

**YT-200 Series air filter regulator.
Installation, Operation &
Maintenance Instructions.**

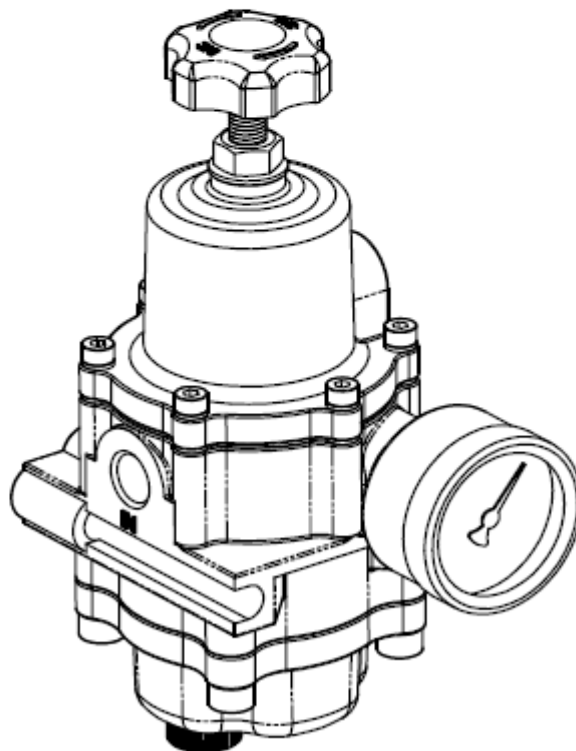


Doc: YT-200/IOM/01

Nov 2006

**Air Filter Regulators
YT-200, YT-205**

USER'S MANUAL



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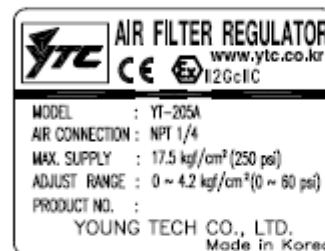
Product Description

Air Filter Regulator, YT-200 (YT-205), receives main air pressure and supplies to the desirable level to a positioner or other devices.

Product Characteristic

- Maintain desirable pressure level, regardless of fluctuation of pressure input.
- Aluminum body increases versatility of the product in different environments.
- 5 micron filter sorts minuteness particles in the air.
- Relief function is available which discharges to atmosphere if the outlet pressure is higher than setting pressure.

Label



- MODEL:** Indicates product's model, suffix, and options (if any)
- SIZE:** Indicates the port size of air connection.
- MAX. SUPPLY:** Indicates maximum level of air supply.
- ADJUST RANGE:** Indicates adjusting range.
- PRODUCT NO.:** Indicates serial number.

Suffix Symbol

YT-200 (YT-205) follows suffix symbols as below.

YT-200 / YT-205 ① ② ③ ④

① Adjustable Range	A : 0 ~ 4.2kgf/cm ²
	B : 0 ~ 8.4kgf/cm ²
	C : 0 ~ 12.1kgf/cm ²
② Connection Type	P : PT
	N : NPT
③ Gauge	0 : None
	1 : 4kgf/cm ²
	2 : 10kgf/cm ²
④ Ambient Temperature	1 : -20 ~ 70 °C
	2 : -20 ~ 120 °C
	3 : -40 ~ 70 °C

* NPT 1/4 Connection Type is only available for YT-205 model.

