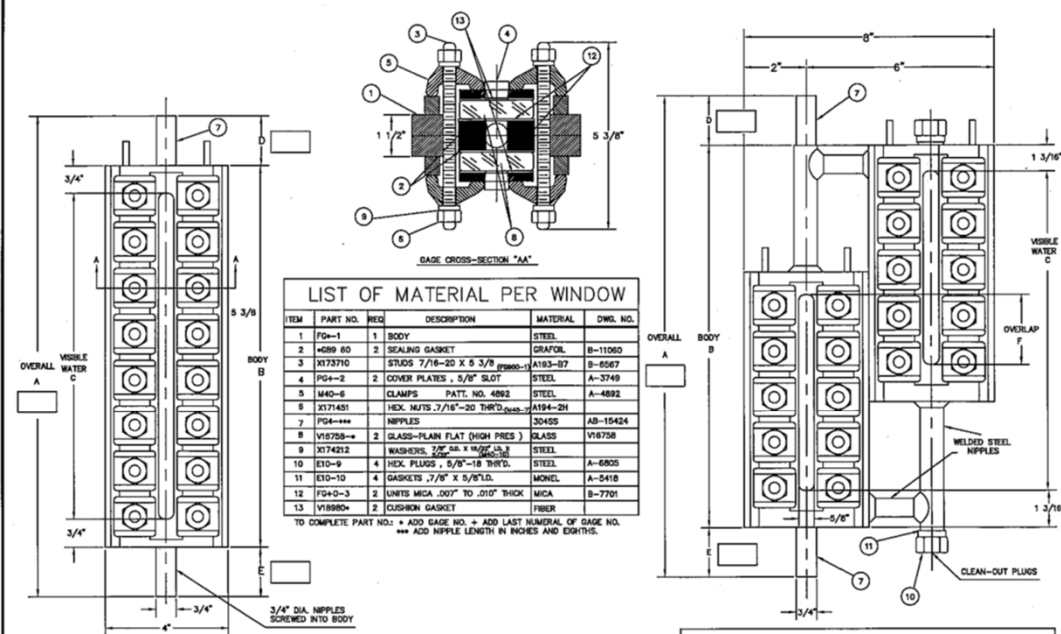


RFQ and Purchase Order Specification Work Sheets

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Flat Glass Gages



LIST OF MATERIAL PER WINDOW

ITEM	PART NO.	REQ.	DESCRIPTION	MATERIAL	DWG. NO.
1	FD-1	1	BODY	STEEL	
2	+689 80	2	SEALING GASKET	GRAFOL	B-11060
3	X173710	2	STUDS 7/16-20 X 5 3/8	A103-B7	B-6567
4	PG-2	2	COVER PLATES, 5/8" SLOT	STEEL	A-3749
5	M40-6	2	CLAMPS	PATT. NO. 4892	A-4892
6	X171451	2	HEX. NUTS 7/16-20 THRD	A194-2H	
7	FG-4	2	NIPPLES	304SS	AB-15434
8	V16728	2	GLASS-PLAIN FLAT (HIGH PRES)	GLASS	V16728
9	X174212	2	WASHERS 2 1/2" DIA X 1/8" THK	STEEL	A-6805
10	E10-9	4	HEX. PLUGS 5/8"-18 THRD	STEEL	A-6805
11	E10-10	4	GASKETS 7/8" X 5/8" LD	MONEL	A-5418
12	FG-D-3	2	UNITS MICA .0007" TO .010" THICK	MICA	B-7701
13	V18880	2	CUSHION GASKET	FIBER	

TO COMPLETE PART NO.: + ADD GAGE NO. + ADD LAST NUMERAL OF GAGE NO.
*** ADD NIPPLE LENGTH IN INCHES AND EIGHTHS.

STANDARD SIZES

GAGE NO.	A	B	C	D	E	F	QUAN.	NO. MIN.	NO. MAX.
FG968	17 3/8"	15"				3"	24	28	
FG977	19 7/8"	17 1/2"				2 3/4"	28	29	
FG988	22 3/8"	20"				3 1/2"	32	31	
FG999	23 7/8"	21 1/2"				3 1/2"	32	33	

WORKING STEAM PRESSURE 900 P.S.I.
HYDROSTATIC TEST AT 1400 P.S.I.

THE CLARK-RELIANCE CORP.
STRONGSVILLE, OHIO

FG 900 SERIES MICA-PROTECTED
FLAT GLASS GAGE

REV. 11/11

QUAN. 14

NO. 7010

NO. 14

Please complete all information fields in this worksheet and submit with your RFQ (Request For Quote) or Purchase Order. The use of these worksheets has proven to greatly decrease Engineering time and virtually eliminate specification errors.

