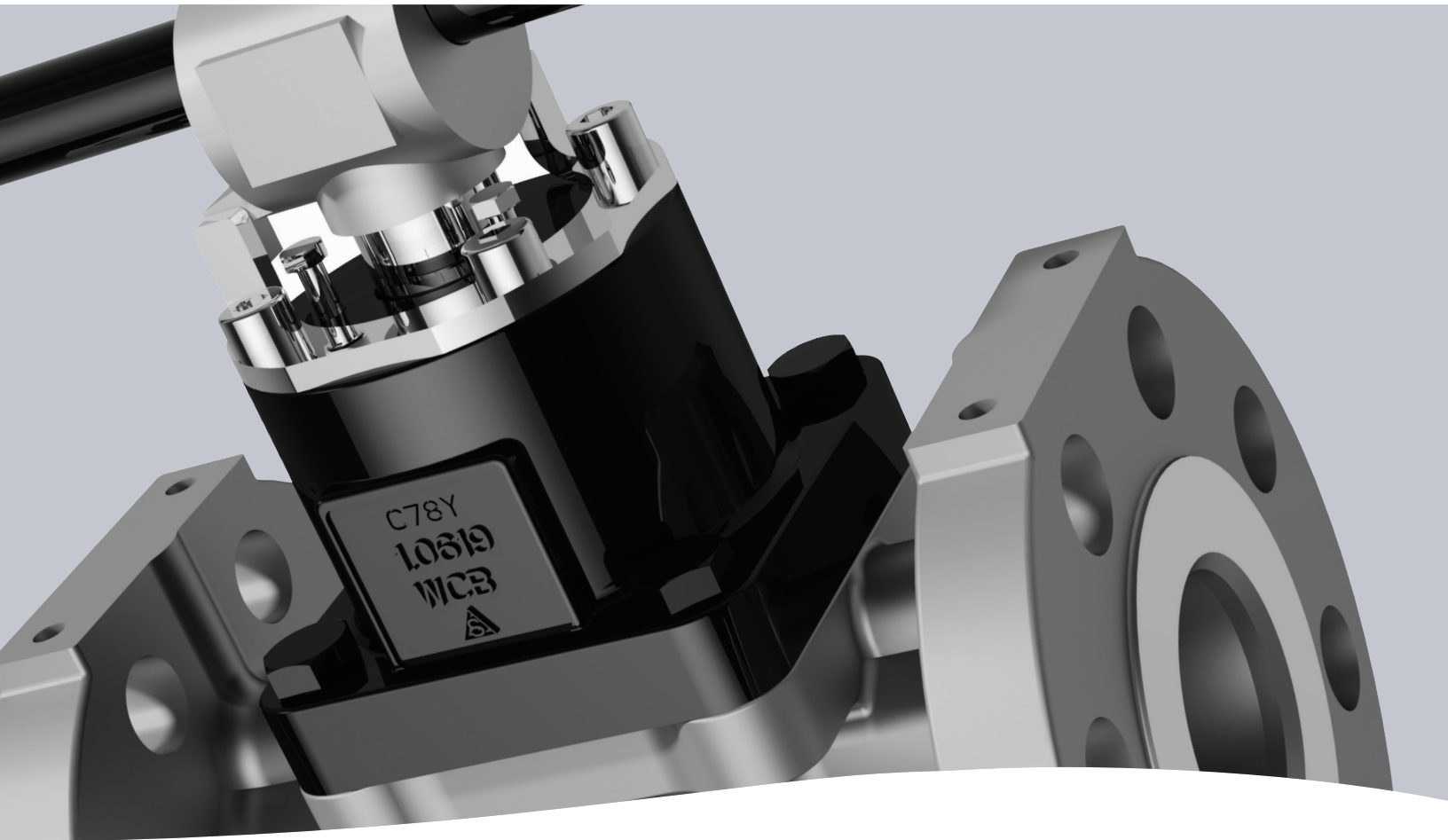


## XP3 Series

### Low Emission Sleeved Plug Valves

THE FIRST SLEEVED PLUG  
VALVE ABLE TO PASS  
FOUR (4) THERMAL CYCLES  
WITH ZERO PACKING ADJUSTMENTS



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# ISO 15848 Standard Introduction



International Organization for Standardization

INTERNATIONAL .....ISO  
STANDARD ..... 15848-1

ISO 15848-1 is an International standard for fugitive emissions issued by the ISO Organization. It contains both dynamic life cycles and thermal cycles and is considered one of the most demanding fugitive emission standards for soft seated valves. This standard contains different levels of acceptance based on the number of thermal and mechanical cycles, temperature, and number of adjustments. The objective of ISO 15848-1 is to enable classification of performance in different designs and constructions of valves to reduce fugitive emissions.

## Example Description Tables

ISO 15848 – 1 BH CO3 392°F – SSA 0 (200°C)

| Part Composition  |   | Number of Adjustments |  |
|---|---|-----------------------|--|
| <b>Part 1: Design</b><br><br>• System of classification and procedures of qualification for the tests of the valve type | <b>Part 2: Industrial (Production)</b><br><br>• Acceptance tests in production of the valves<br>• Non-destructive | <b>0 / 1 / 2 / 3</b>  |  |

| Temperature Classes |          |                      |              |          |
|---------------------|----------|----------------------|--------------|----------|
| (T-196°C)           | (T-40°C) | (T RT)               | (T200°C)     | (T400°C) |
| -320°F              | -40°F    | Room temperature, °F | <b>392°F</b> | 752°F    |
| -196°C              | -40°C    | Room temperature, °C | <b>200°C</b> | 400°C    |

| Class          | Measured Leak Rate <sup>a</sup><br>mg s <sup>-1</sup> m <sup>-1</sup> | Remarks  |
|----------------|---|--|
| A <sup>b</sup> | ≤ 10 <sup>-6</sup>  | Typically achieved with bellow seals or and equivalent stem (shaft) sealing system for quarter turn valves |
| B              | ≤ 10 <sup>-4</sup>  | <b>Typically achieved with PTFE based packings or elastomeric seals</b>                                    |
| C              | ≤ 10 <sup>-2</sup>  | Typically achieved with flexible graphite based packings   |

| Classification | Minimum number of mechanical cycles                 |
|----------------|---|
| CO1            | 500 cycles, with two thermal cycles (except for RT) |
| CO2            | 1,500 cycles, with three thermal cycles             |
| <b>CO3</b>     | <b>2,500 cycles, with four thermal cycles</b>       |

| Test Fluid  | Class      |
|-------------|------------|
| H - Helium  | AH, BH, CH |
| M - Methane | BM, CM     |

<sup>a</sup> Expressed in mg s<sup>-1</sup> m<sup>-1</sup> measured with total leakage method  
<sup>b</sup> Class A can be measured only with helium using the vacuum method

Manufacturing valves will be subjected to the ISO 15848-2 test as described in the norm. This is a non-destructive test that intends to address the performance of the valves (Please refer to ISO 15848 norm).

