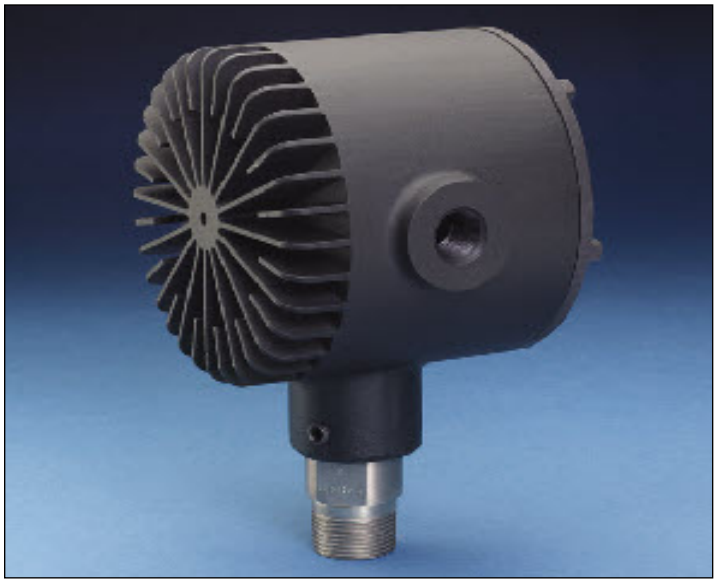
CANTY

PROCESS TECHNOLOGY

HYL SERIES 80W, 50W PROCESS LIGHTING SYSTEMS



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: 50 VA max (50W models), 80 VA max (80W models)
- Typ. Max Tank Specification
  50W: 8 ft [2.4m] dia. X 12 ft [3.7m] dp.
  80W: 25 ft [7.6m] dia. X 70 ft [21.3m] dp.
- Power Supply
  Options: Base Mount (non WP), OEM (bare transformer), WP/IP, EXP/FP, customer supplied PSU Options

HOW IT WORKS

The HYL 80 and HYL 50 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 can be diffused to produce conical light outputs of 30° (normal beam) or 90° (wide beam). The HYL light can mate with a variety of couplings, including flanged, sanitary and NPT connections.

FEATURES

- Pressure rating from full vacuum to 10,000 PSI available. Consult factory.
- 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.
- Efficient high output tungsten halogen lamp.
- All wiring and maintenance external.

UNIQUE DESIGN

Our patented design consists of three main components: light source, light pipe and power supply. An infra red filter is used to remove heat from the light, providing only cool, effective light into the process. A high output, low voltage bulb and reflector deliver 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.

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Typical Dimensions

NPT

FLANGE

TRI-CLAMP®

For fiber optic flexible bundle models reference datasheet P/N TA10607-1

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

EXAMPLE: H7UD45S0

Light Source Selection

Integral Transformer Models. Separate Power Supply Not Required

H7 - 80 W, 120V AC input direct to light. EXP rating.
E7 - 80 W, 230V AC input direct to light. FP rating.

EH - 80 W, 120V AC input direct to light. WP rating.
E1 - 80 W, 230V AC input direct to light. IP rating.

HW- 50 W, 120V AC input direct to light. EXP rating.
HZ - 50 W, 230V AC input direct to light. FP rating.

HV - 50 W, 120V AC input direct to light. WP rating.
HY - 50 W, 230V AC input direct to light. IP rating.

Separate Transformer / Power Supply
H6 - 80 W, EXP rated light with separate power supply.
E6 - 80 W, FP rated light with separate power supply.

H8 - 80 W, WP rated light with separate power supply.
E9 - 80 W, IP rated light with separate power supply

E5 - 50 W, EXP rated light with separate power supply.
EG - 50 W, FP rated light with separate power supply.

H4 - 50 W, WP rated light with separate power supply.
E4 - 50 W, IP rated light with separate power supply.

Power Supplies

Weather proof Light Options
(H8/E9) HYL 80 WP/IP Lights with Separate Power Supply
9 - NEMA 4X / IP66 power supply with switch. User supplies 120V AC (WP Models) or 230V AC (IP Models).
5 - NEMA unrated / IP00 bare transformer. User supplies 120V AC.
0 - NEMA unrated / IP00 bare transformer. User supplies 230V AC.

(EH/E1) HYL 80 Toroidal WP/IP Lights with Integral Transformer
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.

(H4/E4) HYL 50 WP/IP Lights with Separate Power Supply
5 - NEMA unrated / IP00 bare transformer. User supplies 120V AC.
6 - No Transformer. Customer supplies 12V AC or DC source, 50W min.
7 - NEMA unrated / IP00 bare transformer. User supplies 230V AC.

(HV/HY) HYL 50 WP/IP Lights with Integral Transformer
U - Customer supplies ON/OFF switch.

Explosion proof / Flame proof Light Options
(H6/E6) HYL 80 EXP/FP Lights with Separate Power Supply
J - Explosion proof power supply. 120V AC input. See note 5.
5 - NEMA unrated / IP00 bare transformer. User supplies 120V AC
N - NEMA unrated / IP00 bare transformer. User supplies 230V AC

(H7/E7) HYL 80 EXP/FP Lights with Integral Transformer
U - Customer supplies ON/OFF switch.
P - Explosion proof switch, 120V AC. See note 5.

(E5/EG) HYL 50 EXP/FP Lights with Separate Power Supply
5 - NEMA unrated / IP00 bare transformer. User supplies 120V AC
N - NEMA unrated / IP00 bare transformer. User supplies 230V AC.
H - No Transformer. Customer supplies 12V AC or DC source, 50W min

(HW/HZ) HYL 50 EXP/FP Lights with Integral Transformer
U - Customer supplies ON/OFF switch

Insertion Length*

0 - None 5 - 5" INS B - 11" INS
1 - 2" INS 6 - 7" INS C - 12" INS
2 - 6" INS 7 - 8" INS D - 13" INS
3 - 3" INS 8 - 9" INS E - 14" INS
4 - 4" INS A - 10" INS

* Insertions Are Not Available on Glass Wetted Models

Non Wetted Material (Carbon Steel, 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.

Beam Output Options

3 - Wide Beam High Temp. (90°) cone.
4 - Normal Beam High Temp. (30°) cone

Wetted Materials

S - 316L SS*
D - Hastelloy® C276 or equal
E - Hastelloy® C-22® or equal
F - Boroplus (Glass Wetted)**
* Canty Reserves the right to upgrade to Hastelloy® C-family of alloys or equal at their own cost.
** Not available on all models

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 with 30° normal beam conical light output option. 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 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.

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

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