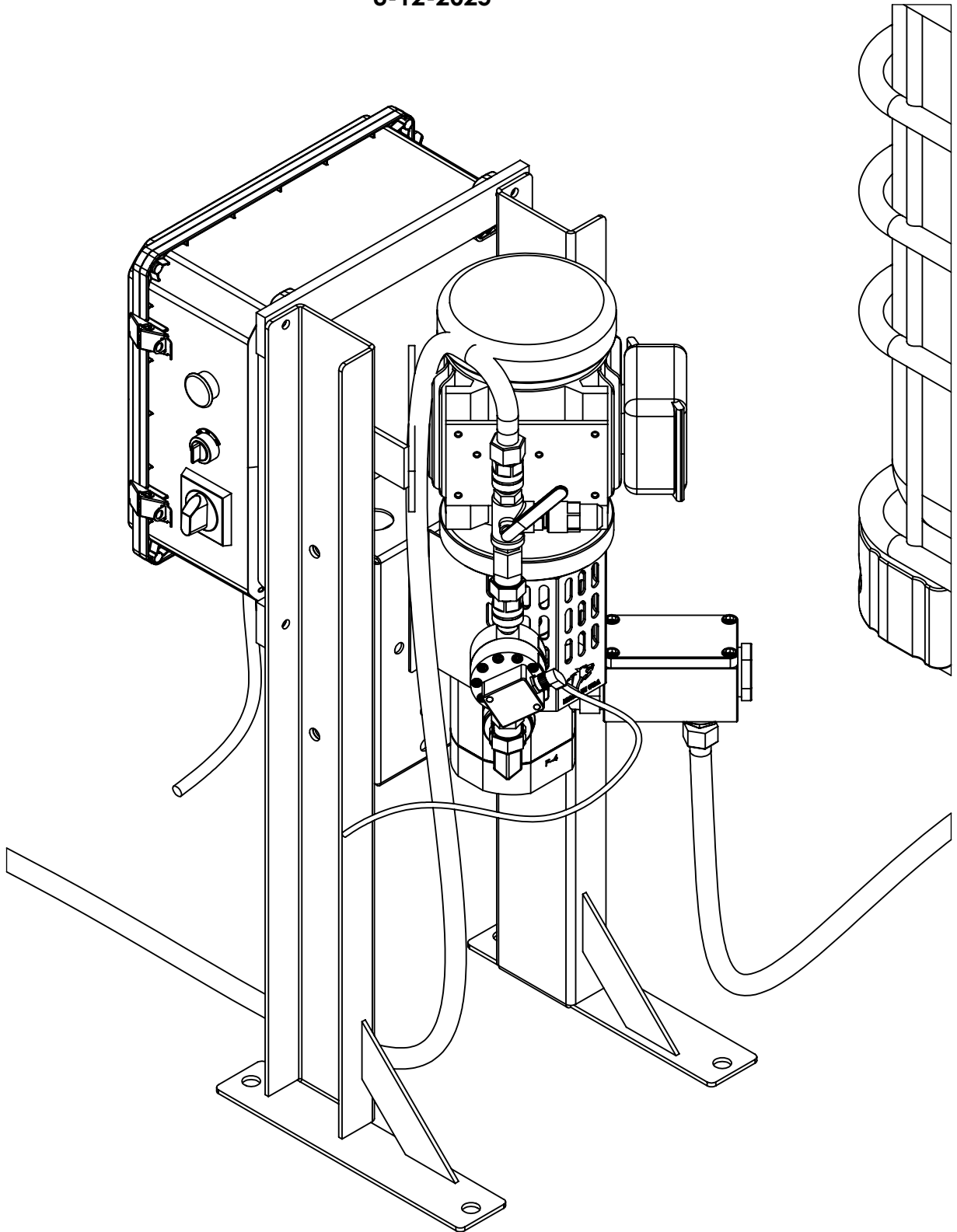


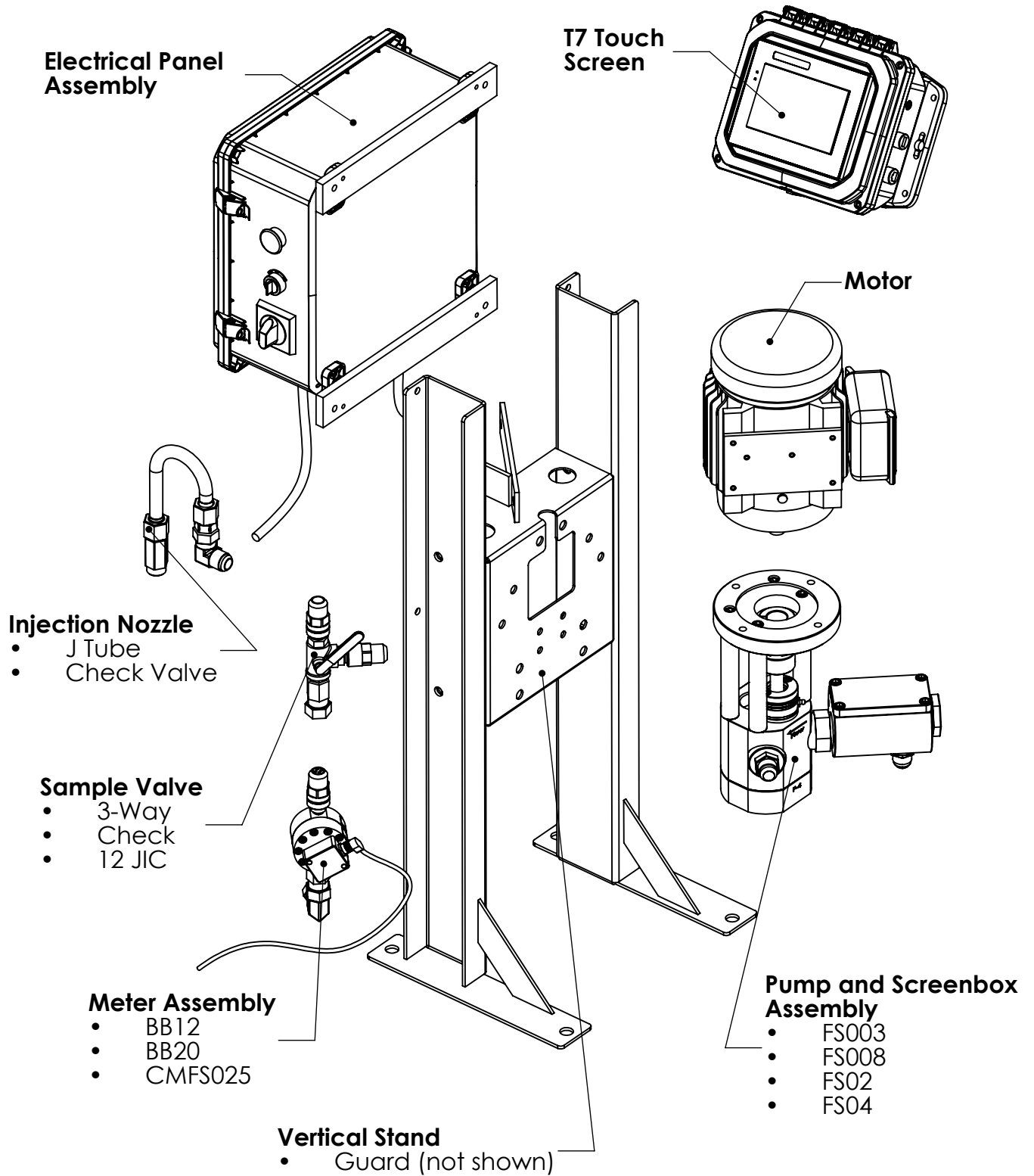
BearCat Pumps

Additive Pump Manual