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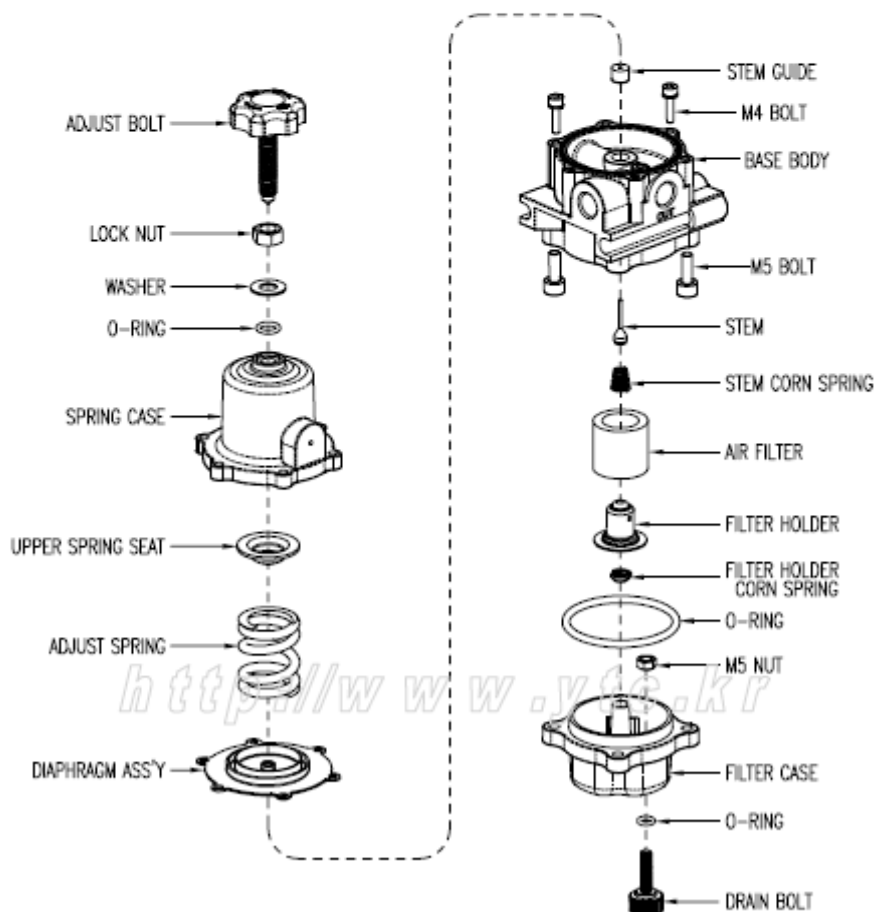


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Specification

Category	YT-200		YT-205
	A	B	C
Max Supply Pressure	15kgf/cm ² (231psi)		
Max Output Pressure	4.2kgf/cm ²	8.4kgf/cm ²	2.1kgf/cm ²
Air Connection	PT(NPT) 1/4		NPT1/4
Gauge Connection	PT(NPT) 1/8		NPT1/8
Ambient Temperature	-20~70℃(Standard), -20~120℃(High Temp.)		
Min Filtering Size	5 micron		
Material	Aluminum		Stainless Steel 316
Weight	0.6kg		1.4kg

Parts and Assembly



Please be knowledgeable of product's major parts and assembly steps for future maintenance.

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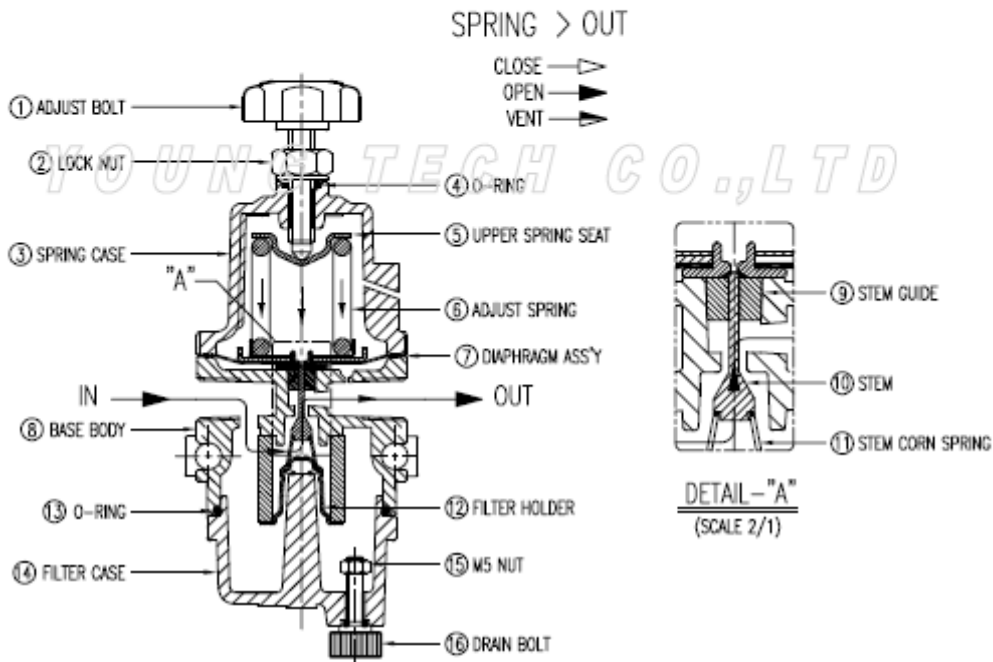


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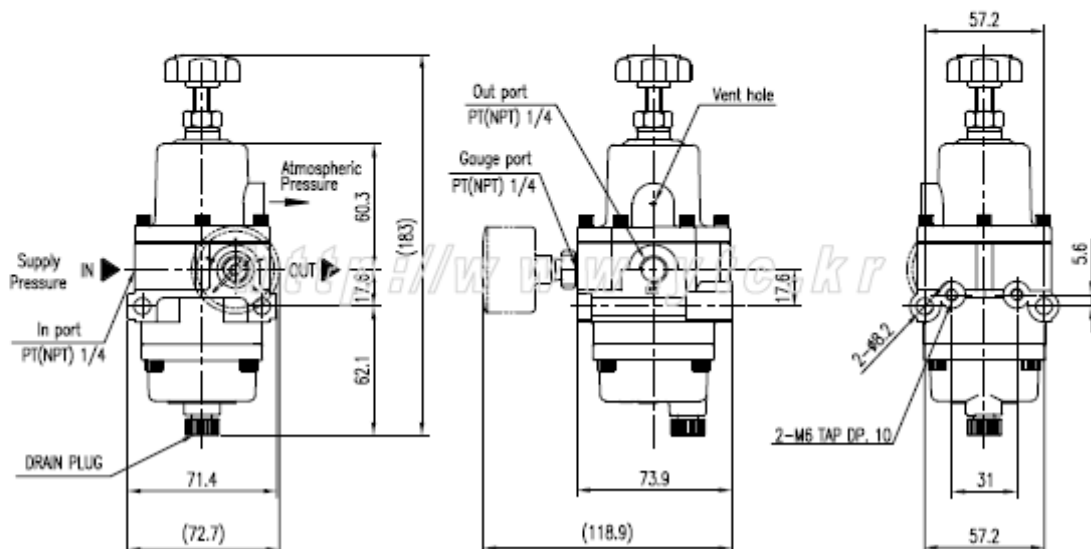
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Operation Logic

Air pressure is being supplied to output port by turning adjust bolt clockwise which will push diaphragm, then disconnects from stem and disc. The set pressure level stays by transferring pressure to lower diaphragm, which results to balance adjust spring. In case of higher pressure than setting, the pressure pushes diaphragm and pressure is released through the hole on spring case.



Dimension (outer)



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Installing

⚠ Caution

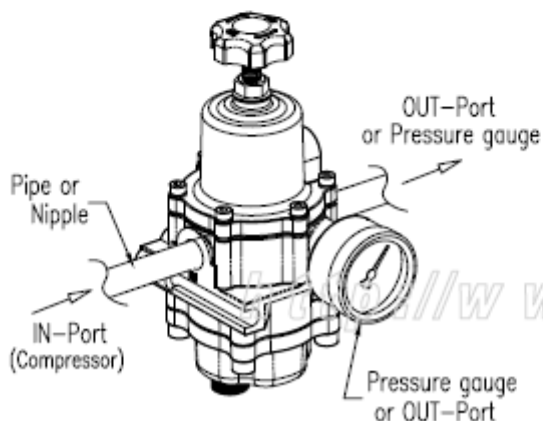
When installing the product, please follow below procedures.

- Always wear safety equipments and follow safety procedures.
- Air must be clean and dry.
- Please operate within the range of specified capacity of the regulator in the manual. If exceeded, the product can be damaged and may result serious damages and accident.
- The product can be malfunctioned if any damages applied. Please treat the unit with appropriate care.
- For maintenance, release drain bolt on timely basis to extract any water inside.
- Filter must be replaced on timely basis. Filter usage depends on the environment/field.
- After pressure is set, please make sure adjust bolt is completely fastened.

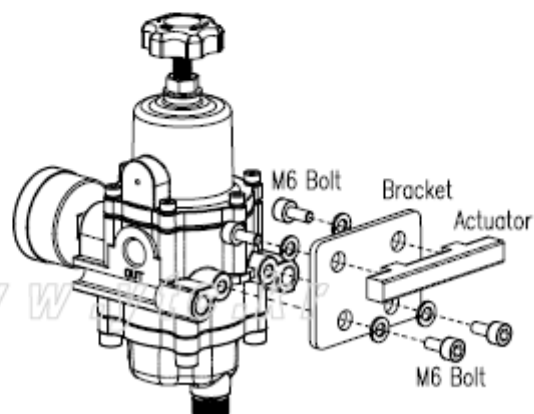
Pipe Connection

YT-200 is used for constant supply pressure to positioner, actuator, solenoid valves, or etc. It can be installed without a bracket <Figure1>, which can be installed on through the pipeline. Before connecting with pipeline, please make sure pipeline is emptied, and the size of the pipeline is appropriate for required capacity.

