

## G & GH Series – Subminiature

- ▶ MOPD: 250 PSI (17 Bar)
- ▶  $C_v$  Range: 0.018 to 0.070 ( $K_v$  Range: 0.015 to 0.054)
- ▶ 0.65 Watts or 2 Watts

This extremely versatile 2- or 3-way sub-miniature valve gives you the option of choosing the highly durable stainless steel or the lightweight corrosion resistant acetal body, to meet your overall design parameters. Select stainless steel or Delrin®, and other materials available to resist corrosion in most acids and alkaline solutions, or pick acetal for a tough and heat resistant metal substitute to meet your weight and chemical inert requirements.

### Typical Applications

Stainless Steel Bodies:

- Hospital Equipment
- Laboratory Equipment
- Air Sampling Systems

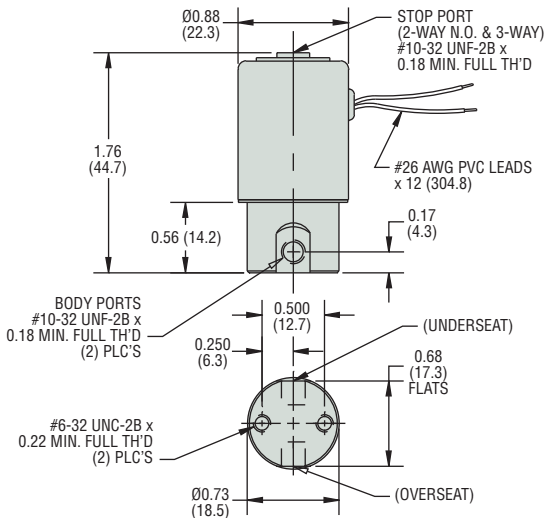
Acetal Bodies:

- Water Purification Systems
- Analytical Equipment

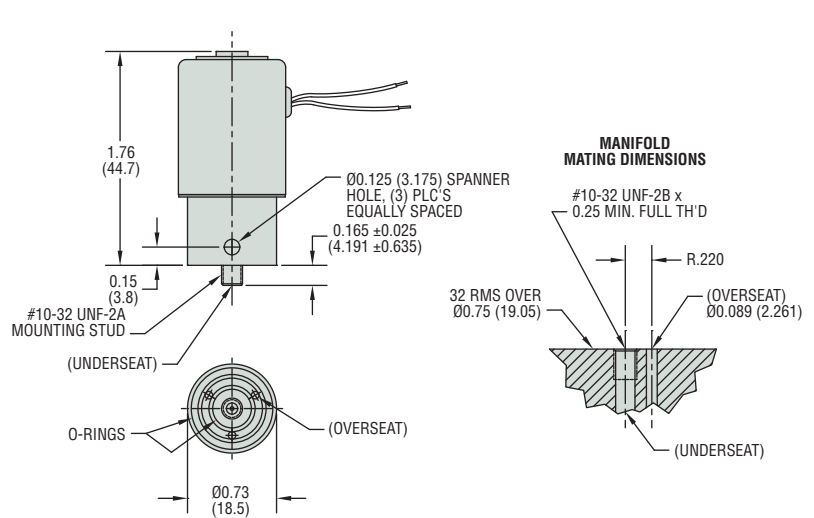


### Dimensions

#### Threaded Port Body

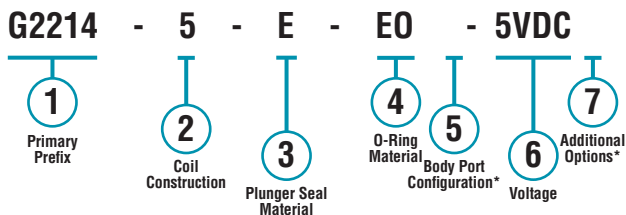


#### Manifold Mount Body



### How To Order

Use the **Bold** characters from the choices listed on the following page to construct a product code.



