

PILOT VALVES (5/2 & 5/3 WAY)



5/2 Way Valves -Pilot Spring

5/2 Way Valves -Pilot Pilot

5/3 Way Valves -Pilot Spring Pilot

Installation & Application Data

- 1) Before installing, be sure the valve hasn't been damaged in transit.
- 2) It is suggested to use clean lubricated air filtered to $40\mu\text{m}$. Be aware of the flow direction and port size.
- 3) Please note that the installation conditions meet the technical requirements (such as actuation frequency, working pressure and temperature before installing the valve).
- 4) Notice the flow direction of air during installation, P is the air input port, A (B) is the outlet ports and R (S) is the exhaust ports.
- 5) Avoid freezing temperatures and vibration.



PILOT, LOGIC & SPECIALIST VALVES

PILOT VALVE (5/2 & 5/3 WAY)

DKA200 SERIES

Specification

Model	DKA210-06 DKA220-06	DKA230C-06 DKA230E-06 DKA230P-06	DKA210-08 DKA220-08	DKA230C-08 DKA230E-08 DKA230P-08
Fluid	Air (to be filtered by 40µm filter element)			
Acting	Exterior Control			
Port	1/8"		Inlet & Outlet 1/4" Exhaust 1/8"	
Orifice	14.0mm ² (Cv=0.78)	12.0mm ² (Cv=0.67)	16.0mm ² (Cv=0.89)	12.0mm ² (Cv=0.67)
Valve Type	5/2	5/3	5/2	5/3
Operating Pressure	0.15-0.8MPa(21-114psi)			
Proof Pressure	1.5MPa(215psi)			
Temperature	-20 to + 70C			
Material of Body	Aluminum Alloy			
Lubrication	Not required			
Max. Frequency	5 cycle/sec	3 cycle/sec	5 cycle/sec	3 cycle/sec
Weight	DKA210-06 185g DKA220-06 285g	365g	DKA210-08 185g DKA220-08 285g	365g

- G threads as standard. PT & NPT thread are available on request
- If using lubricants the practice must remain constant for the life of the valve.
Lubricants like ISO VG32 or equivalent are recommended;
- The maximum actuation frequency is in the no-load state.

Symbol

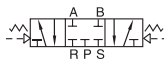
Pilot Spring



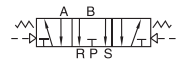
Pilot Pilot



Fully Sealed



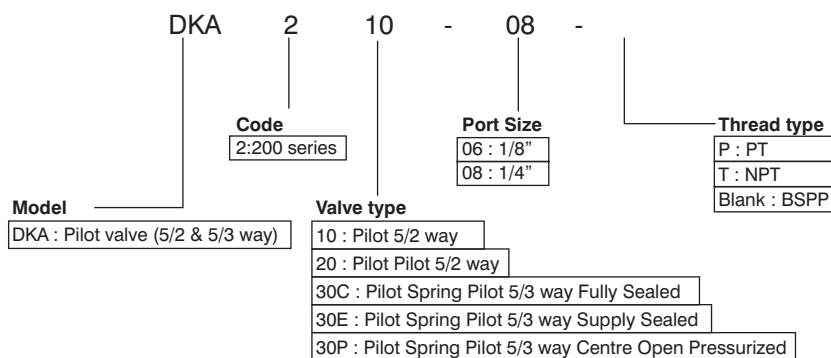
Supply Sealed



Centre Open Pressurized

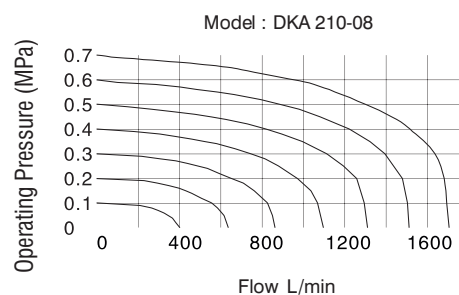
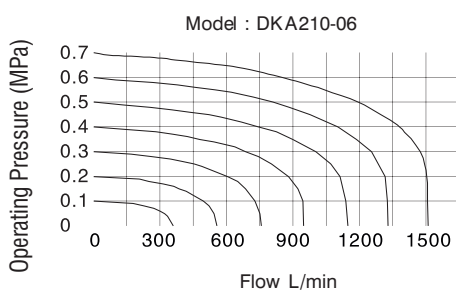


