

CANTY

5+ YEAR LIFE

HIGH INTENSITY
UNIFORM WHITE LIGHT
OUTPUT, MAINTENANCE
FREE!

PROCESS TECHNOLOGY

HYL 80-LED Nickel Plated Process Lighting Systems



HOW IT WORKS

The HYL 80 lights are designed to illuminate pressurized, irradiated or isolated areas. The HYL lighting package provides a compact, cost effective lighting system. Our patented design allows for an intense beam of light to cross the pressure/process boundary. Once across, the beam is diffused to provide a conical light output of bright, even illumination. The HYL light can mate with a variety of couplings, including flanged, sanitary and NPT connections.

UNIQUE DESIGN

Our patented design consists of three main components: light source, light pipe and driver. A high output, long-life LED array delivers the maximum amount of light into the vessel. Light is guided fiber-optically through the light pipe into the process or pressure area. All Canty light pipes feature our high pressure, high temperature fused glass seal for maximum safety. A variety of couplings are available.

APPLICATIONS

- Process Vessels and Equipment
- Pressure Vessels
- Sterilizers
- Diving Decompression Chambers
- Altitude and Environmental Chambers
- Many, many more

SPECIFICATIONS

- Light Pipe Pressure: Full Vacuum to 10,000 PSI available. Consult factory.
- Mounting: 1" NPT, flanged and sanitary models available.
- Light Source Rating: WP, IP 66, EXP and FP available.
- Power Req.: 16-20W
- Typ. Max Tank Specification; 80 W: 25 ft [7.6m] dia. X 70 ft [21.3m] dp
- Power Supply Options: 24V - 230V input options available.

FEATURES

- Pressure rating from full vacuum to 10,000 PSI available. Consult factory.
- Brighter than former 80W Halogen lights.
- Low power consumption, 16-20W.
- NEMA 4, IP 66 ratings available.
- Explosion proof Class I, Div. 1, Groups B, C and D, Class II, Div. 1, Groups E, F and G, and NEMA 4 models.
- Flame proof Ex II 2 GD, Eex d IIC T6 and IP 66 models.
- Maintenance-free, high output LED.
- All wiring and maintenance external.

CANTY

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Typical Dimensions



HOW TO ORDER: Select the appropriate symbols and build a part number as shown:

EXAMPLE:

HL UD85S0-LED

Light Source Selection

120V / 230V Options:
HL - 120V AC input direct to light. EXP rating, .25A
 EK - 230V AC input direct to light. ATEX FP rating, .25A

NH - 120V AC input direct to light. WP rating, .25A
 N1 - 230V AC input direct to light. IP rating, .25A

24V DC Options:
 N6 - 24V DC, EXP rated light, 1A
 N2 - 24V DC, ATEX FP rated light, 1A

N8 - 24V DC, WP rated light, 1A
 N9 - 24V DC, IP rated light, 1A

Switches

Weather Proof Light Options
(NH/N1) 120V / 230V Models:
 U - Customer supplies ON/OFF switch.
 C - NEMA 4X / IP66 enclosure with switch. 120V AC input.
 R - NEMA 4X / IP66 enclosure with switch. 230V AC input.

(N8/N9) 24V DC Models:
 U - Customer supplies ON/OFF switch.

Explosion Proof / ATEX Flame Proof Light Options
(HL/EK) 120V / 230V Models:
U - Customer supplies ON/OFF switch.
 P - Explosion proof switch, 120V AC (HL) / or ATEX Switch, 230V AC (EK). See note 5.

(N6/N2) 24V DC Models:
 U - Customer supplies ON/OFF switch

Wetted Materials

S - 316L SS*

D - Hastelloy® C276 or equal
 E - Hastelloy® C-22® or equal
 F - Boroplus (Glass Wetted)**
 U - Hastelloy® C276 or equal, 20 RA EP

*Canty Reserves the right to upgrade to Hastelloy® C-family of alloys or equal at their own cost.
 **Not available on all models.

Beam Output Options

8 - Normal Beam High Temp

Insertion Length*

0 - None 5 - 5" INSB - 11" INS
 1 - 2" INSB - 7" INSC - 12" INS
 2 - 6" INSB - 8" INSD - 13" INS
 3 - 3" INSB - 9" INSE - 14" INS
 4 - 4" INSB - 10" INS

*Insertions Are Not Available on Glass Wetted Models

Non-Wetted Material (Carbon or Stainless Steel)

C - CS, 150#ANSI	D - CS, 300# ANSI
S - SS, 150#ANSI	E - SS, 300# ANSI
A - CS, 10 BAR	Z - CS, 16 BAR
B - SS, 10 BAR	Y - SS, 16 BAR

0 - No Retaining Flange Required/Applicable.
 Select for Tri-Clamp® Connections.

Mounting Connection

1 - 1" NPT
 9 - 1.5" Flanged, 150# /DN40 PN10
 3 - 2" Flanged, 150# /DN50 PN10
 4 - 3" Flanged, 150# /DN80 PN10
5 - 4" Flanged, 150# /DN100 PN10
 6 - 6" Flanged, 150# /DN150 PN10 (Insertion only)

Z - 1.5" Flanged, 300# /DN40 PN16
 A - 2" Flanged, 300# /DN50 PN16
 B - 3" Flanged, 300# /DN80 PN16
 C - 4" Flanged, 300# /DN100 PN16
 D - 6" Flanged, 300# /DN150 PN16 (Insertion only)

E - 1" or 1.5" Tri-Clamp®
 F - 2" Tri-Clamp®
 Y - 2.5" Tri-Clamp®
 G - 3" Tri-Clamp®
 H - 4" Tri-Clamp®

J - 2" 150# / DN50 PN10 Glass Wetted Flange
 K - 3" 150# / DN80 PN10 Glass Wetted Flange
 L - 4" 150# / DN100 PN10 Glass Wetted Flange
 M - 6" 150# / DN150 PN10 Glass Wetted Flange

Many Additional Sizes Available. Consult Factory.

WP = Weather Proof
 EXP = Explosion Proof
 FP = Flame Proof
 IP = Ingress Protection

Notes :

- 1) Some options are not available on all models.
- 2) Vessel lighting diameter, depth specifications provided are a general guideline for stainless steel tanks. For blue glass lined reactors, which will absorb visible wavelengths of light, a derating factor of 0.7 is recommended.
- 3) All Explosion Proof lights are rated for use in Class I, Div. 1, Groups B, C and D, Class II, Div. 1, Groups E, F & G as well as NEMA 4 locations. Power supply rating vary with model.
- 4) All ATEX Flame Proof lights are approved for use in EExd II C T6 and IP 66 locations.
- 5) Explosion proof power supply enclosures are rated use in Class I, Div. 1, Groups C and D, Class II, Div. 1, Groups E, F & G locations. Flame proof switch is EEx edm IIC T6.



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