

HAZARDOUS AREA

Sensor element in: IS Class I, Division 1, Group A,B,C & D;
Class II Division 1 Group E,F & G.T6 at 60°C and
EEx ia II A,B,C T6

Associated apparatus: IS Class I, Division 1, Group B,C & D;
Class II Division 1 Group E,F & G.T6 at 50°C and
EEx d IIB+H2 T6

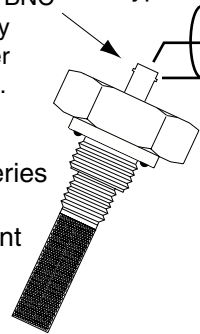
Revisions			
Rev	Description	Date	Approved
1	updated notes	5/6/98	BB
2	added MTL755ac	11/18/98	BB
3	CENELEC exp bx	2/3/99	BB
4	added 9001zen.	6/30/99	BB
5	Grp A outputs	3/10/00	BB

Intrinsically Safe (Simple) Apparatus

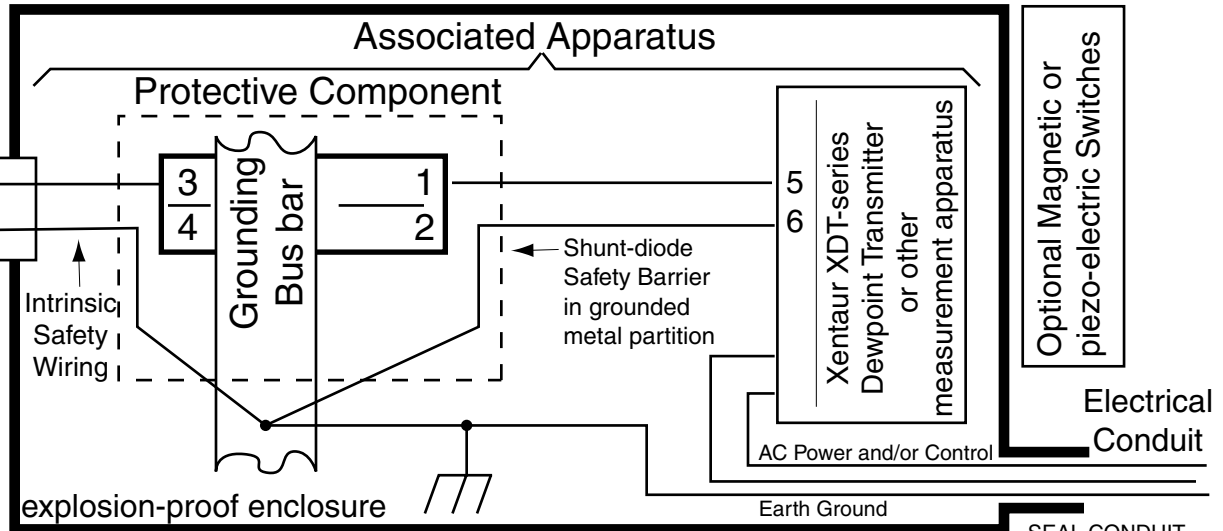
Female BNC Connector on Sensor Fitting, Cable must have a Male BNC Connector. Polarity back to Transmitter must be observed.

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

Xentaur XTR-series Dewpoint Sensor Element



Explosion-Proof and Dust-Tight Sealing Fitting. Connectorized with Female BNC. Threaded for conduit connection if necessary. **FACTORY SEALED CONDUIT SEAL NOT REQUIRED**



Notes:

- Intrinsically Safe (Simple) Apparatus Entity Parameters: $C_i \leq 0.3\mu F$ $L_i = 0mH$ Therefore: $V_{max} = ?? Vdc$ $I_{max} = ?? mA$
- Entity Concept field installation and wiring calculations: $C_a \geq C_i + C_{cable}$ $L_a \geq L_i + L_{cable}$ $V_{max} \geq V_{oc}$ or V_t $I_{max} \geq I_{sc}$ or I_t
- Hazardous (Classified) Location Use: Associated apparatus IS Class I Division 1 Groups B,C & D; Class II Group E,F and G, T6 at 50°C and EEx d IIB+H2 T6 provides intrinsically safe outputs for use in IS Class I Division 1 Groups A,B,C & D; Class II Group E,F and 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® (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, and is certified Explosion-Proof and Dust-Tight e.g. Adalet XJT BGC (XJT GCX for CENELEC EEx d IIB+H2) or O-Z/Gedney GUBSW-664A.
- Associated apparatus protective component may be any one of the following protective barriers, or any other approved device with parameters meeting the requirements (calculations) of note B.:

MTL 755ac, or MTL 760ac, or R Stahl Inc. or R Stahl Inc.

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

- 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.
- Associated apparatus must not be powered, while the Explosion-Proof Enclosure cover is not tightly fastened.
- Evaluated under UL file # E204260. No revisions to drawing without prior approval.

TOLERANCES: (unless otherwise stated) Decimal .X = ± .030 .XX = ± .010 .XXX = ± .005 Angular ± 1 deg. Do Not Scale Drawing.	XENTAUR Corporation 3661 HORSEBLOCK RD. MEDFORD, NY 11763		
	Control Drawing for Approved Installation in Hazardous (Classified) Locations, of Xentaur XTR-series Dewpoint Sensor connected to Associated Apparatus with Protective Component in an Explosion Proof Enclosure		
Material & Finish: (see Notes)	SIZE A	Dwg. No. XDT.00.D.6002	Rev 5
Drawn: B.B.	Scale: N/A	Date: 3/11/98	Sheet 1 of 1