

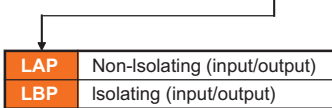
# PROGRAMMABLE LOAD CELL TRANSMITTER



## FEATURES

- Field-rangeable. Wide switchable exciting voltages 5~12V, Wide switchable input ranges 3mV to 90mV, Wide switchable output ranges over 20 standard process ranges
- Input offset 85%, input gain 165%
- Accuracy 0.1% F.S.
- Input/output isolation 1.6KVdc

1. MODEL: PF - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] → Non-programmable

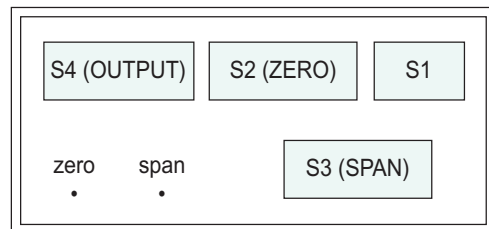


NO	Input Ranges	NO	Exciting	NO	Output Ranges	NO	Aux. Power
A	0 ~ 3 mV	1	5.0V	A	0 ~ 0.5 V	1	AC 110V (50/60Hz)
B	0 ~ 4 mV	2	10.0V	B	0 ~ 1 V	2	AC 220V (50/60Hz)
C	0 ~ 5 mV	3	12.0V	C	0 ~ 2 V	3	DC 24V
D	0 ~ 6 mV	4	15.0V (optional)	D	0 ~ 4V	4	DC 48V
E	0 ~ 8 mV	9	SPECIFIED	E	0 ~ 5 V	5	DC 110V
F	0 ~ 10 mV	* Max. output current 50mA		F	1 ~ 5 V	6	DC 220V
G	0 ~ 12 mV			G	0 ~ 8 V	7	AC 90~260V
H	0 ~ 15 mV			H	0 ~ 10 V	9	SPECIFIED
I	0 ~ 18 mV			I	2 ~ 10 V	• ±20% of rate, less 3.5VA for AC input • ±20% of rate, less 3WATT for DC input • Switchable 110V/220V by jump internally • ±10% of rate, less 3.5VA for AC switching input	
J	0 ~ 20 mV			J	0 ~ 1 mA		
K	0 ~ 24 mV			K	0 ~ 2 mA		
L	0 ~ 25 mV			L	0 ~ 5 mA		
M	0 ~ 27 mV			M	1 ~ 5 mA		
N	0 ~ 30 mV			N	0 ~ 10 mA		
O	0 ~ 50 mV			O	0 ~ 16 mA		
P	0 ~ 60 mV			P	0 ~ 20 mA		
Q	0 ~ 90 mV			Q	4 ~ 20 mA		
R	SPECIFIED			R	SPECIFIED		

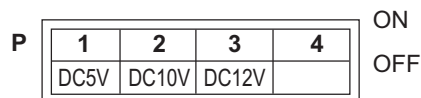
## 2. Specification

- Accuracy : 0.1% F.S (23±5°C)
- Output ripple (p-p) : <0.1% F.S.
- Temp. coefficient : 100ppm/°C (0-50°C)
- Dielectric strength : 1.5kVac / 1min. (power/input / output) 1600Vdc (input/output)
- Output drive capability : ≤10mA for voltage mode, ≤10V for current mode
- Response time : ≤250 ms (0-90%)
- Operating condition : 0~55°C (20 to 95% RH non-condensed)
- Storage condition : 0~70°C (20 to 95% RH non-condensed)
- Construction : Socket/plug-in type with barrier terminals

## 3. Function switches (S1, S2, S3, S4)



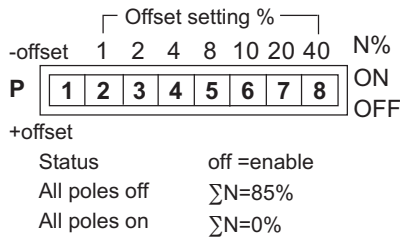
• S1 → input exciting voltage



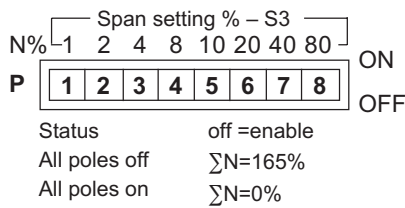
(Status on enable 1 = on; 0 = off)

