

brands you trust.



Saunders[®] S360 Actuator Technical Datasheet

Saunders® S360 Lite

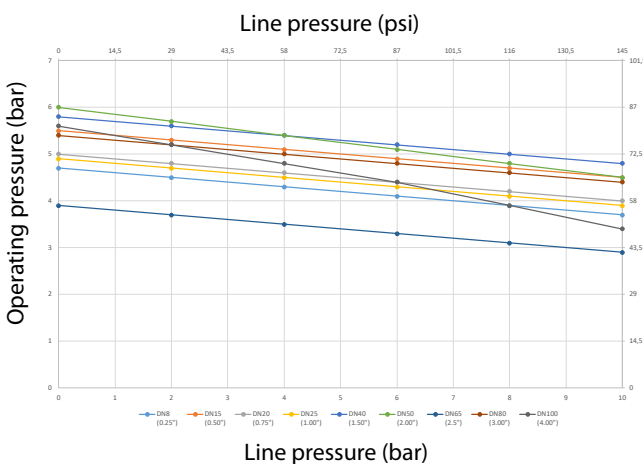
The Saunders® S360 Lite range provides excellent closure performance for normally closed applications in a compact and lightweight package and is ideal for most applications. The S360 Lite fits into tight piping arrays and its compact size can even help reduce block valve design. It is available through sizes DN8 – DN100 (0.25" – 4.00").



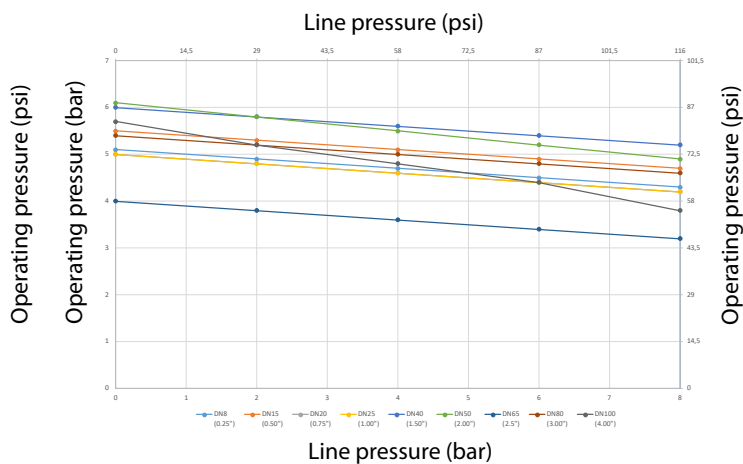
| Closure Performance (Saunders® S360 Lite Normally Closed) | | | | |
|---|----------------|-----------------|------------------|------------------|
| Size | Line Pressure | | Control Pressure | Weight |
| | PTFE | Rubber | | |
| DN8 (0.25") | 16bar (232psi) | 16bar (232psi) | 6bar (87psi) | 0.5kg (1.1lbs) |
| DN15 (0.50") | 8bar (116 psi) | 10bar (145 psi) | 6bar (87psi) | 1.0kg (2.3lbs) |
| DN20 (0.75") | 8bar (116 psi) | 10bar (145 psi) | 6bar (87psi) | 1.9kg (4.3lbs) |
| DN25 (1.00") | 8bar (116 psi) | 10bar (145 psi) | 6bar (87psi) | 2.6kg (5.6lbs) |
| DN40 (1.50") | 8bar (116 psi) | 10bar (145 psi) | 6bar (87psi) | 3.3kg (7.7lbs) |
| DN50 (2.00") | 8bar (116 psi) | 10bar (145 psi) | 6bar (87psi) | 6.0kg (13.4lbs) |
| DN65 (2.50") | 8bar (116 psi) | 10bar (145 psi) | 6bar (87psi) | 16.5kg (36.4lbs) |
| DN80 (3.00") | 8bar (116 psi) | 10bar (145 psi) | 6bar (87psi) | 32kg (70.6lbs) |
| DN100 (4.00") | 8bar (116 psi) | 10bar (145 psi) | 6bar (87psi) | 33.5kg (73.9lbs) |

All pressures are gauge pressures. Line pressure values were determined with pressure on one side of the weir only. This condition is called 100% pressure drop, or 100% ΔP. Information on line pressure applied to both upstream and downstream sides of the weir is available on request.

