

## TILTVIEW® BOILER WATER GAGES SPECIAL GAGES FOR ELEVATED BOILER DRUMS

**EASIER, MORE ACCURATE  
LEVEL READINGS OF  
ELEVATED BOILER DRUMS.  
PRESSURES TO 450 PSI.**

Clark-Reliance offers a selection of Tiltview Gage Assemblies for improved level reading on boiler drums installed above normal floor operations. Tiltview gages are inclined 30° toward the viewer to improve visibility and reading accuracy.

High quality components are employed throughout the assembly. Reliable Clark-Reliance bronze gage valves are combined with durable bronze screwed adaptors. Top connection is 3/4" seamless steel pipe. Centers and alignment are maintained using a steel tie rod. All passages are straight and accessible for cleaning.

*Tiltview Gage Assemblies may be offset right or left. Right hand offset, Figure 2, is furnished unless otherwise specified.*

**Water gage centers must be specified when ordering.**

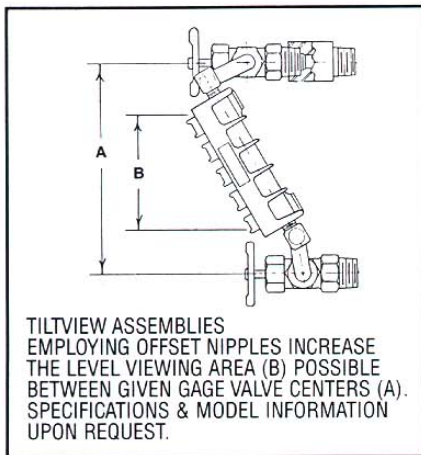


Figure 1

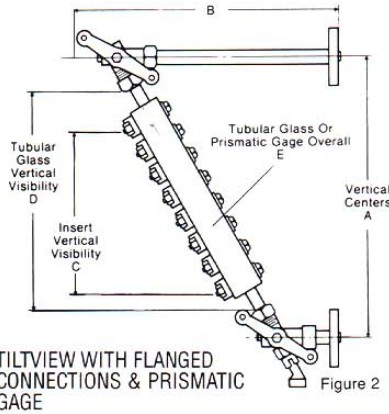
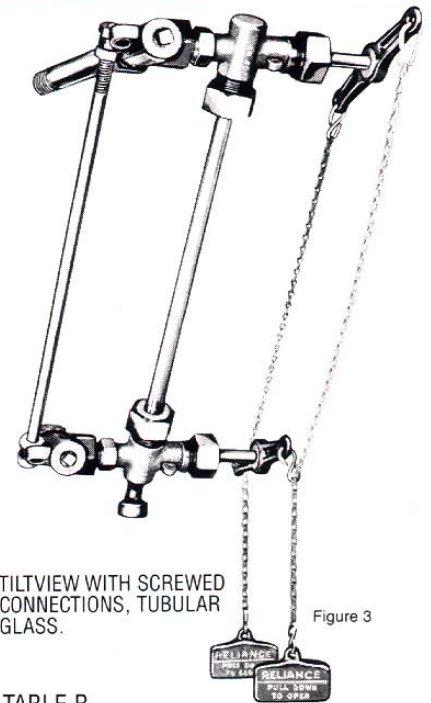


TABLE A  
STANDARD TILTVIEW DIMENSIONS

A	B	Prismatic Gage Number	C	D	E
15	16 3/4	S6	7 7/8	11	14 1/2
16	17 3/8	S7	8 3/4	12	15 3/4
17	17 7/8	S8	10 1/4	13	16 3/4
18	18 1/2	S9	10 3/4	14	18
19	19	S9	10 3/4	15	19 1/4
20	19 5/8	S44	12 7/8	16	20 1/4
21	20 1/8	S44	12 7/8	17	21 1/2
22	20 3/4	S55	14 3/4	18	22 1/2
23	21 1/4	S55	14 3/4	19	23 3/4
24	21 7/8	S66	16 7/8	20	25
25	22 1/2	S66	16 7/8	21	26
26	23	S77	18 3/4	22	27 1/4
27	23 5/8	S77	18 3/4	23	28 1/2
28	24 1/4	S77	18 3/4	24	29 1/2
29	24 3/4	S88	21 5/8	25	30 3/4
30	25 3/8	S99	22 3/4	26	31 3/4

### STANDARD ASSEMBLY COMPONENTS

Pyrex High Pressure tubular glass • 3/8" tapped bronze ell for vertical blow-off • Two 5-foot chains with handles complying with ASME Boiler Code • PACKING: Stem, BG403R-9, 3 rings per set, 1 1/64" OD x 9/16" ID x 1/4" thick • Tubular Glass, BG403R-8, 1 7/32" OD x 1 1/16" ID x 7/16" thick specially compounded rubber ring for high temperature service • Steel or cast iron gages with stainless steel nipples, BG403R-12, 1 1/4" OD x 3/4" ID x 7/16" thick, non-asbestos.



TILTVIEW WITH SCREWED CONNECTIONS, TUBULAR GLASS.

Figure 3

TABLE B  
TILTVIEW MODEL SELECTION GUIDE

Model	Connection	Gage Type	Max. Pres.	Net Wt.
602RS	1/2" Male NPT	Tubular Glass or Prismatic	250 psi	18 lbs.
603RS	3/4" Male NPT	Tubular Glass or Prismatic	250 psi	18 lbs.
605RA	3/4"-300 lb. R.F. Flange	Tubular Glass or Prismatic	250 psi	20 lbs.
604RS	3/4" Male NPT	Flat Glass	450 psi*	20 lbs.
606RA	3/4"-300 lb. R.F. Flange	Flat Glass	450 psi	26 lbs.

