

# Diaphragm Valve AP Series (Air Operated)

● Standard ○ Selectable by model or option  
 △ Source applications for max. source pressure of 250 psig (1.7 MPa) or less

| Series | Application                 |                   | Status |      | Body material*1                |  | Max. operating pressure |      | Cv*2 | LOTO | Connection size [inch]   | Connection type |                            | Page |
|--------|-----------------------------|-------------------|--------|------|--------------------------------|--|-------------------------|------|------|------|--------------------------|-----------------|----------------------------|------|
|        | Distribution (Point of use) | Source (Cylinder) | N.C.   | N.O. |                                |  | psig                    | MPa  |      |      |                          | Connection      | Fitting                    |      |
| AP3542 | ●                           |                   | ●      |      | ● 316L VAR<br>○ Ni-Cr-Mo alloy |  | 125                     | 0.9  | 0.29 |      | 1/4<br>3/8               |                 |                            | 145  |
| AP3540 | ●                           |                   | ●      |      |                                |  | 145                     | 1    | 0.29 | ○    |                          |                 |                            |      |
| AP3550 | ●                           | △                 | ●      |      |                                |  | 300                     | 2.1  | 0.29 |      |                          |                 |                            |      |
| AP3580 | ●                           | △                 |        | ●    |                                |  | 250                     | 1.7  | 0.29 |      |                          |                 |                            |      |
| AP3000 |                             | ●                 | ●      |      | ● 316L VAR<br>○ Ni-Cr-Mo alloy |  | 3000                    | 20.7 | 0.23 | ○    | 1/4<br>3/8               |                 |                            | 149  |
| AP3002 |                             | ●                 | ●      |      |                                |  | 3000                    | 20.7 | 0.28 | ○    |                          |                 |                            |      |
| AP3080 |                             | ●                 |        | ●    |                                |  | 3000                    | 20.7 | 0.23 |      |                          |                 |                            |      |
| AP3004 |                             | ●                 | ●      |      | 316L VAR                       |  | 3700                    | 25.5 | 0.23 | ○    | 1/4                      |                 |                            |      |
| AP3007 |                             | ●                 | ●      |      |                                |  | 4500                    | 31   | 0.23 | ○    |                          |                 |                            |      |
| AP4542 | ●                           |                   | ●      |      | ● 316L VAR<br>○ Ni-Cr-Mo alloy |  | 125                     | 0.9  | 0.5  |      | 1/4<br>3/8               | Welded          | ● Face seal<br>○ Tube weld | 147  |
| AP4540 | ●                           |                   | ●      |      |                                |  | 125                     | 0.9  | 0.5  | ○    |                          |                 |                            |      |
| AP4550 | ●                           | △                 | ●      |      |                                |  | 300                     | 2.1  | 0.5  |      |                          |                 |                            |      |
| AP4580 | ●                           | △                 |        | ●    |                                |  | 250                     | 1.7  | 0.5  |      |                          |                 |                            |      |
| AP4000 | ●                           | ●                 | ●      |      | ● 316L VAR<br>○ Ni-Cr-Mo alloy |  | 3000                    | 20.7 | 0.35 | ○    | 1/4<br>3/8               |                 |                            | 151  |
| AP4141 | ●                           | △                 | ●      |      | 316L VAR                       |  | 250                     | 1.7  | 0.8  |      | 1/4<br>3/8<br>1/2        |                 |                            | 153  |
| AP3113 | ●                           | ●                 | ●      |      | ● 316L VAR<br>○ Ni-Cr-Mo alloy |  | 1300                    | 9.0  | 1.0  | ○    | 1/4<br>3/8<br>1/2<br>3/4 |                 |                            | 155  |
| AP3130 | ●                           | ●                 | ●      |      |                                |  | 3000                    | 20.7 | 0.7  | ○    |                          |                 |                            |      |
| AP3700 | ●                           | △                 | ●      |      | 316L VAR                       |  | 250                     | 1.7  | 2.8  |      | 3/8<br>1/2<br>3/4        |                 |                            | 157  |
| AP3708 | ●                           | △                 |        | ●    |                                |  | 250                     | 1.7  | 2.8  |      |                          |                 |                            |      |
| AP3571 | ●                           |                   | ●      |      | ● 316L VAR<br>○ Ni-Cr-Mo alloy |  | 125                     | 0.9  | 0.29 |      | 1/4<br>3/8               | Welded          | ● Face seal<br>○ Tube weld | 159  |
| AP4571 | ●                           |                   | ●      |      |                                |  | 125                     | 0.9  | 0.5  |      |                          |                 |                            |      |

