F-luent-Master®

80 SERIES
360° ROTATION IMPACT SPRINKLERS

DESCRIPTION

The Senninger Irrigation F-luent-Master® sprinkler is designed specifically for disposing effluent by the land treatment method in accordance with EPA guidelines. It is suitable for use on solid-set systems. With minor modifications it can also be used on center pivots or other mechanical-move systems. The 80 series is designed for maximum efficiency at high flow rates.

SPECIFICATIONS

Sprinkler shall be of 360 degree rotation driven by impact splasharm and spring. It shall be capable of a distribution pattern of _____ (feet/meters) in diameter at a riser height of _____ (feet/meters) with a sprinkler base operating pressure of _____ (psi / bar) and a discharge rate of _____ (gpm / L/s).
Trajectory shall be 25 degrees.
Nozzle size shall be _____ inch (nozzle # _____).
Lower bearing plastic thread shall be 1 1/4" NPT male.

Sprinkler body shall be constructed of high-impact engineering-grade thermoplastics with stainless steel fulcrum pin and splasharm spring. Fulcrum pin shall be molded into the body for maximum support and stability. Splasharm spring and bearing shall be enclosed for trouble-free performance. Sprinkler shall be equipped with an effluent vane to minimize possible flow obstruction from water-borne solids. Sprinkler cap shall be lavender to correspond to industry standards denoting non-potable water.

Sprinkler shall carry a two-year manufacturer's warranty on materials, workmanship and performance.

FEATURES

- Flow range: 23.6 to 91.8 gpm (1.51 to 5.69 L/s)
- Sprinkler base pressure: 35 to 75 psi (2.5 to 5.0 bar)
- 25 degree models:
  8025 RD-1-1 1/4" F EFF
  (includes 1 1/4" female NPT plastic coupling)
  8025 RD-1-1" F EFF
  (includes 1 1/4" x 1" female NPT plastic reducer coupling)
  8025 RD-1-1 1/4" M EFF
  (galvanized steel connection fittings not recommended)
- High-impact engineering-grade thermoplastic construction resists chemical degradation, scale buildup and UV effects
- Stainless steel springs and fulcrum pin enclosed to resist contamination; electrolysis eliminated by using no brass parts
- Lavender cap to correspond to industry standards denoting use of non-potable water
- Effluent vane minimizes obstruction from water-borne materials
- Nozzle sizes from 3/8" to 5/8" (#24 through #40) (9.5 to 15.9 mm)
- Two-year manufacturer's warranty on materials, workmanship and performance
- Also available in a double-nozzle model, flow range: 28.9 to 106.8 gpm (1.85 to 6.62 L/s)

Available through leading irrigation dealers.

Designed and manufactured by:

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F-luent-Master®

8025RD-1 EFF

SPRINKLER BASE PRESSURE (psi)	35	40	45	50	55	60	65	70	75
#24 Nozzle - (3/8")									
Flow (gpm)	23.6	25.2	26.7	28.2	29.6	30.9	32.1	33.3	34.5
Diam. at 1.5' height (ft)	128	134	139	144	149	154	157	159	160
Diam. at 6.0' height (ft)	147	152	156	159	162	164	166	168	170
#26 Nozzle - (13/32")									
Flow (gpm)	27.4	29.3	31.0	32.7	34.3	35.9	37.3	38.7	40.1
Diam. at 1.5' height (ft)	136	142	147	152	157	161	164	166	168
Diam. at 6.0' height (ft)	152	157	161	164	167	169	171	173	175
#28 Nozzle - (7/16")									
Flow (gpm)	31.8	33.9	36.0	38.0	39.8	41.6	43.3	44.9	46.5
Diam. at 1.5' height (ft)	142	148	153	157	161	166	169	171	173
Diam. at 6.0' height (ft)	156	161	165	168	171	173	175	177	179
#30 Nozzle - (15/32")									
Flow (gpm)	36.1	38.6	40.9	43.1	45.2	47.2	49.2	51.0	52.8
Diam. at 1.5' height (ft)	147	153	158	162	166	170	173	175	178
Diam. at 6.0' height (ft)	160	165	169	172	175	177	179	181	183
#32 Nozzle - (1/2")									
Flow (gpm)	41.0	43.9	46.5	49.0	51.4	53.7	55.9	58.0	60.1
Diam. at 1.5' height (ft)	150	156	161	165	169	173	176	179	183
Diam. at 6.0' height (ft)	164	169	173	176	179	181	183	185	187
#34 Nozzle - (17/32")									
Flow (gpm)	46.3	49.5	52.5	55.4	58.1	60.7	63.1	65.5	67.8
Diam. at 1.5' height (ft)	153	159	164	168	172	176	180	183	186
Diam. at 6.0' height (ft)	167	172	176	179	182	184	186	188	190
#36 Nozzle - (9/16")									
Flow (gpm)	51.9	55.5	58.9	62.1	65.1	68.0	70.8	73.5	76.0
Diam. at 1.5' height (ft)	155	161	166	170	174	178	183	187	190
Diam. at 6.0' height (ft)	170	175	179	182	185	187	189	191	193
#38 Nozzle - (19/32")									
Flow (gpm)	56.0	59.9	63.5	66.9	70.2	73.3	76.3	79.2	82.0
Diam. at 1.5' height (ft)	157	163	168	172	176	180	185	190	192
Diam. at 6.0' height (ft)	173	178	182	185	188	190	192	194	196
#40 Nozzle - (5/8")									
Flow (gpm)	–	67.1	71.1	75.0	78.7	82.1	85.5	88.7	91.8
Diam. at 1.5' height (ft)	–	165	170	174	178	182	187	192	194
Diam. at 6.0' height (ft)	–	180	184	187	190	192	194	196	198

