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HYL SERIES 80W, 50W NICKEL PLATED SANITARY LIGHTING SYSTEMS

HOW IT WORKS

The HYL 50 and 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 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.

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

FEATURES

- Nickel Plated Aluminum Light Source.
- 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.

Reading Office
Cutbush Park, Danehill, Lower Earley,
Reading, Berkshire. RG6 4UT. UK.
Tel: +44 (0)118 9311188
Email: info@able.co.uk

Aberdeen Office
Unit 6 Airside Business Park, Kirkhill Industrial Estate,
Dyce, Aberdeen. AB21 0GT. UK.
Tel: +44 (0)1224 725999
Email: ab@able.co.uk

Internet: www.able.co.uk
e-procurement: www.247able.com
Registered in England No: 01851002
VAT No: GB 417 2481 61

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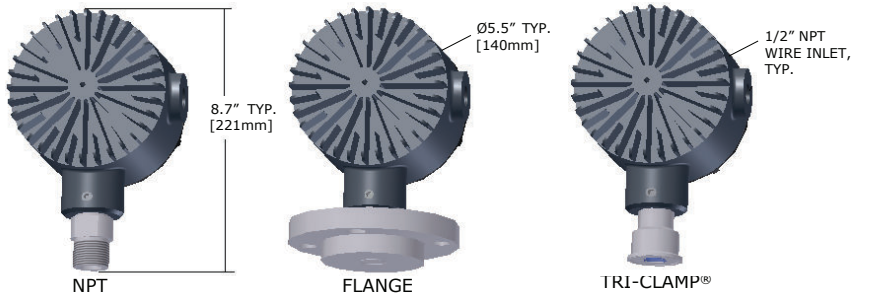
Typical Dimensions



For fiber optic flexible bundle models reference datasheet P/N TA10836-1.

HOW TO ORDER: Select the appropriate symbols and build a part number as shown.
Recommended model options are shown in bold.

EXAMPLE: **HLUS45S0**

Integral Transformer Models. Separate Power Supply Not Required

HL - 80 W, 120V AC input direct to light. EXP rating.
EK - 80 W, 230V AC input direct to light. FP rating.
NH - 80 W, 120V AC input direct to light. WP rating.
N1 - 80 W, 230V AC input direct to light. IP rating.
NW- 50 W, 120V AC input direct to light. EXP rating.
NZ - 50 W, 230V AC input direct to light. FP rating.
NV - 50 W, 120V AC input direct to light. WP rating.
NY - 50 W, 230V AC input direct to light. IP rating.

Separate Transformer / Power Supply
N6 - 80 W, EXP rated light with separate power supply.
N2 - 80 W, FP rated light with separate power supply.
N8 - 80 W, WP rated light with separate power supply.
N9 - 80 W, IP rated light with separate power supply.
N5 - 50 W, EXP rated light with separate power supply.
NG - 50 W, FP rated light with separate power supply.
N4 - 50 W, WP rated light with separate power supply.
N7 - 50 W, IP rated light with separate power supply.

Power Supplies

Weather proof Light Options

(N8/N9) HYL 80 WP/IP Lights with Separate PSU
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.

(N4/N7) HYL 50 WP/IP Lights with Separate PSU
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.

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

(NH/N1) 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.

Explosion proof / Flame proof Light Options

(N6/N2) HYL 80 EXP/FP Lights with Separate PSU
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.

(HL/EK) HYL 80 Toroidal EXP/FP Lights with Integral Transformer
U - Customer supplies ON/OFF switch.

(N5/NG) HYL 50 EXP/FP Lights with Separate PSU
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.

(NW/NZ) HYL 50 EXP/FP Lights with Integral Transformer
U - Customer supplies ON/OFF switch.

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

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

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 all 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

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.

Reading Office
Cutbush Park, Danehill, Lower Earley,
Reading, Berkshire. RG6 4UT. UK.
Tel: +44 (0)118 9311188
Email: info@able.co.uk

Aberdeen Office
Unit 6 Airside Business Park, Kirkhill Industrial Estate,
Dyce, Aberdeen. AB21 0GT. UK.
Tel: +44 (0)1224 725999
Email: ab@able.co.uk

Internet: www.able.co.uk
e-procurement: www.247able.com
Registered in England No: 01851002
VAT No: GB 417 2481 61