

73

74

2½"-8" | DN65-DN200 | CLASS 150/300

77

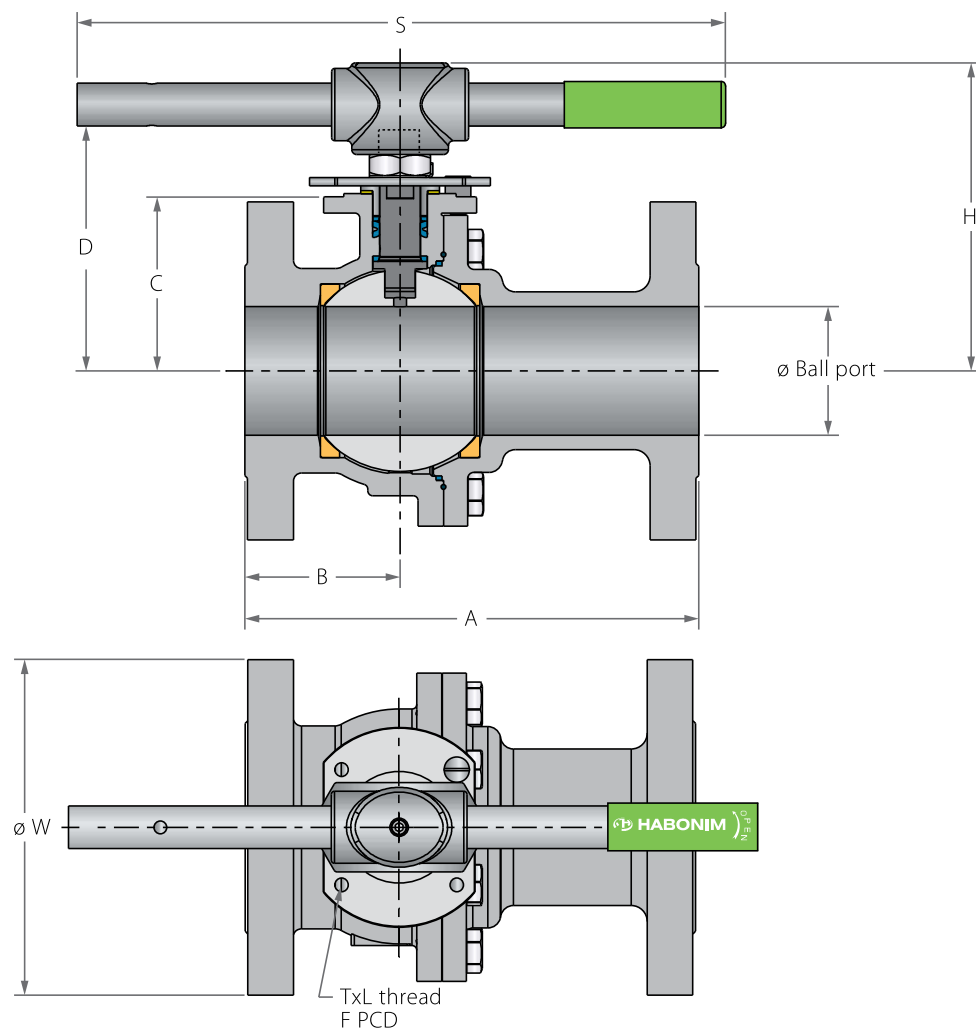
3"-8" | DN80-DN200 | PN 16

78

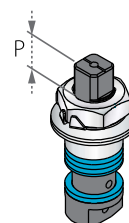
2½" | DN65 | PN40

## Floating Ball Flanged

Valve dimensions



Preparation  
for actuation



Stem groove  
shows valve  
ball position

N thread  
1"-14 UNS-2A

Square

| 73 74 2½"-8" |      |           |       |       |       |       |      |       |       |       |       |       |       |       |        |      |       |      |              |       |       |      |
|--------------|------|-----------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|--------|------|-------|------|--------------|-------|-------|------|
| Std. port    | Unit | Ball port | A     |       | B     |       | C    | D     | H     | S     | W     |       | M     | M-DD  | N      | P    | F     | TxL  | Weight kg/lb |       | Kv    |      |
|              |      |           | 150   | 300   | 150   | 300   |      |       |       |       | 150   | 300   |       |       |        |      |       |      | 150          | 300   | 150   | 300  |
| DN65         | mm   | 65        | 190   | 241   | 83    | -     | 119  | 165.5 | 194.8 | 400   | 180   | 190   | 18.9  | 15.9  | 1"-14  | 16.7 | (F10) | 102  | M10x20       | -     | -     | -    |
| 2½"          | inch | 2.56      | 7.48  | 9.48  | 3.26  | -     | 4.76 | 6.51  | 7.67  | 15.75 | 7.08  | 7.48  | 0.74  | 0.63  | UNS-2A | 0.66 |       | 4.02 |              | -     | -     | -    |
| DN80         | mm   | 80        | 203   | 282.5 | 77.5  | 96.4  | 108  | 154.6 | 194.8 | 400   | 191   | 210   | 18.9  | 15.9  | 1"-14  | 16.7 | (F10) | 102  | M10x20       | 22    | 28.2  | 1111 |
| 3"           | inch | 3.20      | 7.99  | 11.12 | 3.05  | 3.80  | 4.25 | 6.09  | 7.67  | 15.75 | 7.52  | 8.27  | 0.74  | 0.63  | UNS-2A | 0.66 |       | 4.02 |              | 48.5  | 62.2  | 1300 |
| DN100        | mm   | 100       | 228.5 | 304.8 | 84.5  | 104.5 | 124  | 170.5 | 211   | 610   | 230   | 254   | 18.9  | 15.9  | 1"-14  | 16.7 | (F10) | 102  | M10x20       | 39    | 44.5  | 2051 |
| 4"           | inch | 3.94      | 9.00  | 12.00 | 3.33  | 4.11  | 4.88 | 6.69  | 8.31  | 24.02 | 9.06  | 10.00 | 0.74  | 0.63  | UNS-2A | 0.66 |       | 4.02 |              | 86    | 98.1  | 2400 |
| DN150        | mm   | 150       | 394   | 403.5 | 163.5 | 174.5 | 179  | 248.5 | 308   | 916   | 279.4 | 328   | 28.45 | 23.75 | 1½"-12 | 26.2 | (F12) | 125  | M12x20       | 82    | 100   | 4615 |
| 6"           | inch | 5.91      | 15.51 | 15.89 | 6.44  | 6.87  | 7.05 | 9.78  | 12.13 | 36.06 | 11.00 | 12.91 | 1.12  | 0.94  | UNS-2A | 1.03 |       | 4.92 |              | 180.8 | 220.5 | 5400 |
| DN200        | mm   | 200       | 457.2 | 502   | 242.5 | 241   | 241  | 353.7 | -     | -     | 460   | 460   | 35.92 | 35.92 | 2"-8   | 37.5 | (F14) | 140  | M16x240      | 190   | 225   | 7949 |
