

# Automated Ball Valve Part Number Matrix

| 1 Prefix |  |
|----------|--|
| F        | Firesafe Tested (see valve series for details & testing) |
| NS       | NSF 61 & 372 Certified Series                            |

| 2 Valve Series |  |
|----------------|--|
| 10             | 1pc. Regular Port 2000 psi                   |
| 20             | 2pc. Full Port 1000 psi                      |
| 21             | 2pc. Regular Port 2000 psi max               |
| 22             | 2pc. Direct Mount 1000 psi, Full Port        |
| 24             | 2pc. 3000 psi                                |
| 30             | 3-Way Flanged, Full Port                     |
| 31             | 3-Way Flanged, Direct Mount, Full Port       |
| 33             | 3, 4, 5-Way Full Port, Multiport             |
| 38             | 3-Way NPT, Regular Port                      |
| 55             | 3pc. 1000 psi max, Full Port                 |
| 77             | 3pc. 1000 psi max, Full Port, Sanitary       |
| 75             | Series 77, EC 1935/2004 Compliant            |
| HP             | 3pc. Forged High Purity                      |
| H78            | 3pc. Cast High Purity, Encapsulated Bolts    |
| 83             | 3pc. 2000 psi max, Full Port                 |
| 8R             | 3pc. 2000 psi max, Regular Port              |
| 88             | 3pc. Direct Mount 2000 psi max, Full Port    |
| R8             | 3pc. Direct Mount 2000 psi max, Regular Port |
| 90             | 2pc. Flanged Full Port (Investment Cast)     |
| 91             | Unibody Regular Port Flanged                 |
| 9R             | Unibody Regular Port Flanged                 |
| 93             | 2pc. Flanged Full Port (Sand Cast)           |
| V7             | 3pc. Sanitary, V-Port                        |
| V7S            | Series V7, EC 1935/2004 Compliant            |
| V8             | 3pc. V-Port                                  |
| V9             | Flanged V-Port                               |
| D9             | Direct Mount Flanged                         |
| T5             | Tank Bottom 3pc.                             |
| C8             | Cryogenic 3pc. Full Port                     |
| CR             | Cryogenic 3pc. Regular Port                  |
| DR             | 3-Way Bottom Entry Diverter Valve            |
| LB             | PFA Lined, Split Body, Flanged Ball Valve    |
| P1             | Schedule 10 Piggable Valve                   |
| VS             | Segment V-Port, Soft                         |
| VM             | Segment V-Port, Metal Graphite Packing       |
| VV             | Segment V-Port, Metal Viton® Packing         |

| 3 Body/Ball/Stem Material |   |
|---------------------------|---|
| Blank                     | Valve Series Standard                   |
| A                         | Alloy 20 Body, Ball, & Stem             |
| C                         | Carbon Steel Body                       |
| L                         | Low Carbon 316L Stainless Steel         |
| J                         | Low Carbon 304 Stainless Steel          |
| H                         | Carbon Body /Hastelloy Ball & Stem      |
| Q                         | Carbon Body/Monel Ball & Stem           |
| R                         | 316 SST Body/Monel Ball & Stem          |
| T                         | Hastelloy C-276 Body, Ball, & Stem      |
| E                         | Electropolished Stainless Steel         |
| Z                         | Epoxy Coated Carbon Steel               |
| D                         | CD3MN Body/Duplex SST Ball & Stem       |
| G                         | CE3MN Body/Super Duplex SST Ball & Stem |
| 2                         | F316L (SF4) Electropolished Forged      |
| 3                         | CF3M (SF4) Electropolished Cast         |
| 4                         | F316H Forged Body                       |
| 5                         | LCB Body                                |
| 8                         | LCC Body                                |
| 6                         | WC6 Body                                |
| 9                         | WC9 Body                                |
| P                         | CF8 (304 SST) Body/304 SST Ball & Stem  |

| 4 End Connection |                                 |
|------------------|---------------------------------|
| T                | NPT Ends                        |
| S                | Socket Weld Ends                |
| B                | Butt Weld Ends                  |
| E                | Extended Butt Weld Ends         |
| F                | 150# Flanged Ends               |
| 3                | 300# Flanged Ends               |
| 6                | 600# Flanged Ends               |
| R                | 600# RTJ Flanged Ends           |
| C                | Sanitary Clamp Ends             |
| D                | Tube O.D. Ends                  |
| H                | Sanitary Clamp x Tube O.D. Ends |
| M                | NPT x Socket Weld               |
| Q                | Tube x Socket Weld              |

