

4V100 Series Solenoid Valve, Pneumatic Control Valve



Ordering code

4V	1	10	-	06	B	-	AC220V	-	W
Specification 4V:5/2(3) way solenoid valve 4A:5/2(3) way pneumatic control valve 3V:3/2 way solenoid valve 3A:3/2 way pneumatic control valve	Series 100 series	Coil and places 10:Single-head double-position 20:Double-head double-position 30C:Double-head three-position close centre 30E:Double-head three-position exhaust centre 30P:Double-head three-position Pressure centre		Port size M5: M5×0.8 06: 1/8"	Joint pipe form and initial state Blank:Pipe connection type B:5/2 way plate connection type 5/3 way plate connection type NC:3/2 way normal close type NO:3/2 way normal open type		Coil voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz		Electrical entry Blank:Standard connector LD:Brown connector with light LD:White connector with light W: Lead wire type

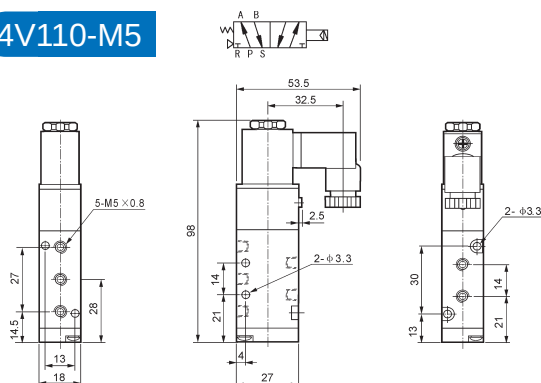
Specifications

Model	4V110-M5	4V120-M5	4V130C-M5	4V130E-M5	4V130P-M5	4V110-06	4V120-06	4V130C-06	4V130E-06	4V130P-06
	4A110-M5	4A120-M5	4A130C-M5	4A130E-M5	4A130P-M5	4A110-06	4A120-06	4A130C-06	4A130E-06	4A130P-06
Position and way NO.	5/2 way		5/3 way			5/2 way		5/3 way		
Effective area	10mm ² (CV=0.56)		7mm ² (CV=0.40)			12mm ² (CV=0.67)		9mm ² (CV=0.5)		
Model	3V110-M5	3V120-M5	3A110-M5	3A120-M5	3V110-06	3V120-06	3A110-06	3A120-06		
Position and way NO.	3/2 way				3/2 way					
Effective area	10mm ² (CV=0.56)				12mm ² (CV=0.67)					
Port size	Air inlet=Air outlet=Exhaust=M5×0.8				Air inlet=Air outlet=Exhaust=G1/8″					
Fluid	40 micron filtered air									
Operation	Inside pilot type									
Operating pressure	0.15～0.8MPa									
Max. proof pressure	1.2MPa									
Temperature	5～50℃									
Allowable voltage	±10% of rated voltage									
Power consumption	AC: 2.5VA DC: 2.5W									
Coil insulation & protection grade	Class F. IP65									
Electrical entry	Lead wire or connector									
Highest action frequency	5 cycle / second									
Shortest excitation time	0.05 second									

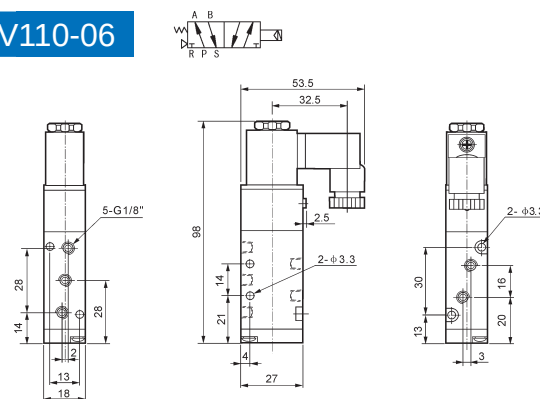
4V100 Series Solenoid Valve

● Dimensions

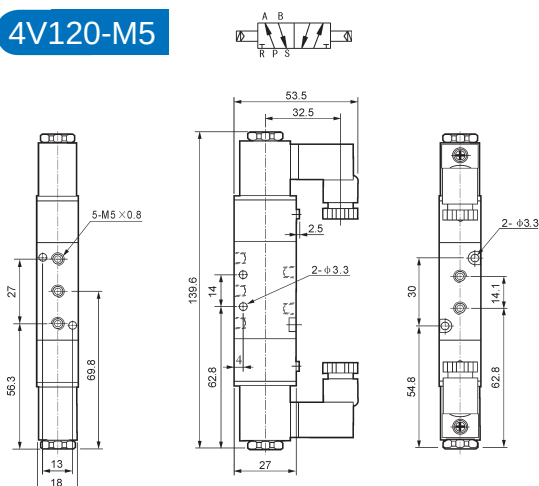
4V110-M5



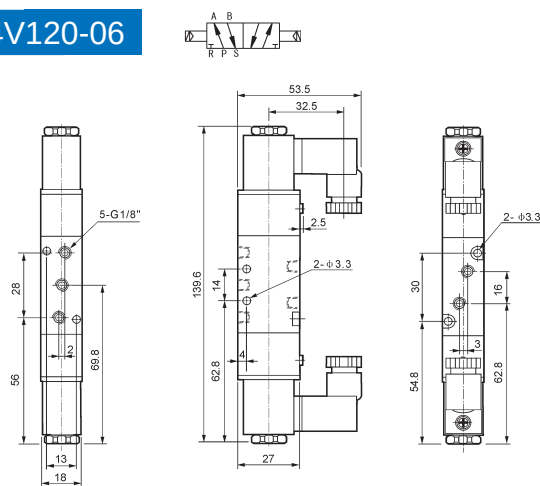
4V110-06



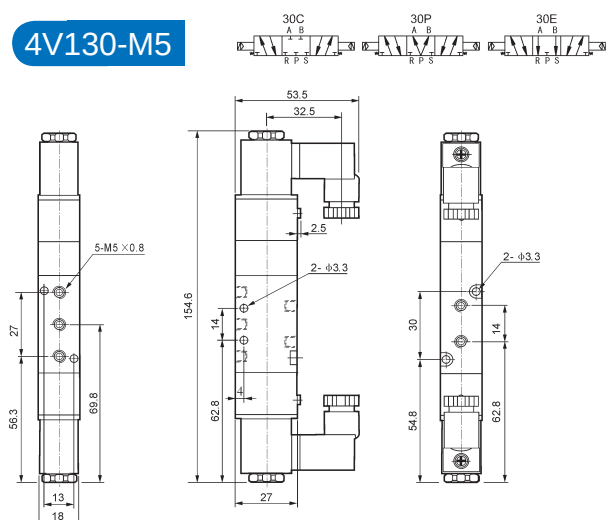
4V120-M5



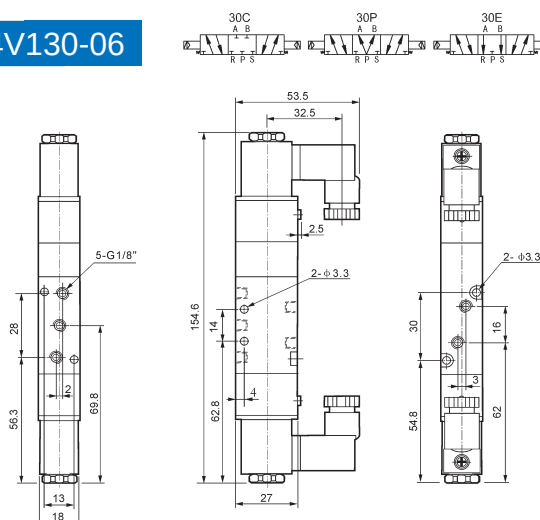
4V120-06



4V130-M5



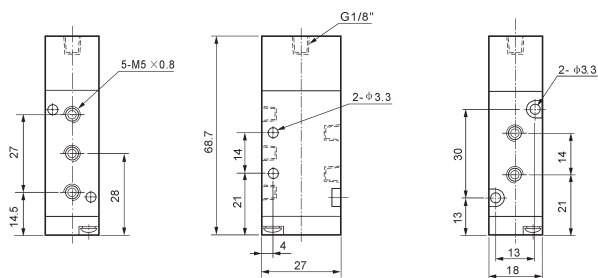
4V130-06



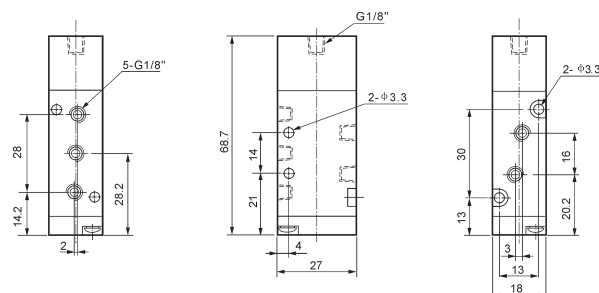
4A100 Series Pneumatic Control Valve

Dimensions

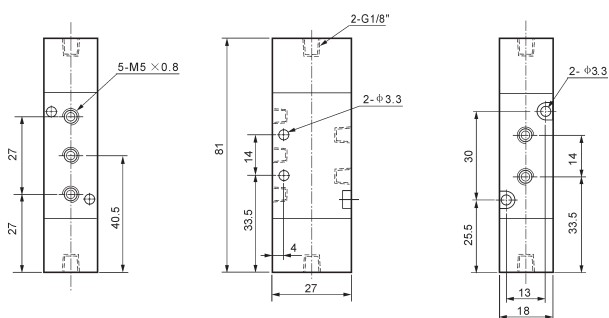
4A110-M5



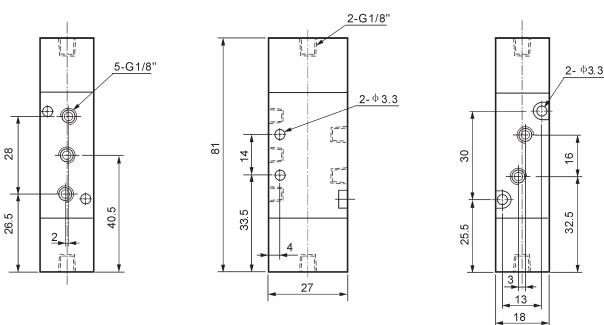
4A110-06



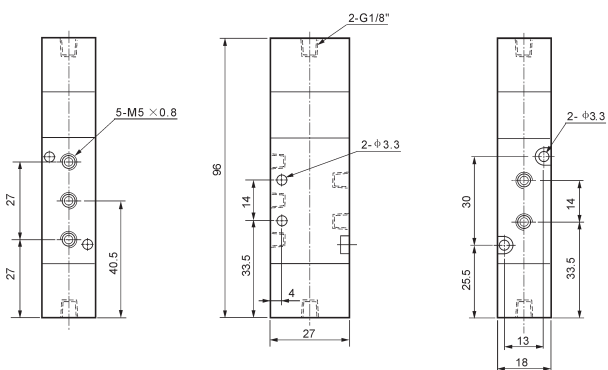
4A120-M5



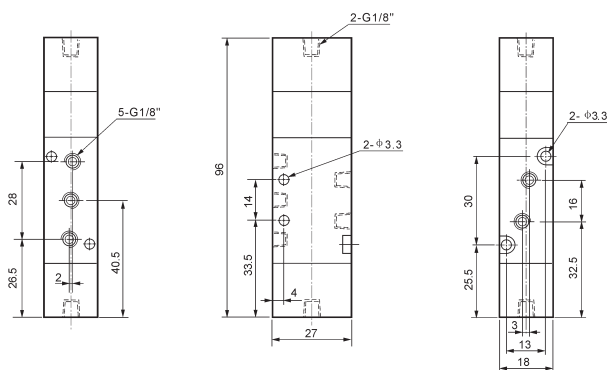
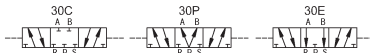
4A120-06



4A130-M5



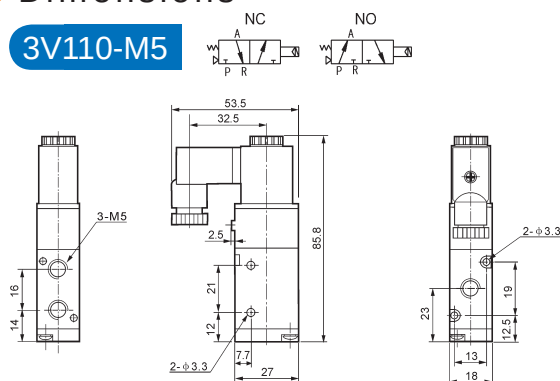
4A130-06



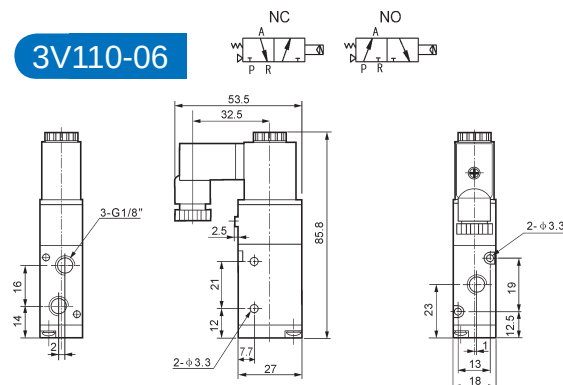
3V100 Series Solenoid Valve & 3A 100 Series Pneumatic Control Valve

● Dimensions

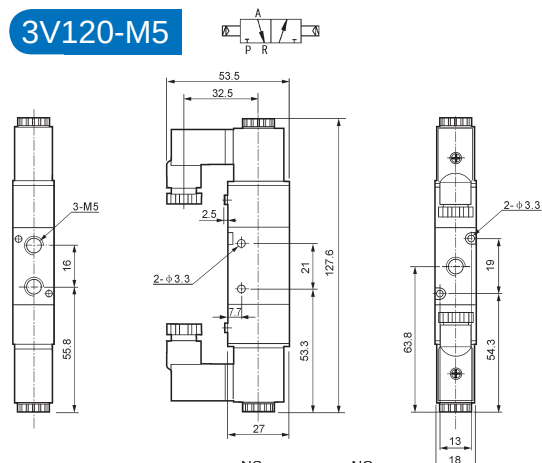
3V110-M5



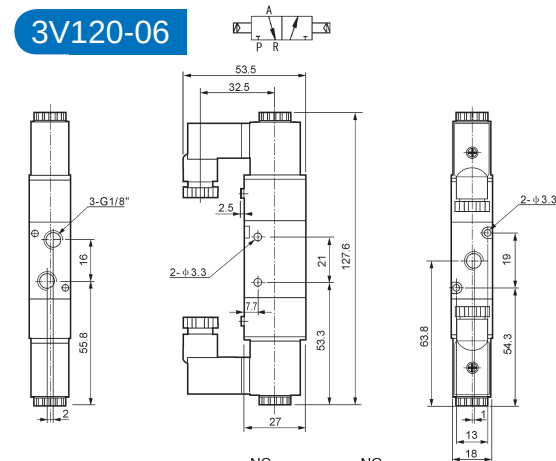
3V110-06



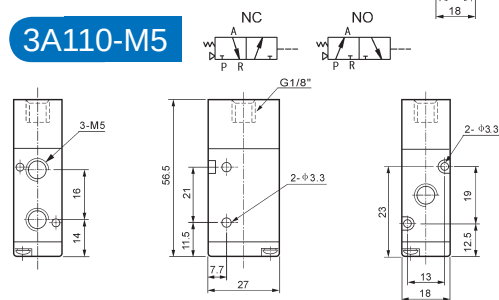
3V120-M5



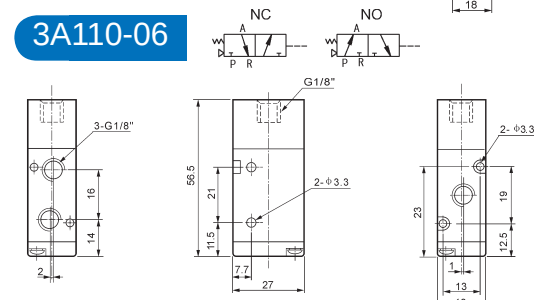
3V120-06



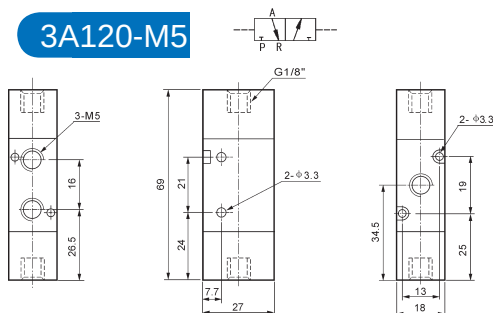
3A110-M5



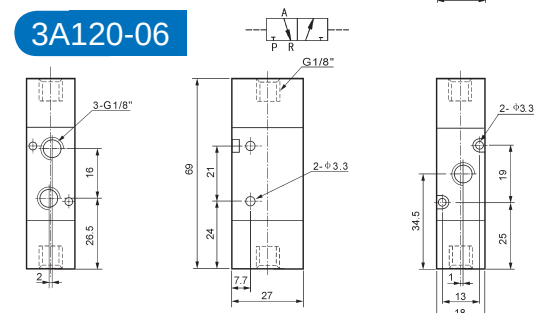
3A110-06



3A120-M5



3A120-06



4V200 Series Solenoid Valve, Pneumatic Control Valve



Ordering code

4V	2	10	-	08	B	-	AC220V	-	W
Specification 4V:5/2(3) way solenoid valve 4A:5/2(3) way pneumatic control valve 3V:3/2 way solenoid valve 3A:3/2 way pneumatic control valve	Series 200 series	Coil and places 10:Single-head double-position 20:Double-head double-position 30C:Double-head three-position close centre 30E:Double-head three-position exhaust centre 30P:Double-head three-position Pressure centre	Port size 06: 1/8" 08: 1/4"	Joint pipe form and initial state Blank:Pipe connection type B:5/2 way plate connection type 5/3 way plate connection type NC:3/2 way normal close type NO:3/2 way normal open type	Coil voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz	Electrical entry Blank:Standard connector LD:Brown connector with light LD::White connector with light W: Lead wire type			

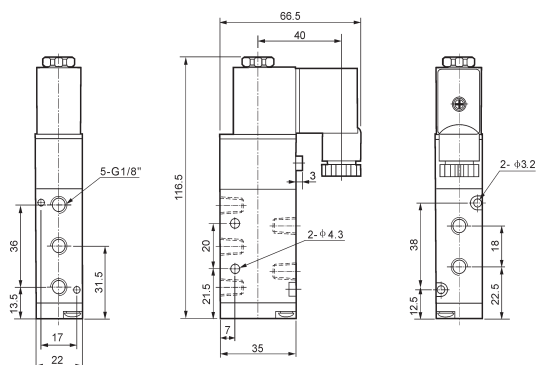
Specifications

Model	4V210-06	4V220-06	4V230C-06	4V230E-06	4V230P-06	4V210-08	4V220-08	4V230C-08	4V230E-08	4V230P-08		
	4A210-06	4A220-06	4A230C-06	4A230E-06	4A230P-06	4A210-08	4A220-08	4A230C-08	4A230E-08	4A230P-08		
Position and way NO.	5/2 way		5/3Five-way			5/2 way		5/3 way				
Effective area	14mm ² (CV=0.78)		12mm ² (CV=0.67)			16mm ² (CV=0.89)		12mm ² (CV=0.67)				
Model	3V210-06	3V220-06	3A210-06	3A220-06	3V210-08	3V220-08	3A210-08	3A220-08				
Position and way NO.	3/2 way				3/2 way							
Effective area	14mm ² (CV=0.78)				16mm ² (CV=0.89)							
Port size	Air inlet=Air outlet=Exhaust=G1/8 ”				Air inlet=Air outlet=G1/4 ” Exhaust=G1/8 ”							
Fluid	40 micron filtered air											
Operation	Inside pilot type											
Operating pressure	0.15～0.8MPa											
Max. proof pressure	1.2MPa											
Temperature	5～50℃											
Allowable voltage	± 10% of rated voltage											
Power consumption	AC: 4.5VA DC: 3W											
Coil insulation & protection grade	Class F. IP65											
Electrical entry	Lead wire or connector											
Highest action frequency	5 cycle / second											
Shortest excitation time	0.05 second											

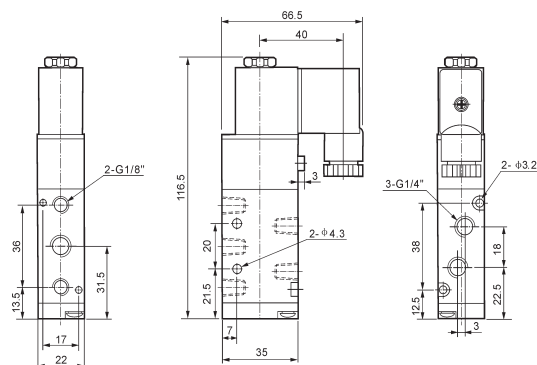
4V200 Series Solenoid Valve

● Dimensions

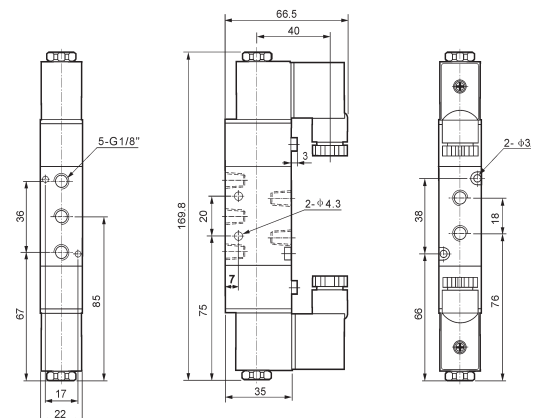
4V210-06



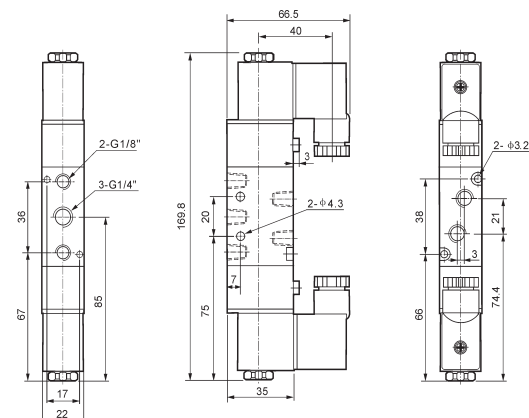
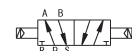
4V210-08



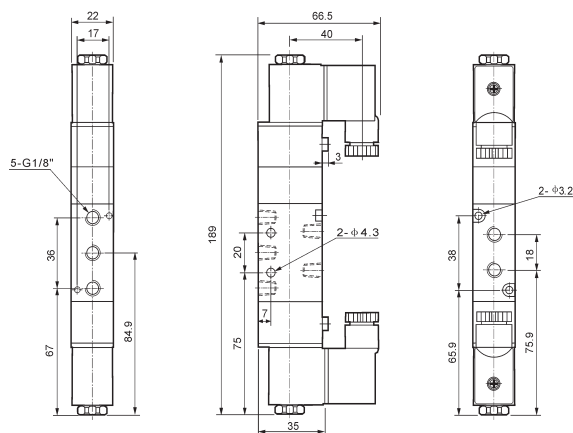
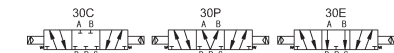
4V220-06



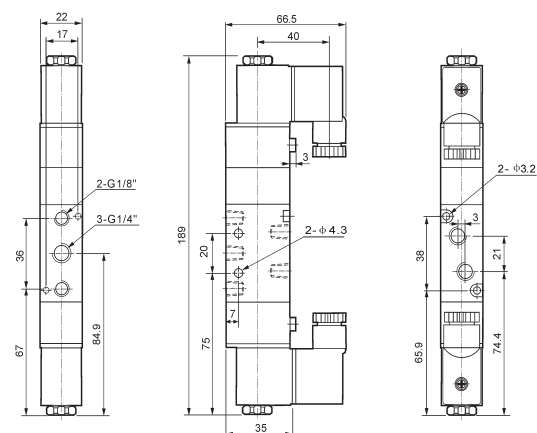
4V220-08



4V230-06



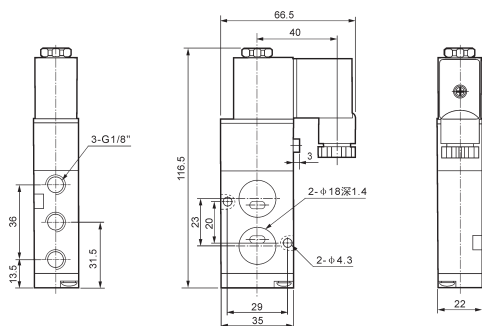
4V230-08



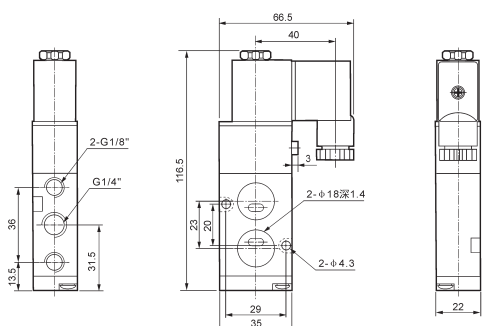
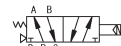
4V200 Series Solenoid Valve

Dimensions

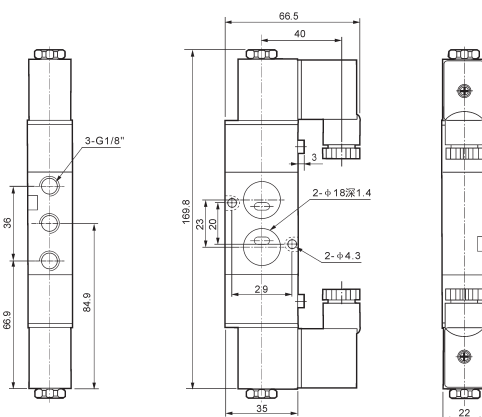
4V210-06B



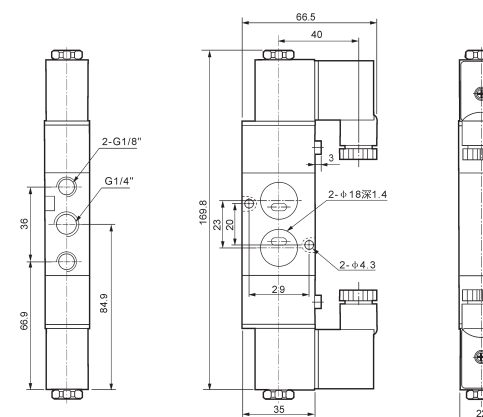
4V210-08B



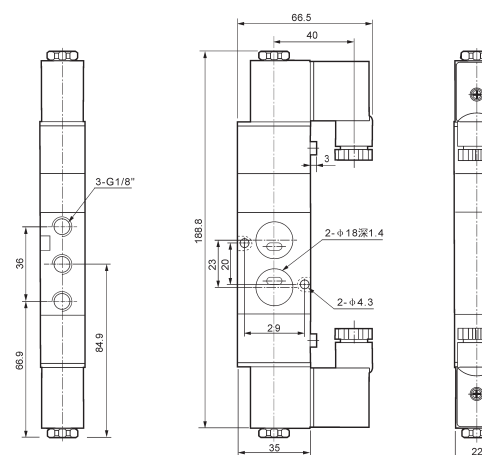
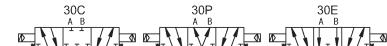
4V220-06B



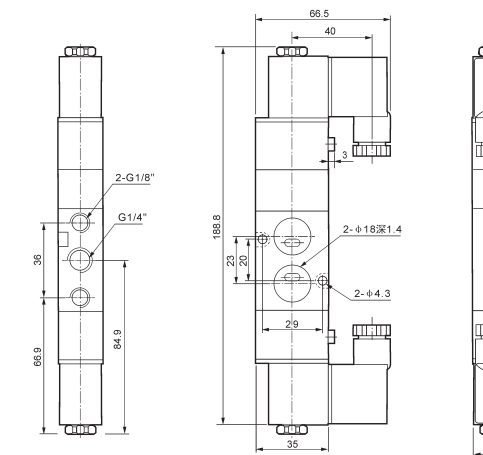
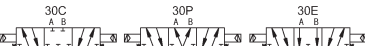
4V220-08B



4V230-06B



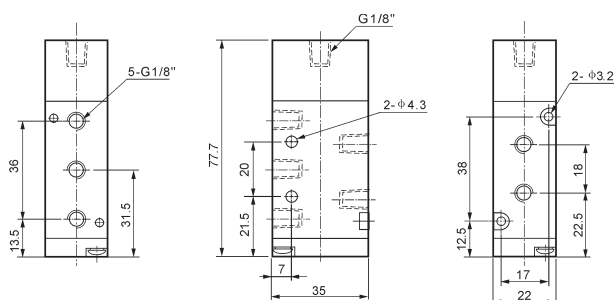
4V230-08B



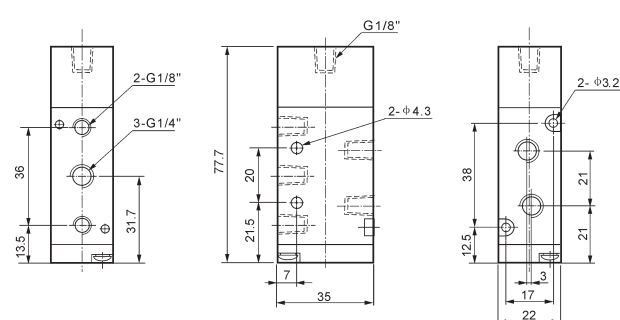
4A200 Series Pneumatic Control Valve

● Dimensions

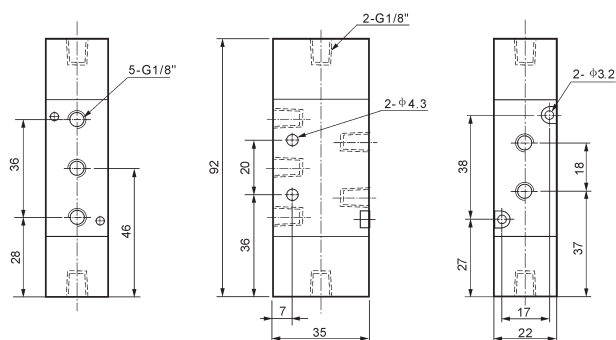
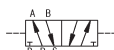
4A210-06



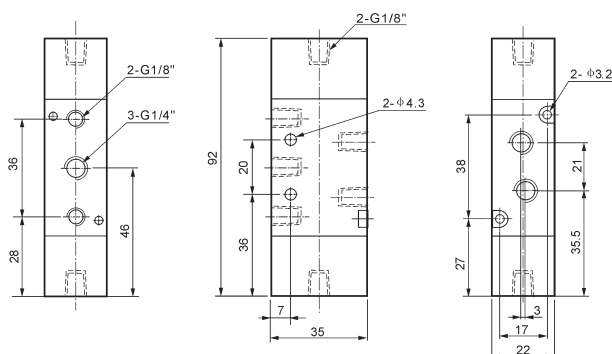
4A210-08



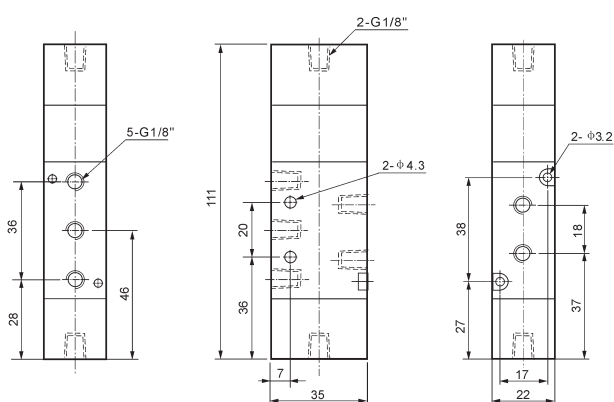
4A220-06



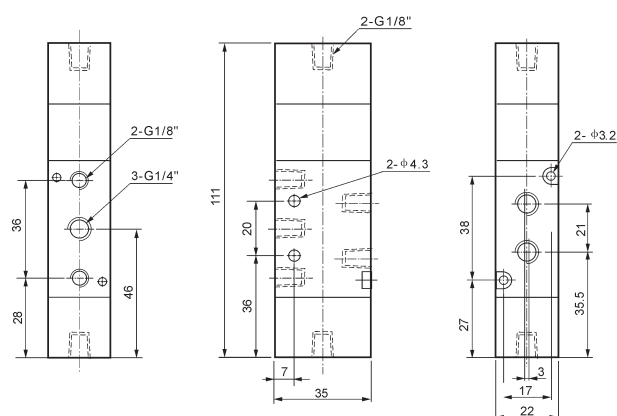
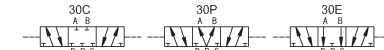
4A220-08



4A230-06



4A230-08





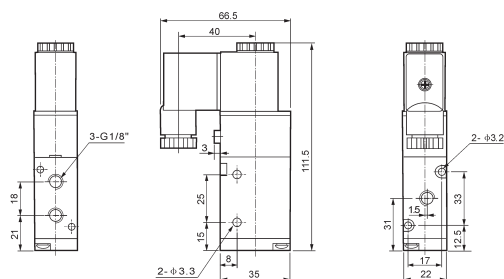
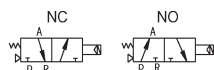
VOGUEPNEUMATICS

Ningbo Vogue Pneumatics Industry Co., Ltd.

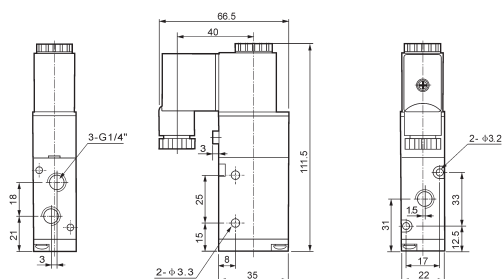
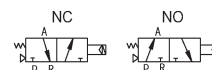
3V200 Series Solenoid Valve & 3A200 Series Pneumatic Control Valve

● Dimensions

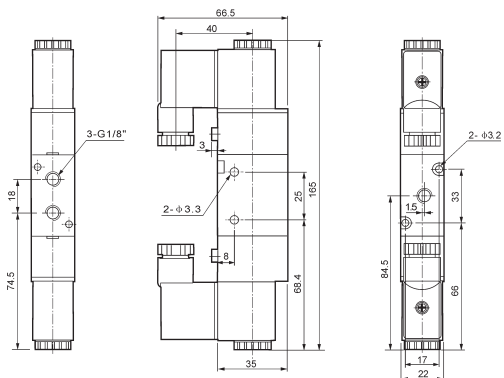
3V210-06



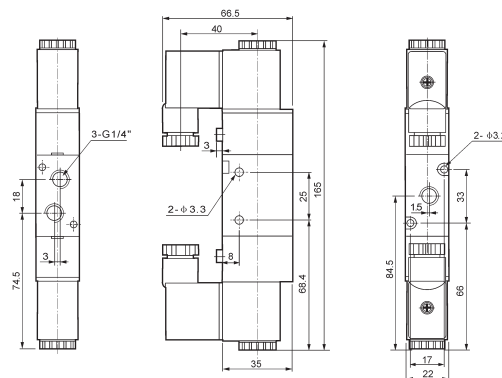
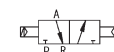
3V210-08



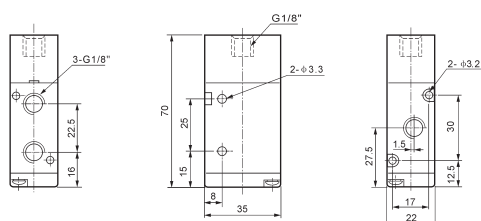
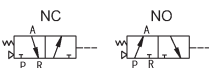
3V220-06



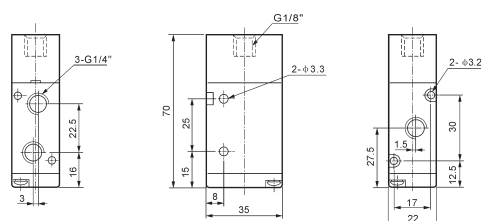
3V220-08



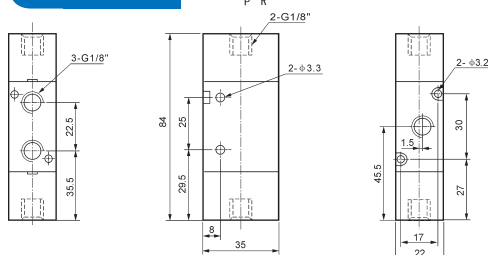
3A210-06



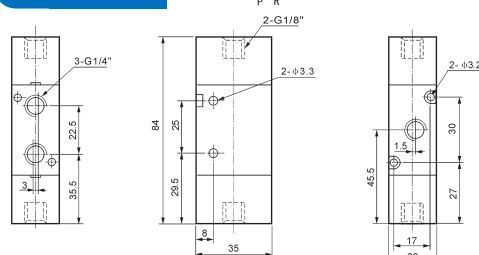
3A210-08



3A220-06



3A220-08



4V300 Series Solenoid Valve, Pneumatic Control Valve



Ordering code

4V	3	10	-	10	B	-	AC220V	-	W
Specification 4V:5/2(3) way solenoid valve 4A:5/2(3) way pneumatic control valve 3V:3/2 way solenoid valve 3A:3/2 way pneumatic control valve	Series 300 series	Coil and places 10:Single-head double-position 20:Double-head double-position 30C:Double-head three-position close centre 30E:Double-head three-position exhaust centre 30P:Double-head three-position Pressure centre		Port size 08: 1/4" 10: 3/8"	Joint pipe form and initial state Blank:Pipe connection type B:5/2 way plate connection type 5/3 way plate connection type NC:3/2 way normal close type NO:3/2 way normal open type		Coil voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz		Electrical entry Blank:Standard connector LD:Brown connector with light LD:White connector with light W: Lead wire type

Specifications

Model	4V310-08	4V320-08	4V330C-08	4V330E-08	4V330P-08	4V310-10	4V320-10	4V330C-10	4V330E-10	4V330P-10
	4A310-08	4A320-08	4A330C-08	4A330E-08	4A330P-08	4A310-10	4A320-10	4A330C-10	4A330E-10	4A330P-10
Position and way NO.	5/2 way		5/3 way			5/2 way		5/3 way		
Effective area	25mm ² (CV=1.40)		18mm ² (CV=1.00)			30mm ² (CV=1.68)		18mm ² (CV=1.00)		
Model	3V310-08	3V320-08	3A310-08	3A320-08		3V310-10	3V320-10	3A310-10	3A320-10	
Position and way NO.	3/2 way					3/2 way				
Effective area	25mm ² (CV=1.40)					30mm ² (CV=1.68)				
Port size	Air inlet=Air outlet=Exhaust=G1/4″					Air inlet=Air outlet=G3/8″ Exhaust=G1/4″				
Fluid	40 micron filtered air									
Operation	Inside pilot type									
Operating pressure	0.15～0.8MPa									
Max. proof pressure	1.2MPa									
Temperature	5～50℃									
Allowable voltage	±10% of rated voltage									
Power consumption	AC: 4.5VA DC: 3W									
Coil insulation & protection grade	Class F. IP65									
Electrical entry	Lead wire or connector									
Highest action frequency	5 cycle / second									
Shortest excitation time	0.05 second									



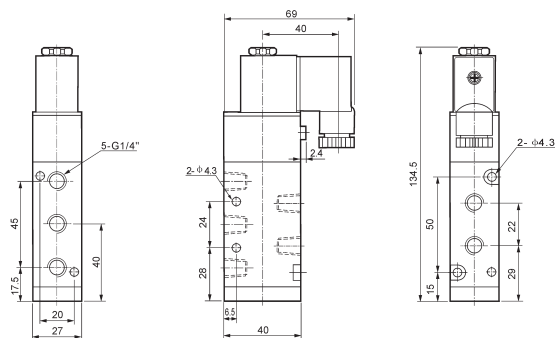
VOGUEPNEUMATICS

Ningbo Vogue Pneumatics Industry Co., Ltd.

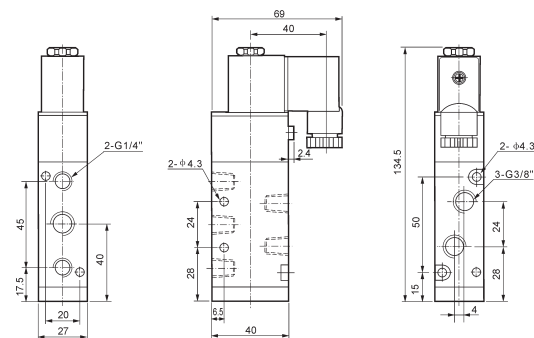
4V300 Series Solenoid Valve

Dimensions

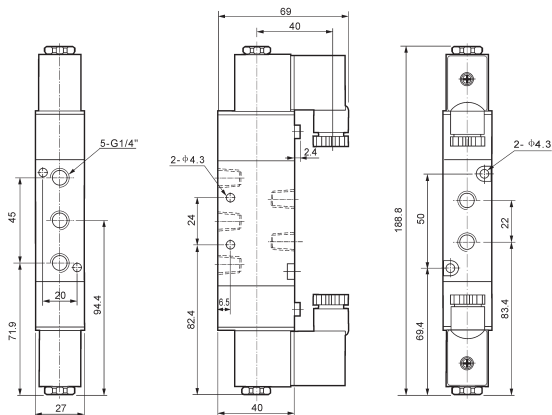
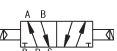
4V310-08



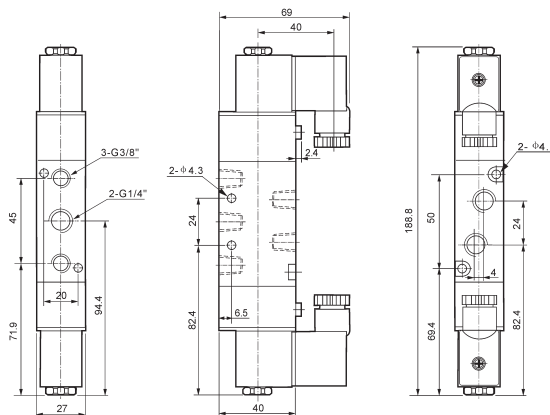
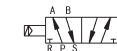
4V310-10



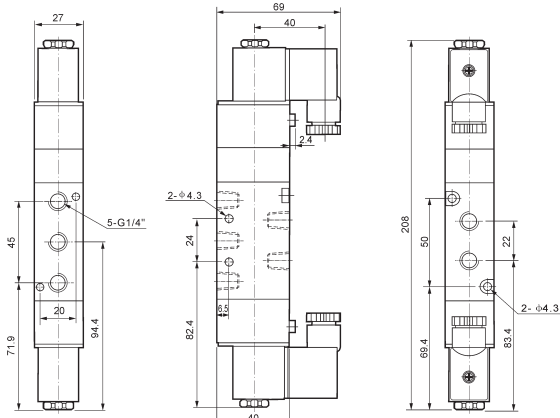
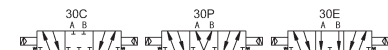
4V320-08



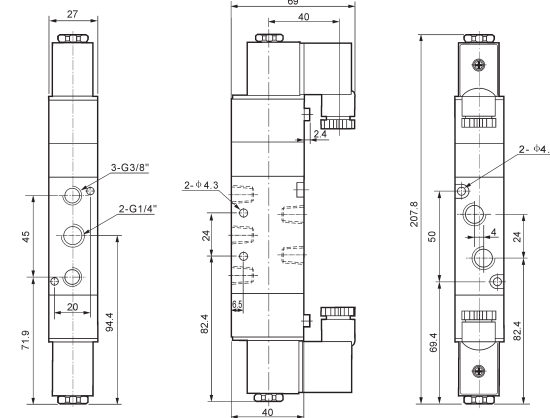
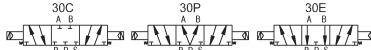
4V320-10



4V330-08



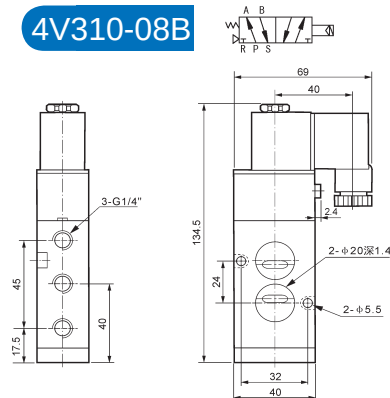
4V330-10



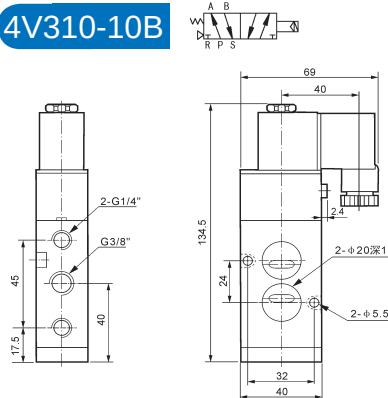
4V300 Series Solenoid Valve

Dimensions

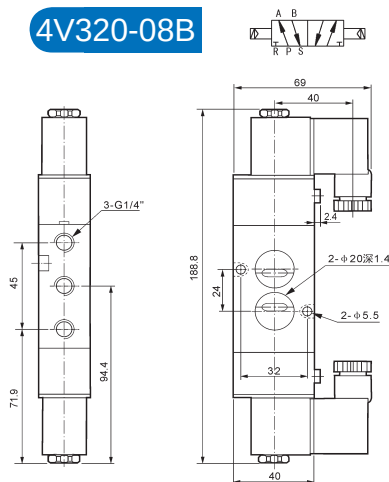
4V310-08B



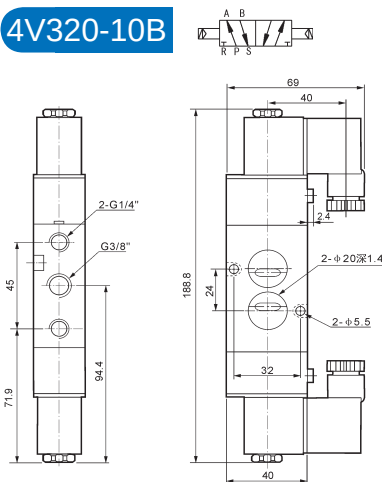
4V310-10B



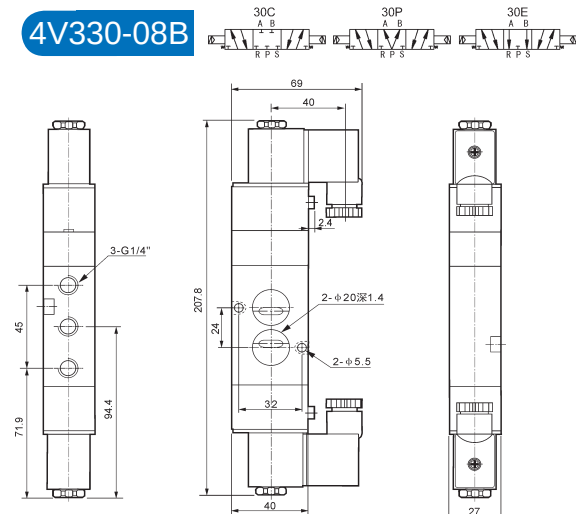
4V320-08B



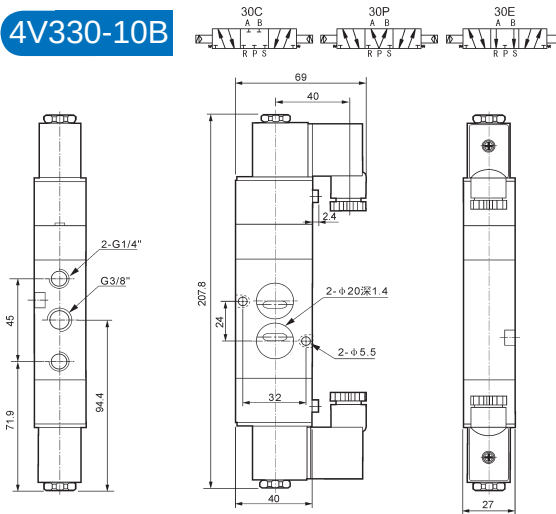
4V320-10B



4V330-08B



4V330-10B





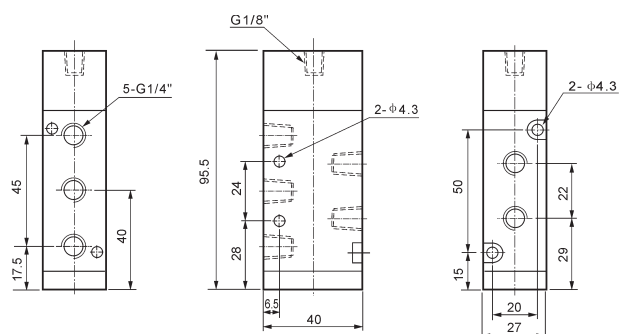
VOGUEPNEUMATICS

Ningbo Vogue Pneumatics Industry Co., Ltd.

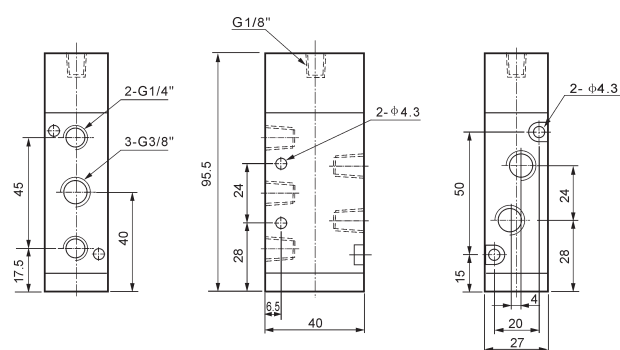
4A300 Series Pneumatic Control Valve

Dimensions

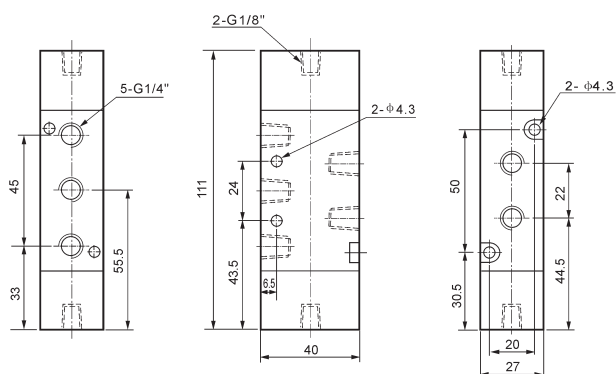
4A310-08



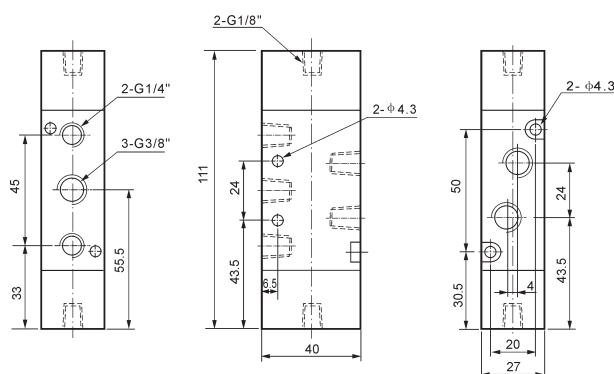
4A310-10



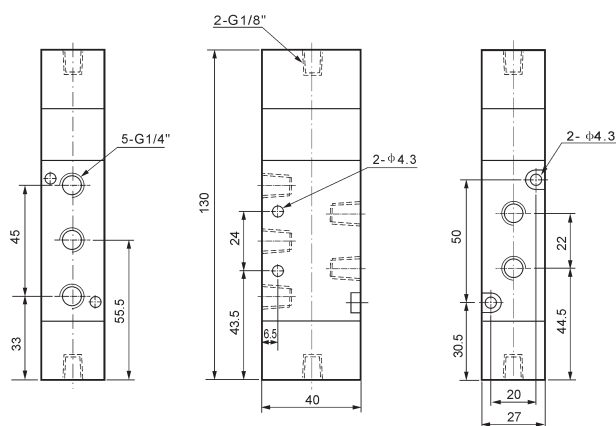
4A320-08



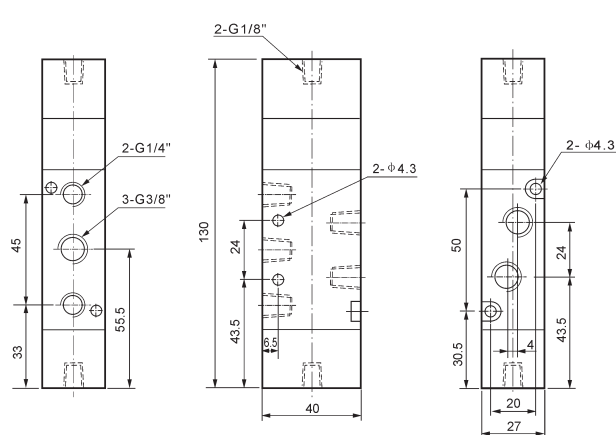
4A320-10



4A330-08



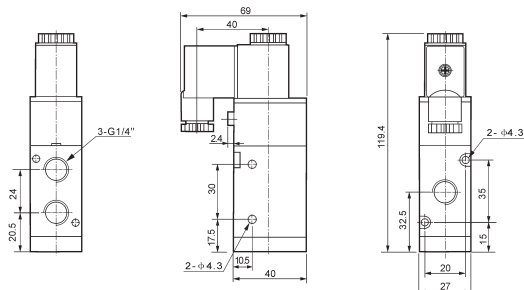
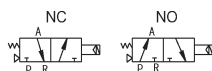
4A330-10



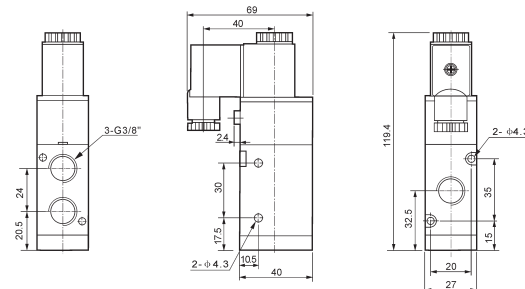
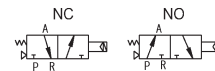
3V300 Series Solenoid Valve & 3A300 Series Pneumatic Control Valve

Dimensions

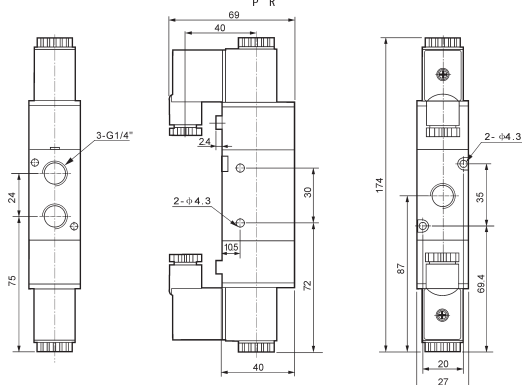
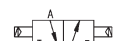
3V310-08



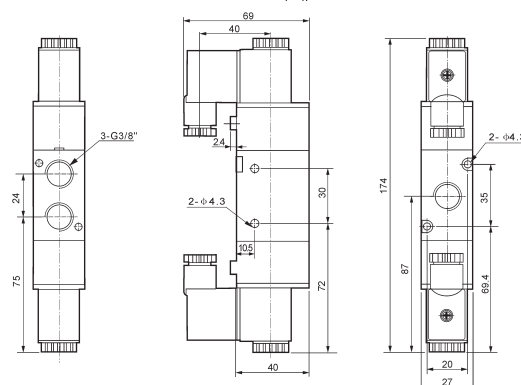
3V310-10



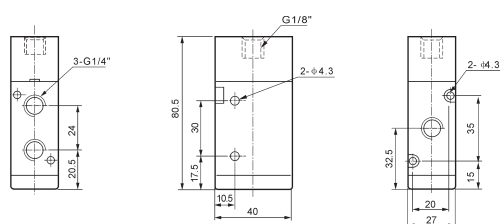
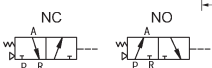
3V320-08



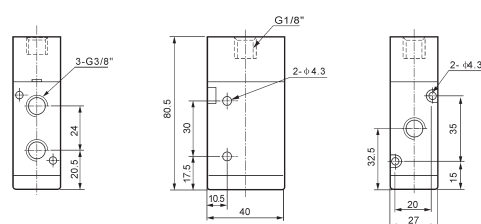
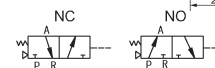
3V320-10



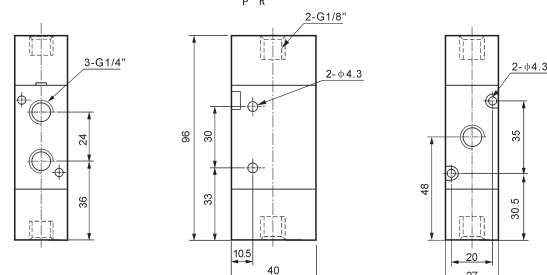
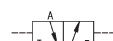
3A310-08



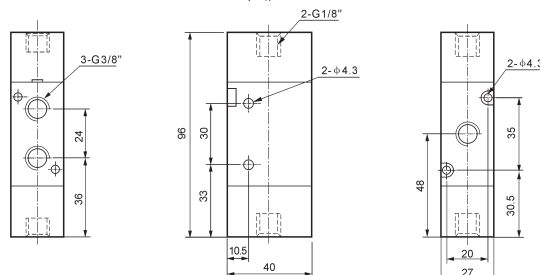
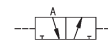
3A310-10



3A320-08



3A320-10



4V400 Series Solenoid Valve, Pneumatic Control Valve



Ordering code

4V	4	10	-	15	B	-	AC220V	-	W
Specification 4V:5/2(3) way solenoid valve 4A:5/2(3) way pneumatic control valve 3V:3/2 way solenoid valve 3A:3/2 way pneumatic control valve	Series 400 series	Coil and places 10:Single-head double-position 20:Double-head double-position 30C:Double-head three-position close centre 30E:Double-head three-position exhaust centre 30P:Double-head three-position Pressure centre		Port size 15: 1/2"	Joint pipe form and initial state Blank:Pipe connection type B:5/2 way plate connection type 5/3 way plate connection type NC:3/2 way normal close type NO:3/2 way normal open type		Coil voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz		Electrical entry Blank:Standard connector LD:Brown connector with light LD:White connector with light W: Lead wire type

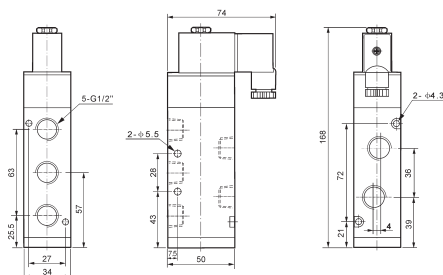
Specification

Model	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15
	4A410-15	4A420-15	4A430C-15	4A430E-15	4A430P-15
Position and way NO.	5/2 way		5/3 way		
Effective area	50mm ² (CV=2.79)		30mm ² (CV=1.68)		
Model	3V410-15	3V420-15	3A410-15	3A420-15	
Position and way NO.	3/2 way				
Effective area	50mm ² (CV=2.79)				
Port size	Air inlet=Air outlet=Exhaust=G1/2"				
Fluid	40 micron filtered air				
Operation	Inside pilot type				
Operating pressure	0.15~0.8MPa				
Max. proof pressure	1.2MPa				
Temperature	5~50℃				
Allowable voltage	± 10% of rated voltage				
Power consumption	AC: 4.5VA DC: 3W				
Coil insulation & protection grade	Class F. IP65				
Electrical entry	Lead wire or connector				
Highest action frequency	5 cycle / second				
Shortest excitation time	0.05 second				

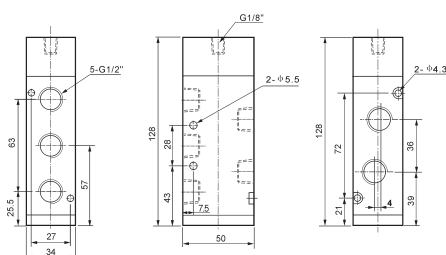
(3)4V400 Series Solenoid Valve & (3)4A400 Pneumatic Control Valve

● Dimensions

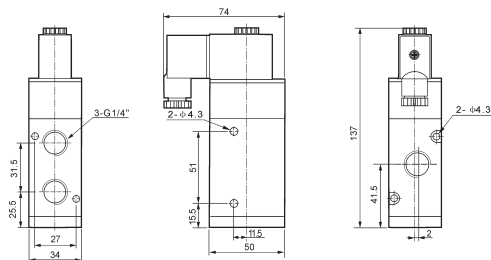
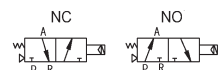
4V410-15



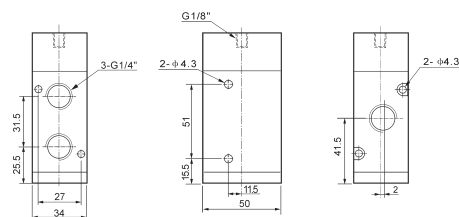
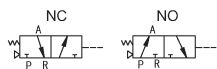
4A410-15



3V410-15



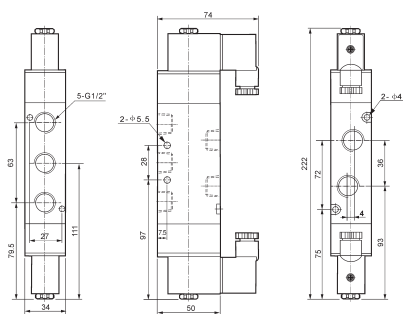
3A410-15



4V420-15



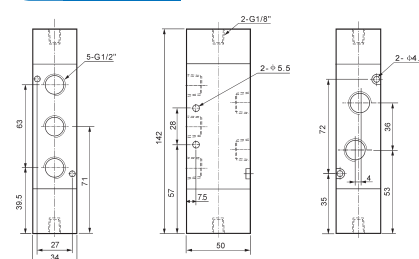
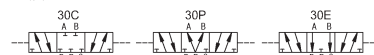
4V430-15



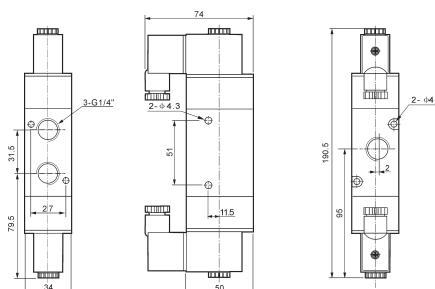
4A420-15



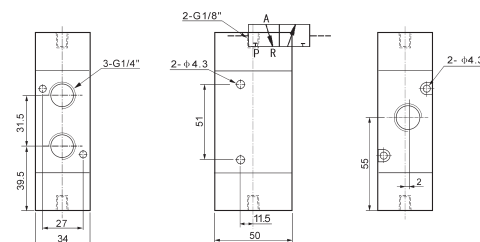
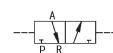
4A430-15



3V420-15



3A420-15



100 - 400 Series Manifold Base



● Ordering code

100M

-

□F

Series

100M: Base for 100 series
200M: Base for 200 series
300M: Base for 300 series
400M: Base for 400 series

Base numbers

● Seal plate ordering code

200M

-

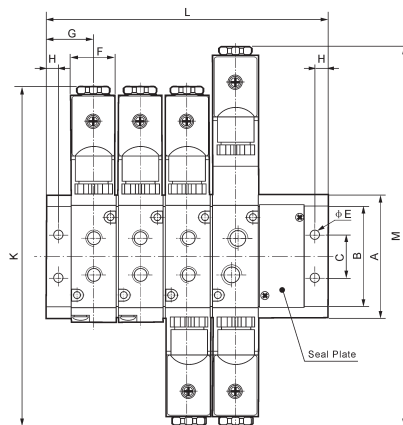
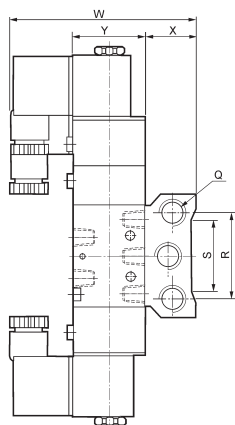
B

Series

100M: For 100 series
200M: For 200 series
300M: For 300 series
400M: For 400 series

Seal plate

● Dimensions



Internal diameter/Symbol	A	B	C	E	F	G	H	K	L	M	Q	R	S	W	X	Y
100M-□F	58	44	20	4.2	18.3	19	5	140	(n-1)*19+38	155	G1/4	40	30	78.5	25	27
200M-□F	61	51	21	4.3	22.4	23	6	170	(n-1)*23+46	189	G1/4	43	32	92.5	26	35
300M-□F	75	65	26	4.5	27.3	27	6	189	(n-1)*28+54	208	G3/8	53	48	99	30	40
400M-□F	104	95	32	5.5	34.3	31.5	7	222	(n-1)*35+63	243	G1/2	68	67	112	38	50

V Series Solenoid Valve



● Ordering code

V	52	2	-	S	-	AC220V	-	W
Valve type V: Solenoid valve A: Pneumatic control valve	Position and way number 52: 5/2 way 53: 5/3 way 32: 3/2 way 22: 2/2 way	Port size 1: G1/8" 2: G1/4" 3: G3/8" 4: G1/2"		Coil and places S: Single-head double-position D: Double-head double-position C: Double-head three-position close centre E: Double-head three-position exhaust centre P: Double-head three-position pressure centre		Coil voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz		Electrical entry Blank: Standard connector LD: Brown connector with light LD: White connector with light W: Lead wire type

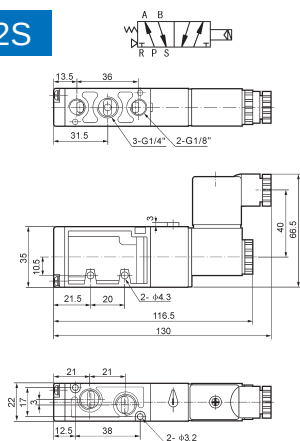
● Specification

Model	V522S	V522D	V532C(E/P)	V523S	V523D	V533C(E/P)	V524S	V524D	V534C(E/P)
	A522S	A522D	A532C(E/P)	A523S	A523D	A533C(E/P)	A524S	A524D	A534C(E/P)
Position and way NO.	5/2 way		5/3 way	5/2 way		5/3 way	5/2 way		5/3 way
Effective area	14mm ² (CV=0.78)		12mm ² (CV=0.67)	25mm ² (CV=1.40)		18mm ² (CV=1.00)	50mm ² (CV=2.79)		30mm ² (CV=1.68)
Fluid	40 micron filtered air								
Operation	Inside pilot type								
Operating pressure	0.15～0.8MPa								
Proof pressure	1.2MPa								
Operating temperature	5～50℃								
Allowable voltage	±10% of rated voltage								
Power consumption	AC: 4.5VA DC: 2.5W								
Coil insulation & protection grade	Class F. IP65								
Electrical entry	Lead wire or connector type								
Highest action frequency	5 cycle / second								
Shortest excitation time	0.05 second								

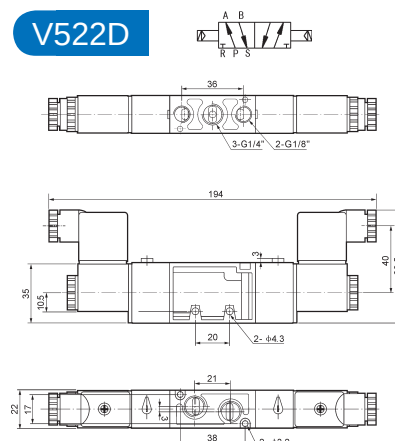
V Series Solenoid Valve

● Dimensions

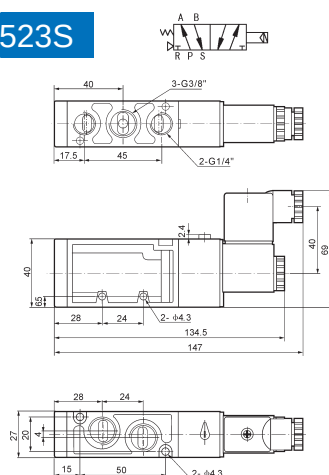
V522S



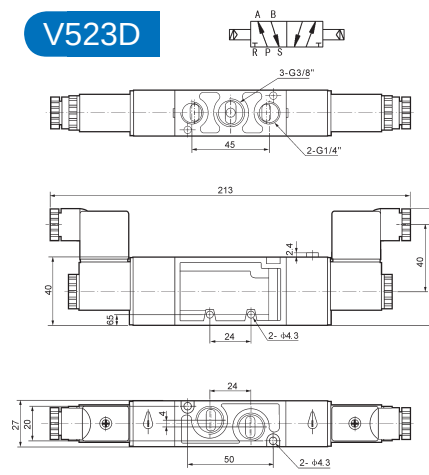
V522D



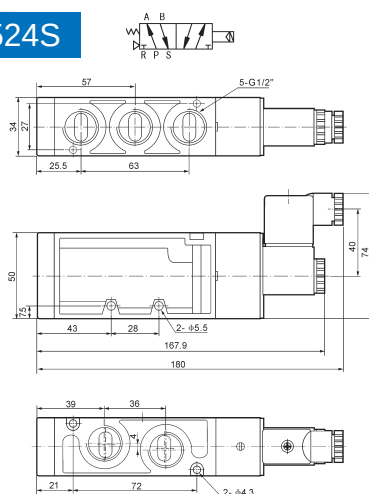
V523S



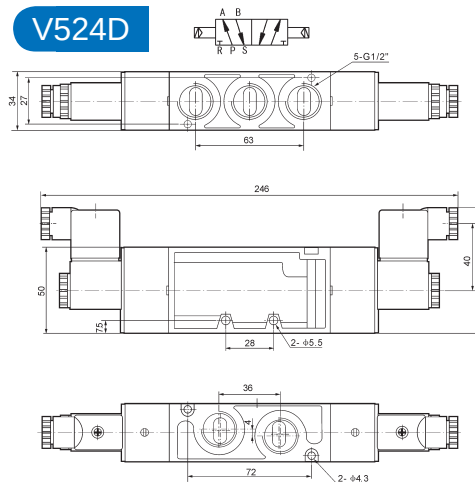
V523D



V524S



V524D



V Series Solenoid Valve



Ordering code

V	-	180	-	4		E2		C	-	AC110V	-	L		BSP
Model		Body width 180: 180mm 220: 220mm 260: 260mm 300: 300mm 460: 460mm		3:Three way 4:Four way		E1:Single coil E2:Double coil		C:The middle position close P:The middle position ventilate R:The middle position exhaust		Coil voltage DC24V AC110V 50Hz/60Hz AC220V 50Hz/60Hz		Electrical entry Blank: DIN connector L: Connector with light E: Blast-proof type (sheet 1) W: Lead wire type		Pipe thread Blank: PT thread BSP: BSP thread NPT: NPT thread

Specifications

Model	Port size	Position and way NO.	Port size	Fluid	Operating pressure range	Proof pressure	Effective area	Answer time	Operating temperature	Coil voltage	Power consumption	Allowable voltage	Insulation class
V-180-3E1,E2	6A	3/2 way	G1/8"	Air	0.15~0.8MPa	1.0MPa	12mm ² (CV=0.67)	30ms	5~50℃	AC: 110V, 220V (50/60)Hz DC: 24V	AC: 3.7/3.1VA DC: 2.9W	±10%	Class F
V-180-4E1,E2		5/2 way			0.2~0.7MPa		12mm ² (CV=0.67)						
V-180-4E2C.P.R		5/3 way			0.2~0.7MPa		9mm ² (CV=0.50)						
V-220-3E1,E2	8A	3/2 way	PT-1/4	Air	0.2~0.7MPa	1.0MPa	18mm ² (CV=1.00)	30ms	5~50℃	AC: 110V, 220V (50/60)Hz DC: 24V	AC: 6/4.9VA DC: 2.5W	±10%	Class F
V-220-4E1,E2		5/2 way			0.3~0.7MPa		16mm ² (CV=0.89)						
V-220-4E2C.P.R		5/3 way			0.3~0.7MPa		16mm ² (CV=0.89)						
V-260-4E1	8A	5/2 way	PT-1/4	Air	0.2~0.7MPa	1.0MPa	18mm ² (CV=1.00)	40ms	5~50℃	AC: 110V, 220V (50/60)Hz DC: 24V	AC: 6/4.9VA DC: 2.5W	±10%	Class F
V-260-4E2		5/2 way			0.3~0.7MPa		16mm ² (CV=0.89)						
V-260-4E2C.P.R		5/3 way			0.3~0.7MPa		16mm ² (CV=0.89)						
V-300-3E1,E2	10A	3/2 way	PT-3/8	Air	0.2~0.7MPa	1.0MPa	35mm ² (CV=1.96)	40ms	5~50℃	AC: 110V, 220V (50/60)Hz DC: 24V	AC: 6/4.9VA DC: 2.5W	±10%	Class F
V-300-4E1,E2		5/2 way			0.3~0.7MPa		25mm ² (CV=1.40)						
V-300-4E2C.P.R		5/3 way			0.3~0.7MPa		25mm ² (CV=1.40)						
V-460-3E1	15A	3/2 way	G-1/2	Air	0.2~0.7MPa	1.05MPa	50mm ² (CV=2.79)	50ms	5~50℃	AC: 110V, 220V (50/60)Hz DC: 24V	AC: 6/4.9VA DC: 2.5W	±10%	Class F
V-460-4E1,E2		5/2 way			0.3~0.7MPa		30mm ² (CV=1.68)						
V-460-4E2C.P.R		5/3 way			0.3~0.7MPa		30mm ² (CV=1.68)						

Blast-proof type specifications

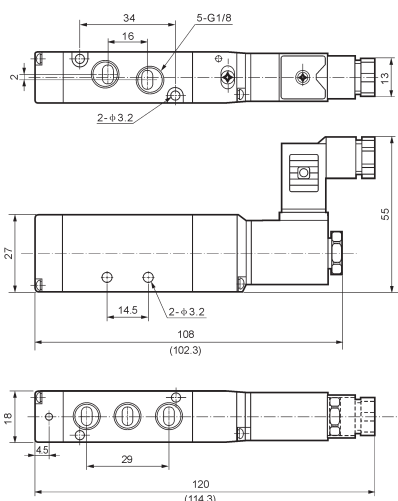
220\260\300\460 Series solenoid valve (sheet 1)

Blast-proof class	Ex m II T4
Coil voltage	AC: 110V, 220V (50/60)Hz DC: 24V
Power consumption	AC: 4.4VA DC: 5W
Allowable voltage	± 10% of rated voltage
Coil insulation	Class F

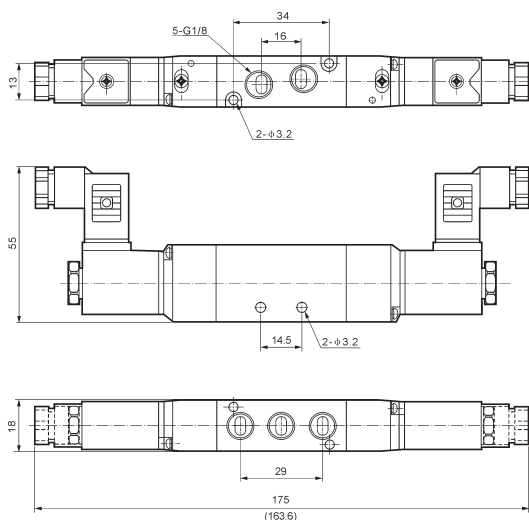
V-180 Series Solenoid Valve

● Dimensions

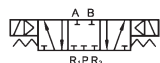
V-180-4E1



V-180-4E2



V-180-4E2C.P.R



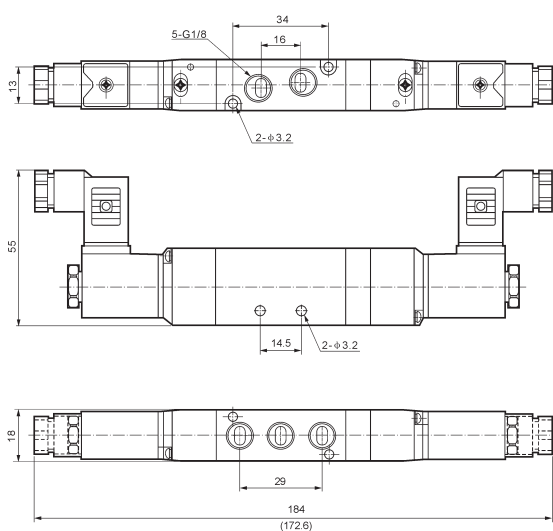
V-180-4E2C



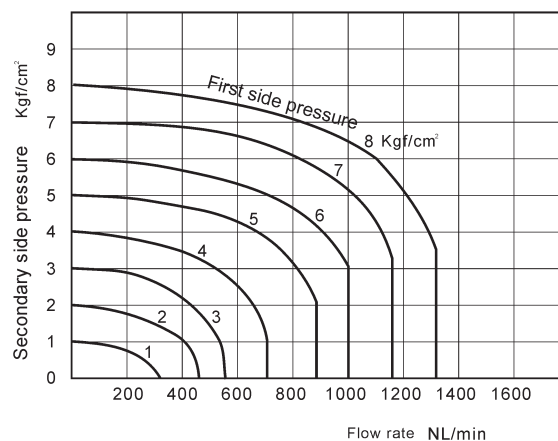
V-180-4E2P



V-180-4E2R



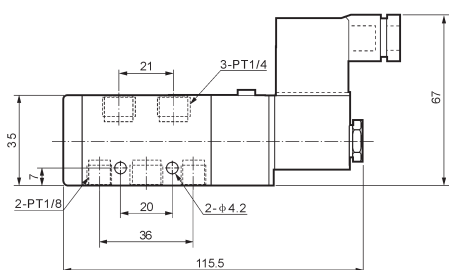
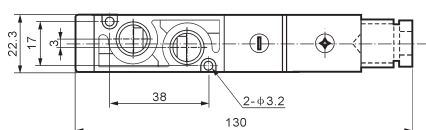
● Flow Chart



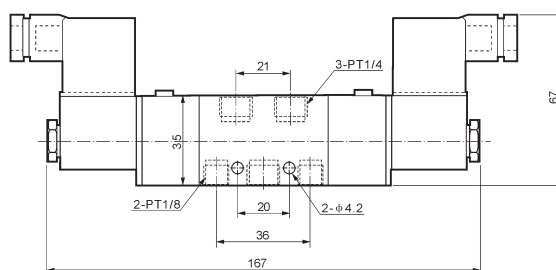
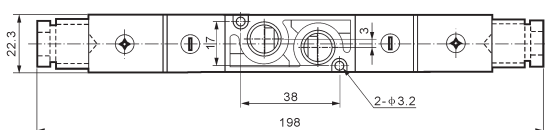
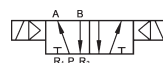
V-220 Series Solenoid Valve

● Dimensions

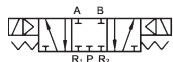
V-220-4E1



V-220-4E2



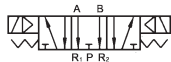
V-220-4E2C.P.R



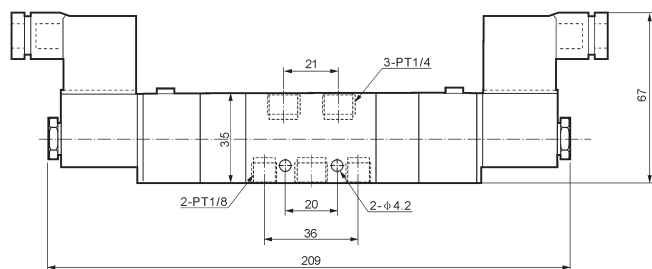
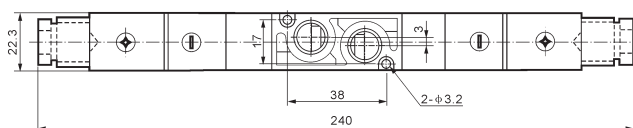
V-220-4E2C



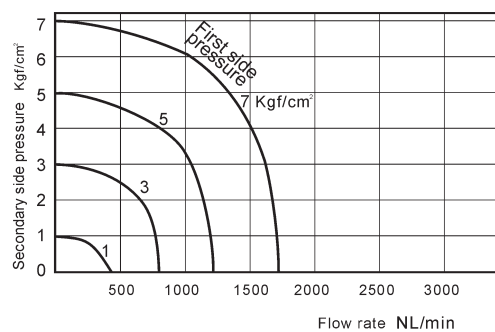
V-220-4E2P



V-220-4E2R



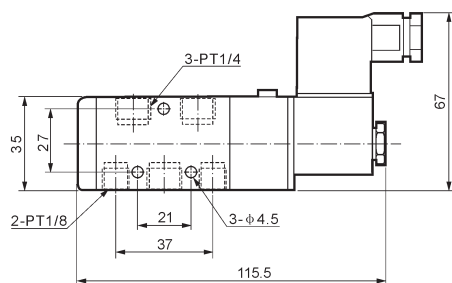
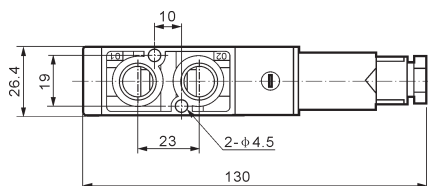
● Flow Chart



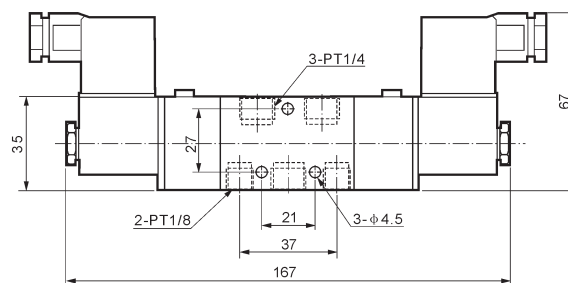
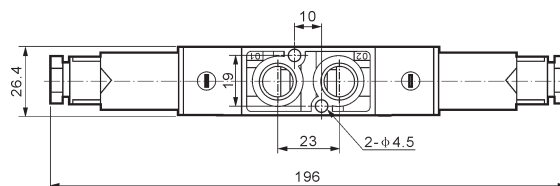
V-260 Series Solenoid Valve

● Dimensions

V-260-4E1



V-260-4E2



V-260-4E2C.P.R



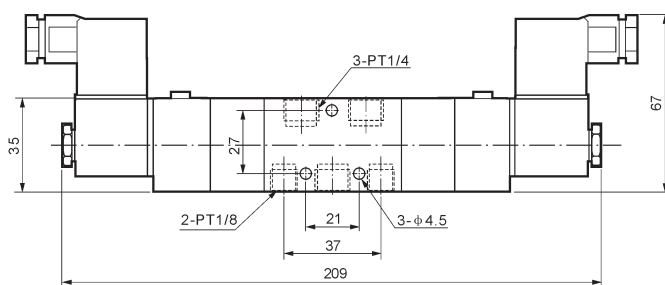
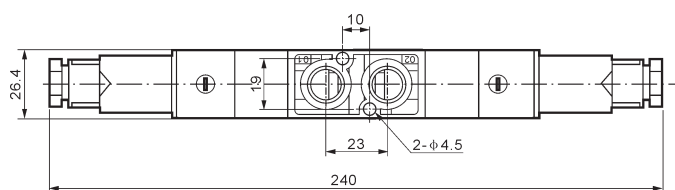
V-260-4E2C



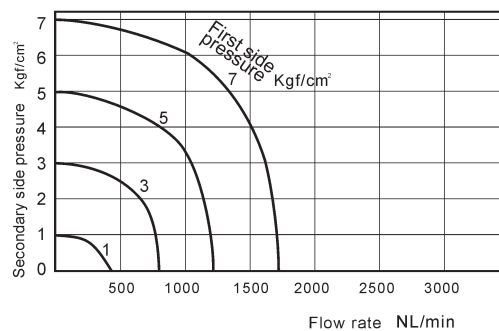
V-260-4E2P



V-260-4E2R



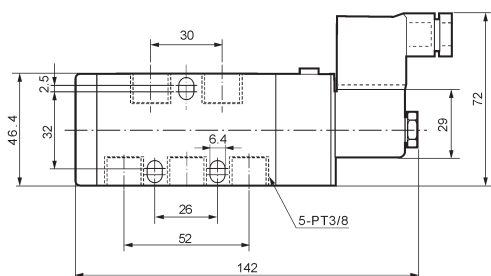
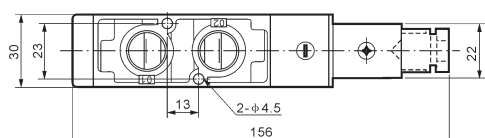
● Flow Chart



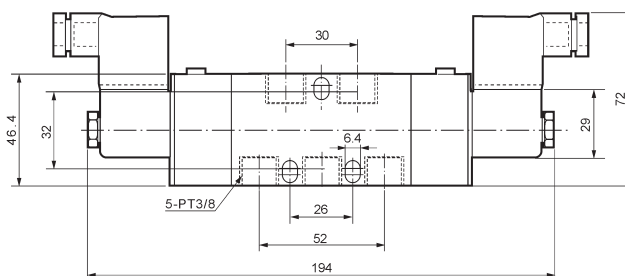
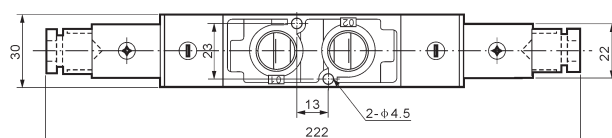
V-300 Series Solenoid Valve

● Dimensions

V-300-4E1



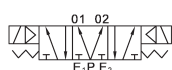
V-300-4E2



V-300-4E2C.P.R



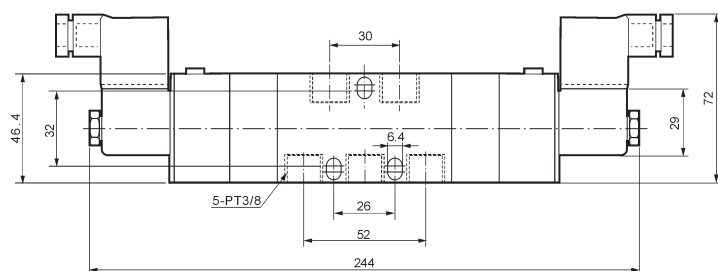
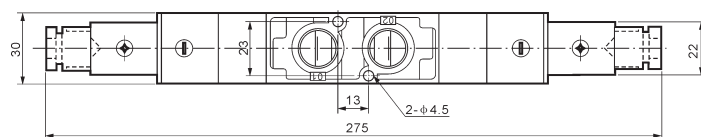
V-300-4E2C



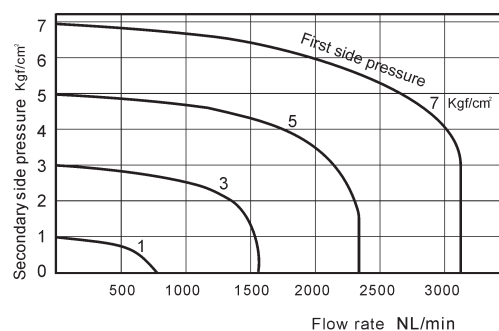
V-300-4E2P



V-300-4E2R



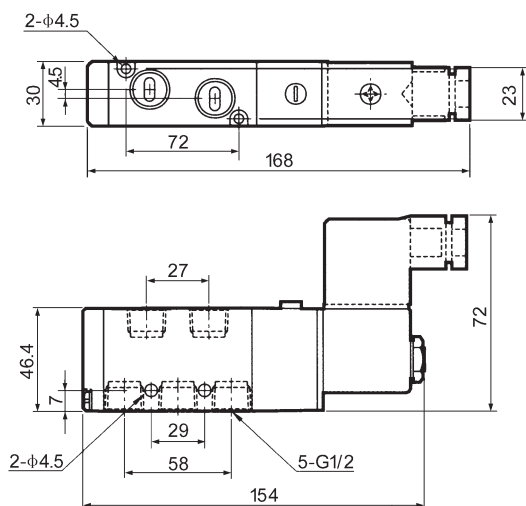
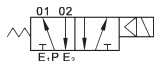
● Flow Chart



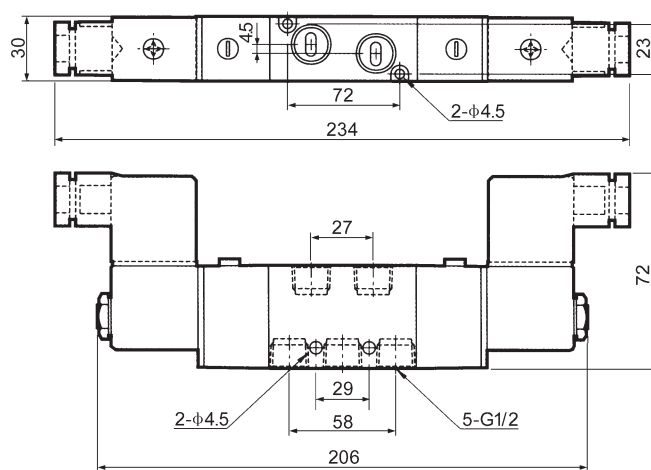
V-460 Series Solenoid Valve

● Dimensions

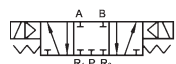
V-460-4E1



V-460-4E2



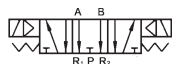
V-460-4E2C.P.R



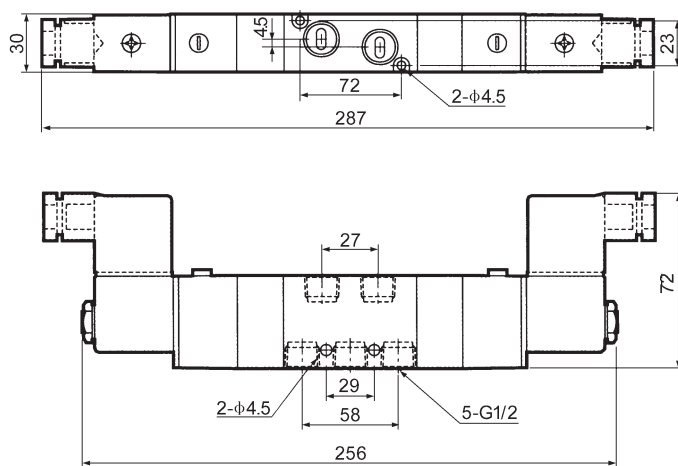
V-460-4E2C



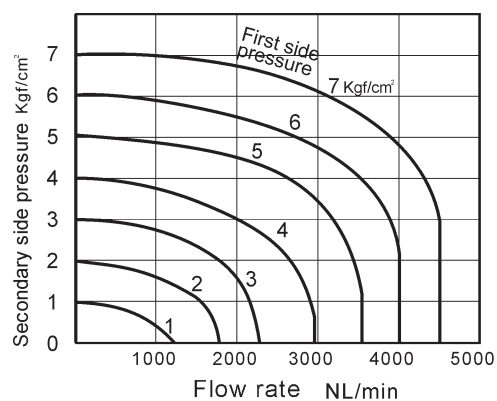
V-460-4E2P



V-460-4E2R



● Flow Chart



VF, VZ Series Solenoid Valve



Ordering code

VF3	1	-	30	AC220V	-	W
Series VF3 series VF5 series VZ5 series	Coil and places 1:Single-head double-position 2:Double-head double-position 3:Double-head three-position close centre 4:Double-head three-position exhaust centre 5:Double-head three-position pressure centre	Order NO. VF3: 30 VF5: 20 VZ5: 20	Coil voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz	Electrical entry Blank:Standard connector LD:Brown connector with light LD:White connector with light W: Lead wire type		

Base ordering code

VF3000M	-	□F
Specification code VF3000M:for VF3 series VF5000M:for VF5 series VZ5000M:for VZ5 series		Joint base NO.

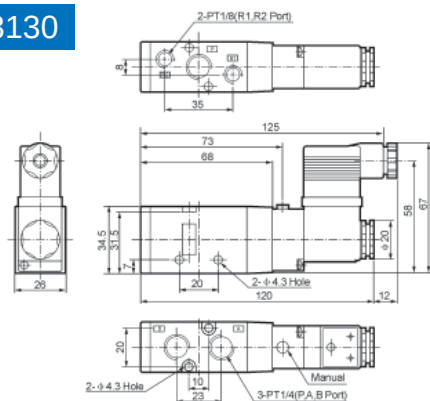
Specifications

Model	VF3130	VF3230	VF33(4/5)30	VF5120	VF5220	VF53(4/5)50	VZ5120	VZ5220	VZ53(4/5)50
Position and way NO.	5/2 way		5/3 way	5/2 way		5/3 way	5/2 way		5/3 way
Effective area	16mm ² (CV=0.89)		12mm ² (CV=0.67)	25mm ² (CV=1.40)		18mm ² (CV=1.00)	12mm ² (CV=0.67)		9mm ² (CV=0.50)
Fluid	40 micron filtered air								
Operation	Inside pilot type								
Operating pressure	0.15～0.8MPa								
Proof pressure	1.2MPa								
Operating temperature	5～50℃								
Allowable voltage	±10% of rated voltage								
Power consumption	AC: 4.5VA DC: 3W								
Coil insulation & protection grade	Class F. IP65								
Electrical entry	Lead wire or connector type								
Highest action frequency	5 cycle / second								
Shortest excitation time	0.05 second								

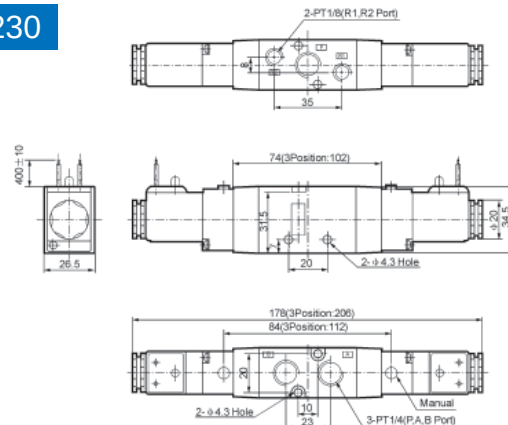
VF, VZ Series Solenoid Valve

● Dimensions

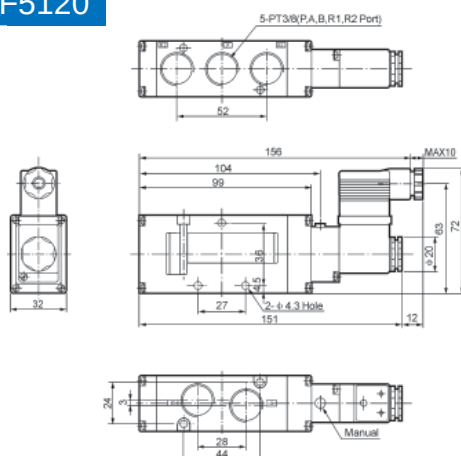
VF3130



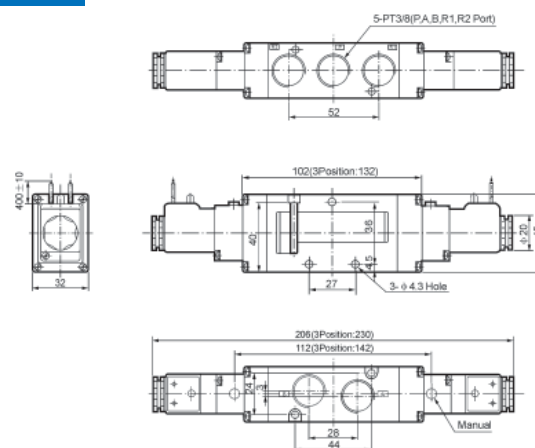
VF3230



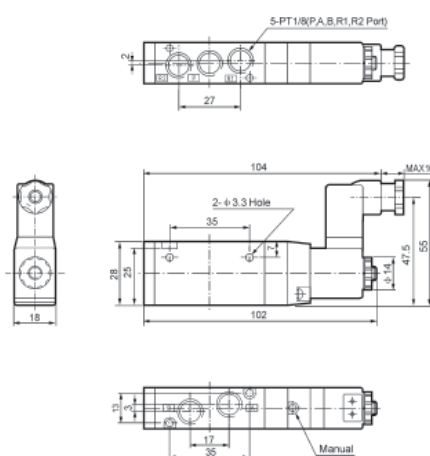
VF5120



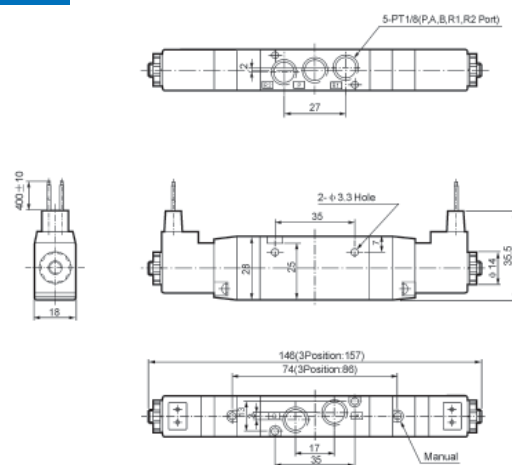
VF5220



VZ5120



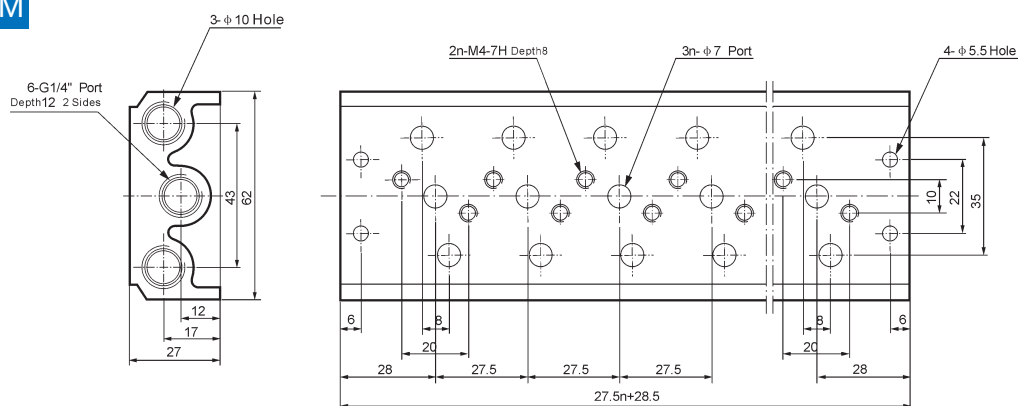
VZ5220



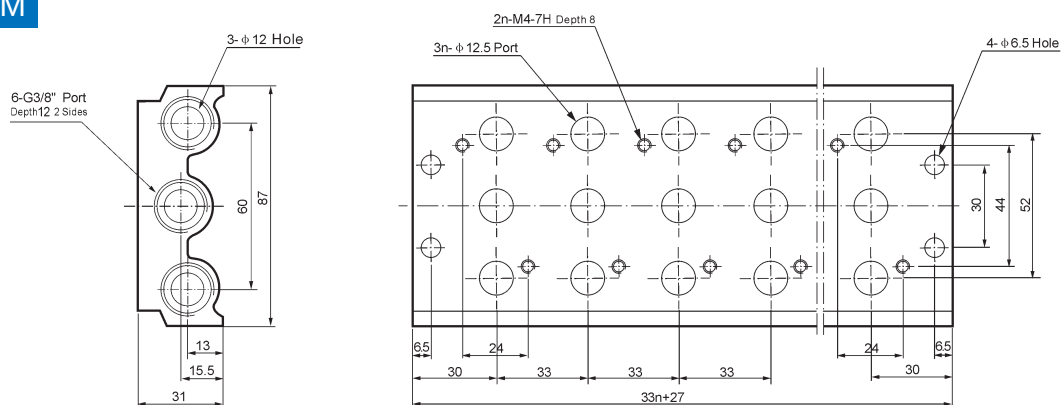
VF, VZ Series Solenoid Valve

● Dimensions

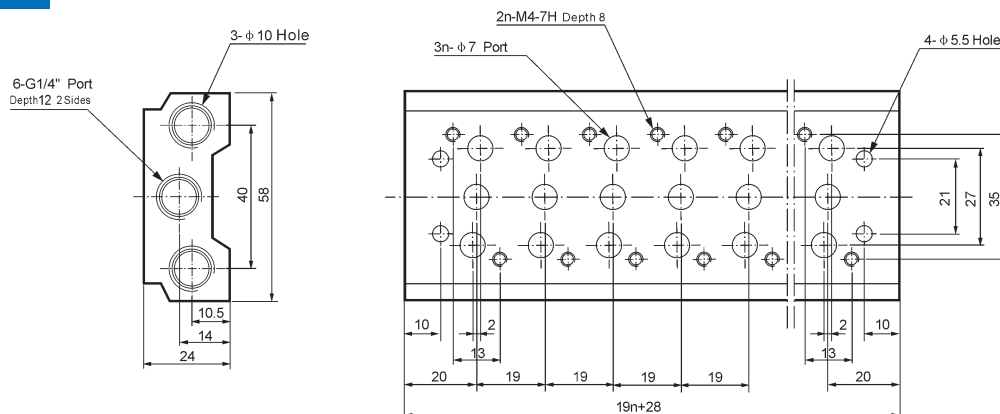
VF3000M



VF5000M



VZ5000M



3V1 Series Solenoid Valve



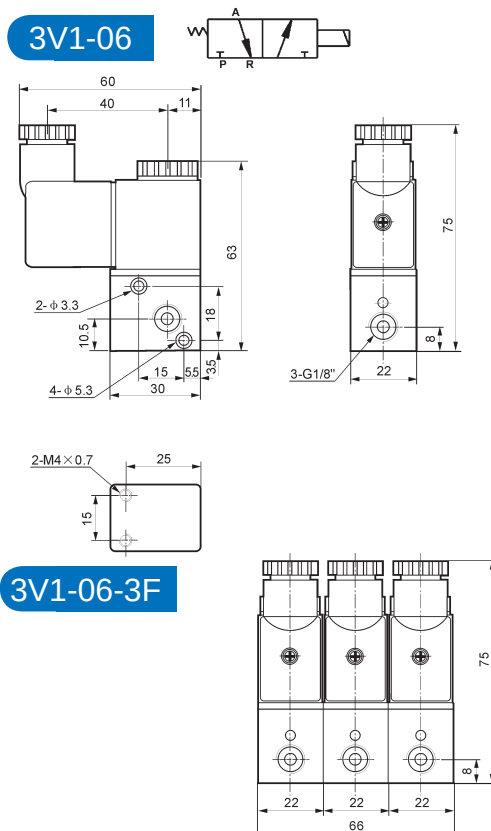
Ordering code

3V	1	-	06	-	B	-	AC220V	-	W
Specification 3V: 3/2 way solenoid valve	Series 1: 100 series		Port size M5: M5 06: 1/8"		Connecting type Blank: Pipe connection type B: Plate connection type		Coil voltage DC12V DC24V AC24V 50Hz/60Hz AC110V 50Hz/60Hz AC220V 50Hz/60Hz AC380V 50Hz/60Hz		Electrical entry Blank: Standard connector LD: Brown connector with light LD: White connector with light W: Lead wire type

Specifications

Model	3V1-M5	3V1-06
Fluid	40 micron filtered air	
Operation	Direct drive type	
Port size	M5	1/8"
Ambient temperature	-10~+60°C	
Gas temperature	5~60°C	
Air outlet diameter	1.0mm	
Lubrication	Not required	
Operating pressure	0~0.8MPa	
Proof pressure	1.2MPa	
Power consumption	AC: 4.5VA DC: 3W	
Protection grade	IP65	
Electrical entry	Lead wire or connector type	
Material of body	Aluminum alloy	
Highest action frequency	10 cycle / second	
Coil insulation	Class F	
Allowable voltage	±10% of rated voltage	
Shortest excitation time	0.05 second	

Dimensions



Mechanical Valve



Ordering code

MSV

Specification
Mechanical valve

86

Series
86 Series
98 Series

32

Position and way NO.
32:3/2 way
52:5/2 way

1

Port size
1: G1/8"
2: G1/4"

R

Button type
Blank: Basic type
R: Roller type
TB: Selective knob
LB: Strengthened knob
PB: Large round button
PP: Flat round button
PPL: Convex round button
EB: With lock button

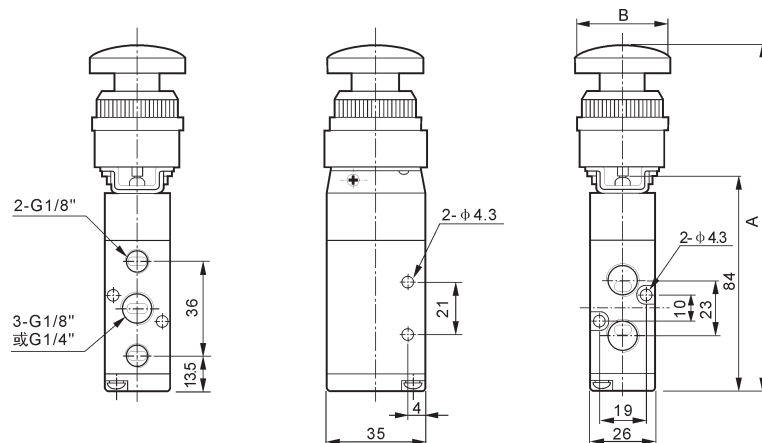
Specifications

Model	MSV86321	MSV86522	MSV98322
Fluid	40 micron filtered air		
Position and way NO.	3/2 way	5/2 way	3/2 way
Effective area	12mm ² (CV=0.67)	16mm ² (CV=0.89)	16mm ² (CV=0.89)
Port size	G1/8"	G1/4"	G1/4"
Operating pressure	0~0.8MPa		
Operating temperature	0~60℃		

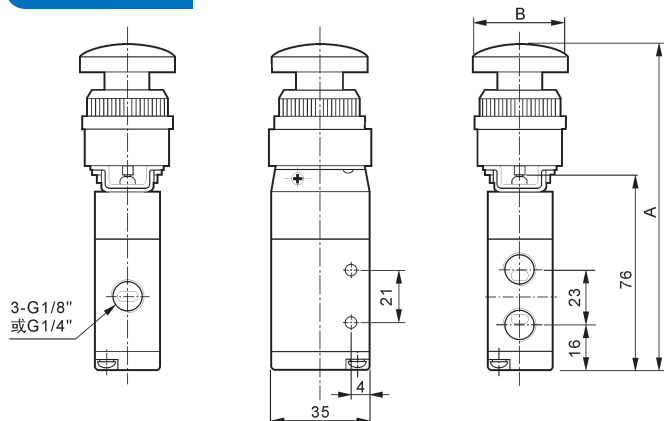
Mechanical Valve

● Dimensions

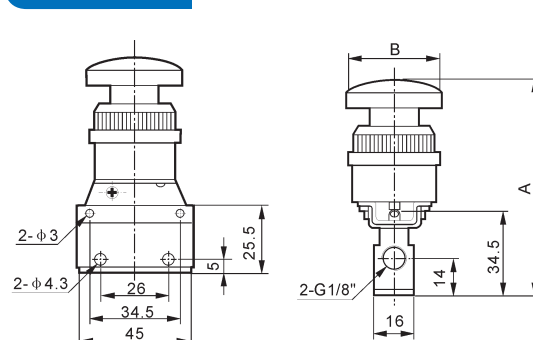
MSV86522



MSV98322

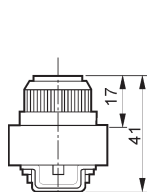


MSV86321

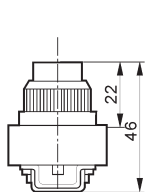


Series	Symbol / Model	PP	PPL	LB	TB	EB	PB	R
MSV86522	A	114	119	133	136.5	134	131	107.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	42.5
MSV98322	A	106	111	125	129.5	126	123	99.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	42.5
MSV86321	A	66	71	85	88.5	86	83	59.5
	B	39.5	24.5	26.5	36.5	39.5	37.5	42.5

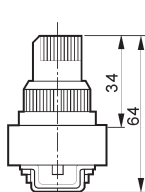
PP



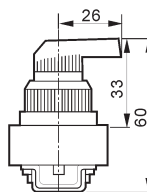
PPL



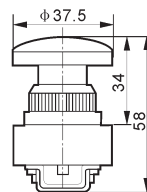
TB



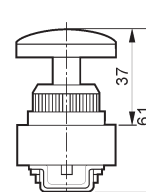
LB



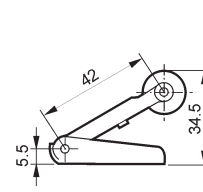
PB



EB



R



Mechanical Valve



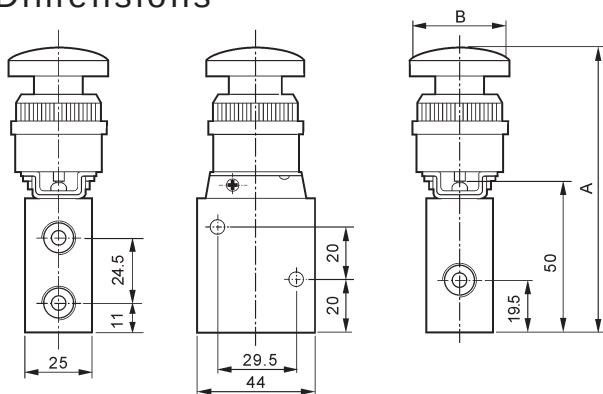
Ordering code

JM	-	05
Specification code Stop-type machinery valve		Button type 05: Selective knob 06: With lock button 06A: Flat round button 07: Roller type

Specifications

Model	JM-05	JM-06	JM-06A	JM-07
Fluid	40 micron filtered air			
Position and way NO.	3/2 way			
Port size	G1/4"			
Operating pressure	0~0.8MPa			
Operating temperature	0~60℃			

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

Mechanical Valve



Ordering code

MOV

Type

02

Button type

01: Selective knob
02: Roller type
03: With lock button
03A: Flat round button

A

Resetting

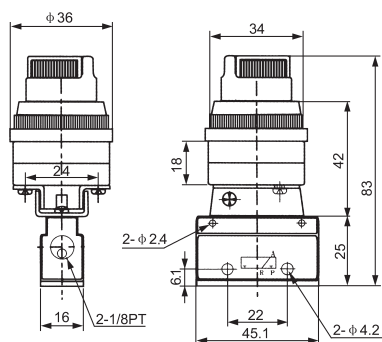
Blank: Standard type
A: Spring return type

Specifications

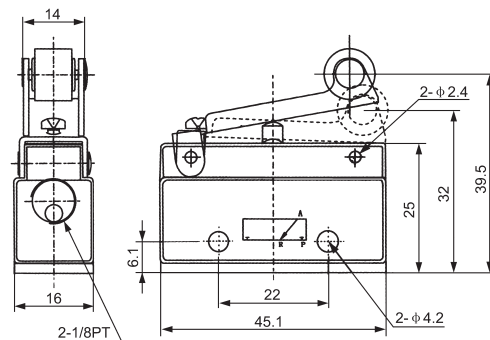
Model	MOV-01	MOV-02	MOV-03	MOV-03A
Fluid	Air			
Position and way NO.	3/2 way			
Port size	G1/8"			
Operating pressure	0~0.8MPa			
Operating temperature	0~70℃			

Dimensions

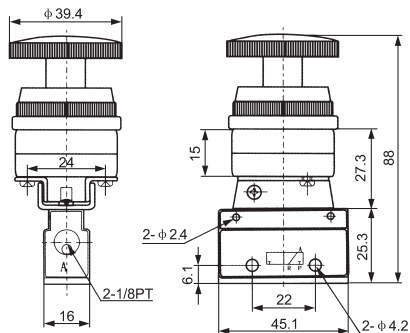
MOV-01



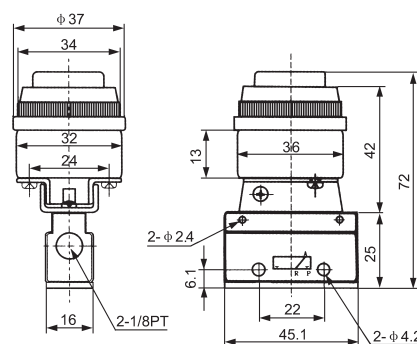
MOV-02



MOV-03



MOV-03A



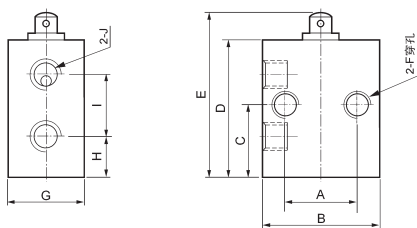
Two blue hydraulic cylinders are shown side-by-side. The one on the left is labeled 'S3R-06' and the one on the right is labeled 'S3L-06'. Both cylinders have a hydraulic ram attached to the top, which is a black metal arm with a silver-colored roller at the end. The cylinders are blue with a white label in the center. The labels also feature the 'Vibro' logo and the text 'HYDRAULIC CYLINDER'.

S3R

M5

Model	S3R	S3L	S3V
Fluid	Air		
Port Size	M5: M5	06: PT1/8	08: PT1/4
Operating pressure	0~8Kgf/cm ²		
Operating temperature	-5~60℃		
Lubrication	Not required		

S3B



Model	A	B	C	D	E	F	G	H	I	J
M5	16	26	15	30	36	M5×0.8	16.5	9	13	M5×0.8
06	23	30	20.5	41	47	M5×0.8	16.5	11.5	17.5	PT1/8
08	24	34	22.5	46	52	M5×0.8	17.5	12	21	PT1/4

Change way stroke / Model	S3R	S3L	S3V
Axes stroke range	2.4~3.0	2.4~3.0	2.4~3.8
Roller stroke range	4.8~6.2	4.5~6.0	3.4~4.8

Technical drawing of a mechanical part, showing a top view and a side view.

Top View Dimensions:

- Overall width: 18.5
- Overall height: 12
- Distance from center to side features: 2-6.3.3 mm

Side View Dimensions:

- Overall height: 27
- Base height: 16
- Distance from center to side features: 18.5

	A	B
M5	26	16.5
06	30	16.5
08	34	17.5

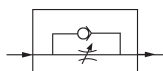
Flow Control Valve



Ordering code

SV	-	01		ASC	-	08		RE	-	01
Series		Port size		Series		Port size		Series		Port size
SV: Accurate type flow Control valve		01: G1/8" 02: G1/4"		ASC: Accurate type Flow Control valve		06: G1/8" 08: G1/4" 10: G3/8" 15: G1/2"		RE: Ordinary type flow Control valve		01: G1/8" 02: G1/4" 03: G3/8" 04: G1/2"

Symbol



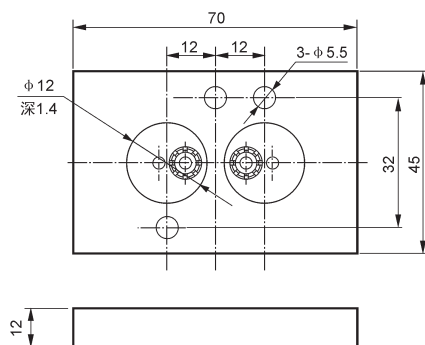
Specifications

Model	Accurate type						Ordinary type			
	SV-01	SV-02	ASC-06	ASC-08	ASC-10	ASC-15	RE-01	RE-02	RE-03	RE-04
Port size	G1/8"	G1/4"	G1/8"	G1/4"	G3/8"	G1/2"	G1/8"	G1/4"	G3/8"	G1/2"
Fluid	Air									
Operating pressure	0~0.95MPa									
Operating temperature	0~60℃									

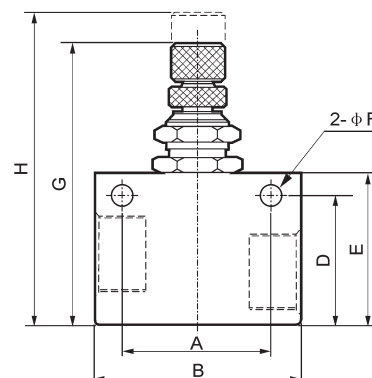
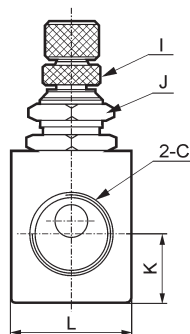
Flow Control Valve

● Dimensions

ASC-08B



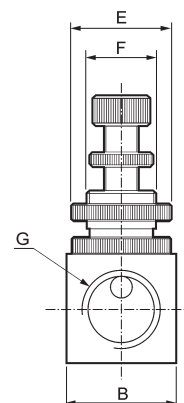
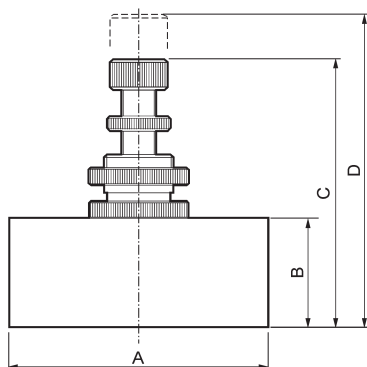
SV、ASC



Model / symbol	A	B	C	D	E	F	G	H	I	J	K	L
ASC-06	22	32	G1/8	22	27	4.3	49.7	56.5	M6×0.5	M12×0.75	12	18
ASC-08	26	36	G1/4	22	27	4.3	49.7	56.5	M6×0.5	M12×0.75	12	18
ASC-10	28	40	G3/8	25	30	4.3	52.7	59.5	M6×0.5	M12×0.75	13	22
ASC-15	28	40	G1/2	30	35	4.3	58.7	65.5	M6×0.5	M12×0.75	13.5	26

● Dimensions

RE Series



Model / symbol	A	B	C	D	E	F	G
RE-01	45	19	43	50	φ 19	M14×1	G1/8
RE-02	45	19	43	50	φ 19	M14×1	G1/4
RE-03	55	25	55	62	φ 25	M18×1	G3/8
RE-04	55	25	55	62	φ 25	M18×1	G1/2

Quick Exhaust Valve



Ordering code



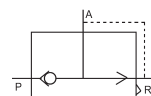
Series

QE: Quick exhaust valve

Port size

01: G1/8" 02: G1/4" 03: G3/8"
04: G1/2" 06: G3/4"

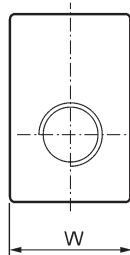
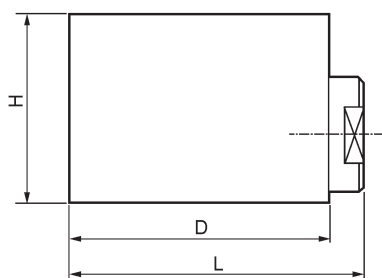
Symbol



Specifications

Model	QE-01	QE-02	QE-03	QE-04	QE-06
Fluid	Air				
Effective area	16mm ²	27.5mm ²	28mm ²	71mm ²	72.5mm ²
Port size	G1/8"	G1/4"	G3/8"	G1/2"	G3/4"
Operating pressure	0~0.8MPa				
Operating temperature	0~60℃				

Dimensions



Model / Symbol	Bore	L	W	H	D
QE-01	G1/8	39	18	27	35
QE-02	G1/4	54	28	36	50
QE-03	G3/8	54	28	36	50
QE-04	G1/2	66	28	36	50

Shuttle Valve



Ordering code

ST

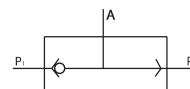
Series
ST: Shuttle valve

-

01

Port size
01: G1/8" 02: G1/4" 03: G3/8"
04: G1/2" 06: G3/4" 08: G1"

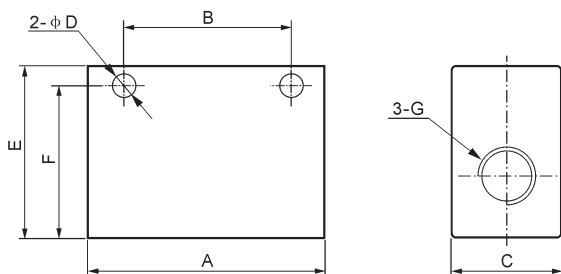
Symbol



Specifications

Model	ST-01	ST-02	ST-03	ST-04	ST-06	ST-08
Fluid	Air					
Effective area	7.5mm ²	21mm ²	40mm ²	60mm ²	110mm ²	190mm ²
Port size	G1/8"	G1/4"	G3/8"	G1/2"	G3/4"	G1"
Operating pressure	0~1.0MPa					
Operating temperature	0~60°C					

Dimensions



Model / Symbol	A	B	C	D	E	F	G
ST-01	40	24	16	4.5	25	20.5	G1/8"
ST-02	50	35	22	5.5	35	25	G1/4"
ST-03	75	48	30	7	50	42	G3/8"
ST-04	75	48	30	7	50	42	G1/2"
ST-06	110	72	40	7	70	58	G3/4"
ST-08	110	72	40	7	70	58	G1"

Foot Valve



● Ordering code

4F	2	10	-	08	L	FV	-	320
Specification 4F: 5/2 way foot valve	Series 2: 200 Series	Number of places 10: Single-head Double-position		Port size 08: G1/4"	Type Blank: Standard type L: with lock G: with cover LG: with lock and cover	Specification Foot valve		Position and way NO. 320: 3/2 way 420: 4/2 way

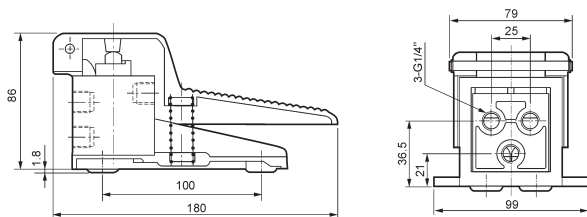
● Specifications

Model	4F210-08	4F210-08L	4F210-08G	4F210-08LG	FV420	FV320
Fluid	40 micron filtered air					
Position and way NO.	5/2 way				4/2 way	3/2 way
Operation	Direct drive type					
Port size	Air inlet=Air outlet=Exhaust=G1/4 ”				Air inlet=Air outlet=G1/4 ” Exhaust=G1/8 ”	
Operating pressure	0～0.8MPa					
Operating temperature	0～60℃					

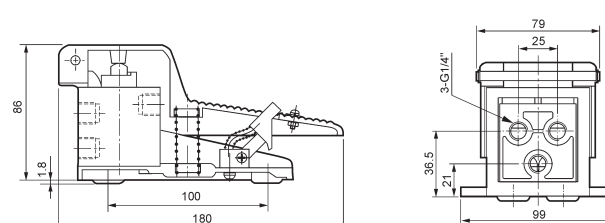
Foot Valve

● Dimensions

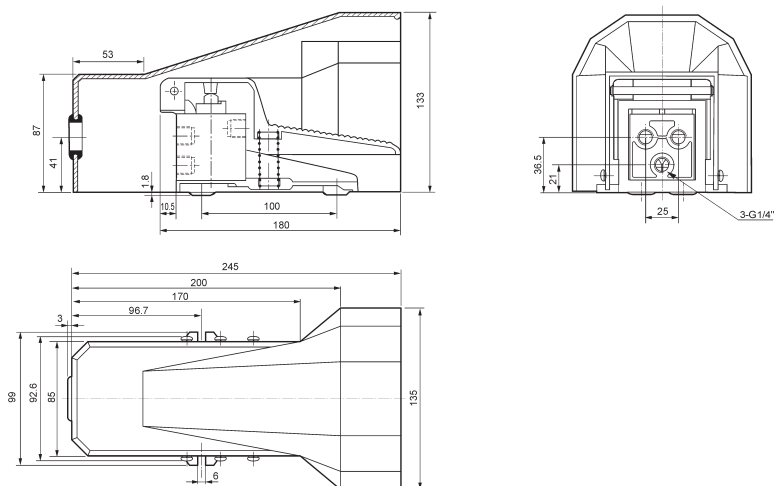
4F210-08



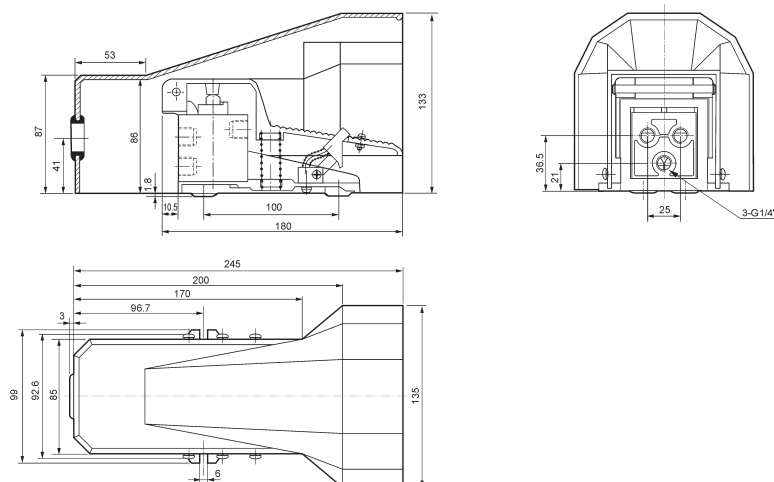
4F210-08L



4F210-08G



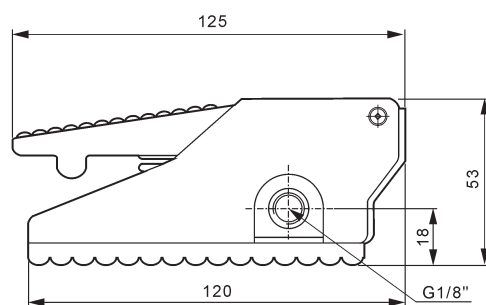
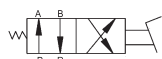
4F210-08LG



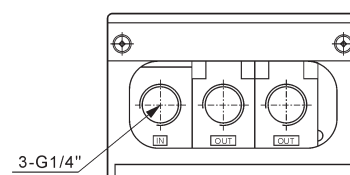
Foot Valve

● Dimensions

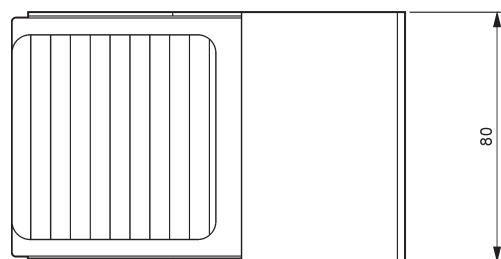
FV420



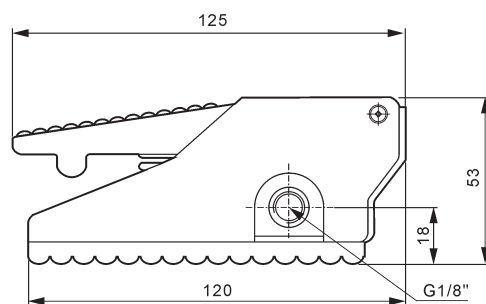
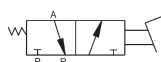
K



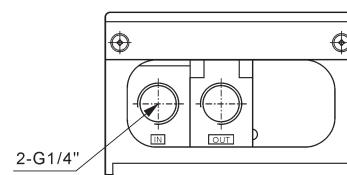
K向



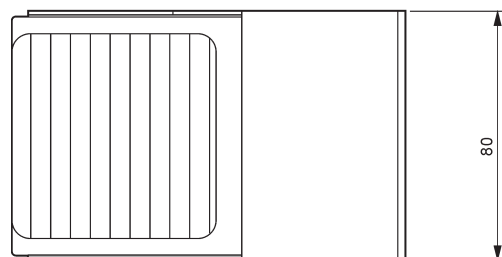
FV320



K



K向



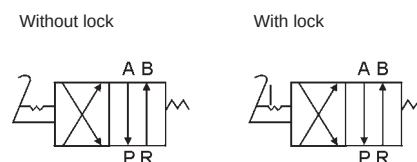
Foot Valve



Ordering code

4FM	2	10	-	08	L
Specification 4FM: 4/2 way mini foot valve	Series 2: 200 series	Number of places 10: Single-head Double-position		Port size 06: PT1/8 08: PT1/4	Type Blank: Standard type L: With lock

Symbol

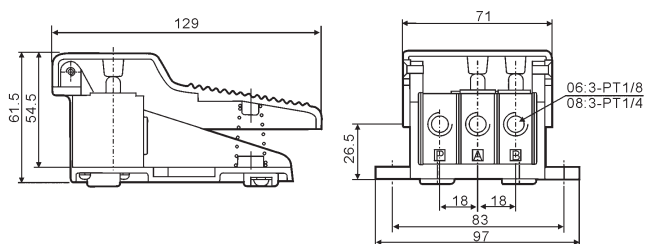


Specifications

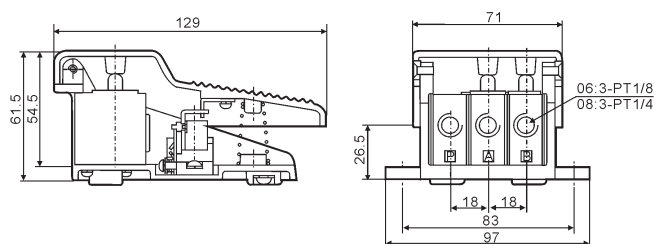
Model	4FM210-06	4FM210-06L	4FM210-08	4FM210-08L
Fluid	Air			
Position and way NO.	4/2 way			
Operation	Direct drive type			
Port size	Air inlet=Air outlet=PT1/8		Air inlet=Air outlet=PT1/4	
Operating pressure	0～0.8Kg/cm ²			
Operating temperature	-5～60℃			
Lubrication	Not required			

Dimensions

4FM210



4FM210L



Hand-Draw Valve



Ordering code

4R

Specification

4R: 5/2 way hand-draw valve
3R: 3/2 way hand-draw valve

2

Series

200 Series
300 Series

10

Number of places

10: Single-head double-position

-

06

Port size

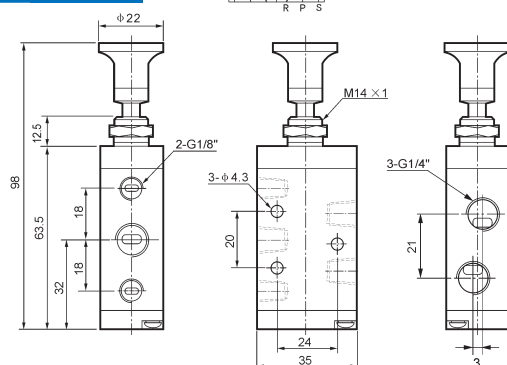
06: G1/8"
08: G1/4"
10: G3/8"

Specifications

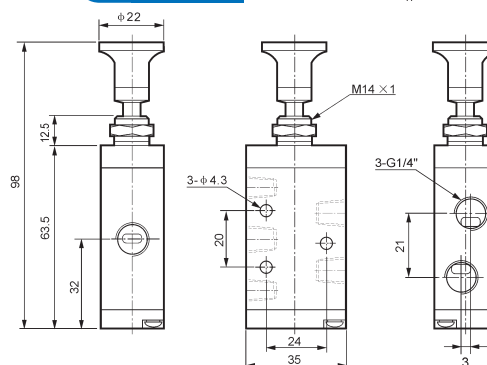
Model	4R210-06	4R210-08	3R210-06	3R210-08	4R310-08	4R310-10	3R310-08	3R310-10
Fluid	40 micron filtered air							
Position and way NO.	5/2 way		3/2 way		5/2 way		3/2 way	
Effective area	14mm ² (CV=0.78)	16mm ² (CV=0.89)	14mm ² (CV=0.78)	16mm ² (CV=0.89)	25mm ² (CV=1.40)	30mm ² (CV=1.68)	25mm ² (CV=1.40)	30mm ² (CV=1.68)
Port size	Air inlet=Air outlet =Exhaust=G1/8"	Air inlet=Air outlet =G1/4" Exhaust=G1/8"	Air inlet=Air outlet =Exhaust=G1/8"	Air inlet=Air outlet =Exhaust=G1/4"	Air inlet=Air outlet =Exhaust=G1/4"	Air inlet=Air outlet =G3/8" Exhaust=G1/4"	Air inlet=Air outlet =Exhaust=G1/4"	Air inlet=Air outlet =Exhaust=G3/8"
Operating pressure	0~0.8MPa							
Operating temperature	0~60℃							

Dimensions

4R210-08



3R210-08



Hand-switching Valve



Ordering code

HV	400	-	02	B	K	34	-	R₈	L8	D
Specification Hand-switching valve	Series NO.		Port size 02: G1/4" 03: G3/8" 04: G1/2"	Joint pipe type Blank: Pipe connection type B: Plate connection type	Specification Hand-switching valve	Position and way NO. 24: 4/2 way 34: 4/3 way		Type code R ₈ : Hand-switching valve	Port size L6: G1/8" L8: G1/4"	Base joint

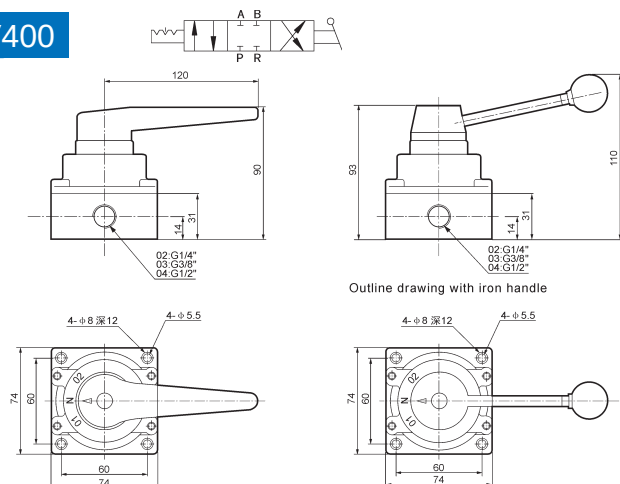
Specifications

Model	HV400-02	HV400-03	HV400-04	K34R ₈ -L6	K34R ₈ -L8
Fluid	40 micron filtered air				
Effective area	30mm ² (CV=1.68)			18mm ² (CV=1.00)	
Port size	G1/4"	G3/8"	G1/2"	G1/8"	G1/4"
Operating pressure	0~0.8MPa				
Operating temperature	0~60℃				

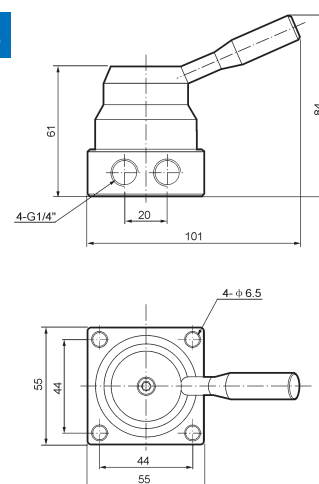
* Company can offer hand-switching valve with soft rubber seals and hard pottery seals as the seal structure form.

Dimensions

HV400



K34R₈-L8



Hand-pull Valve



Ordering code

4H	2	10	-	06	-	L
Specification 4H: 5/2(3) way	Series 2: 200 series 3: 300 series 4: 400 series	Number of places 10: Single-head double-position 30: Single-head three-position		Port size 06: G1/8" 08: G1/4" 10: G3/8" 15: G1/2"		Type Blank: 5/3 way reset type L: 5/3 way locking type

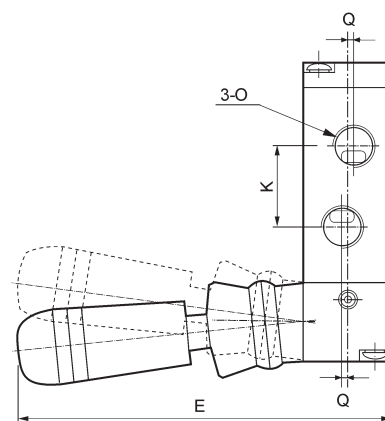
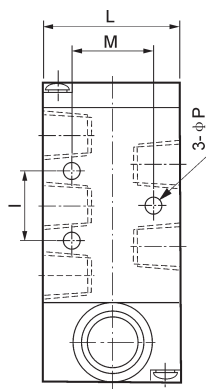
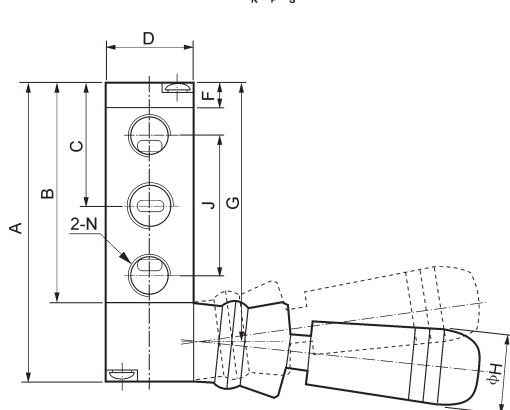
Specifications

Model	4H210-06	4H210-08	4H230-08	4H310-08	4H310-10	4H410-15
Fluid	40 micron filtered air					
Operation	Direct drive type					
Effective area	14mm ² (CV=0.78)	16mm ² (CV=0.89)	12mm ² (CV=0.67)	25mm ² (CV=1.4)	30mm ² (CV=1.68)	50mm ² (CV=2.79)
Port size	Air inlet=Air outlet =Exhaust=G1/8"	Air inlet=Air outlet=G1/4" Exhaust=G1/8"		Air inlet=Air outlet= Exhaust=G1/4"	Air Inlet=Air outlet= G1/8" Exhaust=G1/4"	Air Inlet=Air outlet= Exhaust=G1/2"
Operating pressure	0～0.8MPa					
Operating temperature	0～60℃					

Hand-pull Valve

● Dimensions

4H Series



Symbol / Model	4H210-06	4H230-06	4H230-06 (Automatic reset)	4H210-08	4H230-08L	4H230-08 (Automatic reset)	4H310-08	4H310-10	4H410-15
A	76		95	76		95	92	92	126
B	56.5		75.5	56.5		75.5	72.5	72.5	102
C	31.5		31.5	31.5		31.5	40	40	55.5
D	22		22	22		22	27	27	34
E	95		95	95		95	100	100	110
F	6.5		6.5	6.5		6.5	7.5	7.5	7.5
G	66.5		85.5	66.5		85.5	82.5	82.5	114
H	18		18	18		18	18	18	18
I	20		20	20		20	24	24	28
J	36		36	36		36	45	45	63
K	21		21	21		21	24	24	36
L	35		35	35		35	40	40	50
M	21		21	21		21	27	27	35
N	G1/8		G1/8	G1/8		G1/8	G1/4	G1/4	G1/2
O	G1/8		G1/8	G1/4		G1/4	G1/4	G3/8	G1/2
P	4.3		4.3	4.3		4.3	4.3	4.3	5.5
Q	-		-	1.5		1.5	-	2	-

Hand-pull Valve



Ordering code

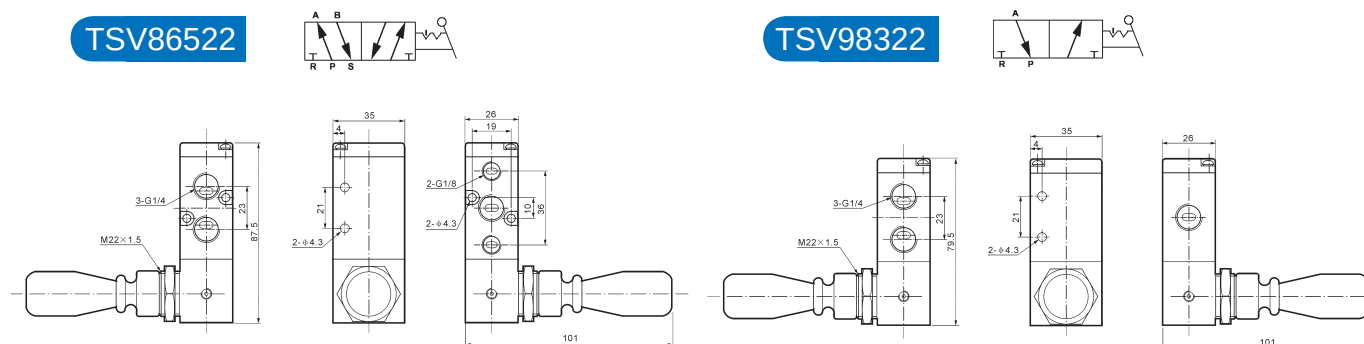
TSV86	52	2	-	M
Specification Hand-pull valve	Position and way NO. 5/2 way	Port size 1: G1/8" 2: G1/4"		Type M: Machinery locking type S: Spring reset type C: 5/3 way center close down type

TSV98	32	2	-	M
Specification Hand-pull valve	Position and way NO. 3/2 way	Port size 1: G1/8" 2: G1/4"		Type M: Machinery locking type S: Spring reset type type

Specifications

Model	TSV86522 ^M _S	TSV98322 ^M _S
Fluid	40 micron filtered air	
Operation	Direct drive type	
Effective area	18mm ² (CV=1.00)	
Port size	G1/4"	
Operating pressure	0~0.8MPa	
Operating temperature	0~60℃	

Dimensions

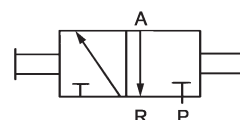


Piping Exhaust Valve



This valve is a 3/2-way sliding valve, which is usually installed in the piping to turn on/off air. When it is turned off, the air pressure in the pneumatic system is exhausted simultaneously.

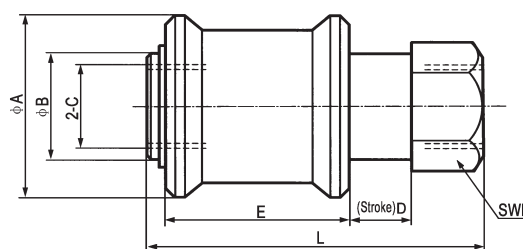
● Symbol



● Specifications

Model	DGP-1	DGP-2	DGP-3	DGP-4	DGP-5
Port size	G1/8"	G1/4"	G3/8"	G1/2"	G3/4"
Bore	4mm	7mm	10mm	12mm	18mm
Fluid	Filtered air				
Operating pressure	0~1.0MPa				
Operating temperature	5~60℃				
Actuating force	20N				30N

● Dimensions

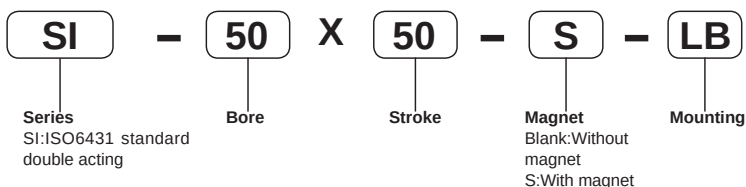


Model / symbol	A	B	C	D	E	F	L
DGP-1	25	13	G1/8	9	28	14	48
DGP-2	30	18	G1/4	11	32	19	58
DGP-3	35	21	G3/8	14	39	22	68
DGP-4	40	26	G1/2	15	45	27	80
DGP-5	46	30	G3/4	18	50	32	100

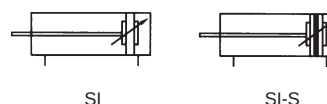
SI Series ISO6431 Standard Cylinder



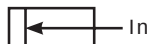
Ordering code



Symbol



Theoretical force

Unit: N  Out  In

Bore size (mm)	Rod diameter (mm)	Operating direction		Piston area(mm ²)	Operating pressure (MPa)								
					0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
32	12	Double acting	Out	804	80.4	160.8	241.2	321.6	402.0	482.4	562.8	643.2	723.6
			In	690	69.0	138.0	207.0	276.0	345.0	414.0	483.0	552.0	621.0
40	16	Double acting	Out	1256	125.6	251.2	376.8	502.4	628.0	753.6	879.2	1002.4	1130.4
			In	1055	105.5	211.0	316.5	422.0	527.5	633.0	738.5	844.0	949.5
50	20	Double acting	Out	1963	196.3	392.6	588.9	785.2	981.5	1177.8	1374.1	1570.4	1766.7
			In	1649	164.9	329.8	494.7	659.6	824.5	989.4	1154.3	1399.2	1484.1
63	20	Double acting	Out	3117	311.7	623.4	935.1	1246.8	1558.5	1870.2	2181.9	2493.6	2805.3
			In	2803	280.3	560.6	840.9	1121.2	1401.5	1681.8	1962.1	2242.4	2522.7
80	25	Double acting	Out	5026	502.6	1005.2	1507.8	2010.4	2513.0	3015.6	3518.2	4020.8	4523.4
			In	4536	453.6	907.2	1360.8	1814.4	2268.0	2721.6	3175.2	3628.8	4082.4
100	25	Double acting	Out	7853	785.3	1570.6	2355.9	3141.2	3926.5	4711.8	5497.1	6282.4	7067.7
			In	7147	714.7	1429.4	2144.1	2858.8	3573.5	4288.2	5002.9	5717.6	6432.3
125	32	Double acting	Out	12272	1227.2	2454.4	3681.6	4908.8	6136.0	7363.2	8590.4	9817.6	11044.8
			In	11468	1146.8	2293.6	3440.4	4587.2	5734.0	6880.8	8027.6	9174.4	10321.2
160	40	Double acting	Out	20106	2010.6	4021.2	6031.8	8042.4	10053.0	12063.6	14074.2	16084.8	18095.4
			In	18849	1884.9	3769.8	5654.7	7539.6	9424.5	11309.4	13194.3	15079.2	16964.1
200	40	Double acting	Out	31416	3141.6	6283.2	9424.8	12566.4	15708.0	18849.6	21991.2	25132.8	28274.4
			In	30157	3015.7	6031.4	9047.1	12062.8	15078.5	18094.2	21109.9	24125.6	27141.3
250	50	Double acting	Out	49087	4908.7	9817.4	14726.1	19634.8	24043.5	29452.2	34360.9	39269.6	44178.3
			In	47124	4712.4	9377.6	12566.4	18849.6	23562.0	28274.4	32986.8	37699.2	42411.6

SI Series ISO6431 Standard Cylinder

Specifications

Bore (mm)	32	40	50	63	80	100	125	160	200
Operation	Double acting								
Fluid	Air								
Mounting	Basic, FA, FB, CA, CB, LB								
Operating pressure	0.1~0.9MPa								
Proof pressure	1.35MPa								
Operating temperature	0~70°C								
Operating piston speed	50~800 mm/s								
Cushioning	Adjustable cushioning								
Cushioning stroke	24						32		
Port size	G1/8 "	G1/4 "		G3/8 "		G1/2 "		G3/4 "	

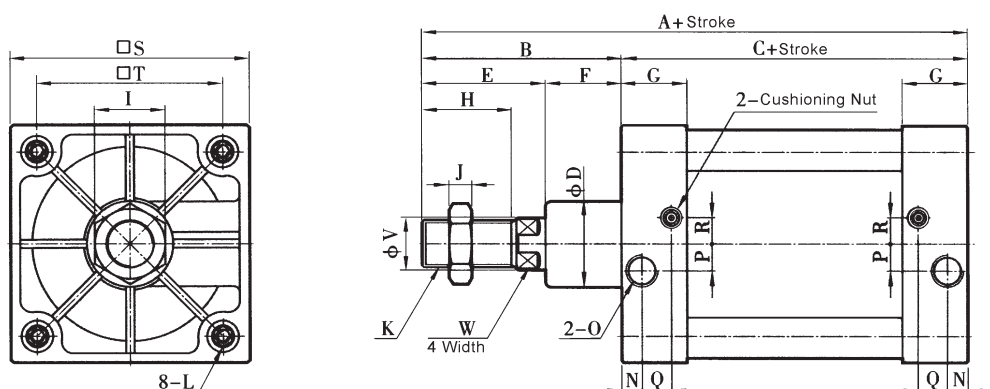
Stroke

Bore (mm)	Standard stroke	Max. stroke	Allowable stroke
32	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
160	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

Intermediate strokes are available.

SI Series ISO6431 Standard Cylinder

φ 32~ φ 200

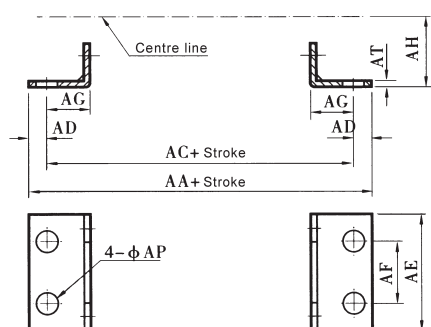


Bore/Symbol	A	B	C	D	E	F	G	H	I	J	K	L
32	142	48	94	30	32	16	28	22	17	6	M10×1.25	M6
40	159	54	105	35	36	18	29	24	19	7	M12×1.25	M6
50	175	69	106	40	44	25	31	32	24	8	M16×1.5	M8
63	190	69	121	45	44	25	32	32	24	8	M16×1.5	M8
80	214	86	128	45	56	30	35	40	30	10	M20×1.5	M10
100	229	91	138	55	59	32	36	40	30	10	M20×1.5	M10
125	279	119	160	60	74	45	46	54	41	13.5	M27×2	M12
160	332	152	180	65	94	58	50	72	55	18	M36×2	M16
200	347	167	180	75	107	60	50	72	55	18	M36×2	M16

Bore/Symbol	N	O	P	Q	R	S	T	V	W
32	13.5	1/8	4	7.5	7	47	32.5	12	10
40	16	1/4	6	9.5	9	53	38	16	13
50	18.5	1/4	8.5	6.7	9	65	46.5	20	17
63	19	3/8	6	7.7	9	75	56.5	20	17
80	19	3/8	10	5	13.5	95	72	25	22
100	18	1/2	12.5	10	14.5	115	89	25	22
125	23	1/2	14	12	14	140	110	32	27
160	25	3/4	15	12	20	180	140	40	36
200	25	3/4	15	12	20	220	175	40	36

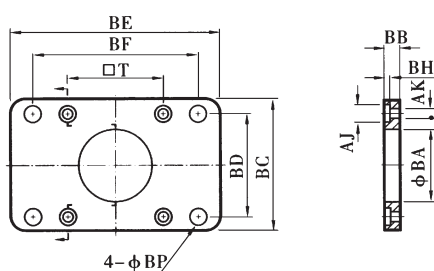
ISO 6431 Standard Cylinder Mounting Bracket

LB



Symbol / Bore	32	40	50	63	80	100	125	160	200
AA	158	179	190	209	248	258	290	340	380
AC	142	161	170	185	210	220	250	300	320
AD	8	9	10	12	19	19	20	20	30
AE	48	53	63	73	98	115	140	180	220
AF	32	36	45	50	63	75	90	115	135
AG	24	28	32	32	41	41	45	60	70
AH	32	36	45	50	63	71	90	115	135
AP	7	9	9	9	12	14	16	18	22
AT	4	4	4	4	5	5	8	8	9

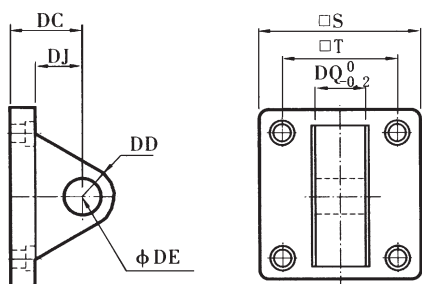
FA



Symbol / Bore	32	40	50	63	80	100	125	160	200
AJ	10.5	10.5	14	14	17	17	19	25	25
AK	7	7	9	9	11	11	13	17	17
BA	30.3	35.3	40.3	45.3	45.3	55.3	60.3	65.3	75.3
BB	10	10	12	12	16	16	20	20	25
BC	50	55	65	75	100	120	140	180	220
BD	32	36	45	50	63	75	90	115	135
BE	80	90	110	125	154	186	224	280	320
BF	64	72	90	100	126	150	180	230	270
BH	6.5	6.5	6.5	8.5	10.5	10.5	8	8	12
BP	7	9	9	9	12	14	16	18	22
T	32.5	38	46.5	56.5	72	89	110	140	175

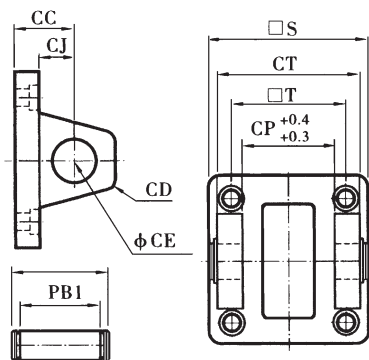
ISO 6431 Standard Cylinder Mounting Bracket

CA



Symbol / Bore	32	40	50	63	80	100	125	160	200
S	47	53	65	75	95	115	140	180	220
T	32.5	38	46.5	56.5	72	89	110	140	175
DC	22	25	27	32	36	41	50	55	60
DD	9	12	12	15	15	20	25	30	30
DE	10	12	12	16	16	20	25	30	30
DJ	13	16	17	22	22	27	33	35.5	37
DQ	25.8	27.8	31.7	39.7	49.7	59.7	69.7	89.7	89.7

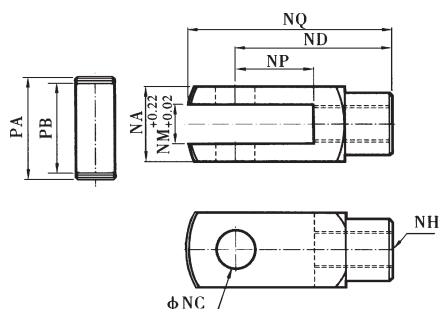
CB



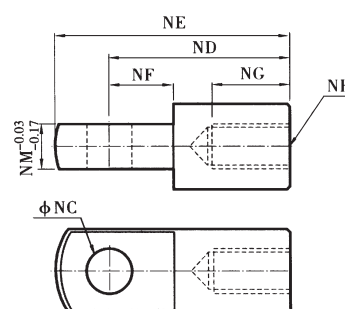
Symbol / Bore	32	40	50	63	80	100	125	160	200
CC	22	25	27	32	36	41	50	55	60
CD	5	5	3	3	8	8	8	9	9
CE	10	12	12	16	16	20	25	30	30
CJ	13	16	17	22	22	27	31	35.5	36
CP	26	28	32	40	50	60	70	90	90
CT	45	52	60	70	90	110	130	170	170
PAI	52	60	68	79	99	119	139	181	181
PBI	46.5	53.5	61.5	71.5	91.5	111.5	131.5	171.5	171.5
S	47	53	65	75	95	115	140	180	220
T	32.5	38	46.5	56.5	72	89	110	140	175

ISO6431 Standard Cylinder Joint Accessory

Y joint

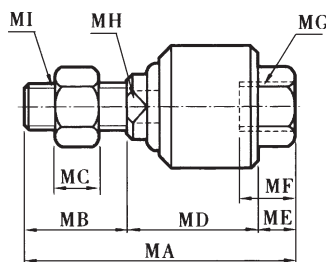


I joint



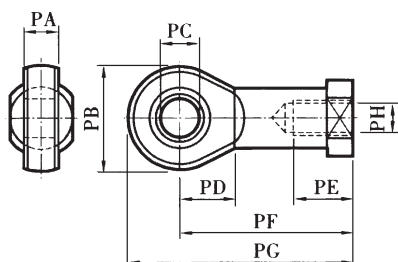
Bore / Symbol	NA	NC	ND	NE	NG	NH	NM	NP	NQ	PA	PB
32	19	10	40	52	20	M10×1.25	10	20	52	26.2	20
40	25.4	12	48	67	20	M12×1.25	12	24	62	32.8	26.5
50	32	16	64	89	23	M16×1.5	16	32	83	39.3	33
63	32	16	64	89	23	M16×1.5	16	32	83	39.3	33
80	44.4	20	80	112	30	M20×1.5	20	40	105	53.3	45
100	44.4	20	80	112	30	M20×1.5	20	40	105	53.3	45
125	55	30	110	155	56	M27×2.0	30	54	148	64	55.6
160	70	35	144	201	72	M36×2.0	35	72	191	80	70.6
200	70	35	144	201	72	M36×2.0	3	72	191	80	70.6

Float joint



Bore / Symbol	MA	MB	MC	MD	ME	MF	MG	MH	MI
32	73	20	6	45	8	26	M10×1.25	12	M10×1.25
40	77	24	7	46	7	26	M12×1.25	12	M12×1.25
50	106	32	8	62	12	34	M16×1.5	19	M16×1.5
63	106	32	8	62	12	34	M16×1.5	19	M16×1.5
80	122	40	10	68	14	42	M20×1.5	19	M20×1.5
100	122	40	10	68	14	42	M20×1.5	19	M20×1.5
125	147	54	13.5	77	16	40	M27×2.0	24	M27×2.0
160	251	72	18	161	18	78	M36×2.0	36	M36×2.0
200	251	72	18	161	18	78	M36×2.0	36	M36×2.0

Fisheye joint



Bore / Symbol	PA	PB	PC	PD	PE	PF	PG	PH
32	14	28	10	15	20	43	57	M10×1.25
40	16	32	12	17	22	50	66	M12×1.25
50	21	42	16	22	28	64	85	M16×1.5
63	21	42	16	22	28	64	85	M16×1.5
80	25	50	20	26	33	77	102	M20×1.5
100	25	50	20	26	33	77	102	M20×1.5
125	37	70	30	36	51	110	145	M27×2.0
160	21	80	35	41	56	125	165	M36×2.0
200	21	50	35	41	56	125	165	M36×2.0

DNC Series ISO6431 Standard Cylinder



● Ordering code

DNC	—	63	X	50	PPV	—	A	—	S2
Mounting DNC: Basic type HNC: Foot mounting FNC: Flange mounting SNCB: Single clevis SNCL: Double clevis		Bore		Stroke	Cushioning Blank: Without cushioning PPV: With cushioning		Magnet Blank: Without magnet A: With built-in magnet		S2: Through piston rod K2: Extended male piston rod thread K3: Female piston rod thread K7: Piston rod with external hexagon K8: Extended piston rod

● Specifications

Bore (mm)	32	40	50	63	80	100	125
Fluid	Filtered air						
Operation	Double acting						
Proof pressure	1.5MPa						
Max. operating pressure	1.0MPa						
Min. operating pressure	0.1MPa						
Cushioning	Air cushioning (Standard)						
Ambient temperature	5~60℃						
Operating piston speed	50~500mm/s						
Allowable stroke tolerance	0~250 ^{+1.0} ₀ 251~1000 ^{+1.5} ₀ 1001~1500 ^{+2.0} ₀						
Operating life	Not less than 4000Km						
Lubrication	Not required						
Port size	1/8"	1/4"		3/8"		1/2"	

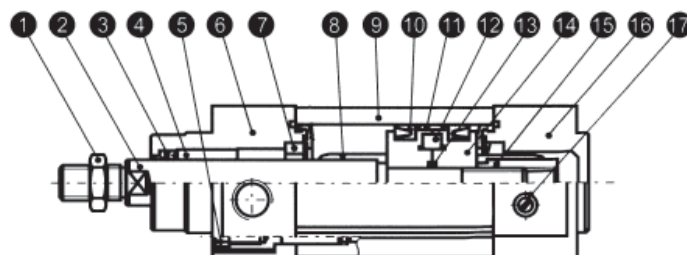
DNC Series ISO6431 Standard Cylinder

● Stroke

Bore	Standard stroke	Cushioning length PPV	Max. stroke range
32	25 40 50 80 100 125 160 200 250 320 400 500	20	10~2000
40			
50			
63			
80			
100			
		22	
		32	

Bore	Min. stroke of proximity sensor	Type of proximity sensor
32	32	KCK2400C embedding type
40	40	
50	50	
63	63	
80	80	
100	100	

● Construction



● Component parts

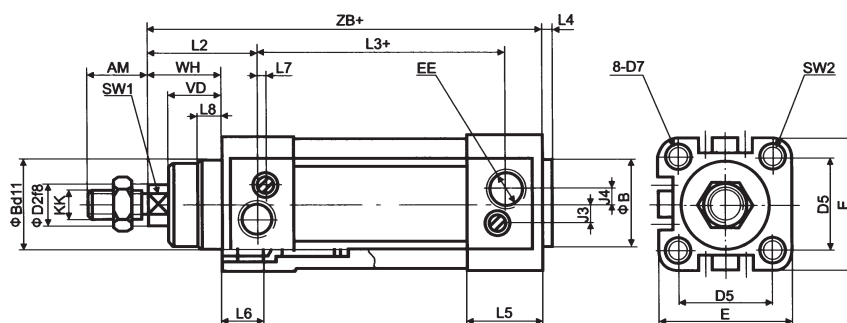
No.	Name	Material
1	Nut	35
2	Piston rod	45
3	Axes envelop	PU
4	Guide envelop	Sleeve bearing
5	Rod bolt	35
6	Front cover	ZZnAl4-1
7	Cushioning seal	NBR
8	Cushioning piston	POM

No.	Name	Material
9	Cylinder tube	A6063-TS
10	"Y"Ring	NBR
11	Washer	F4
12	Magnetic ring	Magnetic plastic
13	"O"Ring	NBR
14	Front and back piston	LY12
15	Compaction nut	LY12
16	Back cover	ZZnAl4-1
17	Adjustable valve pin	HPb59-1

DNC Series ISO6431 Standard Cylinder

- Basic type
- Dimensions

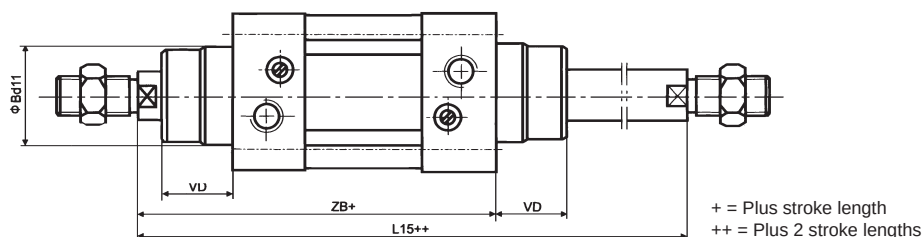
DNC...PPV-A



Bore	AM	B	D2	D5	D7	E	EE(G)	J3	J4	KK	L2	L3	L4	L5	L6	L7	L8	SW1	SW2	VD	WH	ZB
32	22	30	12	32.5	M6	45	1/8	6	5.2	M10×1.25	41.6	62.8	4	26	16	3.3	10	10	6	18	26	120
40	24	35	16	38	M6	54	1/4	8	6	M12×1.25	44	77	4	29.5	16	3.6	10.5	13	6	21.5	30	135
50	32	40	20	46.5	M8	64	1/4	10	8.5	M16×1.5	51	78	4	30	17	5.1	11.5	17	8	28	37	143
63	32	45	20	56.5	M8	75	3/8	12.4	10	M16×1.5	54	87	4	35.5	17	6.6	15	17	8	28.5	37	158
80	40	45	25	72	M10	94	3/8	12.5	8	M20×1.5	62.4	95.2	4	36	17	10.5	15.7	22	10	34.7	46	174
100	40	55	25	89	M10	112	1/2	11.8	10	M20×1.5	69.8	100.4	4	39	17	8	19.2	22	10	38.2	51	189
125	54	60	32	110	M12	134	1/2	13	8	M27×2	83	124	6	36	22	14	20.5	27	8	46	65	225

- Through piston rod type
- Dimensions

DNC...PPV-A-S2

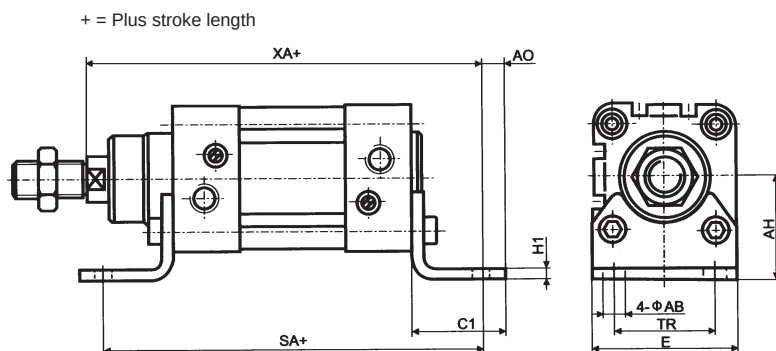


Bore	B	L15	VD	ZB
32	30	146	18	120
40	35	165	21.5	135
50	40	180	28	143
63	45	195	28.5	158
80	45	220	34.7	174
100	55	240	38.2	189
125	60	291	46	225

DNC Series ISO6431 Standard Cylinder

● Dimensions

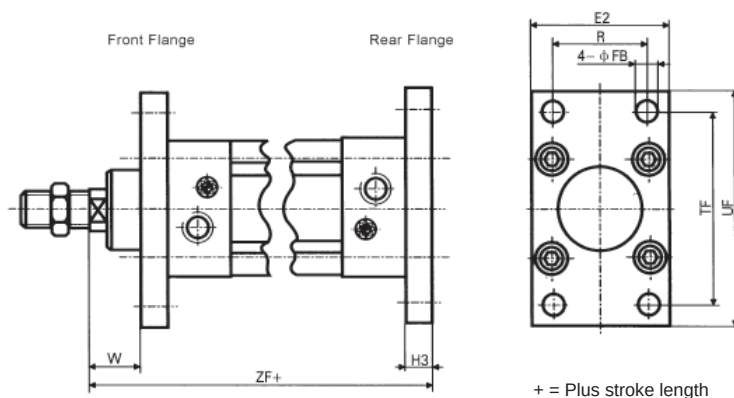
HNC...PPV-A foot mounting



Bore	AB	AH	AO	C1	E	H1	SA	TR	XA
32	7	32	6.5	30.5	45	5	142	32	144
40	10	36	9	37	54	5	161	36	163
50	10	45	10.5	41.5	64	6	170	45	175
63	10	50	12.5	44.5	75	6	185	50	190
80	12	63	15	56	93	6	210	63	215
100	14.5	71	17.5	58.5	110	6	220	75	230

● Dimensions

FNC...PPV-A flange mounting

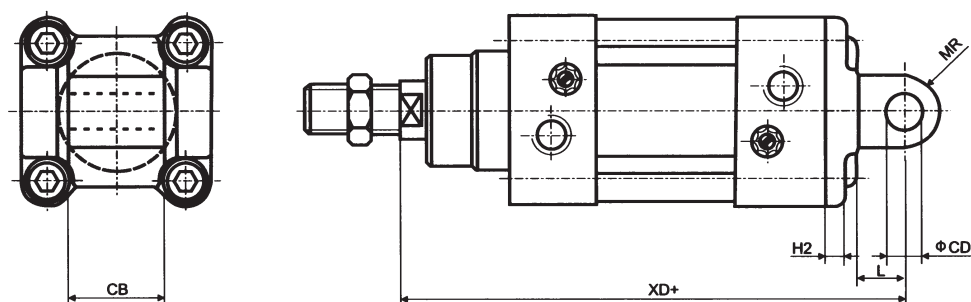


Bore	E2	FB H13	H3	R	TF	UF	W	ZF
32	50	7	10	32	64	80	16	130
40	55	9	10	36	72	90	20	145
50	65	9	12	45	90	110	25	155
63	75	9	12	50	100	125	25	170
80	100	12	16	63	126	154	30	190
100	120	14	16	75	150	186	35	205

DNC Series ISO6431 Standard Cylinder

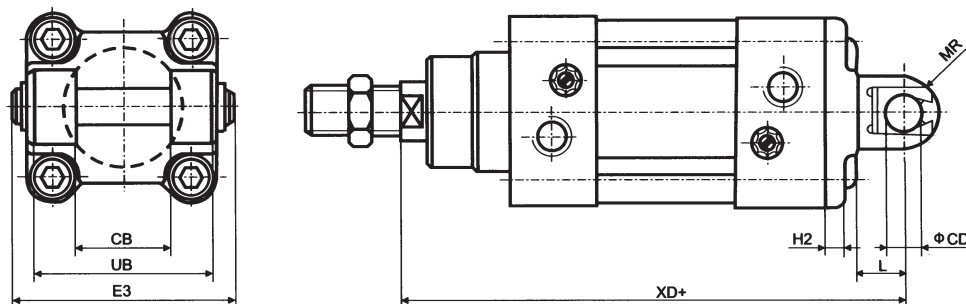
● Dimensions

SNCB...PPV-A single clevis



+ = Plus stroke length

SNCL...PPV-A double clevis



+ = Plus stroke length

Bore	CB	CD	E3	H2	L	MR	UB	XD
32	26	10	55	6	13	10	45	142
40	28	12	63	6	16	12	52	160
50	32	12	71	7	16	12	60	170
63	40	16	83	7	21	16	70	190
80	50	16	103	10.5	22	16	90	210
100	60	20	127	10.5	27	20	110	230

SC Series Standard Cylinder



Ordering code

SC	D	-	50	X	50	-	25	-	S	-	LB
Type SC: Pull rod type SU: Hidden pull rod type	Blank: Standard double acting D: Double-shaft double acting J: Double-shaft and adjustable stroke type		Bore		Stroke		SCJ adjustable stroke type SUJ adjustable stroke type		Magnet S: With magnet Blank: Without magnet		Mounting Blank: Basic type LB: Front and back fixed FA: Front cover fixation (Front flange) FB: Back cover fixation (Rear flange) CA: Back cover fixation (Single Clevis) CB: Back cover fixation (double Clevis) TC: Centre Turnion TC-M: Swinging type attaching foot seat

Specifications

Bore (mm)	32	40	50	63	80	100	125	160	200
Operation	Double acting								
Fluid	Air								
* Mounting	Basic FA FB CA CB LB TC TC-M								
Operating pressure	1.0~9.0 Kg/cm ²								
Proof pressure	13.5 Kg/cm ²								
Operating temperature	0~70°C								
Operating piston speed	50~800 mm/s								
Cushioning	Adjustable cushioning								
Cushioning stroke	20				26				45
Port size	G1/8"	G1/4"		G3/8"		G1/2"		G3/4"	

*SCD,SCJ Mounting: FA,FB,LB,TC & TC-M.

SC Series Standard Cylinder

Stroke

Bore(mm)	Standard stroke																Max. stroke	Allowable stroke
32	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500																1000	2000
40	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800																1200	2000
50	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000																1200	2000
63	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000																1500	2000
80	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000																1500	2000
100	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000																1500	2000
125	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000																1500	2000
160	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000																1500	2000
200	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000																1500	2000

Theoretical force

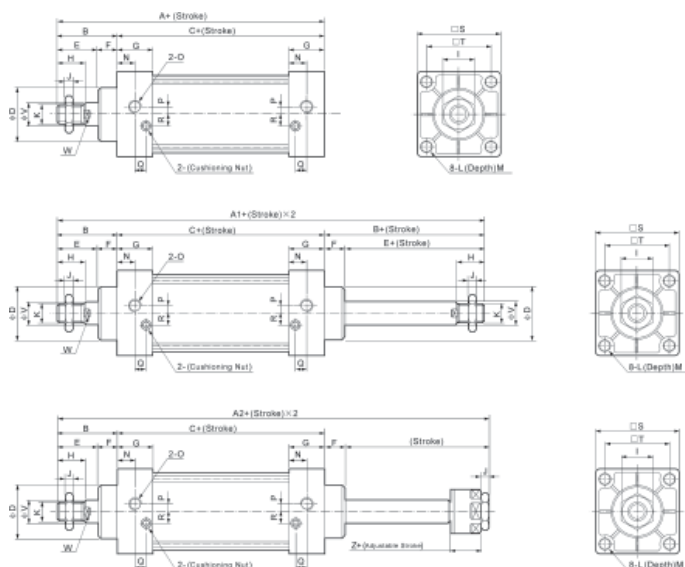
Unit:N  Out  In

Bore size		32		40		50		63		80		100		125		160		200	
Rod diameter		12		16		20		20		25		25		32		40		40	
Operation		Double acting		Double acting		Double acting		Double acting		Double acting		Double acting		Double acting		Double acting		Double acting	
		Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In
Piston area(mm ²)		804	690	1256	1055	1963	1649	3117	2803	5026	4536	7853	7362	12270	11460	20100	18840	31420	30140
Operating pressure (MPa)	0.1	80.4	69.0	125.6	105.5	196.3	164.9	311.7	280.3	502.6	453.6	785.3	736.2	1227.0	1146.0	2010.0	1884.0	3142.0	3014.0
	0.2	160.8	138.0	251.2	211.0	392.6	329.8	623.4	560.6	1005.2	907.2	1570.6	1472.4	2454.0	2292.0	4020.0	3768.0	6284.0	6028.0
	0.3	241.2	207.0	376.8	316.5	588.9	494.7	935.1	840.9	1507.8	1360.8	2355.9	2208.6	3681.0	3438.0	6030.0	5652.0	9426.0	9042.0
	0.4	321.6	276.0	502.4	422.0	785.2	659.6	1246.8	1121.2	2010.4	1814.4	3141.2	2944.8	4908.0	4584.0	8040.0	7536.0	12568.0	12056.0
	0.5	402.0	345.0	628.0	527.5	981.5	824.5	1558.5	1401.5	2513.0	2268.0	3926.5	3681.0	6135.0	5730.0	10050.0	9420.0	15710.0	15070.0
	0.6	482.4	414.0	753.6	633.0	1177.8	989.4	1870.2	1681.8	3015.6	2721.6	4711.8	4417.2	7362.0	6876.0	12060.0	11304.0	18852.0	18084.0
	0.7	562.8	483.0	879.2	738.5	1374.1	1154.3	2181.9	1962.1	3518.2	3175.2	5497.1	5153.4	8589.0	8022.0	14070.0	13188.0	21994.0	21098.0
	0.8	643.2	552.0	1004.8	844.0	1570.4	1319.2	2493.6	2242.4	4020.8	3628.8	6282.4	5889.6	9816.0	9168.0	16080.0	15072.0	25136.0	24112.0
	0.9	723.6	621.0	1130.4	949.5	1766.7	1484.1	2805.3	2522.7	4523.4	4082.4	7067.7	6625.8	11043.0	10314.0	18090.0	16956.0	28278.0	27126.0

SC Series Standard Cylinder

● Dimensions

SC Series

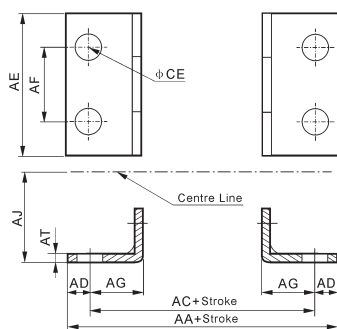


Bore size / Symbol	A	A1	A2	B	C	D	E	F	G	H	I	J	K
32	140	187	182	47	93	28	32	15	27.5	22	17	6	M10×1.25
40	142	191	185	48	93	32	34	15	27.5	24	17	7	M12×1.25
50	150	207	196	57	93	38	42	15	27.5	32	23	8	M16×1.5
63	153	210	199	57	96	38	42	15	27.5	32	23	8	M16×1.5
80	183	258	243	75	108	47	54	21	33	40	26	10	M20×1.5
100	183	258	243	75	108	47	54	21	33	40	26	10	M20×1.5
125	226	/	/	104	122	55	70	34	33	54	40	10	M27×2
160	291	/	/	123	168	62	91	32	48	72	55	18	M36×2
200	347	/	/	167	180	80	112	55	48	72	55	18	M36×2
Bore size / Symbol	L		M	N	O	P	Q	R	S	T	V	W	Z
32	M6×1		9.5	13.5	G1/8	3.5	7.5	7	45	33	12	12	21
40	M6×1		9.5	1.5	G1/4	6	8.2	9	50	37	16	14	21
50	M6×1		9.5	13.5	G1/4	8.5	8.2	9	62	47	20	17	23
63	M8×1.25		9.5	13.5	G3/8	7	8.2	8.5	75	56	20	17	23
80	M10×1.5		11.5	16.5	G3/8	10	9.5	14	94	70	25	22	29
100	M10×1.5		11.5	16.5	G1/2	11	9.5	14	112	84	25	22	29
125	M12×1.75		15.5	16.5	G1/2	/	/	/	140	110	32	27	/
160	M16×2		17.5	25	G1/2	/	/	/	180	140	40	36	/
200	M16×2		17.5	25	G3/4	/	/	/	220	175	40	36	/

SC Series Standard Cylinder Accessory

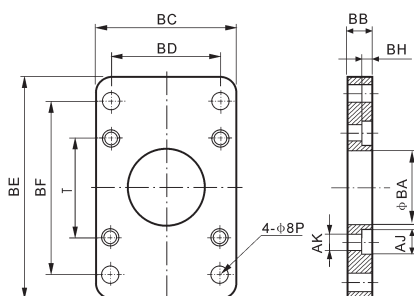
● Dimensions

LB foot rest



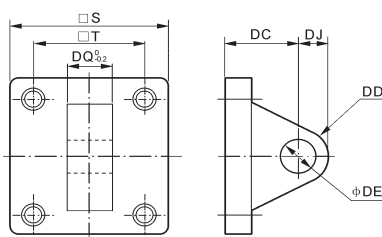
Symbol / Bore	32	40	50	63	80	100	125	160	200
AA	153	169	173	184	200	210	249	328	380
AC	134	140	149	158	168	174	213	288	320
AD	9.5	14.5	12	12	16	18	18	20	30
AE	50	57	68	80	97	112	140	180	220
AF	33	36	47	56	70	84	90	115	135
AG	20.5	23.5	28	31	30	30	45	60	70
AJ	28	30	36.5	41	49	57	90	115	135
AP	9	12	12	12	14	14	16	18	22
AT	3.2	3.2	3.2	3.2	4	4	8	8	10

FA、FB flange



Symbol / Bore	32	40	50	63	80	100	125	160	200
BA	28.3	32.3	38.3	38.3	47.3	47.3	56	63	81
BB	10	10	10	12	16	16	20	25	25
BC	47	52	65	76	95	115	140	180	220
BD	33	36	47	56	70	84	90	115	135
BE	72	84	104	116	143	162	224	280	320
BF	58	70	86	98	119	138	180	230	270
BH	6.5	6.5	6.5	8.5	10.5	10.5	15	20	20
AJ	10.5	10.5	13.5	13.5	16.6	16.6	19	25	25
AK	6.5	6.5	8.5	8.5	10.5	10.5	12.5	16.5	16.5
BP	7	7	9	9	12	12	16	18	22
T	33	37	47	56	70	84	110	140	175

CA single clevis

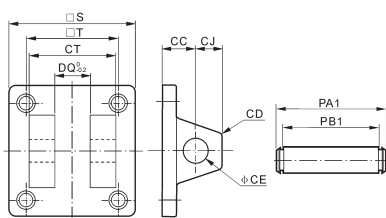


Symbol / Bore	32	40	50	63	80	100	125	160	200
S	48	50	62	75	94	112	140	180	220
T	33	37	47	56	70	84	110	140	175
DC	34	34	34	34	48	48	50	55	60
DD	14	14	15	15	20	20	25	30	30
DE	12	14	14	14	20	20	25	30	30
DJ	14	14	15	15	20	20	25	30	30
DQ	16	20	20	20	32	32	70	90	90

SC Series Standard Cylinder Accessory

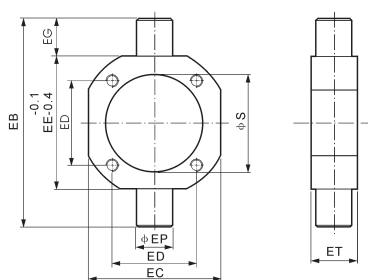
● Dimensions

CB double clevis



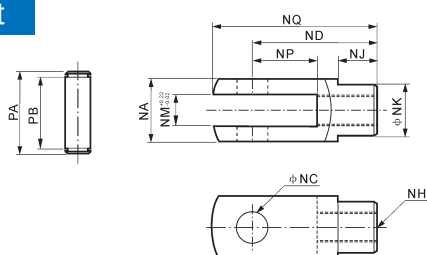
Symbol / Bore	32	40	50	63	80	100	125	160	200
CC	19	19	19	19	32	32	50	55	60
CD	5	5	3	3	8	8	25	30	30
CE	12	14	14	14	20	20	25	30	30
CJ	13	13	15	15	21	21	25	30	30
CP	16.3	20.5	20.3	20.3	32.3	32.3	70	90	90
CT	32	44	52	52	64	64	120	160	160
PAI	41	51.8	60.3	60.3	73.8	73.8	130	170	170
PBI	33.5	45.8	54	54	65.5	65.5	121.5	161.5	161.5
S	48	50	62	75	94	112	140	180	220
T	33	37	47	56	70	84	110	140	175

TC centre turnnion

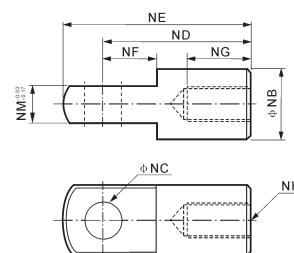


Symbol / Bore	40	50	63	80	100	125	160	200
EB	113	126	138	164	182	210	264	336
EC	63	76	88	114	132	160	200	240
ED	37	47	56	70	84	110	140	175
EE	63	76	88	114	132	160	200	240
EG	25	25	25	25	25	25	32	48
EP	25	25	25	25	25	25	32	38
ET	30	30	30	30	30	30	38	44
S	45.5	55.5	68.5	87.5	107.5	134.5	172.5	212.5

Y joint



I joint



Symbol / Bore	NA	NB	NC	ND	NE	NF	NG	NH	NJ	NK	NM	NP	NQ	PA	PB
32	19	20	10	40	52	15	20	M10×1.25	12	18	10	20	52	26.2	20
40	25.4	24	12	48	67	24	20	M12×1.25	20	23	12	24	62	32.8	26.5
50	32	32	16	64	89	32	23	M16×1.5	22	30	16	32	83	39.3	33
63	32	32	16	64	89	32	23	M16×1.5	22	30	16	32	83	39.3	33
80	44.4	40	20	80	112	40	30	M20×1.5	30	39	20	40	105	53.3	45
100	44.4	40	20	80	112	40	30	M20×1.5	30	39	20	40	105	53.3	45

MA Series Stainless Steel Mini Cylinder



Ordering code

MA	-	CA	50	X	50	-	25	-	S	-	LB
Type MA: Double acting MSA: Single acting MAD: Double-shaft double acting MAJ: Double-shaft and adjustable stroke		Back cover type CA: Fishtail type CM: Rounded type U: Horizontal type	Bore		Stroke		MAJ adjustable stroke type		Magnet Code S: With magnet Blank: Without magnet		Mounting Blank: Basic type LB: Front and back fixed type FA: Front flange type SDB: Back cover swinging type

Specifications

Bore (mm)	16	20	25	32	40
Operation	Double acting or single acting				
Fluid	Air				
Mounting	Basic FA LB SDB				
Operating pressure	1.0~9.0 Kg/cm ²				
Proof pressure	13.5 Kg/cm ²				
Operating temperature	0~70℃				
Operating piston speed	50~800 mm/s				
Cushioning	Rubber bumper				
Port size	M5×0.8		G1/8"		

Stainless Steel, Aluminum Alloy Mini Cylinder

Stroke

Bore (mm)	Standard stroke	Max. stroke	Allowable stroke
16	25 50 75 80 100 125 150 160 175 200	300	500
20	25 50 75 80 100 125 150 160 175 200 250 300	500	650
25	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	500	650
32	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	500	650
40	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	500	650

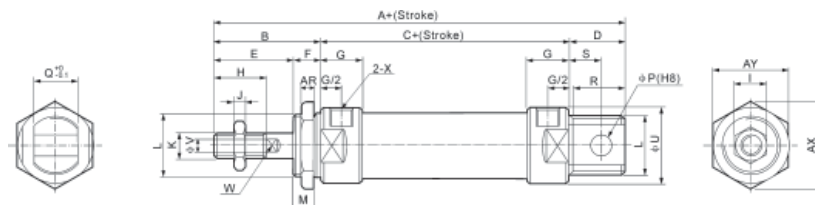
Theoretical force

Bore size		16			20			25			32			40		
Rod diameter		6			8			10			12			16		
Operation		Single-acting	Double acting		Single-acting	Double acting		Single-action	Double acting		Single-acting	Double acting		Single-acting	Double acting	
			Extrusion side	Pull side		Extrusion side	Pull side		Extrusion side	Pull side		Extrusion Side	Pull side		Extrusion side	Pull side
Piston area(cm ²)		2.01	2.01	1.81	3.14	3.14	2.64	4.90	4.90	4.12	8.04	8.04	6.90	12.56	12.56	10.55
Operating pressure (Kg/cm ²)	1	-	2.01	1.81	-	3.14	2.64	-	4.90	4.12	-	8.04	6.90	-	12.56	10.55
	2	-	4.02	3.62	1.57	6.28	5.28	2.45	9.80	8.24	4.02	16.08	13.80	6.28	25.12	21.10
	3	2.01	6.03	5.43	4.71	9.42	7.92	7.35	14.70	12.36	12.06	24.12	20.70	18.84	37.68	31.65
	4	4.02	8.04	7.24	7.85	12.56	10.56	12.25	19.60	16.48	20.10	32.16	27.60	31.40	50.24	42.20
	5	6.03	10.05	9.05	10.99	15.70	13.20	17.15	24.50	20.60	28.14	40.20	34.50	43.96	62.80	52.75
	6	8.04	12.06	10.86	14.13	18.84	25.84	22.05	29.40	24.72	36.18	48.24	41.40	56.52	75.36	63.30
	7	10.04	14.07	12.67	17.27	21.98	18.48	26.95	34.30	28.84	44.22	56.28	48.30	69.08	87.92	73.85
	8	-	-	-	20.41	25.12	21.12	31.85	39.20	32.96	52.26	64.32	55.20	81.64	100.48	84.40
	9	-	-	-	23.55	28.26	23.76	36.75	44.10	37.08	60.30	72.36	62.10	94.20	113.04	94.95

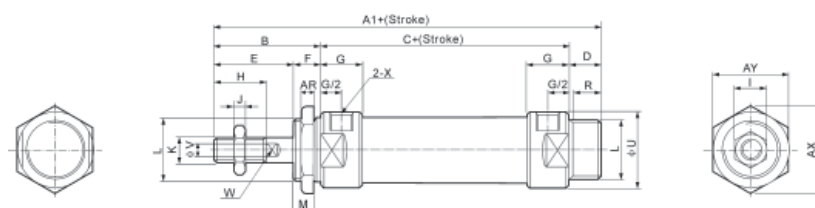
MA Series Stainless Steel Mini Cylinder

● Dimensions

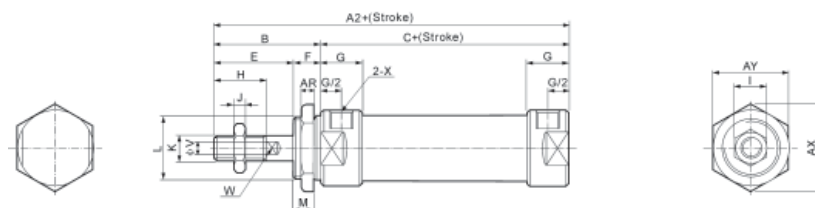
MA-CA



MA-CM



MA-U

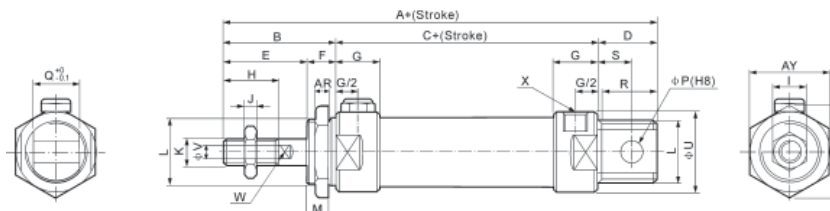


Bore size / Symbol	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K	
16	114	114	98	38	60	15	15	22	16	10	16	10	5	M6×1	
20	137	128	116	40	76	21	12	28	12	16	20	12	6	M8×1.25	
25	141	134	120	44	76	21	14	30	14	16	22	17	6	M10×1.25	
32	147	134	120	44	76	27	14	30	14	16	22	17	6	M10×1.25	
40	149	136	122	46	76	27	14	32	14	16.7	24	17	7	M12×1.25	
Bore size / Symbol	L		M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
16	M16×1.5		14	6	12	14	14	9	21	6	5	M5	6	24	27.5
20	M22×1.5		10	8	16	19	12	12	27	8	6	G1/8	7	33	29
25	M22×1.5		12	8	16	19	14	12	30	10	8	G1/8	7	33	29
32	M24×2.0		12	10	16	25	14	15	35	12	10	G1/8	8	37	32
40	M30×2.0		12	12	20	25	14	15	41.6	16	14	G1/8	9	47	41

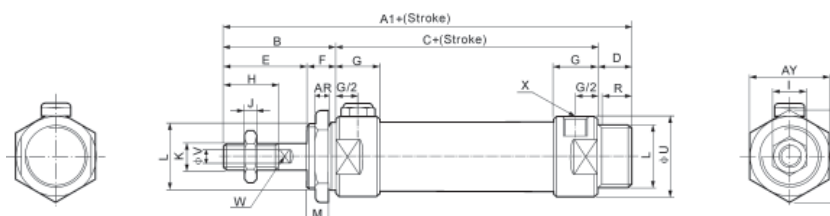
MA Series Stainless Steel Mini Cylinder

● Dimensions

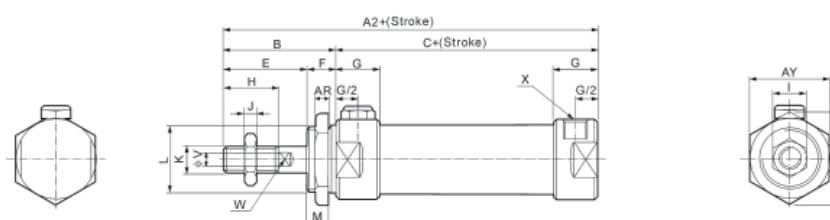
MSA-CA



MSA-CM



MSA-U

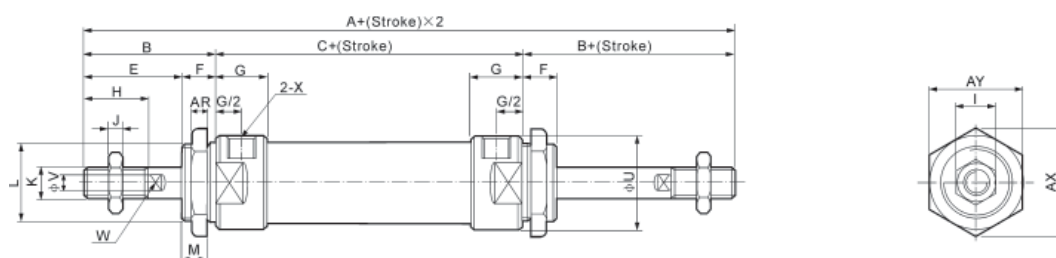


Symbol	A		A1		A2		B	C		D	D1	E	F	G	H	I	J
Bore / Stroke	0~50	51~100	0~50	51~100	0~50	51~100		0~50	51~100								
20	137	162	128	153	116	141	40	76	101	21	12	28	12	16	20	12	6
25	141	166	134	159	120	145	44	76	101	21	14	30	14	16	22	17	6
32	147	172	134	159	120	145	44	76	101	27	14	30	14	16	22	17	6
40	149	174	136	161	122	147	46	76	101	27	14	32	14	22	24	17	7
Bore / Symbol	K		L		M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
20	M8×1.25		M22×1.5		10	8	16	19	12	12	27	8	6	G1/8	7	33	29
25	M10×1.25		M22×1.5		12	8	16	19	14	12	30	10	8	G1/8	7	33	29
32	M10×1.25		M24×2.0		12	10	16	25	14	15	35	12	10	G1/8	8	37	32
40	M12×1.25		M30×2.0		12	12	20	25	14	15	41.6	16	14	G1/8	9	47	41

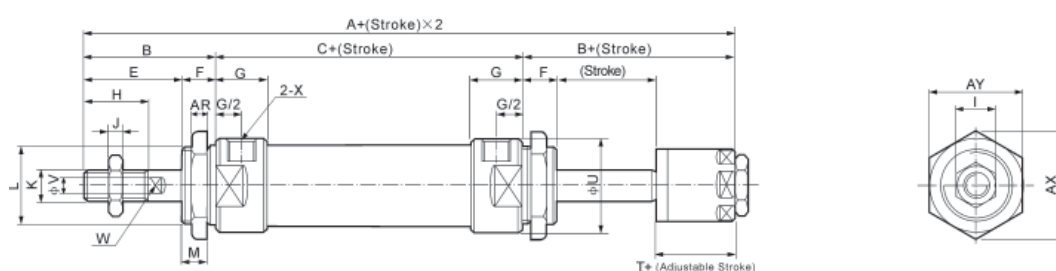
MA Series Stainless Steel Mini Cylinder

● Dimensions

MAD



MAJ



Bore/Symbol	A	A1	B	C	E	F	G	H	I	I	K
20	156	153	40	70	28	12	16	20	12	6	M8×1.25
25	164	161	44	70	30	14	16	22	17	6	M10×1.25
32	164	161	44	70	30	14	16	22	17	6	M10×1.25
40	168	164	46	92	32	14	22	24	17	7	M12×1.25
Bore/Symbol	L		M	U	V	W	X	AR	AX	AY	T
20	M22×1.5		10	29	8	6	G1/8	7	33	29	19
25	M22×1.5		12	34	10	8	G1/8	7	33	29	21
32	M24×1.5		12	39.5	12	10	G1/8	8	37	32	21
40	M30×2.0		12	49.5	16	14	G1/4	9	47	41	21

MAL Series Aluminum Alloy Mini Cylinder



Ordering code

MAL	-	CA	-	50	X	50	-	25	-	S	-	LB
Type MAL: Double acting MSAL: Single acting MALD: Double-shaft double acting MALJ: Double-shaft and adjustable stroke type		Back cover type CA: Fishtail type CM: Rounded type U: Horizontal type		Bore 50		Stroke 50		MALJ adjustable stroke type 25		Magnet S: With magnet Blank: Without magnet		Mounting Blank: Basic type LB: Front and back fixed type FA: Front cover fixed type SDB: Back cover swinging type

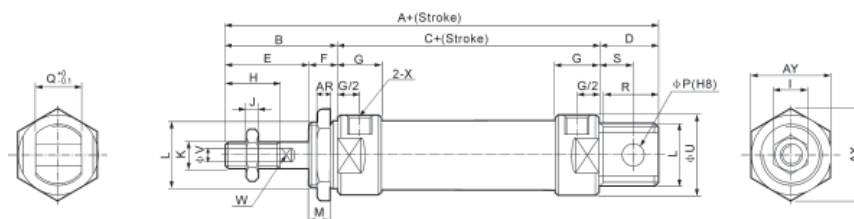
Specifications

Bore (mm)	16	20	25	32	40
Operation	Double acting or single acting				
Fluid	Air				
Mounting	Basic FA LB SDB				
Operating pressure	1.0~9.0 Kg/cm ²				
Ensured proof pressure	13.5 Kg/cm ²				
Operating temperature	0~70°C				
Operating piston speed	50~800 mm/s				
Cushioning	Rubber bumper				
Port size	M5×0.8		G1/8"		

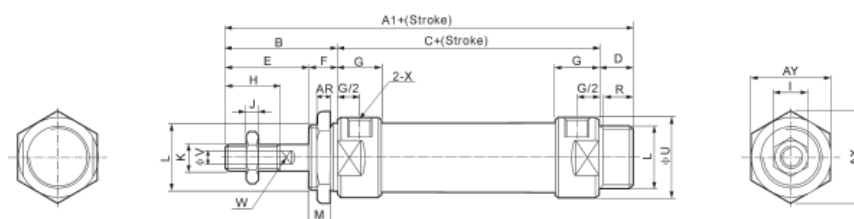
MAL Series Aluminum Alloy Mini Cylinder

● Dimensions

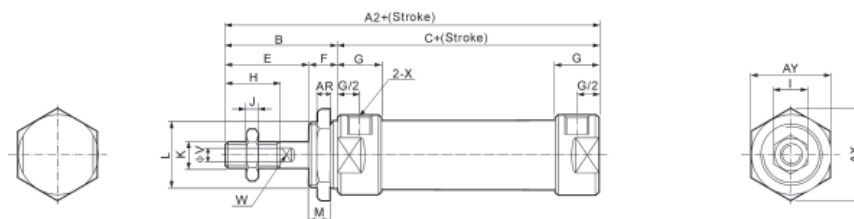
MAL-CA



MAL-CM



MAL-U

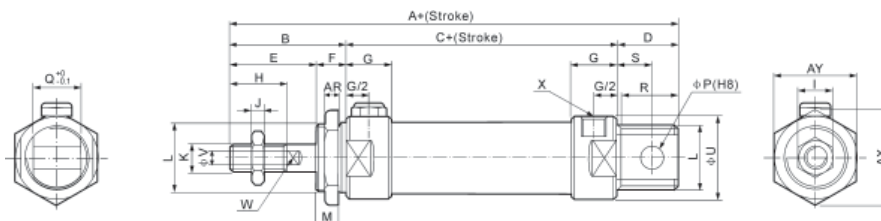


Bore / Symbol	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K
16	104	104	90	38	52	15	15	24	14	11	16	10	5	M6×1
20	131	122	110	40	70	21	12	28	12	16	20	12	6	M8×1.25
25	135	128	114	44	70	21	14	30	14	16	22	17	6	M10×1.25
32	141	128	114	44	70	27	14	30	14	16	22	17	6	M10×1.25
40	165	152	138	46	92	27	14	32	14	22	24	17	7	M12×1.25
Bore / Symbol	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
16	M16×1.5	8	6	12	13	13	6	20	6	/	M5	7	24	27.5
20	M22×1.5	10	8	16	19	12	12	29	8	6	G1/8	7	33	29
25	M22×1.5	12	8	16	19	14	12	34	10	8	G1/8	7	33	29
32	M24×2.0	12	10	16	25	14	15	39.5	12	10	G1/8	8	37	32
40	M30×2.0	12	12	20	25	14	15	49.5	16	14	G1/4	9	47	41

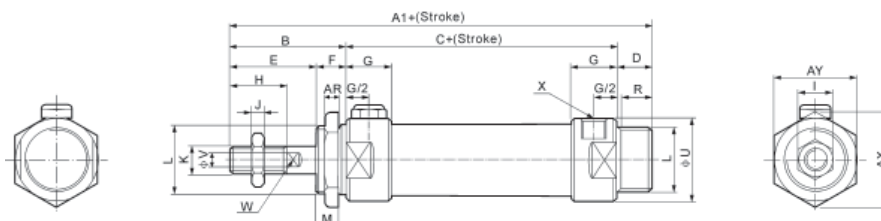
MAL Series Aluminum Alloy Mini Cylinder

● Dimensions

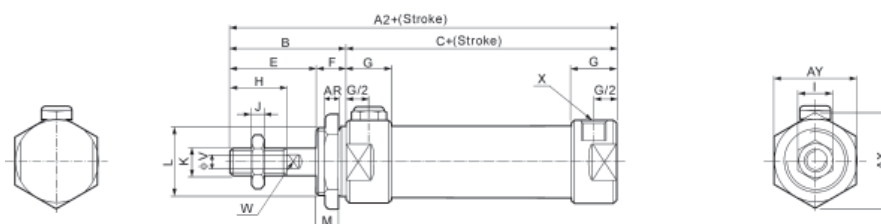
MSAL-CA



MSAL-CM



MSAL-U

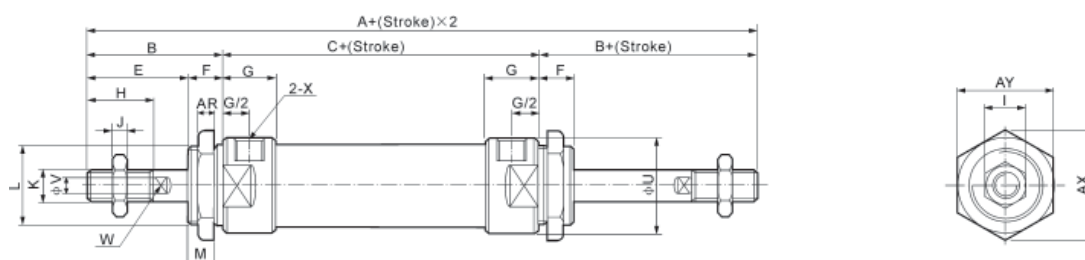


Symbol	A		A1		A2		B	C		D	D1	E	F	G	H	I	J
Bore / Stroke	0-50	51-100		51-100	0-50	51-100		0-50	51-100								
20	131	156	122	147	110	135	40	70	95	21	12	28	12	16	20	12	6
25	135	160	128	153	114	139	44	70	95	21	14	30	14	16	22	17	6
32	141	166	128	153	114	139	44	70	95	27	14	30	14	16	22	17	6
40	165	190	152	177	138	163	46	92	117	27	14	32	14	22	24	17	7
Bore / Symbol	K		L		M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
20	M8×1.25		M22×1.5		10	8	16	19	12	12	29	8	6	G1/8	7	33	29
25	M10×1.25		M22×1.5		12	8	16	19	14	12	34	10	8	G1/8	7	33	29
32	M10×1.25		M24×2.0		12	10	16	25	14	15	39.5	12	10	G1/8	8	37	32
40	M12×1.25		M30×2.0		12	12	20	25	14	15	49.5	16	14	G1/4	9	47	41

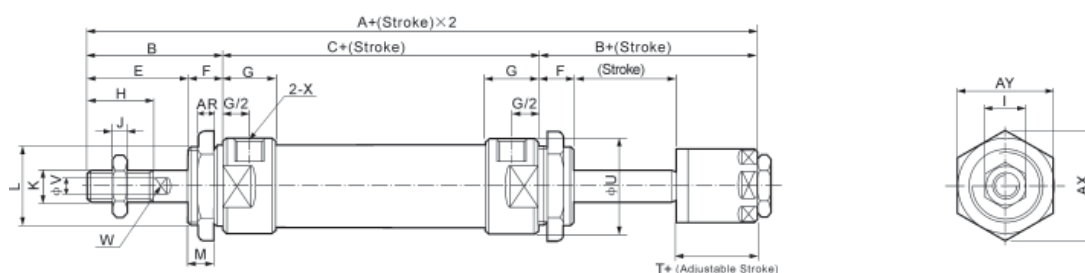
MAL Series Aluminum Alloy Mini Cylinder

● Dimensions

MALD



MALJ



Bore/Symbol	A	A1	B	C	E	F	G	H	I	J	K
20	131	122	40	70	28	12	16	20	12	6	M8×1.25
25	135	128	44	70	30	14	16	22	17	6	M10×1.25
32	141	128	44	70	30	14	16	22	17	6	M10×1.25
40	165	152	46	92	32	14	22	24	17	7	M12×1.25
Bore/Symbol	L		M	U	V	W	X	AR	AX	AY	T
20	M22×1.5		10	29	8	6	G1/8	7	33	29	19
25	M22×1.5		12	34	10	8	G1/8	7	33	29	21
32	M24×2.0		12	39.5	12	10	G1/8	8	37	32	21
40	M30×2.0		12	49.5	16	14	G1/4	9	47	41	21

DSNU / DSNUL Series ISO6432 Stainless Steel Mini Cylinder



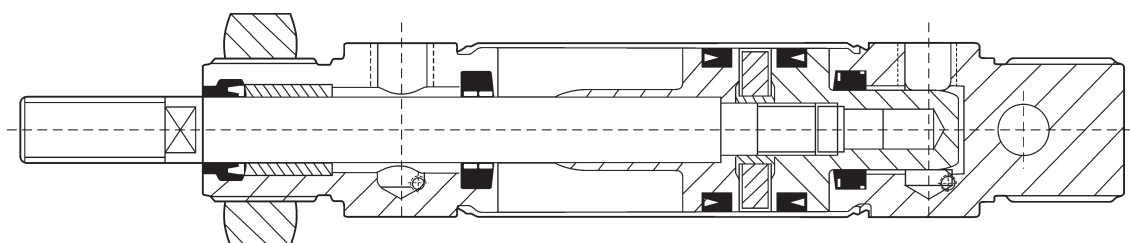
● Character

Non touched reaction testing accord with
ISO6432 standard cylinder. $\phi 8 \sim \phi 25\text{mm}$

● Ordering code

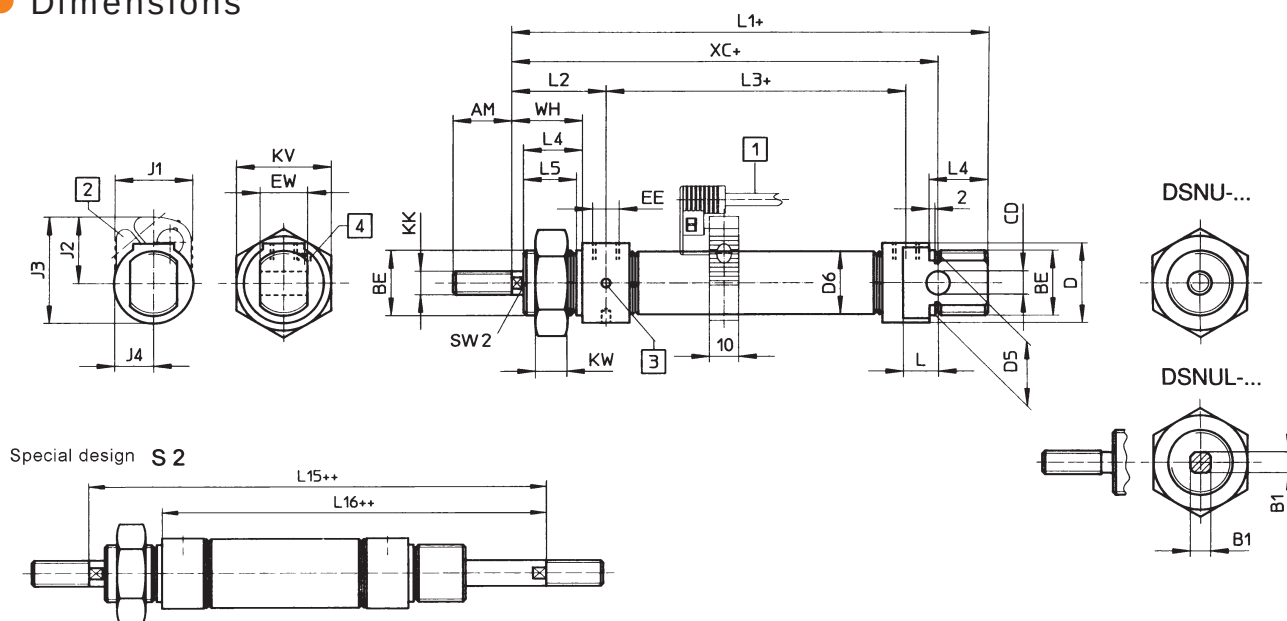
DSNU	-	25	-	50	-	P	-	A
Series		Bore		Stroke		Cushioning		Position sensing
DSNU: DSNU series DSNUL: DSNUL series						P: Without cushioning PPV: With cushioning		BLank: Without magnet A: With built-in magnet

● Sectional view



DSNU / DSNUL Series ISO6432 Stainless Steel Mini Cylinder

Dimensions



- 1 Sensor switch
2 Accessory
3 Wrench's position Port

+ = Plus stroke length
++ = Plus 2 stroke lengths

Bore / Symbol	AM	B1 f8	BE	φ CD	φ D h9	φ D5	φ D6	EE	EW	J1	J2	J3	J4
8	12	-	M12×1.25	4	15	12	9.3	M5	8	20.4	16.5	23.2	13.9
10	12	-	M12×1.25	4	15	12	11.3	M5	8	22	18.2	25.9	13.8
12	16	5.5	M16×1.5	6	20	16	13.3	M5	12	22	20	28.6	11
16	16	5.5	M16×1.5	6	20	16	17.3	M5	12	22.5	22.5	33.2	11
20	20	7	M22×1.5	8	27	22	21.3	G1/8	16	26.5	22.5	35.3	13
25	22	9	M22×1.5	8	27	22	26.5	G1/8	16	31.5	25	40.2	16

Bore / Symbol	KK	KV	KW	L	L1	L2	L3	L4	L5	L15	L16	SW2	WH	XC
8	M4	19	6	6	78	22	34	12	10	78	62	-	16	64
10	M4	19	6	6	78	22	34	12	10	78	62	-	16	64
12	M6	24	8	9	89	28	38	17	15	94	72	5	22	75
16	M6	24	8	9	95	28	44	17	15	100	78	5	22	82
20	M8	32	11	12	112	32	51.6	20	18	116	92	7	24	95
25	M10×1.25	32	11	12	119.5	36	53.1	22	20	125.5	97.5	9	28	104

SDA Series Thin Type Cylinder



Ordering code

SDA	-	20	X	30	-	S	-	LB
Type SDA: Double acting SSA: Single acting extrusion type STA: Single acting drawing-in type SDAD: Double-shaft type		Bore		Stroke		Magnet S: With magnet Blank: Without magnet		Thread Blank: Female thread B: Male thread N: No thread

Specifications

Bore (mm)		12	16	20	25	32	40	50	63	80	100
Operation		Double acting									
		Single acting extrusion type					Single acting drawing-in type			-	
Fluid		Air									
Operatinag pressure	Double acting	1.0~9.0 Kg/cm ²									
	Single acting	2.0~9.0 Kg/cm ²						-			
Proof pnsure		10.5 Kg/cm ²									
Operating temperature		0~70℃									
Operating piston speed	Double acting	30~500 mm/s						30~350 mm/s		30~250 mm/s	
	Single acting	100~500 mm/s						-			
Port size		M5×0.8				G1/8″		G1/4″		G3/8″	

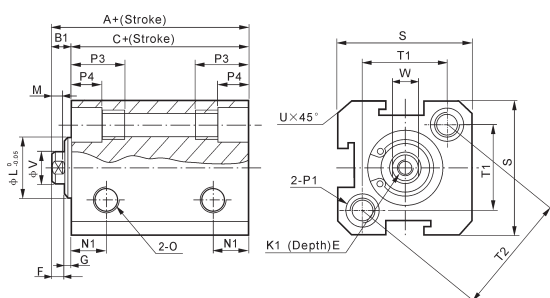
Stroke

Bore (mm)		12	16	20	25		32	40	50	63	80	100	
Double acting	Without magnet	5~60 mm Every 5mm is grouped as one grade		5~85 mm Every 5mm is grouped as one grade		5~90 mm Every 5mm is grouped as one grade		100~110 mm Every 5mm is grouped as one grade		5~90 mm Every 5mm is grouped as one grade		100~130 mm Every 5mm is grouped as one grade	
	With magnet	5~50 mm Every 5mm is grouped as one grade		5~75mm Every 5mm is grouped as one grade		5~90 mm Every 5mm is grouped as one grade		100mm		5~90 mm Every 5mm is grouped as one grade		100~120 mm Every 5mm is grouped as one grade	
Single acting	Without magnet	5~30 mm Every 5mm is grouped as one grade							5~30 mm Every 5mm is grouped as one grade		-		
	With magnet	5~30 mm Every 5mm is grouped as one grade							5~30 mm Every 5mm is grouped as one grade		-		
Max. Stroke		60mm		100mm		120mm		130mm					

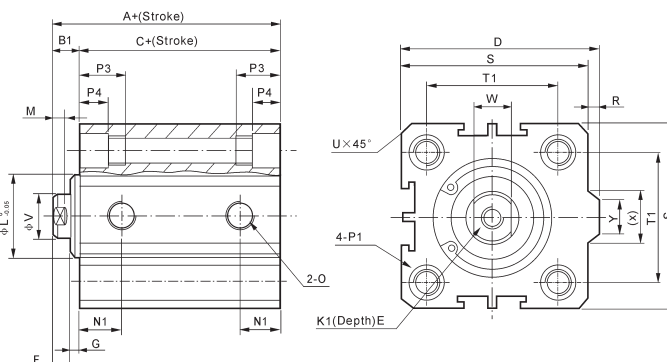
SDA Series Thin Type Cylinder

● Dimensions

SDA12-16



SDA20-100

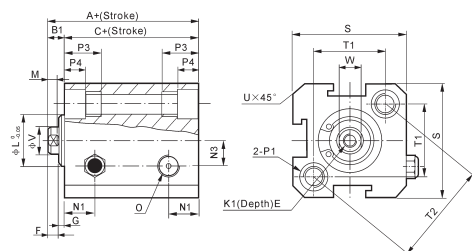


Type	Standard type			With magnet			B	E	F	G	K1		L	M	N1	N3	O	
Bore / Symbol	A	B1	C	A	B1	C												
12	22	5	17	32	5	27	-	6	4	1	M3×0.5	10.2	2.8	6.3	6	M5×0.8		
16	24	5.5	18.5	34	5.5	28.5	-	6	4	1.5	M3×0.5	11	2.8	7.3	6.5	M5×0.8		
20	25	5.5	19.5	35	5.5	29.5	36	8	4	1.5	M4×0.7	16	2.8	7.5	-	M5×0.8		
25	27	6	21	37	6	34	42	10	4	2	M5×0.8	17	2.8	8	-	M5×0.8		
32	31.5	7	24.5	41.5	7	34.5	50	12	4	3	M6×1	22	2.8	9	-	G1/8		
40	33	7	26	43	7	36	58.5	12	4	3	M8×1.25	28	2.8	10	-	G1/8		
50	37	9	28	47	9	38	71.5	15	5	4	M10×1.5	38	2.8	10.5	-	G1/4		
63	41	9	32	51	9	42	84.5	15	5	4	M10×1.5	40	2.8	11.8	-	G1/4		
80	52	11	41	62	11	51	104	15	6	5	M14×1.5	45	4	14.5	-	G3/8		
100	63	12	51	73	12	61	124	18	7	5	M18×1.5	55	4	20.5	-	G3/8		
Bore / Symbol	P1							P3	P4	R	S	T1	T2	U	V	W	X	Y
12	Double side: φ 6.5		Thread : M5×0.8		Through hole: φ 4.2		12	4.5	-	25	16.2	23	1.6	6	5	-	-	
16	Double side: φ 6.5		Thread : M5×0.8		Through hole: φ 4.2		12	4.5	-	29	19.8	28	1.6	6	5	-	-	
20	Double side: φ 6.5		Thread : M5×0.8		Through hole: φ 4.2		14	4.5	2	34	24	-	2.1	8	6	11.3	10	
25	Double side: φ 8.2		Thread : M6×1.0		Through hole: φ 4.6		15	5.5	2	40	28	-	3.1	10	8	12	10	
32	Double side: φ 8.2		Thread: M6×1.0		Through hole: φ 4.6		16	5.5	6	44	34	-	2.15	12	10	18.3	15	
40	Double side: φ 10		Thread : M8×1.25		Through hole: φ 6.5		20	7.5	6.5	52	40	-	2.25	16	14	21.3	16	
50	Double side: φ 11		Thread : M8×1.25		Through hole: φ 6.5		25	8.5	9.5	62	48	-	4.15	20	17	30	20	
63	Double side: φ 11		Thread : M8×1.25		Through hole: φ 6.5		25	8.5	9.5	75	60	-	3.15	20	17	28.7	20	
80	Double side: φ 14		Thread: M12×1.75		Through hole: φ 9.2		25	10.5	10	94	74	-	3.65	25	22	36	26	
100	Double side: φ 17.5		Thread : M12×1.75		Through hole: φ 11.3		30	13	10	114	90	-	3.65	32	27	35	26	

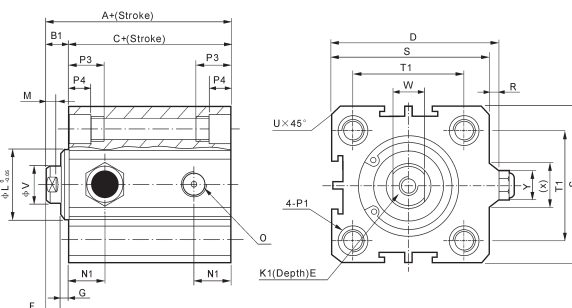
SDA Series Thin Type Cylinder

● Dimensions

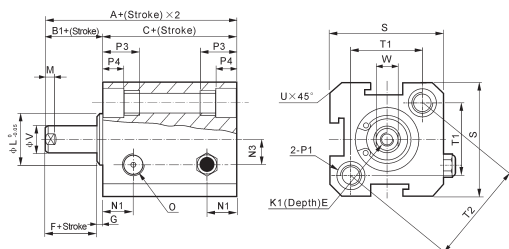
SSA12-16



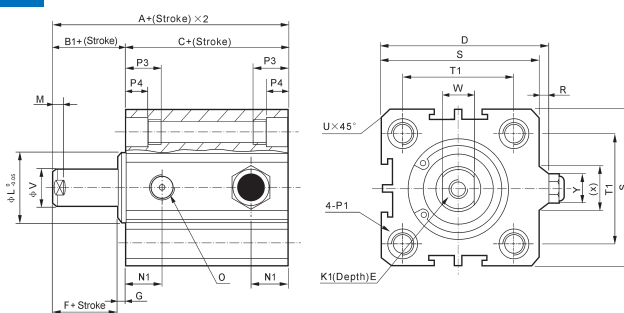
SSA20-40



STA12-16



STA20-40

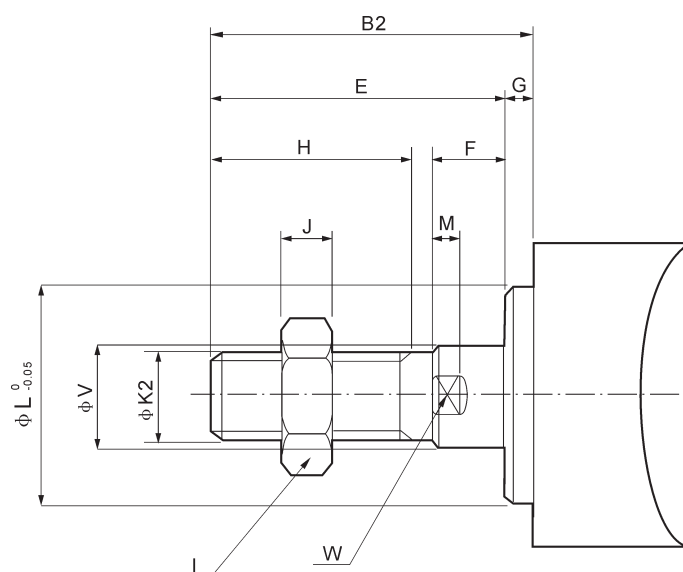


Type	Standard type					With magnet					D	E	F	G	K1	L	M	N1	N3	
Bore /Symbol Stroke	A		B1	C		A		B1	C											
	≤10	>10		≤10	>10	≤10	>10		≤10	>10										
12	32	42	5	27	37	42	52	5	37	47	-	6	4	1	M3×0.5	10.2	2.8	6.3	6	
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5	-	6	4	1.5	M3×0.5	11	2.8	7.3	6.5	
20	35	45	5.5	29.5	39.5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4×0.7	16	2.8	7.5	-	
25	37	47	6	34	41	47	57	6	41	51	42	10	4	2	M5×0.8	17	2.8	8	-	
32	41.5	51.5	7	34.5	44.5	51.5	61.5	7	44.5	54.5	50	12	4	3	M6×1	22	2.8	9	-	
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8×1.25	28	2.8	10	-	
Bore /Symbol	O		P1						P3		P4	R	S	T1	T2	U	V	W	X	Y
12	M5×0.8		Double Side: φ6.5 Thread : M5×0.8 Through Hole: φ4.2						12	4.5	-	25	16.2	23	1.6	6	5	-	-	
16	M5×0.8		Double Side: φ6.5 Thread : M5×0.8 Through Hole: φ4.2						12	4.5	-	29	19.8	28	1.6	6	5	-	-	
20	M5×0.8		Double Side: φ6.5 Thread : M5×0.8 Through Hole: φ4.2						14	4.5	2	34	24	-	2.1	8	6	11.3	10	
25	M5×0.8		Double Side: φ8.2 Thread : M6×1.0 Through Hole: φ4.6						15	5.5	2	40	28	-	3.1	10	8	12	10	
32	G1/8		Double Side: φ8.2 Thread : M6×1.0 Through Hole: φ4.6						16	5.5	6	44	34	-	2.15	12	10	18.3	15	
40	G1/8		Double Side: φ10 Thread : M8×1.25 Through Hole: φ6.5						20	7.5	6.5	52	40	-	2.25	16	14	21.3	16	

SDA Series Thin Type Cylinder

● Dimensions

SDA,SSA,STA



Bore / Symbol	B2	E	F	G	H	I	J	K2	L	M	V	W
12	17	16	4	1	10	8	4	M5×0.8	10.2	2.8	6	5
16	17.5	16	4	1.5	10	8	4	M5×0.8	11	2.8	6	5
20	20.5	19	4	1.5	13	10	5	M6×1.0	16	2.8	8	6
25	23	21	4	2	15	12	6	M10×1.25	17	2.8	10	8
32	25	22	4	3	15	17	6	M14×1.5	22	2.8	12	10
40	35	32	4	3	25	19	8	M18×1.5	28	2.8	16	14
50	37	33	5	4	25	27	11	M18×1.5	38	2.8	20	17
63	37	33	5	4	25	27	11	M22×1.5	40	2.8	20	17
80	44	39	6	5	30	32	13	M22×1.5	45	4	25	22
100	50	45	7	5	35	36	13	M26×1.5	55	4	32	27

TN Series Cylinder



Ordering code

TN

Series code
TN: Dual-rod
double acting

20

Bore

X

50

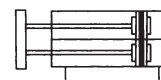
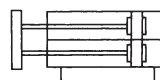
Stroke

-

S

Magnet
Blank: Without magnet
S: With magnet

Symbol



Specifications

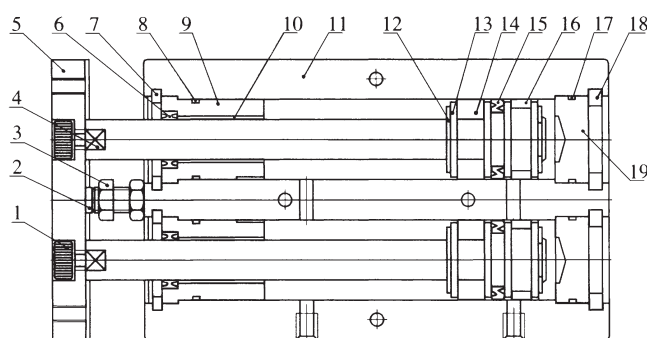
Bore (mm)	10	16	20	25	32
Fluid	Air				
Operation	Double acting				
Operating pressure	0.1~0.9MPa				
Proof pressure	1.35MPa				
Operating temperature	0~70℃				
Operating piston speed	100~500 mm/s				
Adjustable stroke	-10~0 mm				
Cushioning	No	Rubber bumper at both ends			
Non-rotary precision	0.4°	0.3°			
Port size	M5×0.8				PT1/8"

