ORDERING INFORMATION Model : JRP2

PLEASE FILL IN THIS SECTION	FACTORY USE ONLY	
Model	Job No.	Approved by: (Sales office)
Company	Ser No. –	
Name	Sales	Issued by: (Sales office)
P/O No.		

SOFTWARE SETTING Fill in blank sections or mark ❑ with ✔. Standard settings will be used if not otherwise specified.

ITEM	SET VALUE	STANDARD	COMMENTS
INPUT TYPE	❑ Open collector ❑ Voltage pulse ❑ RS-422 line driver	Open collector	
PULSE SENSING (voltage pulse only)	❑ Capacitor coupled ❑ DC coupled	DC coupled	Choose from the list to the left for the voltage pulse input. For the capacitor coupling, specify the detecting level to '0V.'
PULSE AMPLITUDE (voltage pulse only)	Vp-p	N/A	They are required to accurately understand the input waveform. The maximum voltage applicable across the input terminals is 50V.
DC OFFSET (voltage pulse only)	V	N/A	
DETECTING LEVEL (voltage pulse only)	V	N/A	Choose within 0 to 5V. To specify refer to the "DETECTING LEVEL" and confirm it. If not specified, the factory will choose an appropriate value based on the supplied information on pulse sensing, pulse amplitude and DC offset.
NOISE FILTER (voltage pulse & open collector only)	❑ High ❑ Low ❑ No filter Please refer to the comments and the table to the right.	Low	Choose a noise filter type to match the input frequency range. If not used, the transmitter accuracy may not satisfy described accuracy level.
INPUT ZERO FREQUENCY fz	Hz	0 Hz	Specify the frequency for 0% input. -200 kHz (200 kHz in the reverse direction) ≤ fz < fs
INPUT SPAN FREQUENCY fs	Hz	1000 Hz	Specify the frequency for 100% input. Min. 10% of the selected frequency range value required. fz < fs ≤ Max. value of the selected frequency range Max. 200 kHz (forward direction)

FREQUENCY RANGE	FILTER TYPE
100 kHz (-200 to +200 kHz)	None
10 kHz (-10 to +10 kHz)	None
1 kHz (-1 to +1 kHz)	Low
100 Hz (-100 to +100 Hz)	Low
10 Hz (-10 to +10 Hz)	Low
1 Hz (-1 to +1 Hz)	High
100 mHz (-100 to +100 mHz)	High
10 mHz (-10 to +10 mHz)	High

ITEM	SET VALUE	STANDARD	COMMENTS
LOW-END CUTOUT	Hz Please refer to the comments and the table to the right.	0 Hz	Choose within the input range (fs – fz). The transmitter forcibly provides an output equivalent to 0 Hz input. The minimum increments used to determine the low-end cutout frequency depend upon frequency ranges. FREQUENCY RANGE / MIN. INCREMENTS 100 kHz (-200 to +200 kHz) / 10 Hz 10 kHz (-10 to +10 kHz) / 1 Hz 1 kHz (-1 to +1 kHz) / 0.1 Hz 100 Hz (-100 to +100 Hz) / 0.01 Hz 10 Hz (-10 to +10 Hz) / 1 mHz 1 Hz (-1 to +1 Hz) / 0.1 mHz 100 mHz (-100 to +100 mHz) / 0.01 mHz 10 mHz (-10 to +10 mHz) / 0.001 mHz
LOW-END CUTOUT DEADBAND (0 Hz to 5% of the each frequency range)	Hz See min. increments in the comments for LOW-END CUTOUT column.	1 % of each frequency range	Choose from the selectable range shown below. It is invalid, when the deadband is set to 0 Hz. FREQUENCY RANGE / MIN. INCREMENTS / SELECTABLERANGE 100 kHz (-200 to +200 kHz) / 10 Hz / 0 to 5.00 kHz 10 kHz (-10 to +10 kHz) / 1 Hz / 0 to 500 Hz 1 kHz (-1 to +1 kHz) / 0.1 Hz / 0 to 50.0 Hz 100 Hz (-100 to +100 Hz) / 0.01 Hz / 0 to 5.00 Hz 10 Hz (-10 to +10 Hz) / 1 mHz / 0 to 500 mHz 1 Hz (-1 to +1 Hz) / 0.1 mHz / 0 to 50.0 mHz 100 mHz (-100 to +100 mHz) / 0.01 mHz / 0 to 5.00 mHz 10 mHz (-10 to +10 mHz) / 0.001 mHz / 0 to 0.500 mHz
ALARM MODE	❑ High alarm ❑ Low alarm ❑ No alarm	High alarm	Choose from the list to the left.
ALARM SETPOINT	%	100.00%	Specify within -15.00 to +115.00% if High/Low alarm is selected. (% of the input range (fs – fz))
ALARM DEAD-BAND	%	1.00%	Specify within 0.00 to 20.00% if High/Low alarm is selected. (% of the input range (fs – fz))
ALARM ON DELAY TIME AT START UP	sec.	3 sec.	Specify the delay time for the alarm trip after the power is turned on, within 2.0 to 1000.0 sec. if High/Low alarm is selected.

