

General Specifications

MP1
Pulse Repeater

JUXTA

This plug-in type pulse repeater receives contact pulse, voltage pulse or current pulse from the field and converts it into isolated transistor contact pulse or dry contact AC switch-pulse.

- 4 ports isolation (input, output, power supply, ground)
- Can specify pulse generator power supply to supply 12V DC or 24V DC.
- Versatile power supply (100V/200V AC, 24V/100V DC)
- If it receives chattering signals, internal input filter (10ms) requirement can be selected through switch
- Selection of load resistance and setting of input filter can be made through front face.
- 2000V AC high voltage proof.

MP1 - - -

Model

Generator Power Supply

- 1 : Pulse generator power supply (12V DC \pm 10%)
- 2 : Pulse generator power supply (24V DC \pm 10%)

Output Signal

- 1 : Open collector
- 3 : Dry contact AC switch

Power Supply

- 3 : 24V DC \pm 10%
- 4 : 85~132V AC/85~150V DC
- 5 : 170~264V AC

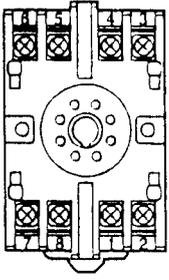
ORDERING INFORMATION

- Model Code : (Example) MP1-11-3

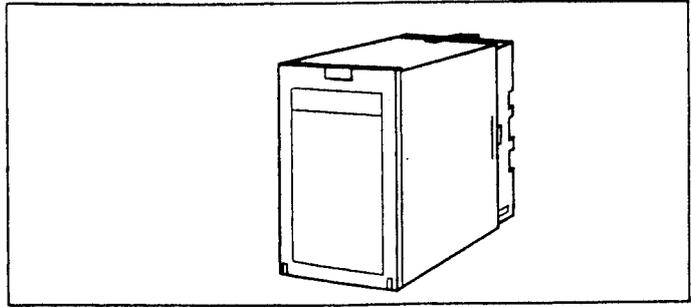
Input & Output	
Input Signal Type :	
	Signal Type
	Dry Voltage Contact
ON Input	Contact R 200 Ω or less
OFF Input	Contact R 100k Ω or more
	Signal Type
	Voltage Pulse
	Current Pulse
Hi level	2V~50V DC (2/R _L)mA~(50V/R _L)mA
Lo level	-1V~+8V DC (-1/R _L)mA~(+8V/R _L)mA
Voltage pulse amplitude : 2V or more	
Max. permissible input voltage : 50V DC or less	
R _L : Internal load resistance (k Ω)	

Input Frequency : 0~10kHz	
Input Resistance : Contact or voltage pulse : 15k Ω or more Current pulse : Load resistance value	
Input Pulse Width : Minimum 40 μ s or both ON time and OFF time	
Input Contact Rating : 15V DC/15mA or more	
Input Filter : Time constant about 10ms Setting ON/OFF can be done from front face (Set it at OFF when shipment from factory) Input frequency range at time of filter setting is 100Hz (pulse width more than 3ms or more)	
Generator Power Supply : 12V DC/30mA or 24V DC/30mA (with current control circuit at 40~60mA)	
Internal Load Resistance(R _L):None, 200 Ω , 500 Ω , 1k Ω (In case of current pulse input, it can be selected by whichever resistance or combination) (In case of voltage pulse or dry voltage contact input, select none) (Set it at none when shipment from factory)	
Output Type : Open collector or dry contact AC switch	
Max. Load Resistance : Open collector 30V DC/200mA Dry contact AC switch 100V AC /200mA	
Relation of Input/Output : Output circuit is ON/OFF against input signal ON/OFF	
Standard Performance	
Insulation Resistance : Over 100M Ω (500V DC) between input~output~power supply~ground	
Withstand Voltage : 2000V AC/minute between input~output~power supply~ground	
Temperature Range : 0~50 $^{\circ}$ C	
Humidity Range : 5~90% RH (no condensation)	
Power Voltage : 24V DC \pm 10% 85~132V AC (47~63Hz)/85~150V DC or 170~264V AC (47~63Hz)	
Effect of Power Voltage Fluctuation : No erroneous action for power voltage range	
Effect of Ambient Temperature Change : No erroneous action for temperature range	
Power Dissipation : 24V DC 70mA, 110V DC 15mA	
Current Dissipation : 100V AC 5VA, 200V AC 7.5VA * When pulse generator power supply is not used	
Mounting, Shape & Accessories	
Materials	Case ABS plastic
Mounting Method	Wall and DIN rail mountings More than 5mm interval is required for close mounting
Connecting Method	M3.5 screw terminal
External Dimension	85x50x123mm(HxWxD) (including socket)
Weight	Body : Abt. 250g Socket : Abt. 60g
Accessories :	Spacer 1 (use for DIN rail mounting) Tag number label 2

