

## Series 3822

The Spartan Scientific Series 3822 is a metal body solenoid valve offered in both 2-Way \& 3-Way, 2-Position Normally Closed or Normally Open functions and eight orifice sizes. Component features include the proven Series 3800 solenoid operator available in brass/stainless steel or all stainless steel pilot design, optional seal materials and Glass-Filled Nylon encapsulated coil in both DIN spade and flying lead. The "basket" orifice design feature allows the possibility of changing the orifice diameter to meet flow requirements within a matter of seconds. The rugged metal body coupled with the high cycle life, proven solenoid meet to make a solid solution for media and inert gas control. Available in all standard voltages, the valve saves energy while giving you the confidence of high quality in small envelope size.

## Dimensional Data

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED


1/8" -27 NPT (2


| ORIFICE SIZE / VOLTAGE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F |  | 0.6 mm |  | 0.8 mm |  | 1.0 mm |  | 1.2 mm |  | 1.5 mm |  | 2.0 mm |  | 2.4 mm |  | *3.0mm |  |
| N |  | AC | DC | AC | DC | AC | DC | AC | DC | AC | DC | AC | DC | AC | DC | AC | DC |
| C | 2/2 NC | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 75 | 60 |
| T | 2/2 NO | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 150 | 150 | N/A | N/A | N/A | N/A | N/A | N/A |
| $\bigcirc$ | 3/2 NC | 200 | 200 | 200 | 200 | 200 | 200 | 180 | 180 | 150 | 150 | 90 | 75 | 60 | 60 | 25 | 25 |
| N | 3/2 NO | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 150 | 150 | N/A | N/A | N/A | N/A | N/A | N/A |

MAX. PRESSURE RANGE (psi)


## Technical Data

| Function: | 2-Way, 2-Position; Direct Acting; Normally Closed or Normally Open 3-Way, 2-Position; Direct Acting Normally Closed or Normally Open | Mounting: <br> Wetted Mater | \#8 x 0.150" Self-Tapping Screw (2) not provided <br> : Elastomers: EPDM, FKM, NBR <br> Operator: 300 and 400 Series Stainless Steel; or Brass |
| :---: | :---: | :---: | :---: |
| Port Size: | 1/8" NPT |  | Orifice Basket: APOM <br> Shading Ring: Copper (AC only) |
| Orifice Size / Flow Factor: | $\begin{aligned} & 0.6 \mathrm{~mm} / 0.02 \mathrm{CV} \\ & 0.8 \mathrm{~mm} / 0.03 \mathrm{Cv} \end{aligned}$ |  | Springs: 300 Series Stainless Steel Valve Body: Brass or Zamak |
|  | $1.0 \mathrm{~mm} / 0.05 \mathrm{CV}$ <br> $1.2 \mathrm{~mm} / 0.06 \mathrm{Cv}$ <br> $1.5 \mathrm{~mm} / 0.08 \mathrm{Cv}$ <br> $2.0 \mathrm{~mm} / 0.17 \mathrm{Cv}$ <br> $2.4 \mathrm{~mm} / 0.24 \mathrm{Cv}$ <br> $3.0 \mathrm{~mm} / 0.31 \mathrm{CV}$ | Coil Data: | Duty Cycle: Continuous (within specifications) <br> Encapsulation: Glass-Filled Nylon <br> Insulation: Class F <br> Power Rating: 6.5 Watt VDC, 8.5VA VAC <br> (others available on request) <br> Voltage: 12, 24 VDC |
| Pressure Range: | Vacuum to 200 psi (depending on orifice size and function) |  | $24,120,220,240$ VAC $50 / 60 \mathrm{~Hz}$ Voltage Tolerance: +/- 10\% Nominal |
| Temp. Range: | Fluid Max.: $+90^{\circ} \mathrm{C}$ <br> Dry Range: Ambient $+10^{\circ}$ to $+50^{\circ} \mathrm{C}$ | Connections: | Winding: Class H <br> Spades: Terminals AMP $6.3 \times 0.8$ width 11 mm |
| Response Time: | 12 to 14ms Complete Cycle |  | (Available in DIN 43650 Form "A" / ISO 4400, EN175301-803:2006 for 3.0 mm orifice or larger) |
| Media: | Air, inert gas, light oil, water (contact factory for compatibilities) |  | Flying Lead: PVC 22 AWG, Multi-Strand Copper Wire, 300V, 12" minimum length |
| Environment Protection: | IP65 (IEC 144), NEMA 4 <br> Dust-tight and water resistant (with electrical connector) | Packaged Weig | 0.21 lbs . |

## How To Order



