TR70 Series

TR70P, TR70PSS, TR70XTP, TR70XTPSS

Turf
Radius: 33'–71'
Flow rate: 6.7–29.6 GPM
Pressure: 40–100 psi

Application: TR70XTP and TR70XTPSS are made to withstand the pressures of commercial applications such as sports fields.

Specifications (TR70P)

Radius:

TR70P, TR70PSS:
43'–71' (13,1–21,6m)
TR70XTP, TR70XTPSS:
33'–71' (10,0–21,6m)

Flow rate:

TR70P, TR70PSS:
7.5–29.6 GPM (28,3–112,0 LPM)
TR70XTP, TR70XTPSS:
6.7–27 GPM (25,3-102,2 LPM)

Nozzle data:

See page 38–39

Recommended operating pressure range:

40–100 psi (2,7–7,0 Bar)

Maximum operating pressure:

75 psi (5,2 Bar)

Inlet:

1" (25mm) female-threaded

Below-grade installation:

½" (13mm) (except shrub models)

Dimensions (lawn pop-up model):

Pop-up to center of nozzle: 4¾" (120mm)
Base diameter: 2⅜" (60mm)
Height: 9¼" (234mm)

Models:

Lawn pop-up: 5" (127mm)

Check valve (Standard):

Reversible check valve prevents low-head drainage, keeping laterals charged with water (maintains up to 6' (1,9m) elevation change on all models)

Operational Features (All Models)

- Simple to set watering pattern with adjusting band—the arc on the TR70P is factory pre-set to 180°, if that's not the arc you need, just turn the easy-to-adjust black band (see illustrations on pg. 37)
- Full 5" pop-up to clear tall grasses
- Smart Arc™ memory returns sprinkler to previously set arc if vandalized and slip clutch assures no damage to gears
- Below-grade installation allows for maximum safety helping to eliminate the potential for liability
- TruArc for easy arc set—eliminates the need to double check—for ease in installation and to eliminate the palming of a sprinkler to check the final arc setting
- Effluent and check valve options—for safety in reclaimed water situations and to prevent low-head drainage
- Unique, over-molded wiper seal for greater debris resistance and below-grade installation
- Cluster, water-lubricated, gear-drive design
- Standard rubber cover for safety
- Large filter screen to prevent clogging
- Five-year warranty

Installation Features (All Models)

- Color-coded nozzle tree with seven nozzles to cover varying flow requirements and for quick and easy nozzle identification
- Factory-installed with a #12.0 nozzle
- Arc adjustment from 30°–360°
- Continuous, unidirectional rotation provides uniform water coverage when set at 360°
- Stainless steel radius adjustment screw allows up to 25% radius reduction

Specifying Information—TR70P, TR70PSS

TR70 XX XX E

Description	Body	Nozzles		Optional
TR70—TR70 Series Rotor	P—Lawn Pop-up SS—Stainless Steel Lawn Pop-up	7—7.0 9—9.0 12—12.0 16—16.0	20—20.0 24—24.0 27—27.0	E—Effluent

Example: A TR70 Series lawn pop-up sprinkler with a 12.0 nozzle, would be specified as: **TR70P-12**

