



# 59 series dual VCR purge port high purity ball valve.

## CFOS Applications:

Clean dry air (CDA), Oil free air (OFA), General nitrogen (GN2), Utility nitrogen (UN2) and other inert gasses\*.

## Product Specs:

Sizes 1/4" thru 6", OD and wall thicknesses coincide to ASTM tube, tolerances in accordance with ASTM A269 & A632.

Dual capped VCR facesal purge ports.

Design pressure 232psi @ 302F (1.6MPa).

Flow coefficient by size:

1/4" Cv 1.1  
1/2" Cv 19  
3/4" Cv 35  
1" Cv 50  
1-1/2" Cv 200  
2" Cv 350  
3" Cv 1100  
4" Cv 2100  
6" Cv 5100



## Materials of Construction:

SS 316 tube extensions, centerbody CF8M and ball, PTFE seats seals.

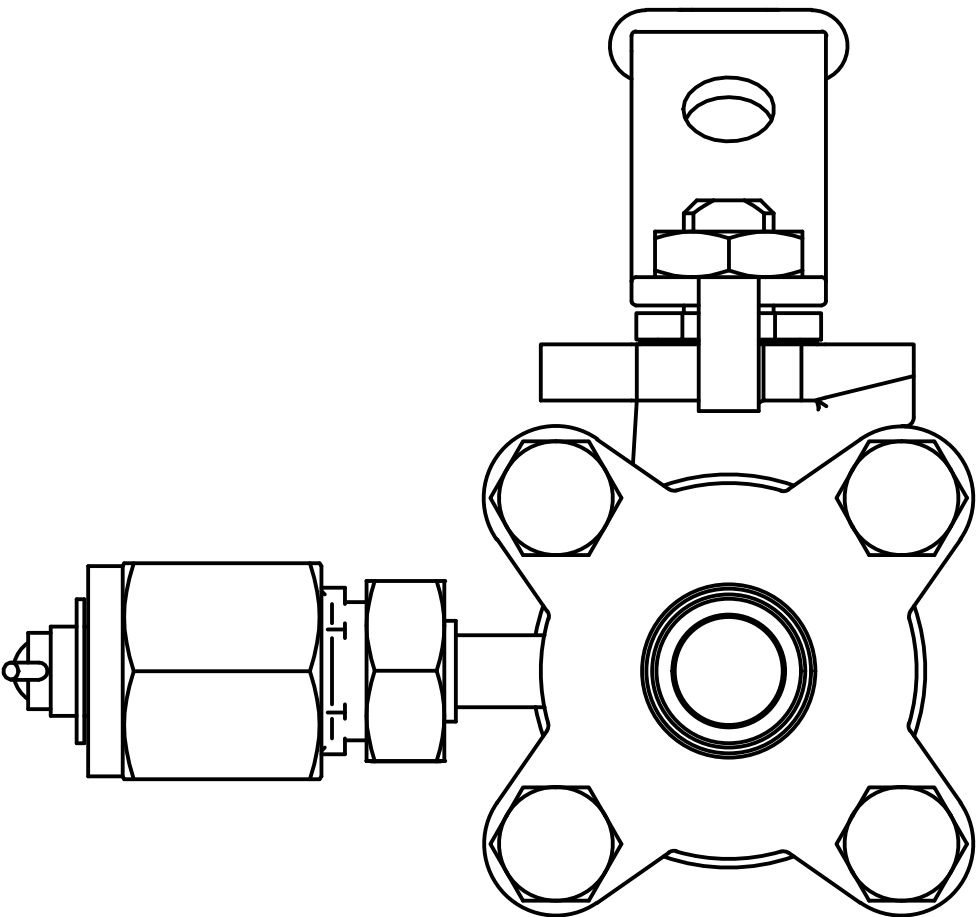
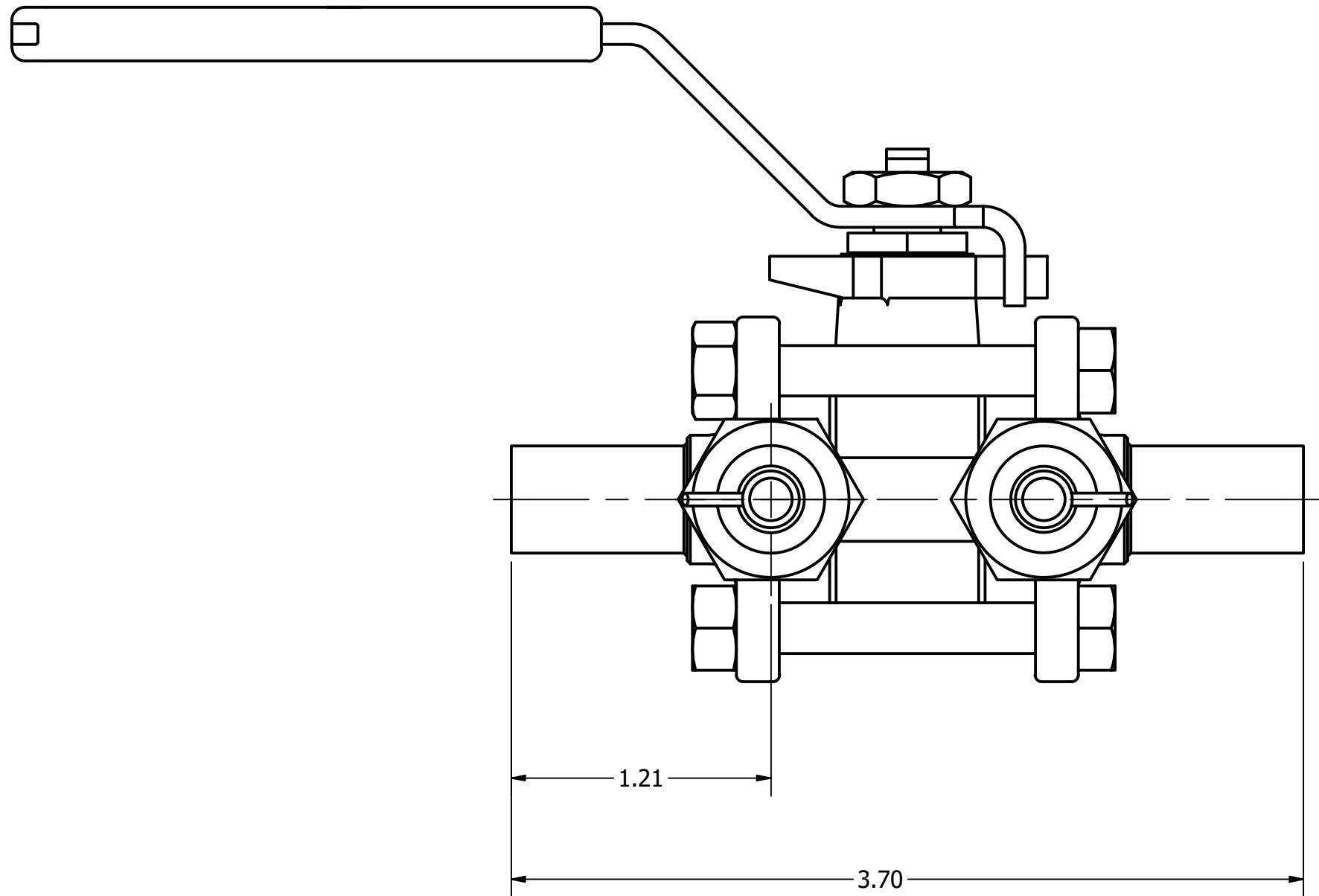
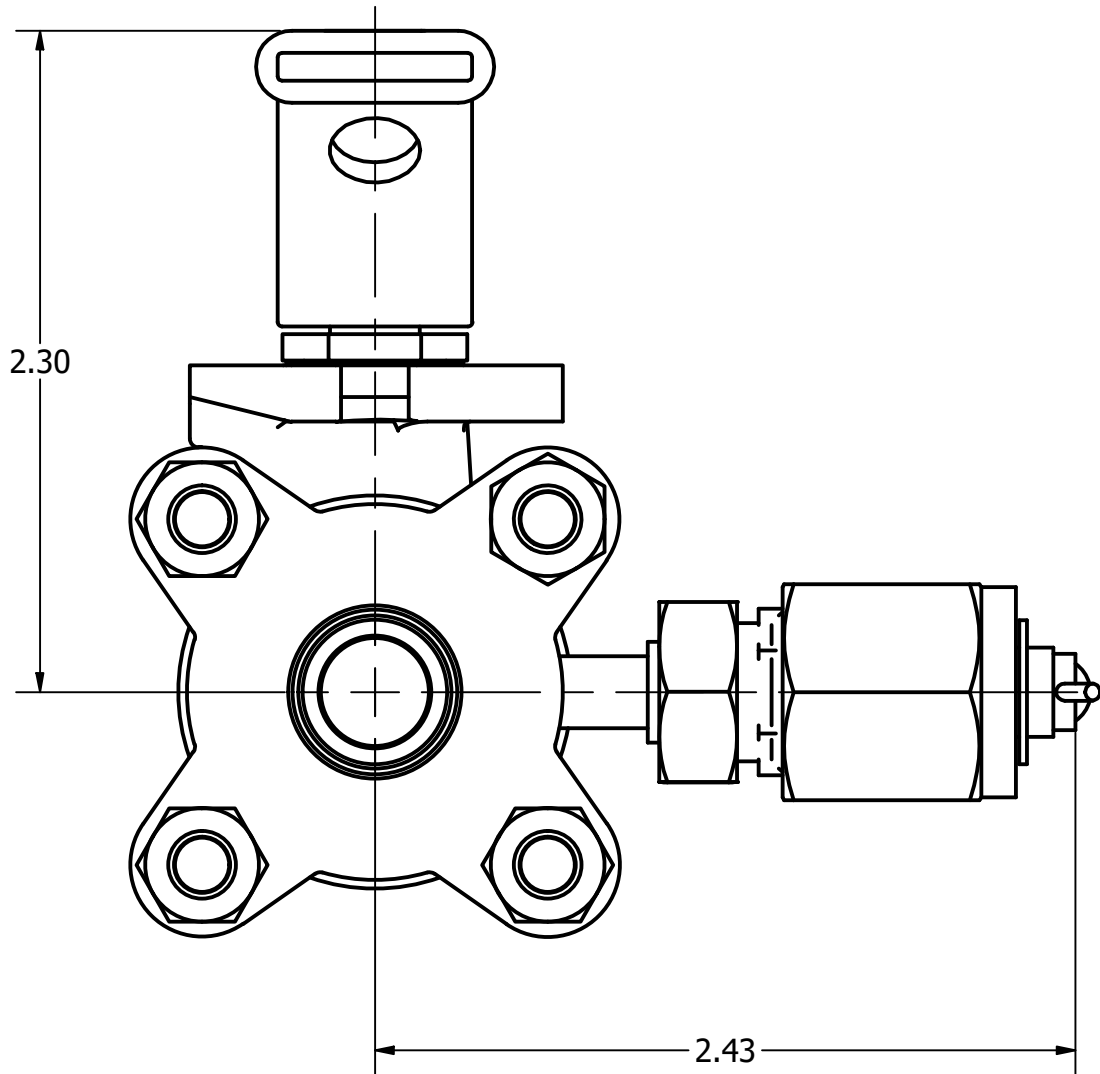
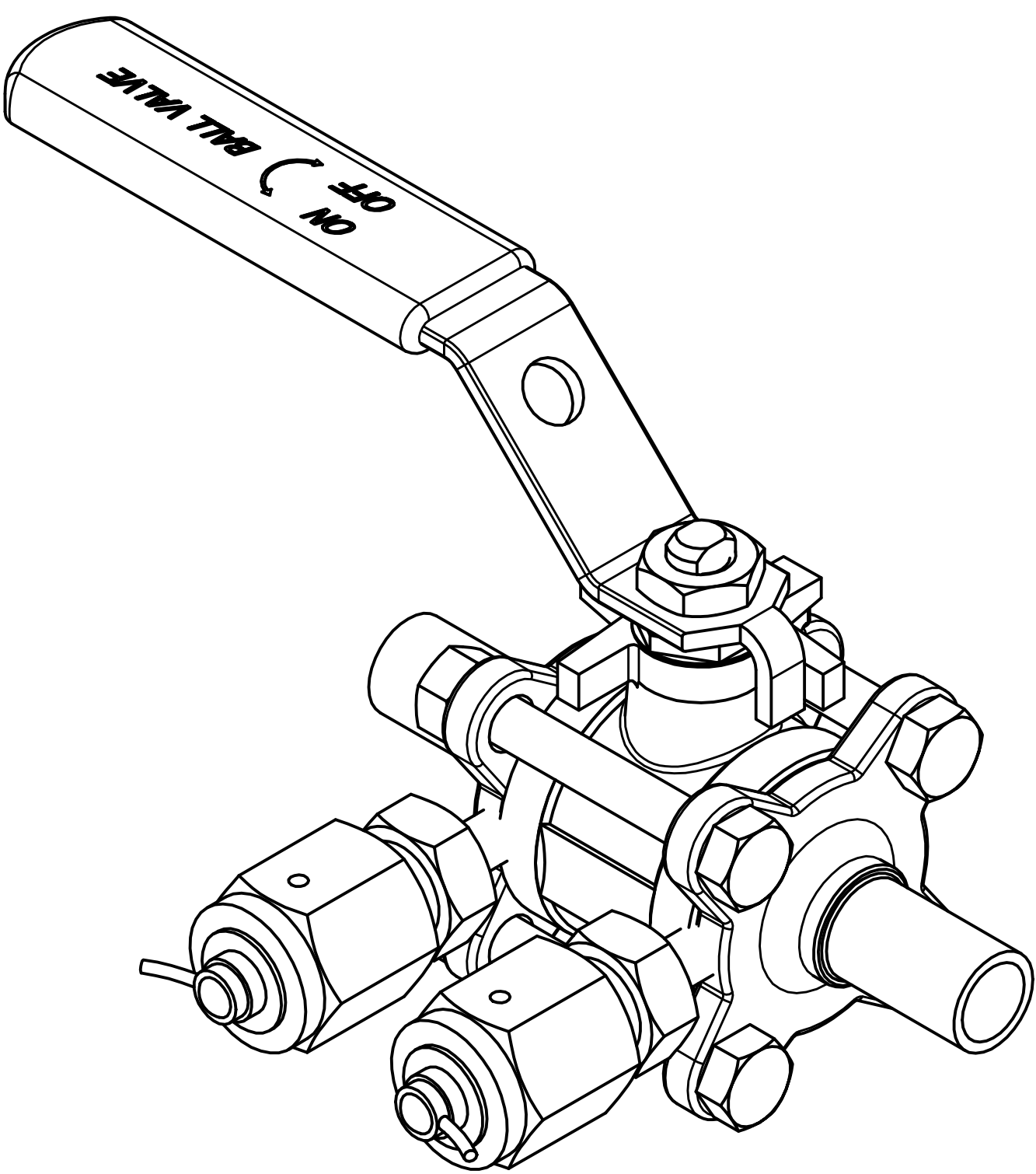
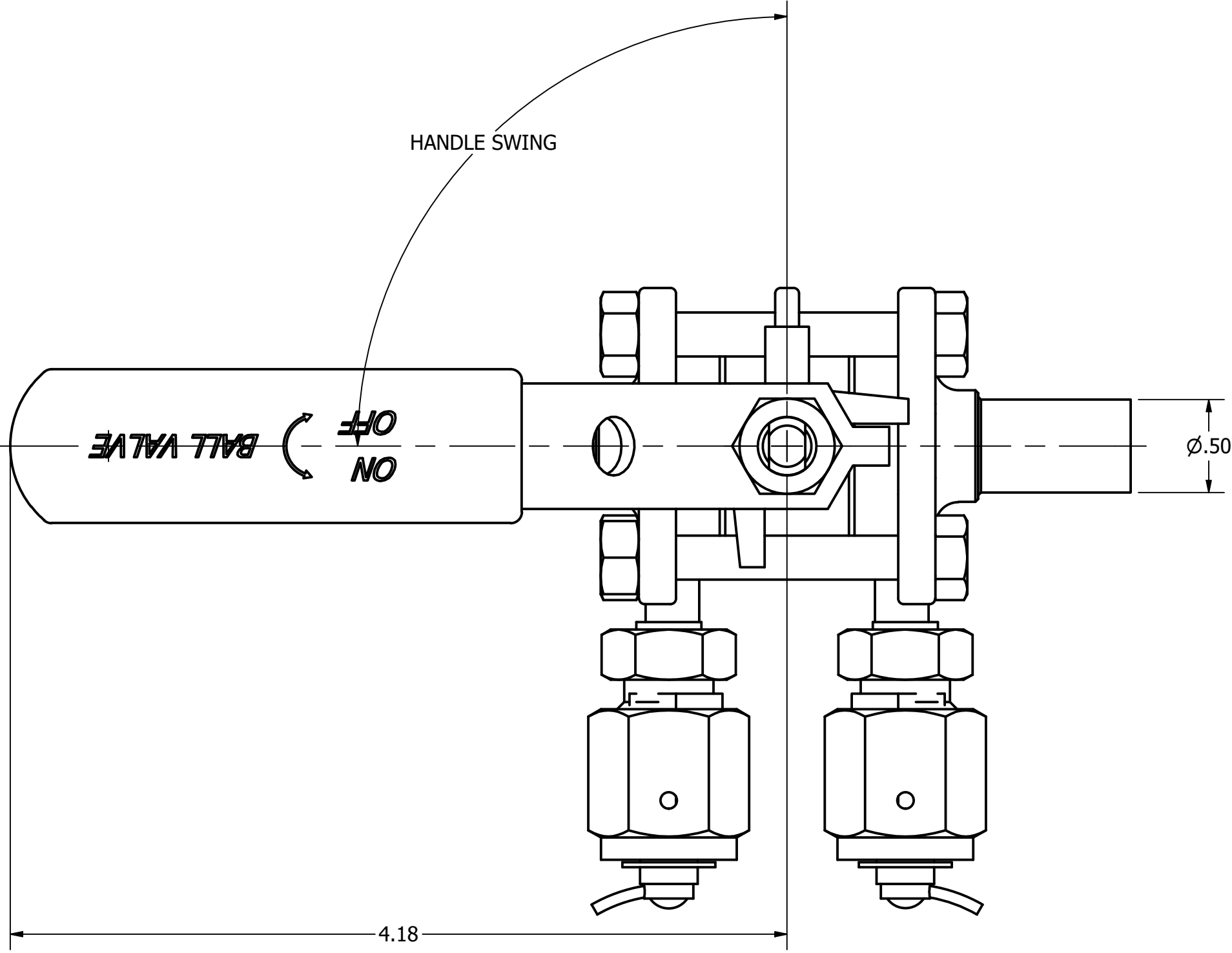
## Handles:

