



### 30000 SERIES PUMP SETTING GAUGES

### **APPLICATION**

The Kenco PSG-30,000 series Pump Setting Gauges utilize individually calibrated scales based on the inside diameter of the sight tube to provide an extremely accurate reading when calibrating the flow rate of a chemical metering pump. Gauge can also be used to periodically monitor pump performance, accuracy of a chemical injection system, or as a primary containment reservoir for liquid pumped into a chemical injection system.

### **OPERATING PRINCIPLE**

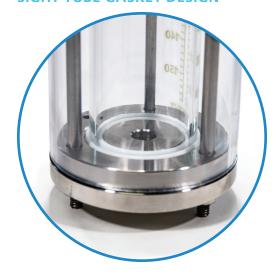
To check the flow rate of a chemical pump, isolate the chemical in the storage tank from the Pump Setting Gauge. Keep the isolation valve closed and observe the number of scale markings the liquid level passes in one minute. This will give you the actual chemical pump flow rate. If the rate is not the one desired, make an adjustment to the chemical metering pump feed rate and conduct as many one minute tests as necessary to achieve the chemical feed rate desired. The Pump Setting Gauge sight tube has a decal with (2) calibrated scales. The scale on the left side is a volume scale in milliliters (ML). In a one minute test, the scale will read the pump rate in milliliters per minute. The scale on the right side will depend on the desired flow rate unit of measure; i.e. Gallons per Day (GPD), Gallons per Hour (GPH), Liters per Day (LPD), Liters per Hour (LPH), U.S. Gallons by Volume (GBV) or Liters by Volume (LBV).

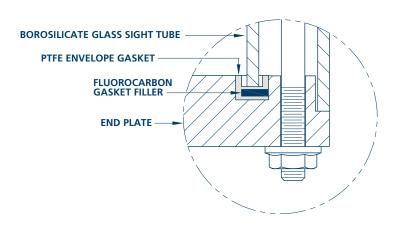


### **GAUGE FEATURES**

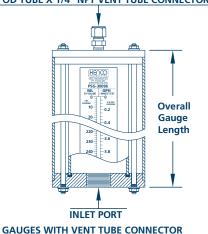
- Direct-Reading Volume/Rate scales on the sight tube are individually calibrated to the inside diameter of the glass to maintain a high level of accuracy.
- Scales are highly visible and labeled with well-sized characters for easy reading against all liquids.
- Six scale options are available: Gallons per Day (GPD), Gallons per Hour (GPH), Liters per Day (LPD), Liters per Hour (LPH), U.S. Gallons by Volume (GBV) and Liters by Volume (LBV). Each scale option includes a volume scale in milliliters (ML).
- Gauge sizes cover a broad range of flow rates from 16 Gallons per Day (60.57 Liters per Day) to 1440 Gallons per Day (5450.99 Liters per Day).
- Sight tube on all models is made from borosilicate glass.
- Clear thermoplastic sight tube shield for impact resistance is standard on all models.
- Close fit between inside diameter of sight tube shield and end plates enhances the structural stability of gauge and helps keep out unwanted contaminants between sight tube and shield.
- Lower end plate has drain hole(s) to prevent condensation build up.
- End plates are available in 316 stainless steel, PVC, CPVC, Alloy 20 and Hastelloy C-276. Other materials available upon request.
- Engineered PTFE envelope sight tube gasket ensures compatibility with most liquids and has an integral isolation barrier to prevent glass from making contact with end plates. Fluorocarbon filler provides a constant load on gasket to ensure a positive seal.

### SIGHT TUBE GASKET DESIGN

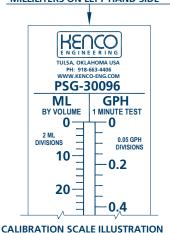




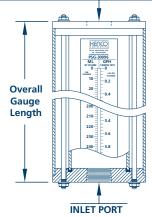
## GAUGES WITH S6 / PVC END PLATES (EXCEPT PSG-31440) ARE SUPPLIED WITH A 3/8" OD TUBE X 1/4" NPT VENT TUBE CONNECTOR



