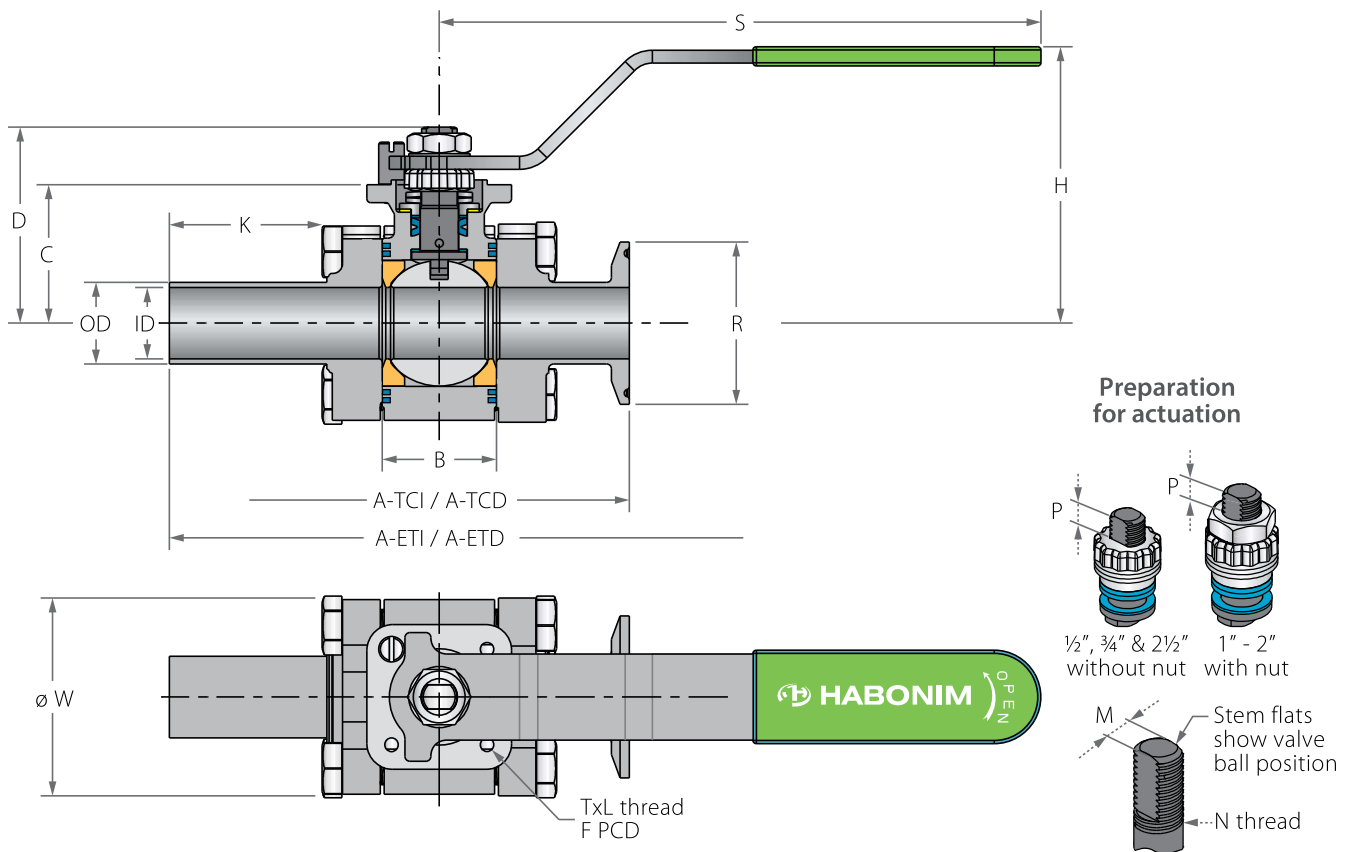


## ISO 1127 / DIN 11850 Floating Ball 3 Piece

## Valve dimensions



## ISO 1127 Tube Sized

| Std. port | Unit | Ball port | Pipe ID | Pipe OD | A ETI  | A TCI  | B     | C     | D     | H      | S      | W      | M    | N        | P           | F     | TxL   | Weight kg/lb | Kv Cv |
|-----------|------|-----------|---------|---------|--------|--------|-------|-------|-------|--------|--------|--------|------|----------|-------------|-------|-------|--------------|-------|
| DN10      | mm   | 14.30     | 14.00   | 17.20   | 146.50 | 101.50 | 24.50 | 31.40 | 40.30 | 63.90  | 150.00 | 53.70  | 5.54 | 3/8 UNF  | 6.65 (F03)  | 36.00 | M5X10 | 0.80         | 10    |
| 3/8"      | inch | 0.56      | 0.55    | 0.68    | 5.76   | 3.99   | 0.97  | 1.24  | 1.59  | 2.52   | 5.91   | 2.11   | 0.22 | 3/8 UNF  | 0.26        | 1.42  | M5X10 | 1.77         | 12    |
| DN15      | mm   | 15.75     | 18.10   | 21.30   | 146.60 | 102.00 | 24.60 | 36.00 | 45.00 | 67.90  | 150.00 | 52.10  | 5.54 | 3/8 UNF  | 6.65 (F03)  | 36.00 | M5X10 | 1.00         | 29    |
| 1/2"      | inch | 0.62      | 0.71    | 0.84    | 5.77   | 4.00   | 0.97  | 1.42  | 1.77  | 2.67   | 5.91   | 2.05   | 0.22 | 3/8 UNF  | 0.26        | 1.42  | M5X10 | 2.10         | 34    |
| DN20      | mm   | 22.10     | 23.70   | 26.90   | 167.8  | 118.00 | 35.50 | 43.50 | 61.00 | 84.80  | 187.00 | 60.45  | 7.54 | 3/8 UNF  | 7.40 (F04)  | 42.00 | M5X10 | 1.70         | 53    |
| 3/4"      | inch | 0.87      | 0.93    | 1.06    | 6.60   | 4.65   | 1.40  | 1.71  | 2.41  | 3.34   | 7.36   | 2.38   | 0.30 | 3/8 UNF  | 0.29        | 1.65  | M5X10 | 3.80         | 62    |