| 8"           | inch | 7.87      | 18.00 | 19.76 | 9.55  | 9.49  | 9.49 | 19.93 | -     | -     | 18.11 | 18.11 | 1.41  | 1.41  | UNS-2A | 1.48 |       | 5.51 |              | 418.9 | 496   | 9300 |

| 78 2½" 77 3"-8" |      |           |         |      |       |      |         |         |       |       |         |       |       |        |      |       |      |              |     |      |      |
|-----------------|------|-----------|---------|------|-------|------|---------|---------|-------|-------|---------|-------|-------|--------|------|-------|------|--------------|-----|------|------|
| Std. port       | Unit | Ball port | A 16/40 |      | B     |      | C 16/40 | D 16/40 | H     | S     | W 16/40 | M     | M-DD  | N      | P    | F     | TxL  | Weight kg/lb |     | Kv   |      |
|                 |      |           | F5/F1   | F4   | 16    | 40   |         |         |       |       |         |       |       |        |      |       |      | F5           | F4  | Cv   |      |
| DN65            | mm   | 65        | -       | 170  | 83    | 70   | 119     | 165.5   | 194.8 | 400   | 185     | 18.9  | 15.9  | 1"-14  | 16.7 | (F10) | 102  | M10X20       | -   | -    | -    |
| 2½"             | inch | 2.56      | -       | 6.69 | 3.26  | 2.75 | 4.68    | 6.51    | 7.67  | 15.75 | 7.28    | 0.74  | 0.63  | UNS-2A | 0.66 |       | 4.02 |              | -   | -    | -    |
| DN80            | mm   | 80        | -       | 180  | 77.5  | -    | 108.00  | 162     | 194.8 | 400   | 200     | 18.9  | 15.9  | 1"-14  | 16.7 | (F10) | 102  | M10X20       | -   | 24   | 1111 |
| 3"              | inch | 3.20      | -       | 7.09 | 3.05  | -    | 4.25    | 6.40    | 7.67  | 15.75 | 7.87    | 0.74  | 0.63  | UNS-2A | 0.66 |       | 4.02 |              | -   | 52.8 | 1300 |
| DN100           | mm   | 100       | -       | 190  | 84.5  | -    | 132.00  | 186     | 211   | 610   | 225     | 18.9  | 15.9  | 1"-14  | 16.7 | (F10) | 102  | M10X20       | -   | 30   | 2051 |
| 4"              | inch | 3.94      | -       | 7.48 | 3.33  | -    | 5.20    | 7.32    | 8.31  | 24.02 | 8.86    | 0.74  | 0.63  | UNS-2A | 0.66 |       | 4.02 |              | -   | 66   | 2400 |
| DN150           | mm   | 150       | 350     | -    | 163.5 | -    | 178.00  | 236     | 308   | 916   | 328     | 28.45 | 23.75 | 1½"-12 | 26.2 | (F12) | 125  | M12X20       | 63  | -    | 4615 |
| 6"              | inch | 5.91      | 13.78   | -    | 6.44  | -    | 7.01    | 9.29    | 12.13 | 36.06 | 12.91   | 1.12  | 0.94  | UNS-2A | 1.03 |       | 4.92 |              | 139 | -    | 5400 |
| DN200           | mm   | 200       | 400     | -    | 242.5 | -    | 226.00  | 286     | -     | -     | 395     | 35.92 | 35.92 | 2"-8   | 37.5 | (F14) | 140  | M16X24       | 97  | -    | 7949 |
| 8"              | inch | 7.87      | 15.75   | -    | 9.55  | -    | 8.91    | 11.26   | -     | -     | 15.55   | 1.41  | 1.41  | UNS-2A | 1.48 |       | 5.51 |              | 213 | -    | 9300 |

