

ORIFICE PLATE TYPE FLOWMETER

OPF SERIES

Technical Data

Service: Air, Gases, Water and other Liquid
Upper Housing Type: Differential Pressure Gauge, and Differential Pressure Transmitter available
Dial Indicator: $\phi 4''$ or $\phi 6''$ available (except Transmitter type)
Housing Material: SS304
Body Material: SS316, SS304, PVC, PVDF, option available
Beta Ratio: (β) 0.3~0.7

β	Discharge Coefficient Uncertainty
≤ 0.4	$\pm 0.5\%$
$0.4 < \beta < 0.65$	$\pm 0.75\%$
$\geq 0.65^{(*)}$	$\pm 1.0\%$

(*) For $\beta 0.65$ and $ReD < 10,000$ add an additional 0.5% to the discharge coefficient uncertainty.

Discharge Coefficient Uncertainty:

For $\frac{1}{2}'' - (\beta) 0.3 \sim 0.7$: $\pm 2.25\%$
 For $1'' \sim 1\frac{1}{2}'' - (\beta) 0.3 \sim 0.7$: $\pm 1.75\%$
 For $2'' \sim 20'' - (\beta) 0.3 \sim 0.7$: $\pm 1.25\%$

Flow Element: Orifice type

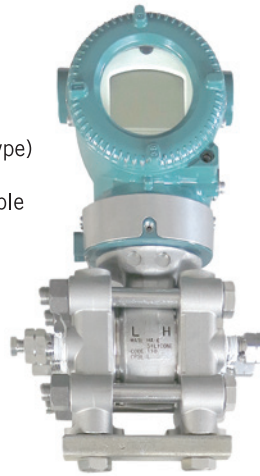
Connection Size: 2''~20'' and option available

Connection Rating: ANSI 150#, ANSI 300#; other flange rating available

Flow Range: Water- 3~2500 M³/H ; Air- 30~2400 NM³/H

Max. Working Temperature: PVC- 40°C ; PVDF- 80°C ;
 Metal- standard 150°C (300°C option)

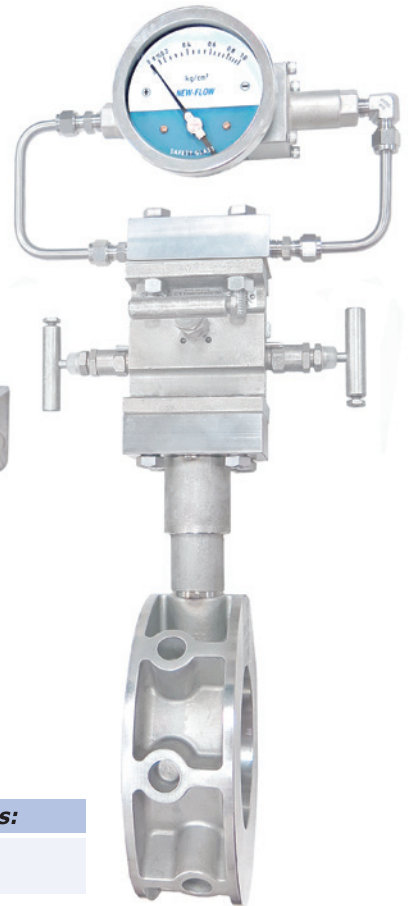
Accuracy: DPH200/300/400: $\pm 3\%$ F.S (Ascending)
 D/P Transmitter: $\pm 0.04\%$ of Span
 DPBG: $\pm 2.5\%$ F.S (on rising pressure)