\*1 316L VAR: 316L SS secondary remelt  
 \*2 In accordance with SEMI F32

|                                      |
|--------------------------------------|
| Recommendations                      |
| Regulators                           |
| AP                                   |
| SL                                   |
| AZ                                   |
| AK                                   |
| BP                                   |
| Diaphragm Valves                     |
| AP                                   |
| AZ                                   |
| AK                                   |
| Check Valves                         |
| Vacuum Generators                    |
| Flow Switches                        |
| Technical Data/<br>Glossary of Terms |
| Precautions                          |

# Diaphragm Valve AP Series (Manually Operated)

● Standard ○ Selectable by model or option  
 △ Source applications for max. source pressure of 250 psig (1.7 MPa) or less

| Series | Application                 |                   | Knob  | Body material*1                | Max. operating pressure |             | Cv*2       | LOTO | Connection size [inch]   | Connection type |                            | Page |
|--------|-----------------------------|-------------------|---|--------------------------------|-------------------------|-------------|------------|------|--------------------------|-----------------|----------------------------|------|
|        | Distribution (Point of use) | Source (Cylinder) |   |                                | psig                    | MPa         |            |      |                          | Connection      | Fitting                    |      |
| AP3600 | ●                           | ●                 | Multi turn round knob   | ● 316L VAR<br>○ Ni-Cr-Mo alloy | 3000                    | 20.7        | 0.29       |      | 1/4<br>3/8               |                 |                            | 163  |
| AP3625 | ●                           | ●                 | 1/4 turn lever knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP3650 | ●                           | ●                 | 1/4 turn round knob with open/close indication window                         |                                |                         |             |            |      |                          |                 |                            |      |
| AP3652 | ●                           | △                 | Round knob with a raised rectangular section and open/close indication window |                                |                         |             |            |      |                          |                 |                            |      |
| AP3659 | ●                           | △                 | Pull twist round knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP3657 | ●                           | ●                 | Pull twist round knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP3604 | ●                           | ●                 | Multi turn round knob   | 316L VAR                       | 3700                    | 25.5        |            |      | 1/4                      |                 |                            | 167  |
| AP3624 | ●                           | ●                 | Lever knob  |                                |                         |             |            |      |                          |                 |                            |      |
| AP3627 | ●                           | ●                 | T handle  |                                |                         |             |            |      |                          |                 |                            |      |
| AP4600 | ●                           | △                 | Multi turn round knob   | ● 316L VAR<br>○ Ni-Cr-Mo alloy | 300<br>3000             | 2.1<br>20.7 | 0.5        |      | 1/4<br>3/8               | Welded          | ● Face seal<br>○ Tube weld | 165  |
| AP4625 | ●                           | △                 | 1/4 turn lever knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP4650 | ●                           | △                 | 1/4 turn round knob with open/close indication window                         |                                |                         |             |            |      |                          |                 |                            |      |
| AP4652 | ●                           | △                 | Round knob with a raised rectangular section and open/close indication window |                                |                         |             |            |      |                          |                 |                            |      |
| AP4659 | ●                           | △                 | Pull twist round knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP4657 | ●                           | △                 | Pull twist round knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP4150 | ●                           | △                 | Round knob with open/close indication window                                  | 316L VAR                       | 250                     | 1.7         | 0.8        |      | 1/4<br>3/8               |                 |                            | 169  |
| AP4157 | ●                           | △                 | Pull twist round knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP3100 | ●                           | ●                 | Multi turn round knob   | ● 316L VAR<br>○ Ni-Cr-Mo alloy | 3000                    | 20.7        | 0.7<br>1.3 |      | 1/4<br>3/8<br>1/2<br>3/4 |                 |                            | 171  |
| AP3125 | ●                           | ●                 | 1/4 turn lever knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP3150 | ●                           | ●                 | 1/4 turn round knob with open/close indication window                         |                                |                         |             |            |      |                          |                 |                            |      |
| AP3157 | ●                           | ●                 | Pull twist round knob   |                                |                         |             |            |      |                          |                 |                            |      |
| AP3800 | ●                           | △                 | Round knob  | 316L VAR                       | 250                     | 1.7         | 2.8        |      | 3/8<br>1/2<br>3/4        |                 |                            | 173  |
| AP3900 | ●                           | △                 | Pull twist round knob   |                                |                         |             |            |      |                          |                 |                            |      |



