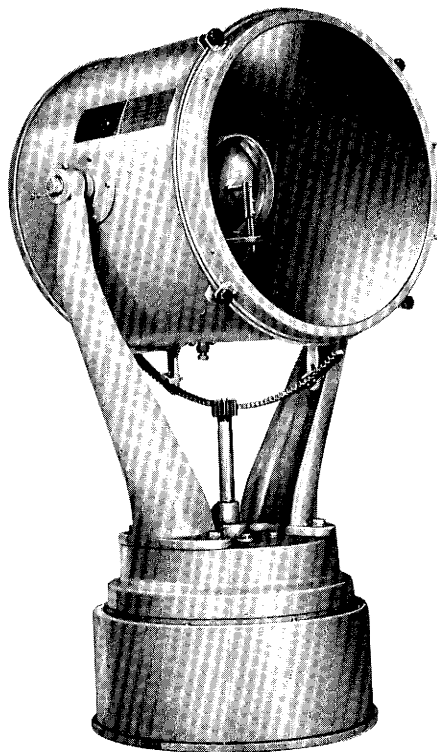


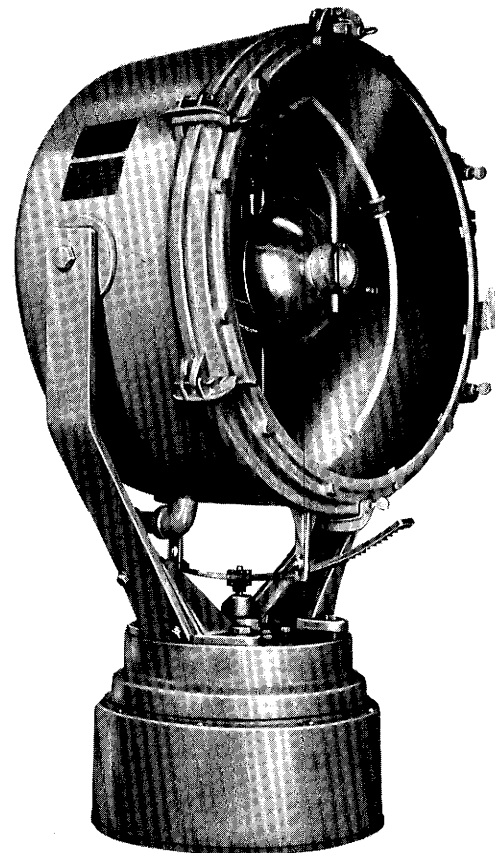


19 & 24 Inch Incandescent Distant Electric Control Searchlight Systems

BULLETIN SL 123B



19-Inch Searchlight



24-Inch Searchlight

Manufacturers of Quality Marine Lighting Equipment Since 1894

The Carlisle & Finch Co.

4562 West Mitchell Avenue, Cincinnati, Ohio 45232-1798 U.S.A.

Telephone: 513-681-6080 Fax: 513-681-6226

Website: www.carlislefinch.com

Specifications

General. These searchlights are designed for heavy duty marine service on commercial vessels. Motors in the searchlight base control both horizontal and vertical beam movements so that the searchlight can be located any distance from the pilot house. Dynamic braking stops beam movement instantly upon controller release. Page three shows control stations for both single-station and multiple-station systems. These components are priced separately.

Drum. Contains the optical system. 19-inch searchlight drum is constructed of formed brass and stainless steel. 24-inch drum all corrosion resistant aluminum. All doors are hinged and clamped to drum by captive fasteners.

Base and Arms. Constructed of high strength corrosion resistant marine aluminum. Base assembly is weatherproof and contains motors, slip clutches, ball bearing, and sliding stop which permits horizontal rotation more than 360 degrees while providing positive mechanical stops to prevent damage to the electric cables due to excessive rotation. **Collector/Slip-Rings** and brushes can be specified to permit searchlight to turn continuously through 360 degrees (optional feature - CR). Brass construction is an optional feature (-B).

Lamp Wattages Acceptable. 19-inch searchlight up to 1500W continuous, 2000W intermittent (approx. one hour or less). 24-inch up to 2000W continuous, 3000W intermittent.

Beam Characteristics. See table below.

Unique "Lamp Shock-Mount Design". Medium Prefocus Lampholder is mounted on a Special Shock-Absorbing Base, which helps prevent Lamp Filament Damage, due to excess Vessel Vibration and Shock.

