

ITV1000 2000 3000 Series

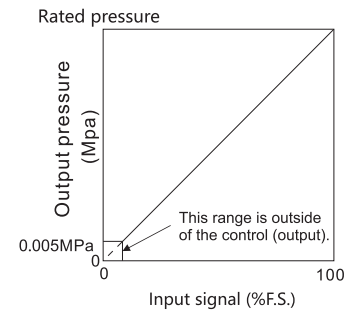
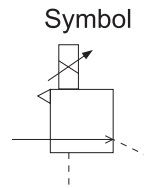


Figure 1. Input/output characteristics chart

Model		ITV101□ ^{Note 8)}	ITV103□ ^{Note 8)}	ITV105□ ^{Note 8)}
		ITV201□	ITV203□	ITV205□
		ITV301□	ITV303□	ITV305□
Minimum supply pressure		Set pressure +0.1 MPa		
Maximum supply pressure		0.2MPa	1.0MPa	
Set pressure range ^{Note 1)}		0.005 to 0.1 MPa	0.005 to 0.5 MPa	0.005 to 0.9 MPa
Power supply	Voltage	24 VDC ± 10%, 12 to 15 VDC		
	Current consumption	Power supply voltage 24 VDC type: 0.12 A or less ^{Note 9)} Power supply voltage 12 to 15 VDC type: 0.18 A or less		
Input signa ^{Note 9)}	Current type ^{Note 2)}	4 to 20 mA DC, 0 to 20 mA DC (Sink type)		
	Voltage type	0 to 5 VDC, 0 to 10 VDC		
	Preset input	4 points (Negative common), 16 points (No common polarity)		
Input impedance	Current type	250 Ω or less ^{Note 6)}		
	Voltage type	Approx. 6.5 KΩ		
	Digital input	Power supply voltage 24 VDC type: Approx. 4.7 KΩ Power supply voltage 12 VDC type: Approx. 2.0 KΩ		
Output signal output (monitor output)	Analog out	1 to 5 VDC (Output impedance: Approx. 1 kΩ) 4 to 20 mA DC (Sink type) (Output impedance: 250 Ω or less) Output accuracy ± 6% F.S. or less		
	Switch out	NPN open collector output: Max. 30 V, 80 mA PNP open collector output: Max. 80 mA		
Linearity		± 1% F.S. or less		
Hysteresis		0.5% F.S. or less		
Repeatability		± 0.5% F.S. or less		
Sensitivity		0.2% F.S. or less		
Temperature characteristics		± 0.12% F.S./°C or less		
Output pressure display ^{Note 4)}	Accuracy	± 2% F.S. ± 1 digit or less		
	Minimum unit	Mpa: 0.001, kgf/cm2: 0.01, bar: 0.01, psi: 0.1 ^{Note 5)} , kPa: 1		
Ambient and fluid temperature		0 to 50°C (No condensation)		
Enclosure		Ip65		
Weight Note 10)	ITV10□□	Approx. 250 g (without options)		
	ITV20□□	Approx. 350 g (without options)		
	ITV30□□	Approx. 645 g (without options)		

Note 1) Please refer to Figure 1 for the relationship between set pressure and input. Because the maximum set pressure differs for each pressure display, refer to page 945.

Note 2) 2-wire type 4 to 20 mA DC is not available. Power supply voltage (24 VDC or 12 to 15 VDC) is required.

Note 3) Select either analog output or switch output. Further, when switch output is selected, select either NPN output or PNP output. When measuring NITV analog output from 1 to 5 VDC, if the load impedance is less than 100 kΩ, the analog output monitor accuracy of within ±6% (full span) may not be available. The product with the accuracy of within ±6% is supplied upon your request. Output pressure remains unaffected.

Note 4) Adjustment of numerical values such as the zero/span adjustment or preset input type is set based on the minimum units for output pressure display (e.g. 0.001 to 0.500 MPa). Note that the unit cannot be changed.

Note 5) The minimum unit for 0.9 MPa (130 psi) types is 1 psi.

Note 6) Value for the state with no over current circuit included. If an allowance is provided for an over current circuit, the input impedance varies depending on the input current. This is 350 Ω or less for an input current of 20 mA DC.

Note 7) The above characteristics are confined to the static state. When air is consumed on the output side, the pressure may fluctuate.

Note 8) The NITV1000 series is a Grease-free specification (Wetted parts).

