

85EHD-LA Tough Bird®

1 1/4" 32 mm Full or Part Circle,
Brass Impact Sprinklers

- Heavy duty brass construction
- Stainless steel wear buttons, springs and fulcrum pin
- Locking stainless steel trip collars

Features

- Chemically resistant washers
- Full or Part Circle operation

Benefits

- Internal straightening vane increases distance of throw
- Stainless steel buttons protect trip mechanism from wear
- Corrosion and grit resistant
- Built to last
- Five-year Customer Satisfaction Policy

Specifications

- Bearing: 1 1/4" (32mm) Male NPT, Brass
- Trajectory Angle: 17°
- Operating Range: 25-100 psi (1.7-6.9 bar)
- Flow Rate: 17.1-127.7 gpm (3.88-29.0 m³/h)
- Radius: 52-108 ft. (15.8-32.9 meters)
- Nozzle Port: 3/4" Female NPT



Straight Bore Nozzle (SBN-5) with Plug Performance*

psi@ Nozzle	NOZZLE SIZE									
	(Stream Height: 10 ft.)									
	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	5/8"	11/16"
	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)	Rad. Flow (ft.) (gpm)
25	52 17.10	55 20.30	57 23.40	60 26.70	60 30.30	60 33.80	60 37.10	60 42.30	60 51.50	60 61.90
30	57 18.80	59 22.30	62 25.70	63 29.30	65 33.20	67 37.10	67 40.80	67 46.40	67 56.50	67 68.10
35	60 20.30	62 24.10	65 27.80	67 31.70	70 35.90	71 40.10	73 44.10	73 50.20	73 61.10	73 73.80
40	62 21.80	65 25.80	67 29.70	70 33.90	72 38.50	75 42.90	76 47.20	79 53.70	79 65.40	79 79.20
45	65 23.10	67 27.40	70 31.60	72 36.00	75 40.80	77 45.60	80 50.10	80 57.10	84 69.50	84 84.20
50	67 24.40	69 28.90	72 33.30	74 38.00	77 43.10	79 48.10	82 52.90	84 60.20	87 73.30	88 88.90
55	69 25.50	71 30.30	74 34.90	76 39.70	79 45.30	82 50.30	84 55.60	86 63.20	91 77.30	92 93.50
60	71 25.80	73 30.80	76 35.90	78 41.60	81 47.40	83 53.00	86 58.80	88 66.50	93 80.70	96 97.80
65	72 26.90	75 32.00	77 37.40	80 43.30	83 49.90	85 55.30	88 61.20	90 69.40	94 84.40	98 102.00
70	74 28.10	77 33.30	79 38.90	82 45.10	84 51.40	87 57.50	89 63.50	92 72.20	96 87.80	100 106.00
75	76 29.20	78 34.50	81 40.30	83 46.80	86 53.30	89 59.60	91 65.80	93 74.90	98 91.00	102 109.90
80	77 30.40	80 35.70	82 41.80	85 48.40	88 55.10	90 61.60	93 68.10	95 77.50	99 94.10	103 113.70
85	79 31.50	81 37.00	84 43.20	86 50.00	89 56.90	92 63.50	94 70.30	97 80.00	101 97.10	105 117.30
90	80 32.70	83 38.30	85 44.60	88 51.50	91 58.50	93 65.30	96 72.40	98 82.20	102 99.90	106 120.90
95	82 33.90	84 39.50	87 46.00	89 53.00	92 60.00	95 67.10	97 74.40	99 84.30	103 102.60	107 124.30
100	83 34.00	85 40.10	88 47.40	91 54.50	93 61.50	96 68.90	98 76.40	101 87.20	105 105.20	108 127.70

* Nozzles must be purchased separately.
See Chart below.

Part Numbers and Ordering Information

Sprinkler Only	
Sprinkler without Nozzle	A23960

Nozzle Only		XX = Nozzle Size										
U.S. Standard		11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	5/8"	11/16"	
Metric		8.7mm	9.5mm	10.3mm	11.1mm	11.9mm	12.7mm	13.5mm	14.3mm	15.9mm	17.5mm	
Brass Straight Bore Nozzle	SBN-5	103043-XX	22	24	26	28	30	32	34	36	40	44

Bold nozzle size number denotes the most common nozzle choice.

