

LEFOO

LFT6210  
INTRINSICALLY SAFE PRESSURE  
TRANSMITTER MANUAL  
PRODUCT OPERATION MANUAL



OVERVIEW

LFT6210 intrinsically safe pressure transmitter is suitable for general industrial applications. It has a variety of explosion-proof options, gas intrinsically safe, dust intrinsically safe and so on. The pressure core of the product is made by a well-known international brand, and utilizes a laser-modulated resistor process for temperature compensation over a wide range of temperatures. It has the advantages of low temperature drift, wide working temperature range, stable performance and reliable quality. It also has a variety of measurement ranges, a variety of pressure connections, rotatable display screen and other advantages, easy to match different working conditions of the site.

PARAMETER INDICATORS

Main parameter

Measurement range	-100kPa...0~10kPa...60MPa
Overload pressure	1.5 Multiple rated pressure
Accuracy <sup>Note 1</sup>	0.1%F.S, 0.25%F.S, 0.5%F.S
Output signa	4~20mA(2 wire)

Intrinsic safety parameter

Explosion-proof mark	Ex ia IIC T6 Ga Ex ia IIIC T200 85°C Da
Intrinsic safety parameter	Ui: 28VDC; Ii: 93mA; Pi: 0.65W; Ci: 0.025uF; Li: 0.25mH
Certification	Intrinsically safe certification; CE.

Note 1: Measurement at 25°C, including the comprehensive accuracy of linearity, repeatability and hysteresis

Other parameters

Power Supply	(15~28) VDC
Working environment	Intrinsically safe:-40~60°C, Ordinary type:-40~80°C; Relative humidity:<90%; Atmospheric pressure:80-110kPa
Storage environment	-40°C~85°C
Enclosure Protection	IP67
Insulation resistance	>100MΩ@500VDC
Pressure Connection	M20*1.5、G1/2

EXPLOSION-PROOF EXPLANATION

Intrinsically safe explosion-proof mark: Ex ia IIC T6 Ga, suitable for dangerous places in Zone 0, Zone 1 and Zone 2, IIC type explosive gas environment.  
Dust intrinsically safe explosion-proof mark: Ex ia IIIC T200 85°C Da, suitable for hazardous places in Zones 20, 21 and 22, IIIC type conductive dust environment.  
The product is used in explosive dust, where there is a potential static electricity hazard. Therefore, it cannot be used in areas affected by processes that generate charges, mechanical friction, separation processes, electron emission and pneumatic transmission dust.  
Complies with the standards GB/T3836.1 and GB/T3836.4  
Associated device parameter:  
 $U_o \leq U_i$ ;  $I_o \leq I_i$ ;  $P_o \leq P_i$ ;  $C_o \geq C_i + C_c$ ;  $L_o \geq L_i + L_c$   
 $U_o$ 、 $I_o$ 、 $P_o$ 、 $C_o$ 、 $L_o$  is the safety gate parameter,  $C_c$ 、 $L_c$  indicates the distribution parameters of connecting cables.

Wiring

The transmitter adopts a two-wired system, Figure 1 terminal "+" is connected to the safety gate input positive terminal, Figure 1 terminal "-" is connected to the safety gate input negative terminal; The safety gate connection is shown in Figure 2.

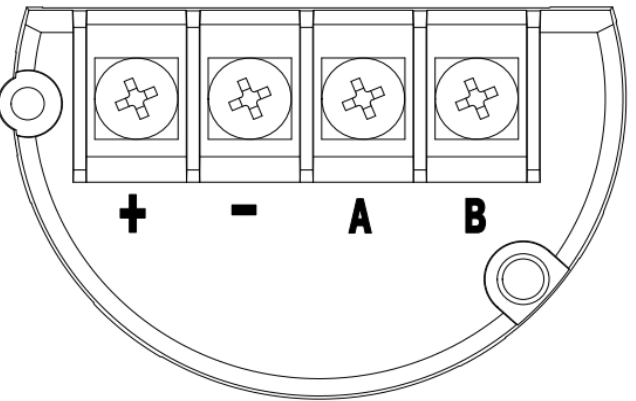


Figure 1 Transmitter terminal

01

02

03

GROUNDING

The safety gate should be kept consistent with the transmitter potential. When the safety gate is grounded, connect the transmitter housing ground terminal to the wire, and then connect to the safety gate ground terminal. Do not ground the transmitter when the safety grid is not grounded.