Reflector. High quality parabolic silvered glass reflector efficiently concentrates light into a powerful beam. Circular louvers cut off unwanted front spill light.

Cover Glass. One piece heat-tempered clear glass.

Finish. Drum Interior heat resistant, flat black paint. Exterior surfaces high quality, Scratch and Salt-Resistant Powder Coat.

Anti-icing. Searchlight with sliding-stop type base can be equipped with heaters to prevent icing between rotating and fixed base, between rack and pinion, and between trunnions and drum (optional feature -H). Bases with collector rings and brushes can have heaters only between rotating gear and fixed base (optional feature -CRH).

Wiring. Multi-conductor flexible power cable extends from drum and is clamped to the rotating base. Sufficient length is supplied to terminate in a junction box (not supplied) near the searchlight without causing mechanical stress when searchlight is moved throughout its entire horizontal travel. Two single conductor power cables extend out bottom of base when collector rings and brushes are specified. Terminal block provided in base for motor and anti-icing heater wiring.

Optional Features

Searchlight can be tailored to your exact needs by specifying these features at extra charge.

Brass base and arms instead of marine aluminum. Add - B* to searchlight catalog no.

Collector/Slip-Ring Base. Provides totally uninterrupted and continuous horizontal rotation, with No End Points. Increases Safety for Marine Vessels where both Fore and Aft Illumination is important, and is critical for all Prison and Security Applications. Add -CR* to searchlight catalog number.

Anti-icing heaters. Add -H* to searchlight catalog no.

*When more than one options are selected list them alphabetically (same order as listed above) after a single hyphen. Example 19" searchlight with brass base and arms, collector rings, and anti-icing heaters is 19SL8660D-BCRH.

Selected Searchlight Lamp Data

LAMP REF. CODE	WATTS	VOLTS	BASE	*LIFE ** HRS.	19-INCH SEARCHLIGHT			24-INCH SEARCHLIGHT		
					CANDLEPOWER	BEAM SPREAD HOR.°	VERT.°	** CANDLEPOWER	BEAM SPREAD HOR.°	VERT.°
54.5 BTP	750	120	MED. PREF.	200	3,700,000	2.6	3.7	4,287,500	2.1	2.9
68.05 BTR	1000	120	MED. PREF.	200	4,300,000	4.1	4.4	7,350,000	3.2	3.5
73 1M/T2OBP	1000	120	MOG. BIP.	500	2,381,500	4.9	5.2	2,450,000	3.9	4.1
FKN	1000	230	MED. PREF.	200	1,800,000	5.6	5.9	N/A	N/A	N/A
83.7 CWZ	1500	120	MOG. PREF.	325	3,614,000	3.4	5.1	6,431,000	2.6	4.0
85.5 CYX	2000	120	MOG. BIP.	300	NOT USED	6.6	5.1	5,512,500	5.2	4.1

* THESE LAMP MANUFACTURER'S FIGURES ARE RELATIVE ONLY. INDIVIDUAL LAMPS MAY VARY CONSIDERABLY.

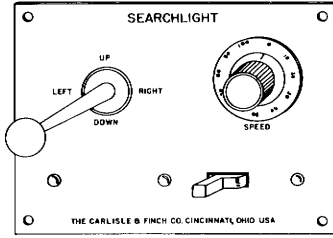
** THESE FIGURES PROVIDED TO AID IN LAMP SELECTION.

Searchlight Selection Table

Size Searchlight	Searchlight Catalog No. for Lampholder Types:					Weight Net*	lb. (kg) Ship*
	Mog. Bip.	Mog. Pref.	Mog. Scr.	Mog. Bip. 3KW	Med. Pref.		
19-Inch	19SL8660	19SL8660A	19SL8660B	N/A	19SL8660D	131(59)	190(86)
24-Inch	24SL8659	24SL8659A	24SL8659B	24SL8659D	24SL8659E	218(99)	338(153)

* Searchlight only. Does not include control components.

Control Components

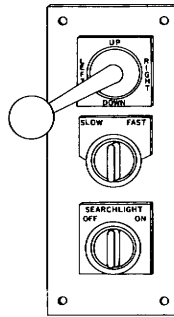


Control Station C5777-S

For distant electric control (DEC) searchlights controlled from a single remote location. See 8779X-S and 8973XS-1 for multi-station control. Single joystick controls all beam movements. Also contains power off-on switch and a device allowing operator to adjust speed of beam movement.

