

Revisions			
Rev	Description	Date	Approved
1	updated notes	5/6/98	BB
2	added MTL755ac	11/18/98	BB
3	added 9001zen.	6/30/99	BB

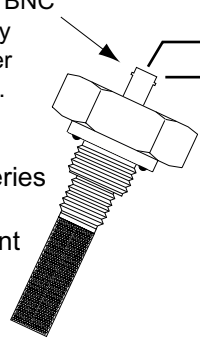
HAZARDOUS AREA

IS Class I, Division 1, Group A,B,C and D;
Class II Group E,F and G, T6 at 60 C and
EEx ia II A,B,C T6

Intrinsically Safe (Simple) Apparatus

Female BNC Connector on Sensor Fitting, Cable must have a Male BNC Connector. Polarity back to Transmitter must be observed.

Xentaur XTR-series Dewpoint Sensor Element



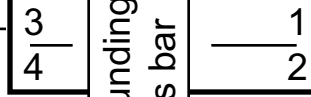
75Ω Coaxial Cable typically 12-20pF/ft.

SAFE AREA

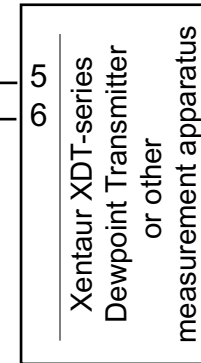
Associated Apparatus

Protective Component

Shunt-diode Safety Barrier



75Ω Coaxial Cable typically 12-20pF/ft. or for short distances less than 12" can use 2 conductor cable



Notes:

- Intrinsically Safe (Simple) Apparatus Entity Parameters: $C_i \leq 0.3\mu\text{F}$ $L_i = 0\text{mH}$ Therefore: $V_{\text{max}} = ?? \text{Vdc}$ $I_{\text{max}} = ?? \text{mA}$
- Entity Concept field installation and wiring calculations: $C_a \geq C_i + C_{\text{cable}}$ $L_a \geq L_i + L_{\text{cable}}$ $V_{\text{max}} \geq V_{\text{oc}}$ or V_t $I_{\text{max}} \geq I_{\text{sc}}$ or I_t
- Hazardous (Classified) Location Use: IS Class I Division 1 Groups A,B,C & D; Class II Group E,F & G, T6 at 60 C and EEx ia II A,B,C T6
- Installation must be in accordance with the ANSI/ISA RP12.6 "Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations" and the National Electrical Code^{fi} (ANSI/NFPA 70, Article 504).
- Associated apparatus protective component must be approved.
- Associated apparatus protective component manufacturer's installation drawing must be followed when installing this equipment.
- Associated apparatus must be installed in an enclosure that meets the requirements of ANSI/ISA S82.01.
- Associated apparatus protective component may be any one of the following protective barriers:

MTL 755ac, or	MTL 760ac, or	R Stahl Inc.	or	R Stahl Inc.
		9002/22-093-300-00		9001/02-093-390-10
$V_{\text{oc}} \leq 2.96\text{V}$	$V_{\text{oc}} \leq 10.03\text{V}$	$V_t \leq 9.6\text{V}$		$V_{\text{oc}} \leq 9.6\text{V}$
$I_{\text{sc}} \leq 296\text{mA}$	$I_{\text{sc}} \leq 194\text{mA}$	$I_t \leq 297.5\text{mA}$		$I_{\text{sc}} \leq 374.7\text{mA}$
$C_a \leq 346\mu\text{F}$	$C_a \leq 3\mu\text{F}$	$C_a \leq 3.8\mu\text{F}$		$C_a \leq 3.7\mu\text{F}$
$L_a \leq 0.4\text{mH}$	$L_a \leq 0.9\text{mH}$	$L_a \leq 0.2\text{mH}$		$L_a \leq 0.16\text{mH}$

or any other approved device with parameters meeting the requirements (calculations) of note B.

- Resistance between Intrinsically Safe ground and earth ground must be less than 1 Ohm.
- Associated apparatus must not be powered by or contain a source of potential with respect to earth ground exceeding 250VRMS or 250VDC.
- Evaluated under UL file no. E204260.
No revisions to drawing without prior approval.

TOLERANCES: (unless otherwise stated) Decimal .XX = - .030 .XX = - .010 .XXX = - .005 Angular - 1 deg. Do Not Scale Drawing.	 3661 HORSEBLOCK RD. MEDFORD, NY 11763		
	Control Drawing for Entity Concept Approved Installation of Xentaur XTR-series Dewpoint Sensor connected to Associated Apparatus, in Hazardous (Classified) Locations		
Material & Finish: (see Notes)	SIZE A	Dwg. No. XDT.00.D.6001	Rev 3
Drawn: B.B.	Scale: N/A	Date: 3/5/98	Sheet 1 of 1