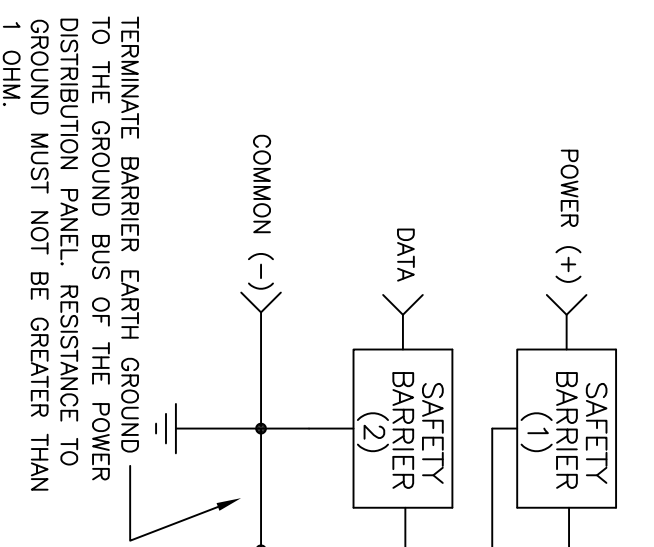


NON HAZARDOUS AREA

HAZARDOUS AREA



GROUP IIA, IIB ZONES 0,1
 GROUP IIC, ZONE 2
 CLASS I, DIV I, GROUPS C & D
 CLASS II & III, GROUPS E, F & G
 CLASS I, DIV 2, GROUPS A, B, C & D

ATEX FM13ATEX0102X

II 1 G EX ia T4 Ga Tamb: -40°C TO +70°C

**** APPROVED DOCUMENT ****
CHANGES TO THIS DOCUMENT
REQUIRE AGENCY APPROVAL

REV.	DESCRIPTION	DATE	BY
A	ADDED NOTE 8	07/18/05	KTP
B	CHANGED TITLE AND SERIES NAME	06/01/11	JCP
C	REVISED NOTE 8, CONDITIONS FOR SAFE USE	12/12/13	GSL

- NOTES: UNLESS OTHERWISE SPECIFIED
- MINIMUM VOLTAGE TO OPERATE THE 7250 PROBE IS 3.6V.
 - THE SELECTED BARRIER SHALL BE APPROVED WITH INTRINSICALLY SAFE CIRCUITS FOR THE HAZARDOUS LOCATION GROUP AND ZONE AS APPROPRIATE FOR THE APPLICATION AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - ELECTRONIC EQUIPMENT CONNECTED TO THE ASSOCIATED APPARATUS MUST NOT USE OR GENERATE MORE THAN 250Vrms, WITH RESPECT TO EARTH GROUND.
 - INSTALLATIONS SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70) AND THE CANADIAN ELECTRICAL CODE (CEC).
 - ALL CABLES MUST BE 24 GAUGE OR HEAVIER.
 - INSTALLATIONS SHALL BE IN ACCORDANCE WITH ANSI/AS1 RP 12.06.01, INSTALLATION OF INTRINSICALLY SAFE SYSTEMS FOR HAZARDOUS (CLASSIFIED) LOCATIONS.
 - FOR FM APPROVAL, THE ASSOCIATED APPARATUS MUST BE FM APPROVED.
 - SPECIAL CONDITIONS FOR SAFE USE:
THE EQUIPMENT CONTAINS NON-METALLIC ENCLOSURE PARTS, TO PREVENT THE RISK OF ELECTROSTATIC SPARKING THE NON-METALLIC SURFACE SHOULD ONLY BE CLEANED WITH A DAMP CLOTH.

POWER (+) ZENER BARRIER PARAMETERS (1)	
Voc(1)	Voc(1) <= Vmax
Isc(1)	Isc(1) <= Imax-Isc(2)
Ca(1)	Ca(1) >= Ci+Cwire(1)+Cwire(2)
La(1)	La(1) >= [Li+Lwire(1)+Lwire(2)]-La(2)
DATA ZENER BARRIER PARAMETERS (2)	
Voc(2)	Voc(2) <= Vmax
Isc(2)	Isc(2) <= Imax-Isc(1)
Ca(2)	Ca(2) >= Ci+Cwire(2)+Cwire(1)
La(2)	La(2) >= [Li+Lwire(2)+Lwire(1)]-La(1)

It = Isc(1)+Isc(2)
It <= Imax

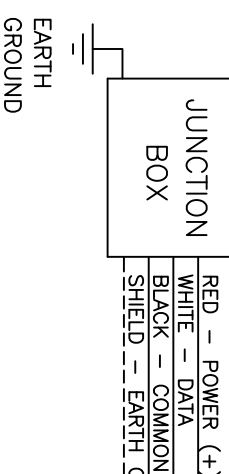
Vt = MAXIMUM VOLTAGE OF Voc(1) AND Voc(2)
Vt <= Vmax

La(total) = La(1)+La(2)
La(total) >= Li+Lwire(1)+Lwire(2)

IF WIRE PARAMETERS ARE UNKNOWN THEN
THE FOLLOWING SHALL BE USED:

