

## ITV1000/2000/3000, Electro-Pneumatic Regulator ITV1050-31F1BN3

Datasheet

### General series information

- Pressure range: 0.005 to 0.9 MPa
- Maximum flow rate: 4000 l/min (ANR)
- Port sizes: 1/8, 1/4, 3/8, 1/2
- Applicable fieldbus protocols: IO-Link, CC-Link, DeviceNet™, PROFIBUS, RS-232C.



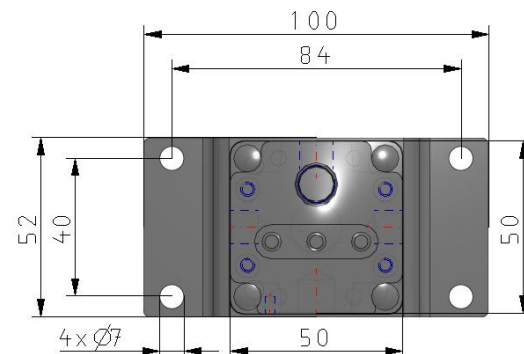
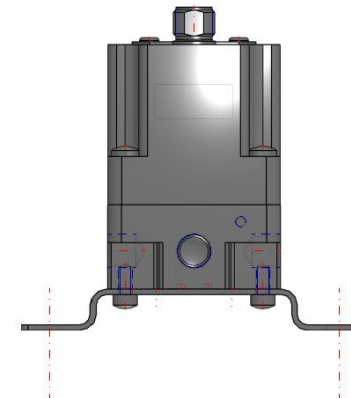
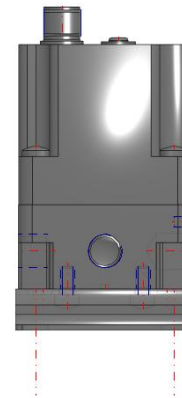
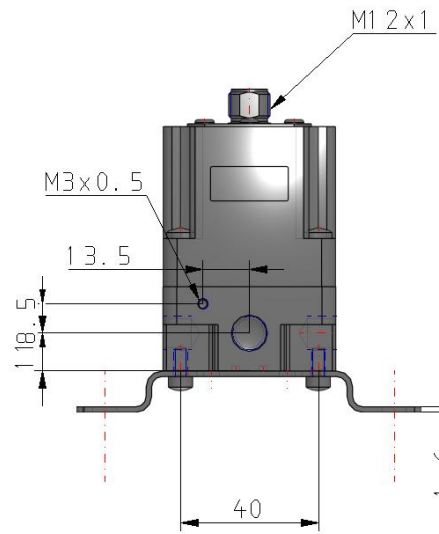
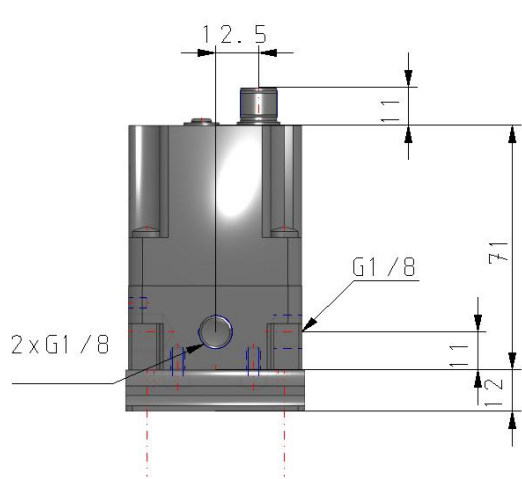
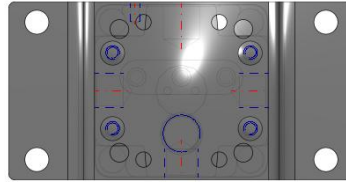
Electro-pneumatic regulator

