	Total NS area (mm^2)	NS orifice (mm)	Switching point (bar)	Flow at 0.4 bar (m^3/h)
1½"	1 orifice	37.5	12.6	4	Spring loaded normally closed	17.5
2" (50mm)	1 orifice	50	15.9	4.5		24
	2 orifice	50	30.8	6.2		31.6
	3 orifice	50	47.7	7.8		40
3" (80mm)	1 orifice	75	50.3	8		38.47
	2 orifice	75	100.5	11.3		72.51
	3 orifice	75	150.8	13.9		111.38
4" (100mm)	1 orifice	100	78.5	10		150
	2 orifice	100	314	20		190
	3 orifice	100	706.5	30		233

Size		1/4"	3/8"	1½"	2"	3"	4"
Material		NYLON		PAGF/ PPGF +POM	PAGF/ PPGF	PAGF/ PPGF	PAGF/ PPGF
Thread Connection		BSPT		BSP/NPSM	BSPT/ NPT	BSPT/ NPT	BSPT/ NPT
Weight (gr.)	PAGF	8	13	80	270	720	1402
	PPGF	---		80	205	580	1080
Pressure Rating	One-way In	PN 10		PN 10	PN 10	PN 10	PN 10
	One-way Out	PN 100		PN 100	PN 100	PN 100	PN 100
	Non-Slam 3 or more permanently open holes with no adjustable shutter	---		PN 100	PN 100	PN 100	PN 100
	Non-Slam 3 holes with adjustable shutter	---		PN 10	PN 10	PN 10	PN 10

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