

# PLASTIC TUBE FLOW METER BPF300

## Technical Data

**BPF300 for high flows of gas and liquid**

**Case material:** SS316; Aluminum alloy available

**Body wetted parts material:** in PVC, CPVC, PVDF  
indication via magnetic coupling (no sealed)

**Scales calibrated:** in l/h, m<sup>3</sup>/h, kg/h, %, etc.

**Flow rates for:** – Water: 4 l/h up to 15,000 l/h (SS316 float)  
4 l/h up to 10,000 l/h (PVDF float)  
(special ranges on request)  
– Air: 0.1 Nm<sup>3</sup>/h up to 450 Nm<sup>3</sup>/h

**Connection size:** Thread ½”~2½”NPT or BSP available;  
Flange type available

**Mounting length:** 250mm, standard or others

**Protection class:** IP66

**Accuracy:** ±5% F.S for tube BPF3(P)3001~BPF3(P)3003;  
±2% F.S for tube BPF3(P)3004~BPF3(P)3026; option ±1.6% on request

**Max. working pressure:** 20 kg/cm<sup>2</sup> (PVDF); 15 kg/cm<sup>2</sup> (PP & PVC)

**Max. working temperature:** PVC: 0~40°C; PP: 0~60°C  
PVDF: -30~100°C

**Adjustable micro switch:** 1 adjustable alarm contact

**Load:** 5A/125VAC, 5A/250VAC, 2A/30VDC

**Hysteresis:** ±10% F.S (Dead Band)

**Electric transmitter:** Analog output available 4~20mA (2 wire)

No alarm switch available

Power supply: 24VDC

Temperature: -25°C~+50°C (AMB)



**Approvals:**

**Patent No.**



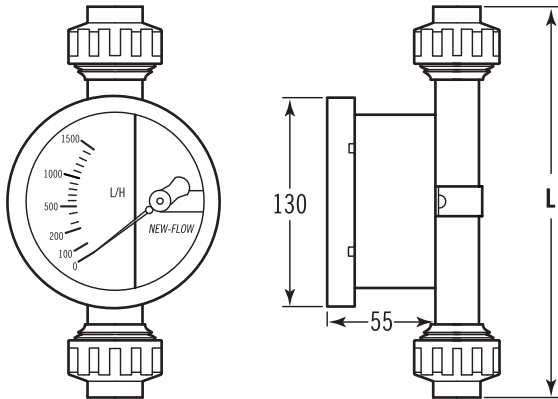
Taiwan: M358295/M332836  
China: 1187801

