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SOLENOID VALVES

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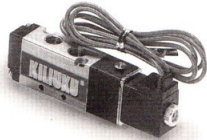
*P*NEUMATIC CONTROL VALVES
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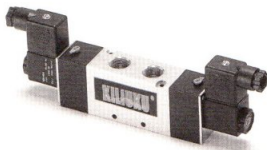
PNEUMATIC 2/2, 3/2, 5/2, 5/3 WAY SOLENOID VALVES



SDF 5/2, 5/3, WAY SOLENOID VALVE G1/8"

SDF Compact valve are perfect for application where space savings are a must! Lead wire comes stripped and preattached to the coil (DIN coil are available as optional).

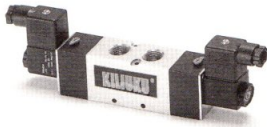
- Optional MF manifold are available -----Page 16,28.
- See -----Page 2 for description.
- See -----Page 19 for dimensional data.



SDE 5/2, 5/3 WAY SOLENOID VALVE G1/8"~ G1/2"

SDE valve has identical design as SDF valves. To install at a space restricted area, it requires manifolds in number of station configuration for easier assembly. SDE'S body is Hard Anodising coated surface creating a hardness & scratch resistibility, and a durable valve,using life.

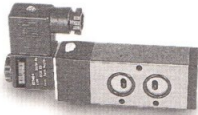
- Optional BF manifold are available-----Page 16,28.
- See description on -----Page 3 & dimensional data on -----Page 20.



SDA/B/C/G/S/R/M/L 2/2,3/2, 5/2, 5/3 WAY SOLENOID VALVE G1/8"~G1/2"

SDA/B/C/G/S/R/M/L valve are widely suitable for various applications/locations requirements. 2/2,3/2 way direct & pilot types offer large & small air flow rates.

- 5/2, 5/3 way standard type are available for port size 1/4",3/8",1/2".
- Optional MF manifold-----Page 16,28.
- See description on -----Page 4,5,6, 8,9,10 & dimensional data on -----Page 21~26.



SDY, MTY 5/2 WAY SOLENOID & PNEUMATIC CONTROL VALVE G1/4",3/8"

Suitable for small bore, single acting cylinder and electric of air Interface application.

- See optional EX-proof coil.
- See description on -----Page 7 & dimensional data on -----Page 24.



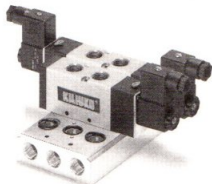
MTG/A/B/C 3/2, 5/2, 5/3 WAY DIRECTIONAL CONTROL VALVE-PNEUMATIC OPERATED G1/8",G1/4",G3/8",G1/2"

These valves are basically used to control double acting cylinder.

When one outlet in plugged, the valves function can be changed open or close.

They can also be used to control single acting cylinder. Suitable for SD solenoid valves.

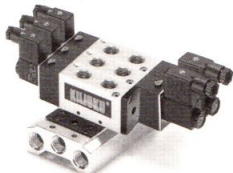
- Optional MF manifolds-----Page 16,28.
- See description on -----Page 11,12,13,14 & dimensional data on -----Page 26, 27.



MF 5/2, 5/3 WAY MANIFOLDS

Suitable SDF, SDA/B/C solenoid valves. O-ring and screw for interconnection are included in delivery.

- See description information on -----Page 16,28.



BF 5/2,5/3 WAY MANIFOLDS

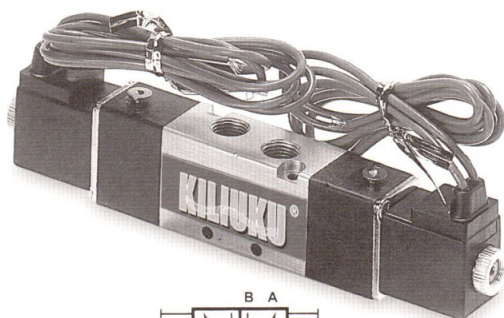
Suitable for SDE solenoid valves

- See description on -----Page 16,28.



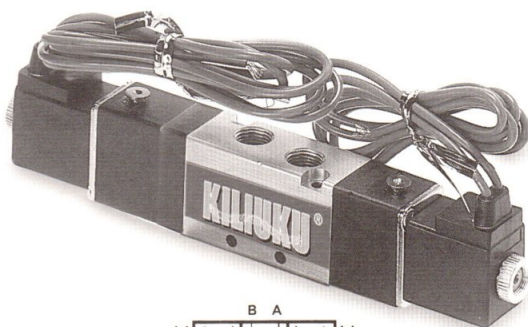
SDF-5201-S Single coil solenoid valve 1/8"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	11mm ²
PORT SIZE	Input & Output=G1/8", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
COIL.	Lead wire or optional DIN
WEIGHT	125g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V



SDF-5201-D Double coils solenoid valve 1/8"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	11mm ²
PORT SIZE	Input & Output=G1/8", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
COIL.	Lead wire or optional DIN
WEIGHT	195g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V



SDF-5301-D Double coils solenoid valve 1/8"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	9mm ²
PORT SIZE	Input & Output=G1/8", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~7kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
COIL.	Lead wire or optional DIN
WEIGHT	215g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V

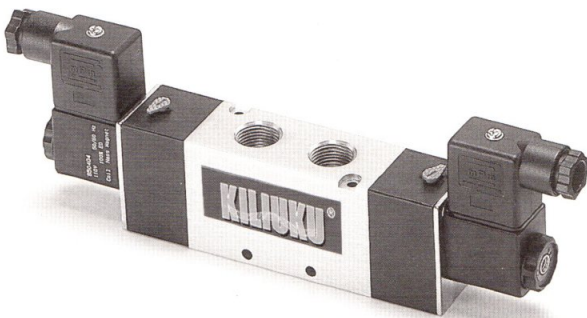
SDE series

5/2, 5/3 way(22mm width)
PILOT SOLENOID VALVES G1/4"



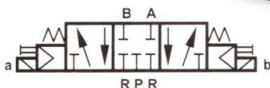
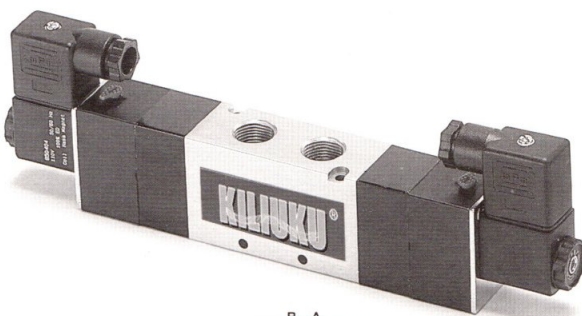
SDE-5202-S Single coil solenoid valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/4", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	235g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



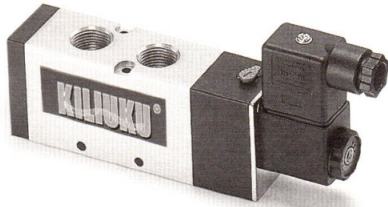
SDE-5202-D Double coils solenoid valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/4", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	335g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



SDE-5302-D Double coils solenoid valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/4", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	445g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

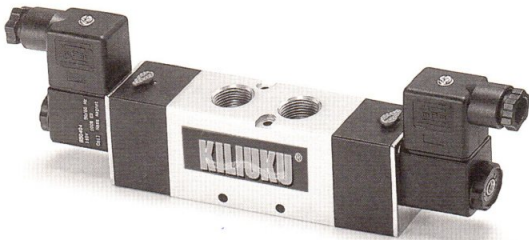


SDA-5202-S Single coil solenoid valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/4", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	270g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

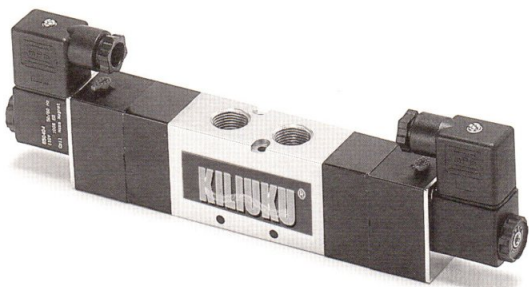
SDA-5202-D Double coils solenoid valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/4", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	355g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



SDA-5302-D Double coils solenoid valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/4", Exhaust=G1/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	475g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



SDB series

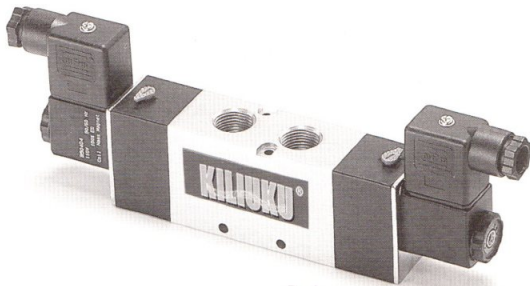
5/2, 5/3 way(30mm width)
PILOT SOLENOID VALVES G3/8"

SDB-5203-S Single coil solenoid valve 3/8"



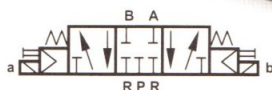
MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	35mm ²
PORT SIZE	Input & Output=G3/8", Exhaust=G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	430g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

SDB-5203-D Double coils solenoid valve 3/8"



MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	35mm ²
PORT SIZE	Input & Output=G3/8", Exhaust=G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	525g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

SDB-5303-D Double coils solenoid valve 3/8"



MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	32mm ²
PORT SIZE	Input & Output=G3/8", Exhaust=G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~7kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	715g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



SDC-5204-S Single coil solenoid valve 1/2"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	70mm ²
PORT SIZE	Input & Output=G1/2", Exhaust=G1/2"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	655g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

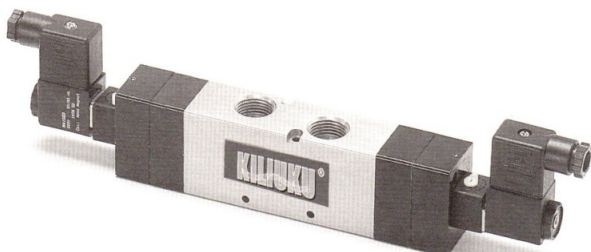
SDC-5204-D Double coils solenoid valve 1/2"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	70mm ²
PORT SIZE	Input & Output=G1/2", Exhaust=G1/2"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	770g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



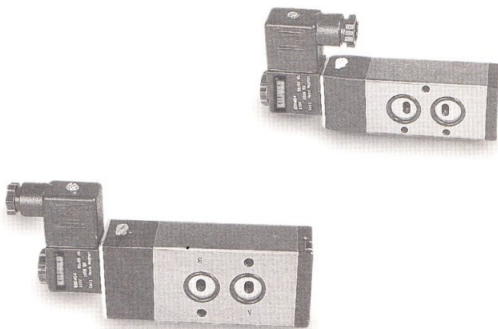
SDC-5304-D Double coils solenoid valve 1/2"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	54mm ²
PORT SIZE	Input & Output=G1/2", Exhaust=G1/2"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	1045g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



SDY series

5/2 way PILOT SOLENOID VALVES G1/4", G3/8"

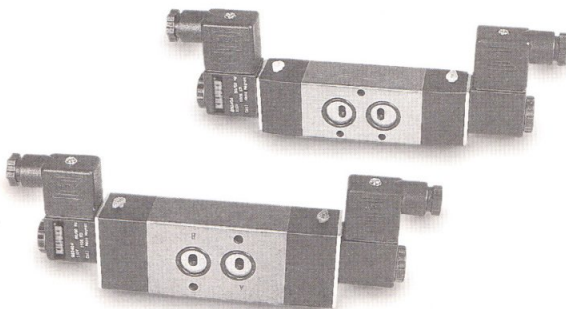


SDY-5202-S, SDY-5203-S Single coil solenoid valve 1/4", 3/8"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ² (02)/ 35 mm ² (03)
PORT SIZE	Input & Output=G1/4",G3/8",Exhaust=G1/4",G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	305g/450g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

SDY-5202-D, SDY-5203-D Double coils solenoid valve 1/4", 3/8"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ² (02)/ 35 mm ² (03)
PORT SIZE	Input & Output=G1/4",G3/8", Exhaust=G1/4",G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	395g/545g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



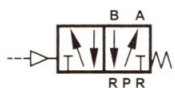
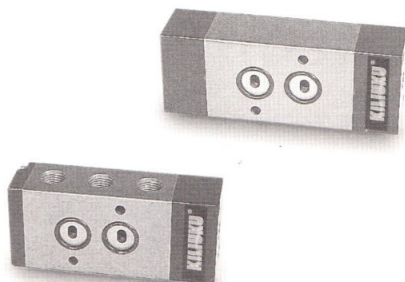
MTY series

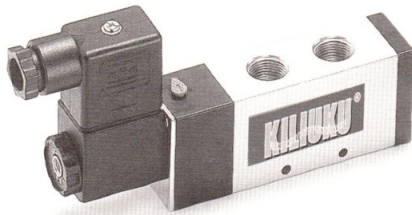
5/2 way PNEUMATIC OPERATED VALVES G1/4", G3/8"

MTY-5202-S, MTY-5203-S Single end pneumatic operated valve 1/4", 3/8"

MTY-5202-D, MTY-5203-D Double ends pneumatic operated valve 1/4", 3/8"

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ² (02)/ 35 mm ² (03)
PORT SIZE	Input & Output=G1/4",G3/8", Exhaust=G1/4",G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	02-S: 105g, 02-D: 115g, 03-S: 390g, 03-D: 420g





SDG-3202-SO Single coil solenoid valve 1/4" N/O

SDG-3202-SC Single coil solenoid valve 1/4" N/C

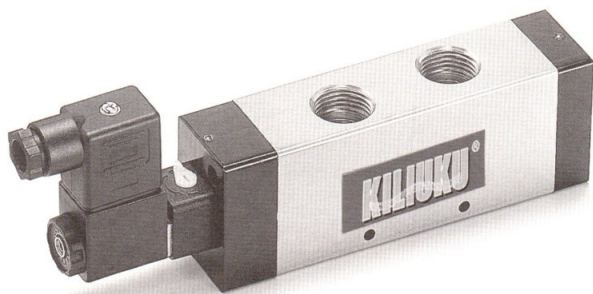
MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/4", Exhaust=G1/4"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	280g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



SDG-3203-SO Single coil solenoid valve 3/8" N/O

SDG-3203-SC Single coil solenoid valve 3/8" N/C

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	35mm ²
PORT SIZE	Input & Output=G3/8", Exhaust=G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	450g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



SDG-3204-SO Single coil solenoid valve 1/2" N/O

SDG-3204-SC Single coil solenoid valve 1/2" N/C

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	70mm ²
PORT SIZE	Input & Output=G1/2", Exhaust=G1/2"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	685g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

SDS series

3/2 way DIRECT SOLENOID VALVES G1/8", G1/4"



SDS-3201-SC Single coil solenoid valve 1/8" N/C

SDS-3202-SC Single coil solenoid valve 1/4" N/C

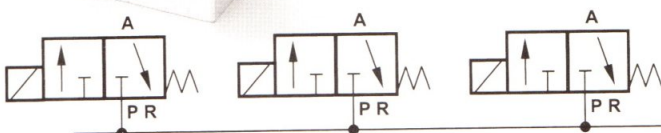
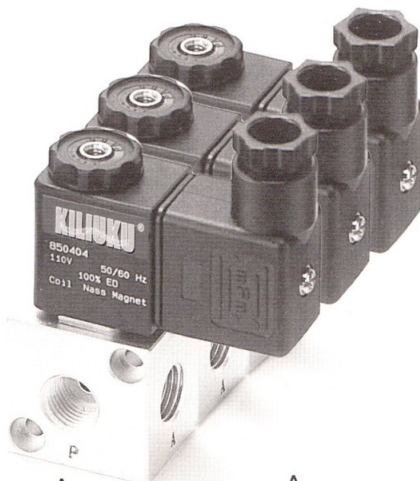
MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	1.5mm ²
PORT SIZE	Input & Output=G1/8", G1/4" (BSP or NPT), Exhaust=M5
LUBRICATION	None required
OPERATING PRESSURE	0~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65 (DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	155g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V



SDS-3201-SO Single solenoid valve 1/8" N/O

SDS-3202-SO Single solenoid valve 1/4" N/O

MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	1.5mm ²
PORT SIZE	Input & Output=G1/8", G1/4, Exhaust=G1/8", G1/4" (BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	0~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65 (DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	180g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

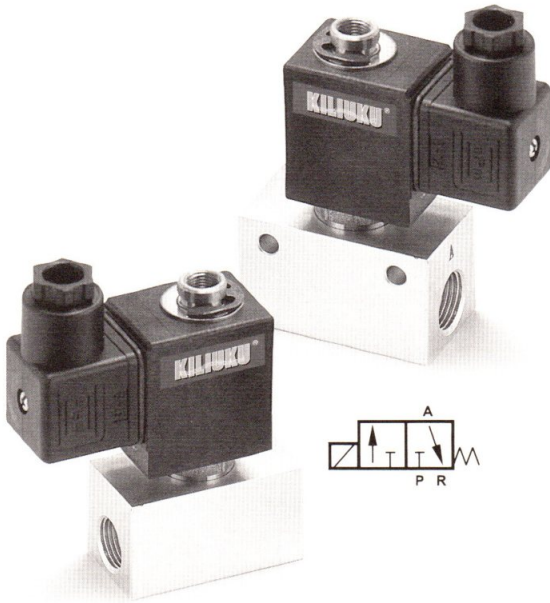


3/2 way DIRECT SOLENOID VALVES ASSEMBLY

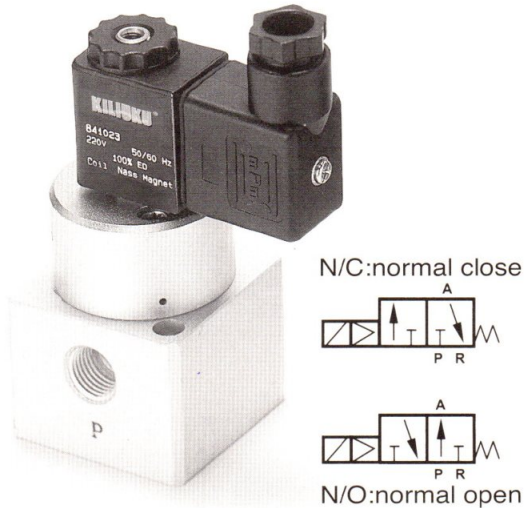
3/2way solenoid valves are available as single station units, or assembled as a stack. To stack these valves should applied with tie-rod & nuts, O-ring and plug.

Remark:

To stack these valves, tie-rod mounting kits are required. Need to order kits separately. Standard valve comes with one plug.



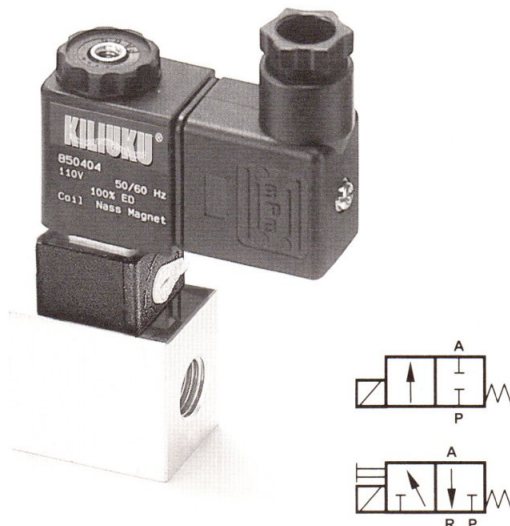
SDR-3202-SC	Single coil solenoid valve 1/4" N/C
SDR-3203-SC	Single coil solenoid valve 3/8" N/C
MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	3.8mm ² /4.2mm ²
PORT SIZE	Input & Output=G1/4", G3/8", Exhaust=G1/8"(BSP)
LUBRICATION	None required
OPERATING PRESSURE	0~6kgf/cm ²
MAX. PRESSURE	7.0kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	270g / 370g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V



SDM-3202-SC	Single coil solenoid valve 1/4" N/C
SDM-3203-SC	Single coil solenoid valve 3/8" N/C
SDM-3202-SO	Single coil solenoid valve 1/4" N/O
SDM-3203-SO	Single coil solenoid valve 3/8" N/O
MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	12mm ²
PORT SIZE	Input & Output=G1/4",G3/8",Exhaust=G1/4",G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~7kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	365g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

SDL series

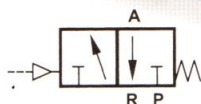
2/2, 3/2 way SDL · DIRECTION VALVES G1/8", G1/4"



SDL-2201-SC	2/2 way single coil solenoid valve 1/8" N/C
SDL-2202-SC	2/2 way single coil solenoid valve 1/4" N/C
SDL-3201-SC	3/2 way single coil solenoid valve 1/8" N/C
SDL-3202-SC	3/2 way single coil solenoid valve 1/4" N/C
MEDIUM	Compressed air (40 micron element for filters)
OPERATING TYPE	Inner spring return
SECTIONAL AREA	2.5mm ²
PORT SIZE	Input & Output=G1/8,G1/4", Exhaust=G1/8",G1/4(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	0~7kgf/cm ²
MAX. PRESSURE	7.5kgf/cm ²
OPERATING TEMPERATURE	-10°C-50°C
DUTY CYCLE	100%
VOLTAGE RANGE	DC ± 10%, AC ± 10%
INSULATION CLASS	F
DEG. OF PROTECTION	IP65(DIN40050)
COIL	Water-resisted, Dust-resisted
WEIGHT	150g
STANDARD VOLTAGE	DC12V, DC24V, AC220V, AC110V, AC380V

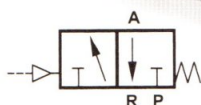
MTG series

3/2 way
PNEUMATIC OPERATED VALVES
G1/8", G1/4", G3/8", G1/2"



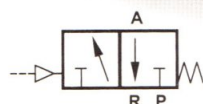
MTG-3201-S Single end pneumatic operated valve 1/8"
MTG-3202-S Single end pneumatic operated valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/8",G1/4" (BSP or NPT)
PORT SIZE	Exhaust=G1/8",G1/4"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	180g



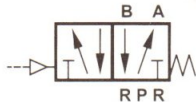
MTG-3203-S Single end pneumatic operated valve 3/8"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	35mm ²
PORT SIZE	Input & Output=G3/8"(BSP or NPT)
PORT SIZE	Exhaust=G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	375g



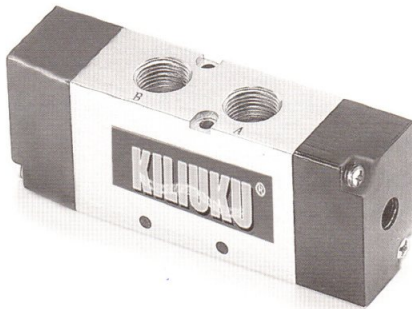
MTG-3204-S Single end pneumatic operated valve 1/2"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	70mm ²
PORT SIZE	Input & Output=G1/2"(BSP or NPT)
PORT SIZE	Exhaust=G1/2"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	595g



MTA-5201-S Single end pneumatic operated valve 1/8"
MTA-5202-S Single end pneumatic operated valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/8", G1/4" (BSP or NPT)
PORT SIZE	Exhaust=G1/8", G1/4" (BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	170g



MTA-5201-D Double ends pneumatic operated valve 1/8"
MTA-5202-D Double ends pneumatic operated valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/8", G1/4" (BSP or NPT)
PORT SIZE	Exhaust=G1/8" (BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	1.5~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	180g

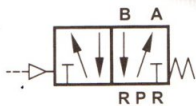


MTA-5301-D Double ends pneumatic operated valve 1/8"
MTA-5302-D Double ends pneumatic operated valve 1/4"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	18mm ²
PORT SIZE	Input & Output=G1/8", G1/4" (BSP or NPT)
PORT SIZE	Exhaust=G1/8" (BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~7kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	310g

MTB series

5/2, 5/3 way
PNEUMATIC OPERATED VALVES G3/8"



MTB-5203-S Single end pneumatic operated valve 3/8"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	35mm ²
PORT SIZE	Input & Output=G3/8" (BSP or NPT)
PORT SIZE	Exhaust=G3/8" (BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	370g



MTB-5203-D Double ends pneumatic operated valve 3/8"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	35mm ²
PORT SIZE	Input & Output=G3/8"(BSP or NPT)
PORT SIZE	Exhaust=G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	400g



MTB-5303-D Double ends pneumatic operated valve 3/8"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	32mm ²
PORT SIZE	Input & Output=G3/8"(BSP or NPT)
PORT SIZE	Exhaust=G3/8"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~7kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	585g



MTC-5204-S Single pneumatic operated valve 1/2"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	70mm ²
PORT SIZE	Input & Output=G1/2"(BSP or NPT)
PORT SIZE	Exhaust=G1/2"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	565g



MTC-5204-D Double ends pneumatic operated valve 1/2"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	70mm ²
PORT SIZE	Input & Output=G1/2"(BSP or NPT)
PORT SIZE	Exhaust=G1/2"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~8kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	605g

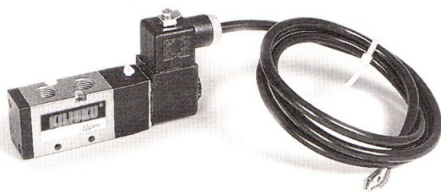
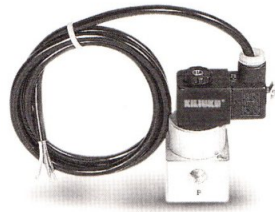


MTC-5304-D Double ends pneumatically operated valve 1/2"

MEDIUM	Compressed air (40 micron element for filters)
SECTIONAL AREA	54mm ²
PORT SIZE	Input & Output=G1/2"(BSP or NPT)
PORT SIZE	Exhaust=G1/2"(BSP or NPT)
LUBRICATION	None required
OPERATING PRESSURE	2~7kgf/cm ²
MAX. PRESSURE	9.99kgf/cm ²
AMBIENT TEMPERATURE	-10°C-80°C
WEIGHT	865g

EX-PROOF

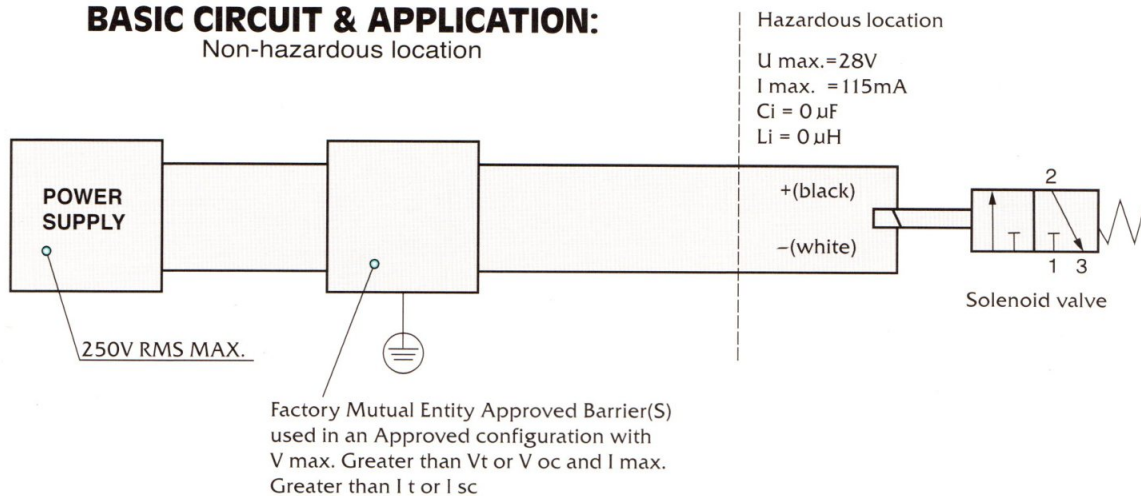
3/2, 5/2 way
EXPLOSION PROOF SOLENOID
VALVES



NOTE:

- In the field of Ex-proof coil, it is designed for two different working fluids which the one is Air-State fluid and the other is Liquid-State fluid.
- The main function for the Ex-proof included pressurization & the elimination of the environment pollution factor and the temperature change of the fluid.
- For the using symbol to show the suitable range , there are JIS(G4, G5, G6) , and CENECEC (T4, T5, T6), both of them represent the same.
- To order Ex-proof valve, please add "E" at the end of each valve model number.
- EEx ia IIc T6 coil required the following approved manufacturers of safety barriers.

