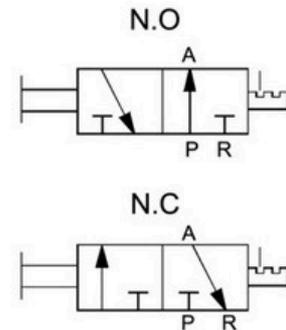




Symbol



Specifications

Item/Type	3L110-06	3L210-06	3L210-08	3L310-08	3L310-10
Fluid	Air				
Type of actuation	3 port 2 position				
Port size	In=Out=PT1/8		In=Out=PT1/4		In=Out=PT3/8
Orifice size	12mm ² (Cv=0.67)	14mm ² (Cv=0.78)	16mm ² (Cv=0.89)	25mm ² (Cv=1.39)	30mm ² (Cv=1.67)
Operating pressure range	0-0.8 MPa				
Proof pressure	1.2 MPa				
Ambient and fluid temperature	-5-60 °C (No freezing)				

How to Order

3L 1 10 - 06 - NO

Action

NO	Normal close	NC	Normal open
----	--------------	----	-------------

Port size

06	PT1/8	08	PT1/4	10	PT3/8
----	-------	----	-------	----	-------

Type of actuation

10	3 port 2 position
----	-------------------

Series

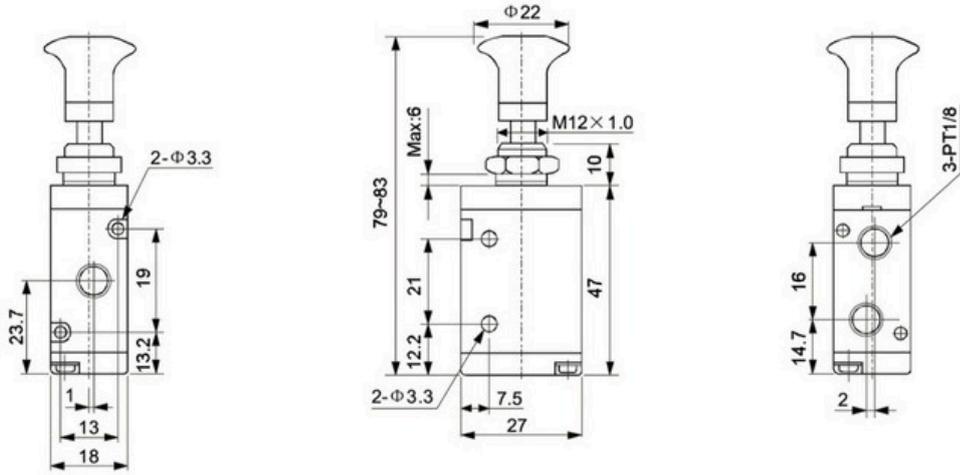
1	100 series	2	200 series	3	300 series
---	------------	---	------------	---	------------

Model

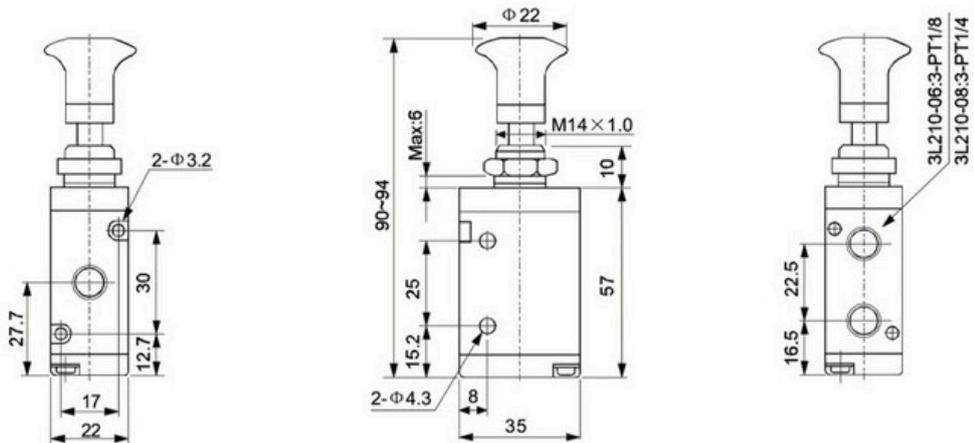
3L	3 port 2 position push-pull valve
----	-----------------------------------

