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Fountain Lights are built to Underwriter's Laboratories standards, and meet the National Electric Code. They are not intended for use in swimming pools. Safety requirements for swimming pool lights are more demanding, and prescribe additional internal safeguards.

SWIMMING POOL LIGHTS

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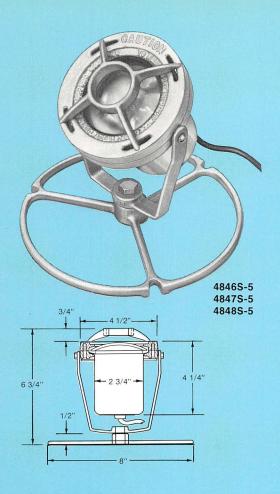
All Hydrel Swimming Pool Lights are built to UL Standards, and meet the specifications of the National Electric Code.



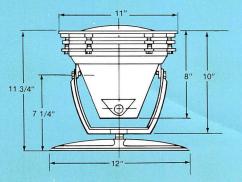
12691 BRADLEY AVENUE • SYLMAR, CALIFORNIA 91342 • (818) 362-9465 • TELEX 181-488

fountain lighting

Hydrel offers you the simple assurance that there are no finer fixtures made for lighting fountains and reflecting pools.







250 Watts Maximum T-4 • 120V 75 Watts Maximum MR-16 • 12V

FIXTURE HOUSING & DOOR: Shall be stainless steel construction with cast bronze doors. Outer door shall be chrome finished.

LAMP: Shall be Quartz Halogen 120V-100W. (1000 hr. life): 120V-250W. (2000 hr. life) T-4: 12V-75W. (4000 hr. life): Dichroic halogen lamp MR-16 EYC standard. Lamp included.

LENS: Shall be 3-1/8" diameter tempered Borosilicate, clear Fresnel standard. *Optional: Clear, Amber, Blue, Green, & Red (Not Fresnel).

GASKET: Shall be single piece U-shaped molded silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: 120V-Bayonet Mount • 12V-Bipin Mount.

FACTORY WIRED: 9 ft. of 18-2/16-1 ST Submersible cord with ground wire positively grounded inside the fixture. Cord rating 105C.

ROCKGUARD: Cast Bronze exterior grid standard.

LOW WATER CUT OFF: Temperature sensing LWC standard.

					(UI
CAT NO.	WATTS	VOLTS		DESCRIPTION	
4846S-5 4847S-5 4848S-5	75 100 250	12 120 120	Base Mounted	8" Diameter cast bronze base with provisions for floor anchor bolts. Rockguard included.	
4846S-4 4847S-4 4848S-4	75 100 250	12 120 120	Yoke Mounted	For 3/8" diameter stud or mount- ing bolt up to 180° angle of adjustment. Rockguard included.	
				ACCESSORIES	
*1415-2	С	olored	Lens	Amber, Blue, Green, Red, Clear. Available at additional cost.	

^{*}NOTE: Use Blue or Green lens with 75 or 100 Watt only. Photometrics.spare parts and relamp instruction available on Spec sheet.

1000 Watts Maximum Par 64 Quartz Lamp

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

LAMP: Shall be clip mounted 120V, Par 64, 1000 watts tungsten halogen (Quartz 4000 hour lamp).

LENS: Shall be 8 3/8" diameter convex clear tempered heat resistant glass, (Color lens available on special order).

GASKET: Shall be single-pieced molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be mogul end prong type with 200° C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

		(-1
CAT NO.		DESCRIPTION
4427-4	Yoke Mounted	For 3/8" diameter stud or mounting bolt. Up to 180° angle of adjustment.
4427-5	Base Mounted	12" diameter cast bronze base with provisions for floor anchor bolts.
		ACCESSORIES
1420-2	Colored Lens	Amber, blue, green, or red lens avail- able at additional cost.
2661	Rockguard	Cast bronze exterior grid, available at additional cost.

Fixtures shall be listed by Underwriter's Laboratories for use in fountain or reflection pools.

500 Watts Maximum Par 56 Quartz Lamp 300 Watts Par 56 Incandescent Lamp

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

LAMP: Shall be clip mounted 120V, Par 56, 500 watts tungsten halogen (Quartz 4000 hour lamp) or 300 watts incandescent.

LENS: Shall be 8 3/8" diameter convex clear tempered heat resistant glass, (Color lens available on special order).

GASKET: Shall be single-piece molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be mogul end prong type with 200° C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO.		DESCRIPTION
*4424-4	Yoke Mounted	For 3/8" diameter stud or mounting bolt. Up to 180° angle of adjustment.
*4424-5	Base Mounted	12" diameter cast bronze base with provisions for floor anchor bolts.
		ACCESSORIES
1420-2	Colored Lens	Amber, blue, green, or red lens avail- able at additional cost.
2476	Rockguard	Cast bronze exterior grid, available at additional cost.

*Low voltage (12 volt) • Fixture is available for use with maximum 300 watts Par 56 screw terminal 12 Volt lamp. Fixture supplied with 9' of #10-3ST submersible cord. Specify 4422-4LV yoke mounted or 4422-5LV base mounted. Accessories are the same as for the 120 Volt model.

500 Watts Maximum T-4 Mini-Can Quartz Lamp

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

LAMP: Shall be 120V, T-4 mini-can, 100, 150, 250, 400, and 500 watts tungsten halogen (Quartz).

REFLECTOR: Shall be parabolic spun copper and electro plated.

LENS: Shall be 7 9/16" diameter convex clear tempered heat resistant glass, (Color lens available on special order).

GASKET: Shall be single-piece molded "U" shaped silicone.

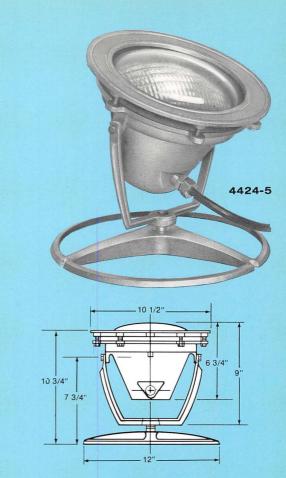
FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be mini-can base type with 200° C insulated leads.

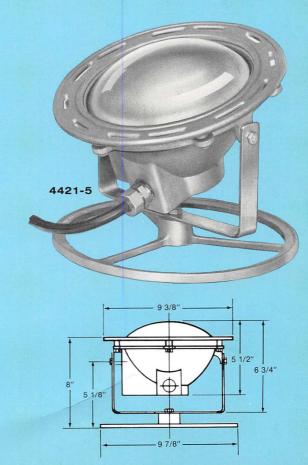
FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

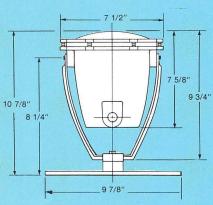
CAT. NO.		DESCRIPTION
4421-4	Yoke Mounted	For 3/8" diameter stud or mounting bolt. Up to 180° angle of adjustment.
4421-5	Base Mounted	9 7/8" diameter cast bronze base.
		ACCESSORIES
1306-2	Colored Lens	Amber, blue, green, or red lens avail- able at additional cost.
2458	Rockguard	Cast bronze exterior grid, available at additional cost.