BASIC CIRCUIT & APPLICATION:

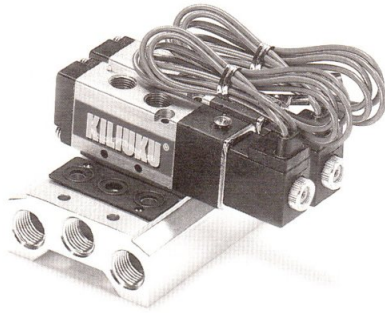


MANUFACTURERS OF SAFETY BARRIERS	APPROPRIATED BARRIERS	LINE LENGTH	MAX. LEAD RESISTANCE ⁴⁾
Fa. Stahl	8901/31-280-110-00	510m at 1mm ²	18 Ohm
Fa. Pepperl + Fuchs	KHD3-ISO/EX 148	510m at 1mm ²	18 Ohm
Fa. Stachl	9004/01-280-50-00	510m at 1mm ²	18 Ohm
Fa. Measurement Technology Ltd.	MTL 3021	510m at 1mm ²	18 Ohm

Line resistance for go-and return line: 0.6mm² ----- 0.059 Ohm / mm
0.6mm² ----- 0.059 Ohm/mm

MANIFOLD

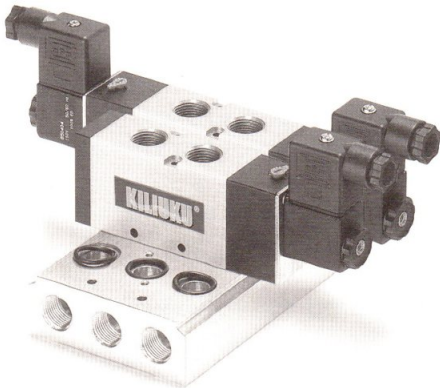
MANIFOLD for 5/2, 5/3 way
SOLENOID VALVES &
PNEUMATIC OPERATED VALVES



MANIFOLD FOR **SDF** SERIES VALVES MF-5201 *

PORT SIZE: 1/8"
Please find left picture
MF-5201 * 2
for reference

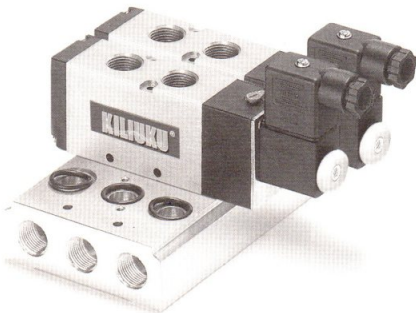
HOW TO ORDER:
MF-5201 * 1-----for 1 valve
MF-5201 * 2-----for 2 valve
MF-5201 * 3-----for 3 valve
)
MF-5201 * N-----for N valve



MANIFOLD FOR **SDA,MTA** SERIES VALVES MF-5202 *

PORT SIZE: 1/4"
Please find left picture
MF-5202 * 3
for reference

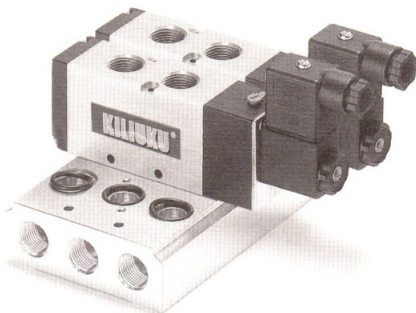
HOW TO ORDER:
MF-5202 * 1-----for 1 valve
MF-5202 * 2-----for 2 valve
MF-5202 * 3-----for 3 valve
)
MF-5202 * N-----for N valve



MANIFOLD FOR **SDB,MTB** SERIES VALVES MF-5203 *

PORT SIZE: 3/8"
Please find left picture
MF-5203 * 3
for reference

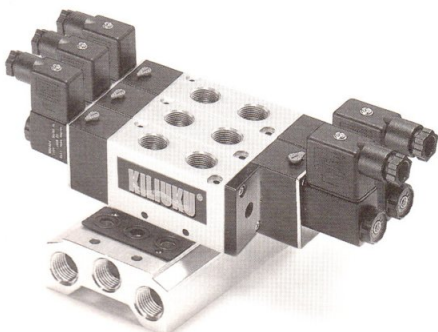
HOW TO ORDER:
MF-5203 * 1-----for 1 valve
MF-5203 * 2-----for 2 valve
MF-5203 * 3-----for 3 valve
)
MF-5203 * N-----for N valve



MANIFOLD FOR **SDC,MTC** SERIES VALVES MF-5204 *

PORT SIZE: 1/2"
Please find left picture
MF-5204 * 3
for reference

HOW TO ORDER:
MF-5204 * 1-----for 1 valve
MF-5204 * 2-----for 2 valve
MF-5204 * 3-----for 3 valve
)
MF-5204 * N-----for N valve



MANIFOLD FOR **SDE** SERIES VALVES BF-5202 *

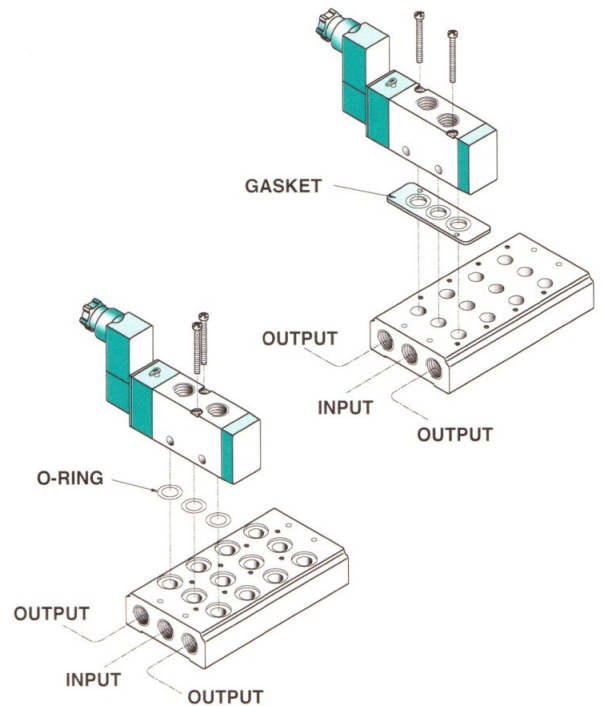
PORT SIZE: 1/4"
Please find left picture
BF-5202 * 4
for reference

HOW TO ORDER:
BF-5202 * 1-----for 1 valve
BF-5202 * 2-----for 2 valve
BF-5202 * 3-----for 3 valve
)
BF-5202 * N-----for N valve

Operation/Installation

SOLENOID VALVE MANIFOLD

- ❑ **MF** manifold designed for **SDA/B/C/G/S/R/M/L** series solenoid valve.
Manifold kit includes one manifold, three O-ring and two screws for **MF** manifold.
- ❑ **BF** series manifold designed for **SDE** solenoid valve.
Manifold kit includes one manifold, one gasket and two screws for **BF** manifold.
- ❑ Option:blacking plate kit includes a plate, two screws, three O-rings.
- ❑ **O-ring size:**
OR8.8x1.9 (2pcs / line) & OR10.8x2.4 (1pc/ line) for SDA-5202
OR14.8x2.4 (3pcs / line) for SDB-5203
OR20.8x2.4 (3pcs / line) for SDC-5204
MF-5201 * for **SDF-5201**
BF-5202 * for **SDE-5202**
- ❑ **Blanking plate part No.**
BP-02B for BF-5202 (1/4") BP-03M for MF-5203 (3/8")
BP-01M for MF+5201 (1/8") BP-04M for MF-5204 (1/2")
BP-02M for MF-5202 (1/4")



FLOW DATA

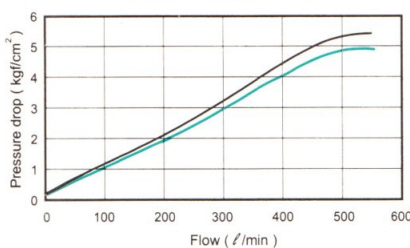
For SDF series, SD* series

HOW TO READ FLOW CHARTS:

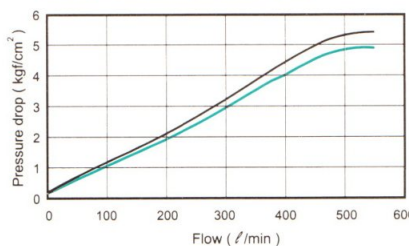
- *Decide upon the air flow rate required for this application.
- *To find the pressure drop by drawing a vertical line from the flow rate selected, and get two cross points with the inlet pressure curve (black line), and out put pressure (blue line).
- *From this intersection draw two horizontal lines to where they intersect with the vertical pressure drop scale.
- *The difference between these two points is the pressure drop.

SDF series

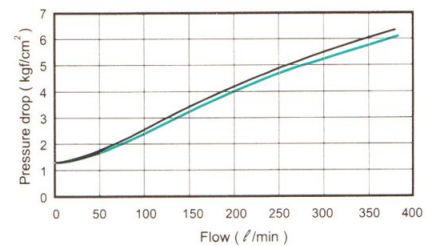
1/8", 5/2 Way single coil valve
Model: **SDF-5201-S**



1/8", 5/2 Way double coils valve
Model: **SDF-5201-D**

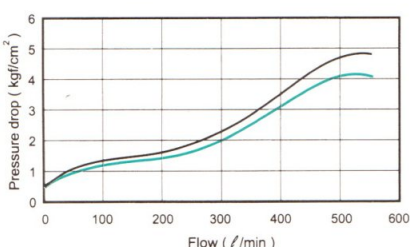


1/8", 5/3 Way double coils valve
Model: **SDF-5301-D**

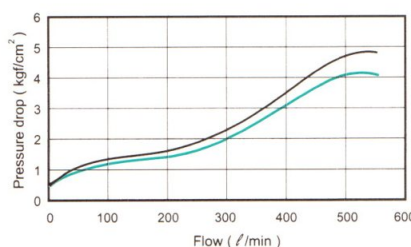


SD* series

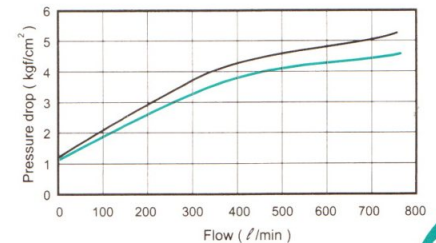
1/4", 5/2 Way single coil valve
Model: **SDA-5202-S**



1/4", 5/2 Way double coils valve
Model: **SDA-5202-D**

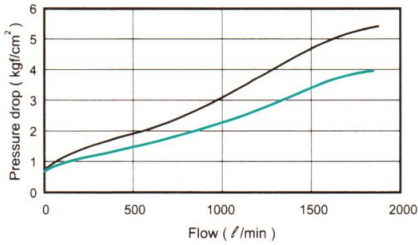


1/4", 5/3 Way double coils valve
Model: **SDA-5302-D**

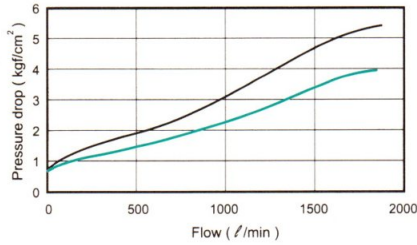


SD* series

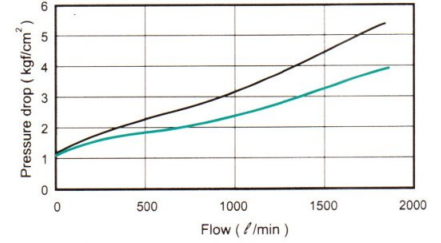
3/8", 5/2 Way single coil valve
Model: **SDB-5203-S**



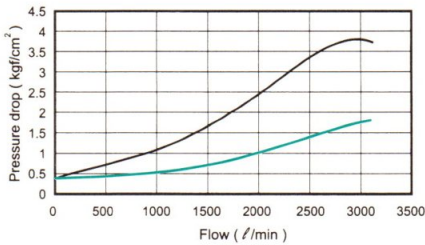
3/8", 5/2 Way double coils valve
Model: **SDB-5203-D**



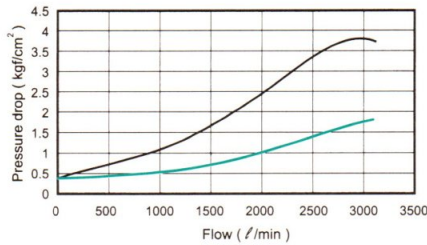
3/8", 5/3 Way double coils valve
Model: **SDB-5303-D**



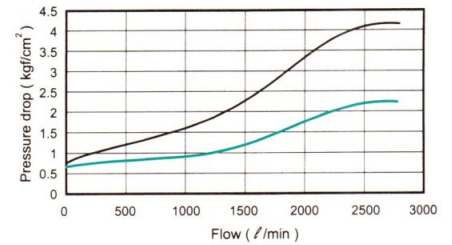
1/2", 5/2 Way single coil valve
Model: **SDC-5204-S**



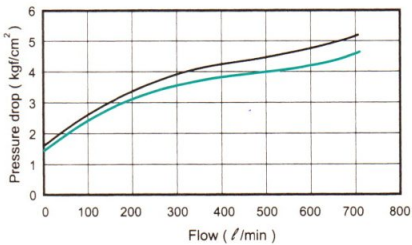
1/2", 5/2 Way double coils valve
Model: **SDC-5204-D**



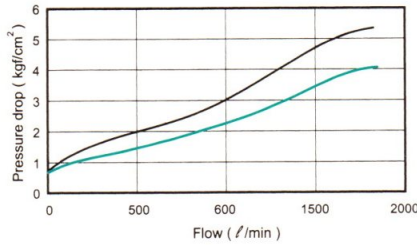
1/2", 5/3 Way double coils valve
Model: **SDC-5304-D**



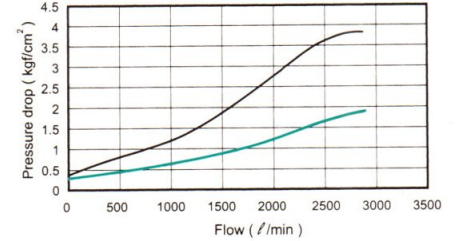
1/4", 3/2 Way single coil valve
Model: **SDG-3202-SC**



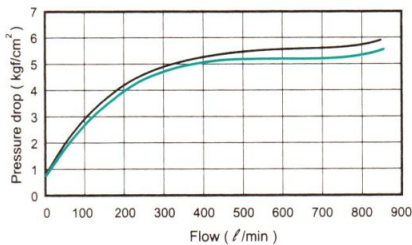
3/8", 3/2 Way single coil valve
Model: **SDG-3203-SC**



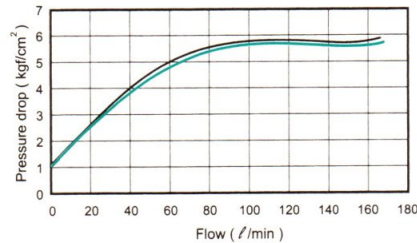
1/2", 3/2 Way single coil valve
Model: **SDG-3204-SC**



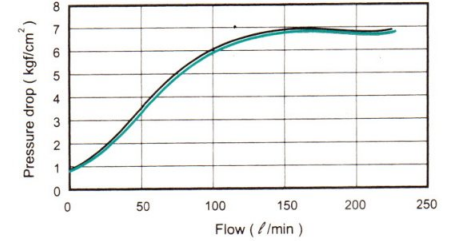
3/8", 3/2 Way single coil valve
Model: **SDM-3203-SC**



1/4", 3/2 Way single coil valve
Model: **SDR-3202-SC**

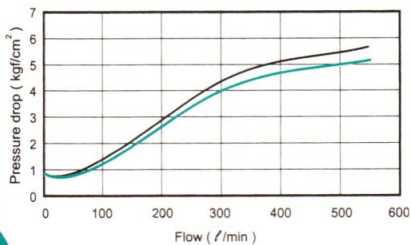


3/8", 3/2 Way single coil valve
Model: **SDR-3203-SC**

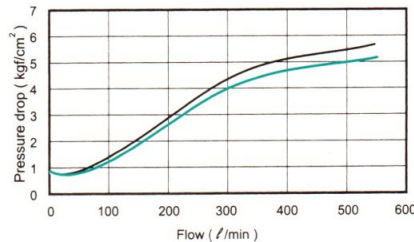


SDE series

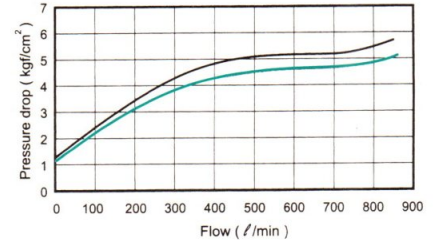
1/4", 5/2 Way single coil valve
Model: **SDE-5202-S**



1/4", 5/2 Way double coils valve
Model: **SDE-5202-D**



1/4", 5/3 Way double coils valve
Model: **SDE-5302-D**

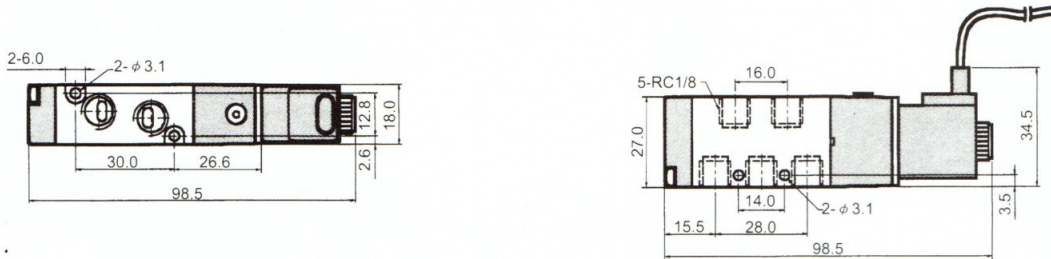


SDF series

DIMENSION

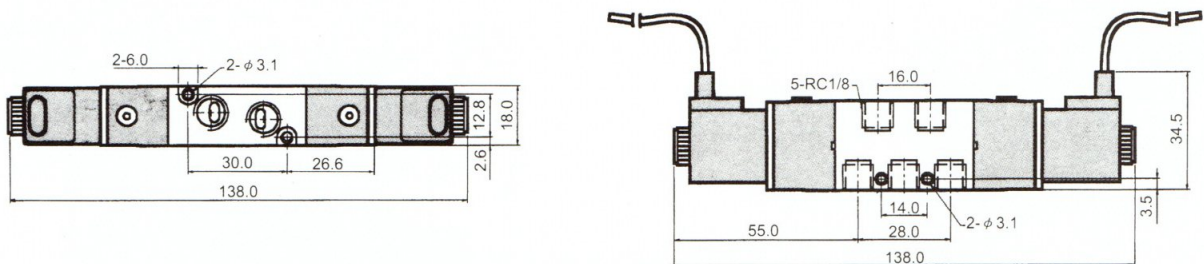
Unit:mm

SDF-5201-S



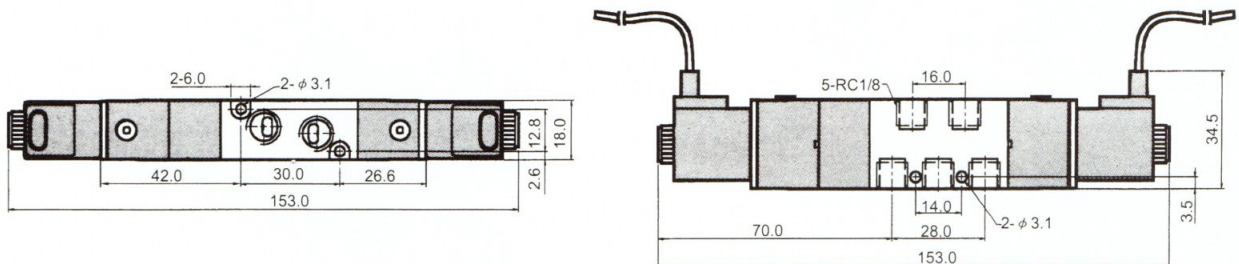
Unit:mm

SDF-5201-D



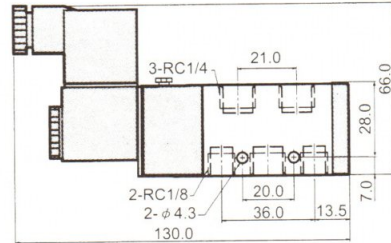
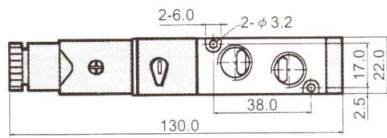
Unit:mm

SDF-5301-D



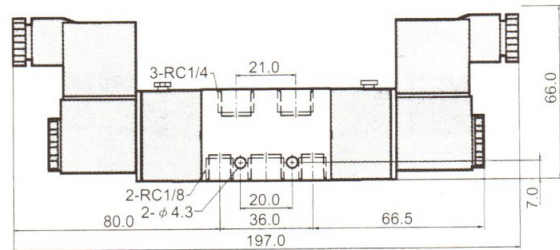
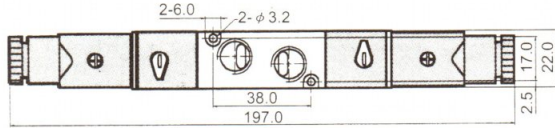
Unit:mm

SDE-5202-S



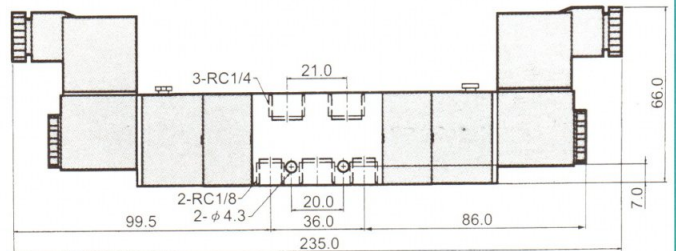
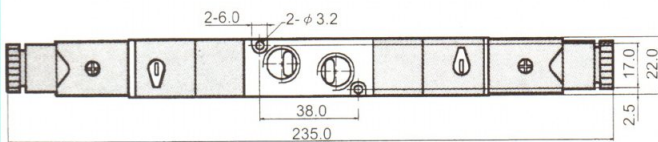
Unit:mm

SDE-5202-D



Unit:mm

SDE-5302-D

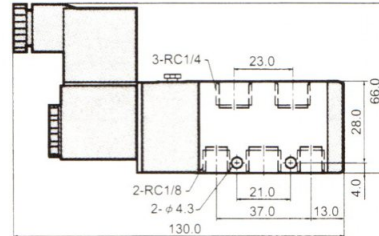
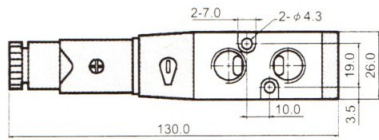


SDA series

DIMENSION

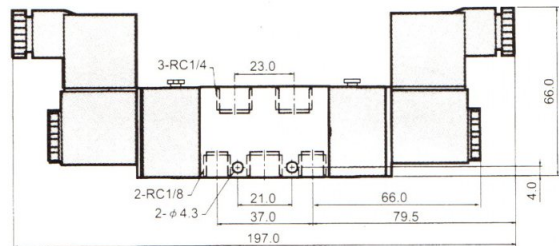
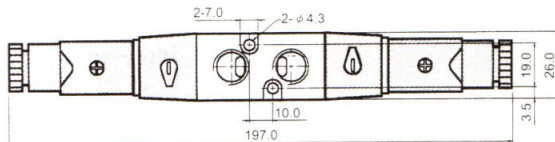
Unit:mm

SDA-5202-S



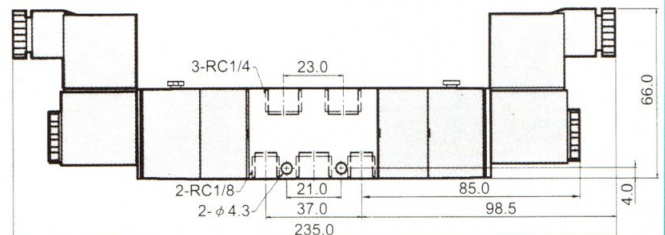
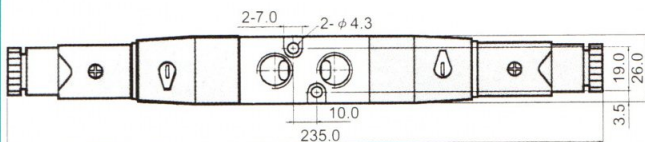
Unit:mm

SDA-5202-D



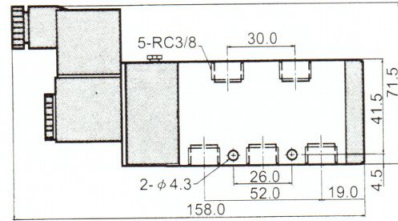
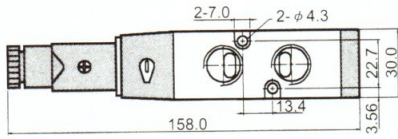
Unit:mm

SDA-5302-D



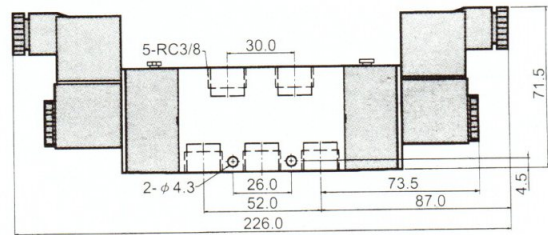
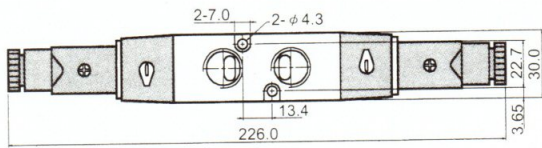
Unit:mm

SDB-5203-S



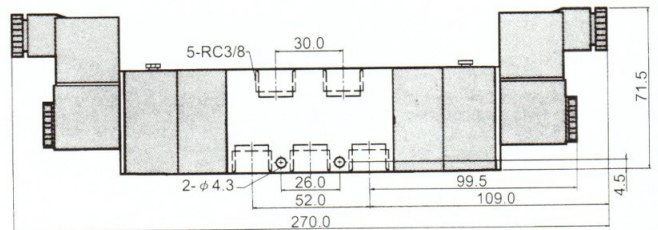
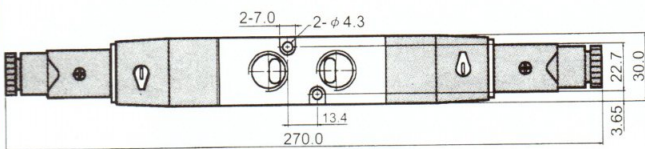
Unit:mm

SDB-5203-D



Unit:mm

SDB-5303-D

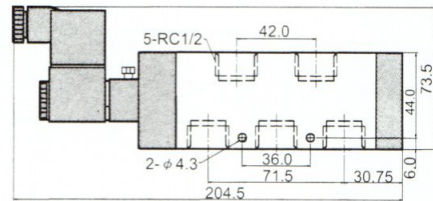
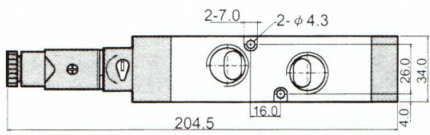


SDC series

DIMENSION

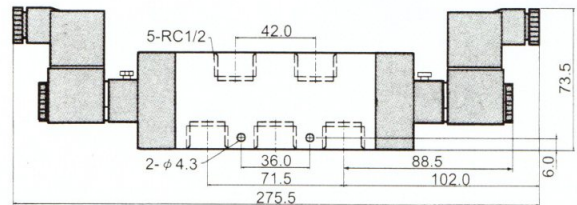
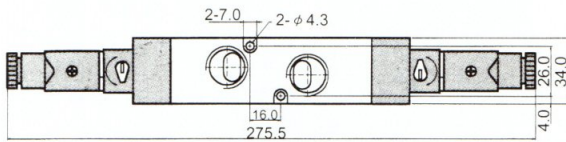
Unit:mm

SDC-5204-S



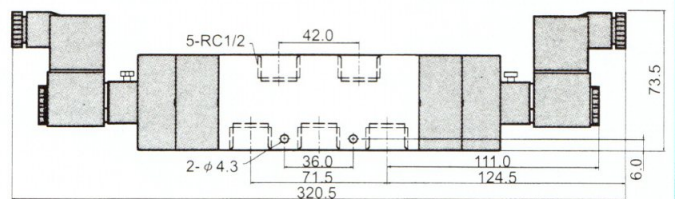
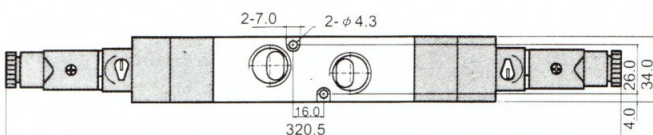
Unit:mm