# XP3 Low Emission Sleeved Plug Valves (SPV)

The first sleeved plug valves capable of passing four (4) thermal cycles with ZERO packing adjustments.

## Key Features & Benefits

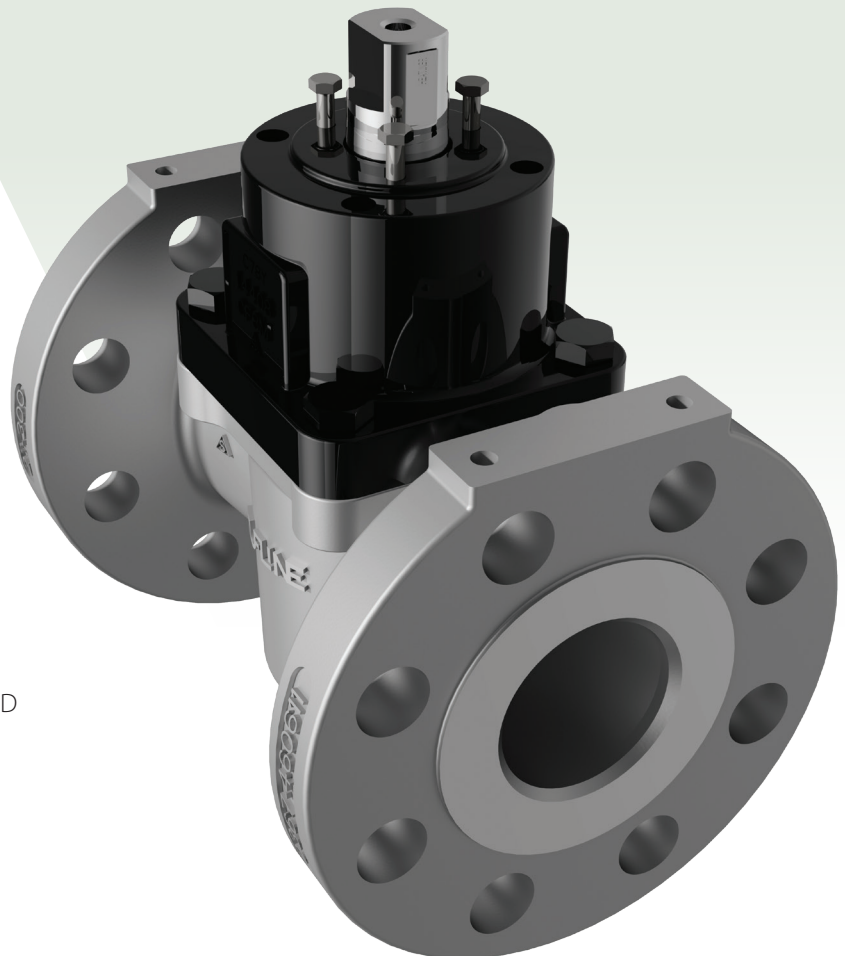
- 1 Innovative stem seal design permits best in class FUGITIVE EMISSIONS CONTROL (ISO 15848-1 BH CO3 392°F or 200°C SSA 0).
- 2 Live-loaded design optimizes sealing performance (self-adjusted) and extended service life with ZERO PACKING ADJUSTMENTS through thermal cycling.
- 3 MAINTENANCE and CAVITY FREE: No costly lubrication, no sticking, and no contamination of process media.

## XP3 LIVE-LOADED STEM CARTRIDGE SEAL

The new XP3 Soft Seated Sleeved Plug Valve incorporates a Live-loaded Stem Cartridge which enables to meet the most stringent emissions standards in the industry.

### Options:

- Options for different packing materials to suit different temperatures and applications (392°F/200°C or 500°F/260°C); PTFE & graphite packing.
- All current sleeve material options are available.
- XP4D design; Option for an additional manual 4D stem seal which provides the same emissions performance as the XP3 configuration.
- XP3 and XP4D are API 641 Class B and E approved.
- Firetest according to API 607 7<sup>th</sup> edition.



## XP3 Low Emission SPV Features and Benefits

XP3 Sleeved Plug Valves are the first valves capable to pass all four thermal cycles without any packing adjustments, while meeting the ISO 15848-1 standard at the BH CO3 200°C/392°F SSA 0. The new **XP3** valve top seal technology is able to perform in its entire temperature range even under thermal cycle conditions. This is achieved by the patented Live-loaded stem cartridge.

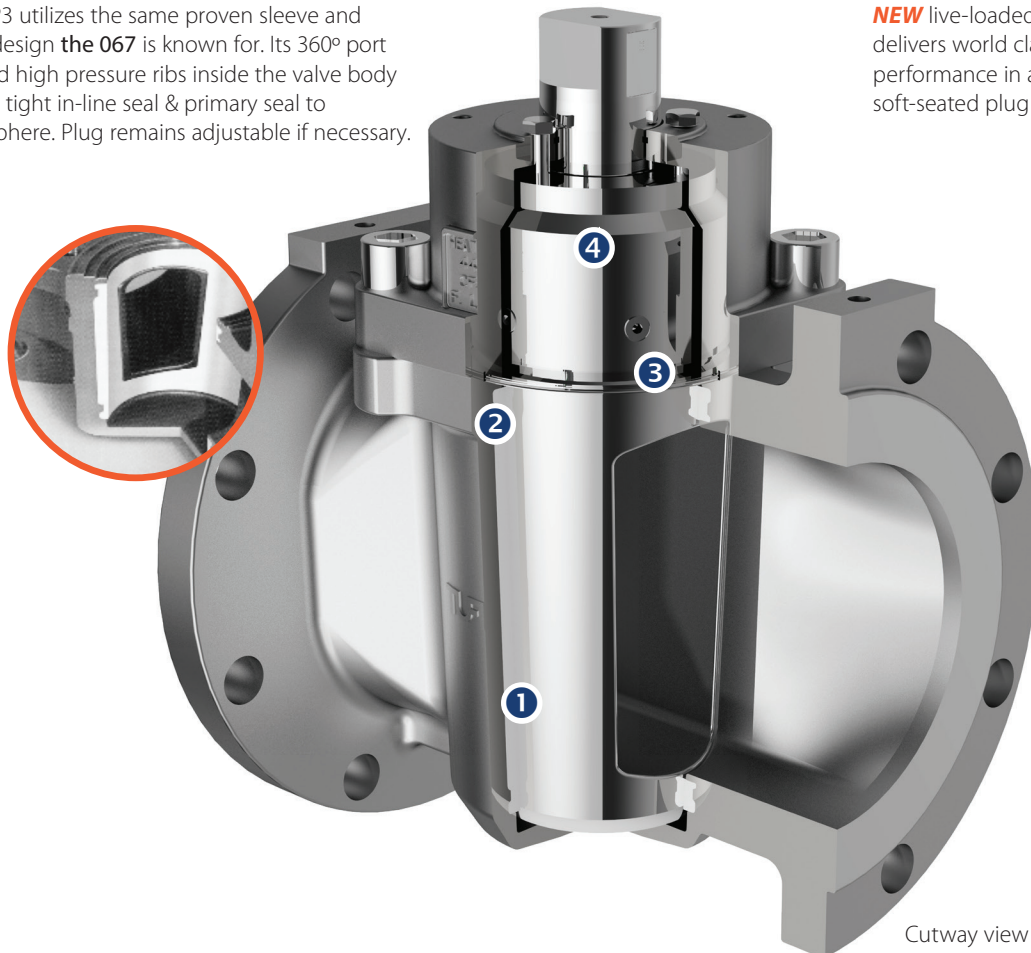
The XP3 design incorporates the same features and benefits of the standard **067** Sleeve Plug Valve by being maintenance and cavity-free. These valves require no costly lubrication and prevent accumulation or contamination of process media, reducing maintenance costs and the cost of ownership over time.