Standard locking lever handle, sizes 1/4" thru 4", Tee style bar for 6". Standard handle color blue, other color options available upon request.

## Part Number:

1/4", **BV-59-04-VV**, 1/2", **BV-59-08-VV**, 3/4" **BV-59-12-VV**, 1" **BV-59-16-VV**,  
1-1/2", **BV-59-24-VV**, 2" **BV-59-32-VV**, 3" **BV-59-48-VV**, 4" **BV-59-64-VV**, 6" **BV-59-96-VV**.

\*CGA 4.1 cleaning and bagging upon request.



ISSUED FOR CUSTOMER REVIEW

| GENERAL TOLERANCES<br>(UNLESS OTHERWISE STATED) |           |
|-------------------------------------------------|-----------|
| 3 PLACES                                        | $\pm .01$ |
| 2 PLACES                                        | $\pm .03$ |
| 1 PLACE                                         | $\pm .05$ |
| ANGULAR $\pm 1^{\circ}$                         |           |

|            |
|------------|
| DATE       |
| 4/18/2025  |
| DRAWN BY   |
| N. SEVERN  |
| CHECKED BY |

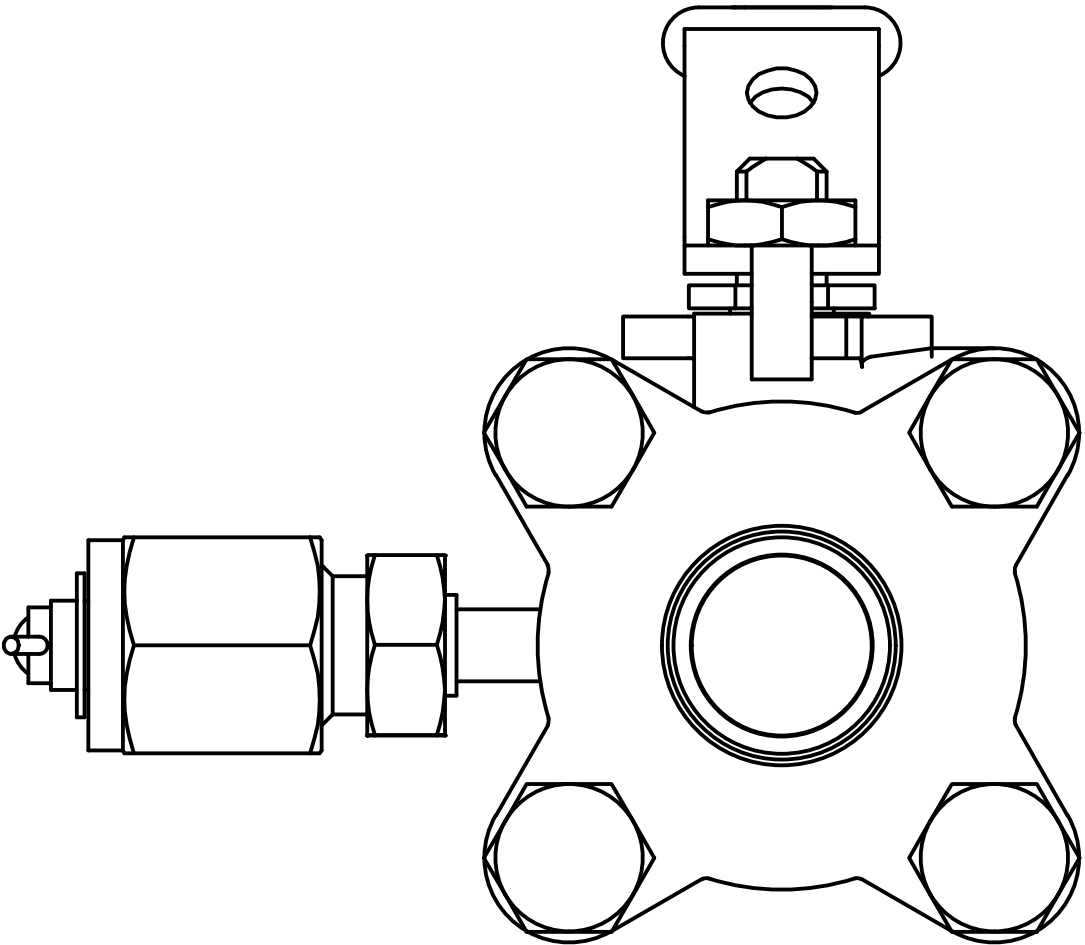
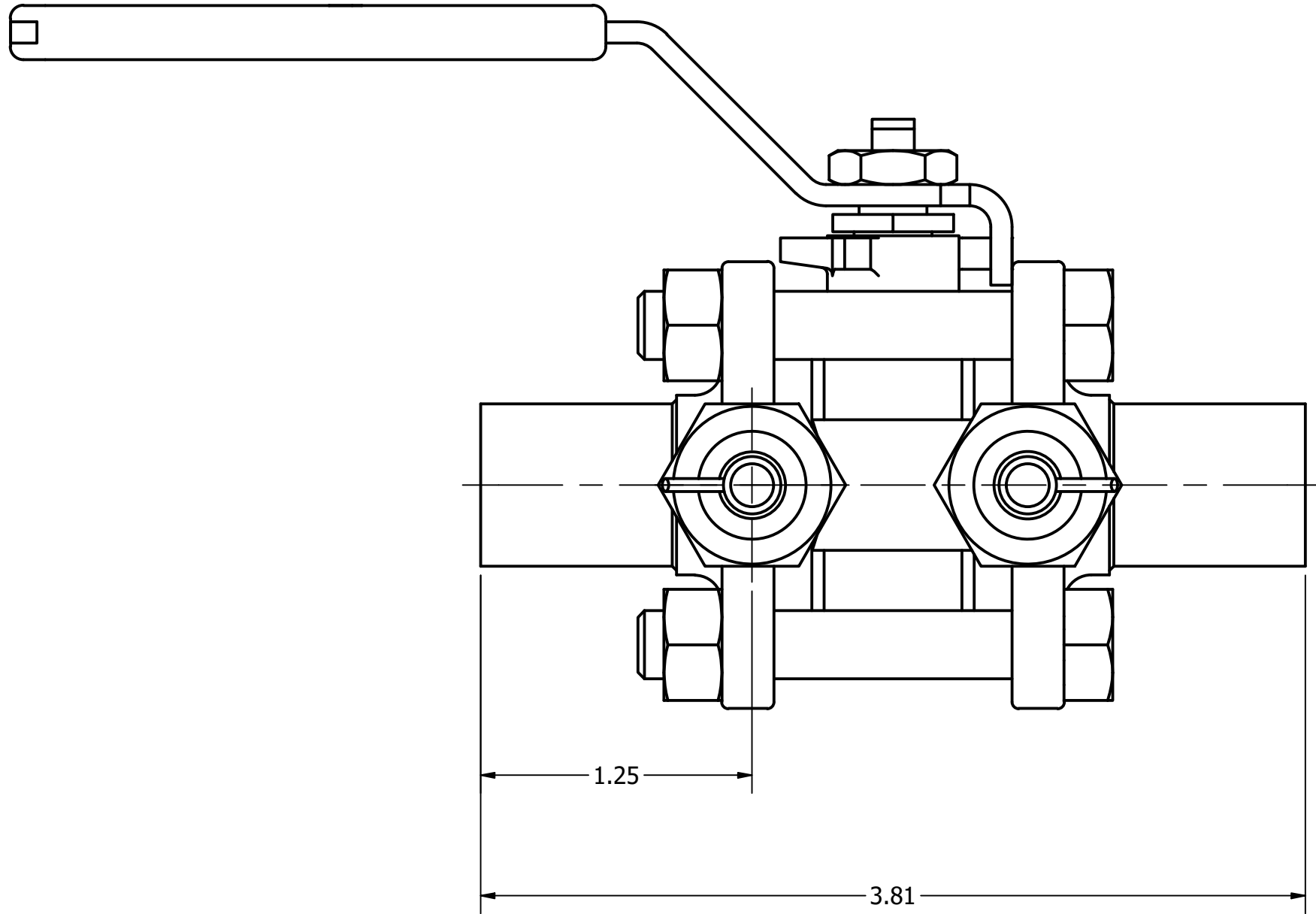
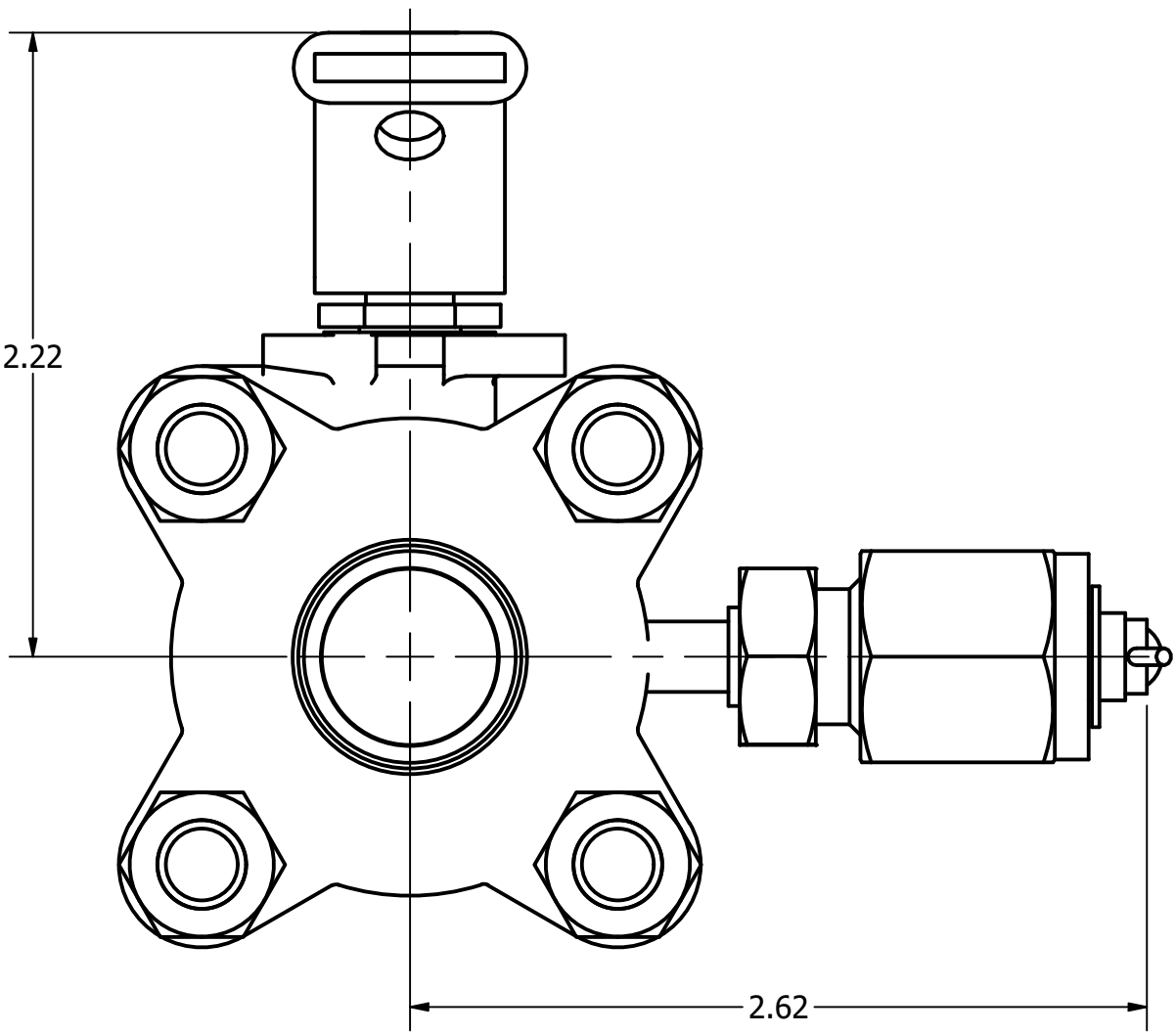
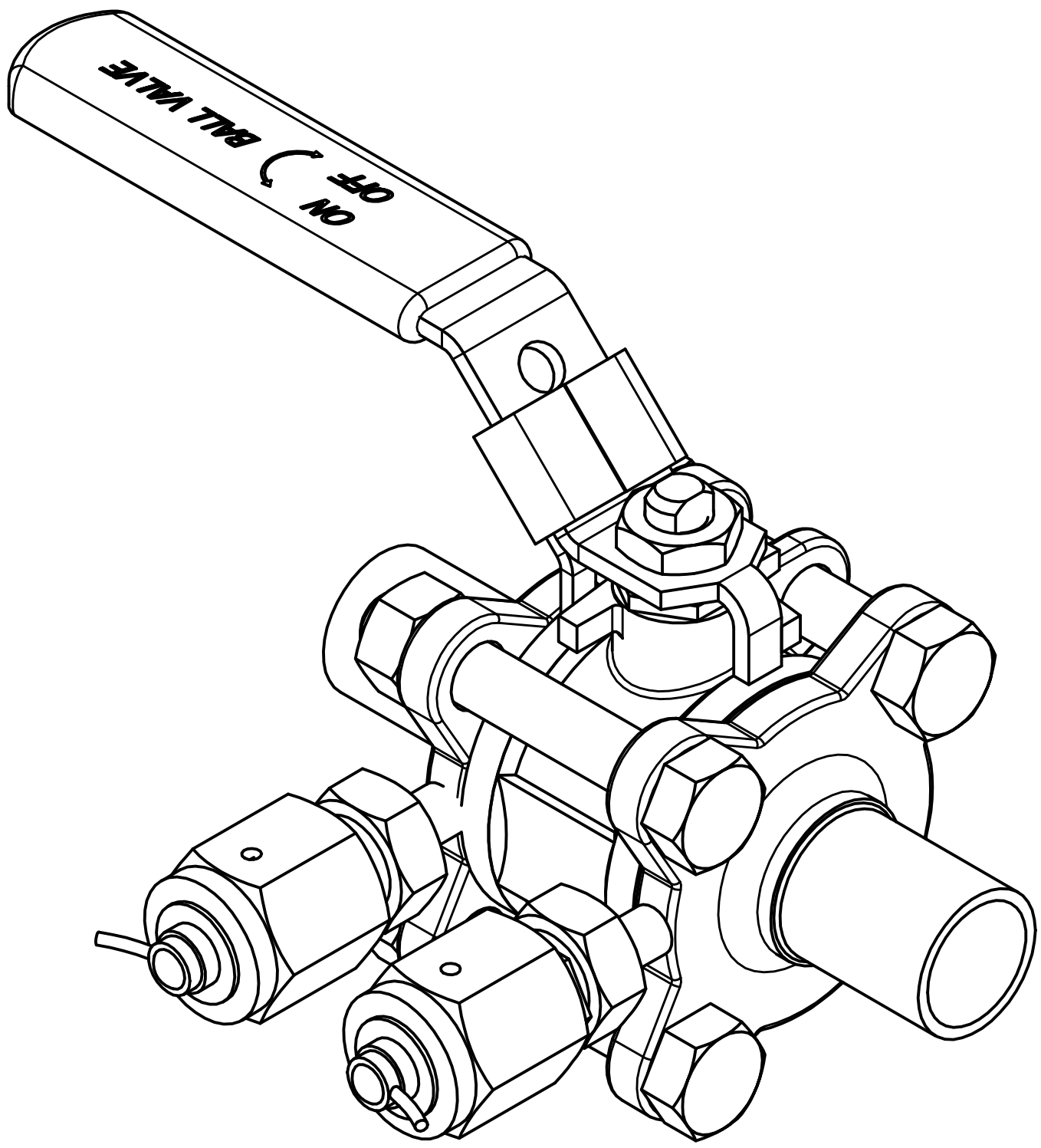
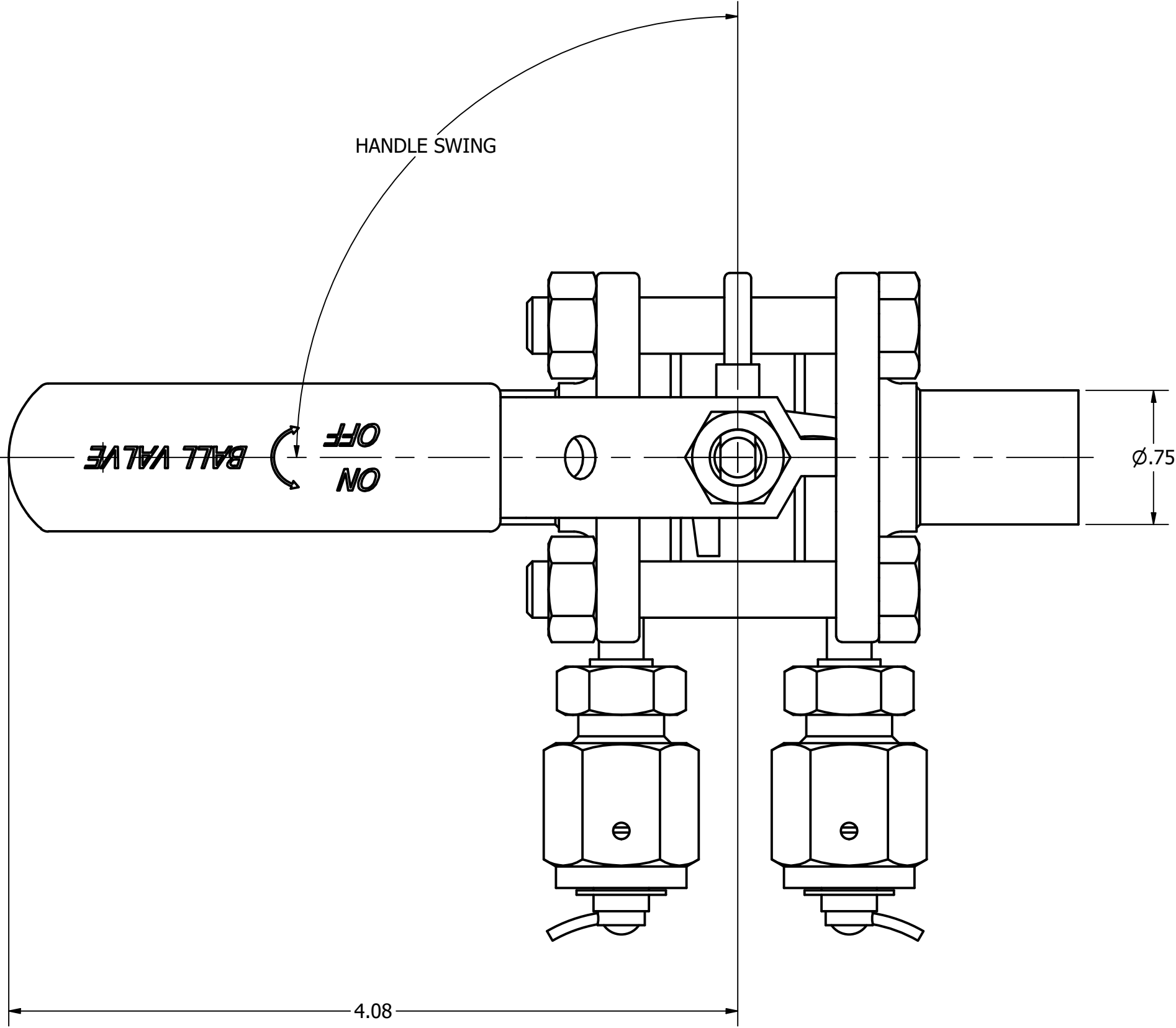