◆ **Dimensions**

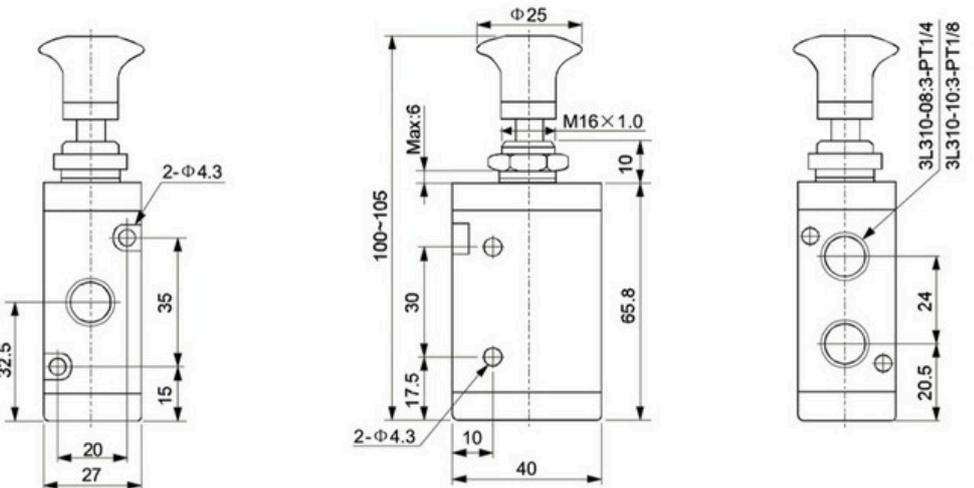
3L110



3L210

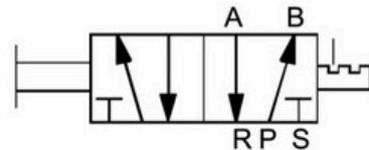


3L310





Symbol

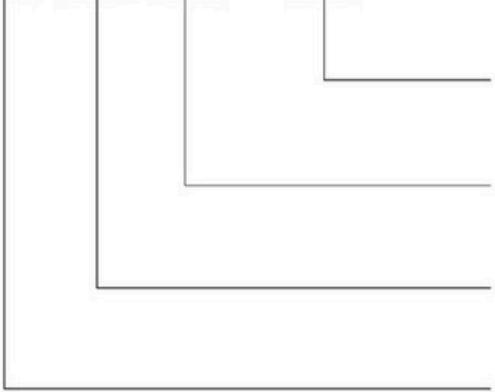


◆ Specifications

Item/Type	4L110-06	4L210-06	4L210-08	4L310-08	4L310-10
Fluid	Air				
Type of actuation	5 port 2 position				
Port size	In=Out=PT1/8		In=Out=PT1/4		In=Out=PT3/8
Orifice size	12mm ² (Cv=0.67)	14mm ² (Cv=0.78)	16mm ² (Cv=0.89)	25mm ² (Cv=1.39)	30mm ² (Cv=1.67)
Operating pressure range	0~0.8 MPa				
Proof pressure	1.2 MPa				
Ambient and fluid temperature	-5~60 °C(No freezing)				

◆ How to Order

4L 1 10 - 06



Port size

06	PT1/8	08	PT1/4	10	PT3/8
----	-------	----	-------	----	-------

Type of actuation

10	5 port 2 position
----	-------------------

Series

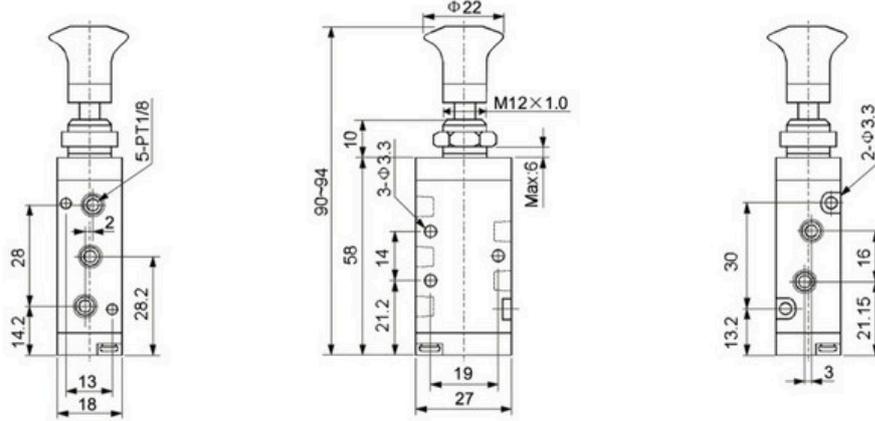
1	100 series	2	200 series	3	300 series
---	------------	---	------------	---	------------

