

Type K1 Thin Film Pressure Transducer/ Transmitter – For Industrial Applications

Type K1-UL #3

NOTES:

1) EACH SAFETY BARRIER (OR SAFETY BARRIER CHANNEL FOR DUAL CHANNEL BARRIERS) MUST MEET THE FOLLOWING PARAMETERS.

$V_{oc} < V_{max} = 23 \text{ VDC (Group A,B) = 29VDC (Groups C,D)}$

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$I_{sc} < I_{max} = 140 \text{ mA (Group A,B) = 250 mA (Groups C,D)}$

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$C_a > C_i + C_{\text{cable}} = 0.1\mu\text{f} + \text{cable}$

$L_a > L_i + L_{\text{cable}} = 0.0 + L_{\text{cable}}$

Max Cable length = 3000 feet

2) IF THE ELECTRICAL PARAMETERS OF THE CABLE ARE UNKNOWN, THE FOLLOWING VALUES MUST BE USED FOR C cable AND L cable

Capacitance = 60 pf/ft

Inductance = 0.2 uH/ft

Example: 3000 feet of cable would equal:

$3000 \times 60\text{pf} = 0.28 \text{ ufd.}$

$3000 \times 0.2 \text{ uH} = 0.6 \text{ mH}$

3) PRESSURE TRANSMITTER ENTITY PARAMETERS

CLASS I , GROUPS A ,B ,C, AND D ; CLASS II, GROUPS E, F AND G

TERMINALS	V MAX	I MAX	Ci	Li
RED BLACK	24	140 mA	0.1 uF	0.0 mH

CLASS I , GROUPS C, AND D ; CLASS II, GROUPS E, F AND G

TERMINALS	V MAX	I MAX	Ci	Li
RED BLACK	30	250 mA	0.1 uF	0.0 mH

SHEET 3 OF 3

B	5981	ADDED SH 1- SH2 & 3 WERE 1 & 2.	DI2G	08/20/93
A	5909	RELEASED	LPD	7/2/93
REV	C/N	DESCRIPTION	BY	DATE
LTR	NO			

SCHEMATIC FOR K SERIES PRESSURE TRANSMITTER INSTALLATION OF U.L. APPROVED BARRIERS	S					DRAWN	LPD	7/2/93	
						CHECKED			
						APPROVED			
	SCALE	71A256						REV	B
	NONE								