LINEARIZER

LTP1 - □□□

LTP1-A6F5
(80×50×121mm/350g)

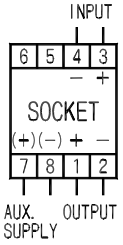
■ Use

Converts measurand into linear signal. Such as a differential pressure signal, a signal of weir-type flow meter or analyzer, or a signal unrelated to linearity.

■ Features

1. A digital linearizer that uses ADC, ROM and DAC.
2. Constant voltage/current output.
3. Withstand voltage between electric circuit and outer case is AC2, 000V (50/60Hz) for 1 minute, or between input and output is AC1, 500V (50/60Hz) for 1 minute.
4. Impulse withstands voltage 5kV, 1.2/50μs (between electric circuit and outer case), and positive/negative polarity 3 times each is guaranteed.

■ Connection diagram



Indicated in ( ) are the polarities in the case of DC auxiliary supply.

■ Specification

Input (input resistance or voltage drop)		Output (load resistance)	Auxiliary supply	Common specification
A1 : DC0-10mV (approx.1MΩ)	C1 : DC0-10μA (100mV) *1	1 : DC0-100mV (≧200Ω)	1 : AC100V±10%, 50/60Hz	Tolerance: ±0.25% *2
A2 : DC0-50mV (approx.1MΩ)	C2 : DC0-100μA (100mV)	2 : DC0-1V (≧200Ω)	2 : AC110V±10%, 50/60Hz	Response time: ≦0.5sec./99%
A3 : DC0-60mV (approx.1MΩ)	C3 : DC0-1mA (approx.100Ω)	3 : DC0-5V (≧1kΩ)	3 : AC200V±10%, 50/60Hz	Resolution: 1/4000
A4 : DC0-100mV (approx.1MΩ)	C4 : DC0-5mA (approx.100Ω)	4 : DC 0-10V (≧2kΩ)	4 : AC220V±10%, 50/60Hz	Consumption VA:
A5 : DC0-1V (approx.1MΩ)	C5 : DC0-10mA (approx.100Ω)	5 : DC1-5V (≧1kΩ)	5 : DC24V±10%	AC power source:3VA
A6 : DC0-5V (approx.1MΩ)	C6 : DC0-16mA (approx.100Ω)	6 : DC±5V (≧1kΩ)	0 : other than those above	DC power source:4W
A7 : DC0-10V (approx.1MΩ)	C7 : DC4-20mA (approx.100Ω)	7 : DC±10V (≧2kΩ)		Weight:
A8 : DC1-5V (approx.1MΩ)	D1 : DC±10μA (±100mV)*1	A : DC0-1mA (≦10kΩ)		AC power source:700g
B1 : DC±10mV (approx.1MΩ)	D2 : DC±100μA (±100mV)	B : DC0-5mA (≦2kΩ)		DC power source:350g
B2 : DC±50mV (approx.1MΩ)	D3 : DC±500μA (±100mV)	C : DC0-10mA (≦1kΩ)		
B3 : DC±60mV (approx.1MΩ)	D4 : DC±1mA (approx.100Ω)	D : DC0-16mA (≦600Ω)		
B4 : DC±100mV (approx.1MΩ)	D5 : DC±5mA (approx.100Ω)	E : DC1-5mA (≦3kΩ)		
B5 : DC±1V (approx.1MΩ)	D6 : DC±10mA (approx.100Ω)	F : DC4-20mA (≦750Ω)		
B6 : DC±5V (approx.1MΩ)	00 : other than those above	0 : other than those above		
B7 : DC±10V (approx.1MΩ)				

*1. Circuit voltage ≦15V for an input of 10μA.

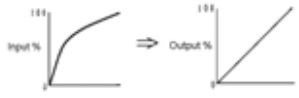
*2. Tolerance becomes ±0.5% when input voltage is less than 50mV; input current is less than 100μA.

● Open of current output: even if the current output terminal is used in a state of regular open, there is no problem. Also, a voltage of approx. 25V occurs on the output terminal.

● Input signal

- Orifice, venturi ⋯ input
- Palmer Bowrus, partial flume ⋯ (input)[a]
- Triangular weir ⋯ (input)★
- Rectangular weir, Full Width Weir ⋯ (input)★

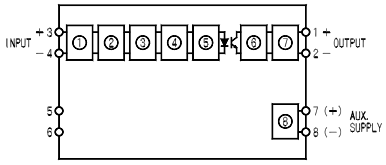
In the case of other signal, specify operational expression or kinked point of input/output characteristics. Product shall be manufactured in accordance with specifications.



● UR-1 precise resistance unit (selling separately)

Please use a UR-1 combined with a linearizer of voltage input. When changing the linearizer a hot line state at the time of current input, if measures against open are necessary, connect UR-1 to socket and convert it into a voltage signal before using it. (UR-1, the resistance specified)

■ Block diagram



①Low-drift amplifying circuit
②AD ③Memory ④DA
⑤Pulse width modulation circuit
⑥Pulse width demodulation circuit
⑦Output circuit
⑧Power source circuit

■ Purchase specifications

●Item to specify

Type

LTP1 - A 6 F 5

Input Output Auxiliary supply

Operational expression or kinked point of input/output characteristics.