

# JERGUSON®

A PRODUCT OF CLARK-RELIANCE



# Armoured Level Gages

# Bouyancy

## TRANSPARENT GLASS

(Shown with LED Illuminator)

Reliable, accurate liquid level indication where fluid properties must be directly viewed.

### Features:

- Recessed Gasket Surface
- Shrouded Covers
- Meets ASME/ANSI/NACE Standards
- Complete line of safety shut off valves available

### Capabilities:

- Pressures from 300# ANSI to 10,000 PSIG (690 BAR)
- Temperatures from cryogenic to 800°F (427°C)
- Large Volume Chambers Available
- Available with a wide variety of connection configurations
- Custom Engineered Solutions

### Applications:

- Interface Applications
- Steam Applications w/mica shields to protect glass
- Hydrocarbon Processes
- Offshore Platforms
- Acid Storage
- Water Treatment
- Pulp & Paper



(Series 20, 32, 40, 51, 300L, L-10)

## REFLEX GLASS

Reliable, accurate bi-color liquid level indication of fluid / gas interface.

### Features:

- Low maintenance
- Recessed Gasket Surface
- Shrouded Covers
- Meets ASME/ANSI/NACE Standards

### Capabilities:

- Pressures from 300# ANSI to 5,000 PSIG (345 BAR)
- Temperatures from cryogenic to 800°F (427°C)
- Large Volume Chambers Available
- Available with a wide variety of connection configurations
- Custom Engineered Solutions

### Applications:

- Low Pressure Steam
- Hydrocarbon Processes
- Offshore Platforms
- Acid Storage
- Water Treatment
- Pulp & Paper



(Series 20, 32, 40, 300L, L-10)

## OFFSHORE

## VALVES

## WELD PAD



- Non-Frost Extension
- Expansion Coils
- Custom Options

## SafeView™ Shield

Made of tough polycarbonate, SafeView Shields are available in lengths to fit all of the most popular flat glass gage styles.

- Protects operators from high pressure leaks
- Protects gage glass from accidental impact



(SafeView Shield)

## SIDE MOUNTED FLOAT SWITCHES



(MLS & MRS Series)

The MLS horizontal mounted level switch offers the highly reliable operating principle of repelling magnet forces.

### Features:

- Compact 1-1/2" NPT Connection
- Snap Action Switching
- Integral Conduit Box
- SPDT or DPDT Switches
- Low .50 Min. S.G.

## EXTERNAL CAGE Tri-Magnet Level Switch™



(BC & XC Series)

The float operated external cage level switch features the unique tri-magnet design offering anti-vibration snap action without the use of springs, cams, or mercury.

### Features:

- Tri-Magnet switching
- 316-SST Trim
- ASME B31.1 & 31.3 Design
- No exposed moving parts
- NPT enclosure mounting connection

## DISPLACER SWITCH



(DC Series)

The displacer operated switches are ideal for sump and other top mounted applications such as high or low level alarms.

### Features:

- Tri-Magnet switching
- 316-SST Trim
- ASME B31.1 & 31.3 Design
- No exposed moving parts
- NPT enclosure mounting connection
- Models available with external chambers

# Magnetic

# Radar



(Magnicator®)

## MAGNETIC LEVEL INDICATORS

A highly reliable, low maintenance indirect reading level gage that offers control, indication and actuation with a single device.

**Features:**

- No glass in contact with process
- Reduced fugitive emissions
- ASME B31.1 & 31.3 Design
- Sch. 40 Chamber Standard Construction

**Capabilities:**

- Critical Service Applications
- Wide variety of materials available
- Wide variety of mounting configurations and connections

**Applications:**

- Broad range of clean liquids, steam, flammable or hazardous liquids.

## INDICATORS



NightStar®



Hermetically Sealed



Flag



(RS-2™)

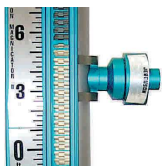
## POINT LEVEL SWITCHES

### RS-2™ POINT LEVEL SWITCH

Hermetically sealed bi-stable latching reed switch.

**Features:**

- Continuous 1 Amp max; 130 VDC/VAC max; 30 Watts max
- UL/CUL Approved



(SAS-16™)

### SAS-16™ POINT LEVEL SWITCH

Snap Action latching switch for reliable high current device control utilizing the "tri-magnet" design.