Model

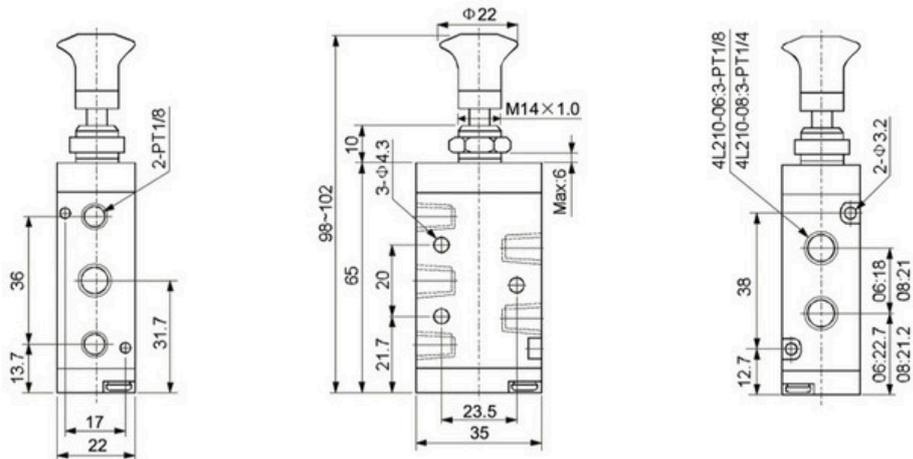
4L	5 port 2 position push-pull valve
----	-----------------------------------

◆ **Dimensions**

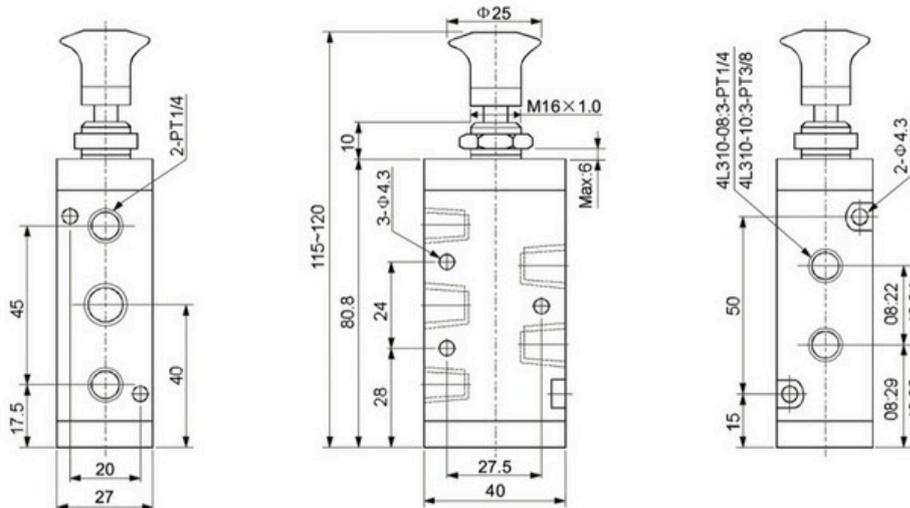
4L110



4L210



4L310



◆ How to Order



HV 400 02 B

Port type

Nil	Pipe connection type
B	Plate connection type

Port size

02	1/4	03	3/8	04	1/2
----	-----	----	-----	----	-----

Code

400	4 port 3 position
-----	-------------------

Model

HV	Hand Lever Valve
----	------------------



K 34 R8 L8

Port size

L6	1/8	L8	1/4
----	-----	----	-----

Type of actuation

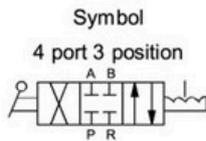
R8	Hand-switching Valve
----	----------------------