### 1 Primary Seal to Atmosphere

The XP3 utilizes the same proven sleeve and body design the **067** is known for. Its 360° port lips and high pressure ribs inside the valve body ensure tight in-line seal & primary seal to atmosphere. Plug remains adjustable if necessary.

### 3 Tertiary Seal to Atmosphere

**NEW** live-loaded stem cartridge delivers world class low E performance in a quarter-turn soft-seated plug valve.



### 2 Secondary Seal to Atmosphere

Enabled by the same wedge ring and plastic diaphragm design that is in place on our existing product, ensuring another layer of protection to stem seal and body cover joint.

### 4 Packing Options

Stem packing can be changed depending on operating conditions. Various packing options are available.

## XP3 Low Emission SPV Features and Benefits



- 5 Patented live-loaded stem cartridge design**  
Optimizes sealing integrity to atmosphere and extended service life.

### XP3 maintains all design features of the 067 Series

- **Re-inforced** body cover joint gasket for emissions-proof valves.
- **360° port lips** on body prevent cold flow and deformation of the sleeve, eliminating the chances that the sleeve will rotate during thermal cycling.
- **Plug vent hole** options depending on different service conditions.
- **Actuator mounting** capabilities per ISO 5211.
- **Flange pad design** remains available per the standard configuration.
- All **sleeve materials** are available.
- **Current material** selection on body and plug are available.

## MEETING BEST IN CLASS FUGITIVE EMISSIONS STANDARDS

### ISO 15848-1 BH CO3 200°C/392°F SSA 0

- Tightness class BH (<0-4 mg/(s x m))
- Endurance class CO3
- Temperature class RT to 200°C/392°F
- Adjustments: SSA 0 (zero packing adjustments)

