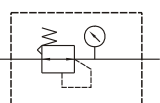


# MAIR100 series

AIR UNITS (PRECISION REGULATOR)



Symbol:



## Specification:

Model	MAIR100
Bore No.	6A
Port size	PT 1/8
Medium	Air
Operating pressure range	0~9.9 kgf/cm <sup>2</sup> (0~0.99MPa)
Proof pressure	15 kgf/cm <sup>2</sup> (1.5MPa)
Regulated pressure range	2K: 0.05~2 kgf/cm <sup>2</sup> (0.005~0.2 MPa)
	4K: 0.1~4 kgf/cm <sup>2</sup> (0.01~0.4 MPa)
	8K: 0.1~8 kgf/cm <sup>2</sup> (0.01~0.8 MPa)
Sensitivity	Within(E) 0.2% of full span
Repeatability	Within(E) ± 0.5% of full span
Ambient temperature	-5~+60°C (No freezing)
Attachment	Bracket
Option	Pressure gauge (PG-33)
Weight	150g

Order example:

MAIR100 - 6A - 2K - C - BSP

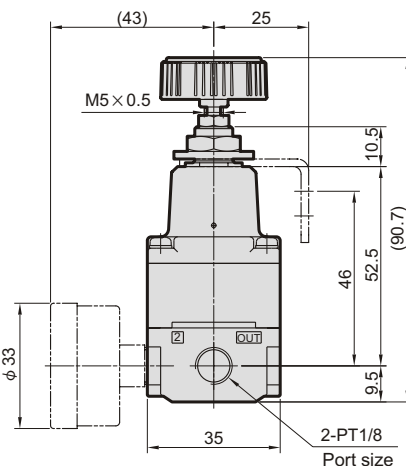
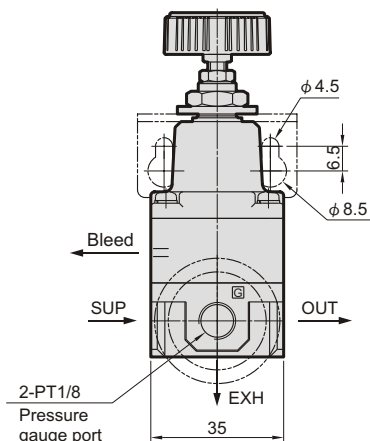
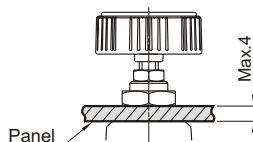
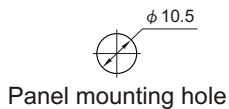
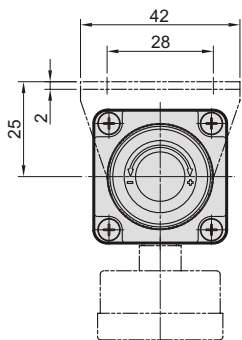
MODEL

BORE SIZE  
6A : PT 1/8

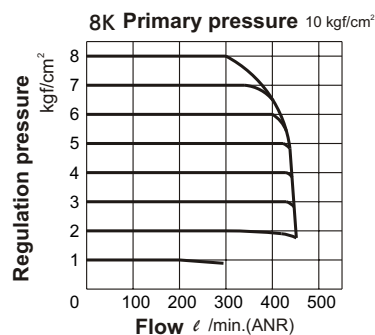
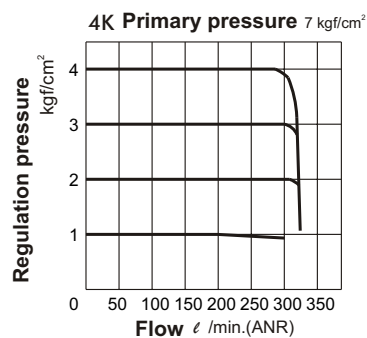
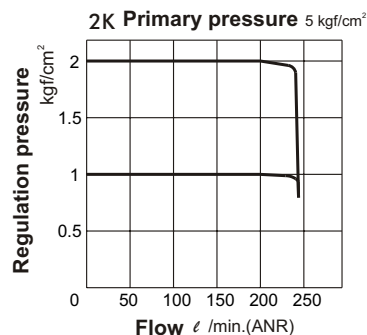
PRESS. RANGE  
2K : 0.05~2 kgf/cm<sup>2</sup>  
4K : 0.1~4 kgf/cm<sup>2</sup>  
8K : 0.1~8 kgf/cm<sup>2</sup>

PRESSURE  
GAUGE  
(PG-33)

PORT THREAD  
Blank: PT thread  
BSP: BSP thread  
NPT: NPT thread



## Flow feature:

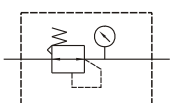


# MAIR200 series

AIR UNITS (PRECISION REGULATOR)



