



# Solenoid Valve 2 Way / 2 Position N.C. Direct Acting



21A31K1V25-T3  
Valve & Coil Shown

Direct acting solenoid valve for use with water and other compatible fluids.

Minimum operational pressure is not required.

The materials used and the tests carried out ensure maximum reliability and duration.

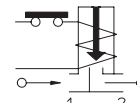
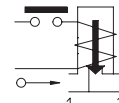
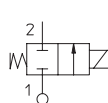
## Features

- Each valve and coil assembly is designated by the valve P/N followed by -A for 110VAC and -B for 24VDC
- Use in vending and other potable water applications
- G1/8 or G1/4
- Coil temperature class: class H (180°C - 356°F)
- Recommended ambient temperature range -20°C to +60°C (-4°F to +140°F)
- Electrical conformity IEC 335
- Protection degree IP 65 EN 60529 (DIN 40050) with coil fitted by connector.
- NSF/ANSI 169
- Accepts DIN 43650A cables



See our website  
[www.AutomationDirect.com](http://www.AutomationDirect.com)  
for a variety of cable options.

| Gaskets                 | Temperature     |                   | Medium            |
|-------------------------|-----------------|-------------------|-------------------|
| V=FKM (fluoroelastomer) | -10°C<br>(14°F) | +140°C<br>(284°F) | Water, Air, Steam |



| Solenoid Valve 2/2 Way N.C. Direct Acting |                 |           |               |      |           |      |                                |        |                              |          |                                     |         |              |                     |
|-------------------------------------------|-----------------|-----------|---------------|------|-----------|------|--------------------------------|--------|------------------------------|----------|-------------------------------------|---------|--------------|---------------------|
| Valve Part No.<br>Coil Part No.           | Order Code      | Port Size | Max Viscosity | ø mm | Kv (l/mn) | Cv   | Coil Voltage                   | Power* | Operating Pressure (bar/psi) |          |                                     | Price   | Weight (lbs) | Drawing Link        |
|                                           |                 |           | cSt           |      |           |      |                                |        | Min                          | Max      | Max Operating Pressure Differential |         |              |                     |
| 21A31K1V25-T3                             | 21A31K1V25-T3-A | G1/8      | 53            | 2.5  | 3.2       | 0.22 | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   | 0 / 0                        | 40 / 580 | 14 / 203.1                          | Retired | 0.75         | <a href="#">PDF</a> |
| 21A31K1V25-T3<br>BDV08024CY               | 21A31K1V25-T3-B |           |               |      |           |      | 24VDC                          | 11W    |                              |          | 9 / 130.5                           | Retired | 0.76         | <a href="#">PDF</a> |
| 21A22K1V25-T3                             | 21A22K1V25-T3-A | G1/4      |               |      |           |      | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   |                              |          | 14 / 203.1                          | Retired | 0.72         | <a href="#">PDF</a> |
| 21A22K1V25-T3<br>BDV08024CY               | 21A22K1V25-T3-B |           |               |      |           |      | 24VDC                          | 11W    |                              |          | 9 / 130.5                           | Retired | 0.73         | <a href="#">PDF</a> |

| Materials               |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Body                    | Low lead brass                                                                                                        |
| Armature Tube           | Stainless steel AISI series 300                                                                                       |
| Fixed Core              | Stainless steel AISI series 400                                                                                       |
| Plunger                 | Stainless steel AISI series 400                                                                                       |
| Phase Displacement Ring | Gold plated copper                                                                                                    |
| Spring                  | Stainless steel AISI series 300                                                                                       |
| Seal                    | V=FKM (fluoroelastomer)                                                                                               |
| Orifice                 | Stainless steel AISI series 300                                                                                       |
| Electrical Connections  | 18mm DIN 43650 Form A<br>With connector EN 175301-803 paragraph 5.3.1<br>Protection degree IP 65 EN 60529 (DIN 40050) |

\* NOMINAL VOLTAGE TOLERANCES: AC + 10% - 15%  
DC + 10% - 5%

The power values are indicative, as they change as a function of the magnetic kit used and of the application sector of reference. Other voltages and power absorptions are available.

ODE 10-09-2018

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.



# Solenoid Valve 2 Way / 2 Position N.C. Direct Acting



21A31K1V45-WT3  
Valve & Coil Shown

Direct acting solenoid valve for use with water and other compatible fluids.

Minimum operational pressure is not required.

