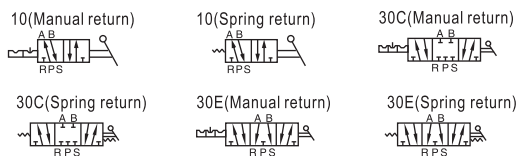


Hand lever valve (5/2 way, 5/3 way)

4H Series



Symbol

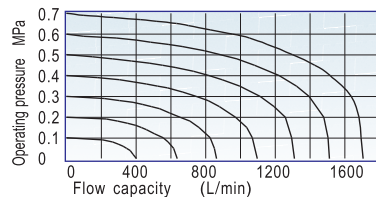


Product feature

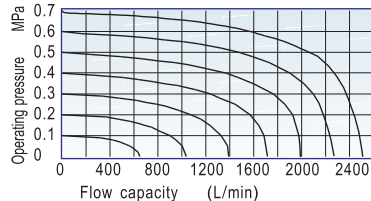
1. Manual operation, smooth actuation, and exact and reliable orientation.
2. Sliding column structure has good tightness and light weight and is easy to install and dismount.
3. Internal hole adopts special processing technology which has little attrition friction, long service life.
4. No need to add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

Flow chart

Model: 4H210-08



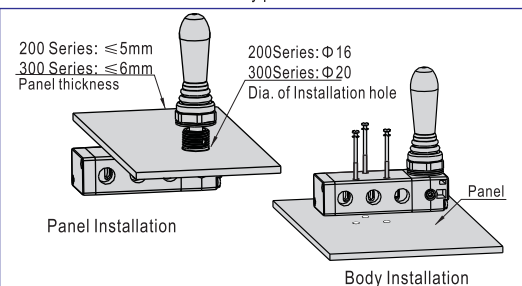
Model: 4H310-10



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.



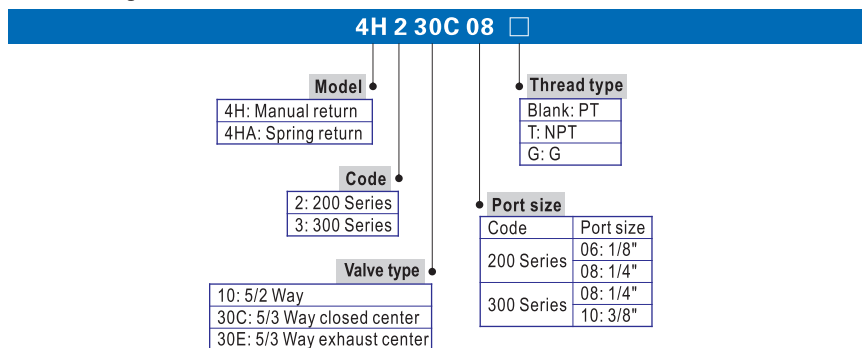
Specification

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 size①	In=Out =Exhaust=1/8"		In=Out=1/4"; Exhaust=1/8"		In=Out =Exhaust=1/4"		In=Out=3/8"; Exhaust=1/4"	
Orifice size	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
Lubrication②	Not required							
Pressure range	0~0.8MPa(0~116psi)							
Proof pressure	1.5MPa(215psi)							
Temperature	-20~70℃							
Material body	Aluminum alloy							
Operating angle	±15°	±8.5°	±15°	±8.5°	±18°	±10°	±18°	±10°

① PT thread, NPT thread and G thread are available;

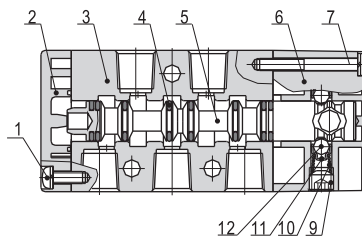
② Once lubricated air is used, continue with same medium to optimise valve life span. It is suggested to use ISO VG32 lubricant or the oil with the same grade.

Ordering code

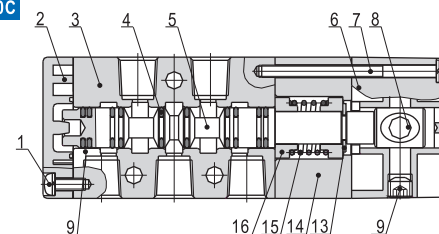


Inner structure

4H210



4HA230C



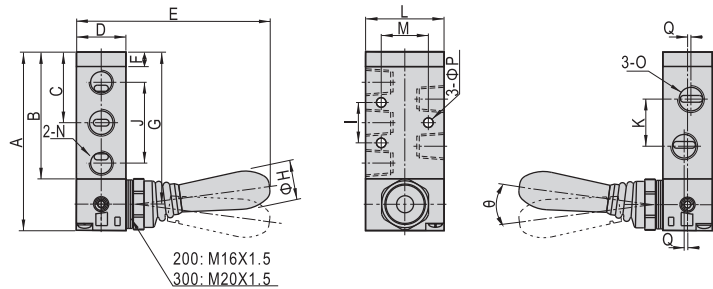
No.	Item
1	Round head screw
2	Bottom cover
3	Body
4	O-ring
5	Spool
6	Top cover
7	Round head cover
8	Axle
9	Stop screw
10	Spring
11	Steel ball jacket
12	Steel ball
13	E clip
14	Side cover
15	Spring
16	Spring holder