If YT-200 must be installed on the bracket, please make a bracket according to the product's dimension. <Figure 2>



<Figure 1>



<Figure 2>

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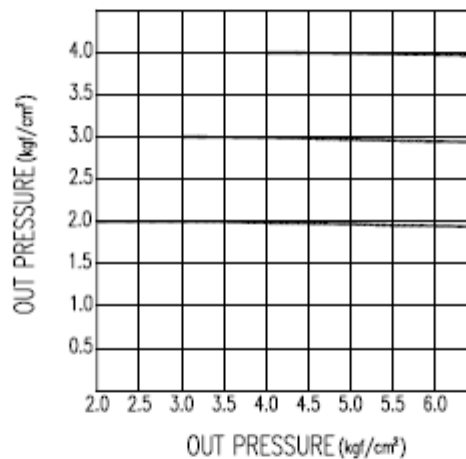
Instruction

- (1) Before supplying air pressure into YT-200, turn adjust bolt counter-clockwise, so the ring is not pushed.
- (2) Install pressure gauge on the secondary pressure output port. The pressure gauge indicates primary pressure that is being output.
- (3) Air pressure is supplied through primary pressure input port after output port is being blocked by using ball-valve or other fitting tools.
- (4) When the secondary pressure reaches at set level, fasten the adjust bolt completely.

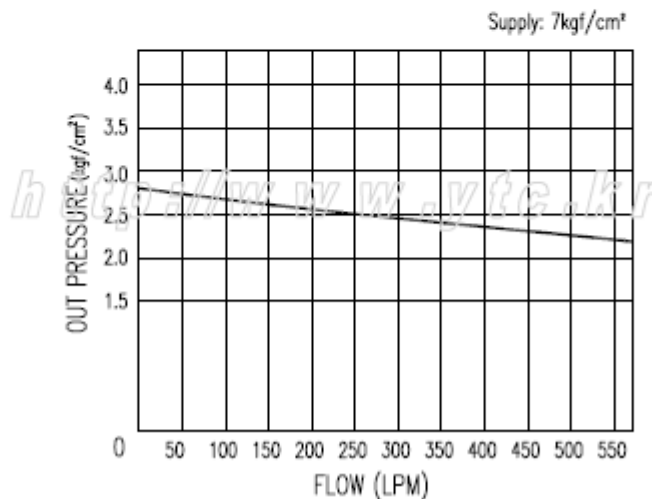
YOUNG TECH CO.,LTD

Output and Flow (LPM)

Pressure



Flow (LPM)



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Maintenance

Please refer to below table (repair kit) and parts' name. Before replacing any parts, please make sure to follow field's safety procedure and the manual to avoid any accidents and damages to the product.

Repair kit

Part Name	Qty
Stem	1 (ea)
Diaphragm Assembly	1 (ea)
Filter	1 (ea)
O-Ring	2 (ea)

When using Repair Kit, all of the parts must be replaced at the same time. Partial part replacement may result in shortening product's life cycle.

► Draining condensed water

- ① When draining out condensed water, supply air pressure must be shut down completely or adjust the pressure level below 1kgf/cm^2 . The operator can be seriously hurt when draining out at high pressure.
- ② Slowly open drain plug to drain condensed water.
- ③ After draining out completely, close the drain plug.

► Replacing filter case and parts

- ① Shut off supply air pressure.
- ② Release lock nut on adjust bolt, rotate adjust bolt counter-clockwise to lower setting pressure.
- ③ Open drain plug on filter case to drain condensed water and close.
- ④ Unscrew bolts on filter case in diagonal order.
- ⑤ Replace filter, o-ring, and stem.
- ⑥ Screw bolts on filter case in diagonal order.
- ⑦ Unscrew 6 bolts on spring case in diagonal order.
- ⑧ Replace diaphragm assembly.
- ⑨ Screw bolts on spring case in diagonal order. Make sure not to damage diaphragm when screwing.
- ⑩ After part replacement, set air pressure to desired level.