



WATEROUS TOTAL INTEGRATION

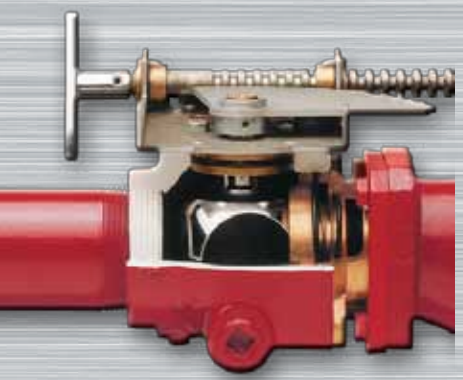
Waterous has you covered with *Total Integration* – a comprehensive program that ensures fire departments have everything needed from specification to implementation. *Total Integration* guarantees the right equipment, proper installation, thorough education and lifetime support with zero exceptions. **EVALUATE PROPOSE IMPLEMENT ORIENTATE SUPPORT**

WATEROUS

SINCE
1886

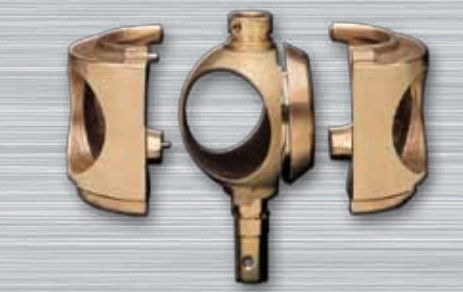
VEHICLE-MOUNTED TWO-STAGE CMU FIRE PUMP

Discharge Valve



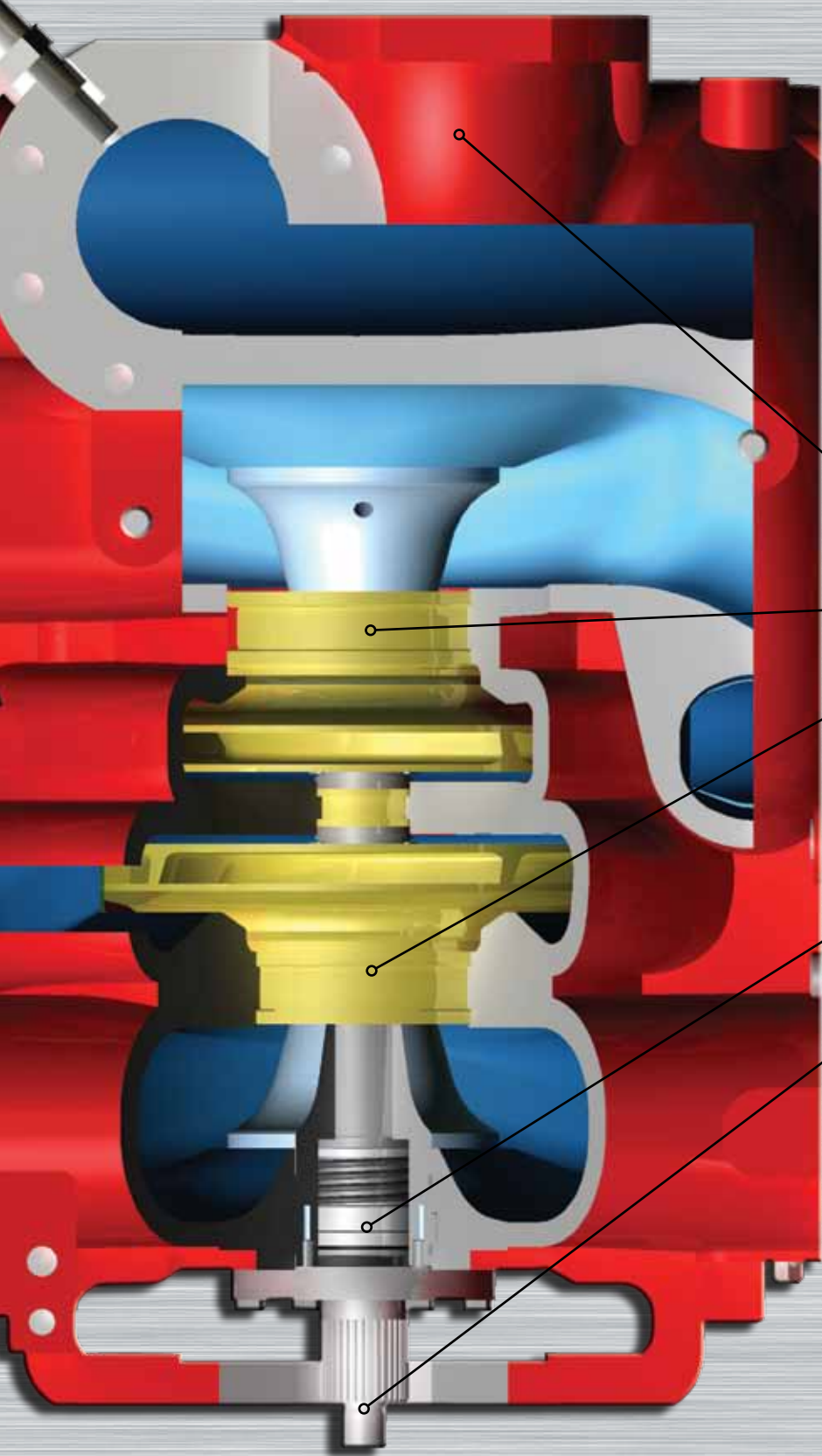
- Available in 2-1/2 inch standard, 2-1/2 inch full-flow, and 3-1/2 inch sizes
- Available with Rack-and-Sector push/pull controls, manual worm gear and electric actuators
- Worm gear and electric actuators comply with NFPA requirements for slow actuation
- All use chrome-plated bronze valve balls
- Lasts longer, resists scratching and scoring from sand and grit
- Spring-loaded floating seal assemblies
- Seals tight, no adjustments required