### Standard specifications

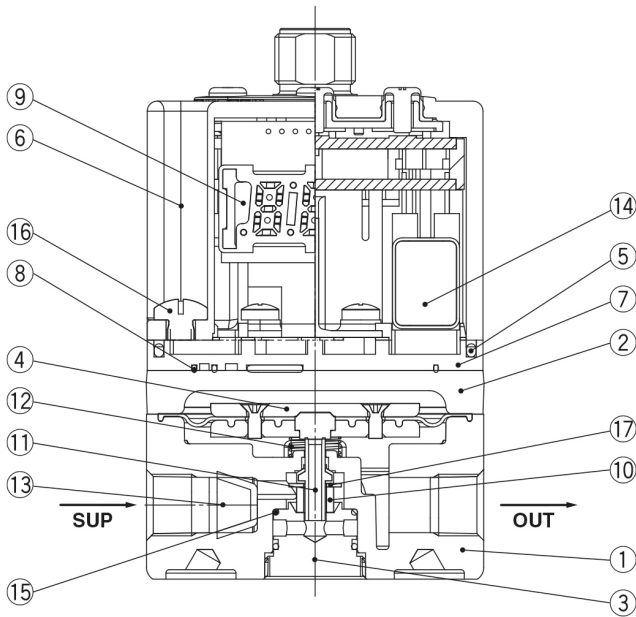
Model	10 (200 L/min [ANR])
Pressure Range	5 (0.005~0.9MPa)
Power Voltage	0 (24VDC)
Input Signal	3 (Voltage Style 0~10VDC)
Monitor Output	1 (Analogue Output 1~5VDC)
Thread	F (G[PF])
Port Size	1 [1/8 (1000)]
Accessory	B (Flat Bracket)
Cable Connector	N (w/oCable Connector)
Pressure Display Unit	3 (Bar)
Options	None
Maximum temperature of pressure medium	50 °C
Minimum temperature of pressure medium	0 °C
Maximum operating pressure	1.0 MPa
Maximum ambient temperature	50 °C
Minimum ambient temperature	0 °C
Approvals	CE
Protection class with connector	IP65
Current consumption	0.12 A

Enclosure	IP65
Sensitivity	0.2% (F.S.)
Repeatability	±0.5% (F.S.)
Set pressure range	0.005 - 0.9 MPa
Linearity	±1% (F.S.)
Power supply voltage	24 VDC ±10%
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	0.5% (F.S.)
Input signal Voltage type	0 - 10 VDC
Input impedance current type	250 Ω
Input impedance Voltage type	6.5 kΩ
Output signal Analogue	1 to 5 VDC (Output impedance: Approximately 1 kΩ) Output accuracy within ±6% (Full span)
Weight	0.250 Kg

# Dimensions



## Constructions



### Main Component Parts

No.	Description	Material
◆ 1	Body	Aluminum alloy
2	Cover	Aluminum alloy
◆ 3	Valve guide	Aluminum alloy
◆ 4	Diaphragm assembly	Aluminum alloy
		HNBR
5	Seal	Steel
6	Bowl assembly	NBR
		Resin
7	Sub-plate	Silicone rubber
8	Seal	Resin
9	Control circuit assembly	NBR
◆ 10	Bumper	—
◆ 11	Valve	HNBR
		Stainless steel
◆ 12	Bias spring	Stainless steel
◆ 13	Filter	Stainless steel
14	Solenoid valve	—
◆ 15	O-ring	NBR
16	Round head Phillips screw	—
17	Flat washer	Steel
◆ 17	Flat washer	Stainless steel

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

## Additional information

Catalogue	<a href="#">ITV-G_EU.pdf</a>
Declaration of conformity	<a href="#">newDoC_ITVx000-G_EN.pdf</a> <a href="#">newDoC_ITVx000-H_EN.pdf</a> <a href="#">newDoC_ITVx000_IO-Link-EN.pdf</a> <a href="#">DoC_ITVx_TF00023-B.pdf</a>
Installation manuals	<a href="#">IM_ITVx000_EN-A.pdf</a> <a href="#">IM_ITVx000-IO-Link_EN.pdf</a> <a href="#">IM_ITV3000_EN-A.pdf</a>
Operation manuals	<a href="#">OM_ITVx000-60_EN-C.pdf</a> <a href="#">OM_ITVx000-CC-Link_EN-B.pdf</a> <a href="#">OM_ITVx000-DeviceNet_EN-C.pdf</a> <a href="#">OM_ITVx000_EN-C.pdf</a> <a href="#">OM_ITVx000-PROFIBUS-DP_EN-A.pdf</a> <a href="#">OM_ITVx000-52_53_EN-C.pdf</a> <a href="#">OM_ITVx000-RS-232C_EN.pdf</a> <a href="#">OM_ITVx000-IO-Link_EN-E.pdf</a>