

Techtrol Weld Pad Flat Glass Level Gauge- WFG

It is designed for safe and positive visual indication of liquid level in vessels under high pressure and temperature conditions. They are installed on the vessel by direct welding so as to become its integral part.

Applications :

Highly viscous liquids, liquids with suspended solids, high vibrations, limited space where thermal error due to piping not acceptable or where conventional gauge glass is impractical.

Construction:

It consists of a weld pad block, reflex transparent gauge glass, sealing gasket, cushion gasket and cover plate all held together by bolts. The gauge glass sandwiched between sealing and cushion gasket is placed on front side for viewing of liquid level and held in the recesses machined in the block and cover plate.

This ensures leak proof assembly, prevents gasket slippages and avoids glass to metal contact. The weld pad block comes in different lengths from 250 to 590mm (table 1) and its weldable side is either flat (fig a) or radius (fig b) to suit the vessel surface on which it is intended to be attached.

It is provided with an AI scale calibrated in mm (LC=10mm). As an option, frost free extension (fig c) can be provided for liquids at low temperature for prevention of 'frost formation' on out side surface of gauge glass for clear visual indication of level.

Material of construction: The standard weld pad block is made from ASTM A 105 carbon steel or SS316 / SS316L and cover plate in ASTM A 105.

However, they can be made in any other desired material on request and sufficient quantity.

Sealing gaskets :

Several gasket materials like CAF, CNAF or PTFE are available. Their selection depends upon the process temperature and the service contents in the vessel.

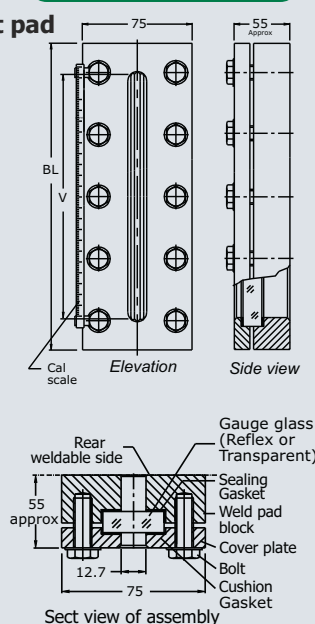
Ratings :

Is rated for pressure upto 72 Kg/cm^2 and max temperature upto 300°C (with borosilicate glass). However, with soda ash glass the pressure rating is 20 Kg/cm^2 and max temperature upto 100°C . High pressure model upto 150 Kg/cm^2 is available on demand.

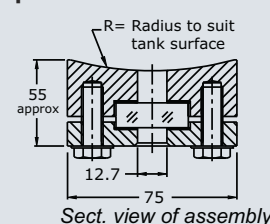


Construction

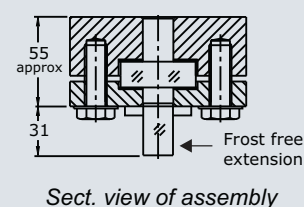
Flat pad Fig. a



Radius pad Fig b



Frost free extension Fig c



Installation :

They are installed Single (fig d) or Staggered (fig e) depending on required visibility to suit your application. Employ flat pad for flat tank surface and radius pad for curved tank surface. The weld pad can be welded on to the vessel in two ways:

- 1) Cutting a slot in the tank wall equal to the vision slot of the gauge.
- 2) Drilling two holes in the tank wall located at the top and bottom of the visible range. Ensure their diameters are equivalent to the width of the vision slot of the gauge. During the welding process, replace glass with welding insert to prevent warpage.

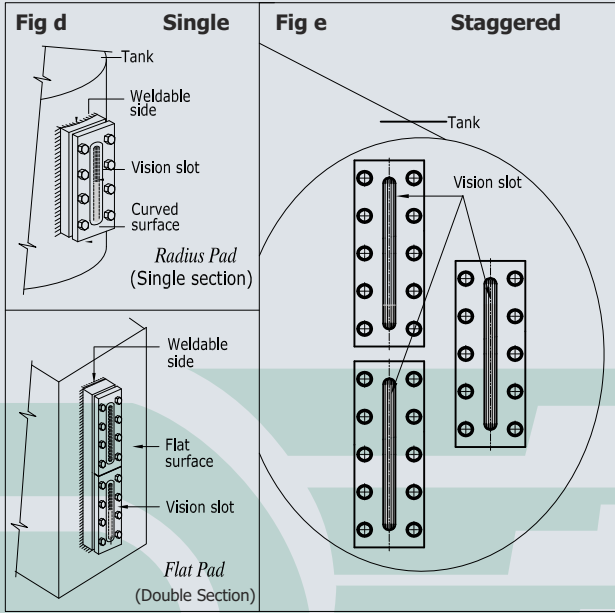


Table 1

No	Block Length BL (mm)	Visibility (mm)	No of Sections
A	205	145	1
B	230	170	1
C	260	200	1
D	290	230	1
E	320	260	1
F	360	300	1
G	380	320	1

Model Identification

WFG -

_____	_____	_____	_____	_____	_____	_____	_____
A	B	C	D	E	F	G	H
S	R	G	H	M	A	N	S
M	A	N	S	O	M	A	N
S	O	O	O	O	O	O	O
1	2	3	4	5	O	O	O
1	2	3	4	5	O	O	O

Weld Pad Block Length
 Block length x Visibility (mm)
 205 x 145 _____
 230 x 170 _____
 260 x 200 _____
 290 x 230 _____
 320 x 260 _____
 360 x 300 _____
 380 x 320 _____

Weld Pad Type
 Flat _____
 Radius _____
 Radius 6" _____
 Radius 8" _____

Weld Pad Block
 CS _____
 ASTM A-105 _____
 SS304 _____
 SS316 _____
 Others _____

Cover Plate
 CS _____
 ASTM A-105 _____
 SS304 _____
 SS316 _____

Gauge Glass
 Tempered soda ash (30W x 17mm thk) _____ 1
 Tempered borosilicate (30W x 17mm thk) _____ 2
 Others _____ O

Sealing Gasket
 CAF _____ 1
 CNAF _____ 2
 PTFE _____ 3
 SS304 impregnated graphite filler _____ 4
 SS316 impregnated graphite filler _____ 5
 Others _____ O

Glass Cushion
 CAF _____ 1
 CNAF _____ 2
 PTFE _____ 3
 SS304 impregnated graphite filler _____ 4
 SS316 impregnated graphite filler _____ 5
 Others _____ O

Ordering Information

Model No, Liquid , Optg. Temp & Pressure

Units in mm