Code

24	4 port 2 position
34	4 port 3 position

Model

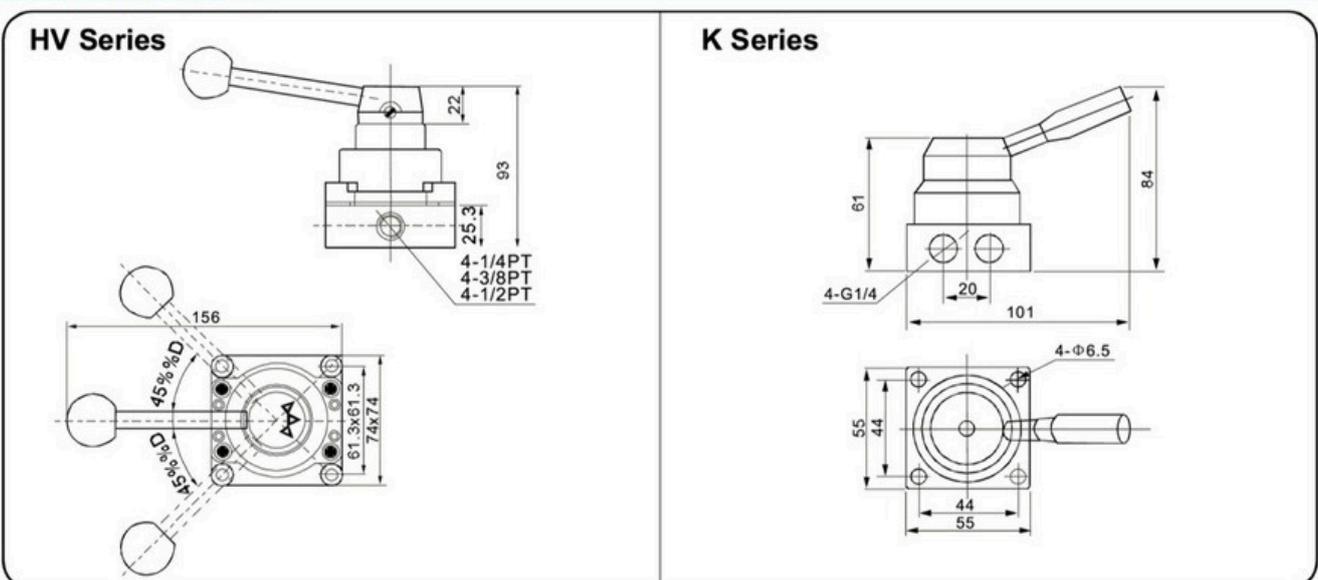
K	Hand Lever Valve
---	------------------

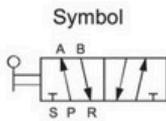


◆ Specifications

Model	HV400-02	HV400-03	HV400-04	K34R8-L6	K34R8-L8
Fluid	Air				
Port size	1/4	3/8	1/2	1/8	1/4
Flow area	30mm ² (Cv=1.68)			18mm ² (Cv=1.00)	
Operating pressure range	0~0.8 MPa				
Ambient and fluid temperature	0~60°C				

