



Specifications

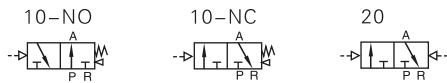
Model	3A110-M5	3A120-M5	3A110-06	3A120-06
Fluid	Air (to be filtered by 40μm filter element)			
Acting	Exterior control			
Port size ①	M5		1/8"	
Orifice size	5.5mm ² (Cv=0.31)		12.0mm ² (Cv=0.67)	
Valve type	3 port 2 position			
Lubrication ②	Not required			
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.2MPa(175psi)			
Temperature (°C)	-20~70			
Material of body	Aluminum alloy			
Max. frequency ③	5 cycle/sec			

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

② Once lubricated air is used, continue with same medium to optimise valve life span. lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency is in the no-load state.

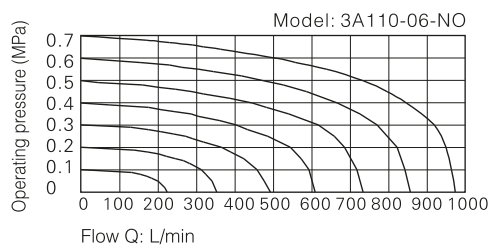
Symbol



Product feature

- Structure in sliding column mode: good tightness and sensitive reaction.
- Double air control valves have memory function.
- Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- No need to add oil for lubrication.
- Multi-mounting helps to install and apply.
- Integrate with the manifold to save installation space.

Flow chart



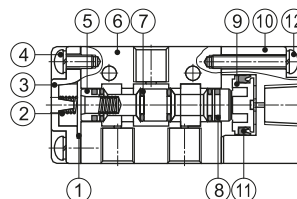
Ordering code

Model	Valve type	Acting type	Thread type
3A Air valve (3/2 way)	10 Single air control 20 Double air control	Valve type Acting type 10 NC: Normally close 20 NO code	Port size Thread type 1/8" Blank: PT M5 G: G T: NPT No this code
Code	Port size		
1 100 Series	M5 M5 06 1/8"		

Please refer to 115 for manifold specification and the order way.

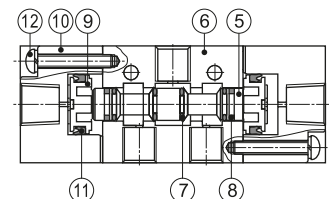
Inner structure

3A110



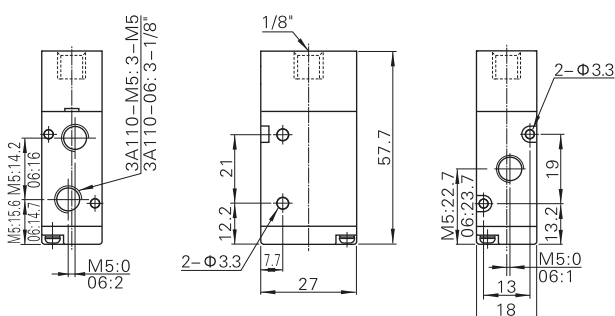
No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston
2	Spring	6	Body	10	Pilot body
3	Bottom cover	7	O-ring	11	Piston O-ring
4	Bottom cover screw	8	Wear ring	12	Piston screw

3A120

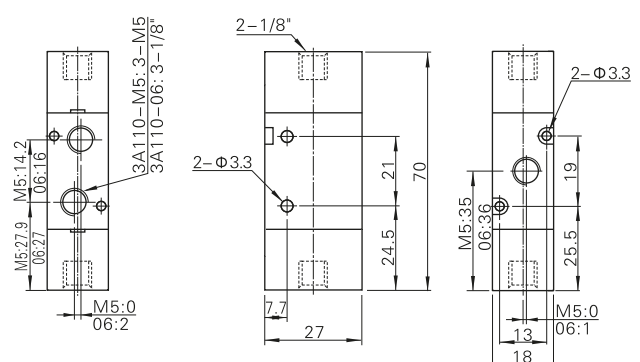


Dimensions

3A110



3A120



Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

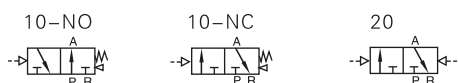
KA

XQ

AQ



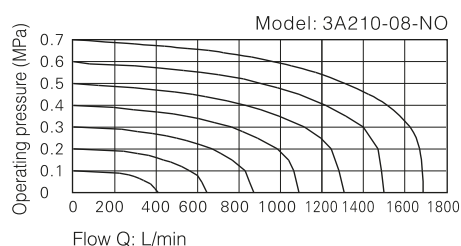
Symbol



Product feature

- Structure in sliding column mode: good tightness and sensitive reaction.
- Double air control valves have memory function.
- Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- No need to add oil for lubrication.
- Multi-mounting helps to install and apply.
- Integrate with the manifold to save installation space.

Flow chart



Specifications

Model	3A210-06	3A220-06	3A210-08	3A220-08
Fluid	Air (to be filtered by 40μm filter element)			
Acting	Exterior control			
Port size ①	In=Out=1/8"		In=Out=1/4"	
Orifice size	14.0mm ² (Cv=0.78)		16.0mm ² (Cv=0.89)	
Valve type	3 port 2 position			
Lubrication ②	Not required			
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.2MPa(175psi)			
Temperature (°C)	-20~70			
Material of body	Aluminum alloy			
Max. frequency ③	5 cycle/sec			

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

② Once lubricated air is used, continue with same medium to optimise valve life span. lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency is in the no-load state.

Ordering code

Model	Valve type	Acting type	Thread type
3A	10 Single air control 20 Double air control	Valve type Acting type 10 NC: Normally close 20 NC: Normally open NO code	Blank PT G G T NPT
Code	Port size		
2 200 Series	06 1/8" 08 1/4"		

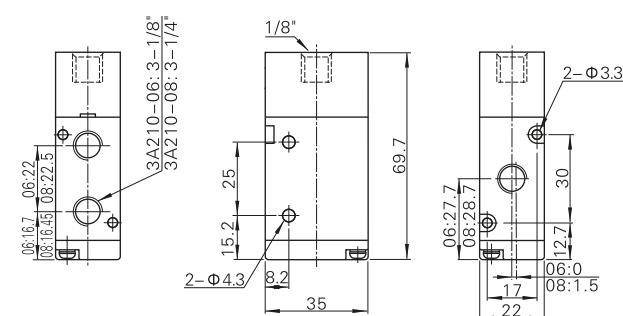
Please refer to 115 for manifold specification and the order way.

Inner structure

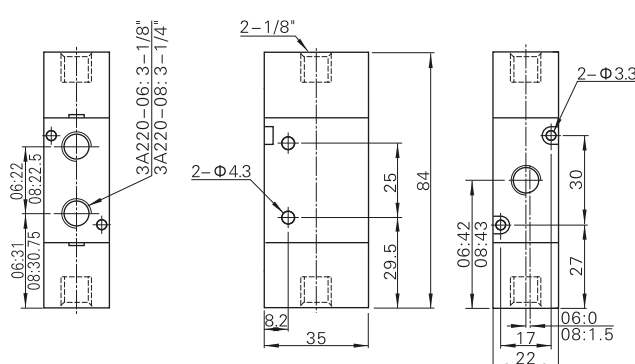
3A210				3A220			
No.	Item	No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston		
2	Spring	6	Body	10	Pilot body		
3	Bottom cover	7	O-ring	11	Piston O-ring		
4	Bottom cover screw	8	Wear ring	12	Piston screw		

Dimensions

3A210

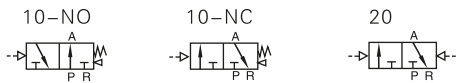


3A220





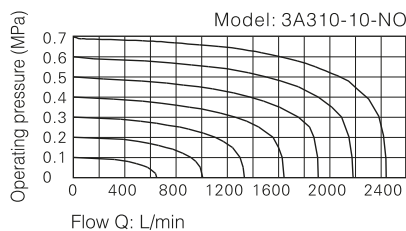
Symbol



Product feature

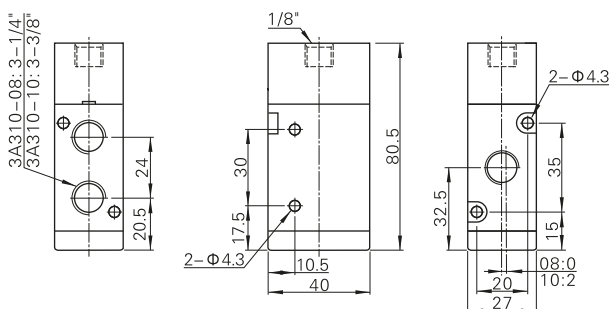
1. Structure in sliding column mode: good tightness and sensitive reaction.
2. Double air control valves have memory function.
3. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
4. No need to add oil for lubrication.
5. Multi-mounting helps to install and apply.
6. Integrate with the manifold to save installation space.

Flow chart

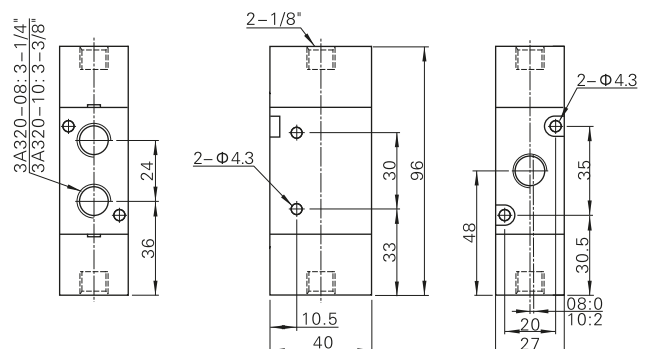


Dimensions

3A310



3A320



Specifications

Model	3A310-08	3A320-08	3A310-10	3A320-10
Fluid	Air (to be filtered by 40μm filter element)			
Acting	Exterior control			
Port size ①	In=Out=1/4"		In=Out=3/8"	
Orifice size	25.0mm ² (Cv=1.35)		30.0mm ² (Cv=1.67)	
Valve type	3 port 2 position			
Lubrication ②	Not required			
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.2MPa(175psi)			
Temperature (°C)	-20~70			
Material of body	Aluminum alloy			
Max. frequency ③	5 cycle/sec			

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

② Once lubricated air is used, continue with same medium to optimise valve life span. lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency of no-load state.

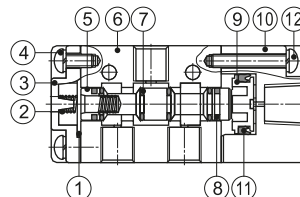
Ordering code

Model	Valve type	Acting type	Thread type
3A	10	Valve type	Blank
3	20	Acting type	PT
300 Series		10	G
		20	T
			NPT

Please refer to 115 for manifold specification and the order way.

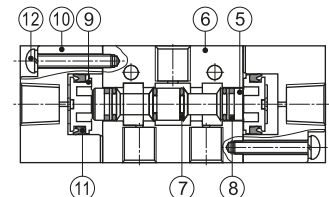
Inner structure

3A310



No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston
2	Spring	6	Body	10	Pilot body
3	Bottom cover	7	O-ring	11	Piston O-ring
4	Bottom cover screw	8	Wear ring	12	Piston screw

3A320



Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

KA

XQ

AQ



Specifications

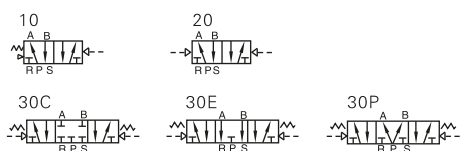
Model	4A110-M5 4A120-M5	4A130C-M5 4A130E-M5 4A130P-M5	4A110-06 4A120-06	4A130C-06 4A130E-06 4A130P-06
Fluid	Air (to be filtered by 40µm filter element)			
Acting	Exterior control			
Port size ①	In=Out=M5		In=Out=1/8"	
Orifice size	5.5mm²(Cv=0.31)	5.0mm²(Cv=0.28)	12.0mm²(Cv=0.67)	9.0mm²(Cv=0.50)
Valve type	5 port 2 position	5 port 3 position	5 port 2 position	5 port 3 position
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.2MPa(175psi)			
Temperature (°C)	-20~70			
Material of body	Aluminum alloy			
Lubrication ②	Not required			
Max. Frequency ③	5 cycle/sec	3 cycle/sec	5 cycle/sec	3 cycle/sec
Weight (g)	4A110-M5:85 4A120-M5:140	165	4A110-06:85 4A120-06:140	165

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

② Once lubricated air is used, continue with same medium to optimise valve life span. lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency is in the no-load state.

Symbol



Product feature

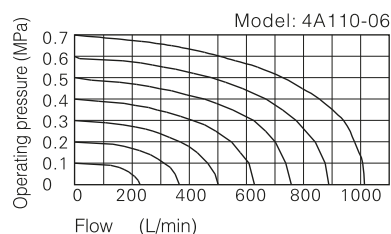
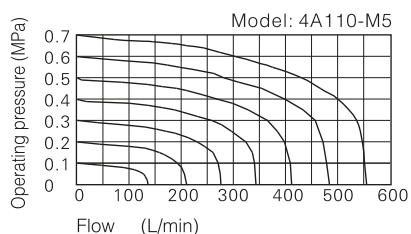
1. Structure in sliding column mode: good tightness and sensitive reaction.
2. Three position air valves have three kinds of central function for your choice.
3. Double air control valves have memory function.
4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
5. No need to add oil for lubrication.
6. Integrate with the manifold to save installation space.

Ordering code

Model	Code	Valve type	Port size	Thread type
4A	1	10	06	
4A	1	100 Series	M5	Port size
4A	1	100 Series	06	Thread type
4A	1	100 Series	M5	Blank: PT
4A	1	100 Series	06	G: G
4A	1	100 Series	M5	T: NPT
4A	1	100 Series	06	No this code

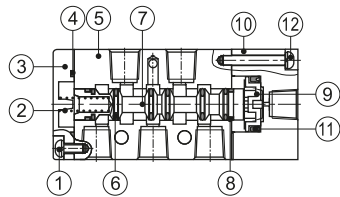
Please refer to 116 for manifold specification and the order way.

Flow chart

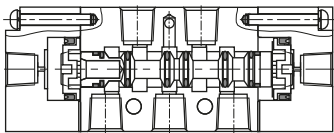


Inner structure

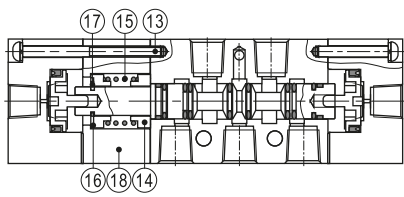
4A110



4A120



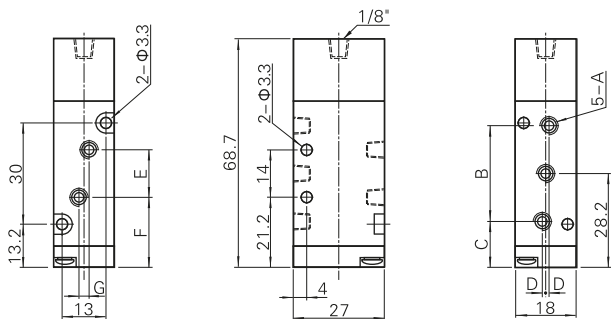
4A130C



No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Screw	5	Body	9	Piston	13	Screw	17	E Clip
2	Spring	6	O-ring	10	Pilot body	14	Spring holder	18	Side cover
3	Bottom cover	7	Spool	11	O-ring	15	Return Spring		
4	Bottom cover gasket	8	Wear ring	12	Screw	16	Spring holder		

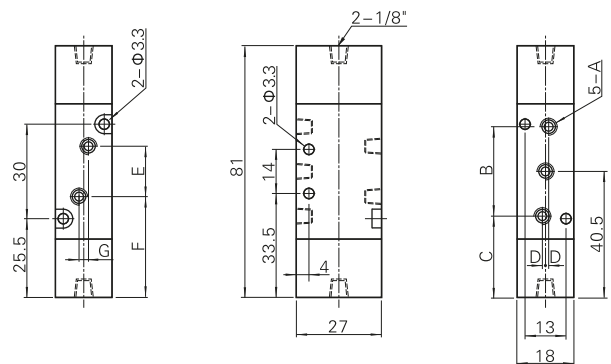
Dimensions

4A110



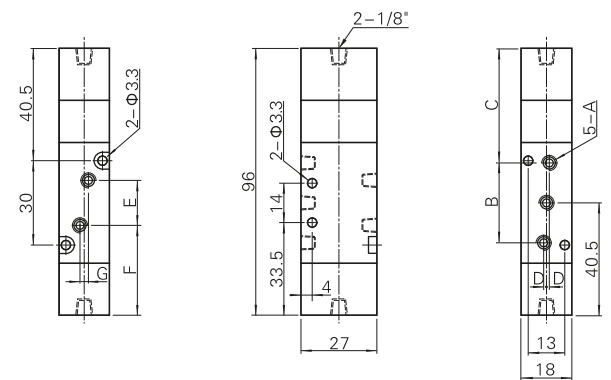
Model\Item	A	B	C	D	E	F	G
4A110-M5	M5×0.8	27	14.7	0	14	21.2	0
4A110-06	1/8"	28	14.2	1	16	20.2	3

4A120



Model\Item	A	B	C	D	E	F	G
4A120-M5	M5×0.8	27	27	0	14	33.5	0
4A120-06	1/8"	28	26.5	1	16	32.5	3

4A130



Model\Item	A	B	C	D	E	F	G
4A130-M5	M5×0.8	27	42	0	14	33.5	0
4A130-06	1/8"	28	41.5	1	16	32.5	3

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

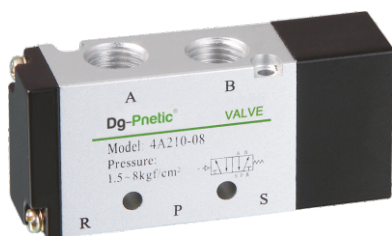
QE

ST

KA

XQ

AQ



Specifications

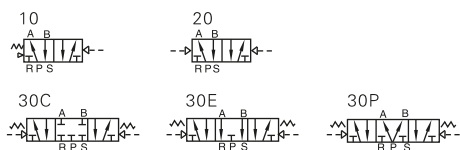
Model	4A210-06 4A220-06	4A230C-06 4A230E-06 4A230P-06	4A210-08 4A220-08	4A230C-08 4A230E-08 4A230P-08
Fluid	Air (to be filtered by 40µm filter element)			
Acting	Exterior control			
Port size ①	In=Out=Exhaust=1/8"		In=Out=1/4" Exhaust=1/8"	
Orifice size	14.0mm ² (Cv=0.78)	12.0mm ² (Cv=0.67)	16.0mm ² (Cv=0.89)	12.0mm ² (Cv=0.67)
Valve type	5 port 2 position	5 port 3 position	5 port 2 position	5 port 3 position
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.2MPa(175psi)			
Temperature (°C)	-20~70			
Material of body	Aluminum alloy			
Lubrication ②	Not required			
Max. Frequency ③	5 cycle/sec	3 cycle/sec	5 cycle/sec	3 cycle/sec
Weight (g)	4A210-06:185 4A220-06:285	365	4A210-08:185 4A220-08:285	365

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

② Once lubricated air is used, continue with same medium to optimise valve life span. lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency of no-load state.

