

Chemical Processing • Industrial • Oil / Gas • Shipyards / Marine • Water Treatment

The H.I.D. H Series has a powder coat finish over a cast copper-free aluminum housing designed for hazardous environments. Perfect for a multitude of applications such as chemical plants, automobile manufacturing and marine and coastal facilities. The H.I.D. H Series also has an assortment of options from reflector choices, auxiliary quartz lamp and a 3-sided exit sign attachment.





1	2	3	4	5	6	7	8	9	10	11	12	13
1 SERIES	2 LAMP		3 STARTE	3 STARTER		4 WATTS		5 BALLAST		6 VOLTAG	E	
D: HID H	S: High Pressure Sodium (50 to 400 watts) HP: Metal Halide G: Q: Quartz Auxiliary Option**		05 : 50W 07 : 70W 10 : 100W		H: High Reacta C: Constant Wa Autotransfor	attage	1	7V, 60Hz 8/240/277V, 6 0/347V 60Hz				

1 SERIES	2 LAMP	3 STARTER	4 WAITS	5 BALLAS I	6 VOLIAGE			
D: HID H	S: High Pressure Sodium (50 to 400 watts) HP: Metal Halide (70 to 400 watts) Pulse Start	Starter Circuit/Quartz 0: Standard Fixture Q: Quartz Auxiliary Option** R: Instant Start J: Auto Shutoff Starter	05: 50W 07: 70W 10: 100W 15: 150W 17: 175W 20: 200W 25: 250W 40: 400W	H: High Reactance (≤150W) C: Constant Wattage Autotransformer (All ballast high power factor.)	03: 120/277V, 60Hz 04: 120/208/240/277V, 60Hz 09: 120/240/347V, 60Hz (CSA) 12: 120V, 60Hz 27: 277V, 60Hz 48: 480V, 60Hz 225: 220V, 50Hz 245: 240V, 50Hz			
7 HOUSING	G	8 OPTICAL						
R: Refracto (150W H L: Large Ho	HPS, 250W MH max.) or Globe Housing HPS, 250W MH max.)	For Std. Housing Fixtures (5 1/2" Thread) TG: Thermal Shock Resist. Globe TGL: TG with Polymeric Guard SG: Tuffskin® Coated Globe SGL: SG with Polymeric Guard	For Refractor Globe Ho (7 3/4" Thread) R1: 7 3/4" Refractor Glo R3: 7 3/4" Refractor Glo R5: 7 3/4" Refractor Glo R1P: R1 with Polymeric	be, Type I be, Type III be, Type V Guard	For Large Housing Fixtures (7 3/4" Thread) TG: Thermal Shock Resist. Globe TGC: TG with Cast Alum. Guard SG: Tuffskin® Coated Globe SGC: SG with Cast Alum. Guard			

L: Large Housing (200-400W HPS; 400W MH) S: Standard Housing with Stainless Steel Inserts I: Refractor Globe Housing with Stainless Steel Inserts M: Large Housing with Stainless Steel Inserts M: Large Housing with Stainless Steel Inserts SG: Tuffskin® Coated Globe SGL: SG with Polymeric Guard R2: 12" Glass Refractor, Type II R5: 12" Glass Refractor, Type V R2G: R2 with Wire Guard R5G: R5 with Wire Guard		RS: / 3/4 Refractor Glo R1P: R1 with Polymeric R3P: R3 with Polymeric R5P: R5 with Polymeric TG: 7 3/4" Thermal Shot TGP: TG with Polymeric	Guard Guard Guard ck Res. Globe	SG: Tuffskin® Coated Globe SGC: SG with Cast Alum. Guard R2: 12" Glass Refractor, Type II R5: 12" Glass Refractor, Type V R2G: R2 with Steel Guard R5G: R5 with Steel Guard RCB: Enclosed High Bay Reflector RCG: RCB with Steel Wire Guard		
9 MOUNT	10 FINISH	11 UNIPAK	12 FUSING	13 CSA		
A2: 3/4" Cone Top Pendant A3: 1" Cone Top Pendant B2: 3/4" Wall Mount B3: 1" Wall Mount C2: 3/4" Ceiling Mount C3: 1" Ceiling Mount F2: 3/4" Flexible Pendant F3: 1" Flexible Pendant HV1: HazVertor™ Ring - CI, D2	T: HazCote™ Custom Corrosion Coating	UNIPAK® Packaging E: with Clear Lamp D: with Dual Arc Lamp (HPS only) U: Unlamped See Note for UNIPAK® packaging options WITH reflectors	F: Single Fuse Block with Fuse FF: Double Fuse Block with Fuse	CSA Certification C: CSA Nameplate (Consult factory)		

HV2: HazVertor™ Ring - CII, D1 L4: 1 1/4" Straight Stanchion

L5: 1 1/2" Straight Stanchion

S4: 1 1/4" 25° Angle Stanchion \$5: 1 1/2" 25° Angle Stanchion

P2: 3/4" Rigid Pendant

P3: 1" Rigid Mount

H fixture with the "0" ballast housing:

Standard reflector option (VR22P) use a "1" after UNIPAK® selection.