◆ Dimensions





◆ How to Order

4H 2 10 - 06

Port size

06	PT1/8	08	PT1/4	10	PT3/8
----	-------	----	-------	----	-------

Type of actuation

10	Single head double position
----	-----------------------------

Series

2	200 series	3	300 series
---	------------	---	------------

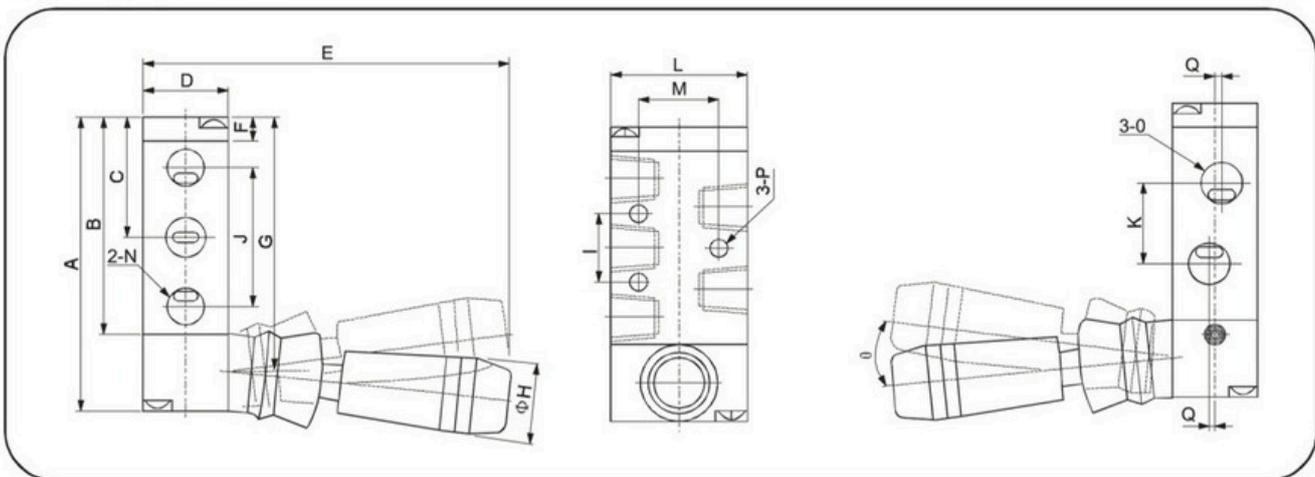
Model

4H	5 port 2 position Hand lever valve
3H	3 port 2 position Hand lever valve

◆ Specifications

Item/Type	4H210-06	4H210-08	4H310-08	4H310-10
Fluid	Air			
Type of actuation	5 port 2 position			
Orifice size	14mm ² (Cv=0.78)	16mm ² (Cv=0.89)	25mm ² (Cv=1.39)	30mm ² (Cv=1.67)
Port size	In=Out=Exhaust=PT1/8	In=Out=PT1/4 Exhaust=PT1/8	In=Out=Exhaust=PT1/4	In=Out=PT3/8 Exhaust=PT1/4
Operating pressure range	0~0.8 MPa			
Ambient and fluid temperature	-5~60°C (No freezing)			
Lubrication	Not required			
Operating angle	± 15°			

◆ Dimensions



Item/Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	θ
4H210-06	76.7	56.5	31.5	22	95	6.5	66.5	Φ19	20	36	18	35	23.5	PT1/8	PT1/8	Φ4.3	-	15.8
4H210-08	76.7	56.5	31.5	22	95	6.4	66.5	Φ19	20	36	21	35	23.5	PT1/8	PT1/4	Φ4.3	1.5	15.8
4H310-08	92.5	72.5	40	27	100	7.5	66.5	Φ19	24	45	22	40	27.5	PT1/4	PT1/4	Φ4.3	-	17.5
4H310-10	92.5	72.5	40	27	100	7.5	66.5	Φ19	24	45	24	40	27.5	PT1/4	PT3/8	Φ4.3	2	17.5

Product Description

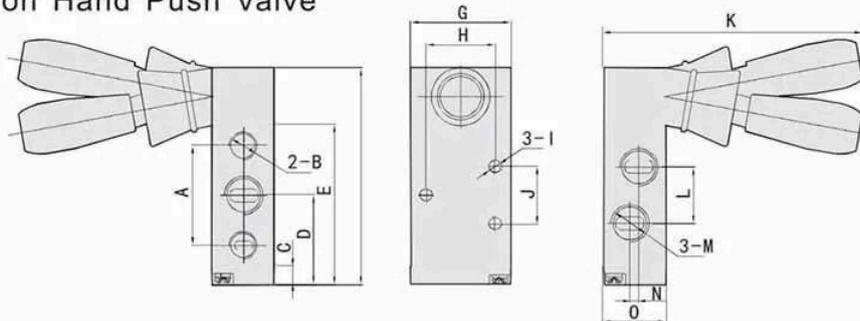


Ordering Code H Series Push Valve

4 H	2	10	-	08
Type Code	Series Code	Ways		Joint Size
3H: 3Port, 2Position 4H: 5Port, 2(3) Position	1:100 Series 2:200 Series 3:300 Series 4:400 Series	10:Single Control 30C:Double Control		M5:M5 06:G1/8" 08:G1/4" 10:G3/8" 15:G1/2"
		Center Pressure		