The materials used and the tests carried out ensure maximum reliability and duration.

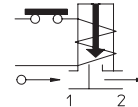
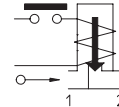
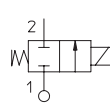
## Features

- Each valve and coil assembly is designated by the valve P/N followed by -A for 110VAC and -B for 24VDC
- Use in vending and other potable water applications
- G1/8 or G1/4
- Coil temperature: 180°C (356°F) (class H)
- Recommended ambient temperature range -20°C to +60°C (-4°F to +140°F)
- Electrical conformity IEC 335
- Protection degree IP 65 EN 60529 (DIN 40050) with coil fitted by connector.
- NSF/ANSI 169
- Accepts DIN 43650A cables



See our website  
[www.AutomationDirect.com](http://www.AutomationDirect.com)  
for a variety of cable options.

| Gaskets                 | Temperature     |                   | Medium            |
|-------------------------|-----------------|-------------------|-------------------|
| V=FKM (fluoroelastomer) | -10°C<br>(14°F) | +140°C<br>(284°F) | Water, Air, Steam |



| Solenoid Valve 2/2 Way N.C. Direct Acting |                                  |           |               |      |            |      |                                |        |                              |          |                                     |         |              |                     |
|-------------------------------------------|----------------------------------|-----------|---------------|------|------------|------|--------------------------------|--------|------------------------------|----------|-------------------------------------|---------|--------------|---------------------|
| Valve Part No.<br>Coil Part No.           | Order Code                       | Port Size | Max Viscosity | ø mm | Kv (l/min) | Cv   | Coil Voltage                   | Power* | Operating Pressure (bar/psi) |          |                                     | Price   | Weight (lbs) | Drawing Link        |
|                                           |                                  |           | cSt           |      |            |      |                                |        | Min                          | Max      | Max Operating Pressure Differential |         |              |                     |
| 21A31K1V45-WT3                            | <a href="#">21A31K1V45-WT3-A</a> | G1/8      | 53            | 4.5  | 6.5        | 0.45 | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   | 0 / 0                        | 40 / 580 | 10 / 145.0                          | Retired | 0.74         | <a href="#">PDF</a> |
| 21A31K1V45-WT3<br>BDV08024CY              | <a href="#">21A31K1V45-WT3-B</a> |           |               |      |            |      | 24VDC                          | 11W    |                              |          | 5 / 72.5                            | Retired | 0.76         | <a href="#">PDF</a> |
| 21A22K1V55-WT3                            | <a href="#">21A22K1V55-WT3-A</a> | G1/4      |               | 5.5  | 9          | 0.63 | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   |                              |          | 7 / 101.5                           | Retired | 0.71         | <a href="#">PDF</a> |
| 21A22K1V55-WT3<br>BDV08024CY              | <a href="#">21A22K1V55-WT3-B</a> |           |               |      |            |      | 24VDC                          | 11W    |                              |          | 2 / 29.0                            | Retired | 0.73         | <a href="#">PDF</a> |

| Materials               |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Body                    | Low lead brass                                                                                                        |
| Armature Tube           | Stainless steel AISI series 300                                                                                       |
| Fixed Core              | Stainless steel AISI series 400                                                                                       |
| Plunger                 | Stainless steel AISI series 400                                                                                       |
| Phase Displacement Ring | Gold plated copper                                                                                                    |
| Spring                  | Stainless steel AISI series 300                                                                                       |
| Seal                    | V=FKM (fluoroelastomer)                                                                                               |
| Orifice                 | Low lead brass                                                                                                        |
| Electrical Connections  | 18mm DIN 43650 Form A<br>With connector EN 175301-803 paragraph 5.3.1<br>Protection degree IP 65 EN 60529 (DIN 40050) |

\* NOMINAL VOLTAGE TOLERANCES: AC + 10% - 15%  
DC + 10% - 5%

The power values are indicative, as they change as a function of the magnetic kit used and of the application sector of reference. Other voltages and power absorptions are available.

ODE 10-09-2018

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.



# Solenoid Valve 2 Way / 2 Position N.C. With Pilot Control



21WN3K1E130-T5 Valve &  
Coil Shown

Solenoid valve with pilot control for use with water and other compatible fluids.

A minimum operational pressure of 0.2 bar (2.9 psi) is required.

The materials used and the tests carried out ensure maximum reliability and duration.

