



By-Pass Level Transmitter











































### INTRODUCTION

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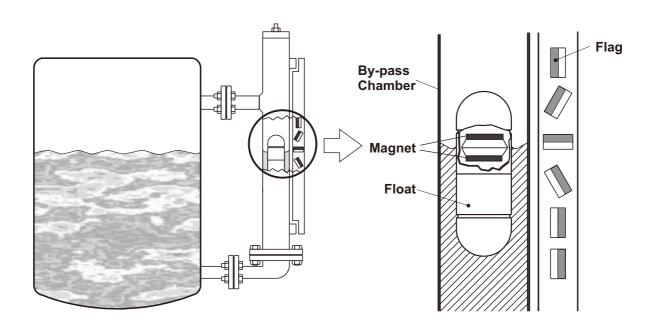
The By-Pass Level Indicator is installed outside of a vessel or tank. The liquid level in the tank can easily be observed from the change of the flag color. Optional devices of magnetic switch and level transducer can be added for electrical signal output and level transmitting.

### **PRINCIPLE**

Fine-Tek's By-Pass indicator utilizes hydrostatic principle to show the liquid level in the tank. A float with a magnet inside rises and drops according to the liquid level change. Magnetic flags will flip as float passes through to indicate liquid level based on magnetic attraction method.

### **APPLICATIONS AND FEATURES**

- Applicable in environment with high temp., high pressure, strong acid, strong alkaline and hazardous locations. The structure is simple but durable and reliable. It is also available with various options for upgrade.
- A level transducer or magnetic switch can be installed and adjusted during operation.
- It is not operated by electricity thus it will not be affected by power failure.
- Add different color of hag per 10cm that can he recognized easily.
- Multiple applications for textile dyeing, sewage water processing, power generating, boiler and petrochemical industries.





### PRODUCT WITH PATENT RECOMMENDATION

### 1.) Magnetic Switch (Fig.1)

- \* The plastic miniature magnetic switch is anti-corrosive and with IP67 rating. It is the smallest magnetic switch in the current market.
- \* The magnetic switch is easy to set up and has real time adjustment.

# 2.) Innovative Design For Bottom End Flange and the Connecting Flange (Fig.2)

- \* The lower center duct is at the bottom end of the chamber.
- \* This is suitable for production that requires frequent liquid change and mixture is not allowed during the process.

# 3.) Removable Duct and Connecting Flange (Fig.3)

- \* The flange setting is close to the two ends of the chamber, therefore the "C-C" distance is maximized.
- \* It is strengthened in the structure by a large phase weld
- \* During the installation, adjust the flange to the fitting mounting holes.

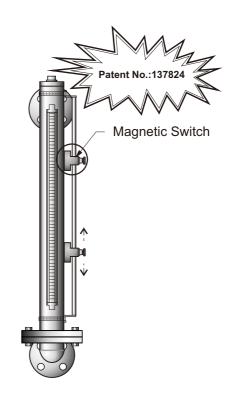
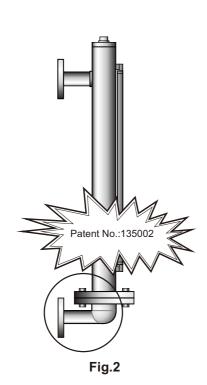


Fig.1



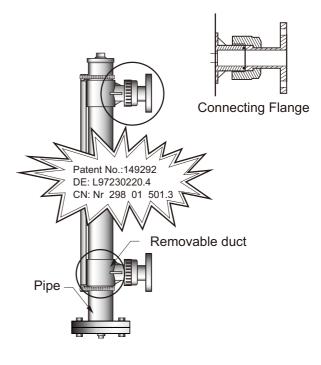
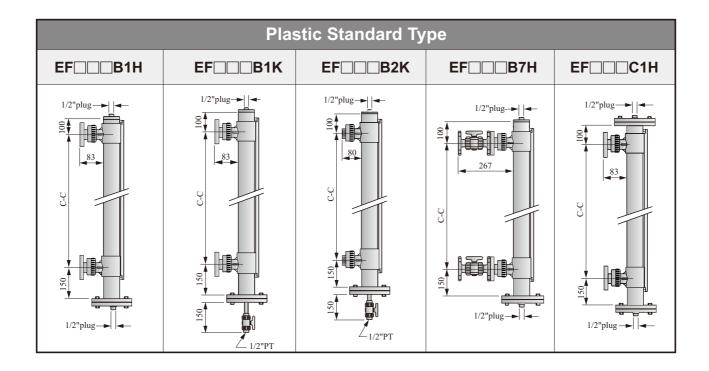