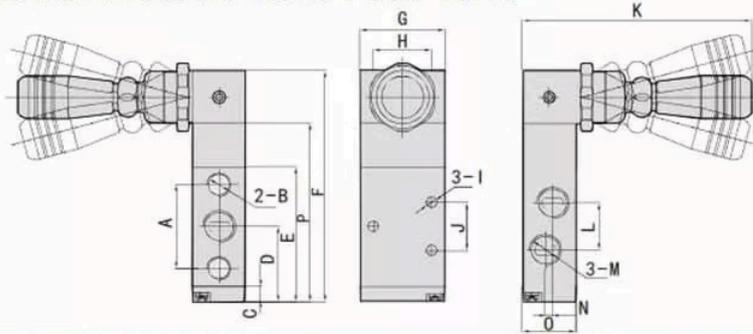
Main Dimensions

5Port, 2Position Hand Push Valve



Modle	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
4H110-06	28	G1/8	6.5	28	49.5	69.5	27	19	3.3	14	87.5	16	G1/8	3	18
4H210-06	35	G1/4	6.5	31.5	76.5	76.5	35	24	4.3	20	90	20	G1/4	3	22
4H310-08	45	G3/8	7.5	40	92.5	92.5	40	28	4.3	24	96.5	24	G3/8	4	27
4H410-08	63	G1/2	7.5	54.5	129.5	129.5	50	36	5.5	28	105	36	G1/2	4	34

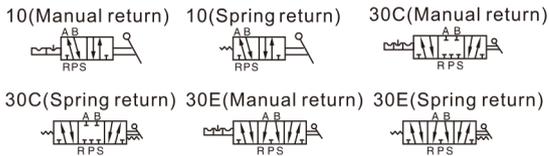
5Port, 3Position Center Pressure Hand Push Valve



Modle	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
4H130C-06	28	G1/8	6.5	28	49.5	84.5	27	19	Φ3.5	14	94.5	16	G1/8	3	18	64.5
4H230C-08	35	G1/4	6.5	31.5	56.5	97	35	24	Φ4.3	20	95.5	20	G1/4	3	22	75
4H330C-10	44	G3/8	7.5	40	72.5	113.5	40	28	Φ4.3	24	100	24	G3/8	4	27	91.5
4H430C-15	63	G1/2	7.5	54.5	101.5	152	50	36	Φ5.5	28.5	108	35	G1/2	4	34	124



Symbol



Specification

Model	210-06	230-06	210-08	230-08	310-08	330-08	310-10	330-10
Fluid	Air (to be filtered by 40 µm filter element)							
Operating	Manual control direct acting type)							
Port size[Note1]	In=Out =Exhaust= $G\frac{1}{8}$ "		In=Out= $G\frac{1}{4}$ " ; Exhaust= $G\frac{1}{8}$ "		In=Out =Exhaust= $G\frac{1}{4}$ "		In=Out= $G\frac{3}{8}$ " ; Exhaust= $G\frac{1}{4}$ "	
Orifice size(Cv)	14.0mm ² (Cv=0.78)	12.0mm ² (Cv=0.67)	16.0mm ² (Cv=0.89)	12.0mm ² (Cv=0.67)	25.0mm ² (Cv=1.39)	18.0mm ² (Cv=1.00)	30.0mm ² (Cv=1.67)	18.0mm ² (Cv=1.00)
Valve type	5/2 way	5/3 way	5/2 way	5/3 way	5/2 way	5/3 way	5/2 way	5/3 way
Lubrication [Note2]	Not required							
Pressure range	0~0.8MPa(0~116psi)							
Proof pressure	1.5MPa(215psi)							
Temperature	-20~70°C							
Material of body	Aluminum alloy							
Operating angle	±15°	±8.5°	±15°	±8.5°	±18°	±10°	±18°	±10°

[Note1] PT thread, G thread and NPT thread are available;

[Note2] Once lubricated air is used, continue with same medium to optimise valve life span. It is suggested to use ISO VG32 lubricant or the oil with the same grade.

Product feature

1. Manual operation, smooth actuation, and exact and reliable orientation.
2. Sliding column structure has good tightness and light weight and is easy to install and dismount.
3. Internal hole adopts special processing technology which has little attrition friction, long service life.
4. No need to add oil for lubrication.
5. Panel-mounting makes it convenient to install and apply.