NG7  
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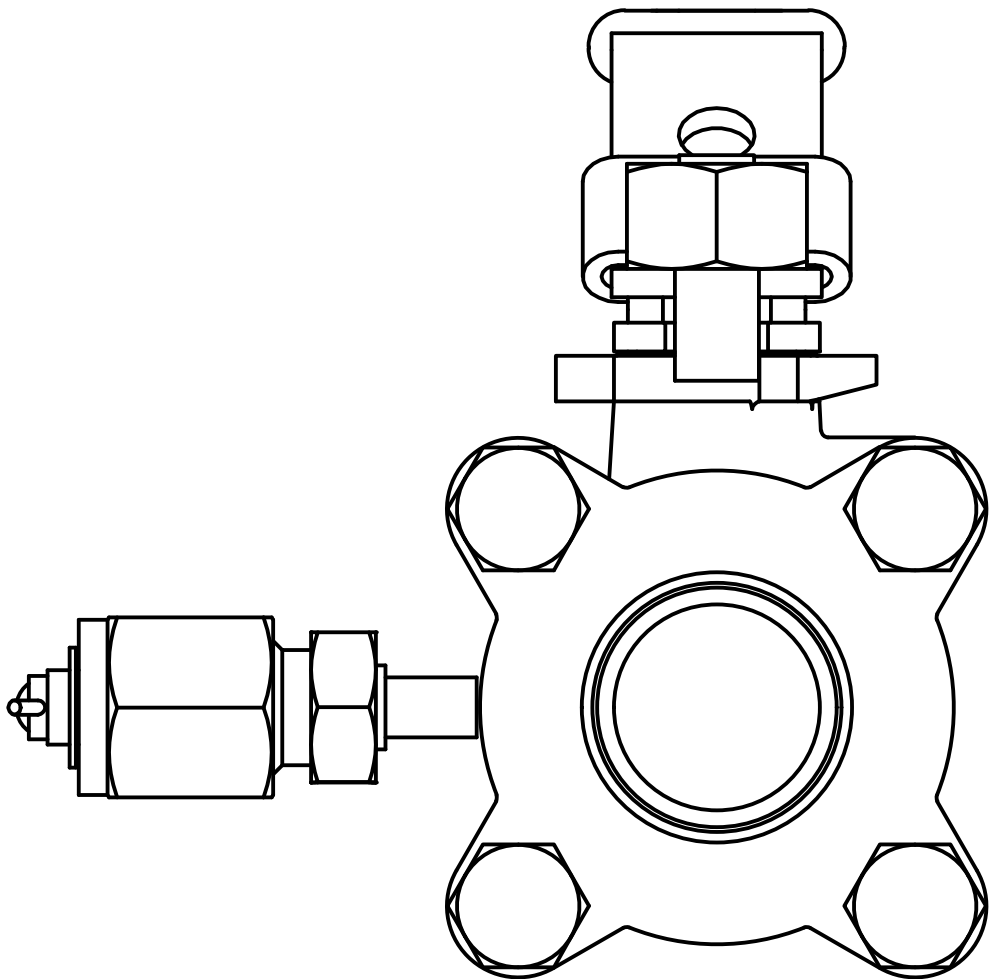
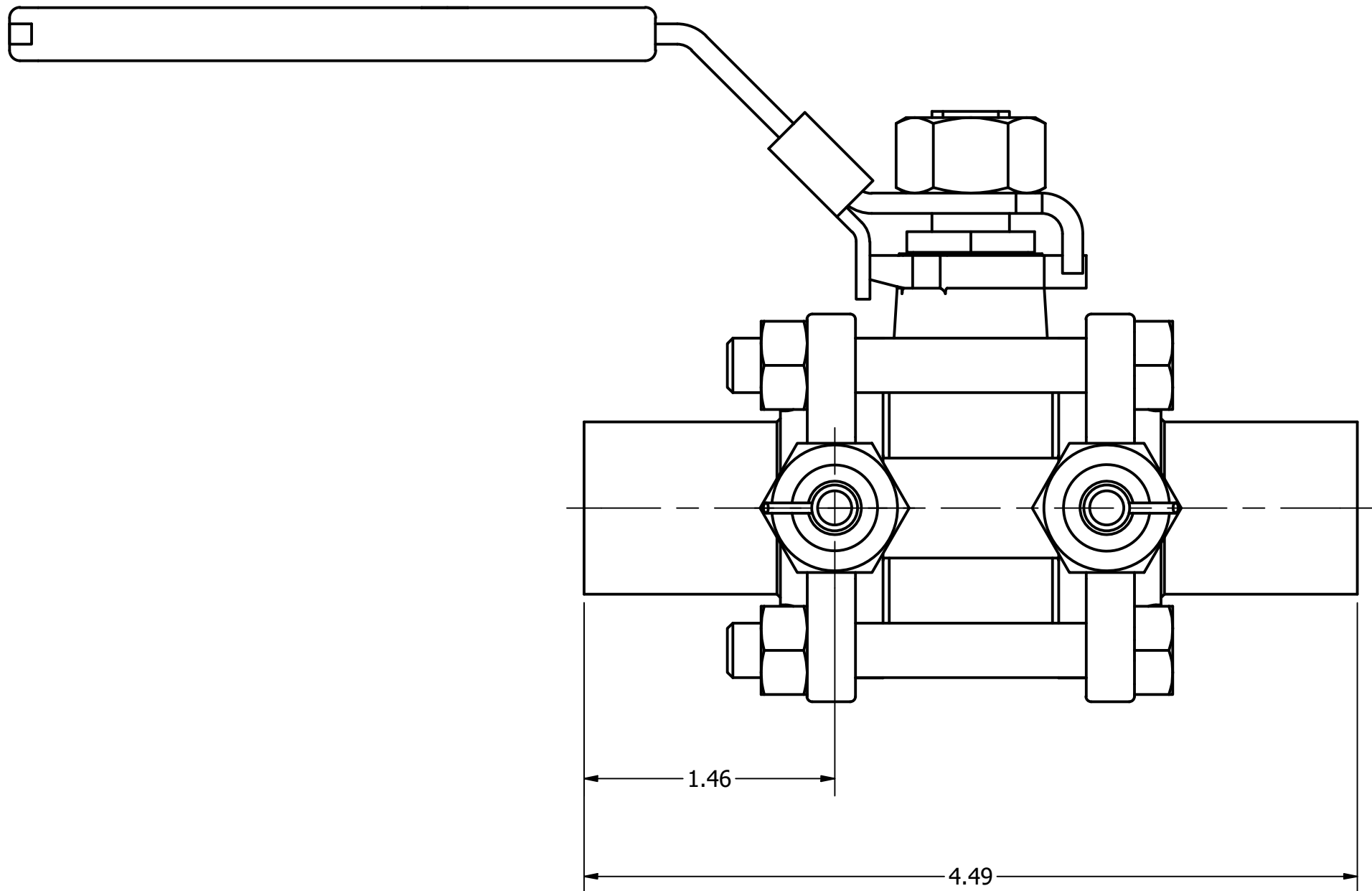
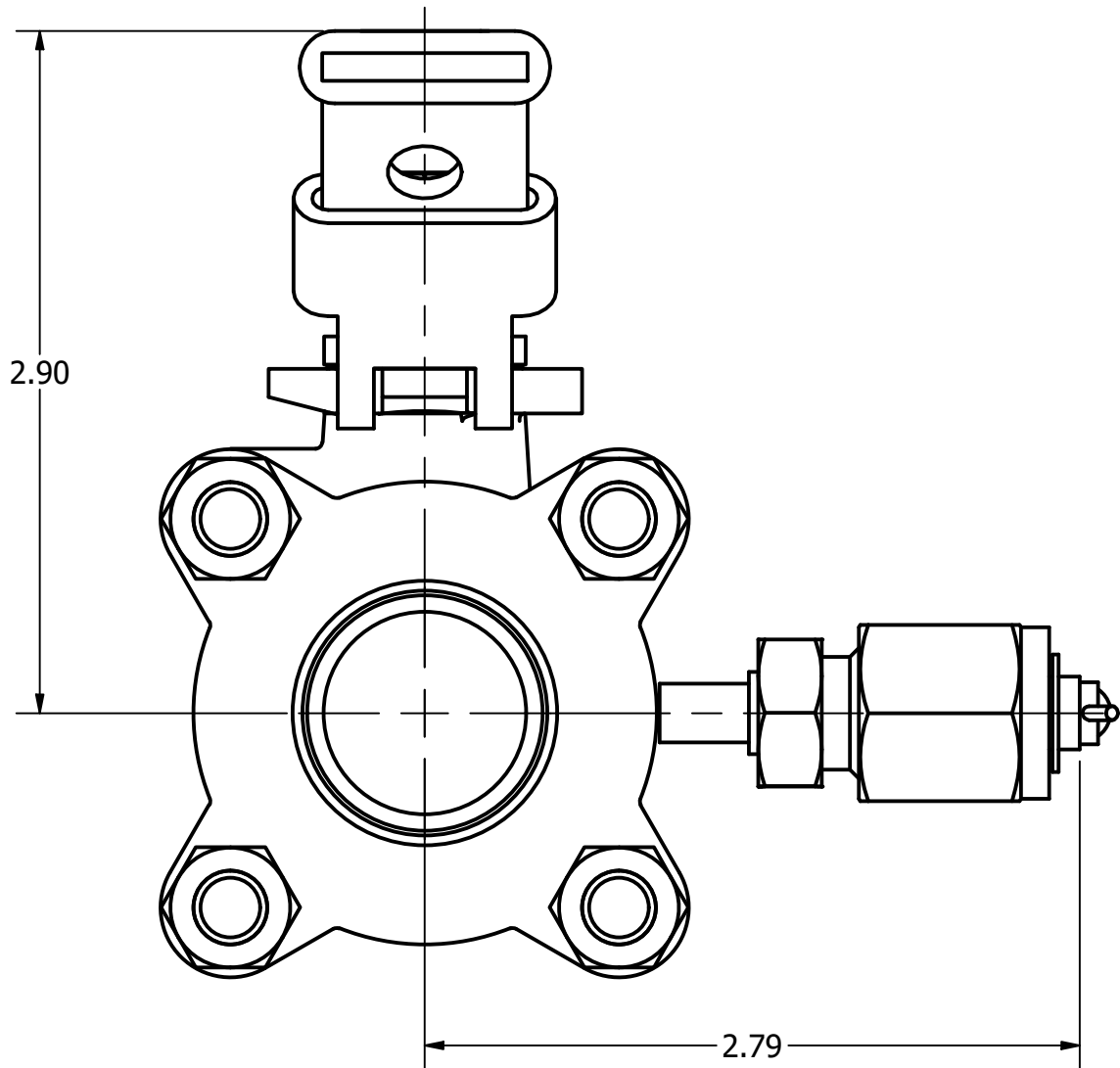
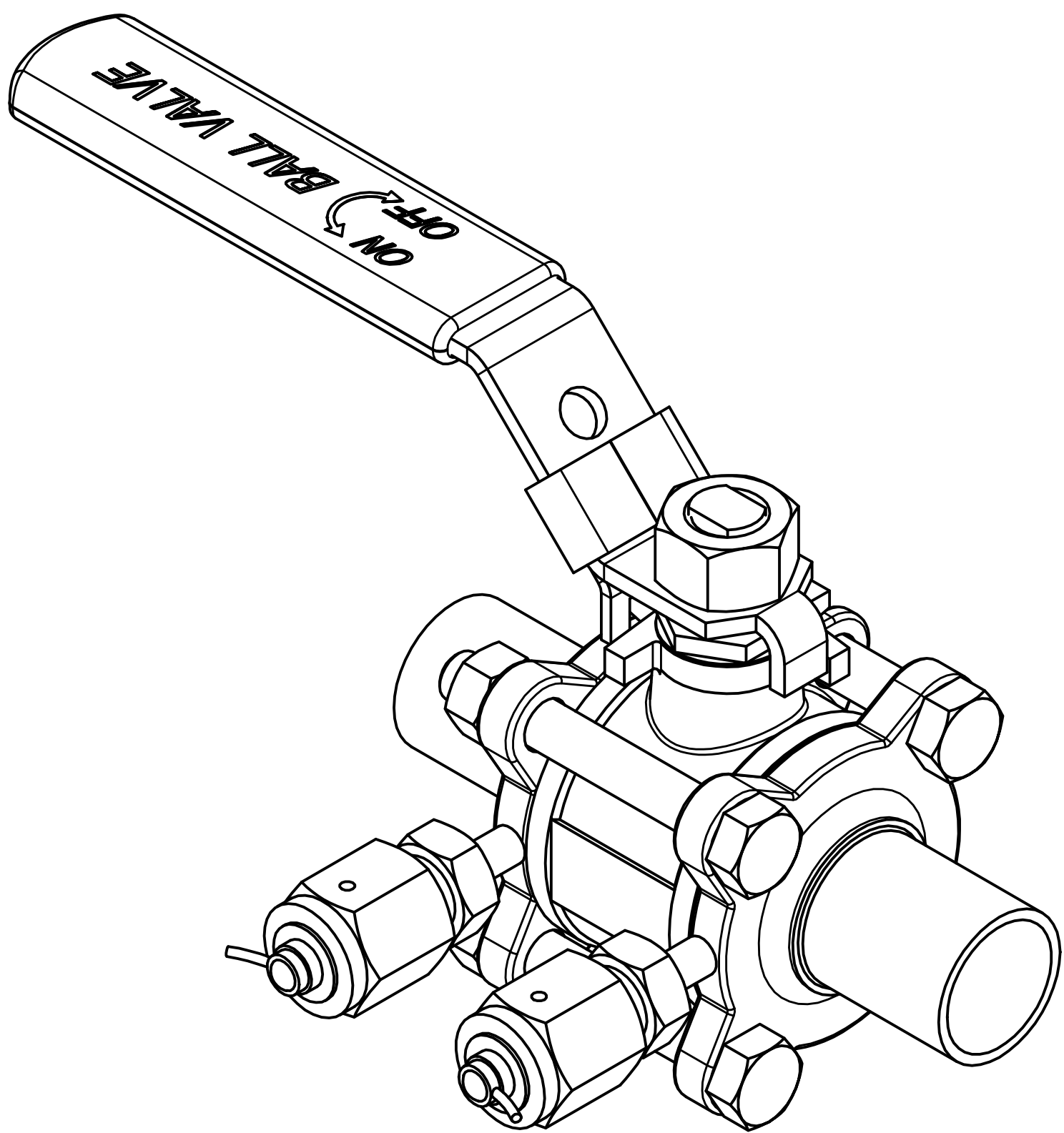
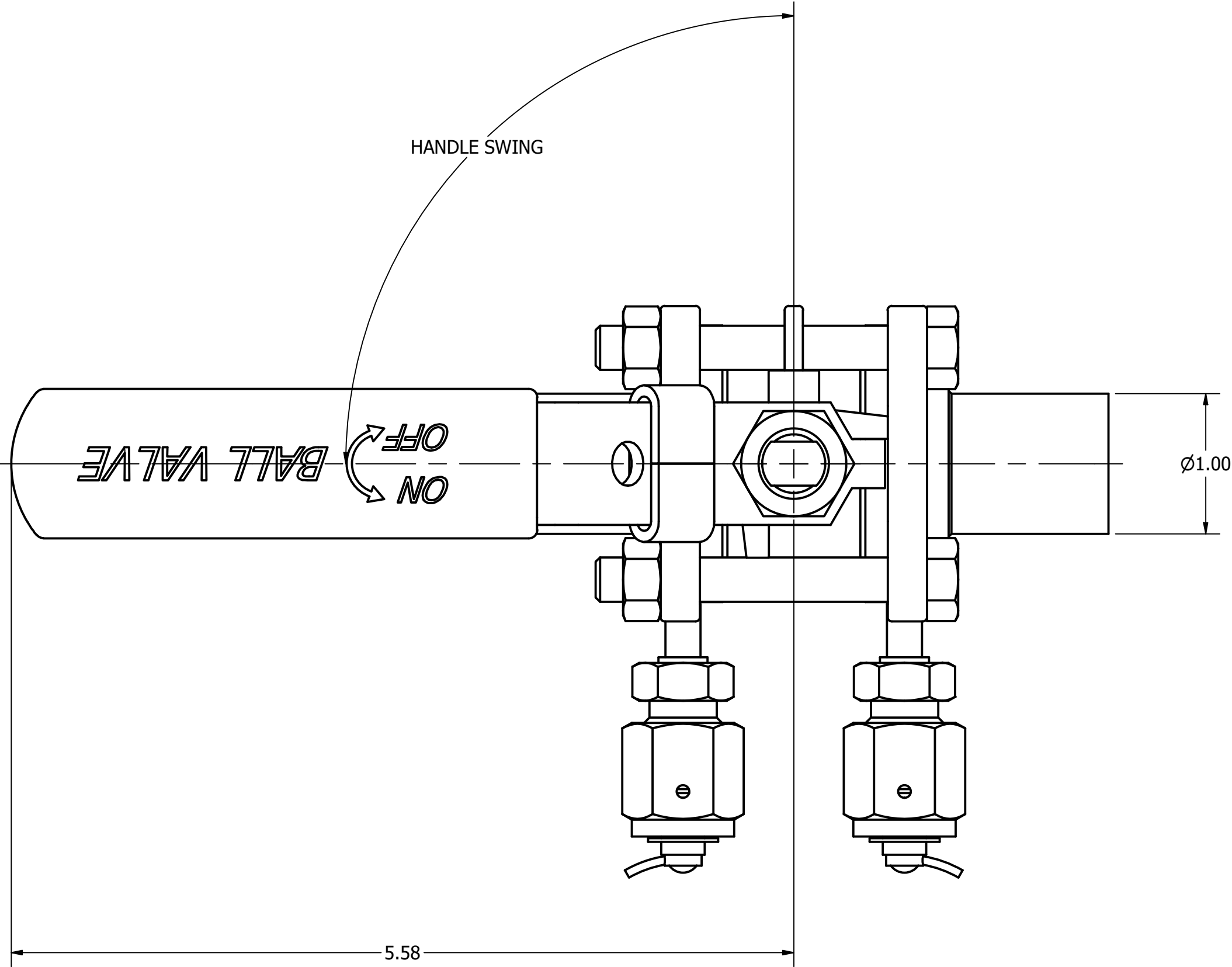
|                                          |
|------------------------------------------|
| DESCRIPTION                              |
| 1/2" SS 316 BALL VALVE W/ DUAL VCR PURGE |
| PART NUMBER                              |
| BV-59-08-VV                              |

