

# Product Overview

## ELECTRONIC LEVEL MEASUREMENT

#### **MAGNETIC LEVEL GAUGE (MAGNA-SITE)**

The KENCO Magna-Site is a magnetic liquid level gauge used to determine the volume of liquid contained within a vessel. The flag assembly is hermetically sealed and protected inside a stainless steel chamber. Fluorescent green polysulfone flags provide optimum visibility. The Magna-Site features a 360 degree magnetic flux float that ensures accuracy in turbulent applications. This cylindrical float contains a rare earth magnet assembly that is resistant to demagnetization. The unit can be configured with a magnetostrictive transmitter and high/low latching switches. The Magna-Site is available in a variety of materials and configurations.



#### ULTRASONIC LEVEL SWITCHES

Ultrasonic Liquid Level Switches are used to detect the location of liquid level in a process or storage vessel. KENCO Ultra-sonic Switches use piezoelectric crystals to transform electrical energy into transmittable sound, which is then used to detect the presence of liquid in a given space. With their unique, crystalbased design, and a wide range of available materials and mounting configurations, the switches can be used in virtually any liquid.



#### KMD MAGNETOSTRICTIVE TRANSMITTER

The Model KMD is an advanced, state-ofthe-art, two-wire, Magnetostrictive-based level transmitter suitable for a wide range of process applications and can be externally mounted to the Magna-Site Magnetic Level Gauge. The latest microprocessor technology allows this instrument to consistently and reliably measure the level of your process fluid. Built-in Hart® Communications allows for remote calibration and diagnostics. The Model KMD can measure overall level, interface level and process temperature. Up to two 4-20mA output loops are available to track any two of these three variables.

#### THERMAL DIFFERENTIAL FLOW AND LEVEL SWITCHES

KENCO Thermal Differential Switches are designed for a wide range of flow and level applications. By detecting a temperature differential between two RTDs, the switches can be used to detect overall liquid level, liquidliquid interface, specific flow rates or flow/no flow conditions in liquids and gasses. The 5A DPDT output indicates when the setpoint has been reached, and with a maximum temperature of 850 degrees F, and a maximum pressure rating of 3000 psig, these switches are highly functional.



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# MECHANICAL LEVEL MEASUREMENT

#### SHIELDED TUBULAR LEVEL GAUGES WITH INTEGRAL VALVES (K9900 – U.S. PATENT NO. 6857315B1)

The patented K9900 Series Level Gauge features an innovative casting design that simplifies the installation process and eliminates problems typically associated with level gauge installations. The K9900 Series incorporates floating misalignment unions, integral offset pattern valves with ball check shutoffs, and drain connections inline for routine sight glass maintenance.



#### **TUBULAR GLASS GAUGE VALVES (KTV)**

The KENCO Tubular valve when used with the Safeguard or EPG Level Gauges, provides maximum operator safety and environmental protection from a potential gauge glass



failure, and is available in 316 stainless steel and zinc plated carbon steel. The KTV is designed for low to medium pressure service applications up to 500 psi.

#### FLAT GLASS LEVEL GAUGES & VALVES (REFLEX, TRANSPARENT)

KENCO Flat Glass Level Gauges and Valves are used in high-pressure installations where direct visual observation of process fluids is required. These gauges can accommodate pressures up to 4000 psig @ 100°F, and temperatures up to 750°F @ 2300 psig. The robust and reliable construction of Flat Glass Level Gauges allows you to directly view the process fluid under temperature/ pressure conditions that would render most other level technologies ineffective.



#### SHIELDED LEVEL GAUGE FOR USE WITH TUBULAR GAUGE VALVES (EPG – U.S. PATENT NO. 5442959)

The Environmental Protection Gauge (EPG) is easy to install. It installs just like tubular glass and is designed to replace your existing tubular glass. The packing nut on the tubular valve tightens around the metal nozzles of the EPG gauge, not glass! Nozzles match the O.D. of 5/8" glass or 3/4" glass. The clear polycarbonate shield allows 360° visibility. Unlike expanded metal protection, the fluid level is not obstructed.

#### SHIELDED LEVEL GAUGE FOR USE WITH TUBULAR GAUGE VALVES (SAFEGUARD – U.S. PATENT NO. 4693117)

The KENCO Safeguard level gauge is designed for use with tubular gauge valves. Valve packing tightens around KENCOpatented nozzles to avoid glass breakage, and the sight tube is completely protected by a metal frame and polycarbonate shield.



#### **CLOSE MOUNT LEVEL GAUGE (4400)**

The 4400 series is ideally suited for applications requiring minimum protrusion from the vessel. Ideal for corrosive environments, the gauge is available in stainless steel or nickelplated brass construction. Large port connections provide a quick level response, standard redline glass allows for easy viewing of the fluid level, and the design affords simple installation into the process connection.



