

# Vumatik 8000 Vertical Scale (Fixed Scale) Indicator Controller (Cascade Set-Point) Model NUCB 5

## Specifications

### Indicating section

**Input:** 0.2to1.0 kgf/cm<sup>2</sup> or 3 to 15 psi

**Indication:** Accuracy;  $\pm 0.5\%$  FS  
Repeatability; Within 0.2% FS  
Dead band; Within 0.1% FS

**Scale length:** 85 mm

### Set-point section

**Set-point setting:** Cascade (0.2to1.0 kgf/cm<sup>2</sup> signal or signal from set-point transmitter.)

Accuracy;  $\pm 0.5\%$  FS  
Repeatability; Within 0.2% FS

**Scale length:** 85 mm

### Manual loading unit

**Valve meter:** Scale; 0to100% (20 even div.)  
Accuracy; Within  $\pm 3.0\%$  FS  
Repeatability; Within 0.5% FS

**Auto-Man. transfer:** Balanceless-Bumpless

**Output air capacity:** 50 NI/min

### Control unit

**Output:** 0.2to1.0 kgf/cm<sup>2</sup> or 3 to 15 psi

**Type of control:** PI, PI (Batch control) and PID

### Controller performance:

Proportional band (P); 5to500%  
Integral (I); 0.01 to 50 min  
Derivative (D); 0.01 to 50 min

**Output air capacity:** 50 NI/min

**Air supply:** 1.4  $\pm$ 0.14 kgf/cm<sup>2</sup>

**Minimum load:** ID4 mm  $\times$  3 m + 20 cm<sup>3</sup>

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

**Operating condition:** Temperature; 0to50°C  
Humidity; 10to90% RH

**Mounting:** Indoor panel mounting.

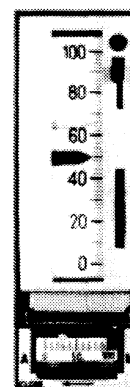
**Mounting angle:** Up to 75° case rear down from horizontal.

### 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 $\frac{1}{4}$  (PT $\frac{1}{4}$ ) or  $\frac{1}{4}$  NPT internal thread  
Electric; M 3.5 mm screws

**Net weight:** 6.7 kg



NUCB 5

## Options

Following options are available.

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

### (1) Lamp (1-set)

Rating: 24 V, 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 250 V, 4 A

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**

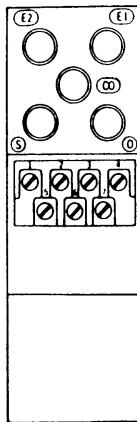
Basic Model No.	Selection	Option	Description
NUCB 52			Vertical Scale Indicator Controller (Cascade Type, PI)
NUCB 53			" ( " , PID)
NUCB 55			" ( " , PI Batch Control)
	-A		Air Piping Connection: Rc $\frac{1}{4}$ (PT $\frac{1}{4}$ ) Internal Thread
	-B		" : $\frac{1}{4}$ NPT Internal Thread
		1	Pneumatic Signal Range: 0.2 – 1.0 kgf/cm <sup>2</sup>
		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:**

- When ordering "Y" semi-standard options, please write as: NUCB 52Y-A1-X (Y□).
- Front mask semi-standard color

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

**Connections**



**PNEUMATIC CONNECTIONS**

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

**ELECTRIC CONNECTIONS**

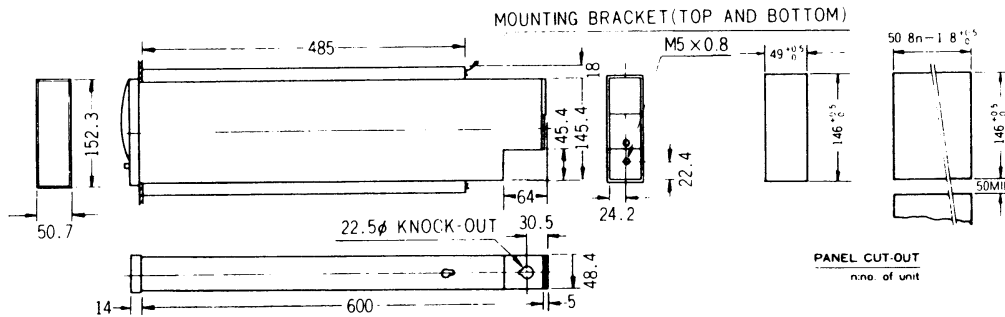
With 1-point Monitor and Lamp Set

- MONITOR OUT
- MONITOR COMMON
- MONITOR OUT
- GROUND
- RIGHT OF LAMP SET (-)
- LEFT OF LAMP SET (-)
- COMMON OF LAMP SET (+)

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

- MONITOR OUT (HI)
- MONITOR COMMON
- MONITOR OUT (LOW)
- GROUND
- RIGHT OF LAMP SET (-)
- LEFT OF LAMP SET (-)
- COMMON OF LAMP SET (+)

**Dimensions**



**Ordering Information**

When ordering, please specify:

- Model No.
- Scale range
- Options

\*Reference instruction manual . . . . . OM2-3330-0100

Specifications are subject to change without notice.



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: Singapore 65-778-5966  
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**Savemation**

*Saving through Automation*

9807-Y/Y