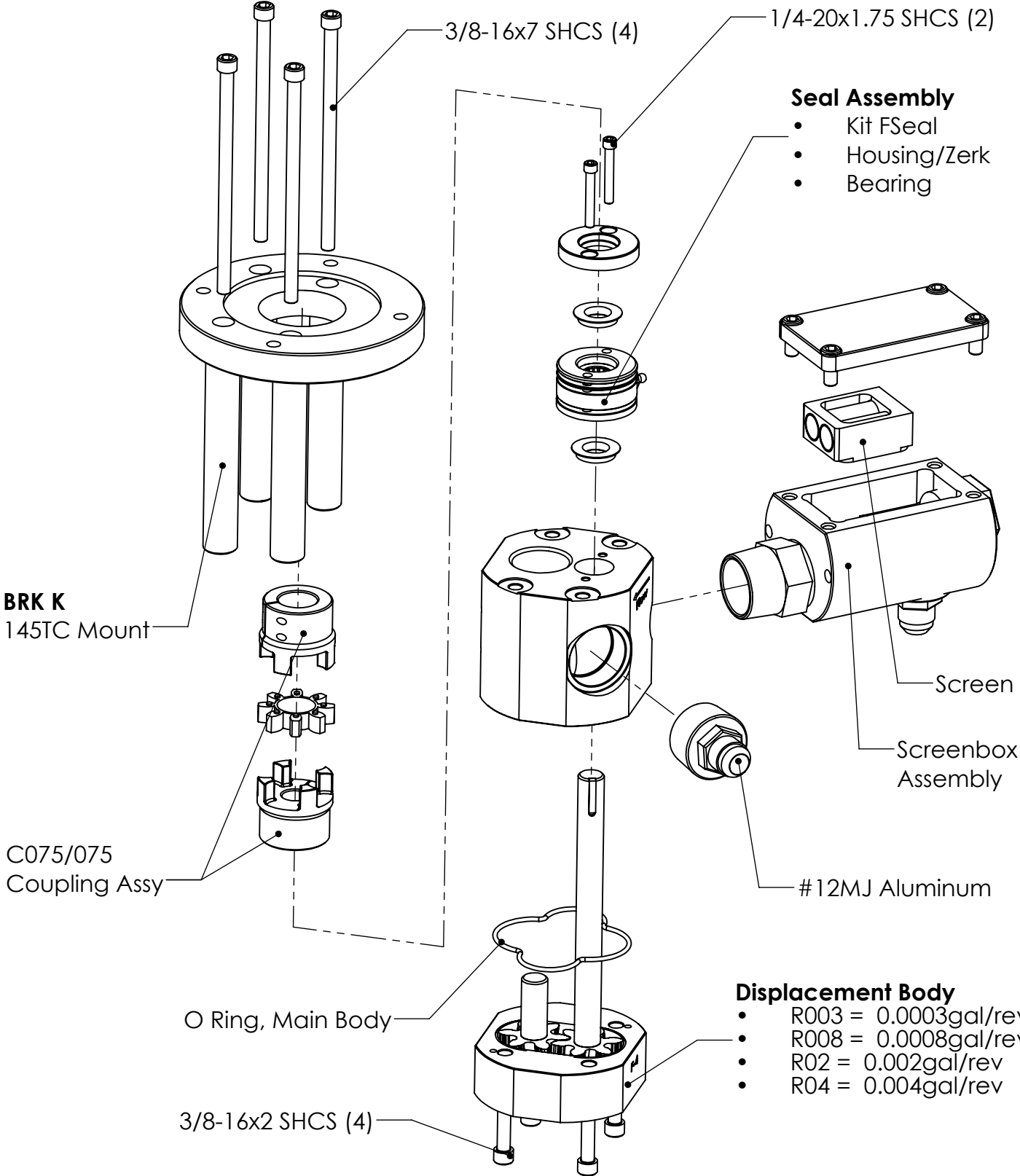
3-12-2025



System Components



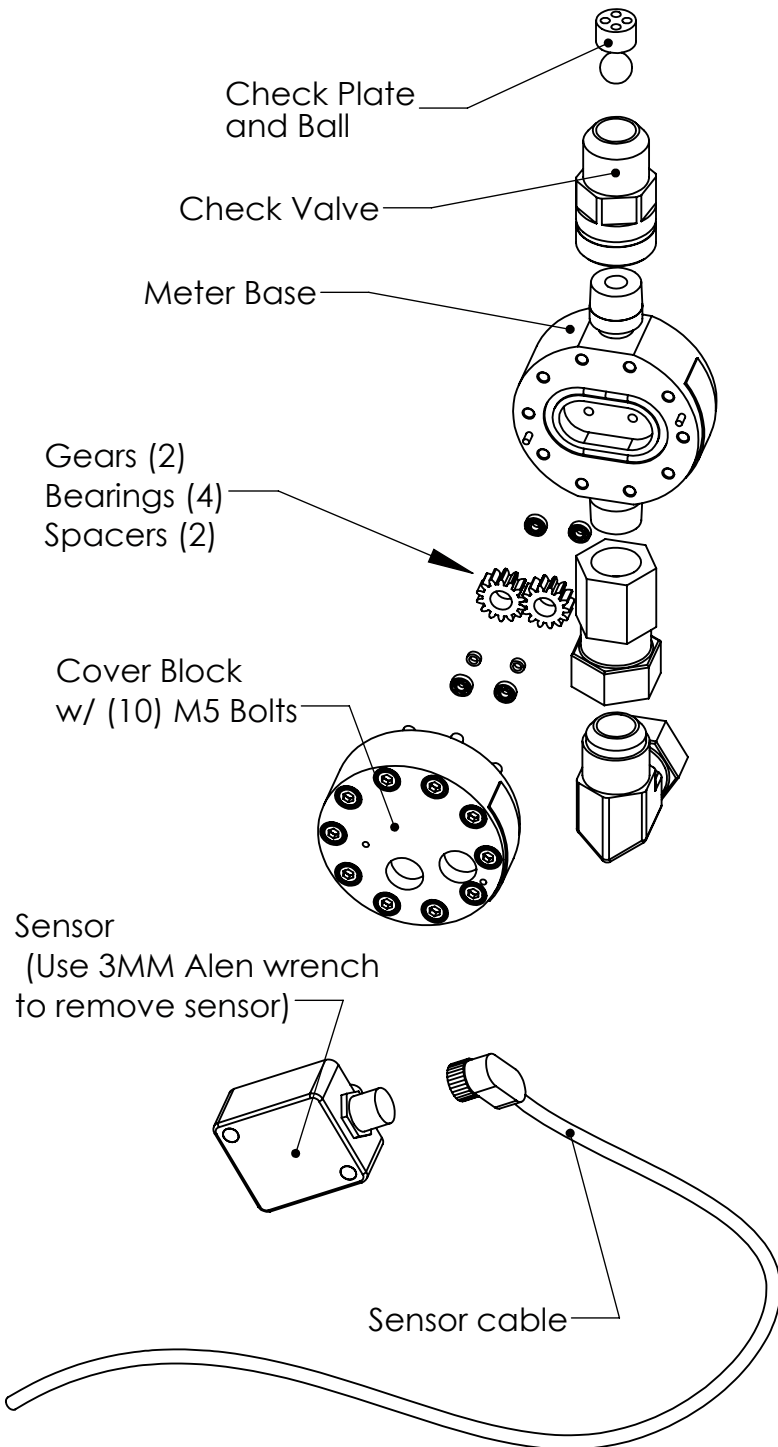
Pump Assembly



Meter Assembly

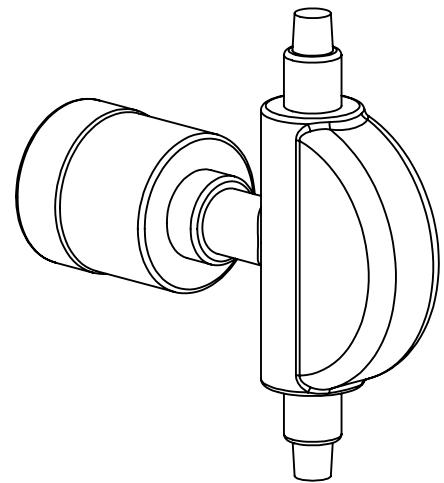
Meter Assembly

- BB12 (.005-.8gpm)
- BB20 (.02-2.0gpm)
- BB30(.1-7gpm)