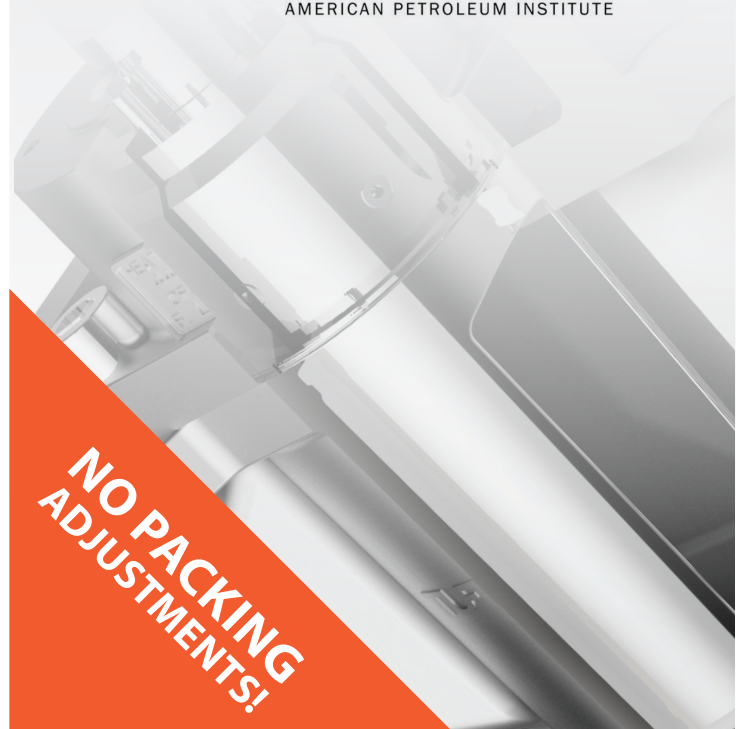


International  
Organization for  
Standardization

**Option:**  
**API 641 Class B and E**  
**(200°C/392°F) (260°C/ 500°F)**



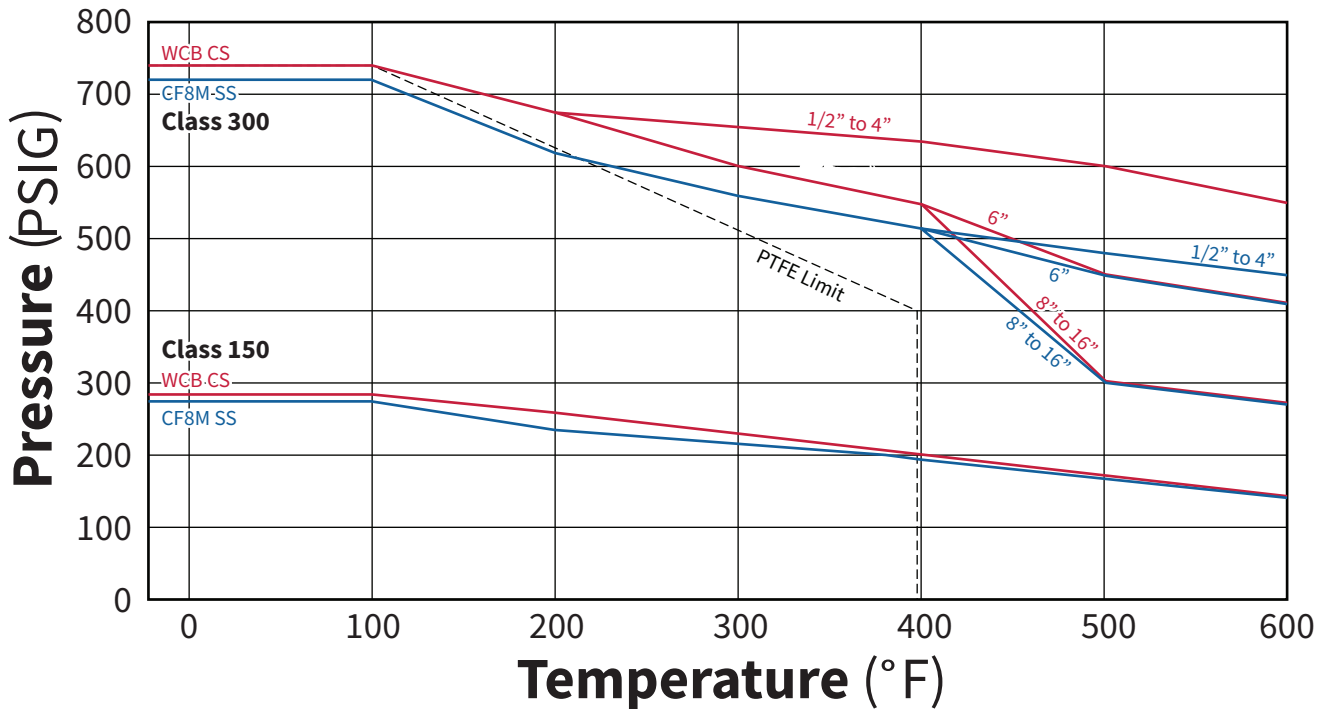
AMERICAN PETROLEUM INSTITUTE



# XP3 Low Emission SPV Properties & Characteristics

## XP3 Break Torque - Class 150 and 300 [in\*lbs]

| Size    | PTFE/PTFEX |           | %R-PTFE Sleeve |           | PTFEXC/XeniTh Sleeve |           | UHMWPE/PFA Sleeve |           |
|---------|------------|-----------|----------------|-----------|----------------------|-----------|-------------------|-----------|
|         | Std        | Built Dry | Std            | Built Dry | Std                  | Built Dry | Std               | Built Dry |
| ½" & ¾" | 163        | 244       | 204            | 305       | 214                  | 326       | 326               | 478       |
| 1"      | 458        | 692       | 580            | 865       | 621                  | 936       | 916               | 1384      |
| 1 ½"    | 916        | 1384      | 1150           | 1730      | 1242                 | 1863      | 1842              | 2758      |
| 2"      | 1262       | 1893      | 1578           | 2372      | 1710                 | 2565      | 2534              | 3797      |
| 3"      | 1384       | 2066      | 1730           | 2585      | 1863                 | 2799      | 2758              | 4143      |
| 4"      | 2758       | 4143      | 3450           | 5181      | 3725                 | 5588      | 5517              | 8285      |
| 6"      | 5751       | 8621      | 7186           | 10779     | 7766                 | 11644     | 11502             | 17252     |
| 8"      | 8967       | 13456     | 11217          | 16815     | 12112                | 18168     | 17944             | 26912     |
| 10"     | 16560      | 24845     | 20703          | 31054     | 22352                | 33538     | 33120             | 49681     |
| 12"     | 24153      | 36225     | 30189          | 45284     | 32601                | 48907     | 48296             | 72450     |



If any additional information is required, please contact your sales representative or customer service.



## XP3 Low Emission SPV Dimensional Data

### Bare Stem Operated

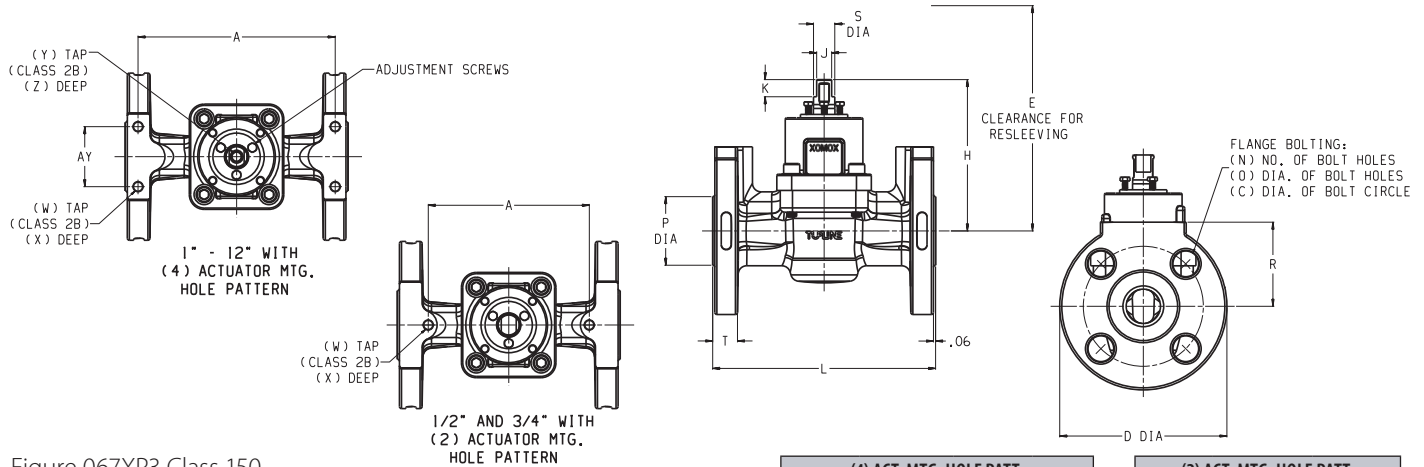


Figure 067XP3 Class 150

| SIZE   | L     | D     | T    | R    | N   | O    | C     | W   |
|--------|-------|-------|------|------|-----|------|-------|-----|
| 1/2"   | 4.25  | 3.50  | .38  | 1.75 | 4   | .63  | 2.38  | 3.1 |
| 3/4"   | 4.63  | 3.88  | .41  | 1.94 | 4   | .63  | 2.75  | 3.6 |
| 1"     | 5.00  | 4.25  | .44  | 2.13 | 4   | .63  | 3.13  | 7.2 |
| 1-1/2" | 6.50  | 5.00  | .56  | 2.50 | 4   | .63  | 3.88  | 14  |
| 2"     | 7.00  | 6.00  | .63  | 3.00 | 4   | .75  | 4.75  | 21  |
| 3"     | 8.00  | 7.50  | .75  | 3.75 | 4   | .75  | 6.00  | 33  |
| 4"     | 9.00  | 9.00  | .94  | 4.63 | 8   | .75  | 7.50  | 57  |
| 6"     | 10.50 | 11.00 | 1.00 | 5.50 | 8   | .88  | 9.50  | 98  |
| 8"     | 11.50 | 13.50 | 1.13 | 6.75 | 8*  | .88  | 11.75 | 180 |
| 10"    | 13.00 | 16.00 | 1.19 | 8.00 | 12* | 1.00 | 14.25 | 268 |
| 12"    | 14.00 | 19.00 | 1.25 | 9.50 | 12* | 1.00 | 17.00 | 366 |

| (4) ACT. MTG. HOLE PATT. |           |           |     |
|--------------------------|-----------|-----------|-----|
| A                        | AY        | W         | X   |
| ----                     | ----      | -----     | --- |
| ----                     | ----      | -----     | --- |
| 3.625                    | 5/16 - 18 | .47       | .38 |
| 3.750                    | 5/16 - 18 | .47       | .47 |
| 6.313                    | 2.250     | 5/16 - 18 | .47 |
| 7.125                    | 3.500     | 3/8 - 16  | .56 |
| 8.000                    | 4.000     | 7/16 - 14 | .63 |
| 9.438                    | 4.000     | 7/16 - 14 | .63 |
| 10.188                   | 6.000     | 1/2 - 13  | .63 |
| 11.562                   | 6.000     | 1/2 - 13  | .63 |
| 12.532                   | 6.000     | 1/2 - 13  | .63 |

| (2) ACT. MTG. HOLE PATT. |           |     |
|--------------------------|-----------|-----|
| A                        | W         | X   |
| 3.625                    | 5/16 - 18 | .47 |
| 3.750                    | 5/16 - 18 | .47 |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |

Figure 0367XP3 Class 300

| SIZE   | L     | D     | T    | R     | N  | O    | C     | W   |
|--------|-------|-------|------|-------|----|------|-------|-----|
| 1/2"   | 5.50  | 3.75  | .56  | 1.88  | 4  | .63  | 2.63  | 6.6 |
| 3/4"   | 6.00  | 4.63  | .63  | 2.31  | 4  | .75  | 3.25  | 9.9 |
| 1"     | 6.50  | 4.88  | .69  | 2.44  | 4  | .75  | 3.50  | 12  |
| 1-1/2" | 7.50  | 6.13  | .81  | 3.06  | 4  | .88  | 4.50  | 22  |
| 2"     | 8.50  | 6.50  | .88  | 3.25  | 8  | .75  | 5.00  | 29  |
| 3"     | 11.13 | 8.25  | 1.13 | 4.13  | 8  | .88  | 6.63  | 40  |
| 4"     | 12.00 | 10.00 | 1.25 | 5.13  | 8  | .88  | 7.88  | 84  |
| 6"     | 15.88 | 12.50 | 1.44 | 6.25  | 12 | .88  | 10.63 | 170 |
| 8"     | 16.50 | 15.00 | 1.63 | 7.50  | 12 | 1.00 | 13.00 | 275 |
| 10"    | 18.00 | 17.50 | 1.88 | 8.75  | 16 | 1.13 | 15.25 | 407 |
| 12"    | 19.75 | 20.50 | 2.00 | 10.25 | 16 | 1.25 | 17.75 | 556 |

| (4) ACT. MTG. HOLE PATT. |       |           |     |
|--------------------------|-------|-----------|-----|
| A                        | AY    | W         | X   |
| ----                     | ----  | -----     | --- |
| ----                     | ----  | -----     | --- |
| 5.570                    | 1.750 | 5/16 - 18 | .38 |
| 6.625                    | 1.150 | 5/16 - 18 | .47 |
| 7.563                    | 2.250 | 5/16 - 18 | .47 |
| 9.938                    | 3.500 | 3/8 - 16  | .56 |
| 10.688                   | 4.000 | 7/16 - 14 | .63 |
| 14.000                   | 4.000 | 7/16 - 14 | .63 |
| 14.625                   | 6.000 | 1/2 - 13  | .63 |
| 15.688                   | 6.000 | 1/2 - 13  | .63 |
| 17.375                   | 6.000 | 1/2 - 13  | .63 |

| (2) ACT. MTG. HOLE PATT. |           |     |
|--------------------------|-----------|-----|
| A                        | W         | X   |
| 4.375                    | 5/16 - 18 | .47 |
| 3.750                    | 5/16 - 18 | .47 |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |
| ----                     | -----     | --- |

\*see note 1

Figure 067XP3 (Class 150) & 0367XP3 (Class 300)

| SIZE   | H      | S     | J     | K     | P     | E     | Y         | Z   |
|--------|--------|-------|-------|-------|-------|-------|-----------|-----|
| 1/2"   | 4.591  | .537  | .437  | .500  | 1.38  | 8.68  | 1/4 - 20  | .91 |
| 3/4"   | 4.591  | .537  | .437  | .500  | 1.69  | 8.68  | 1/4 - 20  | .91 |
| 1"     | 4.433  | .620  | .437  | .500  | 2.00  | 8.93  | 1/4 - 20  | .91 |
| 1-1/2" | 5.456  | .848  | .563  | .530  | 2.88  | 10.43 | 5/16 - 18 | .91 |
| 2"     | 6.067  | 1.102 | .755  | .748  | 3.63  | 11.63 | 5/16 - 18 | .91 |
| 3"     | 6.598  | 1.102 | .755  | .748  | 3.63  | 11.63 | 5/16 - 18 | .91 |
| 4"     | 8.054  | 1.260 | .880  | 1.000 | 6.19  | 24.83 | 5/16 - 18 | .91 |
| 6"     | 9.590  | 2.008 | 1.398 | 1.000 | 10.63 | 30.47 | 5/16 - 18 | .91 |
| 8"     | 11.795 | 2.008 | 1.398 | 1.000 | 10.63 | 30.47 | 5/16 - 18 | .91 |
| 10"    | 13.291 | 2.500 | 1.673 | 1.000 | 12.75 | 31.47 | 1/2 - 13  | .91 |
| 12"    | 14.315 | 2.992 | 1.968 | 1.000 | 15.00 | 37.53 | 1/2 - 13  | .91 |

NOTES

- 2 top holes in the flanges of 8" Fig. 067XP3 are tapped 3/4 - 10unc - 2b threads  
2 top holes in the flanges of 10", 12" Fig. 067XP3 are tapped for 7/8 - 9unc - 2b
- Weight of valve in pounds. All weights are estimated

