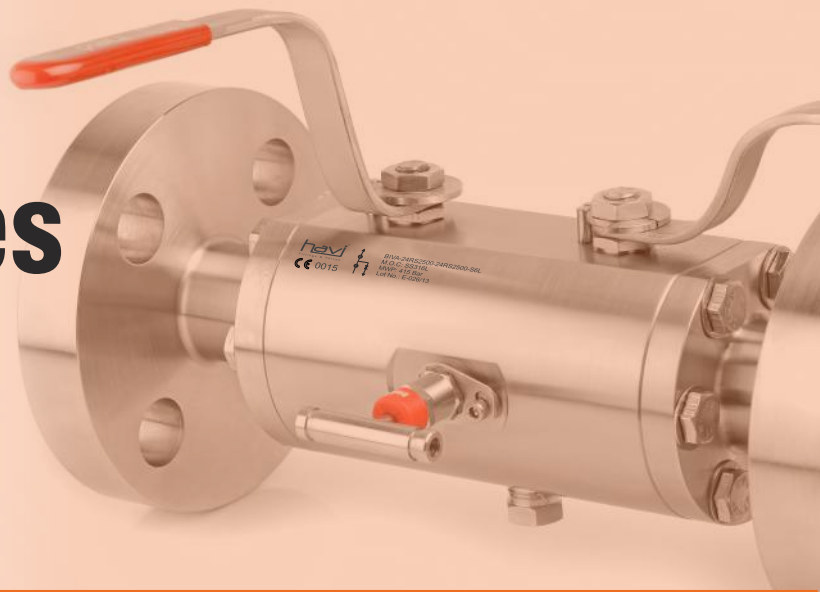


# Block & Bleed Valves

One piece Forged Integral Valve series  
Bolted Body Integral Valve series  
Monoflange Valve series





## Features

Directly Mounted on the Flange of Piping connection, hence the overall height is reduced  
 Helps to reduce weight and Cost  
 Flange Connections conforming to ANSI B16.5  
 Working Pressure to Flange Class  
 Stainless Steel Construction with options of packing for high temperature application  
 Colour coded Dust Caps for identification of Valve type  
 100% factory Tested  
 Metal to Metal Seating for constant compression  
 Thread rolled and Burnished Stem  
 Hardened Tip for extended Leak Proof Life

## Available Options

| CV = 6.3                   | CV = 11.7                  | CV = 27.9                  |
|----------------------------|----------------------------|----------------------------|
| Bore Size: 10.0mm          | Bore Size: 14.0mm          | Bore Size: 20.0mm          |
| DN Size: 1/2"NB to 2"NB    | DN Size: 1/2"NB to 2"NB    | DN Size: 1/2"NB to 2"NB    |
| Class: 150 # to 2500#      | Class: 150 # to 2500#      | Class: 150 # to 2500#      |
| Outlet: 1/2" NPTF          | Outlet: 3/4" NPTF          | Outlet: 1" NPTF            |
| Vent: 1/2" NPTF            | Vent: 1/2" NPTF            | Vent: 1/2" NPTF            |
| Flange to Flange Available | Flange to Flange Available | Flange to Flange Available |

## Configuration

| Primary Isolation | Secondary Isolation | Drain  |
|-------------------|---------------------|--------|
| Ball              | Ball                | Needle |
| Needle            | Needle              | Needle |
| Ball              | Needle              | Needle |

## Material

### Carbon Steel

Specification: ASTM A350 LF2 Body  
 Trim: Stainless 300 Series

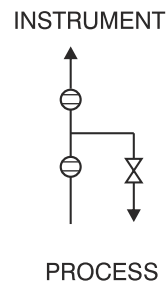
### Stainless Steel

Specification: ASTM A182 F316/L Body  
 Trim: Stainless 316/L

## Forged Body Integral Valves

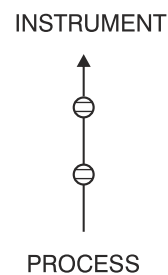
### IVA series

Double Isolation & Bleed  
First Isolation: Ball  
Second Isolation: Ball  
Bleed: Needle



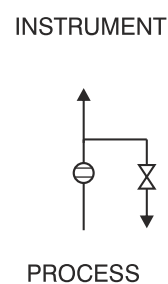
### IVB series

Double Isolation  
First Isolation: Ball  
Second Isolation: Ball



### IVC series

Single Isolation & Bleed  
First Isolation: Ball  
Bleed: Needle



## Bolted Body Integral Valves



Fastest Delivery Speed

Wide flexibility of end connection at a minimum Lead time.

