

## **Electromagnetic Flow Meters**

### **Conductivity Chart**

**NOTE:** Conductivity levels change with temperature and fluid concentrations. This is a guideline to assist in determining fluid conductivity. If the conductivity level is marginal, the application should be reviewed in further detail. Consult factory for chemicals that are not listed.

### Conductivity normally > 20 $\mu$ S/CM

Acetamide
Acetic acid*
Aluminium chloride, 80%
Aluminium fluoride
Aluminium nitrate
Aluminium potassium sulfate
Aluminium sulfate, 50%
Ammonia
Ammonium bicarbonate, 50%
Ammonium bifluoride, 50%
Ammonium bisulfate
Ammonium carbamate, 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
Barium liquor
Boric acid, 50%
Brine
Butryc acid*
Cadmium bromide
Cadmium chloride, 50%
Cadmium iodide, 45%
Cadmium nitrate, 48%
Cadmium sulfate, 36%
Calcium bisulfite
Calcium bromide
Calcium carbonate
Calcium chlorate, 30%
Calcium chloride, 90%
Calcium hydroxide
Calcium hypochlorite, 6%
Calcium nitrate, 50%
Coffee extract
Cola syrup
Copper nitrate, 35%
Copper ore slurry
Copper sulfate, 17%
copper suitate, 1770

Cranberries, crushed	
Cream cheese mix	
Cupric chloride	
Cupric nitrate, 50%	
Cupric sulfate	
Ferric chloride, 50%	
Ferric nitrate, 10%	
Ferric sulfate, 10%	
Ferrous chloride, 10%	
Ferrous sulfate, 50%	
Fluosilicic acid	
Formaldehyde, 35%	
Formic acid (all conc.)	
Fruit juices	
Fudge	
Gallium	
Germanium tetrabromide	
Glucose	
Glutamic acid	
Green liquor	
Hydriodic acid, 5%	
Hydrobromic acid, 15%	
Hydrochloric acid (all conc.)	
Hydrocyanic acid	
Hydrofluoric acid, 48%	
Hydrogen peroxide*	
Hydrogen sulfide	
Hypochlorous acid, 80° F	
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	
Maleic acid	
Malic acid	
Magnesium carbonate, 10%	
Magnesium chloride	
Magnesium nitrate	
Magnesium sulfate	
Manganese chloride	
Mercuric bromide*, 42%	
Mercuric chloride, 60%	

Table 1: Conductivity normally > 20  $\mu$ S/CM

Mercury
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
Potassium bromide, 36%
Potassium carbonate, 50%
Potassium chloride, 21%
Potassium cyanide, 6%
Potassium fluoride, 40%
Potassium hydroxide, 42%
Potassium iodide, 55%
Potassium nitrate, 22%
Potassium oxalate, 10%
Potassium sulfate, 10%
Potassium sulfide, 47%
Propionic acid, 70%
Silver nitrate, 60%
Sodium acetate, 32%
Sodium carbonate, 15%
Sodium chloride, 26%
Sodium hydroxide, 50%
Sodium iodide, 40%
Sodium nitrate, 30%
Sodium sulfate, 15%
Sodium sulfide, 18%
Strontium chloride, 22%
Strontium nitrate, 35%
Sugar solution dilute, 5%
Sulfuric acid
Titanium dioxide, 100%
Toothpaste, 100%
Urea, 100%
Zinc chloride, 60%
Zinc oxide, 100%
Zinc sulfate, 30%



# **Application Data Sheet**

### Conductivity normally 1-20 µS/CM

Acetaldehyde, 100%	Furfural
Acetonitrile	Gin, 90 proof
Acetyl bromide	Hydrogen cyanide
Alizarin, 100%	Hydrogen peroxide, 90%
Allyl alcohol	Isopropyl alcohol
Arsenic tribromide	Mercuric bromide, 22%
Arsenic trichloride	Methyl acetate
Benzyl alcohol	Methyl nitrate
Capronitrile	O-Toluidine, 100%
Carboxylic acid	Phenyl isothiocyanate
Corn syrup	Phosporous oxychloride
Chloroacetic acid	Sulfonyl chloride
Ethyl thiocyanate, 100%	Sugar solution, pure
Formamide	Vodka, 100 proof