Performance characteristics for S360 Lite Actuators Normally Closed with Elastomer Diaphragms at 100% ΔP



Performance characteristics for S360 Lite Actuators Normally Closed with PTFE Diaphragms at 100% ΔP



Graphs denote the operating air required to fully open the actuator at a given line pressure.

Saunders® S360 Power

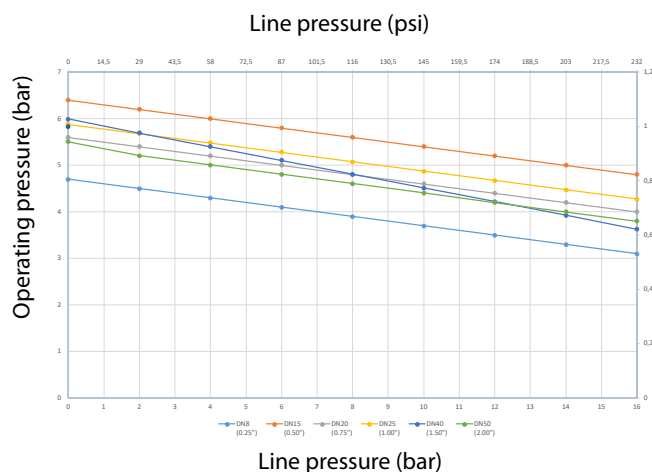
The Saunders® S360 Power range offers higher operating closure performance in a compact package for high operating pressure or atypical closing conditions with high pressure on both sides of the weir. The S360 Power normally close actuator is available through sizes DN15 – DN50 (0.50" – 2.00").



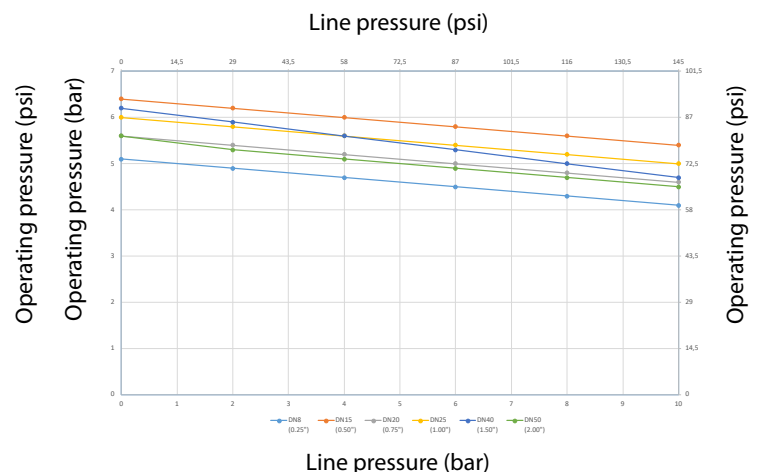
| Closure Performance (Saunders® S360 Power Normally Closed) | | | | |
|--|----------------|----------------|------------------|-----------------|
| Size | Line Pressure | | Control Pressure | Weight |
| | PTFE | Rubber | | |
| DN15 (0.50") | 16bar (232psi) | 16bar (232psi) | 6bar (87psi) | 1.1kg (2.4lbs) |
| DN20 (0.75") | 16bar (232psi) | 16bar (232psi) | 6bar (87psi) | 2.5kg (5.5lbs) |
| DN25 (1.00") | 16bar (232psi) | 16bar (232psi) | 6bar (87psi) | 2.6kg (5.7lbs) |
| DN40 (1.50") | 16bar (232psi) | 16bar (232psi) | 6bar (87psi) | 5.3kg (11.7lbs) |
| DN50 (2.00") | 16bar (232psi) | 16bar (232psi) | 6bar (87psi) | 8.8kg (19.4lbs) |

All pressures are gauge pressures. Line pressure values were determined with pressure on one side of the weir only. This condition is called 100% pressure drop, or 100% ΔP. Information on line pressure applied to both upstream and downstream sides of the weir is available on request.

