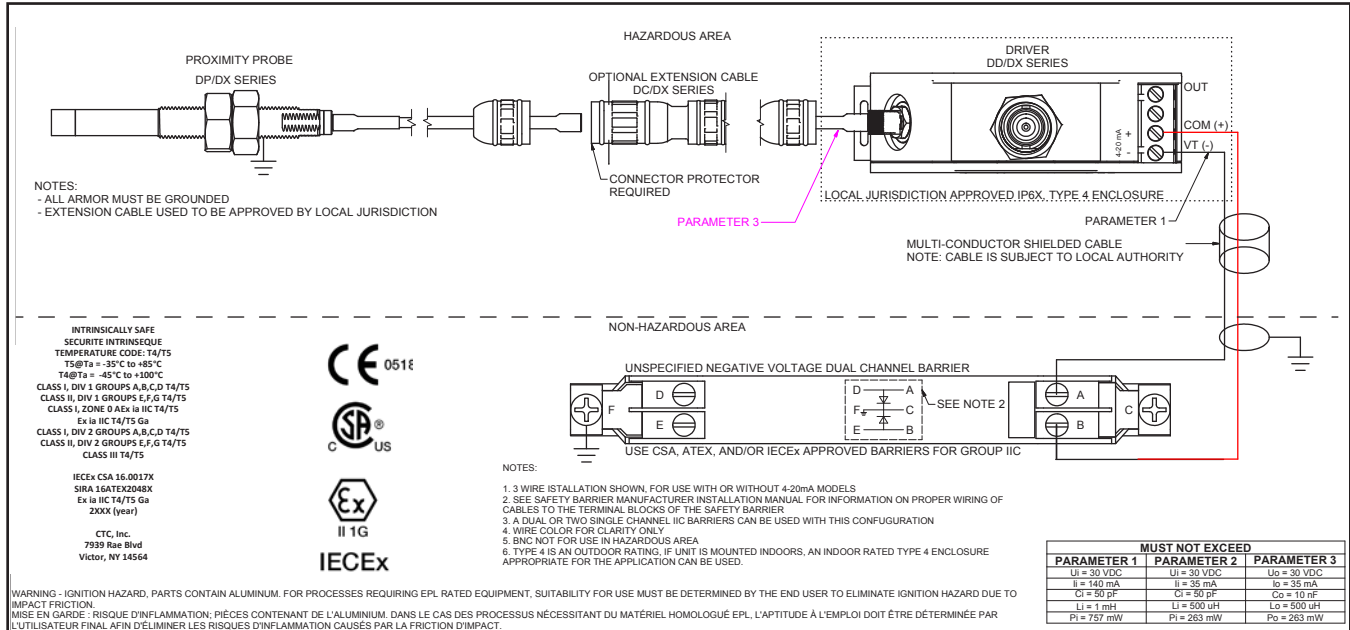




# CSA/ATEX/IECEX Control Drawing & Overview

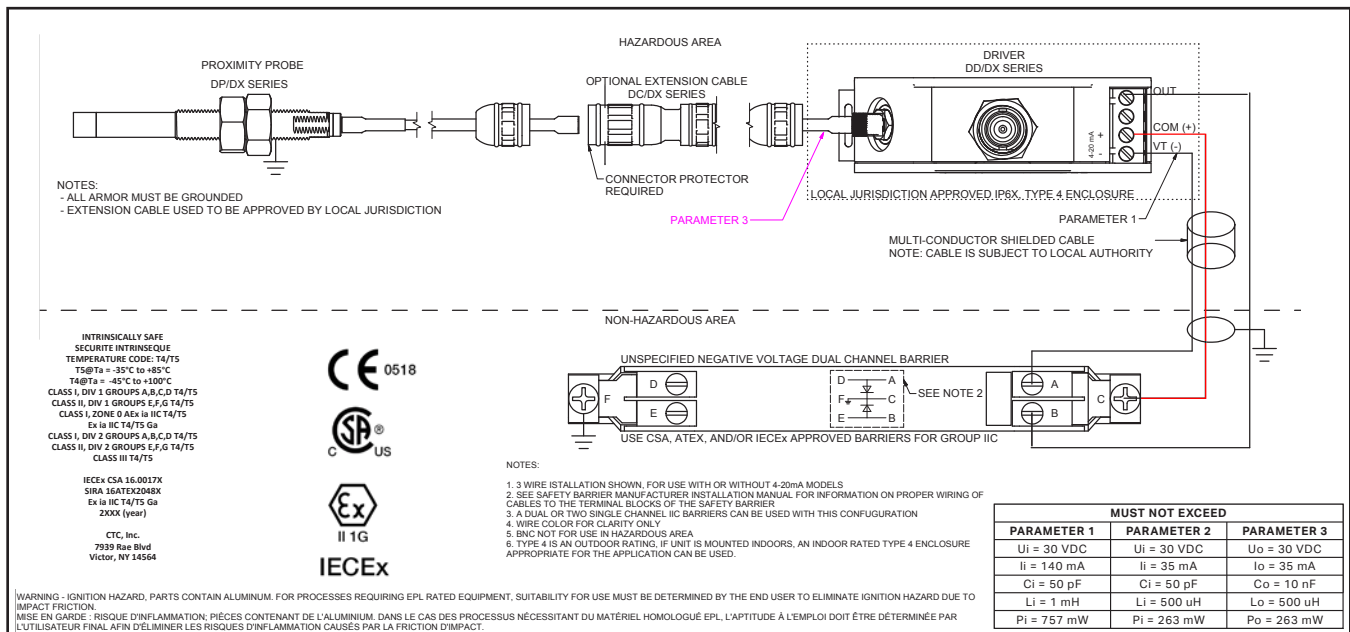
For DP, DC, DD & DX Proximity Probe Series