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2½"-8" | DN65-DN200 | CLASS 150/300



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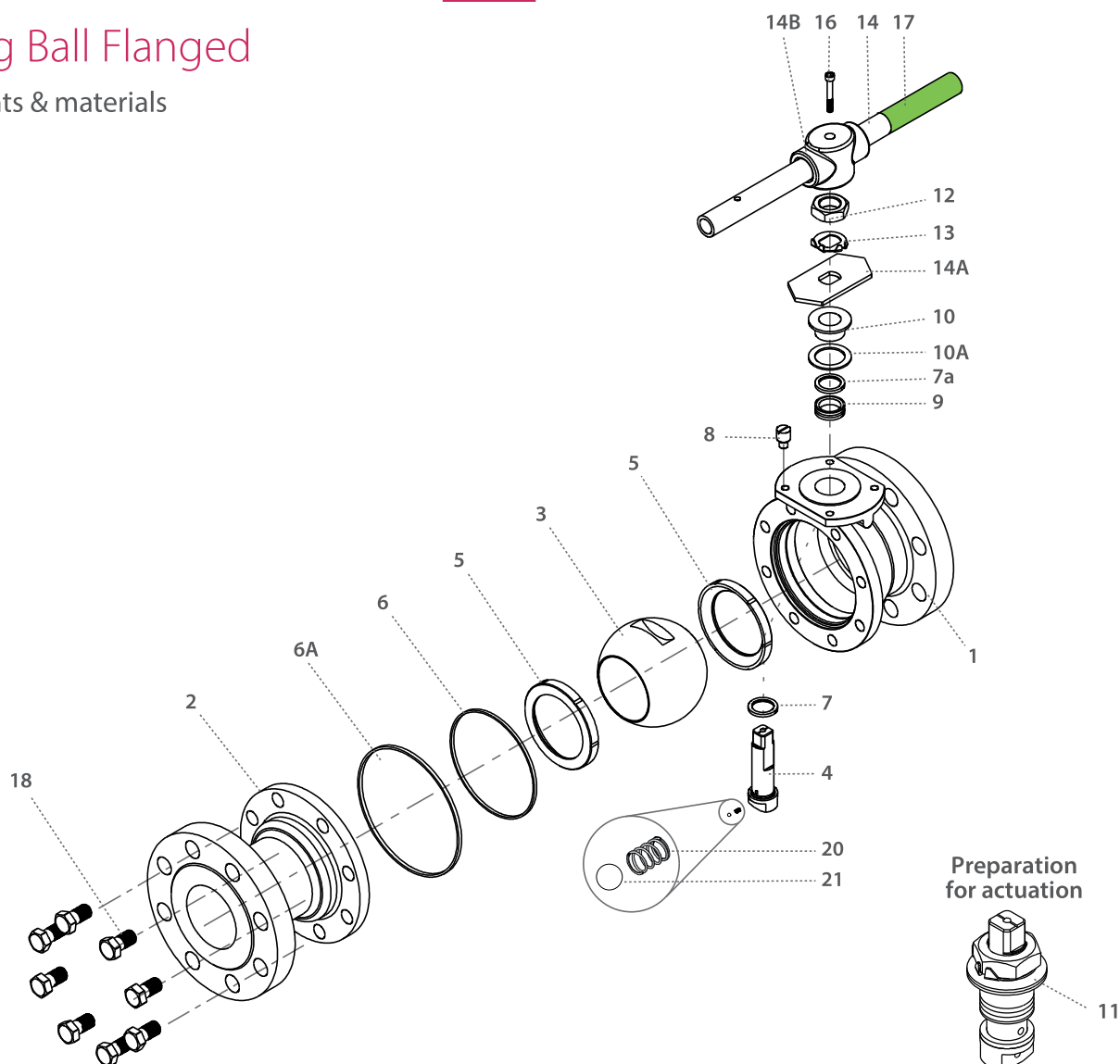
3"-8" | DN80-DN200 | PN 16