Performance characteristics for S360 Power Actuators Normally Closed with Elastomer Diaphragms at 100% ΔP



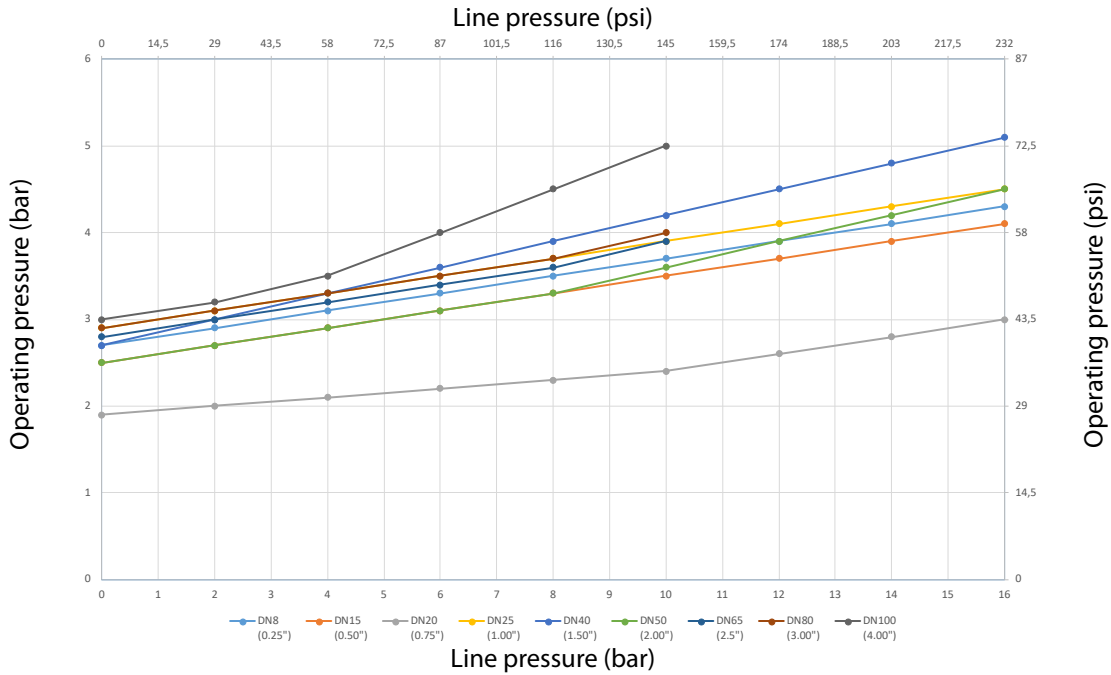
Performance characteristics for S360 Power Actuators Normally Closed with PTFE Diaphragms at 100% ΔP