**Features:**

- Highly reliable - No cams, springs, or mercury
- Highly resistant to vibration
- Max AC Power - 2000VA
- Max DC Power - 50W
- UL/CUL/CE/ATEX Approved



(RST-2™)

## TRANSMITTERS

### REED SWITCH TRANSMITTER

A low cost loop powered step output transmitter for remote indication from a Magnicator®.

**Features:**

- Low Cost
- Available with 1/2" resolution
- UL Approved

### MAGNETOSTRICTIVE TRANSMITTER

A loop powered continuous output transmitter for remote indication of a Magnicator®.

**Features:**

- HART 7 Protocol
- FM Approved (CFM, ATEX, IECEx available)
- SIL 2 Available



(MTII 4300™)

## MAGNETIC GUIDED WAVE RADAR



(MGWR)

Redundant level solution utilizing Magnetic Level Indicator and Guided Wave Radar.

- Single set connections to process vessel
- ASME B31.1 & 31.3 Design
- Remote signal independent from local indicator
- Ideal for applications with changing density, such as
  - Feedwater Heaters
  - Steam Drums\*
  - Condensate Tanks
- Process temperatures from -328°F (-200°C) to 842°F (450°C)
- Pressure ranges from full vacuum up to 3500 PSIG (240 BAR)

\*ASME Section I Drums are subject to special rules of construction. Refer to JS-012010 for more information.

## IN-CHAMBER GUIDED WAVE RADAR

- Measurement independent of density, conductivity, dielectric constant and temperature
- Measurement unaffected by foam or turbulent surfaces
- Process temperatures from -328°F (-200°C) to 842°F (450°C)
- Pressure ranges from full vacuum up to 5802 PSIG (400 BAR) for GWR chamber alone
- Models available for interface applications; both total and interface level can be provided on one Hart® signal
- Models available with gas phase compensation for steam applications
- Communication Protocols
  - 4-20 mA Hart®
  - Fieldbus Foundation™
  - Used for level instruments up to SIL3



(GWR/BPC)

# Ultrasonic

## JMS SERIES LIQUID LEVEL TRANSMITTERS



(JMS Series)

Non-contact ultrasonic level transmitter provides continuous monitoring of linear level utilizing proven Time of Flight technology.

**Features:**

- 2 Wire 24V DC loop powered
- Operating ranges up to 36 Ft.
- Measures liquid height, distance to liquid, contents or flow in open channels
- Simple push button calibration
- Built-in LCD display
- Automatic temperature compensation

## JMSC900 LIQUID LEVEL TRANSMITTERS



**Features:**

- IS Supply to transmitter
- 4-20 mA / HART input
- Isolated 4-20 mA output
- 5 Control relays
- Multi-function back-lit display
- Wall or panel mount
- Preprogrammed Linearisation -Contents and Open Channel Flow

**Specifications:**

- Tough polycarbonate weatherproof wall mount enclosure for internal and external mounting.
- Accepts any 4-20 mA or HART compatible input, allowing standardization of control room layout.
- Control units are 240/115V ac powered and provide an intrinsically Safe 24V DC power supply to the transmitter.
- Supports two voltage free contact closure inputs, allowing override of control functions on external triggers.
- Clear visual display of measured value with units and relay status. Also used to guide user through programming menu.
- 4-20 mA 12 bit isolated current output proportional to measured value.
- 5 voltage free SPDT relays for alarm and control duties.

**Applications:**

- Pump Control Stations
- Differential Level Measurement
- Open Channel Flow

## After Market Services

### Maintain Optimum Performance and Accuracy with OEM Parts

*Critical spare parts for overnight delivery, direct from the manufacturer.*

[clark-reliance.com/parts](http://clark-reliance.com/parts)



**Rapid Response Centers<sup>SM</sup>** are the first and only of their kind—a network of professional service, repair, and sales facilities specializing in the level indication and control industry. Rapid Response Centers are authorized, supported, and continually trained by the world's leader in visual process safety – Clark-Reliance.



Rapid Response Centers' unique customer-driven capabilities and program offerings are based on years of field service experience, applications knowledge and end-user interface. Rapid Response Centers' proven competencies will help you maximize your plant's performance to meet your demands, any time... anywhere.