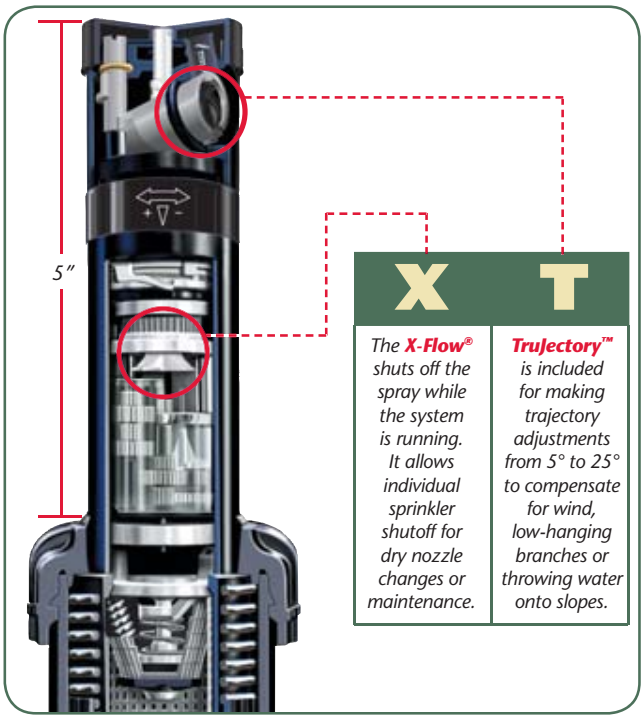
NEW Stainless Steel Models

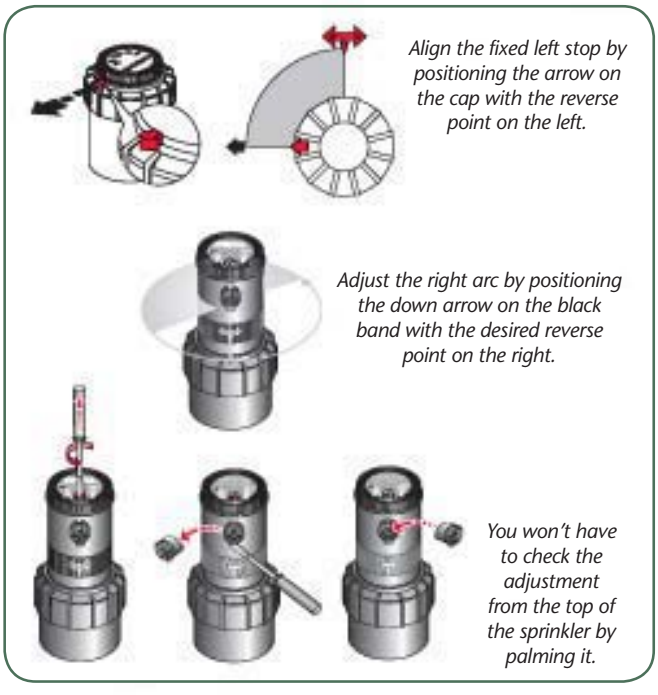
TR70XTP and TR70XTPSS

These rotors have all the features of the TR70P with the addition of the exclusive X-Flow® device and TruJectory™ nozzle adjustment feature.

Additional Features (XTP Models Only)

- Patented X-Flow® shutoff device built into the riser to turn off sprinkler flow allowing for maintenance or partial installations
- Exclusive TruJectory™ adjustment from 5° to 25° for fine-tuning nozzle spray trajectory to avoid low-hanging branches or compensate for the wind





Align the fixed left stop by positioning the arrow on the cap with the reverse point on the left.

Adjust the right arc by positioning the down arrow on the black band with the desired reverse point on the right.

You won't have to check the adjustment from the top of the sprinkler by palming it.

Specifying Information—TR70XT, TR70XTSS

TR70XT | XX | XX | E

Description	Body	Nozzles	Optional
TR70XT—TR70XT Series Rotor	P—Lawn Pop-up SS—Stainless Steel Lawn Pop-up	7—7.0 20—20.0 9—9.0 24—24.0 12—12.0 27—27.0 16—16.0	E—Effluent

Example: A TR70XT Series sprinkler with a stainless steel riser and a 6.0 nozzle, would be specified as: **TR70XT-SS-60**

TR70 Series—U.S.

TR70P, TR70PSS Performance Data—U.S.