Order Code

ITV 3 0 1 0 - 0 1 2 S - -

Model

1	1000 type
2	2000 type
3	3000 type

Pressure range

1	0.1MPa
3	0.5MPa
5	0.9MPa

Power supply voltage

0	DC24V
1	DC12~15V

Input signal/
Communication model

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
40	4 points preset input
52	16 points preset input (Switch output/NPN output)
53	16 points preset input (Switch output/PNP output)
MB	ModBus 485

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)
Nil	None

Thread type

Nil	Rc
N	NPT
T	NPTF
F	G

Pressure display unit

Nil	Mpa
2	kgf/cm ²
3	bar
4	psi
5	kPa

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

Port size

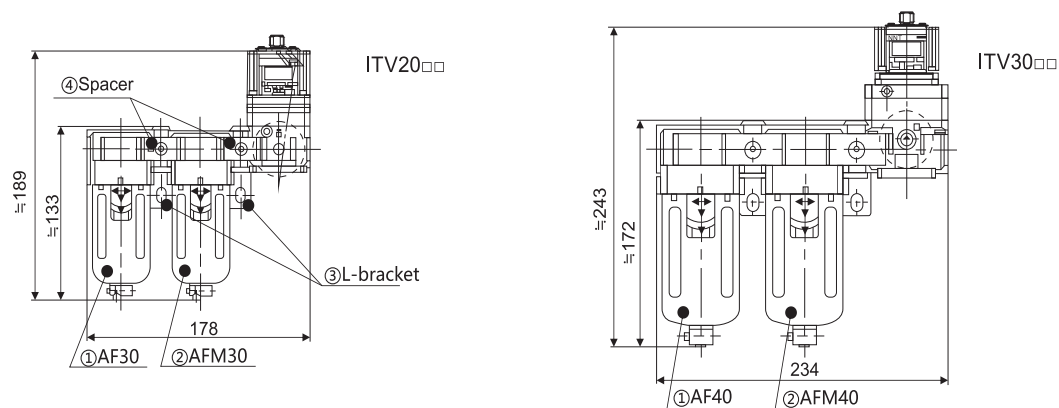
1	1/8 (1000 type)
2	1/4 (1000, 2000, 3000 type)
3	3/8 (2000, 3000 type)
4	1/2 (3000 type)

Identity

Nil	Nope
Q	CE

Custom Specification

Modular Products and Accessory Combinations



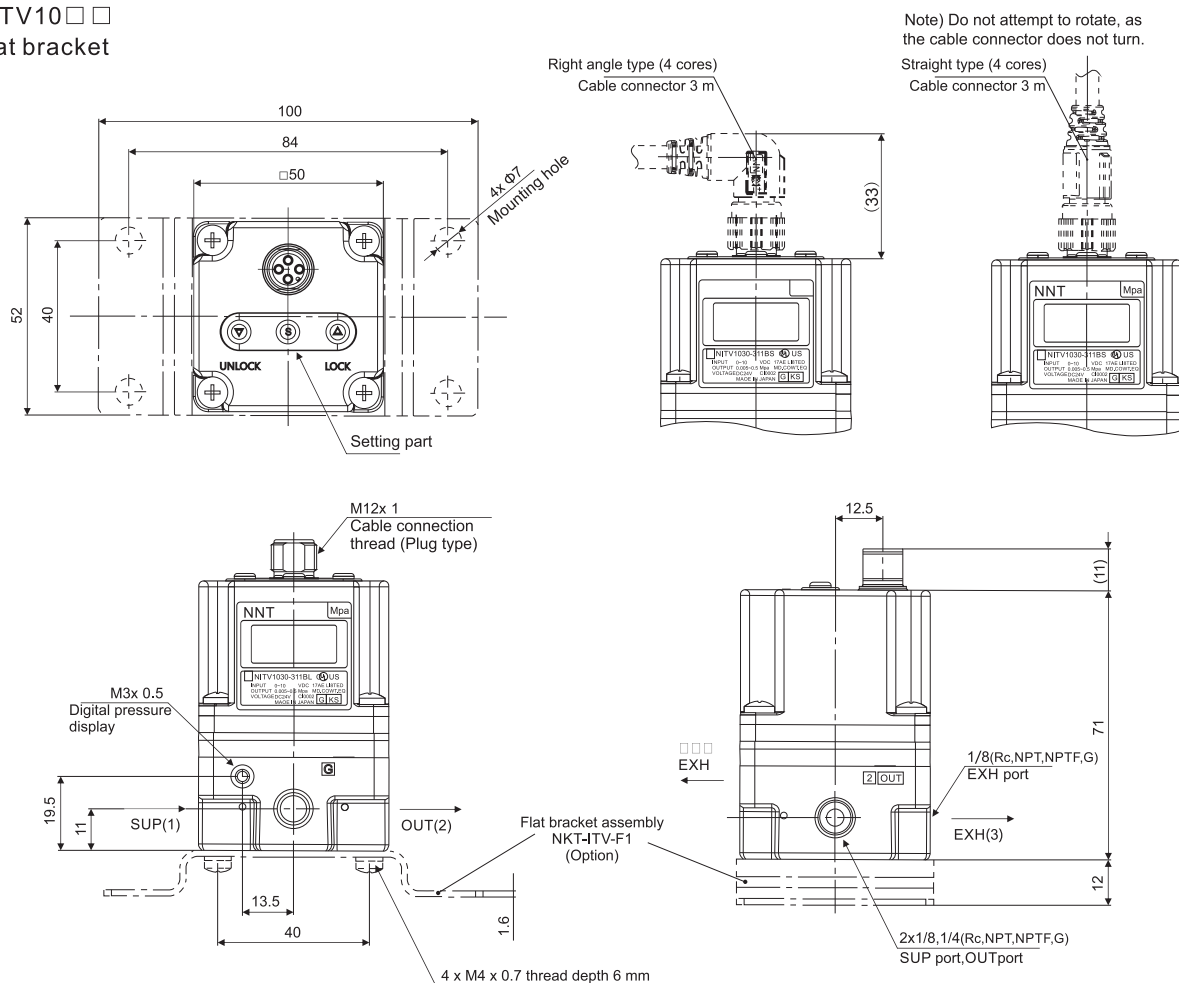
Modular Products and Accessory Combinations

