

Pulse Divider KD2

SPECIFICATIONS

SSD31051 19.06

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. 12V, Approx. 1.2 mA;
ON level :2V or under

Contact input

Frequency: 30 Hz or under (ON/OFF ratio 1:1)
Voltage & current: Approx. 12V, 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

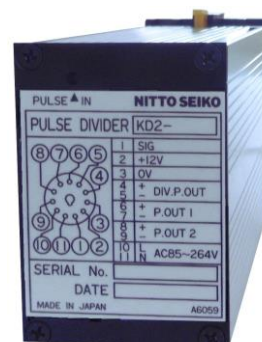
Contact capacity: AC220V, 0.2A/DC24V,
0.5A (resistance load)

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.

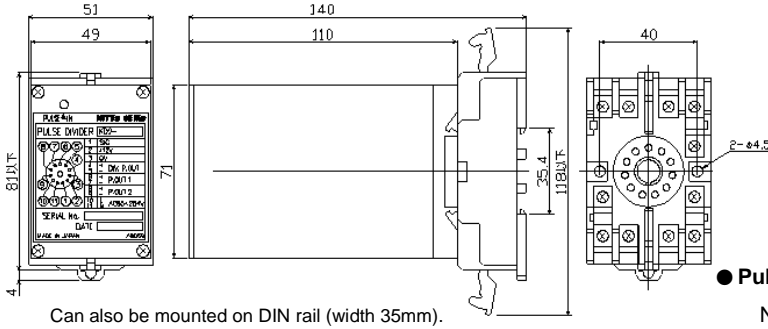
[Standard signal width of no-contact pulse output]

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

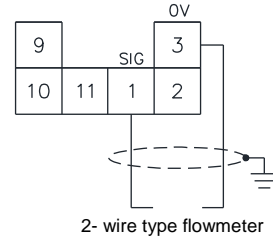
[Standard signal width of contact pulse output]

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

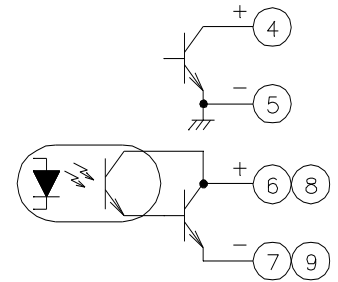
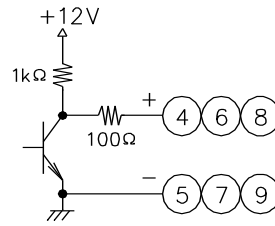


Pulse output (Use shielded cable)

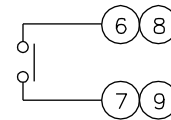
No-contact out

12V voltage output

Open collector output



Contact output

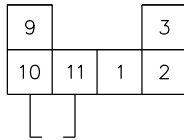


Terminal arrangement

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

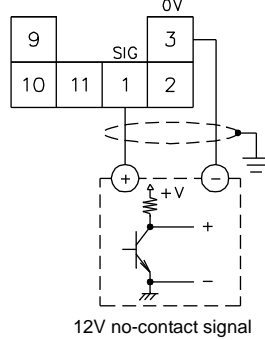
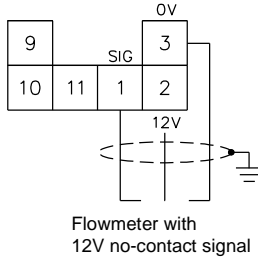
Connection of power source



AC power source

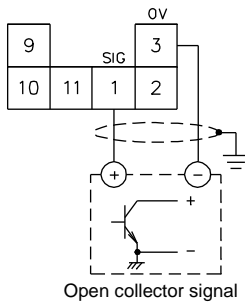
Connection of input signal (Use shielded cable)

Voltage input (same as 6V-pulse)



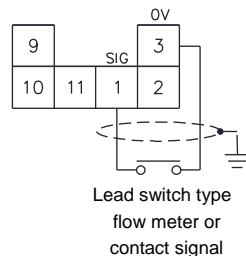
12V no-contact signal

Open collector input



Open collector signal

Contact input



Lead switch type flow meter or contact signal

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 : +81-773-43-1412
 +81-6-6105-5086(Global Sales Section)
 FAX : +81-773-43-1595
 E-mail:sales@nittoseiko.co.jp
 https://www.nittoseiko.co.jp/