Symbol



Product feature

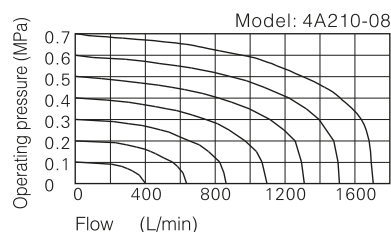
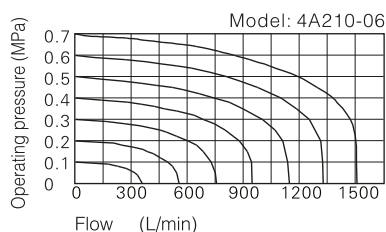
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4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
5. No need to add oil for lubrication.
6. Integrate with the manifold to save installation space.

Ordering code

Model	Code	Valve type	Port size	Thread type
4A	2	10	06 1/8"	Blank PT
4A	2	20	08 1/4"	G G
4A	2	30C		T NPT
4A	2	30E		
4A	2	30P		

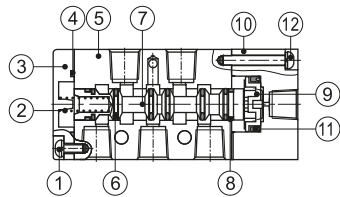
Please refer to 116 for manifold specification and the order way.

Flow chart

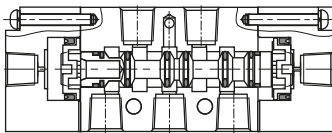


Inner structure

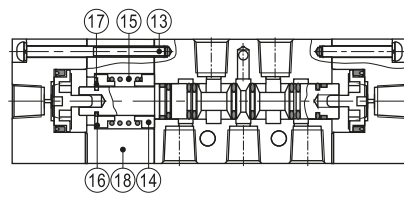
4A210



4A220



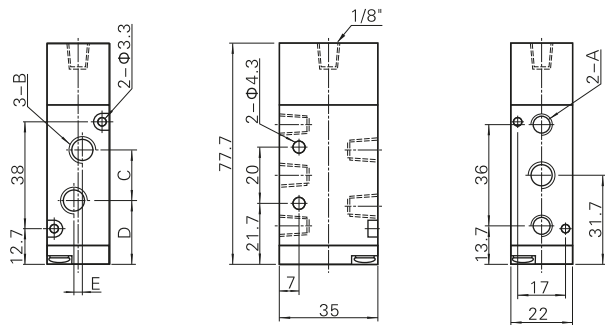
4A230C



No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Screw	5	Body	9	Piston	13	Screw	17	E Clip
2	Spring	6	O-ring	10	Pilot body	14	Spring holder	18	Side cover
3	Bottom cover	7	Spool	11	O-ring	15	Return Spring		
4	Bottom cover gasket	8	Wear ring	12	Screw	16	Spring holder		

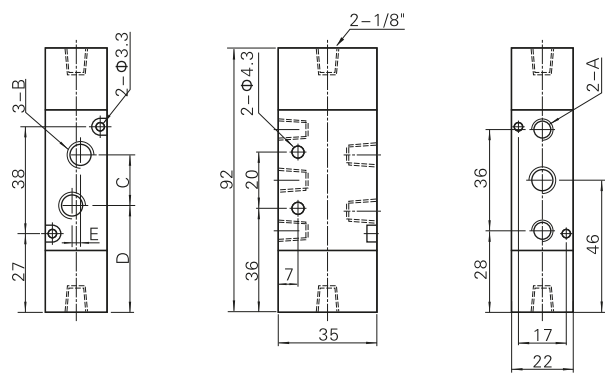
Dimensions

4A210



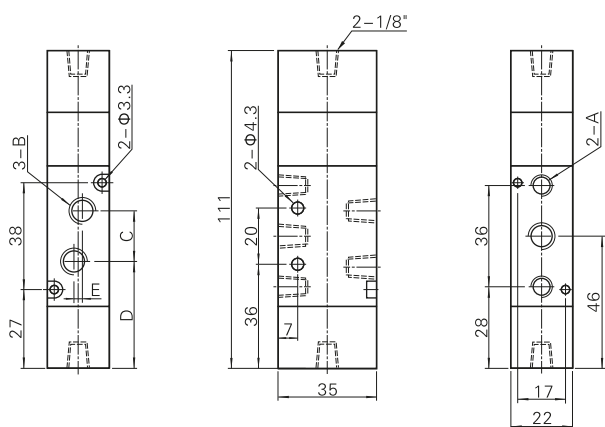
Model\Item	A	B	C	D	E
4A210-06	1/8"	1/8"	18	22.7	0
4A210-08	1/8"	1/4"	21	21.2	3

4A220



Model\Item	A	B	C	D	E
4A220-06	1/8"	1/8"	18	37	0
4A220-08	1/8"	1/4"	21	35.5	3

4A230C



Model\Item	A	B	C	D	E
4A230-06	1/8"	1/8"	18	37	0
4A230-08	1/8"	1/4"	21	35.5	3

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300

4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10

3H
4H
TSV
3R
4R
HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

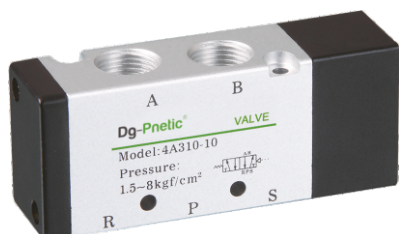
QE

ST

KA

XQ

AQ



Specifications

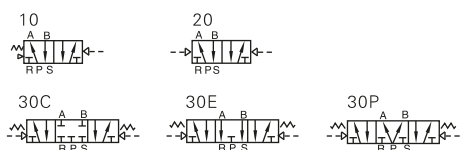
Model	4A310-08 4A320-08	4A330C-08 4A330E-08 4A330P-08	4A310-10 4A320-10	4A330C-10 4A330E-10 4A330P-10
Fluid	Air (to be filtered by 40μm filter element)			
Acting	Exterior control			
Port size ①	In=Out=Exhaust=1/4"		In=Out=3/8" Exhaust=1/4"	
Orifice size	25.0mm ² (Cv=1.40)	18.0mm ² (Cv=1.00)	30.0mm ² (Cv=1.68)	18.0mm ² (Cv=1.00)
Valve type	5 port 2 position	5 port 3 position	5 port 2 position	5 port 3 position
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.2MPa(175psi)			
Temperature (°C)	-20~70			
Material of body	Aluminum alloy			
Lubrication ②	Not required			
Max. Frequency ③	4 cycle/sec	3 cycle/sec	4 cycle/sec	3 cycle/sec
Weight (g)	4A310-08:275 4A320-08:365	505	4A310-10:275 4A320-10:365	505

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

② Once lubricated air is used, continue with same medium to optimise valve life span. lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency of no-load state.

Symbol



Product feature

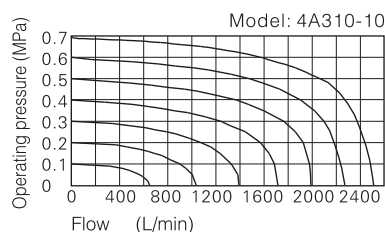
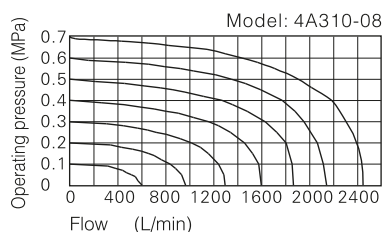
1. Structure in sliding column mode: good tightness and sensitive reaction.
2. Three position air valves have three kinds of central function for your choice.
3. Double air control valves have memory function.
4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
5. No need to add oil for lubrication.
6. Integrate with the manifold to save installation space.

Ordering code

4A		3		10		10			
Model		Code		Valve type		Port size		Thread type	
4A	Air valve (5/2, 5/3 way)	3	300 Series	10	Single air control 5/2 way	08	1/4"	Blank	PT
				20	Double air control 5/2 way	10	3/8"	G	G
				30C	Double air control 5/3 way closed center			T	NPT
				30E	Double air control 5/3 way exhaust center				
				30P	Double air control 5/3 way pressure center				

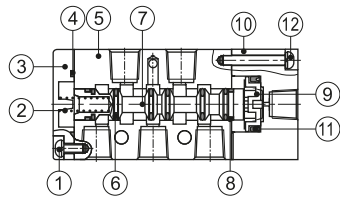
Please refer to 116 for manifold specification and the order way.

Flow chart

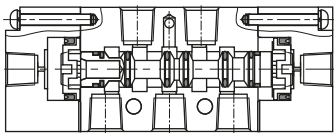


Inner structure

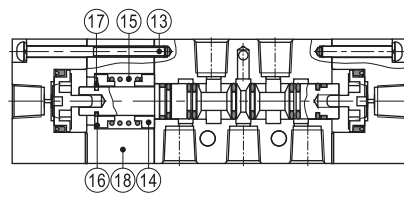
4A310



4A320



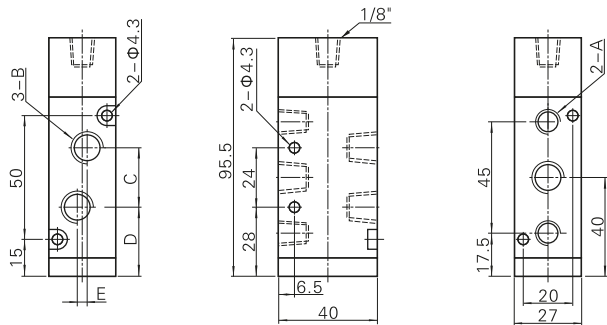
4A330C



No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Screw	5	Body	9	Piston	13	Screw	17	E Clip
2	Spring	6	O-ring	10	Pilot body	14	Spring holder	18	Side cover
3	Bottom cover	7	Spool	11	O-ring	15	Return Spring		
4	Bottom cover gasket	8	Wear ring	12	Screw	16	Spring holder		

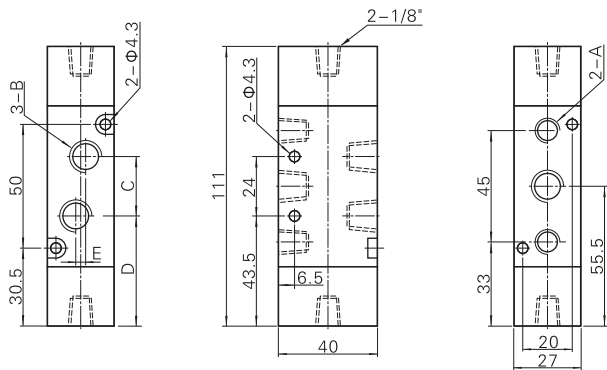
Dimensions

4A310



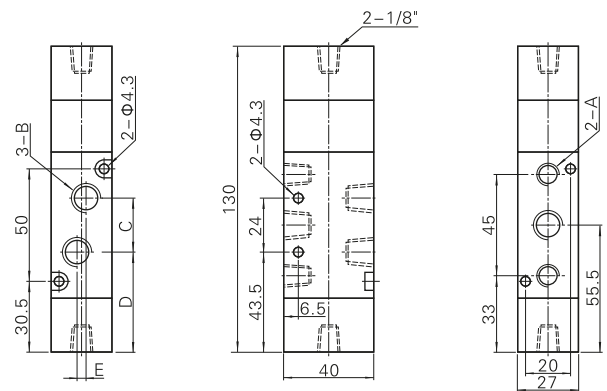
Model\Item	A	B	C	D	E
4A310-08	1/4"	1/4"	22	29	0
4A310-10	1/4"	3/8"	24	28	4

4A320



Model\Item	A	B	C	D	E
4A320-08	1/4"	1/4"	22	44.5	0
4A320-10	1/4"	3/8"	24	43.5	4

4A330C



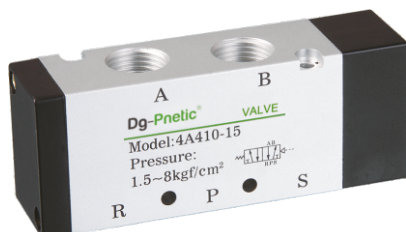
Model\Item	A	B	C	D	E
4A330-08	1/4"	1/4"	22	44.5	0
4A330-10	1/4"	3/8"	24	43.5	4

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4



4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

KA

XQ

AQ

Specifications

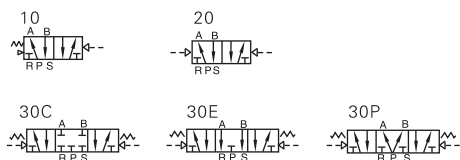
Model	4A410-15	4A420-15	4A430C-15	4A430E-15	4A430P-15
Fluid	Air (to be filtered by 40μm filter element)				
Acting	Exterior control				
Port size ①	In=Out=Exhaust=1/2"				
Orifice size	50.0mm ² (Cv=2.79)		30.0mm ² (Cv=1.68)		
Valve type	5 port 2 position		5 port 3 position		
Operating pressure	0.15~0.8MPa(21~114psi)				
Proof pressure	1.2MPa(175psi)				
Temperature (°C)	-20~70				
Material of body	Aluminum alloy				
Lubrication ②	Not required				
Max. Frequency ③	3 cycle/sec				
Weight (g)	555	685	735		

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

② Once lubricated air is used, continue with same medium to optimise valve life span. lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency of no-load state.

Symbol



Product feature

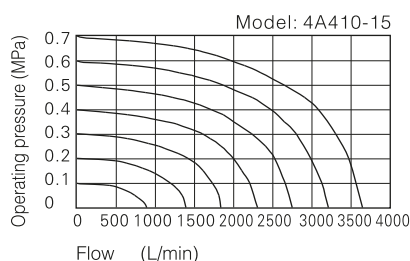
1. Structure in sliding column mode: good tightness and sensitive reaction.
2. Three position air valves have three kinds of central function for your choice.
3. Double air control valves have memory function.
4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
5. No need to add oil for lubrication.
6. Integrate with the manifold to save installation space.

Ordering code

Model	Code	Valve type	Port size	Thread type
4A	4	10	15	Blank
Air valve (5/2, 5/3 way)		10	1/2"	PT
		20		G
		30C	1/2"	G
		30E		NPT
		30P		

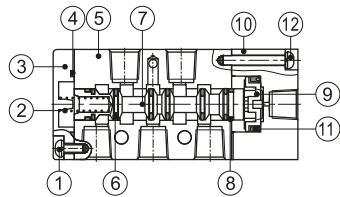
Please refer to 116 for manifold specification and the order way.

