

**Air Filter Regulator
YT-200 and YT-205 Series**

USER'S MANUAL

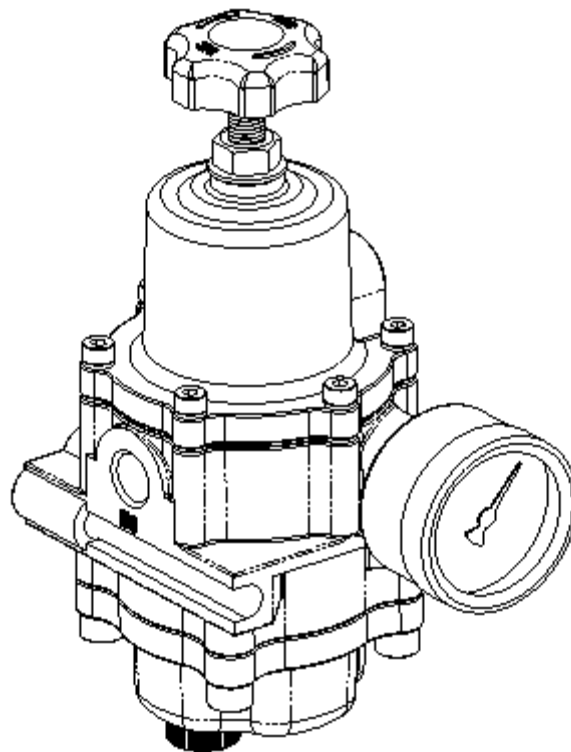


Table of Contents

Contents	Page No.
Introduction	3
Manufacturer Warranty	3
Product Description	4
Label Description	4
Suffix Symbol	4
Specification	5
Parts and Assembly	5
Operation Logic	6
Dimension	6
Installation	7
Maintenance	9
Manufacturer Warranty	10

Introduction

Thank you for choosing YTC product. Each product is fully inspected after the production to offer you the highest quality. In order to fully utilize the product, we strongly recommend users to read the manual carefully and fully understood.

- The manual should be provided to the end-user.
- The manual can be altered or revised without any prior notice. Any changes in product's specification, structure, and/or any components may not result immediate revised version of the manual.
- The manual should not be duplicated or reproduced for any purpose without any approval from Young Tech Co., Ltd, South Korea.

Manufacturer Warranty

- For the safety, it is imperative to follow instructions in the manual. It is not manufacturer's liability for any damages which caused by users' negligence.
- It is not manufacturer's liability for any damages or accidents which resulted by any alteration or modification of the product and parts. If alteration or modification is necessary, please contact the manufacturer directly.
- Manufacturer warrants the product from the date of original retail purchase of the product for one (1) year, except as otherwise stated.
- Manufacturer warranty will not cover the products that the product have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; damages that occurs in shipment, due to act of God, failure due to power surge, and cosmetic damage. Improper or incorrectly performed maintenance or report voids this Limited Warranty.
- For detailed warranty information, please contact the corresponding local Young Tech Co., Ltd office or main office in South Korea.

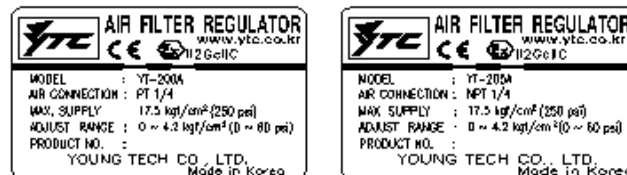
Product Description

YT-200 & YT-205 receives main air pressure and supplies to the desirable level pressure to a positioner or other devices.

Product Characteristic

- Maintains 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 Description



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 and YT-205 series follow suffix symbols as follows.