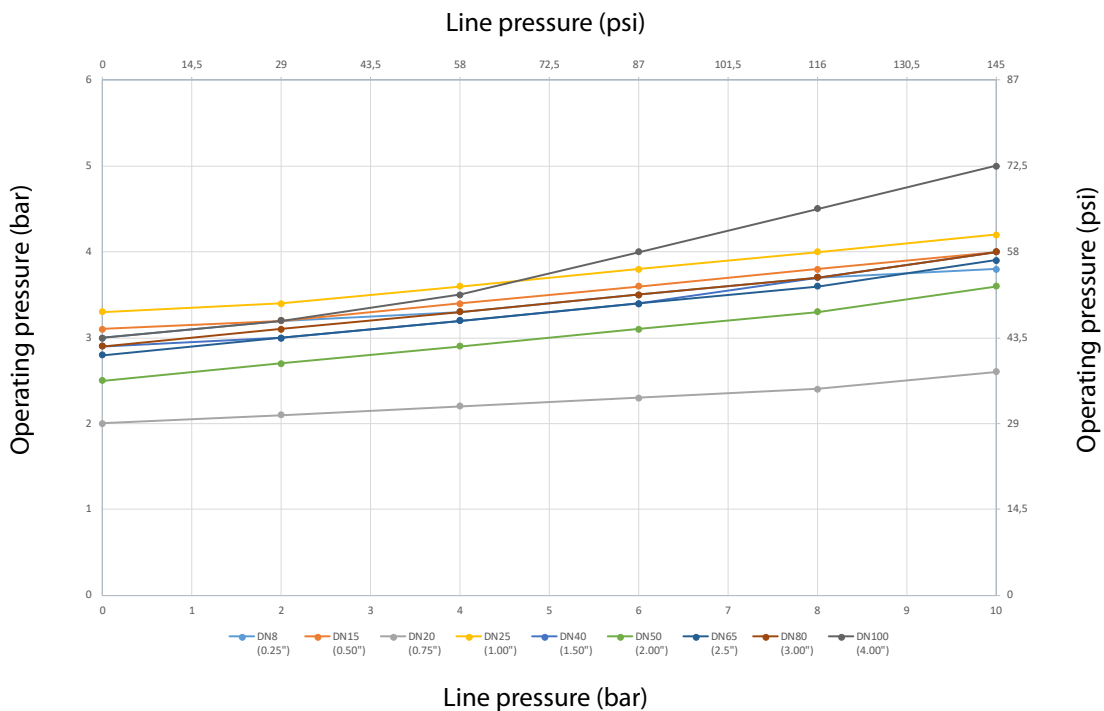
Graphs denote the operating air required to fully open the actuator at a given line pressure.

Saunders® S360 Normally Open Actuator

Performance characteristics for S360 actuators Normally Open with Elastomer Diaphragms at 100% ΔP

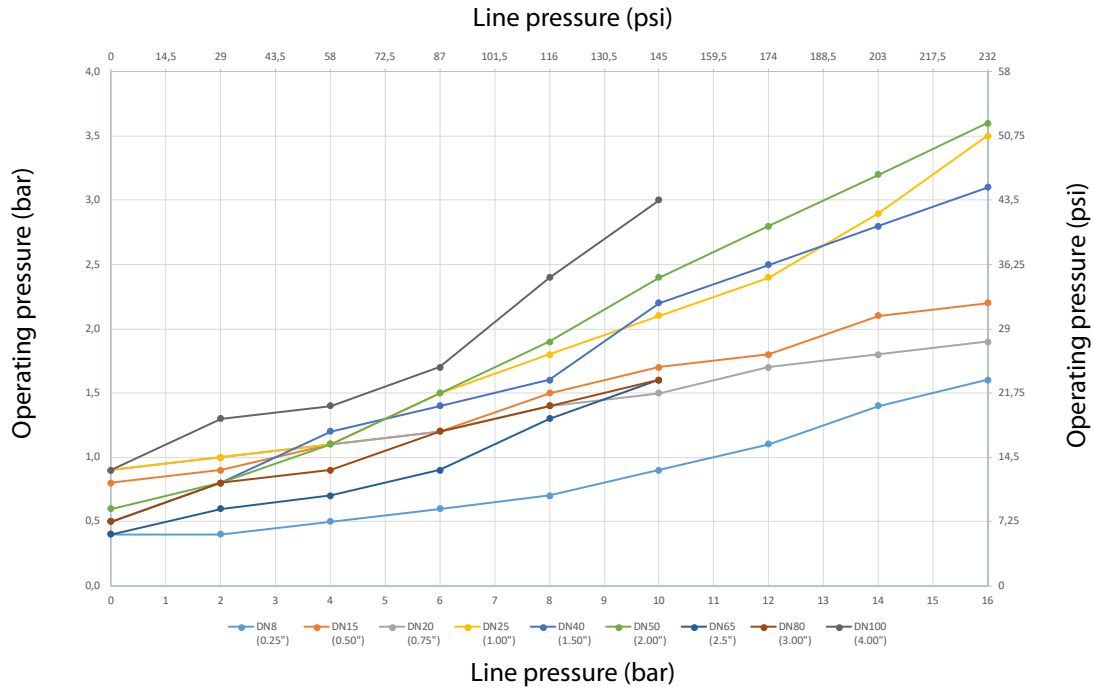


Performance characteristics for S360 actuators Normally Open with PTFE Diaphragms at 100% ΔP