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO NG7.  
AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

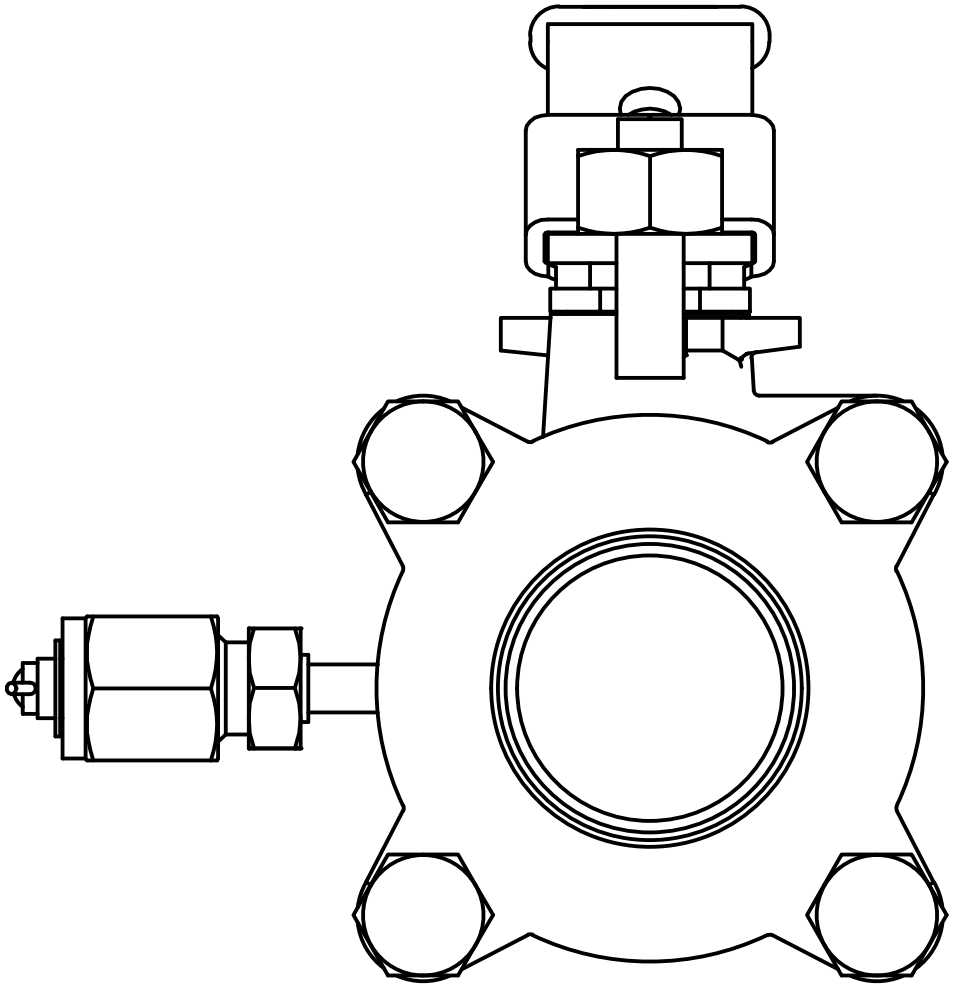
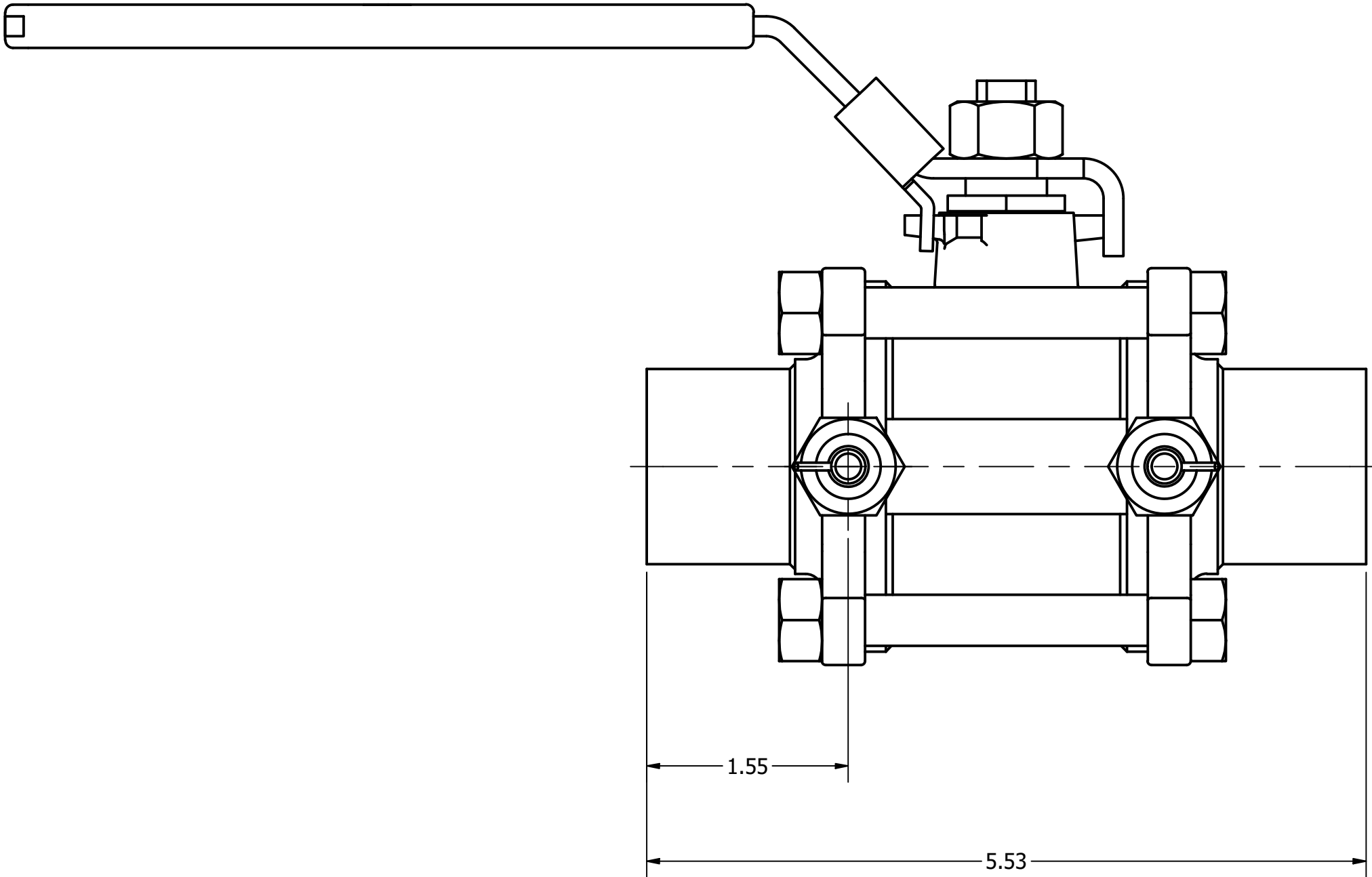
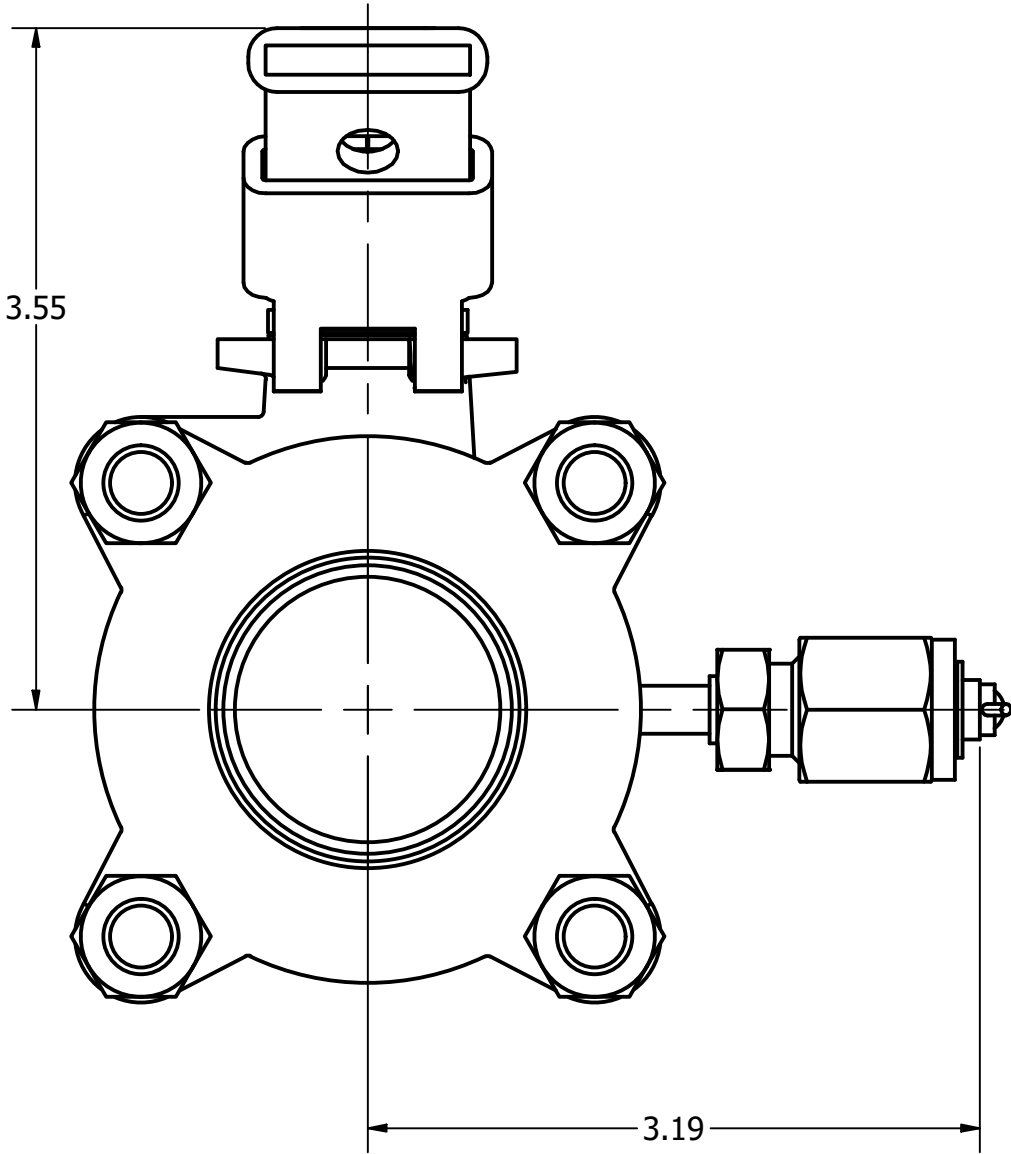
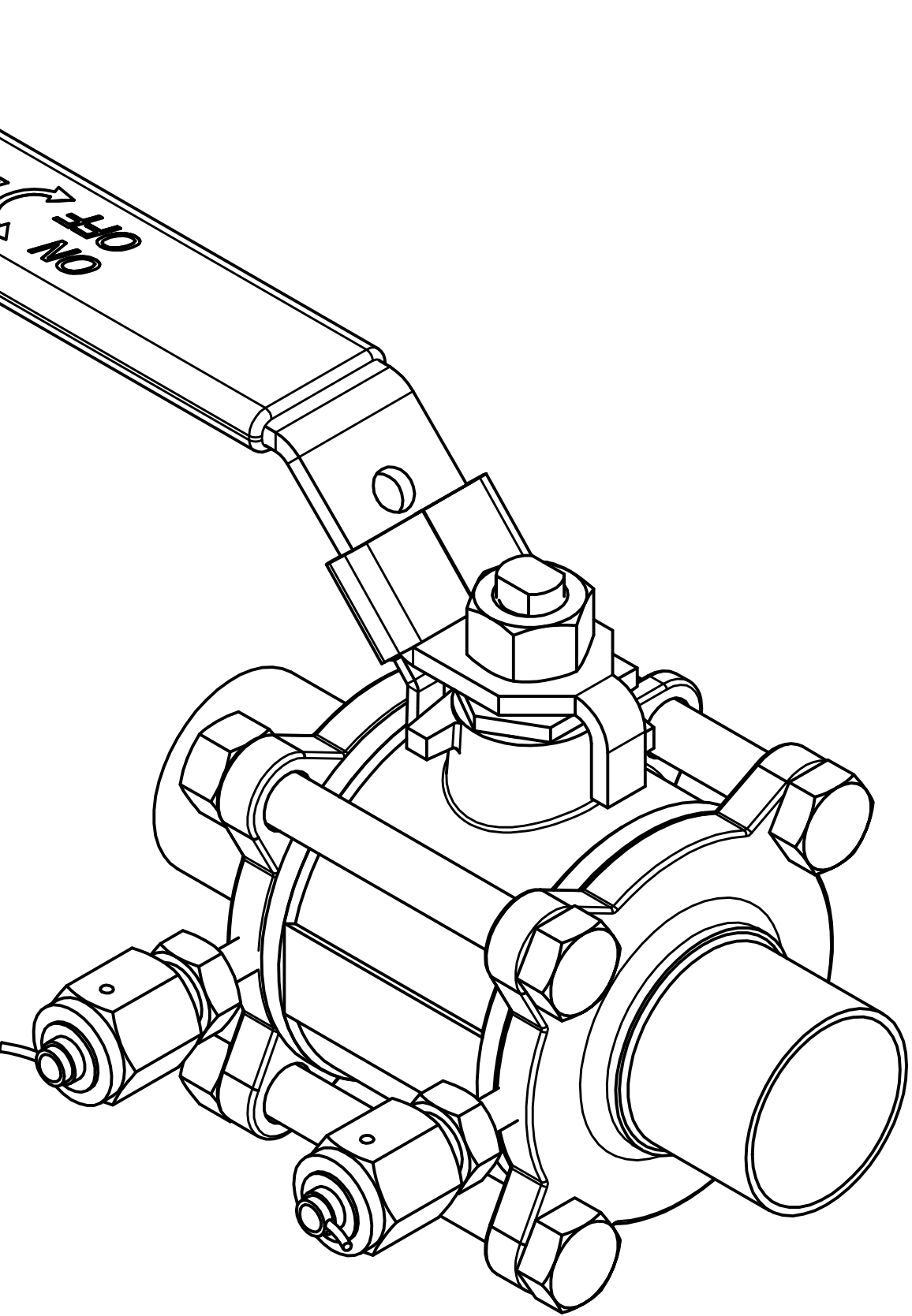
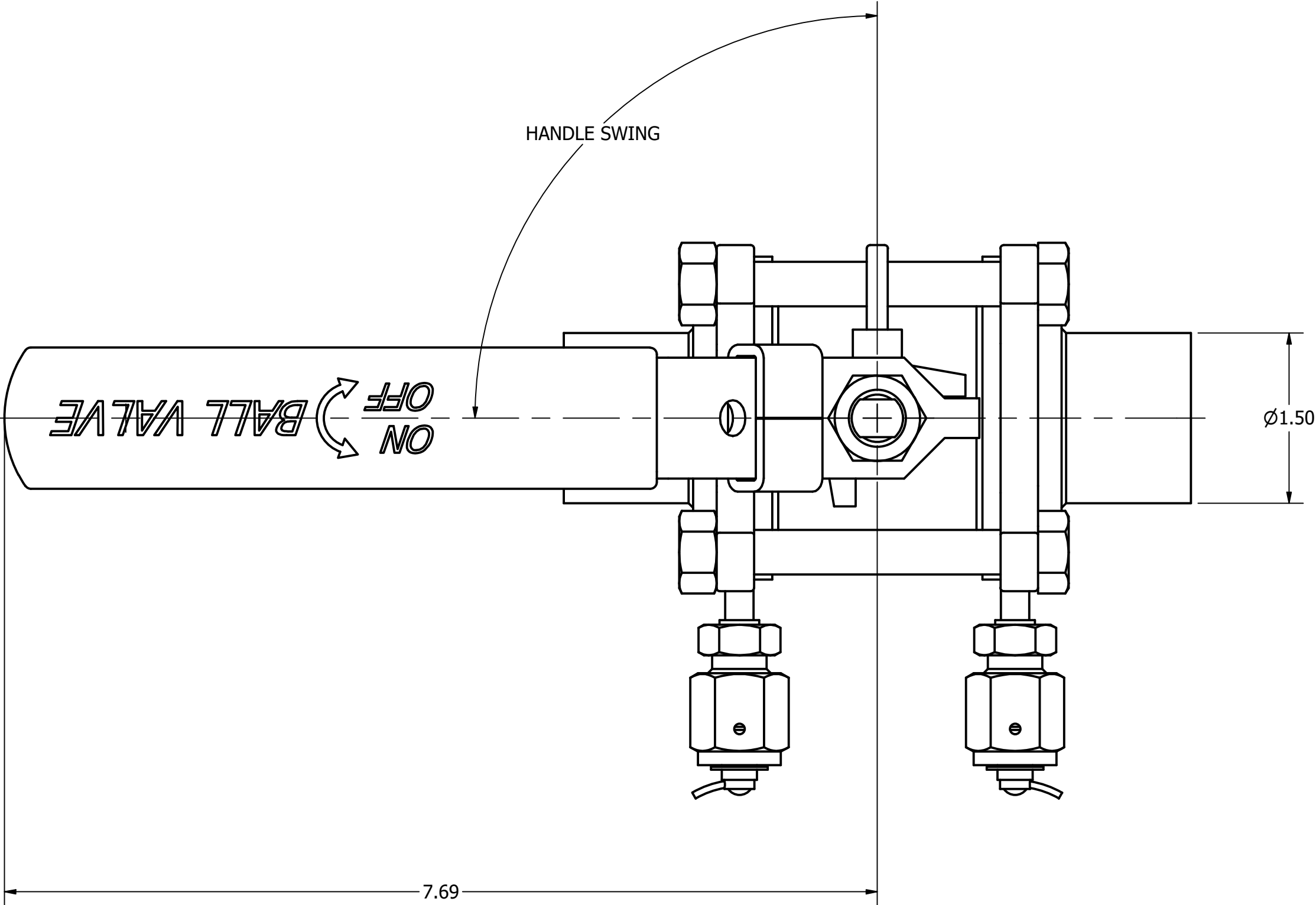
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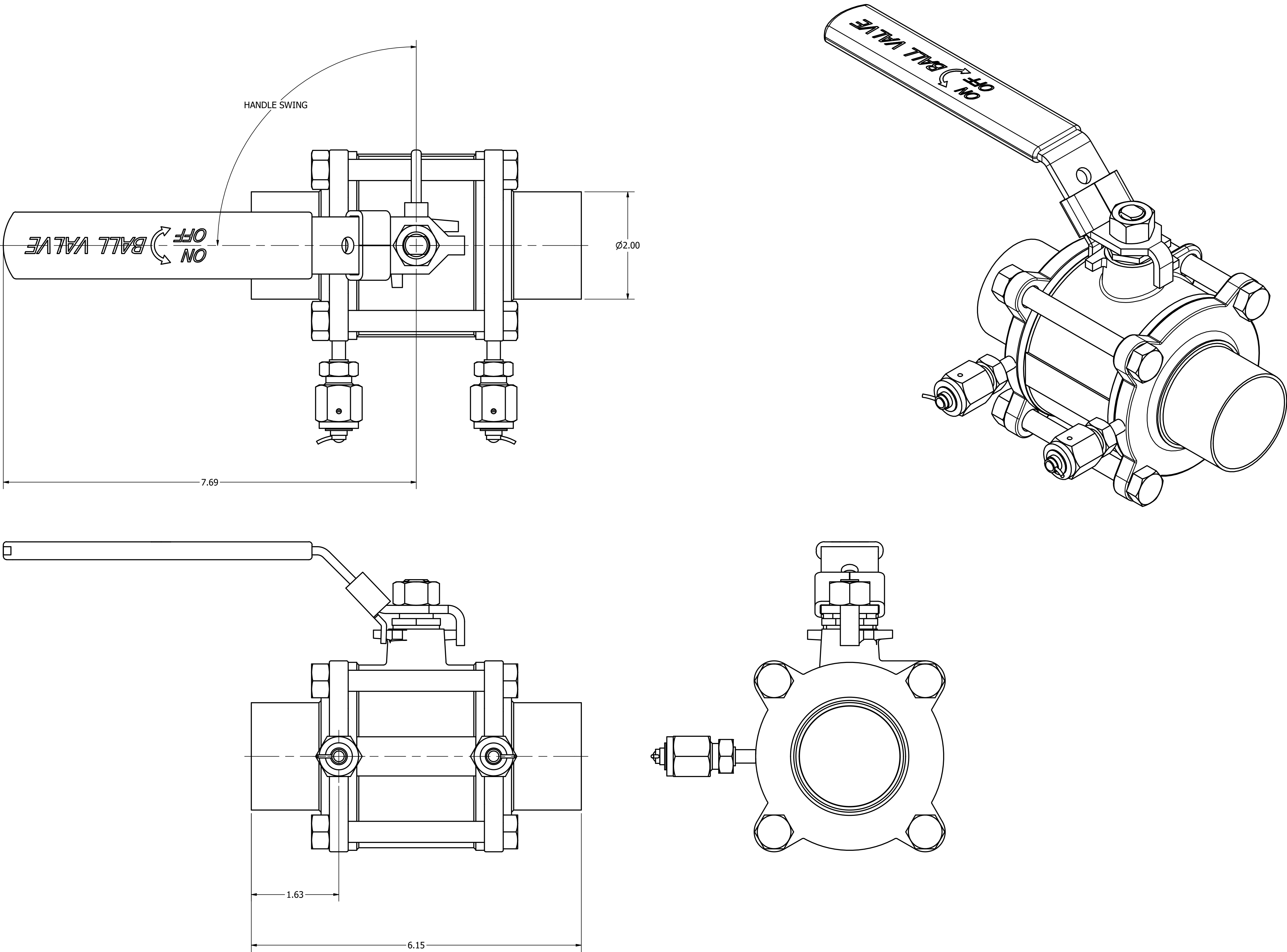
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| ISSUED FOR CUSTOMER REVIEW |  |  |  | GENERAL TOLERANCES<br>(UNLESS OTHERWISE STATED) |       | DATE<br>4/18/2025     |  NG7<br>WWW.NG7DESIGN.COM | DESCRIPTION<br>3/4" SS 316 BALL VALVE W/ DUAL VCR PURGE                                                             |             |              |     |
|                            |  |  |  | 3 PLACES                                        | ± .01 | DRAWN BY<br>N. SEVERN |                                                                                                                | PART NUMBER<br>BV-59-12-VV                                                                                          |             |              |     |
|                            |  |  |  | 2 PLACES                                        | ± .03 | CHECKED BY            |                                                                                                                | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO NG7.<br>AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |             |              |     |
|                            |  |  |  | 1 PLACE                                         | ± .05 |                       |                                                                                                                |                                                                                                                     |             |              |     |
|                            |  |  |  | ANGULAR ± 1°                                    |       |                       |                                                                                                                | SHEET SIZE<br>D                                                                                                     | UNITS<br>IN | SHEET #<br>1 | REV |



