SOLENOID VALVES 3/2, 5/2, 5/3 WAY

Solenoid 3/2 Way, Solenoid Spring



Solenoid 3/2 Way, Solenoid Solenoid



Solenoid 5/2 Way, Solenoid Spring



Solenoid 5/2 Way, Solenoid Solenoid



Solenoid 5/3 Way, Solenoid Spring Solenoid



Namur Solenoid 5/2 Way, Solenoid Spring



Namur Solenoid 5/2 Way, Solenoid Solenoid

Installation & Application Data

Before installing, be sure the valve hasn't been damaged in transit.

Use clean lubricated air filtered to $40\mu m$.

Be aware of the flow direction and port size.

Please note whether the installation conditions meet the technical requirements (such as voltage, actuation frequency, working pressure & temperature) before installing the valve.

Notice the flow direction of air during installation, P is the air input, A (B) is the outlet port & R (S) is the exhaust port.

Avoid freezing temperature and vibration.

Before use ensure fittings and tubes are clean.

Use PTFE tape correctly when connecting fittings.

To stop the ingress of dust use silencers in the exhaust ports.

After installation use the manual override to test the valve first.



SOLENDID VALVE (5/2 & 5/3 Way) DKV2DD SERIES

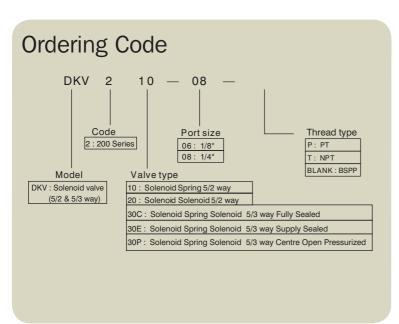
Specification

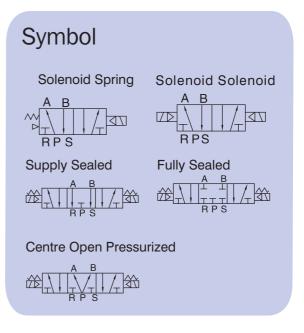
| Model | DKV210-06 DKV220-06 | DKV230C-06 DKV230E-06 DKV230P-06 | 06 DKV210-08 DKV230E-08 | | | |
|--------------------|----------------------------------|--|---|------------------|--|--|
| Fluid | | Air (to be filtered by | 40μm filter element) | | | |
| Acting | | Interna | al Piloted | | | |
| Port | 1/8 | 3" | Inlet & Outlet 1 | /4" Exhaust 1/8" | | |
| Orifice | 14.0mm ² (Cv=0.78) | 12.0mm ² (Cv = 0.67) | 16.0mm ² 12.0mm ² (Cv = 0.89) (Cv = 0.67) | | | |
| Valve Type | 5/2 | 5/3 | 5/2 5/3 | | | |
| Operating Pressure | | 0.15-0.8MP | a (21–114psi) | | | |
| Proof Pressure | | 1.5MPa | a(215psi) | | | |
| Temperature | | -20 | to +70°C | | | |
| Material of Body | | Alumin | um Alloy | | | |
| Lubrication | | Not re | equired | | | |
| Max. frequency | 5 cycle/sec | 3 cycle/sec | 5 cycle/sec | 3 cycle/sec | | |
| Weight | DKV210-06 220g DKV220-06 320g | 360 g | DKV210-08 220g DKV220-08 320g | 360g | | |



G threads as standard. PT & NPT threads are available on request.

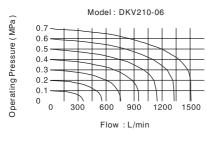
If using lubricants the practice must remain constant for the life of the valve. Lubricants like ISO VG32 or the equivalent are recommended.

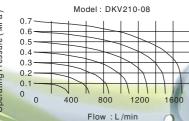




Please refer to Page 15 for manifold specification and the order way.

Flow Charts





Product Features

Pilot-oriented mode has optional internal or external pilots.

Sliding spool has tight tolerances.

Three position valves have three different central functions.

Double control solenoid valves have memory function.

Internal orifice adopts special processing technology giving low friction and long service life.

Lubrication is not necessary but once oil is introduced to the valve it must be continued.