LINEARIZATION Fill in the table only when the linearization is required. Refer to the example below.

INPUT (%)		OUTPUT (unit :)		INPUT (%)		OUTPUT (unit :)	
X (01)		Y (01)		X (09)		Y (09)	
X (02)		Y (02)		X (10)		Y (10)	
X (03)		Y (03)		X (11)		Y (11)	
X (04)		Y (04)		X (12)		Y (12)	
X (05)		Y (05)		X (13)		Y (13)	
X (06)		Y (06)		X (14)		Y (14)	
X (07)		Y (07)		X (15)		Y (15)	
X (08)		Y (08)		X (16)		Y (16)	

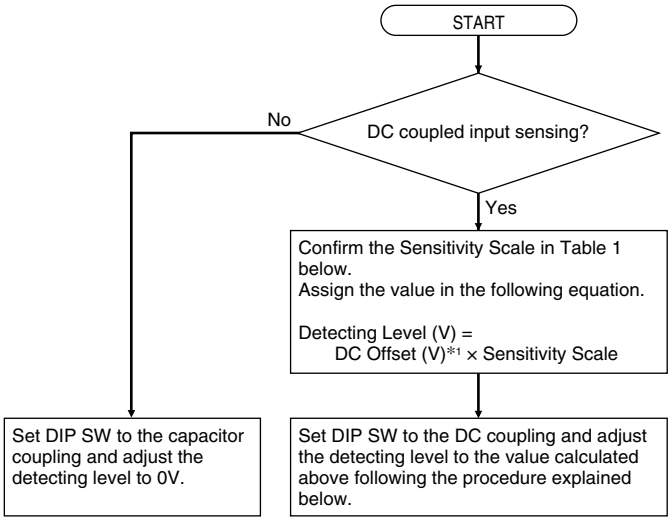
Output data in % is acceptable.

EXAMPLE

X (01)	0.00 (%)	Y (01)	4.00 (mA)	X (09)	80.00 (%)	Y (09)	17.58 (mA)
X (02)	10.00	Y (02)	6.37	X (10)	90.00	Y (10)	18.81
X (03)	20.00	Y (03)	8.42	X (11)	100.00	Y (11)	20.00
X (04)	30.00	Y (04)	10.25	X (12)		Y (12)	
X (05)	40.00	Y (05)	11.92	X (13)		Y (13)	
X (06)	50.00	Y (06)	13.47	X (14)		Y (14)	
X (07)	60.00	Y (07)	14.92	X (15)		Y (15)	
X (08)	70.00	Y (08)	16.28	X (16)		Y (16)	

■ **DETECTING LEVEL (voltage pulse and two-wire current pulse)**

Determine the appropriate detecting level referring to the flow chart below. Input type is for voltage pulse.



*1. Rounded off to one decimal place.

Table 1

SW	PULSE AMPLITUDE	SENSITIVITY SCALE
0	50 – 100 Vp-p	1/20
1	25 – 50 Vp-p	1/10
2	10 – 25 Vp-p	1/5
3	5 – 10 Vp-p	1/2
4	1 – 5 Vp-p	1
5	0.5 – 1 Vp-p	5
6	0.1 – 0.5 Vp-p	10
7	Open collector	1

A specific sensitivity scale is applied according to the pulse amplitude setting. The scaled input voltage is then compared to the preset detecting level.
With DC coupling, the scaled H level voltage must be higher than the detecting level so that the pulse state is accurately detected.

• Setting Examples

(DC Offset = Pulse Amplitude / 2)

PULSE AMPLITUDE (Vp-p)	AMPLITUDE RANGE (Vp-p)	DETECTING LEVEL (V)
50	50 – 100	1.3
50	25 – 50	2.5
30	25 – 50	1.5
25	10 – 25	2.5
15	10 – 25	1.5
10	5 – 10	2.5
7.5	5 – 10	1.9
5	1 – 5	2.5
3.5	1 – 5	1.8
2	1 – 5	1
1	0.5 – 1	2.5
0.5	0.1 – 0.5	2.5

The maximum voltage applicable across the input terminals is 50V. For a voltage pulse input of 100 Vp-p amplitude, the DC offset must be set to 0V.