

Pulse Divider KD2

SPECIFICATIONS

SSD31051 22.06

Outline

This Pulse Divider receives pulse signals from flowmeter, and outputs distributed pulses or divided pulses.

Features

- Has 3 pulse outputs, enabling to select various types of signal.
- Can also be used as pulse isolator.
- AC free power supply unit.
- Easy maintenance with mounting by plug-in type

Specifications

Pulse input

Voltage input Frequency: 5 kHz or under (ON/OFF ratio 1:1)
Signal level: H: 4~30V; L: 3V or under
Input resistance Approx. 10 kΩ

Open collector input

Frequency: 5 kHz or under (ON/OFF ratio 1:1)
Voltage & current: Approx. 7.4V, Approx. 1.2 mA;
ON level ;2V or under

Contact input

Frequency: 30 Hz or under (ON/OFF ratio 1:1)
Voltage & current: Approx. 7.4V, Approx. 1.2 mA

2-wire input

Signal level: H: 11~14V; L: 10V or under
Input resistance Approx. 510 Ω

Indication

Indication of pulse input Green LED 3φ

Distributed output (1 point, select the type)

Contents of signal Output synchronizing with input pulse
Type of signal 12V no-contact output
Signal level H: Approx. 12V,
L: 1V or under (at no load)
Output resistance Approx. 1.1kΩ (protective
resistance against
short-circuit, approx. 100Ω)
Open collector output
Voltage & current: DC30V 30mA,
ON voltage; 1V or under

Pulse output (2 points, select the type)

Contents of signal At each point, either distributed output or divided
output are selectable.
Signal logic Distributed output;
same logic with distributed output.
Divided output;
12V no-contact output: Positive logic
Open collector output: negative logic
Type of signal 12V no-contact output
Signal level, H: Approx. 12V,
L: 1V or under (at no load)
Output resistance, Approx. 1.1kΩ (protective
resistance against
short-circuit, approx. 100Ω)

Open collector output

Voltage & current: DC30V 30mA,
ON voltage; 1V or under
Insulation system: Photocoupler insulation

Lead relay output

Contact capacity: AC100V, 0.02A/DC24V,
0.1A (resistance load)

Switching frequency: 5 times/sec or under

Mini relay output

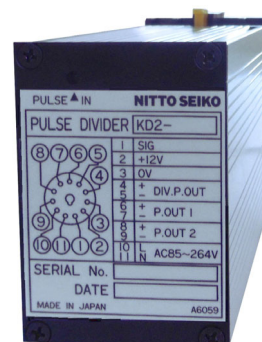
Contact capacity: AC220V, 0.2A/DC24V,
0.5A (resistance load)

Switching frequency: 1 time/sec or under

Dividing

Selects dividing value of divided output.
(same value with 2 divided outputs)

Dividing value: 1/1~1/9, 1/10~1/90,
1/100~1/900, 1/1000~1/9000



Adjustment of pulse width

Adjusts pulse width of divided output.
Range of adjustment: Approx. 0.5~1000ms
(Volume adjustment)

Power source for flowmeter

DC12V ± 10%, 50mA

Insulation resistance

DC500V, 100MΩ or over
(Between case, power supply terminal, and relay
output terminal)

Withstand voltage

AC1500V for 1 minute (Test points: Same as
those for insulation resistance)
AC1000V for 1 minute (Between relay output
terminals)

Noise resistance

Square wave noise by noise simulator 1000V
(Noise width 1 μs, Polarity ±, Application by
synchronization with power source, Phase 0~
360°)

Power source

AC85~264V, 50/60Hz

Power consumption

5 VA or under

Ambient temperature

0~45°C (Without condensation)

Mass

Approx. 0.4 kg

Casing

Aluminium case on resin base

Actions

- Input pulse signal, and output distributed pulse or divided pulse.
- It is necessary to specify the pulse width on divided pulse.
If not specified, standard signal width will be selected.

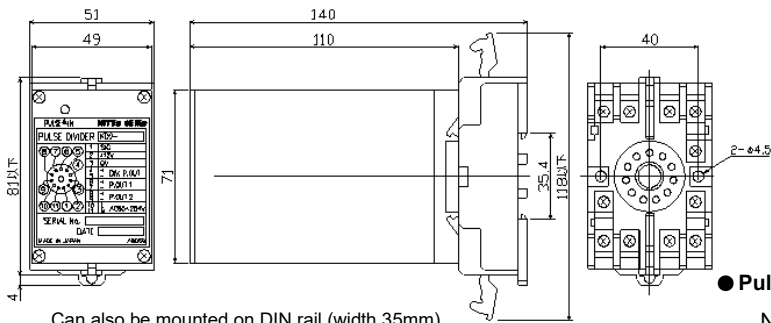
[Standard signal width of no-contact pulse output]

