

ITV1000/2000/3000, Electro-Pneumatic Regulator ITV2050-31F3BN3

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.



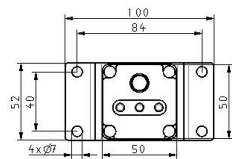
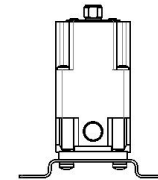
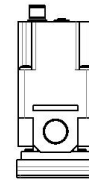
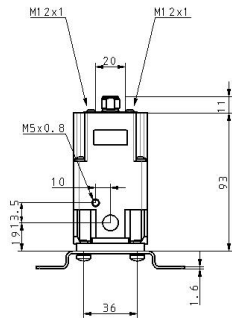
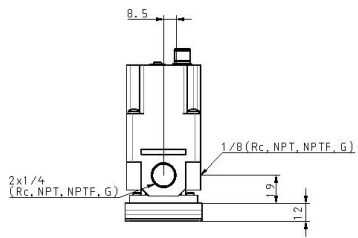
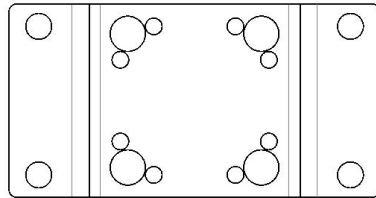
Electro-pneumatic regulator

Standard specifications

Model	20 (1500 L/min)
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	3 (3/8 [2000,3000])
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	0.350 Kg

Dimensions



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

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	ITV-G_EU.pdf
Declaration of conformity	newDoC_ITVx000-G_EN.pdf newDoC_ITVx000-H_EN.pdf newDoC_ITVx000_IO-Link-EN.pdf DoC_ITVx_TF00023-B.pdf
Installation manuals	IM_ITVx000_EN-A.pdf IM_ITVx000-IO-Link_EN.pdf IM_ITV3000_EN-A.pdf
Operation manuals	OM_ITVx000_DOC1070538EN.pdf OM_ITVx000-60_EN-D.pdf OM_ITVx000-CC-Link_EN-D.pdf OM_ITVx000-PROFIBUS-DP_EN-A.pdf OM_ITVx000-IO-Link_EN-A.pdf OM_ITVx000-52_53_EN-E.pdf OM_ITVx000-DeviceNet_EN-E.pdf OM_ITVx000-RS-232C_EN-A.pdf