Reliance®

A PRODUCT OF CLARK-RELIANCE

16633 Foltz Parkway • Strongsville, OH 44149 USA

Telephone: +1 (440) 572-1500

www.clark-reliance.com • RelianceAppEng@clark-reliance.com

Customer:	_____	Date:	_____
Address:	_____	P.O. No.:	_____
	_____	Quote Ref.:	_____
Contact Name:	_____	On Site Req'd.:	_____
Phone No.:	_____	Other Info.:	_____
E-mail:	_____		_____

REQUIRED INFORMATION

- ☐ Design Pressure: _____
- ☐ Design Temperature: _____
- ☐ Gage Visibility Required: _____
- ☐ Gage Model No. (if known): _____

Water Gage Valve Conns.

- ☐ ¾" O.D. Nipple (end stem)
- ☐ ½"-2500# RTJ Flange
Side Conns.
- ☐ Other (Specify below)

Water Gage Valve Set Required

Bronze

- ☐ BG402RS
- ☐ BG403RS
- ☐ BG404RS
- ☐ Other

Steel

- ☐ SG854
- ☐ SG860
- ☐ SG861U
- ☐ SG885U
- ☐ SG778
- ☐ SG777
- ☐ Other

Water Gage Valve Centers _____

Environment:

- ☐ Indoor
- ☐ Outdoor
- ☐ Hazardous Area

Illumination Required:

- ☐ None
- ☐ DuraStar LED

Viewing Hood

- ☐ None
- ☐ Direct Vision
- ☐ Periscope

Power Requirements:

- ☐ 120 VAC
- ☐ 240 VAC

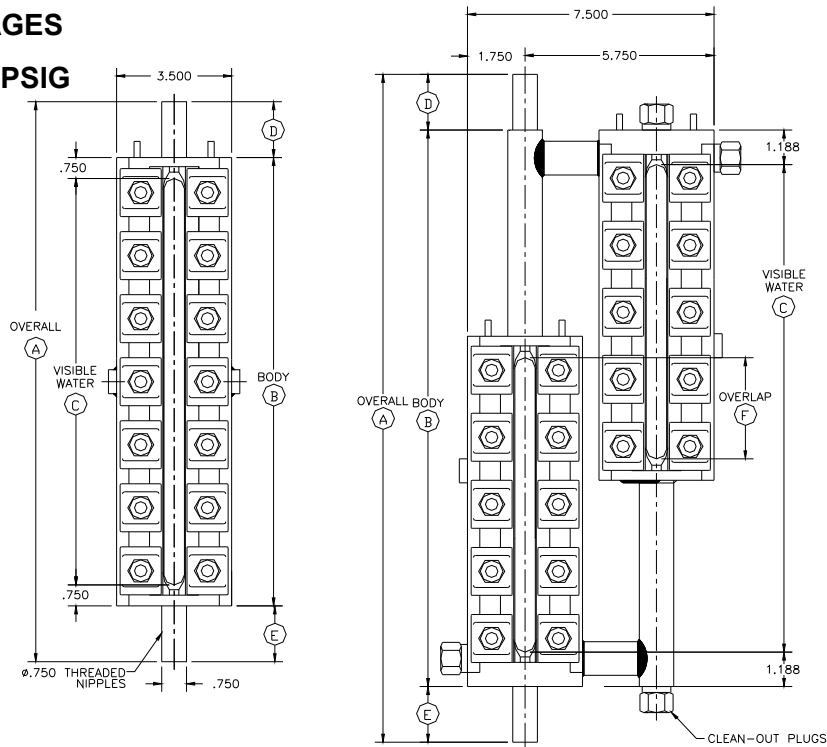
Mirror Assembly Required:

Notes:

- Available in 4 different pressure classes; 450, 900, 1500, and 2000 PSIG
- The 400, 900, and 1500 Series Gages have ¾" O.D. end nipples for stuffing box connections and use Borosilicate Glass. The 2000 Series Gages have ½"-2500# R.T.J. Side Flange connections and use Aluminosilicate glass.
- All Flat Glass gages are equipped with Mica Shields, which protect the glass from the corrosive effects of boiler water.
- When more than one window is required for specific visible ranges, the gages are assembled side-by-side and the windows are overlapped by a minimum of 1" to comply with ASME Code
- All gages over three sections must be quoted with flanged connections and appropriate valves – consult factory