**Rapid Response Centers provide you the safest and most economical means to maintain the optimum performance of your level gage instrumentation.**



# NEW SOLUTIONS

## 360 Series Safety Ballcheck Valve

Featuring an innovative and patented design locating a ballcheck within the core of a metal seated ball valve to guarantee proper commissioning, improve maintenance, and enhance plant safety.



- Quarter turn position visible handle
- Cleanout port for quick inspection and flushing
- Certified low emissions to ISO 15848-1 and API 641
- API Class V Shutoff
- Wetted parts conform to NACE MR0103/MR0175
- Lock out tag/out capable

## SureTest™

- Unique lift method does not break pressure boundary
- Brass displacer options for API 2350 compliance
- 360° rotation
- Same tri-magnet reliability!

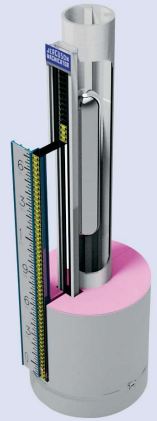


(SureTest™)

## FlashProof™ Magnicator®

The FlashProof design addresses potential problems that may occur with standard level indicators: boiling fluids, flashing vapors, and applications where suspended solids can build up and cause float to become "stuck". Common applications:

- Ethane
- Liquid Nitrogen
- Propane
- Butane
- Propylene
- Ethylene
- Atmospheric Distillation Towers
- Methane
- Carbon Dioxide
- Anhydrous Ammonia and other refrigerants
- LPG
- LNG
- Light End Hydrocarbons
- Other "Dirty" Service



(FlashProof™ Magnicator®)

## Spherical Float Solutions

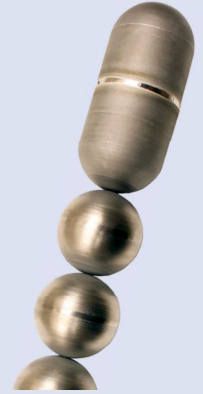
Unique spherical design delivers the same focused magnetic characteristics and reliability as our standard float design.

- Non-pressurized design
- 3500-PSIG (241 BAR) max
- 1000°F (315°C) max
- Specific gravity down to 0.36

### Hermetically-Sealed Design

Pressure/Temperature and Min SG Ratings

PSIG (BAR) @ 100°F	PSIG (BAR) @ Max Temp	Max Temp °F (°C)
1500 (103)	745 (51)	1000 (538)
3000 (206)	1495 (103)	1000 (538)
3500 (241)	2465 (170)	600 (315)



(High Pressure Float)



leading the industry with the most complete line of innovative products and solutions

## Agency Approvals



Jerguson® designs and develops product specifications consistent with the customer's use for that product, and ensures that all products and services conform to their established quality specifications.

For the latest product and application solutions, visit [jerguson.com](http://jerguson.com)

## Instrumentation & Controls

**JERGUSON®**



- Level Gages
- Magnetic Level Indicators
- Switches & Transmitters

**JACOBY-TARBOX®**



- Sight Flow Indicators
- Sight Windows
- Eductors & Tank Agitators

**Reliance®**



- Boiler Level Gages
- Remote Level Indicators
- Boiler Safety Instruments

## Purity Products

**ANDERSON®  
Separator**

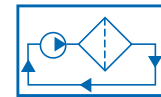


- Gas Coalescing & Filtration
- Steam Separation & Traps
- Complete Vessels & Internals

**Enervac™  
INTERNATIONAL ULC**



- Transformer Oil Purification
- SF6 Purification Equipment
- Oil Regeneration Equipment



**OIL  
FILTRATION  
SYSTEMS**



- Vacuum Dehydrators
- Varnish Removal Systems
- High & Low Flow Filter Skids

## Elements & Internals

**Clark-Reliance  
FILTER ELEMENTS®**

Absolute Rated Elements for contaminant removal from liquids, steam, and gasses. Elements for critical use applications.



## Parts & More



[clark-reliance.com](http://clark-reliance.com) / [clark-reliance.com/parts](http://clark-reliance.com/parts)

**CLARK RELIANCE CORPORATION**  
16633 FOLTZ PARKWAY • STRONGSVILLE, OHIO 44149 U.S.A.  
PHONE +1 (440) 572-1500 • FAX +1 (440) 238-8828  
sales@clark-reliance.com • www.clark-reliance.com

**CHPOLANSKY**

3, rue Angiboust 91460 Marcoussis - FRANCE  
Téléphone : +33 1 69 80 15 00. www.chpolansky.fr