\* Blank entry indicates a "Standard" selection (#10-32 straight thread ports, in this case).

#### Example:

G2214-5-E-EO-5VDC

G-Series 303 Stainless Steel 2-Way N.O. solenoid valve, with tape-wrapped, Class-B, with 12" (30.48cm) long lead-wires, encapsulated coil with 0.110" (2.79mm) spade terminals, EPR plunger seal, EPR o-ring, #10-32 straight thread ports, operating at 5 VDC.

Part Prefix Table ①

	Power Rating	Orifice				MOPD		C <sub>v</sub>		K <sub>v</sub>		① Primary Prefix
		Body		Stop		psig	bar	Body	Stop	Body	Stop	303 Stainless Steel <sup>1</sup>
		inches	mm	inches	mm							
2-WAY N.C.	0.65W	0.030	0.762	—	—	125	8.6	0.015	0.018	—	—	G2012
		0.040	1.016	—	—	70	4.8	0.020	0.023	—	—	G2013
		0.055	1.397	—	—	40	2.8	0.032	0.038	—	—	G2014
		0.078	1.981	—	—	20	1.4	0.054	0.063	—	—	G2015
	2W	0.030	0.762	—	—	250	17	0.015	0.018	—	—	GH2012
		0.040	1.016	—	—	175	12	0.020	0.023	—	—	GH2013
		0.055	1.397	—	—	100	6.9	0.032	0.038	—	—	GH2014
		0.078	1.981	—	—	50	3.4	0.054	0.063	—	—	GH2015
2-WAY N.O.	0.65W	—	—	0.030	0.762	125	8.6	—	—	0.018	0.015	G2212
		—	—	0.040	1.016	70	4.8	—	—	0.023	0.020	G2213
		—	—	0.055	1.397	40	2.8	—	—	0.038	0.032	G2214
		—	—	0.078	1.981	20	1.4	—	—	0.057	0.049	G2215
	2W	—	—	0.030	0.762	200	14	—	—	0.018	0.015	GH2212
		—	—	0.040	1.016	150	10	—	—	0.023	0.020	GH2213
		—	—	0.055	1.397	100	6.9	—	—	0.038	0.032	GH2214
		—	—	0.078	1.981	50	3.4	—	—	0.057	0.049	GH2215
3-WAY N.C.	0.65W	0.030	0.762	0.030	0.762	125	8.6	0.018	0.015	0.0153	0.018	G3012
		0.040	1.016	0.040	1.016	70	4.8	0.023	0.020	0.01955	0.023	G3013
		0.055	1.397	0.055	1.397	40	2.8	0.038	0.032	0.0323	0.038	G3014
		0.078	1.981	0.078	1.981	20	1.4	0.063	0.054	0.04845	0.057	G3015
	2W	0.030	0.762	0.030	0.762	200	14	0.018	0.015	0.01955	0.023	GH3012
		0.040	1.016	0.040	1.016	150	10	0.023	0.020	0.01955	0.023	GH3013
		0.055	1.397	0.055	1.397	100	6.9	0.038	0.032	0.0323	0.038	GH3014
		0.078	1.981	0.078	1.981	50	3.4	0.063	0.054	0.04845	0.057	GH3015
3-WAY N.O.	0.65W	0.030	0.762	0.030	0.762	125	8.6	0.015	0.018	0.018	0.015	G3212
		0.040	1.016	0.040	1.016	70	4.8	0.020	0.023	0.023	0.020	G3213
		0.055	1.397	0.055	1.397	40	2.8	0.032	0.038	0.038	0.032	G3214
		0.078	1.981	0.078	1.981	20	1.4	0.048	0.057	0.057	0.049	G3215
	2W	0.030	0.762	0.030	0.762	175	12	0.015	0.018	0.018	0.015	GH3212
		0.040	1.016	0.040	1.016	150	10	0.020	0.023	0.023	0.020	GH3213
		0.055	1.397	0.055	1.397	80	5.5	0.032	0.038	0.038	0.032	GH3214
		0.078	1.981	0.078	1.981	40	2.8	0.048	0.057	0.057	0.049	GH3215
3-WAY Multi Purpose	0.65W	0.030	0.762	0.030	0.762	80	5.5	0.015	0.018	0.018	0.015	G3312
		0.040	1.016	0.040	1.016	40	2.8	0.020	0.023	0.023	0.020	G3313
		0.055	1.397	0.055	1.397	20	1.4	0.031	0.036	0.029	0.024	G3314
		0.078	1.981	0.078	1.981	10	0.7	0.054	0.063	0.053	0.045	G3315
	2W	0.030	0.762	0.030	0.762	110	7.6	0.015	0.018	0.018	0.015	GH3312
		0.040	1.016	0.040	1.016	85	5.9	0.020	0.023	0.023	0.020	GH3313
		0.055	1.397	0.055	1.397	50	3.4	0.031	0.036	0.029	0.024	GH3314
		0.078	1.981	0.078	1.981	25	1.7	0.054	0.063	0.057	0.049	GH3315
3-WAY Directional Control	0.65W	0.030	0.762	0.030	0.762	135	9.3	0.015	0.018	0.018	0.015	G3412
		0.040	1.016	0.040	1.016	80	5.5	0.020	0.023	0.023	0.020	G3413
		0.055	1.397	0.055	1.397	45	3.1	0.025	0.029	0.029	0.024	G3414
		0.078	1.981	0.078	1.981	20	1.4	0.054	0.063	0.055	0.046	G3415
	2W	0.030	0.762	0.030	0.762	190	13	0.015	0.018	0.018	0.015	GH3412
		0.040	1.016	0.040	1.016	165	11	0.020	0.023	0.020	0.017	GH3413
		0.055	1.397	0.055	1.397	80	5.5	0.032	0.038	0.038	0.032	GH3414
		0.078	1.981	0.078	1.981	40	2.8	0.054	0.063	0.063	0.053	GH3415