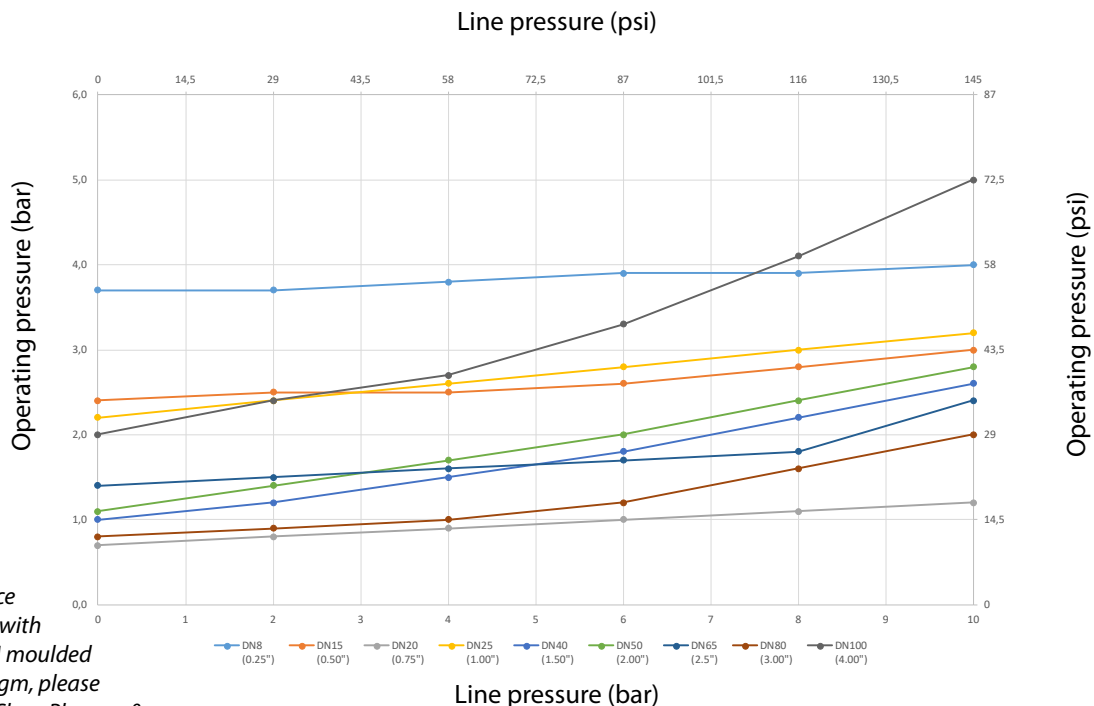


Saunders® S360 Double Acting Actuator

Performance characteristics for S360 actuators Double Acting with Elastomer Diaphragms at 100% ΔP

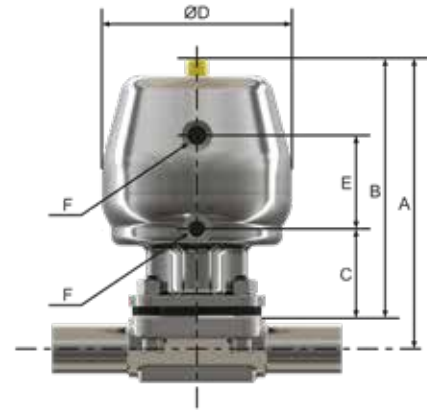


Performance characteristics for S360 actuators Double Acting with PTFE Diaphragms at 100% ΔP



For performance characteristics with Saunders® TFM moulded closed diaphragm, please consult Crane ChemPharma & Energy, Saunders®.