### ALL GAUGE CALIBRATION SCALES HAVE A VOLUME SCALE IN MILLILITERS ON LEFT-HAND SIDE



# GAUGES WITH CPVC / A20 / HC END PLATES AND ALL PSG-31440 GAUGES ARE NOT SUPPLIED WITH A VENT TUBE CONNECTOR



GAUGES WITHOUT VENT TUBE CONNECTOR

#### PUMP SETTING GAUGE SPECIFICATIONS MAXIMUM PUMPING RATE (BASED ON A 1 MINUTE TEST) GAUGE VOLUME **GAUGE** INLET **OVERALL END PLATE VENT PORT PORT GAUGE OUTSIDE** NUMBER GPD LPH LBV SIZE\*\* SIZE<sup>3</sup> LENGTH DIAMETER ML GBV PSG-30016 16 0.67 60.57 2.52 42.06 0.04 1/4" NPT 0.01 1/4" NPT 18-5/16' 2-1/2" PSG-30030 30 1.25 113.56 4.73 78.86 0.08 1/4" NPT 1/4" NPT 0.02 15-11/32 2-1/2 PSG-30060 60 2.50 227.12 9.46 157.73 0.04 0.16 1/2" NPT 1/4" NPT 17-1/2" 2-1/2" PSG-30096 96 4 00 363.40 15.14 252.36 0.07 0.25 1/2" NPT 1/4" NPT 17-21/32 3" PSG-30144 144 6.00 545.10 22.71 378.54 0.10 0.38 1/4" NPT 1/4" NPT 14-1/4" 3-1/2" PSG-30216 216 9.00 817.65 34.07 1/2" NPT 1/4" NPT 15-5/16' 4" 567.81 0.15 0.57 PSG-30280 4" 280 11.67 1059.92 44.16 736.05 0.19 0.741/2" NPT 1/4" NPT 15-17/32 PSG-30420 420 17.50 1589.87 66.24 1104.08 0.29 1.10 1/2" NPT 1/4" NPT 15-15/32" 4-1/2" PSG-30580 580 24.17 2195.54 91.48 1524.68 0.40 1.52 3/4" NPT 1/4" NPT 15-21/32 5" PSG-30700 700 29.17 2649.79 3/4" NPT 1/4" NPT 15-5/16" 110.41 1840.13 0.491.84 5-1/2"

Note: 3/8" OD tube x 1/4" NPT vent tube connector is 316 S.S. on gauges with S6 end plates and polypropylene on gauges with PVC end plates.

1.00

3.79

1" NPT

1" NPT

16-7/16'

7"

3785.41

227.12

#### ORDERING GUIDE REQUESTED BY: \_\_\_ \_\_\_\_ COMPANY:\_\_\_ STATE: ZIP: ADDRESS: CITY: PHONE: FAX: \_ EMAIL : \_\_ Т **End Plate Material Gasket Material** Calibration Scale Gauge Model Number **S6** = 316 Stainless Steel PSG-30016 PSG-30580 **T** = PTFE Envelope with **GPD** = Gallons Per Day $\mathbf{P} = PVC$ PSG-30030 PSG-30700 Fluorocarbon Filler **GPH** = Gallons Per Hour C = CPVC PSG-30060 PSG-31440 LPD = Liters Per Day PSG-30096 **A20** = Alloy 20 **LPH** = Liters Per Hour PSG-30144 **HC** = Hastelloy C-276 **GBV** = Gallons By Volume Other (Please specify above) PSG-30216 **LBV** = Liters By Volume PSG-30280 PSG-30420 • Example Order Number: PSG-30016-S6-T-LPH • Please contact Kenco to request a quote for options not covered by gauge specifications shown above.

Represented by:

PSG-31440

1440

60.00

5450.99

Kenco Sales Offices: Headquarters 10001 E. 54th St. Tulsa, OK 74146 phone 918.663.4406 fax 918.663.4480 www.kenco-eng.com

email: info@kenco-eng.com

11616 Industriplex, Suite 7 Baton Rouge, LA 70809 phone 225.755.1912 fax 225.755.1913

**Baton Rouge Office** 

phone 225.755.1912 fax 225.755.1913 www.kenco-eng.com email: kenco-la@kenco-eng.com



<sup>\*</sup>Model PSG-31440 and gauges constructed with CPVC / A20 / HC end plates are not supplied with a vent tube connector.

<sup>\*\*</sup>Inlet port sizes and types shown are standard, but other sizes and types, such as flanged, are available upon request.