Flow chart

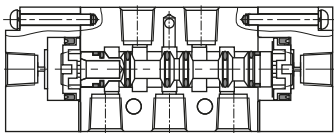


Inner structure

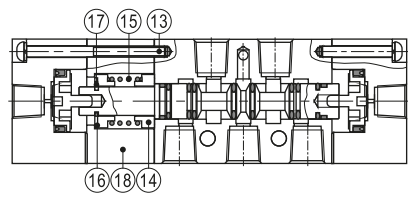
4A410



4A420



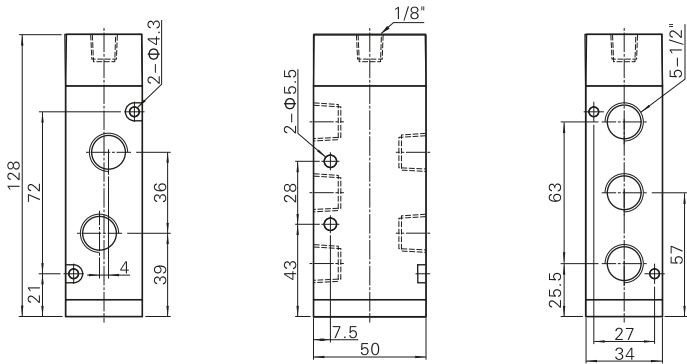
4A430C



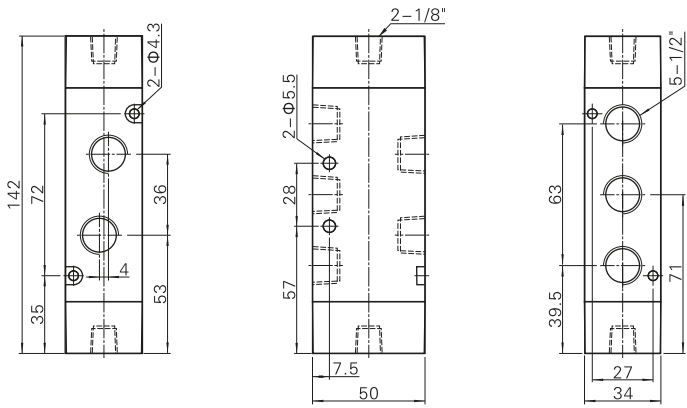
No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Screw	5	Body	9	Piston	13	Screw	17	E Clip
2	Spring	6	O-ring	10	Pilot body	14	Spring holder	18	Side cover
3	Bottom cover	7	Spool	11	O-ring	15	Return Spring		
4	Bottom cover gasket	8	Wear ring	12	Screw	16	Spring holder		

Dimensions

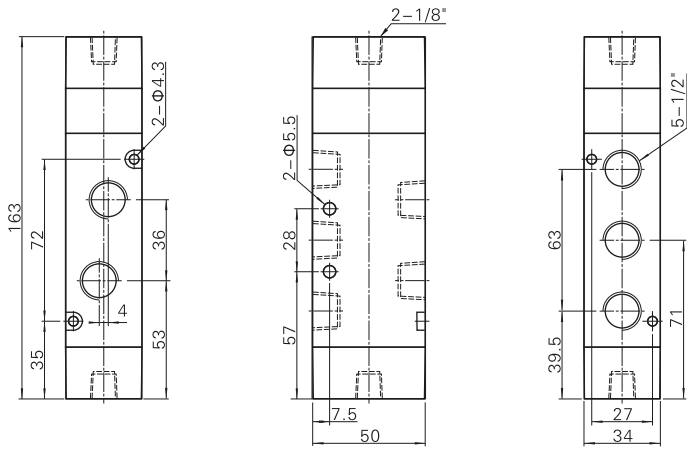
4A410



4A420



4A430C

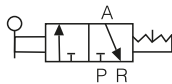


Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ



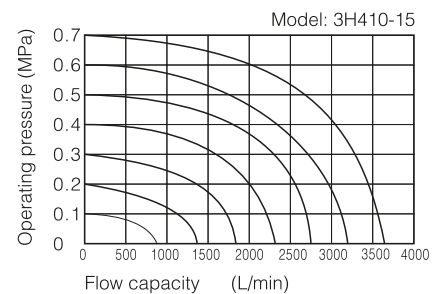
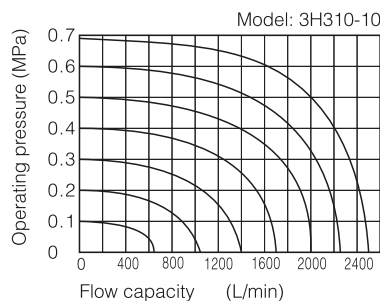
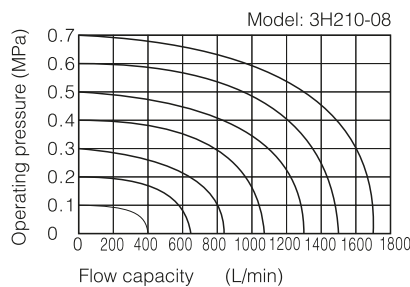
Symbol



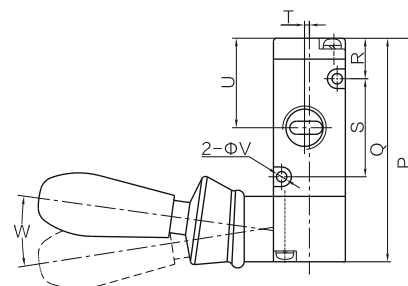
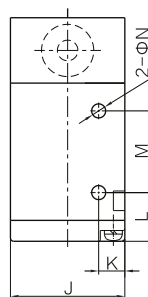
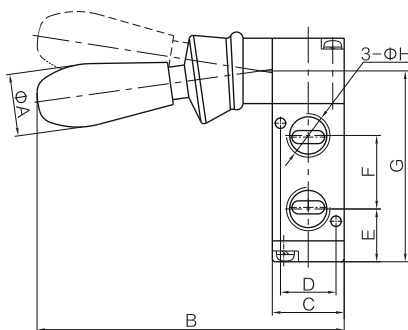
Product feature

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



Dimensions



Model\Item	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W
3H210-06	19	94	22	17	16.2	22.5	58.4	1/8"	35	8	14.9	25	4.3	76.5	68.4	12.4	30	0	27.4	3.2	16.8
3H210-08	19	94	22	17	16.2	22.5	58.4	1/4"	35	8	14.9	25	4.3	76.5	68.4	12.4	30	15	27.4	3.2	16.8
3H310-08	19	98.4	27	20	20.3	24	67.3	1/4"	40	10	14.8	30	4.3	85.2	77.3	14.8	35	0	32.3	4.3	16.5
3H310-10	19	98.4	27	20	20.3	24	67.3	3/8"	40	10	14.8	30	4.3	85.2	77.3	14.8	35	2	32.3	4.3	16.5
3H410-15	19	105	34	27	23	36	84.5	1/2"	50	13.5	16	50	5.2	105	95.5	19.5	43	3	41	4.3	22.3

Specification

Model	3H210-06	3H210-08	3H310-08	3H310-10	3H410-15
Fluid	Air (to be filtered by 40μm filter element)				
Operating	Manual control direct acting tupe				
Port size ①	1/8"	1/4"	3/8"	1/2"	
Orifice size	14.0mm ² (Cv=0.78)	16.0mm ² (Cv=0.89)	25.0mm ² (Cv=1.39)	30.0mm ² (Cv=1.67)	50.0mm ² (Cv=2.79)
Valve type	3/2 Way				
Lubrication ②	Not required				
Pressure range	0~1.0MPa(0~145psi)				
Proof pressure	1.2MPa(170psi)				
Temperature	-20~70℃				
Material body	Aluminum alloy				

① PT thread, G thread and NPT 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 or the oil with the same grade.

Ordering code

3H	2	10	08	
Model	Code	Valve type	Port size	Thread type
3H Hand lever valve (3/2 way)	2 200 Series	10 3/2 Way	06 1/8"	Blank PT
	3 300 Series		08 1/4"	G G
	4 400 Series		10 3/8"	T NPT
			15 1/2"	

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

KA

XQ

AQ



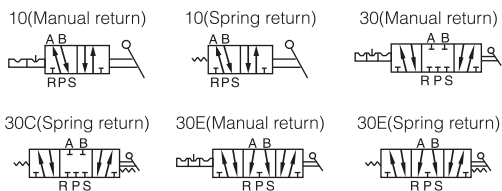
Specifications

Model	210-06	230-06	210-08	230-08	310-08	330-08	310-10	330-10
Fluid	Air (to be filtered by 40μm filter element)							
Operating	Manual control direct acting tupe							
Port size ①	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
Lubrication ②	Not required							
Pressure range	0~1.0MPa(0~145psi)							
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, G thread and NPT 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 or the oil with the same grade.

Symbol



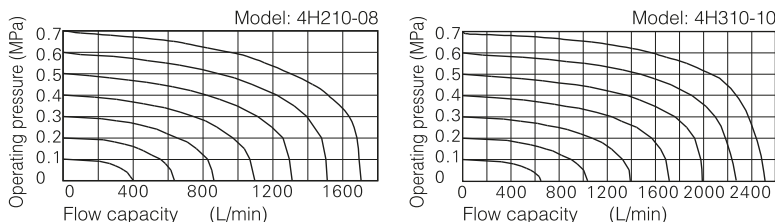
Ordering code

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

Product feature

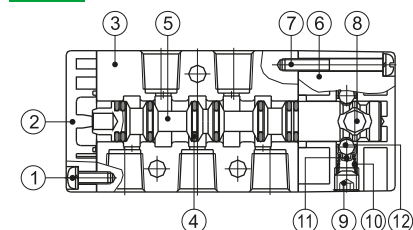
1. Manual operation, smooth actuation, and exact and reliable orientation.
2. Sliding column structure has good tightness and light weight and is easy to install and dismount.
3. Internal hole adopts special processing technology which has little attrition friction, long service life.
4. No need to add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

Flow chart

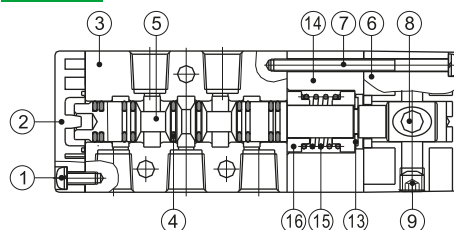


Inner structure

4H210



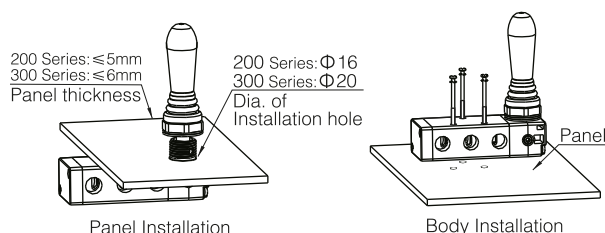
4HA230C



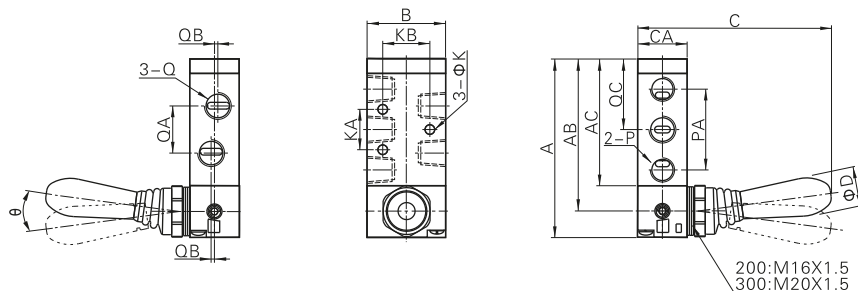
No.	Item	No.	Item
1	Round head screw	9	Stop screw
2	Bottom cover	10	Spring
3	Body	11	Steel ball jacket
4	O-ring	12	Steel ball
5	Spool	13	E clip
6	Top cover	14	Side cover
7	Round head cover	15	Spring
8	Axle	16	Spring holder

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.



4H210/310、4HA210/310



Model\Item	A	AB	AC	B	C	CA	D	K	KA	KB	P	PA	Q	QA	QB	QC	Θ
4H210-06	81.5	69.5	57.5	35	90	22	18	4.3	20	23.5	PT1/8	36	1/8"	18	-	32.5	15
4HA210-06																	
4H210-08	81.5	69.5	57.5	35	90	22	18	4.3	20	23.5	PT1/8	36	1/4"	21	1.5	32.5	15
4HA210-08																	
4H310-08	101	87	73	40	93.5	27	18	4.3	24	27.5	PT1/4	45	1/4"	22	-	40.5	18
4HA310-08																	
4H310-10	101	87	73	40	93.5	27	18	4.3	24	27.5	PT1/4	45	3/8"	24	2	40.5	18
4HA310-10																	

Model/Item	A	AB	AC	B	C	CA	D	K	KA	KB	P	PA	Q	QA	QB	QC	Θ
4H230C-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
4H230E-06																	
4H230C-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
4H230E-08																	
4H330C-08	101	87	73	40	94	27	18	4.3	24	27.5	1/4"	45	1/4	22	-	40.5	10
4H330E-08																	
4H330C-10	101	87	73	40	94	27	18	4.3	24	27.5	1/4"	45	3/8	24	2	40.5	10
4H330E-10																	

Model/Item	A	AB	AC	B	C	CA	D	K	KA	KB	P	PA	Q	QA	QB	QC	Θ
4HA230C-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
4HA230E-06																	
4HA230C-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
4HA230E-08																	
4HA330C-08	120	106	92	40	94	27	18	4.3	24	27.5	1/4"	45	1/4"	22	-	40.5	10
4HA330E-08																	
4HA330C-10	120	106	92	40	94	27	18	4.3	24	27.5	1/4"	45	3/8"	24	2	40.5	10
4HA330E-10																	

AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

KA

XQ

AQ



Specification

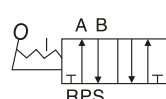
Model	TSV86522	TSV98322
Fluid	Air (to be filtered by 40µm filter element)	
Operating	Manual control direct acting tupe	
Port size ①	1/4"	
Orifice size	18mm ² (Cv=1.00)	
Valve type	5/2 Way	3/2 Way
Lubrication ②	Not required	
Pressure range	0~1.0MPa(0~145psi)	
Proof pressure	1.5MPa(215psi)	
Temperature	-20~70℃	
Material body	Aluminum alloy	

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

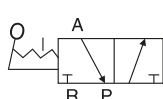
② Once lubricated air is used, continue with same medium to optimise valve life span. It is suggested to use ISO VG32 or the oil with the same grade.