| 5 Seat, Lining & Trim Materials |   |
|---------------------------------|---|
| 1                               | Valve Series Standard                                 |
| X                               | Reinforced TFE Seats (RTFE)                           |
| P                               | Virgin TFE Seats (PTFE)                               |
| U                               | UHMWPE Seats  |
| D                               | Delrin® Seats   |
| S                               | 50/50 STFE Seats                                      |
| C                               | 25% CS Powder/75% TFE Seats (CTFE)                    |
| T                               | TFM™-1600 Seats                                       |
| E                               | All TFM™-1600 Seats, Seals, & Packing                 |
| A                               | 50% SS Powder/50% TFM™-1600 Seats (STFM)              |
| F                               | PTFE Cavity Filler Seats                              |
| K                               | PCTFE Seats (Cryogenic)                               |
| L                               | PFA Lined w/ PTFE Seats                               |
| M                               | MG1241 Seats  |
| Z                               | PEEK Seats  |
| G                               | STFE Seats w/ Non-Standard Graphite Packing & Gaskets |
| 2                               | Tungsten Carbide Coated 316SST Seats & Ball           |
| 3                               | HCr Coated Ball/Stellite® Inlay Seats                 |
| 4                               | Chrome Carbide Coated 316 SST Seats & Ball            |
| 8                               | Chrome Carbide Coated Inconel® 718 Seats & Ball       |

| 6 Valve Size |      |     |        |
|--------------|------|-----|--------|
| 025          | 1/4" | 125 | 1-1/4" |
| 038          | 3/8" | 150 | 1-1/2" |
| 050          | 1/2" | 200 | 2"     |
| 075          | 3/4" | 250 | 2-1/2" |
| 100          | 1"   | 300 | 3"     |

| 7 Actuator - Pneumatic (DA) |         |      |          |      |          |
|-----------------------------|---------|------|----------|------|----------|
| TRYD                        | TR10DA  | 2R5D | 2R200DA  | 2R0D | 2R1750DA |
| TR1D                        | TR20DA  | 2R6D | 2R300DA  | 2RAD | 2R2500DA |
| 2R2D                        | 2R40DA  | 2R7D | 2R500DA  | 2RBD | 2R3500DA |
| 2R3D                        | 2R80DA  | 2R8D | 2R850DA  |      |          |
| 2R4D                        | 2R130DA | 2R9D | 2R1200DA |      |          |

| 7 Actuator - Pneumatic (SR) |         |      |          |
|-----------------------------|---------|------|----------|
| TR1S                        | TR20SR  | 2R7S | 2R500SR  |
| 2R2S                        | 2R40SR  | 2R8S | 2R850SR  |
| 2R3S                        | 2R80SR  | 2R9S | 2R1200SR |
| 2R4S                        | 2R130SR | 2R0S | 2R1750SR |
| 2R5S                        | 2R200SR | 2RAS | 2R2500SR |
| 2R6S                        | 2R300SR | 2RBS | 2R3500SR |

| 7 Actuator - Pneumatic Stainless (DA) |          |      |          |
|---------------------------------------|----------|------|----------|
| S21D                                  | S2-052DA | S25D | S2-125DA |
| S22D                                  | S2-063DA | S26D | S2-140DA |
| S23D                                  | S2-083DA | S27D | S2-160DA |
| S24D                                  | S2-105DA | S28D | S2-210DA |

| 7 Actuator - Pneumatic Stainless (SR) |          |      |          |
|---------------------------------------|----------|------|----------|
| S21S                                  | S2-052SR | S25S | S2-125SR |
| S22S                                  | S2-063SR | S26S | S2-140SR |
| S23S                                  | S2-083SR | S27S | S2-160SR |
| S24S                                  | S2-105SR | S28S | S2-210SR |

