

310/410 Valves

310, S310, 410, S410, M310, M410

Humphrey's popular valve series, the 310 and 410 Solenoid Valves, provide outstanding performance and reliability in a simple, versatile design. The pressure-balanced poppet, direct-acting operating principle provides multi-purpose functionality in a compact body.

310: 2- or 3-way, normally closed or open

410: 4-way

410-70: 4-way with integral flow controls

Available in several mounting options, as inline, stackable or manifold mount. The new 410M manifold accepts the standard 310 and 410 inline valves for a low cost manifold solution.

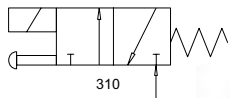
Base Models

- 3-Way Inline (310), 4-Way Inline (410)
- 3-Way Stackable (S310), 4-Way Stackable (S410)
- 3-Way Manifold Mount (M310), 4-Way Manifold Mount (M410)

Features and Benefits:

- Compact, high flow construction.
- Quiet operation. No AC hum.
- Electrical connection options include lead wires, DIN-type or conduit.
- Short stroke, fast response, poppet design.
- Low leak rate.
- Reliable, tolerant of difficult ambient/media conditions.
- Order "V310" for multi-purpose 3-port use, for pressure or vacuum, diverter or selector. See Vacuum, p. 76-77.
- Use 410 as universal valve, 3- or 4-way, multi-purpose.
- Available in common AC or DC voltages.

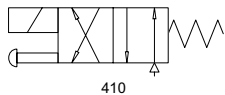
DIRECT-ACTING SOLENOID VALVES



310



310



410



410



SPECIFICATIONS FOR 310 AND 410

Design Principle:	Pressure Balanced – Spring Return
Porting Type:	2-, 3- or 4-Way
Port Size:	1/8 PIPE (E31t0/E410: 1/8 BSP)
Media:	Air, Inert Gases
Pressure Range:	28"Hg to 125 PSIG (see Vacuum, p. 76-77)

Temperature Range:	32°F to 125°F
Flow @100 PSIG:	10 CFM, 283 LPM (Cv=0.15)
Power:	4.5 W
Available Voltages:	12VDC, 24VDC, 24/50/60, 120/50/60, 240/50/60

Manifolds and Subbases

310 and 410 series valves are available in three mounting/ porting types: Inline, Stackable, and Manifold.

- **Inline:** 310, 410 and 410-70 valves can be individually mounted via body mounting holes or hard plumb mount. **410M Manifolds** accept inline valves, are low profile/ cost effective, and ideal for OEM applications. Manifolds are shipped with gaskets and screws.

- **Stackable:** S310, S410 and S410-70 valves “stack” together with tie-rods, gaskets and end plate kit (PN 7-900A) for a compact, expandable solution.
- **Manifold:** M310, M410 and M410-70 valves are base piping types to permit manifold mounting to SM manifolds. Ports 1, 2, 3 and 4 located in manifold for convenient valve replacement without disturbing the plumbing.



410M
Accepts 310 and/or
410 Series Inline Valves
(410M6 shown)



**S410, S410-70,
and S310**
Stackable Assembly



**(8) M310 Valves on
SM8 Manifold**

Stackable Valve and Manifold Types Available	Overall Size (valves not mounted)	Nominal Dimensions (inch)		
		L	H	D
410M Manifold: Extruded Aluminum. Delivery port 2 and 4 located on valve. Accepts 310 and 410 valve models.	Two Station (410M2)	2.69	0.89	1.57
	Each Additional station	0.76		
	Max # of stations	12		
Stackable Valve Type: Extruded Aluminum End Plates for Stackable Valves. Delivery port 2 and 4 located on valve. Available in S310 and S410 valve models.	Two Valves plus End Plates	1.94	2.82	1.86
	Each Additional Valve	0.75		
	Max # of stations	12		
SM Manifold: Extruded Aluminum. Delivery ports 1 and 2 located on manifold. Accepts M310 and M410 valve models.	Two Station (M2)	1.94	2	1.62
	Each Additional station	0.75		
	Max # of stations	12		

Consult website for exact dimensions and additional manifold configurations.

How To Order Valves & Manifolds...Pages 95, 98 & 117

HOW TO OBTAIN VALVE SPECIFICATIONS

- Visit www.humphrey-products.com and select “Online Product Guide.”
- From the search options provided, choose the valve you want and the details for that product.
- Once completed, select “Spec Sheet” to create a PDF of the valve, which you may save and print at your convenience.

HOW TO FIND A DISTRIBUTOR

- Visit www.humphrey-products.com, select “Find A Distributor,” and input your information to locate a distributor nearest you.
- Or, call Customer Service at 1-800-477-8707 for the name and phone number of your local distributor.

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