

Compact Electro-Pneumatic Regulator Series *ITV0000*



How to Order

For single unit and single unit for manifold

ITV00 **1** **0** - **0** **0** **0** **0** **N**

Pressure range

1	0.1 MPa
3	0.5 MPa
5	0.9 MPa

Power supply voltage

0	24 VDC $\pm 10\%$
1	12 to 15 VDC

Input signal

0	Current type 4 to 20 mA DC (Sink type)
1	Current type 0 to 20 mA DC (Sink type)
2	Voltage type 0 to 5 VDC
3	Voltage type 0 to 10 VDC

Built-in One-touch fittings type

For single unit

Symbol	SUP. [1]	OUT [2]	EXH [3]
Nil	Metric size (Light gray)	$\phi 4$	
U	Inch size (Orange)	$\phi 5/32''$	

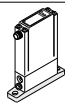
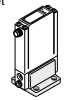
For manifold

Symbol		SUP1	OUT2	EXH3
Nil	Metric size (Light gray)	ø6	ø4	ø6
U	Inch size (Orange)	ø1/4"	ø5/32"	ø1/4"

Cable connector (Option)

N	Without cable connector
S	Straight type 3 m
L	Right angle type 2 m

Bracket/Option for single unit only

Nil	Without bracket
B	Flat Bracket 
C	L-bracket 

Base type

Nil	For single unit
M	For manifolds

Manifold

IITV00 - **02** **0** - **n**

Stations

02	2 stations
03	3 stations
...	...
10	10 stations

Option

If a DIN rail longer than the specified stations is required, specify the applicable stations in two digits.
(Maximum 10 stations)
Example) IITV00-05-07

One-touch fitting size for supply/exhaust parts (End plate)

Nil	$\phi 6$ (Light gray)
U	$\phi 1/4''$ (Orange)

Note) A DIN rail with the length specified by the number of stations is attached to the manifold. For dimensions of the DIN rail, refer to the external dimensions.

How to Order Manifold Assembly (Example)

Indicate the part numbers of electro-pneumatic regulators to be mounted below the manifold part number.

Example)

Due to the common supply/exhaust feature, note that different pressure range combinations are not available.

IITV00-03.....1 set (Manifold part no.)

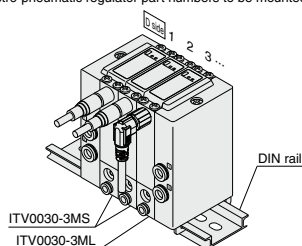
*ITV0030-3MS.....2 sets (Electro-pneumatic regulator part no. (1, 2 stations))

*ITV0030-3ML.....1 set (Electro-pneumatic regulator part no. (3 stations))

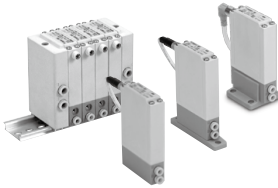
Indicate part numbers in order starting from the first station on the D side.

Note) Combination with having different pressure ranges is not available due to common supply/exhaust features.

The asterisk (*) specifies mounting. Add an asterisk (*) at the beginning of electro-pneumatic regulator part numbers to be mounted.



Specifications



Model		ITV001□	ITV003□	ITV005□
Minimum supply pressure		Set pressure +0.1 MPa		
Maximum supply pressure		0.2 MPa	1.0 MPa	
Set pressure range		0.001 to 0.1 MPa	0.001 to 0.5 MPa	0.001 to 0.9 MPa
Power supply	Voltage	24 VDC ±10%, 12 to 15 VDC		
	Current consumption	Power supply voltage 24 VDC type: 0.12 A or less Power supply voltage 12 to 15 VDC type: 0.18 A or less		
Input signal	Voltage type	0 to 5 VDC, 0 to 10 VDC		
	Current type	4 to 20 mA DC, 0 to 20 mA DC (Sink type)		
Input impedance	Voltage type	Approx. 10 kΩ		
	Current type	Approx. 250 Ω		
Output signal ^{Note 4)}	Analog output	1 to 5 VDC (Output impedance: Approx. 1 kΩ) Output accuracy: ±6% F.S. or less		
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		±0.12% F.S./°C or less		
Operating temperature range		0 to 50°C (No condensation)		
Enclosure		Equivalent to IP65 *		
Connection type		Built-in One-touch fittings		
Connection size	For single unit	Metric size	①, ②, ③: ø4	
		Inch size	①, ②, ③: ø5/32"	
	Manifold	Metric size	①, ③: ø6, ②: ø4	
		Inch size	①, ③: ø1/4", ②: ø5/32"	
Weight ^{Note 1)}	100 g or less (without option)			

Note 1) Indicates the weight of a single unit.

For IITV00-n

Total weight (g) Stations (n) $\times$ 100 + 130 (Weight of end block A, B assembly) + Weight (g) of DIN rail

Note 2) When there is a downstream flow consumption, pressure may become unstable depending on piping conditions.

Note 3) When the input signal is at 0%, the exhaust solenoid valve is controlled to reduce the outlet pressure to zero. For this reason, a noise may be generated. This noise is normal and does not indicate a fault.

Note 4) When measuring ITV analog output from 1 to 5 VDC, if the load impedance is less than 100 k Ω , the analog output monitor accuracy of $\pm 6\%$ F.S. or less may not be available. The product with the accuracy of within $\pm 6\%$ is supplied upon your request.

Output pressure remains unaffected.

* When using under the conditions equivalent to IP65, connect the fitting or tube to the breathing hole prior to use. (For details, refer to "Specific Product Precautions 1" on page 849)

Accessories (Option)

Bracket

Flat bracket assembly (includes 2 mounting screws)
P39800022



L-bracket assembly (includes 2 mounting screws)
P39800023



Tighting torque when assembling is 0.3 N·m.

Cable connector

Straight type
M8-4DSX3MG4



Right angle type
P398000-501-2