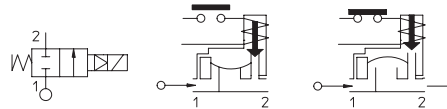
## Features

- Each valve and coil assembly is designated by the valve P/N followed by -A for 110VAC and -B for 24VDC
- Use in water and water distribution
- 3/8", 1/2", 3/4" and 1" NPT ports
- Coil temperature: 180°C (356°F) (class H)
- Recommended ambient temperature range -20°C to +60°C (-4°F to +140°F)
- Max. allowable temperature 82°C (179.6°F)
- Electrical conformity IEC 335
- Protection degree IP 65 EN 60529 (DIN 40050) with coil fitted by connector.
- NSF/ANSI/CAN/61
- Accepts DIN 43650A cables



See our website  
[www.AutomationDirect.com](http://www.AutomationDirect.com)  
for a variety of cable options.

| Gaskets                       | Temperature     |                   | Medium |
|-------------------------------|-----------------|-------------------|--------|
| E = EPDM (ethylene-propylene) | -10°C<br>(14°F) | +140°C<br>(284°F) | Water  |



## Solenoid Valve 2/2 Way N.C. With Pilot Control

| Valve Part No.<br>Coil Part No. | Order Code       | Port Size | Max Viscosity | ø mm | Kv (l/mn) | Cv  | Coil Voltage                   | Power* | Operating Pressure (bar/psi) |          |                                     | Price   | Weight (lbs) | Drawing Link        |
|---------------------------------|------------------|-----------|---------------|------|-----------|-----|--------------------------------|--------|------------------------------|----------|-------------------------------------|---------|--------------|---------------------|
|                                 |                  |           | cSt           |      |           |     |                                |        | Min                          | Max      | Max Operating Pressure Differential |         |              |                     |
| 21WN3K1E130-T5                  | 21WN3K1E130-T5-A | 3/8" FNPT | 12            | 13   | 60        | 4.1 | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   | 0.2 / 2.90                   | 25 / 363 | 16 / 232.1                          | Retired | 1.36         | <a href="#">PDF</a> |
| 21WN3K1E130-T5<br>BDV08024CY    | 21WN3K1E130-T5-B |           |               |      |           |     | 24VDC                          | 11W    |                              |          |                                     | Retired | 1.38         | <a href="#">PDF</a> |
| 21WN5K1E190-T5                  | 21WN5K1E190-T5-A | 3/4" FNPT | 19            | 140  | 9.8       | 9.8 | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   |                              |          |                                     | Retired | 2.48         | <a href="#">PDF</a> |
| 21WN5K1E190-T5<br>BDV08024CY    | 21WN5K1E190-T5-B |           |               |      |           |     | 24VDC                          | 11W    |                              |          |                                     | Retired | 2.51         | <a href="#">PDF</a> |

| Materials               |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Body                    | Low lead brass                                                                                                        |
| Armature Tube           | Stainless steel AISI series 300                                                                                       |
| Fixed Core              | Stainless steel AISI series 400                                                                                       |
| Plunger                 | Stainless steel AISI series 400                                                                                       |
| Phase Displacement Ring | Gold plated copper                                                                                                    |
| Spring                  | Stainless steel AISI series 300                                                                                       |
| Seal                    | E = EPDM (ethylene-propylene)                                                                                         |
| Orifice                 | Low lead brass                                                                                                        |
| Electrical Connections  | 18mm DIN 43650 Form A<br>With connector EN 175301-803 paragraph 5.3.1<br>Protection degree IP 65 EN 60529 (DIN 40050) |

\* NOMINAL VOLTAGE TOLERANCES: AC + 10% - 15%  
DC + 10% - 5%

The power values are indicative, as they change as a function of the magnetic kit used and of the application sector of reference. Other voltages and power absorptions are available.

ODE 10-09-2018

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# Solenoid Valve 2 Way / 2 Position N.C. With Pilot Control



21WN7K1E350-T3  
Valve & Coil Shown

Solenoid valve with pilot control for use with water and other compatible fluids.

A minimum operational pressure of 0.2 bar (2.9 psi) is required.

The materials used and the tests carried out ensure maximum reliability and duration.

