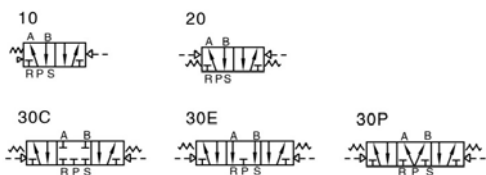


The M4A-Series In-line 5/2 and 5/3 Air actuated valves provide an extensive range of flow options at low prices. The range may be used Lubrication free and be Manifold Mounted for multi-task applications. The Solenoid versions feature interchangeable coils and push/twist—lock Manual Overrides. As well as Pressure Held and Pressure Release 5/3 versions, the range also includes a Pressure Applied spool option.

Specification



Symbols



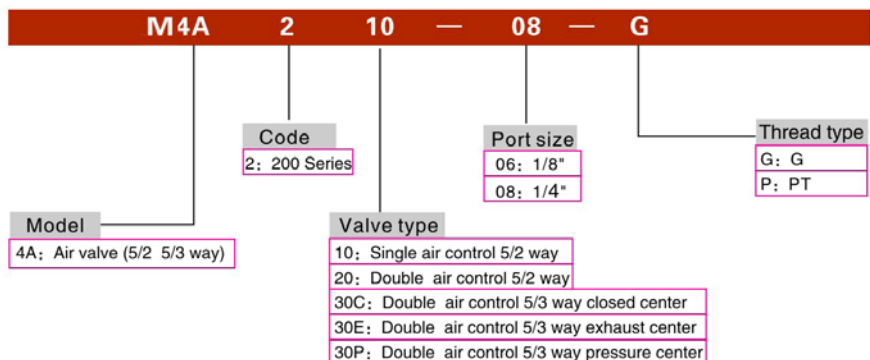
Model	4A210-06 4A220-06	4A230C-06 4A230E-06 4A230P-06	4A210-08 4A220-08	4A230C-08 4A230E-08 4A230P-08
Fluid	Air (to be filtered by 40um filter element)			
Acting	Exterior control			
Port size ①	In=Out=Exhaust=1/8"		In=Out =1/4" Exhaust=1/8"	
Orifice size	14.0mm ² (Cv=0.78)	12.0mm ² (Cv=0.67)	16.0mm ² (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	1.5MPa(215Psi)			
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	4A210-06:185g 4A220-06:285g	365g	4A210-08:185g 4A220-08:285g	365g

1. G (BSP) threads are standard (NPT threads are available as an option on request)
2. If lubrication is preferred, lubricants similar to ISO VG32 or equivalent are recommended.
3. The maximum actuation frequency is for the valve only (no load condition).

Product Features

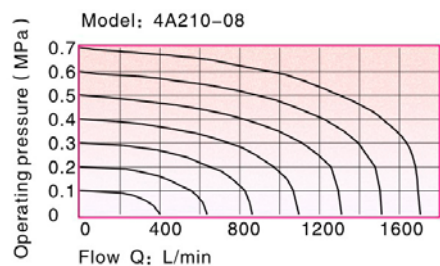
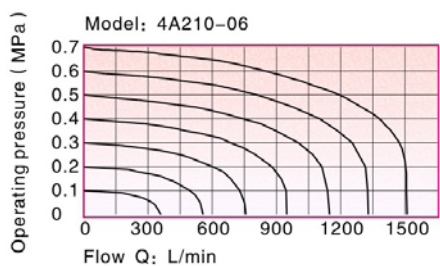
1. Air pilot operated valve series.
2. Spool type, with low leakage and low friction action.
3. 5/3 valves have a choice of three centre functions.
4. 5/2 double air valves have position memory using seal friction to retain the spool position.
5. Special manufacturing techniques ensure low start pressure and long service life.
6. Maybe used lubrication free.
7. The valve range may be manifold mounted for space saving and to reduce installation costs.

Model/Ordering Codes



Refer to In-line Valve Manifold section for mounting options

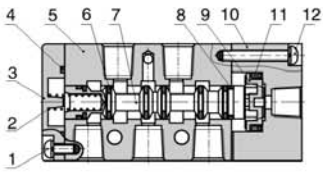
Flow Charts



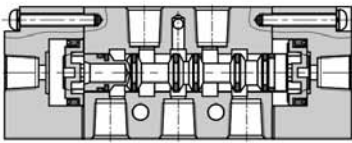
Inner structure

Dimensions

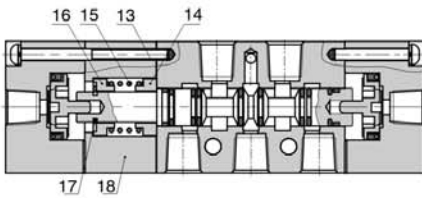
4A210



4A220

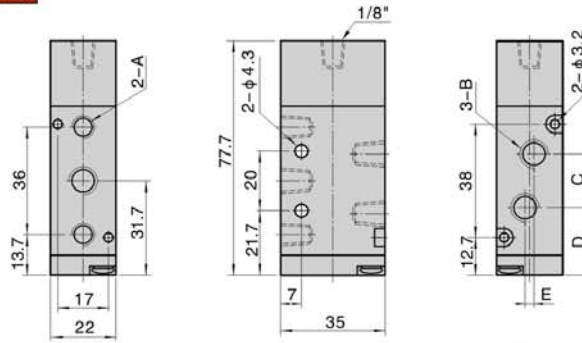


4A230C



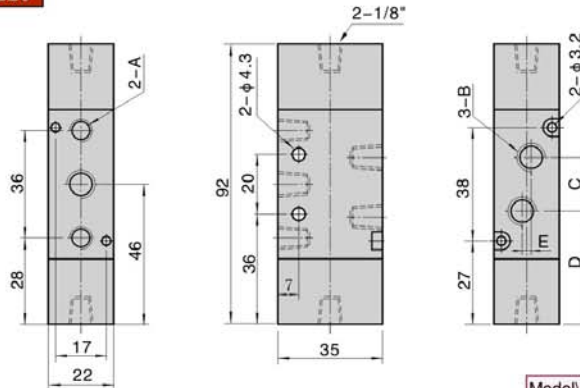
NO.	Item	NO.	Item
1	Bottom cover screw	10	Pilot body
2	Spool spring	11	Piston O-ring
3	Bottom cover	12	Pilot screw
4	Bottom cover gasket	13	Pilot screw
5	Body	14	Return seat
6	Spool O-ring	15	Return spring
7	Spool	16	Return seat
8	Wear ring	17	E clip
9	Piston	18	Side cover

4A210



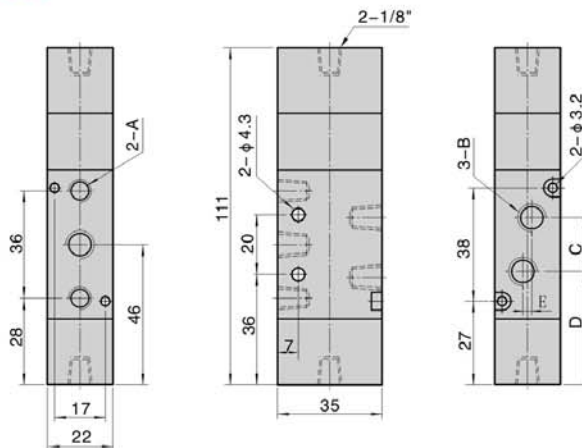
Model/Item	A	B	C	D	E
4A210-06	1/8"	1/8"	18	22.7	0
4A210-08	1/8"	1/4"	21	21.2	3

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

4A230



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