



Informational Handbook

REVISED 2023

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Company Profile

Background: Krueger Sentry Gauge is a company built on old-fashioned values. We are a 15 employee, family owned and operated business. Every employee takes great pride in providing only the finest quality gauges backed by the best service available. Our gauges and all of the components used on our gauges are produced by us or by other American Manufacturers. A flexible manufacturing process combined with a variety of material options allows for gauges that will work in a variety of tank sizes and liquid types. *No minimum orders* *Direct ship orders accepted*

<u>What we offer</u>: We manufacture liquid level gauges primarily for above ground storage tanks. Almost all of the gauges are mechanical. Some of the accessories include very simple electronics and have remote read-out capabilities. We manufacture Level Gauges, Overfill Alert Gauges, and Leak Detection Gauges.

<u>Qualities</u>: An all mechanical design equals low cost, easy installation, very little maintenance, and high durability. Replacement parts are available. So even when the gauge seems to have reached its life, repairs are simple and inexpensive.

<u>Limitations</u>: All the level gauges are top mounted, swing arm style. The gauge gives you a simple reading of eighths and quarters of a tank. We can manufacture gauges anywhere from 6 inches in depth to 12 feet in depth. The gauges are made to order and are not field adjustable.

Warranty: Our gauges are under warranty for one year from the date of purchase. This warranty covers manufacturers defects.

We are not responsible for the following: <u>Compatibility Issues</u>: It is your responsibility to be certain that your liquid is compatible with the gauge components. We offer a suggested material based on chemical resistance books but it is the consumer's responsibility to make the final decision. <u>Sizing/Measurement Issues</u>: We produce our level gauges to your specifications. It is your responsibility to obtain the proper dimensions of the tank so we can manufacture the proper gauges. <u>Physical Damage</u>: We are not responsible for physical damage to the gauge. Parts are available to make the unit more durable if needed.



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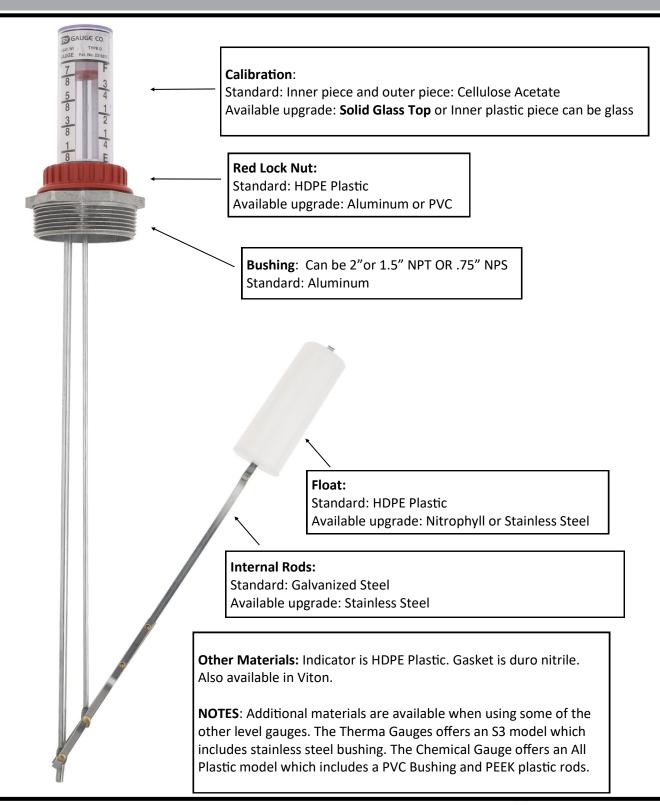
Disclaimer: The data presented in this publication is for reference only. It was compiled primarily from outside sources provided by feedstock materials suppliers and resin manufacturers, and is offered to our customers as a means of comparing the characteristics of resins and materials used by Krueger Sentry Gauge at the time of this publication. The particular conditions of your use and application of our products are beyond our control. Thus, it is imperative that you test our products in your specific application to determine their ultimate suitability. All information is provided without implied or expressed warranty or guarantee by Krueger Sentry Gauge, or the resin and feedstock manufacturers. Krueger Sentry Gauge assumes no liability with respect to the accuracy or completeness of the information contained herein and none of the information provided constitutes a recommendation or endorsement of any kind by Krueger Sentry Gauge.

Recommended Gauge	Gauge Components	Chemical
Standard	Plastic calibration, HDPE lock nut, Nitrile Gasket, Aluminum Bushing, Galvanized Steel Rods, and HDPE Floats	Gasoline, Hydraulic Oil, Transmission Fluid, Isopropyl
NTF	Plastic calibration, HDPE lock nut, Nitrile Gasket, Aluminum Bushing, Galvanized Steel Rods, and Nitrophyll Floats	Diesel and Mineral Spirits
SSF	Plastic calibration, HDPE lock nut, Nitrile Gasket, Aluminum Bushing, Galvanized Steel Rods, and Stainless Steel Floats	Break Fluid, Methyl Ethyl Ketone
S1	Plastic calibration, HDPE lock nut, Nitrile Gasket, Aluminum Bushing, Stainless Steel Rods, and HDPE Floats	Citric Acid
S1-GLC	Glass calibration, HDPE lock nut, Nitrile Gasket, Aluminum Bushing, Stainless Steel Rods, and HDPE Floats	Methanol, Windshield Washer Fluid
S2	Plastic calibration, HDPE lock nut, Nitrile Gasket, Aluminum Bushing, Stainless Steel Rods, and Stainless Steel Floats	Acetone, Antifreeze, Ammonia, JP-5, JP-8, Jet Fuel, Kerosene, Nitric Acid, Paint Resin, Crude/ Waste Oil
S2-VTN	Plastic calibration, HDPE lock nut, Viton Gasket, Aluminum Bushing, Stainless Steel Rods, and Stainless Steel Floats	Biodiesel/Methyl Oleate
S3	Glass calibration, Aluminum lock nut, Viton Gasket, Stainless Steel Bushing, Stainless Steel Rods, and Stainless Steel Floats	Caustic/ Sodium Hydroxide, Diesel Exhaust Fluid (DEF), E-85, Ethanol, Peroxide, Potassium Hydroxide, Urea, Concentrated Sulfuric Acid
Peek Plastic Gauge	Glass calibration, PVC lock nut, Viton Gasket, PVC Bushing, Peek Plastic Rods, and HDPE Floats	Bleach/Sodium Hypochlorite, Ferric Chloride, Hydrochloric Acid, Phosphoric Acid
Kynar Gauge	Glass calibration, PVC lock nut, Viton Gasket, PVC Bushing, Kynar Rods, and HDPE Floats	Chlorine, Low Percentage Sulfuric Acid

At-A-Glance® Direct Reading Gauge (Type D)

PICTURE AND COMPONENT EXPLANATION

Top Mount Mechanical Liquid Level Swing Arm Style Gauge Standard Construction is ULC approved



At-A-Glance® Direct Reading Gauge (Type D)

Ordering Information

Top Mount Mechanical Liquid Level Swing Arm Style Gauge Standard Construction is ULC approved (ULC 75E0)

- · Custom sizes from 6 inches to 144 inches
- Available in .75" NPS, 1.5" NPT, and 2" NPT opening
- Multiple material options and accessories available
- · Cost effective durable design
- Can accommodate pipe risers, vaulted, and double wall tanks
- When ordering specify your size opening and exact tank depth every gauge is made custom to fit your tank