FG400 SERIES GAGES

Max. Pressure 450 PSIG



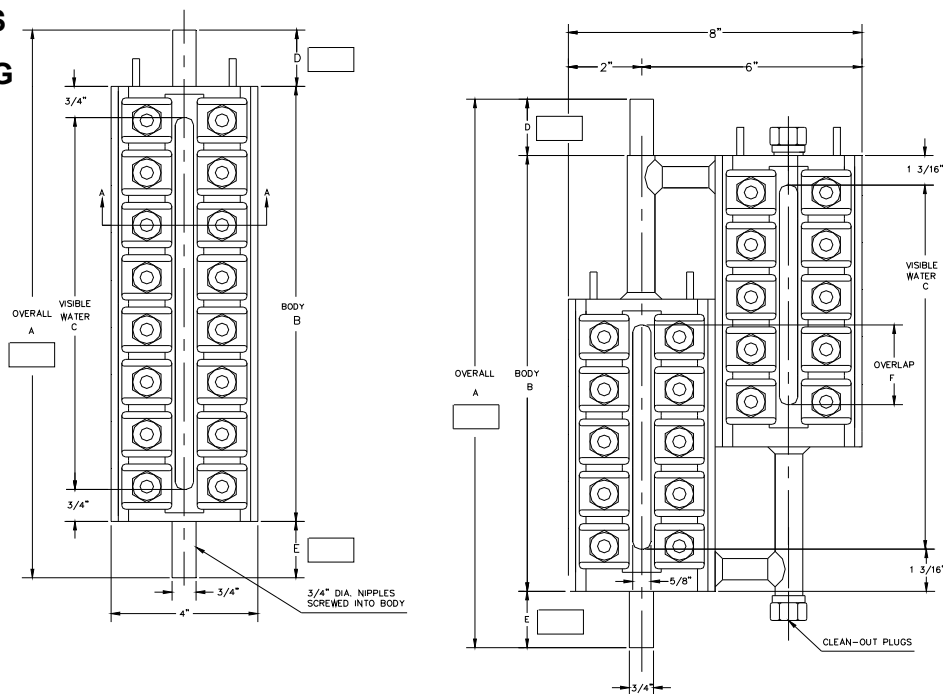
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STANDARD SIZES

PART NO.	A	B	C	D	E	F	NO. OF STUDS	MIN. SG854 W.G. CENTERS
SINGLE WINDOW GAUGES								
FG404	8.125	6.625					8	17
FG405	9.250	7.750					8	18
FG406	10.500	9.000					10	20
FG407	11.625	10.125					12	21
FG408	13.250	11.750					14	22
FG409	14.000	12.500					14	23
DOUBLE WINDOW GAUGES								
FG466	17.375	15.000			3.000		20	26
FG477	19.875	17.500			2.750		24	29
FG488	22.375	20.000			3.500		28	31
FG499	23.875	21.500			3.500		28	33

FG900 SERIES GAGES

Max. Pressure 900 PSIG



STANDARD SIZES

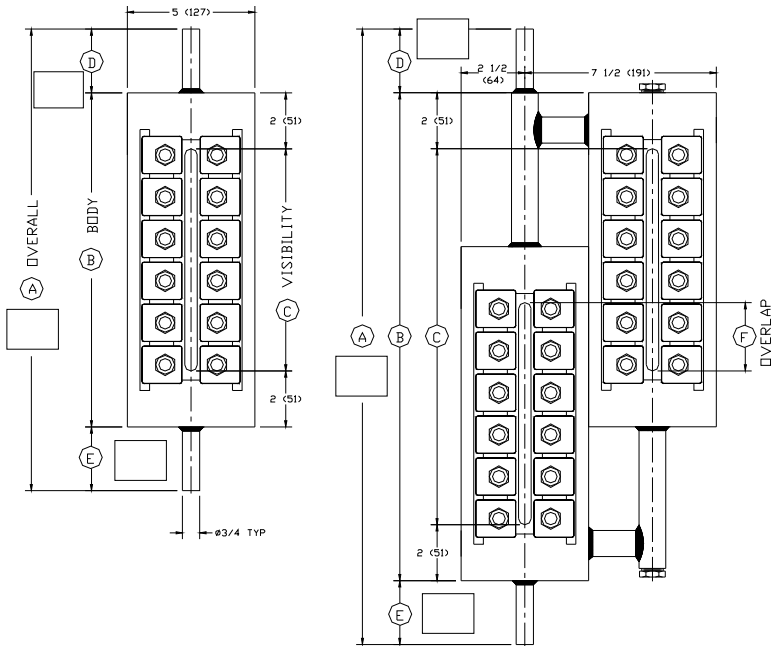
GAGE NO.	A	B	C	D	E	QUAN. NO. STUDS	MIN. SG854 W.G. CTRS
FG904	8 1/8"	6 5/8"				10	17
FG905	9 1/4"	7 3/4"				10	18
FG906	10 1/2"	9"				12	20
FG907	11 5/8"	10 1/8"				14	21
FG908	13 1/4"	11 3/4"				16	22
FG909	14"	12 1/2"				16	23
WITH SG854 SERIES VALVES D=3 1/8", E=2 1/4" (MIN.)							
WITH 403RS, 404RS SERIES VALVES D=1 3/4", E=1 3/8" (MIN.)							