Manifold bases are available for 5/2 valves to save installation space.

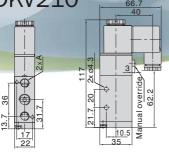
Valves have manual override for test purposes.

Several standard voltages are available.

SOLENOID VALVE (5/2 & 5/3 WAY) DKV200 SERIES

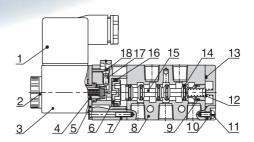
Dimensions

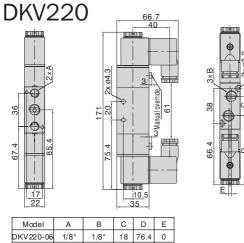
DKV210

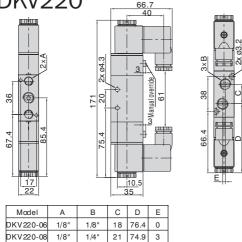


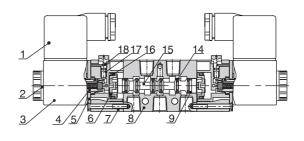
| Model | Α | В | С | D | Е |
|-----------|------|------|----|------|---|
| DKV210-06 | 1/8" | 1/8" | 18 | 22.7 | 0 |
| DKV210-08 | 1/8" | 1/4" | 21 | 21.2 | 3 |

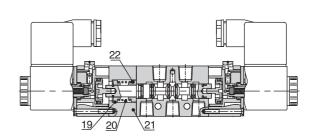
Inner Structure



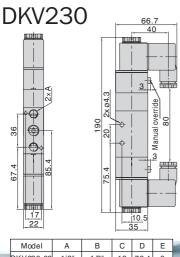








| No. | Item | No. | Item | No. | Item |
|-----|-------------|-----|------------------|-----|-----------------|
| 1 | Connector | 9 | Wearing Ring | 17 | Override Spring |
| 2 | Coil Nut | 10 | End Cover | 18 | Manual Override |
| 3 | Coil | 11 | Fixed Screw | 19 | Spring Holder |
| 4 | Armature | 12 | Spool Spring | 20 | Return Spring |
| 5 | Fixed Plate | 13 | End Cover Gasket | 21 | Side Cover |
| 6 | Piston | 14 | Spool O-ring | 22 | Spring Holder |
| 7 | Pilot Kit | 15 | Spool | | |
| 8 | Body | 16 | Piston O-ring | | |



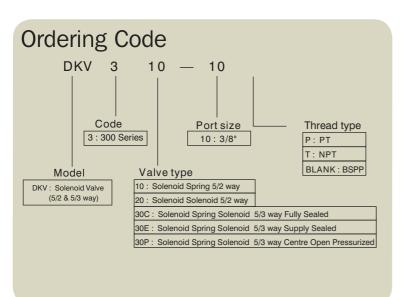
| | Model | Α | В | С | D | Е |
|---|-----------|-----------|------|----|------|---|
| | DKV230-06 | 1/8" | 1/8" | 18 | 76.4 | 0 |
| ě | DKV230-08 | 1/8" | 1/4" | 21 | 74.9 | 3 |
| - | | A CHARLES | | | | |

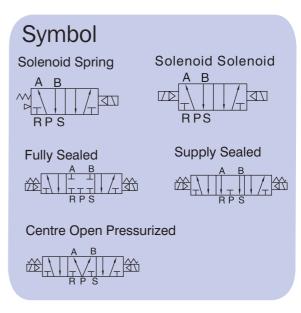
SOLENDID VALVE (5/2 & 5/3 WAY) DKV300 SERIES

Specification

| Model | DKV310-10 DKV320-10 | DKV330C-10 DKV330E-10 DKV330P-10 | | |
|--------------------|-----------------------------------|--|--|--|
| Fluid | Air (to be filtered by | 40μm filter element) | | |
| Acting | Internal | Piloted | | |
| Port | Inlet & Outlet 3/8" | Exhaust 1/4" | | |
| Orifice | 30.0mm ² (C v=1.68) | 18.0mm ² (Cv=1.00) | | |
| Valve Type | 5/2 | 5/3 | | |
| Operating Pressure | 0.15-0.8MPa (21-114psi) | | | |
| Proof Pressure | 1.5MPa | (215psi) | | |
| Temperature | -20 to | o +70°C | | |
| Material of Body | Aluminu | ım Alloy | | |
| Lubrication | Not required | | | |
| Max. frequency | 4 cycle/sec | 3 cycle/sec | | |
| Weight | DKV310-10 310g DKV320-10 400g | 450g | | |