Mounted on bright stainless steel plate 6.00 x 8.00" (152 x 203mm). Depth clearance 3.50" (89mm). Fits enclosure 5402. Net weight 4.5 lb. (2.0 kg.).

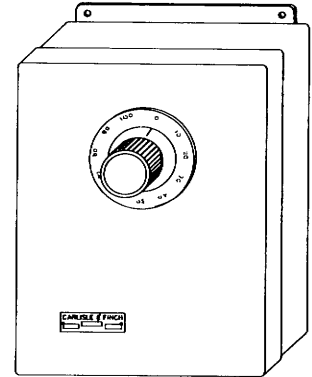
Note: Specify C5777-S-230 for 230 VAC Applications.



Control Station 8779X-S

Used when DEC searchlight is to be controlled from multiple locations. Contains searchlight off-on switch, single joystick for beam direction, and slow-fast switch to select speed of beam movements. As many stations as desired can be used with one 8973XS Control Assembly to control one DEC searchlight. Cannot be used without 8973XS.

Mounted on bright stainless steel plate 3.25 x 8.00" (83 x 203mm). Depth clearance 2.75" (70mm). Fits enclosure 5079G. Net weight 1.8 lb. (0.8 kg.).

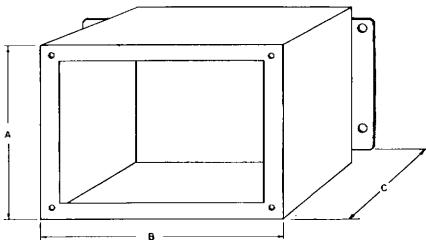


Control Assembly 8973XS-1

Used when DEC searchlights are controlled from more than one remote location. Only one required per searchlight regardless of quantity of 8779X-S control stations used with the searchlight. Steel oiltight enclosure contains circuit breaker, contactor, rectifier, relays, fuses, and external adjustment to preset the slow speed.

Enclosure size 20.00 x 16.00 x 6.62" (508 x 406 x 168 mm). Net weight 45 lb. (20 kg.).

Optional Enclosures for Control Stations



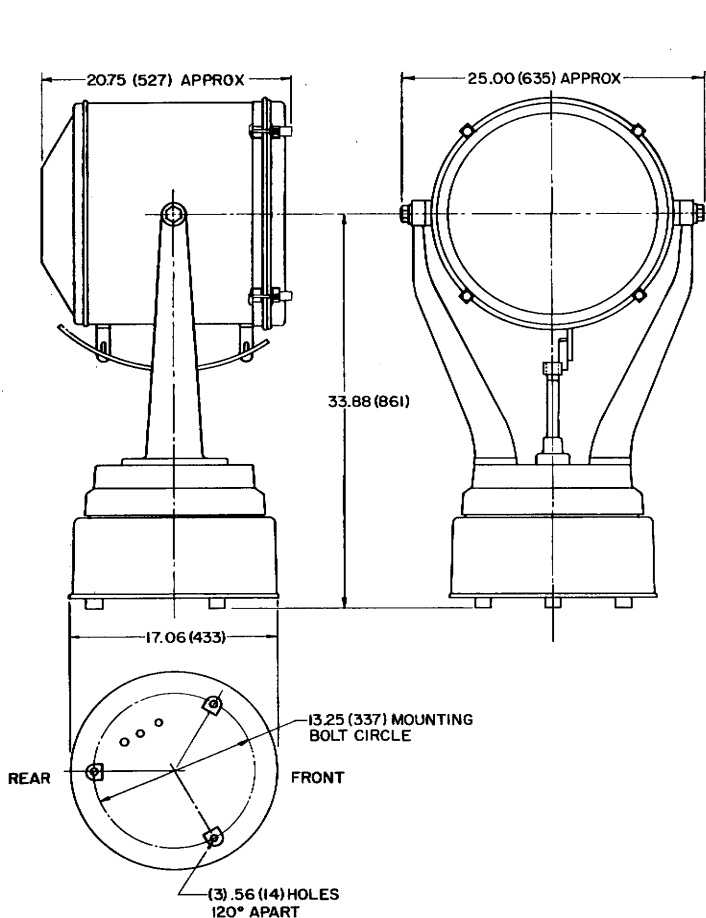
Cat. No.	Used For	Dimensions Inch (mm)			Weight	
		A	B	C	lb.	(kg)
5402	C5777-S	6.00 (152)	8.00 (203)	3.50 (89)	3.7	(1.7)
5079G	8779X-S	3.25 (83)	8.00 (203)	2.75 (70)	2.6	(1.2)