Ordering Code



Please refer to pages 11 & 12 for manifolds to suit

Flow Chart



Product Features

- Close tolerance sliding spool for quick reaction
- Double pilot valves have memory function
- Low friction, low start pressure and long service life
- No need to add oil for lubrication
- Multi-mounting for ease of installation

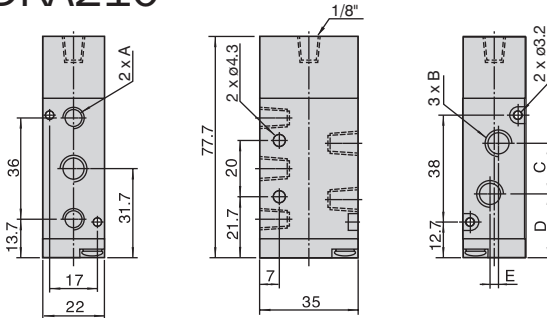
VALVES

PILOT VALVE (5/2 & 5/3 WAY) DKA200 SERIES

Dimensions

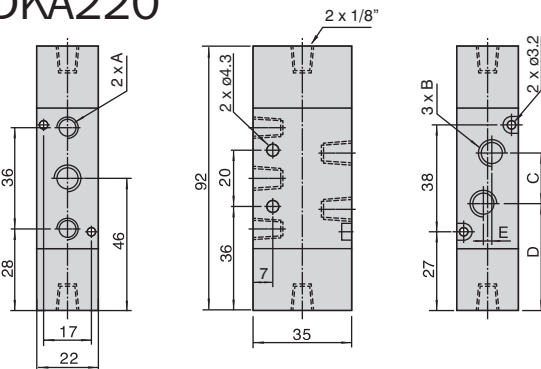
Inner Structure

DKA210



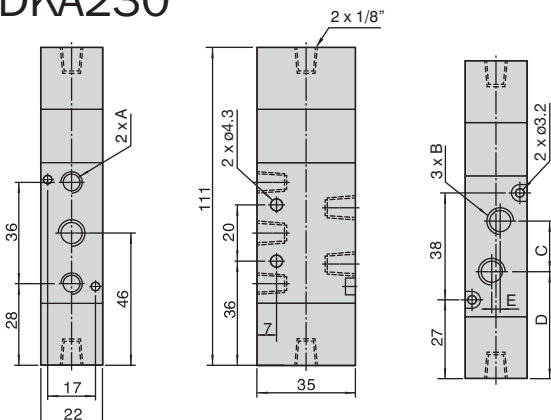
Model	A	B	C	D	E
DKA210-06	1/8"	1/8"	18	22.7	0
DKA210-08	1/8"	1/4"	21	21.2	3

DKA220

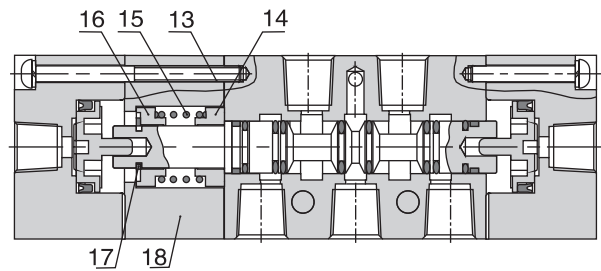
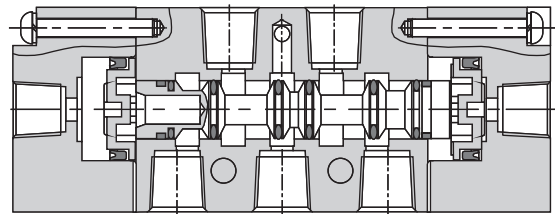
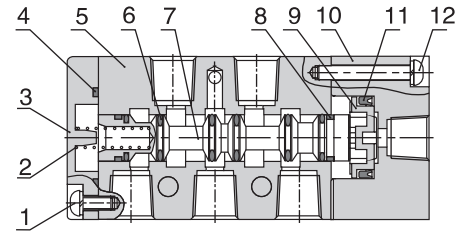


