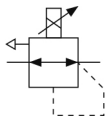


ITV2000/3000, Electro-Pneumatic Regulator

ITV3050-31F4N

Datasheet

- Controls air pressure in proportion to an electric signal.
- Available in MPa, kgf/cm², bar, PSI, and kPa units.
- Pressure range of 0.005 to 0.9MPa.
- Available port sizes 1/4 and 3/8.
- Mounting bracket option.



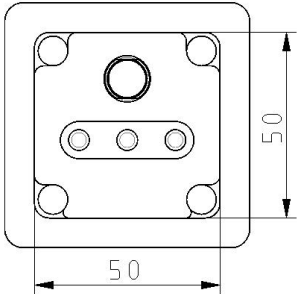
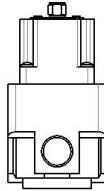
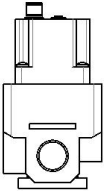
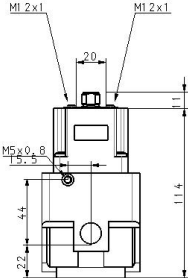
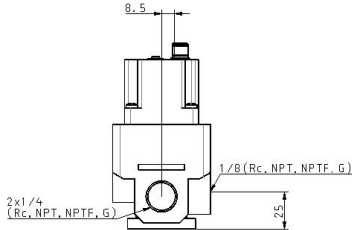
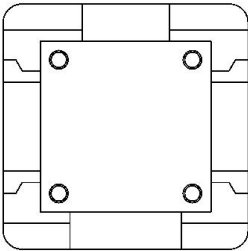
Electro-pneumatic regulator

Standard specifications

Model	30 (4000 L/min)
Pressure Range	5 (0.005~0.9MPa)
Power Voltage	0 (24VDC)
Input Signal	3 (Voltage Style 0~10VDC)
Monitor Output	1 (Analog Output 1~5VDC)
Thread	F (G[PF])
Port Size	4 (1/2 [3000])
Accessory	None
Cable Connector	N (w/oCable Connector)
Pressure Display Unit	MPa
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	4000 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	0.001
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 Analogue	1 to 5 VDC (Output impedance: Approximately 1 kΩ) Output accuracy within ±6% (Full span)
Weight	0.645 Kg

Dimensions



Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

Constructions

ITV3000



Main Component Parts

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

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

Additional information

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