Compatible Chemicals

- Diesel
- Gasoline
- Hydraulic Oil
- Isopropyl
- Methanol (add GLC)
- Windshield Washer Fluid (add GLC)
- Mineral Spirits (add NTF)
- (call for more info)

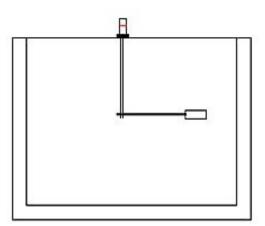
Part Number Key: Gauge Type—Size Opening—Tank Depth + Extension—Accessories
(Tank Depth = empty to full, Extension = full to threads)

Examples:

D-2-48+6 (2" opening, 48" tank depth, 6" riser)
D-1.5-36-GLC (1.5" opening, 36" tank depth, glass calibration)
D-2-42+12-S1 (2" opening, 42" tank depth, 12" riser, stainless steel rods)

For more information visit www.ksentry.com/ordhelp.htm

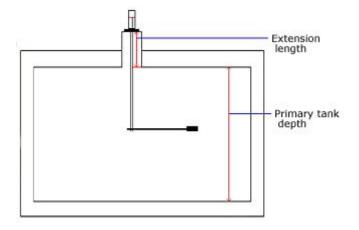
For standard tanks: No pipe riser, no top double wall.



For Vaulted / Pipe Riser Applications:

Use these instructions when you have a pipe riser or double wall.

Example: There is significant space between where the gauge float reads full, and where the gauge threads in. This is the extension.



Pricing for Extensions: Double the extension and add to the primary depth

Example P/N: D-2-48+12

It is NOT priced out as a 60" (48+12)

It is priced as a 72" (48+12+12)

At-A-Glance® Direct Reading Gauge (Type D)

UPGRADES AND REPLACEMENT PARTS

Upgrades and Add-on Accessories

Accessories	Add-on
Inner Glass Calibration	GLC
Solid Glass Package	SGC
Aluminum Lock Nut	ALN
Viton Gasket	VTN
Nitrophyll Float	NTF
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
Vented Bushing	VNT
Alarms/Remote Displays	See pages 34-35



Replacement Parts

Individual Parts

Description	Part Number	
Plastic Calibration (Std)	D-CAL	
Inner Glass Calibration	DG-CAL	(
	DSG-CAL	
Solid Glass Calibration		
Calibration Paper	D-PAP	[
Indicator Disc	D-IND	
Duro Nitrile Gasket (Std)	D-GAS	(
Viton Gasket	D-VTN	6
Red Lock Nut	D-RDN	
Aluminum Lock Nut	D-ALN	1
Aluminum Gauge Guard	ALG	9
PVC Gauge Guard	PVG	t
Polyethylene Float (Std)	PLF	1
Nitrophyll Float	NTF	

Repair Kits

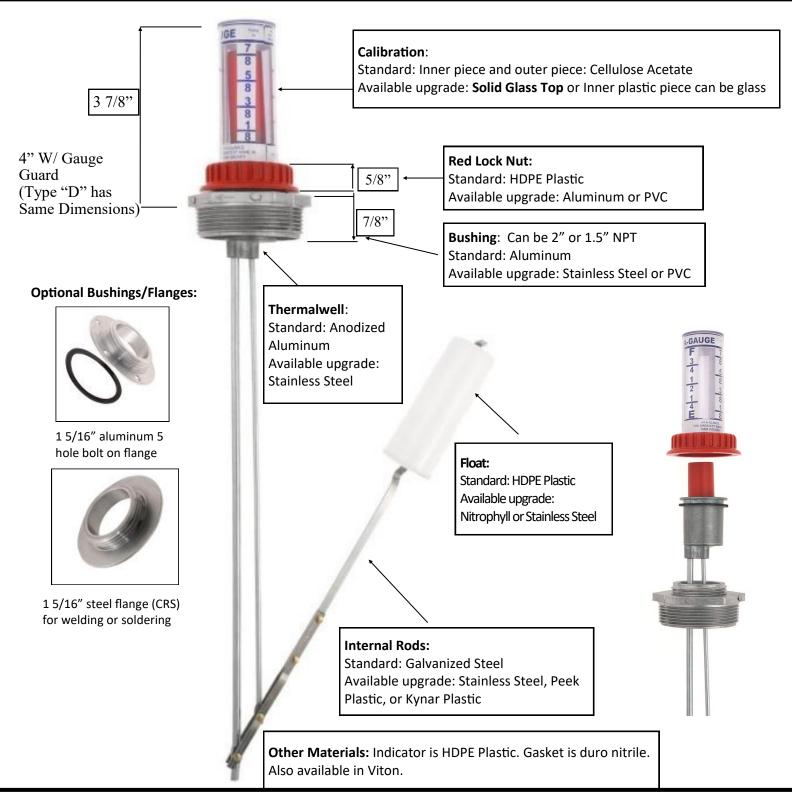
Description	Part Number
Calibration, Indicator Disc, Gasket, and Red Lock Nut	D-KIT
	DG-KIT
Inner Glass Calibration, Indicator Disc, Gasket, and Red Lock Nut	
	DALN-KIT
Calibration, Indicator Disc, Gasket, and Aluminum Lock Nut	
Inner Glass Calibration, Indicator Disc, Gasket, and Aluminum Lock Nut	DGALN-KIT
Solid Glass Calibration Top, Indica- tor Disc, Gasket, Aluminum Lock Nut	DSG-KIT

Therma Gauge (Type H)

PICTURE AND COMPONENT EXPLANATION

Top Mount Mechanical Liquid Level Swing Arm Style Gauge More control over swing arm direction

(Approved in FL for overfill protection)



Therma Gauge (Type H)

Ordering Information

Top Mount Mechanical Liquid Level Swing Arm Style Gauge—More control over swing arm direction (Approved in FL for overfill protection)

- Custom sizes from 6 inches to 144 inches
- Available in 1.5" and 2" NPT opening and 1 5/16" flanges
- Multiple material options and accessories available
- · Cost effective durable design
- Can accommodate pipe risers, vaulted, and double wall tanks
- When ordering specify your size opening and exact tank depth—every gauge is made custom to fit your tank

Compatible Chemicals

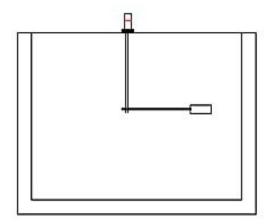
- Diesel
- Gasoline
- Hydraulic Oil
- Isopropyl
- Methanol (add S1, GLC)
- Windshield Fluid (add GLC)
- Mineral Spirits (add S1, NTF)
- (call for more info)

Part Number Key: Gauge Type—Size Opening—Tank Depth + Extension—Accessories
(Tank Depth = empty to full, Extension = full to threads)

Examples:

H-1.5-36-GLC (1.5" opening, 36" tank depth, glass calibration)
H-2-42+12-S1 (2" opening, 42" tank depth, 12" riser, stainless steel rods)
For more information visit www.ksentry.com/ordhelp.htm

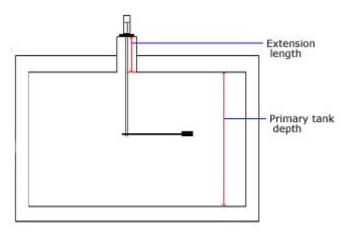
For standard tanks: No pipe riser, no top double wall.



For Vaulted / Pipe Riser Applications:

Use these instructions when you have a pipe riser or double wall.

