

Vumatik 8000

Vertical Scale Deviation Indicator Controller

Cascade Set-Point

Model NUSB 0

Specifications

Indicating section

Input: 0.2 to 1.0 kgf/cm² or 3 to 15 psi
Deviation indication: Span; ± 20% FS
 Accuracy; ± 0.5% FS
 Repeatability; Within 0.2% FS

Set-point section

Set-point setting: Cascade type (0.2 to 1.0 kgf/cm² signal or signal from set-point transmitter. PV indication can be read by PV check knob operation on cascade mode.)
 Repeatability; Within 0.2% FS

Scale length: 190mm
Visible scale length: 85 mm

Manual loading unit

Valve meter: Scale; 0 to 100% (20 even div.)
 Accuracy; ± 3.0% FS
 Repeatability; Within 0.5% FS

Auto-Man. transfer: Balanceless-Bumpless
Output air capacity: 50 NI/min

Control unit

Output: 0.2 to 1.0 kgf/cm² or 3 to 15 psi
Type of control: PI, PI (Batch control) and PID

Controller performance:

Proportional band (P); 5 to 500%
 Integral (I); 0.01 to 50 min
 Derivative (D); 0.01 to 50 min

Batch setting pressure: 0.6 to 1.1 kgf/cm²

Output air capacity: 50 NI/min

Air supply: 1.4 ± 0.14 kgf/cm²

Minimum load: ID4 mm × 3 m + 20 cm³

Air consumption: 13 NI/min. (When 50% output, balanced state)

Operating conditions: Temperature; 0 to 50°C
 Humidity; 10 to 90% RH

Mounting: Indoor panel mounting.

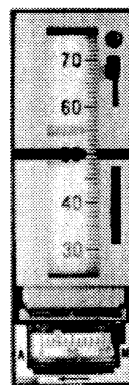
Mounting angle: Up to 75° case rear down from horizontal.

Color finish:

Bezel; Dark beige (Munsell 10YR 4.7/0.5)
 Upper mask; Light gray (Munsell N7)
 Lower mask; Aluminic silver
 Case; Dark beige (Munsell 10YR 4.7/0.5)

Connections: Air; Rc ¼ (PT ¼) or ¼ NPT internal thread
 Electric; M 3.5 mm screws

Net weight: 6.7 kg



NUSB 0

Options

Following options are available.
 Item (1), (2) are the standard options.

(1) **Lamp (1-set)**
 Rating: 24V, 15 mA/lamp
 Number of lamp: 2-lamp (Can be divided into two sections).

(2) **Monitor switch (With a lamp set)**
 Number of alarm: PV; 1- or 2-point
 Deviation; 1-point
 Setting span: PV; 0 to 100% FS

Deviation; 100 to 0 to 100% FS
 [Remark; Minimum 10% FS clearance is required between the lowest value of Hi limit and the highest value of Lo limit.]

Differential gap: Within 0.5% FS
 Repeatability: Within 0.5% FS
 Output contact rating: AC 250V, 4A

Item (3), (4) are the semi-standard options.
 (3) **Front mask semi-standard color (Y 100A, B, D, E)**

(4) **Make-up bottom unit (Y 120A, B)**
 With output gage (Y 120A),
 Blind (Y 120B)

Model Number Table

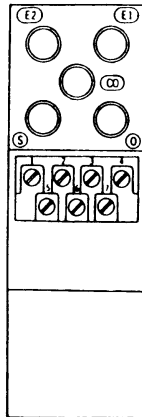
Basic Model No.	Selection	Option	Description
NUSB 02			Vertical Scale Deviation Indicator Controller (Cascade Type, PI)
NUSB 03			Vertical Scale Deviation Indicator Controller (Cascade Type, PID)
NUSB 05			Vertical Scale Deviation Indicator Controller (Cascade Type, PI Batch Control)
	-A		Air Piping Connection: Rc $\frac{1}{4}$ (PT $\frac{1}{4}$) Internal Thread
	-B		" : $\frac{1}{4}$ NPT Internal Thread
		1	Pneumatic Signal Range: 0.2 – 1.0 kgf/cm ²
		2	" : 3 – 15 psi
		-X	No Option
		-1	With a Lamp Set
		-6	With A Type Monitor Switch (Hi and Low on No. 1 PV, with a Lamp Set)
		-7	Deviation Monitor Switch (With a Lamp Set)
		-8	With A Type Monitor Switch (Hi on No. 1 PV, with a Lamp Set)
		-9	With A Type Monitor Switch (Low on No. 1 PV, with a Lamp Set)

Notes:

- 1) When ordering "Y" semi-standard options, please write as: NUSB 02Y-A1-X (Y□).
- 2) Front mask semi-standard color

Part Y.No.	Bezel	Upper Mask	Lower Mask
Y100A		Dark beige (10YR 4.7/0.5)	
Y100B	Green (2.5 G 5/1.5)	Light gray (N 7)	Alumic silver
Y100D	Black (N 1.2)	Light gray (N 7)	Alumic silver
Y100E	Jade green (7.5 BG 4/1.5)	Light gray (N 7)	Alumic silver

Customer Connections



PNEUMATIC CONNECTIONS

- S: SUPPLY
- O: OUT
- E1: PV
- E2: Ex. SP

ELECTRIC CONNECTIONS

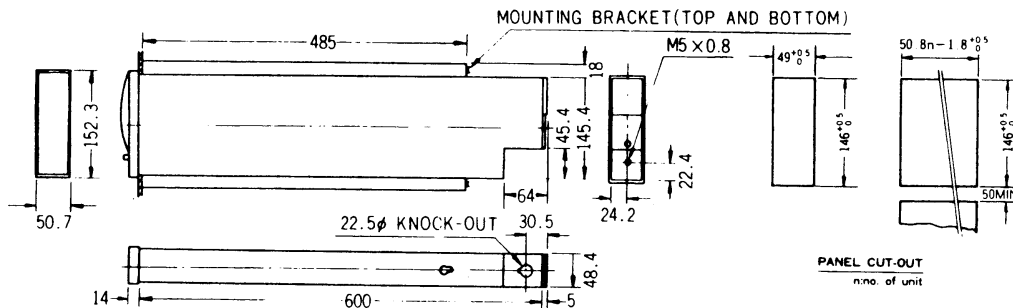
With 1-point Monitor and Lamp Set

- 1 MONITOR OUT
- 2 MONITOR COMMON
- 3 MONITOR OUT
- 4 GROUND
- 5 RIGHT OF LAMP SET (-)
- 6 LEFT OF LAMP SET (-)
- 7 COMMON OF LAMP SET (+)

With 2-point Monitor or Dev. Monitor and Lamp Set

- 1 MONITOR OUT (HI)
- 2 MONITOR COMMON
- 3 MONITOR OUT (LOW)
- 4 GROUND
- 5 RIGHT OF LAMP SET (-)
- 6 LEFT OF LAMP SET (-)
- 7 COMMON OF LAMP SET (+)

Dimensions



Specifications are subject to change without notice.



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