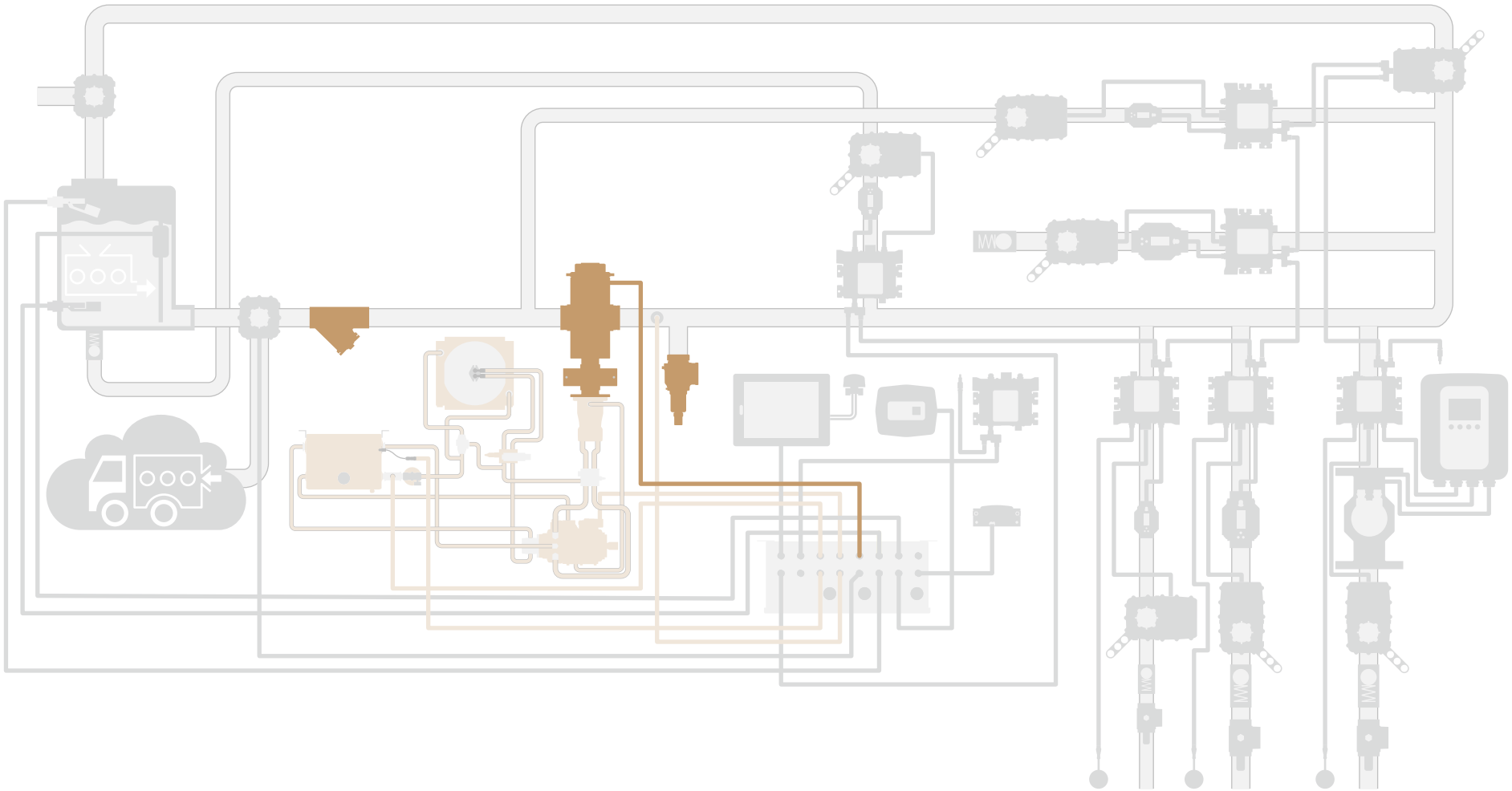
WATEROUS

Form Number: F-3054 Issue Date: Aug 7, 2024

AQUIS™ ULTRAFLOW 500 Foam Component Requirements

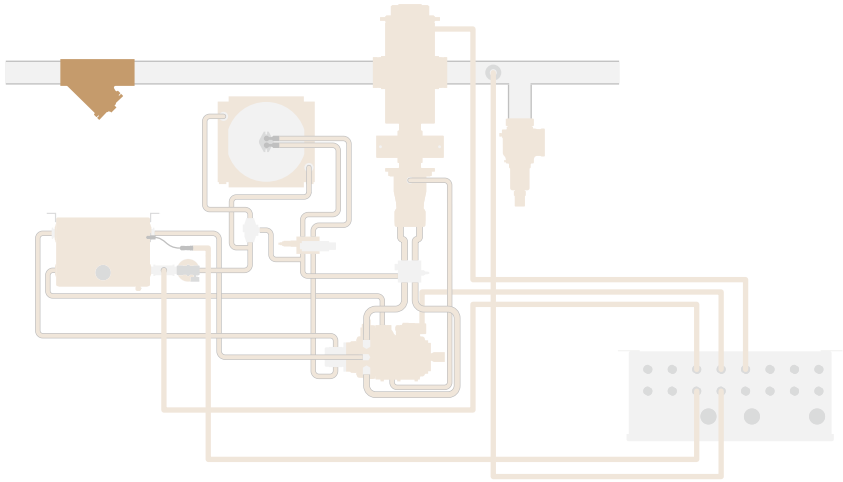


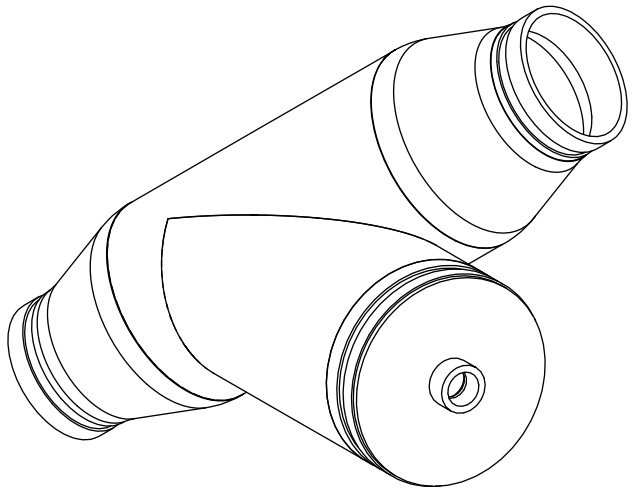
How To Use This Document

The Aquis UltraFlow industrial foam proportioner system supplies concentrate into a solution-capable discharge line. A Tellurus™ control panel, or human machine interface (HMI), shows system activity and provides control of the system using a CANbus protocol. Foam concentrate is sourced from an on-board supply tank or an auxiliary source. The concentrate pump distributes concentrate though the discharge line assembly (DLA) using hydraulic components. The concentrate is then measured, controlled, and introduced into the solution-capable discharge line to produce foam solution. Understand that your application will include all or portions of the components described.

If you source any foam concentrate components for your application outside of Waterous, use the information in this document to guide you in selecting substitute components. UltraFlow component compatibility concerns are outlined for each component that you can substitute. The example components referenced in this document are used in the 500 gpm UltraFlow system. Select appropriate components to achieve the required output for your application. Understand that the compatibility of the substitute components is the responsibility of the installer and is outside the purview of Waterous.

