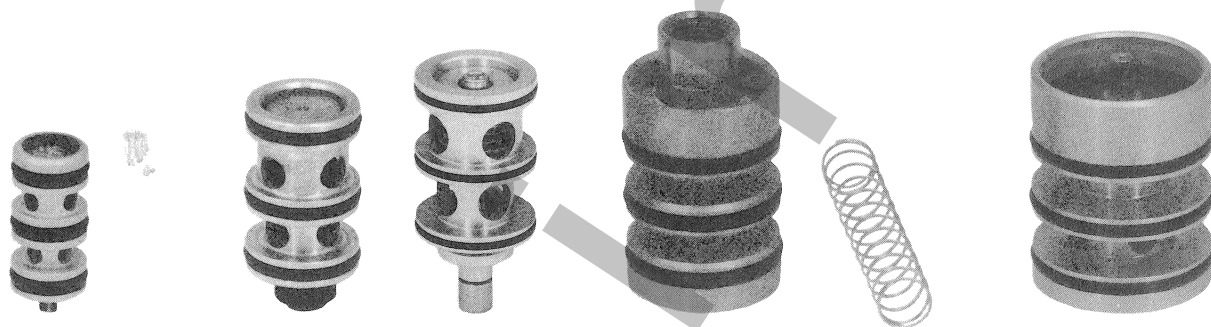


Humphrey® Cartridge Insert Valves

Humphrey cartridge insert valves are 2-way or 3-way valves specifically designed for incorporation into OEM products to become a proprietary and unrecognizable component of these products. Cartridge insert valves are available in 0.125-inch, 0.250-inch, and 0.500-inch orifice sizes for manual, mechanical, or air pilot actuation, and for normally closed or normally open functions in pressure ranges from 0-125 psig.



Y125IN

Model Y125IN is a full 0.125-inch orifice, 3-way, normally closed or normally open valve with captured exhaust. Normally closed or normally open functions are determined by selection of IN and EX-HAUST manifold connections. Actuation is typically air pilot, manual, or mechanical.

Y250IN

Models Y250IN and Y500IN are identical to the Y125IN valve but have full 0.250-inch and 0.500-inch orifices respectively.



Y500IN

125INLA

Model 125INLA is a full 0.125 inch orifice, 2 or 3 way, normally closed or normally open valve with capturable exhaust. No lubrication is required. Actuation is typically air pilot, manual, or mechanical.

250IN

Model 250IN is a full 0.250 inch orifice, 2 or 3 way, normally closed or normally open valve with capturable exhaust. No lubrication is required. Actuation is typically pilot, manual, or mechanical.

Specifications

Y Series

MEDIA:

Compressed Air

PRESSURE RANGE:

0 to 125 psig (0 to 8.6 bars)

PILOT PRESSURE RATIO:

(All models) 1 to 30 psig (.07 to 2 bars) use minimum of 30 psig (2 bars) pilot.

For valved pressure above 30 psig the following pilot pressure (% of valved pressure) will operate the valve:

Normally closed, 85% Normally open, 75%

TEMPERATURE RANGE:

-10 to 225°F (-23.0 to 107.2°C)

MATERIALS:

Anodized Aluminum, Buna N

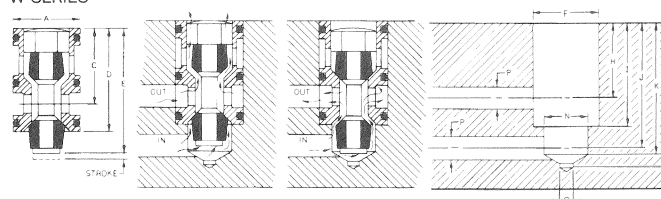
LUBRICATION Not required

Weight

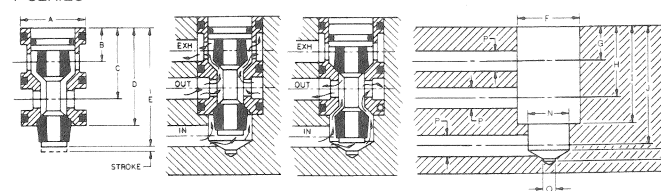
MODEL	CFM	ACTUAL OUNCES	GRAMS
Y125IN	Mult. psi. by 0.15	.25	7.1
Y250IN	Mult. psi. by 0.50	.75	21.2
Y500IN	Mult. psi. by 1.90	3.60	102.0

125INLA and 250IN: Refer to operating specifications of corresponding models 125A and 250A.

W SERIES



Y SERIES



W and Y Series Valve Dimensions

MODEL	STROKE	A	B	C	D	E	ORIFICE
Y125IN	.031	.500	.328	.703	1.000	1.125	.125
Y250IN	.063	.750	.406	.844	1.156	1.375	.250
Y500IN	.125	1.375	.625	1.406	1.906	1.875	.500

W and Y Series Cavity Dimensions

MODEL	F	G*	H	I†	J	K	L	M	N	O	P
Y125IN	.500/.503	.328	.703	1.000	1.156	1.187	1.296	1.500	.375	.187	.125
Y250IN	.750/.753	.406	.843	1.156	1.406	1.437	1.625	1.875	.625	.156	.250
Y500IN	1.375/1.378	.625	1.406	1.906	2.343	2.437	3.187	3.500	1.000	.406	.500

NOTE: Ports (letter "P") do not require same vertical plane, as shown, but may be rotated axially about valve cavity (letter "F") in horizontal plane as dimensioned.

†Add 0.010" to insure valve's complete insertion into cavity.

*Omit on "W" Series. For Overtravel, add 0.030" to dimension "I".

Humphrey® Vacuum Valves

Order Information

Air/Vacuum Piloted Vacuum Valves

1/8-, 1/4-, 1/2-, 3/4-inch ports, 2-way, 3-way

VALVES

	2 Way	3 Way	Normally Closed	Normally Open	w/Out Mount. Base	With Mount. Base	FKM* Seals	Brass Body
Option Code	2	3	10	11	20	21	w/VAI	w/BRB
Model VA125A	SP	N/C	N/C	NA	STD	SP	SP	SP
VA250A	SP	N/C	N/C	NA	STD	SP	SP	SP
VA500A	SP	N/C	N/C	NA	NA	STD	SP	STD
VA590A	SP	N/C	N/C	NA	NA	STD	SP	SP

HOW TO ORDER *Fluoroelastomer

Starting with Model Number specify options in order from left to right.

Example: To Order Model VA125A-3-10-21

3-Way Operation	(VA125-3)
Normally Closed	(VA125-3-10)
With Mounting Base	(VA125-3-10-21)

Remember: Option Codes marked STD and NA are not used as part of the Model Number when ordering. N/C indicates no charge but Option Code must be included in the Model Number. OS indicates that Option must be ordered separately and is not used as part of the Model Number.

N/C = No charge	STD = Standard
NA = Not available	SP = Specify, additional
OS = Order separately, additional charge for this option	charge for this option

Humphrey® Insert/Glue Valves

Order Information

Insert Valves

1/8-, 1/4-, 1/2-inch, 2-way, 3-way

"Y" SERIES

	Fluoroelastomer Seals
Option Code	w/VAI
Model Y125IN	SP
Y250IN	SP
Y500IN	SP

Order example: Y250IN

SP = Specify

Glue Valves

1/8-, 1/4-inch, 2-way

	Description
Model R322C	1/8" Valve w/fluoroelastomer diaphragms*
R561	1/8" Valve w/Teflon Profile Diaphragms*
R332	1/4" Valve w/fluoroelastomer diaphragms

Order example: R561

*Order mounting accessories separately.