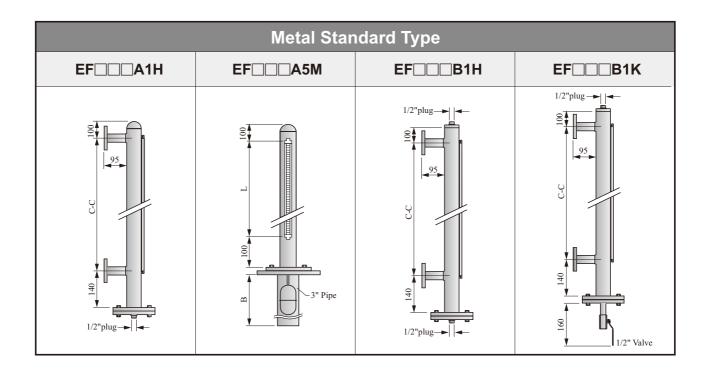
Fig.3





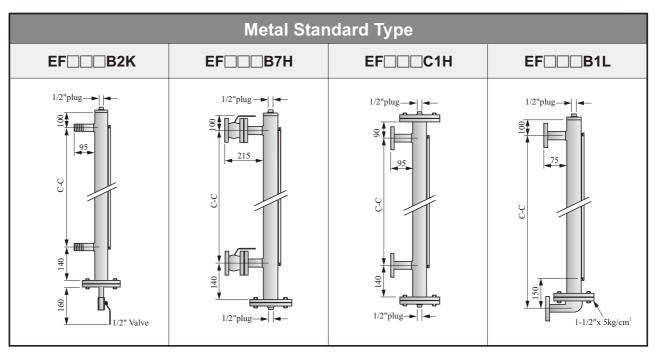
Model No. Description	EF□□□B1H	EF□□□B1K	EF□□□B2K	EF□□□B7H	EF□□□C1H
Top end				Dual flange with 1/2"PT plug	
Bottom end	Dual flange with 1/2"PT plug	Dual flange with 1/2"PT drain valve Dual flange wi		th 1/2"PT plug	
Connecting	3/4" x10	3/4" x10kg/cm² (Flange) 3/4" or 1"PT (Screw)		3/4" x10kg/cm² (Ball Valve)	3/4" x10kg/cm² (Flange)
C-C Distance	Min. 150mm; Max. 3800mm				
Operation pressure	5kg/cm²				
Operation temp.	PP: 80°C, PVDF: 120°C				
Chamber	PP: φ60.5 x 3.8t, PVDF: φ63 x 3.2t				
Float type	EFB-2500 (PVDF) / 2510 (PP) (Refer float specifications)				
Material	PP / PVDF				
Flag indicator	EFB-0750 (140°C) (Refer flag display data)				
Ruler	Option(Refer ruler data)				





Model No. Description	EF□□□A1H	EF□□□A5M	EF□□□B1H	EF□□□B1K	
Top end	Ca	ар	Flat top with 1/2"PT plug		
Bottom end	Dual flange with 1/2"PT plug	Dual flange with 3" shield pipe	Dual flange with 1/2"PT plug	Dual flange with 1/2" drain valve	
Bottom flange	1-1/2" x 5kg/cm <sup>2</sup>	3-1/2" x 5kg/cm <sup>2</sup>	1-1/2" x {	5kg/cm <sup>2</sup>	
Connecting	3/4" x10kg/cm² (Flange)	3" (Hole)	3/4" x10kg/	cm² (Flange)	
C-C Distance Flag isplay length(L)	Min. 150mm; Max. 5,800mm	Min. 150mm; Max. 2,000mm	Min. 150mm; Max. 5.800mm		
Operation pressure	25kg/cm² (Max. 50kg/cm²)			20kg/cm <sup>2</sup>	
Operation temp.	SUS304: 140°C, 200°C, 400°C SUS316: 140°C, 200°C, 400°C			SUS304: 140°C,200°C,350°C SUS316: 140°C,200°C,350°C	
Chamber	φ60.5 x 2.8t				
Float type	EFB-2580 (Refer float specifications)				
Material	SUS304 / SUS316				
Flag indicator	EFB-0700 (200°C), EFB-0740 (400°C), EFB-0750 (140°C)(Refer flag display data)				
Ruler	Option (Refer ruler data)				

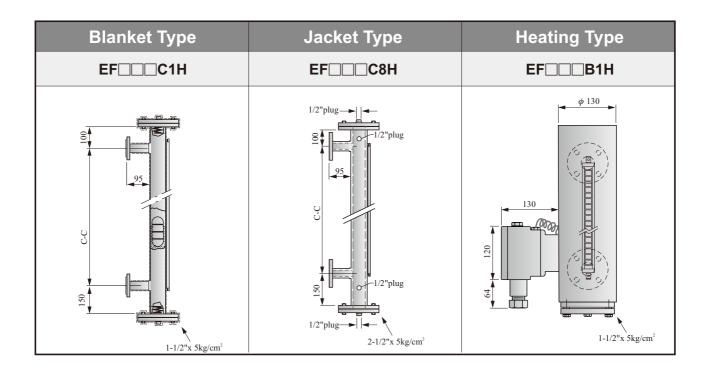




<sup>\*</sup> The pipe is so long that support rack is needed to prevent pipe from bending.

