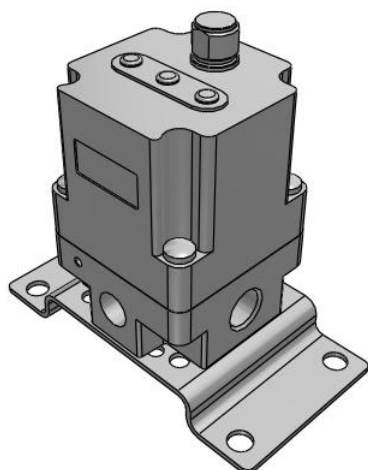


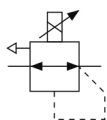


ITV1000, Electro-Pneumatic Regulator

ITV1030-31F2BN2

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 1/8.
- Mounting bracket option.



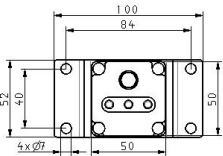
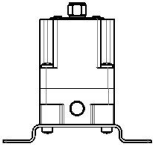
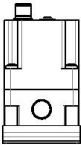
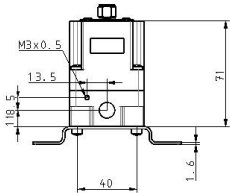
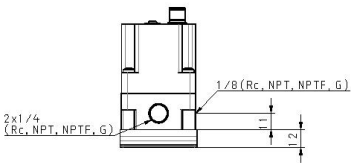
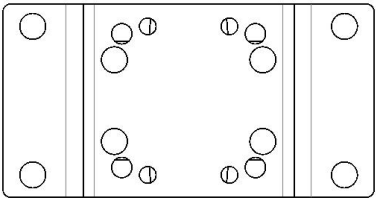
Electro-pneumatic regulator

Standard specifications

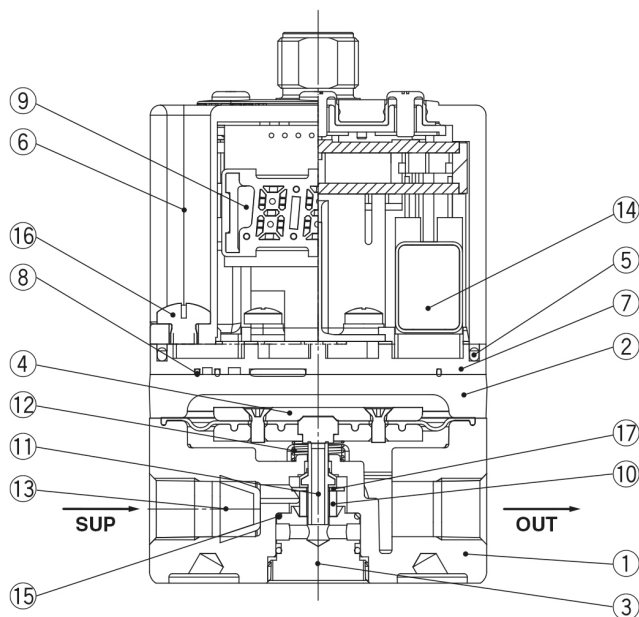
Pressure Range	3 (0.5 MPa)
Power Supply Voltage	0 (24 V DC)
Input Signal	3 (Voltage 0 to 10 VDC)
Monitor Output	1 (Analog Output 1 to 5 VDC)
Thread Type	F (G)
Port Size	2 (1/4)
Bracket	B (Flat Bracket)
Cable Connector Type	N (Without Cable Connector)
Pressure Display Unit	2 (kgf/cm ²)
Options	None
Maximum 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
Conform to the European RoHS Directive	Conform
Approvals	CE, RoHS
Flow rate of secondary exhaust	200 NI/min

Current consumption	0.12 A
Enclosure	IP65
Sensitivity	0.2% (F.S.)
Repeatability	±0.5% (F.S.)
Set pressure range	0.005 - 0.5 MPa
Linearity	±1% (F.S.)
Power supply voltage	24 VDC ±10 %
Max. supply pressure	1.0 MPa
Min. supply pressure	Set pressure +0.1 MPa
Display 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 Voltage type	6.5 kΩ
Output signal Analogue	1 to 5 VDC (Output impedance: Approximately 1 kΩ) Output accuracy within ±6% (Full span)
Weight	0.318 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
7	Sub-plate	Resin
8	Seal	Silicone rubber
9	Control circuit assembly	Resin
◆ 10	Bumper	NBR
◆ 11	Valve	Stainless steel
		HNBR
◆ 12	Bias spring	Stainless steel
◆ 13	Filter	Stainless steel
14	Solenoid valve	—
◆ 15	O-ring	—
16	Round head Phillips screw	NBR
◆ 17	Flat washer	Steel
		Stainless steel

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

Additional information

Catalogue	ITV-Ff_EU.pdf
Declaration of conformity	DoC_ITV1x_TF00001-B.pdf newDoC_ITV1000_TF1V092EN.pdf newDoC_ITV1000_TF1Y018EN.pdf
Installation manuals	IMM_ITV1_TFS03EN-A.pdf IMM_ITV1x_TF111GB-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