Nozzle	psi	GPM	Radius	Precip. Rate △	Precip. Rate □
7 Orange	50	7.5	43	0.34	0.39
	60	8.2	45	0.34	0.39
	70	8.9	45	0.34	0.45
	80	9.6	44	0.41	0.48
	90	10.1	44	0.44	0.50
	100	11.1	46	0.44	0.51
9 Red	50	8.4	46	0.33	0.38
	60	8.8	48	0.32	0.37
	70	9.4	48	0.33	0.38
	80	10.0	51	0.32	0.37
	90	10.1	51	0.31	0.36
	100	11.6	53	0.34	0.40
12 Black	50	10.5	53	0.31	0.36
	60	11.6	55	0.32	0.37
	70	12.6	56	0.34	0.39
	80	13.5	57	0.35	0.40
	90	14.4	58	0.36	0.41
	100	15.3	60	0.35	0.41
16 Blue	50	15.3	55	0.42	0.49
	60	16.3	59	0.39	0.45
	70	17.4	61	0.39	0.45
	80	18.5	61	0.41	0.48
	90	19.7	66	0.38	0.44
	100	20.8	67	0.39	0.45
20 Green	50	18.6	55	0.51	0.59
	60	19.9	59	0.48	0.55
	70	21.0	61	0.47	0.54
	80	22.4	63	0.47	0.54
	90	22.8	66	0.45	0.56
	100	25.1	68	0.45	0.52
24 Brown	50	18.7	57	0.48	0.55
	60	19.8	61	0.44	0.51
	70	21.5	63	0.45	0.52
	80	23.1	66	0.44	0.51
	90	24.5	67	0.46	0.53
	100	25.9	70	0.44	0.51
27 Gray	50	21.1	59	0.51	0.58
	60	23.7	64	0.48	0.56
	70	25.6	67	0.48	0.55
	80	26.8	68	0.48	0.56
	90	28.2	69	0.49	0.57
	100	29.6	71	0.49	0.57

** △ Precipitation rates are for triangular spacing, shown in inches per hour, calculated at 50% of diameter.*

□ Precipitation rates are for square spacing, shown in inches per hour, calculated at 50% of diameter.

All performance specifications are based on the stated working pressure available at the base of the sprinkler.

Radius shown in feet. Data based on 360°.

TR70XT Performance Data—U.S.