## CHEMICAL PROCESS EQUIPMENT

### **CALIBRATION POTS**

Calibration Pots allow you to accurately monitor and calibrate flow rates for chemical metering pumps. Hand calibrated scales and totally enclosed calibration pots assure maximum accuracy and safety, making them ideal for offshore applications. Standard units can calibrate flow rates up to 620 Gallons Per Hour or 2,346 Liters Per Hour, and a wide range of pump capacities, connection sizes, and housing materials are available. Custom units capable of handling larger pump rates or higher volumes are also available.



#### **INJECTION RATE GAUGE (5700/17000)**

The KENCO Injection Rate Gauge is available with 1/2" NPT (5700) or 1" (17000) NPT connections. The 5700 and 17000 injection rate gauges provide a visual means for checking the contents of a chemical storage tank, and the pump rate of chemical metering pumps. The polycarbonate protective shield can be calibrated to read any measurement desired, and the sight tube is totally protected by an armored metal frame. The gauge is constructed so that the only wetted parts are the seal material, sight tube material, and the threaded end connector.

#### **INJECTION RATE GAUGE MANIFOLD (KMK)**

The Kenco Manifold Kit simplifies the installation of a metering pump and a Kenco calibration gauge to a chemical storage tank. The manifolds integral ball



valve and strainer minimizes assembly, leak paths and installation time. The "T" shaped manifold configuration allows the manifold outlet connection to be located on the left-hand side or right-hand side of the chemical storage tank. The manifold has 316 stainless steel and PTFE wetted materials which allows it to be used with most any chemical.

### PUMP SETTING GAUGE (ACCU-RATE®)

KENCO Accu-Rate® Pump Setting Gauges utilize precision scientific glass to provide the most accurate reading for flow rate calibration of a chemical metering pump. The gauge can also be used to periodically monitor the performance and accuracy of a chemical injection system, and can be used as a primary containment reservoir for fluids pumped through a chemical injection system. Ideal for calibrating pump rates up to 45.6 Gallons Per Hour or 172 Liters Per Hour in a one-minute test.



#### **DRAWDOWN CYLINDERS (DDC)**

KENCO Drawdown Cylinders utilize an economical design to provide accurate calibration of chemical metering pumps. PVC pipe design ensures compatibility with harsh chemicals, and Mylar lamination protects calibrated scales from chemical attack. Available with NPT connections on both ends, or a slip-on top cap for top filling and cleaning. Standard sizes range from 60 milliliters to 10 liters.

#### CHEMICAL INJECTORS (U.S. PATENT NO. 7137569)

KENCO Chemical Injectors are designed to inject and atomize corrosive chemicals into a process system pipeline. The KENCO Chemical Injector, available in a variety of styles, materials and sizes, will minimize the possibility of chemical build-up on the walls of the pipeline.

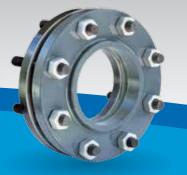


#### **55 GALLON DRUM GAUGES**

Drum gauges are used to indicate tank volume, and to check the pump rate of a chemical metering pump. Gauges easily install into the existing hole of any standard 55-gallon drum, can handle pump rates up to 20 gallons per day and 74 liters per day, and are available in a wide range of wetted materials for ultimate corrosion resistance.







### SIGHT FLOW INDICATION

#### FULL VIEW SIGHT FLOW INDICATOR (FVSF)

KENCO Full View Sight Flow Indicators, designed for low-pressure vertical installation applications, provide 360-degree visibility when observing the flow of liquids in a piping system. The KENCO FVSF is available with threaded or flanged connections, and a wide range of end plate materials are offered to meet your compatibility requirements.



#### **HIGH PRESSURE SIGHT FLOW INDICATOR (KSF)**

**KENCO Standard KSF** Sight Flow Indicators feature a heavy duty cast construction to handle high temperature and pressure requirements, mechanical indicator



options to enhance the visibility of the media, and threaded or flanged connections to meet ANSI standards and installation requirements. Standard materials include carbon steel, 316 stainless steel, ductile iron, and bronze. Other materials are available upon request.

### **ARMORED SIGHT FLOW INDICATOR (ASF)**

KENCO Armored Sight Flow Indicators, recommended for low pressure, vertical or horizontal applications, provide the best mix of visibility and protection. The rigid steel housing surrounding the sight tube provides additional strength and protection from mechanical impact. The KENCO ASF is available with flanged or threaded end connections, and special lengths and materials are available for your specific application requirements.



#### **SIGHT WINDOW**

KENCO Sight Windows are used to provide direct process reading in tanks or pipelines. Sight Windows can be mounted directly to the vessel wall, or to the pipe in a variety of configurations. Threaded Flange (TFW), Bolted Flange (BFW), Weld Neck (WNW) and Flat Plate (FPW) models are available in a variety of sizes and materials. Standard and ANSI rated units are available.

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