Wye Strainer Requirements

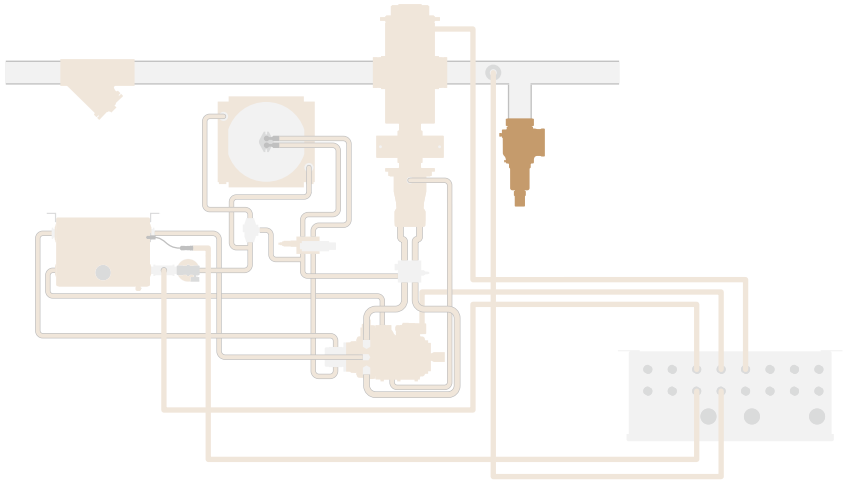


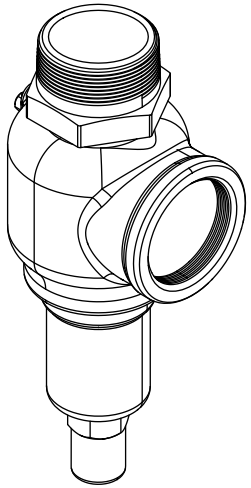


Use the following information to source a wye strainer compatible with the UltraFlow system.

- Use a strainer filter with a C_V factor of 570 or larger.
- Refer to *F-3044 AQUIS ULTRAFLOW 500 Hydraulics Installation and Operation* for installation instructions and placement within the UltraFlow system.

Pressure Relief Valve Requirement

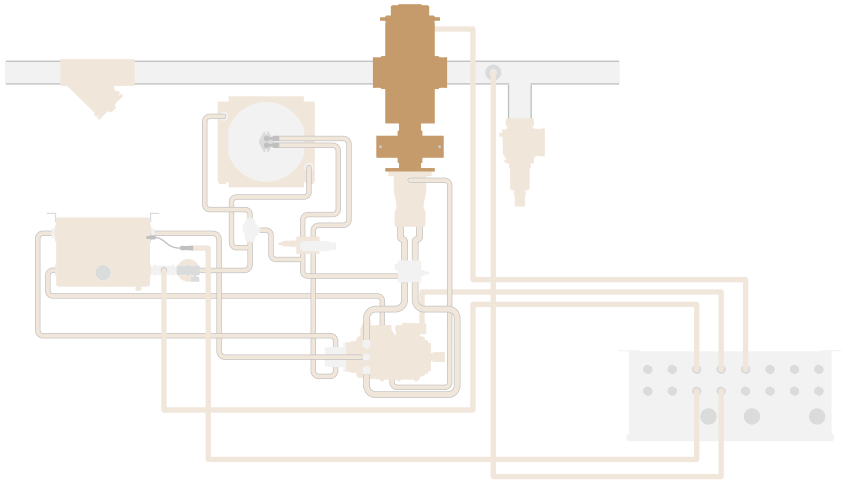


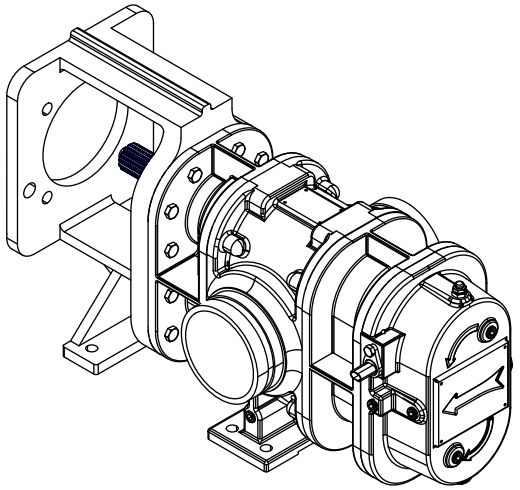


Use the following information to source a pressure relief valve compatible with the UltraFlow system.

