

General

FB-9000 is a bellows type, mechanical direct action float level switch.

Liquids with ferrous powers/particles, which is not suitable for magnet coupling type float level switch, are measured and detected.

Standard Specification

Measuring object	All types of liquids Minimum density ; 0.6g/cm ³		
Max. operating pressure	Standard	0.2MPa	
	Option	2MPa	
Liquid temp.	-19 + 150°C		

Process connection

- 1) Tank side nozzle installation
 - Standard 4" (100mm) flange
- 2) Tank side external chamber installation
 - Standard 1" (25mm) flange or screw
- 3) Option Tank top installation
 - Consult factory for details

Enclosure

- 1) Weather proof type (IP65 equivalent)
- 2) Flame proof (d2G4)
- 3) Intrinsically safe (i3aG5)
 - Suitable safety relay to be provided in safe area

Material

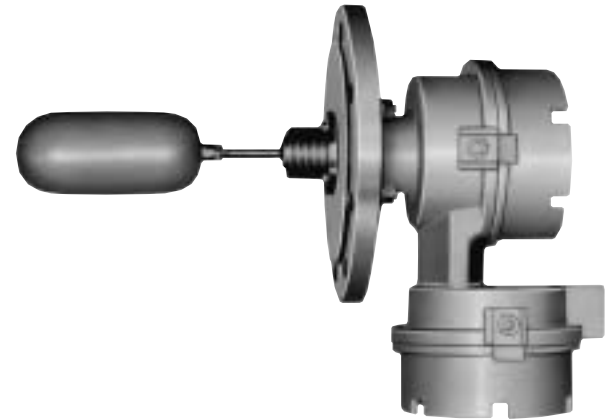
Float	SUS304, SUS316 or SUS316L
Bellows	SUS316L
Flange	SUS304, SUS316, SUS316L
External chamber	Carbon steel, SUS304, SUS316, SUS316L

Available switch

- 1) SPDT microswitch
 - Capacity AC250V, 5A or DC125V, 0.4A
- 2) Air microswitch
 - 3 port type, 0~1 MPa (Max.)

Cable entry Standard 1 X G1/2
(2 X Rc 1/4 for air microswitch version)

Cable termination M3.5 screw



Material construction

● Level switch

	Material class 3	Material class 4	Material class 5
Float	SUS304	SUS316	SUS316L
Bellows	SUS316L		
Flange	SUS304	SUS316	SUS316L
Housing	AC2A		

● External chamber

Carbon steel, SUS304, SUS316, SUS316L, Others

MODEL CODE

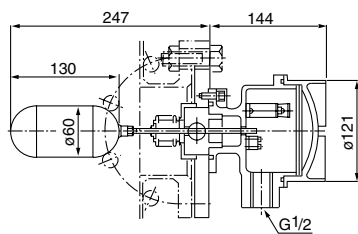
FB-909		-										Description		
Level switch unit	Pressure rating	1											0.2MPa	
		2											2MPa	
	Material construction	W											Weather proof	
		WP											Weather proof with JISF15b gland*	
		E											Flame proof (d2G4)	
		EP											Flame proof (d2G4) with ex-proof cable gland*	
		S											Intrinsically safe (i3aG5, safety relay provided)	
		SP											Intrinsically safe (i3aG5, safety relay provided) with ex-proof cable gland*	
	Connection flange size	-	3											Material class 3
		-	4											Material class 4
		-	5											Material class 5
		-	Z											Other special
	Connection flange standard	1											Standard 4" (100mm)	
		Z											Other special (Min. 100mm)	
	Switch type	1											JIS5K	
2												JIS10K		
3												JIS20K		
4												ANSI#150		
5												ANSI#300		
6												JPI#150		
7												JPI#300		
Z												Other special		
Alarm action	1											Standard SPDT microswitch		
	2											Air microswitch		
	Z											Other special		
Chamber material	H											High alarm action		
	L											Low alarm action		
Connection size	-	0											Chamber not provided	
	-	1											Carbon steel	
	-	2											SUS304	
	-	3											SUS316	
	-	Z											Other special	
Connection standard	0											No chamber provided		
	1											1"SW		
	2											Rc1		
	3											1BJIS10KRF		
	4											1BJIS20KRF		
	5											1"ANSI#150		
	6											1"ANSI#300		
	7											1"JPI#150		
	8											1"JPI#300		
Z											Other special			
Gasket material	0											No chamber provided		
	1											Non Asbestos joint sheet (V#6500 equivalent)		
	2											PTFE		
	3											Metal wound (V#8591 equivalent)		
	Z											Other special		
Bolt,nut material	0											No chamber provided		
	1											SS400/SS400		
	2											SNB7/S45C		
	3											SUS304/SUS304		
	Z											Other special		

External dimensions

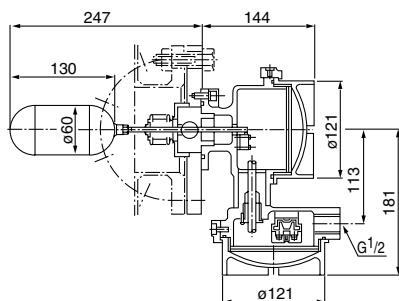
* : Cable diameter to be specified for order

● Level switch unit

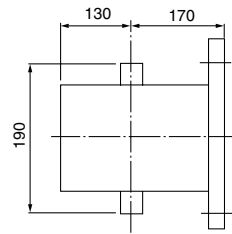
● External chamber



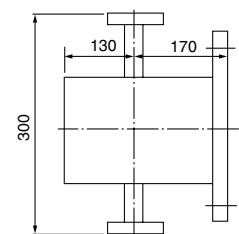
Weather proof (FB-9091W)



Flame proof (FB-9091E)



Screw connection type



Flange connection type

* Specification is subject to change without notice.



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