TIGERMAG EP ELECTROMAGNETIC FLOWMETER CONDUCTIVITIES OF SELECTED LIQUIDS

Magnetic flowmeters can measure a wide variety of liquids accurately if the liquid is conductive. Sparling's TigermagEP series of meters can measure the flow of liquids with conductivities of 5 micromhos/cm or greater. The following table gives conductivities of many of the chemicals which will be encountered and will allow you to quickly determine if a magnetic flowmeter is applicable. Consult the factory for chemicals which are not listed.

We can provide testing of field samples for conductivity provided that they are not hazardous. Tests are limited to temperatures between 32°F and 212°F. Tests can usually be performed within 1 week of receipt. Contact the factory for authorization prior to sending any samples.

Table 1 contains liquids which are normally adequately conductive and thus measurable by the TigermagEP series of meters.

TABLE 1 CONDUCTIVITY NORMALLY >5 MICROMHOS/CM

Acetamide Acetic Acid

Aluminum Chloride, 80%

Aluminum Fluoride Aluminum Nitrate

Aluminum Potassium Sulfate

Aluminum Sulfate, 50%

Ammonia

Ammonium Bicarbonate, 50% Ammonium Bifluoride, 50%

Ammonium Bisulfate

Ammonium Carabamate, 50% Ammonium Carbonate, 50%

Ammonium Chloride

Ammonium Fluoride, 50%
Ammonium Hydroxide
Ammonium Iodide
Ammonium Nitrate
Ammonium Persulfate

Ammonium Phosphate

Ammonium Sulfate Asphalt Emulsion Barium Chloride

Barium Hydroxide, 50%

Barium Nitrate Barium Sulfate Black Liquor Boric Acid, 50%

Brine

Butryic Acid

Cadmium Bromide
Cadmium Nitrate
Cadmium Sulfate
Calcium Bisulfite
Calcium Bromide
Calcium Carbonate
Calcium Chlorate, 30%
Calcium Chloride, 90%
Calcium Hydroxide
Calcium Hypochlorite, 6%



TABLE 1 (Continued) CONDUCTIVITY NORMALLY >5 MICROMHOS/CM

Coca Cola Syrup Coffee Extract

Cranberries, crushed Cream Cheese Mix Cupric Chloride Cupric Nitrate, 50% Cupric Sulfate Copper Ore Slurry Ferric Chloride, 50% Ferric Nitrate, 10% Ferrous Chloride, 10% Ferrous Chloride, 10% Ferrous Sulfate, 50% Fluosilicic Acid Formaldehyde, 35%

Formic Acid, (All Cone.)

Fruit Juices
Fudge
Gallium
Germanium
Tetrabromide
Glucose

Glutamic Acid Green Liquor

Hydrochloric Acid, (All

Conc.)

Hydrocyanic Acid Hydrofluoric Acid, 48% Hypochlorous Acid,80°F Hydrogen Peroxide Hydrogen Sulfide

lodic Acid

Lactic Acid, 10-85%

Latex Latex Paint Lead Nitrate, 60%

Lime (Calcium Hydroxide)

Lithium Carbonate Lithium Chloride Lithium Hydroxide Lithium Iodide Lithium Sulfate Maelic Acid Malic Acid

Magnesium Carbonate, 10%

Magnesium Chloride Magnesium Nitrate Magnesium Sulfate Manganese Chloride

Mercury

Mercuric Bromide Mercuric Chloride, 60% Milk (Skim and Regular)

Molasses

Nickel Chloride, 20% Nickel Nitrate, 10% Nickel Sulfate

Nitric Acid (All Conc.)

Oleum

Oxalic Acid (All Conc.)

Paper Pulp Phosphate Slurry Phosphoric Acid, 30% Phosphoric Acid, 80% Photographic Emulsion

Polystyrene

Potassium Acetate

