

# *Positive Displacement Flow Meter*

**MODEL : RY**

**Display:**  
**Totalizer: 8 digits LCD**  
**Flow Rate: 5 digits LCD**



**Display:**  
**Totalizer: 8 digits LCD**  
**Reset: 5 digits LCD**



**Accessory:**  
**Magnetic Bar**  
**(Used for Zero**  
**Reset)**

**Pulse Output Only**  
**Without Display**



**Explosion Proof Enclosure**

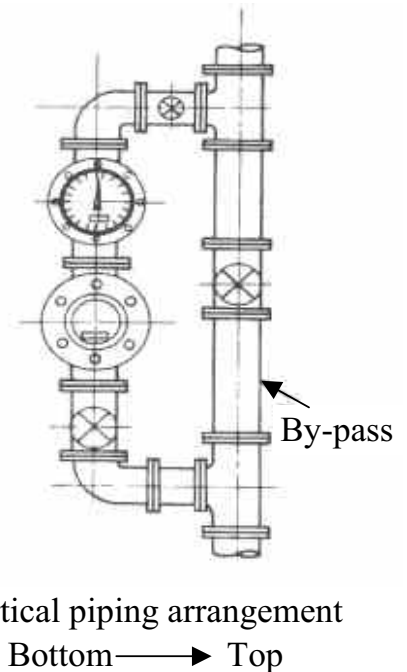
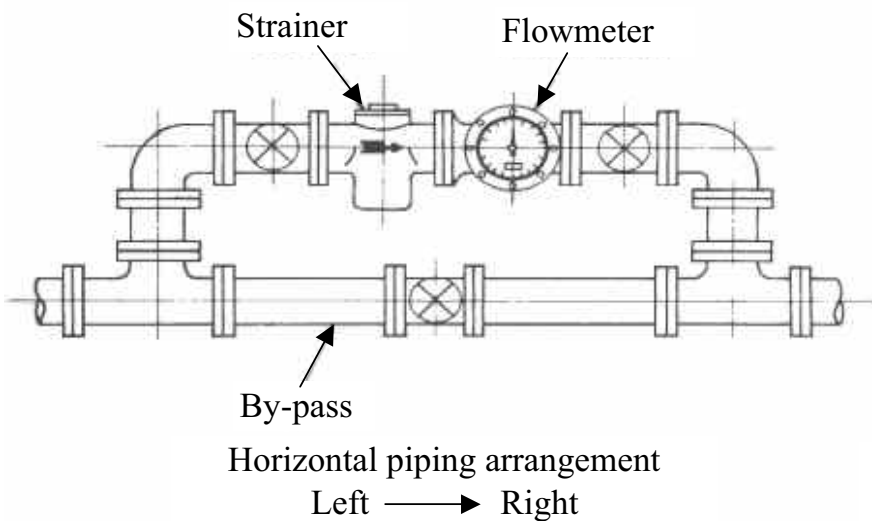


## MODEL CODES:

Basic Model	Size	Mat'l.	Max. temp.	Display/output	Connection	Explosion Proof	Description
RY	25						3.5 M <sup>3</sup> /Hr
	40						6 M <sup>3</sup> /Hr
	50						12 M <sup>3</sup> /Hr
	50L						30 M <sup>3</sup> /Hr
	80						3" (80mm) 35 M <sup>3</sup> /Hr
	80L						3" (80mm) 50 M <sup>3</sup> /Hr
	100						4" (100mm) 50 M <sup>3</sup> /Hr
	100L						4" (100mm) 120 M <sup>3</sup> /Hr
	-FC						FC 25 (Cast Iron)
	-S2						SUS316 (Stainless Steel)
		-0					80 °C
		-1					120 °C
		-2					180 °C
		K1					Totalizer 8 digits / Flow Rate 5 digits
	K2					Totalizer 8 digits / Reset 5 digits	
	K3					Pulse Output Only	
	K4					Totalizer 8 digits / Flow Rate 5 digits / Pulse Output	
	K5					Totalizer 8 digits / Flow Rate 5 digits / Pulse / 4-20 mA	
	K6					Totalizer 8 digits / Reset 5 digits / Pulse Output	
	A					BSP thread	
	B					ASA Flange	
	C					JIS Flange	
	-EX					Explosion Proof - Class I, Division II, Groups B,C&D	
	-N					Without Explosion Proof	



