

POINT OBSTRUCTION LIGHTS POL INCANDESCENT POINTSPEC® SERIES

Compliances: ETL Certified FAA L-810 per FAA AC 150/5343H at -55 deg C to +55 deg C ETL Listed to UL 1598 at -40 deg C to +55 deg C ETL Listed to CSA C22.2 No. 250.0-04 Canada ICAO Annex 14 Low Intensity Types A (10 cd) & B (32 cd) IMO 2009 MODU Code (2010) paragraphs 13.5.24 & 13.5.25

The POL POINTSPEC series of incandescent red aviation obstruction lights presents the highest grade technical features and the most options available in the industry. POL steady-burning obstruction lights are used to mark tall structures that present hazards to air navigation. Use the PPC photoelectric controller or option "-P" to provide automatic lighting activation at dusk in accordance with FAA specifications. All POINTSPEC POL's include lens & cover tethers, corrosion protection, stainless steel hardware, ground wires & captive cover screws. Lamp life is 8,000 hours for the 120V and 230V screw base lamps.

Point Type — Color —		Lamp & Voltage —	Entries	— Style —	Options
POL-20000		 116: 116w 120 volts 116A2: 116w 230 volts 45Q: 45w 6.6A 2-pin^{1,2} 	See Table 1	See Table 2	See Table 3

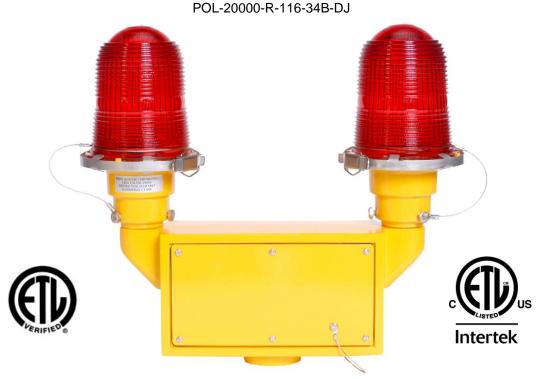
Notes: 1 Limited options; contact Point Lighting 2 Includes 24-inch L-823 lead/plug See file OL190LED for the LED series of POL lights See file OL150SPC for POL specification guide



FAA L-810 certified as: POL-20000 red with 116w FAA lamp number 32

For mounting options and plan details, see file 0MOUNTINGS All details are available as AutoCAD files for insertion in project plans





OL-1.1.0 December, 2016

Point Obstruction Lights POL PointSpec[®] Series

POL-20000-R-116-34B

-34B	3/4-inch NPT Bottom Entry
-34S	3/4-inch NPT Side Entry
-34F	3/4-inch NPT Feed-thru Entry
-10B	1-inch NPT Bottom Entry
-10F	1-inch NPT Feed-thru Entry Note: Junction box styles only
-M20B	Metric Bottom Entry
-SF	Slipfitter 2.375-inch (60 mm)

TABLE 1 ENTRY SELECTION

TABLE 3 OPTIONS

OPTION: –P FAA PHOTOELECTRIC CONTROLLER

Point Lighting PPC mounted and prewired to the POL to comply with FAA required footcandle specifications. The PPC uses a thermal time delay relay that prevents the accidental turn-off of the lights due to stray lighting. The unit is rated for 5000 on-off operations minimum and the plug-in photocell module is replaceable. Requires a double or single with junction box.

OPTION: -FF FLOOR FLANGE

5-inches (127mm) square mounting plate with 4 screw holes and 6-inches (152mm) long pipe extension.

OPTION: -BKT TOWER MOUNTING BRACKET

L-shaped mounting plain aluminum plate with with mounting hole for light. Installer drills at site for attachment to tower.

OPTION: -CF[B] COMPRESSION FITTING

Through holes with 1.5-inch long ¼-20 hex head stainless steel screws and sealing washers. Metal cable compression fitting for outside diameter: 12 to 18-mm (0.47 to 0.70-inch). Available for –34L unilet style single lights.

OPTION: -CF[C] COMPRESSION FITTING

Through holes with 1.5-inch long ¼-20 hex head stainless steel screws and sealing washers. Metal cable compression fitting for outside diameter: 12 to 18-mm (0.47 to 0.70-inch). Available for all doubles and junction box style single lights.

OPTION: -OS OVERRIDE SWITCH

For use with photoelectric controller option –P. Cover mounted 3-position switch ON-OFF-AUTO. Requires a double or single with junction box. For remote override switch, add item PL40110-3.

