

#### **ILLUMINATORS & VIEWING HOODS**

For Tubular Glass, Prismatic (Reflex), & Flat Glass Water Gages Section: R100 Bulletin: R100.41 Date: 12/1/99 Supersedes: AB8.1A, 2A

# ILLUMINATION FOR TUBULAR GLASS & PRISMATIC WATER GAGES



#### Model GL53 Gage Light

Illumination for Prismatic and Tubular Glass gages is provided by the Model GL53 Clark-Reliance Gage-Lite (Fig. 1). Easily installed and positioned with ordinary conduit, the Gage-Lite focuses light on the face of the gage.

This separate optional illuminator is suggested to improve gage reading on installations with low ambient lighting. A standard 60-watt lamp provides light through a 3/4" slot of 1/4" plate glass. Swing-away fasteners simplify lamp replacement. NOTE:ONE GL53 CAN ILLUMINATE UP TO A 2 WINDOW SECTION WATER GAGE.

NOTE 1: All above models are designed for 120 VAC supply. For 240 VAC supply applications, add (-230) as the suffix to the model number.

## WEATHERPROOF ILLUMINATED VIEWING HOODS FOR PRISMATIC GAGES

Model \* H Periscope Hoods For Prismatic Water Gages

\* = insert gage glass model number

Prismatic gage periscope illumination transmits water level readings from elevated gages down to

floor level. This hood consists of stainless steel construction, a high grade mirror, and an integral illuminator, which is attached to one side of the hood. The lamps are 100 watt incandescent type. The number of lamps are determined by the gage size.

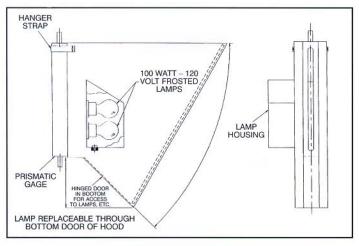
### Model \* WP Direct Vision Hoods For Prismatic Water Gages

\* = insert gage glass model number

Prismatic gage direct vision hoods may be installed to exclude other light and improve gage level visibility. We recommend that the viewing angle between horizontal plane and the line of vision, not exceed 45°.

When direct viewing of the gage is not possible, intermediate and floor stand mirrors should be employed.

This hood consists of an angular open end stainless steel housing and an integral illuminator, which is attached to one side of the hood. The lamps are 100 watt incandescent type. The number of lamps is determined by the gage size.



Ref: Bulletin AB7.1A for 3 Prismatic Water Gages

# ILLUMINATION FOR FLAT GLASS WATER GAGES

#### Standard Flat Glass Illuminators

Flat Glass Illuminators are available in vertical and horizontal designs. In operation, the lamp is positioned below the gage window. The light rays are directed upward and produce a bright, star-like spot at the water level. The 150 watt lamp is easily serviced through a hinged door on the illuminator housing on all models.

#### Vertical Design Models:

FG \* 0V (for FG400 and FG900 series gage glasses) FG150 \* V (for FG1500 and FG2000 series gage glasses) \* = insert individual gage glass window size. (4 thru 9)



The illuminator(s) are easily installed on single or multiple window section gages. Vertical models may be outfitted with a weatherproof Illuminator Hood to shield the illuminator from the outdoor elements. The lamp is vertically oriented.

#### Horizontal Design Models:

FG \* 0 (for FG400 and FG900 series gage glasses) FG150 \* (for FG1500 and FG2000 series gage glasses) \* = insert individual gage glass window size. (4 thru 9)

Horizontal Illuminators are available for standard **indoor** applications, and they require less clearance between the illuminator and the water connection piping to the gage glass for the installation. The lamp is oriented horizontally. The lamp box portion of the illuminator assembly is reversible for left or right hand installations.

NOTE 1: All above models are designed for 120 VAC supply. For 240 VAC supply applications, add (-230) as the suffix to the model number.

NOTE 2: An individual illuminator is required for each window section on multiple section water gages.

