CANTY
PROCESS TECHNOLOGY

ABLE
Instruments & Controls

PROCESS TECHNOLOGY

HYL SERIES 80W, 50W Nickel Plated Sanitary Fiber Optic Flex Bundle Lighting Systems

HOW IT WORKS

Canty fiber optic lighting systems have been designed to provide efficient, high output tungsten-halogen light in a cost effective package. Conventional methods of lighting through a sight glass are ineffective since a majority of the light is reflected off of the sight glass. Canty uses only high quality, flexible fiber optic light pipes to fiber-optically guide the light from our light source through a sight glass or process connection. The light is elliptically focused into the fiber optic light pipe and guided through the sight glass, minimizing losses while maximizing your tank or vessel lighting!
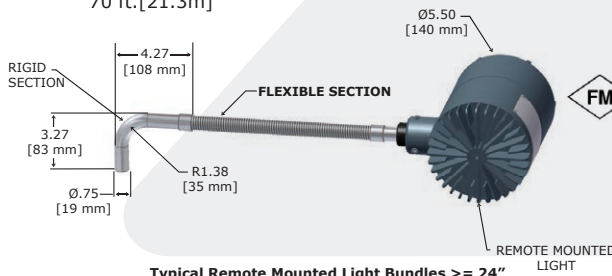
LIGHTING PACKAGES

Our flexible bundle lighting systems are available with a variety of high quality Canty lights and process connections. We offer both weather proof and explosion proof / flame proof lights with a variety of power supply options and mounting connections to meet all of your process needs.

Our flexible bundle lighting systems are designed to work with any sightglass, whether it's your existing sight glass or a Canty safety Fuseview™ sight glass. We offer many standard sight glass mounting connections to easily illuminate one, two or three sight glasses using only one Canty light.

Model Recommendation

50 W - Typical tank diameter 8 ft. [2.4m], max. depth
 12 ft.[3.7m]
80 W - Typical tank diameter 25 ft. [7.6m], max. depth
 70 ft.[21.3m]

SPECIFICATIONS

Fiber Optic Bundle
Construction: Multi-fiber glass bundle
Exterior: Crush resistant outer tubing
Termination: Stainless steel, .75" diameter
Configuration: Single, two or three leg bundles
 are available
Lengths: 12" - 108" lengths are available.
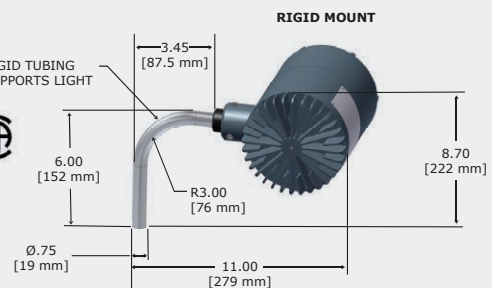 Consult factory for additional sizes.

Lighting Systems

- 50W and 80W lights are available to cover all your process requirements
- Weather proof, explosion proof, flameproof, and IP66 models are available
- Various models are FM approved, CSA approved and approved to ATEX directives.
- Canty offers a variety of power supplies to best suit the needs of your application

MOUNTING CONNECTIONS

- Sight glass mount-universal mounting bracket is designed to function with any flange mounted sight glass. Standard brackets are constructed of aluminum or SS.
- NPT mounting connection - flexible bundle may connect to vessel using a 1" NPT threaded connection. Available in SS or Hastelloy® or equal or glass wetted materials
- Tri-Clamp®-sanitary vessel connection. Ideal for pharmaceutical or food grade applications

FEATURES

- Nickel Plated Aluminum Light Enclosures
- Flexible fiber optic light bundle provides a high intensity light output
- NEMA 4, IP66, Explosion proof (Class 1, Div. 1, Groups B, C & D, Class II, Div. 1, Groups E, F & G) or Flameproof Eex d IIC T6 ratings
- Fused glass seal provides a safe, reliable, hermetic seal between electronics and the process area
- Various models feature FM, CSA, approval to ATEX directives
- Canty lights provide the maximum illumination possible
- Cool light output - there is no product bake-on

Ø5.50
[140 mm]

4.27
[108 mm]

RIGID SECTION

FLEXIBLE SECTION

3.27
[83 mm]

R1.38
[35 mm]

Ø.75
[19 mm]

FM Ex CSA

REMOTE MOUNTED LIGHT

Typical Remote Mounted Light Bundles >= 24"

RIGID MOUNT

3.45
[87.5 mm]

RIGID TUBING SUPPORTS LIGHT

6.00
[152 mm]

R3.00
[76 mm]

8.70
[222 mm]

Ø.75
[19 mm]

11.00
[279 mm]

Typical 12" Direct Mount Light Bundle Models

Ordering Information

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

EXAMPLE: **H M U 7 0 S**

LIGHT SOURCE SELECTION

Weather Proof (WP) / IP Lights	*Explosion proof (EXP) / Flame proof (FP) Lights*

Integral Transformer Models. Separate Power Supply Not Required

NL - 50 W, 120V AC input direct to light. WP rating.