| DN25      | mm   | 25.40     | 29.70   | 33.70   | 179.30 | 133.70 | 41.30 | 42.70 | 60.20 | 84.10  | 187.00 | 71.70  | 7.54 | 7/16 UNF | 7.40 (F04)  | 42.00 | M5X10 | 2.50         | 49    |
| 1"        | inch | 1.00      | 1.17    | 1.33    | 7.05   | 5.26   | 1.62  | 1.68  | 2.37  | 3.31   | 7.36   | 2.82   | 0.30 | 7/16 UNF | 0.29        | 1.65  | M5X10 | 5.53         | 57    |
| DN32      | mm   | 38.10     | 38.40   | 42.40   | 200.30 | 158.90 | 56.30 | 48.30 | 77.80 | 101.80 | 237.00 | 96.90  | 8.71 | 7/16 UNF | 8.50 (F05)  | 50.00 | M6X12 | 4.50         | 102   |
| 1 1/4"    | inch | 1.50      | 1.51    | 1.67    | 7.88   | 6.25   | 2.22  | 1.90  | 3.06  | 4.01   | 9.33   | 3.82   | 0.34 | 7/16 UNF | 0.33        | 1.97  | M6X12 | 9.95         | 118   |
| DN40      | mm   | 38.10     | 44.30   | 48.30   | 200.30 | 158.90 | 56.30 | 48.30 | 77.80 | 101.80 | 237.00 | 96.90  | 8.71 | 9/16 UNF | 8.50 (F05)  | 50.00 | M6X12 | 4.50         | 102   |
| 1 1/2"    | inch | 1.50      | 1.74    | 1.90    | 7.88   | 6.25   | 2.22  | 1.90  | 3.06  | 4.01   | 9.33   | 3.82   | 0.34 | 9/16 UNF | 0.33        | 1.97  | M6X12 | 9.95         | 118   |
| DN50      | mm   | 50.80     | 56.30   | 60.30   | 232.60 | 213.00 | 72.60 | 70.00 | 88.10 | 115.10 | 237.00 | 108.00 | 8.71 | 9/16 UNF | 13.50 (F07) | 70.00 | M8X12 | 9.50         | 208   |
| 2"        | inch | 2.00      | 2.22    | 2.37    | 9.15   | 8.38   | 2.86  | 2.76  | 3.47  | 4.53   | 9.33   | 4.25   | 0.34 | 9/16 UNF | 0.53        | 2.76  | M8X12 | 21.00        | 241   |

