

Compact Electro-Pneumatic Regulator Series *ITV0000*

Compact Vacuum Regulator Series *ITV0009*

Compact 15 mm

With a simplified high-density circuit board design, an extremely compact size has been achieved.

Lightweight 100 g



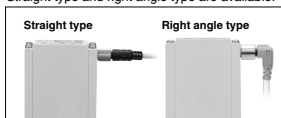
Realizes space-saving and reduction of weight for manifold use.

Stations can easily be increased or decreased due to DIN rail mount design.



■ Cable connectors

Straight type and right angle type are available.



■ Built-in One-touch fittings

■ With error indication LED

■ Brackets

Flat and L-brackets are available.



Flat bracket



L-bracket

● Equivalent to IP65

● Linearity: $\pm 1\%$ F.S. or less

Hysteresis: 0.5% F.S. or less

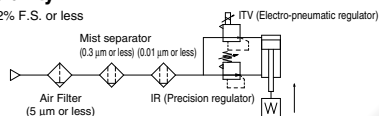
Repeatability: $\pm 0.5\%$ F.S. or less

● High-speed response time: 0.1 sec (Without load)

(Note) This is not a guaranteed value as it depends on the operating environment.

● High stability

Sensitivity 0.2% F.S. or less



Electro-Pneumatic Regulator Series *ITV1000/2000/3000*

Electronic Vacuum Regulator Series *ITV209*



ITV1000

ITV2000

ITV3000

ITV2090

Serial communications specifications to Series *ITV1000/2000/3000* are standardized.

● Reduced wiring

Applicable Fieldbus protocols



RS-232C specification to serial communications is standardized.



● Sensitivity: 0.2% F.S. or less

● Linearity: $\pm 1\%$ F.S. or less

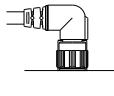
● Hysteresis: 0.5% F.S. or less

● IP65

● Cable connections in 2 directions

Straight type

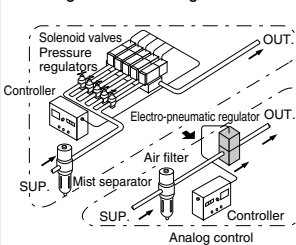
Right angle type



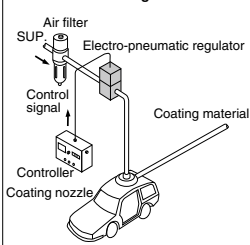
● Grease-free specification (Series *ITV1000*)

● Application examples

Multi-stage control to analog control



Electrostatic coating control









Electro-Pneumatic Regulator

Electronic Vacuum Regulator

Series *ITV*

● Stepless control of air pressure proportional to an electrical signal.

	Series	Model	Set pressure range	Input signal	Port size	Page	ARJ
Electro-Pneumatic Regulator	Series <i>ITV0000</i>	 ITV001 □	0.001 to 0.1 MPa	Current type: 4 to 20 mA DC (Sink type) Current type: 0 to 20 mA DC (Sink type) Voltage type: 0 to 5 VDC Voltage type: 0 to 10 VDC	Built-in One-touch fittings Metric size: ø4 Inch size: ø5/32	806	AR425 to 935
		ITV003 □	0.001 to 0.5 MPa				ARX
		ITV005 □	0.001 to 0.9 MPa				AMR
	Series <i>ITV1000</i>	 ITV101 □	0.005 to 0.1 MPa	Current type: 4 to 20 mA DC (Sink type) Current type: 0 to 20 mA DC (Sink type) Voltage type: 0 to 5 VDC Voltage type: 0 to 10 VDC Preset input (4 points/16 points) 10 bit digital input CC-Link compatible	1/8, 1/4	814	ARM
		ITV103 □	0.005 to 0.5 MPa				ARP
		ITV105 □	0.005 to 0.9 MPa				IR
	Series <i>ITV2000</i>	 ITV201 □	0.005 to 0.1 MPa	Current type: 4 to 20 mA DC (Sink type) Voltage type: 0 to 5 VDC Voltage type: 0 to 10 VDC Preset input (4 points/16 points) 10 bit digital input CC-Link compatible DeviceNet™ compatible PROFIBUS DP compatible RS-232C communication	1/4, 3/8	814	IRV
		ITV203 □	0.005 to 0.5 MPa				VEX
		ITV205 □	0.005 to 0.9 MPa				SRH
	Series <i>ITV3000</i>	 ITV301 □	0.005 to 0.1 MPa	DeviceNet™ compatible PROFIBUS DP compatible RS-232C communication	1/4, 3/8, 1/2	814	SRP
		ITV303 □	0.005 to 0.5 MPa				SRF
		ITV305 □	0.005 to 0.9 MPa				VCHR
Electronic Vacuum Regulator	Series <i>ITV009</i> □	 ITV009 □	-1 to -100 kPa	Current type: 4 to 20 mA DC (Sink type) Current type: 0 to 20 mA DC (Sink type) Voltage type: 0 to 5 VDC Voltage type: 0 to 10 VDC	Built-in One-touch fittings Metric size: ø4 Inch size: ø5/32	836	ITV
	Series <i>ITV209</i> □	 ITV209 □	-1.3 to -80 kPa	Current type: 4 to 20 mA DC (Sink type) Current type: 0 to 20 mA DC (Sink type) Voltage type: 0 to 5 VDC Voltage type: 0 to 10 VDC Preset input (4 points/16 points) 10 bit digital input CC-Link compatible DeviceNet™ compatible PROFIBUS DP compatible RS-232C communication	1/4	843	IC
							ITVX

Compact Electro-Pneumatic Regulator Series *ITV0000*



How to Order

For single unit and single unit for manifold

ITV00 **1** **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		SUP ¹	OUT ²	EXH ³
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** [] - **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.

