

REVISIONS HISTORY				
REV.	ECO #	DESCRIPTION	DATE	BY
IR	EO - 7584	INITIAL RELEASE	04/15/16	JS
A	EO - 7658	ADD TO MODEL # NOTE, CERTIFICATION #'S, DIMS.	11/3/16	JS

**NON-HAZARDOUS
LOCATION**

MS7nn-YYZZZZ
MS7nnX-YYZZZZ

**HAZARDOUS
LOCATION**

MS7nnX-YYZZZZ
**CI I, Div 1 Grp A, B, C,D T4 Exia
CI I, Zn 0 AEx ia IIC T4
Ex ia IIC T4**

Note: Capacitance and Inductance of the field wiring from the intrinsically safe equipment to the associated apparatus shall be calculated and must be included in the system calculations as shown in Table 1.
Cable capacitance, C_{cable} , plus intrinsically safe equipment capacitance, C_i , must be less than the marked capacitance, C_a (or C_o), shown on any associated apparatus used. The same applies for inductance (L_{cable} , L_i and L_a or L_o respectively). Where the cable capacitance and inductance per foot are not known, the following values shall be used. $C_{cable} = 60pF/ft.$, $L_{cable} = 0.2\mu H/ft.$

TABLE 1:

I.S. Equipment		Associated Apparatus
V max (or U_i)	\geq	Voc or Vt (or U_o)
I max (or I_i)	\geq	Isc or It (or I_o)
P max (or P_i)	\geq	Po
$C_i + C_{cable}$	\leq	C_a (or C_o)
$L_i + L_{cable}$	\leq	L_a (or L_o)

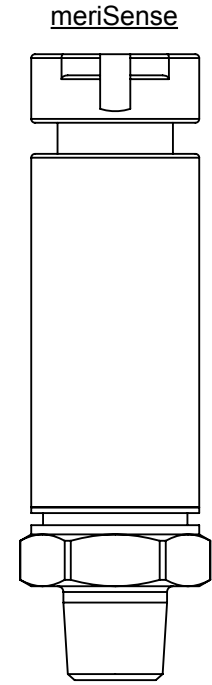
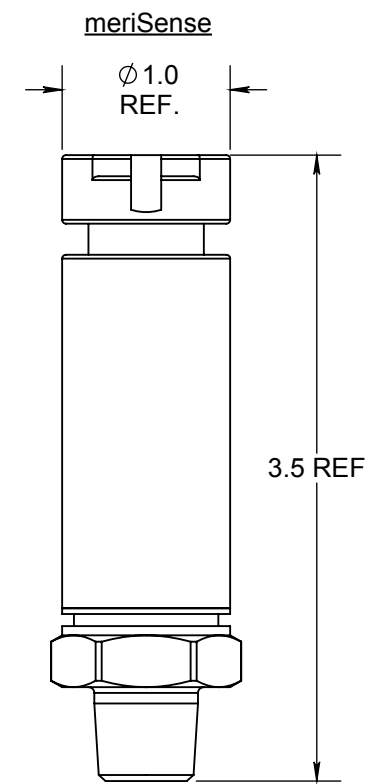
If P_o of the associated apparatus is not known, it may be calculated using the formula $P_o = (Voc * Isc)/4 = (U_o * I_o)/4$

- Associated apparatus output current must be limited by a resistor such that the output voltage-current plot is a straight line drawn between open-circuit voltage and short-circuit current.
- Selected associated apparatus must be third party listed as providing intrinsically safe circuits for the application, and have Voc or Vt not exceeding Vmax (or U_o not exceeding U_i), Isc or It not exceeding Imax (or I_o not exceeding I_i), and the P_o of the associated apparatus must be less than or equal to the Pmax or P_i of the intrinsically safe equipment, as shown in Table 1.
- Associated apparatus must not be used in combination unless permitted by the associated apparatus certification.

ATTENTION: LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ INTRINSÈQUE.

WARNINGS:

- SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY!
- To prevent ignition of flammable or explosive atmospheres,
 - Do Not open or service unit in flammable or explosive atmosphere.