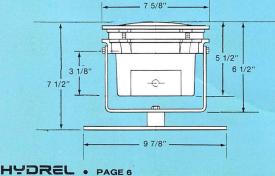
Fixtures shall be listed by Underwriter's Laboratories for use in fountain or reflection pools.











250 Watts Maximum Par 38 Lamp

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

LAMP: Shall be 120V, medium screw base Par 38, 75, and 100 watts incandescent; or 150 and 250 watts tungsten halogen. (Quartz 4000 and 6000 hour lamps respectively).

LENS: Shall be 6 1/2" diameter convex clear tempered heat resistant glass, (Color lens available on special order).

GASKET: Shall be single-piece molded "U" shaped neoprene.

FASTENERS: Shall be stainless steel or silicone bronze.

 ${\tt SOCKET:}$ Shall be porcelain medium screw base with nickel plated copper shell and 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO.		DESCRIPTION
*4418-4	Yoke Mounted	For 3/8" diameter stud or mounting bolt. Up to 180° angle of adjustment.
*4418-5	Base Mounted	9 7/8" diameter cast bronze base.
		ACCESSORIES
1422-2	Colored Lens	Amber, blue, green, or red lens avail- able at additional cost.
2480	Rockguard	Cast bronze exterior grid, available at additional cost.

*Low voltage (12 volt) • Fixture is available for use with maximum 100 watts medium base Par 38 lamp. Fixture supplied with 9' of #16-3ST submersible cord. Specify 4418-4LV yoke mounted or 4418-5LV base mounted. Accessories are the same as for the 120V model.

200 Watts Maximum Par 46 Lamp

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

LAMP: Shall be medium side prong 120V, Par 46, 150, and 200 watts incandes-

LENS: Shall be convex $6\ 1/2''$ diameter clear tempered heat resistant glass, (Color lens available on special order).

GASKET: Shall be single piece "U" shaped molded silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be medium side prong type with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO.		DESCRIPTION
4419-4	Yoke Mounted	For 3/8" diameter stud or mounting bolt. Up to 180° angle of adjustment.
4419-5	Base Mounted	9 7/8" diameter cast bronze base.
		ACCESSORIES
		7.002007.1120
1422-2	Color Lenses	Amber, blue, green, or red lens available at additional cost.

Fixtures shall be listed by Underwriters Laboratories for use in fountains or reflection pools.

50 W. Max. Par 36 Lamp • 12 Volts

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

LAMP: Shall be 12V, Par 36 sealed beam - 25 or 50 watts, fixture is furnished with 50 watts standard, 25 watts available on special order at no additional cost.

 $\mbox{\sc LENS:}$ Shall be the lamp face, which forms lens of fixture, (Color lens available on special order).

GASKET: Shall be single-piece molded wedge shape neoprene ring.

FASTENERS: Shall be stainless steel or silicone bronze.

LAMP CONNECTION: Shall be screw terminals with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO.		DESCRIPTION
4410-4LV	Yoke Mounted	For 3/8" diameter stud or mounting bolt. Up to 180° angle of adjustment.
4410-5LV	Base Mounted	8" diameter cast bronze base with provision for floor anchor bolts.
		ACCESSORIES
1052	Colored Lenses	ACCESSORIES Amber, blue, green, or red lens available at additional cost.

116 Watt Maximum A-21 Incandescent Lamp

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

LAMP: Shall be 120V, medium screw base A-21, 75, 100, and 116 watts incandescent. (116W, 8000 hour lamp.)

LENS: Shall be heat resistant clear glass globe.

GASKET: Shall be two piece molded neoprene.

FASTENERS: Shall be stainless steel or silicone bronze.

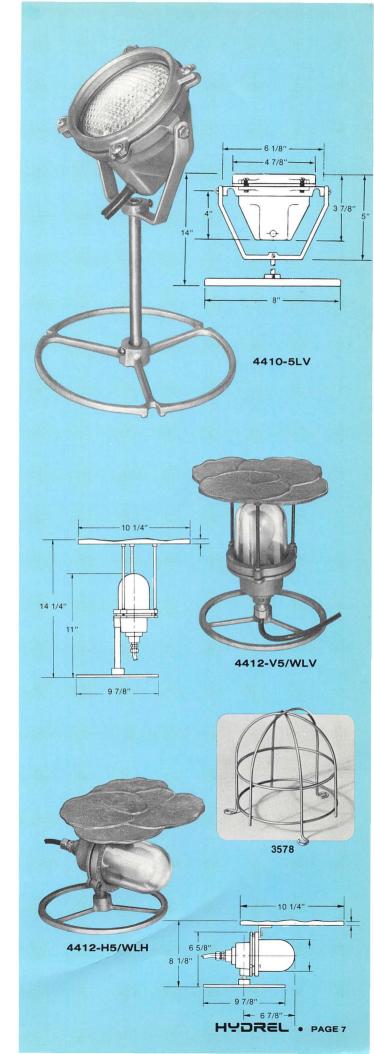
 $\mbox{SOCKET:}$ Shall be porcelain medium screw base with nickel plated copper shell and 200°C insulated leads.

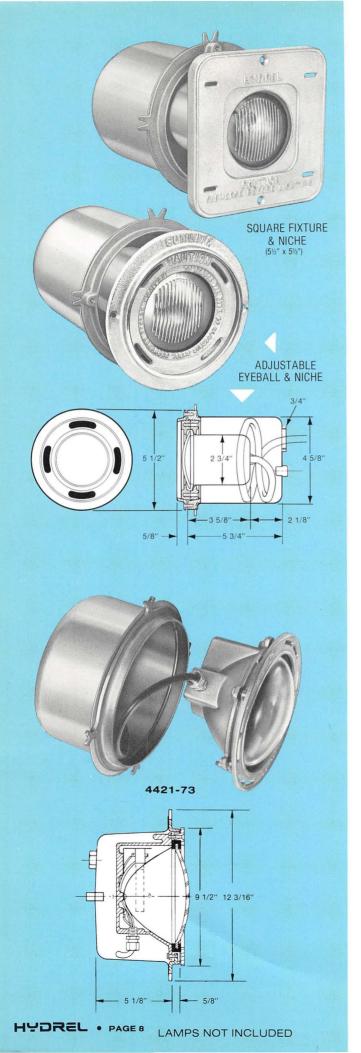
FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water. $(U_{\rm I})$

CAT. NO. 4412-H5	Base Mounted	DESCRIPTION Horizontal Mount on a 97/8" diameter cast bronze base.
4412-V5	Base Mounted	Vertical Mount on a 9 7/8" diameter cast bronze base.
		ACCESSORIES
3578	Rockguard	Heavy gauge stainless steel wire formed and welded.
WLH	Water Lily	Cast bronze leaf for light source con- cealment. Acid etched verdi finish for horizontal mounted fixture.
WLV	Water Lily	Same as WLH except for vertical mounted fixture.

Fixtures shall be listed by Underwriters Laboratories for use in fountains or reflecting pools.





250 W. Max. T-4, 120V • 75 W. MR-16, 12V Adjustable "EYEBALL" & SQUARE Fixture

FIXTURE HOUSING & DOOR: Shall be stainless steel construction with cast bronze doors. Outer door shall be chrome plated.

