

# KENCO KWR & KWT Weld Pad Style Flat Glass Gauges

## OVERVIEW

Kenco weld pad style flat glass gauges are produced and assembled at our state-of-the-art manufacturing facility in Tulsa, Oklahoma. Weld pad gauges are designed to be welded directly to the vessel wall and are available with either reflex or transparent glass configurations. Transparent configurations can be provided with mica or Kel-F shields if needed. Multiple different ASME approved material options are offered for the wetted chamber. All materials meet or exceed ASTM standards to withstand even the most demanding application requirements. In addition to the different material options offered, the gauge chamber can also be supplied with an optional machined radius to match the curvature of the vessel when required.

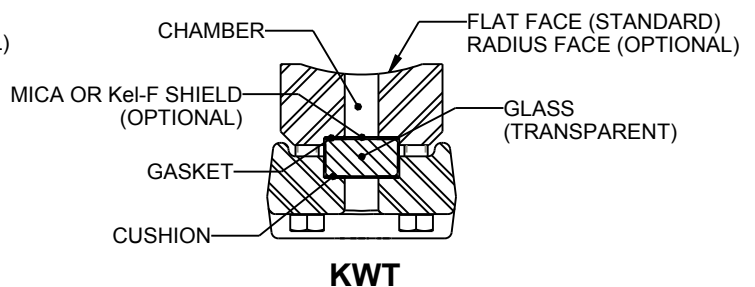
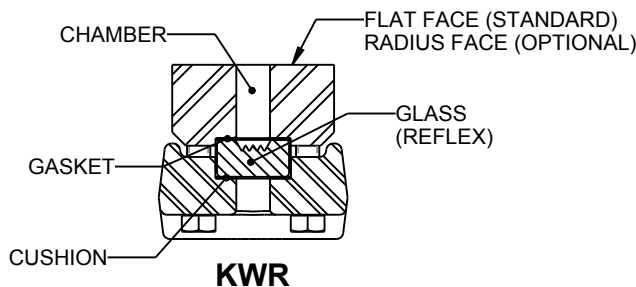


## FEATURES

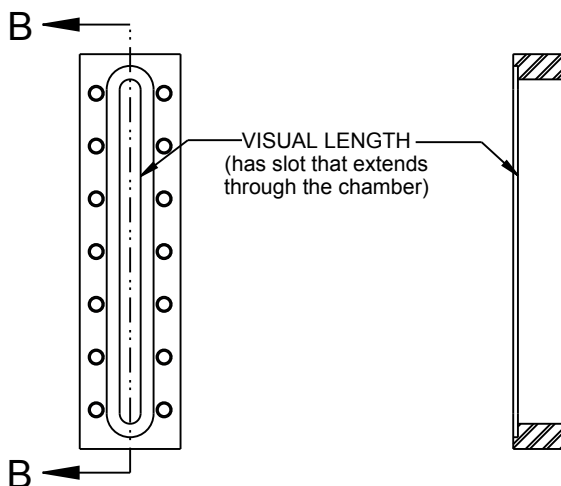
- Designed to be welded directly to vessel
- Available with reflex or transparent style glass configurations
- Transparent styles can be supplied with mica or Kel-F shields
- Chamber visual length can be supplied either fully slotted or with 2 holes and a channel. See details at bottom of page for more information
- Fully slotted chamber allows viewing of viscous liquids and liquids with solids with no piping to clog
- ASME approved materials to meet most application requirements
- 2" minimum to 12" maximum vessel matching radius can be machined in chamber upon request
- Gauges available in visual lengths from 3-3/4" to 55"
- Optional steel spacer available to reduce the risk of warpage to the gasket surface during welding process
- All forged components produced entirely from USA origin materials

Weld pad gauges should be used in non-critical applications since the vessel must be taken out of service, depressurized and drained before any maintenance is performed on the gauge. See the Installation/Operation manual for more details and minimum required safety precautions.

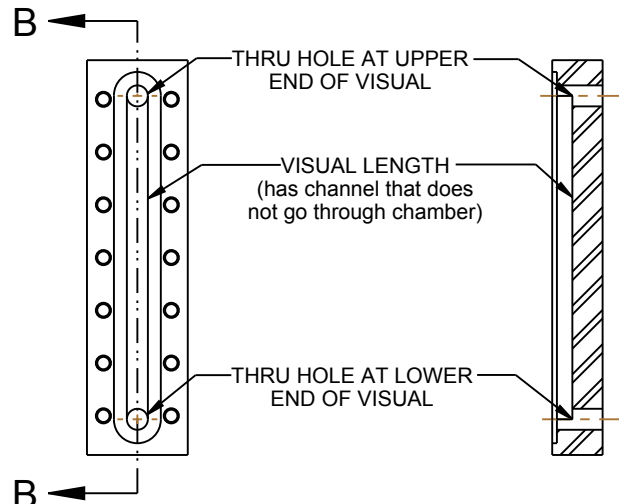
Standard weld pad gauges will withstand the pressure loads inside the gauge itself but are not designed to replace the strength lost in the wall of the vessel where the slot or holes are cut. It is impossible for the gauge manufacturer to determine the loading the vessel will impose on the gauge, therefore it is not possible to provide a pressure rating for a weld pad gauge.



