

- Strongly and high accuracy temperature change
- •Frequency response 10kHz
- Sensor disconnection featured
- Digital Zero featured
- Various units can be added (bus connector connection)

# **SPECIFICATIONS**

CONTROLLER	LS-700-08	LS-700-1	LS-700-2A	LS-700-2B	LS-700-4A	LS-700-4B	LS-700-5	LS-700-10
SENSOR	HA-30S	HA-50S	HA-80S	HA-101S	HA-141S	HA-225S	HA-162S	HA-222R
MEASURING RANGE	0~0.8mm	O~1mm	0~	2mm	0~3.5mm		0~5mm	0~10mm
OUTPUT VOLTAGE	0~0.8V	0~1V	0~	-2V	0~3.5V		0~5V	0~10V
LINEARITY	±1% of F.S							
RESOLUTION	0.1% of F.S(1μm minimum)							
RESPONSE	DC∼10KHz (−3dB)							
OUTPUT IMPEDANCE	52Ω							
STABILITY	CONTROLLER: 0.01% of F.S SENSOR-HEAD: 0.02% of F.S/℃							
AMBIENT TEMPERATURE	CONTROLLER:-10~+60°C SENSOR-HEAD:-20~+70°C							
AMBIENT HUMIDITY	35~85%RH、(no condensation)							
POWER	DC+12V~+24V ±10% Ripple10% or less							
CONSUMPTION	250mA or less							
DIGITAL ZERO FUNCTION	The present output value is made into zero. Error±0.1% of F.S							
ALARM OUTPUT	Disconnection of a sensor-head or poor connection is detected. (NPN open-collector transistor)							
OPTION	SP (high resolution) : 0.03% of F.S(0.3 $\mu$ m minimum)							

# CONNECTION

# LS-700-

# Analog V - O U T \*\*Nothing control of the control terminal 100mA POWER \*\*Nothing control of the control terminal 100mA POWER \*\*Nothing control of the control of the control of the control terminal 100mA POWER \*\*Nothing control of the control of t

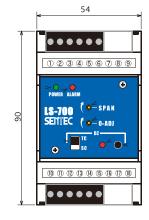
Alarm output

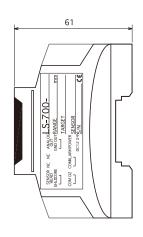
# **CONTOROLLER DIMENSIONS**

(unit:mm)

\*Nothing connects with
3 and 3 terminal.

①Power indicator
②Alarm indicator
③Span-adjustment trimmer
④Zero-adjustment trimmer
⑤Digital zero control changeover switch
⑤Digital zero indicator
⑦Digital zero switch



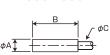


# **SENSOR-HEAD DIMENSIONS**

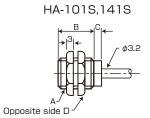
# ●(Please consult us for horizontal) sensor head

(unit:mm)

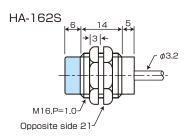


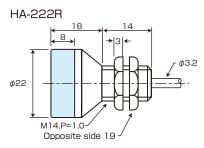


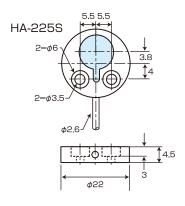
MARK	А	В	С	
HA-30S	3.6	15	2.6	
HA-50S	5.4	15	3.2	
HA-80S	8	15	3.2	



MARK TYPE	А	В	С	D
HA-101S	M10,P=1.0	12	3	14
HA-141S	M14,P=1.0	15	5	19





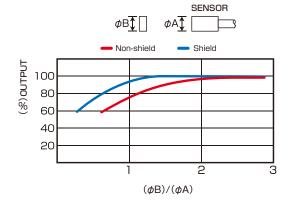


3m of standard coaxial cord is attached to each sensor-head.

# REFERENCE DATA

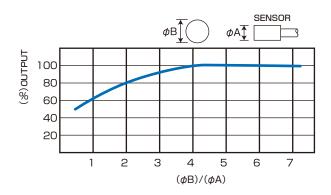
### (1) For the area of object

A specification value will be satisfied, if an object is a thing which has more than the diameter of the following graph when a subject is used as a disk.



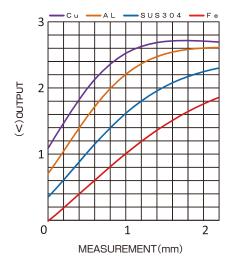
### (2) For a pillar shape object

A specification value will be satisfield, if the diameter of the piller of a subject is by the thing which has 5 or more times of the diameter of a sensor head.

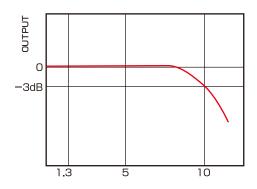


### (3) The characteristic over metals other than iron.

\*Zero adjustment and Span adjustment are the graph set up similarly to an iron state.



### (4) Response For Frequency (LS-700)



Frequency(kHz)

<sup>\*</sup>The whole data can be different depending on the operating environment.

# **CONNECTION BY BUS CONNECTORS**

It is possible to increase controllers using bus connector (sold separately) simply and easily.

\* The expansion unit connection lies left side of the controller.

# ①LS-700 multiple connection

Share: Power supply Max: Up to 8 LS-700 increasable (when the power supply is DC24)



### (4)LS-700 and VI-300 connection

Share: Power supply and analog output Max: Up to 3 sets of LS-700 and VI-300 increasable (when the power supply is DC24)

VI-300 LS-700 VI-300 LS-700



\*The specification of VI-300 is listed on page 25.

### 2LS-700 and DLC-500 connection

Share: Power supply and analog output Max: Up to 4 sets of LS-700 and DLC-500 increasable (when the power supply is DC24)



\*The specification of DLC-500 is listed on page 23.

## 5LS-700 and VI-500 connection

Share: Power supply and analog output Max: Up to 3 sets of LS-700 and VI-500 increasable (when the power supply is DC24)



\*The specification of VI-500 is listed on page 25

### 3LS-700, DLC-500 and CH-500 connection

Share: Power supply and analog output Max: Up to 3 sets of LS-700, DLC-500 and CH-500 increasable (when the power supply is DC24)

CH-500 DLC-500 LS-700 CH-500 DLC-500 LS-700



\*The specification of DLC-500 and CH-500 is listed on page 23 and 24.

### Bus connector (optional)