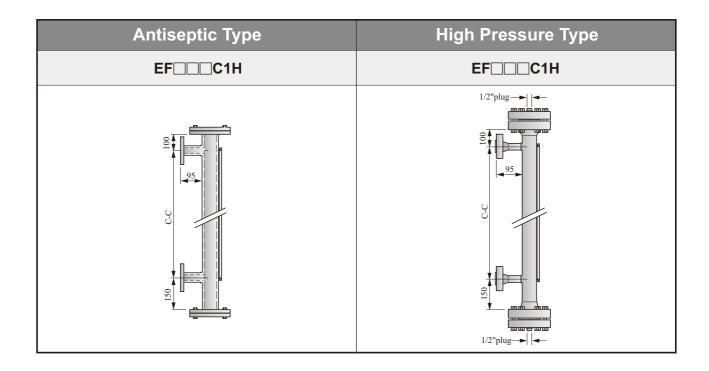
Model No. Description	EF□□□B2K	EF□□□B7H	EF□□□C1H	EF□□□B1L
Top end	Flat top with	1/2"PT plug	Dual flange with 1/2"PT plug	Flat top with 1/2"PT plug
Bottom end	Dual flange with 1/2" drain valve	Dual flange with 1/2"PT plug		Dual flange+angle pipe
Bottom flange		1-1/2" x 5kg/cm <sup>2</sup>		
Connecting	3/4"PT or 1"PT (Screw)	3/4" x10kg/cm² (Ball Valve)	3/4" x10kg/cm² (Flange)	
C-C Distance	Min. 150mm; Max. 5,800mm			
Operation pressure	20kg/cm <sup>2</sup>	10kg/cm <sup>2</sup>	25kg/cm² (Max. 50kg/cm²)	
Operation temp.	SUS304:140°C, 200°C, 350°C SUS316:140°C, 200°C, 350°C		SUS304:140°C, 200°C,400°C SUS316:140°C, 200°C,400°C	
Chamber	φ60.5 x 2.8t			
Float type	EFB-2580 (Refer float specifications)			
Material	SUS304 / SUS316			
Flag indicator	EFB-0700 (200°C), EFB-0740 (400°C), EFB-0750 (140°C) (Refer flag display data)			
Ruler	Option (Refer ruler data)			





Model No. Description	EF□□□C1H	EF□A/B□C1H	EF□□□B1H	
Top end	Dual flange wi	Dual flange with 1/2"PT plug		
Bottom end	Dual flange with 1/2"PT plug		Dual flange with 1/2"PT plug	
Connecting	3/4" x10kg/cm² (Flange)	1-1/4" x 10kg/cm <sup>2</sup>	3/4" x10kg/cm² (Flange)	
C-C Distance	Min. 150mm; Max. 5800mm			
Operation pressure	25kg/cm² (Max. 50kg/cm²)		20kg/cm²	
Operation temp.	SUS304: 140°C, 200°C, 400°C SUS316: 140°C, 200°C, 400°C		SUS304: 100°C SUS316: 100°C	
Chamber	φ60.5 x 2.8t	Jacket $\phi$ 76 x 3.0t 1/2"PT plug	$\phi$ 65 x 3.5t $\phi$ 130 Heating type	
Float type	EFB-2580 (Refer float specifications)			
Material	SUS304 / SUS316			
Flag indicator	EFB-0700 (200°C), EFB-0740 (400°C), EFB-0750 (140°C) (Refer flag display data)			
Ruler	Option (Refer ruler data)			





Model No. Description	EF□A/B□C1H	EF□□□C1H	
Top end	Dual flange	Dual flange with 1/2"PT plug	
Bottom end	Dual flange	Dual flange with 1/2"PT plug	
Connecting	3/4" x10kg/cm² (Flange)	600Lb or 300Lb	
C-C Distance	Min. 150mm; Max. 5800mm		
Operation pressure	25kg/cm² (Max. 50kg/cm²)	100kg/cm²(300°C down)600Lb 60kg/cm²(300°C up)300Lb	
Operation temp.	PP: 80°C PTFE:120°C	SUS304: 140°C SUS316: 140°C	
Chamber	$\phi$ 65 x 2t Coating PP or PTFE	φ 76.3 x 5.5t	
Float type	EFB-2580 (Refer float specifications) +Coating	EFB-2654 (Refer float specifications)	
Material	SUS304 / SUS316		
Flag indicator	EFB-0700 (200°C), EFB-0740 (400°C), EFB-0750 (140°C) (Refer flag display data)		
Ruler	Option (Refer ruler data)		