## FULLY SLOTTED CHAMBER OPTION



## TWO HOLE CHAMBER OPTION

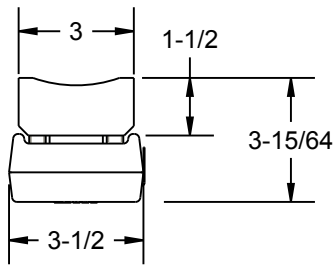


- Visual length is fully slotted and extends through the chamber
- Provides the best visual inspection of the fluid in the vessel
- Excellent for viewing the interface of two different liquids
- Recommended for use with transparent glass but can be used with reflex glass on vessels that are not fully slotted.

- Visual slot is a channel that does not go through the chamber. Liquid travels through the holes and into the channel
- Provides reinforcement for a stronger installation
- Typically the vessel is drilled instead of slotted
- Reflex glass recommended

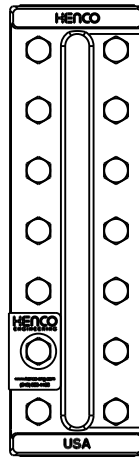
# GAUGE LENGTHS

NUMBER OF GAUGE SECTIONS	GLASS SIZE	VISIBLE LENGTH (inches)	OVERALL LENGTH (inches)	NUMBER OF GAUGE SECTIONS	GLASS SIZE	VISUAL LENGTH (inches)	OVERALL LENGTH (inches)
1	1	3.750	5.250	2	6	19.750	21.250
	2	4.750	6.250		7	22.000	23.500
	3	5.750	7.250		8	25.250	26.750
	4	6.750	8.250		9	26.750	28.250
	5	7.875	9.375	3	6	30.375	31.875
	6	9.125	10.625		7	33.750	35.250
	7	10.250	11.750		8	38.625	40.125
	8	11.875	13.375		9	40.875	42.375
	9	12.625	14.125		4	7	45.500
2	3	13.000	14.500	8		52.000	53.500
	4	15.000	16.500	9		55.000	56.500
	5	17.250	18.750				



TOP VIEW

ALL DIMENSIONS ARE REFERENCE ONLY



VISUAL LENGTH

OVERALL LENGTH

## ORDERING GUIDE:

CODE CODE DESCRIPTION

**GAUGE TYPE:**

KW WELD PAD

**GAUGE STYLE:**

R REFLEX  
T TRANSPARENT

**NUMBER OF GAUGE SECTIONS:**

1 1 GAUGE SECTION  
2 2 GAUGE SECTIONS  
3 3 GAUGE SECTIONS  
4 4 GAUGE SECTIONS

**GLASS SIZE:**

1 THRU 9 FOR 1 GAUGE SECTION  
3 THRU 9 FOR 2 GAUGE SECTIONS  
6 THRU 9 FOR 3 GAUGE SECTIONS  
7 THRU 9 FOR 4 GAUGE SECTIONS

**MATERIALS:**

A1	316 S.S. CHAMBER, 316 S.S. COVER W/O SHIELD	
A2	304 S.S. CHAMBER, 316 S.S. COVER W/O SHIELD	
C1	A36 C.S. CHAMBER, A350 C.S. COVER W/O SHIELD	
C2	1018 C.S. CHAMBER, A350 C.S. COVER W/O SHIELD	
C3	A516 C.S. CHAMBER, A350 C.S. COVER W/O SHIELD	
W1	316 S.S. (WETTED) W/O SHIELD	
W2	304 S.S. (WETTED) W/O SHIELD	
K1	316 S.S. CHAMBER, 316 S.S. COVER W/MICA SHIELD	KWT ONLY
K2	304 S.S. CHAMBER, 316 S.S. COVER W/MICA SHIELD	KWT ONLY
L1	A36 C.S. CHAMBER, A350 C.S. COVER W/MICA SHIELD	KWT ONLY
L2	1018 C.S. CHAMBER, A350 C.S. COVER W/MICA SHIELD	KWT ONLY

**CHAMBER VISUAL CONFIGURATION:**

H TWO HOLE (RECOMMENDED FOR REFLEX GLASS)  
S FULLY SLOTTED (RECOMMENDED FOR TRANSPARENT GLASS)

**OPTIONAL MACHINED RADIUS SIZE (TO MATCH VESSEL CURVATURE)**

(LEAVE BLANK FOR GAUGES WITH NO MACHINED RADIUS)  
(IN INCHES ROUNDED TO TWO DECIMAL PLACES AND THE NEAREST 1/16")  
2.00" MINIMUM  
12.00" MAXIMUM

L3	A516 C.S. CHAMBER, A350 C.S. COVER W/MICA SHIELD	KWT ONLY
M1	316 S.S. (WETTED) W/MICA SHIELD	
M2	304 S.S. (WETTED) W/MICA SHIELD	KWT ONLY
G1	316 S.S. CHAMBER, 316 S.S. COVER W/KEL-F SHIELD	KWT ONLY
G2	304 S.S. CHAMBER, 316 S.S. COVER W/KEL-F SHIELD	KWT ONLY
H1	A36 C.S. CHAMBER, A350 C.S. COVER W/KEL-F SHIELD	KWT ONLY
H2	1018 C.S. CHAMBER, A350 C.S. COVER W/KEL-F SHIELD	KWT ONLY
H3	A516 C.S. CHAMBER, A350 C.S. COVER W/KEL-F SHIELD	KWT ONLY
J1	316 S.S. (WETTED) W/KEL-F SHIELD	KWT ONLY
J2	304 S.S. (WETTED) W/KEL-F SHIELD	KWT ONLY

\* Refer to the Kenco "Flat Glass Liquid Level Gauges and Valves" brochure available on our website for more comprehensive details about Kenco flat glass gauges

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