

# Solenoid Valves

## GENERAL PURPOSE

Providing 2- and 3-way functions and available in miniature and sub-miniature sizes, Gems Sensors general purpose solenoid valves deliver Flow Coefficients (Cv) of .018 to .880. Select from NPT port, manifold or barbed connection types. Body materials include brass, stainless steel, acetal, aluminum, and polypropylene. Versions within this group will control operating pressure differentials up to 1000 psi (70 bar).

All valves are available with a wide range of options. Our modular designs can be easily configured to your specific application. For products with specifications not shown here please contact Gems Sensors.

Gems Sensors General Purpose Solenoid Valve Series:



## SPECIALTY

### Latching

These 2-way and 3-way valves allow the user to control in remote applications where power is limited. Epoxy-filled powder-coated housings and customer-specified elastomers, for superior media compatibility makes these valves suited for non-traditional and extreme applications. The BL Series can change states in temperatures below -40 degrees Celsius, making it well suited for multiple unique markets and applications.



### Cryogenic

These miniature 2-way valves are configured for use with liquid nitrogen (LN2), liquid carbon dioxide (LCO2) and other extreme temperature media. Gems Sensors Cryogenic Valves have a specialized silicone epoxy-encapsulated coil for moisture ingress protection from -320 degrees Fahrenheit to 356 degrees Fahrenheit. PTFE coated plungers and 316 Stainless Steel guide tubes make these valves suitable for applications requiring high cycle life.



Gems Sensors Cryogenic Solenoid Valve Series:  
B-Cryo and D-Cryo

### Humidifier

Available in two orifice sizes (3/64" and 3/32"), the humidifier solenoid valve has a brass body, integrated fittings, ready to connect directly to your plumbing. The valve was originally designed and manufactured for original equipment manufacturers (OEMs) and is now available as a replacement solenoid valve for in-home and commercial humidifiers.



### Isolation

Available in miniature and sub-miniature sizes for high purity or aggressive liquids and gases, these valves feature a diaphragm to isolate the media from internal components. Numerous diaphragm materials, port configurations and voltage options allow the valve to be easily integrated into any complex or demanding system or application containing harsh fluids.



# Solenoid valves

## overview



		EV210 BW (1.5 - 6)	EV220B (6-22)	EV221BW (10-22)	EV250B (10-22)	EV250BW (10-22)							
Media	Drinking Water	✓		✓		✓			✓		✓	✓	
	Water		✓		✓			✓		✓			✓
	Steam										✓		
	Air		✓		✓			✓		✓			
	Oil		✓		✓			✓		✓			
Characteristics	System	Closed and drain	Open	Open	Closed and Drain	Closed and Drain		Open	Open	Open	Open	Open	Open
	Connection	G½" - G¾"	G¼" - G1"	G¾" - G1"	G¾" - G1"	G¾" - G1"		G½" - G2"	G½" - G2"	Fl. 2½", 3", 4"	G½" - G2"	G¼" - G2"	G¼" - G¾"
	Capacity Kv (m3/h)	0.8 - 0.7	0.7 - 6	1.5 - 6	2.5 - 7	2.5 - 7		4.0 - 40	4.0 - 40	50 - 130	4.0 - 40	1.6 - 32	0.8 - 5
	Function	NC or NO	NC or NO	NC or NO	NC or NO	NC or NO		NC or NO	NC or NO	NC	UN latching	NC or NO	NC
	Pressure range (Bar)	0 - 10	0.1 - 30	0.1 - 10	0 - 10	0 - 10		0.3 - 16	0.3 - 10	0.25 - 10	0.3 - 10	0.2 - 10	0.2 - 10
	Media temperature (C)	-30 - 90	-30 - 100	-30 - 90	-30 - 140	-30 - 90		-30 - 140	-30 - 90	-25 - 90	-30 - 70	-30 - 100	-10 - 185
Drinking Water Approvals	WRAS			✓		✓			✓		✓	✓	
	RISE	✓		✓		✓			✓		✓		
	SINTEF	✓		✓		✓			✓		✓		
	ACS	✓		✓		✓			✓		✓		
	PZH	✓	✓	✓	✓	✓		✓	✓	✓	✓		
	UBA-Leitline	✓		✓		✓			✓		✓		
Seal material	EPDM	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	
	FKM		✓		✓			✓				✓	✓
	PTFE												
Valve body	Brass		✓					✓				✓	✓
	DZR Brass		✓		✓			✓				✓	
	DZR ECO Brass	✓		✓		✓			✓		✓		
	SS							✓	✓		✓		
	Cast Iron									✓			