\*1 316L VAR: 316L SS secondary remelt \*2 In accordance with SEMI F32

Option (LOTO, Operational Safety Device) >>> p. 227 Optional Porting Configuration >>> p. 179

|                                      |
|--------------------------------------|
| Recommendations                      |
| Regulators                           |
| AP                                   |
| SL                                   |
| AZ                                   |
| AK                                   |
| BP                                   |
| Diaphragm Valves                     |
| AP                                   |
| AZ                                   |
| AK                                   |
| Check Valves                         |
| Vacuum Generators                    |
| Flow Switches                        |
| Technical Data/<br>Glossary of Terms |
| Precautions                          |


# Diaphragm Valve AP Series (Metal Seated)

● Standard ○ Selectable by model or option  
 △ Source applications for max. source pressure of 250 psig (1.7 MPa) or less

| Series            | Application                 |   | Status or Knob | Body material*1 | Max. operating pressure |                     | Cv*2 | LOTO | Connection size [inch] | Connection type |                            | Page |     |
|-------------------|-----------------------------|---|----------------|-----------------|-------------------------|---------------------|------|------|------------------------|-----------------|----------------------------|------|-----|
|                   | Distribution (Point of use) | Source (Cylinder)   |                |                 | psig                    | MPa                 |      |      |                        | Connection      | Fitting                    |      |     |
| Air Operated      | AP3200                      |  | ●              |                 | 316L VAR                | 125                 | 0.9  | 0.27 | 1/4<br>3/8             | Welded          | ● Face seal<br>○ Tube weld | 161  |     |
|                   | AP3202                      |   | ●              | △               |                         | 508                 | 3.5  | 0.27 |                        |                 |                            |      |     |
| Manually Operated | AP3260                      |  | ●              |                 |                         | 125                 | 0.9  | 0.27 |                        | Welded          | ● Face seal<br>○ Tube weld |      | 175 |
|                   | AP3262                      |   | ●              | △               |                         | 508                 | 3.5  | 0.27 |                        |                 |                            |      |     |
|                   | AP3225                      |   | ●              |                 |                         | 1/4 turn lever knob | 125  | 0.9  |                        |                 |                            |      |     |

