ELECTRODE TYPE LEVEL SWITCH

HE Series

ISO 14001 ISO 9001

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Always The Best Solution

HITROL CO., LTD.

Overview

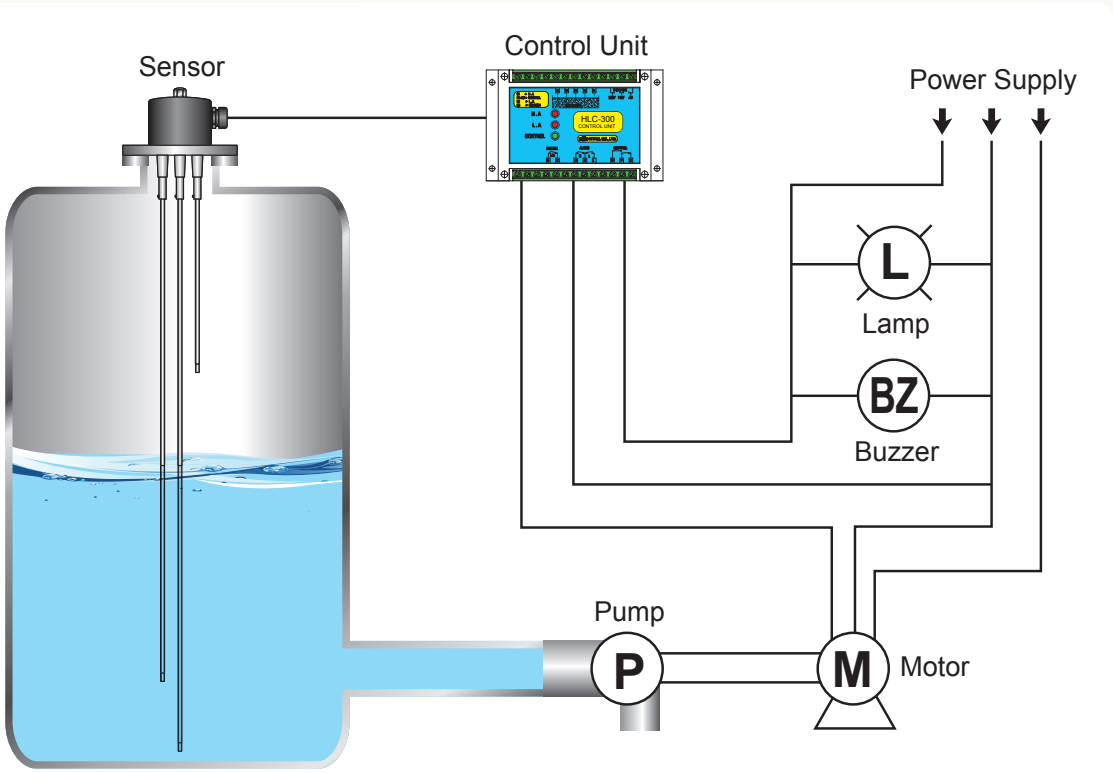
HE Series is an Electrode Type Level Switch, used for limit detection in a tank containing electrically conductive liquids. Limit levels can be determined by using one instrument with multi-probe rods. The rod length depends on the position of the level to be monitored and/or on whether a filling / empty function is required.

Characteristics

- Widely used for various liquids that has conductivity
- Low cost
- High reliability of measurement
- Simple structure and easy installation
- Semi-permanent life cycle due to moveless parts

Operating Principle and Composition

- This technique is based on the conductivity difference between various materials. Air, for example, has very low conductivity and water in general has a very high conductivity. A low alternating voltage is applied between the electrodes. When the filling liquid reaches the electrode, a small alternating current flows, control unit produces a signal output after detecting of this alternating current.



Specification

Model	HE-□S	HE-□V	HE-1S
Installation	Top Mounting		
Electrode Material	SUS 304 + PP (std.), SUS 316 + PP (opt.)		SUS 304 + Teflon (std.), SUS 316 + Teflon (opt.)
Enclosure	Weather Proof (IP54)		Weather Proof (IP65)
Process Pressure	ATM		10kg/cm² (std.) (Max. 20kg/cm²)
Process Temperature	60℃		80℃ (std.) (Max. 150℃)
Connection Material	Bakelite	PVC (std.)	SUS 316 (std.)
Process Connection	Screw PT 2″ (std.)	100A JIS 10K (std.)	Screw PT 1″ (std.)
Head Material	Bakelite	C.S	Aluminum
Cable Entry	PF 1/2″ (std.)	PF 3/4″ (std.)	