Example: There is significant space between where the gauge float reads full, and where the gauge threads in. This is the extension.



Pricing for Extensions: Double the extension and add to the primary depth

Example P/N: H-2-48+12

It is NOT priced out as a 60" (48+12)

It is priced as a 72" (48+12+12)

Therma Gauge (Type H)

UPGRADES AND REPLACEMENT PARTS

Upgrades and Add-on Accessories

Accessories	Add-on
Inner Glass Calibration	GLC
Solid Glass Package	SGC
Aluminum Lock Nut	ALN
Viton Gasket	VTN
Nitrophyll Float	NTF
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
1 5/16" Flange with ALN	Call us
Alarms/Remote Displays	See pages 34-35



Replacement Parts

Individual Parts

Description	Part Number
Plastic Calibration (Std)	H-CAL
Inner Glass Calibration	HG-CAL
	HSG-CAL
Solid Glass Calibration	
Calibration Paper	H-PAP
Indicator Tube	H-IND
Duro Nitrile Gasket (Std)	H-GAS
Viton Gasket	H-VTN
Red Lock Nut	H-RDN
Aluminum Lock Nut	H-ALN
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
Polyethylene Float (Std)	PLF
Nitrophyll Float	NTF
Bushing 1.5" and 2"	H-1.5B & H-2B

Repair Kits

Description	Part Number
Calibration, Indicator Tube, Gasket, and Red Lock Nut	H-KIT
Glass Inner Calibration, Indicator Tube, Gasket, and Red Lock Nut	HG-KIT
Calibration, Indicator Disc, Gasket, and Aluminum Lock Nut	HALN-KIT
Glass Inner Calibration, Indicator Tube, Gasket, and Aluminum Lock Nut	HGALN-KIT
Solid Glass Calibration Top, Indicator Tube, Gasket, Aluminum Lock Nut	HSG-KIT



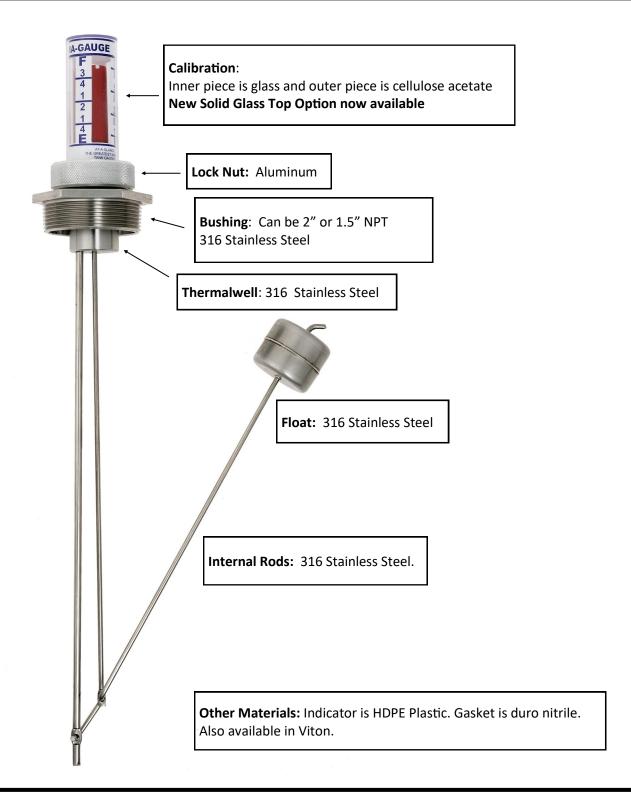
NEW Solid Glass Repair Kit - HSG-Kit

All Stainless Steel Therma Gauge (Type H-S3)

PICTURE AND COMPONENT EXPLANATION

Top Mount Mechanical Liquid Level Swing Arm Style Gauge
More control over swing arm direction

(Approved in FL for overfill protection)



All Stainless Steel Therma Gauge (Type H-S3)

Ordering Information

Top Mount Mechanical Liquid Level Swing Arm Style Gauge

- Custom sizes from 12 inches to 120 inches
- · Available in 1.5" and 2" NPT opening
- Can accommodate pipe risers, vaulted, and double wall tanks
- When ordering specify your size opening and exact tank depth—every gauge is made custom to fit your tank
- Useful for chemical applications/Alternative Fuels

Compatible Chemicals

- Caustic
- Sodium Hydroxide
- E-85
- Ethanol
- Peroxide
- Potassium Hydroxide
- DEF
- Sulfuric Acid (Concentrated)

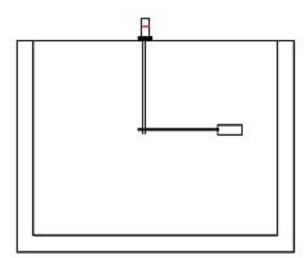
Part Number Key: Gauge Type—Size Opening—Tank Depth + Extension—Accessories

(Tank Depth = empty to full, Extension = full to threads)

Examples:

H-1.5-36-GLC (1.5" opening, 36" tank depth, glass calibration)
H-2-42+12-S3 (2" opening, 42" tank depth, 12" riser, stainless steel rods, floats, and bushing)
For more information visit www.ksentry.com/ordhelp.htm

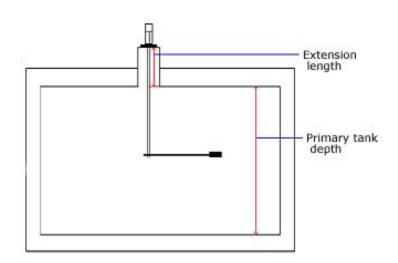
For standard tanks: No pipe riser, no top double wall.



For Vaulted / Pipe Riser Applications:

Use these instructions when you have a pipe riser or double wall.

Example: There is significant space between where the gauge float reads full, and where the gauge threads in. This is the extension.



All Stainless Steel Therma Gauge (Type H-S3)

REPLACEMENT PARTS

Description	Part Number
Inner Glass Calibration	HG-CAL
Solid Glass Calibration	HSG-CAL
Calibration Paper	H-PAP
Indicator Tube	H-IND
Duro Nitrile Gasket (Std)	H-GAS
Viton Gasket	H-VTN
Aluminum Lock Nut	H-ALN
Stainless Steel Lock Nut	SSN
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
Inner Glass Calibration, Indicator Tube, Gasket and Aluminum Lock Nut	HGALN-KIT
	HSG-KIT
Solid Glass Calibration Top, Indicator Tube, Gasket, Aluminum Lock Nut	
Alarms/Remote Displays	See pages 34-35