Table 2: Conductivity normally 1-20 µS/CM

### Conductivity normally < 5 µS/CM

Acetic acid, 99.7%
Acetic anhydride, 100%
Acetone (80°F)
Acetophenone, 100%
Acetyle chloride, 100%
Adipic acid, 100%
Ammonia, 100%
Aniline, 100%
Animal fat, 100%
Anthracene
Benzadehyde, 100%
Benzene, 100%
Benzoic acid, 100%
Benzonitrile, 100%
Benzylamine, 100%
Benzyl benzoate
Bromine, 100%
Bromobenzene, 100%
Bromoform, 100%
lso-butyl alcohol, 100%
Butryc acid, 100%
Carbon disulfide, 100%
Carbon tetrachloride, 100%
Chlorine, 100%
M-Chloroaniline, 100%
Chloroform, 100%
Chocolate liquor, 100%
M-Creosol, 100%
Cyanogen, 100%
Cymene, 100%
Dichloroacetic acid, 100%
Dichlorohydrin, 100%
Diethylamine, 100%
Diethyl carbonate, 100%
Diethyl sulfate, 100%

Dimethyl sulfate, 100%
Epichlorohydrin, 100%
Ethyl acetate, 100%
Ethyl acetoacetate, 100%
Ethyl alcohol, 100%
Ethylamine, 100%
Ethyl benzoate, 100%
Ethyl bromide, 100%
Ethylene bromide, 100%
Ethylene chloride, 100%
Ethyl iodide, 100%
Ethyl isothiocyanate, 100%
Eugenol, 100%
Fuel oil, 100%
Glycerol, 100%
Glycol, 100%
Guaiacol, 100%
Heptane
Hydraulic fluid, 100%
Hydrogen bromide, 100%
Hydrogen chloride, 100%
Hydrogen iodide, 100%
Hydrogen sulfide, 100%
Ink, 100%
lodine, 100%
Kerosene
Lard, 100%
Methyl alcohol, 100%
Methyl ethyl ketone, 100%
Methyl iodine, 100%
Methyl nitrate, 100%
Naphthalene, 100%
Nitrobenzene, 100%
O-OR-M-Nitrotoluene, 100%
Nonane, 100%

Conductivity normally 0.5-1 µS/CM

Diethyl oxalate, 100%
Ethyl nitrate, 100%
Nitromethane, 100%
Proionaldehyde, 10%

Table 3: Conductivity normally 0.5-1 µS/CM

	acid, 100%
	en, 100%
	enamel, 100%
	in wax, 100%
Pean	ut butter, 100%
	ane, 100%
	leum, 100%
Phen	etole, 100%
Phen	ol, 100%
Phos	gene, 100%
Phos	phorous, 100%
Piner	ne, 100%
_	idine, 100%
Piper	idine, 100%
	onitrile, 100%
M-Pro	opyl alcohol, 100%
M-Pro	opyl bromide, 100%
Pyrid	ine, 100%
Quin	oline, 100%
Salicy	/laldehyde, 100%
	ean oil, 100%
	h, 100%
Stear	ic acid, 100%
Sulfu	r, 100%
Sulfu	r dioxide, 100%
Tolue	ene, 100%
P-Tol	uidine, 100%
Trich	loroacetic acid, 100%
Trime	ethylamine, 100%
Turpe	entine, 100%
lso-va	aleic acid, 100%
	table oil, 100%
Wate	r (dist.), 100%
Xylen	ne, 100%

*Table 4: Conductivity normally < 5 μS/CM* 

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