Other Accessories & Parts

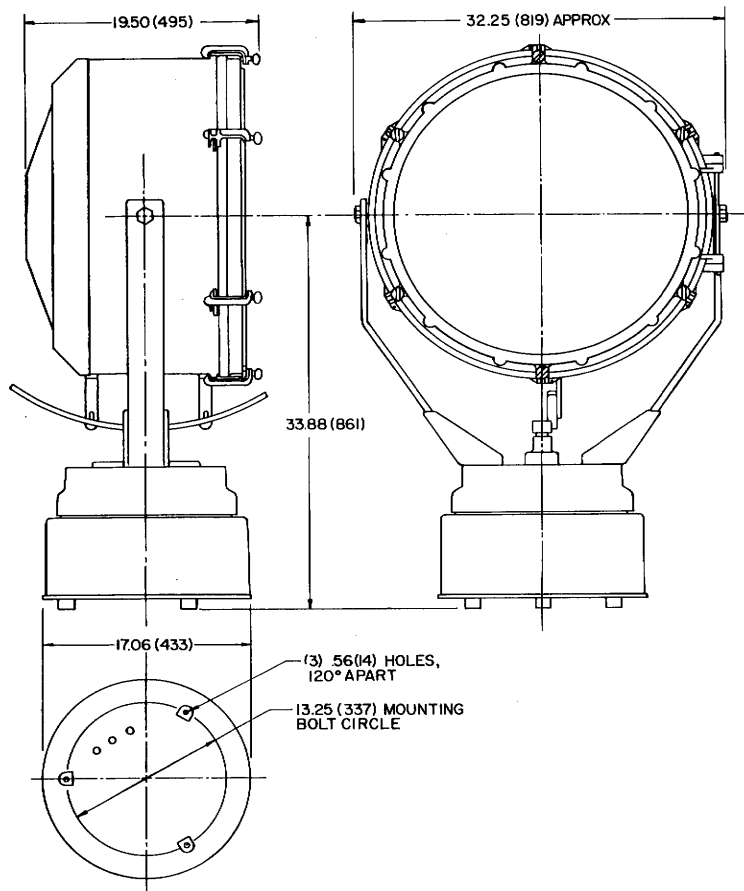
Description (size searchlight)	Part No.	Description (size searchlight)	Part No.
Cover Glass (19")	EF239	Lampholder, Mog. Pref. (19/24")	SL978
Cover Glass (24")	SL547	Lampholder, Mog. Scr. (19/24")	1988
Reflector (19")	EF240	Lampholder, Med. Pref. (19/24")	SL1250C
Reflector (24")	347M	Motor, Drive (19/24")	K2315A
Lampholder, Mog. Bip. (19/24")	FE132X		

Searchlight Dimension Drawings inch (mm)

19-inch Searchlight



24-inch Searchlight



How to Order Searchlight Systems

Step 1: Specify Searchlight... 19 or 24-inch (See Searchlight Selection Table, page 2), with Standard or Collector/Slip-Ring Base (add "-CR" to model number for Slip-Ring Base), and select Lampholder (Medium Prefocus with Special Shock-Mount Design is recommended), and add desired Optional Features (see page 2...add suffixes to Cat. No.)

Step 2: Specify Lamp... compatible with Lampholder and Voltage (see Lamp Table, page 2).

Step 3: Specify Controls... Cat. No. C5777-S Joystick Control Station (if only one control station per searchlight is required) or Cat. No. 8973XS-1 Relay Box plus 2 or more Cat. No. 8779X-S Joystick Control Stations (if more than one control station per searchlight is required).

Sample Order of System controlled from only Single location:

19-inch with Slip-Ring Base, Medium Prefocus Lampholder: **Cat. No. 19SL8660D-CR**

Lamp, 1000 Watt, 120 VAC, Medium Prefocus: **Cat. No. BTR**

Joystick Control Station: **Cat. No. C5777-S**

Sample Order of System controlled from Multiple locations:

19-inch Searchlight with Collector/Slip-Ring Base, Anti-icing Heaters, Medium Prefocus Lampholder: **Cat. No. 19SL8660D-CRH**

Lamp, 1000 Watt, 120 VAC, Medium Prefocus: **Cat. No. BTR**

Relay Box: **Cat. No. 8973XS-1**

Joystick Control Stations (2 or more): **Cat. No. 8779X-S**

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