For ITV10□□, use a modular adapter

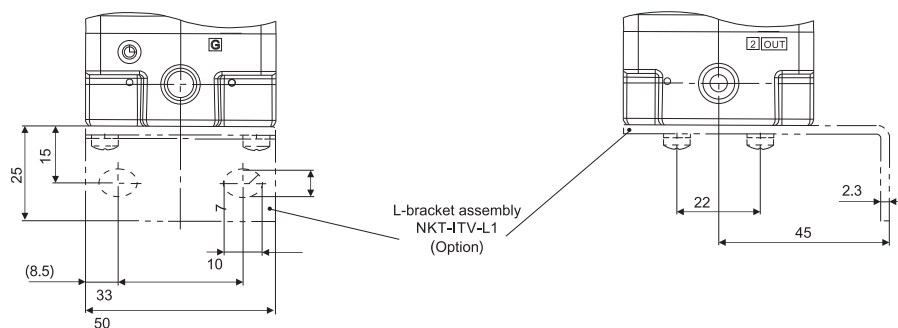
Applicable products and accessories	Applicable model	
	ITV20□□	ITV30□□
①Air filter	AF30	AF40
②Mist separator	AFM30	AFM40
③L-bracket	B310L	B410L
④Spacer	Y30	Y40
⑤Spacer with L-bracket (③+④)	Y30L	Y40L
⑥Spacer with T-bracket	-	Y40T

Dimensions

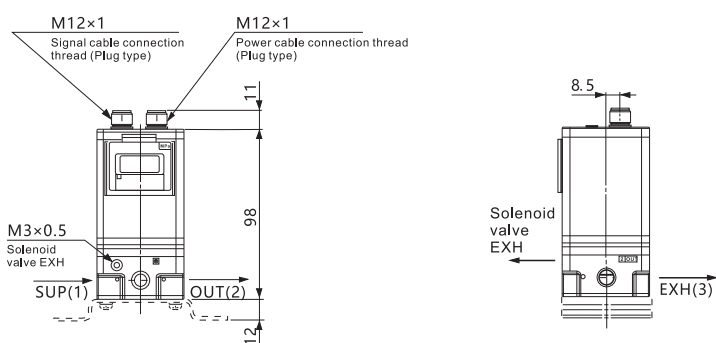
ITV10□□ Flat bracket



L-bracket assembly

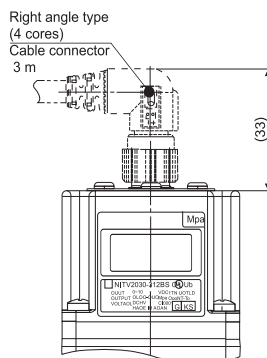
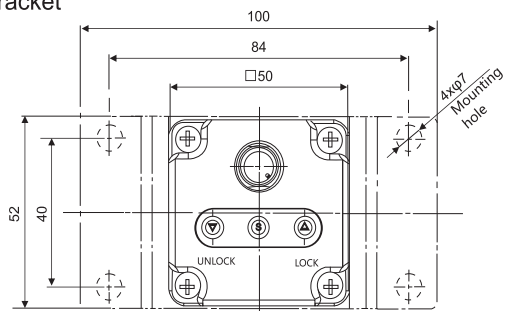