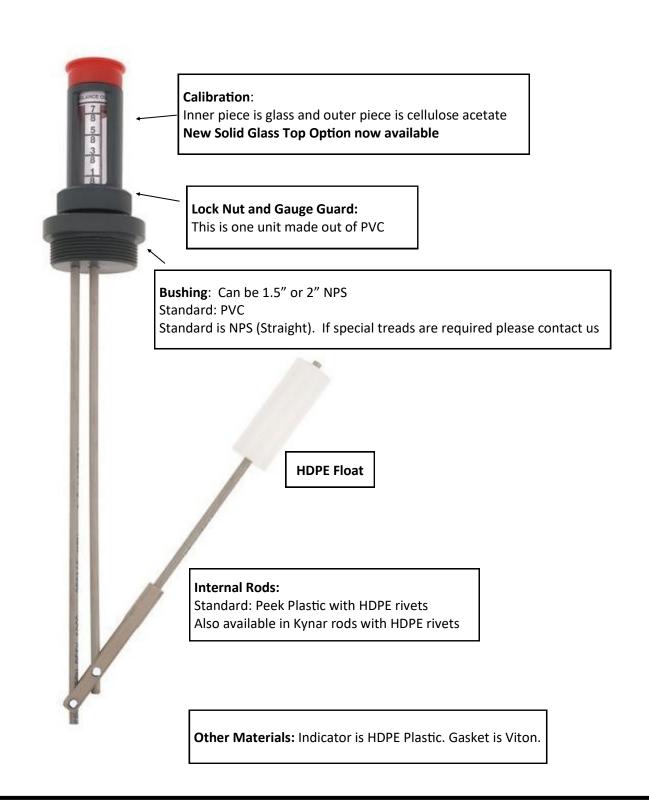


PVG

Peek Plastic Gauge (Type PD or PH)

PICTURE AND COMPONENT EXPLANATION

Top Mount Mechanical Liquid Level Swing Arm Style Gauge



Peek Plastic Gauge (Type PD or PH)

GAUGE INFORMATION

Top Mount Mechanical Liquid Level Swing Arm Style Gauge

- Peek Rods: custom sizes from 17 inches to 110 inches
- Kynar Rods: custom sizes from 17 inches to 76 inches
- Available in 1.5" and 2" NPS opening
- Can accommodate pipe risers, vaulted, and double wall tanks
- Useful for chemical applications
- When ordering specify your size opening and exact tank depth—every gauge is made custom to fit your tank

Compatible Chemicals		
Peek Rods	Kynar Rods	
Bleach	Chlorine	
Ferric Chloride	Sulfuric Acid Low %	
Hydrochloric Acid		
Phosphoric Acid		

Part Number Key: Gauge Type—Size Opening—Tank Depth + Extension—Accessories

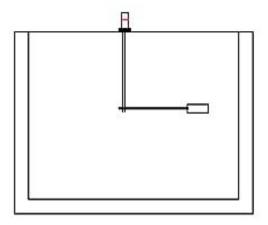
(Tank Depth = empty to full, Extension = full to threads)

Examples:

PH-2-48+6 (Type H Plastic, 2" opening, 48" tank depth, 6" riser)
PD-1.5-36 (Type D Plastic, 1.5" opening, 36" tank depth)
PH-2-64-KYNAR (Type H Plastic, 2" opening, 64" tank depth, Kynar Rods)

For more information visit www.ksentry.com/ordhelp.htm

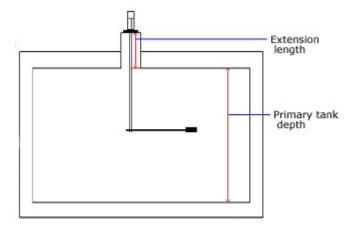
For standard tanks: No pipe riser, no top double wall.



For Vaulted / Pipe Riser Applications:

Use these instructions when you have a pipe riser or double wall.

Example: There is significant space between where the gauge float reads full, and where the gauge threads in. This is the extension.



Difference between PH and PD

Type PH: designed like the Therma Type H Gauge which allows you to precisely aim your swing arm, allowing you to avoid walls and baffles (see pages 9-12)

Type PD: designed like the At-A-Glance® Type D Gauge (see pages 5-8)

Peek Plastic Gauge (Type PD or PH)

REPLACEMENT PARTS

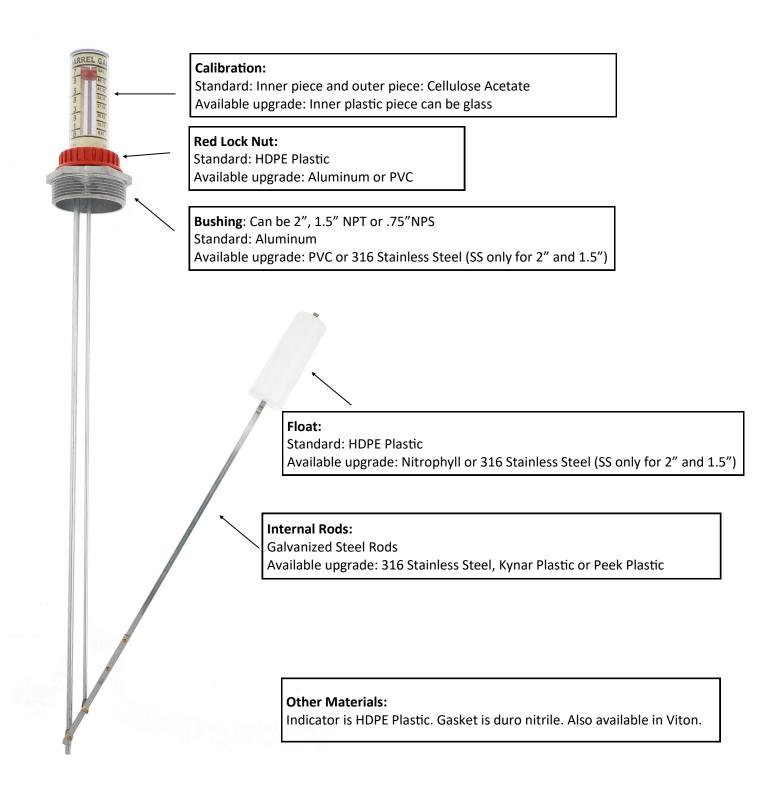
Description	Part Number
Glass Calibration	DG-CAL or HG-CAL
Solid Glass Calibration	HSG-CAL
Calibration Paper	D-PAP or H-PAP
Indicator Disc	D-IND
Indicator Tube	H-IND
Viton Gasket	VTN

Description	Part Number
Polyethylene Float	PLF
PVC Gauge Guard	PVG
Glass Inner Calibration, Indicator Tube, Viton Gasket, and PVC Gauge Guard	PH-KIT
Glass Calibration, Indicator Disc, Viton	r ii-Kii
Gasket, and PVC Gauge Guard	PD-KIT
Solid Glass Calibration, Indicator Tube, Viton Gasket, and PVC Gauge Guard	PHSG-KIT

Barrel Gauge (Type B)

PICTURE AND COMPONENT EXPLANATION

Top Mount Mechanical Liquid Level Swing Arm Style Gauge
—Designed for 15, 30, or 55 gallon drums



Barrel Gauge (Type B)

GAUGE INFORMATION

Top Mount Mechanical Liquid Level Swing Arm Style Gauge
—Designed for 15, 30, or 55 gallon drums

- Sizes for 55, 30, or 15 gallon drum tanks
- Available in .75" NPS, 1.5" NPT, and 2" NPT opening
- Has a gallon, liters and 1/8 increment read out
- Multiple material options and accessories available
- When ordering we need to know your size opening and gallon size

Part Number Key: Gauge Type—Gallon Size—Size Opening—Accessories

Examples:

B-55-.75 (for a 55 gallon tank, 3/4" opening)
B-55-2-S1-GLC (for a 55 gallon tank, 2" opening, stainless steel rods, glass calibration)

B-15-2-ALN (for a 15 gallon tank, 2" opening, aluminum lock nut)