30° angle reflector (VRA22P) use a "2" after UNIPAK® selection.

H fixture with the "R" or "L" ballast housing:
Standard reflector option (VR31P) use a "1" after UNIPAK® selection.
30° angle reflector (VRA31P) use a "5" after UNIPAK® selection.

Deep dome reflector (VRD31) use a "6" after UNIPAK® selection. ** Adding quartz restrike will be Class I Div. 2 ONLY with a T rating of 625°C



HAZARDOUS LIGHTING

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LISTINGS

UL 844 CSA 22.2 No. 137.0 UL 1598A Marine Outside

Class I D2 Groups A,B,C,D T rating see chart Class II D1 Groups E,F,G T rating see chart Class II D2 Groups E,F,G T rating see chart

Class III D1 Trating see chart Class III D2 Trating see chart

NEMA 4X

ELECTRICAL

HPS (50 to 400 watts)
MH - pulse start (70 to 400 watts)

Voltages: 120, 208, 220, 240, 277, 347 and 480

HOUSING

Cast copper-free aluminum with powder coated finish - standard color beige.

GUARD

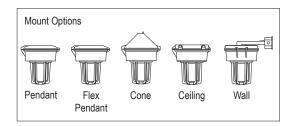
Polymeric, aluminum, or steel wire

GLOBE

5 1/2" or 7 3/4" Dia. heat resistant 7 3/4" IES Type I, III or V, 12" Dia. IES Type II, V, (5 1/2" thread) 12" Dia. IES Type II, V (7 3/4" thread)

MOUNTING

Rigid or flexible pendant, ceiling, Wall or cone pendant 25° stanchion, Straight stanchion, HazVertor™ ring mount



OPTIONS

All Options Ordered Separately
Stainless steel inserts
Auxiliary quartz lamp
Fuse block
UNIPAK® (assembled fixture)
HazCote™ (consult factory on lead time)

UNIPAK® Packaging

LDPI® HID fixtures ordered with UNIPAK® packaging option will be completely assembled with lamp (and with mounting cover and/or reflector, if specified) and shipped in one carton. Each fixture assembly is foamed in place in the carton to insure zero transit damage. Receiving, handling, storing, identification, assembly and component matching are all made easier by this common sense approach to manufacturing and shipping.

Use catalog numbering codes (position #11) to add UNIPAK® with lamp packaging to any made-to-order HID assembly.

Benefits of UNIPAK® packaging:

Fewer cartons to receive
Fewer cartons to store
Reduced job site material and handling cost
Lower installation labor cost
No chance of Lamp/Ballast mismatch in field
No waiting around for fixtures

HazVertor™ Adaptor Ring

The HazVertor™ Ring is a UL listed adapter ring which gives you the freedom to replace Crouse-Hinds® VMV, LMV and DMV series Champ® lighting fixtures with LDPI HID fixtures - without removing the Crouse-Hinds® mounting top hat from the conduit system.

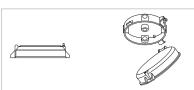
Just look at the advantages:

Increased energy efficiency and lumen output by upgrading from mercury vapor to metal halide or high pressure sodium.

Utilize threaded glass refractors for improved light distribution

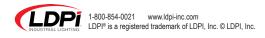
Improved photometric performance in many cases.

Easy to order. Easy to install. UL listed. For use with HID marine, or hazardous environment fixture. Not available for the compact fixture.