SDC-5204-D



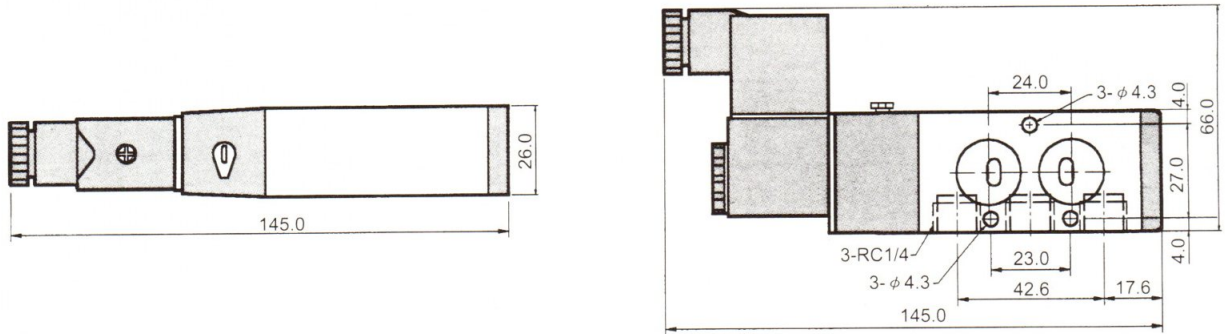
Unit:mm

SDC-5304-D



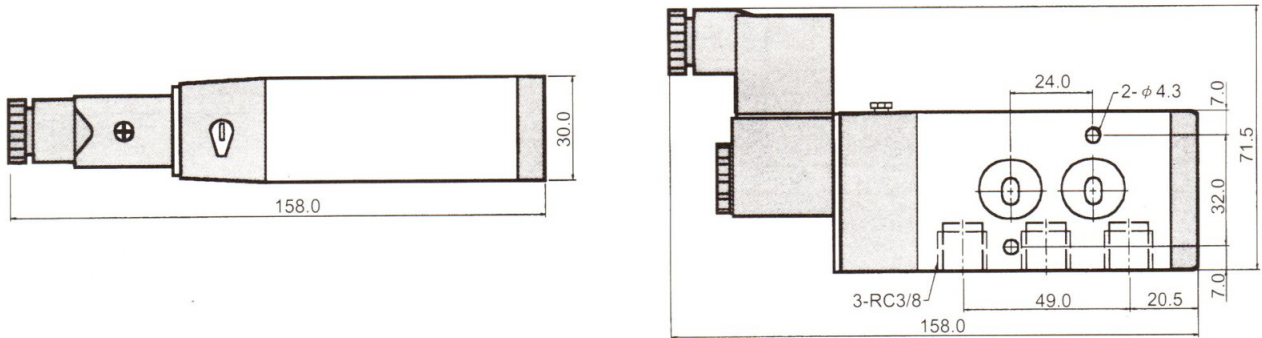
Unit:mm

SDY-5202-S



Unit:mm

SDY-5203-S



Unit:mm

MTY-5202-S



Unit:mm

MTY-5203-S

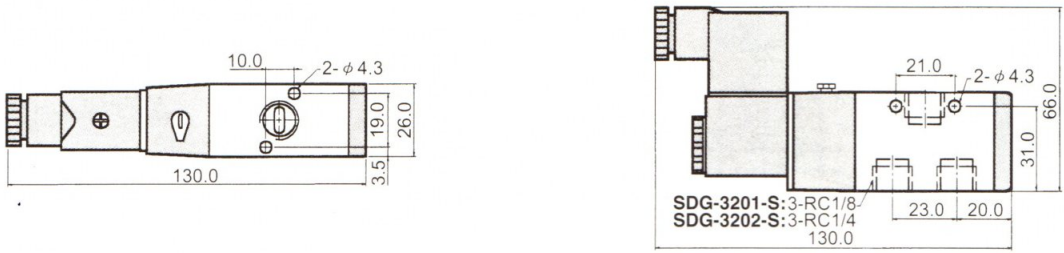


SDG series

DIMENSION

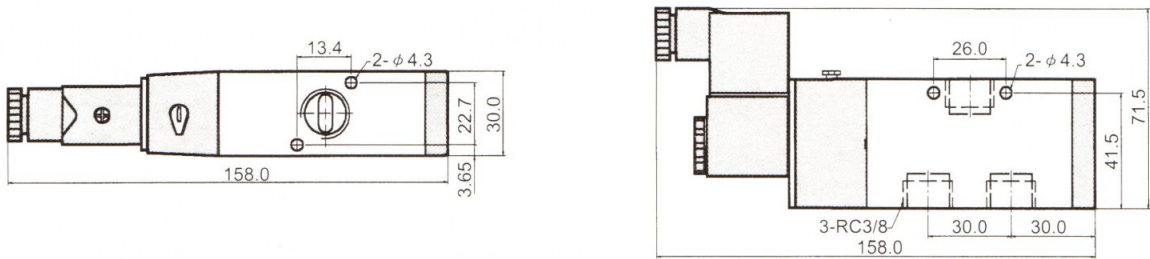
Unit:mm

SDG-3201-S* SDG-3202-S*



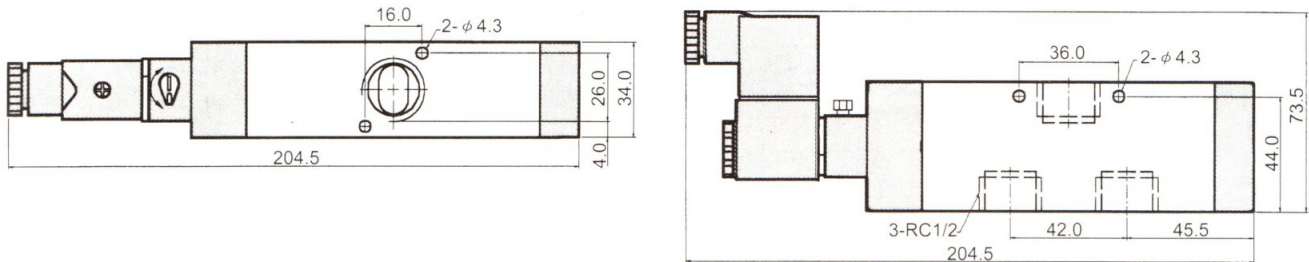
Unit:mm

SDG-3203-S*

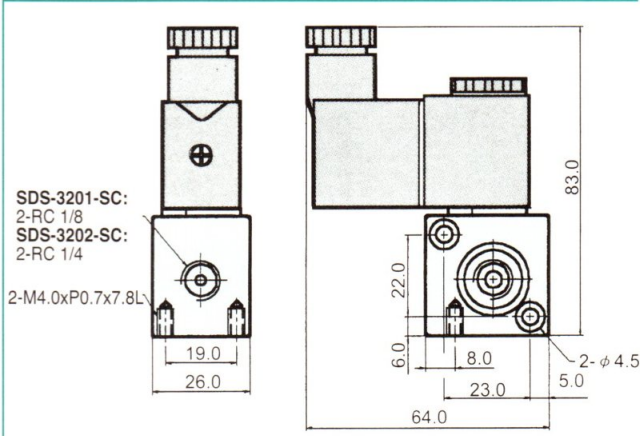


Unit:mm

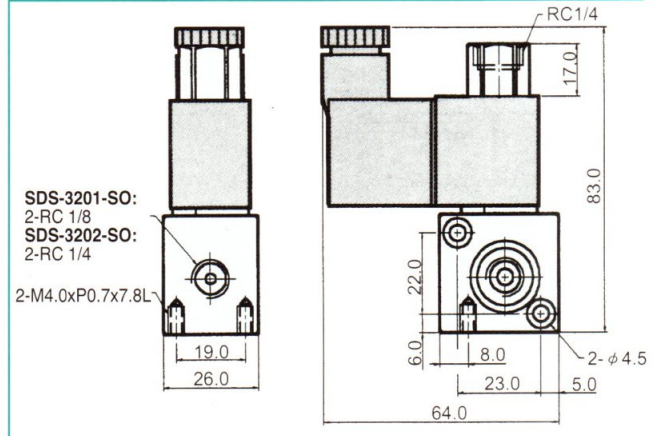
SDG-3204-S*



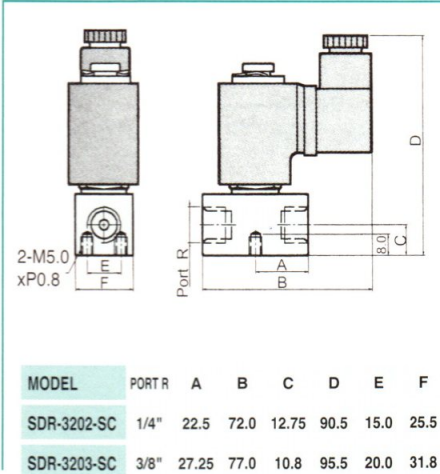
SDS-3201-SC SDS-3202-SC



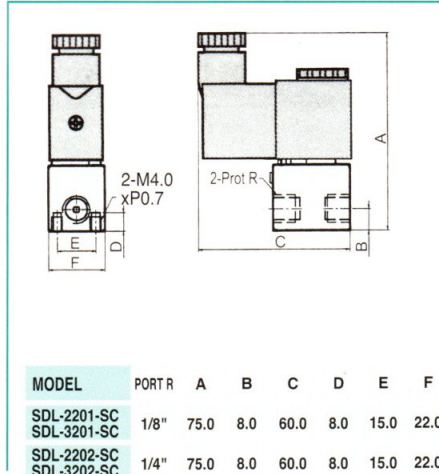
SDS-3201-SO SDS-3202-SO



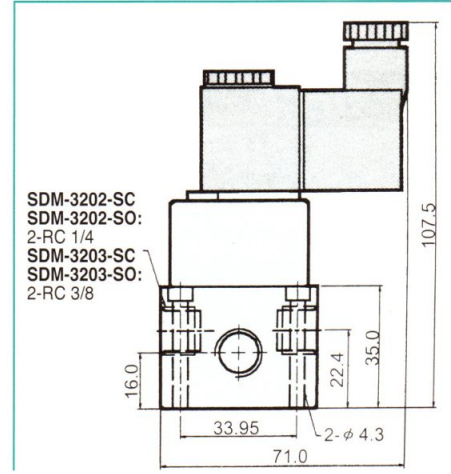
SDR-3202-SC SDR-3203-SC



SDL-2201-SC, SDL-3201-SC SDL-2202-SC, SDL-3202-SC

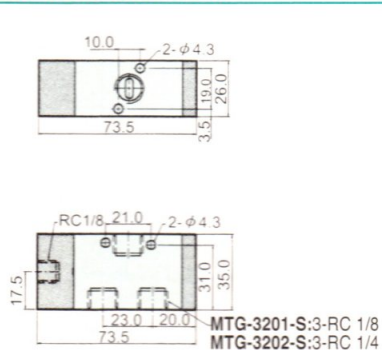


SDM-3202-SC, SDM-3202-SO SDM-3203-SC, SDM-3203-SO

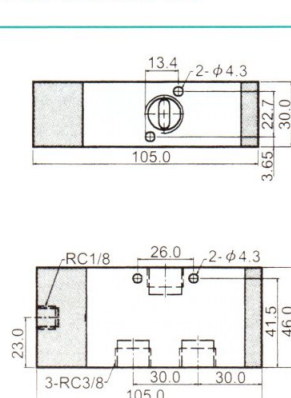


MTG series

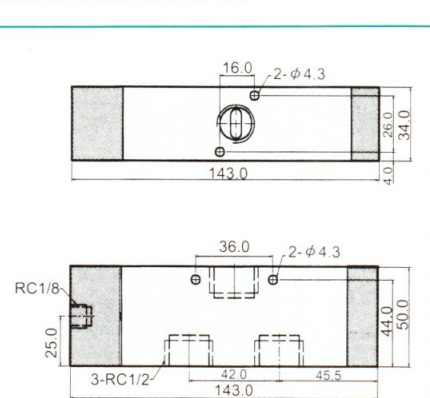
MTG-3201-S MTG-3202-S



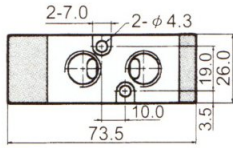
MTG-3203-S



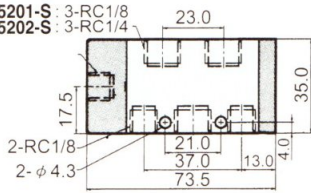
MTG-3204-S



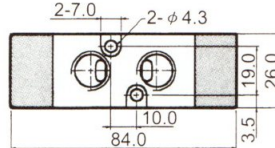
MTA-5201-S
MTA-5202-S



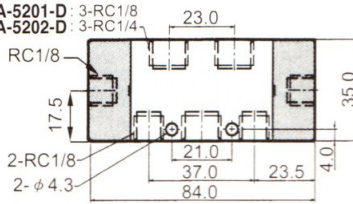
MTA-5201-S : 3-RC1/8
MTA-5202-S : 3-RC1/4



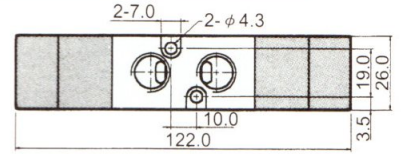
MTA-5201-D
MTA-5202-D



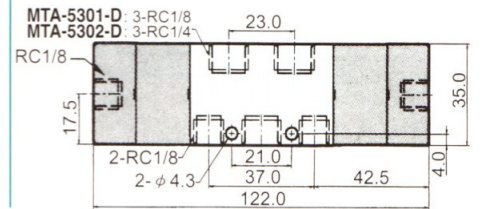
MTA-5201-D : 3-RC1/8
MTA-5202-D : 3-RC1/4



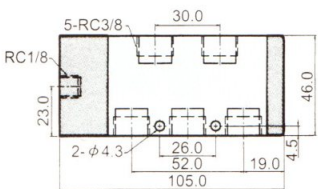
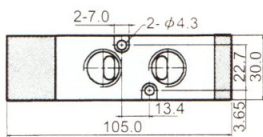
MTA-5301-D
MTA-5302-D



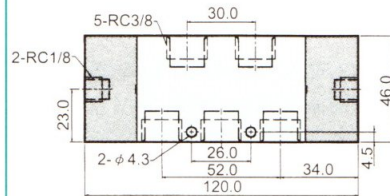
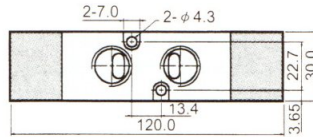
MTA-5301-D : 3-RC1/8
MTA-5302-D : 3-RC1/4



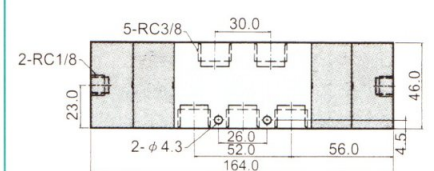
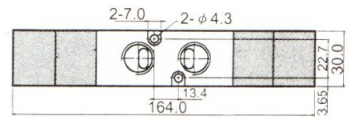
MTB-5203-S



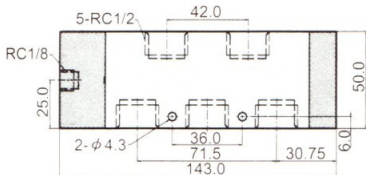
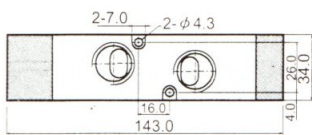
MTB-5203-D



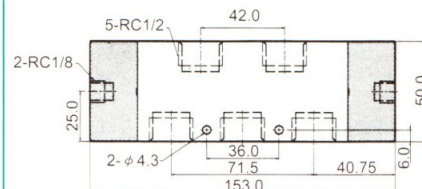
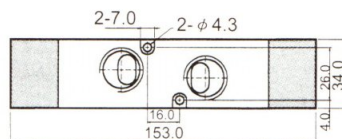
MTB-5303-D



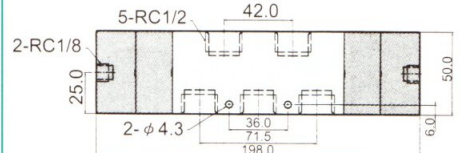
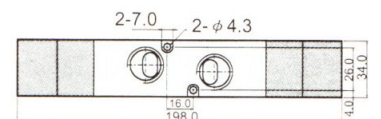
MTC-5204-S



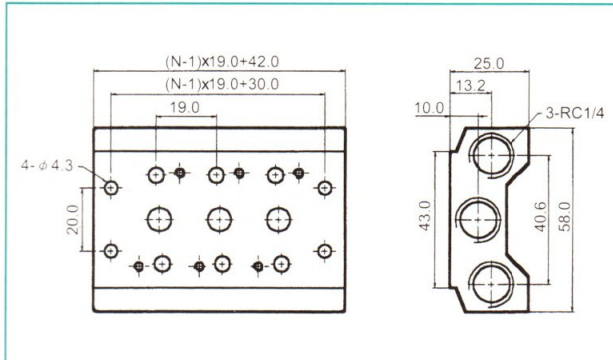
MTC-5204-D



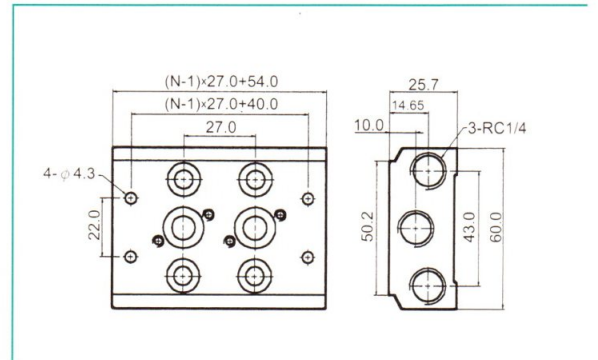
MTC-5304-D



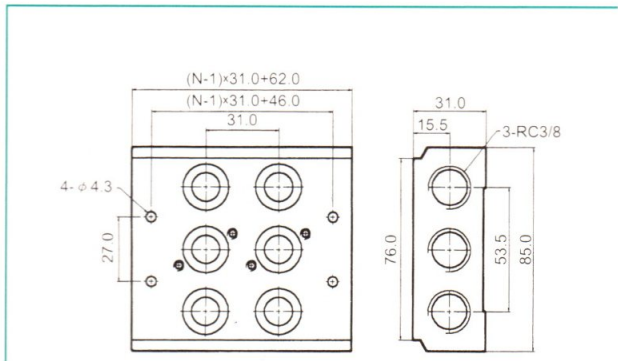
MF-5201



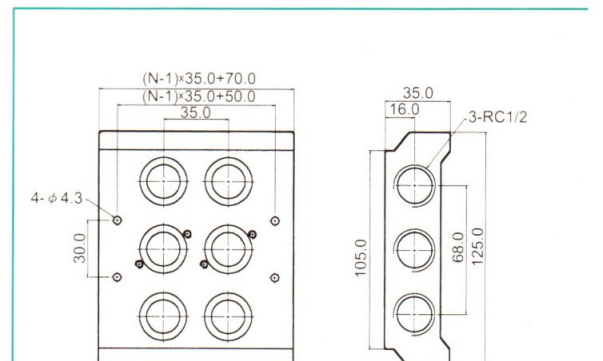
MF-5202



MF-5203



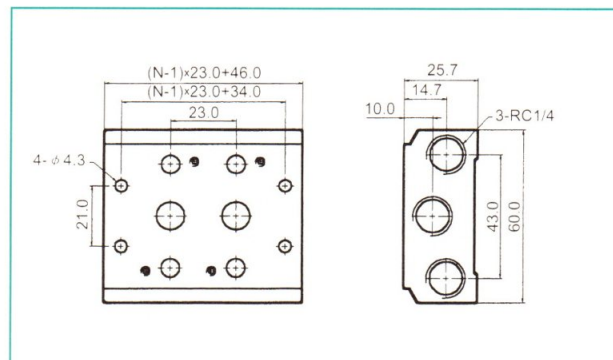
MF-5204



BF series

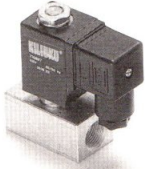
DIMENSION

BF-5202



PNEUMATIC (2/2 WAY) SOLENOID VALVES

NORMAL CLOSE TYPE



SVA, SVB DIRECT ACTING SOLENOID VALVE

Valve body is brass forged, and Aluminum square bar, with spool direct acting designed provides quick response and spring return. Stainless steel stem provides longer reliability and suitable for various fluid. It can be installed by either vertical or horizontal position. And the exproof coils are available.

- See -----Page 30, 31 for detail information.
- Port size: 1/8" ~ 1"



SVC PILOT ACTING SOLENOID VALVE

Valve body is brass forged, with pilot acting designed having an ability to apply a bigger pressure. Stainless steel stem provides longer reliability and suitable for various fluid. It can be installed either vertical or horizontal position. And the EX-proof coils are available.

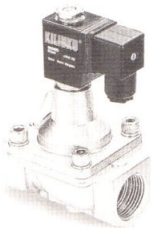
- See -----Page 32, 33 for more information
- Port size: 3/8" ~ 1 1/2"



SVS PILOT ACTING SOLENOID VALVE

Valve body is lost-waxed SUS 304, with pilot acting designed having an ability to apply a bigger pressure. Stainless steel stem has a durable characteristic and suitable for drinking water, water, beverage, air, oil(under 50cst), liquid, gas, chemical..etc.

- Can assemble an Ex-proof coil to this valve if working under the dusty environment is required.
- See -----Page 34, 35 for more information
 - Port size: 3/8" ~ 2"



SVM PILOT ACTING STEAM SOLENOID VALVE

Valve body is brass forged, with pilot acting designed for steam having an ability to apply a bigger pressure. Stainless steel stem has a durable characteristic and suitable for steam, air. Max. temperature can reach to 185°C. Ex-proof coils with these valves are available.

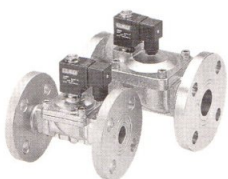
- See-----Page 36 for detail information.
- Port size: 3/8" ~ 1"



SVP, SVT DIRECT SOLENOID VALVE

Valve body is PE, with Teflon diaphragm for ACID & ALKALI. Large, unrestricted air passage produce high flow rate and short response time. The good working reliability, and easy assembly is suitable for pure & beverage water, acid and chemical liquid.

- See-----Page 36 for detail information.
- Port size: 3/8", 1/2"



SVB, SVC, SVS FLANGE TYPE SOLENOID VALVE

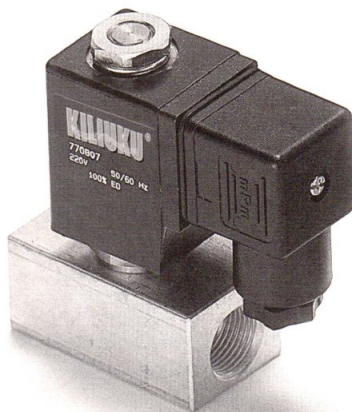
Flange valve is suitable for a bigger piping connection, but not for small port size such as 1/8", 1/4", 3/8".

- See-----Page 37 for detail information.
- Port size: 1/2" ~ 2"



SVA-2201 Direct acting (N/C) solenoid valve
SVA-2202 Direct acting (N/C) solenoid valve

PORT SIZE	1/8", 1/4"
ORIFICE	1.2mm/2.3mm
CV VALUE	0.1/0.18
SECTIONAL AREA	1.8mm ² /2.9mm ²
PRESSURE RANGE	AC 0~8.5 kgf/cm ² , DC 0~7.0 kgf/cm ²
MAX. PRESSURE	10 kgf/cm ²
WEIGHT	175 g / 255 g

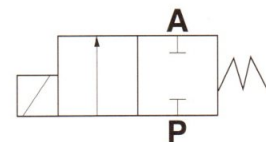


SVA-2203 Direct acting (N/C) solenoid valve

PORT SIZE	3/8"
ORIFICE	8.0mm
CV VALUE	1.0
SECTIONAL AREA	20mm ²
PRESSURE RANGE	AC 0~10 kgf/cm ² ,DC 0~7kgf/cm ²
MAX. PRESSURE	10 kgf/cm ²
WEIGHT	510 g

FEATURES:

- SVA/SVB are the spool direct acting valves. enable the quick response and spring return directly.
- Stainless steel stem provides the operational durability.
- Perfect for low pressure operating environment.
- Can be installed either vertical or horizontal.
- Optional Ex-proof coils are available.



SVA/SVB DESCRIPTIONS:

Body material	Brass forged, Aluminum square bar
Diaphragm	NBR
Optional Diaphragm	Viton, EPDM
Temperature Range	-10°C ~ 90°C
Fluid	Compressed filter air (lubrication or none lubrication), water, light oil (under 50 cst), liquid gas, vacuum
Ambient Temperature	-20°C ~ 60°C
Power Consumption	22 VA
Duty Cycle	100%
Protection Class	IP65 (DIN 40050)
Standard Voltage	DC24V, AC110V, AC220V, 50/60 HZ
Special Voltage	DC12V, DC48V, AC24V, AC380V
Voltage Allowance	±10%

SVB series

2/2 way DIRECT ACTING(N/C)
SOLENOID VALVES



SVB-2203 Direct acting (N/C) solenoid valve
SVB-2204 Direct acting (N/C) solenoid valve

PORT SIZE	3/8", 1/2"
ORIFICE	13mm
CV VALUE	4.0
SECTIONAL AREA	76mm ²
PRESSURE RANGE	AC 0~8.5 kgf/cm ² , DC 0~7.0 kgf/cm ²
MAX. PRESSURE	10 kgf/cm ²
WEIGHT	740g / 715 g



SVB-2206 Direct acting (N/C) solenoid valve

PORT SIZE	3/4"
ORIFICE	20mm
CV VALUE	8.6
SECTIONAL AREA	162mm ²
PRESSURE RANGE	AC 0~8.6 kgf/cm ² ,DC 0~6 kgf/cm ²
MAX. PRESSURE	10 kgf/cm ²
WEIGHT	920 g



SVB-2208 Direct acting (N/C) solenoid valve

PORT SIZE	1"
ORIFICE	25mm
CV VALUE	11
SECTIONAL AREA	220mm ²
PRESSURE RANGE	AC 0~7 kgf/cm ² ,DC 0~5 kgf/cm ²
MAX. PRESSURE	10 kgf/cm ²
WEIGHT	1400 g



SVC-2203 Pilot acting (N/C) solenoid valve

PORT SIZE	3/8"
ORIFICE	13mm
CV VALUE	4.5
SECTIONAL AREA	88mm ²
PRESSURE RANGE	0.5~ 10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	775 g

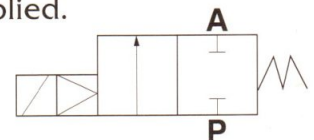


SVC-2204 Pilot acting (N/C) solenoid valve

PORT SIZE	1/2"
ORIFICE	13mm
CV VALUE	4.5
SECTIONAL AREA	88mm ²
PRESSURE RANGE	0.5~ 10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	755 g

FEATURES:

- SVC is a pilot controlled valve and enable to apply a bigger pressure supplied.
- Stainless steel stem provides operational durability and quick response.
- Low electricity consumption enlongates the coil life.
- Ex-proof coil meet T4, T5 and CE standard.
- To clean the filter regularly in order to get a better working durability for valve.
- Can be installed or horizontal position only.

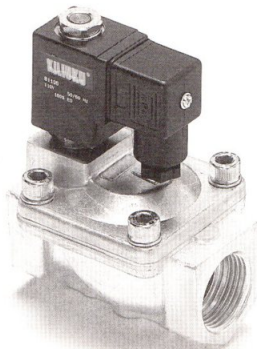


SVC DESCRIPTIONS:

Body material	Brass Forged
Diaphragm	NBR
Optional Diaphragh	Viton, EPDM
Temperature Range	-10°C ~ 90°C
Fluid	Compressed filter air (lubrication or none lubrication), water, light oil (under 50 cst), liquid gas, vacuum
Ambient Temperature	-20°C ~ 60°C
Power Consumption	22 VA
Duty Cycle	100%
Protection Class	IP65 (DIN 40050)
Standard Voltage	DC24V, AC110V, AC220V, 50/60 HZ
Special Voltage	DC12V, DC48V, AC24V, AC380V
Voltage Allowance	±10%

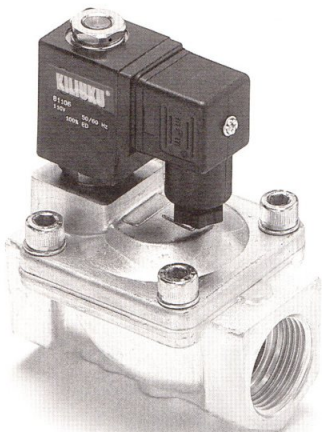
SVC series

2/2 way PILOT ACTING(N/C) SOLENOID VALVES



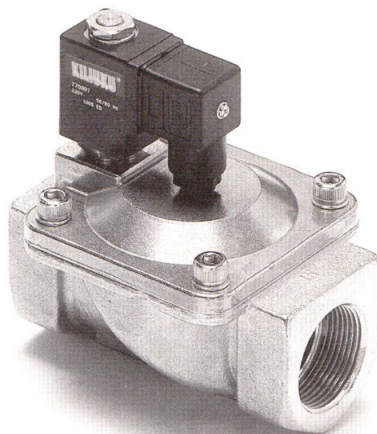
SVC-2206 Pilot acting (N/C) solenoid valves

PORT SIZE	3/4"
ORIFICE	25mm
CV VALUE	12
SECTIONAL AREA	230mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	1550 g



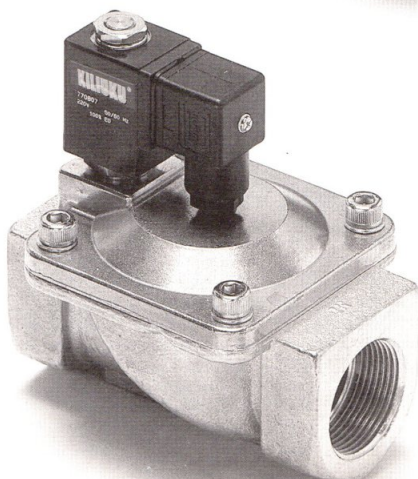
SVC-2208 Pilot acting (N/C) solenoid valves

PORT SIZE	1"
ORIFICE	25mm
CV VALUE	12
SECTIONAL AREA	230mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	1465 g



SVC-2210 Pilot acting (N/C) solenoid valves

PORT SIZE	1 1/4"
ORIFICE	38mm
CV VALUE	22
SECTIONAL AREA	404mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	2820 g



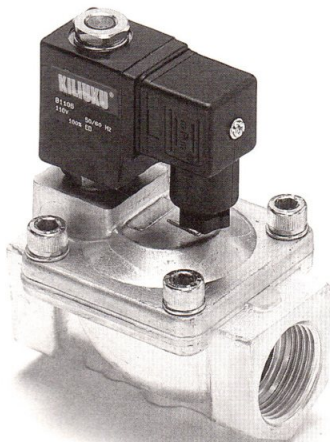
SVC-2212 Pilot acting (N/C) solenoid valves

PORT SIZE	1 1/2"
ORIFICE	38mm
CV VALUE	30
SECTIONAL AREA	552mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	2570 g



SVS-2203/2204 Pilot acting (N/C) stainless solenoid valve

PORT SIZE	3/8"(03) / 1/2"(04)
ORIFICE	13mm
CV VALUE	4.5
SECTIONAL AREA	88mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	740 g / 725 g

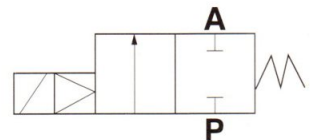


SVS-2206/2208 Pilot acting (N/C) stainless solenoid valves

PORT SIZE	3/4"(06) / 1"(08)
ORIFICE	25mm
CV VALUE	12
SECTIONAL AREA	230mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	1565 g / 1430 g

FEATURES:

- ❑ SVS is a pilot controlled valve in capable of applying a bigger pressure supplied.
- ❑ Valve body is lost-waxed SUS 304.
- ❑ Stainless steel stem provides operational durability and quick response.
- ❑ Suitable for drinking water, pure water, beverage, air, oil(under 50cst), liquid gas, chemical liquid..etc. flow control.
- ❑ To be installed the valve horizontally only.
- ❑ Ex-proof coil to meet T4, T5 and CE standard.



SVS DESCRIPTIONS:

Body material	SUS #316
Diaphragm	NBR
Optional Diaphragm	Viton, EPDM
Temperature Range	-10°C ~ 90°C
Fluid	Compressed filter air (lubrication or none lubrication), water, light oil (under 50 cst), liquid gas, vacuum
Ambient Temperature	-20°C ~ 60°C
Power Consumption	22 VA
Duty Cycle	100%
Protection Class	IP65 (DIN 40050)
Standard Voltage	DC24V, AC110V, AC220V, 50/60 HZ
Special Voltage	DC12V, DC48V, AC24V, AC380V
Voltage Allowance	±10%

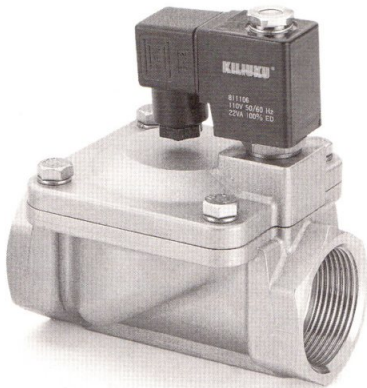
SVS series

2/2 way PILOT ACTING (N/C)
STAINLESS SOLENOID VALVE



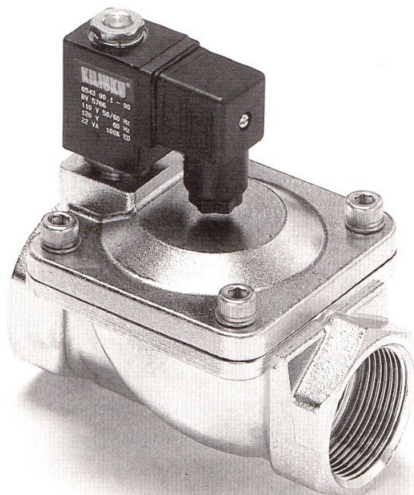
SVS-2210 Pilot acting (N/C) stainless solenoid valve

PORT SIZE	1 1/4"
ORIFICE	38mm
CV VALUE	22
SECTIONAL AREA	404mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	2560 g



SVS-2212 Pilot acting (N/C) stainless solenoid valve

PORT SIZE	1 1/2"
ORIFICE	38mm
CV VALUE	30
SECTIONAL AREA	552mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	2320 g



SVS-2216 Pilot acting (N/C) stainless solenoid valve

PORT SIZE	2"
ORIFICE	50mm
CV VALUE	48
SECTIONAL AREA	883mm ²
PRESSURE RANGE	0.5~10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
WEIGHT	3440 g



SVM-2203/2204/2206/2208 Pilot acting solenoid valves(steam) N/C

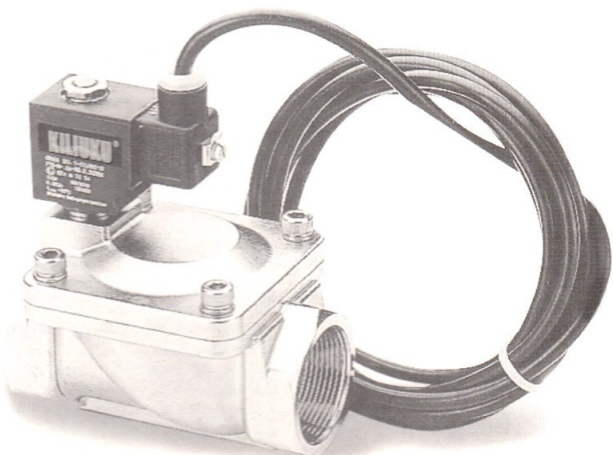
PORT SIZE	3/8" / 1/2" / 3/4" / 1"
ORIFICE	13mm(03, 04) / 25mm(06, 08)
CV VALUE	4.5(03, 04) / 12(06, 08)
SECTIONAL AREA	88mm ² (03, 04) / 231mm ² (06, 08)
OPERATING PRESSURE RANGE	0.5 ~ 10 kgf/cm ²
MAX. PRESSURE	15 kgf/cm ²
FLUID	Steam, air
TEMPERATURE RANGE	-10°C ~ +185°C
INSTALLATION	Horizontal (Note: Don't slant piping, the coil must upright)
STANDARD VOLTAGE	DC24V, AC110V, AC220V, 50/60 HZ
WEIGHT	1660 g



SVP-2203/2204

SVT-2203/2204 Direct acting solenoid valves(Acid & Alkali) N/C

PORT SIZE	3/8" / 1/2"
BODY MATERIAL	PE
OPTIONAL BODY MATERIAL	Teflon valve(model:SVT-2203/2204)
DIAPHRAGM	Teflon
ORIFICE	5.0mm
OPERATING PRESSURE RANGE	0 ~ 1 kgf/cm ²
MAX. PRESSURE	1 kgf/cm ²
FLUID	Pure water, Chemical, Acid, Alkali
TEMPERATURE RANGE	-5°C ~ +90°C
STANDARD VOLTAGE	DC24V, AC110V, AC220V, 50/60 HZ
WEIGHT	440 g



2/2 way ex-proof coil

- In the field of Ex-proof coil, it's designed for two different working fluids which the one is Gas-State fluid and the other is Liquid-State fluid.
- The main function for the of Air Ex-proof included pressurization & the elimination of the environment pollution factor & temperature change factor of the fluid.
- For the using symbol to show the suitable range, such as JIS(G4, G5) and CENCECE (T4, T5) both them represent the same protection grade.
- To order Ex-proof valve, please add "E" at the end of each model numbers.