For more information visit www.ksentry.com/ordhelp.htm



Compatible Chemicals (some examples for reference only)					
Standard	Stainless Rods (S1)	Stainless Rods/Floats (S2)	ALL SS (S3)	Peek Rods	Kynar Rods
Diesel	Methanol (add GLC)	Acetone	Caustic	Bleach	Chlorine
Gasoline	Citric Acid	Ammonia	Sodium Hydroxide	Ferric Chloride	Sulfuric Acid
Hydraulic Oil		Antifreeze	E-85	Hydrochloric Acid	
Isopropyl		Bio Diesel	Ethanol	Phosphoric Acid	
		Brake Fluid	DEF		
		MEK	Peroxide		

Barrel Gauge (Type B)

UPGRADES AND REPLACEMENT PARTS

Upgrades and Add-on Accessories

Accessories	Add-on
Inner Glass Calibration	GLC
Aluminum Lock Nut	ALN
Viton Gasket	VTN
Nitrophyll Float	NTF
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
Alarms/Remote Displays	See pages 34-35



Replacement Parts

Individual Parts

Description	Part Number
Plastic Calibration (Std)	B-CAL
Glass Calibration	BG-CAL
Calibration Paper (specify gallon)	B-PAP(gallon)
Indicator Disc	B-IND
Duro Nitrile Gasket (Std)	B-GAS
Viton Gasket	B-VTN
Red Lock Nut	RDN
Aluminum Lock Nut	B-ALN
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
Polyethylene Float (Std)	PLF
Nitrophyll Float (3/4")	NTF.75
Nitrophyll Float	NTF

Kits

specify gallon size

Description	Part Number
Calibration, Indicator Disc, Gasket, and Red Lock Nut	B-KIT
Glass Calibration, Indicator Disc, Gasket, and Red Lock Nut	BG-KIT
Calibration, Indicator Disc, Gasket, and Aluminum Lock Nut	BALN-KIT
Glass Calibration, Indicator Disc, Gasket, and Aluminum Lock Nut	BGALN-KIT

Leak Interstitial Monitor Gauge (Type K)

PICTURE AND COMPONENT EXPLANATION

Top Mount Mechanical Leak Detection Gauge

(Approved in FL and MI for leak protection)



Calibration:

Standard: Inner piece and outer piece: Cellulose Acetate

Available upgrade: Solid Glass Top or Inner plastic piece can be glass

Red Lock Nut:

Standard: HDPE Plastic

Available upgrade: Aluminum or PVC

Bushing: Can be 1.5" or 2" NPT or .75" NPS

Standard: Aluminum

Available upgrade: PVC (NPS) and Stainless Steel *British standard pipe threads available (BSPT)

Thermalwell:

Standard: Anodized Aluminum

Available upgrade: PVC and Stainless Steel



Internal Rods: Aluminum Rods.

1/8" compression union for 43" to 76" gauges 3/16" self align union for 77" to 170" gauges



Other Materials:

Indicator is HDPE Plastic. Gasket is duro nitrile. Also available in Viton.

Leak Interstitial Monitor Gauge (Type K)

GAUGE INFORMATION

Top Mount Mechanical Leak Detection Gauge

(Approved in FL and MI for leak protection)

- Designed to detect leaks in double wall containment systems, interstitial spaces, and monitoring pipes
- Custom sizes from 6 inches to 170 inches
 - Available in 1.5" NPT opening for sizes 6" to 76"
 - Available in 2" NPT opening for sizes 6" to 170"
 - Available in .75" NPS opening for sizes 6" to 76"
- Simple and effective
- Third party testing documents available
- When ordering specify your size opening and exact tank depth—every gauge is made custom to fit
 your tank

Part Number Key: Gauge Type—Size Opening—Tank Depth—Accessories

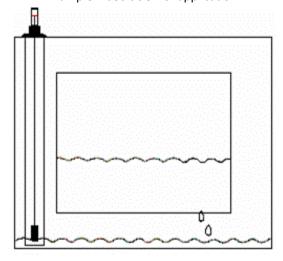
(Tank depth = bottom of tank to threads)

Examples:

K-1.5-48 (1.5" opening, 48" tank depth)
K-2-96-ALG (2" opening, 96" tank depth, aluminum gauge guard)

For more information visit www.ksentry.com/ordhelp.htm

Example illustration of application:



The Interstitial Leak Gauge is custom made in house to fit your tank.

We can accommodate any size tank from 6 inches to 170 inches in depth.

If you have a monitoring pipe or have a threaded fitting at the top of the interstitial space on a double wall containment tank, this monitor will thread right in. Any liquid seeping into the containment space will cause the float to rise which will provide a visual indication on top of the tank that there is liquid in the interstitial containment area.

Leak Interstitial Gauge Pricing (Type K)

UPGRADES AND ADD-ON ACCESSORIES



Accessories	Add-on
Glass Calibration	GLC
Solid Glass Package	SGC
Aluminum Lock Nut	ALN
Viton Gasket	VTN
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
Alarms/Remote Displays	34-35

NEW Solid Glass Option: KSG Kit Pictured

REPLACEMENT PARTS PRICING

Individual Parts

Repair Kits

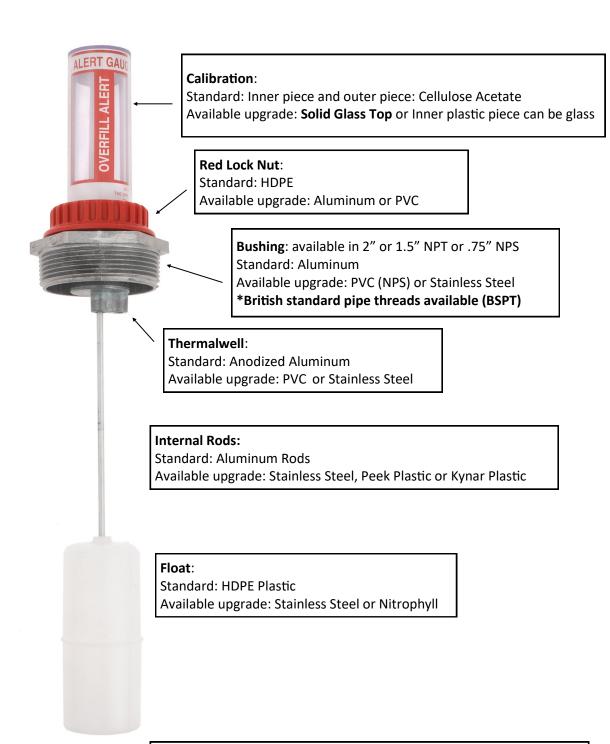
Description	Part Number	Description	Part Number
Plastic Calibration (Std)	K-CAL	·	
Glass Calibration	KG-CAL	Calibration, Gasket, Red Lock	
Solid Glass Calibration	KSG-CAL	Nut, Indicator Tubes, and Clips	K-KIT
(requires Aluminum Nut)			
Calibration Paper	K-PAP	Glass Calibration, Gasket, Red Lock Nut, Indicator Tubes, and	
Indicator Tube	K-IND	Clips	KG-KIT
Duro Nitrile Gasket (Std)	K-GAS	Calibration, Gasket, Aluminum	
Red Lock Nut	K-RDN	Lock Nut, Indicator Tubes, and	
Aluminum Lock Nut	K-ALN	Clips	KALN-KIT
Aluminum Gauge Guard	ALG	Clara Calibratian Cashat	
PVC Gauge Guard	PVG	Glass Calibration, Gasket, Aluminum Lock Nut, Indicator	
Bushing 1.5" and 2"	K-1.5B & K-2 B	Tubes, and Clips	KGALN-KIT
1/8" Union (6"-76")	1/8Comp	Tubes, and enps	KO/LEIV KII
3/16" Union (77"-170")	3/16Comp	Solid Glass Calibration Top,	
	P1.5 and P2.0	Indicator Tube, Gasket,	
Polyethylene Float 1.5" and 2"		Aluminum Lock Nut	KSG-KIT

Overfill Alert Gauge (Type OF)

PICTURE AND COMPONENT EXPLANATION

Top Mount Mechanical Overfill Alert Gauge

(Approved in FL for overfill protection)



Other Materials:

Indicator is HDPE Plastic. Gasket is duro nitrile. Also available in Viton.