D/P Transmitter



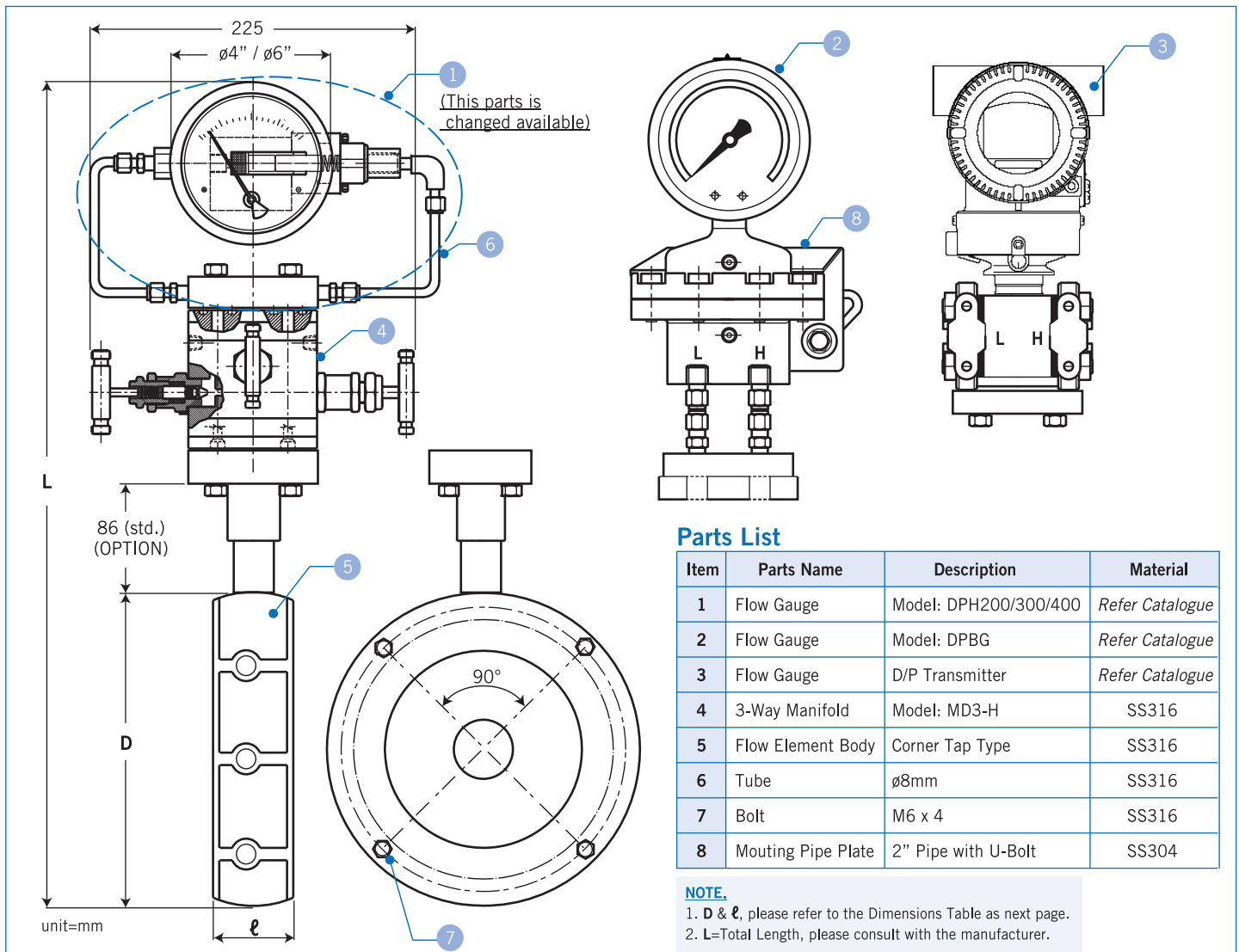
D/P Gauge



Approvals:



Parts & Material List



Parts List

Item	Parts Name	Description	Material
1	Flow Gauge	Model: DPH200/300/400	Refer Catalogue
2	Flow Gauge	Model: DPBG	Refer Catalogue
3	Flow Gauge	D/P Transmitter	Refer Catalogue
4	3-Way Manifold	Model: MD3-H	SS316
5	Flow Element Body	Corner Tap Type	SS316
6	Tube	$\phi 8\text{mm}$	SS316
7	Bolt	M6 x 4	SS316
8	Mouting Pipe Plate	2'' Pipe with U-Bolt	SS304

NOTE.

1. D & l, please refer to the Dimensions Table as next page.
 2. L=Total Length, please consult with the manufacturer.

Dimensions

Length		Size												
		2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"
ℓ	ANSI 150LB	60	60	60	60	60	60	60	60	60	60	60	60	60
	ANSI 300LB	60	60	60	60	60	60	60	60	60	60	60	60	60
D	ANSI 150LB	105	124	137	175	197	222	279	340	410	451	514	546	603
	ANSI 300LB	111	130	149	181	216	251	308	362	422	486	540	594	651

▶ Other Size and Flange Rating are available on request.

NOTE.
Tolerance: ±5mm

Ordering Information

OPF	Code	Body Material
		(1) SS316 (2) SS304 (0) Option
		Code Connection Size
		(1) 2" (2) 2½" (3) 3" (4) 4" (5) 5" (6) 6" (7) 8" (8) 10" (9) 12" (10) 14" (11) 16" (12) 18" (13) 20"
		Code Connection Rating
		15 ANSI 150#
		30 ANSI 300#
		T Other: _____
		Code Fluid Type
		L Liquid
		G Gases
		Code Flow Range
		Please directly fill out the flow range as customer required. And, the flow range must be suitable for the D/P Gauge or Transmitter. (ex.: The flow range is 10M ³ /Hr, and the D/P is 2500mmH ₂ O as calculation, please fill out 10M ³ /Hr / 2500mmH ₂ O.)
		Code Upper Housing Type
		1 Flow Gauge (Model: DPH200 / 300 / 400 Series available)
		2 Flow Gauge (Model: DPBG Series)
		3 Flow Gauge (Yokogawa D/P Transmitter)
		Code Manifold
		A 3-Way Manifold
		B 5-Way Manifold
		O Without
OPF		
Complete Ordering Code		