**SIL2 Certified**

## Dimensions

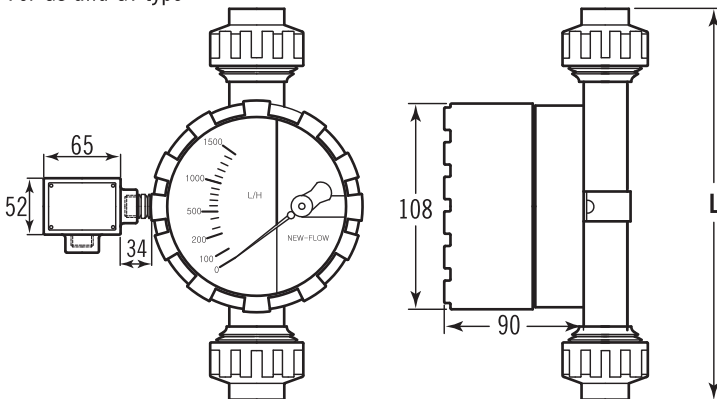
**Case Material:** SS316

**Case Type:** Round Bayonet Ring Type  
Only for indicating type



**Case Material:** Aluminum alloy and SS316 available

**Case Type:** Round Screw Tight type  
For GS and GT type

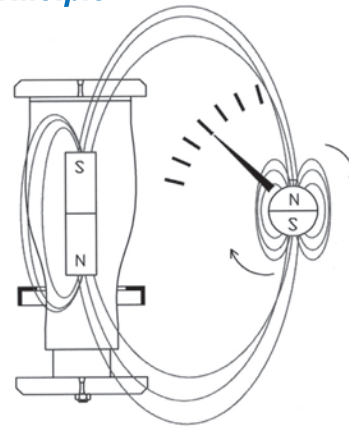


L: Standard 250mm

Other please refer to the *Standard Scales*

unit=mm

## Principle



## Standard Scales

### A. Float Material: SS316

Tube	L/H 20°C Water	NM <sup>3</sup> /H Air 0°C 1.013bar	PmmWater	Thread Connection	Thread Type L (mm)	Accuracy (NOTE 1.)
BPFS3001	4 ~ 30	0.1 ~ 1	≤750	1/2"	221	±5% F.S
BPFS3002	4 ~ 40	0.13 ~ 1.3	≤750	1/2"	221	±5% F.S
BPFS3003	5.5 ~ 55	0.17 ~ 1.7	≤750	1/2"	221	±5% F.S
BPFS3004	8 ~ 80	0.2 ~ 2	≤750	1/2"	221	±2% F.S
BPFS3005	16 ~ 160	0.5 ~ 5	≤750	1/2"	221	±2% F.S
BPFS3006	18 ~ 180	0.6 ~ 6	≤750	1/2"	221	±2% F.S
BPFS3007	30 ~ 300	1 ~ 10	≤750	1/2"	221	±2% F.S
BPFS3008	50 ~ 500	1.5 ~ 15	≤750	1/2"	221	±2% F.S
BPFS3009	60 ~ 600	1.8 ~ 18	≤750	1/2"	221	±2% F.S
BPFS3010	70 ~ 700	2 ~ 20	≤750	1/2"	221	±2% F.S
BPFS3011	100 ~ 1000	3 ~ 30	≤750	1/2"	235	±2% F.S
BPFS3012	120 ~ 1200	4 ~ 40	≤750	1/2"	235	±2% F.S
BPFS3013	160 ~ 1600	5 ~ 50	≤700	3/4"	250	±2% F.S
BPFS3014	200 ~ 2000	6 ~ 60	≤700	3/4"	250	±2% F.S
BPFS3015	240 ~ 2400	7 ~ 70	≤700	3/4"	250	±2% F.S
BPFS3016	280 ~ 2800	8.5 ~ 85	≤700	3/4"	250	±2% F.S
BPFS3017	320 ~ 3200	9 ~ 90	≤700	3/4"	250	±2% F.S
BPFS3018	350 ~ 3500	10 ~ 100	≤700	3/4"	250	±2% F.S
BPFS3019	500 ~ 5000	14 ~ 140	≤650	1" & 1½"	270	±2% F.S
BPFS3020	600 ~ 6000	15 ~ 150	≤650	1" & 1½"	270	±2% F.S
BPFS3021	700 ~ 7000	20 ~ 200	≤650	1" & 1½"	270	±2% F.S
BPFS3022	800 ~ 8000	24 ~ 240	≤650	1" & 1½"	270	±2% F.S
BPFS3023	1000 ~ 10000	30 ~ 300	≤650	2"	306	±2% F.S
BPFS3024	1200 ~ 12000	35 ~ 350	≤650	2"	306	±2% F.S
BPFS3025	1400 ~ 14000	40 ~ 400	≤650	2"	306	±2% F.S
BPFS3026	1500 ~ 15000	45 ~ 450	≤1000	2"	306	±2% F.S

#### NOTE.

1. Accuracy ±5% F.S: BPFS3001~BPFS3003  
Accuracy ±2% F.S: BPFS3004~BPFS3026  
and option ±1.6% F.S on request.

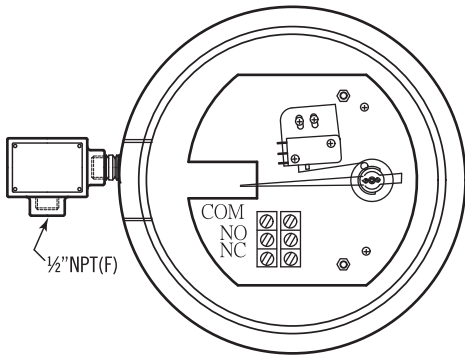
2. Performance Technical Data are effective with date of issue and are subject to change without prior notice.

### B. Float Material: PVDF

Tube	L/H 20°C Water	NM <sup>3</sup> /H Air 0°C 1.013bar	PmmWater	Thread Connection	Thread Type L (mm)	Accuracy (NOTE 1.)
BPFP3001	4 ~ 40	0.13 ~ 1.3	≤750	1/2"	221	±5% F.S
BPFP3002	5.5 ~ 55	0.17 ~ 1.7	≤750	1/2"	221	±5% F.S
BPFP3003	8 ~ 80	0.2 ~ 2	≤750	1/2"	221	±2% F.S
BPFP3004	16 ~ 160	0.5 ~ 5	≤750	1/2"	221	±2% F.S
BPFP3005	28 ~ 280	0.9 ~ 9	≤750	1/2"	235	±2% F.S
BPFP3006	35 ~ 350	1.1 ~ 11	≤750	1/2"	235	±2% F.S
BPFP3007	40 ~ 400	1.3 ~ 13	≤750	1/2"	235	±2% F.S
BPFP3008	50 ~ 500	1.5 ~ 15	≤750	3/4"	250	±2% F.S
BPFP3009	70 ~ 700	2 ~ 20	≤700	3/4"	250	±2% F.S
BPFP3010	90 ~ 900	2.5 ~ 25	≤700	3/4"	250	±2% F.S
BPFP3011	100 ~ 1000	3 ~ 30	≤700	3/4"	250	±2% F.S
BPFP3012	120 ~ 1200	4 ~ 40	≤700	3/4"	250	±2% F.S
BPFP3013	160 ~ 1600	5 ~ 50	≤700	3/4"	250	±2% F.S
BPFP3014	200 ~ 2000	6 ~ 60	≤700	3/4"	250	±2% F.S
BPFP3015	250 ~ 2500	7 ~ 70	≤650	3/4"	250	±2% F.S
BPFP3016	300 ~ 3000	9 ~ 90	≤650	1" & 1½"	270	±2% F.S
BPFP3017	350 ~ 3500	10 ~ 100	≤650	1" & 1½"	270	±2% F.S
BPFP3018	450 ~ 4500	12 ~ 120	≤650	1" & 1½"	270	±2% F.S
BPFP3019	450 ~ 4500	13 ~ 130	≤650	1" & 1½"	270	±2% F.S
BPFP3020	500 ~ 5000	14 ~ 140	≤650	1" & 1½"	270	±2% F.S
BPFP3021	650 ~ 6500	18 ~ 180	≤650	2"	306	±2% F.S
BPFP3022	700 ~ 7000	-----	≤650	2"	306	±2% F.S
BPFP3023	800 ~ 8000	-----	≤650	2"	306	±2% F.S
BPFP3024	900 ~ 9000	-----	≤650	2½"	350	±2% F.S
BPFP3025	1000 ~ 10000	-----	≤650	2½"	350	±2% F.S