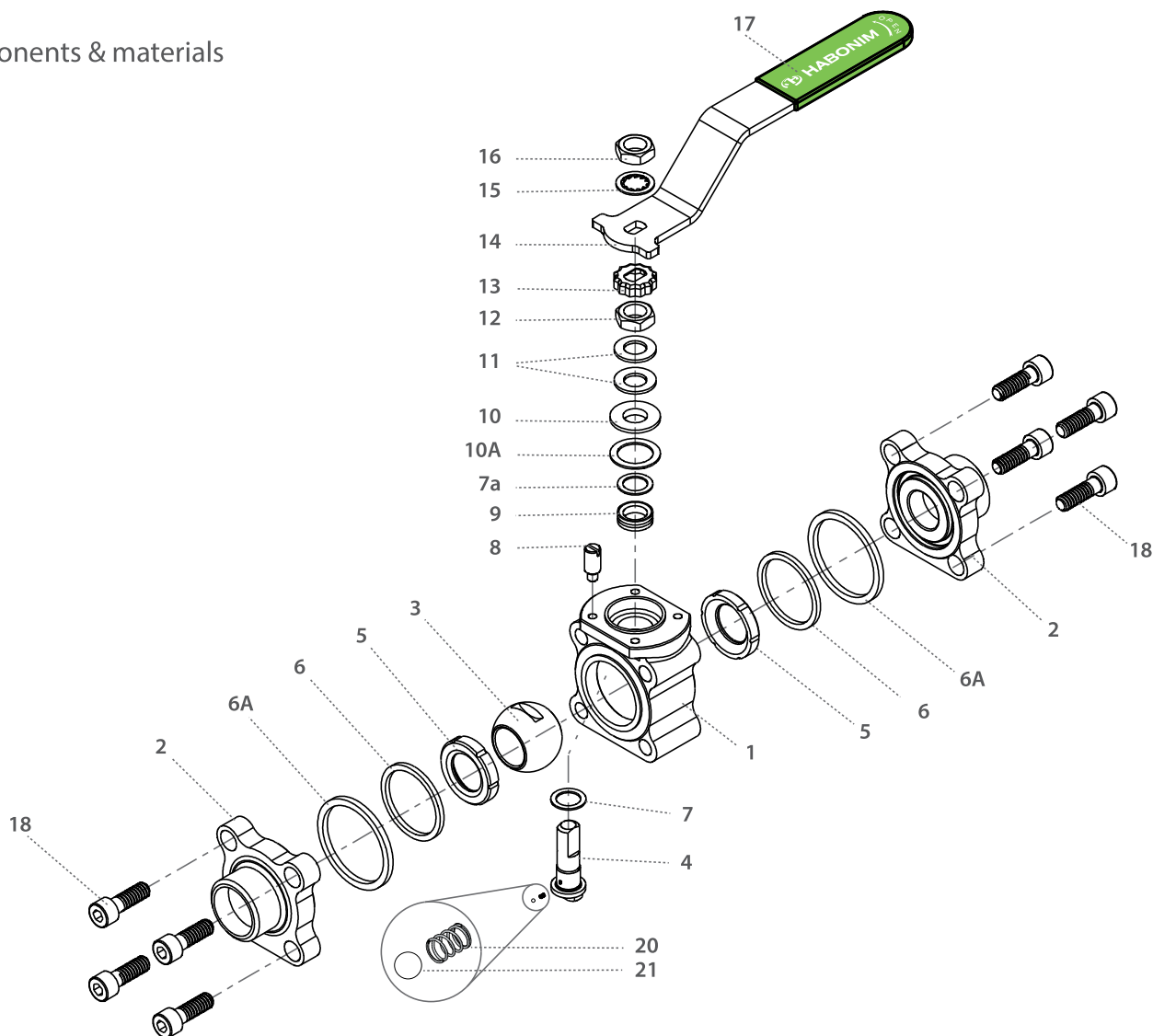
## DIN 11850 Tube Sized

| Std. port | Unit | Ball port | Pipe ID | Pipe OD | A ETD  | A TCD  | B     | C     | D     | H      | S      | W      | M    | N        | P           | F     | TxL   | Weight kg/lb | Kv Cv |
|-----------|------|-----------|---------|---------|--------|--------|-------|-------|-------|--------|--------|--------|------|----------|-------------|-------|-------|--------------|-------|
| DN10      | mm   | 11.15     | 10.00   | 13.00   | 140.60 | 88.80  | 20.60 | 29.00 | 37.9  | 61.50  | 150.00 | 47.00  | 5.54 | 3/8 UNF  | 6.65 (F03)  | 36.00 | M5X10 | 0.60         | 2.6   |
| 3/8"      | inch | 0.44      | 0.39    | 0.51    | 5.53   | 6.49   | 0.81  | 1.14  | 1.49  | 2.42   | 5.91   | 1.85   | 0.22 | 3/8 UNF  | 0.26        | 1.42  | M5X10 | 1.33         | 3.0   |
| DN15      | mm   | 15.75     | 16.00   | 19.00   | 146.60 | 102.00 | 24.60 | 36.00 | 45.00 | 67.90  | 150.00 | 52.10  | 5.54 | 3/8 UNF  | 6.65 (F03)  | 36.00 | M5X10 | 1.00         | 29    |
| 1/2"      | inch | 0.62      | 0.63    | 0.75    | 5.77   | 4.00   | 0.97  | 1.42  | 1.77  | 2.67   | 5.91   | 2.05   | 0.22 | 3/8 UNF  | 0.26        | 1.42  | M5X10 | 2.10         | 34    |
| DN20      | mm   | 20.60     | 20.00   | 23.00   | 164.10 | 114.30 | 31.70 | 38.10 | 55.60 | 79.40  | 187.00 | 63.70  | 7.54 | 3/8 UNF  | 7.40 (F04)  | 42.00 | M5X10 | 1.60         | 28    |
| 3/4"      | inch | 0.81      | 0.79    | 0.91    | 6.46   | 4.50   | 1.25  | 1.50  | 2.19  | 3.13   | 7.36   | 2.51   | 0.30 | 3/8 UNF  | 0.29        | 1.65  | M5X10 | 3.54         | 32    |