ADCS, SVS, SVB, SVD series

2/2 way (NC) SOLENOID VALVES



AUTOMATIC DRAIN CONTROL SWITCH

Mode: **ADCS-2200**

Features & Descriptions:

- ❑ This valve can be used at the end of air piping system for water drain automatically. And the one piece type designed provide easier wire connection.
- ❑ To set up the timer as desired (ON & OFF) for operation.
- ❑ Body size are available from 3/8"~2" for the valve.
- ❑ Max. operating pressure from 0~10 kgf/cm².
- ❑ Temperature range -5°C ~ 90°C.

2/2 WAY FLANGE TYPE VALVES

Model: **SVS-2206-F (G:3/4")**

SVS-2208-F (G:1")

SVS-2210-F (G:1 1/4")

SVS-2212-F (G:1 1/2")

SVS-2216-F (G:2")

Model: **SVC-2206-F (G:3/4")**

SVC-2208-F (G:1")

SVC-2210-F (G:1 1/4")

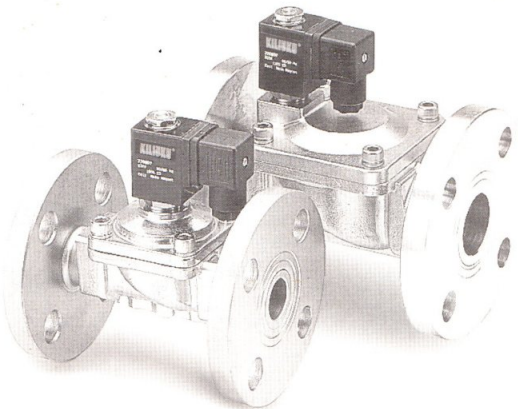
SVC-2212-F (G:1 1/2")

Model: **SVB-2206-F (G:3/4")**

SVB-2208-F (G:1")

Features & Descriptions:

- ❑ High flow rate.
- ❑ Suitable for most bigger piping line connection.
- ❑ Port size 1/2"~2"
- ❑ Standard flange connection 10K
- ❑ Optional 20K, 150LB
- ❑ See dimension on page 38



2/2 WAY DUST COLLECTOR VALVES

Model: **SVD-2206/2208/2212/2216**

Features & Descriptions:

- ❑ High flow rate & high efficiency
- ❑ For jet-pulse bag filter machine and instant air supply & exhaust
- ❑ Available in single or double diaphragm valve
- ❑ Port size: under 1 1/2" (included) pressure 0 ~ 7 kgf/cm²
- ❑ Port size: over 1 1/2" (excluded) operating pressure 2 ~ 8 kgf/cm²
- ❑ The using of high pressure pneumatic air forces a vibration at the wall of the tank. To shake down the dusty on the wall. The instant high flow rate & pressure create the high vibration forces.



CDV series

2/2 way

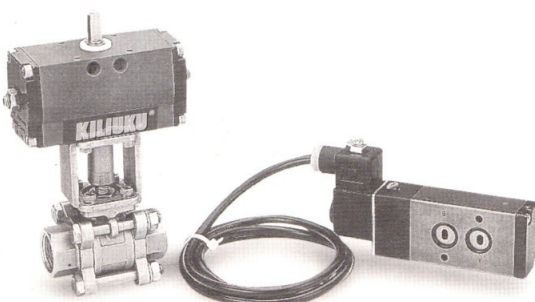
CYLINDER DIRECTIONAL VALVES

CDV-2204~32 Cylinder Directional valves

PORT SIZE	1/2"(04)~4"(32)
ORIFICE	25mm/100mm
PRESSURE RANGE	0~10kgf/cm ²
MAX. PRESSURE	20kgf/cm ²
WEIGHT	1630 g(06)

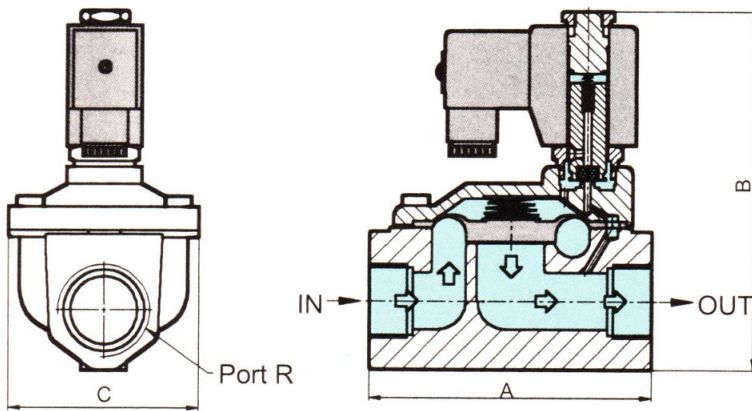
FEATURES:

- ❑ Ball valve on and off controlled by CDV valve & drive a 90° turning for cylinder.
- ❑ Ball valve is SUS #316 or a optional of PVC.
- ❑ Suitable for water, air, chemical, acid, steam, oil.
- ❑ Can be installed either vertical or horizontal.



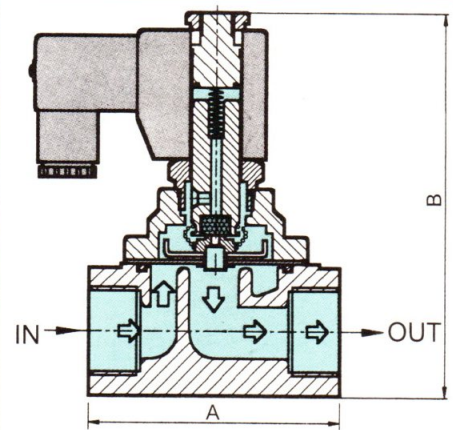
Unit:mm

SVC/SVS



MODEL	SVC-2203	SVC-2204	SVC-2206	SVC-2208	SVC-2210	SVC-2212	SVS-2203	SVS-2204	SVS-2206	SVS-2208	SVS-2210	SVS-2212	SVS-2216
PORT R	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	66.5	66.5	96.0	96.0	131.0	131.0	66.5	66.5	100.0	100.0	131.0	131.0	160.0
B	106.5	106.5	126.0	126.0	145.5	145.5	106.5	106.5	126.5	126.5	145.5	145.5	160.5
C	48.0	48.0	70.0	70.0	96.0	96.0	48.0	48.0	70.0	70.0	96.0	96.0	112.0

SVA/SVB

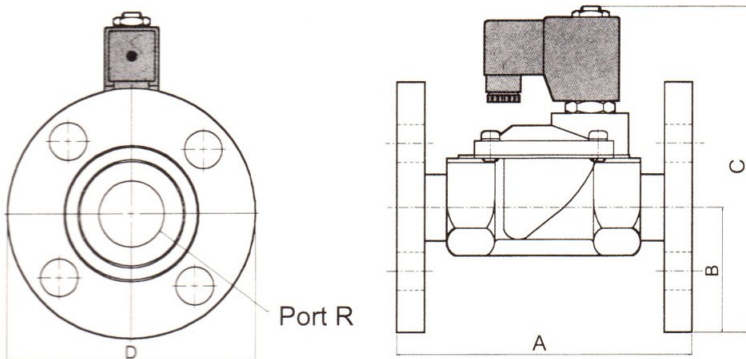


MODEL	SVA-2201	SVA-2202	SVA-2203	SVB-2203	SVB-2204	SVB-2206	SVB-2208
PORT R	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
A	22.0	35.0	55.0	66.5	66.5	71.0	96.0
B	72.0	75.5	79.5	107.5	107.5	113.0	125.0
C	22.0	25.4	30.0	48.0	48.0	58.0	70.0

SVC, SVS series

DIMENSION (Flange type)

SVC/SVS

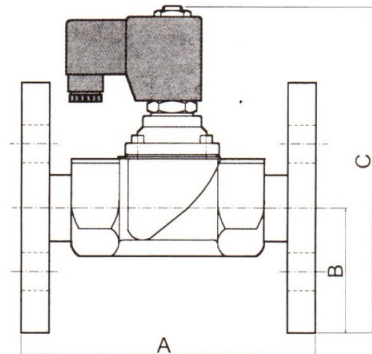


MODEL	SVC-2206-F	SVC-2208-F	SVC-2210-F	SVC-2212-F	SVS-2206-F	SVS-2208-F	SVS-2210-F	SVS-2212-F	SVS-2216-F
PORT R	3/4"	1"	1 1/4"	1 1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	120.0	150.0	180.0	180.0	120.0	150.0	180.0	180.0	210.0
B	50.0	62.5	67.5	70.0	50.0	62.5	67.5	70.0	77.5
C	157.5	165.5	173.0	182.5	152.5	165.5	173.0	182.5	209.5
D	100.0	125.0	135.0	140.0	100.0	125.0	135.0	140.0	155.0

SVB series

DIMENSION (Flange type)

SVB



MODEL	SVB-2206-F	SVB-2208-F
PORT R	3/4"	1"
A	120.0	150.0
B	50.0	62.5
C	144.0	163.5
D	100.0	125.0

FLOW DATA

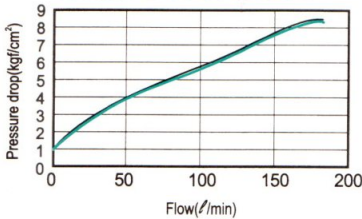
For SVA, SVB, SVC series

HOW TO READ FLOW CHARTS:

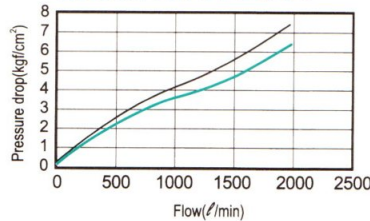
- *Decide upon the air flow rate required for this application.
- *To find the pressure drop by drawing a vertical line from the flow rate selected, and get two cross points with the inlet pressure curve (black line), and out put pressure (blue line).
- *From this intersection draw two horizontal lines to where they intersect with the vertical pressure drop scale.
- *The difference between these two points is the pressure drop.

SVA, SVB series

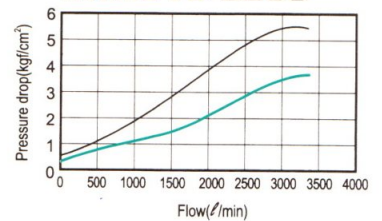
1/4" Direct Acting Valve
Model: **SVA-2202**



3/8" Direct Acting Valve
Model: **SVA-2203**

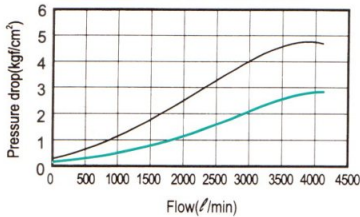


3/8" Direct Acting Valve
Model: **SVB-2203**

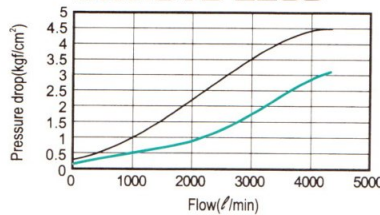


SVB, SVC series

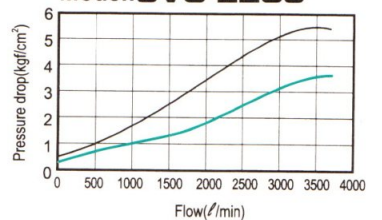
3/4" Direct Acting Valve
Model: **SVB-2206**



1" Direct Acting Valve
Model: **SVB-2208**

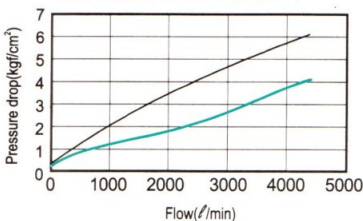


3/8" Pilot Acting Valve
Model: **SVC-2203**

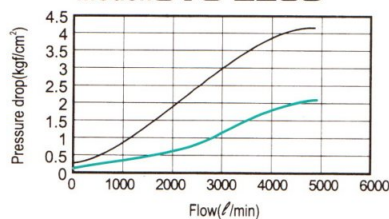


SVC series

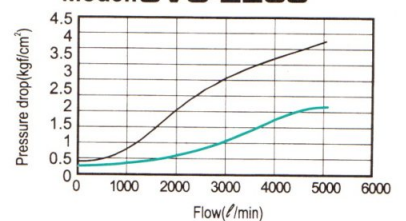
1/2" Pilot Acting Valve
Model: **SVC-2204**



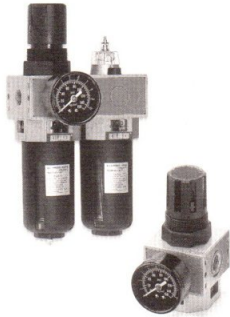
3/4" Pilot Acting Valve
Model: **SVC-2206**



1" Pilot Acting Valve
Model: **SVC-2208**



PNEUMATIC CONTROL UNIT FILTERS, REGULATORS, LUBRICATORS



UFR/L-02~04, UF.R.L-02~04 STANDARD SERIES

The series port size is available with G1/4"~G1/2". The units can be mounted on the air compressor from right or left side.

Filter and lubricator bowl designed for easy removal and installation. The filter is a sintered brass can be selected from 5~40micron.

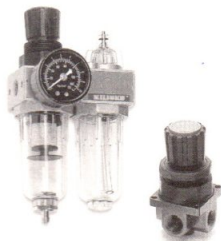
- ▣ See -----Page 41,43, 44, 45, 46 for specifications.
- ▣ See -----Page 54, 55, 56 for dimension.



UFR/L-06,08,UF.R.L-06,08 LARGE PORT SERIES

The series port size is available in G3/4" & G1" and suitable for larger equipment application. Piston constructive regulator provides a stability, reliability and without diaphragm broken problems. Easy-turn adjustment knob provides precise regulation control under any pressure required.

- ▣ See -----Page 42, 43, 44, 45, 46 for specifications.
- ▣ See -----Page 54, 55, 56 for dimension.



FRL-600 MINIATURE SERIES

The series is suitable for small equipment. Piston constructive regulator provides a stability, reliability and without diaphragm broken problems. Pressure supplied range from 0.1~9.9 kgf/cm² and the filter associated with semi-auto drainer.

The filter is sintered bronze element can be selected from 5~40micron. The suitable lubrication can enlongate the using life and increasing the efficiency for air-operated equipment.

- ▣ See -----Page 47 for specifications.
- ▣ See -----Page 54, 55, 56 for dimension.



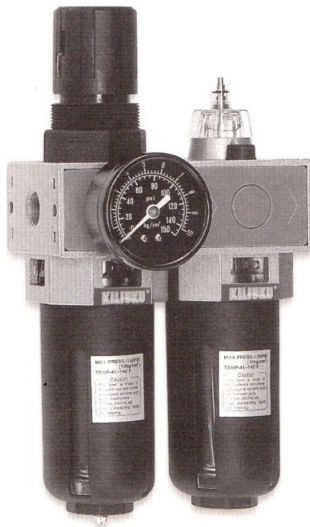
FAD-04~08 AUTOMATIC DRAIN

To use the difference in viscosity between air and water to operated a differential piston. Port size available G1/2"~G1". Filter element can be selected from 5~40micron. The drain outlet is 1/4" port at the bottom.

- ▣ See -----Page 47 for specifications.
- ▣ See -----Page 56 for dimension.

UFR/L series

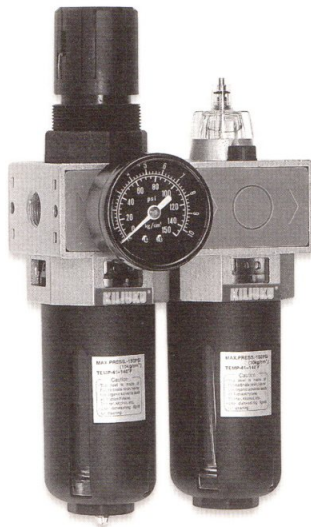
F.R.L AIR CONTROL UNIT



UFR/L-02,03 (1/4", 3/8") Filter/Regulator/Lubricator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2080 ℓ / min(1/4"), 2100 ℓ / min(3/8")
TEMPERATURE RANGE	-10°C~60°C
LUBRICATION OIL	ISO-VG32 (recommended)
BOWL CAPACITY	Filter bowl 105c.c. , Lubricator bowl 125c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	1480 g
ACCESSORIES	Gauge, Bracket set.

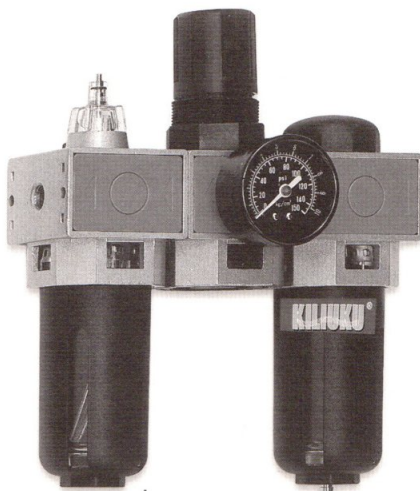
*Optional auto-drain order add letter "D"
 *Optional acid & alkali cup-add letter "A"



UFR/L-04 (1/2") Filter/Regulator/Lubricator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2600 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
LUBRICATION OIL	ISO-VG32 (recommended)
BOWL CAPACITY	Filter bowl 105c.c. , Lubricator bowl 125c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	1480 g
ACCESSORIES	Gauge, Bracket set.

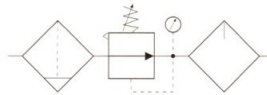
*Optional auto-drain order add letter "D"
 *Optional acid & alkali cup-add letter "A"



UFR/L-02,03,04 (1/4", 3/8", 1/2") Filter/Regulator/Lubricator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2050 ℓ / min(1/4", 3/8"), 2500 ℓ / min(1/2")
TEMPERATURE RANGE	-10°C~60°C
LUBRICATION OIL	ISO-VG32 (recommended)
BOWL CAPACITY	Filter bowl 105c.c. , Lubricator bowl 125c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	1800 g
ACCESSORIES	Gauge, Bracket set.

*Optional auto-drain order add letter "D"
 *Optional acid & alkali cup-add letter "A"



UFR/L-06 (3/4") Filter/Regulator/Lubricator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~12 kgf/cm ²
MAX.PRESSURE	12 kgf/cm ²
MAX.FLOW RATE	7940 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
LUBRICATION OIL	ISO-VG32 (recommended)
BOWL CAPACITY	Filter bowl 210c.c. , Lubricator bowl 235c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	2105 g
ACCESSORIES	Gauge, Bracket set.

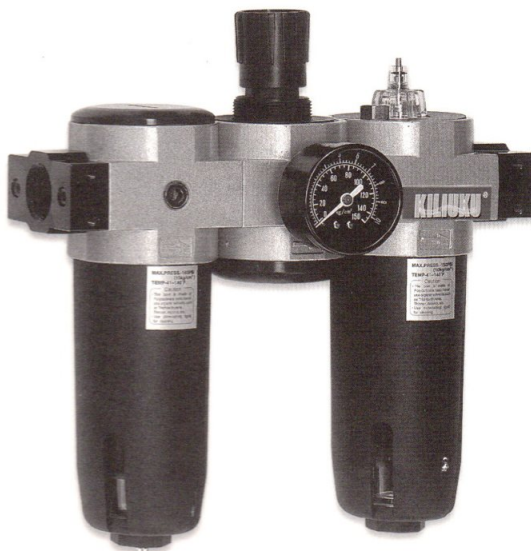
*Optional auto-drain order add letter "D"



UFR/L-08 (1") Filter/Regulator/Lubricator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~12 kgf/cm ²
MAX.PRESSURE	12 kgf/cm ²
MAX.FLOW RATE	8200 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
LUBRICATION OIL	ISO-VG32 (recommended)
BOWL CAPACITY	Filter bowl 210c.c. , Lubricator bowl 235c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	2145 g
ACCESSORIES	Gauge, Bracket set.

*Optional auto-drain order add letter "D"



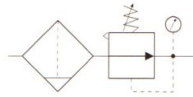
UF.R.L-06,08 (3/4", 1") Filter/Regulator/Lubricator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~12 kgf/cm ²
MAX.PRESSURE	12 kgf/cm ²
MAX.FLOW RATE	7900 ℓ / min(3/4"), 8100 ℓ / min(1")
TEMPERATURE RANGE	-10°C~60°C
LUBRICATION OIL	ISO-VG32 (recommended)
BOWL CAPACITY	Filter bowl 210c.c. , Lubricator bowl 235c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	2580 g (3/4"), 2610 g (1")
ACCESSORIES	Gauge, Bracket set.

*Optional auto-drain order add letter "D"

UFR series

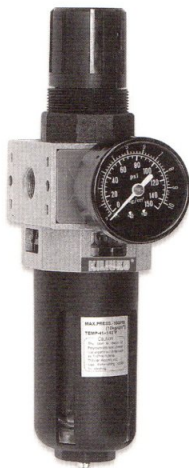
F.R. AIR CONTROL UNIT



UFR-02,03 (1/4", 3/8") Filter/Regulator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2100 ℓ / min(1/4"), 2130 ℓ / min(3/8")
TEMPERATURE RANGE	-10°C~60°C
BOWL CAPACITY	Filter bowl 105c.c
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	930 g
ACCESSORIES	Gauge, Bracket set.

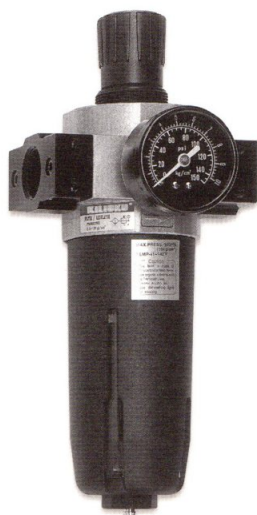
*Optional auto-drain order add letter "D"
*Optional acid & alkali cup-add letter "A"



UFR-04 (1/2") Filter/Regulator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2750 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
BOWL CAPACITY	Filter bowl 105c.c
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	930 g
ACCESSORIES	Gauge, Bracket set.

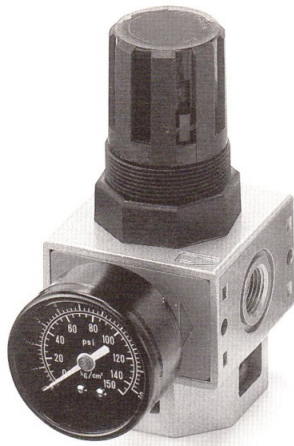
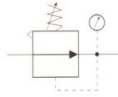
*Optional auto-drain order add letter "D"
*Optional acid & alkali cup-add letter "A"



UFR-06,08 (3/4", 1") Filter/Regulator

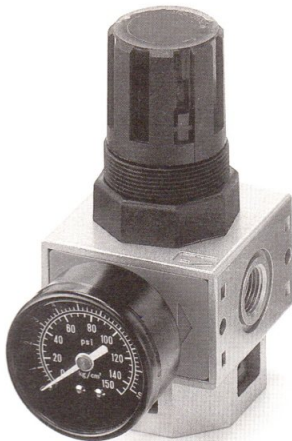
FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~12 kgf/cm ²
MAX.PRESSURE	12 kgf/cm ²
MAX.FLOW RATE	8000 ℓ / min(3/4"), 8500 ℓ / min(1")
TEMPERATURE RANGE	-10°C~60°C
BOWL CAPACITY	Filter bowl 210c.c
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	1360g(3/4"), 1330g(1")
ACCESSORIES	Gauge, Bracket set.

*Optional auto-drain order add letter "D"



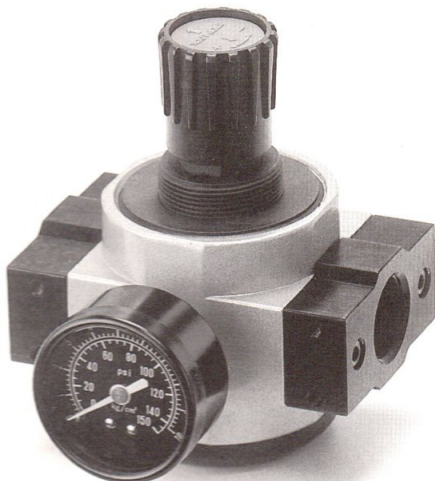
UR-02, 03 (1/4", 3/8") Regulator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2250 ℓ / min(1/4"), 2265 ℓ / min(3/8")
TEMPERATURE RANGE	-10°C~60°C
WEIGHT	740 g
ACCESSORIES	Gauge, Bracket set.



UR-04 (1/2") Regulator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2835 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
WEIGHT	740 g
ACCESSORIES	Gauge, Bracket set.

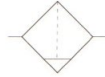


UR-06, 08 (3/4", 1") Regulator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast
OPER.PRESSURE RANGE	0.5~12 kgf/cm ²
MAX.PRESSURE	12 kgf/cm ²
MAX.FLOW RATE	8100 ℓ / min(3/4"), 8550 ℓ / min(1")
TEMPERATURE RANGE	-10°C~60°C
WEIGHT	1090g (3/4"), 1060g (1")
ACCESSORIES	Gauge , bracket set

UF series

FILTER AIR CONTROL UNIT



UF-02,03 (1/4", 3/8") Filter

FLUID	Compressed air
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2440 ℓ / min(1/4"), 2450 ℓ / min(3/8")
TEMPERATURE RANGE	-10°C~60°C
BOWL CAPACITY	Filter bowl 105c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	530 g
ACCESSORIES	Bracket set.

*Optional auto-drain order add letter "D"
*Optional acid & alkali cup-add letter "A"



UF-04 (1/2") Filter

FLUID	Compressed air
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	3030 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
BOWL CAPACITY	Filter bowl 105c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	530 g
ACCESSORIES	Bracket set.

*Optional auto-drain order add letter "D"
*Optional acid & alkali cup-add letter "A"



UF-06, 08 (3/4", 1") Filter

FLUID	Compressed air
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
FILTER ELEMENT	Standard:40 micron, Optional:5 micron
OPER.PRESSURE RANGE	0.5~12 kgf/cm ²
MAX.PRESSURE	12kgf/cm ²
MAX.FLOW RATE	8250 ℓ / min(3/4"), 8860 ℓ / min(1")
TEMPERATURE RANGE	-10°C~60°C
BOWL CAPACITY	Filter bowl 210c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	1235g (3/4"), 1250g (1")
ACCESSORIES	Bracket set.

*Optional auto-drain order add letter "D"



UL-02,03 (1/4\", 3/8\") LUBRICATOR

FLUID	Compressed air
CONSTRUCTION	Oil-fog
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	2490 ℓ / min(1/4\"), 2525 ℓ / min(1/4\")
TEMPERATURE RANGE	-10°C~60°C
LUBRICATING OIL	ISO-VG32(recommended)
BOWL CAPACITY	Lubricator bowl 125c.c.
WEIGHT	500 g
ACCESSORIES	Bracket set.

*Optional acid & alkali cup-add letter "A"



UL-04 (1/2\") LUBRICATOR

FLUID	Compressed air
CONSTRUCTION	Oil-fog
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
OPER.PRESSURE RANGE	0.5~9.9 kgf/cm ²
MAX.PRESSURE	9.9 kgf/cm ²
MAX.FLOW RATE	4310 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
LUBRICATING OIL	ISO-VG32(recommended)
BOWL CAPACITY	Lubricator bowl 125c.c.
WEIGHT	500 g
ACCESSORIES	Bracket set.

*Optional acid & alkali cup-add letter "A"

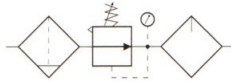


UL-06, 08 (3/4\", 1\") LUBRICATOR

FLUID	Compressed air
CONSTRUCTION	Oil-fog
MATERIAL	BODY:Aluminum die-cast, BOWL:Polyacarbonate
OPER.PRESSURE RANGE	0.5~12 kgf/cm ²
MAX.PRESSURE	12 kgf/cm ²
MAX.FLOW RATE	8400 ℓ / min(3/4\"), 9000 ℓ / min(1\")
TEMPERATURE RANGE	-10°C~60°C
LUBRICATING OIL	ISO-VG32(recommended)
BOWL CAPACITY	Lubricator bowl 235c.c.
WEIGHT	1095g(3/4\"), 1065(1\")
ACCESSORIES	Bracket set.

FRL series

MINIATURE AIR CONTROL UNIT



FRL-600 (1/4") Filter/Regulator/Lubricator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast, BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron
OPER.PRESSURE RANGE	0.5~8.0 kgf/cm ²
MAX.PRESSURE	8.0 kgf/cm ²
MAX.FLOW RATE	1850 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
LUBRICATING OIL	ISO-VG32(recommended)
BOWL CAPACITY	Filter bowl 35c.c, Lubricator bowl 50c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	560 g
ACCESSORIES	Gauge, Bracket set.



FR-500 (1/4") Filter/Regulator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast
MATERIAL	BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron
OPER.PRESSURE RANGE	0.5~8.0 kgf/cm ²
MAX.PRESSURE	8.0 kgf/cm ²
MAX.FLOW RATE	1940 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
BOWL CAPACITY	Filter bowl 35c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	370 g
ACCESSORIES	Gauge, Bracket set.