SOLENOID VALVES

**② Coil Construction**

- (blank) = Tape-wrapped, Class-B, with 12" (30.48cm) long lead-wires\*  
**W** = Lead-wires, non-standard length (specify in inches)  
**1** = Encapsulated coil  
**5** = Encapsulated coil with 0.110" (2.79mm) spade terminals  
**10** = Rectified coil for AC voltage (2-watt only)

**③ Plunger Seal Material**

- (blank) = Viton®\*  
**NB** = Nitrile  
**E** = EPR  
**N** = Neoprene

**④ O-Ring Material**

- (blank) = Viton®\*  
**NBO** = Nitrile  
**EO** = EPR  
**NO** = Neoprene

**⑤ Body Port Configuration**

- (blank) = #10-32 straight thread ports\*  
**LC** = 1/8"-27 NPT ports (2-way valves only)  
**BM** = M5 x 0.8 ports  
**MM** = Manifold mount with #10-32 threaded stud†  
**MM2** = Manifold mount with M5 x 0.8 threaded stud†

**⑥ Voltage**

- \_\_\_ **VDC** = DC (specify voltage)  
 \_\_\_ **VAC** = AC Rectified 2-watt only (specify voltage)

**⑦ Additional Options**

- OC** = Cleaned for oxygen use  
**TP** = PTFE coated plunger  
**VAC** = Vacuum application – 0 to 29.5" Hg (0 to 1000 mBar)

\* Standard selection; will be used unless otherwise specified.  
 Standard selections are not referenced in final part number.

## Notes

1. Use prefixes from this column if you plan to select a Body Port Configuration other than the #10-32 straight thread ports.

† Teflon® o-ring not suitable for manifold mount.

Gems specializes in the design and manufacturing of custom solenoid valves and fluidic systems. If you don't see what you're looking for, or have a question, contact us at 800-378-1600 or [info@gemssensors.com](mailto:info@gemssensors.com).