Model	HE-□H	HE-□H-S	HE-□H-SP
Installation	Top Mounting		
Electrode Material	SUS 304 + Teflon (std.) SUS 316 + Teflon (opt.)	SUS 304 + Teflon + Ceramic (std.) SUS 316 + Teflon + Ceramic (opt.)	
Enclosure	Weather Proof (IP65)		
Process Pressure	Max. 10kg/cm²	10kg/cm² (std.) (Max. 20kg/cm²)	
Process Temperature	80℃ (std.) (Max. 150℃)	250℃ (std.) (Max. 350℃)	250℃ (std.) (Max. 500℃)
Connection Material	SUS 304 (std.)		
Process Connection	Screw PT 2 ″ (std.)	100A JIS 10K RF (std.)	
Head Material	Aluminum		
Cable Entry	PF 3/4″ (std.)		

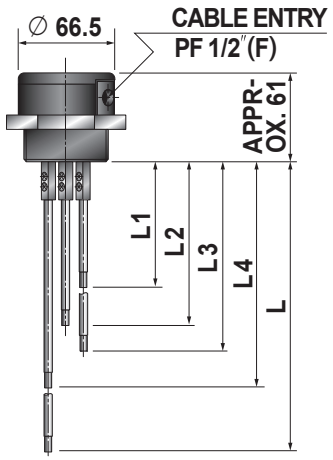
Combination Unit

Model	HLC-200A	HLC-300
Installation	Panel Inside Mounting	
Power Source	AC 110V or AC 220V 50/60Hz	AC 110/220V 50/60Hz (std.), DC 24V (opt.)
Power Consumption	Approx. 3VA	
Contact Form	1-SPDT	1-SPDT + 2-SPST
Function	Control or Alarm	Control + 2-Alarms
Contact Rating	AC 250V 5A, DC 30V 1A	AC 250V 5A, DC 30V 5A
Appearance		

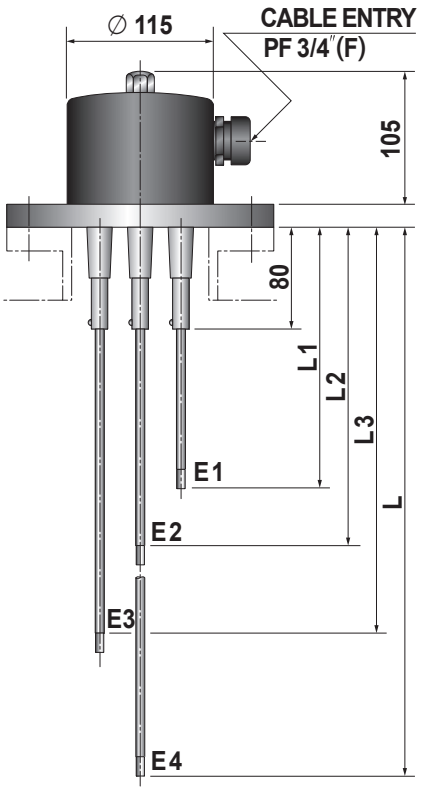
► ***Order Code*** can be printed at our website (***www.hitrol.com***)