Nozzle Size	psi	Flow	5° Radius	5° Precip Rate* △	5° Precip Rate* □	15° Radius	15° Precip Rate* △	15° Precip Rate* □	25° Radius	25° Precip Rate* △	25° Precip Rate* □
7 Orange	40	6.7	33	0.68	0.59	39	0.38	0.44	44	0.29	0.33
	50	7.1	37	0.57	0.50	42	0.34	0.39	46	0.28	0.32
	60	7.8	38	0.60	0.52	43	0.36	0.41	47	0.29	0.34
	70	8.4	40	0.58	0.51	44	0.36	0.42	48	0.30	0.35
	80	9.1	41	0.60	0.52	45	0.37	0.43	49	0.32	0.37
	90	9.5	42	0.60	0.52	46	0.38	0.43	50	0.32	0.37
	100	10.6	43	0.64	0.55	47	0.40	0.46	51	0.34	0.39
9 Red	40	7.1	33	0.73	0.63	39	0.39	0.45	45	0.29	0.34
	50	8.0	37	0.65	0.56	42	0.38	0.44	47	0.30	0.35
	60	8.7	38	0.67	0.58	43	0.39	0.45	48	0.31	0.36
	70	9.3	38	0.71	0.62	44	0.41	0.47	49	0.32	0.37
	80	9.7	40	0.68	0.59	45	0.40	0.46	50	0.32	0.37
	90	10.9	42	0.68	0.59	47	0.42	0.48	51	0.35	0.40
	100	11.6	43	0.70	0.60	47	0.44	0.51	51	0.37	0.43
12 Black	40	9.7	33	0.99	0.86	39	0.53	0.61	45	0.40	0.46
	50	11.4	37	0.93	0.80	43	0.53	0.61	48	0.41	0.48
	60	12.4	38	0.95	0.82	44	0.53	0.61	50	0.41	0.48
	70	13.4	39	0.98	0.85	45	0.55	0.64	51	0.43	0.50
	80	14.2	40	0.99	0.86	46	0.56	0.65	52	0.44	0.51
	90	15.2	42	0.96	0.83	48	0.56	0.65	53	0.45	0.52
	100	16.0	43	0.96	0.83	48	0.58	0.67	53	0.48	0.55
16 Blue	40	12.7	34	1.22	1.06	40	0.66	0.76	46	0.50	0.58
	50	14.5	38	1.12	0.97	45	0.60	0.69	52	0.45	0.52
	60	16.0	42	1.01	0.87	49	0.57	0.65	55	0.44	0.51
	70	17.4	44	1.00	0.86	51	0.56	0.64	58	0.43	0.50
	80	18.3	47	0.92	0.80	53	0.55	0.64	58	0.45	0.52
	90	19.6	48	0.94	0.82	54	0.57	0.66	59	0.47	0.54
	100	20.5	50	0.91	0.79	55	0.56	0.65	60	0.47	0.55
20 Green	40	14.0	34	1.35	1.17	41	0.71	0.82	47	0.53	0.61
	50	16.2	38	1.24	1.08	46	0.65	0.75	53	0.48	0.55
	60	17.9	42	1.13	0.98	50	0.60	0.69	58	0.44	0.51
	70	19.3	48	0.93	0.81	55	0.54	0.63	61	0.43	0.50
	80	20.7	49	0.96	0.83	56	0.55	0.64	63	0.43	0.50
	90	21.9	51	0.94	0.81	56	0.58	0.67	61	0.49	0.57
	100	22.9	51	0.98	0.85	58	0.57	0.66	65	0.45	0.52
24 Brown	40	14.7	35	1.33	1.15	41	0.73	0.84	47	0.55	0.64
	50	16.4	41	1.08	0.94	48	0.59	0.68	55	0.45	0.52
	60	17.7	46	0.93	0.81	52	0.55	0.63	58	0.44	0.51
	70	18.9	49	0.87	0.76	55	0.52	0.60	61	0.42	0.49
	80	20.3	50	0.90	0.78	56	0.54	0.62	62	0.44	0.51
	90	21.6	54	0.82	0.71	60	0.51	0.59	65	0.43	0.49
	100	22.8	56	0.81	0.70	62	0.50	0.58	67	0.42	0.49
27 Gray	40	16.7	34	1.61	1.39	41	0.83	0.96	48	0.60	0.70
	50	19.0	38	1.46	1.27	47	0.72	0.83	56	0.51	0.58
	60	20.9	43	1.25	1.09	52	0.66	0.76	60	0.48	0.56
	70	22.7	49	1.05	0.91	56	0.60	0.70	63	0.48	0.55
	80	24.2	52	1.00	0.86	59	0.59	0.68	65	0.48	0.55
	90	25.6	55	0.94	0.81	62	0.55	0.64	69	0.45	0.52
	100	27.0	57	0.92	0.80	64	0.55	0.63	71	0.45	0.52

** △ Precipitation rates are for triangular spacing, shown in inches per hour, calculated at 50% of diameter.*

□ Precipitation rates are for square spacing, shown in inches per hour, calculated at 50% of diameter.

All performance specifications are based on the stated working pressure available at the base of the sprinkler.

Radius shown in feet. Data based on 360°.

#12 nozzle comes pre-installed from factory.