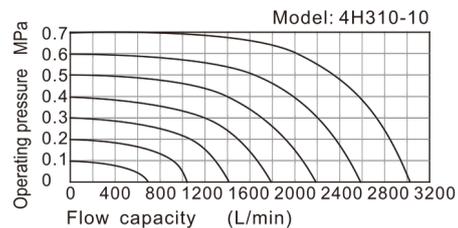
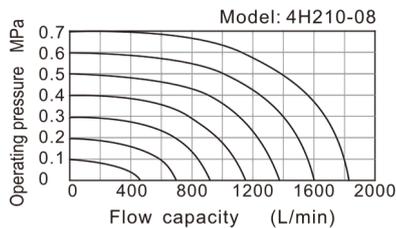
Ordering code

4H 2 30C 08 □

① ② ③ ④ ⑤

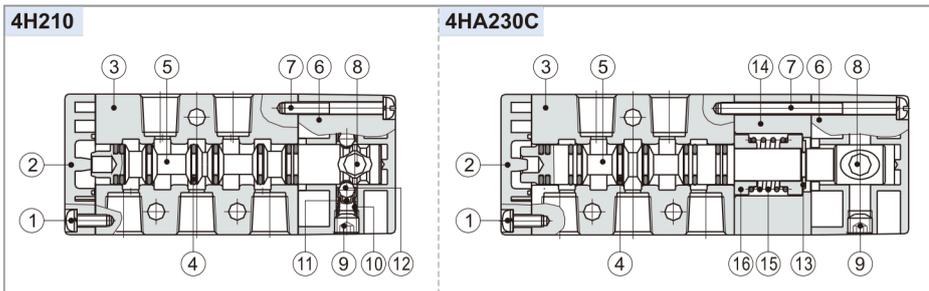
① Model	② Code	③ Valve type	④ Port size	⑤ Thread type
4H: Manual return 4HA: Spring return	2: 200 Series 3: 300 Series	10: 5/2 Way 30C: 5/3 Way closed center 30E: 5/3 Way exhaust center	06: 1/8" 08: 1/4" 10: 3/8"	Blank: PT G: G T: NPT

Flow chart



The data in flow rate chart are obtained from AirTAC lab.

Inner structure



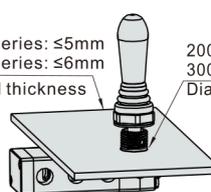
No.	Item	No.	Item
1	Round head screw	9	Stop screw
2	Bottom cover	10	Spring
3	Body	11	Steel ball jacket
4	O-ring	12	Steel ball
5	Spool	13	E clip
6	Top cover	14	Side cover
7	Round head cover	15	Spring
8	Axle	16	Spring holder

Installation

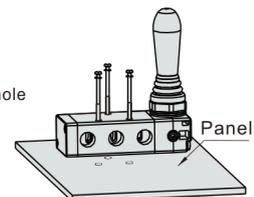
1. 5/3 way manual return hand lever valve is positioned by steel ball, which is convenient to switch. Please apply the proper force to avoid the position mismatch and misoperation.
2. When installed by panel, disassemble the gasket according to the practical requirement.
3. Below is the installation method for reference.
Note: Please give your attention on the panel thickness and hole dimension when installed by panel.