## 2 Wire Control Drawing



\*for reading 4-20 mA outputs only

## 3 Wire Control Drawing

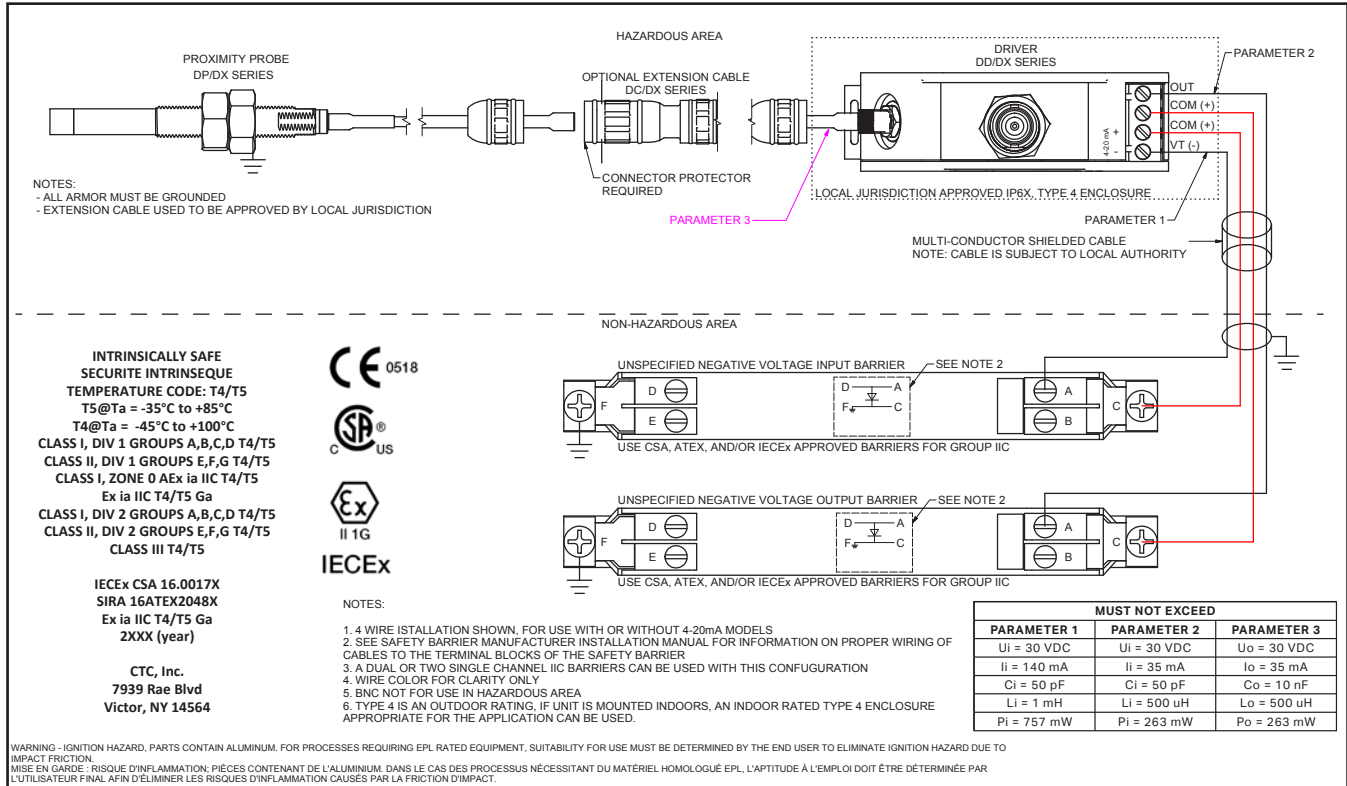


\*for reading voltage outputs only

# CSA/ATEX/IECEX Control Drawing & Overview

For DP, DC, DD & DX Proximity Probe Series

## 4-Wire Control Drawing



\*for reading 4-20 mA and voltage outputs

## Overview & Requirements



- A barrier is required for the installation of IS sensors, the barrier passes signals in either direction as needed but limits the voltage and current that can reach the hazardous area under fault conditions. The barrier is put in series and 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 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: 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. This list may be subject to change without notice.
- Suitability of final installation is to be determined by the authority having jurisdiction.
- The driver must be installed in an IP6X or Type 4 enclosure

## Entity Parameters

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

Ui	= maximum input voltage	Uo	= Maximum Output Voltage
Ii	= Maximum Allowable Current	Io	= Maximum Output Current
Ci	= Total Capacitance of Circuit Allowable	Co	= Total Output Capacitance of Circuit Allowable
Li	= Total Inductance of Circuit Allowable	Lo	= Total Output Inductance of Circuit Allowable
Pi	= Total Power of Circuit Allowable	Po	= Total Output Power of Circuit Allowable

## Regulatory Approvals

	US & Canada (CSA):	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, Canada: Ex ia IIC T4/T5 Ga
	ATEX:	SIRA 16ATEX2048X; Ex ia IIC T4/T5
IECEX	International (IECEX):	IECEX CSA 16.0017X; Ex ia IIC T4/T5
	Temperature Codes:	T4, ambient temperature range -45 °C to 100 °C T5, ambient temperature range -35 °C to 85 °C