Actuator Dimensions (Metric)



Air Port DN8-50 is
1/8 G or BSP

Air Port DN65-100
is 1/4 G or BSP

S360 Lite Normally Closed Actuator Dimensions (Metric)

| Actuator Size | Dimensions (mm) | | | | | | Actuator Weight (Kg) |
|---------------|-----------------|-------|------|-------|---|-------------|----------------------|
| | A | B | C | D | E | F | Flanged |
| DN8 | 90,1 | 81,5 | 21,5 | 55,25 | - | 1/8 BSP/NPT | 0,5 |
| DN15 | 114,75 | 105,4 | 35,2 | 67,5 | - | 1/8 BSP/NPT | 1,06 |
| DN20 | 143,2 | 130,2 | 44,3 | 88 | - | 1/8 BSP/NPT | 1,93 |
| DN25 | 150,7 | 135 | 46,6 | 98 | - | 1/8 BSP/NPT | 2,56 |
| DN40 | 183 | 161 | 54,4 | 98 | - | 1/8 BSP/NPT | 3,3 |
| DN50 | 237,7 | 209,3 | 60,2 | 123 | - | 1/8 BSP/NPT | 6,05 |
| DN65 | 335,2 | 294,7 | 72 | 186 | - | 1/4 BSP/NPT | 17,5 |
| DN80 | 392 | 344 | 89 | 236 | - | 1/4 BSP/NPT | 32 |
| DN100 | 421 | 346 | 89 | 236 | - | 1/4 BSP/NPT | 35,8 |

S360 Power Normally Closed Actuator Dimensions (Metric)

| Actuator Size | Dimensions (mm) | | | | | | Actuator Weight (Kg) |
|---------------|-----------------|-------|------|------|---|-------------|----------------------|
| | A | B | C | D | E | F | Flanged |
| DN15 | 114,75 | 105,4 | 35,2 | 67,5 | - | 1/8 BSP/NPT | 1,1 |
| DN20 | 143,8 | 130,8 | 40,8 | 98,2 | - | 1/8 BSP/NPT | 2,5 |
| DN25 | 150,7 | 135 | 46,6 | 98 | - | 1/8 BSP/NPT | 2,57 |
| DN40 | 206,6 | 184,6 | 54,7 | 123 | - | 1/8 BSP/NPT | 5,3 |
| DN50 | 242 | 213,6 | 60,2 | 150 | - | 1/8 BSP/NPT | 8,8 |

S360 Lite Normally Open Actuator Dimensions (Metric)

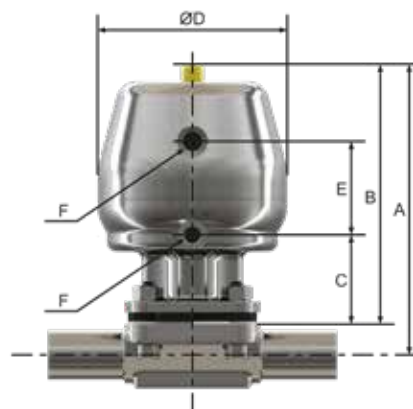
| Actuator Size | Dimensions (mm) | | | | | | Actuator Weight (Kg) |
|---------------|-----------------|-------|------|-------|------|-------------|----------------------|
| | A | B | C | D | E | F | Flanged |
| DN8 | 90,1 | 81,5 | 21,5 | 55,25 | 42 | 1/8 BSP/NPT | 0,4 |
| DN15 | 114,75 | 105,4 | 35,2 | 67,5 | 49 | 1/8 BSP/NPT | 0,9 |
| DN20 | 143,8 | 130,8 | 40,8 | 98,2 | 51 | 1/8 BSP/NPT | 2,3 |
| DN25 | 150,7 | 135 | 46,6 | 98 | 48,4 | 1/8 BSP/NPT | 2,37 |
| DN40 | 206,6 | 184,6 | 54,7 | 123 | 75 | 1/8 BSP/NPT | 4,5 |
| DN50 | 242 | 213,6 | 60,2 | 150 | 86,5 | 1/4 BSP/NPT | 7,4 |
| DN65 | 335,2 | 294,7 | 73 | 186 | 172 | 1/4 BSP/NPT | 17 |
| DN80 | 408 | 360 | 90 | 236 | 114 | 1/4 BSP/NPT | 34 |
| DN100 | 436 | 361 | 90 | 236 | 114 | 1/4 BSP/NPT | 37 |

