

Vumatik 8000 Vertical Scale Deviation Indicator Controller Manual Set-Point (Local) Model NULBO

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: Local type (Internal SP transmitter)
 Accuracy; ±0.5% FS
 Repeatability; Within 0.2% FS

Scale length: 190 mm
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: P + Manual Reset, 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
 Manual reset pressure; 0.2 to 1.0 kgf/cm²

Output air capacity: 50 NI/min

Air supply: 1.4 ± 0.14 kgf/cm²

Minimum load: ID4 mm x 3 m + 20 cm³

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

Operating condition: 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; Rc¼ or ¼ NPT internal thread
 Electric; M 3.5 mm screws

Net weight: 6.7 kg



Options

Following options are available.

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

(1) Lamp set (1-set)

Rating: 24V, 15 mA/lamp

Number of lamp: 2-lamp (Can be divided into two sections.) to

(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) to (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

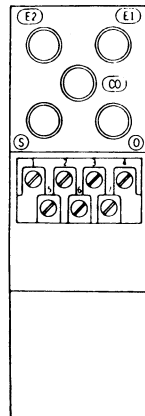
Basic Model No.	Selection	Option	Description
NULB 01			Vertical Scale Deviation Indicator Controller (Local Type, P + Manual Reset)
NULB 02			Vertical Scale Deviation Indicator Controller (Local Type, PI)
NULB 03			" (" , PID)
NULB 05			" (" , PI Batch Control)
	-A		Air Piping Connection: Rc $\frac{1}{4}$ 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:

- When ordering "Y" semi-standard options, please write as: NULB 02Y-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)	Alumimic silver
Y100D	Black (N 1.2)	Light gray (N 7)	Alumimic silver
Y100E	Jade green (7.5 BG 4/1.5)	Light gray (N 7)	Alumimic silver

Terminal Connections



PNEUMATIC CONNECTIONS

S : SUPPLY
O : OUT
E1 : PV

ELECTRIC CONNECTIONS

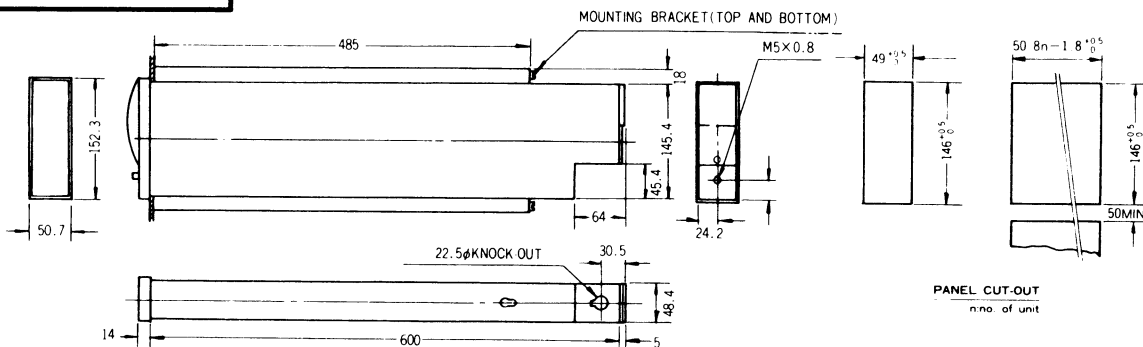
With 1-point Monitor and Lamp Set

- 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 . . . OM2-3330-0180

Specifications are subject to change without notice.

Yamatake Corporation

Totate International Building
2-12-19 Shibuya
Tokyo 150-8316
Tel : 81-3-3486-2506
Fax : 81-3-3486-2503

Yamatake-SIC Control Systems Co., Ltd.
Shanghai Yamatake Jinshan Control Instruments Co., Ltd.
Yamatake (Thailand) Co., Ltd.
Yamatake Philippines, Inc.
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: U.S.A. 1-602-548-1800



Savemation

Saving through Automation