

# BS Series – Higher Flow

- MOPD: 10 Bar (150 PSI)
- K<sub>v</sub> Range: 0.030 to 0.256 (C<sub>v</sub> Range: 0.035 to 0.300)
- > 7 Watts

The BS Series is a 2-way, high flow, isolation valve that is designed to be virtually impervious to chemical attack and to protect high purity media. When your media cannot come in contact with any metallic materials, this highly versatile, modular valve delivers the protection you need for accurate and reliable flow control for millions of cycles. With a variety of body, and diaphragm materials, plus numerous port configurations, voltage options, and coil constructions, the BS Series is truly a miniature inert isolation valve that can be built to your exact applications requirements.

### **Typical Applications**

- Remediation Equipment
- Clinical Chemistry Equipment
- Analytical Instrumentation

### Dimensions

57.6 (2.27)

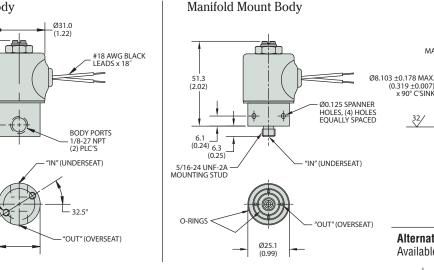
(0.80

#8-32 UNC-2B x 0.25 MIN. FULL TH'D ON A Ø0.735 B.C. (2) PLC'S

### Threaded Port Body



MANIFOLD MATING DIMENSIONS



# (UNDERSEAT) $2 \times 00.094$ , ORIFICE $\leq 1/8^{\circ}$ $3 \times 00.094$ , ORIFICE $\geq 5/32^{\circ}$ (UNDERSEAT)

R.310

5/16-24 UNF-2B x 0.28 MIN. FULL TH'D

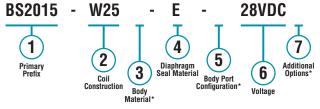
32.0 (1.26) CONDUIT OPTION (1/2-14 NPSM)

### Alternate 1/2" Conduit Housing Available on all body configurations



Ø25.1

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



\* Blank entry indicates a "Standard" selection (1/8-27NPT female thread, in this case).

### Example:

### BS2015-W25-E-28VDC

2-Way N.C. 303 S.S. (grommet housing) solenoid valve, with 63.5cm (25<sup>°</sup>) tape-wrapped coil, lead-wires, non-standard length, EPR diaphragm seal, 1/8-27 NPT female thread, operating at 28 VDC.

3.5			
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1110	ιιc	110	uo

Body	303 S.S.
Diaphragm Seal	Viton®

## **ISOLATION VALVES**

### Part Prefix Table ①

Body Material	Orifice		MOPD		Max Back Pressure		K <sub>v</sub>	Cv	1 Primary Prefix	
	Body		bar psig	psiq	bar	psig	Body		Grommet	
	mm	inches		Pe.9		P0.9	2003		Housing	Housing
303 Stainless Steel <sup>1</sup>	1.19	3/64	10	150	0.7	15	0.030	0.035	BS2010	BS2020
	1.59	1/16	7.6	110	0.7	10	0.055	0.065	BS2011	BS2021
	1.98	5/64	6.2	85	0.7	10	0.077	0.090	BS2012	BS2022
	2.38	3/32	4.8	70	0.7	10	0.132	0.155	BS2013	BS2023
	2.78	7/64	3.1	25	0.3	10	0.171	0.200	BS2014	BS2024
	3.18	1/8	1.0	10	0.3	5	0.205	0.240	BS2015	BS2025
	3.97	5/32	0.3	5	0.3	5	0.256	0.300	BS2016	BS2026

\* Other body orifice sizes may be available, consult factory.

### (2) Coil Construction

(blank) = Class 130°C (B), tape-wrapped, lead-wires

- 45.7cm (18) long\*

- =Lead-wires, non-standard length (specify in centimeters) w
  - **10** = Externally rectified (AC voltage and lead-wires only)
  - 1 = Class 130°C (B), encapsulated, lead-wires
  - 4 = Class 130°C (B), encapsulated, 4.76mm (3/16")
  - spade terminals 6.35mm (1/4") spade optional
- HC2 = Class 130°C (B), encapsulated, 9.4mm DIN
  - (EN175301-803 Style C Industrial 2+1 poles)
  - 11 = Class 180°C (H), tape-wrapped, lead-wires
  - **3** = Class 180°C (H), encapsulated, lead-wires

#### (3) Body Material (Replaces Standard 303 SS)

- **BB** = Brass
- SB = 304 Stainless Steel
- SB5 = 316 Stainless Steel

### 4 Diaphragm Seal Material

- (blank) = Viton<sup>®</sup> diaphragm\*
- $\dot{\mathbf{E}} = \text{EPR diaphragm}$ 
  - NS = Nitrile (NSF/FDA) diaphragm
  - **PF** = Perfluoroelastomer diaphragm

#### **(5)** Body Port Configuration

- (blank) = 1/8-27 NPT female thread\*
  - $L\dot{B} = 1/4-18$  NPT female thread
  - **BD** = #10-32 female straight thread
    - max. orifice = 3.18mm (1/8″)
  - LT = 1/8-28 BSPT female thread with M4 x 0.7 mounting threads
  - LU = 1/4-19 BSPT female thread with #8-32 mounting threads
  - MM = Manifold mount (1/4-28 UNF-2A mounting stud)<sup>2</sup>
  - MM3 = Manifold mount (5/16-24 UNF-2A mounting stud)<sup>2</sup>
  - **OB** = Omit body (operator style)
  - BI = Bottom over-seat port, female thread
  - max. orifice = 3.18mm (1/8")
  - **BIM** = Bottom over-seat port, 1/8-27 NPT male thread - max. orifice = 1.98mm (5/64"), brass body only BO = Bottom under-seat port, female thread
  - BOM = Bottom under-seat port, 1/8-27 NPT male thread
  - max. orifice = 3.18mm (1/8<sup>°</sup>), brass body only
  - **RL** = 90° porting left hand **RR** = 90° porting right hand

#### 6 Voltage

VDC = DC (specify voltage)

VAC = AC Rectified only (specify voltage)

### 7 Additional Options

**WM** = Mounting bracket **OC** = Cleaned for oxygen use

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

#### Notes

- 1. Use Prefixes from these rows if you want to use any of the other Body Materials listed under selection (3). Simply add the respective material code in the 3rd part number
- position (See Example). 2. Teflon<sup>®</sup> o-ring not suitable for manifold mount.