\*1 316L VAR: 316L SS secondary remelt \*2 In accordance with SEMI F32

# Metering Valve AP Series

| Series | Application   |                   | Knob | Body material*1 | Max. operating pressure |     | Cv*2 | Connection size [inch] | Connection type |                            | Page |      |
|--------|---|-------------------|------|-----------------|-------------------------|-----|------|------------------------|-----------------|----------------------------|------|------|
|        | Distribution (Point of use)   | Source (Cylinder) |      |                 | psig                    | MPa |      |                        | Connection      | Fitting                    |      |      |
| AP3672 |  | ●                 |      | 316L VAR        | 145                     | 1.0 | 0.02 | 1/4<br>3/8             | Welded          | ● Face seal<br>○ Tube weld | 177  |      |
| AP3675 |   | ●                 |      |                 | Multi turn              | 145 | 1.0  |                        |                 |                            |      | 0.08 |
| AP4675 |   | ●                 |      |                 |                         | 145 | 1.0  |                        |                 |                            |      | 0.15 |

\*1 316L VAR: 316L SS secondary remelt \*2 In accordance with SEMI F32

Option (LOTO, Operational Safety Device) >>> p. 227 Optional Porting Configuration >>> p. 179

- Recommendations
- Regulators
- AP
- SL
- AZ
- AK
- BP
- Diaphragm Valves
- AP
- AZ
- AK
- Check Valves
- Vacuum Generators
- Flow Switches
- Technical Data/Glossary of Terms
- Precautions

# Diaphragm Valve AZ Series (Air Operated)

● Standard ○ Selectable by model or option  
 △ Source applications for max. source pressure of 250 psig (1.7 MPa) or less

| Series | Application                 |                   | Status |      | Body material*1 |  | Max. operating pressure |      | Cv*2 | LOTO | Connection size [inch] | Connection type    |                            | Page |
|--------|-----------------------------|-------------------|--------|------|-----------------|--|-------------------------|------|------|------|------------------------|--------------------|----------------------------|------|
|        | Distribution (Point of use) | Source (Cylinder) | N.C.   | N.O. |                 |  | psig                    | MPa  |      |      |                        | Connection         | Fitting                    |      |
| AZ3542 | ●                           |                   | ●      |      | 316L            |  | 125                     | 0.9  | 0.29 |      | 1/4<br>3/8             | Machined<br>Welded | ● Face seal<br>○ Tube weld | 181  |
| AZ3540 | ●                           |                   | ●      |      |                 |  | 145                     | 1.0  | 0.29 | ○    |                        |                    |                            |      |
| AZ3550 | ●                           | △                 | ●      |      |                 |  | 300                     | 2.1  | 0.29 |      |                        |                    |                            |      |
| AZ3580 | ●                           | △                 |        | ●    |                 |  | 250                     | 1.7  | 0.29 |      |                        |                    |                            |      |
| AZ3000 |                             | ●                 | ●      |      | 316L            |  | 3000                    | 20.7 | 0.23 | ○    | 1/4<br>3/8             | Machined<br>Welded | ● Face seal<br>○ Tube weld | 185  |
| AZ3002 |                             | ●                 | ●      |      |                 |  | 3000                    | 20.7 | 0.28 | ○    |                        |                    |                            |      |
| AZ3080 |                             | ●                 |        | ●    |                 |  | 3000                    | 20.7 | 0.23 |      |                        |                    |                            |      |
| AZ3004 |                             | ●                 | ●      |      |                 |  | 3700                    | 25.5 | 0.23 | ○    |                        |                    |                            |      |
| AZ3007 |                             | ●                 | ●      |      |                 |  | 4500                    | 31   | 0.23 | ○    |                        |                    |                            |      |
| AZ4542 | ●                           |                   | ●      |      | 316L            |  | 125                     | 0.9  | 0.5  |      | 1/4<br>3/8             | Machined<br>Welded | ● Face seal<br>○ Tube weld | 183  |
| AZ4540 | ●                           |                   | ●      |      |                 |  | 125                     | 0.9  | 0.5  | ○    |                        |                    |                            |      |
| AZ4550 | ●                           | △                 | ●      |      |                 |  | 300                     | 2.1  | 0.5  |      |                        |                    |                            |      |
| AZ4580 | ●                           | △                 |        | ●    |                 |  | 250                     | 1.7  | 0.5  |      |                        |                    |                            |      |
| AZ4000 |                             | ●                 | ●      |      | 316L            |  | 3000                    | 20.7 | 0.35 |      | 1/4<br>3/8             | Machined<br>Welded | ● Face seal<br>○ Tube weld | 187  |
| AZ4141 | ●                           | △                 | ●      |      | 316L            |  | 250                     | 1.7  | 0.8  |      | 1/4<br>3/8<br>1/2      | Welded             | ● Face seal<br>○ Tube weld | 189  |
| AZ3700 | ●                           | △                 | ●      |      | 316L            |  | 250                     | 1.7  | 2.8  |      | 3/8<br>1/2<br>3/4      | Welded             | ● Face seal<br>○ Tube weld | 191  |
| AZ3708 | ●                           | △                 |        | ●    |                 |  | 250                     | 1.7  | 2.8  |      |                        |                    |                            |      |
| AZ3571 | ●                           |                   | ●      |      | 316L            |  | 125                     | 0.9  | 0.29 |      | 1/4<br>3/8             | Machined<br>Welded | ● Face seal<br>○ Tube weld | 193  |
| AZ4571 | ●                           |                   | ●      |      |                 |  | 125                     | 0.9  | 0.5  |      |                        |                    |                            |      |

