AIRPINCH™

Buyer's Guide

Aluminum **Stainless Steel** **Polycarbonate**

Nylon **Polypropylene**

Air Operated Valves

Pinch Valve Configurations

All valve descriptions can be identified using the component breakdown example shown below. Sizes are indicated in 1/8" increments(e.g. 5/8" = 05).

Example Valve Description:

AT - 05 - NF - E60 - 0606 - P

Valve Type
AB = BSPT
AT = NPT
AS = Sanitary

Sleeve I.D.
1/4" = 02
3/8" = 03
5/8" = 05
1" = 08
1 1/4" = 10
2" = 16

Elastomer Compound
NF = Non FDA
FG = FDA

Sleeve Material & Durometer
B = Buna-N*
E = EPDM*
I = Silicone
N = Neoprene®
V = Viton®

* FDA available

End Cap Threads
1/4" = 02
3/8" = 03
3/4" = 06
1 " = 08
1 1/4" = 10
2" = 16

Housing Material
P = Polypropylene
N = Glass Filled Nylon
S = Stainless Steel
A = Aluminum

Valve Actuation Pressures

Pinch Valves

1/4" Valve	Media psi	10	20	30	40	50	60	70	80
	Air psi	42	53	64	76	82	X	X	X
3/8" Valve	Media psi	10	20	30	40	50	60	70	80
	Air psi	32	41	53	64	76	88	X	X
5/8" Valve	Media psi	10	20	30	40	50	60	70	80
	Air psi	40	48	57	68	79	88	X	X
1" Valve	Media psi	10	20	30	40	50	60	70	80
	Air psi	46	53	60	72	81	90	X	X
1¼" Valve	Media psi	10	20	30	40	50	60	70	80
	Air psi	46	53	60	72	81	90	X	X
2" Valve	Media psi	10	20	30	40	50	60	70	80
	Air psi	25	36	48	57	70	X	X	X

NOTE: Maximum valve actuation pressure is 90 psi.Air pressure required for "bubbletight" closure of the sleeves shown are based on factory test conditions using water as the controlled media. Differential pressures for controlling liquids and air will vary. To obtain maximum sleeve life, always use lowest air pressure necessary for complete closure.

Application specific testing is always recommended to determine the suitability of Airpinch valves and sleeves. This information is intended to be used as a guideline only. It is the responsibility of the user to test and determine the suitability of Airpinch valves and sleeves for any given application.

NOTE: It is the responsibility of the user to determine suitability of sleeve material for any particular control application.

Selecting Rubber Sleeves

This information is intended to introduce the multitude of considerations that exist when determining sleeve selection and anticipating performance. In all cases, the end user is responsible for determining the suitability of a sleeve material for a specific application. Actual operating conditions and materials can greatly affect sleeve performance.

A sampling of factors to consider when selecting rubber sleeves follows:

- Will the sleeve be exposed to fluids, oil, water, solvents or chemical solutions?
- Will the sleeve be exposed to gases or liquid vapors, ozone, high or low temperatures?
- Will the sleeve be involved in food or drug processing?
- When working with oils, inks and solvents, determine in detail the brand, type, and grade of the fluid.
- Give consideration to the fact that lubricating oils may be present in compressed air systems.

Richway's food-grade (FG) sleeves are formulated using compounds which meet the Food & Drug Administration regulation FDA 177.2600 for use in food & contact environments.

NOTE: Richway Industries, Ltd., can assume no responsibility for the accuracy and /or completeness of this information when determining sleeve selection or compatibility for any particular application.

The following pages listing technical properties and ratings of the general elastomer compounds are representative of published reference materials from various polymer suppliers. We are unable to guarantee their accuracy and assume no liability for the use thereof.

Sleeve Dimensions

Sleeve I.D.	**1/4"**	**3/8"**	**5/8"**	**3/4"**	**1"**	**1¼"**	**2"**
Weight EPDM (gms)	5	13	38	38	96	96	108
Length (in.)	2.180	1.5	2.40	2.40	3.55	3.55	7.5

Wall Thickness	**1/4"**	**3/8"**	**5/8"**	**3/4"**	**1"**	**1¼"**	**2"**
Ave. (in.)	.112	.125	.185	.185	.200	.200	.25

Flange	**1/4"**	**3/8"**	**5/8"**	**3/4"**	**1"**	**1¼"**	**2"**
Diameter (in.)	.850	1.375	1.745	1.745	2.97	2.97	4.7
Thickness (in.)	.085	.140	.220	.220	.205	.205	.5