Model	A	B	C	D	E
DKA220-06	1/8"	1/8"	18	37	0
DKA220-08	1/8"	1/4"	21	35.5	3

DKA230



Model	A	B	C	D	E
DKA230-06	1/8"	1/8"	18	37	0
DKA230-08	1/8"	1/4"	21	35.5	3



No.	Item	No.	Item
1	End Cover	10	Pilot Body
2	Spool Spring	11	Piston O-ring
3	End Cover	12	Pilot Screw
4	End Cover Gasket	13	Pilot Screw
5	Body	14	Return Seat
6	Spool O-ring	15	Return Spring
7	Spool	16	Return Seat
8	Wear Ring	17	E clip
9	Piston	18	Side Cover

VALVES

PILOT VALVE (5/2 & 5/3 WAY) DKA300 SERIES

Specification

Model	DKA310-10 DKA320-10		DKA330C-10 DKA330E-10 DKA330P-10	
Fluid	Air (to be filtered by 40µm filter element)			
Acting	Exterior Control			
Port	Inlet & Outlet 3/8" Exhaust 1/4"			
Orifice	30.0mm ² (Cv=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 +70°C			
Material of Body	Aluminium Alloy			
Lubrication	Not required			
Max. Frequency	4 cycle/sec	3 cycle/sec	4 cycle/sec	3 cycle/sec
Weight	DKA310-10 275g DKA320-10 365g		505g	

1. G threads as standard, PT & NPT threads are available on request.
2. If using lubricants the practice must remain constant for the like of the valve. Lubricants like ISO VG32 or equivalent are recommended.
3. The maximum actuation frequency is in the no-load state.

Symbol

Pilot Spring



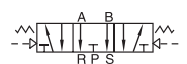
Pilot Pilot



Fully Sealed



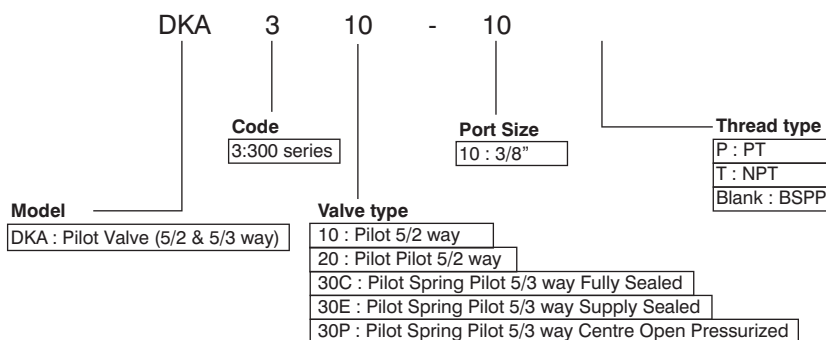
Supply Sealed



Centre Open Pressurized



Ordering Code

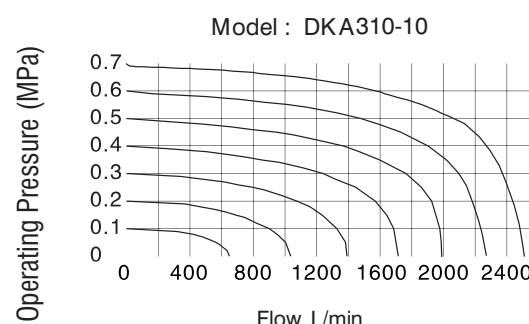
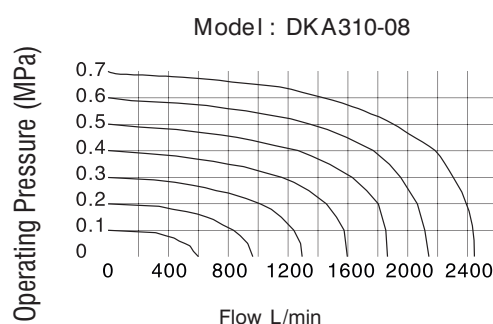


