

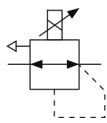
# ITV1000/2000/3000, Electro-Pneumatic Regulator

## ITV1050-03F2BN

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.



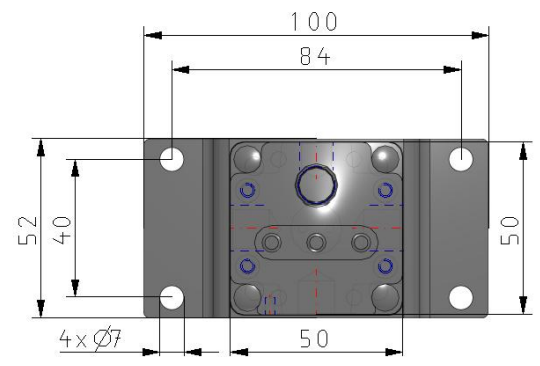
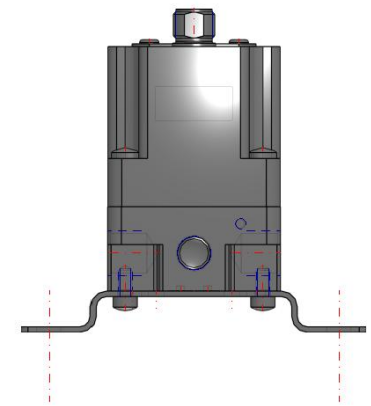
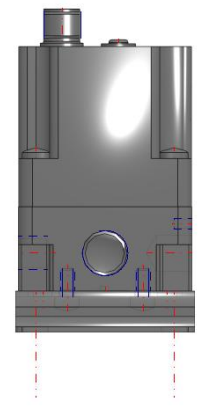
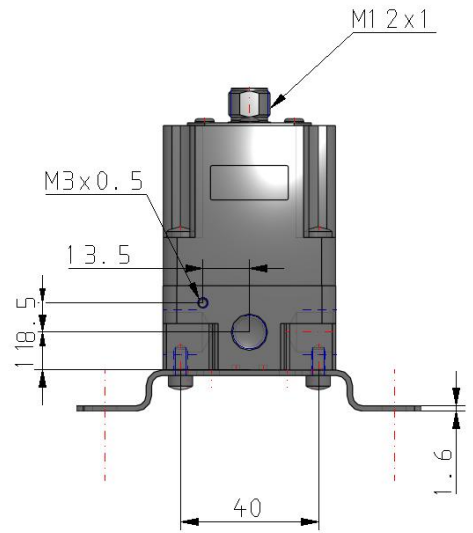
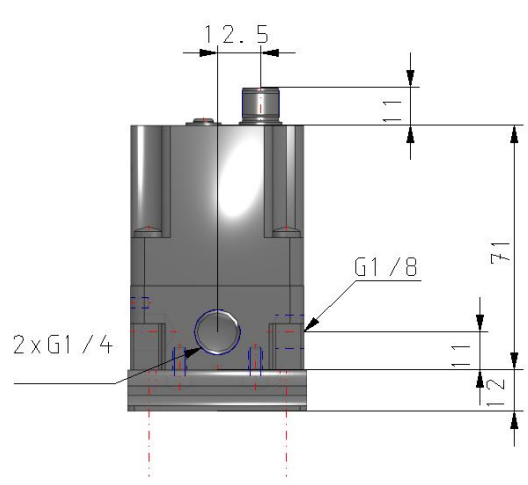
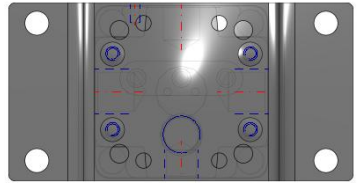
Electro-pneumatic regulator

### Standard specifications

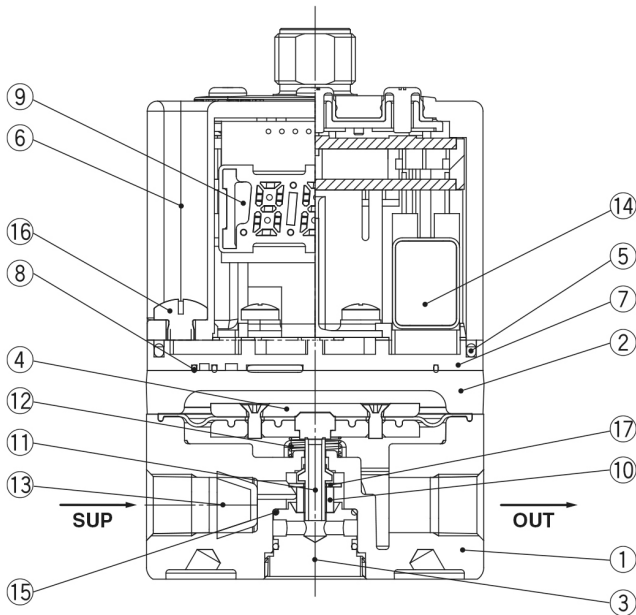
Model	10 (200 L/min [ANR])
Pressure Range	5 (0.005~0.9MPa)
Power Voltage	0 (24VDC)
Input Signal	0 (Current Style 4~20mADC; Requires Sourcing Type PLC Input Module)
Monitor Output	3 (Switch Output PNP)
Thread	F (G[PF])
Port Size	2 (1/4 [2000,3000])
Accessory	B (Flat Bracket)
Cable Connector	N (w/oCable 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
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	0.001
Hysteresis	0.5% (F.S.)
Input signal Current type	4 - 20 mA DC
Input impedance current type	250 Ω
Input impedance Voltage type	6.5 kΩ
Output signal Switch	PNP open collector output: Max. 80 mA
Weight	0.318 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	HNBR
◆ 13	Filter	Stainless steel
14	Solenoid valve	—
◆ 15	O-ring	—
◆ 16	Round head Phillips screw	NBR
◆ 17	Flat washer	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="#">DoC_ITVx_TF00023-B.pdf</a> <a href="#">newDoC_ITV2000_3000_TF1Y106EN.pdf</a> <a href="#">newDoC_ITV2_TF1Y002EN.pdf</a> <a href="#">newDoC_ITV2000_3000_TF1V093EN.pdf</a>
Installation manuals	<a href="#">IM_ITV2-IL-TF2Z014EN.pdf</a> <a href="#">IMM_ITV3000_54GB-A.PDF</a> <a href="#">IM_ITV2-IO_SMY17EN.pdf</a> <a href="#">IMM_ITVx_TF112GB-A.pdf</a>
Operation manuals	<a href="#">OM_ITV2_CC-Link_EN-B.pdf</a> <a href="#">OM_ITV2_OM00068EN-C.pdf</a> <a href="#">om_itv000_om005en-e.pdf</a> <a href="#">OM_ITV2_RS-232C_EN.pdf</a> <a href="#">OM_ITV2_OM00109EN-C.pdf</a> <a href="#">OM_ITV2_DeviceNet_EN-C.pdf</a> <a href="#">OM_ITV2_OM00112EN-C.pdf</a> <a href="#">OM_ITV2_PROFIBUS-DP_EN-A.pdf</a>