- Make sure that your pressure relief valve opens at 300 psi or lower.
- The discharge output must be plumbed back to atmosphere on the low pressure side of the concentrate supply tank.
- Refer to *F-3044 AQUIS ULTRAFLOW 500 Hydraulics Installation and Operation* for installation instructions and placement within the UltraFlow system.

Concentrate Pump Requirements



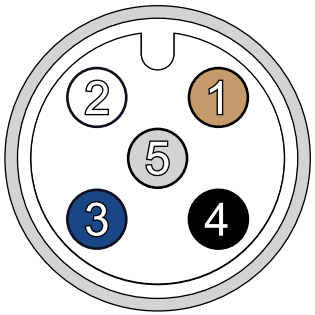


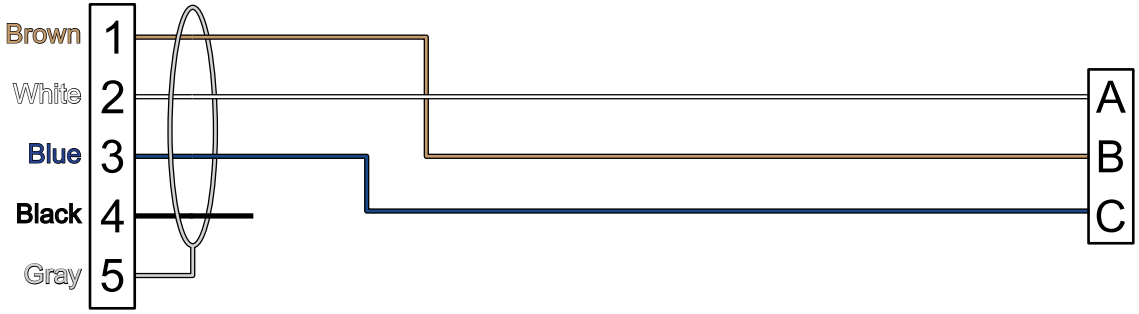
Use the following information to source a concentrate pump compatible with the UltraFlow system.

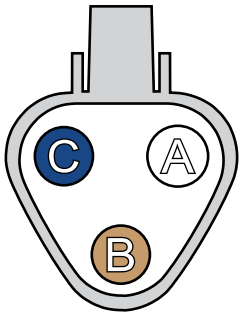
- Reference the Trident Emergency Products concentrate pump part number 31.022.0 (GP500H-T), 49.001.1 (Speed Sensor) used in the 500 gpm UltraFlow system, to compare the compatibility of your substitute concentrate pump.
- Make sure that the concentrate pump that you source is compatible with the communication protocols used by the UltraFlow system control box. Refer to **“Concentrate Pump Cable—Schematic” on page 6** for more information.
- To match the 500 gpm UltraFlow hydraulic motor, source a coupler compatible with an SAE-D spline, 1-3/4 inch, 13T external involute spline, 8/16 pitch.
- Refer to *F-3044 AQUIS ULTRAFLOW 500 Hydraulics Installation and Operation* for installation instructions and placement within the UltraFlow system.

Concentrate Pump Cable—Schematic

The most commonly used concentrate pump is compatible with the concentrate pump cable available from Waterous. Otherwise, use the information below to construct a cable to connect to the UltraFlow control box.

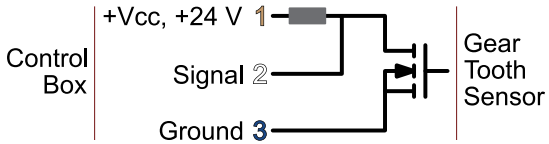






M12 Connector	
1	Vcc, +24 V
2	Signal
3	Ground
4	N/C
5	Shield

Phoenix Contact—1405879 or equivalent



Connector	
A	Signal
B	Vcc, +24 V
C	Ground

Shell—DT06-3S (1)

Wedge—W3S (1)

Sockets—match to counterpart or equivalents