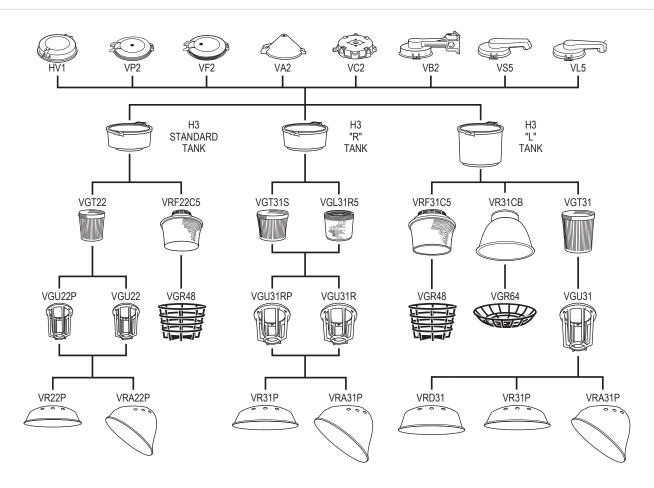




HID H HAZARDOUS LIGHTING

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OPTIONS



HID Options

The options listed below plus many more are available with LDPI HID fixtures.

Instant Restart (50-150W HPS)

Allows high pressure sodium lamp to be immediately restarted after a momentary power outage.

Auxiliary Quartz Circuit - All

Fixtures use 120 volt 100W lamp quartz lamp circuit. Quartz lamp will operate during HID warm-up period, or when HID lamp cools down before restarting.

NEMA Lamp Wattage Decal - All

Adhesive back lamp wattage decal is provided on ballast housing exterior to clearly indicate wattage for relamping and maintenance.

Auto Shutoff Option (50-150W HPS)

Auto shutoff device prevents starter failure by disabling the starter circuit in case of cycling or defective HPS lamp.

(not for use with instant restart option.)
50 Hertz ballast (Most HID Fixtures)
50 Hertz ballast in a variety of voltages can be furnished for international voltage systems.

Tuffskin® Coated Glass Globes

(All globes)

Tuffskin silicone coating contains glass particles in case of breakage, and prevents glass from contaminating process areas.

HazCote™ Custom Corrosion Resistant Coating

Custom chemical coating provides even higher degree of corrosion protection for cast aluminum parts. For use in highly corrosive environments.

Dual Arc Tube Lamps (HPS)

Provide standby/immediate restart capabilities.

Stainless Steel Inserts (All)

Stainless steel inserts for guard screws and ballast housing closure screw eliminate possibility of galvanic corrosion between stainless steel screws and aluminum parts.

UNIPAK® Packaging

(AII)

UNIPAK® packaging means that fixtures are completely assembled - with lamp if specified - and foamed in one carton. Saves labor, handling, storage and reduces total installed cost per fixture.

HazVertor™ Adapter Ring

UL listed adapter ring enables quick, easy, UL listed retrofit of Crouse-Hinds® VMV, LMV and DMV series Champ® fixtures.

Crouse-Hinds® and Champ® are registered trademarks of Cooper Industries, Inc.

HID H

HAZARDOUS LIGHTING

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OPTIONS

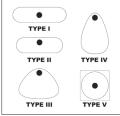
Mounting	Hub	Cat.	Mounting	Hub	Cat.
Style	Size	No.	Style	Size	No.
Rigid			Wall		
Pendant	3/4"	VP2		3/4"	VB2
	1"	VP3		1"	VB3
Cone			25°		
Pendant	3/4"	VA2	Stanchion	1 1/4"	VS4
	1"	VA3		1 1/2"	VS5
Flexible			Straight		
Pendant	3/4"	VF2	Stanchion	1 1/4"	VL4
	1"	VF3		1 1/2"	VL5
Ceiling			HazVertor		
A	3/4"	VC2	Ring		HV2
	1"	VC3			HV3

Reflectors, Exit Sign	Cat. No.	Description
000	VR22P (see note)	Standard dome fiberglass Reinforced polyester. For use with standard housing
	VR31P (see note)	Standard dome fiberglass reinforced polyester. For use with "R" and Lg. housing
000	VRD31	Deep dome anodized aluminum. For use with "R"and large housings. Must be line listed. Can not be UNIPAK®.
	VR31CB	Enclosed high bay anodized aluminum with lens. For use with "R" or large housings
000	VRA22P (see note)	30° angle reflector fiberglass reinforced polyester. For use with standard housing
	VRA31P (see note)	30° angle reflector fiberglass reinforced polyester. For use with "R" or Large housing
EVIEW	VRE22	Three sided exit sign. For use with standard housing

