

PULSE RATE TRANSDUCER

PRTP2 - □□□

Use

Converts a pulse signal into another one with dividing the former one by n. Input is selectable from open collector, voltage pulse, 1a contact, output is selectable from open collector, voltage pulse, 1a contact and photo MOS relay.

Features

1. Security design to have withstood voltage AC2, 000V between input, output and power source.
2. A sensor power source DC12V, 30mA as standard equipment.
3. Input within frequency 0.01—1kHz can be applied commonly.
4. Abundant specifications to have input selectable from voltage pulse, open collector no-voltage contact and output selectable from voltage pulse, open collector, 1a contact and photo MOS relay.
5. By sufficient derating of parts used and reduction of internal heat generation, a long product life is guaranteed.

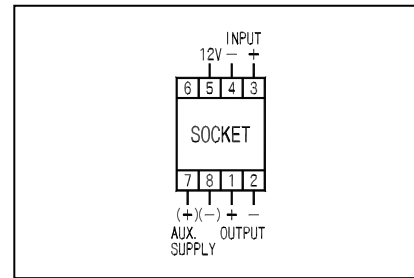
Specification

Input signal method	Output (load resistance)	Auxiliary supply	Common specification
① : Open collector DC12V, 30mA ② : Voltage pulse 50Vp (approx.12k) ③ : Non-voltage contact DC12V, 30mA ④ : other than those above	① : Voltage pulse 10Vp (2k) ② : Open collector DC48V, 100mA MAX. ③ : No-voltage 1a contact (1Hz) DC30V, 200mA 5,000,000 times (resistance load) AC125V, 200mA 2,000,000 times (COSφ=1) ④ : Photo MOS relay AC/DC125V, 70mA MAX. (resistance load) ⑤ : other than those above	① : AC100V (+10%, -15%) 50/60Hz ② : AC110V (+10%, -15%) 50/60Hz ③ : AC200V (+10%, -15%) 50/60Hz ④ : AC220V (+10%, -15%) 50/60Hz ⑤ : DC24V (+10%, -15%) ⑥ : other than those above	Sensor power: DC12V±10%, 30mA Consumption VA: AC power source:3.0VA DC power source:3.5VA Weight: AC power source:500g DC power source:400g

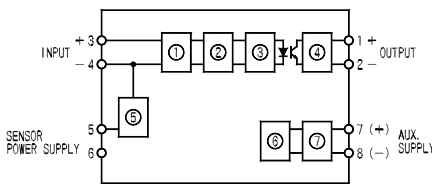


PRTP2-141
(80 × 50 × 123mm/500g)

Connection diagram



Block diagram



- Input circuit
- Input pulse width fixation circuit
- CPU operational circuit
- Output part
- Constant voltage circuit
- power source circuit
- Insulation transformer

Common specification

- Input frequency range: minimum range 0-0.01Hz, maximum range 0-1kHz
- Input pulse width: 30-80% of duty rate of rated input frequency (1/frequency)
- Frequency dividing ratio (integer): 1-10⁵

Purchase specifications

Open collector input

- Detection level: ON 200
- OFF 100k

Voltage input

- Detection level: H level 5-50V
- L level 0-2V

No-voltage 1a contact input

- Detection level: ON 200
- OFF 100k

Item to specify

Type

PRTP2 - ① ④ ①

↑ ↑ ↑
Input signal method Output Auxiliary supply

Frequency dividing ratio (integer)
Specify output pulse width within 0.5-300ms (±20%)
*Output ③ :50-300ms