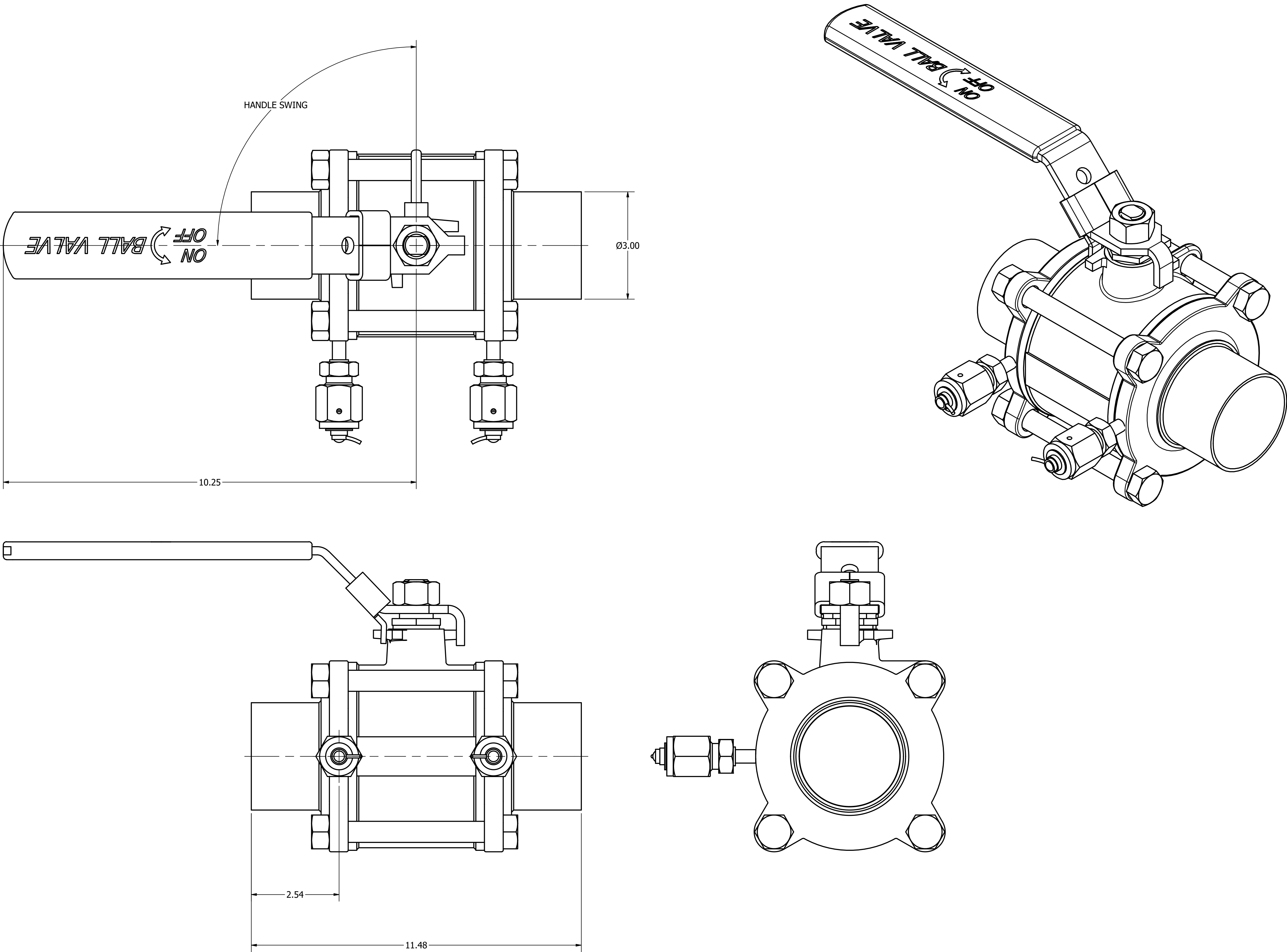
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| ISSUED FOR CUSTOMER REVIEW |  |  |  | GENERAL TOLERANCES<br>(UNLESS OTHERWISE STATED) |       | DATE<br>4/18/2025     |  NG7<br>WWW.NG7DESIGN.COM | DESCRIPTION<br>1" SS 316 BALL VALVE W/ DUAL VCR PURGE                                                               |  |  |             |             |     |
|                            |  |  |  | 3 PLACES                                        | ± .01 | DRAWN BY<br>N. SEVERN |                                                                                                                | PART NUMBER<br>BV-59-16-VV                                                                                          |  |  |             |             |     |
|                            |  |  |  | 2 PLACES                                        | ± .03 | CHECKED BY            |                                                                                                                | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO NG7.<br>AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |  |  |             |             |     |
|                            |  |  |  | 1 PLACE                                         | ± .05 |                       |                                                                                                                |                                                                                                                     |  |  |             |             |     |
|                            |  |  |  | ANGULAR ± 1°                                    |       |                       |                                                                                                                |                                                                                                                     |  |  |             |             |     |
|                            |  |  |  |                                                 |       |                       | SHEET SIZE<br>D                                                                                                |                                                                                                                     |  |  | UNITS<br>IN | SHEET#<br>1 | REV |