Globes, Refractors	Cat.	Description
	VGT22	5 1/2" dia. heat resistant globe For use with standard housing (250W max)
	VGT31S	7 3/4" dia. heat resistant globe For use with "R" housing (250W max)
	VGT31	7 3/4" dia. heat resistant globe For use with large housing (400W max)
	VGL31R1	7 3/4" IES Type I refractor globe For use with "R" housing (250W max)
	VGL31R3	7 3/4" IES Type III refractor globe For use with "R" housing (250W max)
	VGL31R5	7 3/4" IES Type V refractor globe For use with "R" housing (250W max)
	VRF22C2	12" dia. IES Type II refractor 5 1/2" thread, for use with standard housing
	VRF22C5	12" dia. IES Type V refractor 5 1/2" thread, for use with standard housing
	VRF31C2	12" dia. IES Type II refractor 7 3/4" thread, for use with "R" and large housings
	VRF31C5	12" dia. IES Type V refractor 7 3/4" thread, for use with "R" and large housings

Guards	Cat. No.	Description
	VGU22P	Polymeric guard for VGT series globes
	VGU31RP	Polymeric guard for VGT31S globe and VGL31R series refractor globes
	VGU31R	Cast aluminum guard for VGT31S globe and VGL31R series refractor globes
	VGU31	Cast aluminum guard for VGT31 globe
	VGR48	Steel wire guard for all VRF series 12" refractors
	VGR64	Steel wire guard for VR31CB enclosed high bay reflector

Optical Refractor Types



For representational purposes only

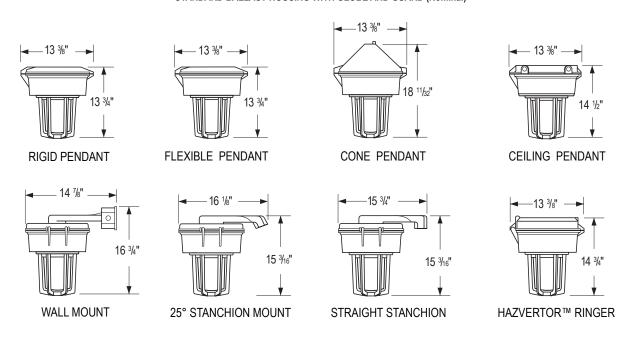






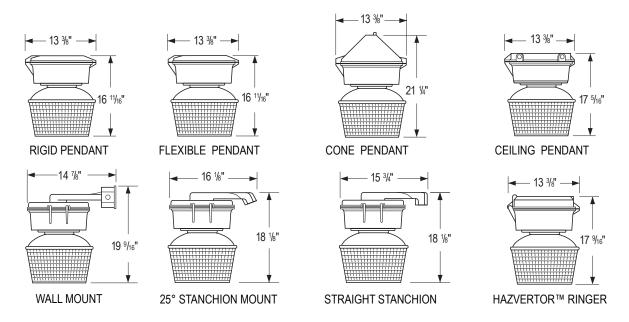
DIMENSIONS

STANDARD BALLAST HOUSING WITH GLOBE AND GUARD (Nominal)



FOR LARGE BALLAST HOUSING WITH GLOBE AND GUARD ADD 7 5/8" (7.625) TO HEIGHT MEASUREMENT

STANDARD BALLAST HOUSING WITH 12" REFRACTOR AND GLOBE (Nominal)



FOR LARGE BALLAST HOUSING WITH 12" REFRACTOR AND GLOBE ADD 4 3/16" (4.1875) TO HEIGHT MEASUREMENT



HAZARDOUS LIGHTING

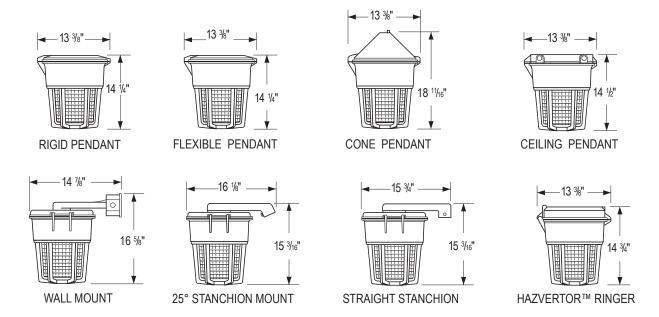


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DIMENSIONS

"R" TANK HOUSING WITH 7 3/4" REFRACTOR AND GUARD DIMENSIONS (Nominal)

"R" TANK HOUSING WITH 7 3/4" GLOBE AND GUARD DIMENSIONS (Nominal)