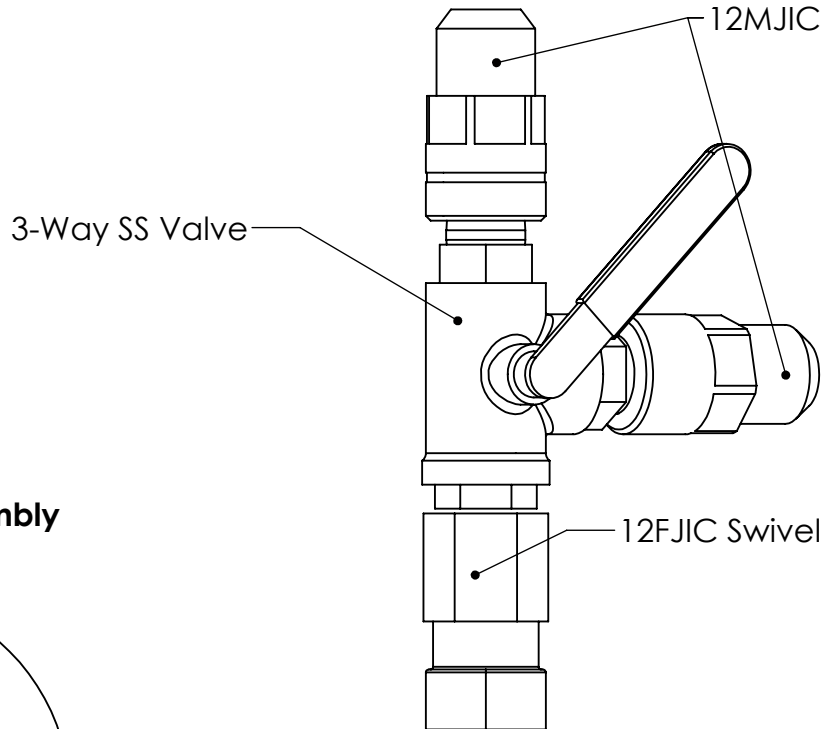
Coriolis Options

- CMFS025

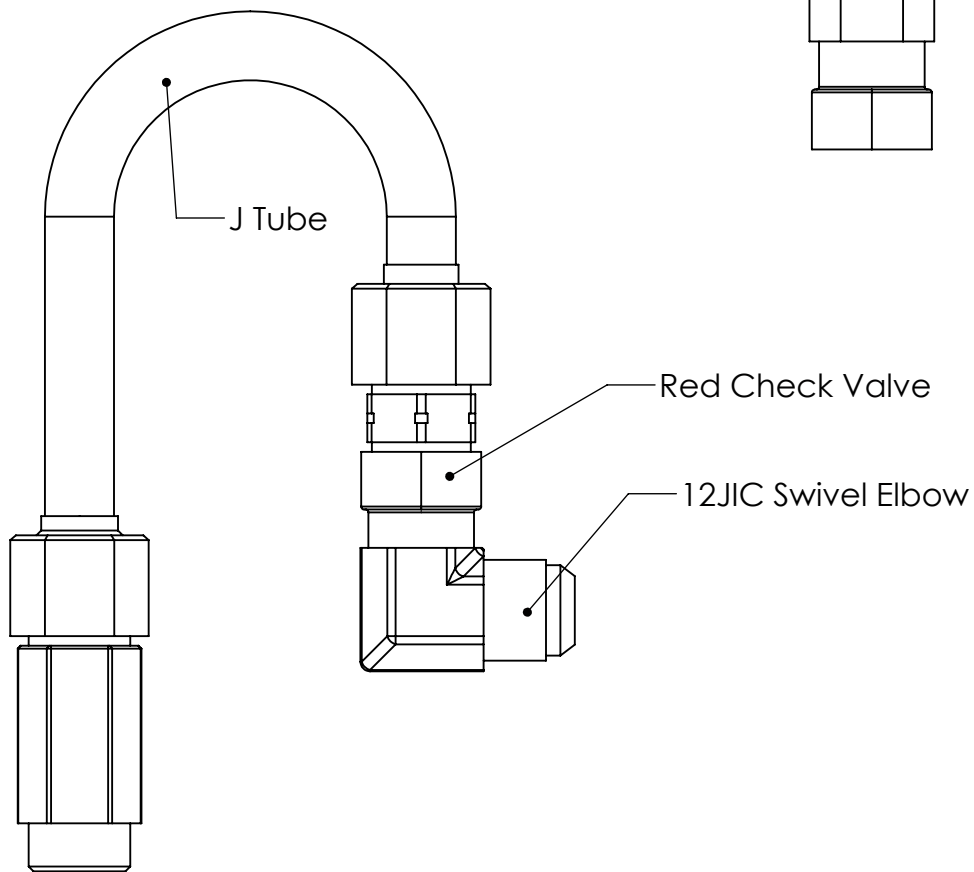


Accessories

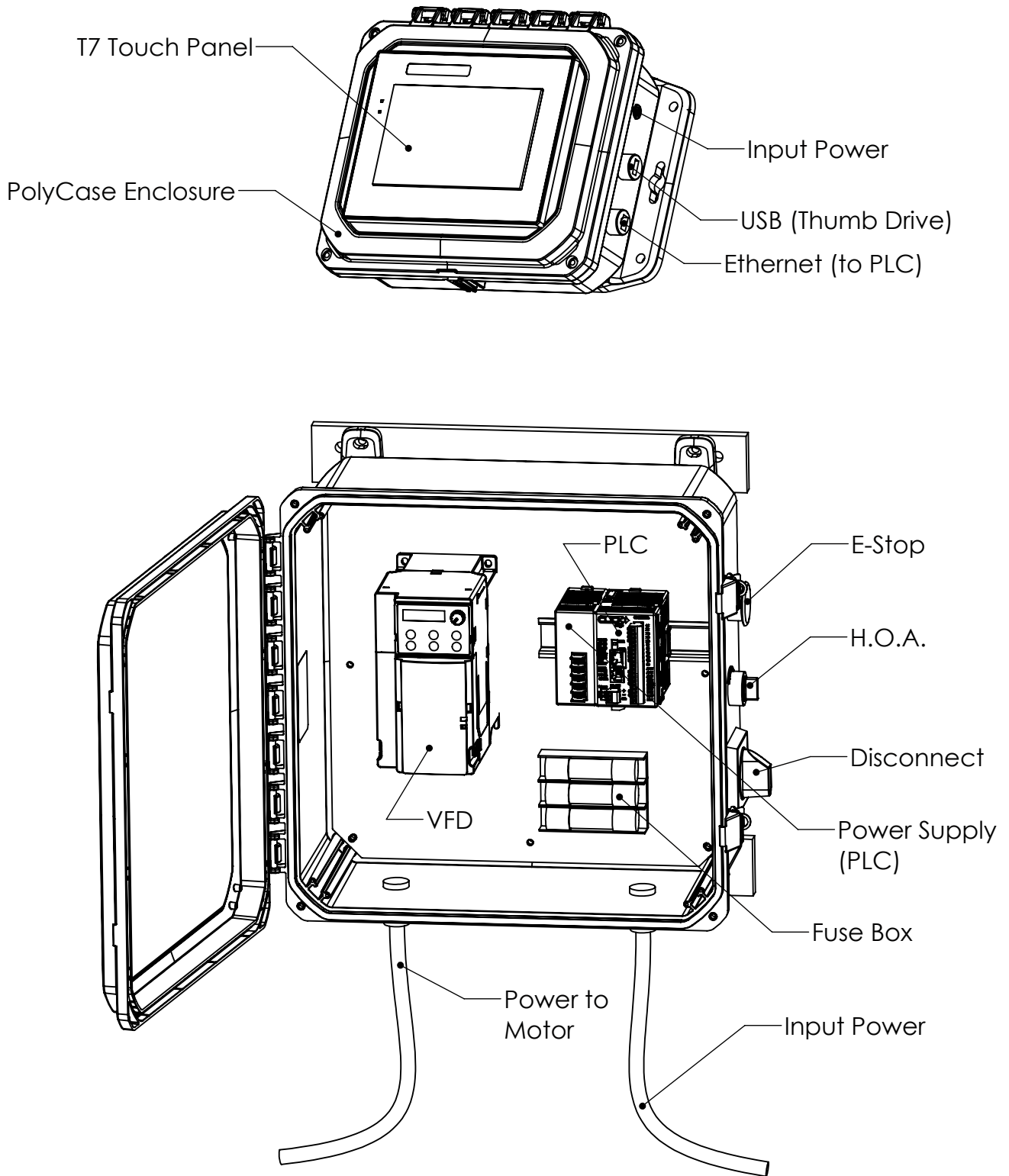
Sample Valve Assembly



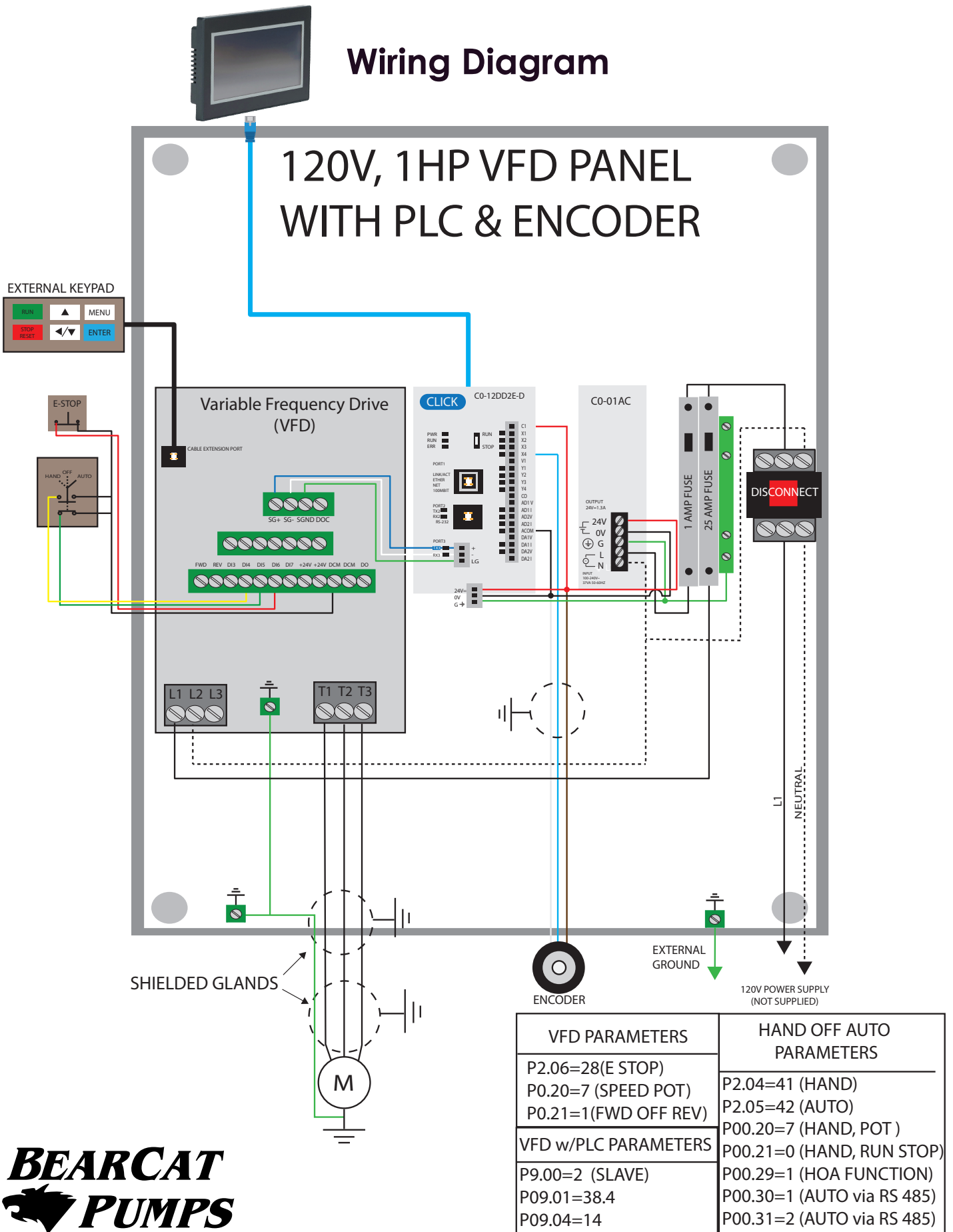
Injection Nozzle Assembly



Electrical Panel



Wiring Diagram



Building a Model Number

FS003 - B12SS - V - S - T7 - A - S

Shaft Plate

- FS = Steel
- FA = Aluminum
- RS = Rebuild, Steel

Displacement

- 003 = 0.003 Gal/Rev
- 008 = 0.008 Gal/Rev
- 02 = 0.02 Gal/Rev
- 04 = 0.04 Gal/Rev

Meter Assembly

- B12SS = PD, 0.005-0.8 GPM
- B20SS = PD, 0.02-2.0 GPM
- B30SS = PD, 0.1-7.0 GPM
- CMFS025 = MM Coriolis
- Z = No Meter

Mount Type

- M = Beam Mount
- V = Vertical Stand
- Z = No Mount

Panel (1HP VFD, 120V-1ph, E-STOP, HOA)

- P = Poly 14x14x8
- S = Steel 15x14x8
- Z = No Panel

HMI

- T4 = 4in Touch Screen (No Case)
- T7 = 7in Touch Screen, Data Logging, Polycase
- Z = No HMI