| DN25      | mm   | 25.40     | 26.00   | 29.00   | 179.30 | 133.70 | 41.30 | 42.70 | 60.20 | 84.10  | 187.00 | 71.70  | 7.54 | 7/16 UNF | 7.40 (F04)  | 42.00 | M5X10 | 2.50         | 49    |
| 1"        | inch | 1.00      | 1.02    | 1.14    | 7.05   | 5.26   | 1.62  | 1.68  | 2.37  | 3.31   | 7.36   | 2.82   | 0.30 | 7/16 UNF | 0.29        | 1.65  | M5X10 | 5.53         | 57    |
| DN32      | mm   | 31.80     | 32.00   | 35.00   | 189.40 | 139.70 | 48.40 | 43.60 | 73.00 | 97.00  | 237.00 | 86.70  | 8.71 | 7/16 UNF | 8.50 (F05)  | 50.00 | M6X12 | 3.60         | 69    |
| 1 1/4"    | inch | 1.25      | 1.26    | 1.38    | 7.45   | 5.50   | 1.91  | 1.72  | 2.87  | 3.82   | 9.33   | 3.41   | 0.34 | 7/16 UNF | 0.33        | 1.97  | M6X12 | 7.96         | 80    |
| DN40      | mm   | 38.10     | 38.00   | 41.00   | 200.30 | 158.90 | 56.30 | 48.30 | 77.80 | 101.80 | 237.00 | 96.90  | 8.71 | 9/16 UNF | 8.50 (F05)  | 50.00 | M6X12 | 4.50         | 102   |
| 1 1/2"    | inch | 1.50      | 1.50    | 1.61    | 7.88   | 6.25   | 2.22  | 1.90  | 3.06  | 4.01   | 9.33   | 3.82   | 0.34 | 9/16 UNF | 0.33        | 1.97  | M6X12 | 9.95         | 118   |
| DN50      | mm   | 50.80     | 50.00   | 53.00   | 232.60 | 213.00 | 72.60 | 70.00 | 88.10 | 115.10 | 237.00 | 108.00 | 8.71 | 9/16 UNF | 13.50 (F07) | 70.00 | M8X12 | 9.50         | 208   |
| 2"        | inch | 2.00      | 1.97    | 2.09    | 9.15   | 8.38   | 2.86  | 2.76  | 3.47  | 4.53   | 9.33   | 4.25   | 0.34 | 9/16 UNF | 0.53        | 2.76  | M8X12 | 21.00        | 241   |