Hand lever valve (5/2 way, 5/3 way)

4H Series

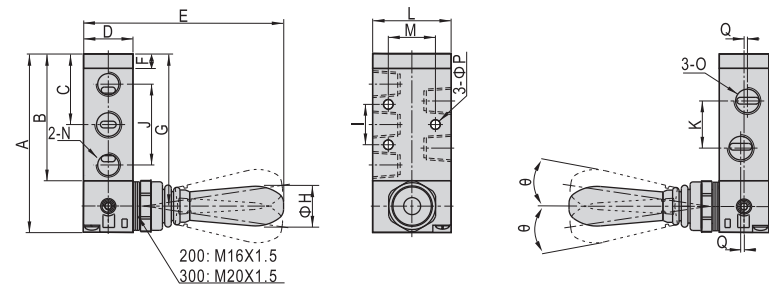
■ Dimensions

4H210\310, 4HA210\310



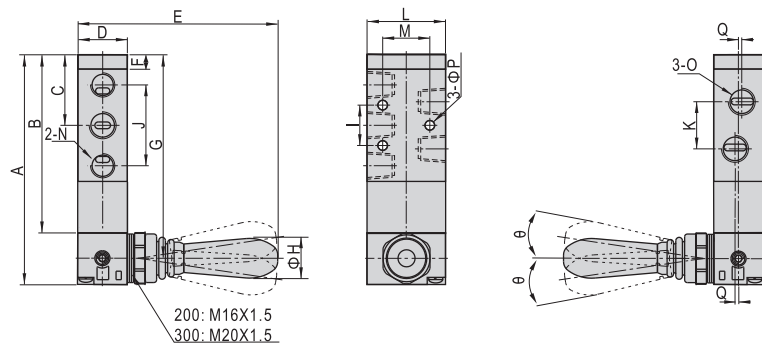
Model\Item	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Θ
4H210-06	81.5	57.5	32.5	22	90	7.5	69.5	18	20	36	18	35	23.5	1/8"	1/8"	4.3	-	15
4HA210-06	81.5	57.5	32.5	22	90	7.5	69.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	15
4H210-08	81.5	57.5	32.5	22	90	7.5	69.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	15
4HA210-08	81.5	57.5	32.5	22	90	7.5	69.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	15
4H310-08	101	73	40.5	27	93.5	8	87	18	24	45	22	40	27.5	1/4"	1/4"	4.3	-	18
4HA310-08	101	73	40.5	27	93.5	8	87	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	18
4H310-10	101	73	40.5	27	93.5	8	87	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	18
4HA310-10	101	73	40.5	27	93.5	8	87	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	18

4H230C\330C, 4H230E\330E



Model\Item	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Θ
4H230C-06	81.5	57.5	32.5	22	90.5	7.5	69.5	18	20	36	18	35	23.5	1/8"	1/8"	4.3	-	8.5
4H230E-06	81.5	57.5	32.5	22	90.5	7.5	69.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	8.5
4H230C-08	81.5	57.5	32.5	22	90.5	7.5	69.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	8.5
4H230E-08	81.5	57.5	32.5	22	90.5	7.5	69.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	8.5
4H330C-08	101	73	40.5	27	94	8	87	18	24	45	22	40	27.5	1/4"	1/4"	4.3	-	10
4H330E-08	101	73	40.5	27	94	8	87	18	24	45	22	40	27.5	1/4"	1/4"	4.3	-	10
4H330C-10	101	73	40.5	27	94	8	87	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	10
4H330E-10	101	73	40.5	27	94	8	87	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	10

4HA230C\330C, 4HA230E\330E



Model\Item	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Θ
4HA230C-06	100.5	76.5	32.5	22	90.5	7.5	88.5	18	20	36	18	35	23.5	1/8"	1/8"	4.3	-	8.5
4HA230E-06	100.5	76.5	32.5	22	90.5	7.5	88.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	8.5
4HA230C-08	100.5	76.5	32.5	22	90.5	7.5	88.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	8.5
4HA230E-08	100.5	76.5	32.5	22	90.5	7.5	88.5	18	20	36	21	35	23.5	1/8"	1/4"	4.3	1.5	8.5
4HA330C-08	120	92	40.5	27	94	8	106	18	24	45	22	40	27.5	1/4"	1/4"	4.3	-	10
4HA330E-08	120	92	40.5	27	94	8	106	18	24	45	22	40	27.5	1/4"	1/4"	4.3	-	10
4HA330C-10	120	92	40.5	27	94	8	106	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	10
4HA330E-10	120	92	40.5	27	94	8	106	18	24	45	24	40	27.5	1/4"	3/8"	4.3	2	10