Please refer to pages 11 & 12 for manifolds to suit

Product Features

1. Close tolerance sliding spool for quick reaction
2. Three functions of 5/3 way valves Fully Sealed, Supply Sealed, & Centre Open Pressurized in mid position
3. Double pilot valves have memory function
4. Low friction, low start pressure and long service life
5. No need to add oil for lubrication
6. Multi-mounting for ease of installation

Flow Chart

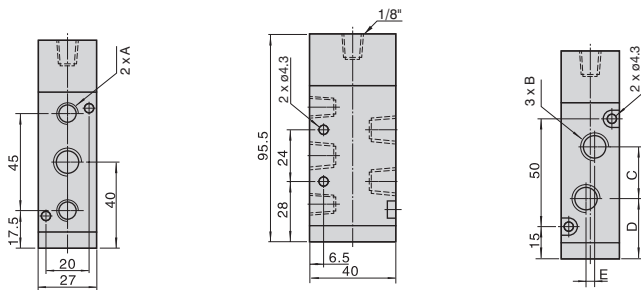


PILOT, LOGIC & SPECIALIST VALVES

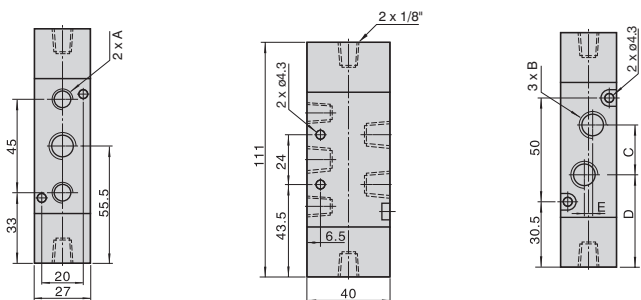
PILOT VALVE (5/2 & 5/3 WAY) DKA300 SERIES

Dimensions

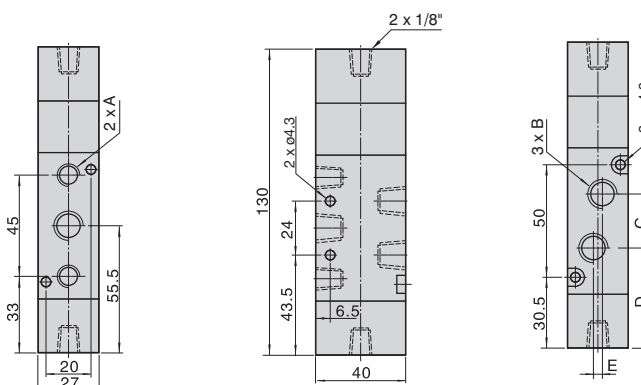
Inner Structure



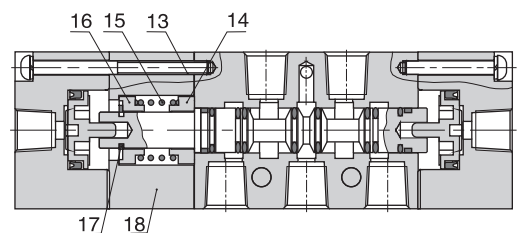
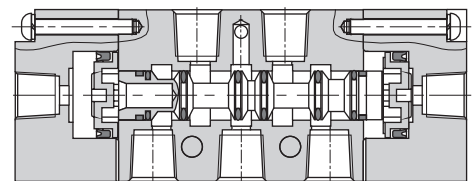
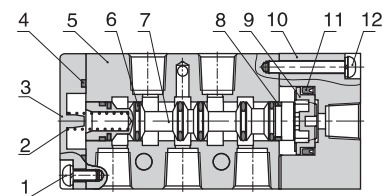
Model	A	B	C	D	E
DKA310-10	1/4"	3/8"	24	28	4



