



|           |           |             |           |           |           |          |          |           |
|-----------|-----------|-------------|-----------|-----------|-----------|----------|----------|-----------|
| <b>WW</b> | <b>3"</b> | <b>1020</b> | <b>EN</b> | <b>55</b> | <b>P2</b> | <b>Y</b> | <b>Q</b> | <b>CC</b> |
|-----------|-----------|-------------|-----------|-----------|-----------|----------|----------|-----------|

  

| Sector                                | Code |
|---------------------------------------|------|
| Waterworks / Buildings & Construction | WW   |

  

| Size            | Code      |
|-----------------|-----------|
| EN Design Type  |           |
| 1½", DN40       | 1½"       |
| 2", DN50        | 2"        |
| <b>3", DN80</b> | <b>3"</b> |
| 4", DN100       | 4"        |
| ES Design Type  |           |
| 2", DN50        | 2"        |
| 3", DN80        | 3"        |
| 4", DN100       | 4"        |
| 6", DN150       | 6"        |

  

| Type                 | Code |
|----------------------|------|
| High Flow Capacity   | EN   |
| Normal Flow Capacity | ES   |

  

| Pattern | Code | Construction Material  | Code |
|---------|------|------------------------|------|
| Oblique | Y    | Nylon Glass Reinforced | Q    |

  

| End Connection         | Code                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |        |    |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|----|--|-----|-------------|--------|----|-----|--|--|----|--------------------|--------|------------|----|--------------------|----|--|----|--|--|--|----|------------------------|--------------------|----|--------|----|--|--------------------|----|----|----|--|--|--|--|----|
| Threaded               | <table border="1"> <tr> <th></th> <th>EN</th> <th>ES</th> <th></th> </tr> <tr> <td>BSP</td> <td>1½", 2", 3"</td> <td>2", 3"</td> <td>BP</td> </tr> <tr> <td>NPT</td> <td></td> <td></td> <td>NP</td> </tr> <tr> <td>BSP <sup>(3)</sup></td> <td>2", 3"</td> <td>2", 3", 4"</td> <td>VV</td> </tr> <tr> <td>NPT <sup>(4)</sup></td> <td>4"</td> <td></td> <td>VN</td> </tr> <tr> <td></td> <td></td> <td></td> <td>VI</td> </tr> <tr> <td>Flanged <sup>(2)</sup></td> <td>BSP <sup>(3)</sup></td> <td>3"</td> <td>3", 4"</td> <td>CC</td> </tr> <tr> <td></td> <td>NPT <sup>(4)</sup></td> <td>4"</td> <td>6"</td> <td>CN</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>CC</td> </tr> </table> |            | EN     | ES |  | BSP | 1½", 2", 3" | 2", 3" | BP | NPT |  |  | NP | BSP <sup>(3)</sup> | 2", 3" | 2", 3", 4" | VV | NPT <sup>(4)</sup> | 4" |  | VN |  |  |  | VI | Flanged <sup>(2)</sup> | BSP <sup>(3)</sup> | 3" | 3", 4" | CC |  | NPT <sup>(4)</sup> | 4" | 6" | CN |  |  |  |  | CC |
|                        | EN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ES         |        |    |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
| BSP                    | 1½", 2", 3"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2", 3"     | BP     |    |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
| NPT                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            | NP     |    |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
| BSP <sup>(3)</sup>     | 2", 3"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2", 3", 4" | VV     |    |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
| NPT <sup>(4)</sup>     | 4"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            | VN     |    |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            | VI     |    |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
| Flanged <sup>(2)</sup> | BSP <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3"         | 3", 4" | CC |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
|                        | NPT <sup>(4)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4"         | 6"     | CN |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |
|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |        | CC |  |     |             |        |    |     |  |  |    |                    |        |            |    |                    |    |  |    |  |  |  |    |                        |                    |    |        |    |  |                    |    |    |    |  |  |  |  |    |

  

<sup>(1)</sup> Complies with ANSI C606, EN 10255, BS 1387  
<sup>(2)</sup> Complies with ISO PN10/16, BST-D, ANSI 125/150, JIS K-10  
<sup>(3)</sup> Adaptors on BSPT threaded body  
<sup>(4)</sup> Adaptors on NPT threaded body