# ISO 1127 / DIN 11850 Floating Ball 3 Piece

## Components & materials



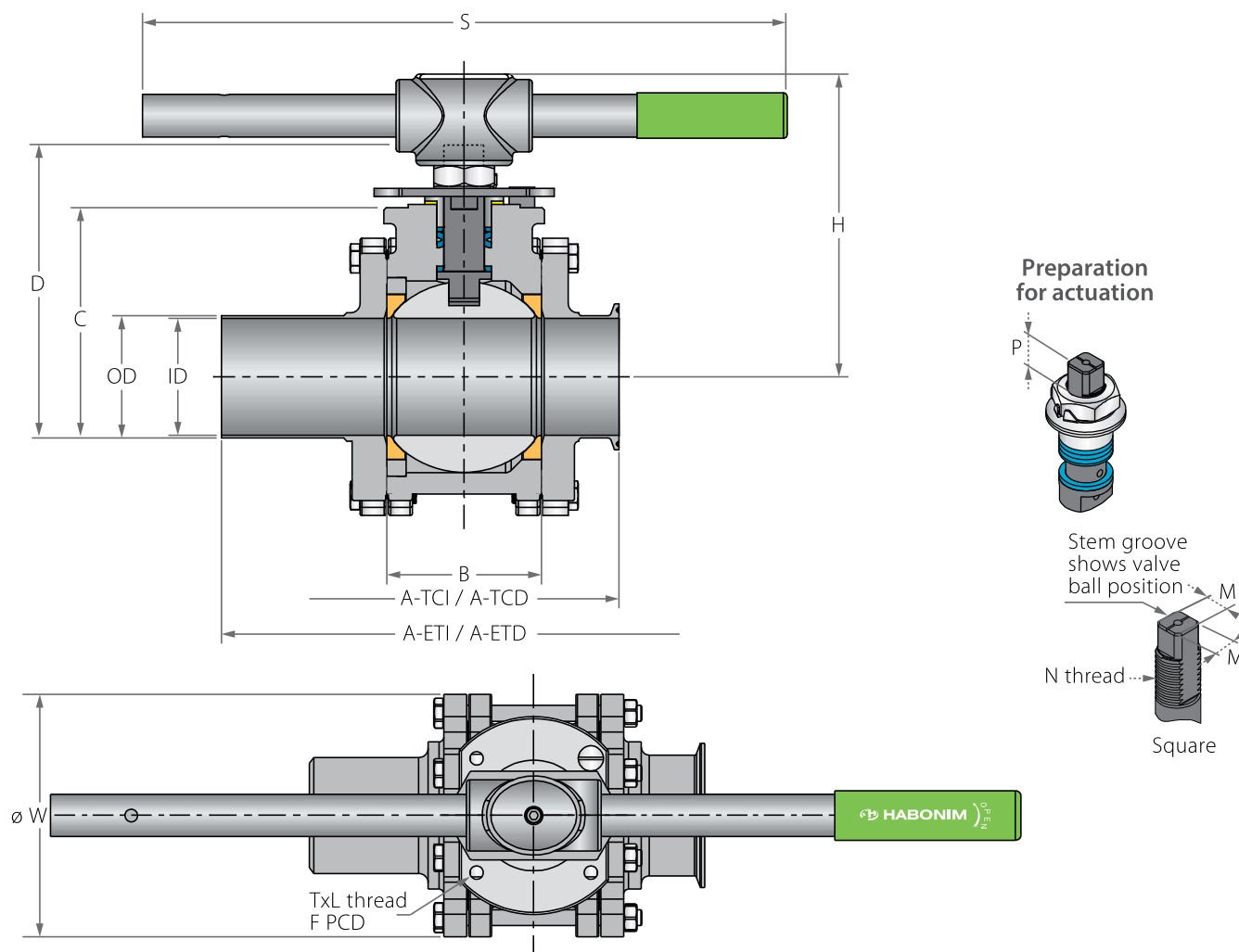
| Item | Description        | Material specification | Qty. |
|------|--------------------|------------------------|------|
| 1    | Body               | Acc. Ordering Code     | 1    |
| 2    | Ends               | Acc. Ordering Code     | 2    |
| 3    | Ball               | Acc. Ordering Code    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

| Item | Description         | Material specification | Qty. |
|------|---------------------|------------------------|------|
| 10A* | Slide bearing       | S. Steel               | 1    |
| 11   | Disc spring         | S. Steel               | 2    |
| 12   | Stem nut            | S. Steel               | 1    |
| 13   | Locking clip        | S. Steel               | 1    |
| 14   | Handle              | S. Steel               | 1    |
| 15   | Serrated washer     | S. Steel               | 1    |
| 16   | Handle nut          | S. Steel               | 1    |
| 17   | Sleeve              | PVC                    | 1    |
| 18   | Body bolt           | S. Steel               | 8    |
| 20   | Anti-static spring  | S. Steel               | 1    |
| 21   | Anti-static plunger | S. Steel               | 1    |
| 23   | Tag (not shown)     | S. Steel               | 1    |