## INSTALLATION



Flow Range : Accuracy  $\pm 0.5\%$

Unit : m<sup>3</sup>/hour

Capacity type Note 1			Dia- meter		Terms Note 2		Viscosity		Petroleum						
									LPG	Gasoline	Kerosene	Light oil, grade-A heavy oi (high tem- perature)	Grade-A heavy oi	Grade-B heavy oil, Grade-C heavy oil, (high tem- perature)	Grade-C heavy oi
							0.1cP~	0.5cP~	2cP~	5cP~	10cP~	50cP~	150cP~	500cP~	2000cP~
25 40	25 40	Normal	Continuous	-	1~4.5	0.8~4.5	0.4~6	0.1~6	0.05~6	0.025~6	0.013~4.5	0.007~3.5			
			Intermittent	-	1~6	0.8~6	0.4~7	0.1~7	0.05~7	0.025~7	0.013~6	0.007~4.5			
			Maximum	-	7	7	8	8	8	8	7	6			
40 50	40 50	Normal	Continuous	-	2~9	1.5~9	0.8~13	0.25~13	0.1~13	0.05~13	0.02~9	0.01~7.5			
			Intermittent	-	2~13	1.5~13	0.8~15	0.25~15	0.1~15	0.05~15	0.02~13	0.01~9			
			Maximum	-	15	15	17	17	17	17	15	13			
80	50 80	Normal	Continuous	6.5~17	5~17	3.5~25	1.8~25	0.6~35	0.3~35	0.15~35	0.07~20	0.03~17			
			Intermittent	6.5~28	5~28	3.5~35	1.8~35	0.6~40	0.3~40	0.15~40	0.07~35	0.03~28			
			Maximum	35	35	40	40	45	45	45	35	28			
80L 100	80 100	Normal	Continuous	13~35	8~35	5~35	2.5~50	1~50	0.5~50	0.25~50	0.12~35	0.06~28			
			Intermittent	13~50	8~50	5~50	2.5~55	1~55	0.5~55	0.25~55	0.12~50	0.06~35			
			Maximum	55	55	55	60	60	60	60	55	50			
100L	100	Normal	Continuous	25~85	16~85	12~85	8~120	4~120	2~120	0.7~120	0.35~85	0.17~60			
			Intermittent	25~120	16~120	12~120	8~130	4~130	2~130	0.7~130	0.35~120	0.17~85			
			Maximum	130	130	130	140	140	140	140	130	120			

Capacity type Note 1			Dia- meter		Terms Note 2		Viscosity		Water		Chemicals		Petrochemicals		
									Normal temperature (up to 80°C)	High temperature (80~120°C)	Concent- rater sulfuric acid	Caustic soda (30%)	Plasticizer	Tar	Polyester
									50cP	500cP	2000cP				
25 40	25 40	Normal	Continuous	0.8~3.5	1~2.8	0.4~2	0.1~4.5	0.05~4.5	0.013~4.5	0.007~3.5					
			Intermittent	0.8~4.5	1~3.5	0.4~2.8	0.1~6	0.05~6	0.013~6	0.007~4.5					
			Maximum	5	4.5	3.5	7	7	7	6					
40 50	40 50	Normal	Continuous	1.5~7.5	2~6	0.8~4.5	0.25~9	0.1~9	0.02~9	0.01~7.5					
			Intermittent	1.5~9	2~7.5	0.8~6	0.25~13	0.1~13	0.02~13	0.01~9					
			Maximum	10	9	7.5	15	15	15	13					
80	50 80	Normal	Continuous	3.5~15	5~10	3.5~12	0.6~20	0.3~20	0.07~20	0.03~17					
			Intermittent	3.5~20	5~17	3.5~15	0.6~35	0.3~35	0.07~35	0.03~28					
			Maximum	20	20	20	40	40	35	28					
80L 100	80 100	Normal	Continuous	5~28	8~22	2.5~17	1~35	0.5~35	0.12~35	0.06~28					
			Intermittent	5~35	8~28	2.5~22	1~50	0.5~50	0.12~50	0.06~35					
			Maximum	40	35	28	55	55	55	50					
100L	100	Normal	Continuous	12~60	16~50	8~40	4~85	2~85	0.35~85	0.17~60					
			Intermittent	12~85	16~60	8~40	4~120	2~120	0.35~120	0.17~85					
			Maximum	95	85	60	130	130	130	120					