FIXTURE ADJUSTMENT: Shall be externally adjustable 18 degrees from center axis. Adjustable eyeball only.

NICHE: Shall be stainless steel with cast bronze mounting assembly; which shall have provision for positive locking of the fixture in position. The unit includes a grounding lug and a 3/4", conduit connector with 1/2" reducer.

LAMP: Shall be Quartz Halogen 120V-100W (1000 hr. life): 120V-250W (2000 hr. life) T-4: 12V-75W (4000 hr. life): Dichroic halogen lamp MR-16 EYC Stan., lamp inc.

LENSES: Shall be 3-1/8" diameter tempered Borosilicate, clear Fresnel standard. *Optional: Clear, Amber, Blue, Green & Red (Not Fresnel).

GASKET: Shall be single piece U-shaped molded silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: 120V-Bayonet Mount • 12V Bipin mount.

FACTORY WIRED: 15 ft. of 18-2/16-1ST Submersible cord with ground wire positively grounded inside the fixture. Also available in lengths of 30, 40 and 50 ft. Specify by adding dash number with length. Cord rating 105C.

ROCKGUARD: Cast Bronze and chromed grid available at additional cost.

LOW WATER CUT OFF. Temperature sensing LWC standard.

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CAT. NO.	WATTS	VOLTS	DESCRIPTION	
4842S-3 4843S-3 4845S-3 4932S	75 100 250	12 120 120	ADJUSTABLE EYEBALL & NICHE ADJUSTABLE EYEBALL & NICHE ADJUSTABLE EYEBALL & NICHE ADJUSTABLE EYEBALL NICHE • 3/4" Conduit with 1/2" Reducer.	
4838S-3 4839S-3 4840S-3 4932SQ	75 100 250	12 120 120	SQUARE FIXTURE & NICHE SQUARE FIXTURE & NICHE SQUARE FIXTURE & NICHE SQUARE LIGHT NICHE • 3/4" Conduit with 1/2" Reducer.	
			ACCESSORIES	
*1415-2 Colored Lenses		-,-,,-,	Amber, blue, green, red, clear available at additional cost. NOTE: Use blue and green lenses with 75 or 100 Watt only.	
2565 Rockguard		guard	Chromed cast bronze exterior grid available at additional cost. Add RG to Part No.	

500 W. Max. T-4 Quartz Lamp

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

NICHE: Shall be stainless steel with cast bronze mounting ring, which shall have provision for positive locking fixture in position, four lugs for tie to forms or steel structural rods. Pressure grounding lug on interior and exterior surfaces. Conduit entrance shall be 3/4" NPT with 3/4" x 1/2" NPT reducer bushing supplied.

LAMP: Shall be 120V T-4 mini-can, 100, 150, 250, 400, and 500 watts tungsten halogen. (Quartz).

REFLECTOR: Shall be parabolic spun copper and electro plated.

LENS: Shall be $7\,9/16''$ diameter convex clear tempered heat resistant glass, (Color lens available on special order).

GASKET: Shall be single-piece molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be mini-can base type with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO		DESCRIPTION	
4421-73	500 Watts Max.	Wet niche type, floor or wall moun	t.
		ACCESSORIES	-
1306-2	Colored Lenses	Amber, blue, green, or red lens ava able at additional cost.	ail-
2458	Rockguard	Cast bronze exterior grid, available additional cost.	at

1000 Watts Maximum Par 64 Quartz Lamp 500 Watts Maximum Par 56 Quartz Lamp 300 Watts Par 56 Incandescent Lamp

FIXTURE HOUSING & DOOR: Shall be cast-bronze construction, wall thickness 5/32 inch. Natural bronze finish.

NICHE: Shall be stainless steel with cast bronze mounting ring, which shall have provision for positive locking fixture in position, four lugs for tie to forms or steel structural rods. Pressure grounding lug on interior and exterior surfaces. Conduit entrance shall be 3/4" NPT with 3/4" x 1/2" NPT reducer bushing supplied.

LAMP: Shall be clip mounted 120V Par 64, 1000 watts; Par 56, 500 watts tungsten halogen. (Quartz 4000 hour lamps), or Par 56, 300 watts incandescent.

LENS: Shall be 8 3/8 diameter convex clear tempered heat resistant glass, (Color lens available on special order).

GASKET: Shall be single-piece molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be mogul prong type with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO.		DESCRIPTION
4427-73	1000 Watts Max.	Wet niche type, floor or wall mount.
*4424-3	500 Watts Max. 300 Watts	Wet niche type, floor or wall mount.
		ACCESSORIES
1420-2	Colored Lenses	Amber, blue, green, or red lens avail- able at additional cost.
2661	Rockguard for 4427-73	Cast bronze exterior grid, available at additional cost.
2636	Rockguard for 4424-3	Cast bronze exterior grid, available at additional cost.

*Low Voltage (12 volt) • Fixture is available for use with maximum 300 watts Par 56 screw terminal 12 Volt lamp. Fixture supplied with 9' of #10-3ST submersible cord and stainless steel niche with 3/4" NPT conduit hub. Specify 4422-3LV. Accessories are the same as for the 120 Volt model.

300 Watts Maximum Quartz 116 Watts Maximum Incandescent

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

NICHE: Shall be stainless steel with cast bronze mounting frame, which shall have provision for positive locking fixture in position. Pressure grounding lug on interior and exterior surfaces. Conduit entrance shall be 3/4" NPT with 3/4" x 1/2" NPT reducer bushing supplied.

LAMP: Shall be 120V, A-21, 116 watts maximum incandescent; or T-3, 300 watts maximum quartz. 200 watts quartz T-3 available on special order.

LENS: Shall be tempered heat resistant diffused glass.

GASKET: Shall be single-piece molded "U" shaped neoprene.

FASTENERS: Shall be stainless steel or silicone bronze.

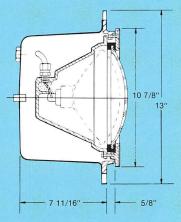
SOCKET: Shall be porcelain medium screw base with nickel plated copper shell for incandescent; or porcelain recessed single contact for quartz with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

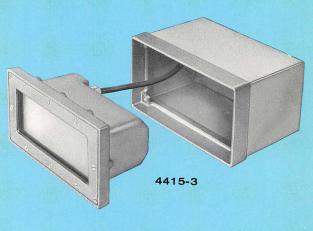
FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water. U_1

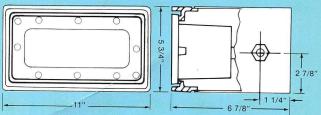
CAT NO		DESCRIPTION
4415-3Q 4415-3	T-3 300 Watts Max. A-21 116 Watts Max.	Wet niche mounted step light with diffused lens for even spread of illumination.
	T-3 300 Watts Max. A-21 116 Watts Max.	Wet niche mounted step light with 45° cut-off louver for directional control.



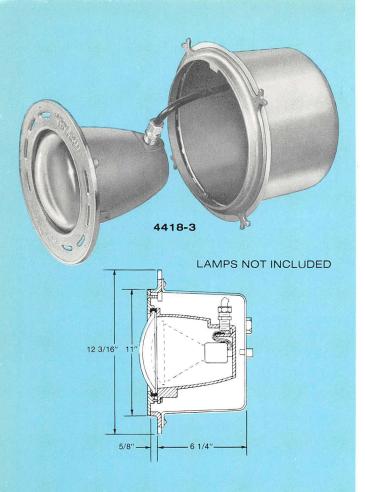


Fixtures shall be listed by Underwriter's Laboratories for use in fountain or reflection pools.