16 points preset input

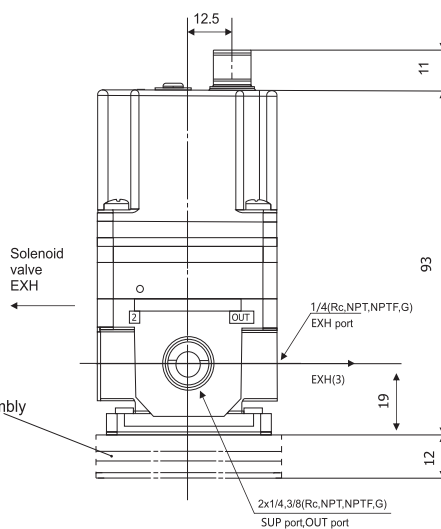
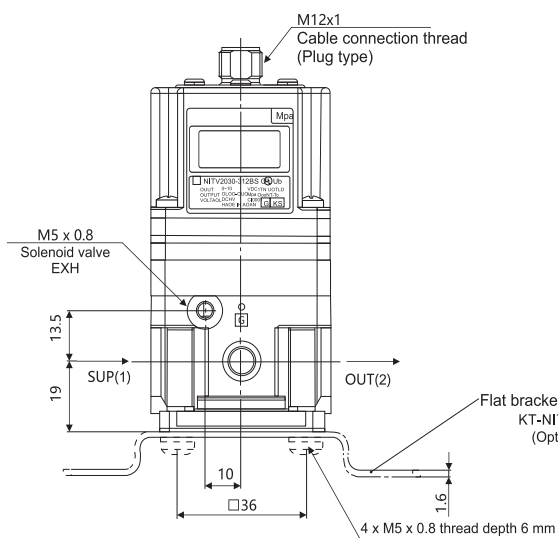
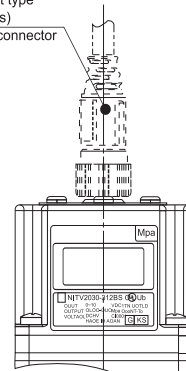


Dimensions

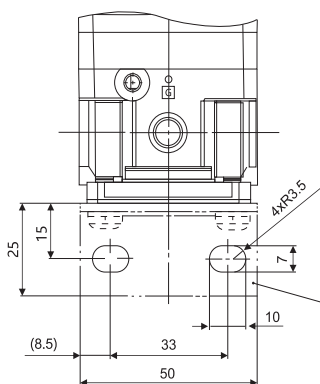
ITV20□□
Flat bracket



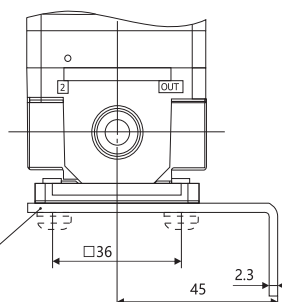
Note) Do not attempt to rotate, as the cable connector does not turn
Straight type
(4 cores)
Cable connector
3 m



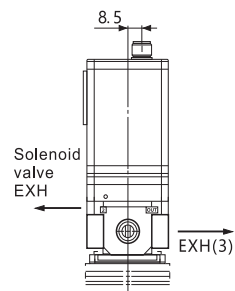
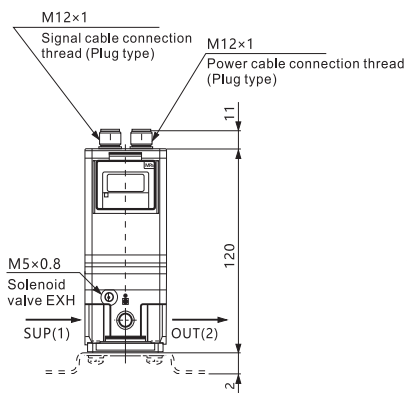
L-bracket



L-bracket assembly
KT-NITV-L2
(Option)

