



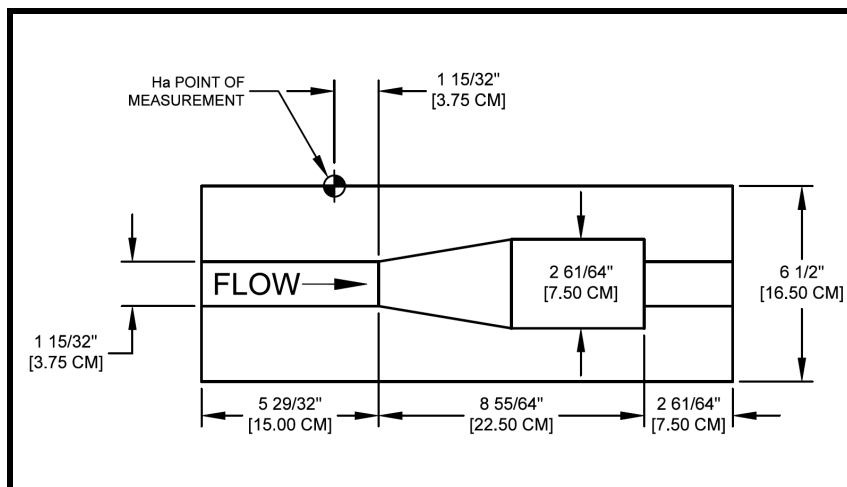
75 mm RBC Flume Discharge Table

80% Submergence Transition ±2% Accuracy

Formulas (H in feet):
Formulas (H in millimeters):

GPM = $854.7 (H_{ft} + 0.0043)^{1.853}$
L/S = $0.001347 (H_{mm} + 1.313)^{1.853}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.01	0.12	0.0030	Excessive error due to fluid-flow properties and boundary conditions				
0.02	0.24	0.0061					
0.03	0.36	0.0091	0.0037	1.651	0.0024	0.1042	0.3748
0.04	0.48	0.0122	0.0059	2.652	0.0038	0.1673	0.6021
0.05	0.60	0.0152	0.0086	3.867	0.0056	0.2440	0.8780
0.06	0.72	0.0183	0.0118	5.290	0.0076	0.3338	1.201
0.07	0.84	0.0213	0.0154	6.914	0.0100	0.4363	1.570
0.08	0.96	0.0244	0.0195	8.737	0.0126	0.5513	1.984
0.09	1.08	0.0274	0.0240	10.75	0.0155	0.6786	2.442
0.10	1.20	0.0305	0.0289	12.96	0.0187	0.8179	2.943
0.11	1.32	0.0335	0.0342	15.36	0.0221	0.9691	3.487
0.12	1.44	0.0366	0.0400	17.94	0.0258	1.132	4.073
0.13	1.56	0.0396	0.0461	20.71	0.0298	1.307	4.701
0.14	1.68	0.0427	0.0527	23.66	0.0341	1.493	5.371
0.15	1.80	0.0457	0.0597	26.78	0.0386	1.690	6.081
0.16	1.92	0.0488	0.0670	30.09	0.0433	1.898	6.831
0.17	2.04	0.0518	0.0748	33.57	0.0483	2.118	7.621
0.18	2.16	0.0549	0.0829	37.22	0.0536	2.349	8.451
0.19	2.28	0.0579	0.0915	41.05	0.0591	2.590	9.321
0.20	2.40	0.0610	0.1004	45.05	0.0649	2.843	10.23
0.21	2.52	0.0640	0.1097	49.23	0.0709	3.106	11.18
0.22	2.64	0.0671	0.1193	53.57	0.0771	3.380	12.16
0.23	2.76	0.0701	0.1294	58.08	0.0836	3.664	13.19
0.24	2.88	0.0732	0.1398	62.75	0.0904	3.960	14.25
0.25	3.00	0.0762	0.1506	67.60	0.0973	4.265	15.35



Source:

Wahl, T., Clemmens, A., Replogle, J., Bos, M., Simplified Design of Flumes and Weirs, *Irrigation and Drainage*, Vol. 54, 2005