Stroke

Bore (mm)	Standard stroke														Max. Stroke	Allowable stroke
10	10	20	30	40	50	60	70								70	100
16	10	20	30	40	50	60	70	80	90	100	125	150			150	200
20	10	20	30	40	50	60	70	80	90	100	125	150			150	200
25	10	20	30	40	50	60	70	80	90	100	125	150			150	200
32	10	20	30	40	50	60	70	80	90	100	125	150			150	200

TN Series Cylinder

Construction



Component parts

No.	Name	Material
1	Hexagon socket head cap screw	-
2	Bumper	PU
3	Adjusting screw	-
4	Axes	-
5	Front board	Free machining iron
6	Front compaction	-
7	"C" type clip	Spring steel
8	Front cover "O" ring	NBR
9	Front cover	Aluminum alloy
10	Axes axletree	-
11	Housing	Aluminum alloy

No.	Name	Material
12	Bumper	PU
13	Piston	Aluminum alloy
14	Magnet	Magnetic material
15	Piston "O" ring	NBR
16	Wearing ring	-
17	Rear cover "O" ring	NBR
18	"C" type clip	Spring steel
19	Rear cover	Aluminum alloy

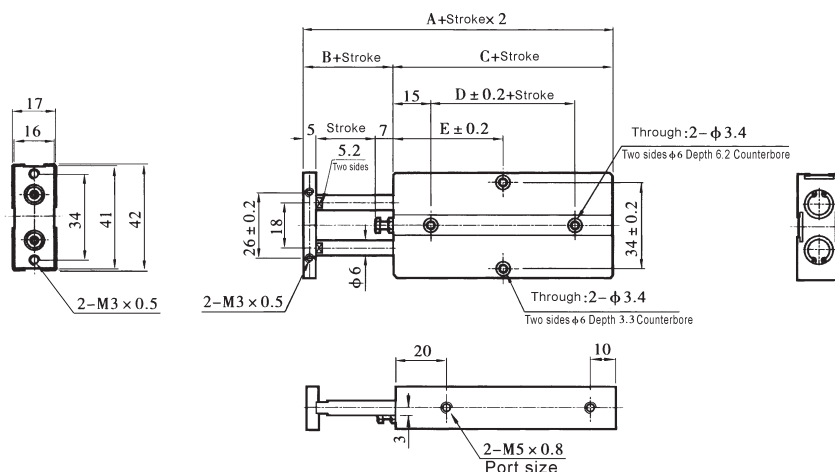
O-ring list

	Front cover seal ring	Piston "O" ring	Front & rear cover "O" ring	Piston rod "O" ring
Bore/Number	1	2	2	1
10	PDU-6	APA-10	10×1.5	P12
16	PDU-8	APA-16	16×1.5	P16
20	PDU-10	APA-20	20×1.5	P20
25	PDU-12	APA-25	25×1.5	P20
32	PDU-16	APA-32	32×1.5	P25

TN Series Cylinder

● Dimensions

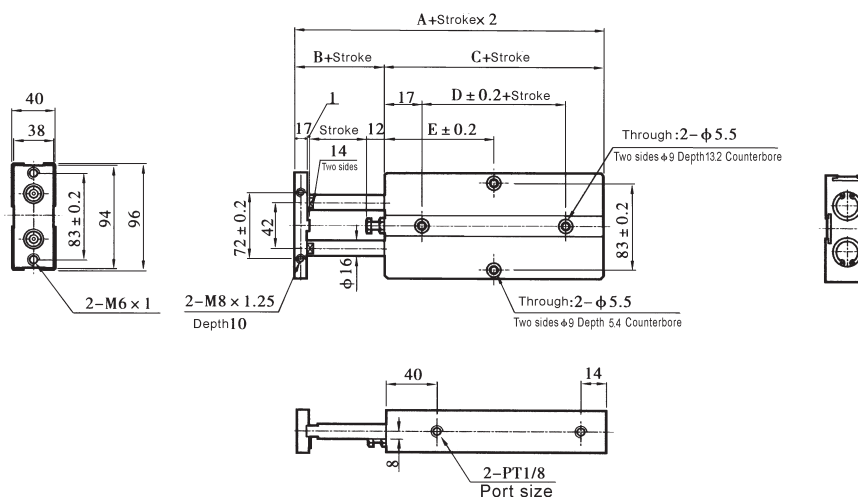
Φ 10



Symbol	A	B	C	D	E						
Bore/Symbol					10	20	30	40	50	60	70
10	58	12	46	10	30	30	35	40	45	50	55

● Dimensions

Φ 32

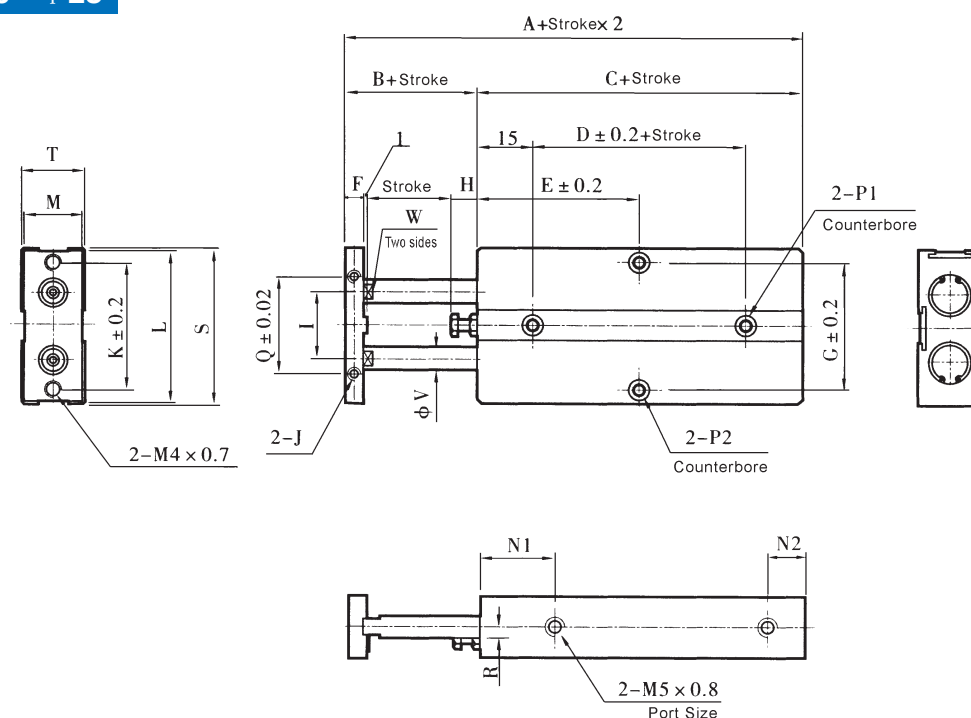


Symbol	A	B	C	D	E											
Bore/Symbol					10	20	30	40	50	60	70	80	90	100	125	150
32	108	30	78	35	45	50	55	60	65	70	75	80	85	90	102.5	115

TN Series Cylinder

● Dimensions

Φ 16 ~ Φ 25



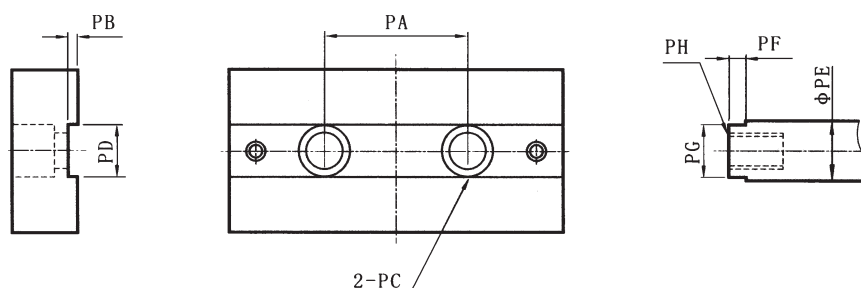
Symbol	A	B	C	D	E												F	G	H	I
Bore/Symbol					10	20	30	40	50	60	70	80	90	100	125	150				
16	68	15	53	20	30	35	40	45	50	55	60	65	70	75	87.5	100	8	47	6	24
20	78	20	58	20	35	35	40	45	50	55	60	65	70	75	87.5	100	10	55	9	28
25	81	19	62	30	40	40	45	50	55	60	65	70	75	80	92.5	105	10	66	8	34

Bore/Symbol	J	K	L	M	N1	N2	P1	P2	Q	R	S	T	V	W
16	M4×0.7Depth5	47	53	20	22	10	2 Sides Φ7.5 Depth 7.2mm. Through: Φ4.5	2 Sides Φ8 Depth 4.4mm. Through: Φ4.5	34	4	54	21	8	6.2
20	M4×0.7Depth5	55	61	24	25	12	2 Sides Φ7.5 Depth 7.2mm. Through: Φ4.5	2 Sides Φ8 Depth 4.4mm. Through: Φ4.5	44	6	62	25	10	8.2
25	M4×0.8Depth6	66	72	29	30	12	2 Sides Φ7.5 Depth 7.2mm. Through: Φ4.5	2 Sides Φ8 Depth 4.4mm. Through: Φ4.5	56	7	73	30	12	10.2

TN Series Cylinder

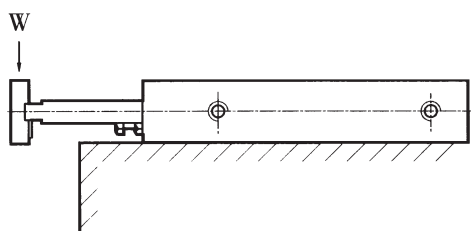
● Front board dimensions

φ 16 ~ φ 25

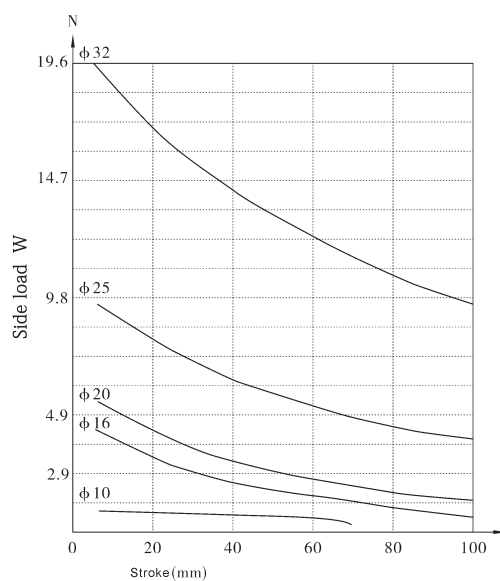


Bore/Symbol	PA	PB	P1	PD	PE	PF	PG	P2
10	18	0.5	φ 6.2 Depth 3.5mm, Through: φ 4.5	5.2	6	3	5.2	M3×0.5 Depth 5mm
16	24	1	φ 7.8 Depth 4.6mm, Through: φ 4.5	6.2	8	3	6.2	M4×0.7 Depth 46mm
20	28	1	φ 11 Depth 6.8mm, Through: φ 4.5	8.2	10	3	8.2	M6×1 Depth 48mm
25	34	1	φ 11 Depth 6.8mm, Through: φ 4.5	10.2	12	3	10.2	M6×1 Depth 48mm
32	42	2	φ 17 Depth 12mm, Through: φ 4.5	14	16	3	14	M10×1.5 Depth 14mm

● Allow the side toward load



*1Kgf=9.81N



www.voguepc.com



| FAX:0086-574-88870281

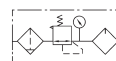
Air Combination (F.R.L Combination)

AC1000~5000 Series



● Specifications

● Symbol



Fluid	Air		
Proof pressure	1.5MPa (15kgf/cm ²)		
Max. operating pressure	1.0MPa (10kgf/cm ²)		
Ambient and fluid temperature	5~60°C		
Nominal filtration rating	5 μm	25 μm	50 μm
Recommended lubricant	Class 1 turbine oil (ISO VG32)		
Bowl material	PC K1300		
Bowl guard	AC1000~2000 (Not available) AC2500~5000 (Available)		
Set pressure range	AC1000:0.05~0.7MPa (0.5~7kgf/cm ²) AC2000~5000:0.05~0.85MPa (0.5~8.5kgf/cm ²)		
Regulator construction	Relieving type		

Model	Specifications							Accessories	
	Component			*Rated flow (L/min)	**Port size (G)	Pressure gauge port size	Weight (kg)	Bracket (2PCS)	Pressure gauge
	Filter	Regulator	Lubricator						
AC1000-M5	AF1000	AR1000	AL1000	90	M5	1/16	0.26	Y10L	G27-10-R1
AC2000-01	AF2000	AR2000	AL2000	500	1/8	1/8	0.74	Y20L	G36-10-01
AC2000-02					1/4				
AC2500-02	AF3000	AR2500	AL3000	1500	1/4	1/8	1.04	Y30L	
AC2500-03					3/8				
AC3000-02					AF3000	AR3000	AL3000	2000	
AC3000-03	3/8								
AC4000-03	AF4000	AR4000	AL4000	4000	3/8	1/4	2.14	Y40L	G46-10-02
AC4000-04					1/2				
AC4000-06	AF4000-06	AR4000-06	AL4000-06	4500	3/4	1/4	2.47	Y50L	
AC5000-06	AF5000	AR5000	AL5000	5000	3/4	1/4	3.82	Y60L	
AC5000-10					1				

*Under the circumstance that the inlet pressure is 0.7MPa (7.1kgf/cm²) and the set pressure is 0.5MPa(5.1kgf/cm²)

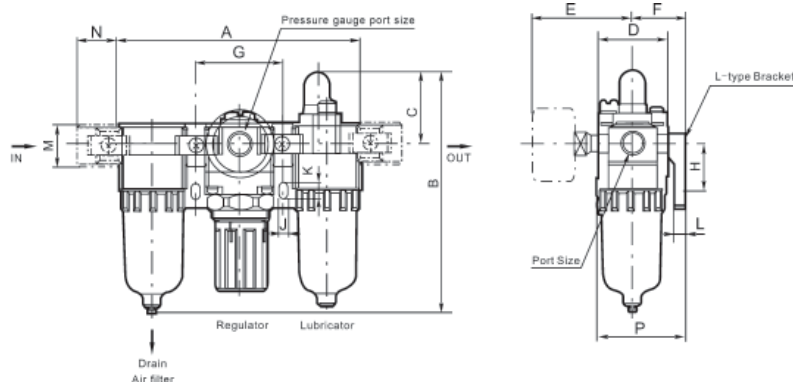
** Rc and NPT port sizes are available.

Air Combination (F.R.L Combination)

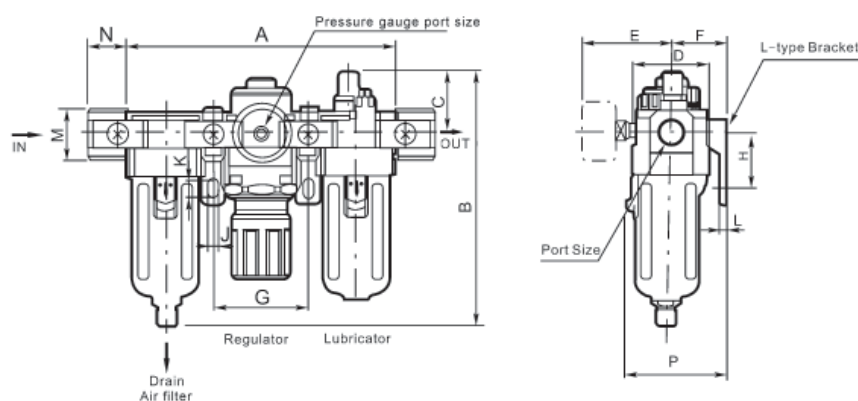
AC1000~5000 Series

● Dimensions

AC1000~2000



AC2500~5000



Model	Port Size G	A	B	C	D	E	F	G	H	J	K	L	M	N	P
AC1000	M5	91	84.5	25.5	25	26	25	33	20	4.5	7.5	5	17.5	16	38.5
AC2000	1/8~1/4	140	125	38	40	56.8	30	50	24	5.5	8.5	5	22	23	50
AC2500	1/4~3/8	181	156.5	38	53	60.8	41	64	35	7	11	7	34.2	26	70.5
AC3000	1/4~3/8	181	156.5	38	53	60.8	41	64	35	7	11	7	34.2	26	70.5
AC4000	3/8~1/2	238	191.5	41	70	65.5	50	84	40	9	13	7	42.2	33	88
AC4000-06	3/4	253	193	40.5	70	69.5	50	89	40	9	13	7	46.2	36	88
AC5000	3/4~1	300	271.5	48	90	75.5	69.8	105	50	12	16	10.5	55.2	40	115

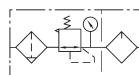
Air Combination (F.R. L Combination)

AC1010~5010 Series



● Specifications

● Symbol



Fluid	Air
Proof pressure	1.5MPa (15kgf/cm ²)
Max. operating pressure	1.0MPa (10kgf/cm ²)
Ambient and fluid temperature	5~60℃
Nominal filtration rating	5 μ m 25 μ m 50 μ m
Recommended lubricant	Class 1 turbine oil (ISO VG32)
Bowl material	PC K1300
Bowl guard	AC1010~2010 (Not Available) AC3010~5010 (Available)
Set pressure range	AC1010:0.05~0.7MPa (0.5~7kgf/cm ²) AC2010~5010:0.05~0.85MPa (0.5~8.5kgf/cm ²)
Regulator construction	Relieving type

Model	Specifications						Accessories	
	Component		*Rated Flow (L/min)	**Port Size (G)	Pressure gauge port size	Weight (kg)	Bracket	Pressure gauge
	Filter & Regulator	Lubricator						
AC1010-M5	AW1000	AL1000	90	M5	1/16	0.22	Y10T	G27-10-R1
AC2010-01	AW2000	AL2000	500	1/8	1/8	0.66	Y20T	G36-10-01
AC2010-02				1/4				
AC3010-02	AW3000	AL3000	1700	1/4	1/8	0.98	Y30T	
AC3010-03				3/8				
AC4010-03	AW4000	AL4000	3000	3/8	1/4	1.93	Y40T	G46-10-02
AC4010-04				1/2				
AC4010-06	AW4000-06	AL4000-06	3000	3/4	1/4	1.99	Y50T	
AC5010-06	AW5000	AL5000	4000	3/4	1/4	3.20	Y60T	
AC5010-10				1				

*Under the circumstance that the inlet pressure is 0.7MPa (7.1kgf/cm²) and the set pressure is 0.5MPa (5.1kgf/cm²)

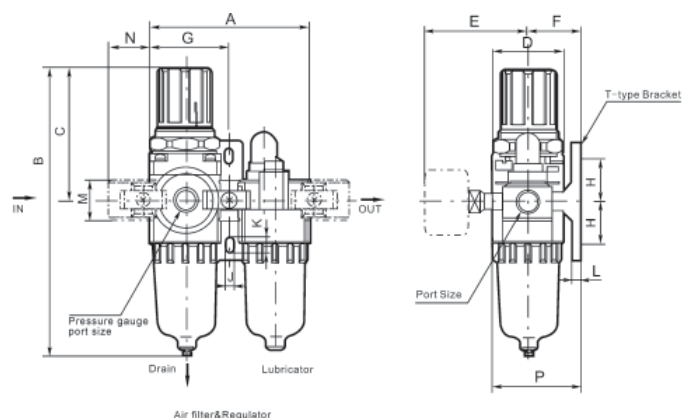
** Rc and NPT port sizes are available.

Air Combination (FR. L Combination)

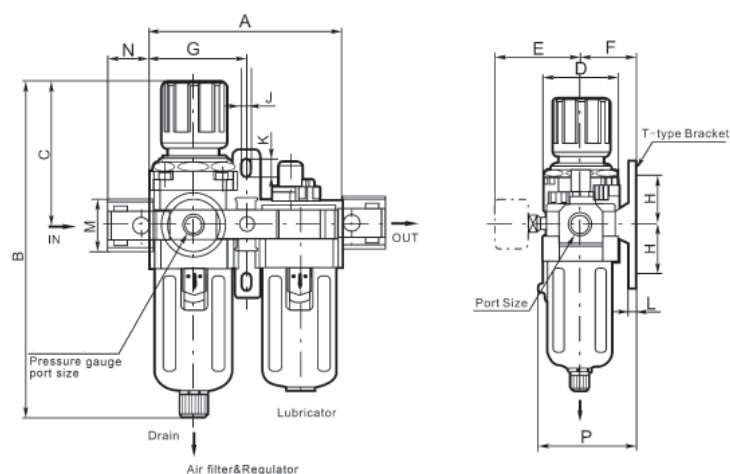
AC1010~5010 Series

● Dimensions

AC1010~2010



AC3010~5010



Model	Port size G	A	B	C	D	E	F	G	H	J	K	L	M	N	P
AC1010	M5	58	109.5	50.5	25	26	25	29	20	4.5	7.5	5	17.5	16	38.5
AC2010	1/8~1/4	90	164.5	78	40	56.8	30	45	24	5.5	8.5	5	22	23	50
AC3010	1/4~3/8	117	211	92.5	53	60.8	41	58.5	35	7	11	7	34.2	26	70.5
AC4010	3/8~1/2	154	262	112	70	70.5	50	77	40	9	13	7	42.2	33	88
AC4010-06	3/4	164	267	114	70	70.5	50	82	40	9	13	7	46.2	36	88
AC5010	3/4~1	195	338	116	90	75.5	69.8	97.5	50	12	16	10.5	55.2	40	115

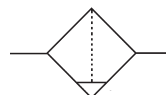
Air Filter

AF1000~5000 Series



● Specifications

● Symbol



Fluid	Air		
Proof pressure	1.5MPa (15kgf/cm ²)		
Max. operating pressure	1.0MPa (10kgf/cm ²)		
Ambient and fluid temperature	5~60℃		
Nominal filtration rating	5 μm	25 μm	50 μm
Bowl material	PC K1300		
Bowl guard	AF1000~2000 (Not Available) AF3000~5000 (Available)		

Model	Specifications				Accessories	Drain function	Model of AF series with auto drain
	*Rated flow (L/min)	**Port size (G)	Oil capacity (CM ³)	Weight (kg)	Bracket		
AF1000-M5	110	M5	4	0.07	-	Manual drain	
AF2000-01	750	1/8	15	0.19	B240		
AF2000-02		1/4					
AF3000-02	1500	1/4	20	0.29	B340	a.Air shutoff drain b.Manual drain	
AF3000-03		3/8					
AF4000-03	4000	3/8	45	0.55	B440		AF4000-03D
AF4000-04		1/2					AF4000-04D
AF4000-06	6000	3/4	45	0.58	B540		AF4000-06D
AF5000-06	7000	3/4	130	1.08	B640		AF5000-06D
AF5000-10		1					AF5000-10D

*Under the circumstance that the inlet pressure is 0.7MPa (7.1kgf/cm²) and the set pressure is 0.5MPa (5.1kgf/cm²)

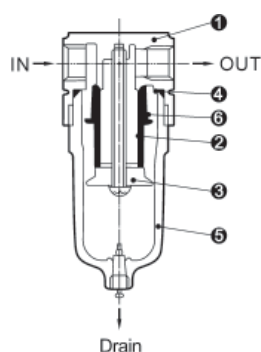
** Rc and NPT port sizes are available.

Air Filter

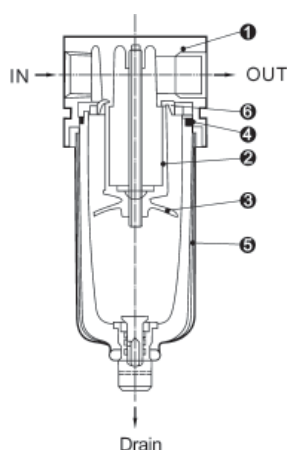
AF1000~5000 Series

Construction

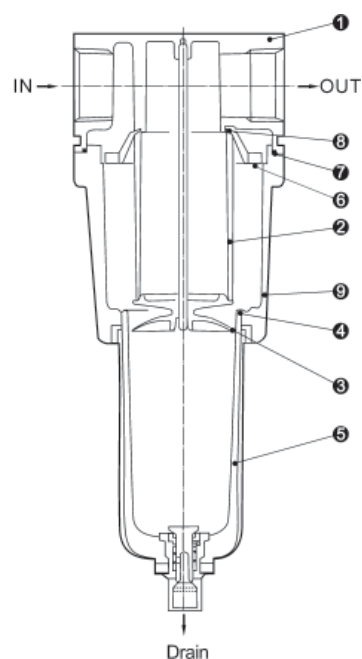
AF1000-2000



AF3000-4000



AF5000



Component parts

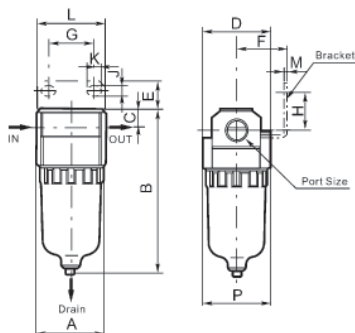
NO.	Description	Material
1	Body	Aluminum die-cast
2	Filter element	Brass
3	Baffle	POM
4	Bowl O-ring	NBR
5	Bowl assembly(bowl guard)	Polycarbonate(Cold rolled steel)
6	Whirlwind blade	POM
7	O-ring	NBR
8	Sealing washer	NBR
9	Housing	Aluminum die-cast

Air Filter

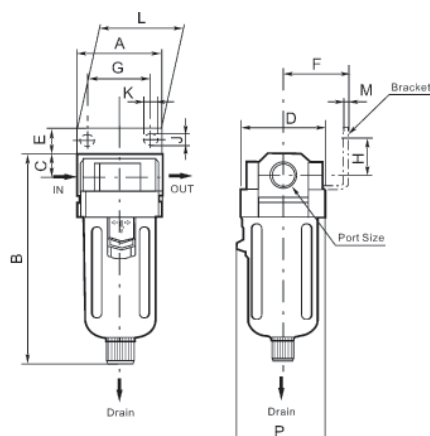
AF1000~5000 Series

● Dimensions

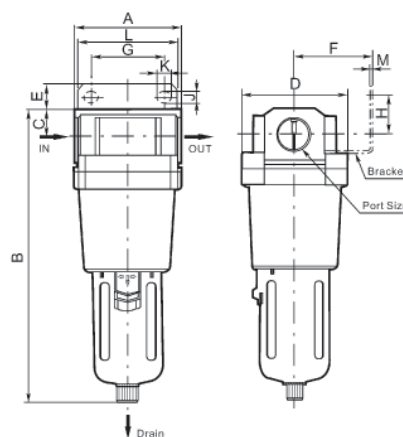
AF1000~2000



AF3000~4000



AF5000



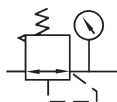
Model	Port Size G	A	B	C	D	E	F	G	H	J	K	L	M	P
AF1000	M5	25	66	7	25	-	-	-	-	-	-	-	-	26.5
AF2000	1/8~1/4	40	97.5	11	40	17	30	27	22	5.4	8.4	40	2.3	40
AF3000	1/4~3/8	53	132.5	14	53	16	41	40	23	6.5	8	53	2.3	56
AF4000	3/8~1/2	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.3	73
AF4000-06	3/4	75	172.5	20	70	14	50	54	25	8.5	10.5	70	2.3	73
AF5000	3/4~1	90	247.5	24	90	23	66.5	66	35	11	13	90	3.2	90

Regulator

AR1000~5000 Series



- Symbol
- Specifications



Fluid	Air
Proof pressure	1.5MPa(15kgf/cm ²)
Max. operating pressure	1.0MPa(10kgf/cm ²)
* Set pressure range	AR1000: 0.05~0.7MPa (0.5~7kgf/cm ²) AR2000~5000: 0.05~0.85MPa (0.5~8.5kgf/cm ²)
Ambient and fluid temperature	5-60℃
Regulator construction	Relieving type

* Set pressure range: 0.02~0.2MPa (0.2~2kgf/cm²)

Model	Specifications				Accessories	
	*Rated flow (L/min)	**Port size (G)	Pressure gauge port size	Weight (kg)	Bracket	Pressure gauge
AR1000-M5	100	M5	1/16	0.08	B120	G27-10-R1
AR2000-01	550	1/8	1/8	0.27	B220	G36-10-01
AR2000-02		1/4				
AR2500-02	2000	1/4	1/8	0.27	B220	G36-10-01
AR2500-03		3/8				
AR3000-02	2500	1/4	1/8	0.41	B320	
AR3000-03		3/8				
AR4000-03	6000	3/8	1/4	0.84	B420	G46-10-02
AR4000-04		1/2				
AR4000-06	6000	3/4	1/4	0.94		
AR5000-06	8000	3/4	1/4	1.19		
AR5000-10		1				

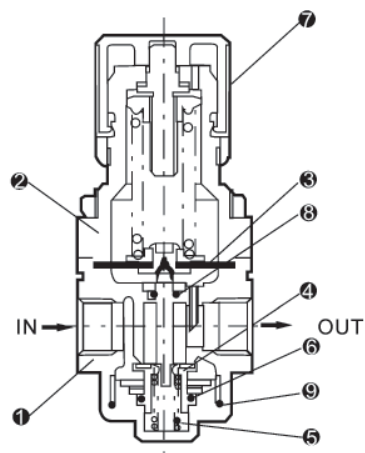
*Under the circumstance that the inlet pressure is 0.7MPa (7.1kgf/cm²) and the set pressure is 0.5MPa(5.1kgf/cm²)

** Rc and NPT port sizes are available.

Regulator

AR1000~5000 Series

Construction

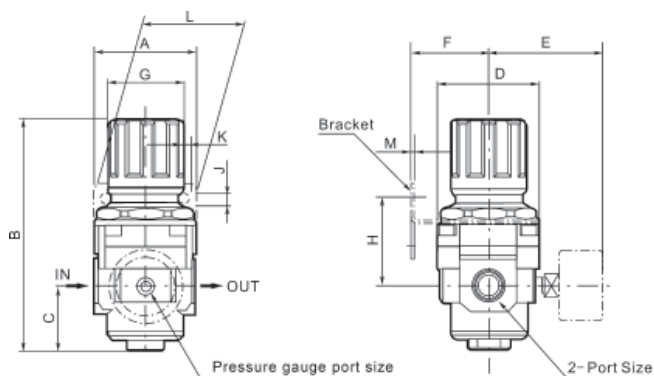


Component parts

NO.	Description	Material		
		AR1000	AR2000 ~ 3000	AR4000 ~ 5000
1	Body	Zinc die-cast	Aluminum die-cast	
2	Bonnet	Reinforced nylon		Aluminum die-cast
3	Diaphragm assembly	NBR		
4	Valve assembly	Brass,NBR		
5	Spring	Stainless steel		
6	O-ring	NBR		
7	Hand wheel	Reinforced nylon		
8	O-ring	NBR		
9	O-ring	NBR		

Dimensions

AR1000~5000



Panel fitting dimensions



AR1000~3000: Max 3.5
AR4000~5000: Max 5

Model	Port size G	A	B	C	D	E	F	G	H	J	K	L	M	N
AR1000	M5	25	61.5	11	25	26	25	28	30	4.5	6.5	40	2	20.5
AR2000	1/8~1/4	40	95	17	40	56.8	30	34	44	5.4	15.4	55	2.3	33.5
AR2500	1/4~3/8	53	102.5	25	48	60.8	30	34	44	5.4	15.4	55	2.3	33.5
AR3000	1/4~3/8	53	127.5	35	53	60.8	39	40	46	6.5	8	53	2.3	42.5
AR4000	3/8~1/2	70	149.5	37.5	70	65.5	49.2	54	54	8.5	10.5	70	2.3	52.5
AR4000-06	3/4	75	154	40.5	70	69.5	49.2	54	55.5	8.5	10.5	70	2.3	52.5
AR5000	3/4~1	90	168	48	90	75.5	49.2	54	62	8.5	10.5	70	2.3	52.5

Lubricator

AL1000~5000 Series



● Specifications

● Symbol



Fluid	Air
Proof pressure	1.5MPa(15kgf/cm ²)
Max.operating pressure	1.0MPa(10kgf/cm ²)
Ambient and fluid temperature	5~60℃
Recommended lubricant	Class 1 turbine oil (ISO VG32)
Bowl material	PC K1300
Bowl guard	AL1000~2000 (Not available) AL3000~5000 (Available)

Model	Specifications					Accessories
	*Min. dripping flow rate (L/min)	*Rated flow (L/min)	**Port size (G)	Oil capacity (CM ³)	Weight (kg)	Bracket
AL1000-M5	4	95	M5	7	0.07	-
AL2000-01	15	800	1/8	25	0.22	B240
AL2000-02			1/4			
AL3000-02	30	1700	1/4	50	0.30	B340
AL3000-03	40		3/8			
AL4000-03	40		3/8	130	0.56	B440
AL4000-04	50	5000	1/2			
AL4000-06	50		3/4			
AL5000-06	190	7000	3/4	130	1.08	B640
AL5000-10			1			

*Under the circumstance that the inlet pressure is 0.5MPa(5.1kgf/cm²), dripping flow rate is 5drops/minute,use of Class 1 turbine oil and 20℃ temperature

*Under the circumstance that the inlet pressure is 0.5MPa (5.1kgf/cm²)and the set pressure is 0.03MPa (0.3kgf/cm²).

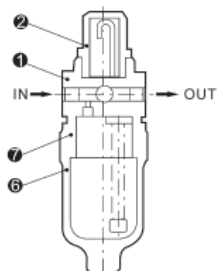
** Rc and NPT port sizes are available.

Lubricator

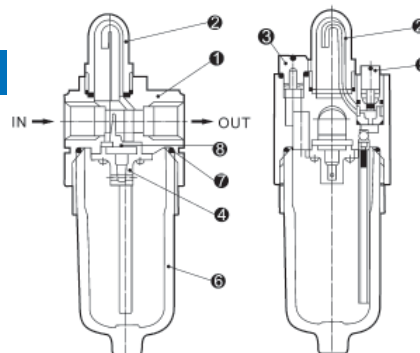
AL1000~5000 Series

● Construction

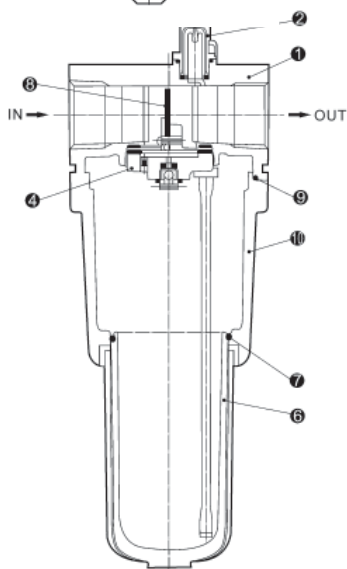
AL1000



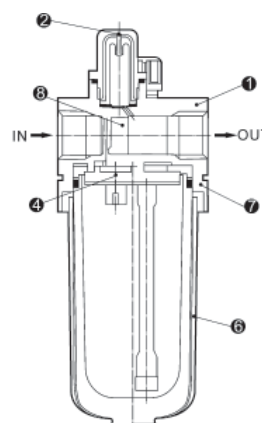
AL2000



AL5000



AL3000~4000



● Component Parts

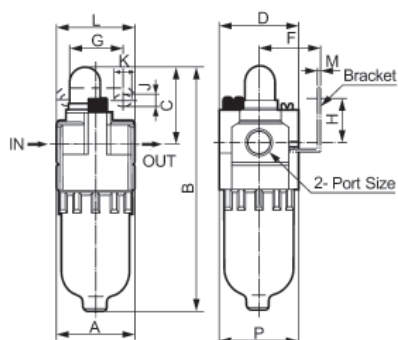
NO.	Descriptions	Material		
		AL1000	AL2000 ~ 4000	AL5000
1	Body	Zinc die-cast	Aluminum die-cast	
2	Sight dome assembly	Polycarbonate, Nylon		
3	Oil feed plug	POM		
4	Deflector gate	POM		
5	Oil adjusting handle	POM		
6	Bowl assembly (bowl guard)	Polycarbonate (Cold rolled steel), PC K1300(Cold rolled steel)		
7	O-ring	NBR		
8	Retainer	POM		
9	O-ring	NBR		
10	Middle part	Aluminum die-cast		

Lubricator

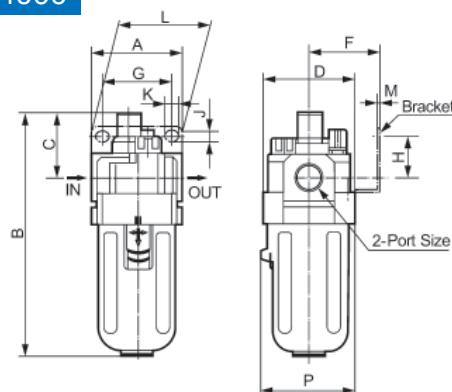
AL1000~5000 Series

● Dimensions

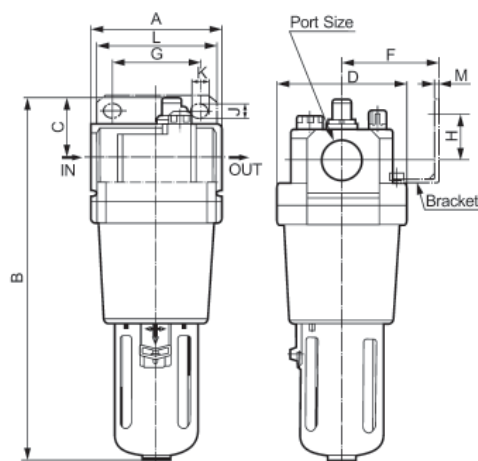
AL1000~2000



AL3000~4000



AL5000



Model	Port Size G	A	B	C	D	F	G	H	J	K	L	M	P
AL1000	M5	25	81.5	25.5	25	-	-	-	-	-	-	-	27
AL2000	1/8~1/4	40	122	38	40	30	27	22	5.4	8.4	40	2.3	40
AL3000	1/4~3/8	53	142	38	53	41	40	23	6.5	8	53	2.3	56
AL4000	3/8~1/2	70	177	41	70	50	54	26	8.5	10.5	70	2.3	73
AL4000-06	3/4	75	177	39	70	50	54	25	8.5	10.5	70	2.3	73
AL5000	3/4~1	90	254	45	90	66.5	66	35	11	13	90	3.2	90

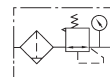
Filter & Regulator

AW1000~5000 Series



Specifications

Symbol



Fluid	Air		
Proof pressure	1.5MPa (15kgf/cm ²)		
Max. operating pressure	1.0MPa (10kgf/cm ²)		
Ambient and fluid temperature	5~60℃		
Nominal filtration rating	5 μm	25 μm	50 μm
Bowl material	Polycarbonate		
Bowl guard	AW1000~2000 (Not Available) AW3000~5000 (Available)		
Set pressure range	AW1000: 0.05~0.7MPa (0.5~7kgf/cm ²) AW2000~5000: 0.05~0.85MPa (0.5~8.5kgf/cm ²)		
Regulator construction	Relieving type		

Model	Specifications				Accessories		Drain function	Model of AW series with auto drain
	*Rated flow (L/min)	**Port size (G)	Pressure gauge port size	Weight (kg)	Bracket	Pressure gauge		
AW1000-M5	100	M5	1/16	0.09	B120	G27-10-R1	Manual drain	-
AW2000-01	550	1/8	1/8	0.36	B220	G36-10-01		AW2000-01D
AW2000-02		1/4						AW2000-02D
AW3000-02	2000	1/4	1/8	0.56	B320		G36-10-01	AW3000-02D
AW3000-03		3/8				AW3000-03D		
AW4000-03	4000	3/8	1/4	1.15	B420	G46-10-02		a.Air shutoff drain b.Manual drain
AW4000-04		1/2					AW4000-04D	
AW4000-06	4500	3/4	1/4	1.21			AW4000-06D	
AW5000-06	5500	3/4	1/4	1.70			AW5000-06D	
AW5000-10		1					AW5000-10D	

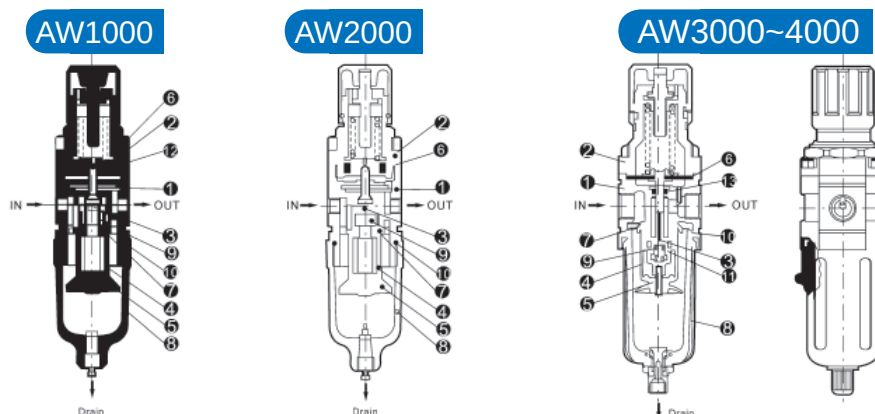
*Under the circumstance that the inlet is 0.7MPa(7.1kgf/cm²) and the set pressure is 0.5MPa(5.1kgf/cm²)

**Rc.and NPT port sizes are available.

Filter & Regulator

AW1000~5000 Series

Construction



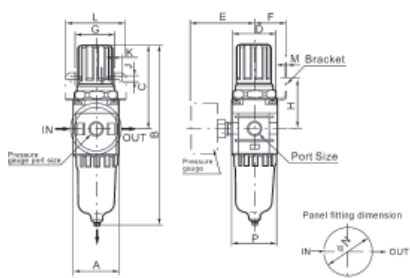
Component parts

NO.	Description	Material			NO.	Description	Material		
		AW1000	AW2000	AW4000			AW1000	AW2000	AW4000
1	Body	Zinc die-cast	Aluminum die-cast		8	Bowl assembly (Bowl guard)	Polycarbonate (Cold rolled steel)		
2	Bonnet	Reinforced nylon		Aluminum die-cast	9	Spring	Stainless steel		
3	Valve assembly	Brass,NBR			10	O-ring	NBR		
4	Filter element	Brass			11	O-ring	NBR		
5	Baffle	POM			12	Hand wheel	Nylon		
6	Diaphragm assembly	NBR			13	O-ring	NBR		
7	Whirlwind blade	POM							

Dimensions

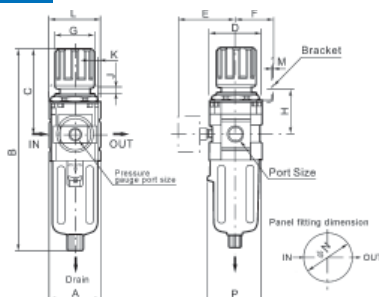
AW1000-2000

AW1000: Max. 3.5
AW2000: Max. 5



AW3000-5000

AW3000: Max. 3.5
AW4000~5000: Max. 5



Model	Port size (G)	A	B	C	D	E	F	G	H	J	K	L	M	N	P
AW1000	M5	25	109.5	50.5	25	26	25	28	30	4.5	6.5	40	2	20.5	28
AW2000	1/8~1/4	40	164.5	78	40	56.8	30	34	43.5	5.4	15.4	55	2.3	33.5	40
AW3000	1/4~3/8	53	211	92.5	53	60.8	39	40	46	6.5	8	53	2.3	42.5	56
AW4000	3/8~1/2	70	262	112	70	70.5	49.2	54	53.5	8.5	10.5	70	2.3	52.5	73
AW4000-06	3/4	75	267	114	70	70.5	49.2	54	55.5	8.5	10.5	70	2.3	52.5	73
AW5000	3/4~1	90	338	116	90	75.5	49.2	54	62	8.5	10.5	70	2.3	52.5	90

AC,BC Series F.R.L Unit



Ordering code

BC

Model

AC: Small size
BC: Middle size

3000

Port size

1500: G1/8"
2000: G1/4"
3000: G3/8"
4000: G1/2"

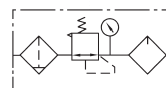
-

D

Drain type

Blank: Differential drain
D: Automatic drain

Symbol



Specifications

Model		AC1500	AC2000	BC2000	BC3000	BC4000
Fluid		Air				
Port size		G1/8 ”	G1/4 ”	G1/4 ”	G3/8 ”	G1/2 ”
Filtering grade		40 μ				
Pressure range		0.05 ~ 0.85MPa				
Max. pressure		0.95MPa				
Proof pressure		1.5MPa				
Operating temperature		5 ~ 60℃				
Drain bowl capacity		15 cc		60 cc		
Oil bowl capacity		25 cc		90 cc		
Recommended lubricant		ISO VG 32 or Equivalent				
Weight		0.7 KG		0.9 KG		
Material	Body	Aluminum die-cast				
	Bowl	PC IR2200				
	Bowl guard	—		Nylon,Iron		
Component	Filter	AF1500	AF2000	BF2000	BF3000	BF4000
	Regulator	AR1500	AR2000	BR2000	BR3000	BR4000
	Lubricator	AL1500	AL2000	BL2000	BL3000	BL4000

AFC,BFC Series FR.L Unit



Ordering code

BFC

Model

AFC: Small size
BFC: Middle size

2000

Port size

1500: G1/8"
2000: G1/4"
3000: G3/8"
4000: G1/2"

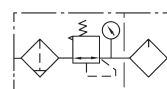
-

D

Drian type

Blank: Differential drain
D: Automatic drain

Symbol



Specifications

Model		AFC1500	AFC2000	BFC2000	BFC3000	BFC4000
Fluid						
Port size		G1/8″	G1/4″	G1/4″	G3/8″	G1/2″
Filtering grade		40 μ				
Pressure range		0.05 ~ 0.85MPa				
Max. pressure		0.95MPa				
Proof pressure		1.5MPa				
Operating temperature		5 ~ 60℃				
Drain bowl capacity		15 cc		60 cc		
Oil bowl capacity		25 cc		90 cc		
Recommended lubricant		ISO VG 32 or equivalent				
Weight		0.5 KG		0.7 KG		
Material	Body	Aluminum die-cast				
	Bowl	PC IR2200				
	Bowl guard	—		Nylon,Iron		
Component	Filter & Regulator	AFR1500	AFR2000	BFR2000	BFR3000	BFR4000
	Lubricator	AL1500	AL2000	BL2000	BL3000	BL4000



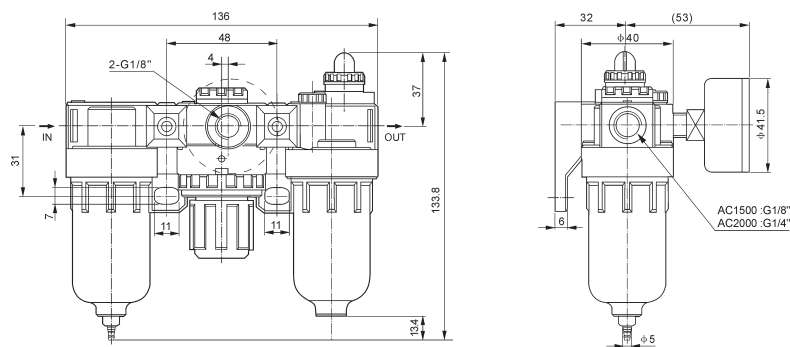
VOGUE PNEUMATICS

Ningbo Vogue Pneumatics Industry Co., Ltd.