OPTION: -TS TEST SWITCH

Cover mounted toggle switch to simulate failure of primary lamp. Intended to demonstrate proper operation of the standby lamp. Requires a double light. Option –TSR for use with a remote switch (by others).

OPTION: -TP TRANSIENT PROTECTION

Metal oxide varistors (MOV's) are installed to provide limited protection of installed photocell and/or relay against short duration voltage spikes on the line input and load output. The number and configuration will be appropriate to the POL version.

OPTION: -MT MARINE TREATMENT

The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.

Note: The POL-20000 is incandescent and, therefore, NVG (night vision) compatible due to the heat signature.

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Style	Transfer	Alarm Non-Isolated	Alarm d Isolated	Pilot Light	Flashing	Description
-S1						Single: lamp flashing
-S2						Single: non-isolated alarm
-\$3						Single: cast aluminum junction box
-\$4						Single: isolated lamp failure alarm
-DJ						Double: both lamps operating
-DT						Double: operating lamp & standby with transfer
-D1						Double: lamp transfer & pilot light
-D2						Double: lamp transfer & alarm
-D2.2						Double: both lamps operating & alarm
-D3						Double: lamp transfer, alarm & pilot light
-D4						Double: lamp transfer & isolated alarm
-D4.2						Double: both lamps operating & isolated alarm
-D5						Same as Style –D4 with pilot light
-D6						Same as Style –D4 with six (6) wires
-D7						Double: both lamps flashing

TABLE 2 STYLES

For available options & related specifications, see file OL150SPC Specification Guide Note: The plain single does not have a suffix; a J-box version is required for any single with option –P.



POINT OBSTRUCTION LIGHTS POL POINTSPEC[®] SERIES

SPECIFICATIONS

SPECIFICATIONS OF COMMON VERSIONS OF INCANDESCENT POL OBSTRUCTION LIGHTS

DOUBLE OBSTRUCTION LIGHT

Description: POINTSPEC double POL with both lamps operating and large wiring space. No alarm function.

Specification: The red steady-burning aviation obstruction light shall be FAA L-810 certified. It shall be configured as a 120v (220-240v) double unit with both (2) lamps operating. Alarm sensing, if any, shall be remote from the light unit. There shall be a minimum of 100 cubic inches of enclosed wiring space accessible from the front of the light unit. The lenses of the L-810 light heads and the wiring access cover shall be secured to the unit with tethers. The wiring access cover shall be gasketed to be watertight and have captive screws. Ground wires shall be included. The entire light unit shall be powdercoat painted yellow for corrosion resistance certified by the manufacturer to comply with the US Military Standard Salt Fog Test conducted per MIL-STD-810E, Method 509.3, Procedure I. All hardware shall be stainless steel. The red glass lens shall be Fresnel military Type M-1 and shall be certified to meet U.S. military specifications MIL-L-7082D, MIL-C-7989B and the chromaticity requirements of MIL-C-25050.

The aviation obstruction light shall be POINTSPEC Series POL-20000-R-116-34B-DJ manufactured by Point Lighting Corporation.

DOUBLE OBSTRUCTION LIGHT WITH AUTOMATIC LAMP TRANSFER

Description: POINTSPEC double POL with one lamp operating & one lamp standby. Upon failure of the operating lamp, power is transferred to the standby lamp. No alarm function.

Specification: The red steady-burning aviation obstruction light shall be FAA L-810 certified. It shall be configured as a 120v (220-240v) double unit with one lamp operating and one lamp standby. Upon failure of the operating lamp, power shall be transferred to the standby lamp by means of a current sensing encapsulated electronic module. Alarm sensing, if any, shall be remote from the light unit. There shall be a minimum of 100 cubic inches of enclosed wiring space accessible from the front of the light unit. The lenses of the L-810 light heads and the wiring access cover shall be secured to the unit with tethers. The wiring access cover shall be gasketed to be watertight and have captive screws. Ground wires shall be included. The entire light unit shall be powdercoat painted aviation yellow for corrosion resistance certified by the manufacturer to comply with the US Military Standard Salt Fog Test conducted per MIL-STD-810E, Method 509.3, Procedure I. All hardware shall be stainless steel. The red glass lens shall be Fresnel military Type M-1 and shall be certified to meet U.S. military specifications MIL-L-7082D, MIL-C-7989B and the chromaticity requirements of MIL-C-25050.

