APPENDIX A

For Rain Bird Tee Type Flow Sensors and Anemometer

Rain Bird FS Series Tee Type Flow Sensor K Factor and Offset are pre-programmed into the PT5002 Memory. Select Menu > Setup > Advanced Setup > Sensor Inputs > Sensor Type > Rain Bird Flow Sensor. Use the down arrows on the keypad to select the proper model. The following tables indicate the suggested flow range for Rain Bird Flow Sensors. Rain Bird Sensors will operate both above and below the indicated flow rates. However, good design practice dictates the use of this range for best performance. Sensors should be sized for flow rather than pipe size.

Model	Description	K-Factor	Offset	Suggested Operating Range (Gallons/ Minute)	Suggested Operating Range (Liters/ Minute)	Suggested Operating Range (Cubic Meters/ Hour)
Brass Tee's						
FS200B	2" Brass T Flow Sensor	2.747	0	10 - 100	38 - 380	2.3 - 23
FS150B	1 ½" Brass T Flow Sensor	1.065	0.089	4 - 80	15 - 300	1 - 18
FS100B	1" Brass T Flow Sensor	0.397	0.262	2 - 40	7.6 - 150	0.5 - 9
Plastic Tee's						
FS400P	4" PVC T Flow Sensor	13.742	0.231	40 - 500	150 - 1900	9 - 110
FS300P	3" PVC T Flow Sensor	8.309	0.227	20 - 300	75 - 1130	4.5 - 70
FS200P	2" PVC T Flow Sensor	2.843	0.144	10 - 200	40 - 750	2.3 - 45
FS150P	1 ½" PVC T Flow Sensor	1.697	-0.316	5 - 100	19 - 380	1.1 - 23
FS100P	1" PVC T Flow Sensor	0.261	1.2	5.4 - 54	20 - 200	1.2 - 12
FS075P	¾" PVC T Flow Sensor	0.156	0.9	3.3 - 33.2	12.6 - 125.8	0.75 - 7.5
FS050P	½" PVC T Flow Sensor	0.078	0.9	1.9 - 18.9	7.2 - 71.7	0.43 - 4.3
Wind Speed Sensor						
ANEMOMETER	Brass Insert Flow Sensor	1.6965	0.059	N/A		

APPENDIX B

For Insert Type Flow Sensors Rain Bird Models FS350B or FS350SS

The following table indicates the suggested flow range for Rain Bird Flow Sensors. Rain Bird Sensors will operate both above and below the indicated flow rate. However, good design practice dictates the use of this range for the best performance. Sensors should be sized for flow rather than pipe size.

FS350B AND FS350SS: K Value, Offset and Suggested Operating Range

Model	Pipe O.D.	Pipe I.D.	K Value	Offset	Suggested Operating Range (Gallons/ Minute)	Suggested Operating Range (Liters/ Minute)	Suggested Operating Range (Cubic Meters/ Hour)
3 inch Sch 10S	3.500″	3.260″	5.009	0.09	12-400	50-1500	1-90
Std. Wt., Sch 40	3.5″	3.068″	4.362	0.063	12-400	50-1500	1-90
Extra Strong, Sch 80	3.5″	2.900″	3.858	0.043	12-400	50-1500	1-90
PVC Class 125	3.5″	3.284″	5.094	0.093	12-400	50-1500	1-90
PVC Class 160	3.5″	3.230″	4.902	0.085	12-400	50-1500	1-90
PVC Class 200	3.5″	3.166″	4.682	0.076	12-400	50-1500	1-90
4 inch Sch 10S	4.5″	4.260″	9.597	0.241	20-600	80-2300	1-140
Std. Wt., Sch 40	4.5″	4.026″	8.34	0.229	20-600	80-2300	1-140
Extra Strong, Sch 80	4.5″	3.826″	7.354	0.188	20-600	80-2300	1-140
PVC Class 125	4.5″	4.224″	9.396	0.24	20-600	80-2300	1-140
PVC Class 160	4.5″	4.154″	9.013	0.24	20-600	80-2300	1-140
PVC Class 200	4.5″	4.072″	8.578	0.239	20-600	80-2300	1-140
5 inch Sch 10S	5.563″	5.295″	16.305	0.25	30-900	110-3400	10-200
Std. Wt., Sch 40	5.50″	5.047″	14.674	0.248	30-900	110-3400	10-200

Model	Pipe O.D.	Pipe I.D.	K Value	Offset	Suggested Operating Range (Gallons/ Minute)	Suggested Operating Range (Liters/ Minute)	Suggested Operating Range (Cubic Meters/ Hour)
3 inch Sch 10S	3.500″	3.260″	5.009	0.09	12-400	50-1500	1-90
Std. Wt., Sch 40	3.5″	3.068″	4.362	0.063	12-400	50-1500	1-90
Extra Strong, Sch 80	3.5″	2.900″	3.858	0.043	12-400	50-1500	1-90
PVC Class 125	3.5″	3.284″	5.094	0.093	12-400	50-1500	1-90
PVC Class 160	3.5″	3.230″	4.902	0.085	12-400	50-1500	1-90
PVC Class 200	3.5″	3.166″	4.682	0.076	12-400	50-1500	1-90
4 inch Sch 10S	4.5″	4.260″	9.597	0.241	20-600	80-2300	1-140
Std. Wt., Sch 40	4.5″	4.026″	8.34	0.229	20-600	80-2300	1-140
Extra Strong, Sch 80	4.5″	3.826″	7.354	0.188	20-600	80-2300	1-140
PVC Class 125	4.5″	4.224″	9.396	0.24	20-600	80-2300	1-140
PVC Class 160	4.5″	4.154″	9.013	0.24	20-600	80-2300	1-140
PVC Class 200	4.5″	4.072″	8.578	0.239	20-600	80-2300	1-140
5 inch Sch 10S	5.563″	5.295″	16.305	0.25	30-900	110-3400	10-200
Std. Wt., Sch 40	5.50″	5.047″	14.674	0.248	30-900	110-3400	10-200
Extra Strong, Sch 80	5.50″	4.813″	13.165	0.246	30-900	110-3400	10-200
6 inch Sch 10S	6.625″	6.357″	24.089	0.26	50-1,500	190-5700	10-340
Std. Wt., Sch 40	6.5″	6.065″	21.574	0.257	50-1,500	190-5700	10-340
Extra Strong, Sch 80	6.5″	5.761″	19.457	0.254	50-1,500	190-5700	10-340

Model	Pipe O.D.	Pipe I.D.	K Value	Offset	Suggested Operating Range (Gallons/ Minute)	Suggested Operating Range (Liters/ Minute)	Suggested Operating Range (Cubic Meters/ Hour)
PVC Class 125	6.625″	6.217″	22.853	0.258	50-1,500	190-5700	10-340
PVC Class 160	6.625″	6.115″	21.968	0.257	50-1,500	190-5700	10-340
PVC Class 200	6.625″	5.993″	21.068	0.256	50-1,500	190-5700	10-340
8 inch Sch 10S	8.625″	8.329″	43.914	0.286	80-2,500	300-9500	20-570
Sch 20	8.625″	8.125″	41.653	0.283	80-2,500	300-9500	20-570
Sch 30	8.625″	8.071″	41.063	0.283	80-2,500	300-9500	20-570
Std. Wt., Sch 40	8.625″	7.981″	40.086	0.281	80-2,500	300-9500	20-570
Sch 60	8.625″	7.813″	38.288	0.279	80-2,500	300-9500	20-570
Extra Strong, Sch 80	8.625″	7.625″	36.315	0.276	80-2,500	300-9500	20-570
PVC Class 125	8.625″	8.095″	41.324	0.283	80-2,500	300-9500	20-570
PVC Class 160	8.625″	7.961″	39.869	0.281	80-2,500	300-9500	20-570
PVC Class 200	8.625″	7.805″	38.203	0.279	80-2,500	300-9500	20-570
10 inch Sch 10S	10.75″	10.420″	70.195	0.321	125-4,000	470-15100	30-910
Sch 20	10.75″	10.250″	67.668	0.318	125-4,000	470-15100	30-910
Sch 30	10.75″	10.136″	66.069	0.316	125-4,000	470-15100	30-910
Sch 40, Std. Wt.	10.75″	10.020″	64.532	0.314	125-4,000	470-15100	30-910
Extra Strong, Sch 60	10.75″	9.750″	61.016	0.309	125-4,000	470-15100	30-910
Sch 80	10.75″	9.564″	58.644	0.306	125-4,000	470-15100	30-910
PVC Class 125	10.75″	10.088″	65.431	0.315	125-4,000	470-15100	30-910
PVC Class 160	10.75″	9.924″	63.272	0.312	125-4,000	470-15100	30-910
PVC Class 200	10.75″	9.728″	60.733	0.309	125-4,000	470-15100	30-910

Model	Pipe O.D.	Pipe I.D.	K Value	Offset	Suggested Operating Range (Gallons/ Minute)	Suggested Operating Range (Liters/ Minute)	Suggested Operating Range (Cubic Meters/ Hour)
12 inch Sch 10S	12.75″	12.390″	104.636	0.367	175-5,000	660-18900	40-1140
Sch 20	12.75″	12.250″	102.553	0.364	175-5,000	660-18900	40-1140
Sch 30	12.75″	12.090″	99.347	0.36	175-5,000	660-18900	40-1140
Std. Wt., Sch 40S	12.75″	12.000″	97.576	0.358	175-5,000	660-18900	40-1140
Sch 40	12.75″	11.938″	96.369	0.356	175-5,000	660-18900	40-1140
Sch 60	12.75″	11.625″	90.441	0.348	175-5,000	660-18900	40-1140
Extra Strong	12.75″	11.750″	92.775	0.351	175-5,000	660-18900	40-1140
Sch 80	12.74″	11.376″	85.922	0.342	175-5,000	660-18900	40-1140
PVC Class 125	12.75″	11.966″	96.912	0.357	175-5,000	660-18900	40-1140
PVC Class 160	12.75″	11.770″	93.152	0.352	175-5,000	660-18900	40-1140
PVC Class 200	12.75″	11.538″	88.842	0.346	175-5,000	660-18900	40-1140
14 inch Sch 10S	14.00″	13.500″	122.307	0.391	200-6,000	760-22700	50-1360
Sch 20	14.00″	13.375″	120.216	0.388	200-6,000	760-22700	50-1360
Std. Wt., Sch 30	14.00″	13.250″	118.151	0.385	200-6,000	760-22700	50-1360
Sch 40	14.00″	13.124″	116.096	0.382	200-6,000	760-22700	50-1360
Sch 60	14.00″	12.814″	111.148	0.376	200-6,000	760-22700	50-1360
Extra Strong	14.00″	13.00″	114.098	0.33	200-6,000	760-22700	50-1360
Sch 80	14.00″	12.50″	106.299	0.369	200-6,000	760-22700	50-1360
16 inch Sch 10S	16.00″	15.500″	159.243	0.44	300-9,000	1140-34100	70-2040
Sch 20	16.00″	15.375″	156.742	0.436	300-9,000	1140-34100	70-2040
Std. Wt., Sch 30	16.00″	15.250″	154.267	0.433	300-9,000	1140-34100	70-2040
Sch 60	16.00″	14.688″	143.456	0.419	300-9,000	1140-34100	70-2040

Model	Pipe O.D.	Pipe I.D.	K Value	Offset	Suggested Operating Range (Gallons/ Minute)	Suggested Operating Range (Liters/ Minute)	Suggested Operating Range (Cubic Meters/ Hour)
Extra Strong, Sch 40	16.00″	15.000″	149.394	0.427	300-9,000	1140-34100	70-2040
Sch 80	16.00″	14.314″	136.548	0.41	300-9,000	1140-34100	70-2040
18 inch Sch 10S	18.00″	17.500″	202.739	0.498	350-10,000	1320-37900	80-2270
Sch 20	18.00″	17.375″	199.828	0.494	350-10,000	1320-37900	80-2270
Sch 30	18.00″	17.124″	194.061	0.486	350-10,000	1320-37900	80-2270
Std. Wt.	18.00″	17.250″	196.943	0.49	350-10,000	1320-37900	80-2270
Sch 40	18.00″	16.876″	188.464	0.479	350-10,000	1320-37900	80-2270
Sch 60	18.00″	16.500″	180.171	0.469	350-10,000	1320-37900	80-2270
Extra Strong	18.00″	17.000″	191.25	0.482	350-10,000	1320-37900	80-2270
Sch 80	18.00″	16.126″	172.152	0.457	350-10,000	1320-37900	80-2270
20 inch Std. Wt., Sch 20	20.00″	19.25″	246.179	0.555	400-12,000	1510-45400	90-2730