Remark:1. Intermittent : continue flowing under 8 hours

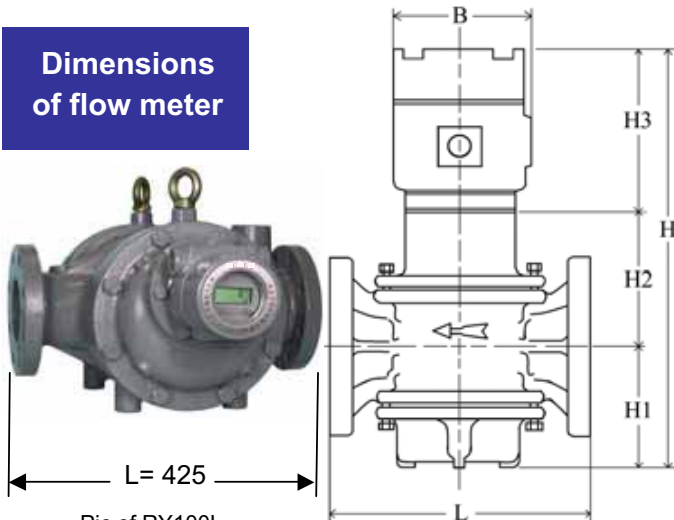
2. Continuous: continue flowing 8-24 hours

3. Maximum: Only can working in short period

### Standard specifications

Counter	8 digit, rate 5 digit
Accuracy:	0.5% ( 0.2% possible)
Max. Pressure:	10kg/cm <sup>2</sup> or 20kg/cm <sup>2</sup>
Temperature:	80°C, 120°C, 180°C
Connection	JIS, DIN, ANSI

### Dimensions of flow meter



Pic of RY100L

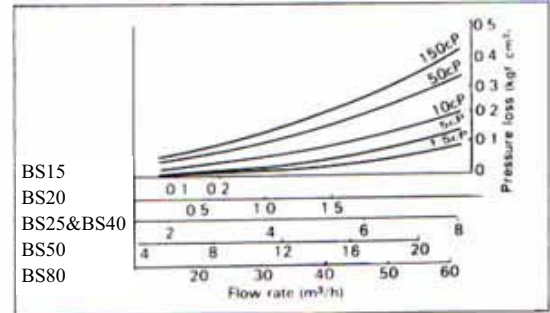
Model	L	H	B	H1	H2	H3	weight (kg)
RY25	200	288	115	78	70	140	15
RY40	200	288	115	78	70	140	18
RY50	250	340	115	105	95	140	22
RY80/RY80L	320	420	115	144	136	140	45
RY100	380	420	115	144	136	140	59
RY100L	425	610	115	260	253	140	173

# STRAINER

## Common specifications

Construction	Bucket type	
Fluid	Oil	
Material	Body	Cast iron (FC25) or stainless steel (SUS304)
	Screen	Stainless steel (SUS304)
Mesh	For S2 type flowmeter	80, 100, 200 mesh
	For other type flowmeter	60, 80, 100 mesh
Paint color	Munsell 1.4 PB3.1/1.2	

## Pressure loss characteristics

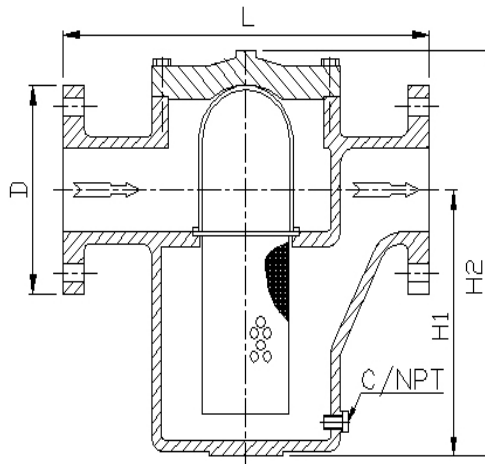


## Standard specifications for each model

Model	Bore (mm)	Flange rating	Max. working pressure (kgf/cm <sup>2</sup> )	Maximum flow m <sup>3</sup> /h(Note)	Dimensions (mm)				Weight (kg)
					D	L	H <sub>1</sub>	H <sub>2</sub>	
BS 15	15	JIS 10kg/cm <sup>2</sup> FF	10	-	95	188	105	146	4
BS 20	20	JIS 10kg/cm <sup>2</sup> FF	10	1.5	100	188	105	146	4
BS 25	25	JIS 10kg/cm <sup>2</sup> FF	10	7	125	215	130	180	10
BS 40	40	JIS 10kg/cm <sup>2</sup> FF	10	7	140	235	146	210	12
BS 50	50	JIS 10kg/cm <sup>2</sup> FF	10	15	155	260	183	260	26
BS 80	80	JIS 10kg/cm <sup>2</sup> FF	10	60	185	355	260	350	29

Note: Maximum flow is the value obtained when a pressure loss is below 0.5 kg/cm<sup>2</sup> at the fluid viscosity of 10 cps

## BUCKET TYPE STRAINER



## HANDLE TYPE STRAINER



## JACKETED FLOWMETERS



## STANDARD AIR SEPARATOR