The aviation obstruction light shall be POINTSPEC Series POL-20000-R-116-34B-DT manufactured by Point Lighting Corporation.

DOUBLE OBSTRUCTION LIGHT WITH AUTOMATIC LAMP TRANSFER & ISOLATED ALARM LINE

Description: POINTSPEC double POL with one lamp operating & one lamp standby. Upon failure of the operating lamp, power is transferred to the standby lamp and to alarm contacts. The contacts are isolated "dry" (voltage free) normally open and normally closed alarm contacts. The installer must provide external power (24v, 120v, 220v, etc.) to the contact(s) which then operate independently of the line power to the POL lamps.

Specification: The red steady-burning aviation obstruction light shall be FAA L-810 certified. It shall be configured as a 120v (220-240v) double unit with one lamp operating and one lamp standby. Upon failure of the operating lamp, power shall be transferred to the standby lamp by means of a current sensing encapsulated electronic module. Upon lamp failure, the electronic relay module shall also activate remote alarm contacts. The contacts shall be isolated "dry" (voltage free). There shall be available both normally open and normally closed alarm contacts. The installer shall provide external power (specify: 24v, 120v, 220v, etc.) to the alarm contact(s) which then operate independently of the line power to the POL lamp. There shall be a minimum of 100 cubic inches of enclosed wiring space accessible from the front of the light unit. The lenses of the L-810 light heads and the wiring access cover shall be secured to the unit with tethers. The wiring access cover shall be gasketed to be watertight and have captive screws. Ground wires shall be included. The entire light unit shall be powdercoat painted aviation yellow for corrosion resistance certified by the manufacturer to comply with the US Military Standard Salt Fog Test conducted per MIL-STD-810E, Method 509.3, Procedure I. All hardware shall be stainless steel. The red glass lens shall be Fresnel military Type M-1 and shall be certified to meet U.S. military specifications MIL-C-7989B and the chromaticity requirements of MIL-C-25050.

The aviation obstruction light shall be POINTSPEC Series POL-20000-R-116-34B-D4 manufactured by Point Lighting Corporation.



POINT OBSTRUCTION LIGHTS POL POINTSPEC[®] SERIES

REPLACEMENT PARTS

PL10334	Relay, 120/230v	PL10001T *	Red Lens & Tether		
PL10455-1	Relay, Alarm 120v Styles S2, D2-D6	PL10491T **	Infrared Lens & Tether		
PL10455-2	Relay, Alarm 230v Styles S2, D2-D6	PL10024-116	Lamp 116w, 120v		
PL10494	Gasket, Cover for All Doubles	PL10025-116	Lamp 116w, 230v		
PL10496	Cover & Tether Styles S1-S4	PL10049	O-Ring Seal		
PL10462	Cover & Tether Double All Styles	PL10076-S ***	Lamp Socket		
PL10606-A-120	Pilot Light 30mm, Amber 120v	PL10611	Lamp, Pilot Light 120v		
PL10236-120	Photoelectric Subassembly 120v	PL10039	Clamp Band		
PL10236-230	Photoelectric Subassembly 230v	PL10692	Flasher Module 120v		
PL10237	Photoelectric Socket	PL10692-1	Flasher Module 230v		
		* NSN 6220-01-536-1611			

** NSN 6220-01-536-1606 *** NSN 6220-01-536-1606 *** NSN 6250-01-536-1597

WEIGHT, DIMENSIONS & SHIPPING DATA

inches (mm)							Multi-Pac	k Carton	
	<u>Weight</u>		<u>Height</u> <u>Width</u>		<u>Depth</u>	Qty	Weight		Dim (inches)
Standard Single:	3 lbs	1.4 kg	8.4 (214)	5.0 (127)	5.0 (127)	32	99 lbs	45 kg	22 x 22 x 22
POINTSPEC Single:	7 lbs	3.2 kg	13.9 (353)	6.0 (152)	5.0 (127)	9	66 lbs	30 kg	18 x 18 x 18
POINTSPEC Double:	10 lbs	4.5 kg	13.3 (338)	14.9 (378)	5.0 (127)	3	39 lbs	18 kg	18 x 18 x 19
Wind Loading:	Effectiv	Effective Projected Area (EPA) for POINTSPEC Double 0.69 square fee					uare feet		

POINT LIGHTING CORPORATION

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