Straight Bore Nozzle (SBN-5) Performance*
METRIC

bar @ Nozzle	NOZZLE SIZE (Stream Height: 3m)														
	8.7 mm (11/32")			9.5 mm (3/8")			10.3 mm (13/32")			11.1 mm (7/16")			11.9 mm (15/32")		
	Rad. (m)	Flow (l/s)	Flow (m ³ /h)	Rad. (m)	Flow (l/s)	Flow (m ³ /h)	Rad. (m)	Flow (l/s)	Flow (m ³ /h)	Rad. (m)	Flow (l/s)	Flow (m ³ /h)	Rad. (m)	Flow (l/s)	Flow (m ³ /h)
1.7	15.8	1.08	3.88	16.8	1.28	4.61	17.4	1.48	5.31	18.3	1.68	6.06	18.3	1.91	6.88
2.0	17.1	1.16	4.19	17.7	1.38	4.97	18.6	1.59	5.73	19.0	1.82	6.53	19.5	2.06	7.41
2.5	18.4	1.30	4.69	19.1	1.55	5.57	20.0	1.78	6.42	20.6	2.03	7.32	21.5	2.31	8.30
3.0	19.5	1.43	5.16	20.2	1.70	6.11	21.1	1.96	7.05	21.8	2.23	8.03	22.6	2.53	9.11
3.5	20.5	1.55	5.58	21.1	1.84	6.61	22.0	2.12	7.62	22.6	2.41	8.69	23.6	2.74	9.86
4.0	21.4	1.62	5.83	22.0	1.93	6.95	22.9	2.24	8.06	23.5	2.58	9.27	24.4	2.94	10.57
4.5	22.0	1.70	6.12	22.9	2.02	7.28	23.5	2.36	8.51	24.4	2.74	9.85	25.3	3.15	11.35
5.0	22.9	1.81	6.51	23.6	2.14	7.70	24.4	2.50	8.99	25.1	2.90	10.43	25.9	3.30	11.89
5.5	23.5	1.91	6.89	24.3	2.25	8.09	25.0	2.63	9.47	25.9	3.05	10.97	26.8	3.47	12.49
6.0	24.2	2.02	7.26	24.9	2.37	8.52	25.7	2.76	9.94	26.5	3.19	11.49	27.4	3.63	13.07
6.5	24.9	2.13	7.66	25.6	2.48	8.93	26.4	2.89	10.40	27.1	3.33	11.98	28.0	3.77	13.57
6.9	25.3	2.15	7.72	25.9	2.57	9.24	26.8	2.99	10.77	27.7	3.44	12.38	28.3	3.88	13.97

bar @ Nozzle	NOZZLE SIZE (Stream Height: 3m)														
	12.7 mm (1/2")			13.5 mm (17/32")			14.3 mm (9/16")			15.9 mm (5/8")			17.5 mm (11/16")		
	Rad. (m)	Flow (l/s)	Flow (m ³ /h)	Rad. (m)	Flow (l/s)	Flow (m ³ /h)	Rad. (m)	Flow (l/s)	Flow (m ³ /h)	Rad. (m)	Flow (l/s)	Flow (m ³ /h)	Rad. (m)	Flow (l/s)	Flow (m ³ /h)
1.7	18.3	2.13	7.68	18.3	2.34	8.43	18.3	2.67	9.61	18.3	3.25	11.70	18.3	3.91	14.06
2.0	20.0	2.30	8.27	20.0	2.53	9.10	20.0	2.87	10.35	20.0	3.50	12.60	20.0	4.22	15.18
2.5	21.9	2.57	9.26	22.5	2.83	10.19	22.7	3.22	11.60	22.7	3.92	14.12	22.7	4.74	17.06
3.0	23.3	2.83	10.17	24.0	3.11	11.18	24.3	3.54	12.73	25.1	4.31	15.50	25.1	5.22	18.78
3.5	24.2	3.05	11.00	25.1	3.36	12.10	25.7	3.83	13.77	26.7	4.66	16.78	27.0	5.65	20.34
4.0	25.2	3.27	11.79	26.0	3.63	13.06	26.6	4.07	14.66	28.1	4.98	17.93	28.8	6.06	21.82
4.5	25.9	3.49	12.58	26.8	3.87	13.92	27.5	4.39	15.79	28.7	5.33	19.20	29.9	6.45	23.21
5.0	26.8	3.69	13.29	27.4	4.08	14.68	28.2	4.64	16.70	29.6	5.64	20.30	30.8	6.81	24.51
5.5	27.4	3.88	13.96	28.3	4.29	15.44	28.9	4.88	17.57	30.2	5.93	21.33	31.4	7.16	25.77
6.0	28.2	4.05	14.58	28.9	4.49	16.15	29.7	5.10	18.37	30.9	6.20	22.30	32.1	7.49	26.96
6.5	28.9	4.22	15.17	29.5	4.67	16.83	30.1	5.30	19.07	31.3	6.45	23.21	32.6	7.81	28.11
6.9	29.3	4.35	15.65	29.9	4.82	17.35	30.8	5.50	19.81	32.0	6.64	23.89	32.9	8.06	29.00

* Nozzles must be purchased separately. See chart on previous page.