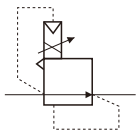
Standard Specifications

Mode		NITVX2000
Minimum supply pressure		Whichever is higher: 0.5 MPa or the set pressure +0.2 MPa
Maximum supply pressure		5MPa Note2)
Set pressure range Note 3)		0.01 to 3.0 MPa
Power supply	Voltage	24 VDC ±10%
	Current consumption	0.12 A or less
Input signal	Current type Note 4)	4 to 20 mA DC, 0 to 20 mA DC (Sink type)
	Voltage type	0 to 5 VDC, 0 to 10 VDC
Input impedance	Current type	500Ω or less
	Voltage type	6~6.5KΩ(at ordinary temperature)
Output signal Note5) (Monitor output)	Analog output	1 to 5 VDC (Output impedance: Approx. 1KΩ) Output accuracy: ±6% or less (Full span)
		4 to 20 mA DC (Sink type) Load impedance: 250 Ω or less Output accuracy: ±6% or less (Full span)
	Switch output	NPN open collector output: Max. 30 V, 80 mA
		Hysteresis: ±3% (Full span), Self-diagnosis: ±5% or less (Full span)
		PNP open collector output: Max. 80 mA
		Hysteresis: ±3% (Full span), Self-diagnosis: ±5% or less (Full span)
Linearity		±1% or less (Full span)
Hysteresis		1% or less (Full span)
Repeatability		±1% or less (Full span)
Sensitivity		±1% or less (Full span)
Temperature characteristics		±0.12% or less (Full span)/°C
Output pressure display	Accuracy	±2% or less (Full span) ±1 digit
	Minimum unit Note 6)	MPa:0.01,kgf/cm²:0.1,bar:0.1,ps:1
Fluid		Air、N2、O2、Ar
Ambient and fluid temperature		0-50℃(No condensation)
Weight		Approx. 570 g (without options)

Symbol



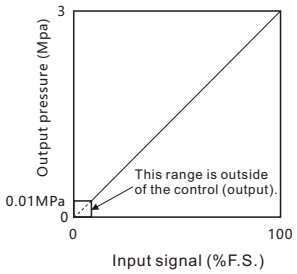


Fig. 2. Input/output characteristics chart

Note1) Characteristics shown above are based on the piping conditions of Fig. 1.

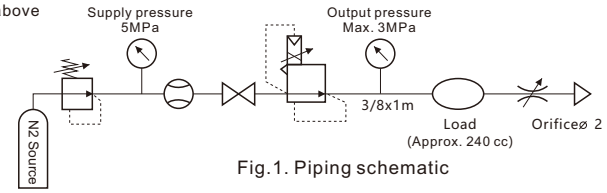


Fig.1. Piping schematic

Note2) When oxygen is used as a fluid, the maximum supply pressure must be less than 1 MPa.
Note3) Refer to Fig. 2 for the relationship between set pressure and input signal.
Note4) 2-wire type 4 to 20 mA DC is not available. Power supply voltage 24 VDC is required.
Note5) Select either analog output or switch output. Further, when switch output is selected, select either NPN output or PNP output. When measuring analog output of 1 to 5 VDC with a load impedance less than 100 kΩ, the analog output may not obtain the output accuracy of ±6% or less (F.S.).
Note6) Adjustment of numerical values such as the zero/span adjustment is set based on the minimum units for output pressure display. Note that the unit cannot be changed.
Note7) This product is only for blowing gas. This product does not have sufficient pressure control for applications other than blowing (driving, sealing, etc.).

Standard Specifications

NITVX 2 0 3 0 – 0 1 □ 3 □ S □

Body size
2	NTVX2000

Pilot type
0	Built-in regulator type Note)

Set pressure range
3	0.01~3.0MPa

Power supply voltage
0	24 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

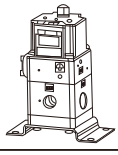
Thread type
Nil	Rc
N	NPT
F	G Note)

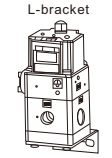
Note)Complies with ISO1179-1(2007)

Port size
3	3/8 Note)

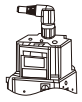
Note) The exhaust port size is 1/4". The exhaust port size for the built-in regulator and the solenoid valve is M5.

Bracket
Nil	Without bracket
B	Flat bracket
C	L-bracket





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



Pressure display unit
Nil	Mpa
2	kgf/cm²
3	bar
4	psi

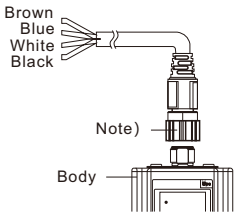
Wiring

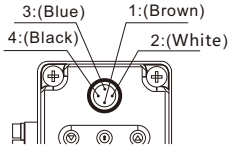
⚠Caution

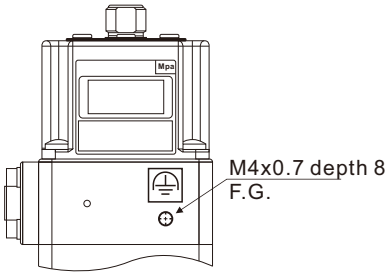
Connect the cable to the connector on the body with the wiring arranged as shown below. Proceed carefully, as incorrect wiring can cause damage.Further, use DC power with sufficient capacity and a low ripple.