4H Series Hand-pull Valve



4H330-10



4H210-06

Ordering Code

4H

2

10

06

□

Specification Code

4H:Two(Three)-position
Five-way Hand Pull Valve

Position and way No

2:200 Series
3:300 Series
4:400 Series

Number of places

10:Single-head Double-position
30:Single-head Three-position

Port Size

06:G1/8"
08:G1/4"
10:G3/8"
15:G1/2"

Type Code

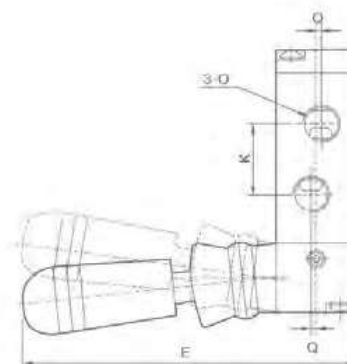
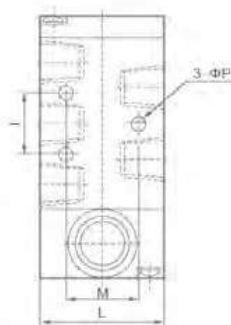
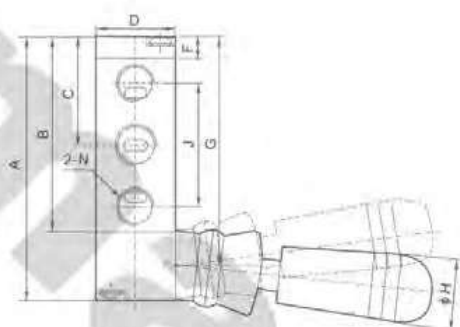
Blank:Two-Position Five-way lock type
L:Three-Position Five-way lock type
S:Two(Three)- Position Five-way
spring return type

Specification

Model	4H210-06	4H210-08	4H230-08	4H310-08	4H310-10	4H330-10	4H410-15	4H430-15
Working Medium	40 Micron Filtered Air							
Motion Pattern	Direct Drive Type							
Effective Section Area	14mm ² (CV=0.78)	16mm ² (CV=0.89)	12mm ² (CV=0.67)	25mm ² (CV=1.4)	30mm ² (CV=1.68)	30mm ² (CV=1.68)	50mm ² (CV=2.79)	50mm ² (CV=2.79)
Port Size	Air Inlet=Air Outlet= Exhaust=G1/8"	Air Inlet=Air Outlet= Exhaust=G1/4"		Air Inlet=Air Outlet= Exhaust=G1/4"		Air Inlet=Air Outlet= G3/8" Exhaust=G1/4"		Air Inlet=Air Outlet= Exhaust=G1/2"
Working-Pressure Range	0~1.0MPa							
Operating Temperature Range	0~60℃							

Overall Dimensions

4H Series



Dimension Sheet

Symbol/Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
4H210-06	76.5	56.5	31.5	22	95	6.5	66.5	18	20	36	21	35	21	G1/8"	G1/8"	4.3	-
4H230-06	76.5	56.5	31.5	22	95	6.5	66.5	18	20	36	21	35	21	G1/8"	G1/8"	4.3	-
4H230-06(S)	97.5	75.5	31.5	22	95	6.5	85.5	18	20	36	21	35	21	G1/8"	G1/8"	4.3	-
4H210-08	76.6	56.5	31.5	22	95	6.5	66.5	18	20	36	21	35	21	G1/8"	G1/4"	4.3	1.5
4H230-08L	97.5	75.5	31.5	22	95	6.5	66.5	18	20	36	21	35	21	G1/8"	G1/4"	4.3	1.5
4H230-08(S)	97.5	75.5	31.5	22	95	6.5	85.5	18	20	36	21	35	21	G1/8"	G1/4"	4.3	1.5
4H310-08	92	72.5	40	27	100	7.5	82.5	18	24	45	24	40	27	G1/4"	G1/4"	4.3	-
4H310-10	92	72.5	40	27	100	7.5	82.5	18	24	45	24	40	27	G1/4"	G3/8"	4.3	2
4H410-15	126	102	55.5	34	100	7.5	114	18	28	63	36	50	35	G1/2"	G1/2"	5.5	-