NC - 50 W, 120V AC input direct to light. EXP rating.

NR - 50 W, 230V AC input direct to light. IP rating.

NT - 50 W, 230V AC input direct to light. FP rating.

NM - 80 W, 120V AC input direct to light. WP rating.

HM - 80 W, 120V AC input direct to light. EXP rating.

N1 - 80 W, 230V AC input direct to light. IP rating.

EA - 80 W, 230V AC input direct to light. FP rating.

Separate Transformer / Power Supply Models

NB- 80 W, WP light with separate 120V AC input power supply.

NN - 50 W, EXP light with separate 120V AC input power supply.

N9- 80 W, IP light with separate 230V AC input power supply.

NG - 50 W, FP light with separate 230V AC input power supply.

ND - 80 W, EXP light with separate 120V AC input power supply.

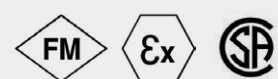N6 - 80 W, FP light with separate 230V AC input power supply.

POWER SUPPLIES

Weather proof Light /IP Models

(NB/N9) 80 Watt WP/IP Lights w/Separate Power Supply

9 - NEMA 4X / IP66 power supply with switch. User supplies 120V AC (WP Models) or 230V AC (IP Models).

0 - NEMA unrated / IP00 bare transformer. User supplies 120V AC (WP Models) or 230V AC (IP Models).

(NL/NR) 50 Watt WP/IP Lights with Integral Transformer

U - Customer supplies ON/OFF switch.

(NM/N1) 80 Watt Toroidal WP/IP Lights w/ Integral Transformer

U - Customer supplies ON/OFF switch.

J - NEMA 4X / IP66 enclosure with switch. 120V AC input.

P - NEMA 4X / IP66 enclosure with switch. 230V AC input.

Explosion proof / Flame proof Light Models

(ND/N6) 80 Watt EXP/FP Lights w/ Separate Power Supply

J - Explosion proof power supply. 120V AC input. See note 5.

N - NEMA unrated / IP00 bare transformer. User supplies 120V AC (EXP Models) or 230V AC (FP Models).

(HM/EA) 80 Watt Toroidal EXP/FP Lights w/Integral Trans.

U - Customer supplies ON/OFF switch.

(NN/NG) 50 Watt EXP/FP Lights w/ Separate Power Supply

N - NEMA unrated / IP00 bare transformer. User supplies 120V AC (EXP Models) or 230V AC (FP Models).

H - No power supply. User supplies 12V AC or 12V DC, 50W (min.) source.

(NC/NT) 50 Watt EXP/FP Lights with Integral Transformer

U - Customer supplies ON/OFF switch.

BUNDLE SHEATHING MATERIAL

S = 304 SS Sheathing

P = Polyolefin Sheathing Over 304 SS

See note 4.

BUNDLE LENGTH

0 - 12" Rigid Bundle

1 - 24" Flex Bundle

2 - 36" Flex Bundle

3 - 48" Flex Bundle

4 - 60" Flex Bundle

5 - 72" Flex Bundle

8 - 96" Flex Bundle

A - 120" Flex Bundle

C - 144" Flex Bundle

BUNDLE SELECTION

7 - Single Leg Bundle with one 90° Bend at End. 205° C Max at Tip.

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

Mounting Brackets - Required to Mount Light to New or Existing Sight Glass. Sold Separately.

12" Fiber Optic Bundle Bracket Options

LC4305-33   2" - 8", 150 # ANSI Sight Glass Mt.

24" and Larger Fiber Optic Bundle Bracket Options

LC4305-60   Universal Flanged Sight Glass Mt. Bkt.

LC4305-42   2" - 6" Canty Tri-Clamp® Sight Glasses,

3" - 8" Flush Canty Tri-Clamp® Sight Glasses

Consult factory for additional models.

Notes :

1) 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.

2) 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 ratings vary with model.

3) All Flame Proof lights are approved for use in EExd II C T6 and IP 66 locations.

4) For all models, bundle end fittings are 304L SS for light collector, emitter.

5) Explosion proof power supply enclosures are rated use in Class I, Div. 1, Groups C and D, Class II, Di Groups E, F & G locations.