Dimension

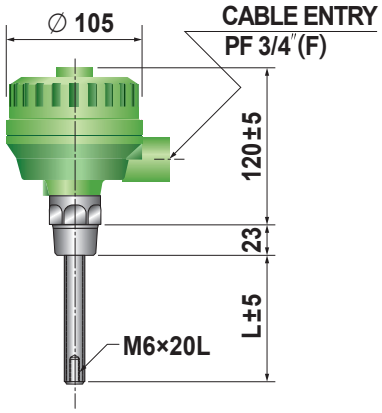
HE-□S



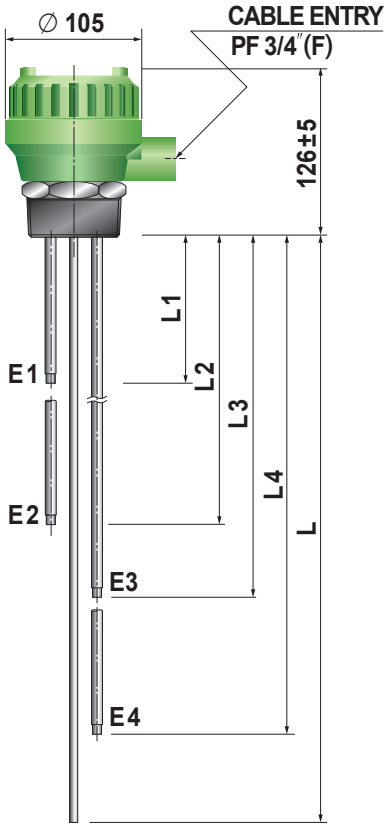
HE-□V



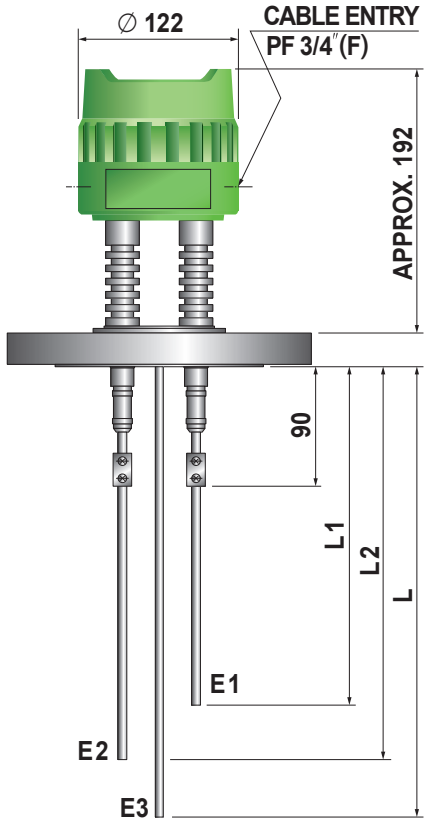
HE-1S



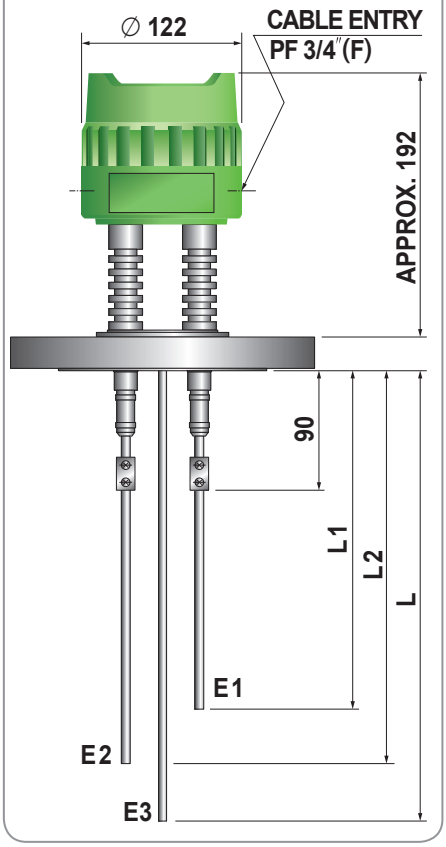
HE-□H



HE-□H-S



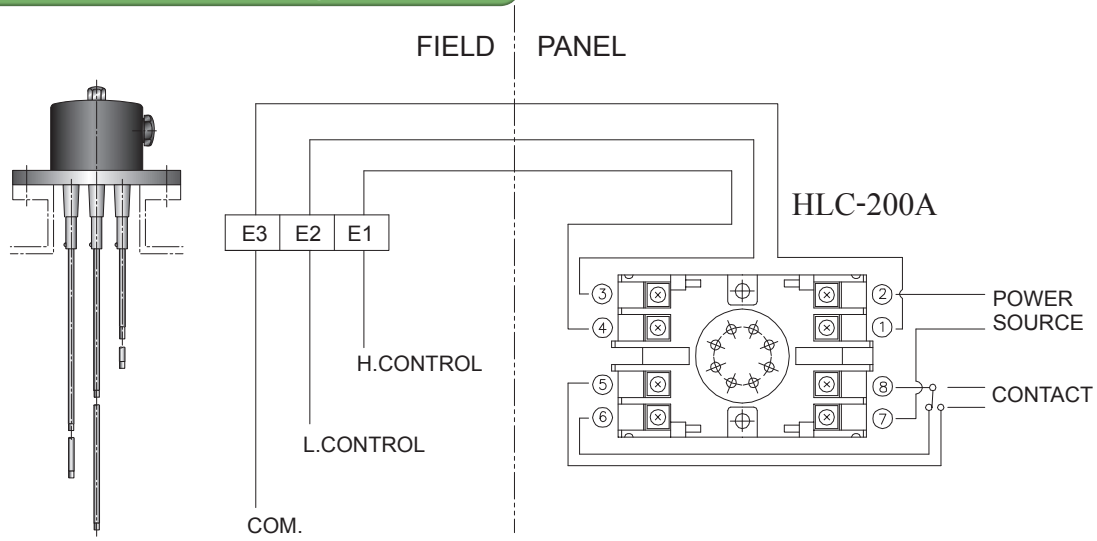
HE-□H-SP



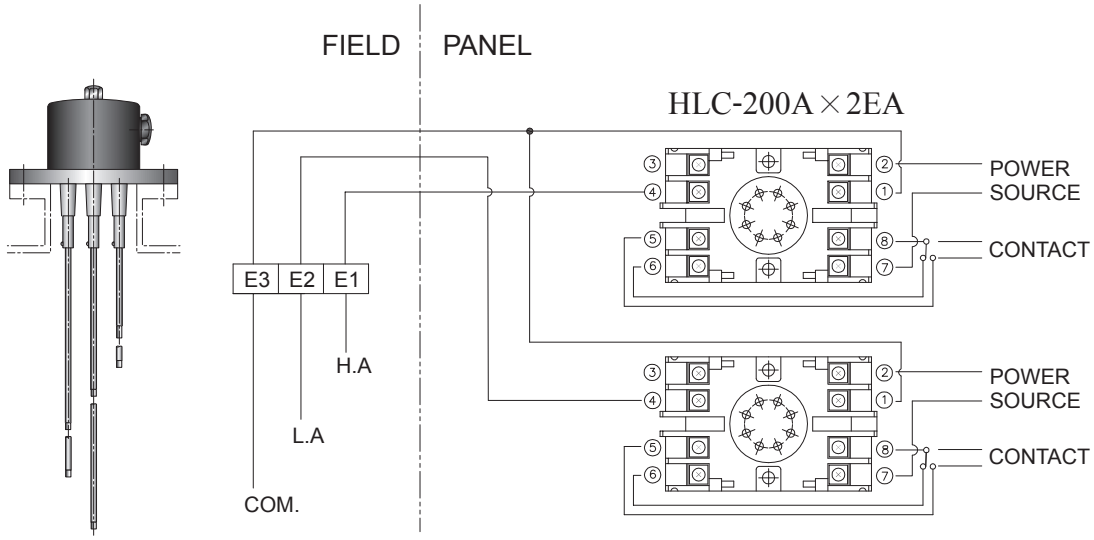
■ Actual product may have a tolerance slightly.