LAMPS NOT INCLUDED



Fixtures shall be listed by Underwriter's Laboratories for use in fountain or reflection pools.

250 Watts Maximum Par 38 Lamp

FIXTURE HOUSING & DOOR: Shall be cast bronze construction, wall thickness 5/32 inch. Natural bronze finish.

NICHE: Shall be stainless steel with cast bronze mounting ring, which shall have provision for positive locking fixture in position, four lugs for tie to forms or steel structural rods. Pressure grounding lug on interior and exterior surfaces. Conduit entrance shall be 3/4" NPT with 3/4" x 1/2" NPT reducer bushing supplied.

LAMP: Shall be 120V, medium screw base Par 38, 75, and 100 watts incandescent; or 150 and 250 watts tungsten halogen. (Quartz 4000 and 6000 hour lamps respectively).

LENS: Shall be $6\,1/2''$ diameter convex clear tempered heat resistant glass, (Color lens available on special order).

GASKET: Shall be single-piece molded "U" shaped neoprene.

FASTENERS: Shall be stainless steel or silicone bronze.

 $\pmb{\mathsf{SOCKET}}.$ Shall be porcelain medium screw base with nickel plated copper shell and 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 9' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water. $(U_{\rm I})$

CAT NO.		DESCRIPTION
*4418-3	250 Watts Max.	Wet niche type, floor or wall mount.
		ACCESSORIES
1422-2	Colored Lenses	Amber, blue, green, or red lens avail- able at additional cost.
2474	Rockguard	Cast bronze exterior grid, available at additional cost.

*Low voltage (12 volt) • Fixture is available for use with maximum 100 watts medium base Par 38 lamp. Fixture supplied with 9' of #16-3ST submersible cord and stainless steel niche with 3/4" conduit hub specify 4418-3LV. Accessories are the same as for the 120V model.

ACCESSORIES

TAP SELECTION GUIDE*

This chart can be used as a rough guide for 300 watt lamp load at 120 volt primary.

CONDUCTOR		DUCTOR S	
LENGTH	#6	#8	#10
10 FT.	12 V.	12 V.	12 V.
20 FT.	12 V.	12 V.	13 V.
30 FT.	12 V.	13 V.	13 V.
40 FT.	13 V.	13 V.	14 V.
50 FT.	13 V.	13 V.	14 V.
60 FT.	13 V.	14 V.	
70 FT.	13 V.	14 V.	
80 FT.	13 V.	14 V.	
90 FT.	14 V.		
100 FT.	14 V.		
110 FT.	14 V.		
120 FT.	14 V.		

*This table in no way suggests correct wire size for this application. Refer to local codes for correct wire usage.

LOW VOLTAGE TRANSFORMERS

These 120V to 12V step down transformers are two-winding isolated type. Taps are provided to insure proper voltage when operated within allowable line loss limits. Two separate wiring compartments isolate primary and secondary leads. Housed in weatherproof enclosure. Meets requirements of Article 680 N.E.C., listed by U.L.

1903 • 120V FUSED PRIMARY, 12V, 13V and 14V SECONDARY. Maximum dimensions: Depth 5 1/2", Height 9 1/2", Width 5 1/8" 1903J • 120V FUSED PRIMARY, 12V and 13V SECONDARY. Maximum dimensions: Depth 5 7/8", Height 5 1/2", Width 10 1/8" 1903L • 120V Circuit Breaker on PRIMARY, 12V SECONDARY. Maximum dimensions: Depth 4 1/2", Height 9", Width 6". 1906 • 220/240V FUSED PRIMARY, 12V SECONDARY. Maximum dimensions: Depth 5 7/8", Height 5 1/2", Width 10 1/8".

1000 WATT TRANSFORMER

1904 • 120V FUSED PRIMARY, 12V, 13V and 14V SECONDARY. Maximum dimensions: Depth 7½", Height 14½", Width 9 3/8".



TIME SWITCHES

A well constructed series of time switches for automatically switching lighting circuits, fountain and filter pumps. Tungsten rated for 40 amps; 4375 watts Tungsten (incandescent); 1 HP; 125V AC. Clock motor rating: 125 Volts, 60 Cycle.

STANDARD TIME SWITCHES

ITC-1 125Volt SPST ITC-2 125Volt DPST

ASTRONOMIC DIAL TIME SWITCHES

(Not U.L. Listed) Meets N.E.C. Requirements.

AD-1 125Volt SPST AD-2 125Volt DPST



UNDERWATER JUNCTION BOXES









Hydrel underwater junction boxes are designed for connection of supply cords from underwater fixtures and service conduits. They feature heavy cast bronze construction, neoprene gaskets, internal ground lugs and silicone bronze hardware. All hubs, indicated by letter, may be tapped 1/2" or 3/4" NPT. Some boxes may have larger hubs; see individual description. When ordering, specify catalog number, hub location and hub size. All boxes furnished standard with 3 tapped hubs.

1701

Outside Dim: 4 3/4" dia. x 3" deep. Inside Dim:

3 1/2" dia. x 2" deep. (25 cubic inches)

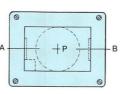
Cover may have single 1/2" or 3/4" NPT hub. Bottom may also have single 1" hub.

1703

Outside Dim: 3 3/8" x 4 3/8" x 2 1/2" deep.

Inside Dim: 3" x 2" x 2" deep.

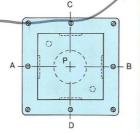
(12.0 cubic inches)



1705

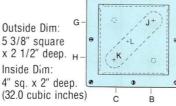
Outside Dim: 4 3/4" square x 2 1/2" deep.

Inside Dim: 3" sq. x 2" deep. (18.0 cubic inches)



1706

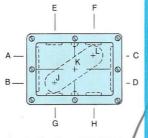
Outside Dim: 5 3/8" square x 2 1/2" deep. H Inside Dim:



1708

Outside Dim: 7 3/8" x 5 3/8" x 2 1/2" deep. Inside Dim: 6" x 4" x 2" deep.

(48.0 cubic inches)



Bottom may also have single 1" or 11/4" NPT hub.

E Outside Dim: M 5/8" square x 4 3/4" deep. N Inside Dim: 6" sq. x 4" deep. (144.0 cubic inches)

Bottom may have maximum three 1" hubs or two 11/4" or one 2" hub.