Dividing set value for adjustment of pulse width	Standard signal width (msec)					
	Max. frequency of pulse input (Hz)					
	5000	500	50	5	0.5	0.05 Hz
1/1~1/9		0.5	5	50	500	1000
1/10~1/90	0.5	5	50	500	1000	1000
1/100~1/900	5	50	500	1000	1000	1000
1/1000~1/9000	50	500	1000	1000	1000	1000

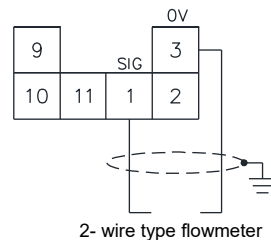
[Standard signal width of contact pulse output]

Dividing set value for adjustment of pulse width	Standard signal width (msec)					
	Max. frequency of pulse input (Hz)					
	5000	500	50	5	0.5	0.05 Hz
1/1~1/9				50	500	1000
1/10~1/90			50	500	1000	1000
1/100~1/900		50	500	1000	1000	1000
1/1000~1/9000	50	500	1000	1000	1000	1000

External & mounting dimensions



2-wire type input

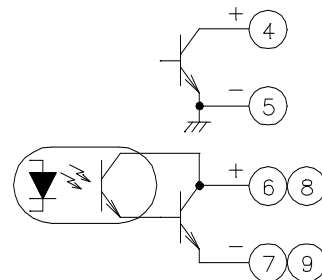
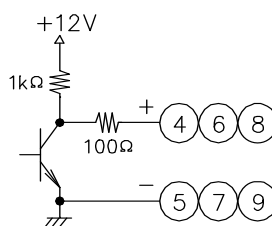


Pulse output (Use shielded cable)

No-contact out

12V voltage output

Open collector output

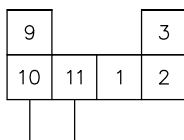


Terminal arrangement

No.	Signal name
1	SIG Pulse input
2	+12V
3	0V
4	+ Distributed output
5	-
6	+ Pulse output 1
7	-
8	+ Pulse output 2
9	-
10	AC85~264V
11	

Connection

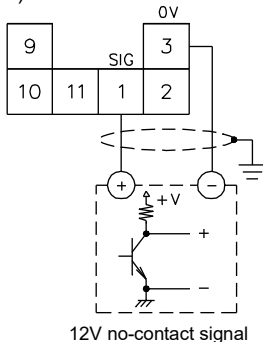
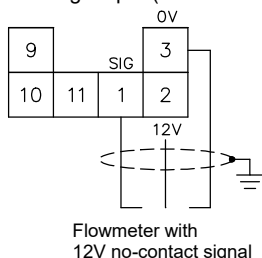
Connection of power source



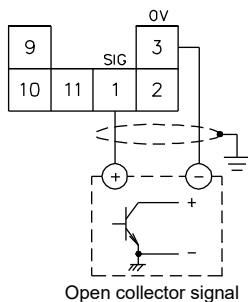
AC power source

Connection of input signal (Use shielded cable)

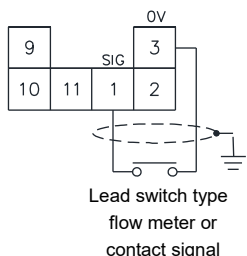
Voltage input (same as 6V-pulse)



Open collector input



Contact input



Type

Type	Specification code	Contents
KD2-		Pulse Distributor
Pulse input	1-	Voltage input Open collector input Contact input 2-wire input Voltage input(6V-pulse)
	2-	
	3-	
	4-	
	5-	
Contents of signal of pulse output 1	1	Distributed output Divided output
	2	
Signal type of pulse output 1	1	12V no-contact output Open collector output Lead relay output Mini relay output
	2	
	3	
	4	
Contents of signal of pulse output 2	1	Distributed output Divided output
	2	
Signal type of pulse output 2	1	12V no-contact output Open collector output Lead relay output Mini relay output
	2	
	3	
	4	
Distributed output	1	12V no-contact output Open collector output
	2	

※ Moreover, in the case of 2 relay outputs, same contents and same signal type will be used.

◆◆◆◆ Matters to be specified at placing of order ◆◆◆◆

1. Type, specification code
2. Max. input frequency, pulse width of divided output

▼ The contents given here are subject to change without notice.

NITTOSEIKO CO., LTD.

30 Nogamibata, Nobu-Cho, Ayabe, Kyoto 623-0041, JAPAN
 TEL : +81-773-43-3151(Domestic Operation)
 +81-6-6105-5086(Global Sales Section)
 FAX : +81-773-43-3155
 E-mail:sales@nittoseiko.co.jp
 https://www.nittoseiko.co.jp/en.html