\* Repair kit components

## ISO 1127 / DIN 11850 Floating Ball 3 Piece

## Valve dimensions



## ISO 1127 Tube Sized

| Std. port | Unit | Ball port | Pipe ID | Pipe OD | A ETI  | A TCI  | B      | C      | D      | H      | S      | W      | M     | M-DD  | N      | P     | Q     | F     | TxL    | Weight kg/lb | Kv Cv     |
|-----------|------|-----------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|-------|-------|--------|--------------|-----------|
| DN65      | mm   | 63.50     | 72.10   | 76.10   | 283.40 | 215.80 | 83.30  | 98.30  | 144.90 | 185.00 | 400.00 | 140.00 | 18.90 | 15.90 | 1"-14  | 16.70 | 22.70 | (F10) | 102.00 | M10X20       | 13.70 300 |
| 2½"       | inch | 2.50      | 2.84    | 3.00    | 11.57  | 8.49   | 3.28   | 3.87   | 5.71   | 7.29   | 15.75  | 5.50   | 0.74  | 0.63  | UNS-2A | 0.66  | 0.89  |       | 4.02   | M10X20       | 30.30 348 |
| DN80      | mm   | 82.60     | 84.30   | 88.90   | 319.80 | 245.40 | 108.80 | 114.10 | 160.70 | 200.00 | 600.00 | 177.00 | 18.90 | 15.90 | 1"-14  | 16.70 | 22.70 | (F10) | 102.00 | M10X20       | 23.70 615 |
| 3"        | inch | 3.25      | 3.32    | 3.50    | 12.59  | 9.66   | 4.28   | 4.49   | 6.33   | 7.89   | 23.62  | 6.97   | 0.74  | 0.63  | UNS-2A | 0.66  | 0.89  |       | 4.02   | M10X20       | 52.40 713 |
| DN100     | mm   | 100.00    | 109.70  | 114.30  | 390.00 | 268.80 | 123.00 | 124.00 | 170.50 | 211.00 | 600.00 | 217.00 | 18.90 | 15.90 | 1"-14  | 16.70 | 22.70 | (F10) | 102.00 | M10X20       | 30.00 744 |
| 4"        | inch | 3.94      | 4.32    | 4.50    | 15.35  | 10.58  | 4.84   | 4.88   | 6.71   | 8.30   | 23.62  | 8.54   | 0.74  | 0.63  | UNS-2A | 0.66  | 0.89  |       | 4.02   | M10X20       | 66.30 863 |