\*"S" Type Prismatic gages can be used to 350 PSI steam service.

**Tiltview Assemblies are also available with steel valves for applications above 450 PSI steam service. Consult factory.**

### HOW TO ORDER GAGE GLASS

In Tiltview Gage Assemblies, vertical valve centers are lengthened to the dimension shown under Column E in Table A. When ordering Prismatic gages, the overall length including nipples equals the tubular glass length. Use of metal water gages reduces the amount of visible water range from 3" to 6", depending on equipment used.

For additional information, contact your local Clark-Reliance representative

# Clark-Reliance

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NOTE: Clark-Reliance shall not be liable for damages of any kind resulting in part from failure to install its products in accordance with all applicable codes and or state and local regulations. improper application and or maintenance

# Clark-Reliance

## DIRECT-TO-DRUM ASSEMBLIES

TIE TUBE MODELS • LOOP TYPE MODELS

### DESIGNED PRIMARILY FOR INSTALLATION ON BOILER DRUMS REQUIRING TWO WATER GAGES

Clark-Reliance Direct-To-Drum Assemblies are used primarily when the ASME Boiler Code (Section I, PG-60.1.1) calls for installation of two water gages per boiler, in operations exceeding pressures of 400 PSI.

In typical dual-gage installations, a Clark-Reliance Water Column and Gage are installed on one end of the boiler drum and a Direct-To-Drum Assembly is installed on the opposite end.

For tailored Direct-To-Drum Assemblies, Clark-Reliance offers a wide selection of gages, gage valves, and illumination combinations. Figures 1 and 2 are representative of conventional and effective assemblies.

Special assemblies, employing multiple section gages or Simpliport gages, are available upon request (See Section AB7.5). Specify Clark-Reliance assemblies for maximum reliability and service life. All Clark-Reliance components are time-tested performers on installations throughout the world.

**NOTE:** Good practice calls for the installation of block valves between the Steam Drum and Water Column or Direct-To-Drum assembly, particularly on high-pressure installations. In addition, when such shut-off valves are employed, they must be of OS&Y design, of thru-flow construction, have lock-open feature, and must show by actuator position whether the valve is open or closed.



Figure 1  
SPECIFY TIE TUBE ASSEMBLIES FOR 350 PSI TO 900 PSI SYSTEMS

### CLARK-RELiance TIE TUBE ASSEMBLIES

Minimum Steam and Water Centers	Gage Number	Visibility	Water Gage Valves	Maximum Pressure Rating
23	FG909	12½	SG854	900
26	FG966	15	SG854	900
29	FG977	17½	SG854	900
31	FG988	20	SG854	900
33	FG999	21½	SG854	900

*NOTE: For applications to 350 PSI, Tie Tube Assemblies with Prismatic gages and bronze valves are available.*

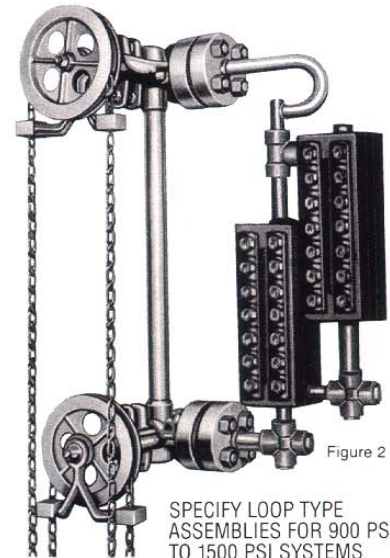


Figure 2  
SPECIFY LOOP TYPE ASSEMBLIES FOR 900 PSI TO 1500 PSI SYSTEMS

### CLARK-RELiance LOOP TYPE ASSEMBLIES

Minimum Steam and Water Centers	Gage Number	Visibility	Water Gage Valves	Maximum Pressure Rating
23	FG1507	10⅞	SG777E	1500
25	FG1555	12	SG777E	1500
28	FG1566	15	SG777E	1500
30	FG1577	17	SG777E	1500
34*	FG15666	21	SG777E	1500

\* Triple Section Gage (Not Shown)

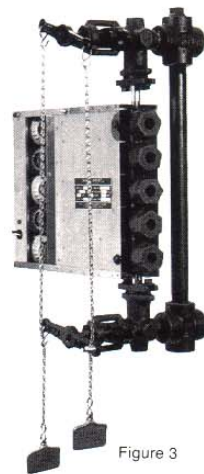


Figure 3

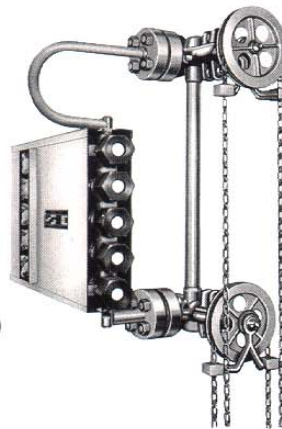


Figure 4

### DIRECT-TO-DRUM ASSEMBLIES ARE AVAILABLE WITH SIMPLIPORT® GAGES

Clark-Reliance Simpliport gages are bi-color, direct reading, and serve steam pressures from 0 to 3000 PSI. Refer to Catalog Section AB7.5 for detailed gage information, including dimension data for Tie Tube (Figure 3) and Loop (Figure 4) Direct-To-Drum installations.



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