STANDARD SIZES

GAGE NO.	A	B	C	D	E	F	QUAN. NO. STUDS	MIN. SG854 W.G. CTRS
FG966	17 3/8"	15"				3"	24	26
FG977	19 7/8"	17 1/2"				2 3/4"	28	29
FG988	22 3/8"	20"				3 1/2"	32	31
FG999	23 7/8"	21 1/2"				3 1/2"	32	33

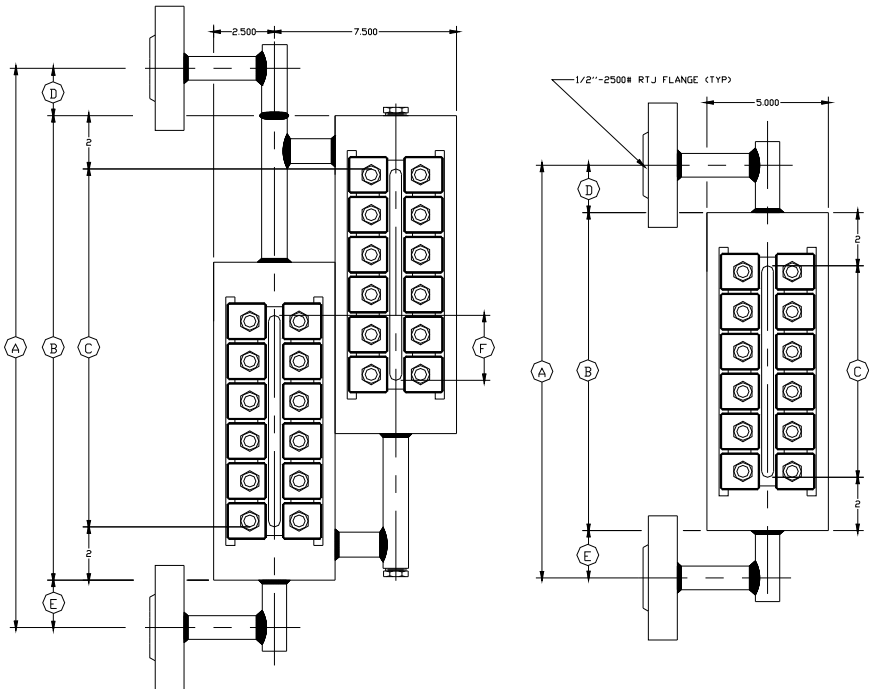
FG1500 SERIES GAGES
Max. Pressure 1500 PSIG

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STANDARD SIZES				
PART NO.	B	C	F	MIN. SG854 W.G. CENTERS
SINGLE WINDOW GAGES				
FG1504	10 5/8 (270)	6 5/8 (168)		20 (508)
FG1505	11 3/4 (298)	7 3/4 (197)		21 (533)
FG1506	13 (330)	9 (229)		23 (584)
FG1507	14 1/8 (359)	10 1/8 (257)		24 (610)
FG1508	15 3/4 (400)	11 3/4 (298)		25 (635)
FG1509	16 1/2 (419)	12 1/2 (318)		26 (660)
DOUBLE WINDOW GAGES				
FG1555	16 (406)	12 (305)	3 1/2 (89)	26 (660)
FG1566	19 (483)	15 (381)	3 (76)	29 (737)
FG1577	21 (533)	17 (432)	3 1/4 (83)	31 (787)
FG1588	23 1/2 (597)	19 1/2 (495)	4 (102)	33 (838)
FG1599	25 (635)	21 (533)	4 (102)	35 (889)

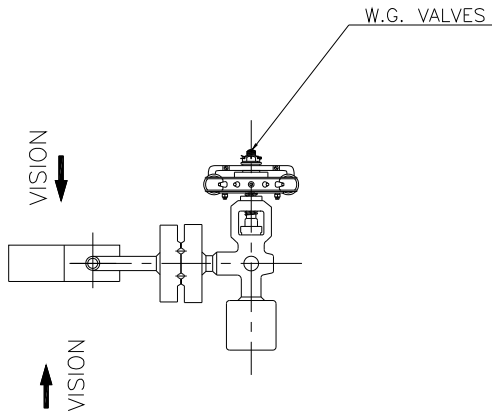
FG2000 SERIES GAGES
Max. Pressure 2000 PSIG