L-200 (1/4") Lubricator

FLUID	Compressed air
CONSTRUCTION	Oil-fog
MATERIAL	BODY:Aluminum die-cast
MATERIAL	BOWL:Polycarbonate
OPER.PRESSURE RANGE	0.5~8.0 kgf/cm ²
MAX.PRESSURE	8.0 kgf/cm ²
MAX.FLOW RATE	2249 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
LUBRICATING OIL	ISO-VG32(recommended)
BOWL CAPACITY	Lubricator bowl 50c.c
WEIGHT	165 g
ACCESSORIES	Bracket set.



F-200 (1/4") Filter

FLUID	Compressed air
MATERIAL	BODY:Aluminum die-cast
MATERIAL	BOWL:Polycarbonate
FILTER ELEMENT	Standard:40 micron
OPER.PRESSURE RANGE	0.5~8.0 kgf/cm ²
MAX.PRESSURE	8.0 kgf/cm ²
MAX.FLOW RATE	2036 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
BOWL CAPACITY	Filter bowl 35c.c.
DRAIN	Semi-automatic drain (below 0.5kgf/cm ²)
WEIGHT	245 g
ACCESSORIES	Bracket set.



R-200 (1/4") Regulator

FLUID	Compressed air
CONSTRUCTION	Piston type regulation
MATERIAL	BODY:Aluminum die-cast
OPER.PRESSURE RANGE	0.5~8.0 kgf/cm ²
MAX.PRESSURE	8.0 kgf/cm ²
MAX.FLOW RATE	1546 ℓ / min
TEMPERATURE RANGE	-10°C~60°C
WEIGHT	205 g
ACCESSORIES	Gauge, Bracket set.

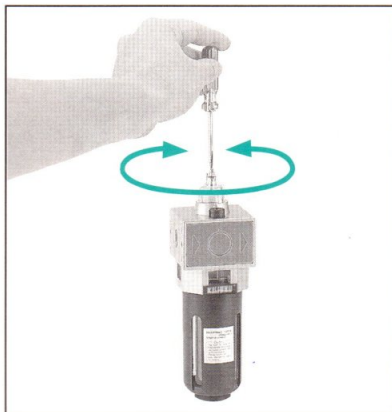
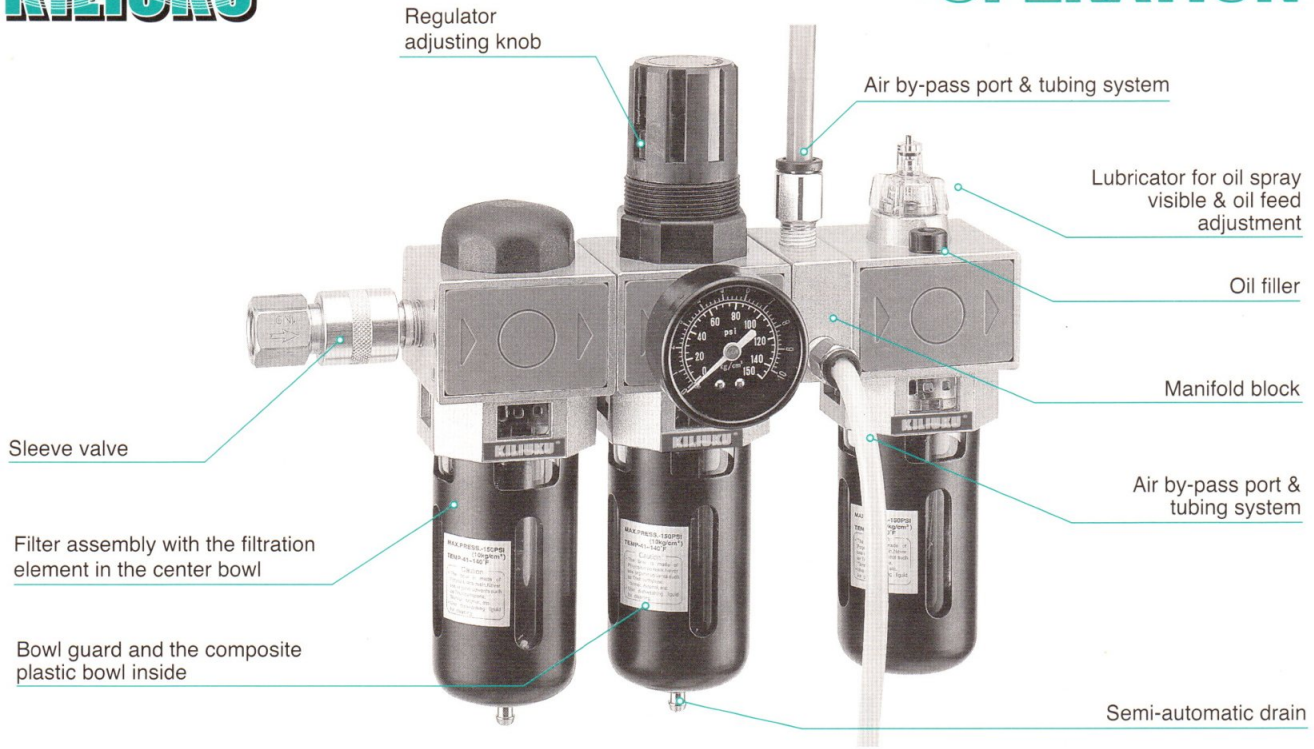


*Optional gauge. Order information-add "G"

FAD-04, 06, 08 (1/2", 3/4", 1") Automatic Drain

- The FAD series float type drain is provided with a threaded port at the top for the connection with the end of piping.
- This drain features a protective fiber glass guard with composite plastic bowl, providing a large sump area for oil sludge and dirty. It is used to give continued performance and low maintenance to drain accumulated water and oil at working period.





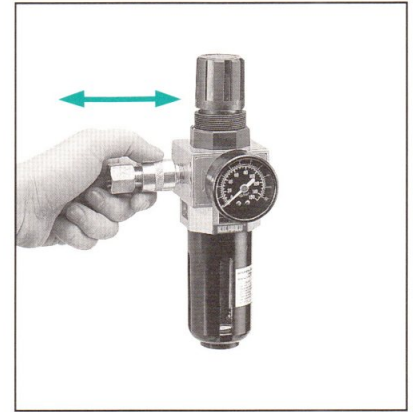
LUBRICATOR ADJUSTMENT

To decrease oil feed rate, turn adjustment screw clockwise, and to increase oil feed rate turn the adjustment screw counter clockwise.



OIL FILLER

Can be filled without shutting down air line. ISO VG32 oil is recommended. Screw can prevent from unauthorized oil delivery.



SLEEVE VALVE

Slide the valve backward for the air flow in. To slide the valve forward to stop the air flow in.



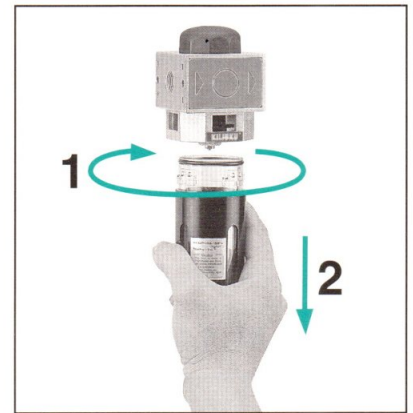
REGULATOR ADJUSTING KNOB

Pull knob to adjust air pressure. Turn clockwise to increase pressure. Turn counter-clockwise to decrease pressure. Push to lock.



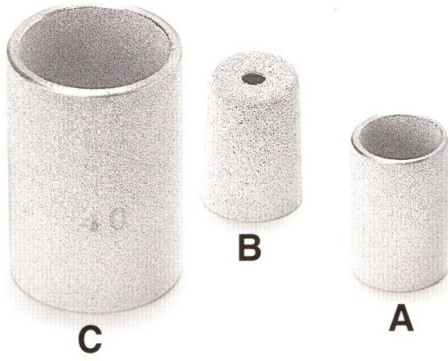
SEMI-AUTOMATIC DRAIN

Easy to drain even the pressure less than 0.5kgf/cm².



BOWL GUARD WITH THE COMPOSITE BOWL

Ratchet mount with lock for quick & easy attachment and removal. 30% fiber and 60% nylon material to ensure durability in a dusty environment.



Select FRL sintered bronze elements for filter unit

Model: **UFC-600,UFC-234,UFC-68**

UFC-600:for FRL-600, F-200, FR-500

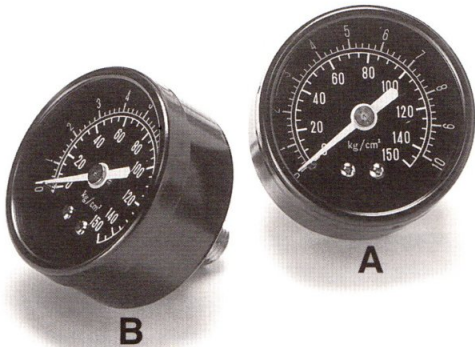
Standard 40 micron
Optional 5 micron

UFC-234:for UFR/L-02, 03, 04, U.F.R.L.-02,03,04

Standard 40 micron
Optional 5 micron

UFC-68:for UFR/L-06, 08, UFRL-06,08

Standard 40 micron
Optional 5 micron



Screw center mounted gauge

Model: **AGE-42,AGE-53**

(A)AGE-42:1/8" for model:R-200,FRL-600,FR-500

size:ø42mm

(B)AGE-53:1/4" for model:UFR/L-02, 03, 04, 06, 08

size:ø53mm

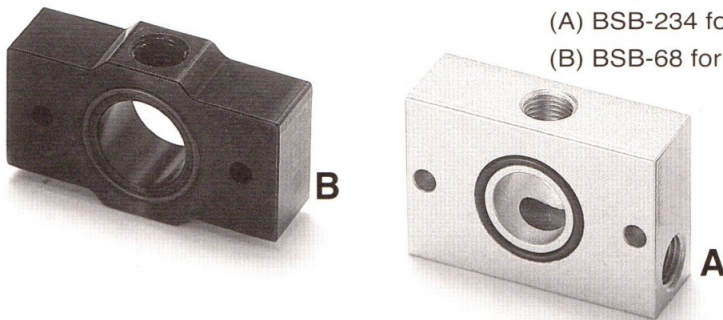
Spacer block

Model: **BSB-234,BSB-68**

□ Spacer block allows easy & flexibility in application. Spacer block can be installed after the filter, regulator, or lubricator providing one additional auxiliary ports in the multi-tubing system.

(A) BSB-234 for model UFR/L-02, 03, 04

(B) BSB-68 for model UFR/L-06, 08.



Automatic Drain

Model: **ADC-23468**

An internal float rises when much of as condensation of water in a filter bowl to activate the drain automatically.This auto-drain designed for model No.UFR/L-02, 03, 04, 06, 08.

- Male thread ø14mm
- Female thead ø15mm
- Dimension:ø30mmxH77.5mm

Mounting Bracket

Model: **BKT-200,FOR R-200**

BKT-600,FOR FRL-600,500

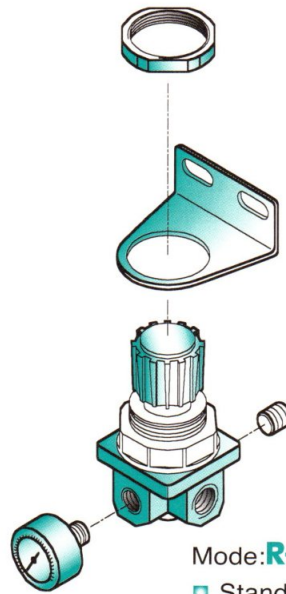
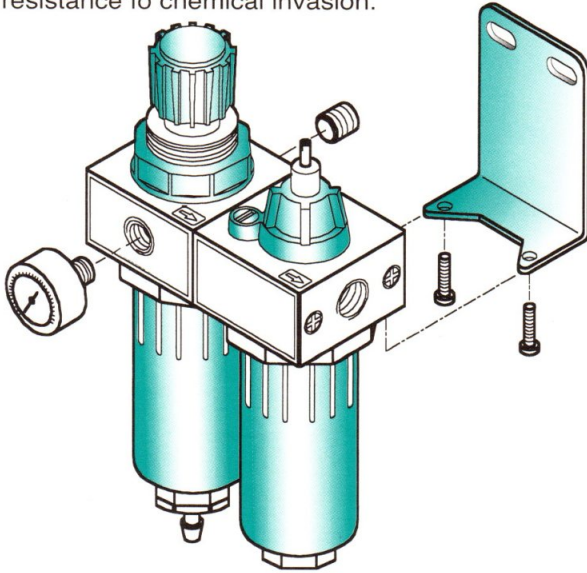
BKT-234,FOR UFR/L-02,03,04

BKT-68,FOR UFR/L-06,08

For More Dimension:See Page 56

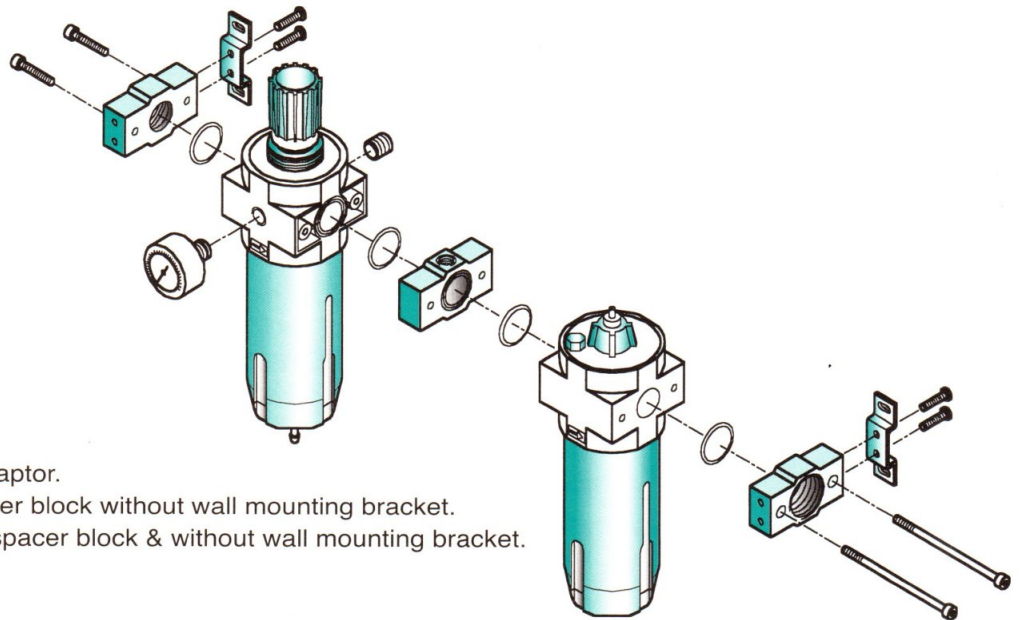
Mode: **FRL-600**

- Select mounting bracket.
Permit to mount the unit on the equipment with any direction of the panel.
- Designed for installation where space is limited, filters remove most of the solid particles and liquids from the air which may damage components.
- Optional composite bowl ensures increased resistance to chemical invasion.



Mode: **R-200**

- Standard miniature regulator comes with mounting bracket and gauge. Select panel mounting nut as optional.
- A small, compact unit is capable of providing an accurate control of air. Piston designed offer a durability and die-cast zinc body with metallic coating increase corrosion resistance.
- Pull and rotate the knob to adjust the downstream pressure setting.



UFR/L-06,08 (3/4",1")

■ INSTALLATION:

- *Installed completely with adaptor.
- *UFR/L08 installed with spacer block without wall mounting bracket.
- *UFR/L-06 installed without spacer block & without wall mounting bracket.

■ OPERATION:

(A) FILTER/REGULATOR

- *Filter/Regulator units are combined to save space, giving more design flexibility.
- *Ratchet bowl attachment provides easy lock and un-lock for the change of filter element.
- *Turn clockwise to increase pressure and turn counter-clockwise to decrease pressure.

(B) LUBRICATOR

- *The drip oil in lubricator is visible, and the drop enter with the downstream air.
- *The bowl pressure control valve closes when the filler is opened, pressurize inside the bowl and allowing to fill without turning the pressure off.
- *The variable orifice keeps a constant oil-to-air volume ratio regardless the change of the air flow, It prevents from over or less lubrication.

■ OPTION:

- *Mounting bracket , *Spacer block (for UFR/L-06) , *Metal element.

UFR/L-02, 03, 04(1/4", 3/8", 1/2")

□ INSTALLATION:

*Open the regulator's back plastic cover and fix the unit onto the bracket with the given components.(See figure)

*Note:Air-inlet is located same as the direction of arrow shown on the plastic cover.

□ OPERATION:

(A)FILTER/REGULATOR

*An units as standard are self-relieving.

*Spring-loaded piston type regulator offers a balance function for pressure regulation characteristics.

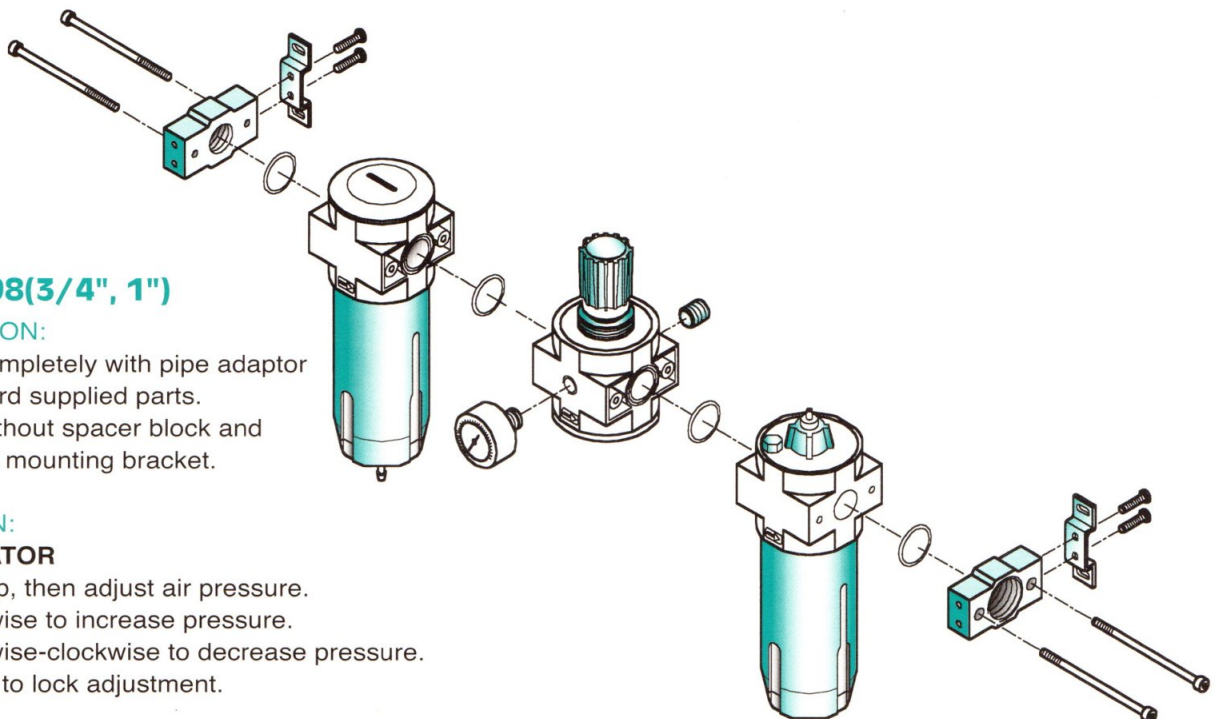
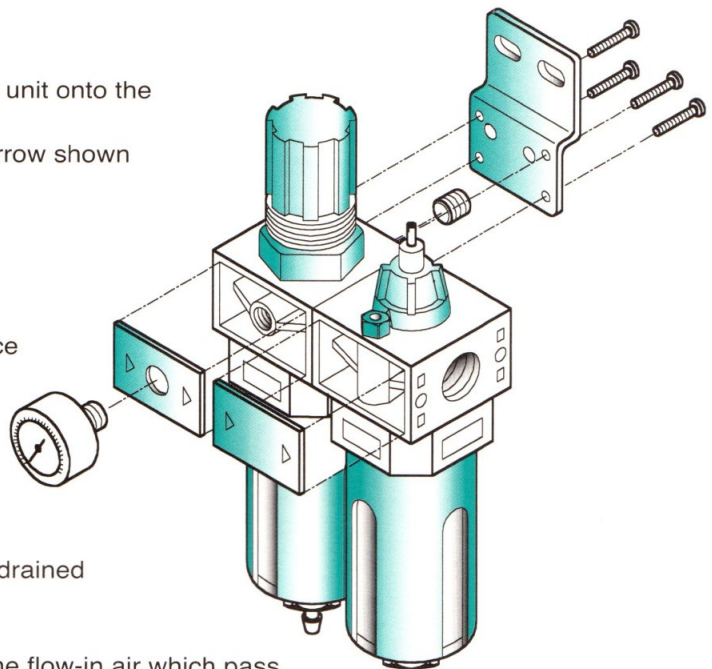
*Turning adjusting knob clockwise to increase pressure and turn counter-clockwise to decrease pressure.

*High-efficiency standard filters are equipped with 40-micron sineted bronze element.

*Contamination collected in the bowl can be easily drained through the standard semi automatic drain device.

(B)LUBRICATOR

*Oil is injected into the mist generator by some of the flow-in air which pass through the pressure control valve enter into the bowl where it forces oil up into the siphon tube. Then,the oil passes through the adjustment screw, which meters the suitable amount of oil to drip to the mist generator.



UFR.L-06, 08(3/4", 1")

□ INSTALLATION:

*Installed completely with pipe adaptor as a standard supplied parts.

*Installed without spacer block and without wall mounting bracket.

□ OPERATION:

(A)REGULATOR

*Pull knob up, then adjust air pressure.

*Turn clockwise to increase pressure.

*Turn clockwise-clockwise to decrease pressure.

*Push down to lock adjustment.

(B)FILTER

*Standard semi-autodrain can work for draining at the pressure less than 0.5kgf/cm².

*Optional for automatic drain .

*If the pressure drop at the filter becomes to be excessive, empty the filter bowls, clean or replace the filter element to assure good efficiency.

(C)LUBRICATOR

*ISO VG32 oil is recommended for use in air line lubricators. Normal lubrication ensure a longer, trouble-free operation due to the reducing of wear-off.

□ OPTION:

*Wall mounting bracket.

*Spacer block.

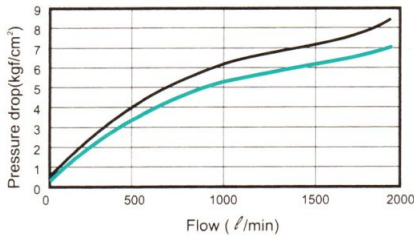
*Metal element.

HOW TO READ FLOW CHARTS:

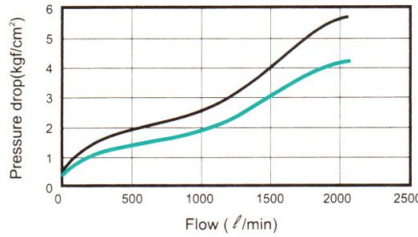
- *Decide upon the air flow rate required for this application.
- *To find the pressure drop by drawing a vertical line from the flow rate selected, and get two cross points with the inlet pressure curve (black line), and out put pressure (blue line).
- *From this intersection draw two horizontal lines to where they intersect with the vertical pressure drop scale.
- *The difference between these two points is the pressure drop.