  

| Primary Feature                                   | Code        |
|---------------------------------------------------|-------------|
| Basic Valve                                       | 1005        |
| Solenoid Controlled Valve                         | 1010        |
| Electronic Control Valve                          | 1018        |
| <b>Pressure Reducing Valve</b>                    | <b>1020</b> |
| Pressure-Reducing & Sustaining Valve              | 1023        |
| Differential Pressure-Reducing Control Valve      | 1026        |
| Pressure Sustaining Valve                         | 1030        |
| Pressure-Relief Valve, Quick Type                 | 103Q        |
| Differential Pressure - Sustaining Valve          | 1036        |
| Level Control Valve                               | 1050        |
| Level Control Valve & Pressure Sustaining Control | 1053        |
| Flow Control Valve (Flanged)                      | 1070        |
| Flow Control & Pressure Reducing Valve (Flanged)  | 1072        |

\* Other primary features available on request.

  

| Additional Feature (Multiple Options Permitted)  | Code                                                                                                                                                                                                                                                                                                                 |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|--------------------------|----|
| No Additional Feature                            | 00                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Closing and Opening Speed Control                | 03                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Check Feature                                    | 20                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Relief Override                                  | 3Q                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Closing at Pressure Rise                         | 41                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Electronic Multi-Level Setting - Type 4R (water) | 4R                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Downstream Over Pressure Guard                   | 48                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Closing Surge Prevention                         | 49                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Motorized Pilot <sup>(2)</sup>                   | 45                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| <b>Solenoid Controlled</b>                       | <b>55</b>                                                                                                                                                                                                                                                                                                            |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Electric Override                                | 59                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| w/o Electric Float (65)                          | 6E                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| w/o Hydraulic Float (60/67)                      | 6H                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Modulating Horizontal Float                      | 60                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Bi-Level Electric Float                          | 65                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Bi-Level Vertical Float                          | 66                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Modulating Vertical Float                        | 67                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Level Control valve Options                      | <table border="1"> <tr> <td>Altitude Pilot</td> <td>80 <sup>(1)</sup></td> </tr> <tr> <td>Modulating Altitude Pilot</td> <td>82 <sup>(1)</sup></td> </tr> <tr> <td>Sustaining Altitude Pilot</td> <td>83 <sup>(1)</sup></td> </tr> <tr> <td>Bi-Level Altitude Control</td> <td>86 <sup>(1)</sup></td> </tr> </table> | Altitude Pilot       | 80 <sup>(1)</sup> | Modulating Altitude Pilot | 82 <sup>(1)</sup> | Sustaining Altitude Pilot | 83 <sup>(1)</sup> | Bi-Level Altitude Control | 86 <sup>(1)</sup> |                          |    |
| Altitude Pilot                                   | 80 <sup>(1)</sup>                                                                                                                                                                                                                                                                                                    |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Modulating Altitude Pilot                        | 82 <sup>(1)</sup>                                                                                                                                                                                                                                                                                                    |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Sustaining Altitude Pilot                        | 83 <sup>(1)</sup>                                                                                                                                                                                                                                                                                                    |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Bi-Level Altitude Control                        | 86 <sup>(1)</sup>                                                                                                                                                                                                                                                                                                    |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Setting Range                                    | <table border="1"> <tr> <td>2-8 meter; 7-26 feet</td> <td>M1</td> </tr> <tr> <td>2-14 meter; 7-46 feet</td> <td>M6</td> </tr> <tr> <td>5-22 meter; 17-72 feet</td> <td>M5</td> </tr> <tr> <td>15-35 meter; 49-115 feet</td> <td>M4</td> </tr> <tr> <td>25-70 meter; 82-230 feet</td> <td>M8</td> </tr> </table>      | 2-8 meter; 7-26 feet | M1                | 2-14 meter; 7-46 feet     | M6                | 5-22 meter; 17-72 feet    | M5                | 15-35 meter; 49-115 feet  | M4                | 25-70 meter; 82-230 feet | M8 |
| 2-8 meter; 7-26 feet                             | M1                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| 2-14 meter; 7-46 feet                            | M6                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| 5-22 meter; 17-72 feet                           | M5                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| 15-35 meter; 49-115 feet                         | M4                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| 25-70 meter; 82-230 feet                         | M8                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |
| Panel Mounted Control                            | L1                                                                                                                                                                                                                                                                                                                   |                      |                   |                           |                   |                           |                   |                           |                   |                          |    |

