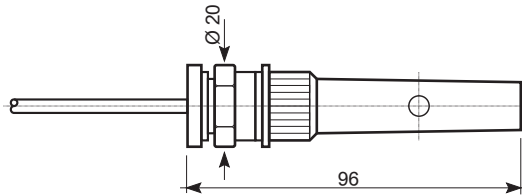


## Vemer S.p.A.

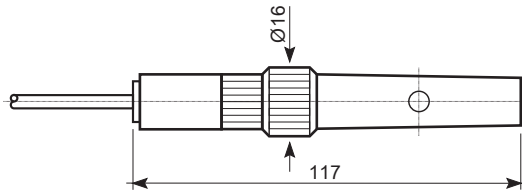
I - 32032 Feltre (BL) • Via Camp Lonc, 16  
Tel +39 0439 80638 • Fax +39 0439 80619  
e-mail: info@vemer.it - web site: www.vemer.it

### Dimensions

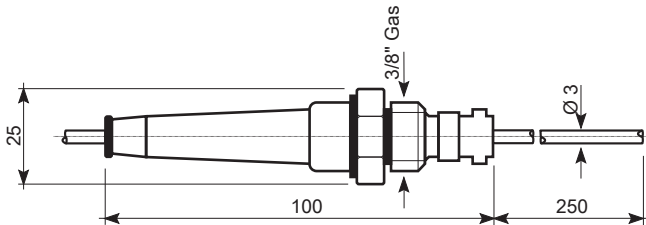
#### ESL



#### ES



#### EST



## User Manual

### SINGLE-POLE ELECTRODES

Read all the instruction carefully

- The single-pole electrodes series **ES** are designed to monitor fitting levels of electrically conductive liquids in well, storage tanks, boilers or surge tanks.
- They can be coupled to the high sensitivity relay LCR, manufactured by VEMER.
- The max operational voltage is 50 V AC.

### SAFETY WARNINGS

**When installing and operating the product it is absolutely necessary to observe the following instructions:**

- 1) **The appliance must be installed by a qualified person**
- 2) **Disconnect power supply while installing the appliance**
- 3) **Do not connect the appliance if any part of it is damaged**

### TECHNICAL SPECIFICATIONS

Catalog No.	Type	Weight g	Operating conditions		Terminals		Flexible cables	Connection of the metallic support	
			Temperat. max °C	Pressure max bar	Screw thread	Tightening torque Nm		Section max mm <sup>2</sup> /AWG	Screw thread
<b>VR448300</b>	<b>ESL</b>	25	80	-	M4	1,2	1,5 / 16	-	-
<b>VR449100</b>	<b>ES</b>	80	80	-	M4	1,2	1,5 / 16	-	-
<b>VR450900</b>	<b>EST</b>	70	200	80	M3	0,5	1,5 / 16	3/8" GAS	50

### TECHNICAL INFORMATION

#### ESL

- Stainless steel electrode of small dimensions, with nylon holder for protection against unintentional contact. A cable-bushing and a seal ring prevent the connection terminal coming in contact with the water and, consequently, oxidizing.  
This electrode is used in metallic or non-metallic wells and storage tanks.

#### ES

- Electrode like type ESL, but provided with ballast.

#### EST

- Stainless steel electrode complete with extension rod and designed for use in boilers, surge tanks and, generally speaking, in all cases where conditions of high pressure and high temperature exist.

### INSTRUCTIONS FOR INSTALLATION

- Do not install the electrode if a part of this is damaged.
- Before carrying out any installation operation, follow the instructions in this leaflet carefully.
- Always disconnect the supply before carrying out any connection, assembling or commissioning operations on the electrode and make sure that the conductors to connect or already connected to the terminals are not live.
- The installation should take place in accordance with the accident prevention provisions in force.
- The cable section is given in the "**Technical Specifications**" table, together with the tightening torque value.
- We recommended using 1,5 mm<sup>2</sup> silicon conductors for the connection of these electrodes to the associated level control relay.
- The cable that interconnect the relay to the electrodes should if possible be kept separate from the supply cables, especially where long distances are involved. If this is not possible, we recommend using of screened cables.