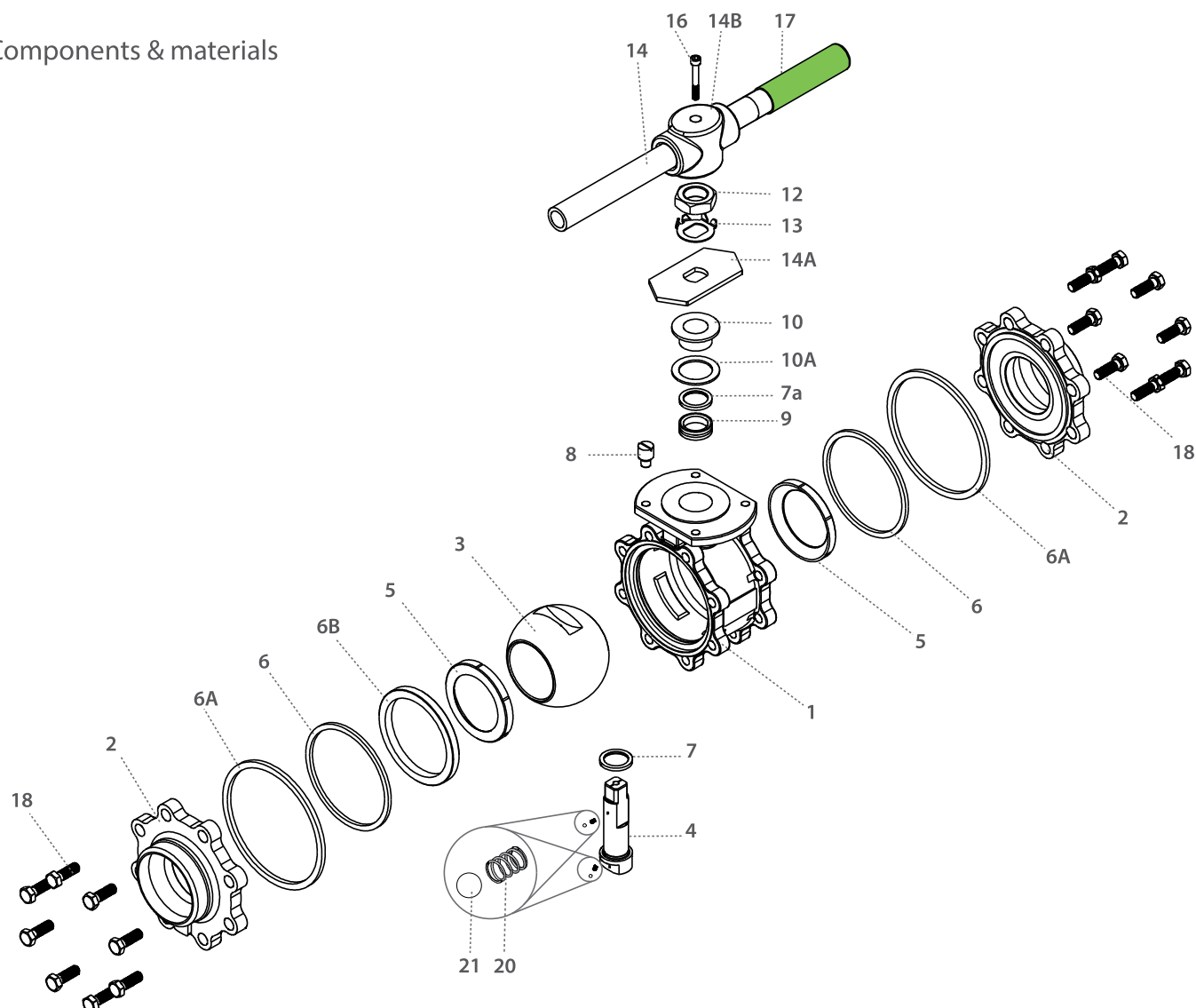
## DIN 11850 Tube Sized

| Std. port | Unit | Ball port | Pipe ID | Pipe OD | A ETD  | A TCD  | B      | C      | D      | H      | S      | W      | M     | M-DD  | N      | P     | Q     | F     | TxL    | Weight kg/lb | Kv Cv     |
|-----------|------|-----------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|-------|-------|--------|--------------|-----------|
| DN65      | mm   | 63.50     | 66.00   | 70.00   | 283.40 | 215.80 | 83.30  | 98.30  | 144.90 | 185.00 | 400.00 | 140.00 | 18.90 | 15.90 | 1"-14  | 16.70 | 22.70 | (F10) | 102.00 | M10X20       | 13.70 300 |
| 2½"       | inch | 2.50      | 2.60    | 2.76    | 11.57  | 8.49   | 3.28   | 3.87   | 5.71   | 7.29   | 15.75  | 5.50   | 0.74  | 0.63  | UNS-2A | 0.66  | 0.89  |       | 4.02   | M10X20       | 30.30 348 |
| DN80      | mm   | 82.60     | 81.00   | 85.00   | 348.80 | 245.40 | 108.80 | 114.10 | 160.70 | 200.00 | 600.00 | 177.00 | 18.90 | 15.90 | 1"-14  | 16.70 | 22.70 | (F10) | 102.00 | M10X20       | 23.70 615 |
| 3"        | inch | 3.25      | 3.19    | 3.35    | 13.73  | 9.66   | 4.28   | 4.49   | 6.33   | 7.89   | 23.62  | 6.97   | 0.74  | 0.63  | UNS-2A | 0.66  | 0.89  |       | 4.02   | M10X20       | 52.40 713 |
| DN100     | mm   | 100.00    | 100.00  | 104.00  | 390.00 | 268.80 | 123.00 | 124.00 | 170.50 | 211.00 | 600.00 | 217.00 | 18.90 | 15.90 | 1"-14  | 16.70 | 22.70 | (F10) | 102.00 | M10X20       | 30.00 744 |
| 4"        | inch | 3.94      | 3.94    | 4.09    | 15.35  | 10.58  | 4.84   | 4.88   | 6.71   | 8.30   | 23.62  | 8.54   | 0.74  | 0.63  | UNS-2A | 0.66  | 0.89  |       | 4.02   | M10X20       | 66.30 863 |