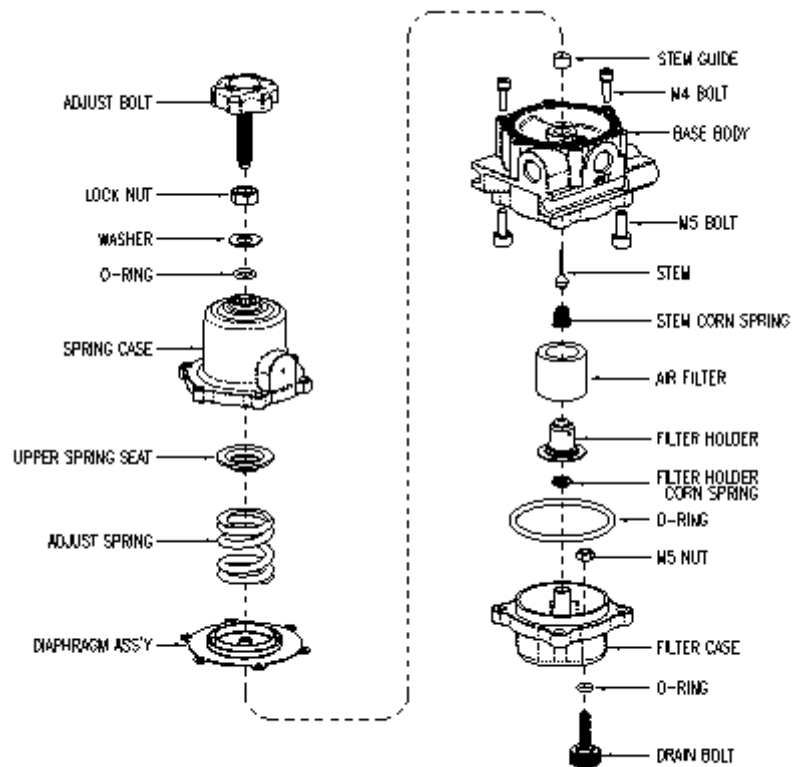
YT-200 / YT-205 □ □ □ □

□ Adjustable Range	A: 0 ~ 4.2 kgf/cm ² B: 0 ~ 8.4 kgf/cm ² C: 0 ~ 2.1 kgf/cm ²
□ Connection Type YT-205: NPT only	P: PT N: NPT
□ Gauge	0: None 1: 4 kgf/cm ² 2: 10 kgf/cm ²
□ Ambient Temperature	1: -20 ~ 70°C 2: -20 ~ 120°C

Specification

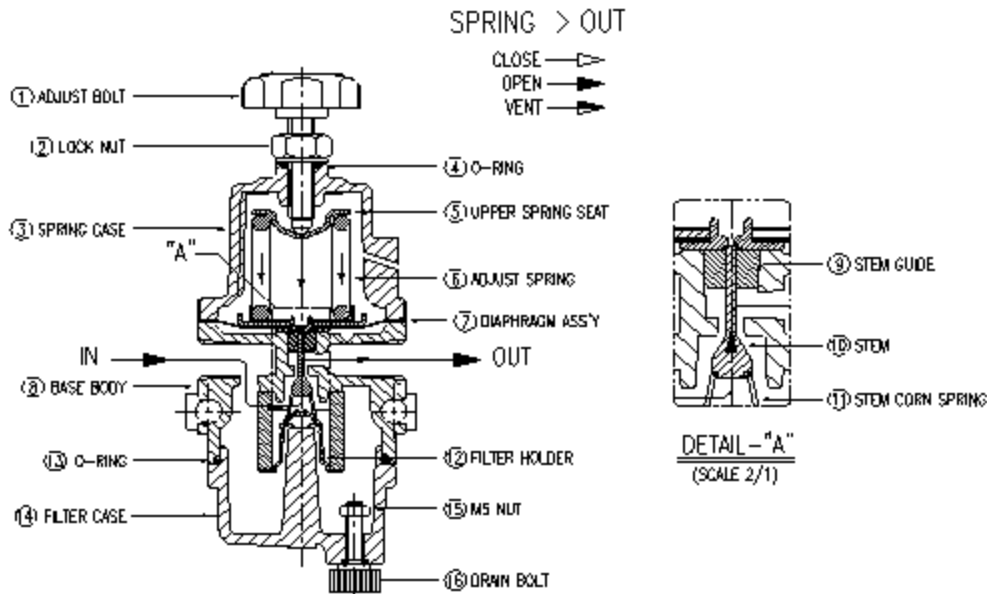
Category	YT-200		YT-205
	A	B	C
Max Supply Pressure	15kgf/cm ² (231psi)		
Max Output Pressure	4.2kgf/cm ²	8.4kgf/cm ²	2.1kgf/cm ²
Air Connection	PT(NPT) 1/4		
Gauge Connection	PT(NPT) 1/8		
Ambient Temperature	-20~70°C(Standard), -20~120°C(High Temp.)		
Min Filtering Size	5 micron		
Material	Aluminum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

Parts and Assembly

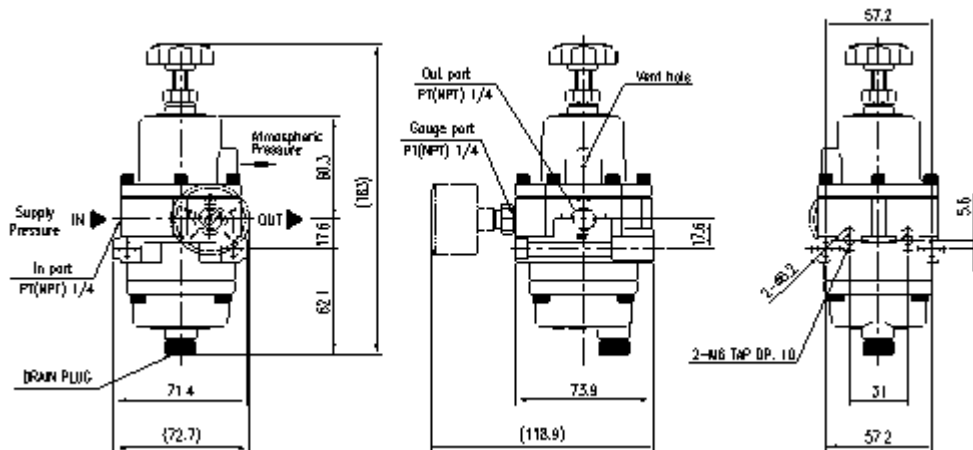


Operation Logic

Air pressure is being supplied to output port by turning adjust bolt clockwise which would push diaphragm, then disconnects from stem and disc. The set pressure level stays by transferring pressure to lower diaphragm, which results to balance the 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)