200 Series: ≤5mm
300 Series: ≤6mm
Panel thickness

200 Series: Φ16
300 Series: Φ20
Dia. of Installation hole



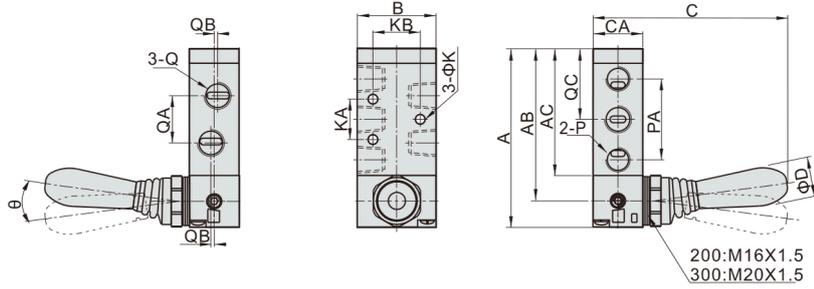
Panel Installation



Body Installation

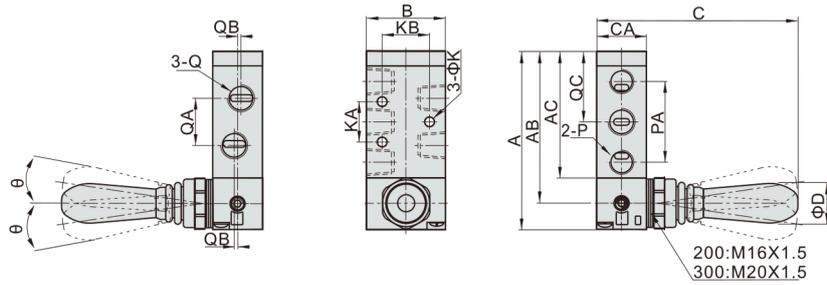
Dimensions

4H210\310, 4HA210\310



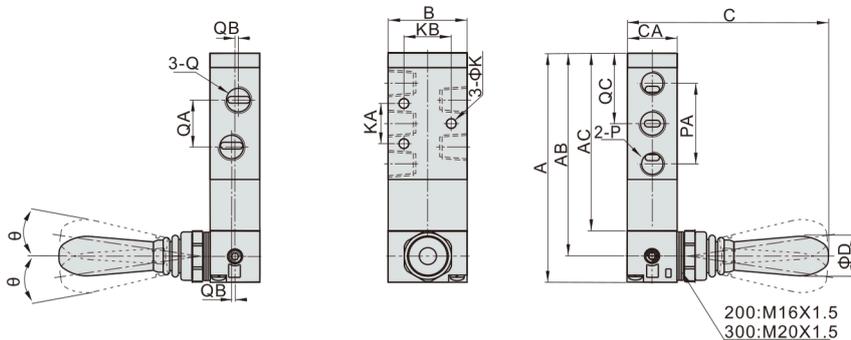
Model\Item	A	AB	AC	B	C	CA	D	K	KA	KB	P	PA	Q	QA	QB	QC	Ø
4H210-06 4HA210-06	81.5	69.5	57.5	35	90	22	18	4.3	20	23.5	1/8"	36	1/8"	18	-	32.5	15
4H210-08 4HA210-08	81.5	69.5	57.5	35	90	22	18	4.3	20	23.5	1/8"	36	1/4"	21	1.5	32.5	15
4H310-08 4HA310-08	101	87	73	40	93.5	27	18	4.3	24	27.5	1/4"	45	1/4"	22	-	40.5	18
4H310-10 4HA310-10	101	87	73	40	93.5	27	18	4.3	24	27.5	1/4"	45	3/8"	24	2	40.5	18

4H230, 4H330



Model\Item	A	AB	AC	B	C	CA	D	K	KA	KB	P	PA	Q	QA	QB	QC	Ø
4H230C-06 4H230E-06	81.5	69.5	57.5	35	90.5	22	18	4.3	20	23.5	1/8"	36	1/8"	18	-	32.5	8.5
4H230C-08 4H230E-08	81.5	69.5	57.5	35	90.5	22	18	4.3	20	23.5	1/8"	36	1/4"	21	1.5	32.5	8.5
4H330C-08 4H330E-08	101	87	73	40	94	27	18	4.3	24	27.5	1/4"	45	1/4"	22	-	40.5	10
4H330C-10 4H330E-10	101	87	73	40	94	27	18	4.3	24	27.5	1/4"	45	3/8"	24	2	40.5	10

4HA230, 4HA330



Model\Item	A	AB	AC	B	C	CA	D	K	KA	KB	P	PA	Q	QA	QB	QC	Ø
4HA230C-06 4HA230E-06	100.5	88.5	76.5	35	90.5	22	18	4.3	20	23.5	1/8"	36	1/8"	18	-	32.5	8.5
4HA230C-08 4HA230E-08	100.5	88.5	76.5	35	90.5	22	18	4.3	20	23.5	1/8"	36	1/4"	21	1.5	32.5	8.5
4HA330C-08 4HA330E-08	120	106	92	40	94	27	18	4.3	24	27.5	1/4"	45	1/4"	22	-	40.5	10
4HA330C-10 4HA330E-10	120	106	92	40	94	27	18	4.3	24	27.5	1/4"	45	3/8"	24	2	40.5	10