FILTER / REGULATOR series

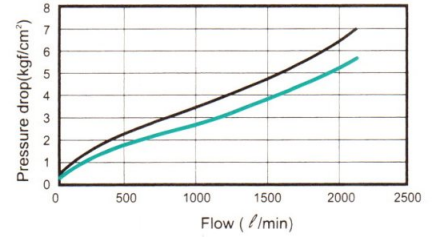
1/4" Filter /Regulator
Model:FR-500



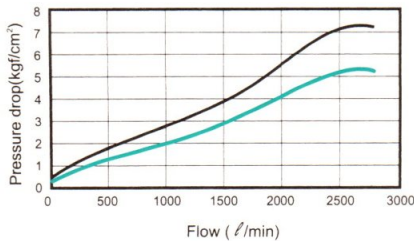
1/4" Filter /Regulator
Model:UFR-02



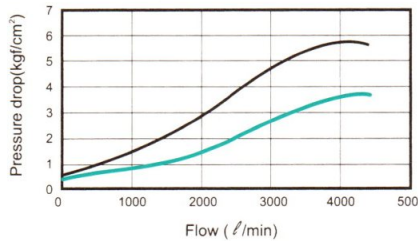
3/8" Filter /Regulator
Model:UFR-03



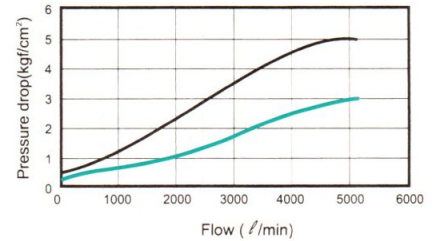
1/2" Filter /Regulator
Model:UFR-04



3/4" Filter /Regulator
Model:UFR-06

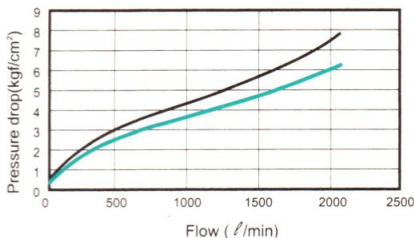


1" Filter /Regulator
Model:UFR-08

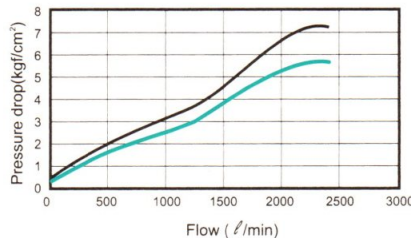


FILTER series

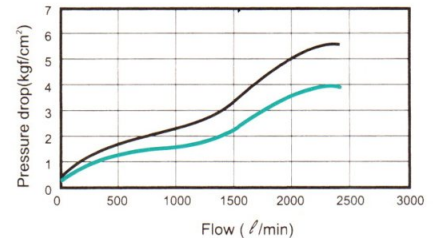
1/4" Filter
Model:F-200



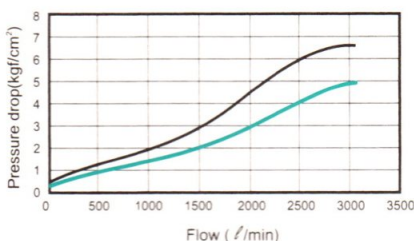
1/4" Filter
Model:UF-02



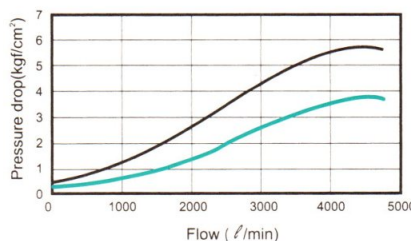
3/8" Filter
Model:UF-03



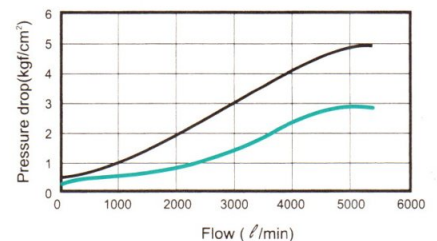
1/2" Filter
Model:UF-04



3/4" Filter
Model:UF-06



1" Filter
Model:UF-08

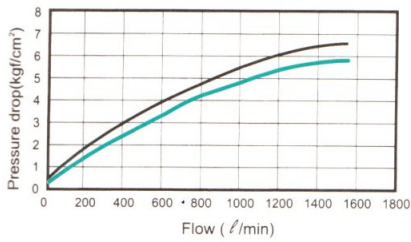


FLOW DATA

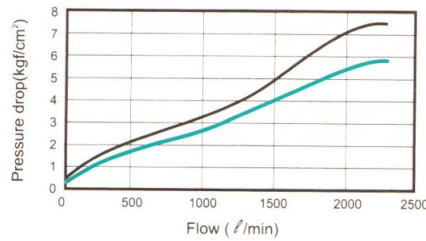
For R, UR, L, UL series

REGULATOR series

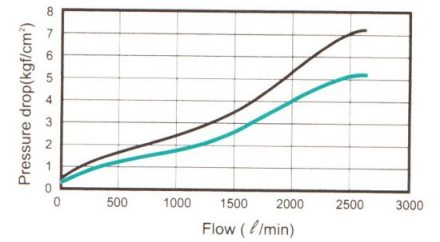
1/4" Regulator
Model: R-200



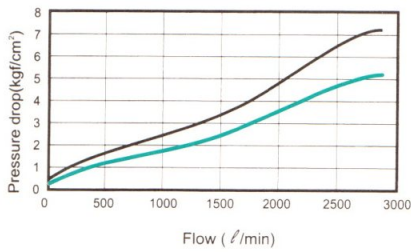
1/4" Regulator
Model: UR-02



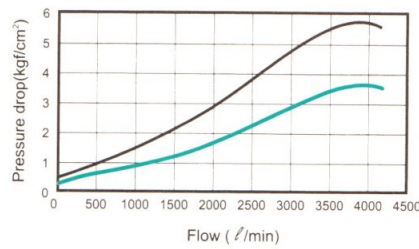
3/8" Regulator
Model: UR-03



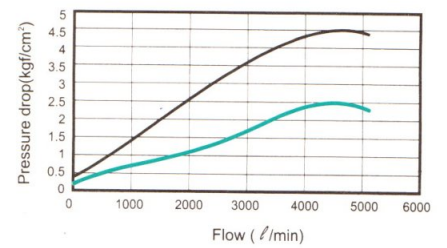
1/2" Regulator
Model: UR-04



3/4" Regulator
Model: UR-06

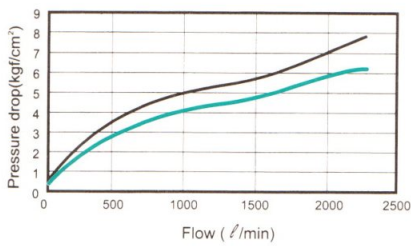


1" Regulator
Model: UR-08

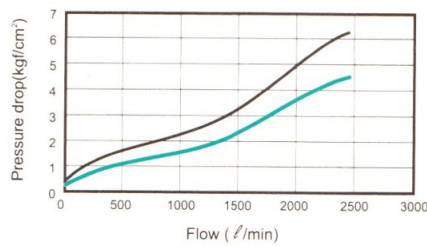


LUBRICATOR series

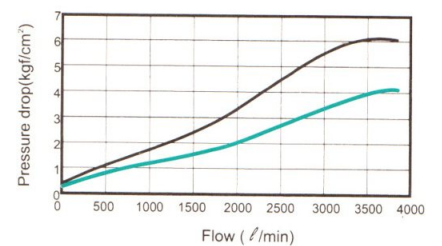
1/4" Lubricator
Model: L-200



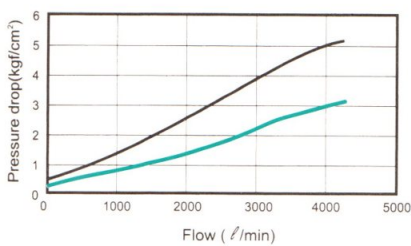
1/4" Lubricator
Model: UL-02



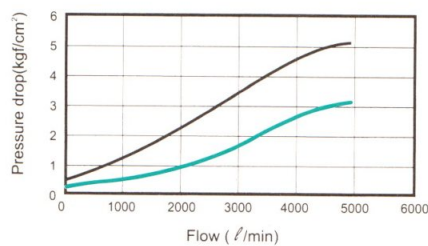
3/8" Lubricator
Model: UL-03



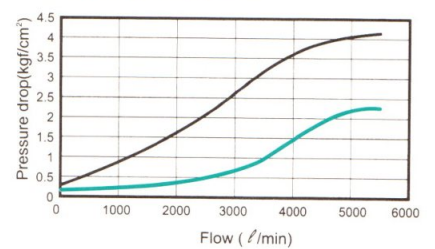
1/2" Lubricator
Model: UL-04



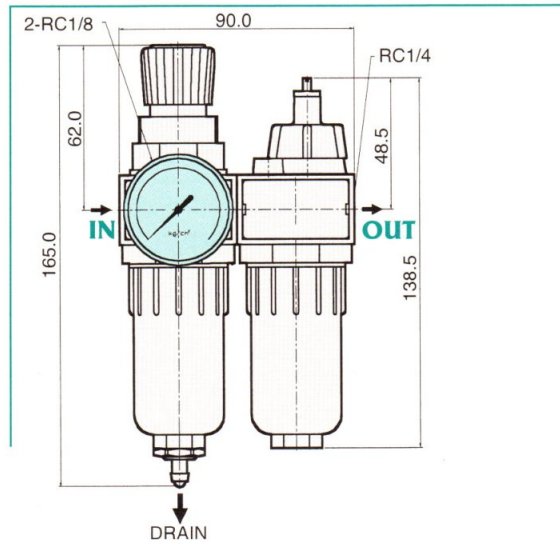
3/4" Lubricator
Model: UL-06



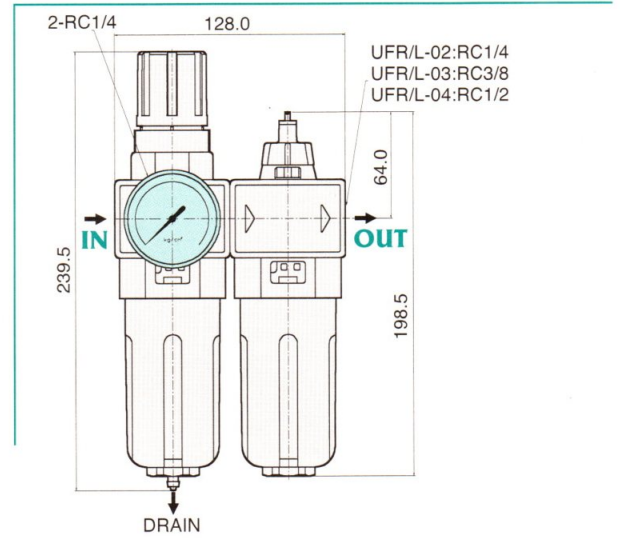
1" Lubricator
Model: UL-08



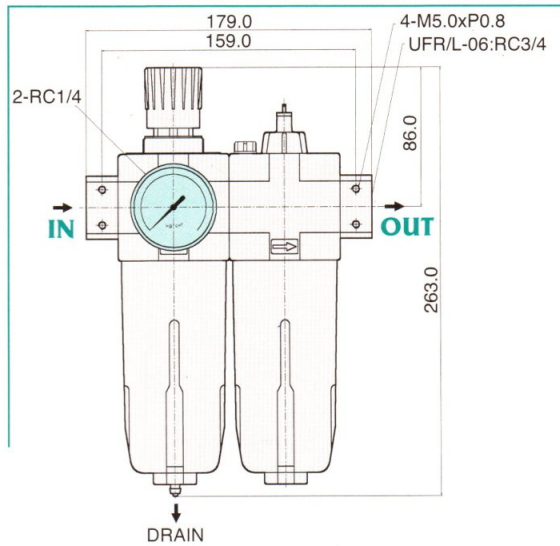
FRL-600



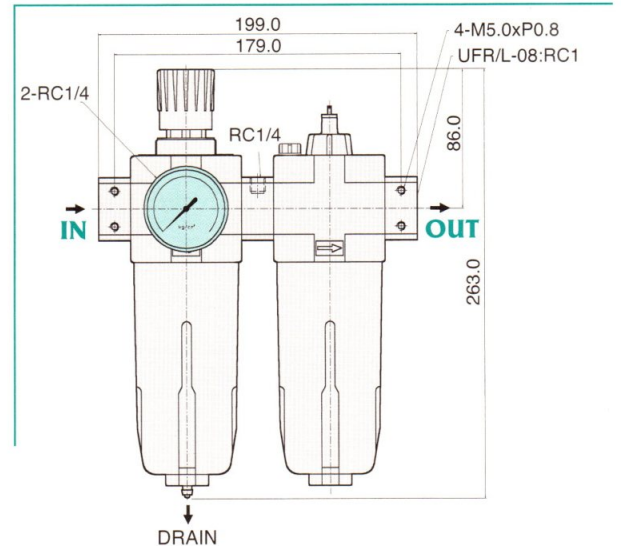
UFR/L-02, 03, 04



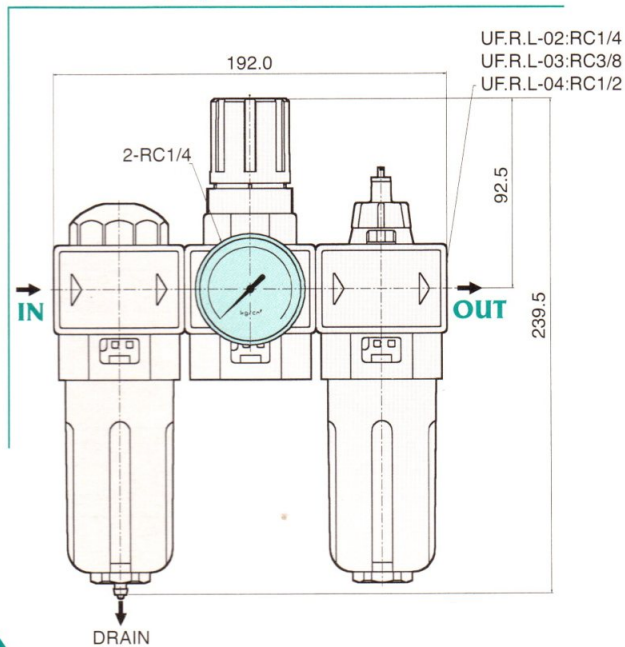
UFR/L-06



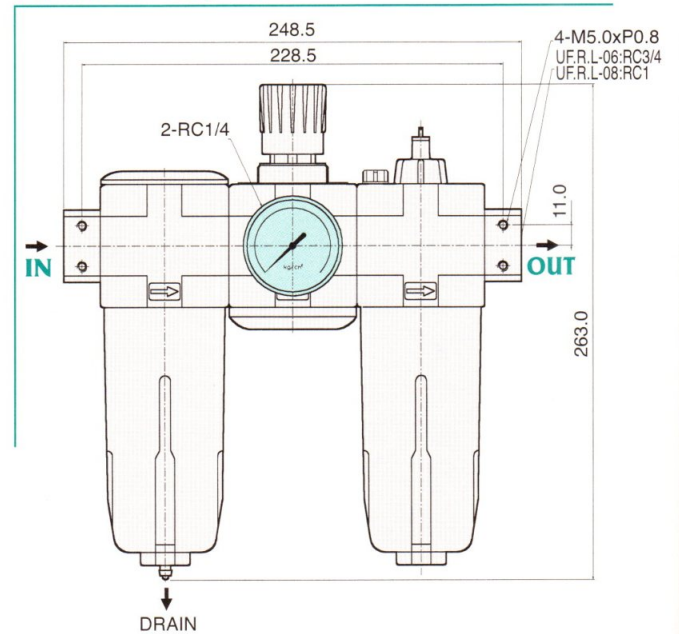
UFR/L-08



UFR.L-02, 03, 04



UFR.L-06, 08

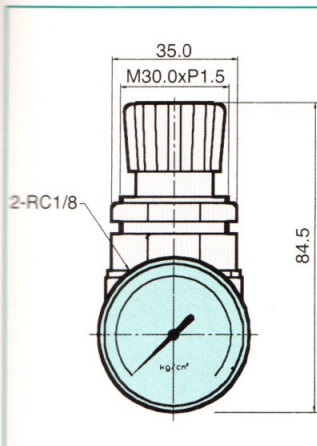


R, UR, F, UF, L, UL series

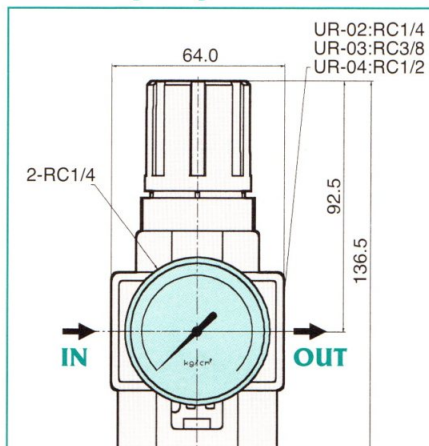
DIMENSION

Unit:mm

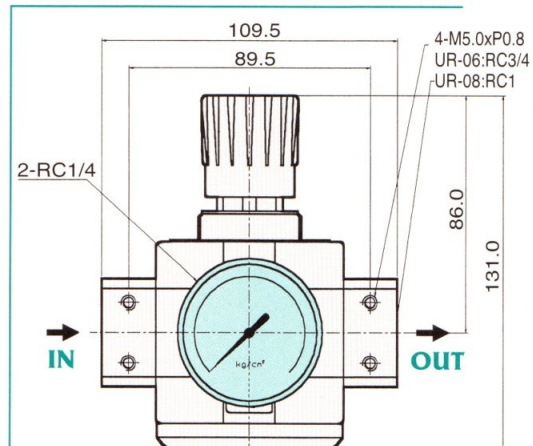
R200



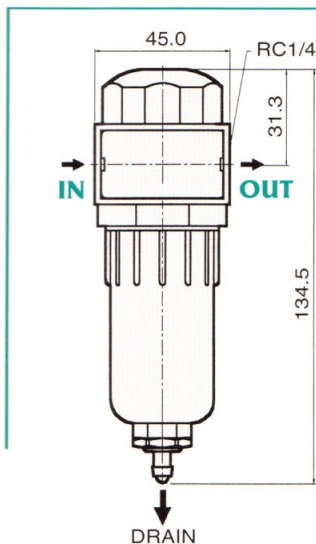
UR-02,03,04



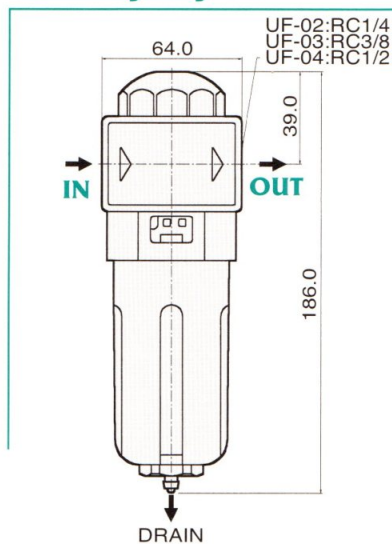
UR-06,08



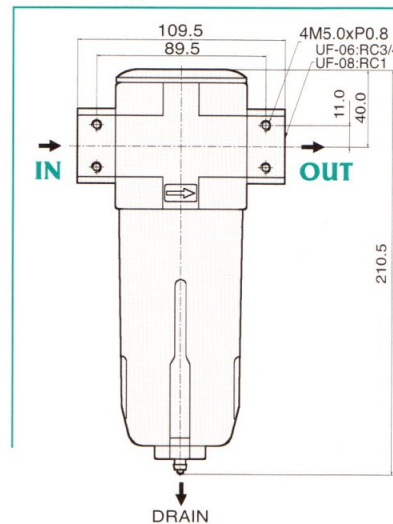
F-200



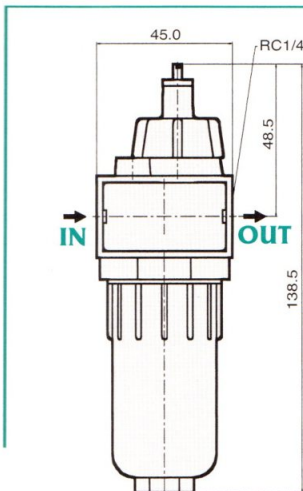
UF-02,03,04



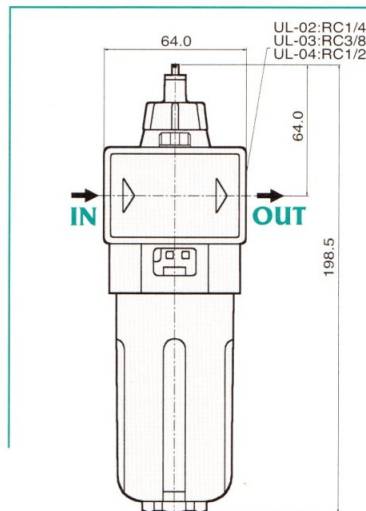
UF-06,08



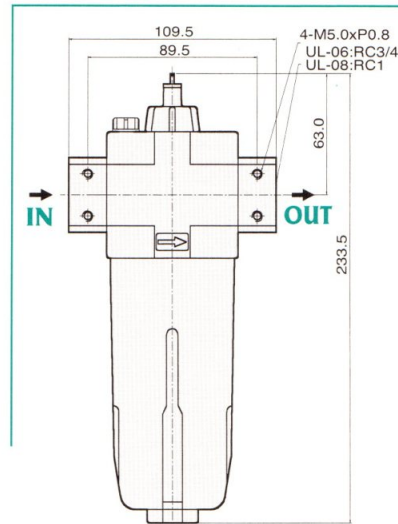
L-200



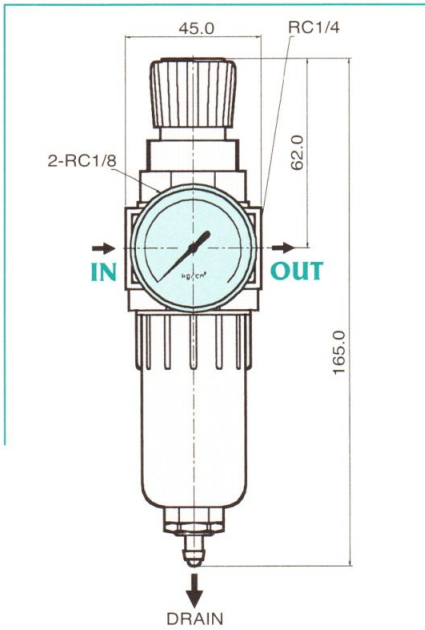
UL-02,03,04



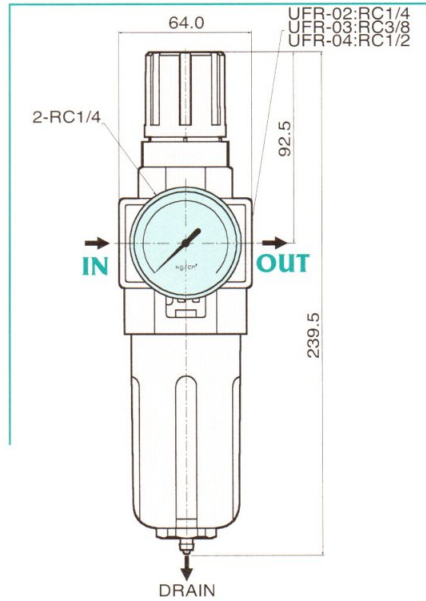
UL-06,08



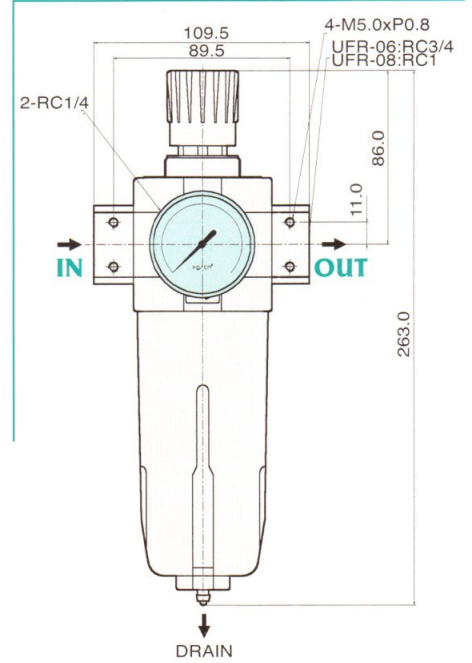
FR-500



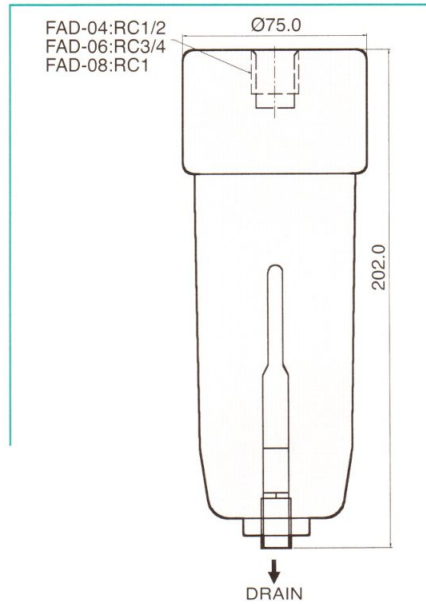
UFR-02,03,04



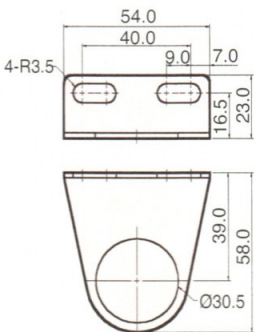
UFR-06,08



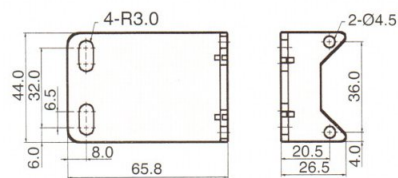
FAD-04,06,08



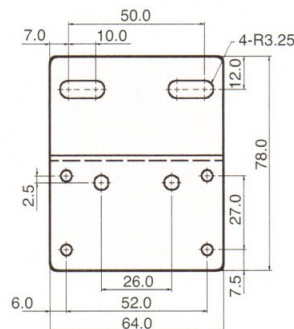
model: **BKT-200**
Bracket for R-200



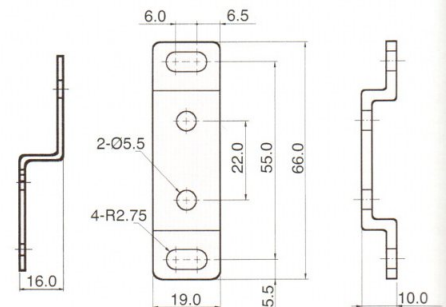
model: **BKT-600**
Bracket for FRL-600
FR-500



model: **BKT-234**
Bracket for
UFR/L-02, 03, 04



model: **BKT-68**
Bracket for
UFR/L-06, 08



PNEUMATIC CONTROL VALVES

MECHANICAL OPERATED TYPE



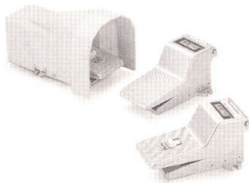
MAV, MBV 3/2, 5/2 WAY MANUAL OPERATED VALVES

- Available in roller, turn selector, lever selector, palm button, finger button, and palm button with detent valve.
- Can be used for pneumatic equipment as a emergency warning signal.
- Installation aperture DIA 30ø or optional 25ø.
- Can be mounted on the bracket or panel.
- See -----Page 58~ 61 for information.



HLV 3/2, 4/3, 5/2, 5/3 WAY HAND CONTROL VALVES

- Suitable for low to high flow application and requiring a manual or mechanical valve operation.
- See -----Page 62 for information.



FPV 3/2, 5/2 WAY FOOT PEDAL VALVES

- An die cast aluminum body provides excellent durability and light in weight.
- Foot pedal guards recommended for application to avoid from a accidental tramp and cause a result of damage or injury.
- See -----Page 63 for information.



VALVES ACCESSORIES

- Included exhaust valves, speed control valves, one direction check valves, shuttle valves, double pressure valves, silencer, pu-tube.
- See -----Page 64,65 for information.



AIR CYLINDER

- See -----Page 68~ 70 for ISO 6431 Air Cylinder & Accessories information.
- See -----Page 71~ 72 for ISO 6432 Air Cylinder Accessories information.



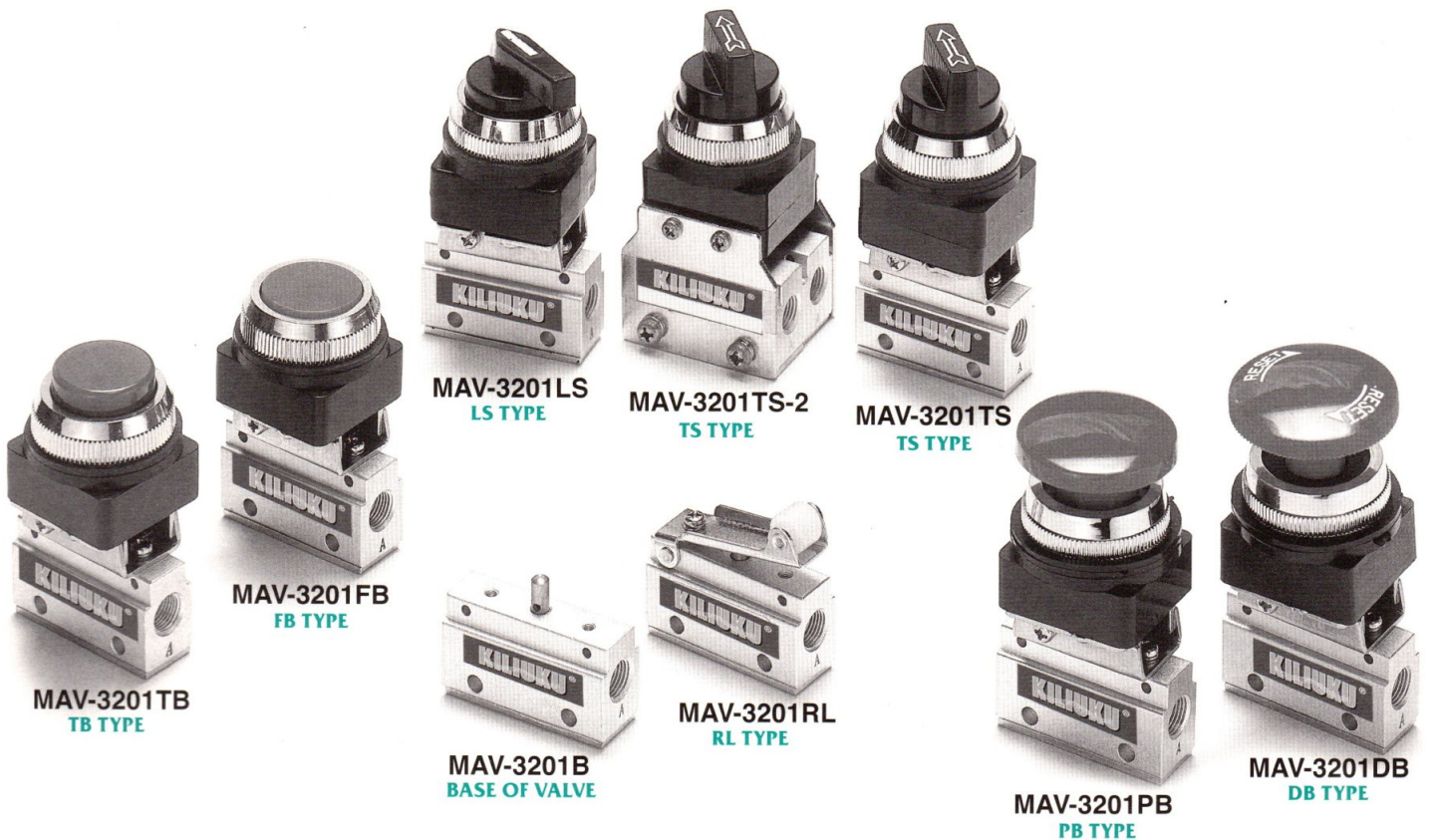
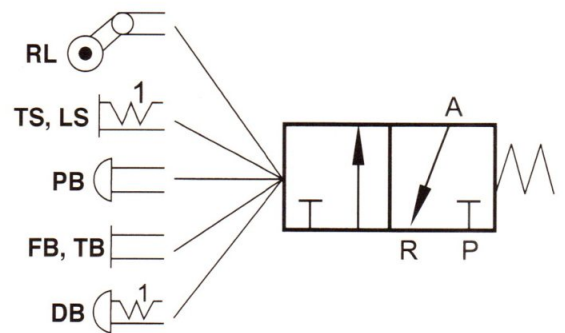
PNEUMATIC FITTING

- See -----Page 73 for One Touch Pneumatic Fitting

FEATURES:

- ❑ A sensitive valve to stop & start a moving device or actuator such as cylinder, slider or gates....etc.
- ❑ Numerous choice of valve styles.
- ❑ Aluminum body reduce the weight of valve.
- ❑ Can be installed vertically to control the close & open for the air passing.
- ❑ All valves use the same base 3/2 way MAV-3201B.
- ❑ Model MAV-3201TS-2, 4/2 way valve contains two row of valves stacking.
- ❑ Button Aperture : DIA ø30(Optional ø25)
- ❑ Button color : Black (TS, LS), Red (PB, FB, TB, DB)
- ❑ Optional : Green, Black, Yellow (PB, FB, TB)
- ❑ Valve styles:

- RL** - Roller Lever
- TS** - Turn selector
- LS** - Lever selector
- PB** - Palm button
- FB** - Finger button
- TB** - Thumb button
- DB** - Palm button with detent



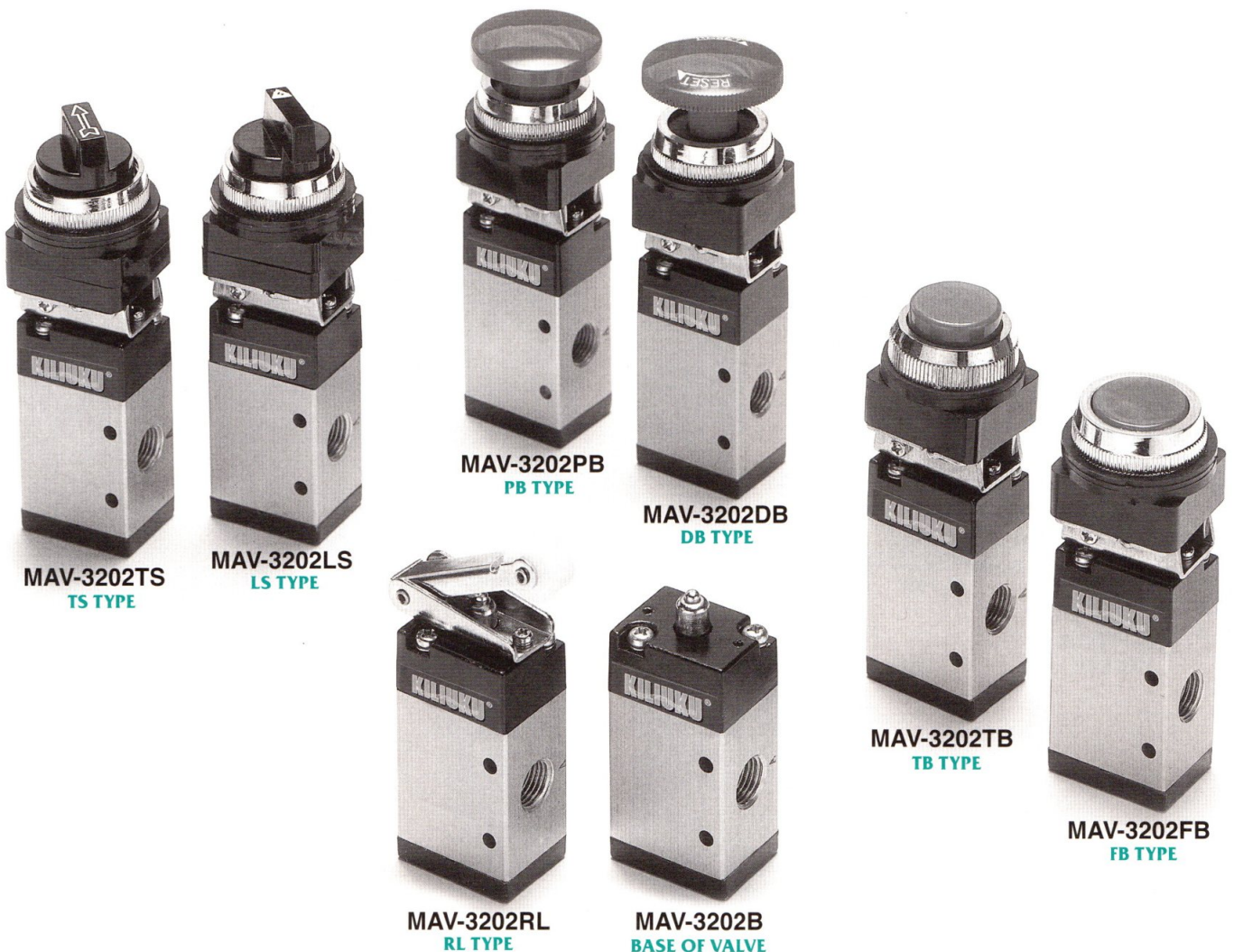
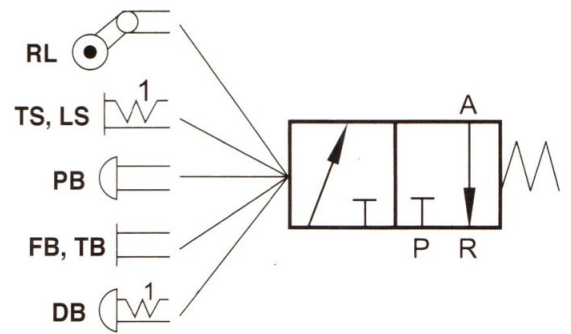
MAV series

3/2 way manual operated
AIR VALVES G1/4"

FEATURES:

