

# Drawings

YS1000 Series  
YS1□□0-□5□

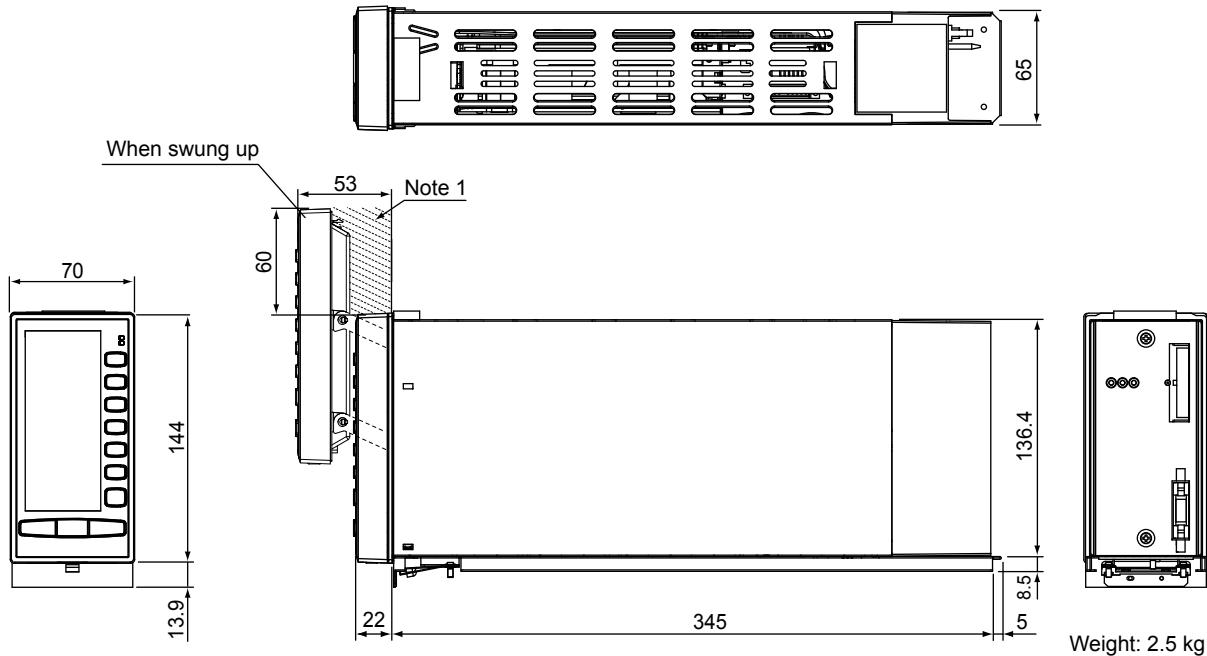
**YS1000** *Series*

SD 01B08H01-04E

Compatible Type for Pneumatic 100 Line  
(with YS100 Terminal)

Unit: mm

## <External Dimensions>



Note 1: If a nameplate, etc. is installed within 60 mm above the instrument, the thickness of the nameplate, etc. must be 30 mm or less from the panel surface.

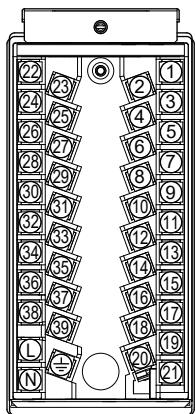
Note 2: To ensure good air ventilation, allow space of 100 mm or more at the top and bottom of the panel.

Note 3: General tolerance =  $\pm$  (value of tolerance class IT18 based on JIS B 0401-1998) / 2

To use this instrument, the separately sold YS006 (pneumatic 100 line-compatible housing) is required. The YS006 can be used with the YS1□□0-□50 (100V AC, 24V DC common power supply) and YS1□□0-□51 (220V AC power supply).

Refer to the Drawings of YS006 (SD YS006-01E) for the external dimensions and panel cutout dimensions.

## <External Dimensions>



## <Terminal Arrangement Table of YS006>

### ● YS1500/YS1700

Terminal number	Programmable mode (YS1700 only)	Single-loop mode	Cascade mode	Selector mode	User settings ( ) mode (Note 10)
1 2	+ Analog input 1 - (1-5V DC)	+ Measurement input - (1-5V DC)	+ Measurement input 1 - (1-5V DC)	+ Measurement input 1 - (1-5V DC)	
3 4	+ Analog input 2 - (1-5V DC)	+ Cascade setting input - (1-5V DC)	+ Cascade setting input - (1-5V DC)	+ Cascade setting input 1 - (1-5V DC)	
5 6	+ Analog input 3 - (1-5V DC)	+ Input value for output - tracking (1-5V DC)	+ Measurement input 2 - (1-5V DC)	+ Measurement input 2 - (1-5V DC)	
7 8	+ Analog input 4 - (1-5V DC)	+ Feedforward input - (1-5V DC)	+ Feedforward input - (1-5V DC) (Note 1)	+ Cascade setting input 2 - (1-5V DC) (Note 1)	
9 10	+ Analog input 5 - (1-5V DC) (Note 2)	+ Output of the direct input signal (1-5V DC)	+ Output of the direct input signal (1-5V DC)	+ Output of the direct input signal (1-5V DC)	
11 12	+ FAIL output (Note 3)				
13	Connection of transmitter supply power (24V DC) (Note 4)	Connection of transmitter supply power (24V DC) (Note 4)	Connection of transmitter supply power (24V DC) (Note 4)	Connection of transmitter supply power (24V DC) (Note 4)	
14 15 16 17 18	Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-)	Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-)	Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-)	Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-)	
19 20 21	+ Direct input terminals - (Note 5)				
22 23	+ Analog output 1 - (4 to 20mA DC)	+ Manipulated output variable 1 - (4 to 20mA DC)	+ Manipulated output variable 1 - (4 to 20mA DC)	+ Manipulated output variable 1 - (4 to 20mA DC)	
24 25	+ Analog output 2 - (1-5V DC)	+ Manipulated output variable 2 - (1-5V DC) (Note 6)	+ Manipulated output variable 2 - (1-5V DC) (Note 6)	+ Manipulated output variable 2 - (1-5V DC) (Note 6)	
26 27	+ Analog output 3 - (4 to 20mA DC/1-5V DC) (Note 7)	+ Setpoint value output - (1-5V DC) (Note 6)	+ Setpoint value output - (1-5V DC) (Note 6)	+ Setpoint value output - (1-5V DC) (Note 6)	
28 29	+ Digital output 1/Digital input 6 (Note 8)	+ High limit alarm setpoint for PV output (Note 9)	+ LOOP 1 alarm output (Note 9)	+ LOOP 1 alarm output (Note 9)	
30 31	+ Digital output 2/Digital input 5 (Note 8)	+ Low limit alarm setpoint for PV output (Note 9)	+ LOOP 2 alarm output (Note 9)	+ LOOP 2 alarm output (Note 9)	
32 33	+ Digital output 3/Digital input 4 (Note 8)	+ Velocity alarm setpoint for PV output (Note 9)	+ O/C status output (Note 9)	+ L/R status output (Note 9)	
34 35	+ Digital output 4/Digital input 3 (Note 8)	+ C/A, M status output (Note 9)	+ C/A, M status output (Note 9)	+ C/A, M status output (Note 9)	
36 37	+ Digital output 5/Digital input 2 (Note 8)	+ C, A/M status output (Note 9)	+ C, A/M status output (Note 9)	+ C, A/M status output (Note 9)	
38 39	+ Digital output 6/Digital input 1 (Note 8)	+ No function (Factory default) (Note 9)	+ No function (Factory default) (Note 9)	+ No function (Factory default) (Note 9)	
L N ±	+ Power supply - Grounding terminal				

NOTE: Do not use an unused terminal as a relaying terminal, etc.

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- Note 1: These terminals can be used as output tracking input if feedforward input or cascade setting input 2 is not used.
  - Note 2: For models with direct input (optional code /A0□), these terminals are treated as direct input signal output (1-5 V DC).
  - Note 3: Using the terminals as fail output requires an external power supply.
  - Note 4: For a transmitter power supply, see "Wiring" of "Installation and Wiring" in each YS1000 Operation Guide.
  - Note 5: For models with direct input (optional code /A0□), the direct input terminals (19, 20, and 21) are used as input terminals. Connect the terminals as specified in Table 1, Connecting Direct Input Terminals.
  - Note 6: For manipulated output variable 2 and setpoint output, the output types can be changed using the analog output-2 selection Y2S and analog output-3 selection Y3S engineering parameters.
  - Note 7: For analog output 3, the output type can be changed using the analog output-3 current/voltage switching Y3TP engineering parameter.
  - Note 8: Using these terminals as digital output requires an external power supply. The function of digital inputs or digital outputs can be set using the YSS1000 Setting Software (sold separately).
  - Note 9: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 to DIO61 engineering parameters. Functions can be set using the DI1F to DI6F and DO1F to DO6F engineering parameters.
  - Note 10: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

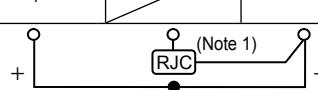
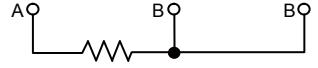
● YS1310/YS1350/YS1360

Terminal number	YS1310	YS1350	YS1360	User settings (Note 8)
1 2	+ > Measurement input 1 - > (1-5V DC)	+ > Measurement input 1 - > (1-5V DC)	+ > Measurement input 1 - > (1-5V DC)	/
3 4	+ > Measurement input 2 - > (1-5V DC)	+ > Cascade setting input - > (1-5V DC)	+ > Cascade setting input - > (1-5V DC)	/
5 6				
7 8				
9 10	+ > Direct input signal output - > (1-5V DC) (Note 1)	+ > Direct input signal output - > (1-5V DC) (Note 1)	+ > Direct input signal output - > (1-5V DC) (Note 1)	/
11 12	+ > FAIL output (Note 2)	+ > FAIL output (Note 2)	+ > FAIL output (Note 2)	/
13	Connection of transmitter supply power (24V DC) (Note 3)	Connection of transmitter supply power (24V DC) (Note 3)	Connection of transmitter supply power (24V DC) (Note 3)	/
14 15 16 17 18	Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) Communication terminal RDB (+)	Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-)	Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-)	/
19 20 21	+ - [ ] Direct input terminals (Note 4)	+ - [ ] Direct input terminals (Note 4)	+ - [ ] Direct input terminals (Note 4)	/
22 23			+ > Manipulated output variable 1 - > (4 to 20mA DC)	/
24 25		+ > Setpoint value output - > (1-5V DC)	+ > Manipulated output variable 2 - > (1-5V DC)	/
26 27				
28 29	+ > High limit alarm output for PV 1 (Note 5)	+ > High limit alarm output - > (Note 6)	+ > High limit alarm output - > (Note 6)	
30 31	+ > Low limit alarm output for PV 1 (Note 5)	+ > Low limit alarm output - > (Note 6)	+ > Low limit alarm output - > (Note 6)	
32 33	+ > High-high limit alarm output for PV 1 (Note 5)			
34 35	+ > Low-low limit alarm output for PV 1 (Note 5)	+ > C/M status output - > (Note 6)	+ > C/M status output - > (Note 6)	
36 37	+ > OR output of high limit alarm output for PV 2 and low limit alarm output for PV 2 (Note 5)	+ > No function (Factory default) (Note 7)	+ > No function (Factory default) (Note 7)	
38 39	+ > OR output of high-high limit alarm output for PV 2 and low-low limit alarm output for PV 2 (Note 5)	+ > No function (Factory default) (Note 7)	+ > No function (Factory default) (Note 7)	
L N GND	+ > Power supply - > Grounding terminal	+ > Power supply - > Grounding terminal	+ > Power supply - > Grounding terminal	/

NOTE: Do not use an unused terminal as a relaying terminal, etc.

- Note 1: For models with direct input (optional code /A0□), these terminals are treated as direct input signal output (1-5 V DC).
- Note 2: Using the terminals as fail output requires an external power supply.
- Note 3: For a transmitter power supply, see “Wiring” of “Installation and Wiring” in each YS1000 Operation Guide.
- Note 4: For models with direct input (optional code /A0□), the direct input terminals (19, 20, and 21) are used as input terminals. Connect the terminals as specified in Table 1, Connecting Direct Input Terminals.
- Note 5: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 engineering parameter. Functions can be set using the DI1F and DO1F to DO6F engineering parameters.
- Note 6: Using these terminals as digital output requires an external power supply.
- Note 7: The settings in the table are the factory defaults. Functions can be set using the DI1F and DI2F engineering parameters.
- Note 8: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

Table 1 Connecting Direct Input Terminals

		Terminal Symbol		
		19	21	20
mV input (optional code /A01) Isolator (optional code /A05)		+		-
Thermocouple (optional code /A02)		+ 	(Note 1) RJC	-
RTD input (optional code /A03)		A 	BO BO	
		Match the wiring resistances of terminals 19 and 21 with each other.		
Potentiometer input (optional code /A04)		100% 	0% Match the wiring resistances of terminals 19 and 20 with each other.	
Frequency input (optional code /A08)	Two-wire type (voltage, contact)	+		-
	Power feed type, two-wired	Signal	Power supply	
	Power feed type, three-wired	+	Power supply	-
Two-wire transmitter input (optional codes /A06, /A07)	Supply voltage required	+ 		-
	Case of 4 to 20 mA signal not requiring power supply	+ 		-

Note 1: Compatible type for pneumatic 100 line: YS1□□0-□5□/A02, an external RJC is connected.

This is different from the existing YS100s.

Connect the provided RJC to terminals 20 and 21. (Mount the RJC at the terminal 21 side.)