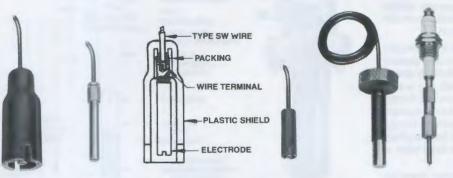
SECTION 6012 & 6013 PAGE 12

# ELECTRODE HOLDERS AND ELECTRODES

### **B/W Controls**

### **WIRE SUSPENSION ELECTRODES**



E-1P WITH SHIELD

6012

DE

E-1P LESS SHIELD E-1P CUT-AWAY E-1S WITH SHIELD 13-064700

PLUG WITH CONNECTOR

Wire suspension electrodes are designed for use in applications requiring long lengths, or where limited head room prevents installation of solid rod electrodes. They can be used with all holders except Type CE-2 & 3. Electrode Types E-1P and E-1S are for use in water and non-corrosive liquids. Type 13-064700 is designed for corrosive liquids and is available with a variety of rod materials. Types E-1P and E-1S electrodes with molded plastic shields can be used at temperatures up to 150°F and other electrodes up to 190°F.

Type E-1P-Shielded: This electrode is approximately 4" long and assembled in a molded plastic insulating shield 1 7/16" in diameter. Designed for general purpose use, it is ideal for elevated tanks, sewage pumping stations, and deep well installations.

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Type E-1P — Less Shield: This electrode is intended for applications where space prevents the use of other electrodes and where vertical spacing between electrodes is 4" or more.

Type E-1S-Shielded: A 2" long electrode assembled in a molded plastic shield 9/16" in diameter. Ideal for use in submersible pump installations and other applications where little clearance is provided for installation.

Type 13-064700: This electrode is intended for corrosive liquids. It is 3" long made from a  $\frac{1}{2}$ " diameter rod and available in any of the materials listed below. The type SW wire is attached at the factory and the connection is completely sealed with PVC and bonded to the insulation of the SW wire.

WIRE CONNECTOR: This adapter is necessary to attach the Type SW suspension wire to the 1/4-20 female electrode holder connections. One is required for each wire suspension electrode used with electrode plugs, and Type E and Type AE-2 holders. See pages 6 & 7

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Type SW Suspension Wire: Designed to provide maximum strength and insulation, Type SW wire should always be used with BIW wire suspension electrodes to assure that a watertight seal is accomplished by the packing in the electrode. The wire is single conductor 18 gauge, 41 strand copper with 4/64" vinyl insulation.

# CATALOG NUMBER 6013—SW—10 LIST PRICE Specify Length In Feet Old No. 01-130500

These electrodes are field assembled and the required amount of Type SW wire must be ordered as a separate item. See above.

NOTE — When wire suspension electrodes are to be used with electrode plugs, or Type E or Type AE-2 electrode holders, wire connectors must also be ordered for each electrode. See above.

CATALOG		ELECTRODE TYPE	ELECTRODE MATERIAL	OLD PART NO.	PRICE
SECTION	W1	E-1P With Shield	Brass	13-020600	\$11.00
	W2	E-1P With Shield	303 Stainless	13-020700	17180
	W3	E-1P Less Shield	Brass	13-052700	4490
	W4	E-1P Less Shield	303 Stainless	13-052600	9.00
	W5	E-1S With Shield	Brass	13-022000	10.00
	W6	E-1S With Shield	303 Stainless	13-024300	10:00

6013-W7 ELECTRODE LIST **ELECTRODE** OLD TYPE MATERIAL PART NO. PRICE CATALOG SECTION \$40:00 W7 13-064700 With SW Wire 316 Stainless 13-064702 13-064700 With SW Wire 13-064703 WR Monel 13-064704 50.00 W9 13-064700 With SW Wire Nickel Carpenter 20 13-064705 40.00 W10 13-064700 With SW Wire 60.00 W11 13-064700 With SW Wire Hastelloy B 13-064707 13-064706 50:00 W12 13-064700 With SW Wire Hastelloy C Titanium 13-064709 13-064700 With SW Wire

-10		LIST
	Type SW Wire Length In Feet	ADD \$:00 per ft.

These electrodes come complete with the Type SW wire permanently attached to the electrode. Lengths must be specified when ordering.

DISCOUNT SCHEDULE LL1
Prices Subject to Change Without Notice

### B/W Controls

## ELECTRODE HOLDERS AND ELECTRODES

SECTION 6012 & 6013 PAGE 13

### ELECTRODE MATERIAL SELECTION

The chart below suggests electrode material for some typical liquids. Electrode corrosion is difficult to predict because the rate of corrosion is effected by many factors such as: concentration, temperature and impurities. Therefore, this information should be used as a general guide, and the final choice should be determined from actual application conditions based on previous experience and knowledge.

ELECTRODE MATERIAL	TYPICAL LIQUID TO BE CONTROLLED	
Brass	Soft Water, Condensate	
316 SS	Water, Sewage, Beer, Alcohol, Food Products, Chemicals, Many Mild Acids	
Monel	Acetic Acid, Sea Water	
Nickel	Boric Acid, Calcium Hydroxide	
Carpenter 20	Sulphuric Acid, Alum Solutions	
Hastelloy B	Hydrochloric Acid	
Hastelloy C	Hydroflouric Acid	
Titanium	Phosphoric Acid, Brine Ferric Chloride, Hot Nitric Acid	
Carbon Tip	Hydrochloric Acid Carbonated Water	

Contact BIW For Specific Recommendations



### TYPE A RODS

Solid rod electrodes are generally used where relatively short lengths of 6 feet or less are required. Care should be exercised when specifying lengths over 6 feet. Longer rods and those installed horizontally should be insulated. After cutting insulated rods, strip about 1 inch of insulation off lower end to expose the bare rod.

TYPE A electrode rods are 1/4" diameter and have 1/4-20 thread for use with electrode plugs, and Type E and Type AE-2 electrode holders. A boot made of the sheath material is furnished to protect and insulate the lower side of the electrode plug.



TYPE B electrode rods are 1/4" diameter and are tapped 6-32 for use only on Type CE-2 and CE-3 holders. Lengths over 12 inch should be insulated and lengths over 30 inch not recommended.

TYPE C electrode rods are ¼" diameter and have the upper end machined with a shoulder and 10-24 thread to assemble into Type KF holders.

**TYPE D** electrode rods are 1/4" diameter are similar to Type C except the upper end is machined to a length that fits only Type FR holders.