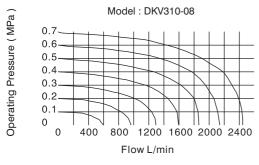


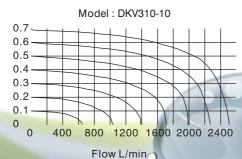


Please refer to Page 15 for manifold specification and the order way.

Flow Chart

Operating Pressure (MPa)





Product Features

Pilot-oriented mode has optional internal or external pilots.

Sliding spool has tight tolerances.

Three position valves have three different central functions.

Double control solenoid valves have memory function.

Internal orifice adopts special processing technology giving low friction and long service life.

Lubrication is not necessary but once oil is introduced to the valve it must be continued.

Manifold bases are available for 5/2 valves to save installation space.

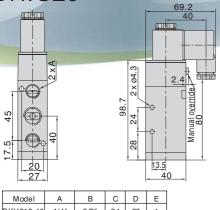
Valves have manual override for test purposes.

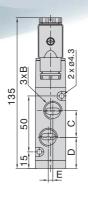
Several standard voltages are available

SOLENOID VALVE (5/2 & 5/3 WAY) DKV300 SERIES

Dimensions

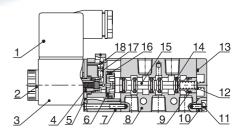
DKV310

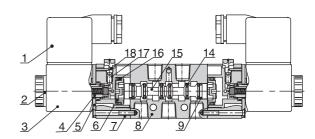


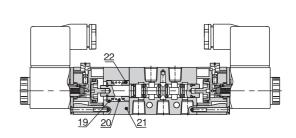


190

Inner Structure

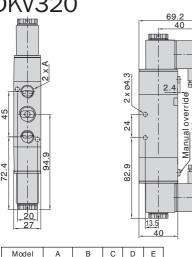






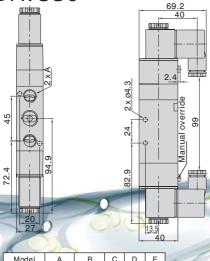
| No. | Item | No. | Item | No. | Item |
|-----|-------------|-----|------------------|-----|-----------------|
| 1 | Connector | 9 | Wearing Ring | 17 | Override Spring |
| 2 | Coil Nut | 10 | End Cover | 18 | Manual Override |
| 3 | Coil | 11 | Fixed Screw | 19 | Spring Holder |
| 4 | Armature | 12 | Spool Spring | 20 | Return Spring |
| 5 | Fixed Plate | 13 | End Cover Gasket | 21 | Side Cover |
| 6 | Piston | 14 | Spool O-ring | 22 | Spring Holder |
| 7 | Pilot Kit | 15 | Spool | | |
| 8 | Body | 16 | Piston O-ring | | |

DKV320

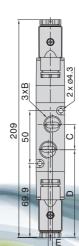


| | | | - | 40 |
|------|-----------|---------------|--------------------|---------------------------|
| Α | В | С | D | Е |
| 1/4" | 3/8" | 24 | 82.9 | 4 |
| | A 1/4" | A B 1/4" 3/8" | A B C 1/4" 3/8" 24 | A B C D 1/4" 3/8" 24 82.9 |

DKV330



| | | A 1 | 9 | | | |
|---|-----------|------|------|----|------|---|
| | Model | Α | В | С | D | Е |
| y | DKV330-10 | 1/4" | 3/8" | 24 | 82.9 | 4 |