Ball-Type Transfer Valve



- Available with optional electric actuator
- Spring-loaded floating seal does not jam due to sand in the water

OVERHEAD



Tank-to-Pump Valve

- 3-1/2 inch full flow
- Chrome-plated bronze ball
- Spring-loaded floating seal assembly

Impeller Shaft Assembly

- Outboard ball bearing
- Labyrinth-type reverse flow wear rings
- Optional flame-plated impeller hubs (Standard on CMU, CSU)
 - Both reduce water bypass loss and result in longer life
- Optional mechanical shaft seals
 - No routine maintenance required
- Separable impeller shaft
 - Reduces downtime for repairs

Priming Systems

- VPO oil-free primer
- Fast, dependable priming
- Electrically driven
- Operates independently from the pump
- Lubrication option (requires priming tank)
- Vacuum-activated priming valve

Pneumatic Shift

- Spring-loaded locking control prevents accidental movement
- Dual-action cylinder stays in position in case of air loss



CONTROL PANEL

OPTIONAL PROTECTION

Overheat Protection Manager (OPM)

- Opens when water inside the pump reaches 140° F (60° C)
- Flashing warning light on pump panel is triggered when water reaches 180° F (82° C)
- Water is released to ground

Zinc Anode

- Optional corrosion protection
- Fits any unused intake pad or pipe tap in the intake fittings

Zinc Intake Screen

- Replaceable corrosion protection

Discharge Relief Valve

- ON - OFF valve
- Indicating lights
- Panel-mounted strainer



CONTROL PANEL

C20 Transmission

- High-strength aluminum construction
- "Silent" Morse HV drive chain
- Smoother transfer of power
- 16,000 lb./ft. torque rating

CAFSystems™

Eclipse™ CAFSystems

- Easy-to-learn, pre-plumbed, pre-mounted, pre-calibrated complete compressed air foam system
- Available on CS, CSU and CMU midship-mounted fire pumps
- Advantus® Foam System
- 200 SCFM rotary-screw air compressor encapsulated in oil sump saves valuable compartment space
- Powered off the main pump via a "hot-shift" pneumatic clutch
- Engage or disengage with pump running
- Toothed-belt drive requires no lubrication or maintenance

FOAM SYSTEMS

Aquis™ Foam Proportioner



CONTROL PANEL



- Complete aspirated foam system
- Available 1.5 GPM (5.68 l/min) or 2.5 GPM (9.46 l/min) @ 150 psi (10 bar) foam output
- Stainless steel paddlewheel flow meter
- 16-bit mixed signal microcontroller
- Blue LED illuminated operator panel (standard on 2.5 models)
- Onsite and online laptop diagnostics
- Maximum operating pressure: 450 psi (32 bar)

Advantus® Foam System



- Complete aspirated foam system
- Available 3 GPM (11.3 l/min) or 6 GPM (22.6 l/min) @ 150 psi (10 bar) foam output
- Stainless steel manifold
- Hydra-Cell foam pump
- 4-sensor technology
- Full-flow brass body check valve
- 16-bit mixed signal microcontroller
- Onsite and online laptop diagnostics
- Maximum operating pressure: 450 psi (32 bar) *
- Pre-plumbed, pre-calibrated, pre-tested
- Factory-mounted to midship fire pump
- Saves valuable compartment space



Monarch Intake Valve

- Manual, electric or pneumatic operation
- Stainless steel Wafer-Sphere element
- Polymeric flexible lip seal
 - Resists "bonding" to moving element
- Includes provision for pre-butterfly relief valve



Intake Relief Valve

- Pilot-operated for improved performance
- Easy to set with pressure scale markings
- Panel-mounted strainer



CONTROL PANEL