$C_{wire} = 60pF/ft. (197pF/m.)$
 $L_{wire} = .2uH/ft. (0.657uH/m.)$

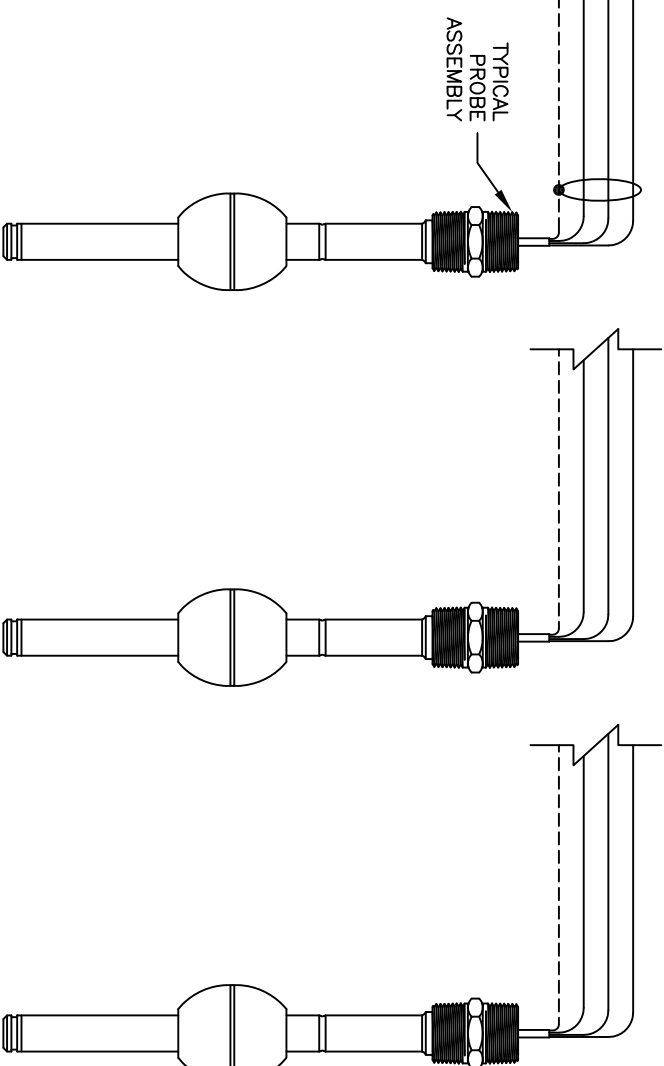
FOR EXAMPLE: 1000 ft X 60 pF/ft. = 0.06uF
100 m X 197 pF/m. = 0.0197uF



PROBE ENTITY PARAMETERS			
Pi	Vmax	Imax	Ci
1W	7.93V	280mA	30.1uF
			0uH

ENTITY PARAMETER NOTES:

- PARAMETERS APPLY COLLECTIVELY TO BOTH "POWER (+)" AND "DATA" TERMINALS WITH RESPECT TO "COMMON (-)".
- PI IS THE TOTAL (OR SUM) OF THE POWER APPLIED TO BOTH THE POWER (+) AND "DATA" TERMINALS.
- Vmax IS THE MAXIMUM VOLTAGE THAT CAN BE APPLIED TO EITHER THE POWER (+) OR "DATA" TERMINALS.
- Imax IS THE TOTAL (OR SUM) OF THE CURRENT APPLIED TO BOTH THE POWER (+) AND "DATA" TERMINALS.
- Ci & Li IS THE TOTAL CAPACITANCE AND INDUCTANCE OF THE PROBE AND IS THE MAXIMUM VALUE THAT CAN APPEAR ON EITHER THE "POWER (+)" OR "DATA" TERMINALS INDIVIDUALLY OR THE COMBINATION OF BOTH.



NOTE: MAXIMUM NUMBER OF PROBES AND CABLE LENGTH DEPENDS ON ENTITY PARAMETERS OF ASSOCIATED APPARATUS.

THIRD ANGLE PROJECTION		SURFACE FINISH 	TOLERANCE ALLOWANCE 	UNLESS OTHERWISE SPECIFIED: UNLESS OTHERWISE SPECIFIED: +/- 0.010 ON 2 PLACE DECIMALS +/- 0.005 ON 3 PLACE DECIMALS +/- 0.0005 ON 4 PLACE DECIMALS +/- 30 MIN. ON ALL ANGLES	COPYRIGHT © 2005. AMETEK AUTOMATION & PROCESS TECHNOLOGIES. ALL RIGHTS RESERVED. DRAWING IS PROPERTY OF AMETEK AUTOMATION & PROCESS TECHNOLOGIES. UNAUTHORIZED USE, DUPLICATION OR DISTRIBUTION IS STRICTLY PROHIBITED BY FEDERAL LAW.	AMETEK AUTOMATION & PROCESS TECHNOLOGIES Clawson, MI 48017 U.S.A.	DR. KTP DATE 6/16/05	TITLE INSTALLATION DRAWING I.S. VERSION HR DIGITAL STIK
SURFACE FINISH 	TOLERANCE ALLOWANCE 	APP. GSL DATE 12/12/13	DRAWING NO. E02241200	REV. SIZE C B				