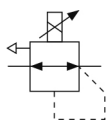


# ITV2000/3000, Electro-Pneumatic Regulator

## ITV2050-33F3BN2

### Datasheet

- Controls air pressure in proportion to an electric signal.
- Available in MPa, kgf/cm<sup>2</sup>, bar, PSI, and kPa units.
- Pressure range of 0.005 to 0.9MPa.
- Available port sizes 1/4 and 3/8.
- Mounting bracket option.



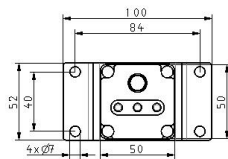
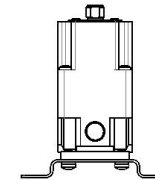
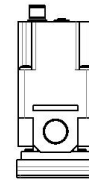
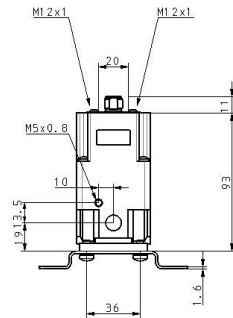
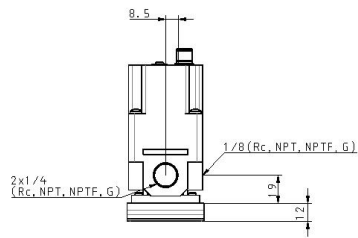
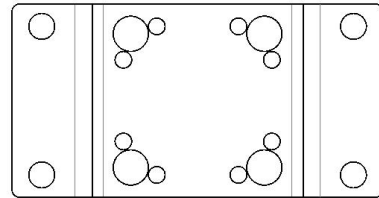
Electro-pneumatic regulator

## Standard specifications

Model	20 (1500 L/min)
Pressure Range	5 (0.005~0.9MPa)
Power Voltage	0 (24VDC)
Input Signal	3 (Voltage Style 0~10VDC)
Monitor Output	3 (Switch Output PNP)
Thread	F (G[PF])
Port Size	3 (3/8 [2000,3000])
Accessory	B (Flat Bracket)
Cable Connector	N (w/oCable Connector)
Pressure Display Unit	2 (kgf/cm <sup>2</sup> )
Options	None
Maximum temperature of pressure medium	50 °C
Minimum temperature of pressure medium	0 °C
Maximum operating pressure	1.0 MPa
Minimum operating pressure	0.1 MPa
Maximum ambient temperature	50 °C
Minimum ambient temperature	0 °C
General power supply	24 VDC ±10%
Conform to the European RoHS Directive	Conform

Approvals	CE
Protection class with connector	IP65
Flow rate of secondary exhaust	1500 NI/min
Enclosure	IP65
Sensitivity	0.2% (F.S.)
Repeatability	±0.5% (F.S.)
Set pressure range	0.005 - 0.9 MPa
Linearity	±1% (F.S.)
Current consumption	0.12 A
Max. supply pressure	1.0 MPa
Min. supply pressure	Set pressure +0.1 MPa
Accuracy	±2%F.S. ±1 digit
Temperature characteristics	±0.12% (F.S.)/C
Minimum display unit	0.01
Hysteresis	±1% (F.S.)
Input impedance current type	250 Ω
Input impedance Voltage type	6.5 kΩ
Input impedance Preset input	4.7 kΩ
Input impedance Digital input	4.7 kΩ
Output signal Switch	PNP open collector output: Max. 80 mA
Weight	0.418 Kg

# Dimensions



## Constructions

### ITV2000



#### Main Component Parts

No.	Description	Material
◆ 1	Body	Aluminum alloy
◆ 2	Intermediate body	Aluminum alloy
3	Cover	Aluminum alloy
◆ 4	Valve guide	Aluminum alloy
◆ 5	Valve (Supply valve)	HNBR/Brass
◆ 6	Valve (Exhaust valve)	HNBR/Brass
◆ 7	Valve spring	Stainless steel
◆ 8	Valve spring	Stainless steel
◆ 9	Diaphragm assembly	Stainless steel
		Aluminum alloy
		HNBR
		Steel
◆ 10	Seal	NBR
◆ 11	Bias spring	Stainless steel
◆ 12	O-ring	NBR
13	Seal	NBR
14	Bowl assembly	Resin
		Silicone rubber
15	Sub-plate	Resin
16	Seal	NBR
17	Control circuit assembly	—
◆ 18	Filter	Stainless steel
19	Solenoid valve	—
◆ 20	O-ring	NBR
21	O-ring	NBR
22	Round head Phillips screw	Steel
◆ 23	Retaining ring	Stainless steel

\* Parts in contact with fluid are indicated with a mark ◆.

## Additional information

Catalogue	<a href="#">ITV-Ff_EU.pdf</a>
Declaration of conformity	<a href="#">DoC_ITVx_TF00023-B.pdf</a> <a href="#">newDoC_ITV2000_3000_TF1Y106EN.pdf</a> <a href="#">newDoC_ITV2000_3000_TF1V093EN.pdf</a>
Installation manuals	<a href="#">IMM_ITV3000_54GB-A.PDF</a> <a href="#">IMM_ITVx_TF112GB-A.pdf</a>
Operation manuals	<a href="#">OM_ITV2_DeviceNet_EN-B.pdf</a> <a href="#">OM_ITV2_PROFIBUS-DP_EN.pdf</a> <a href="#">OM_ITV2_CC-Link_EN-A.pdf</a> <a href="#">OM_ITV2_OM00068EN-C.pdf</a> <a href="#">OM_ITV2_RS-232C_EN.pdf</a> <a href="#">OM_ITV2_OM00109EN-C.pdf</a> <a href="#">OM_ITV2_OM00112EN-C.pdf</a>