### Symbol:



### Specification:

Model	MAIR200
Bore No.	8A
Port size	PT 1/4
Medium	Air
Operating pressure range	0~9.9 kgf/cm <sup>2</sup> (0~0.99MPa)
Proof pressure	15 kgf/cm <sup>2</sup> (1.5MPa)
Regulated pressure range	2K: 0.05~2 kgf/cm <sup>2</sup> (0.005~0.2 MPa)
	4K: 0.1~4 kgf/cm <sup>2</sup> (0.01~0.4 MPa)
	8K: 0.1~8 kgf/cm <sup>2</sup> (0.01~0.8 MPa)
Sensitivity	Within 0.2% of full span
Repeatability	Within ± 0.5% of full span
Ambient temperature	-5~+60°C (No freezing)
Attachment	Bracket
Option	Pressure gauge
Weight	300g

### Order example:

MAIR200 – 8A – 2K – C – BSP

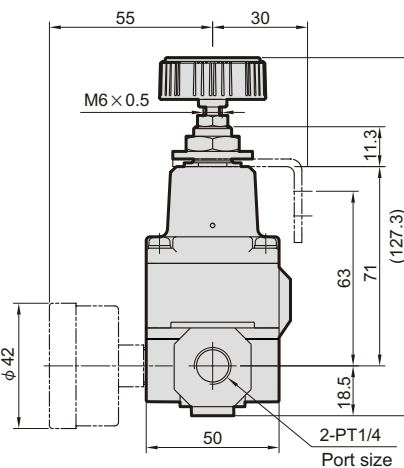
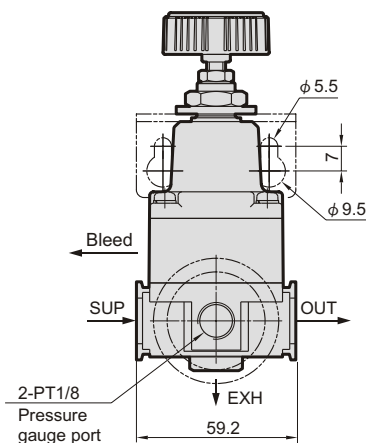
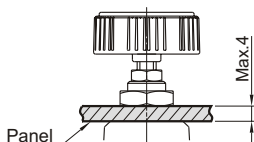
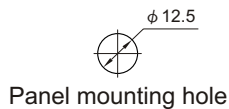
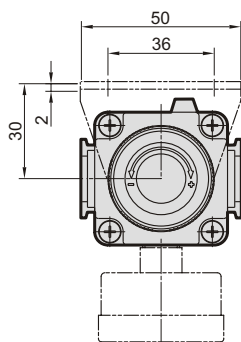
MODEL

BORE SIZE  
8A : PT 1/4

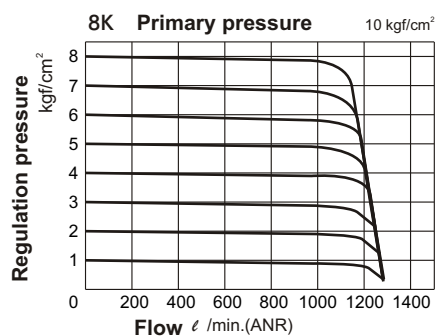
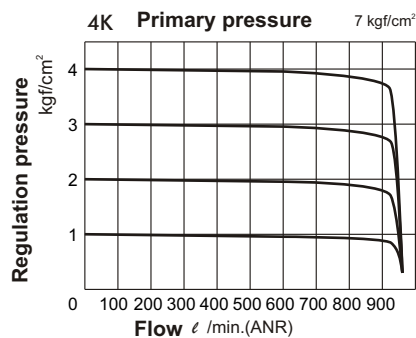
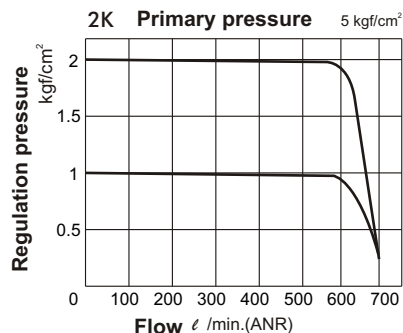
PRESS. RANGE  
2K : 0.05~2 kgf/cm<sup>2</sup>  
4K : 0.1~4 kgf/cm<sup>2</sup>  
8K : 0.1~8 kgf/cm<sup>2</sup>

PRESSURE  
GAUGE

PORT THREAD  
Blank: PT thread  
BSP: BSP thread  
NPT: NPT thread

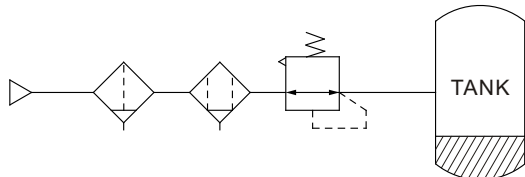


### Flow feature:



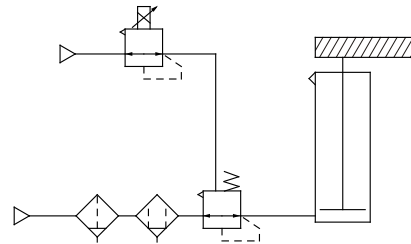
### Application Examples

#### Constant fluid pressure



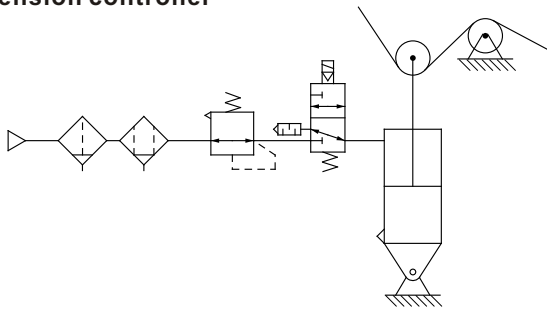
※ Since there is a large effective area for supply and exhaust, pressure setting can be done quickly.