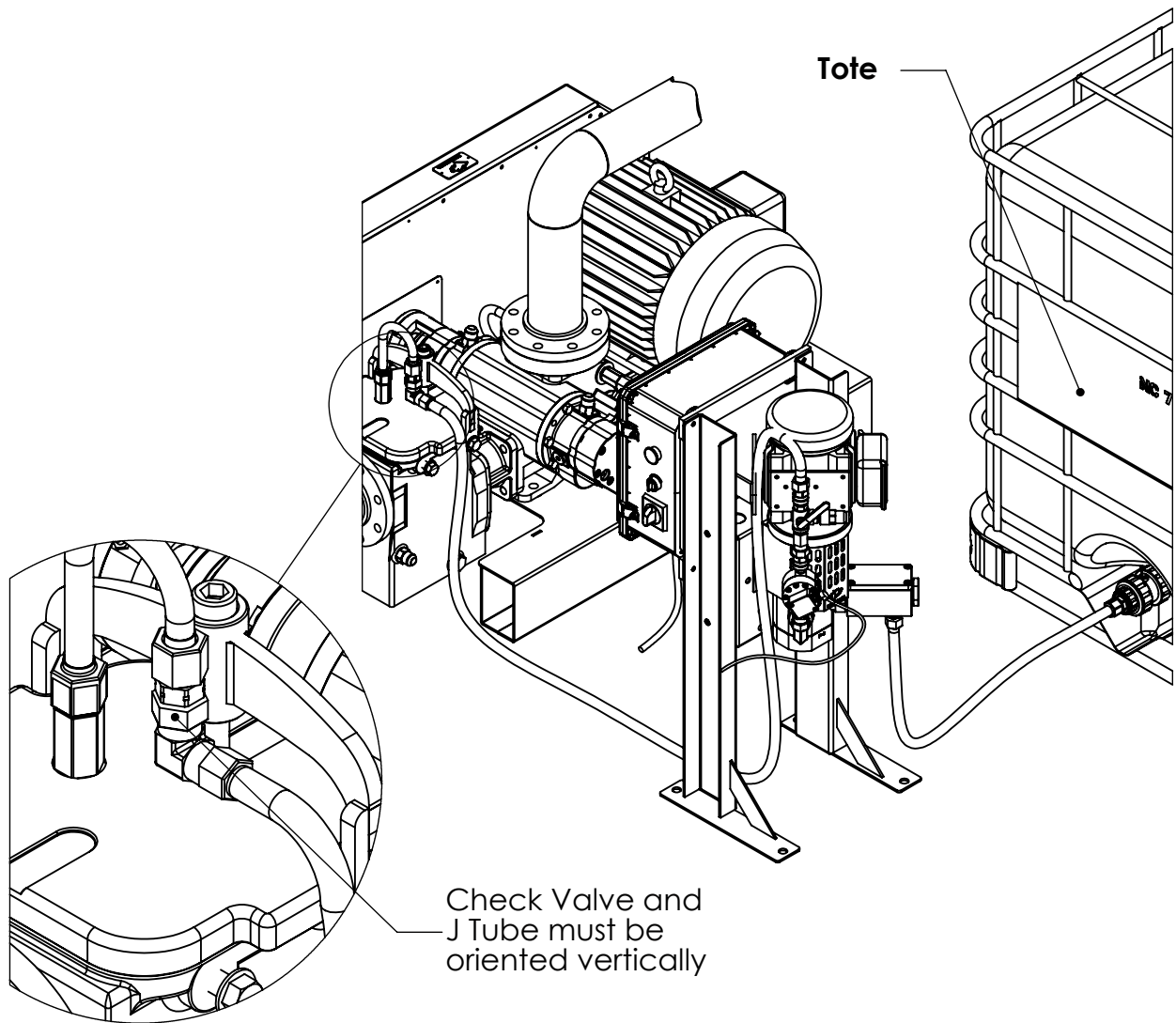
PLC

- A = PLC w/ 4/2-mA I/O
- Z = No PLC

Option Items (one or more)

- I = Injection Assembly
- S = Sample Valve Assembly
- Z = NA

System Set-up



Injection: The lid of the screen box is an optimal location for injection. This area is typically free of asphalt, making it a convenient and accessible point for the process.

Tote Placement: Position the tote in a readily accessible location to facilitate easy replacement or maintenance.

Hose: Utilize stainless steel hoses with JIC swivel ends. This design simplifies field installation and streamlines the flushing process during seasonal shutdowns.

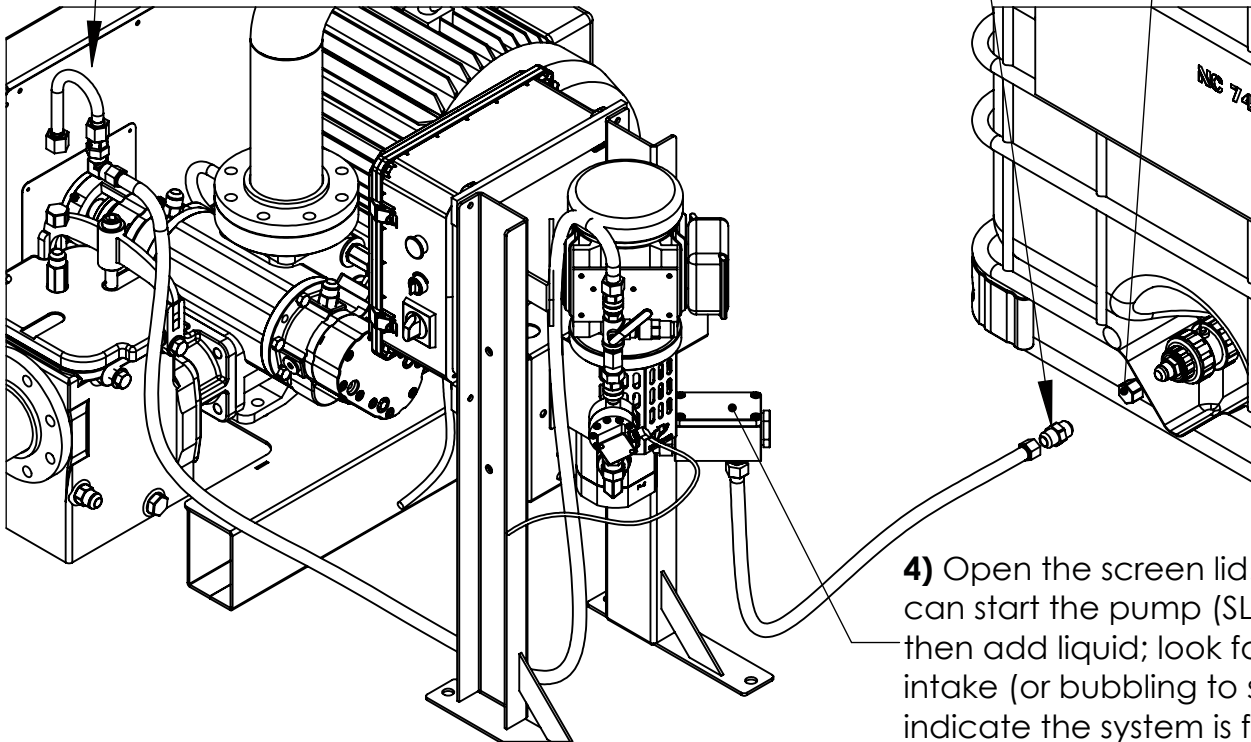
Pump Positioning: Ensure control wiring (Ethernet or signal cables) does not exceed a maximum distance of 300 feet.