Symbol

TSV86522



TSV98322



Ordering code

TSV86

52

2

M

Model

TSV86

TSV98

Valve type

52 5/2 Way

32 3/2 Way

Code

M Mechanical locking type

S Spring automatic reset type

Port size

1 1/8"

2 1/4"

Thread type

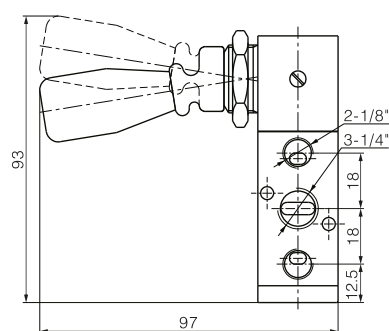
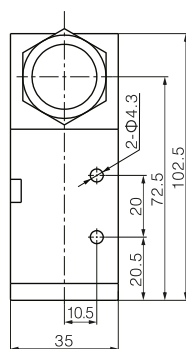
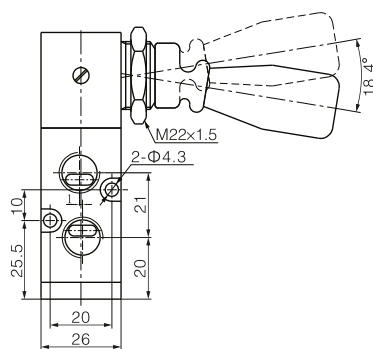
Blank PT

G G

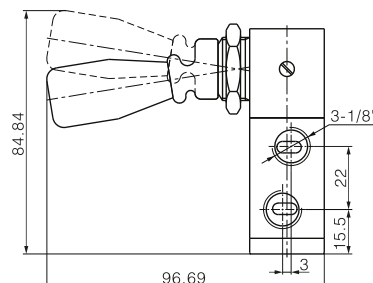
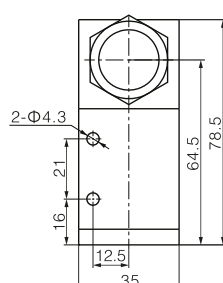
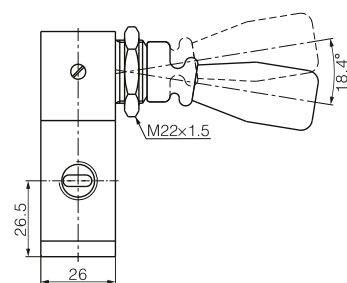
T NPT

Dimensions

TSV86522

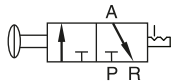


TSV98322





Symbol

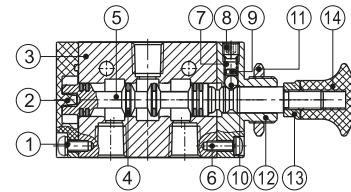


Ordering code

Model		Valve type		Port size		Thread type	
3R	3 port 2 position push-pull valve	10	2 position	06	1/8"	Blank	PT
				08	1/4"	G	G
				10	3/8"	T	NPT

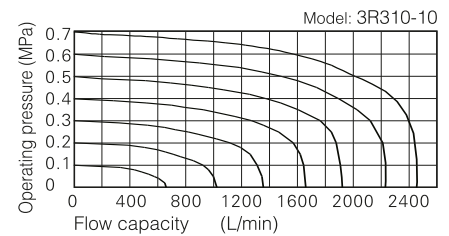
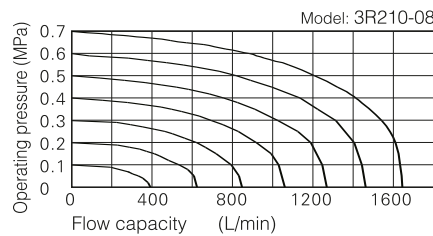
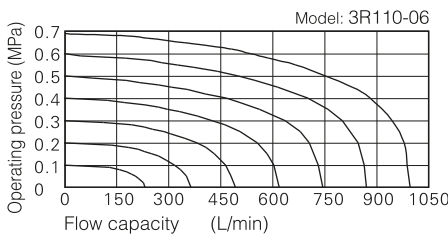
Code	
1	100 Series
2	200 Series
3	300 Series

Inner structure

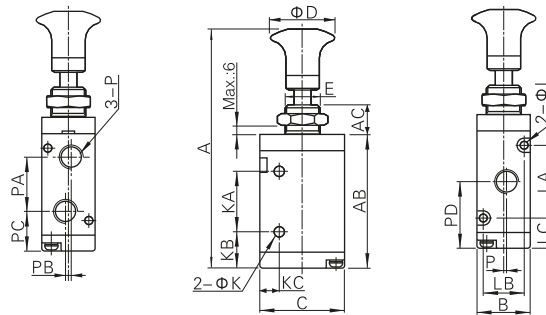


No.	Item	No.	Item	No.	Item
1	Round head screw	6	Round head cover	11	Hexagon nut
2	Bottom cover	7	Spring	12	Top cover
3	Body	8	Stop screw	13	Safety nut
4	O-ring	9	Spring base	14	Hand grip
5	Spool	10	Steel ball		

Flow chart



Dimensions



Model\Item	A	AB	AC	B	C	D	E	K	KA	KB	KC	L	LA	LB	LC	P	PA	PB	PC	PD	PE
3R110-06	87	47.8	10	18	27	25	M12×0.75	3.1	21	13	7.7	3.3	19	13	14	1/8"	16	2	15.5	24.5	1
3R210-06	98	57.8	10	22	35	25	M14×1.0	4.3	25	16	8	3.3	30	17	13.5	1/8"	22.5	0	17.5	28.5	0
3R210-08	98	57.8	10	22	35	25	M14×1.0	4.3	25	16	8	3.3	30	17	13.5	1/4"	22.5	0	17.5	28.5	1.5
3R310-08	106.5	66.5	10	27	40	25	M16×1.0	4.3	30	18	10	4.3	35	20	15.5	1/4"	24	0	21	33	0
3R310-10	106.5	66.5	10	27	40	25	M16×1.0	4.3	30	18	10	4.3	35	20	15.5	3/8"	24	0	21	33	2

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M
3V Manifold
4V Manifold
Coil

3A100
3A200
3A300
4A100
4A200
4A300
4A400

3A Manifold
4A Manifold
VF3000
VF5000
SY

SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

KA

XQ

AQ



Symbol

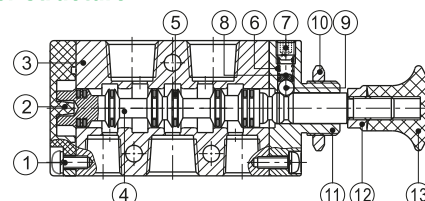


Ordering code

Model	Valve type
4R 5 port 2 position push-pull valve	10 2 position
Code	
1 100 Series	
2 200 Series	
3 300 Series	

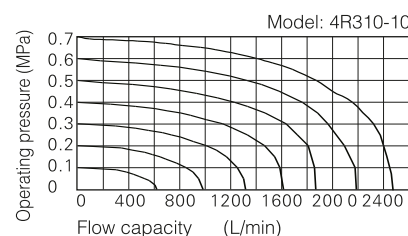
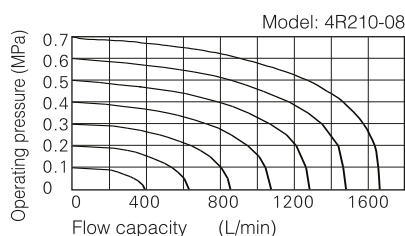
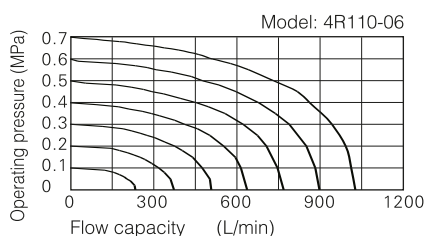
Port size	Thread type
Code Port size	Blank PT
100 Series 06 1/8"	G G
200 Series 08 1/4"	T NPT
300 Series 10 3/8"	

Inner structure

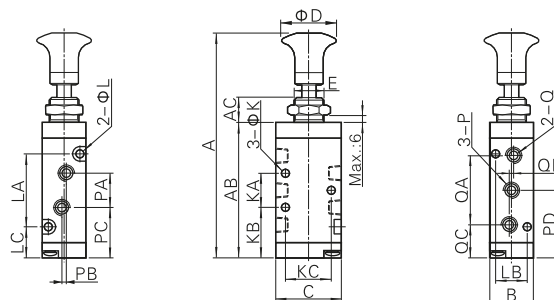


No.	Item	No.	Item	No.	Item
1	Round head screw	6	Spring	11	Top cover
2	Bottom cover	7	Stop screw	12	Safety nut
3	Body	8	Spring base	13	Hand grip
4	Spool	9	Steel ball	14	
5	O-ring	10	Hexagon nut		

Flow chart



Dimensions



Model\Item	A	AB	AC	B	C	D	E	K	KA	KB	KC	L	LA	LB	LC	P	PA	PB	PC	PD	Q	QA	QB	QC
4R110-06	98	58.8	10	18	27	25	M12×0.75	3.3	14	22	19	3.3	30	13	14	1/8"	16	3	21	29	1/8"	28	2	15
4R210-06	106	65.8	10	22	35	25	M14×1	4.3	20	22.5	23.5	3.3	38	17	13.5	1/8"	18	0	23.5	32.5	1/8"	36	0	14.5
4R210-08	106	65.8	10	22	35	25	M14×1	4.3	20	22.5	23.5	3.3	38	17	13.5	1/8"	21	3	22	32.5	1/4"	36	0	14.5
4R310-08	121.5	81	10	27	40	25	M16×1	4.3	24	28.5	27.5	4.3	50	20	15.5	1/4"	22	0	29.5	40.5	1/4"	45	0	18
4R310-10	121.5	81	10	27	40	25	M16×1	4.3	24	28.5	27.5	4.3	50	20	15.5	1/4"	24	4	28.5	40.5	3/8"	45	0	18



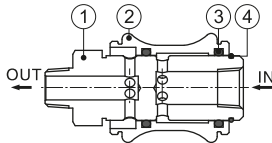
Symbol



Flow chart

1. There are several ways of internal thread connection, suitable for the application in different pipeline systems.
2. The direction-change slides smoothly and has good hand feeling.
3. There is large effective circulating area.
4. The valve spool surface is treated with acid washing passivation, and the surface of valve body is oxidized to keep the color for a long time.

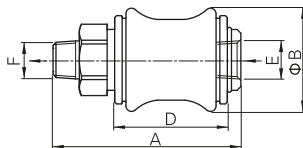
Inner structure



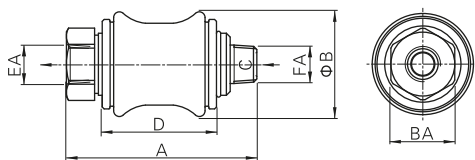
No.	Item
1	Valve plug
2	Body
3	O-ring
4	Clip

Dimensions

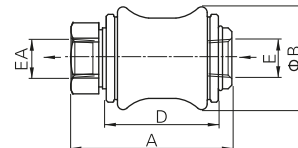
Standard



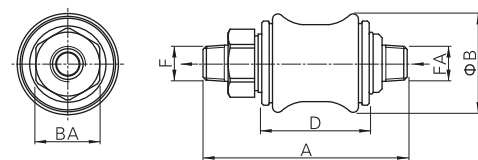
Male and female thread(SF)



Double female thread(FF)



Double male thread(SS)



Model/Item	A				B	BA	D	E	EA	F	FA
	Standard	Double female thread	Male and female thread	Double male thread							
HSV06	50	43	50	57	27.5	17	30	1/8"	1/8"	1/8"	1/8"
HSV08	58	47	58	69	30	19	32.5	1/4"	1/4"	1/4"	1/4"
HSV10	68.5	55.5	68.5	81.5	35.5	22	39	3/8"	3/8"	3/8"	3/8"
HSV15	85.5	70.5	85.5	100.5	44	30	50	1/2"	1/2"	1/2"	1/2"
HSV20	96.5	79.5	96.5	113.5	53.5	36	58	3/4"	3/4"	3/4"	3/4"
HSV25	114.5	96.5	114.5	132.5	65.5	44	70	1"	1"	1"	1"

Specification

Model	HSV06	HSV08	HSV10	HSV15	HSV20	HSV25
Fluid	Air (to be filtered by 40μm filter element)					
Operating	Manual control direct acting type					
Port size ①	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Orifice size	23.0mm ² (Cv=1.28)	40.0mm ² (Cv=2.20)	62.0mm ² (Cv=3.50)	140.0mm ² (Cv=7.80)	250.0mm ² (Cv=13.80)	392.0mm ² (Cv=21.78)
Valve type	3/2 Way					
Lubrication	Not required					
Pressure range	0~1.0MPa(0~145psi)					
Proof pressure	1.5MPa(215psi)					
Temperature	-20~70℃					
Material body	Aluminum alloy					

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

Ordering code

HSV		08		SS			
Model		Port size		Dovt thread		Thread type	
HSV	Hand slide valve	06	1/8"	Blank	Standard	Blank	PT
		08	1/4"	SS	Double male thread	G	G
		10	3/8"	FF	Double female thread	T	NPT
		15	1/2"	SF	Male and female thread		
		20	3/4"				
		25	1"				

Valve

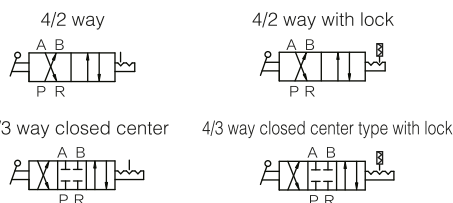
3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ₃₄ ²⁴
MOV
JM
MSV
XQ ₂₅ ²³
3F/3FM
4F
FV
K ₂₅ ²³
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4



Symbol



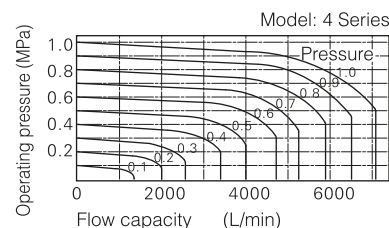
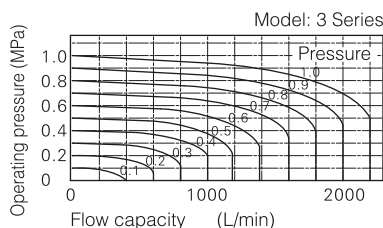
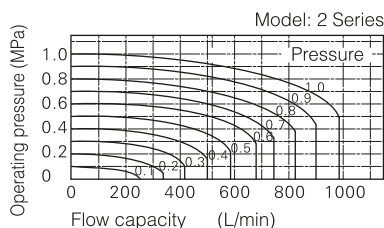
Ordering code

Model	Code	Valve type
4HV	2	10
Hand lever valve	200 Series	4 port 2 position
	3	300 Series
	4	400 Series

Port size	Installation	Note	Thread type
Code	Blank	Blank	Blank
Port size	Body installation	Without lock	PT
200 Series	S	With lock	G
			T
300 Series			NPT
400 Series			

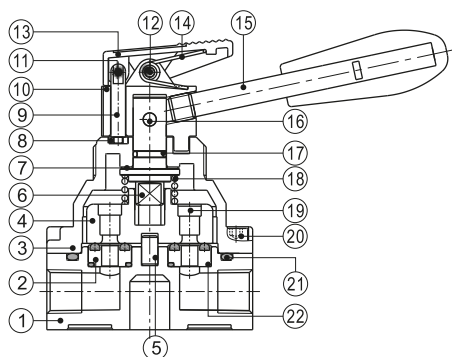
- ① 4 port 3 position only has closed center type.
② The panel installation can be attached with installing nut.

Flow chart



Inner structure

4HVL



No.	Item	No.	Item	No.	Item
1	Body	9	Lock pin	17	Shaft O-ring
2	Seal base	10	Valve cap	18	Spring
3	Valve cover	11	Spring pin	19	Iron plate
4	Valve plug	12	Pin one	20	Fixing screw
5	Column pin	13	Front cover	21	Body O-ring
6	Shaft	14	Spring	22	Seal base O-ring
7	Washer	15	Handle		
8	Fixing plate	16	Pin two		

Specification

Model	4HV2□□ -06(L)	4HV2□□ -08(L)	4HV3□□ -08(L)	4HV3□□ -10(L)	4HV4□□ -15(L)	4HV4□□ -20(L)
Fluid	Air (to be filtered by 40μm filter element)					
Operating	Manual control direct acting tupe					
Port size ①	1/8"	1/4"	1/4"	3/8"	1/2"	3/4"
Orifice size	14.0mm ² (Cv=0.78)	16.0mm ² (Cv=0.89)	30.0mm ² (Cv=1.67)	33.0mm ² (Cv=1.83)	88.0mm ² (Cv=4.89)	95.0mm ² (Cv=5.27)
Valve type	4/2 Way, 4/3 Way					
Lubrication	Not required					
Pressure range	0~1.0MPa(0~145psi)					
Proof pressure	1.5MPa(215psi)					
Temperature	-20~70℃					
Operating angle	90° (4/3 Way: 45°)					

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

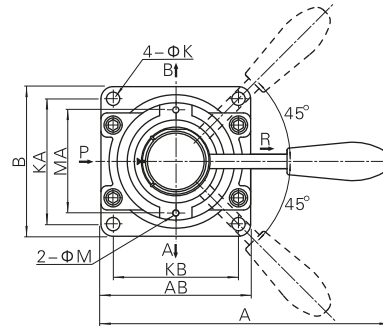
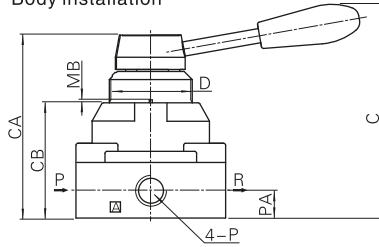
Product feature

1. The direction-change turns lightly with good hand feeling and exact orientation.
2. Large effective circulating area leads to little pressure loss.
3. Panel and body installation are optional, The panel installation can be attached with installing nut.