Flanges are designed to ASME B 16.34

Complete Compatibility with the Forged Body Integral Valves.

Available from 1/2", 150 Class to 2", 2500 Class.

Available in SS316/L, C,S and Exotic Alloys

Available in End Connections of Flange to Pipe thread and Flange to Flange

### **BIVA series**

Double Isolation & Bleed

First Isolation: Ball

Second Isolation: Ball

Bleed: Needle

### **BIVB series**

Double Isolation

First Isolation: Ball

Second Isolation: Ball

### **BIVC series**

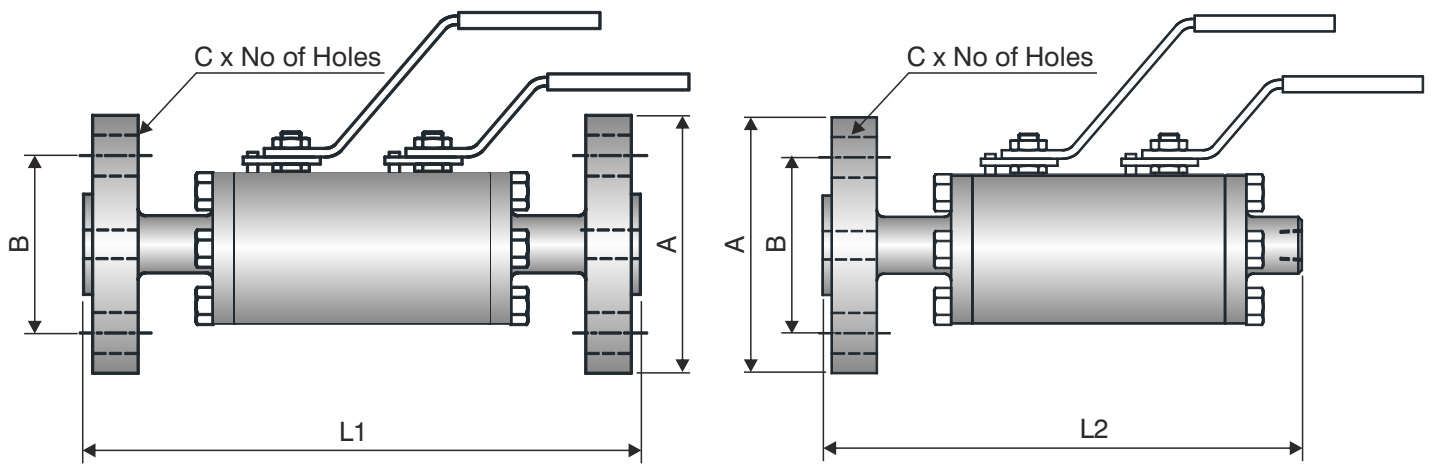
Single Isolation & Bleed

First Isolation: Ball

Second Isolation: Ball

Bleed: Needle

# Dimensions of Block & Bleed Valve



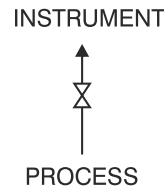
| Bore   |              |       |       |                 | 10.0mm |     | 14.0mm |     | 20.0mm |     |
|--------|--------------|-------|-------|-----------------|--------|-----|--------|-----|--------|-----|
| Size   | Flange Class | A     | B     | C x No of Holes | L1     | L2  | L1     | L2  | L1     | L2  |
| 1/2"   | 150          | 3.5"  | 2.38" | 0.62" x 4       | 235    | 170 | NA     | NA  | NA     | NA  |
| 1/2"   | 300          | 3.75" | 2.62" | 0.62" x 4       | 235    | 170 | NA     | NA  | NA     | NA  |
| 1/2"   | 600          | 3.75" | 2.62" | 0.62" x 4       | 235    | 170 | NA     | NA  | NA     | NA  |
| 1/2"   | 1500         | 4.75" | 3.25" | 0.88" x 4       | 254    | 179 | NA     | NA  | NA     | NA  |
| 1/2"   | 2500         | 5.25" | 3.50" | 0.88" x 4       | 267    | 186 | NA     | NA  | NA     | NA  |
| 3/4"   | 150          | 3.88" | 2.75" | 0.62" x 4       | 235    | 170 | 235    | 208 | NA     | NA  |
| 3/4"   | 300          | 4.62" | 3.25" | 0.75" x 4       | 235    | 170 | 235    | 208 | NA     | NA  |
| 3/4"   | 600          | 4.62" | 3.25" | 0.75" x 4       | 235    | 170 | 235    | 208 | NA     | NA  |