DECK BOXES 1717

Model 1717 is specifically designed for above deck or in remote wall mounting, and meets all require-ments of National Electrical Code. It is listed by Underwriters' Laboratories. Cast bronze construction with internal grounding lugs and brass cord clamps. Available in drilled and tapped hole combinations as shown on chart below. Specify hole location and 1/2" or 3/4" N.P.T. Chrome cover available at slight additional cost. Add suffix "C" to model number when ordering. DIMENSIONS: (I.D.) D. 3"; W. 3 15/16"; L. 5 3/16". (D.) D. 3 15/16"; W. 4 3/8", L. 5 5/8". 'S" denotes service hub while no notation indicates fixture entrance with Strain Relief

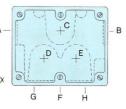
1717

DASH

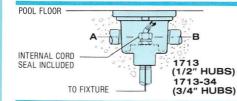
-E

Outside Dim: 43/8" W x 55/8" L x 3 5/16" D

Inside Dim: 3 15/16" W x 5 3/16" L x 3"D (65 cubic inches)



	Α	В	С	D	E	F	G	Н
1			1/2	1/2S	1/2S			
2			1/2	3/4S	3/4S			
3			3/4	3/4S	3/4S			
4					0	1/2	1/2S	1/25
5						1/2	3/4S	3/4S
6						3/4	3/4S	3/45
7	1S	1S	1/2				-,	-
8	1S	1S	1/2	1/2	1/2			
9	1S	1S	3/4					
10	1S	1S	3/4	3/4	3/4			
11	1S	1S				1/2		
12	1S	1S				1/2	1/2	1/2
13	1S	1S				3/4		
14	1S	1S				3/4	3/4	3/4
15							3/4S	1/2
16							3/4S	3/4
17	3/4S	3/4S						1/2
18	3/4S	3/4S						3/4
19	3/4S	3/4S					1/2	1/2
20	3/4S	3/4S					3/4	3/4
21				3/4S	1/2			
22				3/4S	3/4			
23						1/2	3/4S	3/48
24						3/4	3/4S	3/4S
25	3/4S	3/4S					1/2	1/2
26	3/4S	3/4S					3/4	3/4
27	3/4S	3/4S				1/2	1/2	1/2
28	3/4S	3/4S				3/4	3/4	3/4
29						1/2	3/4S	1/2
30						3/4	3/4S	3/4
31			1/2	3/4S	1/2			
32			3/4	3/4S	3/4			
33			1/2	3/4S	3/4S			
34			3/4	3/4S	3/4S			

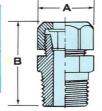


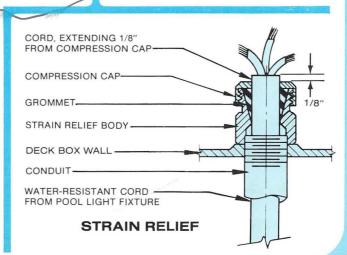
Outside Dimensions: 4 1/2" Dia. x 3 5/8" deep. Inside Dimensions: 1713 (1/2" HUBS) 2 3/4" Dia. x 2 1/4" deep. (10.0 Cubic Inches)

WATERTIGHT CORD **ENTRANCE SEAL**

Constructed of brass with neoprene grommet, these seals are for use in underwater junction boxes for fixture cord entrance seals for type ST & SO Water-resistant cord.

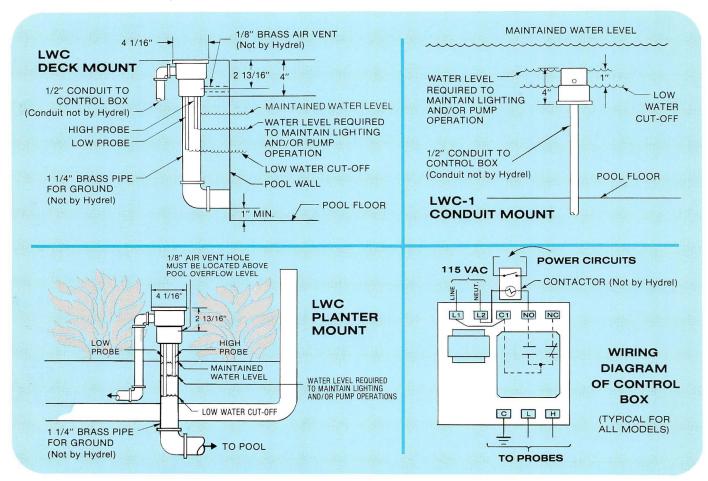
CATALOG NUMBER	CORD	NPT	Α	В
1430-2	18-3	1/2	7/8	1 1/2
1430-22	16-3	1/2	7/8	1 1/2
1430-3	14-3	3/4	1 1/4	1 3/4
1430-33	10-3	3/4	1 1/4	1 3/4





