

Electro-Pneumatic Regulator

With alarm output (Outlet pressure)

ITV20**-X177

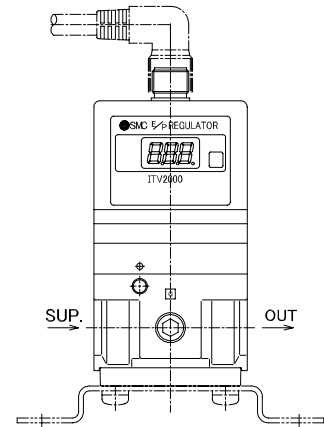
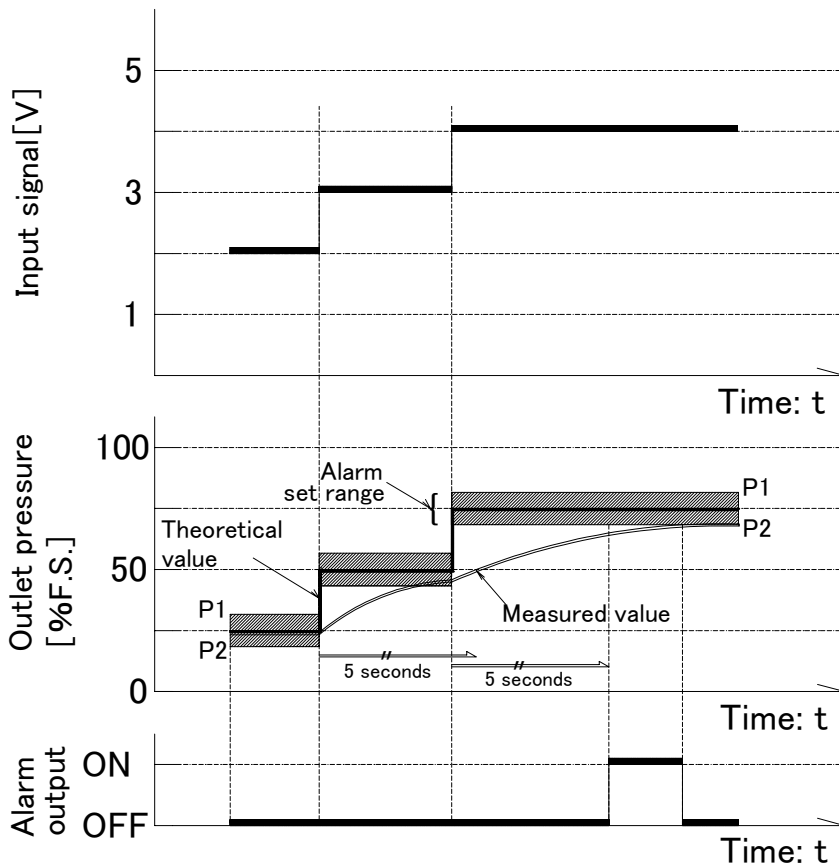
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Feature 1: With alarm output

Alarm signal is outputted when outlet pressure does not reach the setting pressure range (*1) for 5 continuous seconds or more for arbitrary input signal.

Alarm signal is automatically released when outlet pressure reaches the regulating pressure range (*1).

*1) Alarm set range can be changed arbitrarily by setting P1 (Upper limit setting) and P2 (Lower limit setting) of electro-pneumatic regulator.



Difference from standard product:

- Refer to Feature 1 above (With alarm output)

Supplement: This product does not have any output signal function (such as analog output in proportion to detected pressure value and switching output when reaching the set value) like the standard electro-pneumatic regulator (Series ITV).

Other specifications are the same as the standard electro-pneumatic regulator.

Specifications

Model	ITV201*-X177	ITV203*-X177	ITV205*-X177
Minimum supply pressure	Set pressure +0.1MPa		
Maximum supply pressure	0.2MPa	1.0MPa	
Setting pressure range	0.005 to 0.1MPa	0.005 to 0.5MPa	0.005 to 0.9MPa
Power supply voltage	0: 24VDC±10%, 1: 12 to 15VDC		
Current consumption	Power supply voltage 24VDC type: 120mA or less (At static output pressure)		
	Power supply voltage 12 to 15VDC type: 180mA or less (At static output pressure)		
Input signal	2: 0 to 5VDC, 3: 0 to 10VDC		
Input impedance	Approx. 6.5kΩ		
Alarm output (*2)	2: NPN open collector output Max. 30V, 30mA		
	3: PNP open collector output Max. 30mA		
Linearity	±1%F.S.or less		
Hysteresis	0.5%F.S.or less		
Repeatability	±0.5%F.S.or less		
Sensitivity	0.2%F.S.or less		
Temperature characteristics	Within ±0.12%F.S./°C		
Output Accuracy	±3%F.S.		
Pressure display Minimum unit	MPa: 0.01, kgf/cm ² : 0.01, bar: 0.01, PSI: 0.1(*3), kPa: 1		
Ambient and fluid temperature	0 to 50°C (With no condensation)		
Enclosure	IP65		
Weight	Approx. 350g (Without accessory)		

*2) Alarm signal is outputted when outlet pressure does not reach the set pressure for 5 continuous seconds or more for input signal.

3) For ITV205 (Set pressure: 0.9 MPa), the minimum unit is 1 PSI.

*4) Since the characteristics (specifications) above are limited to static conditions, pressure may fluctuate when air is consumed on the outlet side.