| 3/4"   | 1500         | 5.12" | 3.50" | 0.88" x 4       | 254    | 179 | 254    | 218 | NA     | NA  |
| 3/4"   | 2500         | 5.50" | 3.75" | 0.88" x 4       | 267    | 186 | 267    | 224 | NA     | NA  |
| 1"     | 150          | 4.25" | 3.12" | 0.62" x 4       | 235    | 170 | 235    | 208 | 235    | 235 |
| 1"     | 300          | 4.88" | 3.50" | 0.75" x 4       | 235    | 170 | 235    | 208 | 235    | 235 |
| 1"     | 600          | 4.88" | 3.50" | 0.75" x 4       | 254    | 179 | 254    | 218 | 254    | 244 |
| 1"     | 1500         | 5.88" | 4.00" | 1" x 4          | 267    | 186 | 267    | 224 | 267    | 251 |
| 1"     | 2500         | 6.25" | 4.25" | 1.0" x 4        | 267    | 186 | 273    | 227 | 273    | 251 |
| 1-1/2" | 150          | 5.00" | 3.88" | 0.62" x 4       | 235    | 170 | 235    | 208 | 235    | 235 |
| 1-1/2" | 300          | 6.12" | 4.50" | 0.88" x 4       | 254    | 179 | 254    | 218 | 254    | 244 |
| 1-1/2" | 600          | 6.12" | 4.50" | 0.88" x 4       | 254    | 179 | 254    | 218 | 254    | 244 |
| 1-1/2" | 1500         | 7.00" | 4.88" | 1.12" x 4       | 267    | 186 | 267    | 224 | 267    | 251 |
| 1-1/2" | 2500         | 8.00" | 5.75" | 1.25" x 4       | 314    | 200 | 334    | 238 | 334    | 265 |
| 2"     | 150          | 6.00" | 4.75" | 0.75" x 4       | 254    | 179 | 254    | 218 | 254    | 244 |
| 2"     | 300          | 6.50" | 5.00" | 0.75" x 8       | 254    | 179 | 254    | 218 | 254    | 244 |
| 2"     | 600          | 6.50" | 5.88" | 0.75" x 8       | 267    | 186 | 267    | 224 | 267    | 251 |
| 2"     | 1500         | 8.50" | 6.50" | 1.0" x 8        | 314    | 200 | 334    | 238 | 334    | 265 |
| 2"     | 2500         | 9.25" | 6.75" | 1.12" x 8       | 334    | 208 | 334    | 246 | 334    | 273 |

Note :- All Dimensions are for reference only and are subject to change.