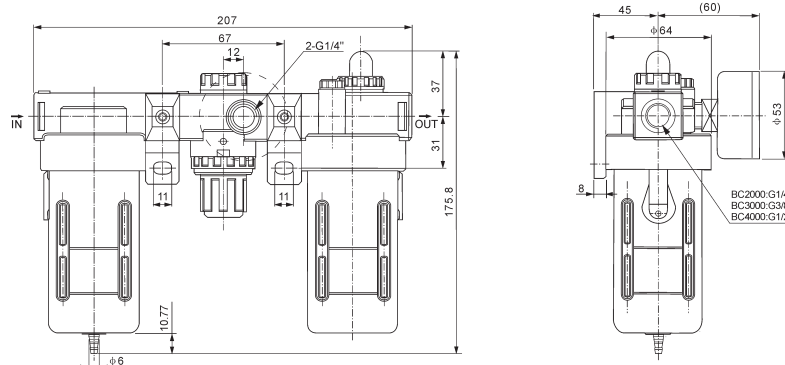
AC, BC Series F.R.L. Unit & AFC, BFC Series FR.L Unit

● Dimensions

AC Series

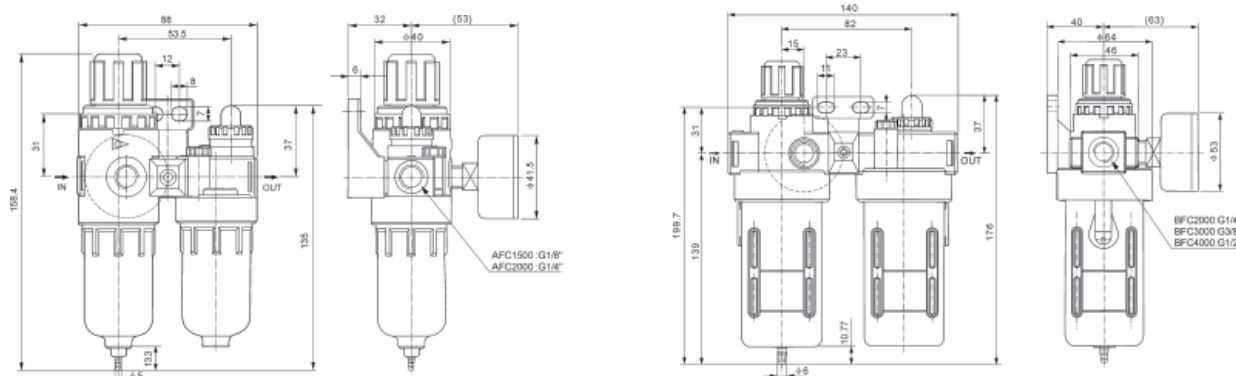


BC Series



AFC Series

BFC Series



AF,BF Series Filter



Ordering code

BF

Model

AF: Small size
BF: Middle size

3000

Port size

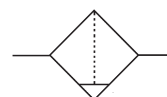
1500: G1/8"
2000: G1/4"
3000: G3/8"
4000: G1/2"

D

Drain type

Blank: Differential drain
D: Automatic drain

Symbol

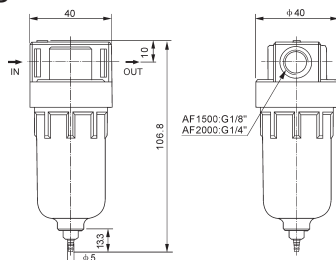


Specifications

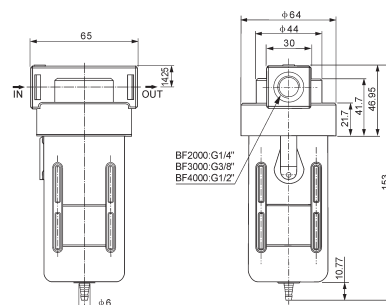
Model		AF1500	AF2000	BF2000	BF3000	BF4000
Fluid		Air				
Port size		G1/8 ”	G1/4 ”	G1/4 ”	G3/8 ”	G1/2 ”
Filtering grade		40 μ				
Proof pressure		1.5MPa				
Operating temperature		5 ~ 60℃				
Drain bowl capacity		15 cc		60 cc		
Weight		0.14KG		0.33KG		
Material	Body	Aluminum die-cast				
	Bowl	PC IR2200				
	Bowl guard	—		Nylon,Iron		

Dimensions

AF Series



BF Series



AR, BR Series Regulator



Ordering code

BR

Model

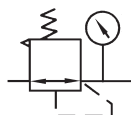
AR: Small size
BR: Middle size

2000

Port size

1500: G1/8"
2000: G1/4"
3000: G3/8"
4000: G1/2"

Symbol

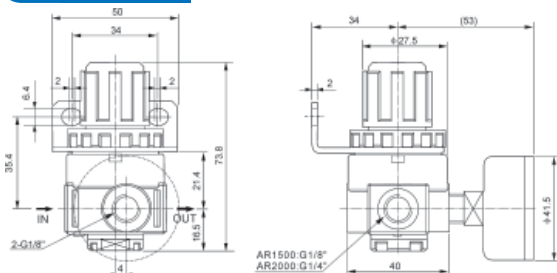


Specifications

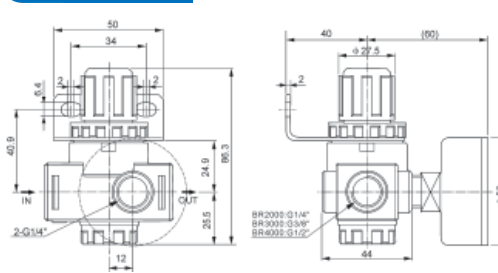
Model	AR1500	AR2000	BR2000	BR3000	BR4000
Fluid	Air				
Port size	G1/8 ”	G1/4 ”	G1/4 ”	G3/8 ”	G1/2 ”
Pressure range	0.05 ~ 0.85MPa				
Max. pressure	0.95MPa				
Proof pressure	1.5MPa				
Operating temperature	5 ~ 60℃				
Weight	0.20 KG		0.23 KG		
Material of Body	Aluminum die-cast				

Dimensions

AR Series



BR Series



AL,BL Series Lubricator



Ordering code

BL

Model

AL: Small size

BL: Middle size

3000

Port size

1500: G1/8"

3000: G3/8"

2000: G1/4"

4000: G1/2"

Symbol

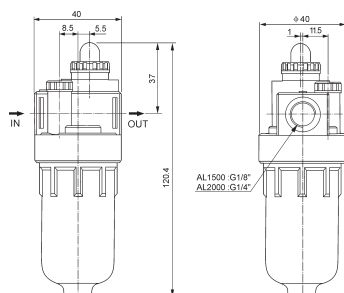


Specifications

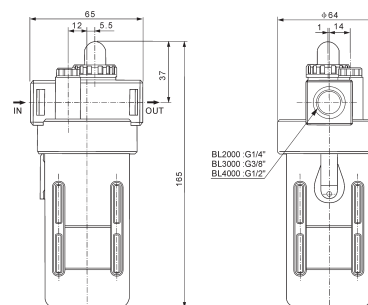
Model		AL1500	AL2000	BL2000	BL3000	BL4000
Fluid		Air				
Port size		G1/8 ”	G1/4 ”	G1/4 ”	G3/8 ”	G1/2 ”
Proof pressure		1.5MPa				
Operating temperature		5 ~ 60℃				
Recommended lubricant		ISO VG 32 or equivalent				
Oil bowl capacity		25 cc		90 cc		
Weight		0.17KG		0.25KG		
Material	Body	Aluminum die-cast				
	Bowl	P C				
	Bowl guard	—		Nylon,Iron		

Dimensions

AL Series



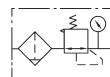
BL Series





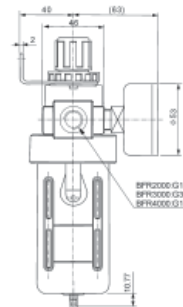
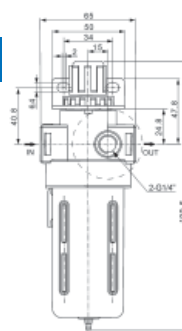
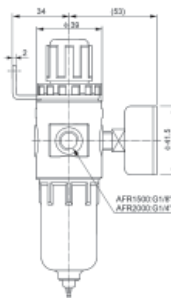
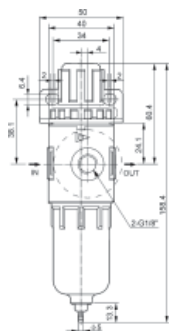
- Symbol

Blank:Differential drain
D: Automatic drain



Model		AFR1500	AFR2000	BFR2000	BFR3000	BFR4000
Fluid		Air				
Port size		G1/8″	G1/4″	G1/4″	G3/8″	G1/2″
Pressure range		0.05 ~ 0.85MPa				
Max. pressure		0.95MPa				
Proof pressure		1.5MPa				
Operating temperature		5 ~ 60℃				
Drain bowl capacity		15 cc		60 cc		
Weight		0.26 KG		0.40 KG		
Material	Body	Aluminum die-cast				
	Bowl	P C				
	Bowl guard	—		Nylon,Iron		

BFR Series



Air Combination

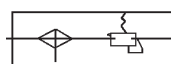


This product is the combination of filter, regulator and lubricator. It has tight structure, large flow rate, steady output and simple installation. The accessories include pressure gauge and mounting bracket. The lubricator can add oil with air on. All have the bowl guard. Use safely and appearance beautifully.

SFC Series FR.L Combination

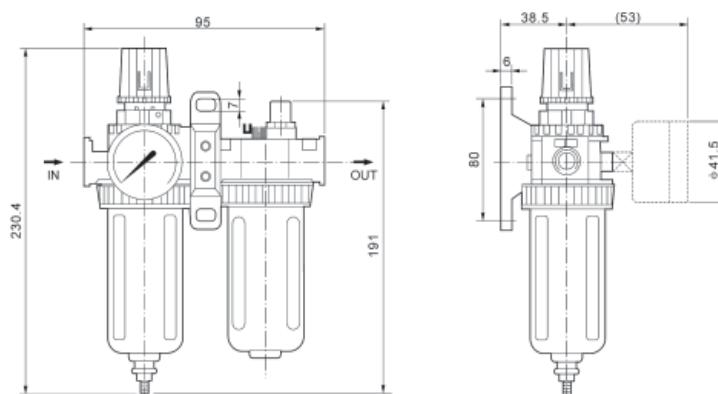
Specifications

Symbol



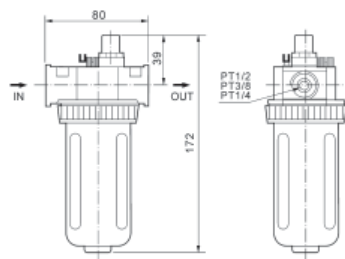
Model	SFC-200	SFC-300	SFC-400
Port size	1/4Rc	3/8Rc	1/2Rc
Pressure gauge port size	1/8Rc	1/8Rc	1/8Rc
Proof pressure	1.5MPa		
Max. operating pressure	1.0MPa		
Ambient and fluid temperature	5~60℃		
Bowl guard	Available		

Dimensions

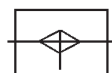


SL Series Lubricator

Dimensions



Symbol



Function

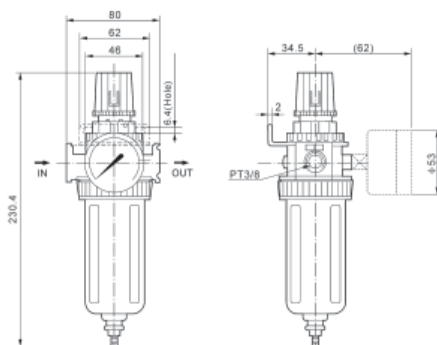
Adding oil with air on.

Specifications

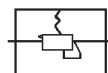
Model	SL-200	SL-300	SL-400
Port size	1/4Rc	3/8Rc	1/2Rc
Proof pressure	1.5MPa		
Max. operating pressure	1.0MPa		
Ambient and fluid temperature	5~60℃		
Bowl guard	Available		

SFR Series Regulator & Filter

Dimensions



Symbol



Operation Instructions

Pulling up the regulator's knob and turning the knob can regulate the pressure of compressed air to the set operating pressure, and can make pressure pulse balance; press down the knob to lock it.

Specifications

Model	SFR-200	SFR-300	SFR-400
Port size	1/4Rc	3/8Rc	1/2Rc
Pressure gauge port size	1/8Rc	1/8Rc	1/8Rc
Proof pressure	1.5MPa		
Max. operating pressure	1.0MPa		
Ambient and fluid temperature	5~60℃		
Bowl guard	Available		

AD402 Series Auto Drain



This product often applies to automatically remove the seeper at the lower places of piping, refrigerated air dryer, oil water separator, gasometer and the bottom of various air filters. It can be installed in the places inconvenient for manual discharge of sewage, such high, low and narrow places, especially there is large consumption of air or frequent water drains. It can prevent the compressed air being re-polluted by condensing to water resulting from neglect of manual drain.

Specifications

Symbol

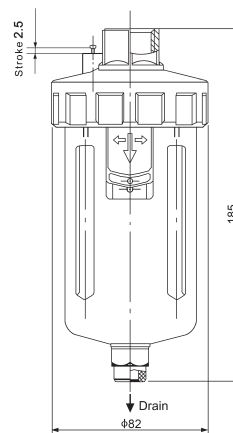


Model	AD402-02	AD402-03	AD402-04
Proof pressure	1.5MPa		
Operating pressure	0.15MPa ~ 1.00MPa		
Ambient and fluid temperature	5 ~ 60℃		
Port size	G1/4"	G3/8"	G1/2"
Drain port size	G1/8"		
Drain status	Normal open type		
Fluid	Compressed air		

Features

- Auto drain
- Air shutoff drain
- Manual drain
- The bowl is provided with metal bowl guard

Dimensions



Attention

When using, the drainer should be installed vertically and the drain port should face down.

ZDFS Type Auto Discharger



● Range of application

This product is installed at the bottom of water cups of auto drainers, air filters and air filter regulators. It can automatically discharge the condensed water gathered in the water cup.

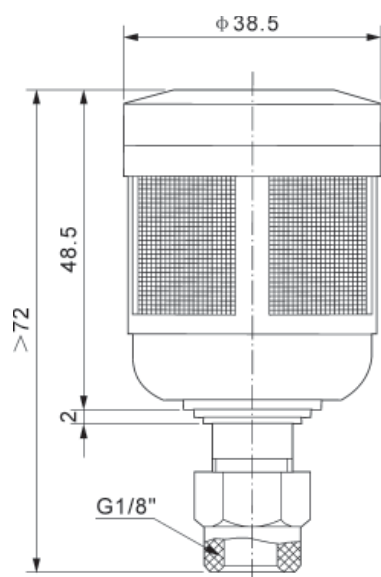
● Features

Auto drain

Air shutoff drain

Manual drain

● Dimensions



● Technical requirements

Fluid: Compressed air

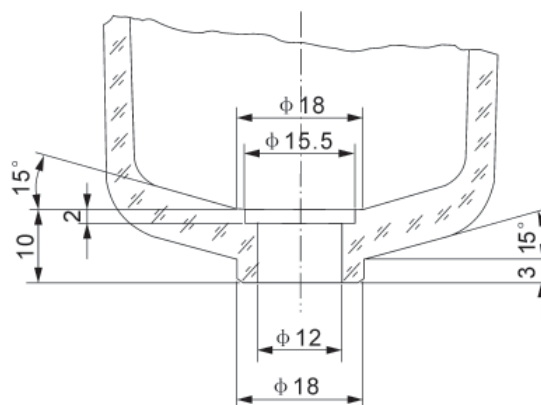
Ambient and fluid temperature : 5~60℃

Operating pressure : 0.15~1.00MPa

● Attention

When using, the drainer should be installed vertically and the drain port should face down.

● Dimension of connecting part of water cup



C Series Filter, Regulator & Lubricator Combination



● Ordering code

C	1	04	-	C	-	5
C series	Specification	Port size		Group type		Filter precision
	1=G1/4	04=G1/4		C=D+L		5=5 μ m
	2=G3/8、G1/2	38=G3/8		E=V+D+L		25=25 μ m
	4=G1	02=G1/2		G=D+L+AVP		
		01=G1		HNA=V+D+L+AVP+PRESS NO		
				HNC=V+D+L+AVP+PRESS NC		
				N=V+D		
				P=D+AVP		
				Q=V+D+AVP		
				T=V+D+L+AVP		
				U=F13+FB3 (Only G3/8、G1/2、G1)		
				ZNA=V+D+AVP+PRESS NO		
				ZNA=V+D+AVP+PRESS NC		

● C Series filter, regulator & lubricator combination code

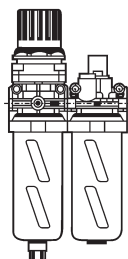
D	Regulator & filter combination, 0~1MPa semi-auto drain, filter precision 5 μ m or 25 μ m	AVP	Electricity control soft start valve
		PRESS	Pressure switch (NC or NO)
V	Two-position three-way separate valve	F13	Filter auto drain (only G3/8、G1/2、G1), filter precision 5 μ m or 25 μ m
L	Lubricator	FB3	Gather filter auto drain (only G3/8、G1/2、G1)

● Specifications

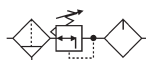
Structure type	Compact type
Material	Al-alloy, Brass, Nylon, NBR
Port size	G1/4、G3/8、G1/2、G1
Installation type	Upright place, board connection or wall installation
Operating temperature	0~60℃ (1MPa)
Surface coat	Painted

● Dimensions

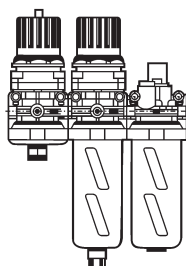
Group type C



D+L



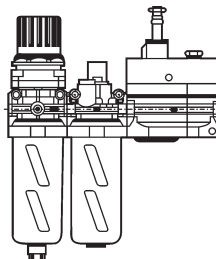
Group type E



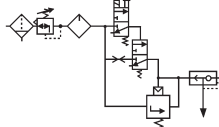
V+D+L



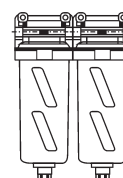
Group type G



D+L+AVP



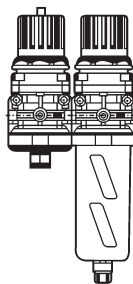
Group type U



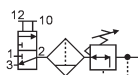
F13+FB3



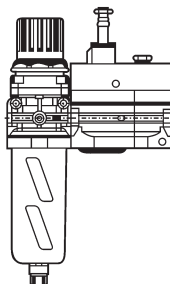
Group type N



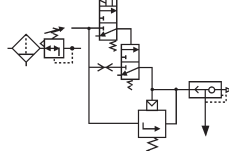
V+D



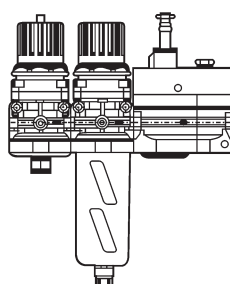
Group type P



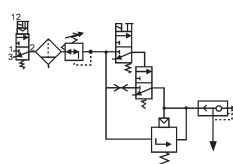
D+AVP



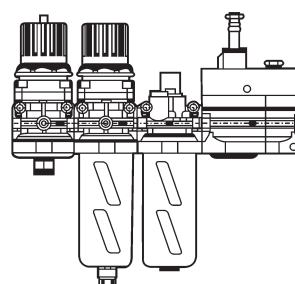
Group type Q



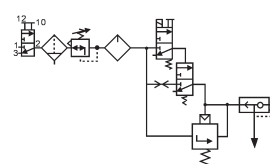
V+D+AVP



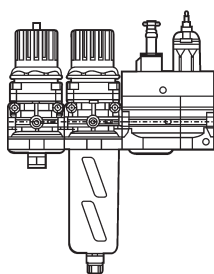
Group type T



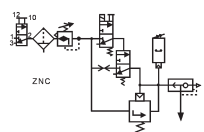
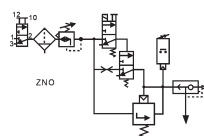
V+D+L+AVP



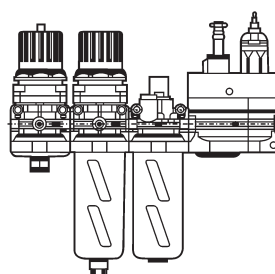
Group type Z



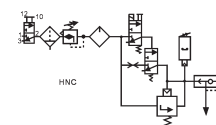
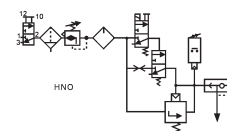
V+D+AVP+PRESS



Group type HN



V+D+L+AVP+PRESS



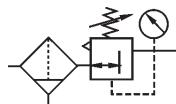
C Series Regulator & Filter Combination



Ordering code

C	1	04	-	D	00
C series	Specification 1=G1/4 2=G3/8、G1/2 4=G1	Port size 04=G1/4 38=G3/8 02=G1/2 01=G1		D=Regulator+Filter	Filter precision and condensation water discharge 00=25 μm, Semi-auto with exhaust entrance 01=25 μm, Semi-auto without exhaust entrance 4=pressure release exhaust entrance 8=G1/8 Port size (Outer exhaust entrance) 10=5 μm, Semi-auto with exhaust entrance 11=5 μm, Semi-auto without exhaust entrance *03=25 μm, Auto with exhaust entrance *13=5 μm, Auto with exhaust entrance Note : only G3/8、G1/2 and G1 have auto drain

Symbol



Specifications

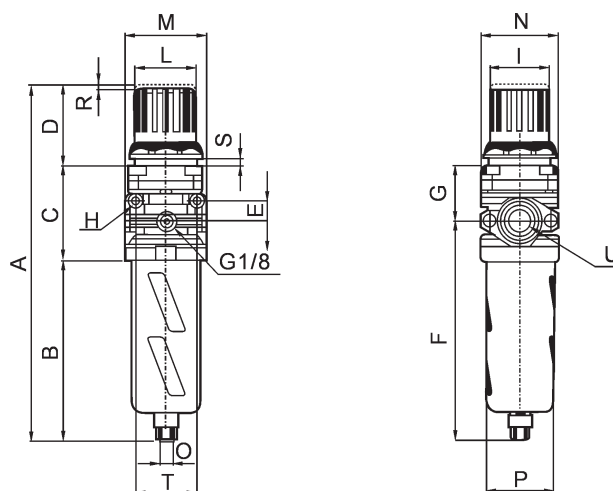
Structure type	Compact Type,Diaphragm Type regulator				
Material	Al- alloy based body & water storage cup engineering plastic observation window , nylon handle,NBR seals				
Port size	G1/4	G3/8	G1/2	G1	
Max. pondage	28	85	85	380	cm ³
Weight	0.510	0.700	0.690	2.280	kg
Pressure gauge port size	G1/8	G1/8	G1/8	G1/4	
Installation type	Upright place,tube and board connection or wall installation				
Operating temperature	0~50℃ (0.1MPa)				
Nominal filtration rating	25 μm(Standard)、5 μm(Client required)				
Drain type	Semi-auto (standard), Auto (Client requirer)				
Surface coat	Painted				
Inlet pressure	0.03~1.6MPa				
Outlet pressure	0.05~1.0MPa				

● Dimensions

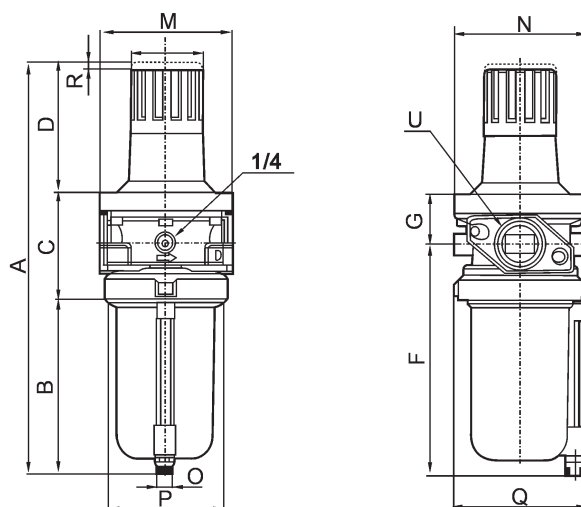
C104-D00

C238-D00

C202-D00



C401-D00



Model	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	U
C104-D00	194	103	52	39	11	127	28	5	28	30×1.5	45	45	G1/8	34	-	3	0-6	35	G1/4
C238-D00	264	134	71	59	15	156	41	6	45	47×1.5	62	59	G1/8	50	-	3.5	0-9	46	G3/8
C202-D00	257	134	71	59	15	156	41	6	45	47×1.5	62	59	G1/8	50	-	3.5	0-9	46	G1/2
C401-D00	344	146	89	124	-	193	43	-	60	-	110	110	G1/8	89	111	5	-	-	G1

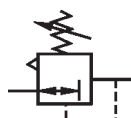
C Series Regulator



Ordering code

C	11	04	-	R	0	0
C Series	Specification 11=G1/4 12=G3/8、G1/2 4=G1	Port size 04=G1/4 38=G3/8 02=G1/2 01=G1		R=Regulator	Operating pressure 0=0.05~1MPa (Standard) 1=0~0.4MPa	Exhaust type 0=With exhaust entrance 1=Without exhaust entrance

Symbol



Specifications

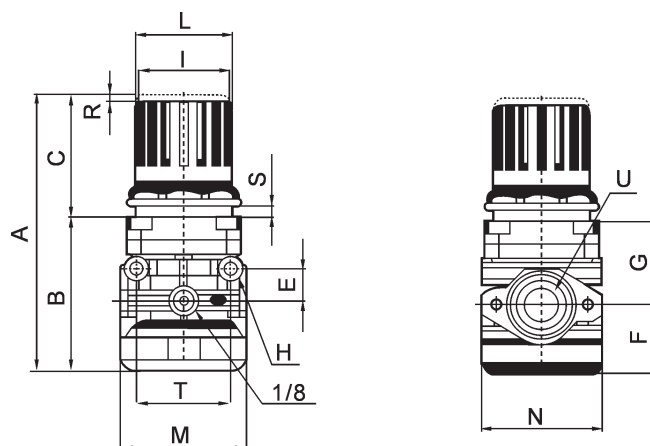
Structure type	Compact type, diaphragm type				
Material	Al-alloy based body nylon handle NBR seals				
Port size	G1/4	G3/8	G1/2	G1	
Weight	0.400	0.470	0.460	1.680	kg
Pressure gauge port size	G1/8	G1/8	G1/8	G1/4	
Installation type	Tube and board connection ,bracket or wall installation				
Operating temperature	0~50℃				
Surface coat	Painted				
Inlet pressure	0~1.6MPa				
Outlet pressure	0.05~1MPa				

● Dimensions

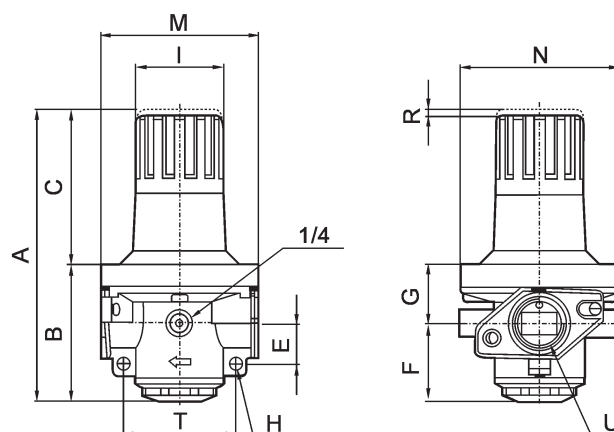
C1104-R00

C1238-R00

C1202-R00



C401-R00

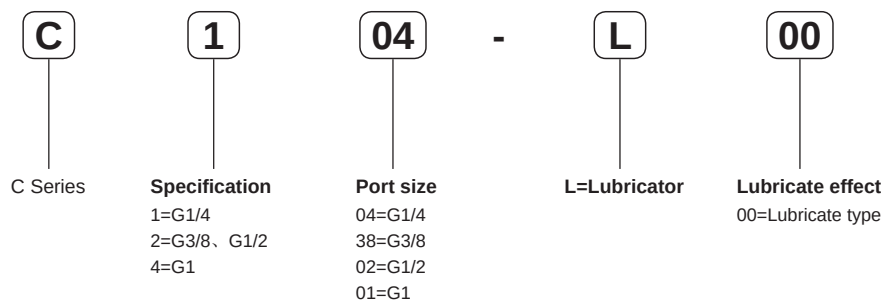


Model	A	B	C	E	F	G	H	I	L	M	N	R	S	T	U
C1104-R00	94	55	39	11	28	28	5	28	30×1.5	45	45	3	0-6	35	G1/4
C1238-R00	134	75	59	15	34	41	6	45	47×1.5	62	59	3.5	0-9	46	G3/8
C1202-R00	134	75	59	15	34	41	6	45	47×1.5	62	59	3.5	0-9	46	G1/2
C401-R00	203.5	95.5	108	28	54	40	8	60	-	110	110	5	-	78	G1

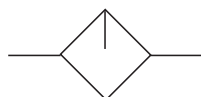
C Series Lubricator



Ordering code



Symbol



Specifications

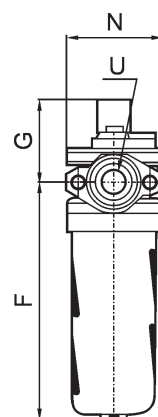
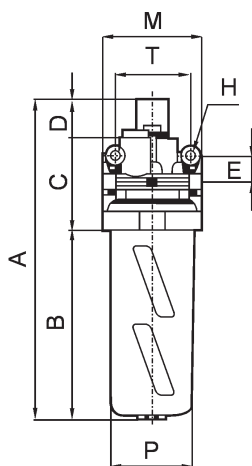
Structure type	Compact type					
Material	Al-alloy shelly body& oil storage cup engineering plastic observation window NBR seals					
Port size	G1/4	G3/8	G1/2	G1		
Oil cubage	37	130	130	455	cm3	
Weight	0.210	0.430	0.420	1.150	kg	
Installation type	Upright place,tube and board connection or wall installation					
Operating temperature	-10℃~5℃（1MPa）					
Put on steam	G1/4 cannot pressure put on steam , G3/8、G1/2、G1 can pressure put on steam					
Lubrication	Oil mucosity 3° -10° E (May ask our engineer)					
Surface coat	Painted					
Operating pressure	0~1.6MPa					
Least start brume flow		G1/4	G3/8	G1/2	G1	
	(0.1MPa)	5	4	4	25	NI/min
	(0.6MPa)	8	8	9	60	NI/min

● Dimensions

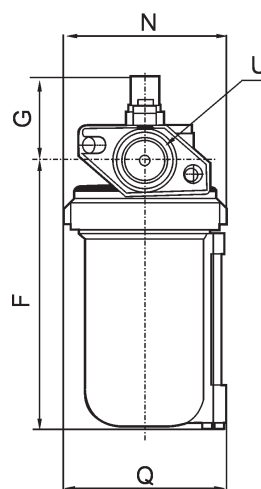
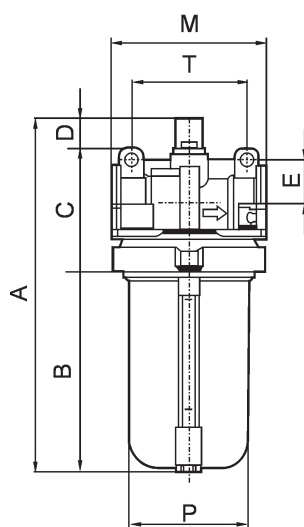
C104-L00

C238-L00

C202-L00



C401-L00



Model	A	B	C	D	E	F	G	H	M	N	P	Q	T	U
C104-L00	157	85	48	24	11	110	47	5	45	45	34	-	35	G1/4
C238-L00	195	115	56	24	15	145	50	6	62	59	50	-	46	G3/8
C202-L00	195	115	56	24	15	145	50	6	62	59	50	-	46	G1/2
C401-L00	239	135	82	22	29	181	58	8	105	110	89	111	78	G1

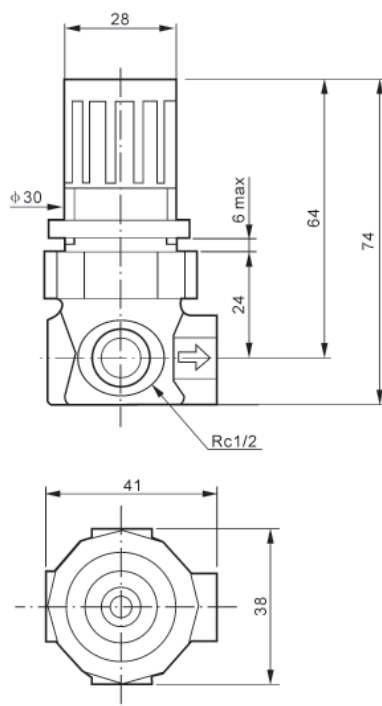
NAR Series Regulator



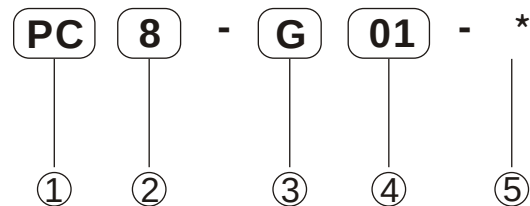
Specifications

Model	NAR-200
Port size	1/4Rc
Pressuer gauge port size	1/8Rc
Proof pressure	1.5MPa
Max. operating pressure	1.0MPa
Ambient and fluid temperature	5-60°C

Dimensions



Pneumatic



③ G-thread & NPT-thread

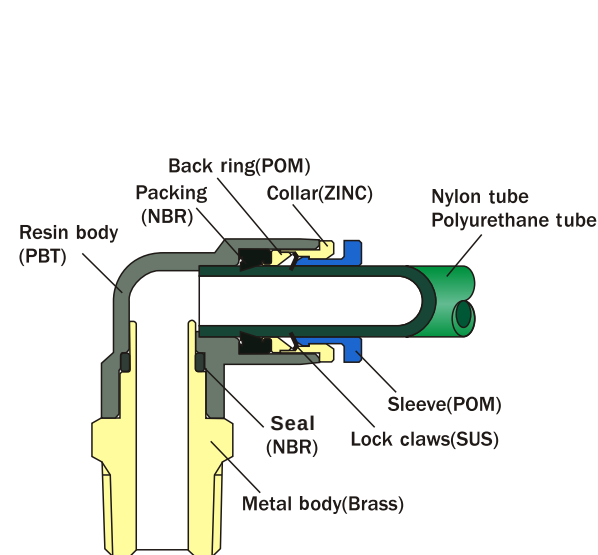
G - thread		NPT - thread	
Code	Dia.	Code	Dia.
G01	G1/8	N01	N1/8
G02	G1/4	N02	N1/4
G03	G3/8	N03	N3/8
G04	G1/2	N04	N1/2

④ Taper pipe thread

Metric size		Taper pipe thread	
Code	Dia.	Code	Dia.
M5	M5X0.8	01	R1/8
M6	M6X1	02	R1/4
M8	M8X1	03	R3/8
M10	M10X1	04	R1/2
M12	M12X1.25	06	R3/4
M12A	M12X1.25		
M14	M14X1.5		
M16	M16X1.5		
M20	M20X1.5		

⑤ Color: Blank:Black; A:Grey

One-touch Fittings



● Features

One-touch tube fittings are used in pneumatic piping. The tube fittings come in a wide variety of models to meet all your needs in pneumatic piping. Even after installation, the direction of the tube can be changed freely. Nickel-plated metal body ensures anti-corrosion and anti-contamination. All R and NPT threads are pre-coated sealant. The teflon coating may duplicate use three times, there is no release in thread.