Overfill Alert Gauge (Type OF)

GAUGE EXPLANATION

Top Mount Mechanical Overfill Alert Gauge

(Approved in FL for overfill protection)

- Designed to alert when tank is about 90% full
- Custom sizes from 6 inches to 40 inches
- Available in .75" NPS or 1.5" or 2" NPT opening (all PVC bushings are NPS threads)
- Multiple material options and accessories available
- When ordering specify the size opening and exact length needed—every gauge is made custom to fit your tank
- · Length is the point at which you want the level of the tank to read the overfill

Part Number Key: Gauge Type—Size Opening—Length—Accessories

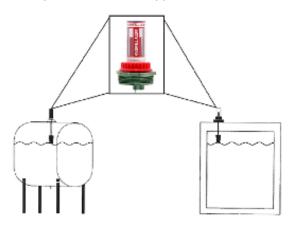
Examples:

OF-2-10 (2" opening, 10" length)

OF-.75-12-GLC-ALG (3/4" opening, 12" length, glass calibration, aluminum gauge guard)
OF-2-6-S3 (2" opening, 6" length, all stainless steel construction)

For more information visit www.ksentry.com/ordhelp.htm

Example illustration of application:



Overfill Gauge Overfill Prevention Ordering Instructions.

Use these instructions when ordering the Overfill Gauge as an overfill prevention device.

The Length of the overfill gauge shall be the distance from the top of your gauge threads to the **full mark** in your tank. Your **full mark** should be no less than 90% capacity, and no more than 95% capacity. These measurements will vary depending upon each individual tank. It is the customers responsibility to insure that we receive the proper measurements for correct overfill warning.

Overfill Alert Gauge (Type OF)

UPGRADES AND REPLACEMENT PARTS

Upgrades and Add-on Accessories

Accessories	Add-on
Glass Calibration	GLC
Aluminum Lock Nut	ALN
Viton Gasket	VTN
Nitrophyll Float	NTF
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
Solid Glass Package	SGC
Alarms/Remote Displays	See pages 34-35



Replacement Parts

Individual Parts

Description	Part Number
Plastic Calibration (Std)	OF-CAL
Glass Calibration	OFG-CAL
	OFSG-CAL
Solid Glass Calibration	
Calibration Paper	OF-PAP
Indicator Tube	OF-IND
Duro Nitrile Gasket (Std)	OF-GAS
Viton Gasket	OF-VTN
Red Lock Nut	RDN
Aluminum Lock Nut	OF-ALN
Aluminum Gauge Guard	ALG
PVC Gauge Guard	PVG
Nitrophyll Float	NTF
Bushing 1.5" and 2"	OF-1.5B & OF-2 B
Polyethylene Float	P1.5 and P2.0

Repair Kits

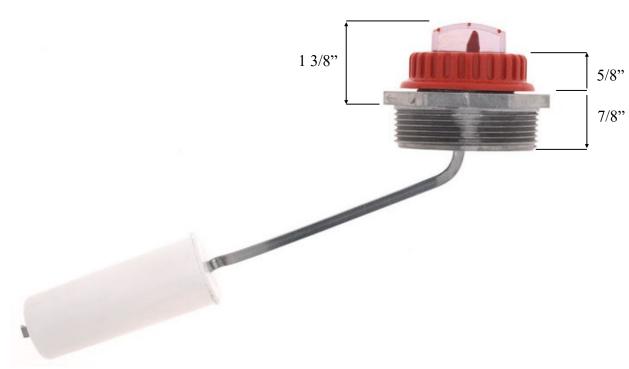
Description	Part Number
Calibration, Indicator Disc, Gasket,	
and Red Lock Nut	OF-KIT
Glass Calibration, Indicator Disc, Gasket, and Red Lock Nut	OFG-KIT
dasket, and ned Lock Nut	OI G-KII
Calibration, Indicator Disc, Gasket,	
and Aluminum Lock Nut	OFALN-KIT
Glass Calibration, Indicator Disc, Gasket, and Aluminum Lock Nut	OFGALN-KIT
Solid Glass Calibration Top,	
Indicator Tube, Gasket, Aluminum	
Lock Nut	OFSG-KIT



L Gauge (Type L)

PICTURE AND COMPONENT EXPLANATION

Top Mount Low Profile Mechanical Liquid Level Gauge



Component:	Description
Calibration	Contains the red marks and the letters E and F for Empty and Full Standard material: Cellulose Acetate
Gasket	Seals the gauge to the bushing Standard material: Duro Nitrile Available upgrade: Viton
Bushing	NPT male fitting that threads into your tank's female fitting Standard material: Aluminum
Locknut	Red plastic locking nut tightens the calibration and the gauge to the bushing Standard material: HDPE Available upgrade: Aluminum or PVC
Rod	Mobile rod inside the tank, moves the red indicator Standard material: Galvanized Steel Available upgrade: Stainless Steel
Float	Attached to the rod inside the tank. Floats on top of the liquid. Standard material: HDPE Available upgrade: Stainless Steel or Nitrophyll

L Gauge (Type L)

GAUGE INFORMATION

Top Mount Low Profile Mechanical Liquid Level Gauge

- Ideal for small tanks
- · Reads Half, Full and Empty
- Custom sizes from 6 inches to 30 inches
- Available in 1.3125" 1.5" or 2" NPT opening
- When ordering specify your size opening and exact tank depth every gauge is made custom to fit your tank

Optional Bushings/Flanges:



1 5/16" aluminum 5 hole bolt on flange

*Includes Aluminum Lock Nut



1 5/16" steel flange (CRS) for welding or soldering level monitor to tank

*Includes Aluminum Lock Nut



UPGRADES AND ADD-ON ACCESSORIES

Accessories	Add-on
Aluminum Lock Nut	ALN
Viton Gasket	VTN
Nitrophyll Float	NTF
Stainless Steel Float	SSF
Aluminum Guard	ALG



Custom bushing allows for installation of the liquid level monitor on your tank with no need for a threaded fitting.
Requires a 1.65" hole.