Connection Diagram

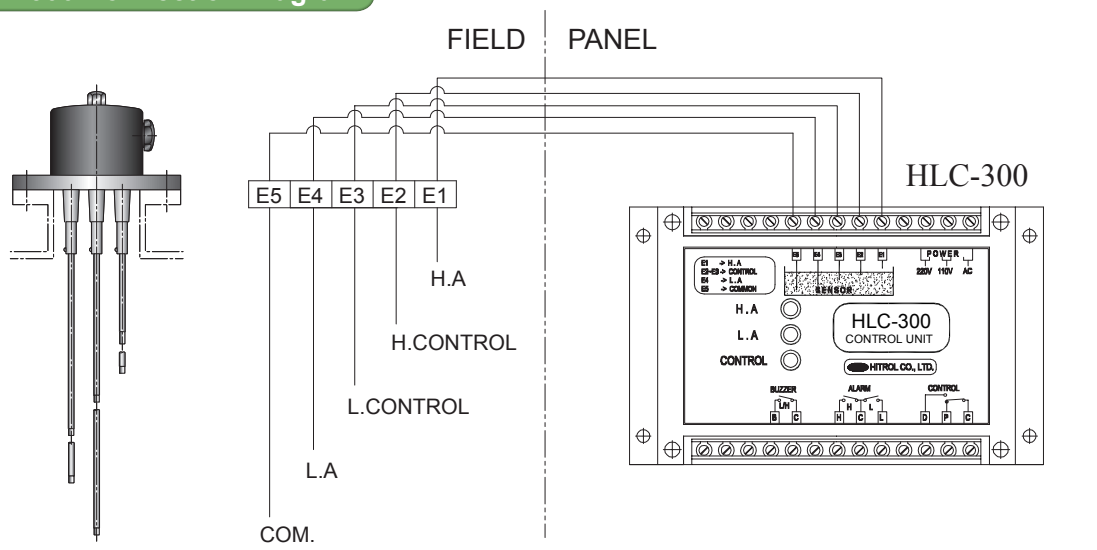
HLC-200A Connection Diagram (Control)



HLC-200A Connection Diagram (Alarm)



HLC-300 Connection Diagram



HE Series

- Low cost and high reliability
- Simple structure and easy installation
- Semi-permanent life cycle due to moveless parts

* Design of product can be changed for upgrade without notice.