

November 2021

# Spence™ Digital Cycle Counter

## Introduction

This installation sheet covers the installation of Digital Cycle Counter on a Condensate Commander Pump.

## Specifications

### Maximum System Pressure

250 psi / 17.2 bar

### Maximum Proof Pressure

500 psi / 34.5 bar

### Maximum System/Proof Pressure in Steam Service:

125 psi / 8.62 bar (saturated steam when used with a pigtail).

### Ambient Temperature Range:

32 to 122°F / 0 to 50°C)

### Dimensions:

7-3/4 in. H x 4-3/4 in W x 2-1/2 in D /  
197 mm H x 121 mm W x 63.5 mm D

## Installation



### WARNING

Personal injury, property damage, equipment damage or leakage due to escaping steam or bursting of pressure containing parts may result if this counter is over pressured or is installed where service conditions could exceed the limits given in the specifications or where conditions exceed any ratings of the adjacent piping or piping connections. To avoid such injury or damage, provide pressure-relieving or pressure-limiting devices (as required by the appropriate code, regulation or standard) to prevent service conditions from exceeding those limits.

## Note

**The Condensate Commander Cycle Counter does not contain user serviceable parts. Violating any part of the enclosure voids any warranty or claim for repair or service.**

**The pigtail should be charged with water before installing**

- When installing a Cycle Counter on a Condensate Commander pump, using steam as the motive force, mount it vertically with an instrument pigtail between the counter and the pump (included).
- Vertical mounting allows condensate to accumulate in the dead-ended pressure line and to be cooled in the pigtail which acts as a temperature buffer between the cycle counter and the steam.
- It is also good practice to install an isolation valve (included) between the counter and the service connection to the Condensate Commander.
- Digital Cycle Counters are built to respond to a 5 psi / 0.34 bar positive pressure increase in the pump body during the pumping cycle, with the pump body vented to atmosphere during the filling cycle.
- The combined lift and backpressure must exceed 5 psi / 0.34 bar and, the motive pressure must exceed 5 psi / 0.34 bar to ensure that the pressure in the pump builds to at least 5 psi / 0.34 bar during the discharge cycle.
- Consult factory on closed loop applications.

# Digital Cycle Counter

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