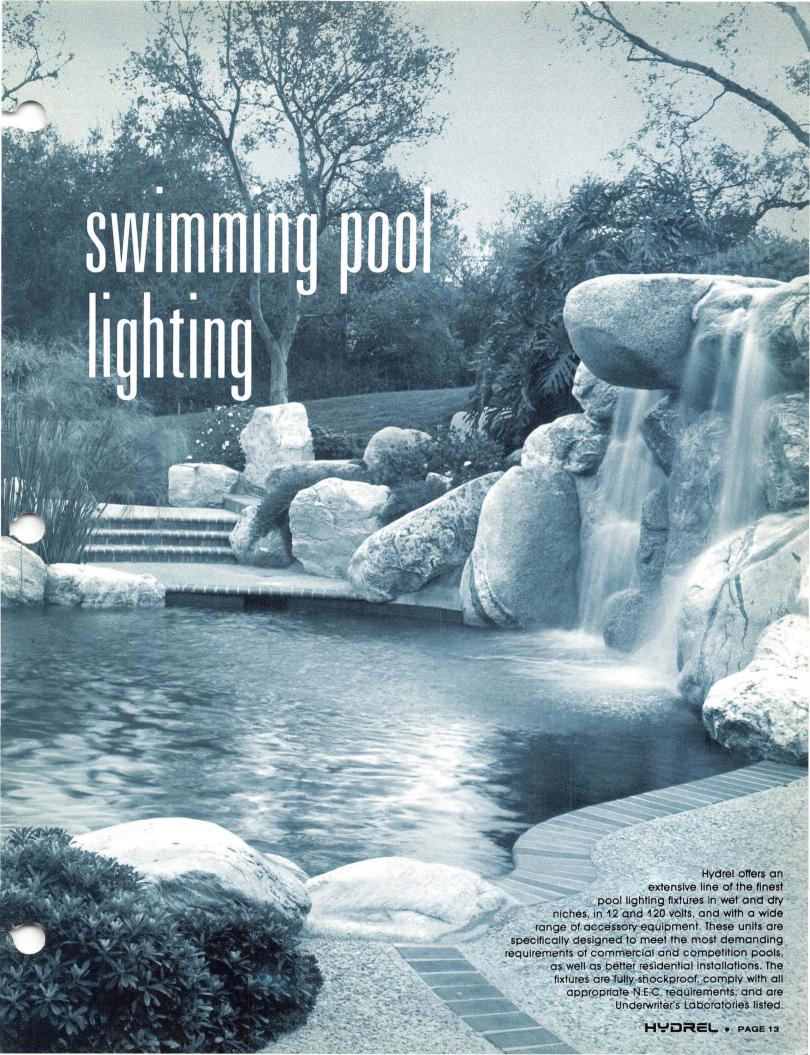
LOW WATER CUT-OFF CONTROLS

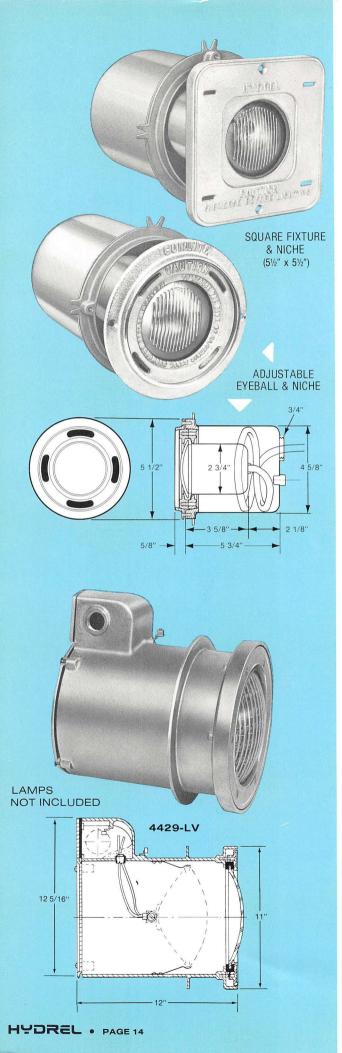
The units illustrated protect lighting fixtures from overheating by automatically turning off the power whenever water levels drop below the minimums required for proper cooling. These controls meet all 1981 N.E.C. requirements for protection against overheating of fixtures that depend upon submersion for their safe operation.



PARTSLIST • FOUNTAINLIGHTS

FIXTURE NO.	LENS	LENS GASKET	SOCKET	ROCK- GUARD	FIXTURE NO.	LENS	LENS GASKET	SOCKET	ROCK- GUARD
4410-5LV	NONE	8352-N	NONE	2554	4420-5	1422-C	8001-N	7580	2477
4412-H5	8999	8413-N	7580	3578	4421-4	1306-C	8387-S	7001	2458
		8414-N			4421-5	1306-C	8387-S	7001	2458
4412-V5	8999	8413-N 8414-N	7580	3578	4421-73	1306-C	8387-S	7001	2458
4415-3	8947	8415-N	7130	NONE	4422-3	1420-C	8404-S	7306	2636
4415-3L	8947	8415-N	7130	NONE	4422-3LV	1420-C	8404-S	NONE	2636
4415-3L	8947	8415-N	2 EA 7012	NONE	4422-4	1420-C	8404-S	7306	2476
				NONE	4422-4LV	1420-C	8404-S	NONE	2476
4415-3QL	8947	8415-N	2 EA 7012		4422-5	1420-C	8404-S	7306	2476
4418-3	1422-C	8001-N	7010	2474	4422-5LV	1420-C	8404-S	NONE	2476
4418-3LV	1422-C	8001-N	7010	2474	4424-3	1420-C	8404-S	7306	2636
4418-4	1422-C	8001-N	7010	2480	4424-4	1420-C	8404-S	7306	2476
4418-4LV	1422-C	8001-N	7010	2480	4424-5	1420-C	8404-S	7306	2476
4418-5	1422-C	8001-N	7010	2480	4427-4	1420-C	8404-S	7306	2661
4418-5LV	1422-C	8001-N	7010	2480	10. 10-10	10 Maria (10 Mar	8063-S	1 0000 0	
4419-3	1422-C	8001-S	7307	2474	4427-5	1420-C	8404-S	7306	2661
4419-4	1422-C	8001-S	7307	2480	10 CO-03 K		8063-S		
4419-5	1422-C	8001-S	7307	2480	4427-73	1420-C	8404-S	7306	2661
4420-4	1422-C	8001-N	7580	2477			8063-S		
					4838-S 4932SQ	1415-C	8092-S	_	2565





250 W. Max. T-4, 120V • 75 W. MR-16, 12V Adjustable "EYEBALL" & SQUARE Fixture

FIXTURE HOUSING & DOOR: Shall be stainless steel construction with cast bronze doors. Outer door shall be chrome plated.

FIXTURE ADJUSTMENT: Shall be externally adjustable 18 degrees from center axis. Adjustable eyeball only.

NICHE: Shall be stainless steel with cast bronze mounting assembly; which shall have provision for positive locking of the fixture in position. The unit includes a grounding lug and a 3/4", conduit connector with 1/2" reducer.

LAMP: Shall be Quartz Halogen 120V-100W (1000 hr. life): 120V-250W (2000 hr. life) T-4: 12V-75W (4000 hr. life): Dichroic halogen lamp MR-16 EYC Stan., lamp inc.

LENSES: Shall be 3-1/8" diameter tempered Borosilicate, clear Fresnel standard. *Optional: Clear, Amber, Blue, Green & Red (Not Fresnel).

GASKET: Shall be single piece U-shaped molded silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: 120V-Bayonet Mount • 12V Bipin mount.

FACTORY WIRED: 15 ft. of 18-2/16-1ST Submersible cord with ground wire positively grounded inside the fixture. Also available in lengths of 30, 40 and 50 ft. Specify by adding dash number with length. Cord rating 105C.

ROCKGUARD: Cast Bronze and chromed grid available at additional cost.

LOW WATER CUT OFF. Temperature sensing LWC standard.

		Para Para	(0)
CAT. NO.	WATTS	VOLTS	DESCRIPTION
4842S-3 4843S-3 4845S-3 4932S	75 100 250	12 120 120	ADJUSTABLE EYEBALL & NICHE ADJUSTABLE EYEBALL & NICHE ADJUSTABLE EYEBALL & NICHE ADJUSTABLE EYEBALL NICHE • 3/4" Conduit with 1/2" Reducer.
4838S-3 4839S-3 4840S-3 4932SQ	75 100 250	12 120 120	SQUARE FIXTURE & NICHE SQUARE FIXTURE & NICHE SQUARE FIXTURE & NICHE SQUARE LIGHT NICHE • 3/4" Conduit with 1/2" Reducer.
			ACCESSORIES
*1415-2	Colored Lenses		Amber, blue, green, red, clear available at additional cost. NOTE: Use blue and green lenses with 75 or 100 Watt only.
2565	Rock	guard	Chromed cast bronze exterior grid available at additional cost. Add RG to Part No.

1000 Watts Maximum Par 64 Quartz Lamp

FIXTURE HOUSING: Shall be cast bronze construction, wall thickness 3/16 inch. Bright white nickel finish. Dry niche pool light.

LENS DOOR: Shall be cast bronze, finished in polished chrome.

ELECTRO GRID: Shall be cast bronze, nickel plated positioned between the lens and lamp.

LAMP: Shall be clip mounted 120V, Par 64, 1000 watts; Par 56, 500 watts tungsten halogen quartz (4000 hour lamp); or Par 56, 300 watts incandescent.

LENS: Shall be heat resistant tempered glass with 30° spread and 15° downward deflection.

GASKET: Shall be single-piece molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

 ${\bf SOCKET:}$ Shall be mogul prong type with 200°C insulated leads passing through neoprene grommet to junction box.

FIXTURE WIRING ENTRANCE PORT: Shall be epoxy encapsulated.

INTEGRAL JUNCTION BOX: There shall be two grounding lugs located in the junction box and one on outer surface of the fixture housing.

BACK HOUSING COVER: Shall be chrome plated cast bronze with stand-off bosses to permit ventilation and allow for rear access and relamping.

CAT NO.	DESCRIPTION	
4429	1000 watts maximum, dry niche wall mount.	
4429LV	300 watts, Par 56, 12 volt lamp, dry niche wall	mount.

