

EG31 (EGX1000-A1/EGX10200-A1)

Magnetostrictive Level Transmitter Operation Manual

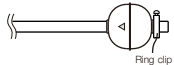
INSTALLATION RECOMMENDATION

- Power supply 18-30 Vdc.
- This product has been adjusted before leaving the factory. Please do not change magnetic float to avoid effect on measurement accuracy.
- Magnetostrictive level transmitter is a measuring device with high accuracy. The pipe body cannot be bent to avoid damage to measurement accuracy, or even improper operation.
- Please do not change the float specifications of the product, to avoid any effects on the normal operation of the product.
- User can install the product directly without having to take off the float, when the connection hole at site is bigger than the float diameter
- Please take off the float before installation, when the connection hole is smaller than the float diameter. When installed, the float shall be reinstalled according to the factory direction (the mark on the float has to be facing towards the product enclosure).
- The stopper has to be fixed well on the probe score and fastened.
- Please do not drop the magnetic float, to avoid magnet breakage inside the float.
- Do not pressure the product with heavy weight, to bend the probe. If the probe is bent and cannot work, please send back to us for calibration.
- Package by bubble bag or foam is necessary to ensure safety during transportation.
- Please do not open the product enclosure to assure measurement accuracy

INSTALLATION METHOD IF THE FLOAT HAS TO BE TAKEN OFF BEFORE INSTALLATION

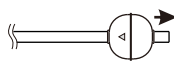
Step 1 :

Loosen the ring clip at stem end



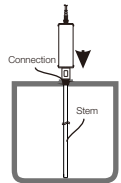
Step 2 :

Take off the float.



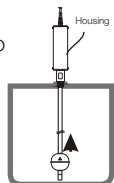
Step 3 :

Install the product itself into the tank, and screw the connection well.



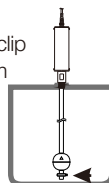
Step 4 :

Put back the float onto the stem by specific direction mark on the float has to be toward the housing



Step 5 :

Screw the ring clip well on the stem

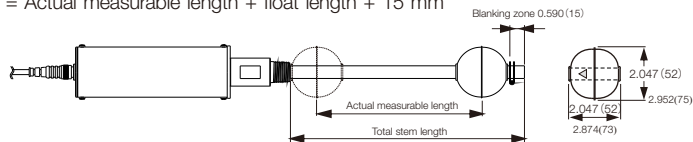


Instructions for actual measurable length in advance:

The relationship between the stem length of and the actual measurable length is shown in the illustration below.

Total stem length = Actual measurable length + float length + 15 mm

For example:



Total stem length= 500mm (Actual measurable length) + 73mm (S5 float)+15mm =588mm

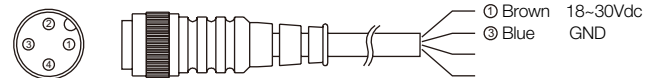
※ the float ball varies in size depending on different options.

SAMPLE SPECIFICATIONS

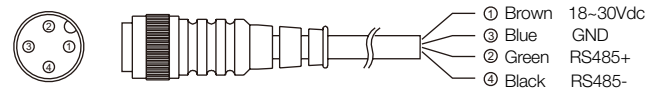
- Power supply: 18-30Vdc(HART loop circuit impedance post-power supply)
- Measuring range: 50-5500mm
- Output signal: 4~20 mA or 20~4 mA
- Maximum load (Ω): (V_s-18V) $\div 0.02$, V_s = power supply
- Non-Linearity(precision μm): $\pm 0.05\%F.S$ or $\pm 1.0mm$ (whichever is greater)
- Repeatability: 0.004%FS
- Hysteresis degree: 0.004%FS
- Temperature coefficient: ± 100 ppm/ $^{\circ}C$
- Environment temp.: $-40\sim 85$ $^{\circ}C$
- Operational temp.: $-40\sim 125$ $^{\circ}C$
 $-40\sim 200^{\circ}C$ (high-temperature type)
- Temperature sensor: PT100 (optional)
- Temp. accuracy: ± 1 $^{\circ}C$
- Communication interface: HART/RS485 (optional)
- Protection rating: IP67(enclosure)/IP69K(probe)
- Communication certification: HART (optional)

WIRING DESCRIPTION

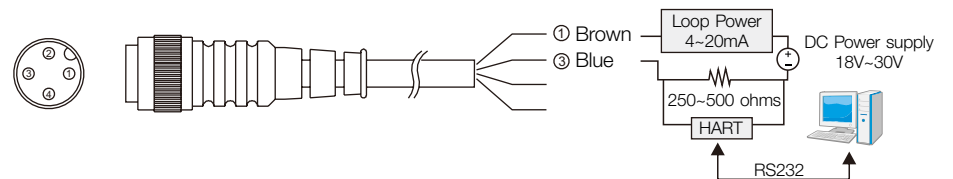
I. Single float + Loop power



II. Single/double float +RS485



III. Single/double float +HART



MODBUS TABLE

	Name	Address(Hex)	Address(Dec)	Data Types	Quantity	Unit/Code	Definition
1	FineTek ID	0x1000	4096	STRING	1	FINE-TEK	READ
2	Product Type	0x1004	4100	UINT16	1	EG	READ
3	Product Number	0x1005	4101	UINT16	1	0x0005	READ
4	Product Version	0x1006	4102	UINT16	1	0x0001	READ
5	Float 1 distance	0x1007	4103	FLOAT	1	1mm	READ
6	Float 2 distance	0x100a	4106	FLOAT	1	1mm	READ
7	Measurable Range	0x1010	4112	FLOAT	1	1mm	READ
8	Display Percentage 1	0x1026	4134	FLOAT	1	%	READ
9	Display Percentage 2	0x1028	4136	FLOAT	1	%	READ
10	Temp Value	0x102a	4138	FLOAT	1	°C	READ WRITE
11	MODBUS ID	0x102c	4140	UINT16	1	ID=1	READ WRITE
12	MODBUS BAUDRATE	0x102d	4141	UINT16	1	BAUD=9600	READ WRITE
13	Float 1 High Limit	0x1034	4148	FLOAT	1	1mm	READ WRITE
14	Float 1 Low Limit	0x1036	4150	FLOAT	1	1mm	READ WRITE
15	Save System Var to EEPROM	0x1054	4180	UINT16	1	Set up value = 1 (save setting)	READ WRITE
16	Save Calibration Setting	0x1057	4183	UINT16	1	Set up value = 1 (save setting)	READ WRITE

WARRANTY

Warranty 12 months after delivery. No fee such as testing, parts and maintenance will be charged in warranty. Any flaws caused by delivery can be filed to us within 7 days given related evidence.

We will be responsible for repair or replacement.

Please send back the whole unit to us and pack well to prevent break-down during delivery.

The following will be charged:

1. Out of warranty
2. Do not follow operation instruction in manual, or over product spec as indicated in catalogue.
3. Any cause by force majeure such as flood, earthquake, typhoon etc.



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