#### Balance and drive Accurate balance pressure setting

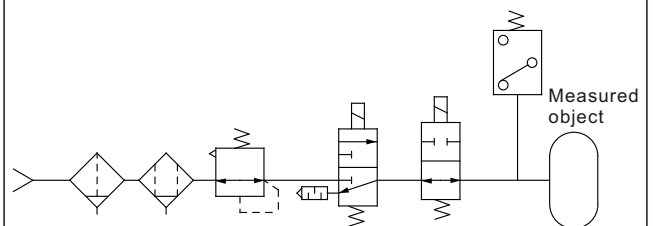


※ Limits pressure fluctuation when driving a cylinder,

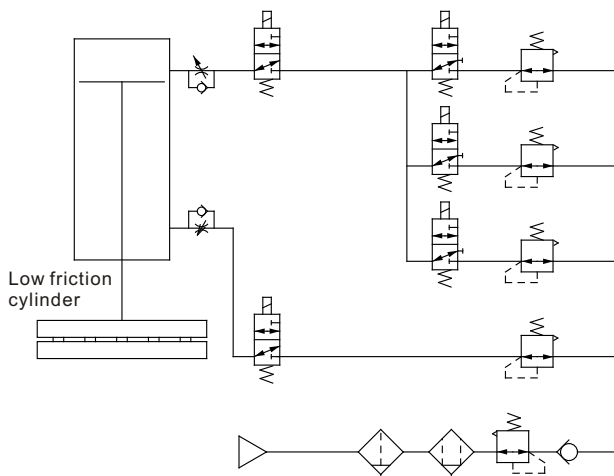
#### Accurate pressure setting -Sensitivity within 0.2%F.S. (full span) Tension controller



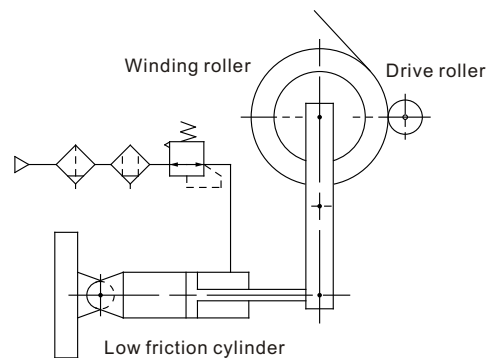
#### Leak test circuit



#### Multistage control of work piece pressing force (Wrapping machine)



#### Contact pressure control



※ Adapts to the cylinder's piston displacement, maintaining a constant pressure.

### Air Supply

#### ⚠ Caution

- 1 If the supply pressure line contains drainage or dirt, etc., the fixed throttle can become clogged leading to malfunction, and therefore, in addition to an air filter be sure to use a mist separator.
- 2 Never use a lubricator on the supply side of the regulator, as this will positively cause the fixed throttle to become clogged and lead to malfunction. If lubrication is required for terminal devices, connect a lubricator on the output side of the regulator.

### Maintenance

#### ⚠ Warning

- 1 When the valve guide (refer to construction drawing on p.1.6-6) is to be removed during maintenance, first reduce the set pressure to "0" and completely shut off the supply pressure.
- 2 When a pressure gauge is to be mounted, remove the plug after reducing the set pressure to "0".

### Precautions for MAIR100 only

#### ⚠ Warning

- 1 When remounting the valve guide after removing it for maintenance, use a tightening torque of no more than 0.6Nm. Since the valve guide on this product is made of resin, there is a danger of damage if tightened with a torque exceeding the prescribed value.

### Operation

#### ⚠ Caution

- 1 Do not use a precision regulator outside the range of its specifications as this can cause failure. (Refer to specifications.)
- 2 When mounting is performed, make connections while confirming port indications.
- 3 If a directional switching valve (solenoid valve, mechanical valve, etc.) is mounted on the supply side of the regulator and repeatedly switched ON and OFF, wear of the nozzle/flapper section will be accelerated and a discrepancy in the setting value may occur. Therefore, avoid using a directional switching valve on the supply side. In the event a directional switching valve will be used, install it on the output side of the regulator.
- 4 Air is normally discharged from the bleed port (the hole on the side of the body's midsection). This is a necessary consumption of air based on the construction of the precision regulator, and is not an abnormality.
- 5 Be sure to tighten the lock nut after pressure adjustment.