## ISO 1127 / DIN 11850 Floating Ball 3 Piece

### Components & materials



| Item | Description        | Material specification | Qty. |
|------|--------------------|------------------------|------|
| 1    | Body               | Acc. Ordering Code     | 1    |
| 2    | Ends               | Acc. Ordering Code     | 2    |
| 3    | Ball               | Acc. Ordering Code     | 1    |
| 4    | Stem               | Acc. Ordering Code     | 1    |
| 5*   | Seat               | Acc. Ordering Code     | 2    |
| 6*   | Inner seal         | PTFE                   | 2    |
| 6A*  | Outer seal         | Acc. Ordering Code     | 2    |
| 6B   | Support ring       | S. Steel               | 1    |
| 7*   | Stem thrust seal   | VIRGIN PEEK, PCTFE     | 1    |
| 7a*  | Anti-abrasion ring | VIRGIN PEEK, PCTFE     | 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    |

| Item | Description         | Material specification | Qty. |
|------|---------------------|------------------------|------|
| 11   | Disc spring         | S. Steel               | 2    |
| 12   | Stem nut            | S. Steel               | 1    |
| 13   | Tab lock washer     | S. Steel               | 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



## Floating Ball 3 Piece - 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 |
| 1    | 0 |          |   |   | Y | 4      | 7 | G      | -  | 6             | 6  | 6             | 6  | A                  | T  | G             | /          | E          | T              | I  |    | -                |    |   |   |    |
| Size |   | Features |   |   |   | Series |   | Design |    | Body material |    | Ends material |    | Ball/Stem material |    | Seat material | Inner Seal | Outer Seal | End Connection |    |    | Special features |    |   |   |    |

| Size (1-2) |        |     |
|------------|--------|-----|
| Code       | inch   | mm  |
| 03         | 3/8"   | 10  |
| 05         | 1/2"   | 15  |
| 07         | 3/4"   | 20  |
| 10         | 1"     | 25  |
| 12         | 1 1/4" | 32  |
| 15         | 1 1/2" | 40  |
| 20         | 2"     | 50  |
| 25         | 2 1/2" | 65  |
| 30         | 3"     | 80  |
| 40         | 4"     | 100 |

| Features (3-6)     |                                                  |
|--------------------|--------------------------------------------------|
| Y                  | <b>Tube Sized port</b>                           |
| F                  | Fire safe                                        |
| O                  | Oxygen service                                   |
| V                  | Vacuum service                                   |
| Q                  | Cavity filler seats                              |
| I                  | High purity Class 10000                          |
| H                  | Hydrogen Service                                 |
| Series (7-8)       |                                                  |
| 47                 | <b>Floating ball 3 piece</b>                     |
| Design (9)         |                                                  |
| W                  | Total HermetiX Integrity package                 |
| G                  | Total HermetiX Integrity package - FDA compliant |
| Body material (11) |                                                  |
| 6                  | S. Steel/CF8M/CF3M                               |
| W                  | Hasteloy-C22                                     |
| Ends material (12) |                                                  |
| 6                  | S. Steel/CF8M/CF3M                               |
| W                  | Hasteloy-C22                                     |
| Ball material (13) |                                                  |
| 6                  | S. Steel                                         |
| W                  | Hasteloy-C22                                     |

| Stem material (14)       |                        |
|--------------------------|------------------------|
| 6                        | S. Steel316L           |
| M                        | High Strength S. Steel |
| W                        | Alloy-C22 B574         |
| Seat material (15)       |                        |
| A                        | TFM                    |
| L                        | Virgin Peek            |
| Inner Seal Material (16) |                        |
| T                        | PTFE                   |
| Outer Seal material (17) |                        |
| A                        | TFM                    |
| G                        | Expanded graphite      |

| End Connection (19-22)   |                                                               |
|--------------------------|---------------------------------------------------------------|
| Welded                   |                                                               |
| ETI                      | Extended butt weld ISO 1127                                   |
| ETD                      | Extended butt weld DIN 11850                                  |
| Clamp                    |                                                               |
| TCI                      | Tri-Clamp for ISO 1127                                        |
| TCD                      | Tri-Clamp for DIN 11850                                       |
| Special Features (24-30) |                                                               |
| P250                     | Ball with Upstream Relief Hole                                |
| SRS                      | Self Relief Seat                                              |
| B                        | Body made from bar stock                                      |
| EP                       | Electropolished                                               |
| J2N05                    | Jacketed valve - number of ports(2), type(NPT) and size(1/2") |