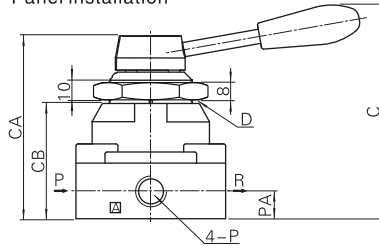
Dimensions

4HV

Body installation



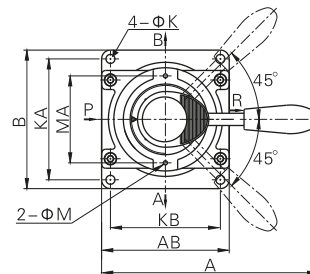
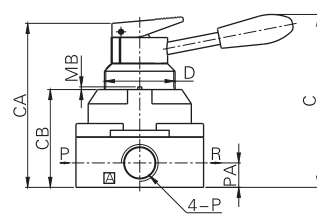
Panel installation



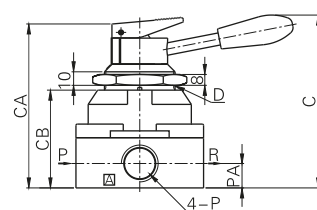
Model\Item	A	AB	B	C	CA	CB	D	K	KA	KB	M	MA	MB	P	PA
4HV2□□-06	120	62	62	92.5	73	45	M34×1.5	5.5	49	49	3	40	1.5	1/8"	11.5
4HV2□□-08	120	62	62	92.5	73	45	M34×1.5	5.5	49	49	3	40	1.5	1/4"	11.5
4HV3□□-08	140	74	74	104	88.5	56	M40×1.5	6.5	62	62	3	51	1.5	1/4"	13.5
4HV3□□-10	140	74	74	104	88.5	56	M40×1.5	6.5	62	62	3	51	1.5	3/8"	13.5
4HV4□□-15	160	94	102	128	110	72	M52×1.5	6.5	89	81	3	64	2	1/2"	18
4HV4□□-20	160	94	102	128	110	72	M52×1.5	6.5	89	81	3	64	2	3/4"	18

4HVL

Body installation



Panel installation



Model\Item	A	AB	B	C	CA	CB	D	K	KA	KB	M	MA	MB	P	PA
4HV2□□-06L	120	62	62	92.5	84	45	M34×1.5	5.5	49	49	3	40	1.5	1/8"	11.5
4HV2□□-08L	120	62	62	92.5	84	45	M34×1.5	5.5	49	49	3	40	1.5	1/4"	11.5
4HV3□□-08L	140	74	74	104	99	56	M40×1.5	6.5	62	62	3	51	1.5	1/4"	13.5
4HV3□□-10L	140	74	74	104	99	56	M40×1.5	6.5	62	62	3	51	1.5	3/8"	13.5
4HV4□□-15L	160	94	102	128	121	72	M52×1.5	6.5	89	81	3	64	2	1/2"	18
4HV4□□-20L	160	94	102	128	121	72	M52×1.5	6.5	89	81	3	64	2	3/4"	18

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

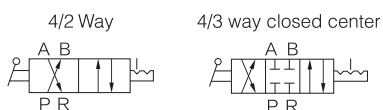
KA

XQ

AQ



Symbol

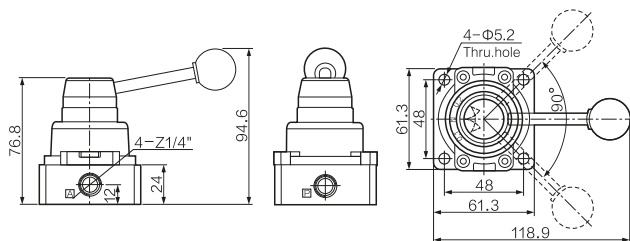


Ordering code

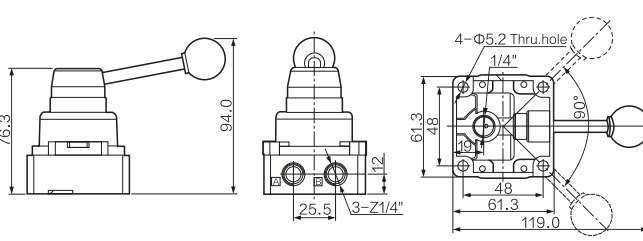
Model	Code	Valve type	Function code	Port size	Handle type	Thread type
HV	2	00	Blank	02	Blank	Blank
Hand lever valve	200 Series	00 4/2 Way	Basic type four side port	02 1/4"	Iron handle	PT
	3	30	A	03	P	G
	300 Series	30 4/3 Way	Bottom port	03 3/8"	Plastic handle	G
			B	04		T
						NPT

Dimensions

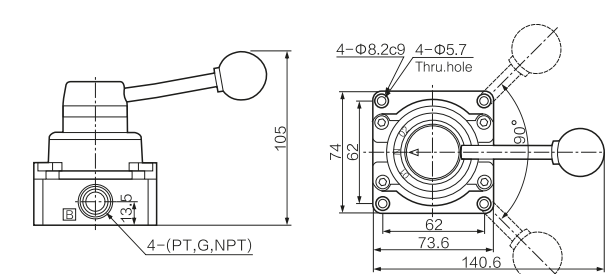
HV200A-02



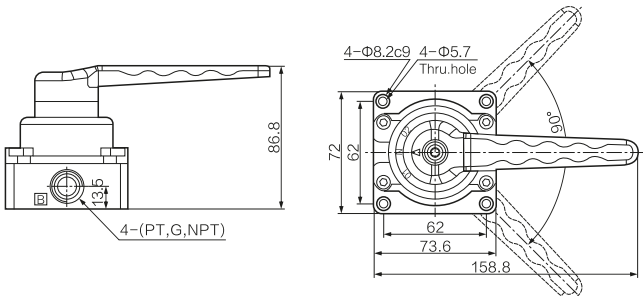
HV200B-02



HV300-02/03/04 HV330-02/03/04



HV300-02/03/04-P HV330-02/03/04-P

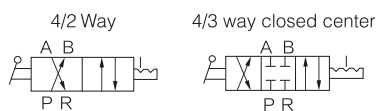




Specification

Model	K24R6-L8	K34R6-L8	K24R6-L8D	K34R6-L8D	K24R6-L8S	K34R6-L8S
Fluid	Air (to be filtered by 40µm filter element)					
Operating	Manual control					
Port size	In=Out=1/4"					
Pressure range	0.15~0.8MPa(21~114psi)					
Valve type	4/2 Way	4/3 Way	4/2 Way	4/3 Way	4/2 Way	4/3 Way
Temperature	-10~60℃					
Proof pressure	1.5MPa(215psi)					

Symbol

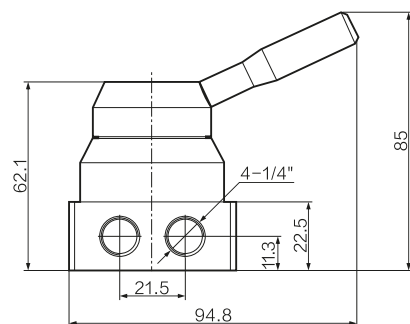
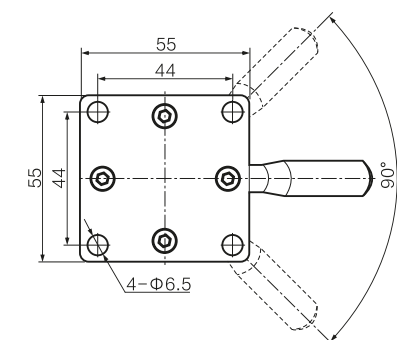


Ordering code

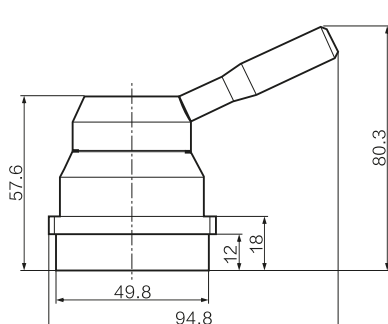
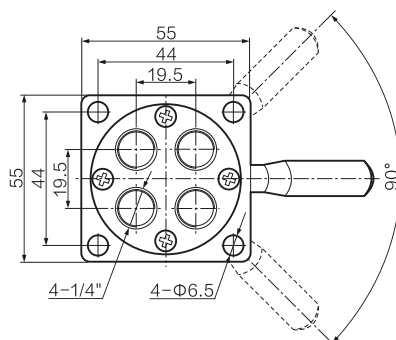
K	24	R6	L8	D	□
Series code	Valve type		Port size		Thread type
	24 4/2 Way		L8 1/4"		Blank PT
	34 4/3 Way				G G
					T NPT
Function code			Take over type		
R6 Hand lever valve			Blank Both sides port		
			D Bottom port		
			S Four side port		

Dimensions

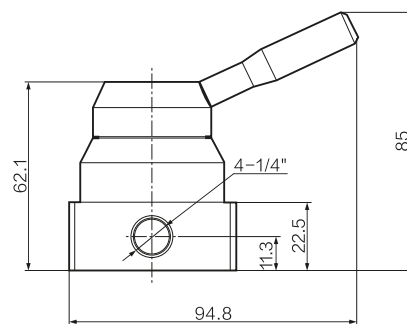
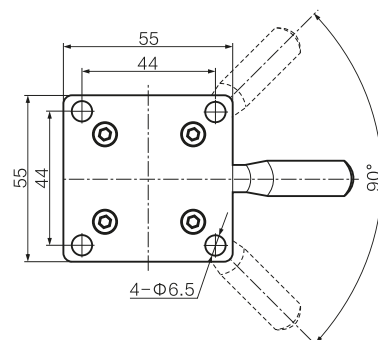
K34R6-8



K34R6-8D



K34R6-8S



Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ₃₄ ²⁴
MOV
JM
MSV
XQ ₂₅ ²³
3F/3FM
4F
FV
K ₂₅ ²³
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

KA

XQ

AQ



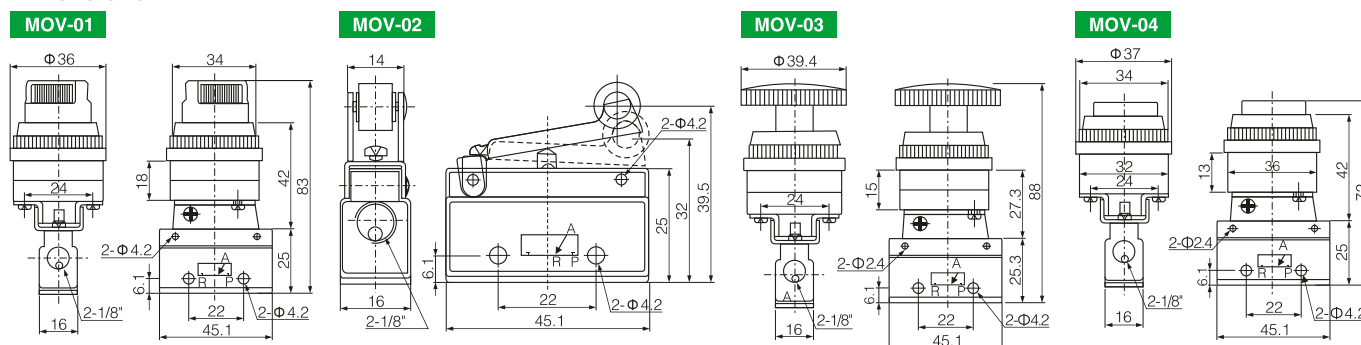
Specifications

Model	MOV-01	MOV-02	MOV-03	MOV-04
Operating fluid	Air			
Position and way no.	Two-position Three-way			
Port size	1/8"			
Working-pressure range	0~0.8MPa			
Operating temperature	0~70℃			

Ordering code

MOV	Model	02	Button type
MOV	Mechanical valve	01	Selective knob
		02	Roller type
		03	With lock button
		04	Plat round button

Dimensions



JM Series Mechanical Valve

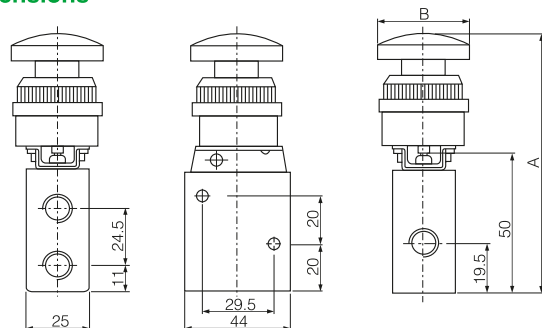
Specifications

Model	JM-05	JM-06	JM-06A	JM-07
Working medium	40μm filtered air			
Position and way no.	Two-position Three-way			
Port size	1/4"			
Working-pressure range	0~0.8MPa			
Operating temperature	0~60℃			

Ordering code

JM	Model	05	Button type
JM	Mechanical valve	05	Selective knob
		06	With lock button
		06A	Plat round button
		07	Roller type

Dimensions



Model	A	B
JM-05	114	36.5
JM-06	111	39.5
JM-06A	96	39.5
JM-07	84.5	42.5



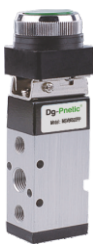
MSV86522EB



MSV86522LB



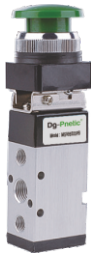
MSV86522TB



MSV86522PP



MSV86522PPL



MSV86522PB



MSV86522R



MSV98322EB



MSV98322LB



MSV98322TB



MSV98322PP



MSV98322PPL



MSV98322PB



MSV98322R

Ordering code

MSV		86		32		1		R		□	
Model		Code		Valve type		Port size		Button type		Thread type	
MSV	Mechanical valve	86	86 Series	32	Two-position Three-way	1	1/8"	Blank	Basic type	Blank	PT
		98	98 Series	52	Two-position Five-way	2	1/4"	R	Roller type	G	G
								TB	Selective knob	T	NPT
								LB	Strengthened knob		
								PB	Large round button		
								PP	Plat round button		
								PPL	Convex round button		
								EB	With lock button		

Specifications

Model	MSV86321		MSV86522		MSV98322	
Working medium			40μm filtered air			
Position and way number	Two-position three-way		Two-position five-way		Two-position three-way	
Pressure range	0~0.8MPa		0~0.8MPa		0~0.8MPa	
Temperature range			0~60℃			
Orifice size	12mm ² (CV=0.67)		16mm ² (CV=0.89)		16mm ² (CV=0.89)	
Port size	1/8"		1/4"		1/4"	

Valve

3V1

3V2

3V2M

3V3

3V100

3V200

3V300

4V100

4V200

4V300

4V400

HY-S1

HY-S2

HY-S3

HY-S4

4M

3V Manifold

4V Manifold

Coil

3A100

3A200

3A300

4A100

4A200

4A300

4A400

3A Manifold

4A Manifold

VF3000

VF5000

SY

SY Manifold

MVSD-180

MVSC-220

MVSC-260

MVSC-300

MVSC-460

HB10

3H

4H

TSV

3R

4R

HSV

4HV/4HVL

HV

K²⁴₃₄

MOV

JM

MSV

XQ²³₂₅

3F/3FM

4F

FV

K²³₂₅

ASC

RE

QE

ST

KA

XQ

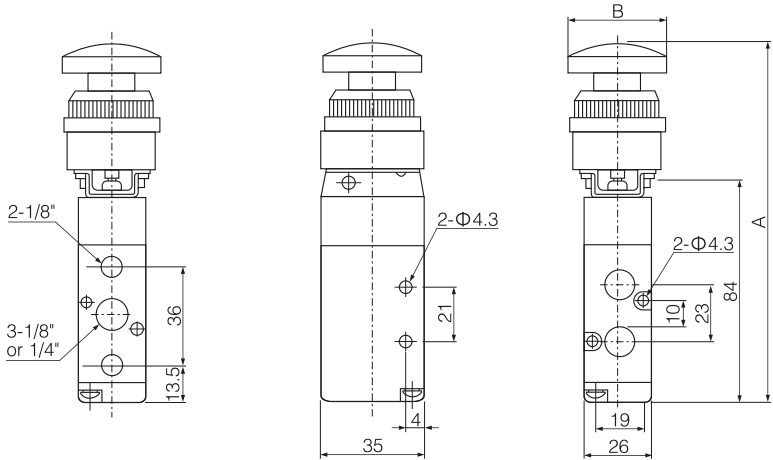
AQ

Valve

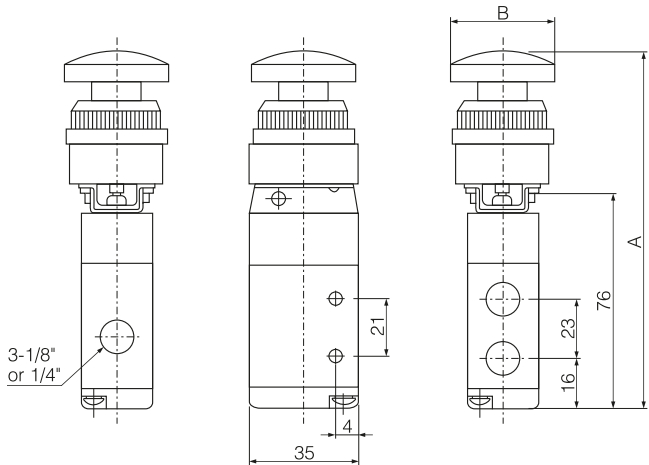
- 3V1
- 3V2
- 3V2M
- 3V3
- 3V100
- 3V200
- 3V300
- 4V100
- 4V200
- 4V300
- 4V400
- HY-S1
- HY-S2
- HY-S3
- HY-S4
- 4M
- 3V Manifold
- 4V Manifold
- Coil
- 3A100
- 3A200
- 3A300
- 4A100
- 4A200
- 4A300
- 4A400
- 3A Manifold
- 4A Manifold
- VF3000
- VF5000
- SY
- SY Manifold
- MVSD-180
- MVSC-220
- MVSC-260
- MVSC-300
- MVSC-460
- HB10
- 3H
- 4H
- TSV
- 3R
- 4R
- HSV
- 4HV/4HVL
- HV
- K²⁴₃₄
- MOV
- JM
- MSV
- XQ²³₂₅
- 3F/3FM
- 4F
- FV
- K²³₂₅
- ASC
- RE
- QE
- ST
- KA
- XQ
- AQ