TR70 Series—Metric

TR70P, TR70PSS Performance Data—Metric

Nozzle	Bar	LPM	Radius	Precip. Rate △	Precip. Rate □
7 Orange	3,5	28,6	13,2	11,4	9,9
	4,0	30,5	13,6	11,4	9,9
	4,5	32,4	13,7	11,9	10,3
	5,0	34,3	13,6	12,8	11,1
	5,5	36,3	13,4	13,9	12,1
	6,0	37,2	13,4	14,5	12,5
	6,5	39,8	13,7	14,7	12,8
	7,0	42,5	14,0	14,9	12,9
9 Red	3,5	31,9	14,1	11,2	9,7
	4,0	33,0	14,5	10,8	9,4
	4,5	34,5	14,8	10,9	9,4
	5,0	36,1	15,1	11,0	9,5
	5,5	37,8	15,5	10,8	9,4
	6,0	38,1	15,8	10,6	9,2
	6,5	40,6	16,0	11,0	9,5
	7,0	44,4	16,2	11,7	10,1
12 Black	3,5	40,0	16,2	10,6	9,1
	4,0	43,1	16,6	10,8	9,3
	4,5	45,9	16,9	11,1	9,6
	5,0	48,3	17,1	11,4	9,9
	5,5	51,0	17,4	11,7	10,1
	6,0	53,5	17,6	12,0	10,4
	6,5	55,9	17,9	12,0	10,4
	7,0	58,6	18,3	12,1	10,4
16 Blue	3,5	58,2	16,9	14,2	12,3
	4,0	60,9	17,7	13,4	11,6
	4,5	63,9	18,3	13,2	11,4
	5,0	66,9	18,6	13,4	11,6
	5,5	69,9	18,6	14,0	12,1
	6,0	73,2	19,7	13,1	11,4
	6,5	76,3	20,2	12,9	11,2
	7,0	79,3	20,5	13,1	11,3
20 Green	3,5	70,8	16,9	17,2	14,9
	4,0	74,3	17,7	16,3	14,2
	4,5	77,5	18,3	16,0	13,9
	5,0	80,8	18,7	15,9	13,8
	5,5	84,6	19,2	15,9	13,8
	6,0	85,8	19,8	15,1	13,1
	6,5	90,0	20,4	15,0	13,0
	7,0	95,7	20,8	15,3	13,3
24 Brown	3,5	71,1	17,5	16,1	14,0
	4,0	74,1	18,3	15,2	13,2
	4,5	78,3	18,9	15,1	13,1
	5,0	82,9	19,4	15,2	13,2
	5,5	87,3	20,1	15,0	13,0
	6,0	91,1	20,3	15,3	13,2
	6,5	95,0	20,8	15,2	13,1
	7,0	98,6	21,4	14,9	12,9
27 Gray	3,5	80,6	18,1	17,0	14,7
	4,0	87,7	19,2	16,5	14,3
	4,5	93,5	20,0	16,2	14,0
	5,0	98,0	20,5	16,1	14,0
	5,5	101,3	20,7	16,3	14,1
	6,0	105,1	20,9	16,8	14,4
	6,5	109,0	21,3	16,6	14,4
	7,0	112,8	21,7	16,5	14,3

* △ *Precipitation rates are for triangular spacing, shown in millimeters per hour, calculated at 50% of diameter.*

□ *Precipitation rates are for square spacing, shown in millimeters per hour, calculated at 50% of diameter.*

All performance specifications are based on the stated working pressure available at the base of the sprinkler.

Radius shown in meters. Data based on 360°.

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TR70XT Performance Data—Metric

Nozzle	Bar	kPa	Kg/cm²	LPM	5° Radius	15° Radius	25° Radius
7 Orange	3,0	300	3,06	25,9	10,5	12,2	13,6
	3,5	350	3,57	27,1	11,3	12,8	14,0
	4,0	400	4,08	29,0	11,5	13,0	14,3
	4,5	450	4,59	30,7	11,9	13,3	14,5
	5,0	500	5,10	32,5	12,3	13,5	14,7
	5,5	550	5,61	34,4	12,5	13,7	14,9
	6,0	600	6,12	35,5	12,7	13,3	15,1
	6,5	650	6,63	37,7	12,9	13,6	15,4
	7,0	700	7,14	40,4	13,2	14,4	15,6
9 Red	3,0	300	3,06	28,1	10,5	12,2	13,9
	3,5	350	3,57	30,5	11,3	12,8	14,3
	4,0	400	4,08	32,4	11,5	13,0	14,6
	4,5	450	4,59	34,1	11,6	13,3	14,8
	5,0	500	5,10	35,6	11,7	13,5	15,0
	5,5	550	5,61	36,7	12,2	13,7	15,2
	6,0	600	6,12	39,9	12,6	14,1	15,5
	6,5	650	6,63	42,4	12,9	14,3	15,5
	7,0	700	7,14	44,2	13,2	14,4	15,6
12 Black	3,0	300	3,06	39,0	10,5	12,3	14,0
	3,5	350	3,57	43,4	11,3	13,1	14,7
	4,0	400	4,08	46,2	11,5	13,3	15,1
	4,5	450	4,59	48,9	11,7	13,6	15,4
	5,0	500	5,10	51,5	12,0	13,8	15,6
	5,5	550	5,61	53,7	12,2	14,0	15,8
	6,0	600	6,12	56,4	12,6	14,4	16,1
	6,5	650	6,63	58,8	12,9	14,6	16,2
	7,0	700	7,14	60,8	13,2	14,7	16,5
16 Blue	3,0	300	3,06	50,4	10,8	12,7	14,7
	3,5	350	3,57	55,3	11,7	13,8	15,9
	4,0	400	4,08	59,4	12,6	14,7	16,6
	4,5	450	4,59	63,3	13,1	15,3	17,2
	5,0	500	5,10	66,7	13,6	15,7	17,7
	5,5	550	5,61	69,2	14,3	16,1	17,7
	6,0	600	6,12	72,7	14,5	16,4	17,9
	6,5	650	6,63	75,6	14,9	16,6	18,1
	7,0	700	7,14	77,9	15,3	16,8	18,3
20 Green	3,0	300	3,06	55,9	10,8	13,0	15,0
	3,5	350	3,57	61,8	11,7	14,1	16,3
	4,0	400	4,08	66,5	12,6	15,0	17,4
	4,5	450	4,59	70,5	13,8	16,0	18,2
	5,0	500	5,10	74,4	14,7	16,8	18,7
	5,5	550	5,61	78,2	14,9	17,1	19,2
	6,0	600	6,12	81,5	15,4	17,1	19,4
	6,5	650	6,63	84,5	15,5	17,3	19,6
	7,0	700	7,14	87,1	15,6	18,2	19,9
24 Brown	3,0	300	3,06	57,9	11,3	13,2	15,2
	3,5	350	3,57	62,4	12,6	14,7	16,8
	4,0	400	4,08	66,0	13,7	15,6	17,5
	4,5	450	4,59	69,4	14,5	16,3	18,2
	5,0	500	5,10	72,8	15,0	16,8	18,7
	5,5	550	5,61	76,7	15,2	17,1	18,9
	6,0	600	6,12	80,3	16,1	17,9	19,5
	6,5	650	6,63	83,7	16,7	18,5	20,1
	7,0	700	7,14	86,7	17,1	19,0	20,5
27 Gray	3,0	300	3,06	66,2	10,8	13,1	15,5
	3,5	350	3,57	72,4	11,7	14,4	17,2
	4,0	400	4,08	77,7	12,8	15,5	18,0
	4,5	450	4,59	82,7	14,1	16,5	18,8
	5,0	500	5,10	87,3	15,2	17,3	19,4
	5,5	550	5,61	91,4	15,8	18,0	19,8
	6,0	600	6,12	95,3	16,5	18,6	20,7
	6,5	650	6,63	99,1	17,0	19,2	21,3
	7,0	700	7,14	102,9	17,4	19,6	21,7

All performance specifications are based on the stated working pressure available at the base of the sprinkler.

Radius shown in meters. Data based on 360°.

#12 nozzle comes pre-installed from factory.

The performance data in this catalog show average values obtained while testing in an enclosed, zero-wind facility. All precipitation rates are based on a full-circle application of the nozzle to maximum radius.

Your results will vary depending on both your spacing requirements and environmental conditions.

To obtain precipitation rates for a ½ circle sprinkler, multiply the chart values by 2. For a ¼ circle sprinkler, multiply the chart values by 4.