# XP3 Low Emission SPV Dimensional Data

## Wrench Operated

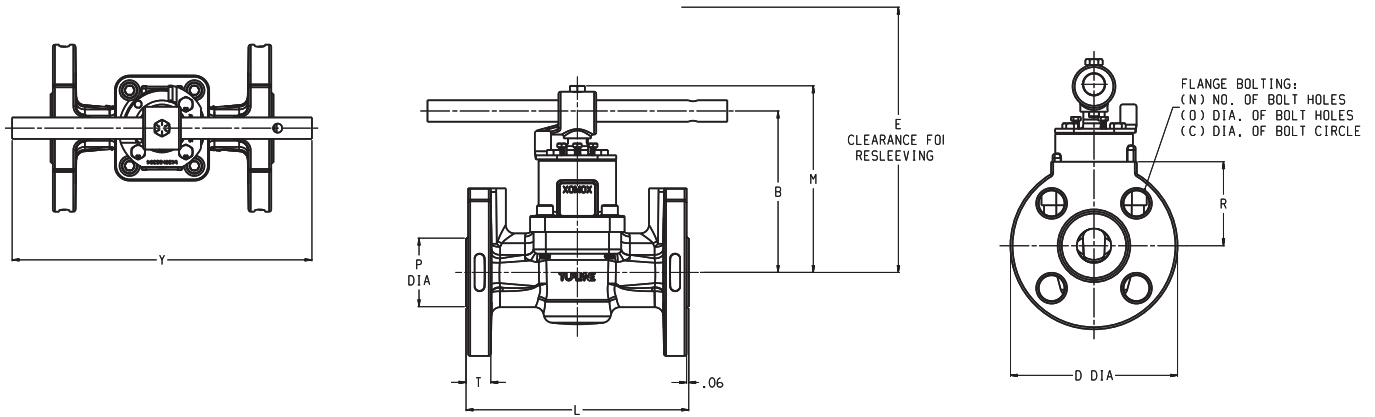


Figure 067XP3 Class 150

| SIZE   | L    | D    | T   | P    | R    | N | O   | C    | E     | M    | B    | Y     | W   |
|--------|------|------|-----|------|------|---|-----|------|-------|------|------|-------|-----|
| 1/2"   | 4.25 | 3.50 | .38 | 1.38 | 1.75 | 4 | .63 | 2.38 | 8.68  | 5.61 | 4.89 | 8.75  | 5.1 |
| 3/4"   | 4.63 | 3.88 | .41 | 1.69 | 1.94 | 4 | .63 | 2.75 | 8.68  | 5.61 | 4.89 | 8.75  | 5.6 |
| 1"     | 5.00 | 4.25 | .44 | 2.00 | 2.13 | 4 | .63 | 3.13 | 8.93  | 5.45 | 4.73 | 8.75  | 9.2 |
| 1-1/2" | 6.50 | 5.00 | .56 | 2.88 | 2.50 | 4 | .63 | 3.88 | 10.43 | 6.62 | 5.79 | 12.50 | 17  |
| 2"     | 7.00 | 6.00 | .63 | 3.63 | 3.00 | 4 | .75 | 4.75 | 11.63 | 7.44 | 6.61 | 18.00 | 24  |
| 3"     | 8.00 | 7.50 | .75 | 5.00 | 3.75 | 4 | .75 | 6.00 | 12.63 | 7.96 | 7.13 | 24.00 | 37  |
| 4"     | 9.00 | 9.00 | .94 | 6.19 | 4.63 | 8 | .75 | 7.50 | 24.83 | 9.76 | 8.68 | 30.00 | 65  |

Figure 0367XP3 Class 300

| SIZE   | L     | D     | T    | P    | R    | N | O   | C    | E     | M    | B    | Y     | W   |
|--------|-------|-------|------|------|------|---|-----|------|-------|------|------|-------|-----|
| 1/2"   | 5.50  | 3.75  | .56  | 1.38 | 1.88 | 4 | .63 | 2.63 | 8.68  | 5.61 | 4.89 | 8.75  | 8.6 |
| 3/4"   | 6.00  | 4.63  | .63  | 1.69 | 2.31 | 4 | .75 | 3.25 | 8.68  | 5.61 | 4.89 | 8.75  | 12  |
| 1"     | 6.50  | 4.88  | .69  | 2.00 | 2.44 | 4 | .75 | 3.50 | 8.93  | 5.45 | 4.73 | 8.75  | 14  |
| 1-1/2" | 7.50  | 6.13  | .81  | 2.88 | 3.06 | 4 | .88 | 4.50 | 10.43 | 6.62 | 5.79 | 12.50 | 25  |
| 2"     | 8.50  | 6.50  | .88  | 3.63 | 3.25 | 8 | .88 | 5.00 | 11.63 | 7.44 | 6.61 | 18.00 | 32  |
| 3"     | 11.13 | 8.25  | 1.13 | 5.00 | 4.13 | 8 | .88 | 6.63 | 12.63 | 7.96 | 7.13 | 24.00 | 44  |
| 4"     | 12.00 | 10.00 | 1.25 | 6.19 | 5.13 | 8 | .88 | 7.88 | 24.83 | 9.76 | 8.68 | 30.00 | 92  |

All dimensions in inches. Weight of valve in pounds. All weights are estimated.



# XP3 Low Emission SPV Dimensional Data

## Gear Operated

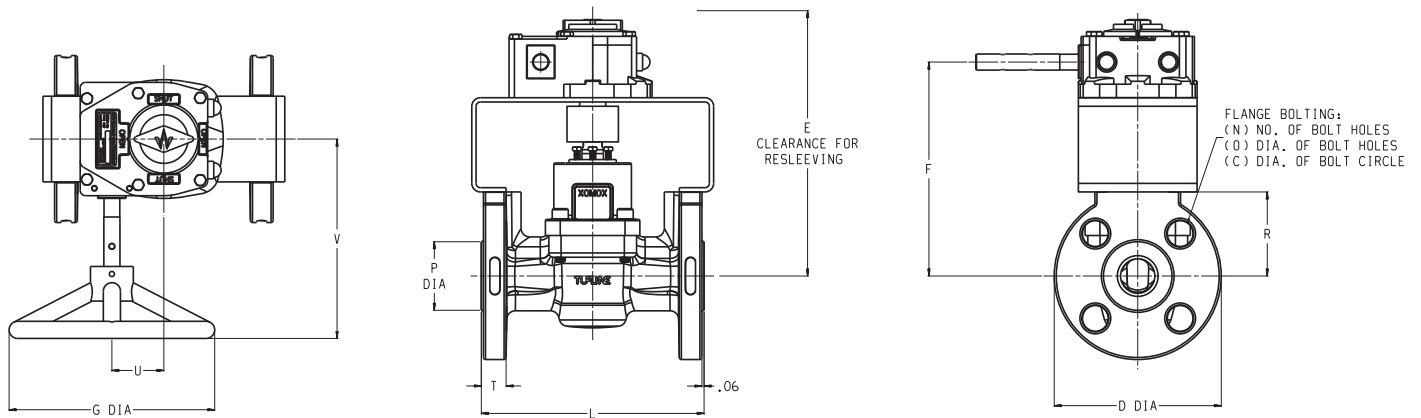


Figure 067XP3 Class 150

| SIZE | L     | D     | T    | P     | R    | N   | O    | C     | E     | F     | G     | U    | V     | W   |
|------|-------|-------|------|-------|------|-----|------|-------|-------|-------|-------|------|-------|-----|
| 3"   | 8.00  | 7.50  | .75  | 5.00  | 3.75 | 4   | .75  | 6.00  | 12.63 | 10.38 | 12.00 | 2.05 | 7.77  | 56  |
| 4"   | 9.00  | 9.00  | .94  | 6.19  | 4.63 | 8   | .75  | 7.50  | 24.83 | 11.57 | 12.00 | 2.05 | 7.77  | 82  |
| 6"   | 10.50 | 11.00 | 1.00 | 8.50  | 5.50 | 8   | .88  | 9.50  | 27.25 | 13.78 | 18.00 | 2.63 | 10.30 | 142 |
| 8"   | 11.50 | 13.50 | 1.13 | 10.63 | 6.75 | 8*  | .88  | 11.75 | 30.47 | 16.03 | 18.00 | 3.52 | 10.96 | 250 |
| 10"  | 13.00 | 16.00 | 1.19 | 12.75 | 8.00 | 12* | 1.00 | 14.25 | 31.47 | 17.78 | 24.00 | 4.84 | 14.26 | 372 |
| 12"  | 14.00 | 19.00 | 1.25 | 15.00 | 9.50 | 12* | 1.00 | 17.00 | 37.53 | 18.78 | 30.00 | 4.84 | 15.76 | 480 |