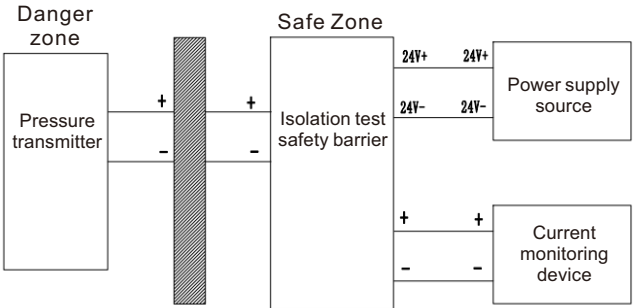
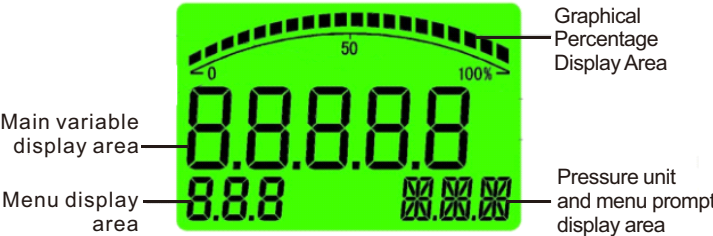


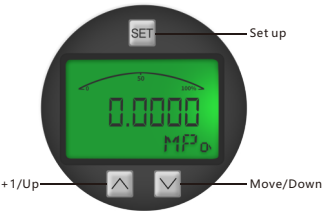
Figure 2 Schematic of safety gate connection

Safety gate parameter  $U_m$ :  
250VAC/DC;  $U_o$ :28VDC;  $I_o$ :93mA;  $P_o$ :0.65W;  $C_o$ :0.08uF;  $L_o$ : 4.1mH  
Recommended safety gate model:  
CB4036-ES isolated safety gate; MTL5041type isolated safety gate.

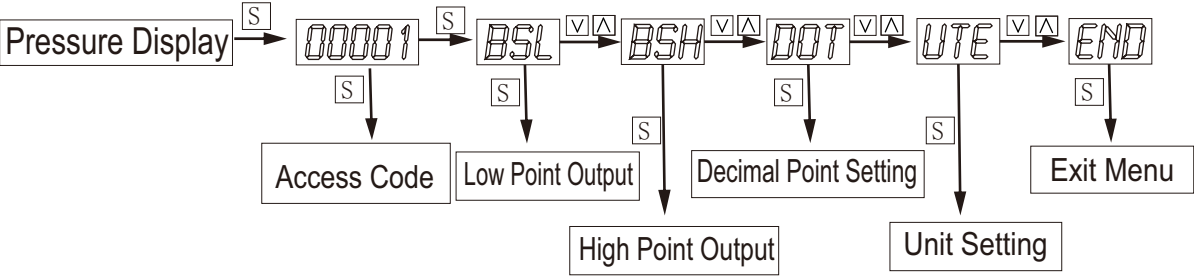
DISPLAY DESCRIPTION



Key Function Description



Operation Diagram



Loc: customer password 00001 bsL: output low bsH: output high  
dot: Display the number of decimal points, can be set in the range (0 ~ 3), the number of decimal places should not be too many, the priority to ensure the stability of the display value.  
uTE: display unit End: exits, save  
Zero clearing: Press the SET key to enter the setting mode, and "Loc" will be displayed in the menu display area. At this time, press ↑ and ↓ at the same time until the pressure value is displayed again on the LCD.

04

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06