How to Order

ITV205 0 - 2 2 2 S -X177

Pressure range

1	0.005 to 0.1MPa
3	0.005 to 0.5MPa
5	0.005 to 0.9MPa

Power supply voltage

0	24VDC
1	12 to 15VDC

Input signal

2	Voltage type 0 to 5VDC
3	Voltage type 0 to 10VDC

Alarm output

2	Switching type NPN output
3	Switching type PNP output

Thread type

Nil	Rc
N	NPT
T	NPTF
F	G

Pressure display units (*5)

Nil	MPa
2	kgf/cm ²
3	bar
4	PSI
5	kPa

Cable connector type

S	Straight type, 3m
L	Right angle type, 3m
N	Without cable connector

Accessory (Bracket)

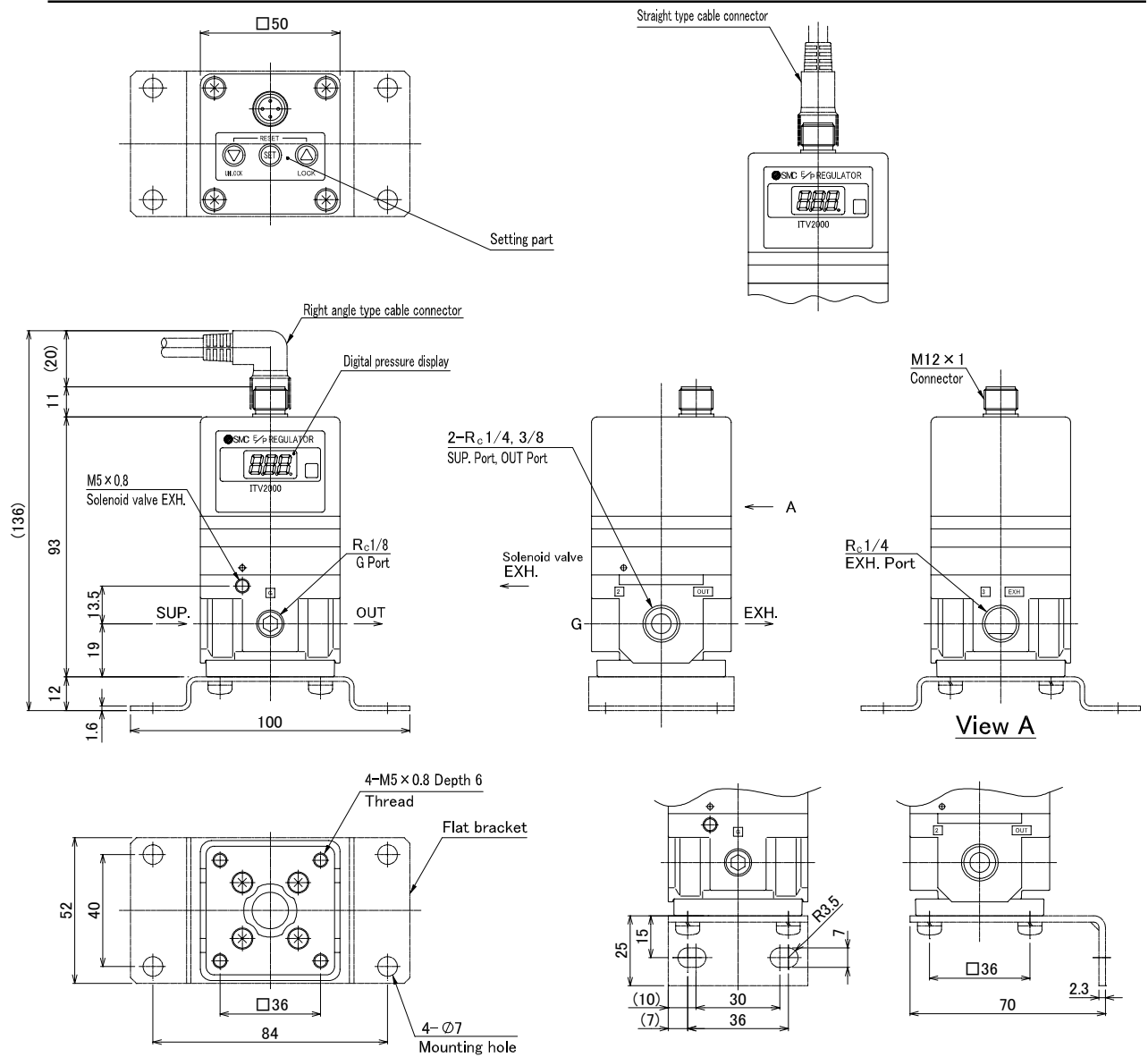
Nil	Without bracket
B	Flat bracket
C	L-type bracket

Port size

2	1/4
3	3/8

*5) In case of domestic (Japan) use, select an applicable symbol (kPa, MPa) for the pressure display units, in accordance with the International System of Units. Other units are available for shipping overseas.

Dimensions: mm



Wiring method

Wiring color	—
Brown	Power supply (+)
White	Input signal
Blue	GND (COM)
Black	Alarm output

Note 1: When alarm signal is given, remove factors (*6) that the outlet pressure does not reach the set pressure value.

*6) Example: Inlet pressure of electro-pneumatic regulator is lower than outlet pressure.

Note 2: Contact SMC sales representative for technical matters of this product.



Caution To ensure the safest possible operation of this product, please be sure to read thoroughly the "Safety Instructions" in our "Best Pneumatics" (general catalog) before use.