Flushing Procedure

1) Turn the Tote valve OFF. Disconnect the hose and drain. Cap the Tote opening.

2) Disconnect J-Tube at the injection port and drain the hose. Cap the opening of the injection port.

3) Use a JIC coupler to connect the ends together from the previous steps.



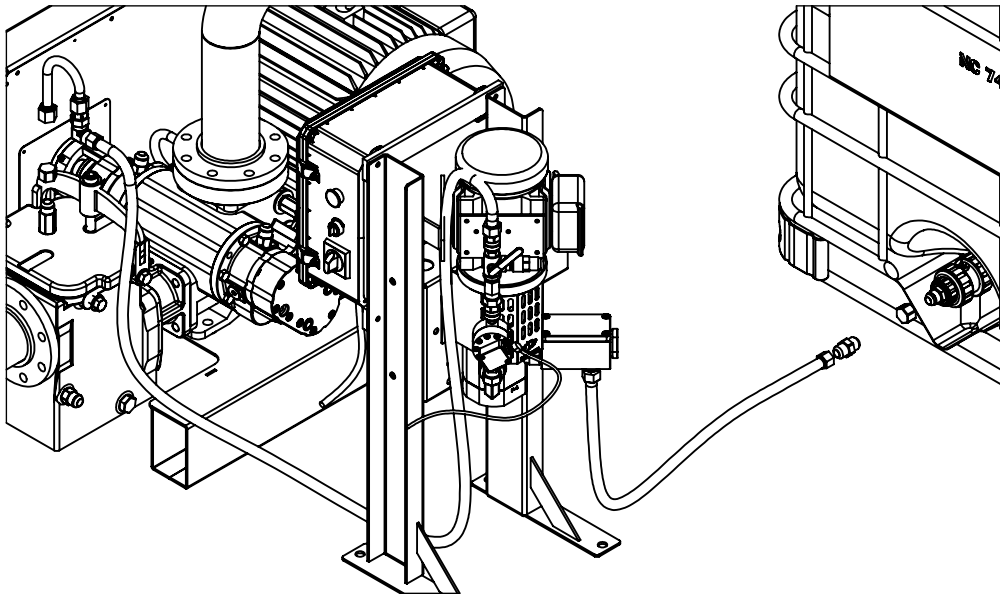
4) Open the screen lid. You can start the pump (SLOWLY) then add liquid; look for rising intake (or bubbling to stop) to indicate the system is full

5) To flush the system, close the lid and run the pump at a moderate rate (5-10min)

Note: WD-40 is effective for flushing most anti-strips but use cautiously as it may not suit all cases.

Order Questionnaire

1. Contact (Name, Phone) : _____
2. Jobsite Address : _____
3. System Type (circle one);
 - Tank Dosing (Terminal)
 - Batch Plant
 - Drum Plant (continuous mix)
4. Additive Type : _____
5. System Voltage;
 - 110V - 1 ph (Standard)
 - Other (ex, 480-3ph): _____
6. Hoses; Tote to Pump: _____ Pump to Injection: _____
7. Flow (Lbs/Min), Min: _____ Max: _____
8. Signal Type (circle if needed);
 - **FROM** Plant; **4/20mA**(standard) or **0-10VDC** or **Pulse**
 - **TO** Plant; **4/20mA** (standard) or **0-10VDC** or **Pulse**



9. System Description: Please describe the system in the best way you can;

Acknowledgement Letter

To ensure a smooth installation of your liquid additive pump system, please review and complete the attached questionnaire before our technicians arrive.

Our team is highly trained in the system's operation, control signals, and hose requirements. However, since each plant has a unique setup, it is essential that you gather site-specific details in advance. We also recommend having a qualified electrician and plant operator available during installation to address any facility-specific requirements.

Additionally, regulations vary by location. While we are knowledgeable about general industry standards, compliance with local codes remains your responsibility.

By signing below, you acknowledge your responsibility to provide the necessary information, personnel, and regulatory compliance for a successful installation.

Signature: _____ Date: _____