

사용설명서

FP101-FP201

Global Flow Probe



SECHANG INSTRUMENTS

가 가

1) Probe

2)

가 , FP201 . FP101 2 . Probe 3 5 15 3 6 가

3)

“v”가 0.1 ft/sec “v”
(0.01 ft/sec)

4)

(Reset) Probe 가

5)

(: 1 2)

6)

$Q=V \times A$

7)

가

2 (Average Velocity)

Flow Probe 가

1)

2) 1 2 feet/sec가

1) Probe Probe Probe Probe 20 40
(Probe .)

Probe &
Probe가 가

10 10 , 10
10 Probe

2) 2 3 feet

40 Probe 20

3) USGS(U.S. Geological Survey) "0.6 method" Probe 40
0.6 가 . 0.6
2 2

3 (Computer Operation)

English	Metric	1
	2	1
	가	
• "V" : "V"	0.1 ft/sec	
"AV" 가	"MX"	
• "D" :		
• STOP Watch/ :	STOP Watch	(
	가	.)

4 (Computer Set-Up)

English	가	8
"mi"	"km"	metric
"CAL"	가	
	가	가
	가	가
"mi"	English	33.31
"km"	Metric	1603
	2.23	10
		22.3
•	:"CAD"	가
•	:"SLEEP"	가
		가
•	:	12
		24
•	:	
•	:	
•	:"V"	가

5 (Maintenance)

- Probe Handle :

Probe , Probe Handle 가

(Computer)

Short가

(Computer)가 가

24

- :

(Computer)

가

가

Radio Shack 675 HP

() (02-332-7511)

- :

가 가

() (02-332-7511)

Calculations for Flow in Partially Filled Pipes

B	C	B	C
0.010	0.013	0.51	0.4027
0.02	0.0037	0.52	0.4127
0.03	0.0069	0.53	0.4227
0.04	0.0105	0.54	0.4327
0.05	0.0147	0.55	0.4426
0.06	0.0192	0.56	0.4526
0.07	0.0242	0.57	0.4625
0.08	0.0294	0.58	0.4723
0.09	0.0350	0.59	0.4822
0.10	0.0409	0.60	0.4920
0.11	0.0470	0.61	0.5018
0.12	0.0534	0.62	0.5115
0.13	0.0600	0.63	0.5212
0.14	0.0668	0.64	0.5308
0.15	0.0739	0.65	0.5404
0.16	0.0811	0.66	0.5499
0.17	0.0885	0.67	0.5594
0.18	0.0961	0.68	0.5687
0.19	0.1039	0.69	0.5780
0.20	0.1118	0.70	0.5872
0.21	0.1199	0.71	0.5964
0.22	0.1281	0.72	0.6054
0.23	0.1365	0.73	0.6143
0.24	0.1449	0.74	0.6231
0.25	0.1535	0.75	0.6318
0.26	0.1623	0.76	0.6404
0.27	0.1711	0.77	0.6489
0.28	0.1800	0.78	0.6573
0.29	0.1890	0.79	0.6655
0.30	0.1982	0.80	0.6736
0.31	0.2074	0.81	0.6815
0.32	0.2167	0.82	0.6893
0.33	0.2266	0.83	0.6969
0.34	0.2355	0.84	0.7043
0.35	0.2450	0.85	0.7115
0.36	0.2546	0.86	0.7186
0.37	0.2644	0.87	0.7254
0.38	0.2743	0.88	0.7320
0.39	0.2836	0.89	0.7384
0.40	0.2934	0.90	0.7445
0.41	0.3032	0.91	0.7504
0.42	0.3130	0.92	0.7560
0.43	0.3229	0.93	0.7612
0.44	0.3328	0.94	0.7662
0.45	0.3428	0.95	0.7707
0.46	0.3527	0.96	0.7749
0.47	0.3627	0.97	0.7785
0.48	0.3727	0.98	0.7816
0.49	0.3827	0.99	0.7841
0.50	0.3827	1.00	0.7854

H= Height of water; D= Diameter of pipe
(in feet)

H/D = Column B

Read Column C adjacent to your pipe's B

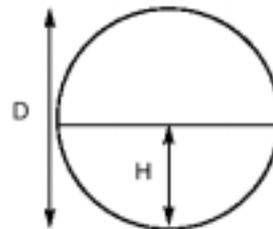
$C \times D^2$ = Filled area, A (sq. ft.)