#### Model \* MLI High Intensity Flat Glass Illuminators

\* = insert gage glass model number

We recommend High-Intensity Illuminators for applications located in excess of 25' above grade, or situations where maximum gage illumination would prove to be beneficial. These Illuminators are available only in a vertical design. Each requires a separate ballast which is supplied with the MLI Illuminator.



NOTE: These illuminators are designed for 120 VAC supply. For 240 VAC supply applications, simply add (-230) as the suffix to the model number.

#### Model \* EPIH Explosionproof Flat Glass Illuminators

\* = insert gage glass model number

These illuminators are constructed with copper-free aluminium, and are attached to the gage with a stainless steel housing. The illuminators are designed for the following hazardous area classifications:

NEC Class 1, Group C & D. NEC Class 2, Group E, F, & G.

NOTE: These illuminators are designed for 120 VAC supply. For 240 VAC supply applications, simply add (-230) as the suffix to the model number.

#### Model\* WPIH Weatherproof Illuminator Hood

\*gage glass model number

These hoods are designed to provide weather protection for the vertical flat glass Illuminators. They are constructed from stainless steel. These hoods simply attach to the gage and surround the vertical type illuminators from outdoor elements.

Ref: Bulletin AB7.3A for Flat Glass Water Gages

### WEATHERPROOF VIEWING HOODS FOR FLAT GLASS GAGES

#### Model \* WPDV Direct Vision Type Hoods

\* = insert gage glass model number

Direct Vision type hoods may be installed to exclude other light and improve gage level visibility. We recommend that the viewing angle between horizontal plane and the line of vision, not exceed 45°.

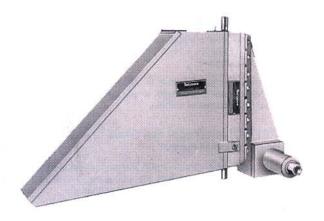
When direct viewing of the gage is not possible, intermediate and floor stand mirrors should be employed.



#### Model \* WPPH Periscope Type Hood

\* = insert gage glass model number

Periscope type hoods may be installed on high elevation boiler drum installations, or on applications with boiler room obstructions, to facilitate convenient gage visibility. Assembled onto the gage with an appropriate illuminator, the periscope hood contains a mirror which reflects the gage image vertically down to a floor stand mirror at eye level, for easy observation.



### **ILLUMINATOR OPTIONS**

#### Model TPS-120 & TPS-240 Illuminator Timer

Model TPS-120 (for 120 VAC supply) 10 AMP capacity Illuminator Timer allows illuminator lamps to light only when gage water level is being observed. Maintenance costs are reduced significantly due to far fewer lamp changes. Added savings occur in lower electricity consumption and fewer lamp purchases. The timer can be set to light lamps for periods between 2 seconds and 3 minutes. Specify model TPS-240 (for 240 VAC supply). Dimensions 6H x 4W x 4-3/4D



# MIRROR ASSEMBLIES AND ACCESSORIES



#### Models #1P and #2P Periscope Floor Stand & Mirror

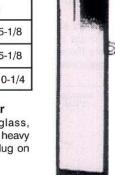
Height of mirror floor stand is adjustable between 4' and 6'. Angle of the mirror plate is adjustable also, to present the reflected image as desired. The floor stand is designed to be bolted to the floor when advisable.

Model No.	Mirror Size
#1	5-1/2 x 12
#2	5-1/2 x 24-1/8

Model No.	Size
IM-4	15-1/8 x 5-1/8
IM-5	24-1/8 x 5-1/8
IM-6	24-1/8 x 10-1/4

# Model IM-4, IM-5, IM-6 Intermediate Mirror

Made of high grade, quarter-inch plate glass, Clark-Reliance intermediate mirrors are mounted in heavy gage metal and feature a welded steel mounting lug on the rear.



For additional information, contact your local Clark-Reliance representative

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