|                                      |
|--------------------------------------|
| Recommendations                      |
| Regulators                           |
| AP                                   |
| SL                                   |
| AZ                                   |
| AK                                   |
| BP                                   |
| Diaphragm Valves                     |
| AP                                   |
| AZ                                   |
| AK                                   |
| Check Valves                         |
| Vacuum Generators                    |
| Flow Switches                        |
| Technical Data/<br>Glossary of Terms |
| Precautions                          |

# Diaphragm Valve AZ Series (Manually Operated)

● Standard ○ Selectable by model or option  
 △ Source applications for max. source pressure of 250 psig (1.7 MPa) or less

| Series | Application                 |                   | Knob  | Body material*1 |  | Max. operating pressure |                 | Cv*2 | LOTO | Connection size [inch] | Connection type    |                            | Page |
|--------|-----------------------------|-------------------|---|-----------------|--|-------------------------|-----------------|------|------|------------------------|--------------------|----------------------------|------|
|        | Distribution (Point of use) | Source (Cylinder) |   |                 |  | psig                    | MPa             |      |      |                        | Connection         | Fitting                    |      |
| AZ3600 | ●                           | ●                 | Multi turn round knob   | 316L            |  | 3000                    | 20.7            | 0.29 |      | 1/4<br>3/8             | Machined<br>Welded | ● Face seal<br>○ Tube weld | 195  |
| AZ3625 | ●                           | ●                 | 1/4 turn lever knob   |                 |  | 3000                    | 20.7            | 0.29 | ○    |                        |                    |                            |      |
| AZ3650 | ●                           | ●                 | 1/4 turn round knob with open/close indication window                         |                 |  | 3000                    | 20.7            | 0.29 |      |                        |                    |                            |      |
| AZ3652 | ●                           | △                 | Round knob with a raised rectangular section and open/close indication window |                 |  | 250                     | 1.7             | 0.29 |      |                        |                    |                            |      |
| AZ3659 | ●                           | △                 | Pull twist round knob   |                 |  | 250                     | 1.7             | 0.29 | ●    |                        |                    |                            |      |
| AZ3657 | ●                           | ●                 | Pull twist round knob   |                 |  | 3000                    | 20.7            | 0.29 | ●    |                        |                    |                            |      |
| AZ3604 | ●                           | ●                 | Multi turn round knob   | 316L            |  | 3700                    | 25.5            | 0.29 |      | 1/4                    | Welded             | ● Face seal<br>○ Tube weld | 199  |
| AZ3624 | ●                           | ●                 | Lever knob  |                 |  | 3700                    | 25.5            | 0.29 | ○    |                        |                    |                            |      |
| AZ3627 | ●                           | ●                 | T handle  |                 |  | 4500                    | 31              | 0.29 |      |                        |                    |                            |      |
| AZ4600 | ●                           | △                 | Multi turn round knob   | 316L            |  | ● 300<br>○ 3000         | ● 2.1<br>○ 20.7 | 0.5  |      | 1/4<br>3/8             | Machined<br>Welded | ● Face seal<br>○ Tube weld | 197  |