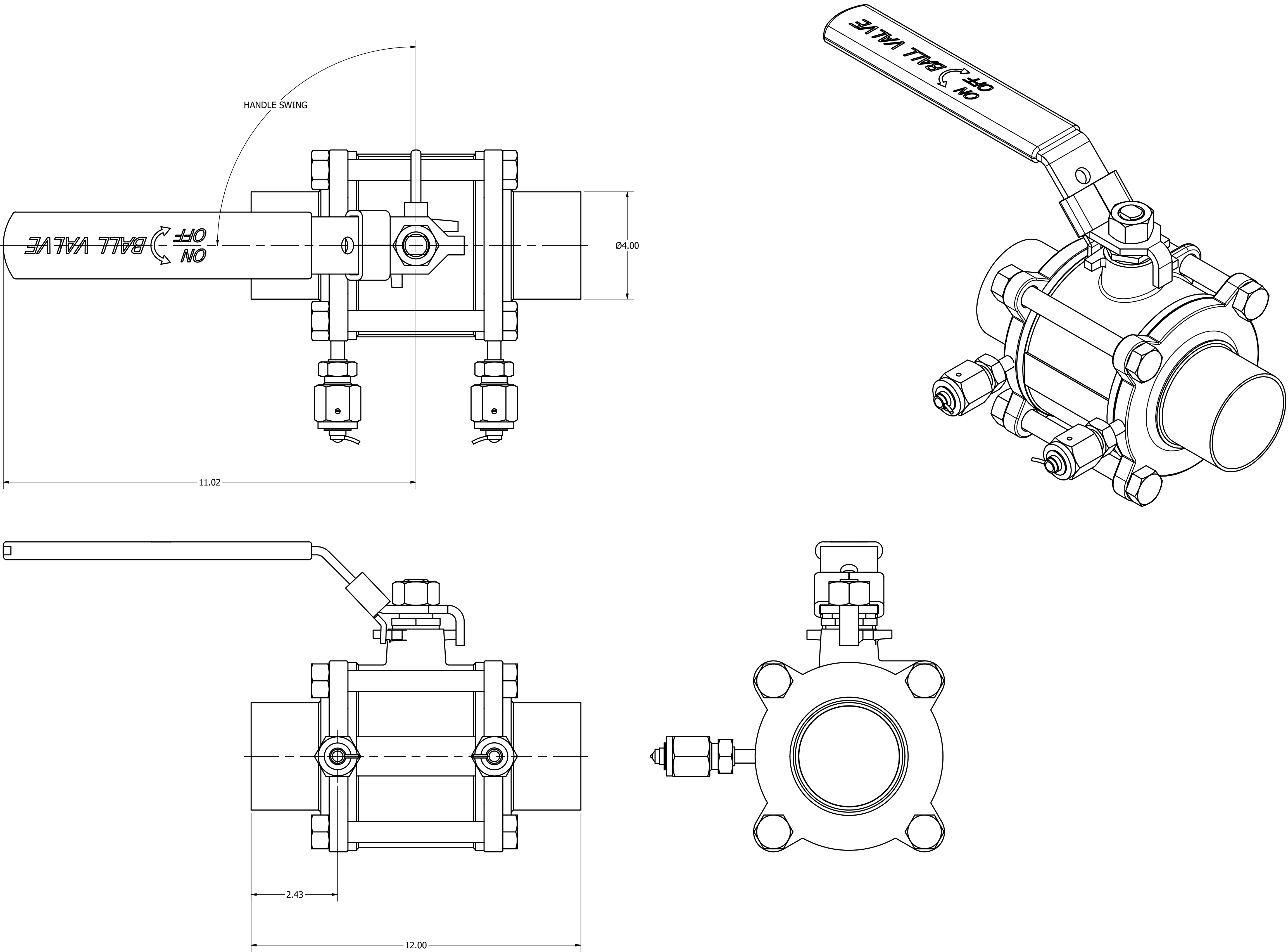
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| ISSUED FOR CUSTOMER REVIEW |  |  |  | GENERAL TOLERANCES<br>(UNLESS OTHERWISE STATED) |       | DATE<br>4/18/2025     |  NG7<br>WWW.NG7DESIGN.COM | DESCRIPTION<br>1-1/2" SS 316 BALL VALVE W/ DUAL VCR PURGE                                                           |             |              |     |
|                            |  |  |  | 3 PLACES                                        | ± .01 | DRAWN BY<br>N. SEVERN |                                                                                                                | PART NUMBER<br>BV-59-24-VV                                                                                          |             |              |     |
|                            |  |  |  | 2 PLACES                                        | ± .03 | CHECKED BY            |                                                                                                                | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO NG7.<br>AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |             |              |     |
|                            |  |  |  | 1 PLACE                                         | ± .05 |                       |                                                                                                                |                                                                                                                     |             |              |     |
|                            |  |  |  | ANGULAR ± 1°                                    |       |                       |                                                                                                                | SHEET SIZE<br>D                                                                                                     | UNITS<br>IN | SHEET #<br>1 | REV |



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| ISSUED FOR CUSTOMER REVIEW |  |  |  | GENERAL TOLERANCES<br>(UNLESS OTHERWISE STATED) |       | DATE<br>4/18/2025 |  |  NG7<br>WWW.NG7DESIGN.COM | DESCRIPTION<br>2" SS 316 BALL VALVE W/ DUAL VCR PURGE                                                               |             |              |     |
|                            |  |  |  | 3 PLACES                                        | ± .01 | DRAWN BY          |  |                                                                                                                | PART NUMBER                                                                                                         |             |              |     |
|                            |  |  |  | 2 PLACES                                        | ± .03 | N. SEVERN         |  |                                                                                                                | BV-59-32-VV                                                                                                         |             |              |     |
|                            |  |  |  | 1 PLACE                                         | ± .05 | CHECKED BY        |  |                                                                                                                | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO NG7.<br>AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |             |              |     |
|                            |  |  |  | ANGULAR ± 1°                                    |       |                   |  |                                                                                                                | SHEET SIZE<br>D                                                                                                     | UNITS<br>IN | SHEET #<br>1 | REV |



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| ISSUED FOR CUSTOMER REVIEW |  |  | GENERAL TOLERANCES<br>(UNLESS OTHERWISE STATED) |       | DATE<br>4/18/2025     |  NG7<br>WWW.NG7DESIGN.COM | DESCRIPTION<br>3" SS 316 BALL VALVE W/ DUAL VCR PURGE                                                               |  |  |                 |             |              |     |
|                            |  |  | 3 PLACES                                        | ± .01 | DRAWN BY<br>N. SEVERN |                                                                                                                | PART NUMBER<br>BV-59-48-VV                                                                                          |  |  |                 |             |              |     |
|                            |  |  | 2 PLACES                                        | ± .03 | CHECKED BY            |                                                                                                                | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO NG7.<br>AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |  |  | SHEET SIZE<br>D | UNITS<br>IN | SHEET #<br>1 | REV |
|                            |  |  | 1 PLACE                                         | ± .05 |                       |                                                                                                                |                                                                                                                     |  |  |                 |             |              |     |
|                            |  |  | ANGULAR ± 1°                                    |       |                       |                                                                                                                |                                                                                                                     |  |  |                 |             |              |     |



|                            |  |  |  |                                                 |       |                       |                                                                                                                |                                                                                                                     |                 |             |              |     |
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|                            |  |  |  | 3 PLACES                                        | ± .01 | DRAWN BY<br>N. SEVERN |                                                                                                                | PART NUMBER<br>BV-59-64-VV                                                                                          |                 |             |              |     |
|                            |  |  |  | 2 PLACES                                        | ± .03 | CHECKED BY            |                                                                                                                | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO NG7.<br>AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |                 |             |              |     |
|                            |  |  |  | 1 PLACE                                         | ± .05 |                       |                                                                                                                |                                                                                                                     |                 |             |              |     |
|                            |  |  |  | ANGULAR ± 1°                                    |       |                       |                                                                                                                |                                                                                                                     |                 |             |              |     |
|                            |  |  |  |                                                 |       |                       |                                                                                                                |                                                                                                                     | SHEET SIZE<br>D | UNITS<br>IN | SHEET #<br>1 | REV |