S360 Double Acting Actuator Dimensions (Metric)

| Actuator Size | Dimensions (mm) | | | | | | Actuator Weight (Kg) |
|---------------|-----------------|-------|------|-------|------|-------------|----------------------|
| | A | B | C | D | E | F | Flanged |
| DN8 | 90,1 | 81,5 | 21,5 | 55,25 | 42 | 1/8 BSP/NPT | 0,4 |
| DN15 | 114,75 | 105,4 | 35,2 | 67,5 | 49 | 1/8 BSP/NPT | 0,8 |
| DN20 | 143,8 | 130,8 | 40,8 | 98,2 | 51 | 1/8 BSP/NPT | 2,2 |
| DN25 | 150,7 | 135 | 46,6 | 98 | 48,4 | 1/8 BSP/NPT | 2,27 |
| DN40 | 206,6 | 184,6 | 54,7 | 123 | 75 | 1/8 BSP/NPT | 4,3 |
| DN50 | 242 | 213,6 | 60,2 | 150 | 86,5 | 1/4 BSP/NPT | 7,1 |
| DN65 | 335,2 | 294,7 | 73 | 186 | 172 | 1/4 BSP/NPT | 13,6 |
| DN80 | 408 | 360 | 90 | 236 | 114 | 1/4 BSP/NPT | 27 |
| DN100 | 436 | 361 | 90 | 236 | 114 | 1/4 BSP/NPT | 32,4 |

Dimension "A" relates to 2-way body OD tubing; all other body variations are available at <http://drawings.craneflow.com>. Please contact Crane ChemPharma & Energy, Saunders[®] for the latest dimensional information. The above drawing should only be used as a general reference.

Actuator Dimensions (Imperial)



Air Port DN8-50 is
1/8 G or BSP

Air Port DN65-100
is 1/4 G or BSP

S360 Lite Normally Closed Actuator Dimensions (Imperial)

| Actuator Size | Dimensions (inches) | | | | | | Actuator Weight (lbs.) |
|---------------|---------------------|-------|------|------|---|-------------|------------------------|
| | A | B | C | D | E | F | Flanged |
| 0.25" | 3,55 | 3,21 | 0,85 | 2,18 | - | 1/8 BSP/NPT | 1,1 |
| 0.50" | 4,52 | 4,15 | 1,39 | 2,66 | - | 1/8 BSP/NPT | 2,33 |
| 0.75" | 5,64 | 5,13 | 1,74 | 3,46 | - | 1/8 BSP/NPT | 4,25 |
| 1.00" | 5,93 | 5,31 | 1,83 | 3,86 | - | 1/8 BSP/NPT | 5,64 |
| 1.50" | 7,20 | 6,34 | 2,14 | 3,86 | - | 1/8 BSP/NPT | 7,27 |
| 2.00" | 9,36 | 8,24 | 2,37 | 4,84 | - | 1/8 BSP/NPT | 13,33 |
| 2.50" | 13,20 | 11,60 | 2,83 | 7,32 | - | 1/4 BSP/NPT | 38,58 |
| 3.00" | 15,43 | 13,54 | 3,50 | 9,29 | - | 1/4 BSP/NPT | 70,54 |
| 4.00" | 16,57 | 13,62 | 3,50 | 9,29 | - | 1/4 BSP/NPT | 78,92 |