Figure 0367XP3 Class 300

| SIZE | L     | D     | T    | P     | R     | N  | O    | C     | E     | F     | G     | U    | V     | W   |
|------|-------|-------|------|-------|-------|----|------|-------|-------|-------|-------|------|-------|-----|
| 3"   | 11.13 | 8.25  | 1.13 | 5.00  | 4.13  | 8  | .88  | 6.63  | 12.63 | 10.38 | 12.00 | 2.05 | 7.77  | 64  |
| 4"   | 12.00 | 10.00 | 1.25 | 6.19  | 5.13  | 8  | .88  | 7.88  | 24.83 | 11.57 | 12.00 | 2.05 | 7.77  | 110 |
| 6"   | 15.88 | 12.50 | 1.44 | 8.50  | 6.25  | 12 | .88  | 10.63 | 27.25 | 13.78 | 18.00 | 2.53 | 10.30 | 218 |
| 8"   | 16.50 | 15.00 | 1.63 | 10.63 | 7.50  | 12 | 1.00 | 13.00 | 30.47 | 16.03 | 18.00 | 3.53 | 10.96 | 349 |
| 10"  | 18.00 | 17.50 | 1.88 | 12.75 | 8.75  | 16 | 1.13 | 15.25 | 31.47 | 17.78 | 24.00 | 4.84 | 14.26 | 515 |
| 12"  | 19.75 | 20.50 | 2.00 | 15.00 | 10.25 | 16 | 1.25 | 17.75 | 37.53 | 18.78 | 30.00 | 4.84 | 15.76 | 674 |

\*See note 1

NOTES:

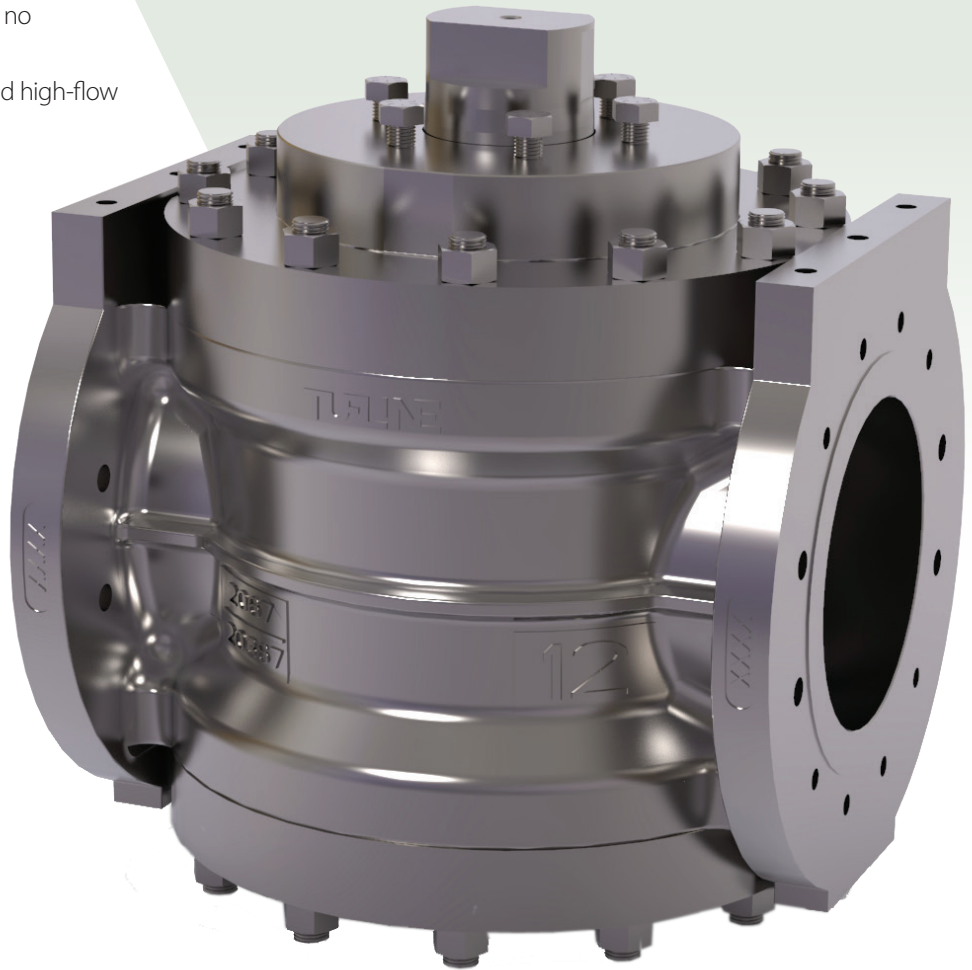
- 2 top holes in the flanges of 8" Fig. 067XP3 are tapped 3/4-10unc-2B threads  
Top holes in the flanges of 10", 12" Fig. 067XP3 are tapped for 7/8-9unc-2B threads
- All dimensions in inches. Weight of valve in pounds. All weights are estimated
- All operator related dimensions are assuming gears and handwheels are sized for valves with PTFE sleeves

## XP3 Full Port Low Emission SPV

### XP3 FULL PORT DESIGN

With the full-area round port there is no diminished or constricted flow.

Ideal wherever low pressure-drop and high-flow efficiency are important.



### Reference of Available Configurations and Figure numbers

| Size (inch) | ASME Class | Figure Number | Flanged Ends |
|-------------|------------|---------------|--------------|
| 2" - 12"    | 150        | 2067XP3       | X            |
| 2" - 12"    | 300        | 20367XP3      | X            |