  

<sup>(1)</sup> Select Setting Range  
<sup>(2)</sup> Require panel mounted control - add code L1.  
Other additional features available on request.  
Aggressive Water Consult Factory

  

| Valve Compatibility              | Code      |
|----------------------------------|-----------|
| Potable Water (European & Other) | P1        |
| <b>Potable Water NSF-61/372</b>  | <b>P2</b> |

Compliance subjected to model specification and registration, see product page or consult Bermad for more information

- Use this guide for creating and interpreting valve configuration codes
- For additional information refer to [1000 Series Engineering Data](#)



| UC       |  |      |
|----------|--|------|
| Coating  |  | Code |
| Uncoated |  | UC   |

  

| 46C               |                                                     |            |
|-------------------|-----------------------------------------------------|------------|
| Voltage           | Main Valve Position<br>(When Solenoid De-energized) | Code       |
| 24VAC/50Hz        | - Normally Closed                                   | 4AC        |
| 24VAC/50Hz        | - Normally Open                                     | 4AO        |
| 24VAC/50Hz        | - Last Position                                     | 4AP        |
| <b>24VAC/60Hz</b> | <b>- Normally Closed</b>                            | <b>46C</b> |
| 24VAC/60Hz        | - Normally Open                                     | 46O        |
| 24VAC/60Hz        | - Last Position                                     | 46P        |
| 24VDC             | - Normally Closed                                   | 4DC        |
| 24VDC             | - Normally Open                                     | 4DO        |
| 24VDC             | - Last Position                                     | 4DP        |
| 24VDC             | - Latch Solenoid                                    | 4DS        |
| 220VAC/50-60Hz    | - Last Position                                     | 2AP        |
| 220VAC/50-60Hz    | - Normally Closed                                   | 2AC        |
| 220VAC/50-60Hz    | - Normally Open                                     | 2AO        |
| 220VDC            | - Normally Closed                                   | 2DC        |
| 220VDC            | - Normally Open                                     | 2DO        |
| 220VDC            | - Latch Solenoid                                    | 2DS        |
| 110VAC/50-60Hz    | - Normally Closed                                   | 5AC        |
| 110VAC/50-60Hz    | - Normally Open                                     | 5AO        |
| 110VDC            | - Normally Closed                                   | 5DC        |
| 110VDC            | - Normally Open                                     | 5DO        |
| 110VDC            | - Latch Solenoid                                    | 5DS        |
| 12VDC             | - Normally Closed                                   | 1DC        |
| 12VDC             | - Normally Open                                     | 1DO        |
| 12VDC             | - Last Position                                     | 1DP        |
| 12VDC             | - Latch Solenoid                                    | 1DS        |

1) Require panel mounted control - add code L1.

| NN                                         |           |
|--------------------------------------------|-----------|
| Tubing & Fittings                          | Code      |
| <b>St. St. 316 Tubing &amp; Fittings</b>   | <b>NN</b> |
| Polypropylene Tubing and Acetal Fittings   | PA        |
| Copper Tubing & Brass Fittings             | CB        |
| Plastic Reinforced Tubing & Brass Fittings | PB        |

  

| N                                                     |          |
|-------------------------------------------------------|----------|
| Additional Attributes<br>(Multiple Options Permitted) | Code     |
| Large Control Filter <sup>(1)</sup>                   | F        |
| <b>St.St. 316 All Control Accessories</b>             | <b>N</b> |
| Differential Flow Sensor (Orifice)                    | U        |
| 3-Way Control                                         | X        |
| 3 Position Manual Control Selector                    | Z        |
| External Control Pressure                             | e        |
| St.St.316 Small Control Accessories (Check/Needle)    | n        |
| Pressure Gauge                                        | 6        |
| Two Pressure Gauges                                   | 66       |
| Horizontal Installation, Left Side Circuit (Standard) | HL       |
| Horizontal Installation, Right Side Circuit           | HR       |

<sup>(1)</sup> Require panel mounted control - add code L1

- Use this guide for creating and interpreting valve configuration codes
- For additional information refer to [1000 Series Engineering Data](#)