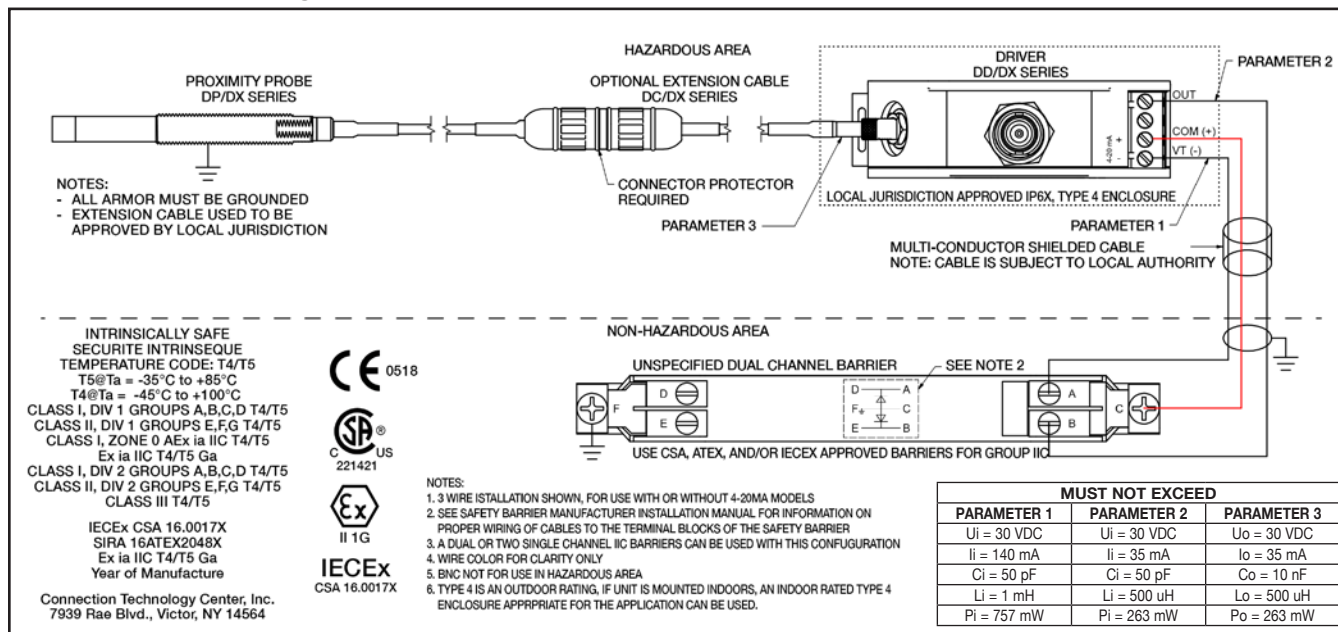


# CSA/ATEX/IECEX Control Drawing & Overview

## 3 Wire Control Drawing

## For DP, DC, DD & DX Proximity Probe Series



## Overview & Requirements




- A barrier is required for the installation of IS sensors, the barrier passes signals in either direction as required but limits the voltage and current that can reach the hazardous area under fault conditions. The barrier is put in series and is installed in a safe area. (See Control drawings)
- **Proper IS Barriers must be used with the proximity probe sensors to ensure compliance with entity parameters.**
  - IS151 and IS251 barriers are compatible with all proximity probe series sensors
  - Please contact a CTC Representative if you require assistance in specifying the correct barrier for CTC sensors
- Installation of connector protectors are required. The gold plated connectors need to be isolated.
- The 316L Stainless Steel probe body must be grounded to a grounded structure, ensuring metal to metal contact.
- IECEX, ATEX, and CSA are all international certificates for electrical equipment used in explosive atmospheres (Ex equipment) intended to facilitate global trade in electrical equipment for use in hazardous locations.
  - At present knowledge, the following countries accept either IECEX, ATEX, or CSA certifications and may be subject to change without notice: Australia, Brazil, Canada, China, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, India, Italy, Japan, Korea, Malaysia, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Singapore, Slovenia, South Africa, Sweden, Switzerland, Turkey, United Kingdom, and the USA
- Suitability of final installation is to be determined by the authority having jurisdiction.
- Driver must be installed in an IP6X, Type 4 enclosure.

## Entity Parameters

All Proximity Probe Sensors have the identical entity parameters for there IS/Hazardous Location installations. This information is used to specify the required barrier.

<b>Ui</b> = Maximum Input Voltage	<b>Uo</b> = Maximum Output Voltage
<b>Ii</b> = Maximum Allowable Current	<b>Io</b> = Maximum Output Current
<b>Ci</b> = Total Capacitance of Circuit Allowable	<b>Co</b> = Total Output Capacitance of Circuit Allowable
<b>Li</b> = Total Inductance of Circuit Allowable	<b>Lo</b> = Total Output Inductance of circuit Allowable
<b>Pi</b> = Total Power of Circuit Allowable	<b>Po</b> = Total Output Power of Circuit Allowable

## Regulatory Approvals

 <b>US &amp; Canada (CSA):</b>	<b>Class I Division 1 Groups A, B, C, D; Class II Division 1 Groups E, F, G; Class III; Class I Zone 0 AEx ia IIC T4/T5; Class I Division 2 Groups A, B, C, D; Class II Division 2 Groups E, F, G</b> Canada: Ex ia IIC T4/T5 Ga
 <b>ATEX:</b>	<b>SIRA 16ATEX2048X; Ex ia IIC T4/T5</b>
 <b>International (IECEX):</b>	<b>IECEX CSA 16.0017X; Ex ia IIC T4/T5</b>
<b>Temperature Codes:</b>	<b>T4, ambient temperature range -45°C to 100°C;</b> <b>T5, ambient temperature range -35°C to 85°C</b>



PROTECTION & RELIABILITY INSTRUMENTS

**Lifetime Warranty on Materials & Workmanship**