Entity parameters for meriSense
 $U_i = 5.5VDC$
 $I_i = 227mA$
 $P_i = 1.25W$
 $C_i = 30\mu F$
 $L_i = 0\mu H$

NOTE:
FOR MODEL NUMBER
MS7nnX-YYZZZZ
MS=meriSense
7= pressure
n= 0-9 or A-Z
n= 0-9 or A-Z
X= intrinsically safe
YY= AI or CI
ZZZZ= 0-9 or A-Z
Max. Pressure Range= 10,000 psi

meriSense Certification Label

Operating Temperature: $-10^\circ C < T_a < 50^\circ C$

meriSense
E303279
UL LISTED
CE
0539
 $U_i=5.5VDC$
 $I_i=227mA$
 $P_i=1.25W$
 $C_i=30\mu F$
 $L_i=0\mu H$

Ex ia IIC T4 Ga

II 1 G
DEMKO 16
ATEX 1785
IECEX UL
16.0120

**CI I, Div 1 Grp A,B,C,D T4 Exia
CI I, Zn 0, AEx ia IIC T4
Ex ia IIC T4**
Proc. Cont. Eqp. for hazardous locations

Warning: Intrinsically Safe Circuit
Only when installed per 9R526

Meriam | 10920 Madison Ave
Cleveland | Ohio | USA | 44102

NOTE:
OPEN AREAS
RESERVED FOR
FUTURE USE.

UNLESS OTHERWISE SPECIFIED: DIM. ARE IN INCH./MM		APPROVALS		meriam process technologies a Scott Fetzer company
1. DIMENSIONS AND TOLERANCING PER ASME Y14.5M-1994 INCH STANDARD AND INCLUDE APPLIED FINISHES	2. DIMENSIONAL LIMITS APPLY BEFORE PLATING/FINISH	NAME	DATE	
3. MULTIVIEW AND SECTIONAL VIEW DRAWINGS PER ASME Y14.3M-1994	4. APPLICATION OF ENGINEERING DRAWINGS PER ASME Y14.24-1999	DRAWN	JULIE STALDER 03-08-16	10920 MADISON AVENUE CLEVELAND, OHIO 44102
5. REMOVE BURRS AND SHARP EDGES: MAX = .020/[0.5]	6. CHAMFER OR DEBURR HOLES: MAX = .010/[0.25]	CHECKED	JOHN MERRILL 03-10-16	
7. MACHINED FILLET RADIUS: .020/[0.5]	8. MACHINED SURFACE FLAT WITHIN .001 IN/IN [0.25mm/mm]; OTHER SURFACE FLAT WITHIN .005 IN/IN [0.127 mm/mm]	ENG APPR.		
9. SURFACE FINISHES: 125 uin or [3.2 um]	10. CONCENTRICITY MACH. SURF. TIR WITHIN 1/2 SUM OF DIAM.TOLERANCE, .001 / [0.025] MIN.	MFG APPR.		
11. TOLERANCES DECIMALS ARE: INCH .030 .010 .005 mm .08 .025 .013 ANGULAR $\leq \pm 0^\circ30'$		Q.A.		TITLE: meriSense MERIAM CONTROL DRAWING
MATERIAL: <MATERIAL> ; OPTIONAL: <OPTIONAL MATERIAL>		COMMENTS: DOCUMENTED ON 3D CAD WITH SolidWorks. Solids File:9A1300-IR Drawing File:9R526-A WHERE USED:<LOCATION>		
FINISH: <FINISH CODE> OPTIONAL: <OPTIONAL FINISH CODE>		DO NOT SCALE DRAWING		SCALE: 1:1 WEIGHT: SHEET 1 OF 1

SCHEDULED DRAWING
AGENCY APPROVED DRAWING:
NO REVISION TO DRAWING
PERMITTED WITHOUT AGENCY
APPROVAL

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MERIAM PROCESS TECHNOLOGIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MERIAM PROCESS TECHNOLOGIES IS PROHIBITED.

REV. **A**
9R526
C