1000 Watts Maximum Par 64 Quartz Lamp

The two fixtures shown on this page both feature a low-level cut-off device which protects the fixtures from over-heating due to a low water condition. In both, a cast bronze "Electro-Grid" is located between the face of the lamp and the lens to form a protective barrier to any electrical field that might occur as a result of malfunction of the fixture.

FIXTURE HOUSING: Shall be cast bronze construction, wall thickness 5/32 inch. **LENS DOOR:** Shall be cast bronze finished in polished chrome.

ELECTRO GRID: Shall be chrome plated cast bronze positioned between the lens and lamp.

NICHE: Shall be stainless steel with cast bronze mounting ring, which shall have provision for positive locking fixture in position, four lugs for tie to forms or steel structural rods. Pressure grounding lug on interior and exterior surfaces. Conduit entrance shall be 3/4" NPT with 3/4" x 1/2" NPT reducer bushing supplied.

LAMP: Shall be clip mounted 120V, Par 64, 1000 watts tungsten halogen. (Quartz 4000 hour lamps)

LENS: Shall be heat resistant tempered glass with 30° spread and 15° downward deflection.

GASKET: Shall be single-piece molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be mogul prong type with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 12 feet #16-3ST 90°C submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO.	DESCRIPTION
4427-3LWC	1000 watts maximum Par 64 Quartz, wet niche wallmount.

Fixture will not operate on 220V, single phase. Specify fixture less LWC. Fixture ordered less LWC is not U.L. listed for swimming pools.

500 Watts Maximum Par 56 Quartz Lamp 300 Watts Par 56 Incandescent Lamp

FIXTURE HOUSING: Shall be cast bronze construction, wall thickness 5/32 inch. **LENS DOOR:** Shall be cast bronze, finished in polished chrome.

ELECTRO GRID: Shall be chrome plated cast bronze positioned between the lens and lamp.

NICHE: Shall be stainless steel with cast bronze mounting ring which shall have provision for positive locking of fixtures in position, four lugs for tie to forms or steel structural rods. Pressure grounding lug on interior and exterior surfaces. Conduit entrance shall be 3/4" with 3/4" x 1/2" NPT reducer bushing supplied

LAMP: Shall be clip mounted 120V, Par 56, 500 Watts Maximum tungsten halogen (Quartz 4000 hour lamp), or 300 watts incandescent.

LENS: Shall be heat resistant tempered glass with 30° spread and 15° downward deflection.

GASKET: Shall be single-piece molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be mogul prong type with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 12 feet #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

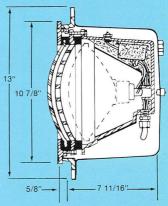
FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO.	DESCRIPTION
4425-3LWC	500 watts maximum Par 56 Quartz, wet niche wall mount
4423-31 WC	300 watts incandescent Par 56 Quartz, wet niche wall mount

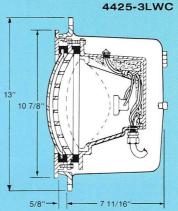
NOTE: On all the fixtures shown on this page, sufficient cord should be coiled in the fixture niche to allow for the removal of fixture to above water level for relamping. If additional cord is required, specify. (At additional cost.)

Fixture will not operate on 220V, single phase. Specify fixture less LWC. Fixture ordered less LWC is not U.L. listed for swimming pools.

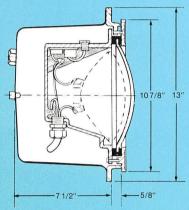




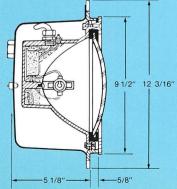












12 Volt 300 Watts Maximum Par 56 Incandescent Lamp

This heavy duty cast bronze fixture, recessed in stainless steel forming niche for "wet niche" type installation, is designed for 12 volt operations.

A low level cut-off device, to protect against fixture heating over from a low water condition, is integral to the fixture.

The low voltage model, designed for use with a 12 volt swimming pool transformer does not require an external safety device.

FIXTURE HOUSING: Shall be cast bronze construction, wall thickness 5/32 inch.

LENS DOOR: Shall be cast bronze, finished in polished chrome.

NICHE: Shall be stainless steel with cast bronze mounting ring, which shall have provision for positive locking fixture in position, four lugs for tie to forms or steel structural rods. Pressure grounding lug on interior and exterior surfaces. Conduit entrance shall be 3/4" NPT with 3/4" x 1/2" NPT reducer bushing supplied.

LAMP: Shall be 12 volt, Par 56, 300 watt lamp with screw terminals.

LENS: Shall be heat resistant tempered glass with 30° spread and 15° downward deflection.

GASKET: Shall be single-piece molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be ring terminals with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 12' of #10-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO. DESCRIPTION

4423-3LVLWC 300 watts, Par 56, 12 volt lamp, wet niche wall mount.

500 Watts Maximum T-4 Mini-Can Quartz Lamp

A low level cut-off device to protect against fixture over heating from a low water condition is integral to the fixture.

Designed for the T-4 Mini-Can Quartz Lamp, it is compact in size, with the fixture being only $4\frac{1}{2}$ inches deep. The overall depth of the niche is 6 inches. It is ideal for installations requiring a shallow depth.

FIXTURE HOUSING: Shall be cast bronze construction, wall thickness 5/32 inch.

LENS DOOR: Shall be cast bronze finished in polished chrome.

REFLECTOR: Shall be parabolic spun copper and electro-plated.

NICHE: Shall be stainless steel with cast bronze mounting ring, which shall have provision for positive locking fixture in position, four lugs for tie to forms or steel structural rods. Pressure grounding lug on interior and exterior surfaces. Conduit entrance shall be 3/4" NPT with 3/4" x 1/2" NPT reducer bushing supplied.

LAMP: Shall be 120V, T-4 mini-can, 100, 150, 250, 400, and 500 watts tungsten halogen (Quartz).

LENS: Shall be heat resistant tempered glass with 30° spread and 15° downward deflection.

GASKET: Shall be single-piece molded "U" shaped silicone.

FASTENERS: Shall be stainless steel or silicone bronze.

SOCKET: Shall be mini-can base type with 200°C insulated leads.

FACTORY WIRED: Shall be supplied with 12' of #16-3ST submersible cord with ground wire positively grounded inside fixture. Cord entrance shall be brass water tight seal and epoxy encapsulated.

FACTORY LEAK TESTED: Fixtures are tested at 10 PSI internal pressure while totally submerged in water.

CAT NO. DESCRIPTION

4421-3LWC 500 watt maximum, T-4, wet niche wall mount

NOTE: On all the fixtures shown on this page, sufficient cord should be coiled in the fixture niche to allow for the removal of fixture to above water level for relamping. If additional cord is required, specify. (At additional cost.)

Fixture will not operate on 220V, single phase. Specify fixture less LWC. Fixture ordered less LWC is not U.L. listed for swimming pools.

EXTENSION JUNCTION BOX



for 4429 - 4429LV **DRY NICHE SWIMMING POOL FIXTURE**

Designed for installations where it is desirable to run conduit on the surface of the service wall, this box has two

1-inch NPT conduit entrances for straight through wire runs. It mounts to the face of the integral fixture junction box, and is finished in bright white nickel. Complete with mounting screws and gasket.