PC

Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PC 04-M5	100	PC 5/32-01	100	PC 5/32-N01	100
PC 04-M6	100	PC 5/32-02	100	PC 5/32-N02	100
PC 04-01	100	PC 5/32-03	100	PC 5/32-N03	100
PC 04-02	100	PC 3/16-01	100	PC 3/16-N01	100
PC 04-03	100	PC 3/16-02	100	PC 3/16-N02	100
PC 06-M5	100	PC 3/16-03	100	PC 3/16-N03	100
PC 06-M6	100	PC 1/4-01	100	PC 1/4-N01	100
PC 06-01	100	PC 1/4-02	100	PC 1/4-N02	100
PC 06-02	100	PC 1/4-03	100	PC 1/4-N03	100
PC 06-03	100	PC 1/4-04	50	PC 1/4-N04	50
PC 06-04	50	PC 5/16-01	100	PC 5/16-N01	100
PC 08-01	100	PC 5/16-02	100	PC 5/16-N02	100
PC 08-02	100	PC 5/16-03	100	PC 5/16-N03	100
PC 08-03	100	PC 5/16-04	50	PC 5/16-N04	50
PC 08-04	50	PC 3/8-01	100	PC 3/8-N01	100
PC 10-01	100	PC 3/8-02	100	PC 3/8-N02	100
PC 10-02	100	PC 3/8-03	100	PC 3/8-N03	100
PC 10-03	100	PC 3/8-04	50	PC 3/8-N04	50
PC 10-04	50	PC 1/2-01	50	PC 1/2-N01	50
PC 12-01	50	PC 1/2-02	50	PC 1/2-N02	50
PC 12-02	50	PC 1/2-03	50	PC 1/2-N03	50
PC 12-03	50	PC 1/2-04	50	PC 1/2-N04	50
PC 12-04	50				
PC 16-03	25				
PC 16-04	25				
PC 16-06					

PCF

Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PCF 04-M5	100	PCF 5/32-01	100	PCF 5/32-N01	100
PCF 04-M6	100	PCF 5/32-02	100	PCF 5/32-N02	100
PCF 04-01	100	PCF 5/32-03	50	PCF 3/16-N01	100
PCF 04-02	100	PCF 3/16-01	100	PCF 3/16-N02	100
PCF 04-03	100	PCF 3/16-02	100	PCF 3/16-N03	100
PCF 06-M5	100	PCF 1/4-01	100	PCF 1/4-N01	100
PCF 06-M6	100	PCF 1/4-02	100	PCF 1/4-N02	50
PCF 06-01	100	PCF 1/4-03	50	PCF 1/4-N03	100
PCF 06-02	100	PCF 5/16-01	100	PCF 5/16-N01	100
PCF 06-03	50	PCF 5/16-02	100	PCF 5/16-N02	100
PCF 06-04	50	PCF 5/16-03	50	PCF 5/16-N03	50
PCF 08-01	100	PCF 5/16-04	50	PCF 5/16-N04	50
PCF 08-02	100	PCF 3/8-01	100	PCF 3/8-N01	100
PCF 08-03	50	PCF 3/8-02	100	PCF 3/8-N02	100
PCF 08-04	50	PCF 3/8-03	50	PCF 3/8-N03	50
PCF 10-01	100	PCF 3/8-04	25	PCF 3/8-N04	25
PCF 10-02	100	PCF 1/2-01	25	PCF 1/2-N01	25
PCF 10-03	50	PCF 1/2-02	25	PCF 1/2-N02	25
PCF 10-04	50	PCF 1/2-03	25	PCF 1/2-N03	25
PCF 12-01	50	PCF 1/2-04	25	PCF 1/2-N04	25
PCF 12-02	50				
PCF 12-03	50				
PCF 12-04	25				
PCF 16-03	25				
PCF 16-04	25				
PCF 16-06	25				

POC

Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
POC 04-M5	100	POC 5/32-01	100	POC 5/32-N01	100
POC 04-M6	100	POC 5/32-02	100	POC 5/32-N02	100
POC 04-01	100	POC 5/32-03	100	POC 5/32-N03	100
POC 04-02	100	POC 3/16-01	100	POC 3/16-N01	100
POC 04-03	100	POC 3/16-02	100	POC 3/16-N02	100
POC 06-M5	100	POC 3/16-03	100	POC 3/16-N03	100
POC 06-M6	100	POC 1/4-01	100	POC 1/4-N01	100
POC 06-01	100	POC 1/4-02	100	POC 1/4-N02	100
POC 06-02	100	POC 1/4-03	100	POC 1/4-N03	100
POC 06-03	100	POC 1/4-04	50	POC 1/4-N04	50
POC 06-04	100	POC 5/16-01	100	POC 5/16-N01	100
POC 08-01	100	POC 5/16-02	100	POC 5/16-N02	100
POC 08-02	100	POC 5/16-03	100	POC 5/16-N03	100
POC 08-03	100	POC 5/16-04	50	POC 5/16-N04	50
POC 08-04	50	POC 3/8-01	100	POC 3/8-N01	100
POC 10-01	100	POC 3/8-02	100	POC 3/8-N02	100
POC 10-02	100	POC 3/8-03	100	POC 3/8-N03	100
POC 10-03	100	POC 3/8-04	50	POC 3/8-N04	50
POC 10-04	50	POC 1/2-01	50	POC 1/2-N01	50
POC 12-01	50	POC 1/2-02	50	POC 1/2-N02	50
POC 12-02	50	POC 1/2-03	50	POC 1/2-N03	50
POC 12-03	50	POC 1/2-04	50	POC 1/2-N04	50
POC 12-04	50				
POC 16-03	25				
POC 16-04	25				
POC 16-06	25				

PL

Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PL 04-M5	100	PL 5/32-01	100	PL 5/32-N01	100
PL 04-M6	100	PL 5/32-02	100	PL 5/32-N02	100
PL 04-01	100	PL 5/32-03	100	PL 5/32-N03	100
PL 04-02	100	PL 3/16-01	100	PL 3/16-N01	100
PL 04-03	100	PL 3/16-02	100	PL 3/16-N02	100
PL 06-M5	100	PL 3/16-03	100	PL 3/16-N03	100
PL 06-M6	100	PL 1/4-01	50	PL 1/4-N01	50
PL 06-01	100	PL 1/4-02	100	PL 1/4-N02	100
PL 06-02	100	PL 1/4-03	100	PL 1/4-N03	100
PL 06-03	50	PL 1/4-04	50	PL 1/4-N04	50
PL 06-04	50	PL 5/16-01	100	PL 5/16-N01	100
PL 08-01	50	PL 5/16-02	100	PL 5/16-N02	100
PL 08-02	50	PL 5/16-03	50	PL 5/16-N03	50
PL 08-03	50	PL 5/16-04	50	PL 5/16-N04	50
PL 08-04	50	PL 3/8-01	25	PL 3/8-N01	25
PL 10-01	50	PL 3/8-02	50	PL 3/8-N02	50
PL 10-02	50	PL 3/8-03	50	PL 3/8-N03	50
PL 10-03	50	PL 3/8-04	50	PL 3/8-N04	50
PL 10-04	25	PL 1/2-01	25	PL 1/2-N01	25
PL 12-01	25	PL 1/2-02	25	PL 1/2-N02	25
PL 12-02	25	PL 1/2-03	25	PL 1/2-N03	25
PL 12-03	25	PL 1/2-04	25	PL 1/2-N04	25
PL 12-04	25				
PL 16-03	20				
PL 16-04	20				
PL 16-06	20				

PLL



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PLL 04-M5	50	PLL 5/32-01	100	PLL 5/32-N01	100
PLL 04-M6	50	PLL 5/32-02	50	PLL 5/32-N02	50
PLL 04-01	50	PLL 5/32-03	50	PLL 5/32-N03	50
PLL 04-02	50	PLL 3/16-01	50	PLL 3/16-N01	50
PLL 04-03	50	PLL 3/16-02	50	PLL 3/16-N02	50
PLL 06-M5	50	PLL 3/16-03	50	PLL 3/16-N03	50
PLL 06-M6	50	PLL 1/4-01	50	PLL 1/4-N01	50
PLL 06-01	50	PLL 1/4-02	50	PLL 1/4-N02	50
PLL 06-02	50	PLL 1/4-03	50	PLL 1/4-N03	50
PLL 06-03	50	PLL 5/16-01	50	PLL 5/16-N01	50
PLL 08-01	50	PLL 5/16-02	50	PLL 5/16-N02	50
PLL 08-02	50	PLL 5/16-03	25	PLL 5/16-N03	25
PLL 08-03	25	PLL 5/16-04	20	PLL 3/8-N01	25
PLL 08-04	25	PLL 3/8-01	25	PLL 3/8-N02	25
PLL 10-01	25	PLL 3/8-02	25	PLL 3/8-N03	25
PLL 10-02	25	PLL 3/8-03	25	PLL 3/8-N04	20
PLL 10-03	25	PLL 1/2-01	20	PLL 1/2-N01	20
PLL 10-04	25	PLL 1/2-02	20	PLL 1/2-N02	20
PLL 12-01	25	PLL 1/2-03	20	PLL 1/2-N03	20
PLL 12-02	25	PLL 1/2-04	20	PLL 1/2-N04	20
PLL 12-03	25				
PLL 12-04	25				
PLL 16-03	12				
PLL 16-04	12				
PLL 16-06	12				

PT



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PT 04-M5	100	PT 5/32-01	100	PT 5/32-N01	100
PT 04-M6	100	PT 5/32-02	100	PT 5/32-N02	100
PT 04-01	100	PT 5/32-03	100	PT 5/32-N03	100
PT 04-02	100	PT 3/16-01	50	PT 3/16-N01	50
PT 04-03	50	PT 3/16-02	50	PT 3/16-N02	50
PT 06-M5	50	PT 3/16-03	50	PT 3/16-N03	50
PT 06-M6	50	PT 1/4-01	50	PT 1/4-N01	50
PT 06-01	50	PT 1/4-02	50	PT 1/4-N02	50
PT 06-02	50	PT 1/4-03	50	PT 1/4-N03	50
PT 06-03	50	PT 1/4-04	50	PT 1/4-N04	50
PT 06-04	25	PT 5/16-01	50	PT 5/16-N01	50
PT 08-01	50	PT 5/16-02	50	PT 5/16-N02	50
PT 08-02	50	PT 5/16-03	25	PT 5/16-N03	25
PT 08-03	50	PT 5/16-04	25	PT 5/16-N04	25
PT 08-04	25	PT 3/8-01	25	PT 3/8-N01	25
PT 10-01	25	PT 3/8-02	25	PT 3/8-N02	25
PT 10-02	25	PT 3/8-03	25	PT 3/8-N03	25
PT 10-03	25	PT 3/8-04	25	PT 3/8-N04	25
PT 10-04	25	PT 1/2-01	25	PT 1/2-N01	25
PT 12-01	25	PT 1/2-02	25	PT 1/2-N02	25
PT 12-02	25	PT 1/2-03	25	PT 1/2-N03	25
PT 12-03	25	PT 1/2-04	20	PT 1/2-N04	20
PT 12-04	20				
PT 16-03	12				
PT 16-04	12				
PT 16-06	12				

PWT



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PWT 04-M5	100	PWT 5/32-01	100	PWT 5/32-N01	100
PWT 04-M6	100	PWT 5/32-02	50	PWT 5/32-N02	50
PWT 04-01	100	PWT 3/16-01	50	PWT 3/16-N01	50
PWT 04-02	100	PWT 3/16-02	50	PWT 3/16-N02	50
PWT 04-03	50	PWT 3/16-03	50	PWT 3/16-N03	50
PWT 06-M5	50	PWT 1/4-01	50	PWT 1/4-N01	50
PWT 06-M6	50	PWT 1/4-02	50	PWT 1/4-N02	50
PWT 06-01	50	PWT 1/4-03	50	PWT 1/4-N03	50
PWT 06-02	50	PWT 5/16-01	50	PWT 5/16-N01	50
PWT 06-03	50	PWT 5/16-02	50	PWT 5/16-N02	50
PWT 08-01	50	PWT 5/16-03	50	PWT 5/16-N03	50
PWT 08-02	50	PWT 5/16-04	25	PWT 5/16-N04	25
PWT 08-03	50	PWT 3/8-01	25	PWT 3/8-N01	25
PWT 08-04	25	PWT 3/8-02	25	PWT 3/8-N02	25
PWT 10-01	25	PWT 3/8-03	25	PWT 3/8-N03	25
PWT 10-02	25	PWT 3/8-04	25	PWT 3/8-N04	25
PWT 10-03	25	PWT 1/2-01	25	PWT 1/2-N01	25
PWT 10-04	25	PWT 1/2-02	25	PWT 1/2-N02	25
PWT 12-01	25	PWT 1/2-03	25	PWT 1/2-N03	25
PWT 12-02	25	PWT 1/2-04	20	PWT 1/2-N04	20
PWT 12-03	25				
PWT 12-04	25				

PKD



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PKD 04-M5	25	PKD 1/4-01	25	PKD 1/4-N1/8	25
PKD 04-01	25	PKD 1/4-02	25	PKD 1/4-N1/4	25
PKD 04-02	25	PKD 1/4-03	25	PKD 1/4-N3/8	25
PKD 04-03	25	PKD 1/4-04	25	PKD 1/4-N1/2	25
PKD 06-M5	25	PKD 5/16-01	25	PKD 5/16-N1/8	25
PKD 06-01	25	PKD 5/16-02	25	PKD 5/16-N1/4	25
PKD 06-02	25	PKD 5/16-03	25	PKD 5/16-N3/8	25
PKD 06-03	25	PKD 5/16-04	25	PKD 5/16-N1/2	25
PKD 06-04	25	PKD 3/8-01	25	PKD 3/8-N1/8	25
PKD 08-01	25	PKD 3/8-02	25	PKD 3/8-N1/4	25
PKD 08-02	25	PKD 3/8-03	25	PKD 3/8-N3/8	25
PKD 08-03	25	PKD 3/8-04	25	PKD 3/8-N1/2	25
PKD 08-04	25				
PKD 10-01	25				
PKD 10-02	20				
PKD 10-03	25				
PKD 10-04	20				

PLF



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PLF 04-M5	100	PLF 5/32-01	100	PLF 5/32-N01	100
PLF 04-M6	100	PLF 5/32-02	100	PLF 5/32-N02	100
PLF 04-01	100	PLF 5/32-03	100	PLF 5/32-N03	100
PLF 04-02	50	PLF 3/16-01	50	PLF 3/16-N01	50
PLF 06-M5	100	PLF 3/16-02	50	PLF 3/16-N02	50
PLF 06-M6	100	PLF 3/16-03	50	PLF 3/16-N03	50
PLF 06-01	50	PLF 1/4-01	50	PLF 1/4-N01	50
PLF 06-02	50	PLF 1/4-02	50	PLF 1/4-N02	50
PLF 06-03	50	PLF 1/4-03	50	PLF 1/4-N03	50
PLF 08-01	50	PLF 5/16-01	50	PLF 5/16-N01	50
PLF 08-02	50	PLF 5/16-02	25	PLF 5/16-N02	25
PLF 08-03	50	PLF 5/16-03	25	PLF 5/16-N03	25
PLF 10-02	25	PLF 5/16-04	20	PLF 5/16-N04	20
PLF 10-03	25	PLF 3/8-01	25	PLF 3/8-N01	25
PLF 10-04	20	PLF 3/8-02	25	PLF 3/8-N02	25
PLF 12-02	20	PLF 3/8-03	25	PLF 3/8-N03	25
PLF 12-03	20	PLF 3/8-04	20	PLF 3/8-N04	20
PLF 12-04	20	PLF 1/2-01	20	PLF 1/2-N01	20
PLF 16-03	20	PLF 1/2-02	20	PLF 1/2-N02	20
PLF 16-04	20	PLF 1/2-03	20	PLF 1/2-N03	20
PLF 16-06	20	PLF 1/2-04	15	PLF 1/2-N04	15

PST



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PST 04-M5	100	PST 5/32-01	100	PST 5/32-N01	100
PST 04-M6	100	PST 5/32-02	50	PST 5/32-N02	50
PST 04-01	100	PST 5/32-03	50	PST 5/32-N03	50
PST 04-02	100	PST 3/16-01	50	PST 3/16-N01	50
PST 04-03	50	PST 3/16-02	50	PST 3/16-N02	50
PST 06-M5	50	PST 3/16-03	50	PST 3/16-N03	50
PST 06-M6	50	PST 1/4-01	50	PST 1/4-N01	50
PST 06-01	50	PST 1/4-02	50	PST 1/4-N02	50
PST 06-02	50	PST 1/4-03	50	PST 1/4-N03	50
PST 06-03	50	PST 5/16-01	50	PST 5/16-N01	50
PST 06-04	25	PST 5/16-02	50	PST 5/16-N02	50
PST 08-01	50	PST 5/16-03	50	PST 5/16-N03	50
PST 08-02	50	PST 5/16-04	25	PST 5/16-N04	25
PST 08-03	50	PST 3/8-01	25	PST 3/8-N01	25
PST 08-04	25	PST 3/8-02	25	PST 3/8-N02	25
PST 10-01	25	PST 3/8-03	25	PST 3/8-N03	25
PST 10-02	25	PST 3/8-04	25	PST 3/8-N04	25
PST 10-03	25	PST 1/2-01	25	PST 1/2-N01	25
PST 10-04	25	PST 1/2-02	25	PST 1/2-N02	25
PST 12-01	25	PST 1/2-03	25	PST 1/2-N03	25
PST 12-02	25	PST 1/2-04	20	PST 1/2-N04	20
PST 12-03	25				
PST 12-04	20				
PST 16-03	12				
PST 16-04	12				
PST 16-06	12				

PH



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PH 04-M5	50	PH 1/4-M5	50	PH 5/32-N01	50
PH 04-01	50	PH 1/4-01	50	PH 3/16-N01	50
PH 04-02	50	PH 1/4-02	50	PH 3/16-N02	50
PH 06-M5	50	PH 5/16-01	50	PH 3/16-N03	50
PH 06-01	50	PH 5/16-02	50	PH 1/4-N01	50
PH 06-02	50	PH 5/16-03	25	PH 1/4-N02	50
PH 06-03	25	PH 3/8-02	25	PH 5/16-N01	50
PH 08-01	50	PH 3/8-03	25	PH 5/16-N02	50
PH 08-02	50			PH 5/16-N03	25
PH 08-03	25			PH 3/8-N02	25
PH 08-04	25			PH 3/8-N03	25
PH 10-02	25			PH 3/8-N04	20
PH 10-03	25			PH 1/2-N03	25
PH 10-04	20			PH 1/2-N04	20
PH 12-02	25				
PH 12-03	25				
PH 12-04	20				

PHF



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)	Model	Box(Pcs)
PHF 04-M5	50	IPHF 1/4-01	50	PHF 5/32-N01	50
PHF 04-01	50	IPHF 1/4-02	50	PHF 3/16-N01	50
PHF 04-02	50	IPHF 5/16-01	50	PHF 3/16-N02	50
PHF 06-M5	50	IPHF 5/16-02	50	PHF 1/4-N01	50
PHF 06-M6	50	IPHF 5/16-03	50	PHF 1/4-N02	50
PHF 06-01	50	IPHF 3/8-02	25	PHF 1/4-N03	50
PHF 06-02	50	IPHF 3/8-03	25	PHF 5/16-N01	50
PHF 06-03	25			PHF 5/16-N02	50
PHF 08-01	25			PHF 5/16-N03	50
PHF 08-02	50			PHF 5/16-N04	50
PHF 08-03	50			PHF 3/8-N02	25
PHF 08-04	25			PHF 3/8-N03	25
PHF 10-02	25			PHF 3/8-N04	25
PHF 10-03	25			PHF 1/2-N02	20
PHF 10-04	25			PHF 1/2-N03	20
PHF 12-02	25			PHF 1/2-N04	20
PHF 12-03	25				
PHF 12-04	20				



Tube(Metric)-Thread(R)	
Model	Box(Pcs)
PHL 04-01(2)	25
PHL 04-02(2)	25
PHL 06-01(2)	25
PHL 06-02(2)	25
PHL 06-03(2)	25
PHL 08-01(2)	25
PHL 08-02(2)	25
PHL 08-03(2)	25
PHL 08-04(2)	20
PHL 10-02(2)	25
PHL 10-03(2)	25
PHL 10-04(2)	12
PHL 12-02(2)	9
PHL 12-03(2)	9
PHL 12-04(2)	9



Tube(Metric)-Thread(R)	
Model	Box(Pcs)
PHL 04-01(3)	25
PHL 04-02(3)	25
PHL 06-01(3)	25
PHL 06-02(3)	25
PHL 06-03(3)	20
PHL 08-01(3)	25
PHL 08-02(3)	15
PHL 08-03(3)	15
PHL 08-04(3)	12
PHL 10-02(3)	12
PHL 10-03(3)	12
PHL 10-04(3)	12
PHL 12-02(3)	9
PHL 12-03(3)	9
PHL 12-04(3)	9



Tube(Metric)	
Model	Box(Pcs)
PYJ04	100
PYJ 06	50
PYJ 08	50
PYJ 10	25
PYJ 12	25
PWJ 06-04	50
PWJ 08-06	50
PWJ 10-08	25
PWJ 12-10	25

Tube(Inch)	
Model	Box(Pcs)
PYJ 5/32	100
PYJ 3/16	100
PYJ 1/4	50
PYJ 5/16	50
PYJ 3/8	25
PYJ 1/2	20
PWJ 1/4-5/32	50
PWJ 5/16-1/4	50
PWJ 3/8-5/16	25
PWJ 1/2-3/8	25



Tube(Metric)		Tube(Inch)	
Model	Box(Pcs)	Model	Box(Pcs)
PUL 04	100	PUL 5/32	100
PUL 06	100	PUL 3/16	100
PUL 08	50	PUL 1/4	100
PUL 10	50	PUL 5/16	50
PUL 12	25	PUL 3/8	25
PUL 16	20	PUL 1/2	20



Tube(Metric)		Tube(Inch)	
Model	Box(Pcs)	Model	Box(Pcs)
PY 04	100	PY 5/32	100
PY 06	100	PY 3/16	100
PY 08	50	PY 1/4	50
PY 10	25	PY 5/16	50
PY 12	25	PY 3/8	25
PW 06-04	100	PY 1/2	25
PW 08-06	50	PW 3/16-5/32	100
PW 10-08	50	PW 1/4-3/16	50
PW 12-10	25	PW 3/8-5/16	25
		PW 1/2-3/8	25



Tube(Metric)		Tube(Inch)	
Model	Box(Pcs)	Model	Box(Pcs)
PUC 04	100	PUC 5/32	100
PUC 06	100	PUC 3/16	100
PUC 07	50	PUC 1/4	100
PUC 08	50	PUC 5/16	50
PUC 09	50	PUC 3/8	50
PUC 10	50	PUC 1/2	25
PUC 12	25	PG 3/16-5/32	100
PUC 15	25	PG 1/4-3/16	100
PUC 16	25	PG 5/16-1/4	50
PG 6-4	100	PG 3/8-5/16	50
PG 8-6	100	PG 1/2-3/8	25
PG 10-8	50		
PG 12-10	50		
PG 16-12	25		



Tube(Metric)	
Model	Box(Pcs)
PGJ 06-04	100
PGJ 08-04	100
PGJ 08-06	100
PGJ 10-06	50
PGJ 10-08	50
PGJ 12-06	50
PGJ 12-08	50
PGJ 12-10	50



Tube(Metric)	
Model	Box(Pcs)
PKJ 06	25
PKJ 08	25
PKJ 10	20
PKJ 12	15
PKJ 06-04	25
PKJ 08-04	25
PKJ 08-06	25
PKJ 10-06	20
PKJ 10-08	15

Tube(Inch)	
Model	Box(Pcs)
PKJ 5/16	25
PKJ 3/16	25
PKJ 1/4	25
PKJ 5/16	20
PKJ 3/8	15
PKJ 3/16-5/32	25
PKJ 1/4-5/32	25
PKJ 5/16-1/4	25
PKJ 3/8-5/16	20



Tube(Metric)	
Model	Box(Pcs)
PLJ 04	100
PLJ 06	50
PLJ 08	50
PLJ 10	50
PLJ 12	25
PLJ 16	20
PLJ 06-04	50
PLJ 08-06	50
PLJ 10-08	50
PLJ 12-10	25

Tube(Inch)	
Model	Box(Pcs)
PLJ 5/32	100
PLJ 3/16	50
PLJ 1/4	50
PLJ 5/16	50
PLJ 3/8	50
PLJ 1/2	25
PLJ 1/4-5/32	50
PLJ 5/16-1/4	50
PLJ 3/8-1/4	50
PLJ 3/8-5/16	25



Tube(Metric)		Tube(Inch)	
Model	Box(Pcs)	Model	Box(Pcs)
PZA 04	50	PZA 5/32	50
PZA 06	50	PZA 3/16	50
PZA 08	25	PZA 1/4	50
PZA 10	25	PZA 5/16	25
PZA 12	20	PZA 3/8	25
		PZA 1/2	20



Tube(Metric)		Tube(Inch)	
Model	Box(Pcs)	Model	Box(Pcs)
PKG 06-04	25	PKG 3/16-5/32	25
PKG 08-04	25	PKG 1/4-3/16	25
PKG 08-06	25	PKG 5/16-1/4	25
PKG 10-06	20	PKG 3/8-5/16	20
PKG 10-08	20		



Tube(Metric)		Tube(Inch)	
Model	Box(Pcs)	Model	Box(Pcs)
PLM 04	50	PLM 5/32	100
PLM 06	50	PLM 3/16	50
PLM 08	50	PLM 1/4	50
PLM 10	25	PLM 5/16	50
PLM 12	25	PLM 3/8	25
		PLM 1/2	25



Tube(Metric)-Thread(R)		Tube(Inch)-Thread(NPT)	
Model	Box(Pcs)	Model	Box(Pcs)
PMF 04-01	100	PMF 5/32-N01	100
PMF 04-02	100	PMF 3/16-N01	100
PMF 04-03	50	PMF 3/16-N02	100
PMF 06-01	100	PMF 1/4-N01	100
PMF 06-02	100	PMF 1/4-N02	100
PMF 06-03	50	PMF 5/16-N01	50
PMF 08-01	50	PMF 5/16-N02	50
PMF 08-02	50	PMF 5/16-N03	50
PMF 08-03	50	PMF 3/8-N02	50
PMF 08-04	25	PMF 3/8-N03	50
PMF 10-01	50	PMF 1/2-N02	25
PMF 10-02	50	PMF 1/2-N03	25
PMF 10-03	25	PMF 1/2-N04	25
PMF 10-04	25		
PMF 12-01	50		
PMF 12-02	25		
PMF 12-03	25		
PMF 12-04	25		



Tube(Metric)		Tube(Inch)	
Model	Box(Pcs)	Model	Box(Pcs)
PMM 04	100	PMM 5/32	100
PMM 06	100	PMM 3/16	100
PMM 08	50	PMM 1/4	100
PMM 10	25	PMM 5/16	50
PMM 12	25	PMM 3/8	25
		PMM 1/2	25



Tube(Metric)	
Model	Box(Pcs)
PP 04	100
PP 06	100
PP 08	100
PP 10	100
PP 12	100
PP 16	50



Tube(Metric)		Tube(Inch)	
Model	Box(Pcs)	Model	Box(Pcs)
PUT 04	100	PUT 5/32	100
PUT 06	50	PUT 3/16	100
PUT 08	50	PUT 1/4	50
PUT 10	25	PUT 5/16	50
PUT 12	25	PUT 3/8	25
PUT 16	15	PUT 1/2	25
PGT 06-04-06	50	PGT 3/16-5/32-3/16	50
PGT 08-06-08	50	PGT 1/4-3/16-1/4	50
PGT 10-08-10	50	PGT 5/16-1/4-5/16	50
PGT 12-10-12	25	PGT 3/8-5/16-3/8	50
PGT 16-12-16	15	PGT 1/2-3/8-1/2	25

PC-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PC 04-G01	100
PC 04-G02	100
PC 04-G03	100
PC 06-G01	100
PC 06-G02	100
PC 06-G03	100
PC 06-G04	50
PC 08-G01	100
PC 08-G02	100
PC 08-G03	100
PC 08-G04	50
PC 10-G01	100
PC 10-G02	100
PC 10-G03	100
PC 10-G04	50
PC 12-G01	50
PC 12-G02	50
PC 12-G03	50
PC 12-G04	50
PC 16-G03	25
PC 16-G04	25

POC-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
POC 04-G01	100
POC 04-G02	100
POC 04-G03	100
POC 06-G01	100
POC 06-G02	100
POC 06-G03	100
POC 06-G04	50
POC 08-G01	100
POC 08-G02	100
POC 08-G03	100
POC 08-G04	50
POC 10-G01	100
POC 10-G02	100
POC 10-G03	100
POC 10-G04	50
POC 12-G01	50
POC 12-G02	50
POC 12-G03	50
POC 12-G04	50
POC 16-G03	25
POC 16-G04	25

PL-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PL 04-G01	100
PL 04-G02	100
PL 04-G03	100
PL 06-G01	100
PL 06-G02	100
PL 06-G03	50
PL 06-G04	50
PL 08-G01	50
PL 08-G02	50
PL 08-G03	50
PL 08-G04	50
PL 10-G01	50
PL 10-G02	50
PL 10-G03	50
PL 10-G04	25
PL 12-G01	25
PL 12-G02	25
PL 12-G03	25
PL 12-G04	25
PL 16-G03	20
PL 16-G04	20

PST-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PST 04-G01	100
PST 04-G02	100
PST 04-G03	50
PST 06-G01	50
PST 06-G02	50
PST 06-G03	50
PST 06-G04	25
PST 08-G01	50
PST 08-G02	50
PST 08-G03	50
PST 08-G04	25
PST 10-G01	25
PST 10-G02	25
PST 10-G03	25
PST 10-G04	25
PST 12-G01	25
PST 12-G02	25
PST 12-G03	25
PST 12-G04	20

PWT-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PWT 04-G01	100
PWT 04-G02	100
PWT 04-G03	50
PWT 06-G01	50
PWT 06-G02	50
PWT 06-G03	50
PWT 06-G04	25
PWT 08-G01	50
PWT 08-G02	50
PWT 08-G03	50
PWT 08-G04	25
PWT 10-G01	25
PWT 10-G02	25
PWT 10-G03	25
PWT 10-G04	25
PWT 12-G01	25
PWT 12-G02	25
PWT 12-G03	25
PWT 12-G04	25

PKD-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PKD4-G01	25
PKD4-G02	25
PKD4-G03	25
PKD6-G01	25
PKD6-G02	25
PKD6-G03	25
PKD6-G04	25
PKD8-G01	25
PKD8-G02	25
PKD8-G03	25
PKD8-G04	25
PKD10-G01	25
PKD10-G02	20
PKD10-G03	25
PKD10-G04	20

PCF-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PCF 04-G01	100
PCF 04-G02	100
PCF 04-G03	100
PCF 06-G01	100
PCF 06-G02	100
PCF 06-G03	50
PCF 08-G01	100
PCF 08-G02	100
PCF 08-G03	50
PCF 08-G04	50
PCF 10-G01	100
PCF 10-G02	100
PCF 10-G03	50
PCF 10-G04	50
PCF 12-G02	50
PCF 12-G03	50
PCF 12-G04	25
PCF 16-G03	25
PCF 16-G04	25

PLL-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PLL 04-G01	50
PLL 04-G02	50
PLL 04-G03	50
PLL 06-G01	50
PLL 06-G02	50
PLL 06-G03	50
PLL 06-G04	25
PLL 08-G01	50
PLL 08-G02	50
PLL 08-G03	25
PLL 08-G04	25
PLL 10-G01	25
PLL 10-G02	25
PLL 10-G03	25
PLL 10-G04	25
PLL 12-G01	25
PLL 12-G02	25
PLL 12-G03	25
PLL 12-G04	25
PLL 16-G03	12
PLL 16-G04	12

PT-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PT 04-G01	100
PT 04-G02	100
PT 04-G03	50
PT 06-G01	50
PT 06-G02	50
PT 06-G03	50
PT 06-G04	25
PT 08-G01	50
PT 08-G02	50
PT 08-G03	50
PT 08-G04	25
PT 10-G01	25
PT 10-G02	25
PT 10-G03	25
PT 10-G04	25
PT 12-G01	25
PT 12-G02	25
PT 12-G03	25
PT 12-G04	20
PT 16-G03	12
PT 16-G04	12

PH-G



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PH4-G01	50
PH4-G02	50
PH6-G01	50
PH6-G02	50
PH6-G03	25
PH6-G04	25
PH8-G01	25
PH8-G02	50
PH8-G03	25
PH8-G04	25
PH10-G01	25
PH10-G02	25
PH10-G03	25
PH10-G04	20
PH12-G02	25
PH12-G03	25
PH12-G04	20

PHF-G



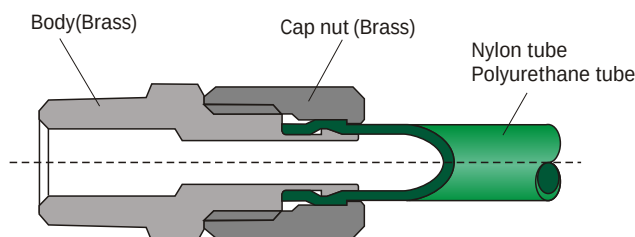
Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PHF4-G01	50
PHF4-G02	50
PHF6-G01	50
PHF6-G02	50
PHF6-G03	25
PHF6-G04	25
PHF8-G01	25
PHF8-G02	50
PHF8-G03	50
PHF8-G04	25
PHF10-G01	25
PHF10-G02	25
PHF10-G03	25
PHF10-G04	25
PHF12-G02	25
PHF12-G03	25
PHF12-G04	20

PHL-G(2)



Tube(Metric)-Thread(G)	
Model	Box(Pcs)
PHL4-G01(2)	25
PHL6-G01(2)	25
PHL6-G02(2)	25
PHL6-G03(2)	25
PHL6-G04(2)	20
PHL8-G01(2)	25
PHL8-G02(2)	25
PHL8-G03(2)	25
PHL8-G04(2)	20
PHL10-G01(2)	25
PHL10-G02(2)	25
PHL10-G03(2)	25
PHL10-G04(2)	12
PHL12-G02(2)	9
PHL12-G03(2)	9

Compact One-touch Fittings

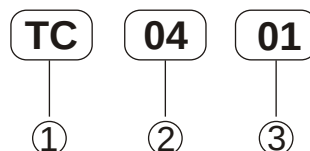


Features

The mini fittings have the small installation space;
The mini fittings are used in nylon tube extensively,
and are able to bear high pressure.

Specifications	
Fluid	Air (No other type of gas or liquid)
Operating pressure	0~150Psi 0~15Kgf/cm ² (0~990kPa)
Negative pressure	-29.5in Hg -750mmHg (10Torr)
Operating temperature	32~140°F 0~60°C
Tube material	Polyurethane

Product Code



① Model

Metric size		
Code	TC	TL
Type	Straight	Elbow

② Tube outer Dia (øD)

Metric size		
Code	04	06
Dia .	ø4×ø2.5	ø6×ø4

③ Thread type

Thread size		
Code	M5	01
Size	M5	R1/8



Tube (Metric)-Thread (R)	
Model (øD-T)	Box (Pcs)
TC 04-M5	100
TC 04-01	100
TC 06-M6	100
TC 06-01	100



Tube (Metric)-Thread (R)	
Model (øD-T)	Box (Pcs)
TL 04-M5	100
TL 04-01	100
TL 06-M6	100
TL 06-01	100



Coupler/Silencers/Air Gun



Model	20PP	30PP	40PP
Box (Pcs)	100	100	50



Model	20SP	30SP	40SP
Box (Pcs)	25	25	25



Model	20PH	30PH	40PH
Box (Pcs)	100	100	50



Model	20SH	30SH	40SH
Box (Pcs)	25	25	25



Model	20PM	30PM	40PM
Box (Pcs)	100	100	50



Model	20SM	30SM	40SM
Box (Pcs)	25	25	25



Model	20PF	30PF	40PF
Box (Pcs)	100	100	50



Model	20SF	30SF	40SF
Box (Pcs)	25	25	25



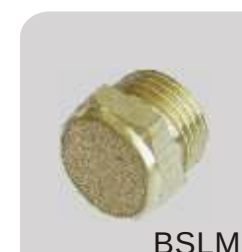
Brass silencer	
Model	Box (Pcs)
BSL -M5	100
BSL -01	100
BSL -02	100
BSL -03	50
BSL -04	50
BSL -06	25
BSL -10	25
BSL -12	15
BSL -14	15
BSL -20	10



Brass silencer	
Model	Box (Pcs)
SD -01	100
SD -02	100
SD -03	50
SD -04	50
SD -06	25
SD -10	10



Controlling silencer	
Model	Box (Pcs)
BESL -01	100
BESL -02	100
BESL -03	50
BESL -04	50



Mini silencer	
Model	Box (Pcs)
BSLM -01	100
BSLM -02	100
BSLM -03	100
BSLM -04	50
BSLM -06	50
BSLM -10	25



Plastical silencer	
Model	Box (Pcs)
PSL -01	100
PSL -02	100
PSL -03	50
PSL -04	50



TUBE CUT - *
Colour



AG - *
Colour

Brass Fittings

Double female sleeve

Style	Model	
	Thread(T1)	Thread(T2)
BA-01A	1/8	
BA-01A	1/4	
BA-01A	3/8	
BA-01A	1/2	
BA-02A01A	1/4	1/8
BA-03A02A	3/8	1/4

Nipple double male adaptor

Style	Model	
	Thread(T1)	Thread(T2)
BC-01T01T	1/8	1/8
BC-01T02T	1/8	1/4
BC-01T03T	1/8	3/8
BC-02T02T	1/4	1/4
BC-02T03T	1/4	3/8
BC-02T04T	1/4	1/2
BC-03T03T	3/8	3/8
BC-03T04T	3/8	1/2
BC-03T06T	3/8	3/4
BC-04T04T	1/2	1/2
BC-04T06T	1/2	3/4
BC-06T06T	3/4	3/4

Hose nut

Style	Model	
	Thread(T1)	Thread(T2)
BD-01T02T	1/8	1/4
BD-01T03T	1/8	3/8
BD-01T04T	1/8	1/2
BD-02T03T	1/4	3/8
BD-02T04T	1/4	1/2
BD-02T06T	1/4	3/4
BD-03T04T	3/8	1/2
BD-03T06T	3/8	3/4
BD-04T06T	1/2	3/4

Cross hose connector

Style	Model
BH-003C	3/16
BH-02AC	1/4
BH-02BC	5/16
BH-03AC	3/8
BH-04AC	1/2

Hex plug

Style	Model
BZ-01A	1/8
BZ-02A	1/4
BZ-03A	3/8
BZ-04A	1/2
BZ-06A	3/4
BZ-M5A	M5

Male/ female adaptor

Style	Model	
	Thread(T1)	Thread(T2)
BG-01T01T	1/8	1/8
BG-01T02T	1/8	1/4
BG-02T01T	1/4	1/8
BG-02T02T	1/4	1/4
BG-02T03T	1/4	3/8
BG-03T01T	3/8	1/8
BG-03T02T	3/8	1/4
BG-03T03T	3/8	3/8
BG-03T04T	3/8	1/2
BG-04T02T	1/2	1/4
BG-04T03T	1/2	3/8
BG-04T04T	1/2	1/2

Equal Y hose connector

Style	Model	
	Thread(T1)	Thread(T2)
CL-0101	1/8	1/8
CL-0102	1/8	1/4
CL-0202	1/4	1/4
CL-0203	1/4	3/8
CL-0204	1/4	1/2
CL-0303	3/8	3/8
CL-0304	3/8	1/2
CL-0404	1/2	1/2

Flare nut

Style	Model
CA-C001	1/4
CA-C002	5/16
CA-C003	3/8
CA-C004	1/2
CA-C005	5/8
CA-C006	3/4

Male stud flare connector

Style	Model	
	Thread(T1)	Thread(T2)
CA-C09-1	1/8	1/4
CA-C09-2	1/4	1/4
CA-C09-3	3/8	1/4
CA-C09-4	1/2	1/4
CA-C010-1	1/8	5/16
CA-C010-2	1/4	5/16
CA-C010-3	3/8	5/16
CA-C010-4	1/2	5/16
CA-C011-2	1/4	3/8
CA-C011-3	3/8	3/8
CA-C011-4	1/2	3/8
CA-C012-2	1/4	1/2
CA-C012-3	3/8	1/2
CA-C012-4	1/2	1/2

Brass Fittings

Double flare connector

Style	Model
CA-C017	1/8
CA-C018	1/4
CA-C019	5/16
CA-C020	3/8
CA-C021	1/2

Male stud 90° Elbow flare connector

Style	Model	
	Thread(T1)	Thread(T2)
CA-C013-1	1/8	1/4
CA-C013-2	1/4	1/4
CA-C013-3	3/8	1/4
CA-C013-4	1/2	1/4
CA-C014-1	1/8	5/16
CA-C014-2	1/4	5/16
CA-C014-3	3/8	5/16
CA-C014-4	1/2	5/16
CA-C015-2	1/4	3/8
CA-C015-3	3/8	3/8
CA-C015-4	1/2	3/8
CA-C016-2	1/4	1/2
CA-C016-3	3/8	1/2
CA-C016-4	1/2	1/2

90° Elbow double flare connector

Style	Model
CA-C022	1/8
CA-C023	1/4
CA-C024	3/8
CA-C025	1/2

Equal tee flare connector

Style	Model
CA-C026	1/4
CA-C027	5/16
CA-C028	3/8
CA-C029	1/2
CA-C030	5/8
CA-C031	3/4

Branch tee flare connector

Style	Model	
	Thread(T1)	Thread(T2)
CA-C032-1	1/4	1/8
CA-C032-2	1/4	1/4
CA-C032-3	1/4	3/8
CA-C032-4	1/4	1/2
CA-C033-2	5/16	1/4
CA-C033-3	5/16	3/8
CA-C033-4	5/16	1/2
CA-C034-2	3/8	1/4
CA-C034-3	3/8	3/8
CA-C034-4	3/8	1/2

Olive

Style	Model
CA-C038	1/8
CA-MC038-2	4m/m
CA-C039	3/16
CA-C039-5	5m/m
CA-C039-6	6m/m
CA-C040	1/4
CA-C041	5/16
CA-MC042	3/8
CA-MC042-10	10m/m
CA-MC043	1/2
CA-MC043-12	12m/m

BUCM

Style	Model
C050	1/4
C051	5/16
C052	3/8
C052-1	10mm
C053	1/2
C053-1	12mm
C053-4	5/8

BULM

Style	Model
C055	1/4
C056	5/16
C057	3/8
C057-1	10mm
C058	1/2
C058-1	12mm

BUTM

Style	Model
C060	1/4
C061	5/16
C062	3/8
C062-1	10mm
C063	1/2
C063-1	12mm

BCMF

Style	Model	
	Thread(T1)	Thread(T2)
C070-1	1/8	1/4
C070	1/4	1/4
C071-1	1/4	5/16
C071	1/4	3/8
C072-1	3/8	1/4
C072-2	3/8	5/16
C072	3/8	3/8
C073	1/2	1/2

Brass Fittings

● BCM

Style	Model	
	Thread(T1)	Hose(B)
C064	1/8	1/4
C065	1/4	1/4
C066	1/4	5/16
C066-1	1/4	3/8
C066-2	1/4	10
C067-0	1/4	12
C067-1	1/4	1/2
C067-2	3/8	1/4
C067-3	1/8	5/16
C067	3/8	3/8
C067-4	3/8	10
C068	3/8	1/2
C068-0	3/8	12
C068-1	1/2	1/4
C068-2	1/2	5/16
C068-3	1/2	3/8
C068-4	1/2	1/2
C068-5	1/2	10
C068-6	1/2	1/2
C069	3/4	3/4



● BLM

Style	Model	
	Thread(T1)	Hose(B)
C079	1/8	1/4
C080	1/4	5/16
C081	3/8	3/8

● BTB/BTD

Style	Model	
	Thread(T1)	Hose
A037	1/8	1/4
A037-1	1/8	5/16
A038	1/4	1/4
A039	1/4	5/16
A040	1/4	3/8
A040-0	1/4	10
A041-1	3/8	1/4
A041-2	3/8	5/16
A041	3/8	3/8
A041-0	3/8	10
A042-1	3/8	1/2
A042-2	1/2	3/8
A042	1/2	1/2



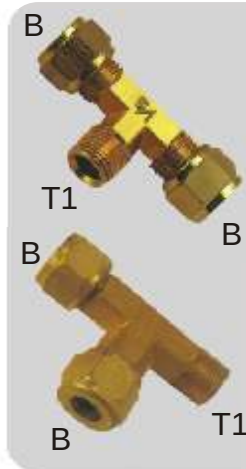
● BLM

Style	Model	
	Thread(T1)	Hose(B)
C075-1	1/8	1/4
C075	1/4	1/4
C076	1/4	5/16
C077-1	1/4	3/8
C077-0	1/4	10
C077-2	1/4	1/2
C077-3	1/4	1/4
C077-4	3/8	5/16
C077	1/8	3/8
C077-5	3/8	10
C078-1	3/8	1/2
C078-0	3/8	12
C078-2	1/2	1/4
C078-3	1/2	5/16
C078-4	1/2	3/8
C078-5	1/2	1/2
C078-6	1/2	10
C078-7	1/2	1/2
C078-8	3/4	3/4



● BTM/BSTM

Style	Model	
	Thread(T1)	Hose(B)
C082	1/8	1/4
C082-1	1/8	3/8
C083	1/4	5/16
C083-1	1/4	1/4
C084-1	1/4	3/8
C084-0	1/4	10
C084-2	1/4	1/2
C084-6	1/4	12
C084-3	3/8	1/4
C084-4	3/8	5/16
C084-5	3/8	3/8
C084	3/8	12
C084-7	3/8	1/2
C085-1	3/8	12
C085-2	1/2	1/4
C085-3	1/2	5/16
C085-4	1/2	3/8
C085-5	1/2	1/2
C085-6	1/2	10
C085-7	1/2	1/2



● BUTB

Style	Model
CB-A009	1/4
CB-A010	5/16
CB-A011	3/8
CB-A011-1	10
CB-A012	1/2
CB-A012-1	12



● BCB

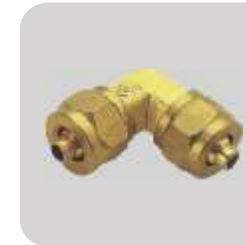
Style	Model	
	Thread(T1)	Hose
A013	1/8	1/4
A014-1	1/8	5/16
A014-2	1/8	3/8
A014-3	1/8	10
A014	1/4	1/4
A015	1/4	5/16
A016	1/4	3/8
A016-0	1/4	10
A016-1	1/4	1/2
A016-2	1/2	14
A017-1	3/8	1/4
A017-2	3/8	5/16
A017	3/8	3/8
A017-3	3/8	10
A018	3/8	1/2
A018-1	3/8	12
A019-1	1/2	1/4
A019-2	1/2	5/16
A019-3	1/2	3/8
A019	1/2	10
A019-4	1/2	1/2
A019-5	1/2	1/2
A019-6	1/2	5/8



Brass Fittings

● BULB

Style	Model
A005	1/4
A006	5/16
A007	3/8
A007-1	10
A008	1/2
A008-1	12



● BCBF

Style	Model	
	Thread(T1)	Hose
A020	1/8	1/4
A020-1	1/8	5/16
A021	1/4	1/4
A022	1/4	5/16
A023	1/4	3/8
A024	3/8	3/8
A025	3/8	1/2



● BLB

Style	Model	
	Thread(T1)	Hose
A031	1/8	1/4
A032-1	1/8	5/16
A032-2	1/8	3/8
A032-3	1/8	10
A032	1/4	1/4
A033	1/4	5/16
A034	1/4	3/8
A034-0	1/4	12
A034-1	1/4	1/2
A034-2	1/4	10
A035-1	3/8	1/4
A035-2	3/8	5/16
A035	3/8	3/8
A035-3	3/8	10
A036	3/8	12
A036-1	3/8	1/2
A036-2	1/2	1/4
A036-3	1/2	5/16
A036-4	1/2	3/8
A036-5	1/2	10
A036	1/2	1/2
A036-6	1/2	1/2



● BLBF

Style	Model	
	Thread(T1)	Hose
A026	1/8	1/4
A026-1	1/8	5/16
A027	1/4	1/4
A028	1/4	5/16
A029	1/4	3/8
A030	3/8	1/2



● BUCB

Style	Model
A001	1/4
A002	5/16
A003	3/8
A003-1	10
A004	1/2
A004-1	12



● 90° Elbow double male

Style	Model	
	Thread(T1)	Thread(T2)
CL-0101-L	1/8	1/8
CL-0102-L	1/8	1/4
CL-0202-L	1/4	1/4
CL-0203-L	1/4	3/8
CL-0204-L	1/4	1/2
CL-0304-L	3/8	1/2
CL-0404-L	1/2	1/2



● 90° Elbow male/ female

Style	Model
CL-FM0101	1/8
CL-FM0202	1/4
CL-FM0303	3/8
CL-FM0404	1/2



● 90° Elbow male stud hose connector

Style	Model	
	Thread(T1)	Hose
Y-N050102	1/8	1/4
Y-N05012B	1/8	5/16
Y-N050201	1/4	1/8
Y-N050202	1/4	1/4
Y-N050203	1/4	3/8
Y-N050224	1/4	1/2
Y-N05022B	1/4	5/16
Y-N050302	3/8	1/4
Y-N050304	3/8	1/2
Y-N05032B	3/8	5/16
Y-N050404	1/2	1/2



Brass Fittings

90° Elbow duple female



Style	Model	
	Thread(T1)	Thread(T2)
CL-F0101	1/8	1/8
CL-F0202	1/4	1/4
CL-F0303	3/8	3/8
CL-F0404	1/2	1/2



Style	Model
P-62	1/4X1/4
P-63	1/4X5/16
P-64	1/4X3/8

Male stud equal tee



Style	Model
CET-01	1/8
CET-02	1/4
CET-03	3/8
CET-04	1/2



Style	Model
Z-01	1/4X8mm
Z-02	1/4X10mm
Z-03	1/4X12mm
Z-04	3/8X10mm
Z-05	3/8X12mm



Style	Model
P-30	3/16
P-30-1	1/4
P-31	5/16
P-32	3/8
P-33	1/2

Male stud equal Y



Style	Model
BY-02T	1/8
BY-02T	3/8

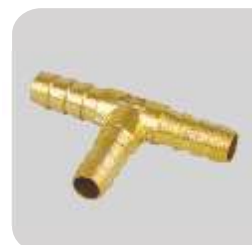


Style	Model
P-34-1	3/16
P-34-2	1/4
P-34	5/16
P-35	3/8
P-36	1/2

Female stud equal tee



Style	Model
CEF-01	1/8
CEF-02	1/4
CEF-03	3/8
CEF-04	1/2



Style	Model
P-37-1A	3/16
P-37-1	1/4
P-37	5/16
P-38	3/8
P-38-1	1/2

Memo