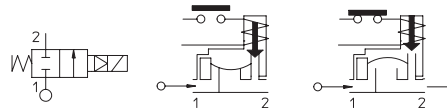
## Features

- Each valve and coil assembly is designated by the valve P/N followed by -A for 110VAC and -B for 24VDC
- Use in water and water distribution
- 1-1/4" and 1-1/2" NPT ports
- Coil temperature: 180°C (356°F) (class H)
- Recommended ambient temperature range -20°C to +60°C (-4°F to +140°F)
- Electrical conformity IEC 335
- Protection degree IP 65 EN 60529 (DIN 40050) with coil fitted by connector.
- NSF/ANSI 169
- Accepts DIN 43650A cables



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[www.AutomationDirect.com](http://www.AutomationDirect.com)  
for a variety of cable options.

| Gaskets                 | Temperature     |                   | Medium                    |
|-------------------------|-----------------|-------------------|---------------------------|
| V=FKM (fluoroelastomer) | -10°C<br>(14°F) | +140°C<br>(284°F) | Water, Water distribution |



## Solenoid Valve 2/2 Way N.C. With Pilot Control

| Valve Part No.<br>Coil Part No. | Order Code                       | Port Size   | Max Viscosity | ø mm | Kv (l/min) | Cv | Coil Voltage                   | Power* | Operating Pressure (bar/psi) |            |                                     | Price   | Weight (lbs) | Drawing Link        |
|---------------------------------|----------------------------------|-------------|---------------|------|------------|----|--------------------------------|--------|------------------------------|------------|-------------------------------------|---------|--------------|---------------------|
|                                 |                                  |             | cSt           |      |            |    |                                |        | Min                          | Max        | Max Operating Pressure Differential |         |              |                     |
| 21WN7K1V350-T3                  | <a href="#">21WN7K1V350-T3-A</a> | 1-1/4" FNPT | 12            | 35   | 400        | 28 | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   | 0.2 / 2.90                   | 16 / 232.1 | 10 / 145.0                          | Retired | 7.29         | <a href="#">PDF</a> |
| 21WN8K1V400-T3                  | <a href="#">21WN8K1V400-T3-A</a> | 1-1/2" FNPT |               | 40   | 520        | 36 | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   |                              |            |                                     | Retired | 6.57         | <a href="#">PDF</a> |
| 21WN8K1V400-T3<br>BDV08024CY    | <a href="#">21WN8K1V400-T3-B</a> |             |               |      |            |    | 24VDC                          | 11W    |                              |            |                                     | Retired | 6.57         | <a href="#">PDF</a> |

## Materials

|                         |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Body                    | Low lead brass                                                                                                        |
| Armature Tube           | Stainless steel AISI series 300                                                                                       |
| Fixed Core              | Stainless steel AISI series 400                                                                                       |
| Plunger                 | Stainless steel AISI series 400                                                                                       |
| Phase Displacement Ring | Gold plated copper                                                                                                    |
| Spring                  | Stainless steel AISI series 300                                                                                       |
| Seal                    | V=FKM (fluoroelastomer)                                                                                               |
| Orifice                 | Low lead brass                                                                                                        |
| Electrical Connections  | 18mm DIN 43650 Form A<br>With connector EN 175301-803 paragraph 5.3.1<br>Protection degree IP 65 EN 60529 (DIN 40050) |

\* NOMINAL VOLTAGE TOLERANCES: AC + 10% - 15%  
DC + 10% - 5%

The power values are indicative, as they change as a function of the magnetic kit used and of the application sector of reference. Other voltages and power absorptions are available.

ODE 10-09-2018

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# Solenoid Valve 2 Way / 2 Position N.C. With Pilot Control



21WN5K1E190-10T5  
Valve & Coil Shown

Solenoid valve with pilot control for use with water and other compatible fluids.

A minimum operational pressure of 0.2 bar (2.9 psi) is required.

The materials used and the tests carried out ensure maximum reliability and duration.