TILE MASK for 4429 -4429LV DRY NICHE SWIM-MING POOL FIXTURES

This tile mask conceals the mating edges of the tile and fixture, and gives the installation a clean finished appearance. In cast bronze with polished chrome finish, it is furnished with 4 flush mounting socket head screws. Note: If mask is desired, it must be ordered with the fixture, since special machining modifications are required on lens door.





1717 DECK BOXES

Model 1717, specifically designed for above deck or remote wall mountings, meets all requirements of the National Electrical Code and is UL listed. It features a cast bronze body & cover, with internal ground-

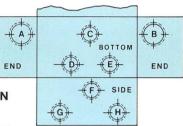
ing lugs and brass isolating cord seals. Available in drilled and tapped hole combinations. (See chart on Page 11.) Specify hole location and 1/2" or 3/4" NPT. Chrome cover available at slight additional cost. Add suffix "C" to model number when ordering. Dimensions: (I.D.): D: 3"; W: 315/16"; L: 53/16". (O.D.): D: 3 5/16"; W: 4 3/8"; L: 5 5/8". Maximum of 3 light fixtures to deck box due to the internal strain relief.

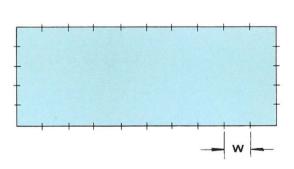
LOCATION OF ELECTRICAL INLET and **OUTLET SUPPLY HOLES** No Hubs available

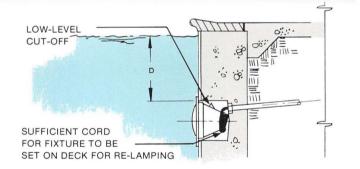
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FOR THE **TAPPING AND** STRAIN RELIEF LOCATION SCHEDULE,

SEE THE CHART ON PAGE 11 OF THE **FOUNTAIN SECTION**







RECOMMENDED LIGHTING DESIGN

The following information will be useful in determining the lighting requirements for swimming pools:

- 1. Establish the number of fixtures required based on the size of the pool and spacing as shown on the chart below.
- 2. Establish the approximate fixture wattage as follows:

Pool Area x Watts per Square Foot

Number of Fixtures

= Watts per Fixture

3. Select the fixture that comes closest to meeting wattage requirements. For in-between wattages, use next highest wattage or increase the number of fixtures.

Using low wattage lamps will produce a more even light distribution. Increase lighting requirements when pool walls are other than white. The recommendations are for standard type pools. For special applications, consult your Hydrel representative.

FOR INCANDESCENT SOURCES

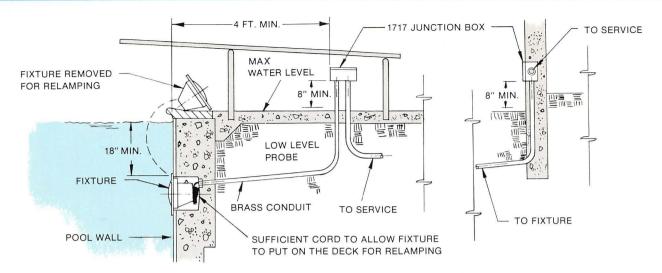
		"W" MAXII	DEPTH	
OUTDOOR* POOL	LAMP WATTS PER SQ. FT.	POOL DEPTH OVER 5 FT.	POOL DEPTH UNDER 5 FT.	BELOW WATER "D"
RESIDENTIAL	.5 to 1	_	_	18"
COMMERCIAL	1 to 1.5	16′	18′	18"
COMPETITION	1 1/2 to 2**	14'	16′	18"
DIVING POOL	2 to 3	14'	_	36"

- * FOR INDOOR POOLS INCREASE LIGHTING BY 25% (X 1.25)
- ** NEVER CENTER LIGHTS IN RACING LANES

QUARTZ HALOGEN SOURCES

(WHITE BOTTOM POOLS)							
120 VOLTS • 250 WATTS							
.25 WATTS/SQ. FT.							
.50 WATTS/SQ. FT.							
.75 WATTS/SQ. FT.							

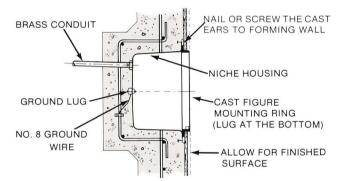
TECHNICAL DATA



Hydrel fixtures are designed to meet 1981 National Code, Article 680 requirements. The N.E.C. requires that fixtures must be installed so that the fixture lens is at least 18" below normal water level. The junction box shall be located at least 8" above maximum water level, pool deck or ground, whichever is greater. The junction box shall be located not less

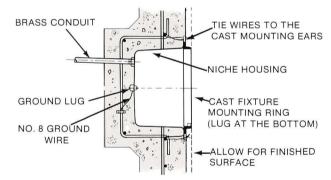
than 4 feet from the perimeter of the pool, unless separated from the pool by a fence, wall or other permanent barrier. Junction boxes mounted above grade in the walkway around the pool shall be afforded additional protection by locating them in such places as under a diving board, adjacent to fixed structures, etc. Check local codes to assure acceptance.

WET NICHE INSTALLATION FOR POURED CONCRETE POOL

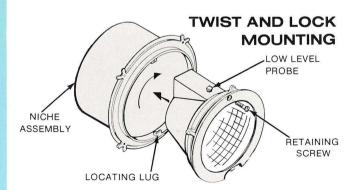


Attach conduit to niche housing. Ground niche to reinforcing bars. Secure niche in place by wiring between cast mounting ears and reinforced bars. Make sure that niche is level and positioned to allow for finishing materials.

WET NICHE INSTALLATION FOR GUNITE POOLS

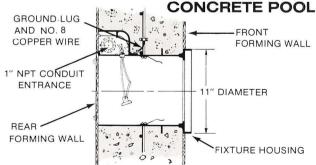


Attach conduit to niche housing. Ground niche to reinforced bars. Cut hole in form to receive cast ring. Nail or screw niche to the form, using four mounting ears. Make sure adequate space is allowed for finishing materials.



Mounting the fixture into the niche is simple and positive with the Twist and Lock feature. Fixture may be inserted directly into the niche. (No hooking a lower lug or slipping over a pin.) Fixture is inserted and given a slight clockwise twist. The retaining screw then provides a positive fixture lock. Sensor must be located on top of fixture housing after location.

DRY NICHE INSTALLATION IN POURED



Install conduit and ground housing to reinforcing bars. Cut hole in front form to receive the fixture. Remove rear cover and junction boxcover. Bolt housing to rear form using same threaded holes and 1/4-20 screws. Allow space for finishing material. Lens and face ring should be removed or masked to prevent damage.

SPARE PARTS LIST • SWIMMING POOL LIGHTS

FIXTURE NO.	LENS	LENS GASKET	SOCKET	GRID GASKET
4421-3	1306-SP	8387-S	7001	NONE
4421-3LWC	1306-SP	8387-S	7001	NONE
4423-3	1418-C	8404-S	7306	8351-S
4423-3LVLWC	1418-C	8404-S	NONE	NONE
4423-3LWC	1418-C	8404-S	7306	8351-S
4425-3	1418-C	8404-S	7306	8351-S
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