

## V246 and V243I Flared Connection Valves Bodies

**LIFETIME WARRANTY**  
ON VALVE BODIES  
SPARTAN PERIPHERAL DEVICES

**5 YEAR WARRANTY**  
ON CARTRIDGES  
SPARTAN PERIPHERAL DEVICES

Designed for use on hot or chilled water up to 50% glycol mix and low-pressure steam, these commercial application 2 way terminal globe valve bodies utilize low zinc bronze alloy for outstanding resistance to corrosion and dezincification. Coupled with a long life of 1.5 million cycles and with replaceable and inline interchangeable cartridges with burnished stainless steel stems and micro machined accurate parabolic characterizing plugs. All Spartan cartridges have spring loaded stems which are driven stem down to close.

These control valve assemblies can be used with the complete line of Spartan Zone Actuators (Electric, Electronic, Pneumatic & Thermostatic) and are easily interchangeable with a thumb-nut. See Spartan Actuators Data Sheets.

- Available range of Cv cartridges from 0.15 to 3.5CV in 0.5CV increments
- Choose from hot or chilled water, low pressure steam or high close-off pressure application versions



Choose Spartan for a quality and versatile alternative to Honeywell and Erie valves.

### Internal Cartridges



Type EP/EV    Type EB    Type BC

**Choice of Cv\*:**  
0.15 / 0.25 / 0.50 / 1.0 / 1.5 / 2.0 /  
2.5 / 3.0 / 3.5

**EPxx Cartridge** - for hot or chilled water up to 50% glycol mix.

**EVxx Cartridge** - low-pressure steam 15psi.

**EBxx Cartridge** - high close off pressures of 100psi.

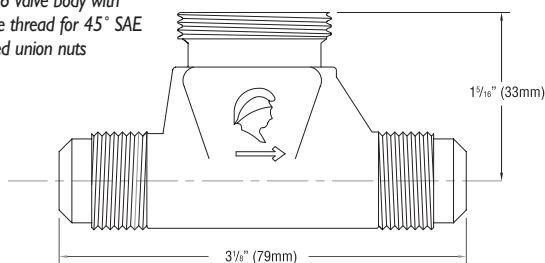
**BCxx Cartridge\*** - for 0.15, 0.25 CVs only

### Internals Specifications

|  | Standard Application<br>Chilled Water/Glycol          | Steam Application<br>15psi                                      | High Pressure Application<br>100psi/6.8 bar close-off          | Low Flow<br>Application                                |
|--|---|---|--|--|
| <b>Cartridge part #s<br/>(Replaceable)</b> | EP - (Cv) or (Kv)<br>ie: EP - 3.5<br>Type "EP" (plug) | EV - (Cv) or (Kv)<br>ie: EV - 3.5<br>Type "EV" (plug) for steam | EB - (Cv) or (Kv)<br>ie: EB - 6.0<br>Type "EB" (balanced plug) | BC - (Cv) or (Kv)<br>ie: BC - 0.25<br>Type "BC" (cage) |
| <b>Valve seat</b>                          | Integral bronze                                       | Integral bronze   | Integral bronze  | Bronze - replaceable                                   |
| <b>Valve disc/plunger</b>                  | EPDM / brass  | Hi-temperature EPDM   | EPDM / brass   | Brass cage   |
| <b>Valve spring</b>                        | Stainless Steel                                       | Stainless Steel   | Stainless Steel  | Stainless Steel  |
| <b>Packing</b>                             | Double EPDM   | Double Hi-temperature EPDM                                      | Double EPDM  | Double EPDM  |
| <b>Stroke</b>                              | 4mm   | 4mm   | 4mm  | 4mm  |
| <b>Tight close off</b>                     | 100 %   | 100 %   | 100%   | 0.1% of Cv   |
| <b>Steam rated</b>                         | N / A   | 15 psi. (250°F / 120°C)   | N / A  | N / A  |
| <b>Water rated</b>                         | (250°F / 120°C)                                       | N / A   | (250°F / 120°C)  | (250°F / 120°C)  |
| <b>Glycol rated</b>                        | To 50%  | N / A   | To 50%   | To 50%   |
| <b>Cv Equal % - 4mm lift</b>               |   | 0.50, 1.0, 1.5, 2.0, 2.5, 3.0                                   |  | 0.15, 0.25, 0.50                                       |
| <b>Cv Linear - 4mm lift</b>                |   | 1.0, 2.0, 3.5   |  | N/A  |

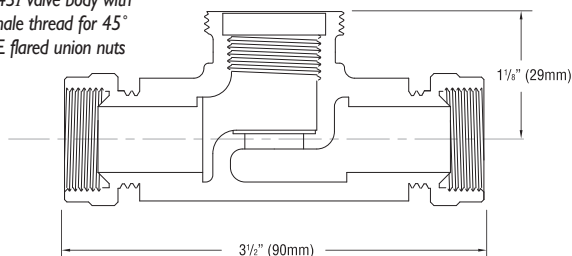
### V246 - Compatible with Honeywell bodies VP527 series

V246 valve body with  
male thread for 45° SAE  
flared union nuts



### V243I - Compatible with Erie bodies

V243I valve body with  
female thread for 45°  
SAE flared union nuts



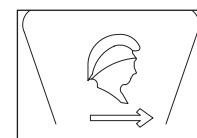
### General Specifications

|                                |   |
|--------------------------------|---|
| <b>Body Material</b>           | Low zinc bronze, alloy C84400                     |
| <b>Pressure Rating</b>         | ANSI 250 (PN16), 400 PSI at 150°F, 27 bar at 65°C |
| <b>Max. Test Pressure</b>      | 1200 PSI (81 bar)                                 |
| <b>Max. ΔP</b>                 | 60 PSI (4.0 bar)                                  |
| <b>Max. Close-off Pressure</b> | 100 PSI with EB cartridge                         |
| <b>Valve Stem</b>              | "Mirror - maker" burnished stainless steel stems  |
| <b>Turndown Ratio</b>          | Better than 50:1                                  |
| <b>Stem Travel</b>             | 5/32" (4mm)                                       |
| <b>Stem Position</b>           | UP = valve open, DOWN = valve closed              |

### Installation and Flow Direction

When installing it is essential that the flow follows the arrow that is embedded into the valve body casting.

The packing and plunger cartridge can be easily replaced by using the AV07 Packing Wrench shown below.



### AV07 Packing Wrench