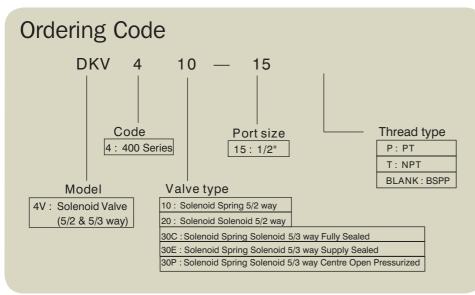




SOLENDID VALVE (5/2 & 5/3 WAY) DKV4DD SERIES

Specification

| Model | DKV410-15 | DKV 420-15 | DKV430C-15 | DKV430E-15 | DKV430P-15 | |
|--------------------|---------------------|---|-------------------|--------------|------------|--|
| Fluid | | Air (to be fil | tered by 40µm fil | ter element) | | |
| Acting | | | Internal Piloted | | | |
| Port | | | 1/2" | | | |
| Orifice | 50.0mm ² | 50.0mm ² (Cv=2.79) 30.0mm ² (Cv=1.68) | | | | |
| Valve Type | 5/2 5/3 | | | | | |
| Operating Pressure | | 0.15-0.8MPa (21-114psi) | | | | |
| Proof Pressure | | | 1.5MPa (215psi) | ı | | |
| Temperature | | | -20 to +70°C | | | |
| Material of Body | | | Aluminum Alloy | | | |
| Lubrication | Not required | | | | | |
| Max. frequency | 3 cycle/sec | | | | | |
| Weight | 590g 720g 770g | | | | | |



Please refer to Page 15 for manifold specification and the order way.

Product Features

Pilot-oriented mode has optional internal or external pilots.

Sliding spool has tight tolerances.

Three position valves have three different central functions.

Double control solenoid valves have memory function.

Internal orifice adopts special processing technology giving low fric tion and long service life.

Lubrication is not necessary but once oil is introduced to the valve it must be continued.

Manifold bases are available for 5/2 valves to save installation space.

Valves have manual override for test purposes.

Several standard voltages are available.

Symbol

Solenoid Spring



Solenoid Solenoid



Fully Sealed



Supply Sealed

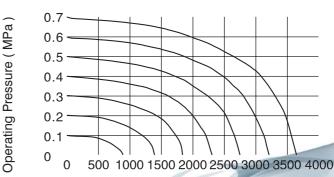


Centre Open Pressurized



Flow Chart

Model: DKV410-15

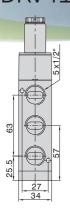


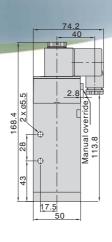
Flow L/min

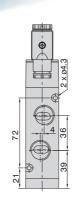
SOLENDID VALVE (5/2 & 5/3 WAY) DKV400 SERIES

Dimensions

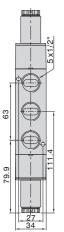
DKV410

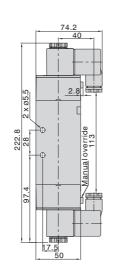


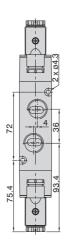




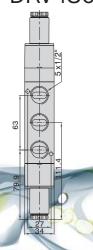
DKV420

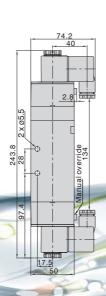


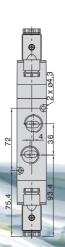




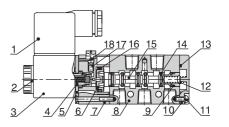
DKV430

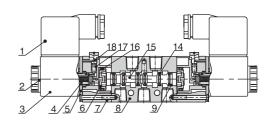


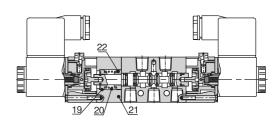




Inner Structure







| No. | Item | No. | Item | No. | Item |
|-----|-------------|-----|------------------|-----|-----------------|
| 1 | Connector | 9 | Wearing Ring | 17 | Override Spring |
| 2 | Coil Nut | 10 | Bottom Cover | 18 | Manual Override |
| 3 | Coil | 11 | Fixed Screw | 19 | Spring Holder |
| 4 | Armature | 12 | Spool Spring | 20 | Return Spring |
| 5 | Fixed Plate | 13 | End Cover Gasket | 21 | Side Cover |
| 6 | Piston | 14 | Spool O-ring | 22 | Spring Holder |
| 7 | Pilot Kit | 15 | Spool | | |
| 8 | Body | 16 | Piston O-ring | | |