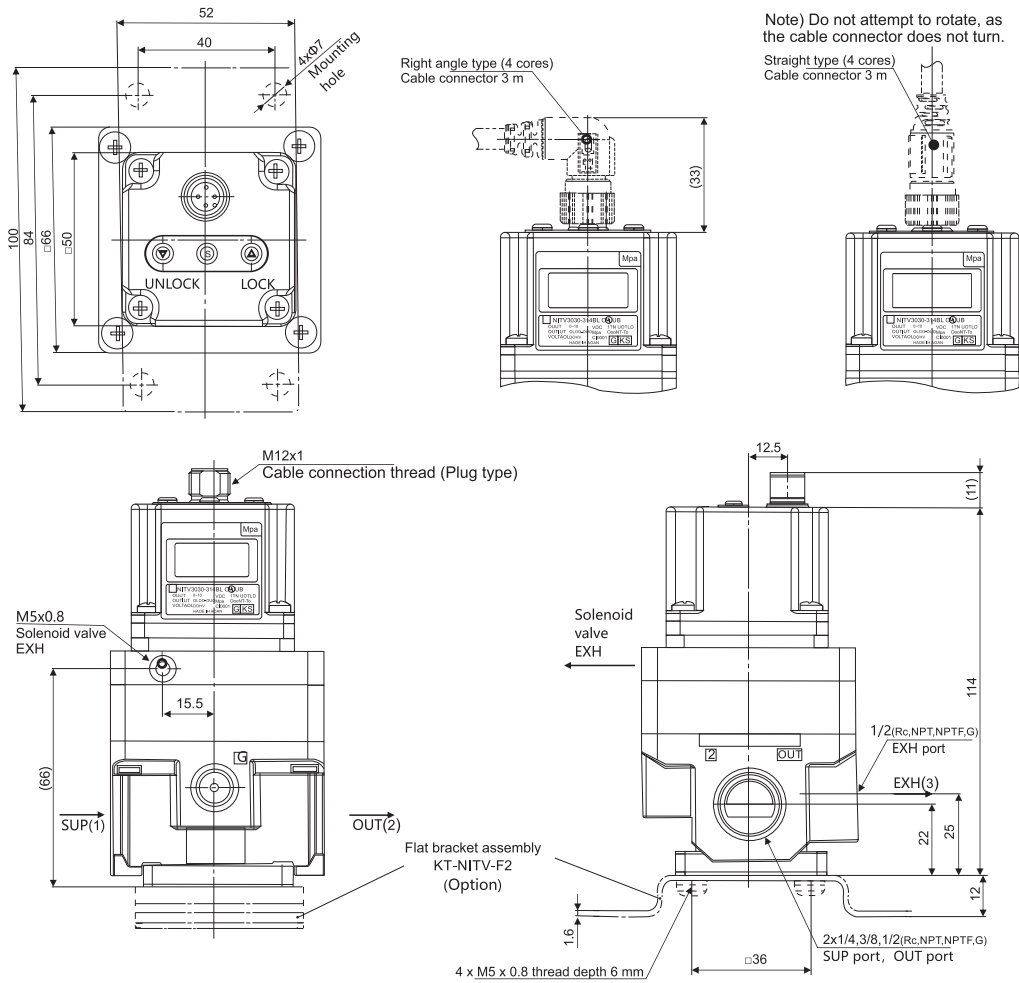


16 points preset input

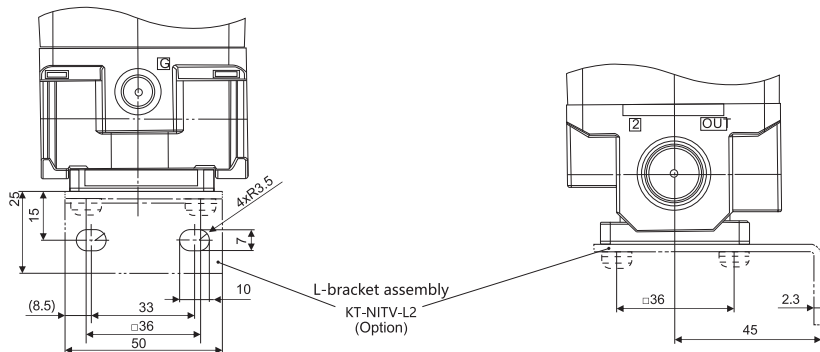


Dimensions

ITV30□□ Flat bracket



L-bracket



16 points preset input