Dimensions

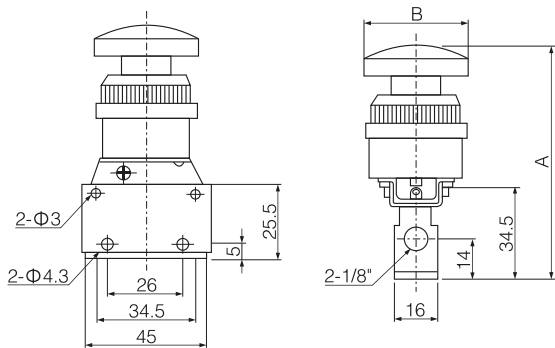
MSV86522



MSV98322



MSV86321



Model	Symbol/Model	PP	PPL	LB	TB	EB	PB	R
MSV86522	A	114	119	133	136.5	134	131	107.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	42.5
MSV98322	A	106	111	125	129.5	126	123	99.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	42.5
MSV86321	A	66	71	85	88.5	86	83	59.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	42.5

PP

PPL

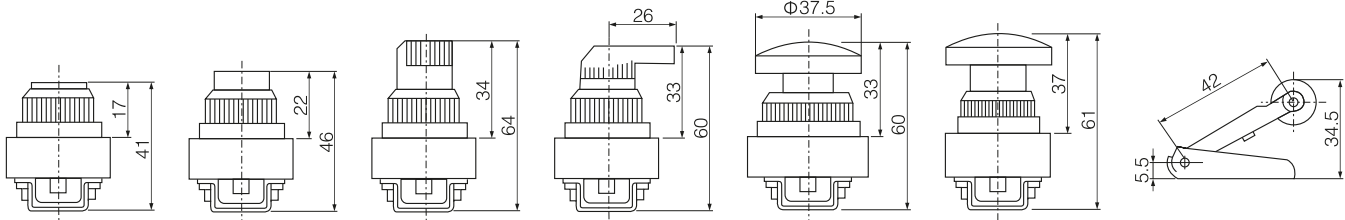
TB

LB

PB

EB

R





Product explain

Manually control valve: manually controlled mechanical valve used for direct control of air source signal or driving executive elements. The valve can be operated and controlled by button, hand-push, pedal and manual. It is convenient and sensitive in operation. Especially the emergency stop valve with short reversing stroke is often used in emergency operation of pneumatic units.

Machine control valve: mechanically controlled reversal valve, which will auto reset and the signal eliminated when the outside force is released. The control by outside force is realized by means of ejector rod, ejector rod roller and lever roller etc.

Ordering code

XQ		25		06		20		□	
Model		Valve type		Port size		Control type		Thread type	
XQ	Machine-control, hand-control valve	23	Two-position three-way	04	1/8" (4mm)	10	Ejector rod type machine-control valve	Blank	PT
		25	Two-position five-way	06	1/4" (6mm)	11	Ejector rod roller type machine-control valve	G	G
						12	Lever roller type machine-control valve	T	NPT
						13	Passable lever roller type machine-control valve		
						20	Button valve		
						20.1	Speedy stop valve		
						21	Hand-push valve		
						22	Hand-draw valve		

Specification

Model	XQ2304□□	XQ2504□□	XQ2306□□	XQ2506□□
Working medium	40μm filtered air			
Position and way no.	Two position three-way	Two position five-way	Two position three-way	Two position five-way
Pipe size	Air inlet=Air outlet= 1/8"		Air inlet=Air outlet= 1/4"	
Orifice size	14mm ² (CV=0.78)		25mm ² (CV=1.39)	
Working pressure	0~8.0Kgf/cm ²			
Proof pressure resistance	12.0Kgf/cm ²			
Operating temperature range	-5~60℃			

Use explain

1. Check if the elements are damaged during transportation before use and installation.
2. Pay attention to the airflow during installation. For mechanically controlled valve, please attend to the conformity between striker and valve stroke.
3. When connecting with metal pipe, please clean the inner side; the dust, such as metal bits may damage the valve.

Valve

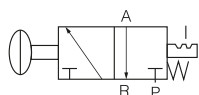
3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ₂₄ ²⁴
K ₃₄ ³⁴
MOV
JM
MSV
XQ ₂₅ ²³
3F/3FM
4F
FV
K ₂₅ ²³
ASC
RE
QE
ST
KA
XQ
AQ

Valve

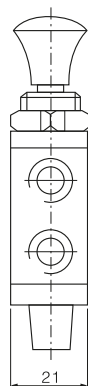
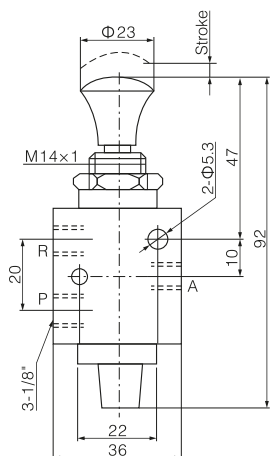
3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K²⁴₃₄
MOV
JM
MSV
XQ²³₂₅
3F/3FM
4F
FV
K²³₂₅
ARC
RE
QE
ST
KA
XQ
AQ

Dimensions

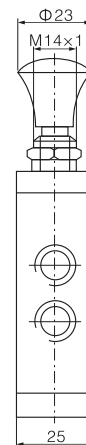
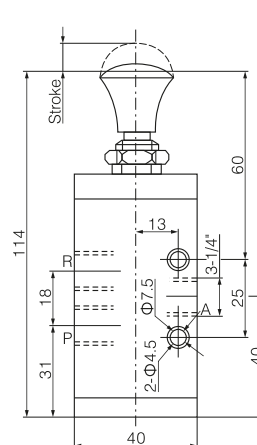
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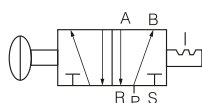
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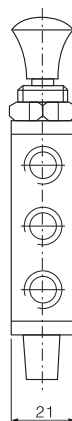
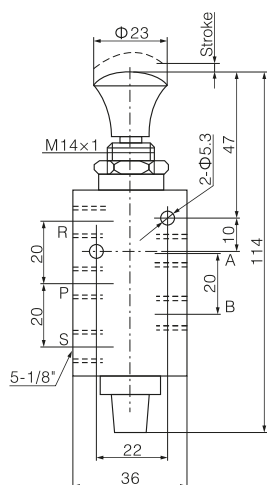
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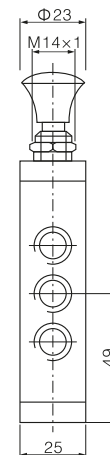
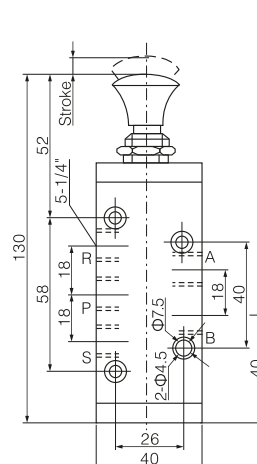
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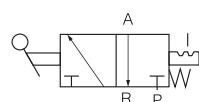
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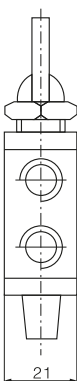
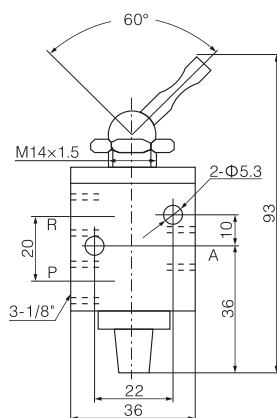
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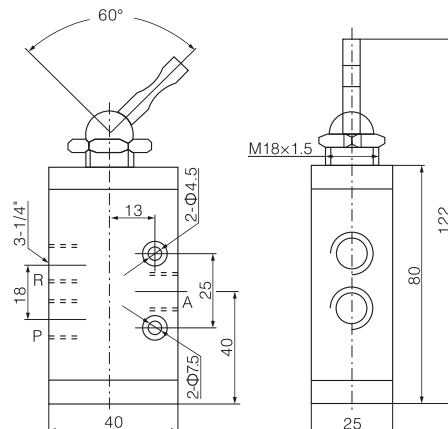
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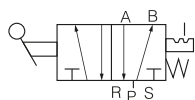


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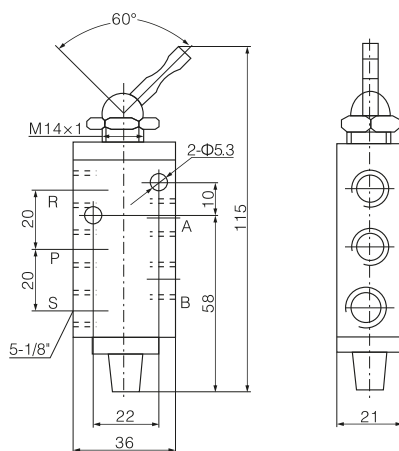


Dimensions

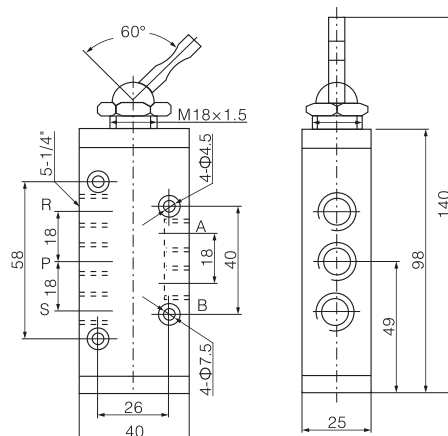
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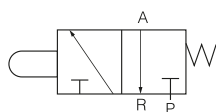
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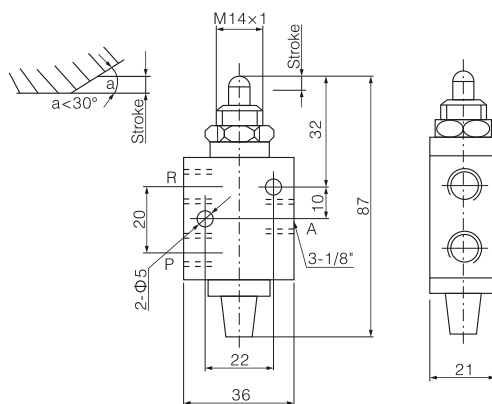
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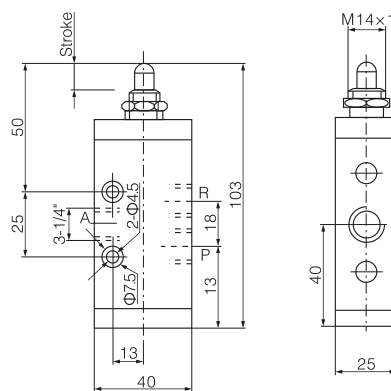
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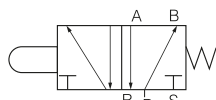
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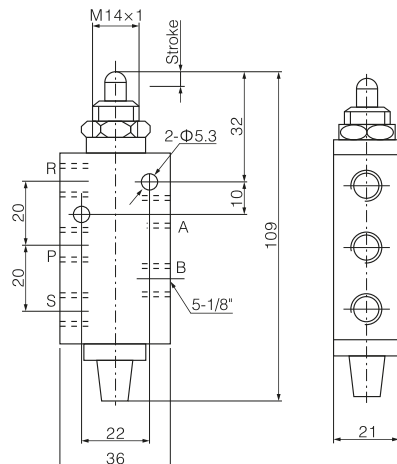
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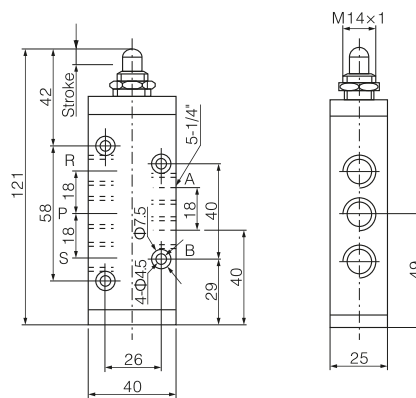
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XQ250410



XQ250610



Valve

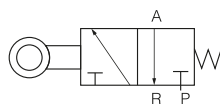
3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ₃₄ ²⁴
MOV
JM
MSV
XQ ₂₅ ²³
3F/3FM
4F
FV
K ₂₅ ²³
ASC
RE
QE
ST
KA
XQ
AQ

Valve

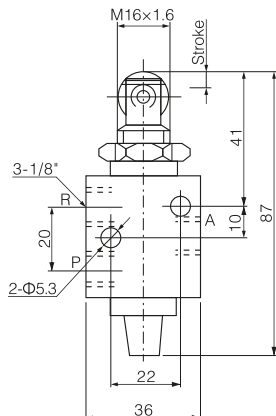
3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K₃₄²⁴
MOV
JM
MSV
XQ₂₅²³
3F/3FM
4F
FV
K₂₅²³
ASC
RE
QE
ST
KA
XQ
AQ

Dimensions

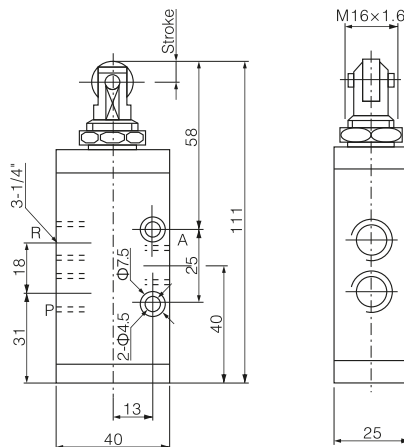
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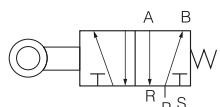
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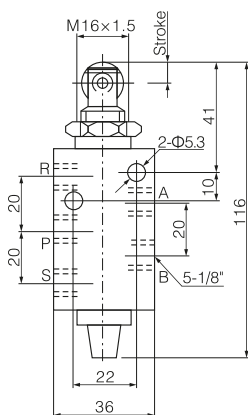
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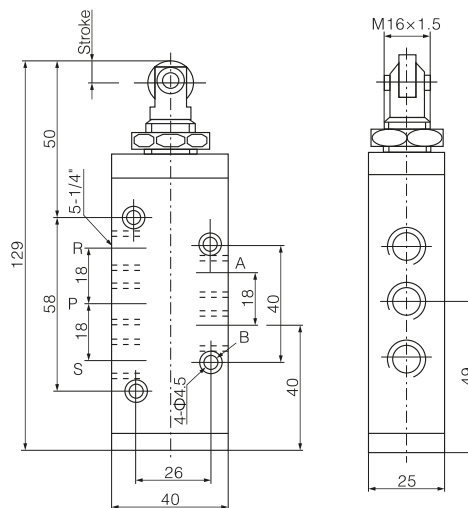
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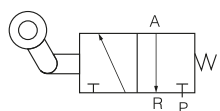
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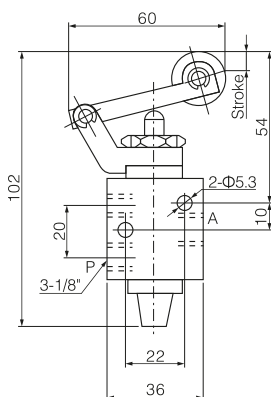
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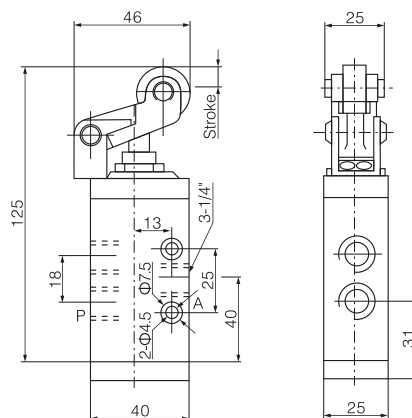
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XQ230412

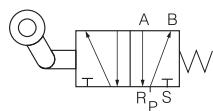


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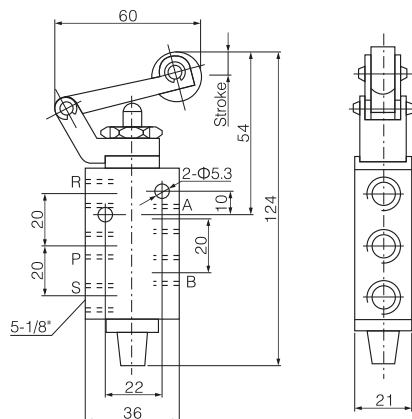