GFK Gauge (Type GFK)

PICTURE AND COMPONENT EXPLANATION

Top Mount All Metal Mechanical Liquid Level Gauge

Component:	Description
Calibration	Contains the 1/4 increments reading Standard material: Zinc Alloy
Gasket	Seals the gauge to the bushing Standard material: Duro Nitrile Available upgrade: Viton
Bushing	NPT male fitting that threads into your tank's female fitting Standard material: Aluminum
Locknut	Locking nut tightens the calibration and the gauge to the bushing Standard material: Aluminum
Rod	Mobile rod inside the tank, moves the red indicator Standard material: Galvanized Steel Available upgrade: Stainless Steel
Float	Attached to the rod inside the tank. Floats on top of the liquid. Standard material: HDPE Available upgrade: Stainless Steel or Nitrophyll



GFK Gauge (Type GFK)

GAUGE INFORMATION

Top Mount All Metal Mechanical Liquid Level Gauge

- · Most durable and rugged gauge
- Custom sizes from 8 inches to 48 inches
- Available in 1.3125" 1.5" or 2" NPT opening
- When ordering specify your size opening and exact tank depth every gauge is made custom to fit your tank

Optional Bushings/Flanges:



1 5/16" aluminum 5 hole bolt on flange

*Includes Aluminum Lock Nut



1 5/16" steel flange (CRS) for welding or soldering level monitor to tank

*Includes Aluminum Lock Nut

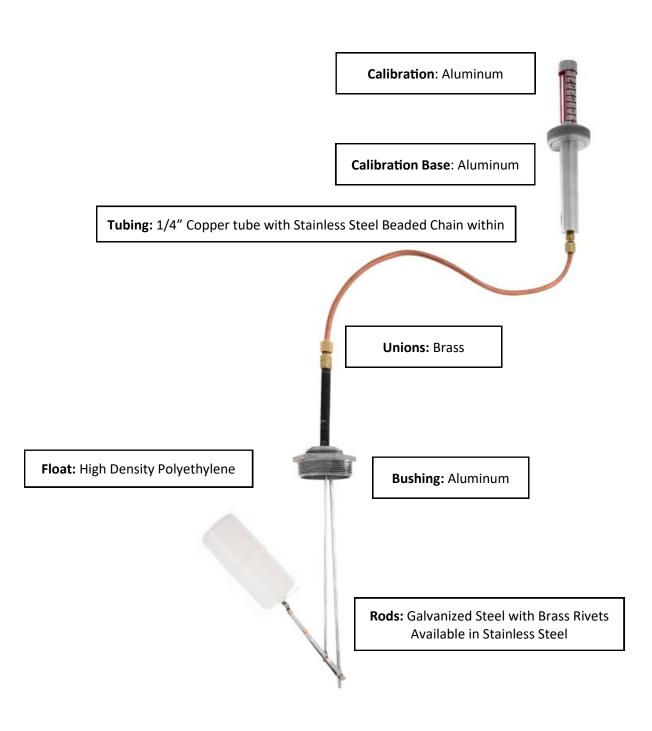


Custom bushing allows for installation of the liquid level monitor on your tank with no need for a threaded fitting. Requires a 1.65" hole.

Remote Reading Gauge (Type DU)

PICTURE AND COMPONENT EXPLANATION

Top Mount Mechanical Remote Reading Liquid Level Gauge



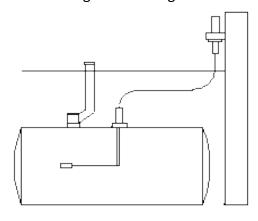
Remote Reading Gauge (Type DU)

GAUGE INFORMATION

Top Mount Mechanical Remote Reading Liquid Level Gauge

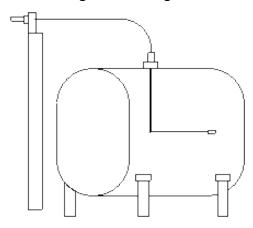
DU Gauge Applications:

Underground Storage Tank





Aboveground Storage Tank



- Monitors tanks from 14 inches to 144 inches in depth.
- Allows for up to 12 feet of remote capability. 12 feet is the maximum.
- All mechanical action, no power required.
- 12 feet of tube and beaded chain are included with the gauge.
- Only available in 2" NPT.

Remote Reading Gauge (Type DU)

Replacement Parts

Description	Part Number		
Calibration Only	DU-CAL		
Complete Calibration Unit	DU-CALALL		
Couplings	DU-Couplings (each)		
Polyethylene Float	P2.0''		
Pipe Nipple	DU-PIPE		
2" Bushing	DU-2B		
Wall Bracket and Screws	DU-WALL		
Copper Tubing	DU-TUB (per foot)		
Stainless Steel Beaded Chain	DU-SSC (per foot)		



LED At-A-Glance® Remote Display

The "LED At-A-Glance®" gauge system is an electronic remote read that accurately and reliably measures the fuel level in your fuel tank. It will transmit and display the level information to a wired LED display located in a convenient location on your premises.

Operation:

- The Display/Receiver displays the liquid level on a row of LED's where each LED represents approximately a 1/8 of the tank's capacity
- The row of LED's is green from 3/8 of a tank to full
- When the level goes to 1/4 tank the highest LED illuminated will be yellow
- At 1/8 of a tank the highest LED illuminated will be red



Features:

- Quick and Easy Install
- Suitable for both inside or outside tanks
- Connects using a 3 wire cable
- Yellow LED will illuminate if any fault to the system occurs
- Powered by a 9V battery—change after 1 year of use
- Display can be located anywhere within 100ft of the Transmitter
- Hi <u>or</u> Lo Level adjustable 90-100 DB alarms triggered by a magnetic switch (can also be disabled)

^{*}Gauge not included*

^{*}Only for use with a Krueger Sentry gauge*







Alarms





All At-A-Glance® Alarms

- Compatible with Krueger Sentry Gauges: Type D, Type H, Type B, Type PH, Type PD, Type OF, and Type K.
- Powered by a 9 volt Lithium Battery and a test switch allows you to test the battery before each use.
- Magnetic Switch triggers a 110 DB Alarm and can be reset while in alarm mode.
- Weather resistant, semi water proof (cannot be submerged)
- Third party tested and approved to be Intrinsically Safe.

At-A-Glance® Remote Mount Alarm

- Remotely mounted for remote access.
- Comes with 25' of cable including connectors
- Can be ordered with a maximum of 100' of cable

At-A-Glance® Alarm with Dry Contacts

- Dry contacts can handle up to 2 amps of resistive or inductive load.
- The active light is a red blinking led. When light is blinking, it means the contacts have been triggered and the unit must be reset.
- The Test/Reset switch can be used to check the battery. Click it left or right. If the red light comes on the battery is working. The Test/Reset switch is also used to reset the alarm. When active, the red light will be blinking. Toggle the switch left or right to reset the alarm back to ready.
- → Open contacts are standard— Has one set of normally open contacts
- → Capable of flipping a switch but can't power or run other devices (can turn on something that is off but can't power it)
- → Output 0 Amps Has no power output
- → Input— up to 2 Amps—Can switch a 2 Amp load (Up to 120v, but not recommended)
- → Handle up to 120 volts—Can switch 120v load but only through an auxiliary relay
- → One alarm per device
- → External device can be anything— AC or DC external powered
- → The dry contacts can be broke by a ground, 9 to 12 volt, as long as it is not over 2 Amps, normally open

When ordering an alarm that is going to be used with a gauge guard you need to order special because the rings are made to fit the gauge so your part numbers are: DAlarm-GG for Direct Mount Alarm and RAlarm-GG for Remote Mount Alarm. No price change.