U.S. - Diameter (feet)

(bar) (psi)	2.5 36.25	3.0 43.50	3.5 50.75	4.0 58.00	4.5 65.25	5.0 72.50
#24 Nozzle - (9.5 mm)						
(L/s)	1.51	1.66	1.79	1.91	2.03	2.14
0.5 m (m)	39.5	41.9	44.1	46.3	47.9	48.6
2.0 m (m)	45.2	47.2	48.6	49.7	50.6	51.5
#26 Nozzle - (10.3 mm)						
(L/s)	1.76	1.92	2.08	2.22	2.36	2.48
0.5 m (m)	41.9	44.4	46.6	48.6	50.0	50.9
2.0 m (m)	46.7	48.7	50.1	51.3	52.1	53.0
#28 Nozzle - (11.1 mm)						
(L/s)	2.04	2.23	2.41	2.58	2.73	2.88
0.5 m (m)	43.7	46.2	48.0	50.0	51.5	52.4
2.0 m (m)	47.9	49.9	51.3	52.5	53.4	54.3
#30 Nozzle - (11.9 mm)						
(L/s)	2.31	2.53	2.74	2.93	3.10	3.27
0.5 m (m)	45.3	47.7	49.6	51.3	52.8	53.8
2.0 m (m)	49.1	51.1	52.6	53.7	54.6	55.5
#32 Nozzle - (12.7 mm)						
(L/s)	2.63	2.88	3.11	3.33	3.53	3.72
0.5 m (m)	46.2	48.6	50.5	52.2	53.7	55.2
2.0 m (m)	50.4	52.4	53.8	54.9	55.8	56.7
#34 Nozzle - (13.5 mm)						
(L/s)	2.97	3.25	3.51	3.76	3.99	4.20
0.5 m (m)	47.1	49.5	51.4	53.2	54.9	56.2
2.0 m (m)	51.3	53.3	54.7	55.8	56.7	57.6
#36 Nozzle - (14.3 mm)						
(L/s)	3.33	3.65	3.94	4.21	4.47	4.71
0.5 m (m)	47.7	50.1	52.0	53.8	55.8	57.5
2.0 m (m)	52.2	54.2	55.6	56.8	57.6	58.5
#38 Nozzle - (15.1 mm)						
(L/s)	3.59	3.93	4.25	4.54	4.82	5.08
0.5 m (m)	48.3	50.8	52.6	54.4	56.5	58.2
2.0 m (m)	53.1	55.1	56.5	57.7	58.5	59.4
#40 Nozzle - (15.9 mm)						
(L/s)	–	4.41	4.76	5.09	5.40	5.69
0.5 m (m)	–	51.4	53.2	55.0	57.1	58.8
2.0 m (m)	–	55.7	57.1	58.3	59.2	60.0

METRIC - Diameter (meters)

Figures reflect actual test data obtained under ideal conditions. Stream heights range from 12.5 - 28.0 ft (3.8 - 8.5 m) above nozzle based on pressure and nozzle size. Sprinkler performance tests were conducted in accordance with the American Society of Agricultural Engineers standard S398.1 and are representative of production at the time of publication. Diameters shown are for standard straight bore nozzles and effluent vanes (black). Other nozzles and/or vane combinations are available; consult factory for specific performance data.