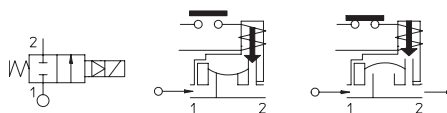
## Features

- Each valve and coil assembly is designated by the valve P/N followed by -A for 110VAC and -B for 24VDC
- Slow close operation reduces pressure spikes and water hammer
- Use in automation and heating
- 3/4" NPT ports
- Coil temperature: 180°C (356°F) (class H)
- Recommended ambient temperature range -20°C to +60°C (-4°F to +140°F)
- Electrical conformity IEC 335
- Protection degree IP 65 EN 60529 (DIN 40050) with coil fitted by connector.
- NSF/ANSI/CAN/61
- Accepts DIN 43650A cables



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[www.AutomationDirect.com](http://www.AutomationDirect.com)  
for a variety of cable options.

| Gaskets                       | Temperature     |                   | Medium |
|-------------------------------|-----------------|-------------------|--------|
| E = EPDM (ethylene-propylene) | -10°C<br>(14°F) | +140°C<br>(284°F) | Water  |



## Solenoid Valve 2/2 Way N.C. With Pilot Control

| Valve Part No.<br>Coil Part No. | Order Code         | Port Size | Max Viscosity | Ø mm | Kv (l/mn) | Cv  | Coil Voltage                   | Power* | Operating Pressure (bar / psi) |            |                                     | Price   | Weight (lbs) | Drawing Link        |
|---------------------------------|--------------------|-----------|---------------|------|-----------|-----|--------------------------------|--------|--------------------------------|------------|-------------------------------------|---------|--------------|---------------------|
|                                 |                    |           | cSt           |      |           |     |                                |        | Min                            | Max        | Max Operating Pressure Differential |         |              |                     |
| 21WN5K1E190-10T5                | 21WN5K1E190-10T5-A | 3/4" FNPT | 12            | 19   | 140       | 9.8 | 120VAC (60Hz)<br>110VAC (50Hz) | 15VA   | 0.2 / 2.90                     | 25 / 362.6 | 16 / 232.1                          | Retired | 2.52         | <a href="#">PDF</a> |
| 21WN5K1E190-10T5<br>BDV08024CY  | 21WN5K1E190-10T5-B |           |               |      |           |     | 24VDC                          | 11W    |                                |            |                                     | Retired | 2.5          | <a href="#">PDF</a> |

## Materials

|                         |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Body                    | Low lead brass                                                                                                        |
| Armature Tube           | Stainless steel AISI series 300                                                                                       |
| Fixed Core              | Stainless steel AISI series 400                                                                                       |
| Plunger                 | Stainless steel AISI series 400                                                                                       |
| Phase Displacement Ring | Gold plated copper                                                                                                    |
| Spring                  | Stainless steel AISI series 300                                                                                       |
| Seal                    | E = EPDM (ethylene-propylene)                                                                                         |
| Orifice                 | Low lead brass                                                                                                        |
| Electrical Connections  | 18mm DIN 43650 Form A<br>With connector EN 175301-803 paragraph 5.3.1<br>Protection degree IP 65 EN 60529 (DIN 40050) |

\* NOMINAL VOLTAGE TOLERANCES: AC + 10% - 15%  
DC + 10% - 5%

The power values are indicative, as they change as a function of the magnetic kit used and of the application sector of reference. Other voltages and power absorptions are available.

ODE 10-09-2018

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# ODE - Replacement Coils

ODE replacement solenoid coils are available in five popular voltages and fit all ODE solenoid valves sold by AutomationDirect.com.

## Features

- Used for ODE brass process valves only
- Coil: BDV - Coil housing material: PET - Black polyethylene - 180°C (class H)
- Winding: In class H
- Electrical Connections: With connector EN 175301-803 paragraph 5.3.1  
Protection degree IP 65 EN 60529 (DIN 40050)  
- accepts DIN 43650A cables



| ODE Water Valve Accessory Coils                                                   |                                   |                |              |                                 |                    |                 |                   |         |              |                            |
|-----------------------------------------------------------------------------------|-----------------------------------|----------------|--------------|---------------------------------|--------------------|-----------------|-------------------|---------|--------------|----------------------------|
| Coil Photo                                                                        | Part No.                          | Voltage Rating | Power Rating | Ambient Temperature             | Connection         | ED (Duty Cycle) | Approvals         | Price   | Weight (lbs) | Drawing Link               |
|  | <a href="#"><u>BDV08012CY</u></a> | 12VDC          | 11W          | -20°C to +60°C (-4°F to +140°F) | 18mm EN 175301-803 | 100%            | UL, CE, CSA & VDE | Retired | 0.33         | <a href="#"><u>PDF</u></a> |

\* NOMINAL VOLTAGE TOLERANCES: AC + 10% - 15%  
DC + 10% - 5%

The power values are indicative, as they change as a function of the magnetic kit used and of the application sector of reference.

See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.