Alarms

		Part Number	Description				
	Direct	DAlarm [Direct Mounted Audible Alarm				
	Mount	DAlarm-FL l	With this model, the audible alarm is replaced with a flashing light. The flashing ight will alert when triggered by the magnetic indicator on the gauge and continue until reset.				
	Alarm Options	DAlarm-FL-TO	With this model, there is an audible alarm with an added flashing light and time-out feature. The flashing light will alert when triggered by the magnetic indicator on the gauge. The time-out feature will shut down the alarm after 20 seconds to save on battery life.				
		Part Numb	er Description				
	Remote	Ralarm	Remote Mounted Audible Alarm (25 ft of wire included)				
	Mount Alarm Options	RAlarm-Fl	With this model, the audible alarm is replaced with a flashing light. The flashing light will alert when triggered and continue until reset. This includes 25 feet of cable to allow for remote access.				
	Dry	RAlarm-FL-1	With this model, there is an audible alarm with an added flashing light and time-out feature. The flashing light will alert when triggered then the time-out feature will shut down the alarm after 20 seconds to save on battery life. This includes 25 feet of cable to				
	Contact	DAlarm-DC-	L Standard dry contacts option with flashing light. (No Audible)				
	Alarm Options	DAlarm-DC- TO	FL- With this model, there is an audible alarm with an added set of dry contacts, flashing light and time-out feature. This allows you to use the dry contacts while having a visual and audible application.				
		RAlarm-DC-	Standard dry contacts option with flashing light. This includes 25 feet of cable to allow for remote access. (no audible)				
		RAlarm-DC-I TO	With this model, there is an audible alarm with an added set of dry contacts, flashing light and time-out feature. This allows you to use the dry contacts while having a visual and audible application. This includes 25 feet of cable to allow for remote access.				



Piping Level



These Piping Levels were crafted by two retired UA Members. The levels have been tried and proven to be a real time saver for aligning tees, 90's, etc. Works well for welding in stubs using various nipples, bushings, or reducing couplings. With reasonable care these levels should last a Lifetime. If a thread becomes damaged, just re-tap it or run the thread over with a die.

Part Number: PLevel

- Made of 6061 grade aluminum bar anodized.
- Level has a 1/2" female pipe thread inside on end and a 1" male pipe thread outside on the same end
- Opposite end has an eye bolt for a plumb bob line
- Level is about 4" long with a diameter of 1.25"



Additional Gauge Ordering Instructions and Help

For standard tanks:

No pipe riser, no top double wall.

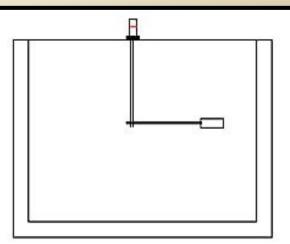
Definition: There is less than one inch of space between where the gauge float reads full, and where the gauge threads into the tank.

Part Number:

Gauge Type—Size Opening—Depth of Tank—Accessories (optional)

Example: D-2-48-GLC

All Gauge measurements are in inches. Depth of tank should be the inside diameter/height of the tank in inches.



For Vaulted / Pipe Riser Applications

Use these instructions when you have a pipe riser or double wall. **Definition**: There is significant space between where the gauge float reads full, and where the gauge threads in. This is the extension.

Part Number:

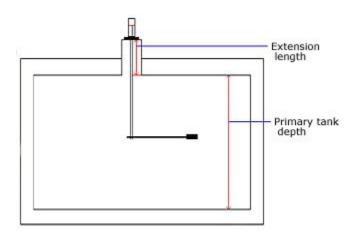
Gauge Type—Size Opening—Depth of Tank—Extension—Accessories **Example:** D—2—48 + 12—GLC

All Gauge measurements are in inches. Depth of tank should be the inside diameter/height of the tank in inches.

Pricing for Extensions: Double the extension and add to the primary depth

Example P/N: D-2-48+12

It is NOT priced out as a 60" (48+12) It is priced as a 72" (48+12+12)



Accessories: Abbreviations and Definitions

Add S1 to part number
 Add SSF to part number
 Stainless Steel Rods
 Stainless Steel Floats

Add S2 to part number
 Stainless Steel Rods and Stainless Steel Floats

Add S3 to part number
 Stainless Rods, Stainless Floats, Stainless Bushing, Aluminum Lock Nut, and Glass Calibration

Add Peek to part number
 Add Kynar to part number
 Add SGC to part number
 Peek Rods, HDPE Float, Glass Calibration, and PVC Bushing
 Kynar Rods, HDPE Float, Glass Calibration, and PVC Bushing
 Calibration is a solid glass piece with aluminum lock nut

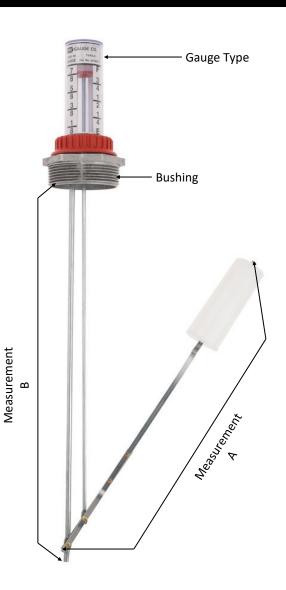
Add GLC to Part number
 Calibration gets a Glass internal piece

Add ALG to Part number
 Adds protective guard and aluminum nut to the top of the gauge

Add ALN to part number
 Add NTF to part number
 Replaces red plastic nut with an aluminum nut
 Replaces HDPE float with a nitrophyll float







Measurement A: Measure from the very end of the float rod to the very end of the riveted bracket. (past the last rivet.)

Measurement B: Measure from the bottom of the threads to the very end of the thicker rod. (past the last rivet)

Ideally, when ordering a gauge, we would like to know your tank measurements in order to be able to manufacture the correct gauge. The measurements we need are as follows:

- Tank depth, or the distance from empty to <u>full</u>.
- Extension length, or the distance from <u>full</u> to gauge threads. Extension length may be 0.
- NPT Opening Size.

Part Number Format:

(gauge type-opening size-tank depth-extension-options)

Tank Depth is the distance in your tank from empty to full.

Extension is the distance in your tank from full to threads.

When getting these measurements from an existing gauge, use the picture to the left and the formulas below.

- Formula: (2xA)+1 = Tank Depth
- Formula: (B-1)-A = Extension Length (may be 0)

Measure bottom / outside of the bushing. Generally, NPT bushings measure .25" larger than they actually are.

We have .75" NPS, 1.5" NPT and 2" NPT bushings.

Example without Extension:

Measurement A is 23 Measurement B is 24

Formula - $(2 \times 23) + 1 = 47$ " tank depth Formula - (24 - 1) - 23 = 0" extension

Opening measures 1.75" = 1.5" opening

Part Number = D-1.5-47

Example with Extension:

Measurement A is 23

Measurement B is 35

Formula - $(2 \times 23) + 1 = 47''$ tank depth Formula - (35 - 1) - 23 = 11'' extension

Opening measures 2.25" = 2" opening

Part Number = D-1.5-47+11



FAQS

Helpful Information:

- → Restocking Fee is typically 25% but may vary depending on the individual situation and the type of gauge.
- → If you can't determine what size you need see page 43 and 44 of this book, or see our order help on our website: https://www.ksentry.com/resource-library/documentation-pdfs.html If that doesn't help, contact us or you can email a copy of your tank drawing and we will help you.
- → If you would like to be listed on our website as a distributor please contact Lee at extension 1 to discuss requirements. https://www.ksentry.com/preferred-distributors.html
- → If you would like to list KSG parts on your website please contact Lee at extension 1 for pictures and information.
- → Product PDF files are available upon request or on our website: https://www.ksentry.com/resource-library/documentation-pdfs.html
- → What is the difference between the Type H Therma Gauge and the Type D Direct Reading gauge? The type H Gauge allows you more control over the swing arm inside your tank. You can "aim" the swing arm, making it easier to install in applications with limited space inside the tank.

Notes:

Notes:							



Who do you talk to?



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