

CYCLONE

METER LUBRICATION SYSTEM

One of the difficulties in maintaining turbine meters in the field is that they require lubricant for the unrestricted movement of the turbine and measurement accuracy.

Maintaining the lubricity in meters is a problem that has existed for a very long time. Today, at YZ Systems, we have the solution in the Cyclone—Meter Lubrication System 4400.

Capable of accepting pulses directly from a meter, index pulser, electronic corrector, or flow computer, the Cyclone can operate in Proportional-to-flow or time-based injection modes. Further refinement of the time based mode adds the capability of control from the YZ DPS-2—Differential Pressure Switch allowing lubricant injection only when flow occurs in the pipeline.



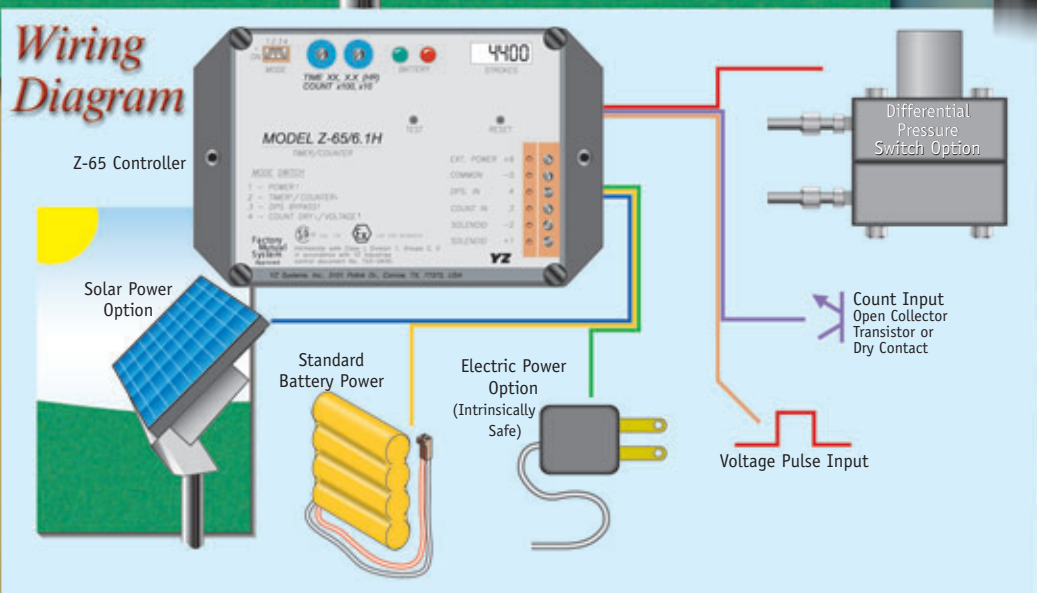
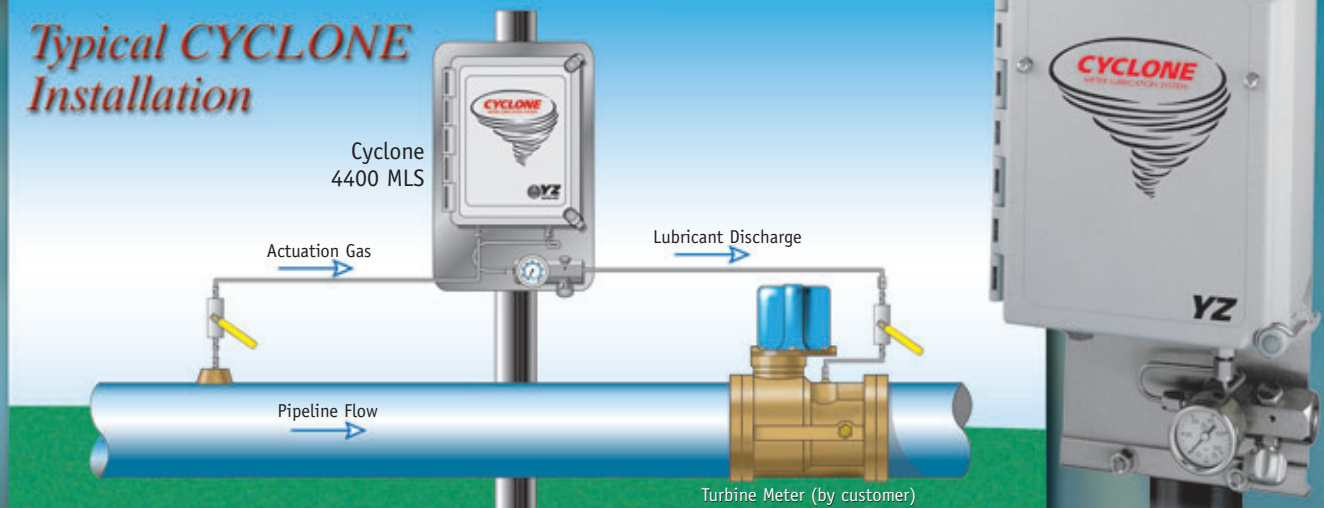
CYCLONE features the C44 injection pump.

Key Features

- Provides Systematic Lubrication to the meter for improved measurement accuracy and durability
- Versatile electronic controller for time-based, time & flow based, and proportional-to-flow operation
- Durable fiberglass reinforced polyester enclosure to protect from the elements
- Flexible dry contact or voltage pulse flow input
- On-Board LCD stroke & LED battery indicator
- Adjustable Filter/Regulator provides actuation gas
- On-board 6 oz. oil reservoir
- Long life potted electronics
- Intrinsically Safe for Class I, Div. I, Group C, D; FM approved, and CSA & Cenelec Certified
- Convenient termination block for pulse and differential pressure switch input



Typical CYCLONE Installation



Specifications

Controller

Power Supply:Lithium battery pack
 Battery Reserve:2 years (1 stroke/hr)
 Timer Accuracy:< ± 0.01%, deviation from absolute
 Display:LCD, indicating total injections (resettable)

Flow Input:

Continuous:20 Hz
 Minimum Pulse Width:20 ms
 Pulse Type:Digital, 5 — 24VDC Dry, Contact Closure

Operating Mode

Timer Mode, Continuous:1 to 99 hours (incrementally adjustable)
 .1 to 9.9 hours in .1 hour (6 minutes) increments
 Timer Mode, Intermittent:Allows control from the YZ DPS-2 to inject proportion to time during periods of flow.
 1 to 99 hours (incrementally adjustable)
 Proportional-to-Flow Mode:10 to 9900 pulses per injection (incrementally adjustable)

Injection Pump

Operating Pressure:15 - 1500 psi.
 Actuation Pressure:15 - 55 psi.
 Displacement:0.140 cc (fixed)
 Operating System Temperature: -30°F — +140°F
 -34°C — +60°C

Oil Reservoir

Material:Polycarbonate & Anodized Aluminum
 Capacity:6 oz. (1250 injections)
 Compatible Lubricants:Chemlube, Anderol, 5w or equivalent

