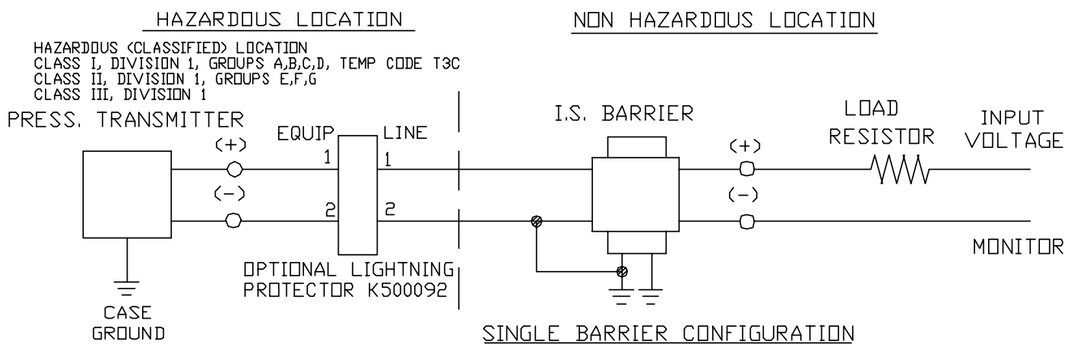
THIS DRAWING IS THE PROPERTY OF AMETEK INC. ALL RIGHTS ARE RESERVED AND NEITHER THIS DRAWING NOR ANY INFORMATION IT CONTAINS IS TO BE COPIED, REPRODUCED, DISCLOSED TO OTHERS, OR USED WITHOUT WRITTEN PERMISSION FROM AMETEK INC.

LIMITS OF ACCEPTABLE WORKMANSHIP ARE DEFINED IN MS-645-A.

BASIC INSTALLATION CIRCUIT DIAGRAM (4-20mA OUTPUT ONLY)

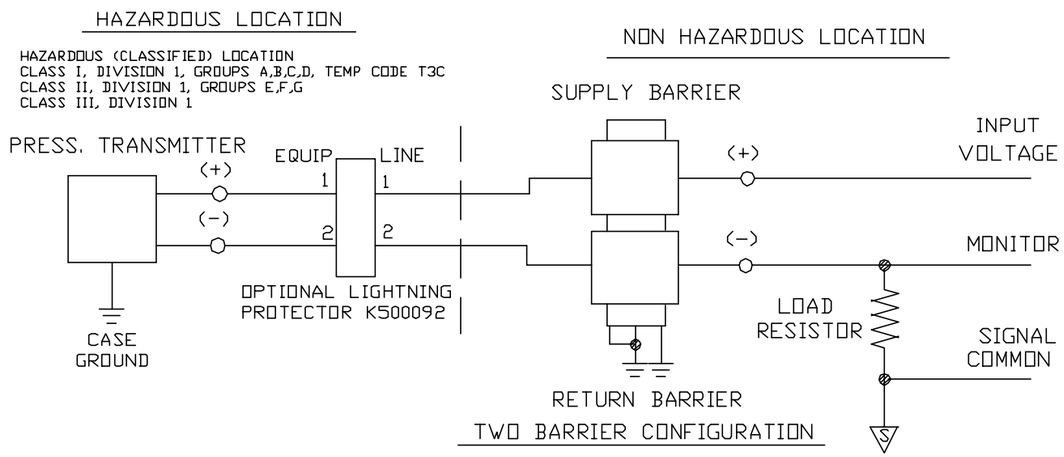
REVISION HISTORY				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	RELEASE	2/5/04	RJD
A1	B	ADD 674 & 675 MODELS TO TITLE BLOCK	2/17/11	RR



SINGLE BARRIER CONFIGURATION

BARRIERS FOR CERTIFIED SYSTEM

MANUFACTURER	MODEL NO.	PUBLICATION NO.
STAHL	9001/01-280-100-10	RST-49
MTL	728+	PS700-10
MTL	708	PS700-10
PEPPERL & FUCHS	Z728	1996/7 CATALOG