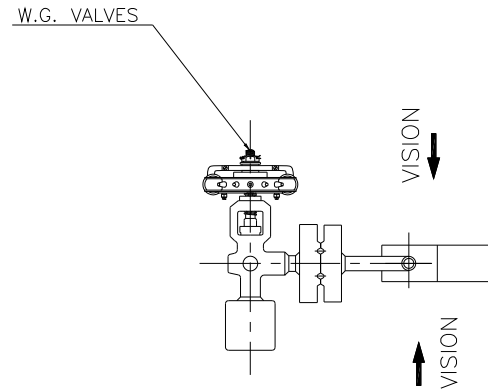
STANDARD SIZES						
PART NO.	A	B	C	D	E	F
SINGLE WINDOW GAGES						
FG2004		10.625	6.625			15
FG2005		11.750	7.750			16
FG2006		13.000	9.000			17
FG2007		14.125	10.125			19
DOUBLE WINDOW GAGES						
FG2055		16.000	12.000		3.500	20
FG2066		19.000	15.000		3.000	23
FG2077		21.000	17.000		3.250	25

NOTE: 2" MINIMUM FOR DIMENSIONS 'D' AND 'E'

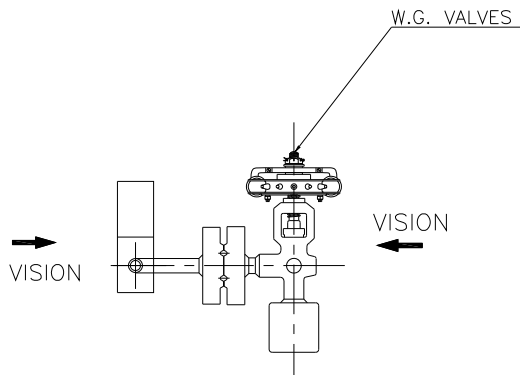
Plan View arrangements for SG600 and SG700 Series Valves with Flanged Flat Glass Gages



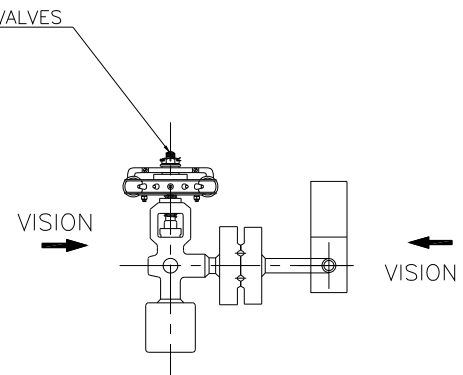
RIGHT HAND VALVE ASSEMBLY
 WITH FLAT GLASS GAGE



LEFT HAND VALVE ASSEMBLY
 WITH FLAT GLASS GAGE



RIGHT HAND VALVE ASSEMBLY
 WITH FLAT GLASS GAGE



LEFT HAND VALVE ASSEMBLY
 WITH FLAT GLASS GAGE

Additional notes:

Maximum Water Gage Visibility for Multi-Window Flat Glass Gages

	Glass Size				
# of Sections	5	6	7	8	9
Three	21 1/4" (540 mm)	25" (635 mm)	28 3/8" (721 mm)	33 1/4" (845 mm)	35 1/2" (902 mm)
Four	28" (712 mm)	33" (838 mm)	37 1/2" (953 mm)	44" (1118 mm)	47" (1194 mm)
Five	34 3/4" (883 mm)	41" (1041 mm)	46 5/8" (1184 mm)	54 3/4" (1391 mm)	58 1/2" (1486 mm)
Six	41 1/2" (1054 mm)	48" (1219 mm)	55 3/4" (1416 mm)	65 1/2" (1664 mm)	70" (1778 mm)

The above table is to be used as a reference guide for sizing of multi-section gages. Consult factory for actual gage recommendation to meet visibility requirements.

Actual visibility required:

Water Gage Valve centers:

Flange size and type:

Notes:

- 1) Minimum 1" overlap on multiple section designs per ASME Code.
- 2) Glass sizes 8 and 9 are not available with FG2000 Series Gage Glasses.
- 3) All gages with more than (3) sections must be supplied with side flanged connections for use with appropriate valves. Consult Factory for retrofit applications.
- 4) Longer visible lengths may be available on request. Consult the Factory.