

## LU-CGP pressure transmitter

### 1. technical performance

- to subject: liquid, gas or vapour
- range ability:refer to "lectotype"
- output: 4-20mA DC
- power: 24VDC, it may be 12VDC if non-load, max. is 45VDC
- load characteristic:
- positive & negative transfer: up and low may not exceed the range limit after positive & negative transfer, whatever the output is.  
Max. positive transfer: 500% of the min. span.  
Max. negative transfer: 600% of the min. span.
- Temperature:  
temperature of operating for amplifier: -25℃ ~ +90℃  
temperature of operating for sensor: -40℃ ~ +104℃
- Relative humidity: 0~100%
- Sensor capacity changes: <0.16cm<sup>3</sup>
- Indicate meter (field): scale gauge length: 30mm,  
grade: 2.5
- Isolating explosion: ds II BT5, Intrinsically-safety: ia II CT5
- Span & Zero: external continually adjusted
- Over-pressure: 0 (absolute pressure) -14Mpa, when range < 6Mpa;  
0 (absolute pressure) -32Mpa, when range < 20Mpa;  
0 (absolute pressure) -52Mpa, when range < 42Mpa;  
no damage for transmitter but may cause zero shift, suggest not to operate over- pressure, the max. pressure is 60Mpa for flange template.
- Damp: continually adjusted when time constant is between 0.2~1.67s.
- Settling time: 2s,

### 2. performance index (note: test under the condition of none shift, max. range status of sensor, 316L stainless isolating diaphragm and other standard condition)

- Accuracy:  $\pm 0.25\%$  of the span, including the synthesise errors of linear,change-difference and repeat.
- Stability:  $\pm 0.25\%$  of max. range (12 months)
- Temperature affect:  
zero error: $\pm 0.5\%$  / 55℃, zero & range errors: $\pm 1.0\%$  / 55℃, when max. range;  
zero error: $\pm 3.0\%$  / 55℃, zero & range errors: $\pm 3.5\%$  / 55℃, when min. range;  
note: for type LU-CGPS-1200 (1300), temperature affect is double times of above

- Over-pressure affect:  $\pm 0.25\%$  of max. range (according to permitted over-loads for different ranges)
- vibration affect:  $\pm 0.05\%$  / g of the max. range, when 200Hz, any axis up.
- Power affect: <0.005%/V of output range
- Load affect: none affect when voltage >12VDC input to the transmitter.
- Mounting position affect: may cause zero error max. 0.24Kpa, but can be calibrated, none affect for range

### 3. structure index:

- Structure material:  
diaphragm: 316 stainless steel, hastelloy C, Monel alloy, Tantalum;  
O ring: Fluorin rubber;  
Flange & bolt: 316 stainless steel;  
Fill oil: silicon oil;  
Electric shell: low-Cu & aluminum alloy  
Plating of electric shell: toast lacquer of amido, formyl, ethene & colophony;
- pressure-impulse connector:  
flange NPT 1/4 (taper pipe screw ), (this is the transmitter flange connection);  
connection head screw thread NPT 1/2 (taper pipe screw), (selected);  
integrated needle valve of welded conduit connector (selected)
- electric parts connector:  
down-lead conduit NPT 1/2 line-through hole;  
electric cable connector (selected)  
explosion-proof connector (selected)
- net weight: 2.4kg (exclude the selected parts)

**4.lectotype:**

LU-CGP				
code				
S	Intelligent (digital, with key board)			
H	Intelligent (HART protocol)			
E	Analog			
code	Measuring ranges			
1200	0~0.25~1.5KPa			
1300	0~1.2~7.2KPa			
1400	0~6~36KPa			
1500	0~30~180KPa			
1600	0~160~1000KPa			
1700	0~400~2500KPa			
1800	0~1600~10000KPa			
1900	0~4000~25000KPa			
1000	0~7000~40000KPa			
Code	Structure material			
	Flange connector	Vent/drain valve	Isolating diaphragm	Filled liquid
F12	Carbon steel plating with cadmium	316 stainless steel	316 stainless steel	Silicon oil
F13	Carbon steel plating with cadmium	hastelloy C	hastelloy C	
F14	Carbon steel plating with cadmium	Monel	Monel	
F15	Carbon steel plating with cadmium	316 stainless steel	Tantalum	
F22	316 stainless steel	316 stainless steel	316 stainless steel	
F23	316 stainless steel	316 stainless steel	hastelloy C	
F24	316 stainless steel	316 stainless steel	Monel	
F25	316 stainless steel	316 stainless steel	Tantalum	
F33	Hastelloy C	Hastelloy C	Hastelloy C	
F35	Hastelloy C	Hastelloy C	Tantalum	
F44	Monel	Monel	Monel	
Code	Selected parts			
B1	Conduit assembly curve bracket (2" conduit)			
B2	Plate assembly curve bracket			
B3	Conduit assembly flat bracket (2" conduit)			
E1	Common cable connector			
E2	Explosion-proof cable connector			
G1	Joint flange			
G2	Welded conduit connector			
d	Isolating-explosion Ex ds II BT5			
i	Intrinsically safety Ex ia II CT5			
LU-CGP S 1200 F12 B1	1KPa (range set when delivery) (indicated)			

Remark: Range should be specified when order, otherwise, will be setted to the highest rated range.

F22 is standard structure material.

Display: LCD Indicator