TERMINAL ARRANGEMENT



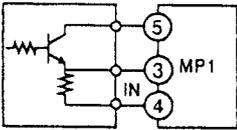
1	OUTPUT	(+)
2	OUTPUT	(-)
3	INPUT	(+)
4	INPUT	(-)
5	INPUT	(PS+)
6	GND	(G)
7	SUPPLY	(L+)
8	SUPPLY	(N-)



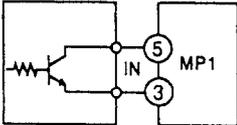
Note: When power of MP1 is turned on/off, one pulse may be counted by the pulse input device which connects to the MP1.

BLOCK DIAGRAM

To receive voltage pulse driving generator power supply

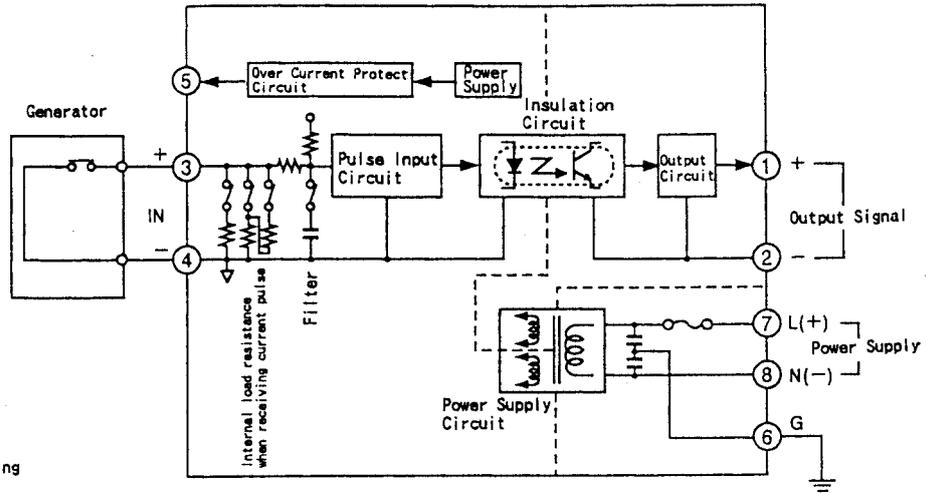


To receive current pulse driving generator power supply

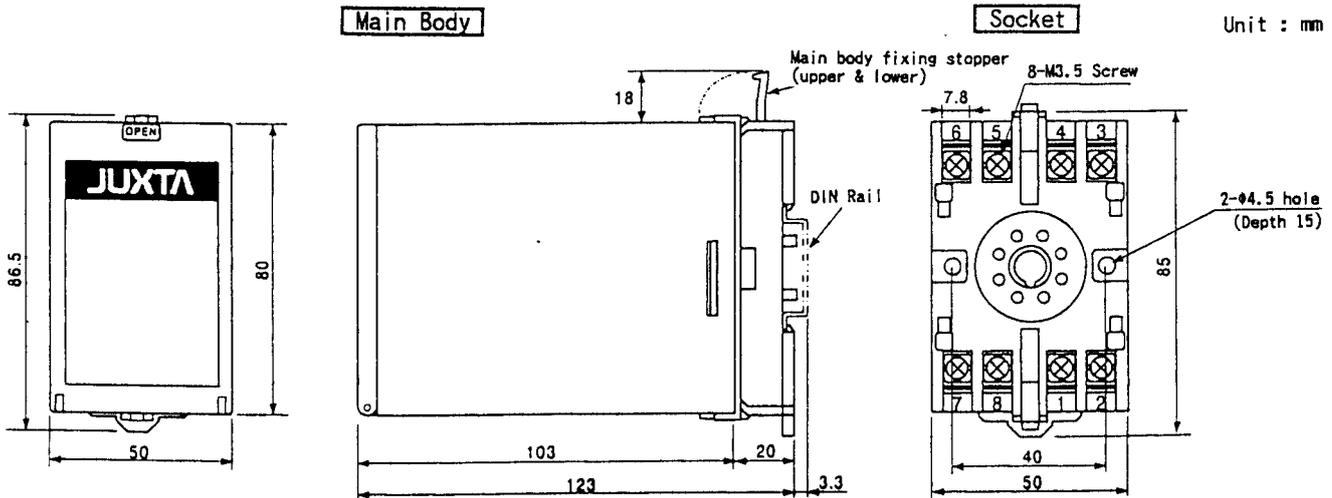


Select most suitable value combining internal load resistances

To receive dry voltage contact (or open collector) or voltage pulse



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance