

ES Series Ultraviolet Sanitizer



SPECIFICATIONS

The Ultraviolet Sanitizer Unit shall be a Delta Ultraviolet Corporation ES Series Model ES-_____, rated at _____ Volts, 50/60 Hz. The unit shall be equipped with a 96 inch (243.8 cm) long power cord. The wet chamber shall be a 8 inch (20.3. cm) UV inhibited PVC housing with four mounting feet and PVC electrical enclosure bonnet suitable for outdoor installation. PVC housing shall have an inner wrapper of stainless steel for added reflective power and an exterior stainless steel outer wrapper. PVC Inlet/Outlet unions shall be _____ (inch/cm) socket size. The UV unit shall include a pressure switch to prevent operation when water is not flowing, a pressure gauge and a clear viewing tail piece to verify bulb ON condition. The UV lamp shall be design rated at 9,000 hours of continuous use and shall be fully replaceable without requiring special tools. The UV lamp shall be rated at no less than 30,000 $\mu\text{watts}/\text{sec}/\text{cm}^2$ (Class A drinking water requirement) and shall bear the manufacturer's EPA Registration number on the unit, cartons and printed literature. The UV unit shall be warranted for three [3] years (Lamp – one [1] year) and shall be accompanied by a printed factory limited warranty, installation instructions and owner's manual.



Model	Part Number	Voltage	I/O Size
ES-5	35-08640	120V/50/60Hz	2 inch
ES-5	35-08650	120V/50/60Hz	63mm
ES-5	35-08670	240V/50/60Hz	2 inch
ES-5	35-08671	240V/50/60Hz	63mm
ES-10	35-08642	120V/50/60Hz	2 inch
ES-10	35-08652	120V/50/60Hz	63mm
ES-10	35-08672	240V/50/60Hz	2 inch
ES-10	35-08673	240V/50/60Hz	63mm

Model	Part Number	Voltage	I/O Size
ES-20	35-08644	120V/50/60Hz	2 inch
ES-20	35-08654	120V/50/60Hz	63mm
ES-20	35-08674	240V/50/60Hz	2 inch
ES-20	35-08675	240V/50/60Hz	63mm
ES-40	35-08646	120V/50/60Hz	2 inch
ES-40	35-08656	120V/50/60Hz	63mm
ES-40	35-08676	240V/50/60Hz	2 inch
ES-40	35-08677	240V/50/60Hz	63mm

Model	Cord Length	Bulb Output (EOL)	Bulb Watts
ES-5	60" (152.4 cm)	30,000 $\mu\text{W}/\text{sec}/\text{cm}^2$	30
ES-10	60" (152.4 cm)	30,000 $\mu\text{W}/\text{sec}/\text{cm}^2$	58

Model	Cord Length	Bulb Output (EOL)	Bulb Watts
ES-20	60" (152.4 cm)	30,000 $\mu\text{W}/\text{sec}/\text{cm}^2$	80
ES-40	60" (152.4 cm)	30,000 $\mu\text{W}/\text{sec}/\text{cm}^2$	90

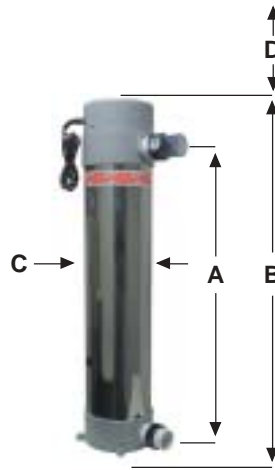
POOL FLOW CHART

Delta UV EA Model	Maximum Flow Rate (GPM)	Maximum Flow Rate (LPM)	Minimum UV Microwatts sec/cm^2	Max Pool Volume 12 Hr. Turnover (Gallons)	Max Pool Volume 12 Hr. Turnover (Liters)	Max Pool Volume 8 Hr. Turnover (Gallons)	Max Pool Volume 8 Hr. Turnover (Liters)
ES-5	31	140	30390	26640	100843	17760	67229
ES-10	57	295	30390	56160	212588	37440	141725
ES-20	79	416	30180	79200	299804	52800	199869
ES-40	110	469	30310	89280	337961	59520	225307

POND FLOW CHART

Delta UV EA Model	Maximum Flow Rate (GPM)	Maximum Flow Rate (LPM)	Minimum UV Microwatts sec/cm^2	Max Volume 2 Hr. Turnover (Gallons)	Max Volume 2 Hr. Turnover (Liters)	Max Volume 3 Hr. Turnover (Gallons)	Max Volume 3 Hr. Turnover (Liters)	Max Volume 4 Hr. Turnover (Gallons)	Max Volume 4 Hr. Turnover (Liters)
ES-5	31	140	30390	4440	16807	6660	25211	8880	33614
ES-10	57	295	30390	9360	35431	14040	53147	18720	70863
ES-20	79	416	30180	13200	49967	19800	74951	26400	99935
ES-40	110	469	30310	14880	56327	22320	84490	29760	112654