Dimensions

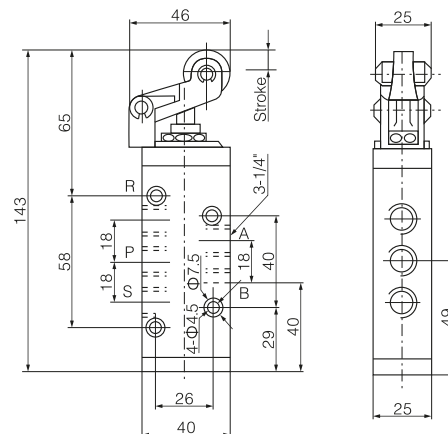
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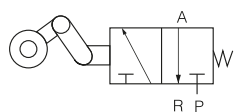
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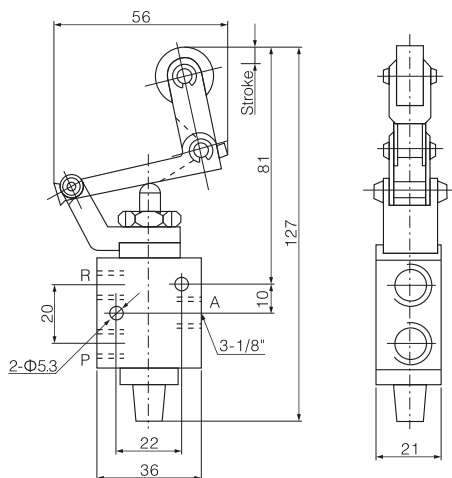
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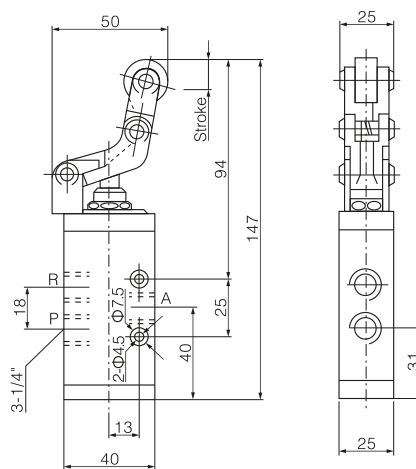
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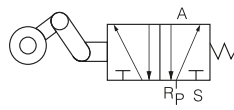
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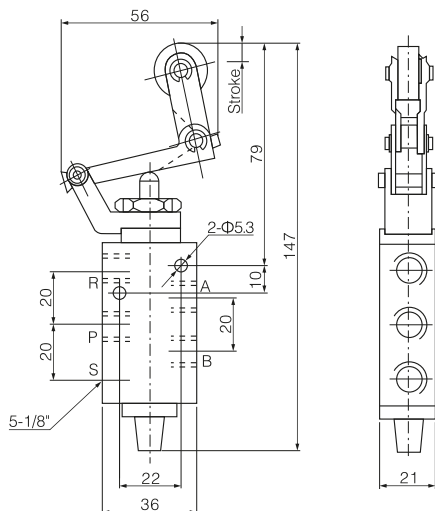
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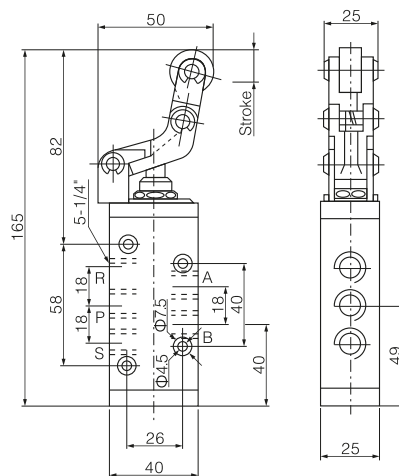
XQ250013



XQ250413



XQ250613



Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ₃₄ ²⁴
MOV
JM
MSV
XQ ₂₅ ²³
3F/3FM
4F
FV
K ₂₅ ²³
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4

4M
3V Manifold
4V Manifold
Coil

3A100
3A200
3A300
4A100
4A200

4A300
4A400

3A Manifold
4A Manifold

VF3000
VF5000

SY
SY Manifold

MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460

HB10
3H
4H

TSV
3R
4R

HSV
4HV/4HVL

HV
K²⁴₃₄

MOV
JM
MSV

XQ²³₂₅

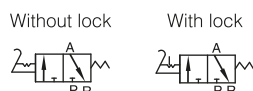
3F/3FM

4F
FV

K²³₂₅
ASC
RE
QE
ST
KA
XQ
AQ



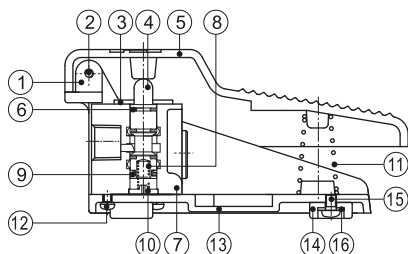
Symbol



Ordering code

3F210		08	
Model		Port size	
3FM210	3/2 way foot pedal valve (mini type)	Model	Port size
3F210	3/2 way foot pedal valve	3FM210	M5: M5
			06: 1/8"
			08: 1/4"
		3F210	06: 1/8"
			08: 1/4"

Inner structure



Specification

Model	3FM210-M5	3F210-06	3FM210-06	3F210-08	3FM210-08
Fluid	Air(to be filtered by 40µm filter element)				
Operating	Acting type controlled by foot normally closed				
Port size ①	M5	1/8"	1/8"	1/4"	1/4"
Valve type	3/2 Way				
Pressure range	0~1.0MPa(0-145psi)				
Proof pressure	1.5MPa(215psi)				
Temperature (°C)	-20~70				
Material body	3FM: Plastic; 3F: Aluminum alloy				
Lubrication	Not required				

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

Product feature

1. Direct acting and normally closed type.
2. The 3F series has aluminum foot pedal and 3FM series has plastic foot pedal, in direct acting type, horizontal and compact structure.
3. If the duration of direction-change is long, the valves with lock may be selected.
4. The clamping framework is steady and reliable that it is easy and quick to unlock. However, with the limitation of the dimension of structure, it can not bear frequent strong impact.

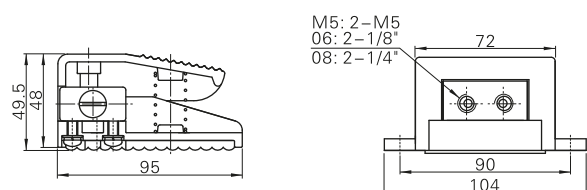
L		Thread type	
Note		Port size	Thread type
Mode	Note	M5	Not code
3FM210	Not code	1/8"	Blank: PT
3F210	Blank: Without lock L: With lock	1/4"	G: G T: NPT

No.	Item	No.	Item	No.	Item
1	Bushing	7	Body	13	Base
2	Fixed screw	8	Spring	14	Base pad
3	Fixed plate	9	E clip	15	Fixed screw
4	Spool	10	Spring bolder	16	Clip
5	Pedal	11	Override spring		
6	O-ring	12	Fixed screw		

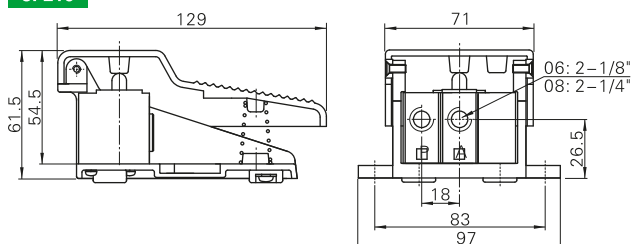
Note: ⚠ Note: Lockable type should be added grease periodically to ensure the machine can work regularly.

Dimensions

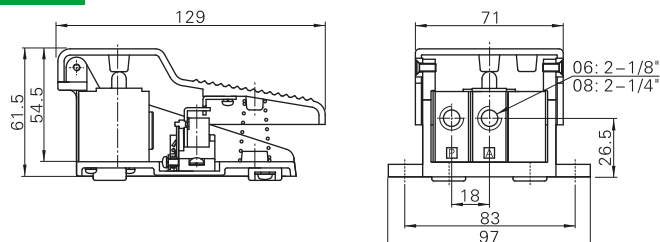
3FM210



3F210



3F210L



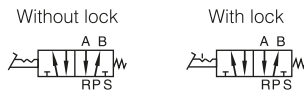


Specifications

Model	4F210-08	4F210-08L	4F210-08F	4F210-08LF
Fluid	Air (to be filtered by 40µm filter element)			
Operating	Acting type controlled by foot			
Port size ①	PT1/4			
Valve type	5/2 Way			
Pressure range	0~1.0MPa(0~145psi)			
Proof pressure	1.5MPa(215psi)			
Temperature (°C)	-20~70			
Material body	Aluminum alloy			
Lubrication	Not required			

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

Symbol



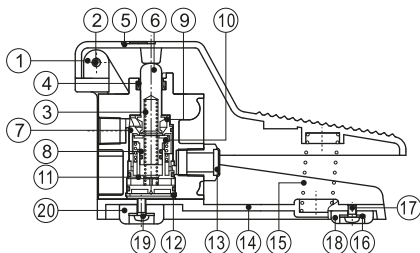
Product feature

1. The aluminum foot pedal is designed with direct acting, which is steady and reliable.
2. If the duration of direction-change is long, the valves with lock may be selected.
3. The clamping framework is steady and reliable that it is easy and quick to unlock. However, with the limitation of the dimension of structure, it can not bear frequent strong impact.
4. Plastic guard with high strength may be selected.

Ordering code

4F210		08	L	
Model	Port size	Note	Thread type	
4F210	5/2 way foot pedal valve	Blank	Blank	PT
		L	G	G
		F	T	NPT
		LF		

Inner structure

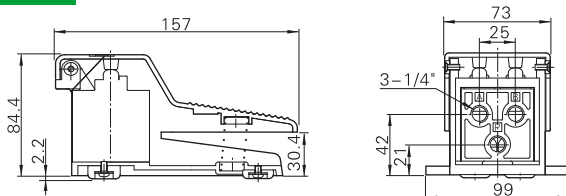


No.	Item	No.	Item	No.	Item	No.	Item
1	Pin	6	Spool	11	Bottom cover	16	Washer
2	Screw	7	O-ring	12	C clip	17	Screw
3	Spring	8	O-ring	13	Silencer	18	Base pad
4	E clip	9	Front cover	14	Base	19	Screw
5	Pedal	10	Piston	15	Pedal spring	20	Base pad

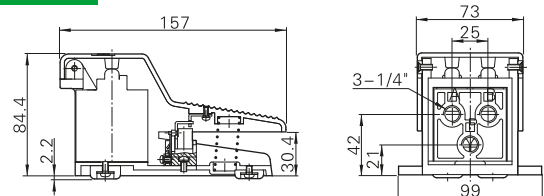
Note: ⚠ Note: Lockable type should be added grease periodically the machine can work regularly.

Dimensions

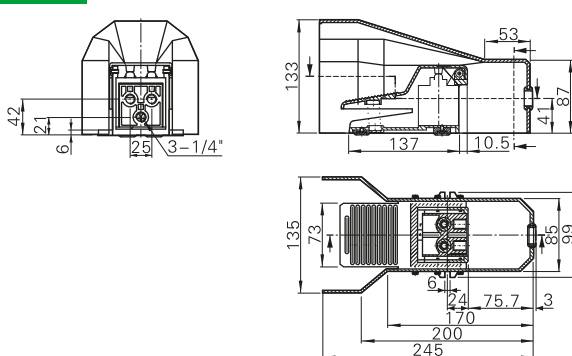
4F210-08



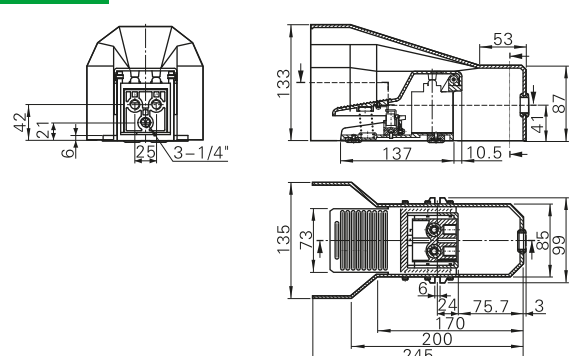
4F210-08L



4F210-08F



4F210-08LF



Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve
3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K²⁴₃₄
MOV
JM
MSV
XQ²³₂₅
3F/3FM
4F
FV
K²³₂₅
ASC
RE
QE
ST
KA
XQ
AQ

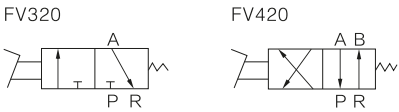


Specifications

Model	FV320	FV420
Fluid	Air(to be filtered by 40μm filter element)	
Valve type	3/2 Way	4/2 Way
Operating	Direct drive type	
Port size ①	06: 1/8"	08: 1/4"
Proof pressure	0~0.8MPa(0~114psi)	
Temperature (℃)	-5~60(28~140°F)	
Lubrication	Not required	

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

Symbol

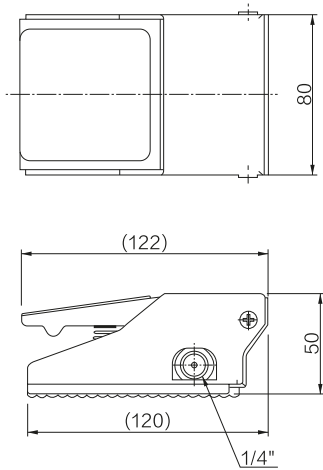


Ordering code

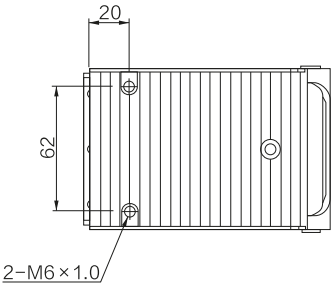
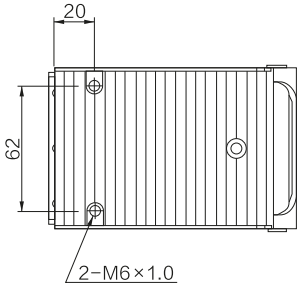
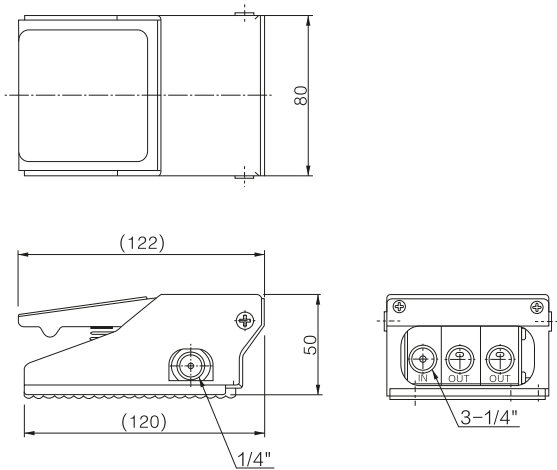
FV	320	08
Model	Position number	Port size
FV	320 3/2 Way	06 1/8"
	420 4/2 Way	08 1/4"

Dimensions

FV320

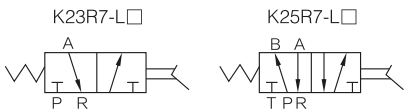


FV420





Symbol



Specifications

Model	K23R7-6	K25R7-6	K23R7-8	K25R7-8
Nominal diameter	6mm		8mm	
Working medium	Air(to be filtered by 40μm filter element)			
Working pressure range	0.05~0.8MPa			
Fluid temperature (℃)	-10~55			
Ambient temperature (℃)	-5~50			
Orifice size	10mm ²		20mm ²	
Leakage rate	≤50cm ³ /min			
Operating force	≤80N		≤100N	
Service life (Million times)	≥200			

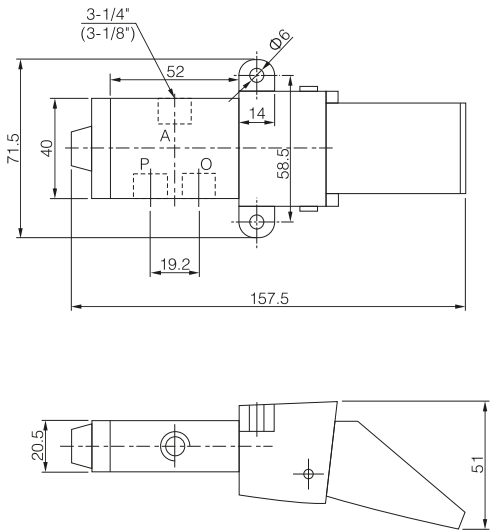
Ordering code

Model	Position number	Control mode
K	23 3/2 Way	R7 Foot pedal valve
	25 5/2 Way	

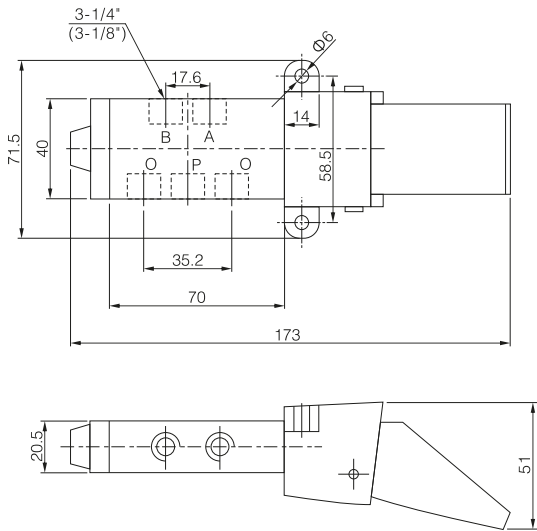
Nominal Diameter	Thread type
6 6mm	Blank PT
8 8mm	G G
	T NPT

Dimensions

K23R7-□



K25R7-□



Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M

3V Manifold
4V Manifold

Coil

3A100
3A200
3A300
4A100
4A200
4A300
4A400

3A Manifold
4A Manifold

VF3000
VF5000

SY
SY Manifold

MVSD-180
MVSC-220

MVSC-260
MVSC-300

MVSC-460
HB10

3H
4H

TSV
3R
4R

HSV
4HV/4HVL

HV
K²⁴₃₄

MOV
JM

MSV
XQ²³₂₅

3F/3FM
4F

FV
K²³₂₅

ASC

RE

QE

ST

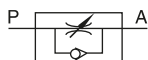
KA

XQ

AQ



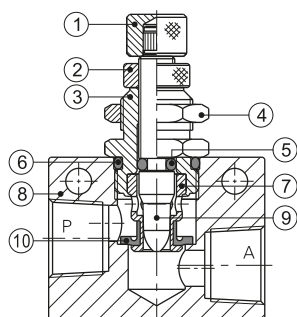
Symbol



Product feature

1. Small and compact structure.
2. Allows air to exhaust and cut off air flow. The adjustment screw is both sensitive and precise.
3. Can be mounted in various position to facilitate installation and application.