| AZ4625 | ●                           | △                 | 1/4 turn lever knob   |                 |  | ● 300<br>○ 3000         | ● 2.1<br>○ 20.7 | 0.5  | ○    |                        |                    |                            |      |
| AZ4650 | ●                           | △                 | 1/4 turn round knob with open/close indication window                         |                 |  | ● 300<br>○ 3000         | ● 2.1<br>○ 20.7 | 0.5  |      |                        |                    |                            |      |
| AZ4652 | ●                           | △                 | Round knob with a raised rectangular section and open/close indication window |                 |  | 250                     | 1.7             | 0.5  |      |                        |                    |                            |      |
| AZ4659 | ●                           | △                 | Pull twist round knob   |                 |  | 250                     | 1.7             | 0.5  | ●    |                        |                    |                            |      |
| AZ4657 | ●                           | △                 | Pull twist round knob   |                 |  | ● 300<br>○ 3000         | ● 2.1<br>○ 20.7 | 0.5  | ●    |                        |                    |                            |      |
| AZ4150 | ●                           | △                 | Round knob with open/close indication window                                  | 316L            |  | 250                     | 1.7             | 0.8  |      | 1/4<br>3/8<br>1/2      | Welded             | ● Face seal<br>○ Tube weld | 201  |
| AZ4157 | ●                           | △                 | Pull twist round knob   |                 |  | 250                     | 1.7             | 0.8  | ●    |                        |                    |                            |      |
| AZ3800 | ●                           | △                 | Round knob  | 316L            |  | 250                     | 1.7             | 2.8  |      | 3/8<br>1/2<br>3/4      | Welded             | ● Face seal<br>○ Tube weld | 203  |
| AZ3900 | ●                           | △                 | Pull twist round knob   |                 |  | 250                     | 1.7             | 2.8  | ●    |                        |                    |                            |      |

# Metering Valve AZ Series

| Series | Application                 |                   | Knob       | Body material*1 |  | Max. operating pressure |     | Cv*2 | Connection size [inch] | Connection type    |                            | Page |
|--------|-----------------------------|-------------------|------------|-----------------|--|-------------------------|-----|------|------------------------|--------------------|----------------------------|------|
|        | Distribution (Point of use) | Source (Cylinder) |            |                 |  | psig                    | MPa |      |                        | Connection         | Fitting                    |      |
| AZ3672 | ●                           |                   | Multi turn | 316L            |  | 145                     | 1.0 | 0.02 | 1/4<br>3/8             | Machined<br>Welded | ● Face seal<br>○ Tube weld | 205  |
| AZ3675 | ●                           |                   |            |                 |  | 145                     | 1.0 | 0.08 |                        |                    |                            |      |
| AZ4675 | ●                           |                   |            |                 |  | 145                     | 1.0 | 0.15 |                        |                    |                            |      |

\*1 316L: 316L SS \*2 In accordance with SEMI F32

Recommendations  
 Regulators  
 AP  
 SL  
 AZ  
 AK  
 BP  
 Diaphragm Valves  
 AP  
 AZ  
 AK  
 Check Valves  
 Vacuum Generators  
 Flow Switches  
 Technical Data/  
 Glossary of Terms  
 Precautions