Installation

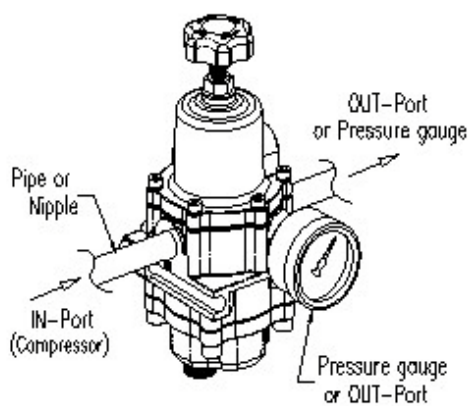
Safety Warning

Before installing the product, please read below procedures.

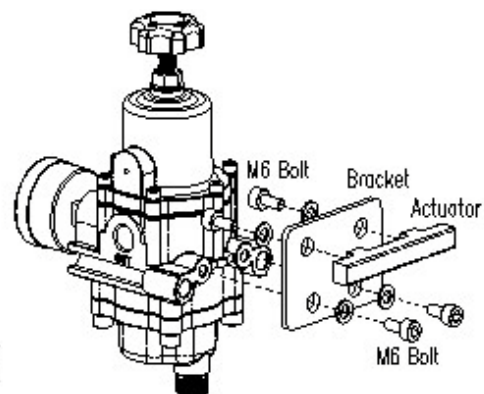
- Always wear safety equipments and follow safety procedures.
- Air must be clean and dry.
- Please operate within the range of specified capacity of the regulator in the manual. If exceeded, the product can be damaged and may result serious damages and accident.
- The product can be malfunctioned if 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 positioned, actuator, solenoid valves, or etc. It can be installed without a bracket <Figure 1>, which can be installed on the pipeline. Before connecting with pipeline, please do make sure that the pipeline is emptied, and the size of the pipeline is appropriate for required capacity. It YT-200 must be installed on a bracket <Figure 2>, please make a bracket according to the product's dimension.



<Figure 1>



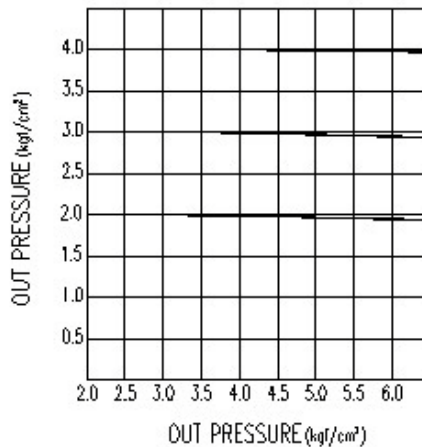
<Figure 2>

Adjustment

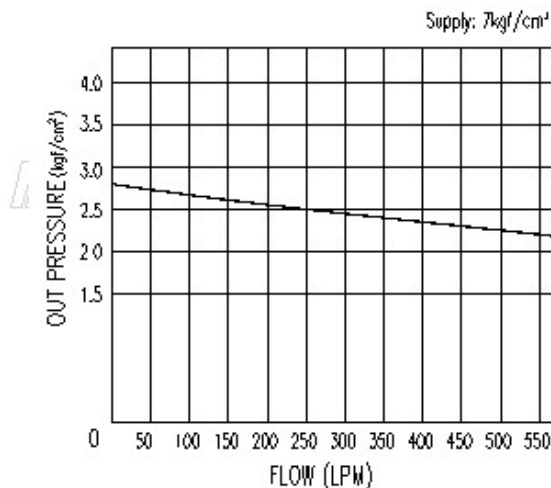
- 1) Before supplying air pressure into YT-200, turn adjust bolt counter-clockwise, so the ring is not being pushed.
- 2) Install pressure gauge on the secondary pressure output port. The pressure gauge indicates primary pressure that is being output.
- 3) Air pressure is supplied through primary pressure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

Output and Flow (LPM)

Pressure



Flow (LPM)



Maintenance

Please refer to below table (repair kit) and parts' name. Before replacing any parts, please make sure to follow field's safety procedures 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
- 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 desired level.

Manufacturer Warranty

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This manual can be changed or revised without any prior notice. For latest version, please contact YTC website.

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