# PROGRAMMABLE LOAD CELL TRANSMITTER

- S2 → P<sub>1</sub> input offset polarity selection  
P<sub>2</sub>-P<sub>3</sub>-P<sub>4</sub>-P<sub>5</sub>-P<sub>6</sub>-P<sub>7</sub>-P<sub>8</sub> input range offset (ZERO)selection



- S3 → Input range Span (GAIN) selection



- S4 → P<sub>1</sub>-P<sub>2</sub>-P<sub>3</sub>-P<sub>4</sub>-P<sub>5</sub>-P<sub>6</sub> output range selection  
P<sub>7</sub>-P<sub>8</sub> output mode: voltage/current selection  
★ (ref. output switching table)

## 4. Programming formula

VH/VL: input high / input low (unit: mV)

- Span → X = [500 (VH-VL)]%
- Offset → Y = (VL)%

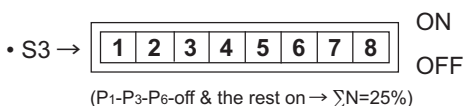
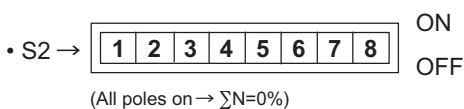
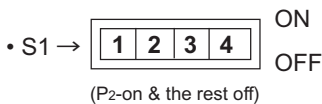
Note: on field application, the required offset at no load status just switching S<sub>2</sub> of 1% = 1mV offset

## 5. Application

Example : PF-LBP-J2H-1

Exciting ..... (DC10V)  
Input range ..... (VH - 20mV, VL - 0mV)  
Output ..... (DC 0-10V)  
Power ..... (AC 110V)

- (Span) X = [500/(20-0)]% = 25%
- (Offset) Y = (0)% = 0%



## 6. Input switching table (% of gain) (S3)

(switching status off = enable; 1 = on; 0 = off)

Input Range (VH-VL)	S3 1-2-3-4-5-6-7-8
3 mV	* 0-0-0-0-0-0-0-0
4 mV	0-1-0-1-1-1-0-0
5 mV	1-1-1-1-1-0-1-0
6 mV	* 0-0-1-1-1-1-1-0
8 mV	* 0-0-1-1-1-0-0-1
10 mV	1-1-1-1-0-1-0-1
12 mV	* 1-0-1-1-1-1-0-1
15 mV	* 0-0-1-1-0-0-1-1
18 mV	* 1-1-1-0-1-0-1-1
20 mV	0-1-0-1-1-0-1-1
24 mV	* 0-1-1-1-1-0-1-1
25 mV	1-1-1-1-1-0-1-1
27 mV	* 0-1-1-0-0-1-1-1
30 mV	* 0-0-0-1-0-1-1-1
36 mV	* 1-1-0-1-0-1-1-1
40 mV	* 0-0-1-1-0-1-1-1
50 mV	1-1-1-1-0-1-1-1
60 mV	* 1-1-1-0-1-1-1-1
90 mV	* 1-0-0-1-1-1-1-1

- recalibration to obtain linear output

## 7. Output switching table (S4)

(switching status 1 = on; 0 = off)

Output Range	O/P Range 1-2-3-4-5-6	O/P Mode 7-8
0 ~ 0.5V	0-1-1-1-1-0	1-1
0 ~ 1V	1-0-1-1-1-0	1-1
0 ~ 2V	1-1-0-1-1-0	1-1
0 ~ 4V	1-1-1-0-1-0	1-1
0 ~ 5V	1-0-1-0-1-0	1-1
1 ~ 5V	1-1-1-0-1-1	1-1
0 ~ 6V	1-1-0-0-1-0	1-1
0 ~ 8V	1-1-1-1-0-0	1-1
0 ~ 10V	1-1-0-1-0-0	1-1
2 ~ 10V	1-1-1-1-0-1	1-1
0 ~ 1mA	0-1-1-1-1-0	0-0
0 ~ 2mA	1-0-1-1-1-0	0-0
0 ~ 5mA	0-1-0-1-1-0	0-0
1 ~ 5mA	1-1-0-1-1-1	0-0
0 ~ 10mA	1-0-1-0-1-0	0-0
2 ~ 10mA	1-1-1-0-1-1	0-0
0 ~ 16mA	1-1-1-1-0-0	0-0
0 ~ 20mA	1-1-0-1-0-0	0-0
4 ~ 20mA	1-1-1-1-0-1	0-0

## 8. Dimension: See other transmitter dimension

## 9. Terminal connection