| 7 Actuator - Electric (On-Off) |         |      |          |
|--------------------------------|---------|------|----------|
| WEX1                           | WE-350  | WEG1 | WE-5200  |
| WEA1                           | WE-500  | WEH1 | WE-6900  |
| WEB1                           | WE-690  | WEJ1 | WE-10500 |
| WEC1                           | WE-1350 | WEK1 | WE-17500 |
| WED1                           | WE-1700 | WEL1 | WE-25900 |
| WEE1                           | WE-2640 | WEM1 | WE-53000 |
| WEF1                           | WE-4400 | WEN1 | WE-80000 |

| 7 Actuator - Electric (Modulating) |          |      |           |      |           |
|------------------------------------|----------|------|-----------|------|-----------|
| WEA2                               | WEM-500  | WEF2 | WEM-4400  | WEL2 | WEM-25900 |
| WEB2                               | WEM-690  | WEG2 | WEM-5200  | WEM2 | WEM-53000 |
| WEC2                               | WEM-1350 | WEH2 | WEM-6900  | WEN2 | WEM-80000 |
| WED2                               | WEM-1700 | WEJ2 | WEM-10500 |      |           |
| WEE2                               | WEM-2640 | WEK2 | WEM-17500 |      |           |

| 8 Accessories/Options |   |
|-----------------------|---|
| X                     | No Specials   |
| A                     | TYPE 4 Solenoid 120VAC                                      |
| B                     | TYPE 7 Solenoid 120VAC                                      |
| C                     | Intrinsically Safe Solenoid                                 |
| D                     | TYPE 4 Solenoid 24VDC                                       |
| F                     | TYPE 7 Solenoid 24VDC                                       |
| Q                     | TYPE 4 SST Solenoid 120VAC                                  |
| M                     | TYPE 7 SST Solenoid 120VAC                                  |
| L                     | TYPE 4 SST Solenoid 24VDC                                   |
| N                     | TYPE 7 SST Solenoid 24VDC                                   |
| P                     | Pneumatic Positioner  |
| E                     | Electro-Pneumatic Positioner                                |
| R                     | 24VDC Electric Actuator                                     |
| S                     | 220VAC Electric Actuator                                    |
| T                     | Other Voltage Electric Actuator                             |
| W                     | 12VDC Electric Actuator                                     |
| Y                     | 24VAC Electric Actuator                                     |
| Blank                 | *No voltage specified on electric assemblies denotes 120VAC |

| 9 Accessories |                                 |
|---------------|---------------------------------|
| X             | No Specials                     |
| A             | TYPE 4 Limit Switch             |
| B             | TYPE 7 Limit Switch             |
| C             | Intrinsically Safe Limit Switch |
| Q             | TYPE 4 SST Limit Switch         |
| M             | TYPE 7 SST Limit Switch         |
| Z             | 180° Operation                  |
| 1             | HS1 High Speed Electric         |
| 2             | HS2 High Speed Electric         |

| 10 Special Designation |  |
|------------------------|--|
| 3                      | 30° V-Port (v-ball)                        |
| 6                      | 60° V-Port (v-ball)                        |
| 9                      | 90° V-Port (v-ball)                        |
| Blank                  | No Designation, SST Stem                   |
| A                      | 17-4 PH® Stem                              |
| B                      | XM-19 (Nitronic 50) Stem                   |
| C                      | Duplex 2205 Stem                           |
| D                      | Inconel® 718 Stem                          |
| L                      | L-Port 3-Way arrangement                   |
| T                      | T-Port 3-Way arrangement                   |
| Y                      | 2 Position, 180° control for Wine Industry |
| P                      | 3 Position, 180° control for Wine Industry |
| X                      | No Specials, Standard (HP/H78 Series)      |
| S                      | Anti-Static Option (HP/H78 Series)         |

| HOW TO ORDER AUTOMATED VALVES |    |   |   |   |   |   |     |   |      |   |   |   |   |    |
|-------------------------------|----|---|---|---|---|---|-----|---|------|---|---|---|---|----|
| 1                             | 2  | 3 | - | 4 | 5 | - | 6   | / | 7    | - | 8 | 9 | - | 10 |
| ↓                             | ↓  | ↓ |   | ↓ | ↓ |   | ↓   |   | ↓    |   | ↓ | ↓ |   | ↓  |
| F                             | 88 | C | - | T | X | - | 025 | / | 2R2D | - | X | X |   |    |