Model	A	B	C	D	E
DKA320-10	1/4"	3/8"	24	43.5	4



Model	A	B	C	D	E
DKA330-10	1/4"	3/8"	24	43.5	4



No.	Item	No.	Item
1	End Cover	10	Pilot Body
2	Spool Spring	11	Piston O-ring
3	End Cover	12	Pilot Screw
4	End Cover Gasket	13	Pilot Screw
5	Body	14	Return Seat
6	Spool O-ring	15	Return Spring
7	Spool	16	Return Seat
8	Wear Ring	17	E clip
9	Piston	18	Side Cover

PILOT VALVE (5/2 & 5/3 WAY) DKA400 SERIES

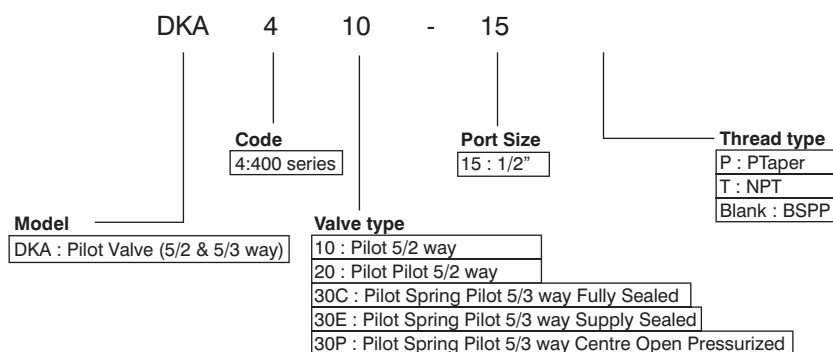


Specification

Model	DKA410-15	DKA420-15	DKA430C-15	DKA430E-15	DKA430P-15
Fluid	Air (to be filtered by 40µm filter element)				
Acting	Exterior Control				
Port	1/2"				
Orifice	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)				
Temperature	-2 0 to +70°C				
Material of Body	Aluminum Alloy				
Lubrication	Not required				
Max. Frequency	3 cycle/sec				
Weight	550g	685g			735g

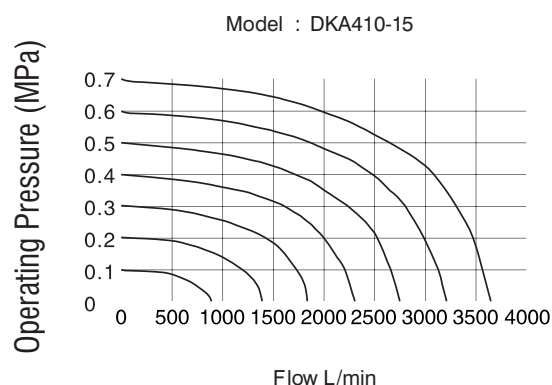
- G threads as standard, PT & NPT threads are available on request.
- If using lubricants the practice must remain constant for the like of the valve. Lubricants like ISO VG32 or equivalent are recommended.
- The maximum actuation frequency is in the no-load state.

Ordering Code



Please refer to page 10 & 11 for manifolds to suit

Flow Chart

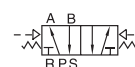


Symbol

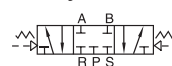
Pilot Spring



Pilot Pilot



Fully Sealed



Supply Sealed



Centre Open Pressurized



Product Features

Close tolerance sliding spool for quick reaction.

Three functions of 5/3 way valves Fully Sealed, Supply Sealed, & Centre Open Pressurized in mid position.

Low friction, low start pressure and long service life.

No need to add oil for lubrication.