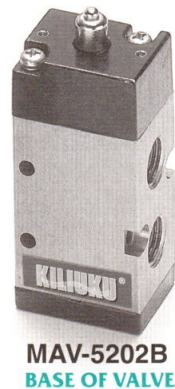
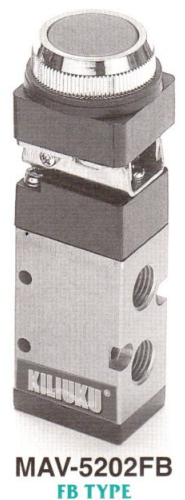
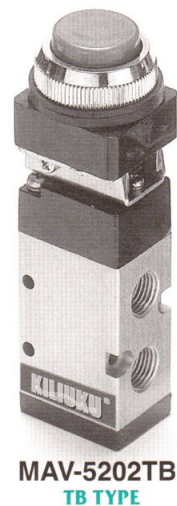
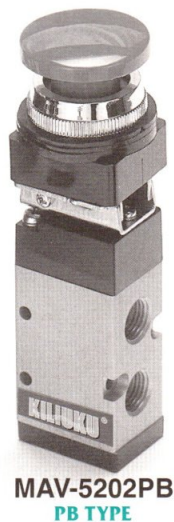
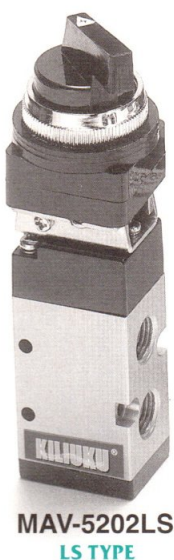
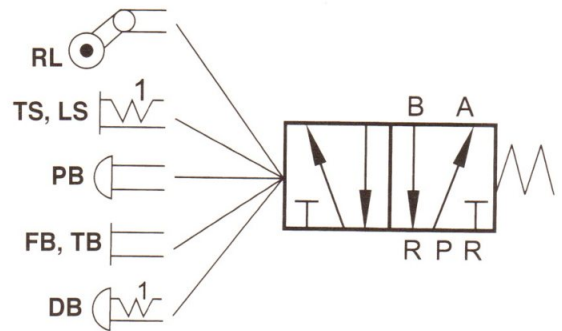
- ❑ A sensitive valve to stop & start a moving device or actuator such as cylinder, slider or gates....etc.
- ❑ Numerous choice of valve styles.
- ❑ Aluminum body reduce the weight of valve.
- ❑ Can be installed vertically to control the close & open for the air passing.
- ❑ All valves use the same base 3/2 way MAV-3202B.
- ❑ Button Aperture : DIA \varnothing 30(Optional \varnothing 25)
- ❑ Button color : Black (TS, LS), Red (PB, FB, TB, DB)
- ❑ Optional : Green, Black, Yellow (PB, FB, TB)
- ❑ Special order:G1/8" ports(model No.MAV-3201**)

- ❑ Valve styles:
- RL** - Roller Lever
 - TS** - Turn selector
 - LS** - Lever selector
 - PB** - Palm button
 - FB** - Finger button
 - TB** - Thumb button
 - DB** - Palm button with detent



FEATURES:

- ❑ A sensitive valve to stop & start a moving device or actuator such as cylinder, slider or gates....etc.
- ❑ Numerous choice of valve styles.
- ❑ Aluminum body reduce the weight of valve.
- ❑ Can be installed vertically to control the close & open for the air passing.
- ❑ All valves use the same base 5/2 way MAV-5202B.
- ❑ Button Aperture : DIA \varnothing 30(Optional \varnothing 25)
- ❑ Button color : Black (TS, LS), Red (PB, FB, TB, DB)
- ❑ Optional : Green, Black, Yellow (PB, FB, TB)
- ❑ Special order:G1/8" ports (model No.MAV-5201**)
- ❑ Valve styles:
 - RL** - Roller Lever
 - TS** - Turn selector
 - LS** - Lever selector
 - PB** - Palm button
 - FB** - Finger button
 - TB** - Thumb button
 - DB** - Palm button with detent

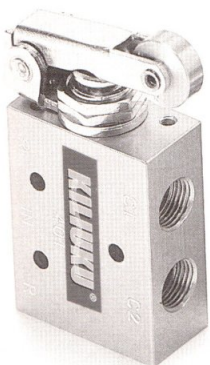
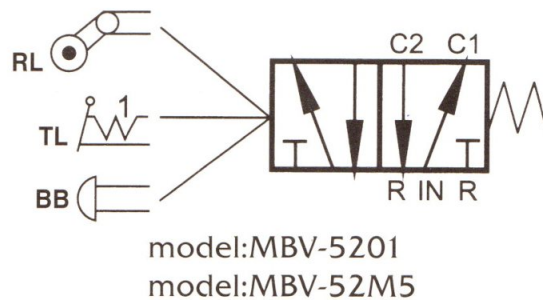
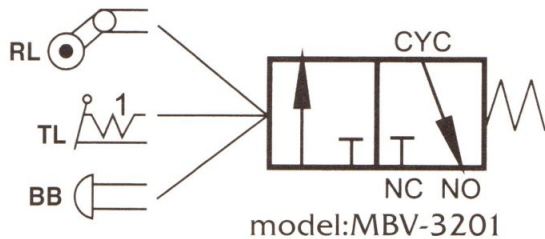


MBV series

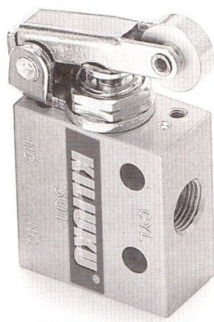
3/2, 5/2 way manual operated
AIR VALVES G1/8"

FEATURES:

- ❑ Model MBV-3201, 3/2 way, installed vertically to perform a normal open & normal close. The N/O & N/C function is designed the inside can be changed commonly.
- ❑ Model MBV-5201, port G1/8 for actuator A & B but the exhaust port R size is M5xP0.8, 5/2 way installed vertically.
- ❑ Aluminum body reduce the weight of valve.
- ❑ Special order: model Model MBV-52M5 port sizes are M5xP0.8 for all inlet & outlet, exhaust ports.
- ❑ Valve styles:
 - TL** - toggle Lever
 - BB** - Ball button
 - RL** - Roller Lever



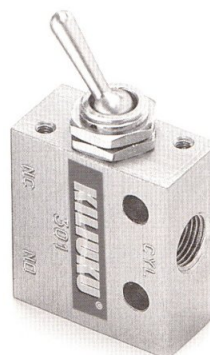
MBV-5201RL
MBV-52M5RL
RL TYPE



MBV-3201RL
RL TYPE



MBV-5201TL
MBV-52M5TL
TL TYPE



MBV-3201TL
TL TYPE



MBV-5201BB
MBV-52M5BB
BB TYPE



MBV-3201BB
BB TYPE

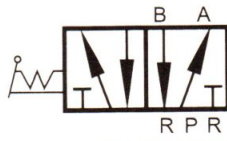
3/2, 4/3, 5/2, 5/3 way hand lever operated AIR VALVES
G1/4", G3/8", G1/2"

FEATURES:

- ❑ Aluminum alloy body provides a using durability.
- ❑ Model HLV-5202, We offer the mounting bracket optional for this valve only.
- ❑ Teflon seals elongate valve life and wear off resistance for HLV-43 ** series.
- ❑ S-stand for spring return. M-stand for mecanical detent. F-stand for mounting bracket.
- ❑ 5/2 way are available in modle **HLV-5201S(G1/8")**, **HLV-5202 S/M (G1/4")**, **HLV-5203M (G3/8")**.
- ❑ 5/3 way are available in modle **HLV-5302M (G1/4")**, **HLV-5303M (G3/8")**.
- ❑ 3/2 way are available in modle **HLV-3202M (G1/4")**. **HLV-3203M (G3/8")**.
- ❑ 4/3 way are available in modle **HLV-4302M (G1/4")**, **HLV-4303M (G3/8")**, **HLV-4304M(G1/2")**.



model:HLV-5201S/5202S
S-type



model:HLV-5202M/03M
M-type



model:HLV-5302M/03M
M-type



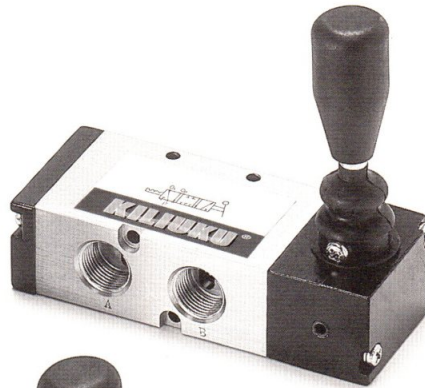
model:HLV-4302M/03M/04M



model:HLV-3202M/03M



HLV-5203M



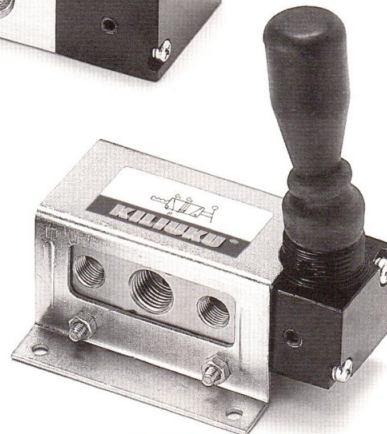
HLV-5303M



HLV-5201S/02S



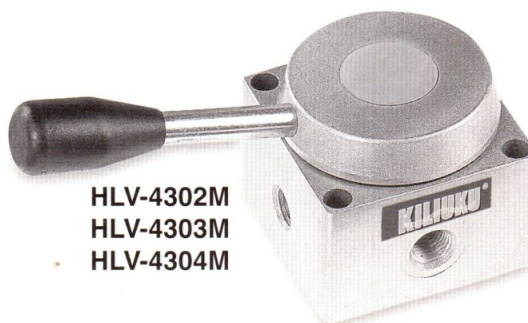
HLV-5202M



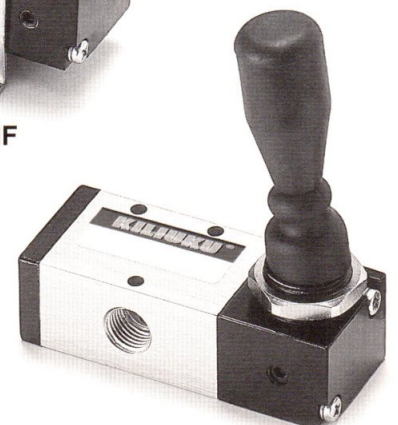
HLV-5202MF



HLV-5302M



HLV-4302M
HLV-4303M
HLV-4304M



HLV-3202M
HLV-3203M

FPV series

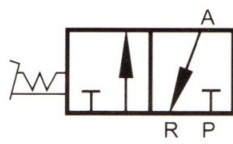
3/2, 5/2 way foot pedal
VALVES G1/4"

FEATURES:

- ❑ Foot pedal valve with/without foot guard.
- ❑ Valve can be selected in mechanical detent or spring return.
- ❑ Strong construction elongate the using life.
- ❑ S-stand for spring return. M-stand for mechanical detnet. F-stand for foot guard.
- ❑ 3/2 way modle **FPV-3202S/M (G1/4")**, **FPV-3202 SF/MF(G1/4")**
- ❑ 5/2 way modle **FPV-5202 S/M (G1/4")**, **FPV-5202 SF/MF(G1/4")**



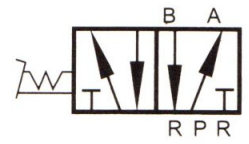
model:FPV-3202S



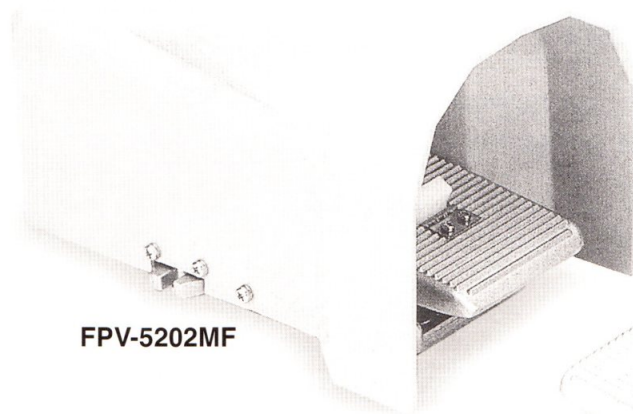
model:FPV-3202M



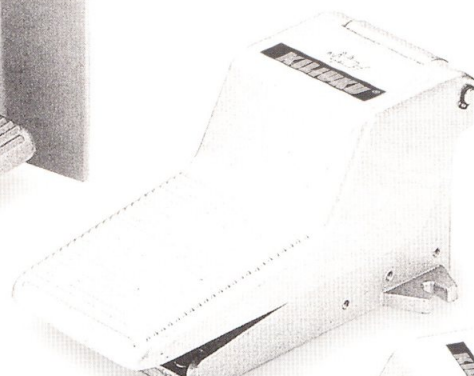
model:FPV-5202S



model:FPV-5202M



FPV-5202MF



FPV-5202S



FPV-5202M

Speed control valve:

Model:

SV-01(1/8"), 02(1/4")
SV-03(3/8"), 04(1/2"), 06(3/4"), 08(1")



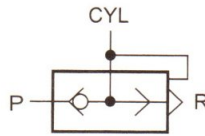
- These valves provide the quick & slow speed adjustable control for the piston rod of air cylinder or actuator.



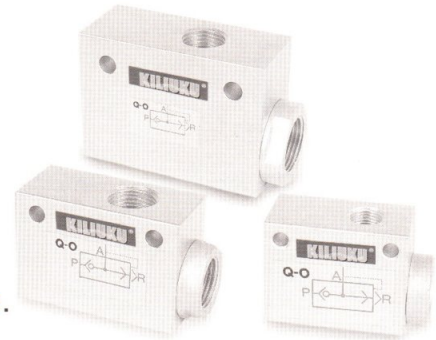
Quick exhaust valve:

Model:

QV-01(1/8"), 02(1/4"), 03(3/8"),
04(1/2"), 06(3/4"), 08(1")



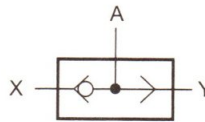
- These valves are designed to speed up the piston rod return by providing immediate outlet to discharge the air quickly from cylinder.
- Valve is mounted on the cylinder A or B port and fitted with a silencer if required to reduce the discharge noise.



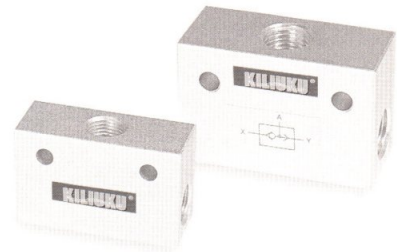
Shuttle valve:

Model:

ST-01(1/8"), 02(1/4")



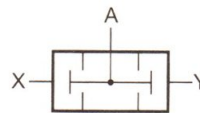
- Check ball moves from the port which is the higher pressure to the other port which is lower pressure and blockade this low pressure port air flow.
- Allow two input sources to get the output



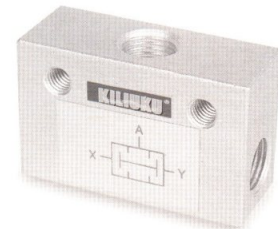
Double pressure valve:

Model:

ST-01H(1/8")

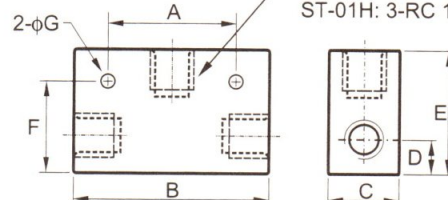


- Required input X & Y keep same pressure for activation, to output A port.
- Required the pressure of both the input ports keep the balance, than the activation can be started!



ST-01: 3-RC 1/8
 ST-02: 3-RC 1/4
 ST-01H: 3-RC 1/8

MODEL	A	B	C	D	E	F	G
ST-01	25.0	40.0	16.0	8.0	25.5	19.5	4.3
ST-02	25.0	40.0	16.0	8.0	25.5	19.5	4.3
ST-01H	35.0	52.0	22.0	11.0	35.0	25.0	5.5



E, C, NA series

FLOW CONTROL & CIRCUITRY VALVES

Silencer:

Model:

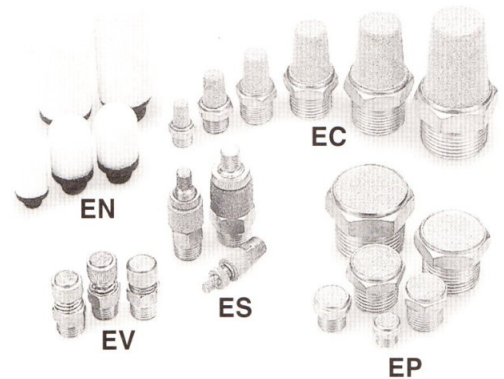
EN-01(1/8")-08(1") Sponge, plastic

EC-01(1/8")-08(1") Brass

EP-01(1/8")-08(1") Brass

EV-01(1/8")-04(1/2")

ES-01(1/8")-04(1/2") Exhaust speed control



- ❑ Separation for Gas & Liquid-state mud.
- ❑ Gas exhaust from silencer.
- ❑ Vibration and sound damper
- ❑ Anti-combustion.

One direction check valve:

Model:

C-01(1/8"), 02(1/4"), 03(3/8"),
04(1/2"), 06(3/4"), 08(1")

- ❑ This valve is used to prevent from the air flow backward.
- ❑ Aluminum body & anodization of surface to prevent the surface from scratch.
- ❑ Inner design apply with a piston and back spring.



PNEUMATIC TUBING:

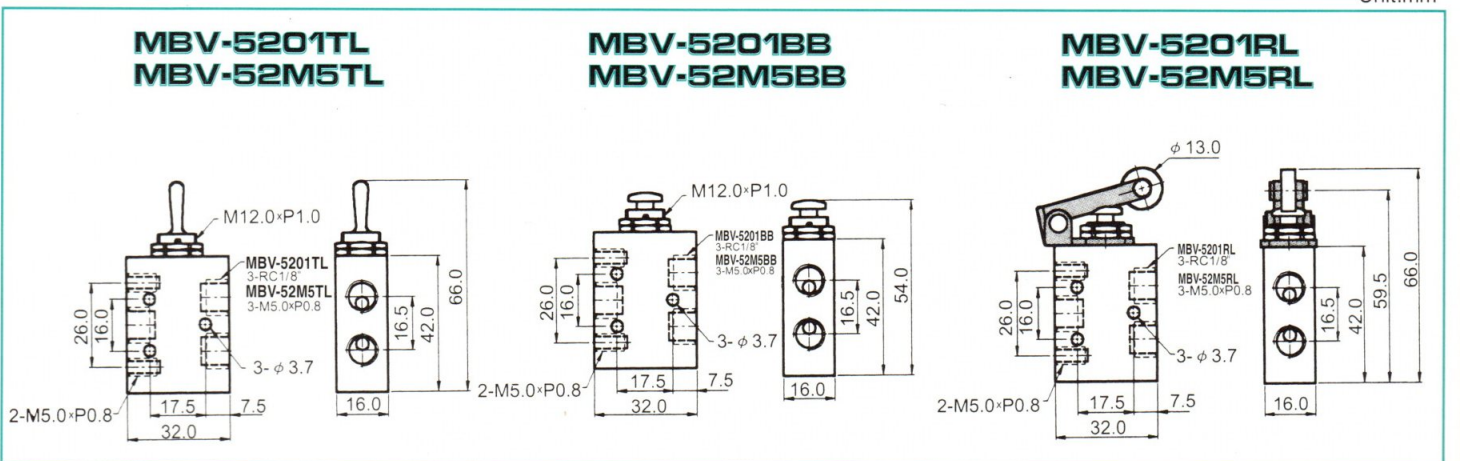
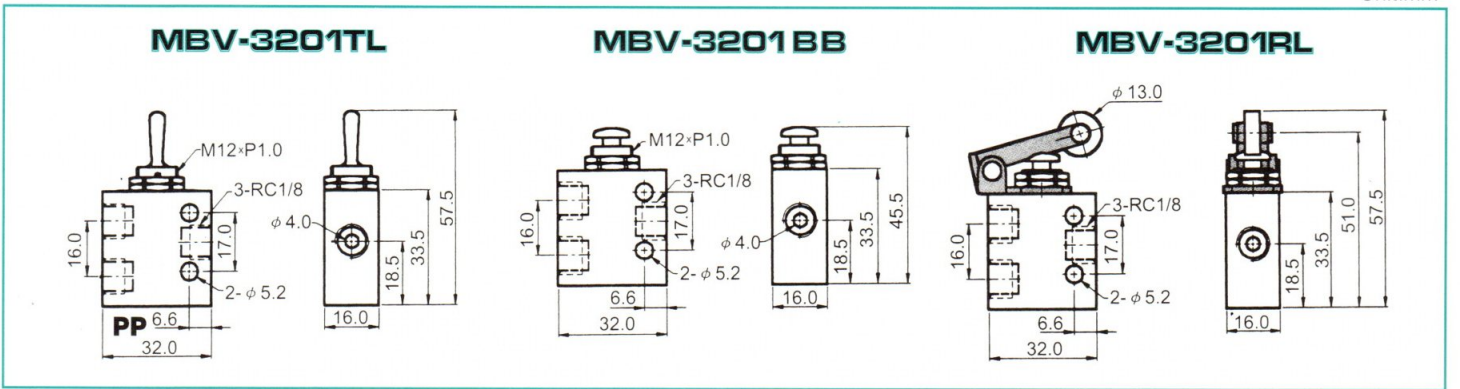
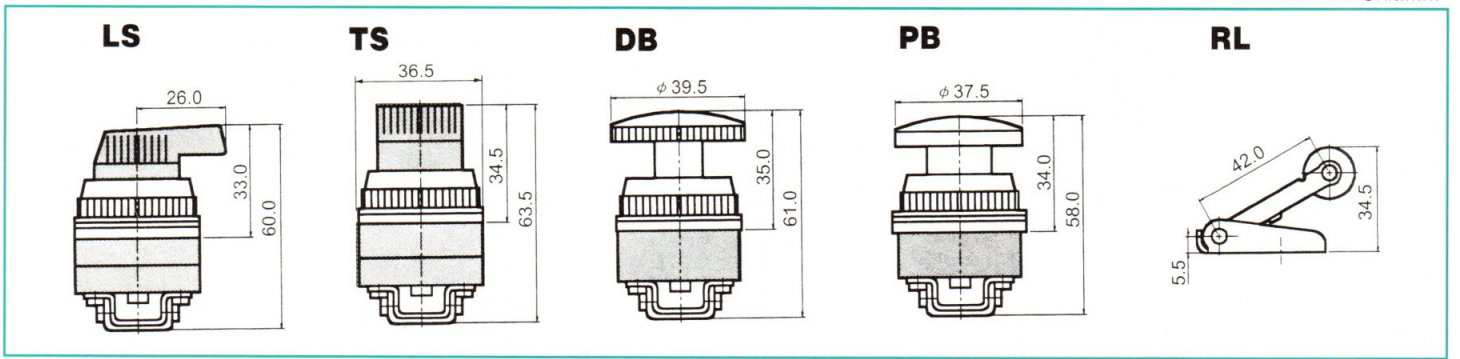
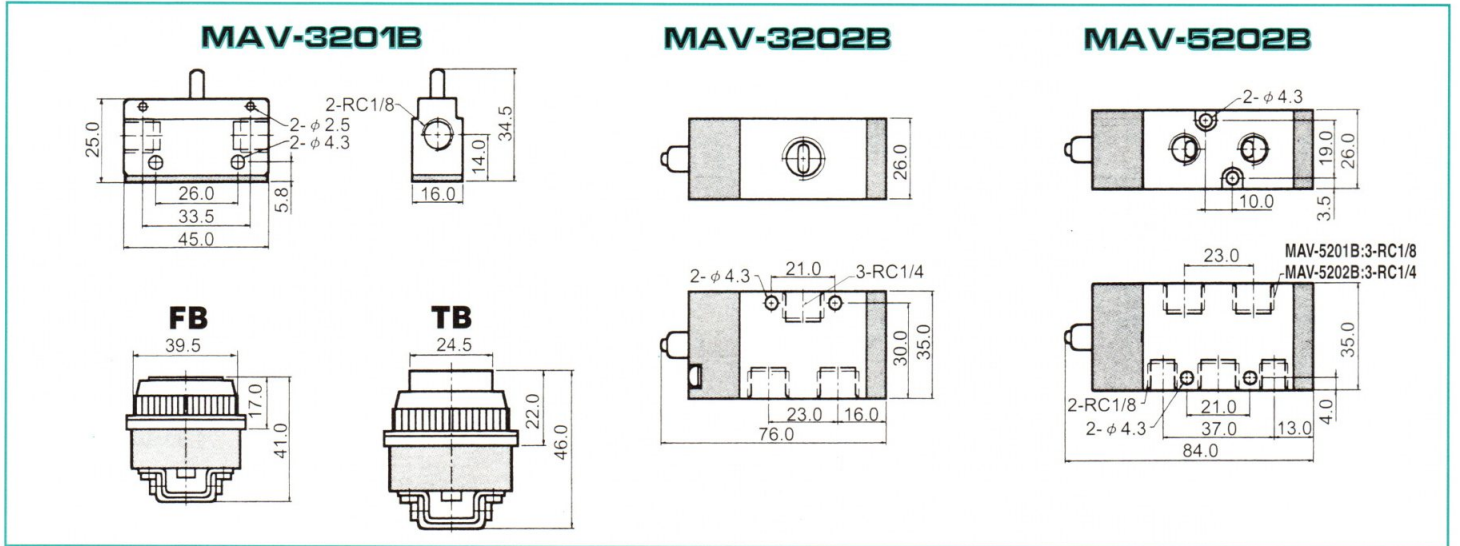
Material:PU

ITEM NO.	O.D.(mm)	I.D.(mm)	Break pressure (kgf/cm ²)
NA-0420	4	2.0	24
NA-0425	4	2.5	24
NA-0640	6	4.0	24
NA-0850	8	5.0	24
NA-0860	8	6.0	18
NA-1065	10	6.5	24
NA-1180	11	8.0	24
NA-1280	12	8.0	24
NA-1612	16	12.0	26
NA-1613	16	13.0	24
NA-1/4	6.35	4.0	24
NA-5/16	8	5.0	24
NA-3/8	9.53	6.5	24
NA-1/2	12.6	9.6	20

PNEUMATIC TUBING:

Material:Nylon

ITEM NO.	O.D.(mm)	I.D.(mm)	Break pressure (kgf/cm ²)
NA-0425	4	2.5	70
NA-0640	6	4.0	55
NA-0860	8	6.0	50
NA-1075	10	7.5	50
NA-1290	12	9.0	50
NA-1/4	6.35	4.57	45
NA-5/16	8	6.0	50
NA-3/8	9.53	6.99	45
NA-1/2	12.6	9.56	50

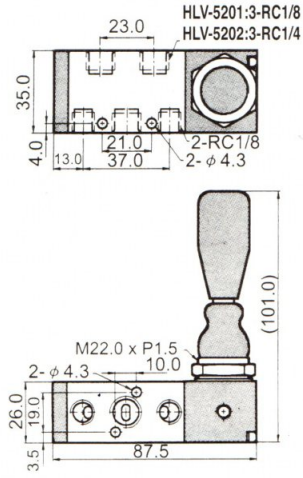


HLV, FPV series

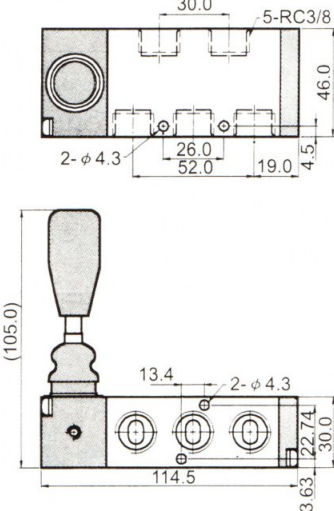
DIMENSION

Unit:mm

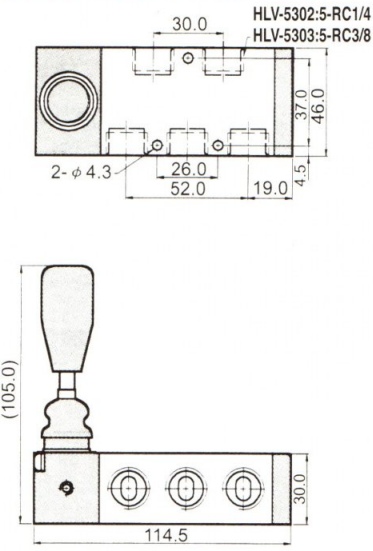
HLV-5201-5202



HLV-5203

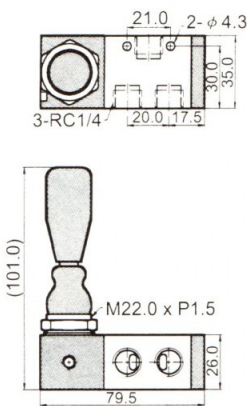


HLV-5302/5303

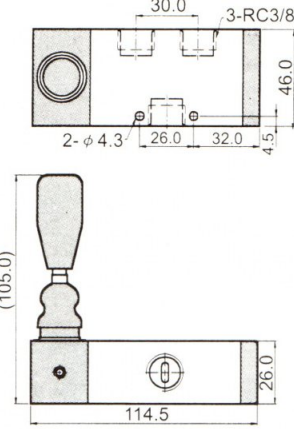


Unit:mm

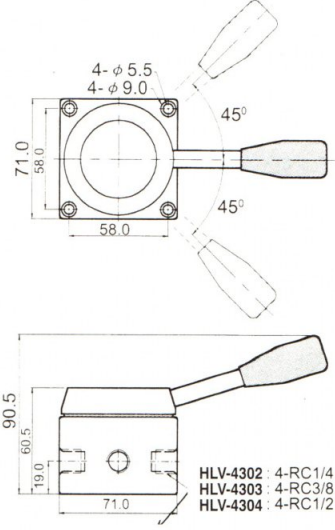
HLV-3202



HLV-3203

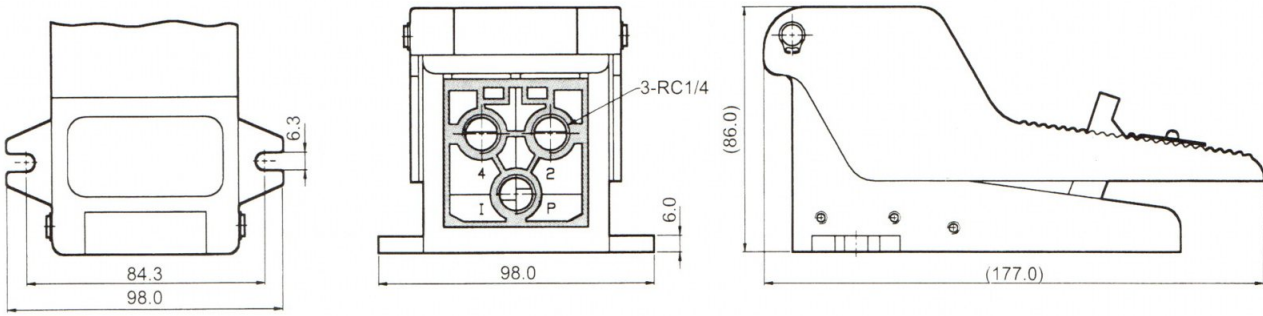


HLV-4302/03/04



Unit:mm

FPV-5202



FEATURES:

- ❑ Tie rod & bolt designed for easy assembling.
- ❑ Available in $\varnothing 32 \sim 150$ mm bore inside diameter.
- ❑ Optional oversize of rod is available to provide a bigger loading work of the heavy duty equipment.
- ❑ Die-cast aluminum body reduce the weight.
- ❑ Optional magnetic piston is available.