## Alarm / Analog output

### BPF300-GS (Micro Switch)



#### Adjustable Micro Switch, Series BPF300-GS

1 Adjustable alarm contact

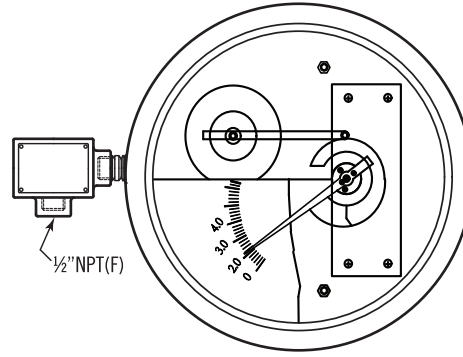
Load: 5A/125VAC, 5A/250VAC, 2A/30VDC

Temperature: -25°C ~ +50°C (AMB)

Hysteresis: ±10% F.S (Dead Band)

Conduit connection: 1/2" NPT female; others on request

### BPF300-GT (Analog Output)



#### Electric Transmitter, Series BPF300-GT

Analog output available: 4~20mA (2 wire)

No Alarm Switch Available

Temperature: -25°C ~ +50°C (AMB)

Power Supply: 24Vdc

Conduit connection: 1/2" NPT female; others on request

## Ordering Information

BPF300	Code	Type	Code	Connection size	
SIL2 Certified	G	Indicating only	2B	1/2" BSP (Female)	4F 1/2" Flange
	GS	Indicating + Switch	2N	1/2" NPT (Female)	6F 3/4" Flange
	GT	Indicating + 4~20mA (no alarm switch available)	6B	3/4" BSP (Female)	10F 1" Flange
			6N	3/4" NPT (Female)	12F 1 1/2" Flange
		<b>Code</b> <b>Switch</b>	10B	1" BSP (Female)	20F 2" Flange
		0 Without alarm switch	10N	1" NPT (Female)	22F 2 1/2" Flange
		M1 One micro switch			
		<b>Code</b> <b>Body &amp; wetted parts</b>	12B	1 1/2" BSP (Female)	
		A PVC, standard	12N	1 1/2" NPT (Female)	
		B PP	20B	2" BSP (Female)	
	C PVDF	20N	2" NPT (Female)		
	D option	22B	2 1/2" BSP (Female)		
	<b>Code</b> <b>Float material</b>	22N	2 1/2" NPT (Female)		
	A SS316				
	B SS316L				
	C PVDF				
	D option				
	<b>Code</b> <b>Connection rating</b>				
	0 Thread connection				
	5 JIS 5K				
	10 JIS 10K				
	15 ANSI 150#				
	30 ANSI 300#				
	T other: _____				
		<b>Code</b> <b>Protection Class</b>			
		IP IP66			
		<b>Code</b> <b>Fluid</b>			
		G Gas			
		L Liquid			
		<b>Code</b> <b>Range</b>			
		S Standard range			
					Please directly fill out the flow range in the order code.

BPF300 [ ] [ ] [ ] [ ] [ ] + [ ] [ ] [ ] [ ] [ ] Complete ordering code

### NOTE:

1. Custom-made flow range and flange size upon request.
2. Please fill in the ordering information and service condition, and fax this sheet along with your inquiry to 886-7-8225588.

**Special instruction, if any:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Service Condition:

Fluid name: \_\_\_\_\_

Sp. Gr. (density): \_\_\_\_\_

Viscosity: \_\_\_\_\_

Press.: \_\_\_\_\_

Temp.: \_\_\_\_\_

Full scale: \_\_\_\_\_