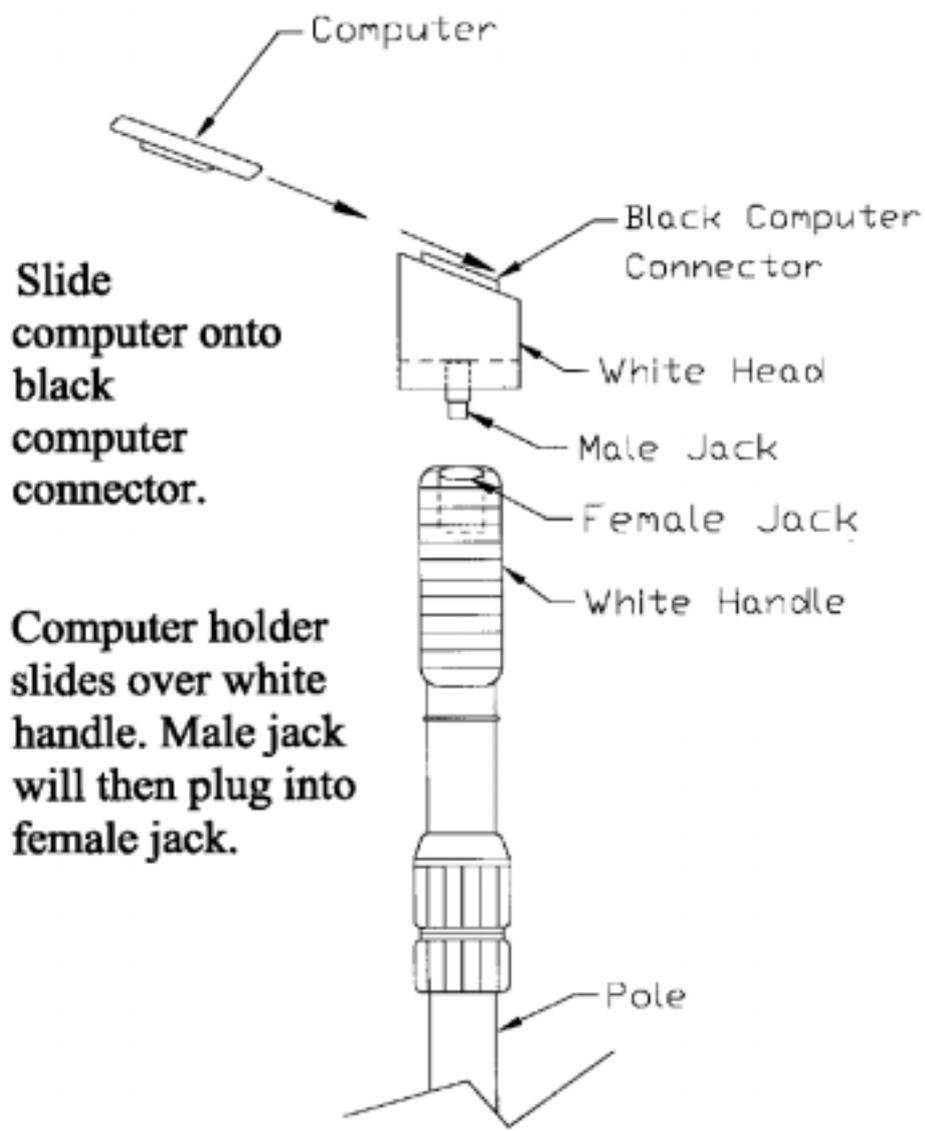
A x Average Velocity = Volumetric flow
(CFS)

CFS x 448.83 = Gallons/minute (GPM)

GPM x 1440 = Gallons/day (GPD)

Round Pipe





Slide computer onto black computer connector.

Computer holder slides over white handle. Male jack will then plug into female jack.

Global Flow Probe Graphic Overview