HID H SERIES CERTIFICATION GUIDE (40°C AMBIENT) STANDARD BALLAST HOUSING 5 1/2" THREAD

LAMP TYPE	WATTS	WATTS	WATTS	AMBIENT TEMP	CLASS I, DI' GROUP A, B, TEMPERATURE	C, D	CLASS II DIV. 1 and GROUPS	2	UL 595 MARINE	NEMA 4X	SUPPLY WIRE
		(Deg. C)	VGT/VGL22 5-1/2" Globe, Guard and Reflector	VRF22C5 12" Dia. Refractor	VGT/VGL22 5-1/2" Globe, Guard and Reflector	VRF22C5 12" Dia. Refractor			TEMP. RATING (Deg. C)		
HIGH PRESSURE SODIUM	50 70 100 150	40 40 40 40	T3C T3A T2C T2A	T4 T3C T2D T2B	EFG EFG EFG	EFG EFG EFG	YES YES YES YES	YES YES YES YES	85 85 85 90		
METAL HALIDE	70 100 175 250	40 40 40 40	T3C T3A T2A T2	T3C T3A T2C T2	EFG EFG - -	EFG EFG EFG EFG	YES YES YES	YES YES YES YES	60 75 90 125		

Notes:

- 1.) Simultaneous Presence Applications: Some HID H Series fixtures are UL Listed for simultaneous presence of gas and dust. Contact LDPI for specific information.
- 2.) Tuffskin® Coated Optics: Many HID Series H fixtures are UL Listed with Tuffskin® (silicone) coating on glass optics. Contact LDPI for specific information.
- 3.) For UL and CSA Certification Information on other ambient temperatures and fixture configurations, consult the factory.
- 4.) Consult factory for fixtures with higher ambient temperature ratings.





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HID H SERIES CERTIFICATION GUIDE (40°C AMBIENT) "R" TANK BALLAST HOUSING 7 3/4" THREAD

LAMP TYPE	WATTS	S AMBIENT TEMP (Deg. C)	CLASS I, DIV. 2 GROUP A, B, C, D TEMPERATURE CODE		CLASS II DIV. 1 and 2 GROUPS		UL 595 MARINE	NEMA 4X	SUPPLY WIRE
			VGT31S 7-3/4" Globe, Guard and Reflector	VGL31R5 7-3/4" Dia. Refractor	VGT31S 7-3/4" Globe, Guard and Reflector	VGL31R5 7-3/4" Dia. Refractor			TEMP. RATING (Deg. C)
HIGH PRESSURE SODIUM	50 70 100 150	40 40 40 40	T3C T3A T2D T2B	T3C T3A T3 T2B	EFG EFG EFG EFG	EFG EFG EFG	YES YES YES YES	YES YES YES YES	60 85 85 85
METAL HALIDE	70 100 175 250	40 40 40 40	T3C T3A T2B T2	T3C T3A T2B T2	EFG EFG EFG EF	EFG EFG EFG EF	YES YES YES	YES YES YES YES	75 75 90 125

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- 3.) For UL and CSA Certification Information on other ambient temperatures and fixture configurations, consult the factory.

Note Regarding Glass Globes And Refractors — All LDPI fixture assemblies shown in the catalog as UL Listed and CSA Certified for Marine applications are suitable for hose-down when fixture is off and glass has been allowed to cool. Tempered glass globes and refractors have better thermal shock resistance properties than non-tempered globes and refractors and should be considered whenever fixtures are subject to being splashed with significantly cooler liquids while illuminated (hot). Consult factory for more information.

HID H SERIES CERTIFICATION GUIDE (40°C AMBIENT) LARGE BALLAST HOUSING 7 3/4" THREAD

LAMP TYPE	WATTS	AMBIENT TEMP	CLASS I, DIV. 2 GROUP A, B, C, D TEMPERATURE CODE			CLASS II DIV. 1 and 2 GROUPS			UL 595 MARINE	NEMA 4X	SUPPLY
		(Deg. C)	VGT31 Globe, Guard and Reflector	VRF31C5 12" Dia. Refractor	VR31CB Reflector w/lens	VGT31 Globe, Guard and Reflector	VRF31C5 12" Dia. Refractor	VR31CB Reflector w/lens			TEMP. RATING (Deg. C)
HIGH PRESSURE SODIUM	200 250 400	40 40 40	T2 350° C T2A	T2A 350° C T2B	T2A 350° C T2B	T2 350° C T2A	T2A 350° C T2B	T2A 350° C T2B	YES YES	YES YES YES	90 90 110
METAL HALIDE	250 400	40 40	T2 350° C	T2A 325° C	T2A 325° C	T2 350° C	T2A 325° C	T2A 325° C	-	YES YES	110 110

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- 4.) Consult factory for fixtures with higher ambient temperature ratings.