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2½" | DN65 | PN40

## Floating Ball Flanged

### Components & materials



| Item | Description        | Material specification     | Qty. |
|------|--------------------|----------------------------|------|
| 1    | Body               | Acc. Ordering Code         | 1    |
| 2    | End                | Acc. Ordering Code         | 1    |
| 3    | Ball               | Acc. Ordering Code         | 1    |
| 4    | Stem               | Acc. Ordering Code         | 1    |
| 5*   | Seat               | Acc. Ordering Code         | 2    |
| 6*   | Inner seal         | PTFE                       | 1    |
| 6A*  | Outer seal         | Acc. Ordering Code         | 1    |
| 7*   | Stem thrust seal   | VIRGIN PEEK, PCTFE (KEL-F) | 1    |
| 7a*  | Anti-abrasion ring | VIRGIN PEEK, PCTFE (KEL-F) | 1    |
| 8    | Stop pin           | S. Steel                   | 1    |
| 9*   | Stem seal          | CF PTFE, TFM               | 1    |
| 10   | Follower           | S. Steel                   | 1    |
| 10A* | Slide bearing      | S. Steel                   | 1    |
| 11   | Disc spring        | S. Steel                   | 2    |

| Item | Description         | Material specification | Qty. |
|------|---------------------|------------------------|------|
| 12   | Stem nut            | S. Steel               | 1    |
| 13   | Tab lock washer     | A240 304               | 1    |
| 14** | Handle              | S. Steel               | 1    |
| 14A  | Stop plate          | S. Steel               | 1    |
| 14B  | Wrench head         | S. Steel               | 1    |
| 16   | Wrench bolt         | S. Steel               | 1    |
| 17   | Sleeve              | PVC                    | 1    |
| 18   | Body bolts          | S. Steel               | 8-12 |
| 20   | Anti-static spring  | S. Steel               | 2    |
| 21   | Anti-static plunger | S. Steel               | 2    |
| 23   | Tag (not shown)     | S. Steel               | 1    |

\* Repair kit components

\*\* Gear operator should be used for size 8" DN200 (handle components are not included)



## Floating Ball Flanged - Ordering Code System

"Mandatory option" options are marked with **green background** | "Standard offer" options are marked with **light green background**

|      |   |          |   |   |   |        |   |        |    |                   |    |                    |    |               |                     |                     |    |                |    |    |    |    |                  |   |   |    |
|------|---|----------|---|---|---|--------|---|--------|----|-------------------|----|--------------------|----|---------------|---------------------|---------------------|----|----------------|----|----|----|----|------------------|---|---|----|
| 1    | 2 | 3        | 4 | 5 | 6 | 7      | 8 | 9      | 10 | 11                | 12 | 13                 | 14 | 15            | 16                  | 17                  | 18 | 19             | 20 | 21 | 22 | 23 | 24               | . | . | 30 |
| 6    | 0 |          |   |   | F | 7      | 3 | W      | -  | 6                 | 6  | 6                  | 6  | A             | T                   | G                   | /  | 1              | 5  | 0  |    | -  |                  |   |   |    |
| Size |   | Features |   |   |   | Series |   | Design |    | Body/end material |    | Ball/Stem material |    | Seat material | Inner Seal material | Outer Seal material |    | End connection |    |    |    |    | Special features |   |   |    |