## Monoflange Valves

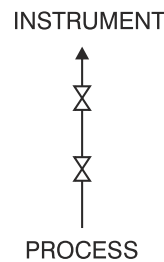
### MVA series

Single Isolation Valve  
Inlet type: Flange  
Outlet type: 1/2" NPTF



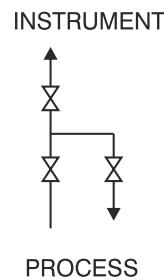
### MVB series

Double Isolation Valve  
Inlet type: Flange  
Outlet type: 1/2" NPTF



### MVC series

Double Isolation & Drain Valve  
Inlet type: Flange  
Outlet type: 1/2" NPTF



## Ordering Information

| Model Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                   |     |              |      | Process Connection |     | Instrument Connection |     | Material of Packing |     | Vent End Connection size |   | Material of Construction |    | Additional Information |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------|-----|--------------|------|--------------------|-----|-----------------------|-----|---------------------|-----|--------------------------|---|--------------------------|----|------------------------|-----|------|----|----------|--|--------|-----|----|----|-------------|----|--------|-----|--------|----|-----------|--|--------|-----|----|----|-----------------|----|---------|------|--|--|--|--|---------|------|--|--|--|--|--|--|--|--|--|--|--|--|
| IVB - 8RS 300 - 8RF 300 - P - 4F - S6 - ES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |                   |     |              |      |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <table border="1"> <thead> <tr> <th>Flange Size</th> <th>Use</th> <th>Flange Face style</th> <th>Use</th> <th>Flange Class</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>1/2"</td> <td>8</td> <td>Raised face</td> <td>RF</td> <td>150 lb</td> <td>150</td> </tr> <tr> <td>3/4"</td> <td>12</td> <td>(smooth)</td> <td></td> <td>300 lb</td> <td>300</td> </tr> <tr> <td>1"</td> <td>16</td> <td>Raised face</td> <td>RS</td> <td>600 lb</td> <td>600</td> </tr> <tr> <td>1-1/2"</td> <td>24</td> <td>(serated)</td> <td></td> <td>900 lb</td> <td>900</td> </tr> <tr> <td>2"</td> <td>32</td> <td>Ring type joint</td> <td>RT</td> <td>1500 lb</td> <td>1500</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>2500 lb</td> <td>2500</td> </tr> </tbody> </table>                                                                                                        |     |                   |     |              |      | Flange Size        | Use | Flange Face style     | Use | Flange Class        | Use | 1/2"                     | 8 | Raised face              | RF | 150 lb                 | 150 | 3/4" | 12 | (smooth) |  | 300 lb | 300 | 1" | 16 | Raised face | RS | 600 lb | 600 | 1-1/2" | 24 | (serated) |  | 900 lb | 900 | 2" | 32 | Ring type joint | RT | 1500 lb | 1500 |  |  |  |  | 2500 lb | 2500 |  |  |  |  |  |  |  |  |  |  |  |  |
| Flange Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Use | Flange Face style | Use | Flange Class | Use  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 1/2"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 8   | Raised face       | RF  | 150 lb       | 150  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 3/4"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 12  | (smooth)          |     | 300 lb       | 300  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16  | Raised face       | RS  | 600 lb       | 600  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 1-1/2"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 24  | (serated)         |     | 900 lb       | 900  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 2"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 32  | Ring type joint   | RT  | 1500 lb      | 1500 |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |                   |     | 2500 lb      | 2500 |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>F - Female NPT<br/>T - Tube Fitting<br/>M - Male NPT<br/>IP - ISO Parallel<br/>IT - ISO Tapered</p> <table border="1"> <thead> <tr> <th>Flange Size</th> <th>Use</th> <th>Flange Face style</th> <th>Use</th> <th>Flange Class</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>1/2"</td> <td>8</td> <td>Raised face</td> <td>RF</td> <td>150 lb</td> <td>150</td> </tr> <tr> <td>3/4"</td> <td>12</td> <td>(smooth)</td> <td></td> <td>300 lb</td> <td>300</td> </tr> <tr> <td>1"</td> <td>16</td> <td>Raised face</td> <td>RS</td> <td>600 lb</td> <td>600</td> </tr> <tr> <td>1-1/2"</td> <td>24</td> <td>(serated)</td> <td></td> <td>900 lb</td> <td>900</td> </tr> <tr> <td>2"</td> <td>32</td> <td>Ring type joint</td> <td>RT</td> <td>1500 lb</td> <td>1500</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>2500 lb</td> <td>2500</td> </tr> </tbody> </table> |     |                   |     |              |      | Flange Size        | Use | Flange Face style     | Use | Flange Class        | Use | 1/2"                     | 8 | Raised face              | RF | 150 lb                 | 150 | 3/4" | 12 | (smooth) |  | 300 lb | 300 | 1" | 16 | Raised face | RS | 600 lb | 600 | 1-1/2" | 24 | (serated) |  | 900 lb | 900 | 2" | 32 | Ring type joint | RT | 1500 lb | 1500 |  |  |  |  | 2500 lb | 2500 |  |  |  |  |  |  |  |  |  |  |  |  |
| Flange Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Use | Flange Face style | Use | Flange Class | Use  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 1/2"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 8   | Raised face       | RF  | 150 lb       | 150  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 3/4"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 12  | (smooth)          |     | 300 lb       | 300  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16  | Raised face       | RS  | 600 lb       | 600  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 1-1/2"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 24  | (serated)         |     | 900 lb       | 900  |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 2"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 32  | Ring type joint   | RT  | 1500 lb      | 1500 |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |                   |     | 2500 lb      | 2500 |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>P - PTFE<br/>G - Graphoil</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |                   |     |              |      |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>1/4" 4F<br/>3/8" 6F<br/>1/2" 8F</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |                   |     |              |      |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>S6 - Stainless Steel 316<br/>S6L - Stainless Steel 316L<br/>B - Brass<br/>C - Carbon Steel<br/>M - Alloy 400<br/>H - Alloy C276<br/>T - Titanium</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |                   |     |              |      |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>LH - Locking Handle<br/>ES - Extended Stem<br/>N - NACE<br/>TP - Tamper Proof Bonnet<br/>10mm Orifice - (Do not specify)<br/>14mm Orifice - 14O<br/>20mm Orifice -20O</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                   |     |              |      |                    |     |                       |     |                     |     |                          |   |                          |    |                        |     |      |    |          |  |        |     |    |    |             |    |        |     |        |    |           |  |        |     |    |    |                 |    |         |      |  |  |  |  |         |      |  |  |  |  |  |  |  |  |  |  |  |  |