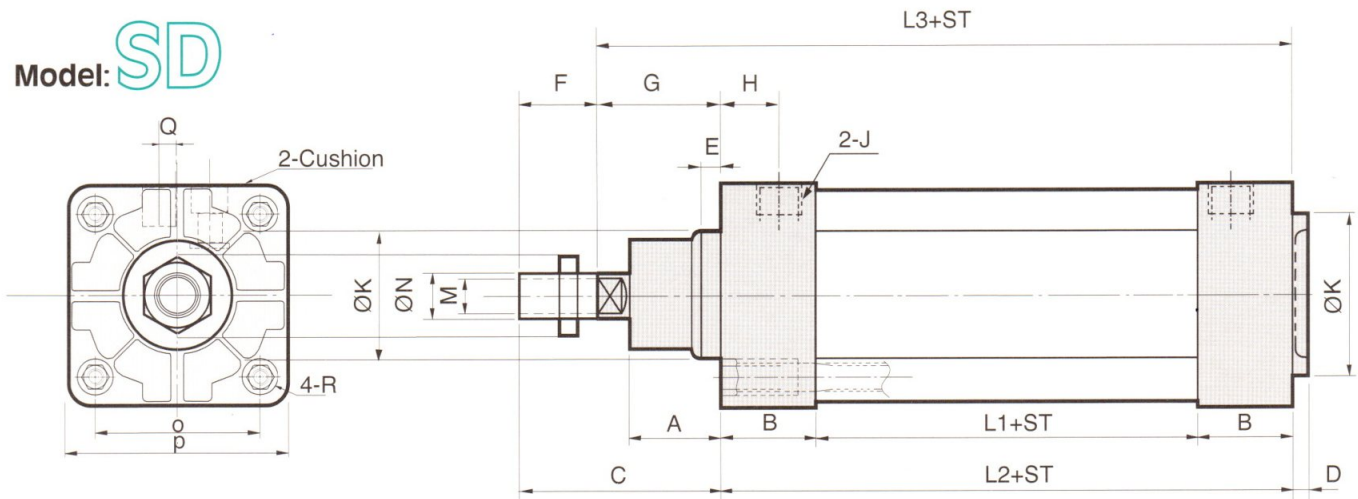


How to order:

S	D	-	ø32	X	50	+	LB	+	Y	+	MS
Item: Pneumatic Cylinder	D: Basic-type DD: Double piston rod type		Bore size: $\varnothing 32$ mm $\varnothing 150$ mm		Stroke(ST): 5mm 2000mm		Mountings: CA,FA,TA, CB,TC,LB,FB		Accessories: I,Y PHS(see p70) RA RN		Magnetic sensor:MS

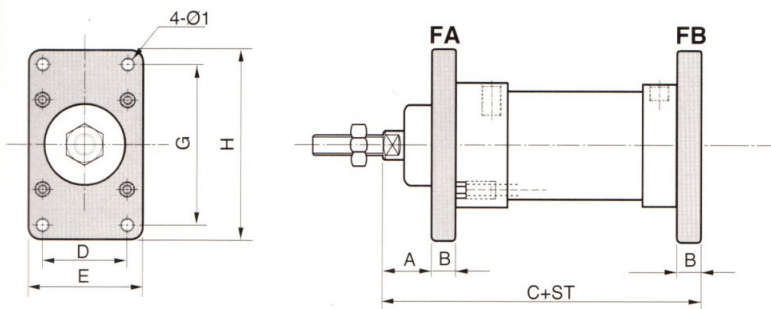
Dimension

Model: **SD**



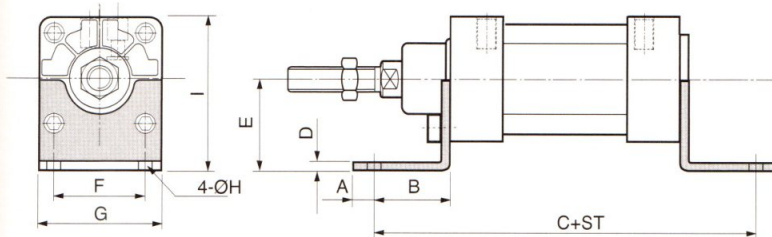
Bore	A	B	C	D	F	G	H	J	K	L1	L2	L3	M	N	O	P	Q	R
$\varnothing 32.0$	16.0	27.0	48.0	3.0	22.0	26.0	17.0	G1/8	30.0	40.0	94.0	120.0	M10xP1.25	12.0	32.5	49.0	4.0	M6.0
$\varnothing 40.0$	21.0	31.0	54.0	4.0	24.0	30.0	19.0	G1/4	35.0	43.0	105.0	135.0	M12xP1.25	16.0	38.0	54.5	6.0	M6.0
$\varnothing 50.0$	28.0	31.5	69.0	4.0	32.0	37.0	19.0	G1/4	40.0	43.0	106.0	143.0	M16xP1.5	20.0	46.5	65.0	7.0	M8.0
$\varnothing 63.0$	28.0	38.0	69.0	4.0	32.0	37.0	23.0	G3/8	45.0	45.0	121.0	158.0	M16xP1.5	20.0	56.5	75.0	8.0	M8.0
$\varnothing 80.0$	34.0	37.0	86.0	4.0	40.0	46.0	25.0	G3/8	45.0	54.0	128.0	174.0	M20xP1.5	25.0	72.0	94.0	10.0	M10.0
$\varnothing 100.0$	37.0	40.0	91.0	4.0	40.0	51.0	26.0	G1/2	55.0	58.0	138.0	189.0	M20xP1.5	25.0	89.0	113.0	10.0	M10.0
$\varnothing 125.0$	45.0	41.0	119.0	6.0	54.0	65.0	27.0	G1/2	60.0	78.0	160.0	225.0	M27xP2.0	32.0	110.0	145.0	11.0	M12.0

FA, FB (Flange Mounting)



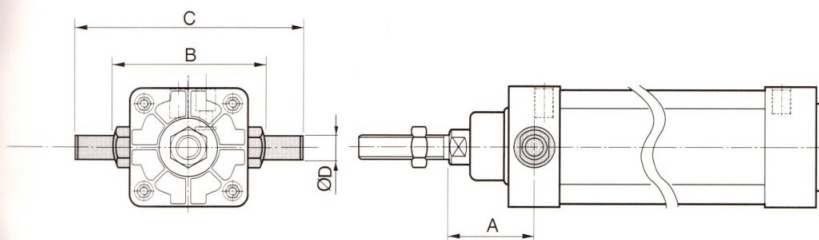
Dimension		Unit:mm							
Bore	A	B	C	D	E	G	H	I	
ø32.0	16.0	10.0	130.0	32.0	50.0	64.0	80.0	7.0	
ø40.0	20.0	10.0	145.0	36.0	55.0	72.0	90.0	9.0	
ø50.0	25.0	12.0	155.0	45.0	65.0	90.0	110.0	9.0	
ø63.0	25.0	12.0	170.0	50.0	75.0	100.0	120.0	9.0	
ø80.0	30.0	16.0	190.0	63.0	95.0	126.0	153.0	12.0	
ø100.0	35.0	16.0	205.0	75.0	115.0	150.0	178.0	14.0	
ø125.0	45.0	20.0	245.0	90.0	150.0	180.0	220.0	16.0	

LB (Foot Mounting)



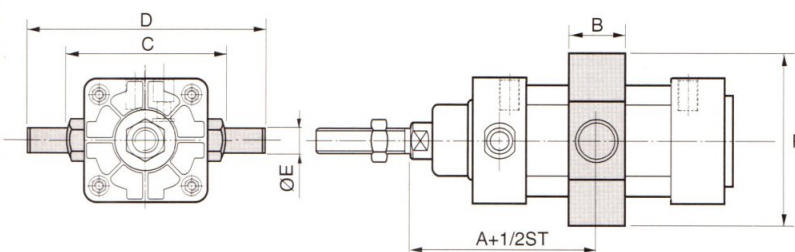
Dimension		Unit:mm								
Bore	A	B	C	D	E	F	G	H	I	
ø32.0	11.0	24.0	142.0	5.0	32.0	32.0	48.0	7.0	56.5	
ø40.0	12.0	28.0	161.0	5.0	36.0	36.0	53.0	9.0	63.5	
ø50.0	13.0	32.0	170.0	5.0	45.0	45.0	63.0	9.0	77.5	
ø63.0	13.0	32.0	185.0	5.0	50.0	50.0	73.0	9.0	87.5	
ø80.0	19.0	41.0	210.0	6.0	63.0	63.0	98.0	12.0	110.0	
ø100.0	19.0	41.0	220.0	6.0	71.0	75.0	115.0	14.5	127.5	
ø125.0	25.0	45.0	250.0	8.0	90.0	90.0	140.0	16.5	162.5	

TA (Trunion Mounting)



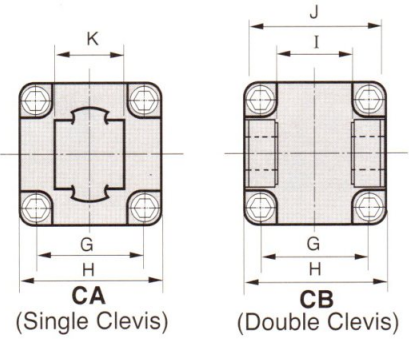
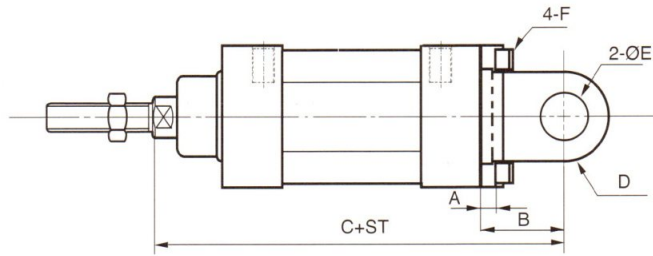
Dimension		Unit:mm			
Bore	A	B	C	D	
ø32.0	35.0	50.0	74.0	12.0	
ø40.0	46.0	63.0	95.0	16.0	
ø50.0	53.5	75.0	107.0	16.0	
ø63.0	60.0	90.0	130.0	20.0	
ø80.0	68.0	110.0	150.0	20.0	
ø100.0	76.0	132.0	182.0	25.0	
ø125.0	91.0	160.0	210.0	25.0	

TC (Trunion Mounting)



Dimension		Unit:mm					
Bore	A	B	C	D	E	F	
ø32.0	73.0	16.0	50.0	74.0	12.0	60.0	
ø40.0	82.5	20.0	63.0	95.0	16.0	70.0	
ø50.0	90.0	24.0	75.0	107.0	16.0	85.0	
ø63.0	97.5	24.0	90.0	130.0	20.0	100.0	
ø80.0	110.0	28.0	110.0	150.0	20.0	120.0	
ø100.0	120.0	38.0	132.0	182.0	25.0	140.0	
ø125.0	145.0	50.0	160.0	210.0	25.0	165.0	

CA, CB (Clevis Mounting)

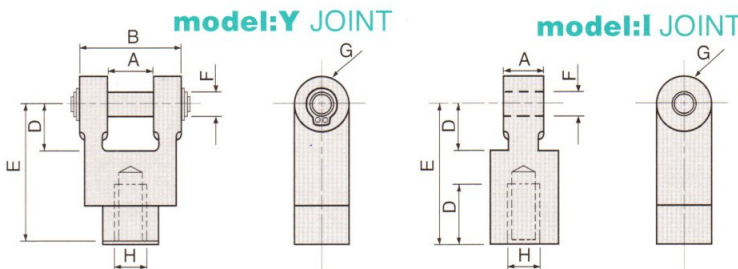


Dimensional

Bore	A	B	C	D	E	F	G	H	I	J	K
ø32.0	5.5	22.0	142.0	R11.0	10.0	M5.0	32.5	48.0	26.0	45.0	26.0
ø40.0	5.5	25.0	160.0	R13.0	12.0	M5.0	38.0	53.0	28.0	52.0	28.0
ø50.0	6.5	27.0	170.0	R13.0	12.0	M8.0	46.5	63.0	32.0	60.0	32.0
ø63.0	6.5	32.0	190.0	R17.0	16.0	M8.0	56.5	73.0	40.0	70.0	40.0
ø80.0	10.0	36.0	210.0	R17.0	16.0	M10.0	72.0	98.0	50.0	90.0	50.0
ø100.0	10.0	41.0	230.0	R21.0	20.0	M10.0	89.0	115.0	60.0	110.0	60.0
ø125.0	10.0	50.0	275.0	R25.0	25.0	M12.0	110.0	140.0	70.0	130.0	70.0

Unit:mm

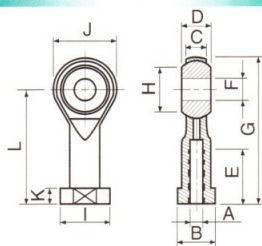
Rod End Joint & Accessories



Symbol	A	B	C	D	E	F	G	H
ø32.0	10.0	30.0	25.0	20.0	40.0	10.0	20.0	M10x1.25
ø40.0	12.0	36.0	25.0	24.0	48.0	12.0	24.0	M12x1.25
ø50.0	16.0	40.0	35.0	32.0	64.0	16.0	32.0	M16x1.5
ø63.0	16.0	40.0	35.0	32.0	64.0	16.0	32.0	M16x1.5
ø80.0	20.0	50.0	45.0	40.0	80.0	20.0	40.0	M20x1.5
ø100.0	20.0	50.0	45.0	40.0	80.0	20.0	40.0	M20x1.5

Unit:mm

PHS: Eye Bolt Universal Joint



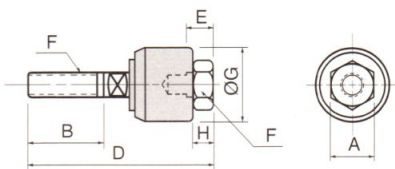
Symbol	A	B	C	D	E	F	G	J	L
PHS10	M10x1.25	17.0	10.5	14.0	21.0	10.0	56.0	26.0	43.0
PHS12	M12x1.25	19.0	12.0	16.0	24.0	12.0	65.0	30.0	50.0
PHS16	M16x1.5	22.0	15.0	21.0	33.0	16.0	83.0	38.0	64.0
PHS20	M16x1.5	30.0	18.0	25.0	40.0	20.0	100.0	46.0	77.0

Unit:mm

RA: Rod Adapter

Symbol	A	B	C	D	E	F	G
RA-10	17.0	20.0	8.0	58.0	9.0	M10x1.25	26.0
RA-12	17.0	21.5	8.0	58.0	9.0	M12x1.25	28.0
RA-16	27.0	27.0	12.0	90.0	14.0	M16x1.5	45.0
RA-20	33.0	29.0	14.0	102.0	18.0	M20x1.5	53.0

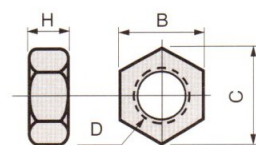
Unit:mm



RN: Rod End Nut

Symbol	D	B	C	H
RN-10	M10x1.25	17.0	19.6	6.0
RN-12	M12x1.25	19.0	21.9	7.0
RN-16	M16x1.5	24.0	27.7	8.0
RN-20	M20x1.5	27.0	31.2	8.0

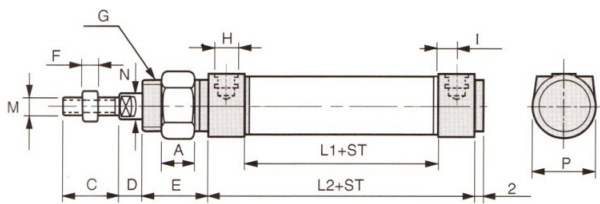
Unit:mm



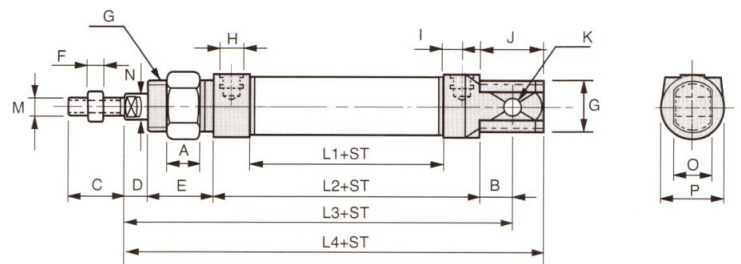
How to order:

M	D	—	ø25	X	30	+	FA	+	Y	+	MS
Item: Pneumatic Cylinder	D: Basic-type DD: Double piston rod type C: Integrated clevis		Bore size: ø12mm~ ø40mm		Stroke(ST): 5mm~ 500mm		Mountings: FA,FB,CB, TA,TB,LB		Accessories: I,Y,PHS RA		Magnetic sensor:MS

MD:Basic type



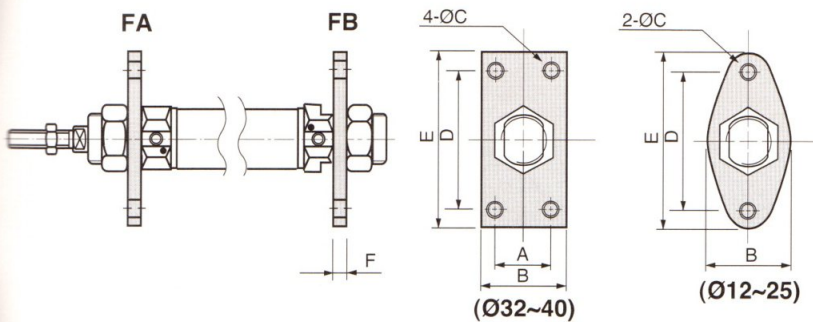
MC:Integrated clevis type



Symbol	A	B	C	D	E	F	G	H	I	J	K	L1	L2	L3	L4	M	N	O	P
ø12.0	8.0	9.0	16.0	5.0	17.0	5.0	M16xP1.5	M5xP0.8	4.5	17.0	ø6.0	27.0	45.0	75.0	84.0	M6xP1.0	ø6.0	12.0	20.0
ø16.0	8.0	9.0	16.0	5.0	17.0	5.0	M16xP1.5	M5xP0.8	5.0	17.0	ø6.0	30.5	50.5	82.0	91.0	M6xP1.0	ø6.0	12.0	20.0
ø20.0	8.0	12.0	20.0	4.0	20.0	4.0	M22xP1.5	G1/8	7.6	20.0	ø8.0	37.0	67.5	95.0	112.0	M8xP1.25	ø8.0	16.0	27.5
ø25.0	8.0	12.0	22.0	6.0	22.0	6.0	M22xP1.5	G1/8	8.0	22.0	ø8.0	37.5	69.5	104.0	119.5	M10xP1.25	ø10.0	16.0	27.5
ø32.0	9.5	13.5	22.0	8.0	20.0	6.0	M27xP2.0	G1/8	9.0	22.0	ø10.0	47.5	83.5	120.0	133.0	M10xP1.25	ø12.0	22.0	37.0
ø40.0	9.5	13.5	24.0	11.0	20.0	8.0	M33xP2.0	G1/8	9.0	22.0	ø10.0	49.0	85.0	125.0	138.0	M12xP1.25	ø16.0	26.0	45.0

Unit:mm

FA (Flange Mounting)

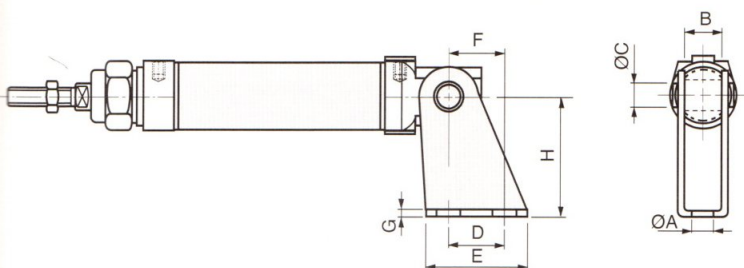


Dimension

Bore	A	B	C	D	E	G
ø12.0	—	30.0	5.5	40.0	52.0	3.0
ø16.0	—	30.0	5.5	40.0	52.0	3.0
ø20.0	—	40.0	6.5	50.0	66.0	3.0
ø25.0	—	40.0	6.5	50.0	66.0	3.0
ø32.0	26.0	40.0	7.0	50.0	64.0	3.0
ø40.0	30.0	50.0	7.0	54.0	74.0	4.0

Unit:mm

CB (Integrated Clevis Mounting)

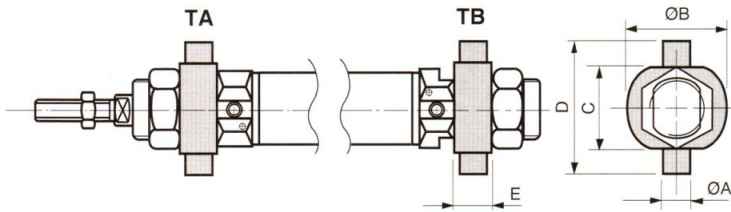


Dimension

Bore	A	B	C	D	E	F	G	H
ø12.0	6.0	12.0	6.0	15.0	25.0	15.0	3.0	27.0
ø16.0	6.0	12.0	6.0	15.0	25.0	15.0	3.0	27.0
ø20.0	7.0	16.0	8.0	20.0	32.0	18.5	3.0	30.0
ø25.0	7.0	16.0	8.0	20.0	32.0	18.5	3.0	30.0
ø32.0	9.0	22.0	10.0	25.0	40.0	22.5	3.0	40.0
ø40.0	9.0	26.0	10.0	25.0	40.0	22.5	3.0	40.0

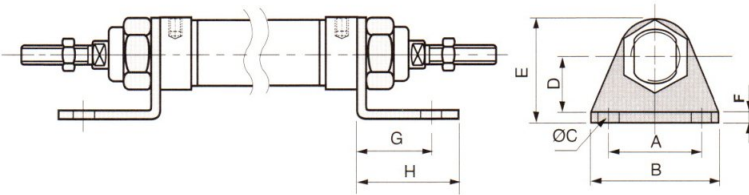
Unit:mm

TA, TB (Trunion Mounting)



Dimension	Unit:mm				
	Bore	A	B	C	D
ø20	8	42	38	58	10
ø25	8	42	38	58	10
ø32	10	45	40	60	12
ø40	10	50	48	72	12

LB (Axial Foot Mounting)

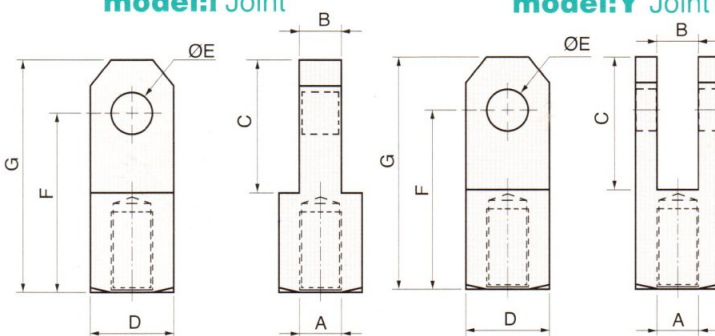


Dimension	Unit:mm							
	Bore	A	B	C	D	E	F	G
ø12.0	32	42	6	20	33	3	14	20.5
ø16.0	32	42	6	20	33	3	14	20.5
ø20.0	40	54	7	25	45	3	17	26
ø25.0	40	54	7	25	45	3	17	26
ø32.0	50	64	7	28	48	3.5	18	25
ø40.0	54	74	7	31.5	60	4	20	30

Rod End Joint & Accessories

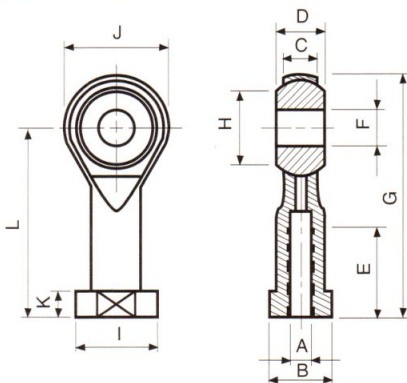
model:I Joint

model:Y Joint



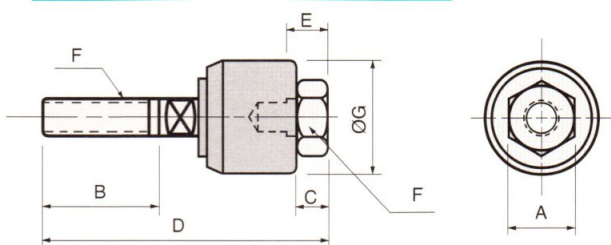
Dimension	Unit:mm						
	Bore	A	B	C	D	E	F
ø20.0	M8xP1.25	8.0	25.0	19.0	8.0	35.0	45.0
ø25.0	M10xP1.25	8.0	25.0	19.0	8.0	35.0	45.0
ø32.0	M10xP1.25	10.0	30.0	22.0	10.0	45.0	57.0
ø40.0	M12xP1.25	10.0	30.0	22.0	10.0	45.0	57.0

PHS: Eye Bolt Universal Joint



Dimension	Unit:mm												
	Symbol	A	B	C	D	E	F	G	H	I	J	K	L
Part No.	PHS6	M6xP1.0	11.0	6.7	9.0	14.0	6.0	39.0	9.0	13.0	18.0	5.0	30.0
PHS8	M8xP1.25	14.0	9.0	12.0	17.0	8.0	47.0	10.4	16.0	22.0	5.0	36.0	
PHS10	M10xP1.25	17.0	10.5	14.0	21.0	10.0	56.0	12.9	19.0	26.0	6.5	43.0	
PHS12	M12xP1.25	19.0	12.0	16.0	24.0	12.0	65.0	15.4	22.0	30.0	6.5	50.0	

RA: Rod Adapter



Dimension	Unit:mm							
	Symbol	A	B	C	D	E	F	G
Part No.	RA-6	10.0	12.5	5.0	37.0	7.0	M6xP1.0	18.0
RA-8	13.0	18.0	7.0	50.0	8.0	M8xP1.25	24.0	
RA-10	17.0	20.0	8.0	58.0	9.0	M10xP1.25	26.0	
RA-12	17.0	21.5	8.0	58.0	9.0	M12xP1.25	28.0	

FITTING series

ONE-TOUCH PNEUMATIC FITTING

<p>SPC</p> 	<p>SPL</p> 	<p>SPD</p> 	<p>SPB</p> 
<p>Specification:</p> <p>SPC4-M5 SPC6-02 SPC8-03 SPC10-04 SPC4-01 SPC6-03 SPC8-04 SPC12-01 SPC4-02 SPC6-04 SPC10-01 SPC12-02 SPC6-M5 SPC8-01 SPC10-02 SPC12-03 SPC6-M8 SPC8-02 SPC10-03 SPC12-04 SPC6-01</p>	<p>Specification:</p> <p>SPL4-M5 SPL6-01 SPL8-02 SPL10-03 SPL4-M8 SPL6-02 SPL8-03 SPL10-04 SPL4-01 SPL6-03 SPL8-04 SPL12-02 SPL4-02 SPL6-04 SPL10-01 SPL12-03 SPL6-M5 SPL8-01 SPL10-02 SPL12-04</p>	<p>Specification:</p> <p>SPD4-M5 SPD6-02 SPD8-03 SPD10-04 SPD4-01 SPD6-03 SPD10-01 SPD12-02 SPD4-02 SPD8-01 SPD10-02 SPD12-03 SPD6-M5 SPD8-02 SPD10-03 SPD12-04 SPD6-01</p>	<p>Specification:</p> <p>SPB4-M5 SPB6-02 SPB8-03 SPB10-04 SPB4-01 SPB6-03 SPB10-01 SPB12-02 SPB4-02 SPB8-01 SPB10-02 SPB12-03 SPB6-M5 SPB8-02 SPB10-03 SPB12-04 SPB6-01</p>
<p>SPU</p> 	<p>SPV</p> 	<p>SPE</p> 	<p>SPN</p> 
<p>Specification:</p> <p>SPU-4 SPU-10 SPU-6 SPU-12 SPU-8</p>	<p>Specification:</p> <p>SPV-4 SPV-10 SPV-6 SPV-12 SPV-8</p>	<p>Specification:</p> <p>SPE-4 SPE-10 SPE-6 SPE-12 SPE-8</p>	<p>Specification:</p> <p>SPN6-4 SPN10-8 SPN8-6 SPN12-10</p>
<p>SPY</p> 	<p>SPG</p> 	<p>SPM</p> 	<p>SPX</p> 
<p>Specification:</p> <p>SPY-4 SPY-10 SPY-6 SPY-12 SPY-8</p>	<p>Specification:</p> <p>SPG6-4 PG10-8 SPG8-6 SPG12-10</p>	<p>Specification:</p> <p>SPM-4 SPM-10 SPM-6 SPM-12 SPM-8</p>	<p>Specification:</p> <p>SPX4-M5 SPX6-01 SPX8-02 SPX10-04 SPX4-01 SPX6-02 SPX8-03 SPX12-02 SPX4-02 SPX6-03 SPX10-02 SPX12-03 SPX6-M5 SPX8-01 SPX10-03 SPX12-04</p>
<p>SPCF</p> 	<p>SPLL</p> 	<p>SPH</p> 	<p>SPA</p> 
<p>Specification:</p> <p>SPCF4-M5 SPCF8-01 SPCF-10-04 SPCF4-01 SPCF8-02 SPCF-12-03 SPCF6-01 SPCF8-03 SPCF-12-04 SPCF6-02 SPCF10-02 SPCF6-03 SPCF-10-03</p>	<p>Specification:</p> <p>SPLL4-M5 SPLL6-03 SPLL10-02 SPLL4-01 SPLL8-01 SPLL10-03 SPLL4-02 SPLL8-02 SPLL12-03 SPLL6-01 SPLL8-03 SPLL12-04 SPLL6-02</p>	<p>Specification:</p> <p>SPH4-M5 SPH6-01 SPH8-02 SPH10-03 SPH4-01 SPH6-02 SPH8-03 SPH10-04 SPH4-02 SPH6-03 SPH10-01 SPH12-02 SPH6-M5 SPH8-01 SPH10-02 SPH12-03 SPH12-04</p>	<p>Specification:</p> <p>SPA-6 SPA-10 SPA-8 SPA-12</p>
<p>JSC</p> 	<p>Specification:</p> <p>JSC4-M5 JSC6-02 JSC10-02 JSC4-01 JSC6-03 JSC10-03 JSC4-02 JSC8-01 JSC10-04 JSC6-M5 JSC8-02 JSC12-03 JSC6-01 JSC8-03 JSC12-04</p>		