# Diaphragm Valve AK Series (Air Operated)

● Standard ○ Selectable by model or option  
 △ Source applications for max. source pressure of 250 psig (1.7 MPa) or less

| Series | Application                 |                   | Status |      | Body material <sup>*1</sup> |      | Max. operating pressure |      | Cv <sup>*2</sup> | LOTO | Connection size [inch] | Connection type                       | Page |   |
|--------|-----------------------------|-------------------|--------|------|-----------------------------|------|-------------------------|------|------------------|------|------------------------|---------------------------------------|------|---|
|        | Distribution (Point of use) | Source (Cylinder) | N.C.   | N.O. |                             |      | psig                    | MPa  |                  |      |                        |                                       |      |   |
| AK3542 |                             | ●                 |        | ●    |                             |      | 125                     | 0.9  | 0.29             |      | 1/4                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 209  |   |
| AK3540 |                             | ●                 |        | ●    |                             |      | 145                     | 1.0  | 0.29             | ○    |                        |                                       |      |   |
| AK3550 |                             | ●                 | △      | ●    |                             |      | 300                     | 2.1  | 0.29             |      |                        |                                       |      |   |
| AK3580 |                             | ●                 | △      |      | ●                           |      | 250                     | 1.7  | 0.29             |      |                        |                                       |      |   |
| AK3000 |                             |                   | ●      | ●    |                             |      | 3000                    | 20.7 | 0.23             | ○    | 1/4                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 213  |   |
| AK3002 |                             |                   | ●      | ●    |                             |      | 3000                    | 20.7 | 0.28             | ○    |                        |                                       |      |   |
| AK3004 |                             |                   | ●      | ●    |                             | 316L |                         | 3700 | 25.5             | 0.23 |                        |                                       |      | ○ |
| AK3007 |                             |                   | ●      | ●    |                             |      |                         | 4500 | 31.0             | 0.23 |                        |                                       |      | ○ |
| AK3080 |                             | ●                 | ●      |      |                             |      | 3000                    | 20.7 | 0.23             |      |                        |                                       |      |   |
| AK4542 |                             | ●                 |        | ●    |                             |      | 125                     | 0.9  | 0.5              |      | 3/8                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 211  |   |
| AK4540 |                             | ●                 |        | ●    |                             | 316L |                         | 125  | 0.9              | 0.5  |                        |                                       |      | ○ |
| AK4550 |                             | ●                 | △      | ●    |                             |      |                         | 300  | 2.1              | 0.5  |                        |                                       |      |   |
| AK4580 |                             | ●                 | △      |      | ●                           |      |                         | 250  | 1.7              | 0.5  |                        |                                       |      |   |
| AK4000 |                             |                   | ●      | ●    |                             | 316L |                         | 3000 | 20.7             | 0.35 | 3/8                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 215  |   |
| AK3571 |                             | ●                 |        | ●    |                             | 316L |                         | 125  | 0.9              | 0.29 | 1/4                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 217  |   |
| AK4571 |                             | ●                 |        | ●    |                             |      |                         | 125  | 0.9              | 0.5  | 3/8                    |                                       |      |   |

|                                      |
|--------------------------------------|
| Recommendations                      |
| Regulators                           |
| AP                                   |
| SL                                   |
| AZ                                   |
| AK                                   |
| BP                                   |
| Diaphragm Valves                     |
| AP                                   |
| AZ                                   |
| AK                                   |
| Check Valves                         |
| Vacuum Generators                    |
| Flow Switches                        |
| Technical Data/<br>Glossary of Terms |
| Precautions                          |

