DELTA CONTROLS CORPORATION SHREVEPORT ENGINEERING

INTRINSIC SAFETY BARRIERS SUITABLE FOR USE WITH DELTA CONTROLS PRESSURE TRANSMITTERS

Delta Controls pressure transmitters are intrinsically safe when used with suitable safety barriers. Barriers to a safe area are suitable if the entity parameters are selected so that:

 $13 \le V \max \le 35v$ $20 \text{ mA} \le I \max \le 180 \text{mA}$ $Ca \ge .03 \text{uF} + Ccable}$

La≥Lcable

In addition, the internal resistance must be selected so that at 20mA, the voltage dropped across the load resistance plus the internal resistance must be less than (Vsupply-13v)

The following are some of the safety barriers that are suitable for use with Delta Controls pressure transmitters.

MANUFACTURER: STAHL						
PART NUMBER	RATED VOLTAGE	INTERNAL RESISTANCE	ALLOWABLE LOAD RESISTANCE AT RATED VOLTAGE	I.S. CONNECTION FOR CL I,II,III, GROUPS:		
9001/01-199-150-10	16	160	10	A-G		
9001/01-280-075-10	24	440	110	A-G		
9001/01-280-085-10	24	356	194	A-G		
9001/01-280-100-10	24	302	248	A-G		
9001/01-280-110-10	24	277	273	A-G		
9001/01-199-165-10	24	187	363	C-G		

MANUFACTURER: CROUSE-HINDS						
PART NUMBER	RATED VOLTAGE	INTERNAL RESISTANCE	ALLOWABLE LOAD RESISTANCE AT RATED VOLTAGE	I.S. CONNECTION FOR CL I,II,III, GROUPS:		
SB19130 M 1801	18	230	20	A-G		
SB19130 M 2401	24	440	110	A-G		
SB19130 M 2402	24	535	15	A-G		

MANUFACTURER: ADALET						
PART NUMBER	RATED VOLTAGE	INTERNAL RESISTANCE	ALLOWABLE LOAD RESISTANCE AT RATED VOLTAGE	I.S. CONNECTION FOR CL I,II,III, GROUPS:		
Z 125/Ex	22	202	133	A-G		
Z 129/Ex	28	367	258	A-G		
Z 123/Ex-CL	20	178+2V	72	A-G		
Z 129/Ex-CL	28	382+2V	268	A-G		

Bold selections are the most commonly specified.