

# Made to Order Specifications 2

Please contact SMC for detailed dimensions, specifications and lead times.



## 4 High-Speed Response Time Type

Pressure response with no load is approx. 0.1 sec.

Note 1) This is not a guaranteed value as it depends on the operating environment.

Note 2) When the input signal is at 0%, the exhaust solenoid valve is controlled to reduce the outlet pressure to zero. For this reason, a noise may be generated. This noise is normal and does not indicate a fault.

**ITV 2 0 1 0 - 0 1 2 S - X88**

### Model

1	1000 type
2	2000 type

### Pressure range

1	0.1 MPa
3	0.5 MPa
5	0.9 MPa

### Power supply voltage

0	24 VDC
1	12 to 15 VDC

### Input signal

0	Current type 4 to 20 mA DC (Sink type)
1	Current type 0 to 20 mA DC (Sink type)
2	Voltage type 0 to 5 VDC
3	Voltage type 0 to 10 VDC

### Monitor output

1	Analog output 1 to 5 VDC
2	Switch output/NPN output
3	Switch output/PNP output
4	Analog output 4 to 20 mA DC (Sink type)

### Thread type

Nil	Rc
N	NPT
T	NPTF
F	G

### Pressure display unit

Nil	MPa
2 *	kgf/cm <sup>2</sup>
3	bar
4 *	psi
5	kPa

\* Under Japan's new Measurement Act, this is only for overseas sales (SI units are to be used inside Japan).

### Cable connector type

S	Straight type 3 m
L	Right angle type 3 m
N	Without cable connector

### Bracket \*

Nil	Without bracket
B	Flat bracket
C	L-bracket

\* Bracket is included.

### Port size

1	1/8 (1000 type)
2	1/4 (1000, 2000 type)
3	3/8 (2000 type)

ARJ

AR425  
to 935

ARX

AMR

ARM

ARP

IR

IRV

VEX

SRH

SRP

SRF

VCHR

ITV

IC

ITVX

PVQ

VEF

VEP

VER

VEA

VY1

VBA

VBAT

AP100

**Made to Order Specifications 4**

Please contact SMC for detailed dimensions, specifications, and lead times.

**6 Linearity:  $\pm 0.5\%$  F.S. or Less**

Application examples: Polishing equipment and peripheral equipment for wafers, LCD glasses, color filters, etc.

**ITV 3 0 1 0 - 0 1 2 S - X410**

**Model**

1	1000 type
2	2000 type
3	3000 type

**Pressure range**

1	0.1 MPa
3	0.5 MPa
5	0.9 MPa

**Power supply voltage**

0	24 VDC
1	12 to 15 VDC

**Input signal**

0	Current type 4 to 20 mA DC (Sink type)
1	Current type 0 to 20 mA DC (Sink type)
2	Voltage type 0 to 5 VDC
3	Voltage type 0 to 10 VDC

**Monitor output**

1	Analog output 1 to 5 VDC
2	Switch output/NPN output
3	Switch output/PNP output
4	Analog output 4 to 20 mA DC (Sink type)

**Thread type**

Nil	Rc
N	NPT
T	NPTF
F	G

**Bracket \***

Nil	Without bracket
B	Flat bracket
C	L-bracket

\* Bracket is included.

**Port size**

1	1/8 (1000 type)
2	1/4 (1000, 2000, 3000 type)
3	3/8 (2000, 3000 type)
4	1/2 (3000 type)

**Linearity:**  
 $\pm 0.5\%$  F.S. or less

**Pressure display unit**

Nil	MPa
2 (Note)	kgf/cm <sup>2</sup>
3	bar
4 (Note)	psi
5	kPa

(Note) Under Japan's new Measurement Act, this is only for overseas sales (SI units are to be used inside Japan).

**Cable connector type**

S	Straight type 3 m
L	Right angle type 3 m
N	Without cable connector

**Rated pressure**

The graph shown above is a typical example. (This graph shows that the output pressure curve is in a negative range when compared to the ideal line.)

**Specifications**

Fluid	Air	
Minimum supply pressure	Set pressure +0.1 MPa	
Maximum supply pressure	1.0 MPa (Pressure range 0.1 MPa type: 0.2 MPa)	
Proof pressure	(Supply side)	1.5 MPa (Pressure range 0.1 MPa type: 0.3 MPa)
	(Output side)	1 MPa (Pressure range 0.1 MPa type: 0.2 MPa)
Set pressure range	1: 0.005 to 0.1 MPa, 3: 0.005 to 0.5 MPa, 5: 0.005 to 0.9 MPa	
Power supply voltage	0: 24 VDC $\pm 10\%$ , 1: 12 to 15 VDC	
	0.12 A or less (24 VDC $\pm 10\%$ type) 0.18 A or less (12 to 15 VDC type)	
Current consumption		
Input signal	0: 4 to 20 mA, 1: 0 to 20 mA, 2: 0 to 5 VDC, 3: 0 to 10 VDC	
Input impedance	Voltage type: Approx. 6.5 k $\Omega$ , Current type: 250 $\Omega$ or less	
Output signal	Analog output: 1 to 5 VDC/4 to 20 mA DC, Switch output (NPN/PNP)	
Linearity	$\pm 0.5\%$ F.S. or less	
Hysteresis	0.5% F.S. or less	
Repeatability	$\pm 0.5\%$ F.S. or less	
Sensitivity	0.2% F.S. or less	
Temperature characteristics	$\pm 0.12\%$ F.S./ $^{\circ}$ C or less	
Output pressure display	Accuracy	$\pm 2\%$ F.S. $\pm 1$ digit or less
	Minimum unit	MPa: 0.001, kgf/cm <sup>2</sup> : 0.01, bar: 0.01, psi: 0.1, kPa: 1
Ambient and fluid temperature	0 to 50 $^{\circ}$ C (No condensation)	
Enclosure	IP65	
Weight	ITV1000: Approx. 250 g, ITV2000: Approx. 350 g, ITV3000: Approx. 645 g (without brackets)	

The above characteristics (specifications) are confined to the static state. When air is consumed on the output side, the pressure may fluctuate.