F.G.(Grounding)

Ground the frame ground (F.G.) terminal at the front of the main body. If the F.G. terminal port is not used, this product may not operate properly due to the noise.







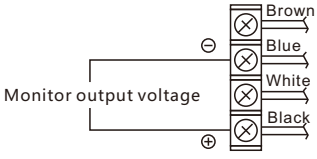
Note)The cable is also available in a right angle type.
A right angle type connector is attached facing left (toward the SUP port). Do not attempt to rotate, as the connector does not turn.

Current Signal Type
Voltage Signal Type

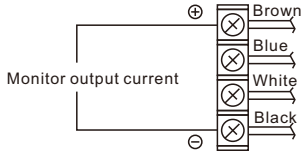
1	Brown	Power supply
2	White	Input signal
3	Blue	GND(COMMON)
4	Black	Monitor output

Monitor output wiring diagram

Analog output: Voltage type

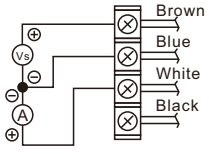


Analog output: Current type (Sink type)



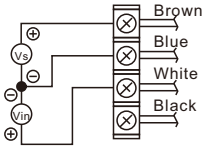
Wiring diagram

Current signal type



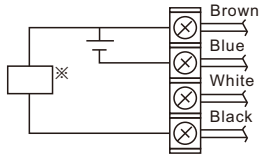
Vs: Power supply 24 VDC
A : Input signal 4 to 20 mA DC
0 to 20 mA DC

Voltage signal type

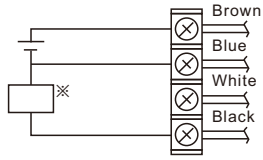


Vs : Power supply 24 VDC
Vin: Input signal 0 to 5 VDC
0 to 10 VDC

Switch output: NPN type

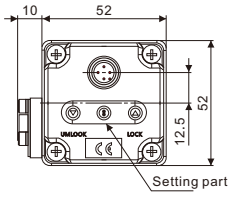


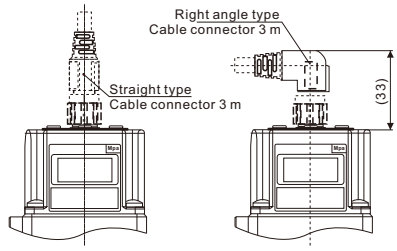
Switch output: PNP type

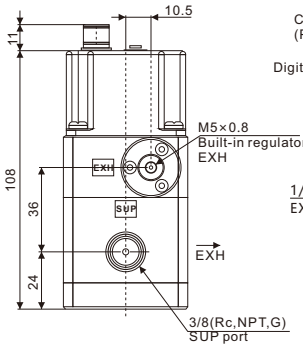


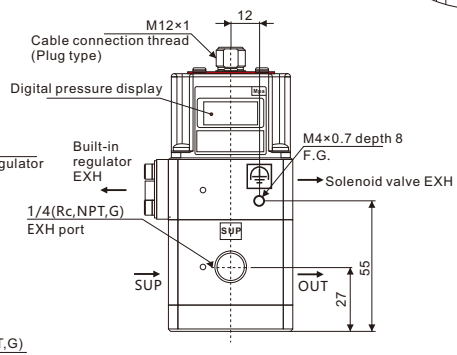
※When 80 mA DC or more is applied, detecting device for overcurrent starts activating and then emits an error signal. (Error)

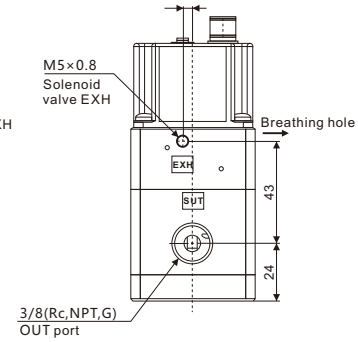
Dimensions

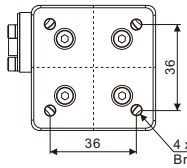




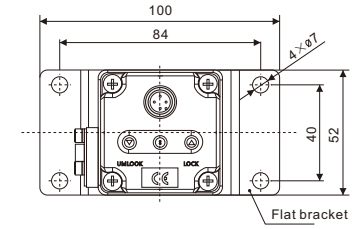


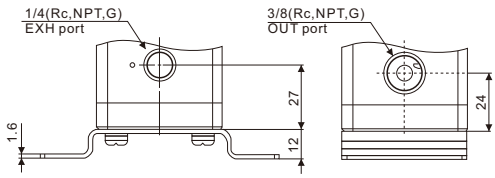




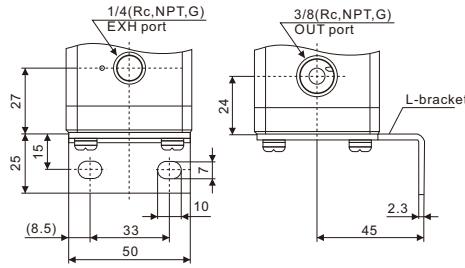


With flat bracket





With L-bracket



Accessories (Option)/Part No.

Description		Part no.
Flat bracket assembly (including mounting screws)		KT-NITV-F2
L-bracket assembly (including mounting screws)		KT-NITV-L2
Power cable connector	Straight type 3 m	P398020-500-3
	Right angle type 3 m	P398020-501-3