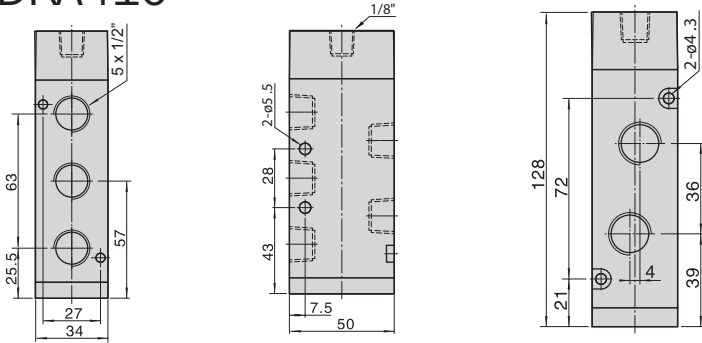
Multi-mounting for ease of installation.

PILOT VALVE (5/2 & 5/3 WAY) DKA400 SERIES

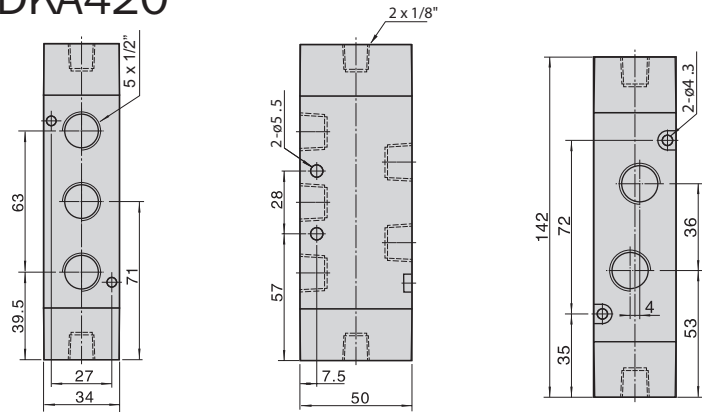


Dimensions

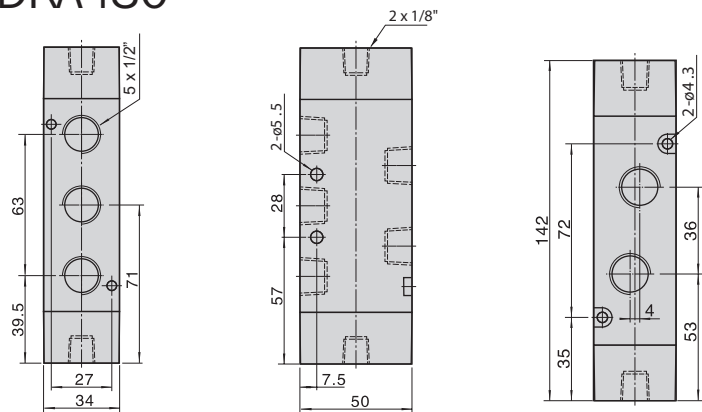
DKA410



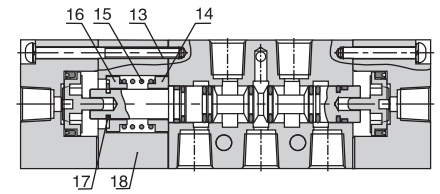
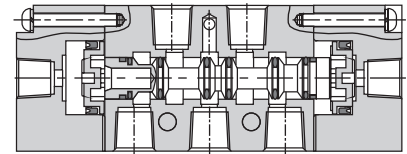
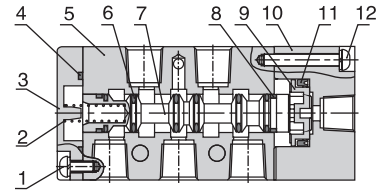
DKA420



DKA430



Inner Structure



No.	Item	No.	Item
1	End Cover	10	Pilot Body
2	Spool Spring	11	Piston O-ring
3	End Cover	12	Pilot Screw
4	End Cover Gasket	13	Pilot Screw
5	Body	14	Return Seat
6	Spool O-ring	15	Return Spring
7	Spool	16	Return Seat
8	Wear Ring	17	E clip
9	Piston	18	Side Cover