# XP3 Full Port Low Emission SPV Dimensional Data

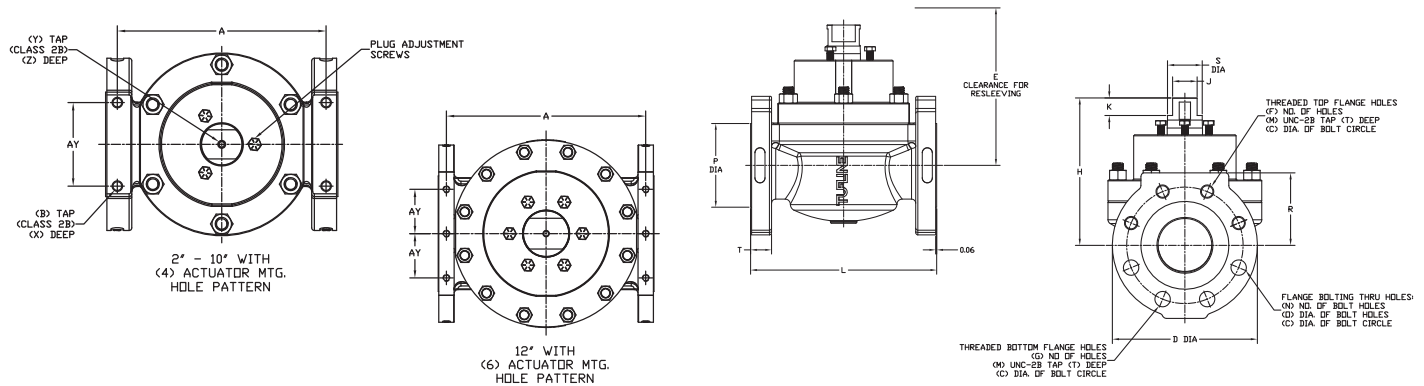


Figure 2067XP3

| SIZE | L     | D     | T    | R     | N | O    | C     | F | G | M      | W    |
|------|-------|-------|------|-------|---|------|-------|---|---|--------|------|
| 2"   | 8.50  | 6.50  | .94  | 3.16  | 4 | .75  | 4.75  | — | — | —      | 54   |
| 3"   | 11.13 | 8.25  | 1.25 | 4.13  | 2 | .75  | 6.00  | 2 | 0 | 5/8–11 | 124  |
| 4"   | 12.00 | 10.00 | 1.43 | 5.00  | 6 | .75  | 7.50  | 2 | 0 | 5/8–11 | 189  |
| 6"   | 15.88 | 12.50 | 1.50 | 6.44  | 0 | —    | 9.50  | 4 | 4 | 3/4–10 | 404  |
| 8"   | 19.75 | 15.00 | 1.73 | 7.56  | 4 | .88  | 11.75 | 2 | 2 | 3/4–10 | 823  |
| 10"  | 22.38 | 17.50 | 2.03 | 8.84  | 6 | 1.00 | 14.25 | 4 | 2 | 7/8–9  | 1344 |
| 12"  | 28.00 | 23.00 | 2.06 | 11.56 | 4 | 1.00 | 17.00 | 4 | 4 | 7/8–9  | 2612 |

Figure 20367XP3

| SIZE | L     | D     | T    | R     | N | O    | C     | F | G | M        | W    |
|------|-------|-------|------|-------|---|------|-------|---|---|----------|------|
| 2"   | 8.50  | 6.50  | .94  | 3.16  | 8 | .75  | 5.00  | — | — | —        | 53   |
| 3"   | 11.13 | 8.25  | 1.25 | 4.13  | 4 | .88  | 6.63  | 4 | 0 | 3/4–10   | 122  |
| 4"   | 12.00 | 10.00 | 1.43 | 5.00  | 6 | .88  | 7.88  | 2 | 0 | 3/4–10   | 188  |
| 6"   | 15.88 | 12.50 | 1.50 | 6.44  | 4 | .88  | 10.63 | 4 | 4 | 3/4–10   | 402  |
| 8"   | 19.75 | 15.00 | 1.73 | 7.56  | 6 | 1.00 | 13.00 | 4 | 2 | 7/8–9    | 819  |
| 10"  | 22.38 | 17.50 | 2.03 | 8.84  | 8 | 1.13 | 15.25 | 6 | 2 | 1–8      | 1338 |
| 12"  | 28.00 | 23.00 | 2.06 | 11.56 | 8 | 1.25 | 17.75 | 4 | 4 | 1–1/4–8* | 2600 |

\* UN-8 THREAD

Figure 2067XP3 and 20367XP3

| SIZE | H      | S     | J     | K     | P     | E     | Y       | Z    | A     | AY   | B       | X    |
|------|--------|-------|-------|-------|-------|-------|---------|------|-------|------|---------|------|
| 2"   | 7.414  | 1.258 | .874  | .984  | 3.63  | 11.38 | 5/16–18 | .88  | 7.50  | 4.00 | 7/16–14 | .69  |
| 3"   | 8.388  | 2.008 | 1.398 | 1.000 | 5.00  | 13.50 | 5/16–18 | .88  | 10.00 | 4.00 | 1/2–13  | .63  |
| 4"   | 8.956  | 2.500 | 1.673 | 1.000 | 6.19  | 15.38 | 1/2–13  | .75  | 10.69 | 4.00 | 1/2–13  | .63  |
| 6"   | 10.575 | 2.992 | 1.969 | 1.000 | 8.50  | 19.25 | 1/2–13  | .75  | 14.38 | 5.50 | 5/8–11  | 1.00 |
| 8"   | 14.789 | 3.937 | 2.000 | 1.575 | 10.63 | 26.00 | 1/2–13  | .75  | 18.06 | 8.00 | 3/4–10  | 1.13 |
| 10"  | 16.897 | 6.000 | 4.000 | 2.000 | 12.75 | 30.38 | 3/4–10  | 1.00 | 20.44 | 8.00 | 3/4–10  | 1.13 |
| 12"  | 18.221 | 6.000 | 4.000 | 2.000 | 15.00 | 24.25 | 3/4–10  | 1.00 | 25.88 | 5.75 | 7/8–9   | 1.31 |

NOTES:

1. Weight of valves in pounds. All weights are estimate.
2. 12" 2067XP3 / 20367XP3 uses bottom cover design.

# XP3 Low Emission SPV Applications

## APPLICATIONS

### Chlor-Akali

- Chlorine & Derivatives
- Caustic Soda & Derivatives

### Olefins

- Ethylene & Derivatives
- Ethylene Oxide & Derivatives
- Butadiene & Derivatives
- Propylene & Derivatives

### Aromatics

- Styrene & Derivatives
- Benzene & Derivatives
- Toluene & Derivatives
- Xylene & Derivatives



## XP3 - PERFORMANCE CHART

● Well Suited    ● Appropriate Application    ● Limited Application

| FUNCTION                       | ON / Off  | ●                  |
|--------------------------------|---|--------------------|
|                                | Throttling  | ●                  |
|                                | Diversion   | ●                  |
| MEDIA TYPES                    | Clean Liquids & Gases   | ●                  |
|                                | Dirty Liquids & Gases   | ●                  |
|                                | Corrosive Liquids & Gases   | ●                  |
|                                | Hazardous Liquids & Gases   | ●                  |
|                                | Viscous Liquids   | ●                  |
|                                | Scaling Liquids & Slurries  | ●                  |
|                                | Abrasive Slurries   | ●                  |
|                                | Fibrous Slurries  | ●                  |
|                                | High Pressure Steam (>150 lbs.)   | ●                  |
|                                | Low Pressure Steam (<150 lbs.)  | ●                  |
|                                | Dry Materials   | ●                  |
|                                | Food / Pharmaceutical   | ●                  |
|                                | Vacuum Service  | ●                  |
|                                | APPLICATION REQUIREMENTS  | High Flow Capacity |
| Low Torque                     |   | ●                  |
| Fire Tested                    |   | ●                  |
| Fugitive Emission Control      |   | ●                  |
| Reduced Maintenance            |   | ●                  |
| Extended Service Life          |   | ●                  |
| Size Range (inches)            |   | ½" to 24"          |
| Pressure Rating (ANSI Classes) |   | 150, 300           |
| High Temperature               |   | 600°F (316°C)      |
| Low Temperature                |   | -40°F (-40°C)      |
| Unique Features and Benefits   | Exceptional fugitive emissions control:<br>ISO15848-1 BH CO3 392°F (200°C) SSA 0 and API 641 Class B & E. |                    |