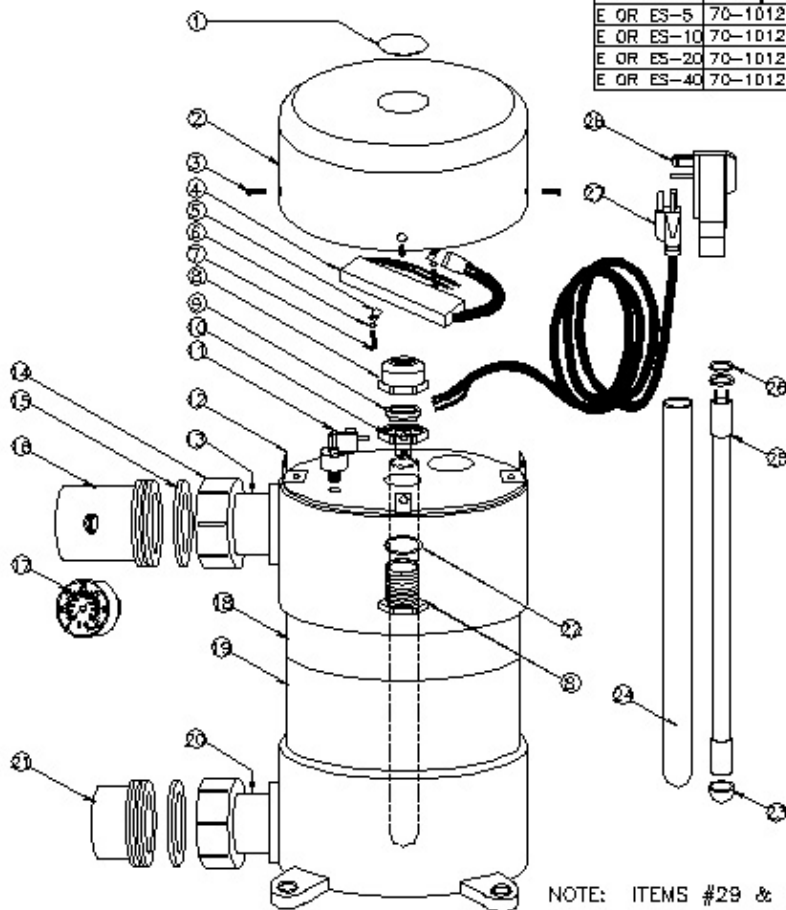
Physical Dimensions



Model	Dim. A	Dim. B	Dim. C	Dim. D	Empty Wt.	Operating Wt.	Shipping Wt.	Carton Size
ES-5	9.25 in. 234.9 mm	17.75 in. 450.8 mm	8 in. 203.2 mm	7 in. 177.8 mm	20 lbs 9 kg	44 lbs 20 kg	25 lbs 11 kg	19-3/4"x13-1/2"x14-1/2" 501.65 x 342.9 x 368.3
ES-10	16.25 in. 412.7 mm	24.75 in. 628.6 mm	8 in. 203.2 mm	18 in. 457.2 mm	27 lbs 12 kg	63 lbs 29 kg	33 lbs 15 kg	26-3/4"x13-1/2"x14-1/2" 679.4 x 342.9 x 368.3
ES-20	30.375 in. 771.5 mm	38.875 in. 987.4 mm	8 in. 203.2 mm	32 in. 818.8 mm	40 lbs 18 kg	102 lbs 46 kg	48 lbs 22 kg	40-3/8"x13-1/2"x14-1/2" 1025.7 x 342.9 x 368.3
ES-40	37.5 in. 952.5 mm	46 in. 952.5 mm	8 in. 203.2 mm	39 in. 990.6 mm	47 lb 21 kg	121 lbs 55 kg	57 lbs 26 kg	48"x13-1/2"x14-1/2" 1219.2 x 342.9 x 368.3

All weights and dimensions nominal.

PART NUMBER MATRIX						
MODEL	ITEM #4	ITEM #19	ITEM #24	ITEM #25	ITEM #29	ITEM #30
E OR ES-5	70-10121	35-04405	58-50305	70-18405	82-04705	82-04706
E OR ES-10	70-10121	35-04410	58-50310	70-18410	82-04710	82-04711
E OR ES-20	70-10122	35-04420	58-50320	70-18420	82-04720	82-04721
E OR ES-40	70-10122	35-04440	58-50340	70-18440	82-04740	82-04741



30	OUTER WRAPPER (ES SERIES ONLY)	1	SEE MATRIX
29	INNER WRAPPER (ES SERIES ONLY)	1	SEE MATRIX
28	CORD CONNECTED GFCI (OPTIONAL)	1	70-09012
27	CORD 18/3X95"-NEMA	1	84-02002
26	ORING 806-VITON	2	44-02221
25	HD UV BULB	1	SEE MATRIX
24	QUARTZ TUBE	1	SEE MATRIX
23	BULB CUSHION	1	44-02018
22	ORING 125-EPDM	1	44-02212
21	UNION TAIL PIECE-2"-WHITE	1	86-02352
20	PVC NIPPLE-2" NPT-SCH 80-GRAY	1	86-08626
19	UV-HOUSING 2" IN/OUT	1	SEE MATRIX
18	TANK ID LABEL-SELF ADHESIVE	1	48-02225
17	PRESSURE GAUGE	1	84-82234
16	UNION TAIL PIECE-2" CLEAR-TAPPED	1	86-02402
15	FLAT ORING-2" WHITE	2	44-02335
14	UNI-NUT*- 2" BLACK	2	86-02335
13	UNION 2" SKT-WHITE	1	86-11515
12	BONNET BRACKET	4	82-02046
11	PRESSURE SWITCH	1	70-02305
10	NUT LOCK-1" NPT-BLACK	1	40-50051
9	QUARTZ TUBE COMPRESSION GASKET	1	44-02018
8	QUARTZ TUBE ACORN NUT&HOLDER	1	86-02411
7	SCREW #10X5/8"-HI-LO-PP-S/S	6	40-08027
6	FLAT WASHER #10-S/S	2	40-08010
5	BALLAST BRACKET	2	82-02050
4	BALLAST ASSEMBLY	1	SEE MATRIX
3	SCREW #1-32X3/8"-PPMS-S/S	4	40-08005
2	ELECTRICAL ENCLOSURE BONNET	1	86-02054
1	DECO DISC	1	90-10201
ITEM	DESCRIPTION	QTY	PART#

NOTE: ITEMS #29 & #30 ARE NOT SHOWN FOR ES SERIES