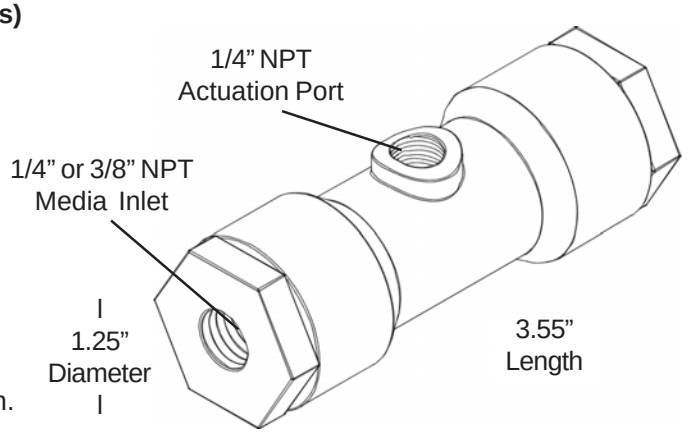
NOTE: Sleeve specifications shown are representative of elastomers currently offered. Actual port dimensions may vary slightly.

Airpinch Valves

1/4” Pinch Valves (1/4” NPT Media Inlets)

Description

AT	-	02	-	NF	-	B60	-	0202	-	N
				FG		E60				P
						E30				
						I 60				
						N60				
						R60				
						V65				



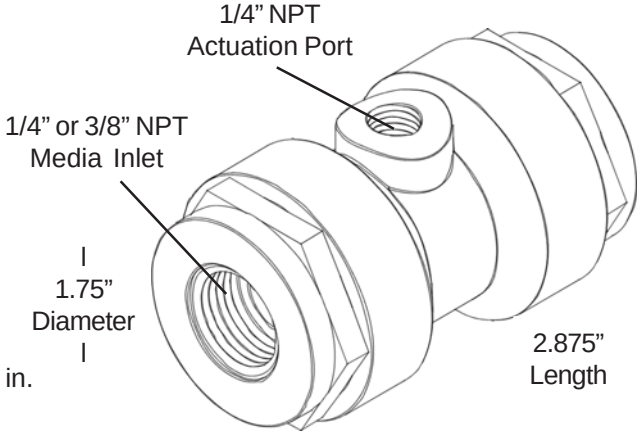
Actuation Displacement: 0.1 cu. in.
Weight: 2 oz

Also available with
3/8” end caps.

3/8” Pinch Valves (1/4” or 3/8” NPT Media Inlets)

Description

AT	-	03	-	NF	-	B60	-	0202	-	N
				FG		E60				P
						E30				
						I 60				
						N60				
						R60				
						V65				

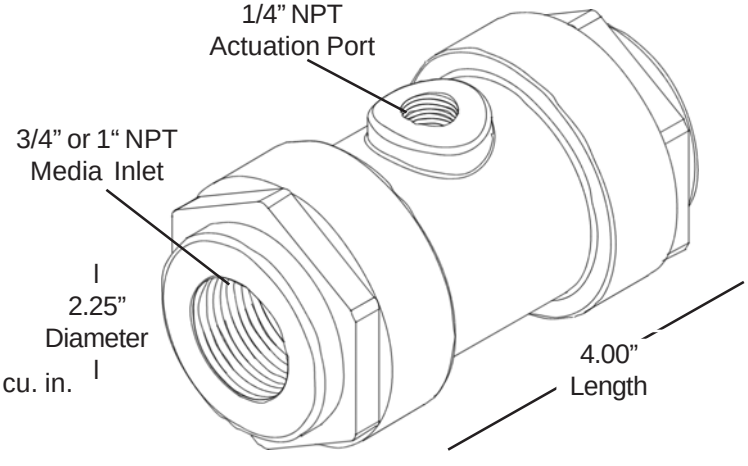


Actuation Displacement: 0.5 cu. in.
Weight: 5 oz

5/8” Pinch Valves (3/4” or 1” NPT Media Inlets)

Description

AT	-	05	-	NF	-	B60	-	0606	-	N
				FG		E60				P
						E30				
						I 60				
						N60				
						R60				
						V65				



Actuation Displacement: 1.1 cu. in.
Weight: 7 oz

NOTE: It is the responsibility of the user to determine suitability of sleeve material for any particular control application.