| Size (1-2) |      |     |
|------------|------|-----|
| Code       | inch | mm  |
| 05         | ½"   | 15  |
| 07         | ¾"   | 20  |
| 10         | 1"   | 25  |
| 12         | 1¼"  | 32  |
| 15         | 1½"  | 40  |
| 20         | 2"   | 50  |
| 25         | 2½"  | 65  |
| 30         | 3"   | 80  |
| 40         | 4"   | 100 |
| 60         | 6"   | 150 |
| 80         | 8"   | 200 |

| Features (3-6) |                               |
|----------------|-------------------------------|
| F              | Fire safe                     |
| N              | Control service               |
| O              | Clean assembly for O2 service |
| M              | Ammonia service               |
| K              | Chlorine service              |
| V              | Vacuum service                |
| H              | Hydrogen service              |

| Series (7-8) |                     |
|--------------|---------------------|
| 31           | ANSI #150 std. port |
| 32           | ANSI #300 std. port |
| 73           | ANSI #150 full port |
| 74           | ANSI #300 full port |
| 77           | DIN PN 16 full port |
| 78           | DIN PN 40 full port |

| Design (9) |                                                  |
|------------|--------------------------------------------------|
| W          | Total HermetiX Integrity package                 |
| G          | Total HermetiX Integrity package - FDA compliant |

| Body/Ends material (11-12) |                   |
|----------------------------|-------------------|
| 6                          | S. SteelCF8M/CF3M |
| 4                          | C. steel          |
| W                          | Hasteloy-C22      |
| S                          | 254SMO            |
| D                          | Duplex            |
| 9                          | Low Temp C. steel |
| 1                          | Bronze            |
| K                          | Super Duplex      |
| 7                          | Monel             |
| A                          | Alloy-20          |
| C                          | Hasteloy-C276     |

| Ball material (13) |                        |
|--------------------|------------------------|
| 6                  | S. SteelCF8M/CF3M      |
| M                  | High Strength S. Steel |
| W                  | Hasteloy-C22           |
| S                  | 254SMO                 |
| D                  | Duplex                 |
| 1                  | Bronze                 |
| K                  | Super Duplex           |
| 7                  | Monel                  |
| A                  | Alloy-20               |
| C                  | Hasteloy-C276          |

| Stem material (14) |                        |
|--------------------|------------------------|
| 6                  | S. Steel316L           |
| M                  | High Strength S. Steel |
| Z                  | Inconel 718 B637       |
| W                  | Alloy-C22 B574         |
| S                  | 254SMO A479            |
| A                  | Alloy-20 A351 CN7M     |
| D                  | Duplex A479            |
| K                  | Super Duplex A479      |
| 7                  | Monel                  |
| C                  | Hasteloy-C276          |

| Seat material (15) |             |
|--------------------|-------------|
| A                  | TFM         |
| P                  | CF PTFE     |
| K                  | CF PEEK     |
| L                  | Virgin Peek |
| U                  | UHMWPE      |
| C                  | PCTFE       |
| Y                  | Delrin      |
| W                  | PVDF        |
| T                  | PTFE        |

| Inner Seal Material (16) |                   |
|--------------------------|-------------------|
| T                        | PTFE              |
| A                        | TFM               |
| G                        | Expanded graphite |
| U                        | UHMWPE            |
| V                        | Viton             |
| B                        | NBR               |

| Outer Seal (17) |                   |
|-----------------|-------------------|
| G               | Expanded graphite |
| A               | TFM               |

| End Connection (19-22) |                    |
|------------------------|--------------------|
| Welded ends            |                    |
| 150                    | ASME B16.5 #150 RF |
| 300                    | ASME B16.5 #300 RF |
| PN16                   | EN1092 PN16 RF     |
| PN40                   | EN1092 PN40 RF     |

| Special Features (24-30) |                                                               |
|--------------------------|---------------------------------------------------------------|
| P250                     | Ball with Upstream Relief Hole                                |
| SRS                      | Self Relief Seat                                              |
| J2N05                    | Jacketed valve- number of ports (2), type (NPT) and size (½") |

| Valve Special Stem Seals |                                                                       |
|--------------------------|-----------------------------------------------------------------------|
| LAX                      | FDA Compliant, Stem seal, Virgin Peek thrust and TFM, X shape, gasket |
| HC                       | High Cycle service                                                    |

| Face To Face sizes |                              |
|--------------------|------------------------------|
| F4 *               | F4 - DIN 3202-1 RF (½" - 4") |
| F1 **              | F1 - DIN 3202-1 RF (½" - 2") |
| F5 ***             | F5 - DIN 3202-1 RF (6")      |

\* Standard offer: ½" to 1¼" & 2½" to 4"

\*\* Standard offer: 1½" & 2"

\*\*\* Standard offer: 6"