TWO BARRIER CONFIGURATION

BARRIERS FOR CERTIFIED SYSTEM

MANUFACTURER	MODEL NO.	PUBLICATION NO.
STAHL	9002/13-280-093-00	RST-49
STAHL	9001/51-280-091-14 (REPEATER)	RST-49
PEPPERL & FUCHS	Z787	1996/7 CATALOG
MTL	787 OR 787S (SUPPLY & RETURN)	PS700-10

SYSTEM OR LOOP INSTALLATION

1) BARRIERS MUST BE CSA CERTIFIED FOR INSTALLATION IN CANADA OR NRTL APPROVED FOR INSTALLATION IN U.S. AND MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2) MAXIMUM NON-HAZARDOUS AREA VOLTAGE MUST NOT EXCEED 250V.
3) INSTALL IN ACCORDANCE WITH CANADIAN ELECTRICAL CODE, PART I, FOR INSTALLATION IN CANADA.
4) INSTALL IN ACCORDANCE WITH NEC (ANSI/NFPA 70) AND ANSI/ISA RP12.06.01 FOR INSTALLATION IN U.S.
5) MAXIMUM CABLE LENGTH FOR THE TABULATED BARRIERS IS 3500 FT, WHEN THE LMA912 LIGHTNING PROTECTOR IS USED, OR 3700 FT WITHOUT THE LIGHTNING PROTECTOR.

ENTITY PARAMETERS INSTALLATION

6) ENTITY PARAMETERS: Vmax=28V, Imax=100mA, Ci=52nF OR 55nF (WHEN USED WITH ONE LMA912 LIGHTNING PROTECTOR), Li=2.5uH
7) BARRIERS MUST BE CSA CERTIFIED FOR INSTALLATION IN CANADA, OR NRTL APPROVED FOR INSTALLATION IN U.S., AND MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
8) MAXIMUM NON-HAZARDOUS AREA VOLTAGE MUST NOT EXCEED 250V.
9) INSTALL IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE C22.1, PART I FOR INSTALLATION IN CANADA.
10) INSTALL IN ACCORDANCE WITH THE NEC (ANSI/NFPA 70) AND ANSI/ISA RP12.06.01 FOR INSTALLATION IN U.S.
11) BARRIER PARAMETERS MUST MEET THE FOLLOWING REQUIREMENTS:
    Voc ≤ Vmax, Isc ≤ Imax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable
12) ONE DUAL-CHANNEL OR TWO SINGLE-CHANNEL BARRIERS MAY BE USED WHERE BOTH CHANNELS HAVE BEEN CERTIFIED FOR USE TOGETHER WITH COMBINED ENTITY PARAMETERS. THE FOLLOWING CONDITIONS MUST BE SATIFIED:
    Voc ≤ Vmax, Isc ≤ Imax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable

NOTES:
1) Tamb=40°C MAX
WARNING 2) SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY, AND IS NOT PERMITTED.
WARNING 3) DISCONNECT POWER BEFORE SERVICING.
4) STANDARD CABLE PARAMETERS:
   Ccable=23pF/FT, Lcable=0.111uH/FT MAX
5) INSTALL OPTIONAL LIGHTNING PROTECTOR, K500092, IN ENCLOSURE SUITABLE FOR THE ENVIRONMENT.

REVISIONS TO THIS DOCUMENT REQUIRE AGENCY NOTIFICATION. REFER TO DOCUMENT EN201-17.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON
2 DEC. PL. ±.01 | 3 DEC. PL. ±.005 | ANGLES ±1°

MATERIAL

FINISH

		DATE
DRAWN	BENNETT	1/21/04
CHECKED	RR	2/3/04
APPROVED	R DILORETO	2/5/04
SUPERCEDES	REVISION A	
USED ON		
NEXT ASS`Y		
E-FILE	K750535.dwg	

AMETEK U.S.GAUGE DIVISION
PMT PRODUCTS
820 PENNSYLVANIA BOULEVARD, FEASTERVILLE, PA 19053

TITLE
MODELS 575, 674 & 675
INTRINSICALLY SAFE SYSTEM

SIZE	CAGE CODE	DWG NO.
B	65048	B K750535

SCALE 1:1 | WEIGHT | SHEET 1 OF 1