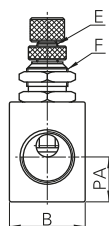
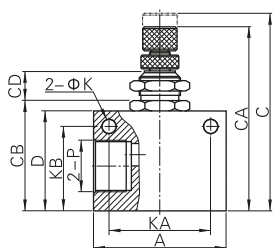
Inner structure



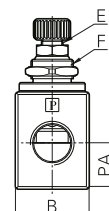
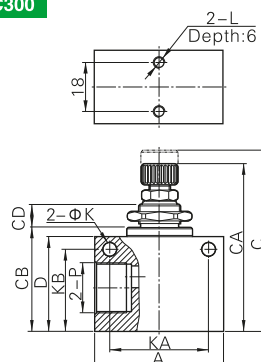
No.	Item
1	Adjustment cap
2	Clamping cap
3	Throttle body
4	Hexagon nut
5	O-ring
6	O-ring
7	Throttle sheath
8	Body
9	Throttle column
10	Spool O-ring

Dimensions

ASC100/ASC200



ASC300



Model/Item	A	B	C	CA	CB	CD	D	E	F	K	KA	KB	L	P	PA
ASC100-06	32	18	52.5	47	26	8.6	23	M6×0.5	M12×0.75	4.3	22	18	M4×0.7	1/8"	10
ASC200-08	36	18	56.5	51	30	8.6	27	M6×0.5	M12×0.75	4.3	26	23	M4×0.7	1/4"	13.5
ASC300-10	50	28	74	65	40.5	10	37	M8×0.75	M16×1.0	5.3	35	32	M4×0.7	3/8"	17.5
ASC300-15	50	28	74	65	40.5	10	37	M8×0.75	M16×1.0	5.3	35	32	M4×0.7	1/2"	17.5

Specifications

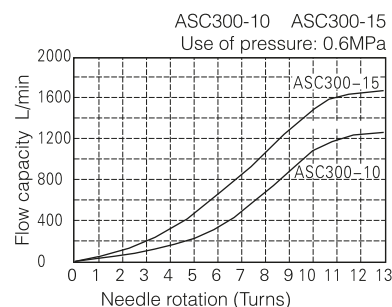
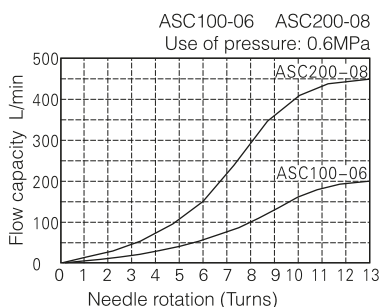
Model		ASC100-06	ASC200-08	ASC300-10	ASC300-15
Fluid		Air(to be filtered by 40μm filter element)			
Port size ①		1/8"	1/4"	3/8"	1/2"
Pressure range		0.05~0.95MPa(7~135psi)			
Proof pressure		1.5MPa(215psi)			
Temperature (°C)		-20~70			
Body material		Aluminum alloy			
Flow (L/min)	Control flow	200	450	1250	1650
	Free flow	400	800	1500	2500

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

Ordering code

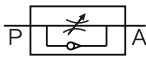
ASC	300	08	
Model	Code	Port size	Thread type
ASC	Flow control valve	Model	Port size
	100 100 Series	100 Series	06 1/8"
	200 200 Series	200 Series	08 1/4"
	300 300 Series	300 Series	10 3/8"
			15 1/2"
			Blank PT
			G G
			T NPT

Flow chart





Symbol



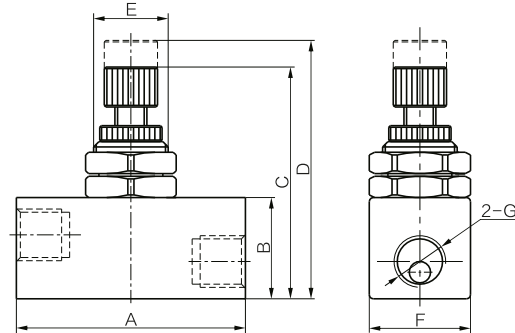
Ordering code

RE		01		
Model		Port size	Thread type	
RE	Flow control valve	01 1/8"	Blank	PT
		02 1/4"	G	G
		03 3/8"	T	NPT
		04 1/2"		

Specifications

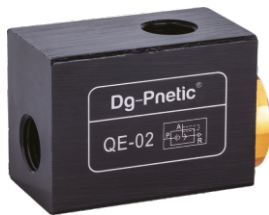
Model	RE-01	RE-02	RE-03	RE-04
Fluid	Air (to be filtered by 40µm filter element)			
Port size	1/8"	1/4"	3/8"	1/2"
Pressure range	0~0.95MPa(0~135psi)			
Temperature (°C)	-5~60(28~140°F)			

Dimensions

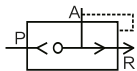


Model/Item	A	B	C	D	E	F	G
RE-01	43	19	43	49	M14×1	19	1/8"
RE-02	43	19	43	49	M14×1	19	1/4"
RE-03	53	26	54	60	M18×1	26	3/8"
RE-04	53	26	54	60	M18×1	26	1/2"

QE Series Quick Exhaust Valve



Symbol



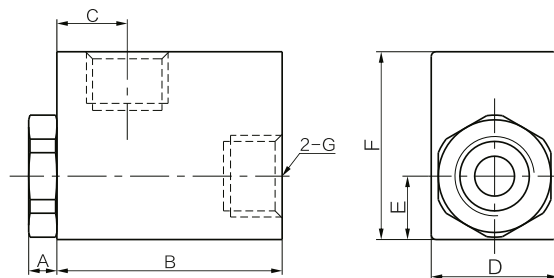
Ordering code

QE		01		
Model		Port size	Thread type	
QE	Fast exhaust valve	01 1/8"	Blank	PT
		02 1/4"	G	G
		03 3/8"	T	NPT
		04 1/2"		

Specifications

Model	QE-01	QE-02	QE-03	QE-04
Fluid	Air (to be filtered by 40µm filter element)			
Port size	1/8"	1/4"	3/8"	1/2"
Pressure range	0~0.95MPa(0~135psi)			
Temperature (°C)	-5~60(28~140°F)			

Dimensions



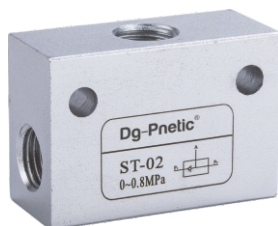
Model/Item	A	B	C	D	E	F	G
QE-01	4	35	10.5	18	9	27	1/8"
QE-02	6	48	15	27	13.5	40	1/4"
QE-03	6	48	15	27	13.5	40	3/8"
QE-04	6	48	15	27	13.5	40	1/2"

Valve

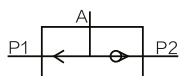
3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K²⁴₃₄
MOV
JM
MSV
XQ²³₂₅
3F/3FM
4F
FV
K²³₂₅
ASC
RE
QE
ST
KA
XQ
AQ



Symbol



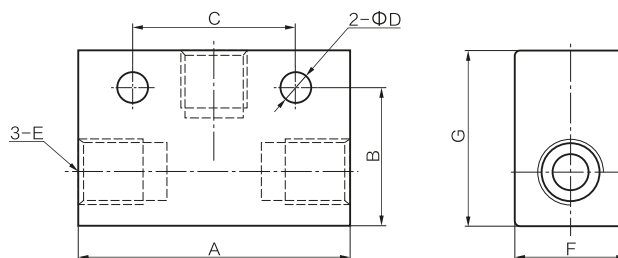
Ordering code

ST	02	
Model	Port size	Thread type
ST Shuttle valve	01 1/8"	Blank PT
	02 1/4"	G G
	03 3/8"	T NPT
	04 1/2"	
	06 3/4"	
	08 1"	

Specification

Model	ST-01	ST-02	ST-03	ST-04	ST-06	ST-08
Port size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Orifice size	7.5mm ²	21mm ²	40mm ²	60mm ²	110mm ²	190mm ²
Operating pressure	0~0.95MPa(0~135psi)					
Proof pressure	1.5MPa(213psi)					
Temperature (°C)	-5~60(28~140°F)					
Material of body	Aluminium alloy					

Dimensions



Model\Item	A	B	C	D	E	F	G
ST-01	40	20.5	24	Φ4.5	1/8"	16	25
ST-02	50	25	35	Φ5.5	1/4"	22	35
ST-03	75	42	48	Φ7	3/8"	30	50
ST-04	75	42	48	Φ7	1/2"	30	50
ST-06	110	58	72	Φ7	3/4"	40	70
ST-08	110	58	72	Φ7	1"	40	70

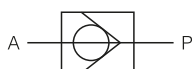
KA Series Air Check Valve



Specification

Model	KA-06	KA-08	KA-10	KA-15	KA-20	KA-25
Fluid	Air(to be filtered by 40μm filter element)					
Port size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Orifice size	10mm ²	20mm ²	40mm ²	60mm ²	100mm ²	190mm ²
Operating pressure	0.15~0.8MPa(21~114psi)					
Proof pressure	1.5MPa(215psi)					
Temperature (°C)	-20~70					
Material of body	Aluminium alloy					

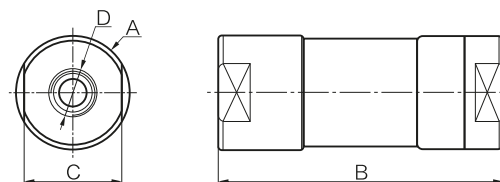
Symbol



Ordering code

KA	02	
Model	Port size	Thread type
KA Air check valve	06 1/8"	Blank PT
	08 1/4"	G G
	10 3/8"	T NPT
	15 1/2"	
	20 3/4"	
	25 1"	

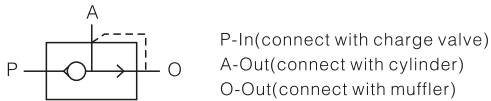
Dimensions



Model\Item	A	B	C	D
KA-06	25.2	63	21.6	1/8"
KA-08	25.2	63	21.6	1/4"
KA-10	38.5	84	34.6	3/8"
KA-15	38.5	84	34.6	1/2"
KA-20	55	110.5	46	3/4"
KA-25	55	110.5	46	1"



Symbol



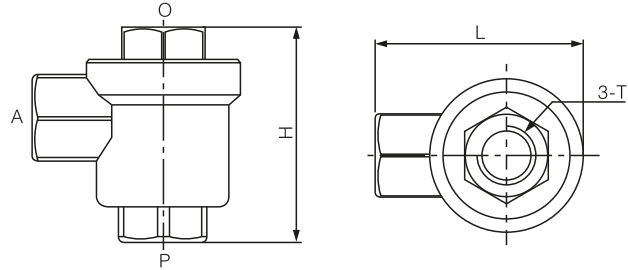
purpose

This fast exhaust valve is suitable for pneumatic industry, mainly used with cylinder. It is used to achieve fast movement of cylinders, so as to improve working efficiency. It has low temperature resistance (-35℃~60℃) and wear resistant spool, and we can customize products with NPT thread specifications.

Specification

Model	XQ0600		XQ1000	XQ1500
Port size	1/8"	1/4"	3/8"	1/2"
Orifice size (mm)	6	8	10	15
Flow (m³/min)	≥0.5	≥0.9	≥2.5	≥4.5
Environment and liquid temperature	5~60℃(Wear-resistant valve core); -30~60℃(Low temperature resistant valve core)			
Durable (Million times)	≥200(Wear-resistant valve core); ≥100(Low temperature resistant valve core)			
Working pressure range	0.2-1.0MPa Resistance to pressure 1.5MPa			
Response time (S)	≤0.01	≤0.03	≤0.04	≤0.05

Dimensions

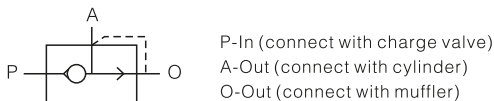


Model	T(Interface)	H	L
XQ0600	1/8"	51	44
XQ0800	1/4"	51	44
XQ1000	3/8"	62	61
XQ1500	1/2"	78	75

AQ Series Quick Exhaust Valve



Symbol



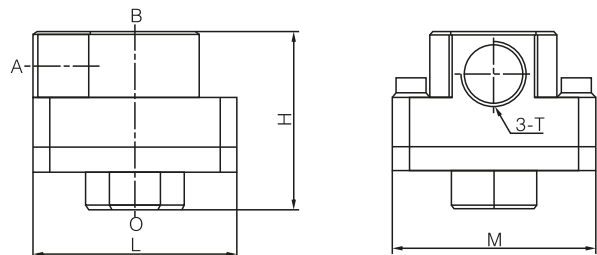
purpose

This fast exhaust valve is applied to the pneumatic industry, mainly used with cylinder, which is used to realize the fast forward movement of the cylinder, so as to improve the working efficiency. (for this product we provide G thread and NPT thread interface).

Specification

Model	AQ2000-01	AQ2000-02	AQ3000-02	AQ3000-03	AQ5000-04	AQ5000-06
Port size	1/8"	1/4"	1/4"	3/8"	1/2"	3/4"
Temperature (℃)	5~60					
Operating pressure	0.15~1.0MPa					
Proof pressure	1.5MPa					

Dimensions



Model	T(Interface)	M	L	H
AQ2000-01/02	1/8" 1/4"	45	45	40
AQ3000-02/03	1/4" 3/8"	56	56	50
AQ5000-04/06	1/2" 3/4"	85	85	75

Flow list

Model	T(Interface)	Orifice size(mm²)		weight(g)
		In→Out	Out→Exhaust	
AQ2000-01	1/8"	25	25	110
AQ2000-02	1/4"	35	40	105
AQ3000-02	1/4"	40	42	215
AQ3000-03	3/8"	60	70	205
AQ5000-04	1/2"	105	115	690
AQ5000-06	3/4"	135	180	690

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4
4M
3V Manifold
4V Manifold
Coil
3A100
3A200
3A300
4A100
4A200
4A300
4A400
3A Manifold
4A Manifold
VF3000
VF5000
SY
SY Manifold
MVSD-180
MVSC-220
MVSC-260
MVSC-300
MVSC-460
HB10
3H
4H
TSV
3R
4R
HSV
4HV/4HVL
HV
K ²⁴ ₃₄
MOV
JM
MSV
XQ ²³ ₂₅
3F/3FM
4F
FV
K ²³ ₂₅
ASC
RE
QE
ST
KA
XQ
AQ