S360 Power Normally Closed Actuator Dimensions (Imperial)

| Actuator Size | Dimensions (inches) | | | | | | Actuator Weight (lbs.) |
|---------------|---------------------|------|------|------|---|-------------|------------------------|
| | A | B | C | D | E | F | Flanged |
| 0.50" | 4,52 | 4,15 | 1,39 | 2,66 | - | 1/8 BSP/NPT | 2,42 |
| 0.75" | 5,66 | 5,15 | 1,61 | 3,87 | - | 1/8 BSP/NPT | 5,51 |
| 1.00" | 5,93 | 5,31 | 1,83 | 3,86 | - | 1/8 BSP/NPT | 5,66 |
| 1.50" | 8,13 | 7,27 | 2,15 | 4,84 | - | 1/8 BSP/NPT | 11,68 |
| 2.00" | 9,53 | 8,41 | 2,37 | 5,91 | - | 1/8 BSP/NPT | 19,4 |

S360 Lite Normally Open Actuator Dimensions (Imperial)

| Actuator Size | Dimensions (inches) | | | | | | Actuator Weight (lbs.) |
|---------------|---------------------|-------|------|------|------|-------------|------------------------|
| | A | B | C | D | E | F | Flanged |
| 0.25" | 3,55 | 3,21 | 0,85 | 2,18 | 1,65 | 1/8 BSP/NPT | 0,88 |
| 0.50" | 4,52 | 4,15 | 1,39 | 2,66 | 1,93 | 1/8 BSP/NPT | 1,98 |
| 0.75" | 5,66 | 5,15 | 1,61 | 3,87 | 2,01 | 1/8 BSP/NPT | 5,07 |
| 1.00" | 5,93 | 5,31 | 1,83 | 3,86 | 1,91 | 1/8 BSP/NPT | 5,22 |
| 1.50" | 8,13 | 7,27 | 2,15 | 4,84 | 2,95 | 1/8 BSP/NPT | 9,92 |
| 2.00" | 9,53 | 8,41 | 2,37 | 5,91 | 3,41 | 1/4 BSP/NPT | 16,31 |
| 2.50" | 13,20 | 11,60 | 2,87 | 7,32 | 6,77 | 1/4 BSP/NPT | 37,47 |
| 3.00" | 16,06 | 14,17 | 3,54 | 9,29 | 4,49 | 1/4 BSP/NPT | 74,95 |
| 4.00" | 17,17 | 14,21 | 3,54 | 9,29 | 4,49 | 1/4 BSP/NPT | 81,57 |

S360 Double Acting Actuator Dimensions (Imperial)

| Actuator Size | Dimensions (inches) | | | | | | Actuator Weight (lbs.) |
|---------------|---------------------|-------|------|------|------|-------------|------------------------|
| | A | B | C | D | E | F | Flanged |
| 0.25" | 3,55 | 3,21 | 0,85 | 2,18 | 1,65 | 1/8 BSP/NPT | 0,88 |
| 0.50" | 4,52 | 4,15 | 1,39 | 2,66 | 1,93 | 1/8 BSP/NPT | 1,76 |
| 0.75" | 5,66 | 5,15 | 1,61 | 3,87 | 2,01 | 1/8 BSP/NPT | 4,85 |
| 1.00" | 5,93 | 5,31 | 1,83 | 3,86 | 1,91 | 1/8 BSP/NPT | 5 |
| 1.50" | 8,13 | 7,27 | 2,15 | 4,84 | 2,95 | 1/8 BSP/NPT | 9,47 |
| 2.00" | 9,53 | 8,41 | 2,37 | 5,91 | 3,41 | 1/4 BSP/NPT | 15,65 |
| 2.50" | 13,20 | 11,60 | 2,87 | 7,32 | 6,77 | 1/4 BSP/NPT | 29,98 |
| 3.00" | 16,06 | 14,17 | 3,54 | 9,29 | 4,49 | 1/4 BSP/NPT | 59,52 |
| 4.00" | 17,17 | 14,21 | 3,54 | 9,29 | 4,49 | 1/4 BSP/NPT | 71,42 |

Dimension "A" relates to 2-way body OD tubing; all other body variations are available at <http://drawings.craneflow.com>. Please contact Crane ChemPharma & Energy, Saunders[®] for the latest dimensional information. The above drawing should only be used as a general reference.

Crane ChemPharma & Energy

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