# Diaphragm Valve AK Series (Manually Operated)

● Standard ○ Selectable by model or option  
 △ Source applications for max. source pressure of 250 psig (1.7 MPa) or less

| Series | Application                 |                   | Knob  | Body material*1 | Max. operating pressure |                 | Cv*2 | LOTO | Connection size [inch] | Connection type                       | Page |
|--------|-----------------------------|-------------------|---|-----------------|-------------------------|-----------------|------|------|------------------------|---------------------------------------|------|
|        | Distribution (Point of use) | Source (Cylinder) |   |                 | psig                    | MPa             |      |      |                        |                                       |      |
| AK3600 | ●                           | ●                 | Multi turn round knob   | 316L            | 3000                    | 20.7            | 0.29 |      | 1/4                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 219  |
| AK3625 | ●                           | ●                 | 1/4 turn lever knob   |                 | 3000                    | 20.7            | 0.29 | ○    |                        |                                       |      |
| AK3650 | ●                           | ●                 | 1/4 turn round knob with open/close indication window                         |                 | 3000                    | 20.7            | 0.29 |      |                        |                                       |      |
| AK3652 | ●                           | △                 | Round knob with a raised rectangular section and open/close indication window |                 | 250                     | 1.7             | 0.29 |      |                        |                                       |      |
| AK3659 | ●                           | △                 | Pull twist round knob   |                 | 250                     | 1.7             | 0.29 | ●    |                        |                                       |      |
| AK3657 |                             | ●                 | Pull twist round knob   |                 | 3000                    | 20.7            | 0.29 | ●    |                        |                                       |      |
| AK3604 | ●                           | ●                 | Multi turn round knob   | 316L            | 3700                    | 25.5            | 0.29 |      | 1/4                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 223  |
| AK3624 |                             | ●                 | Lever knob  |                 | 3700                    | 25.5            | 0.29 | ○    |                        |                                       |      |
| AK3627 |                             | ●                 | T handle  |                 | 4500                    | 31.0            | 0.29 |      |                        |                                       |      |
| AK4600 | ●                           | △                 | Multi turn round knob   | 316L            | ● 300<br>○ 3000         | ● 2.1<br>○ 20.7 | 0.5  |      | 3/8                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 221  |
| AK4625 | ●                           | △                 | 1/4 turn lever knob   |                 | ● 300<br>○ 3000         | ● 2.1<br>○ 20.7 | 0.5  | ○    |                        |                                       |      |
| AK4650 | ●                           | △                 | 1/4 turn round knob with open/close indication window                         |                 | ● 300<br>○ 3000         | ● 2.1<br>○ 20.7 | 0.5  |      |                        |                                       |      |
| AK4652 | ●                           | △                 | Round knob with a raised rectangular section and open/close indication window |                 | 250                     | 1.7             | 0.5  |      |                        |                                       |      |
| AK4659 | ●                           | △                 | Pull twist round knob   |                 | 250                     | 1.7             | 0.5  | ●    |                        |                                       |      |
| AK4657 | ●                           | △                 | Pull twist round knob   |                 | ● 300<br>○ 3000         | ● 2.1<br>○ 20.7 | 0.5  | ●    |                        |                                       |      |

# Metering Valve AK Series

| Series | Application                 |                   | Knob       | Body material*1 | Max. operating pressure |     | Cv*2 | Connection size [inch] | Connection type                       | Page |
|--------|-----------------------------|-------------------|------------|-----------------|-------------------------|-----|------|------------------------|---------------------------------------|------|
|        | Distribution (Point of use) | Source (Cylinder) |            |                 | psig                    | MPa |      |                        |                                       |      |
| AK3672 | ●                           |                   | Multi turn | 316L            | 145                     | 1.0 | 0.02 | 1/4                    | ● Compression<br>○ Rc<br>○ R<br>○ NPT | 225  |
| AK3675 | ●                           |                   |            |                 | 145                     | 1.0 | 0.08 |                        |                                       |      |
| AK4675 | ●                           |                   |            |                 | 145                     | 1.0 | 0.15 | 3/8                    |                                       |      |

\*1 316L: 316L SS \*2 In accordance with SEMI F32

Recommendations  
 Regulators  
 AP  
 SL  
 AZ  
 AK  
 BP  
 Diaphragm Valves  
 AP  
 AZ  
 AK  
 Check Valves  
 Vacuum Generators  
 Flow Switches  
 Technical Data/Glossary of Terms  
 Precautions