

## G20 Admiralty Gauge

The Seetru Admiralty liquid level gauge is a direct reading, tubular design for marine & shipbuilding use. This gauge was designed and developed to meet arduous UK Ministry of Defence requirements, such as for tank deflection and underwater shock loads.

### Example Applications

- Diesel
- Fuel oil
- Lubrication oil
- Water
- Coolant

### Specifications

- Maximum working pressure for Glass Sight Tube: up to 22 bar & 15°C @ 400mm centres
- Maximum working pressure for Polycarbonate Sight Tube: up to 14 bar & 100°C.
- Maximum Operating Temperature: 150°C (depending on O-ring material)
- Maximum Centre Distance: (To suit requirements).
- Minimum Centre Distance: 150mm (For gauges longer than 1000mm, the column is split into sections using intermediate support). Each sections maximum length is 1000mm.



### Materials of Construction

Component	Material
Valve Units and Flanges and Flanges	Brass
	Stainless Steel
Guard Tube	Aluminium
	Stainless Steel
	Brass
	Zinc Plated Mild Steel
Sight Tube	Borosilicate Heat Resisting Glass
	Polycarbonate Plastic
Weld Bosses	Mild Steel
	Stainless Steel

### Seal Materials

Seal Material	Temperature Range
Nitrile (NBR)	Up to 120°C
Viton (FKM)	Up to 150°C
EPDM	Up to 150°C
Neoprene	Up to 140°C

Other seal materials available upon request.

### Connection Options

Type	Size
Weld Boss	42mm

# Design:

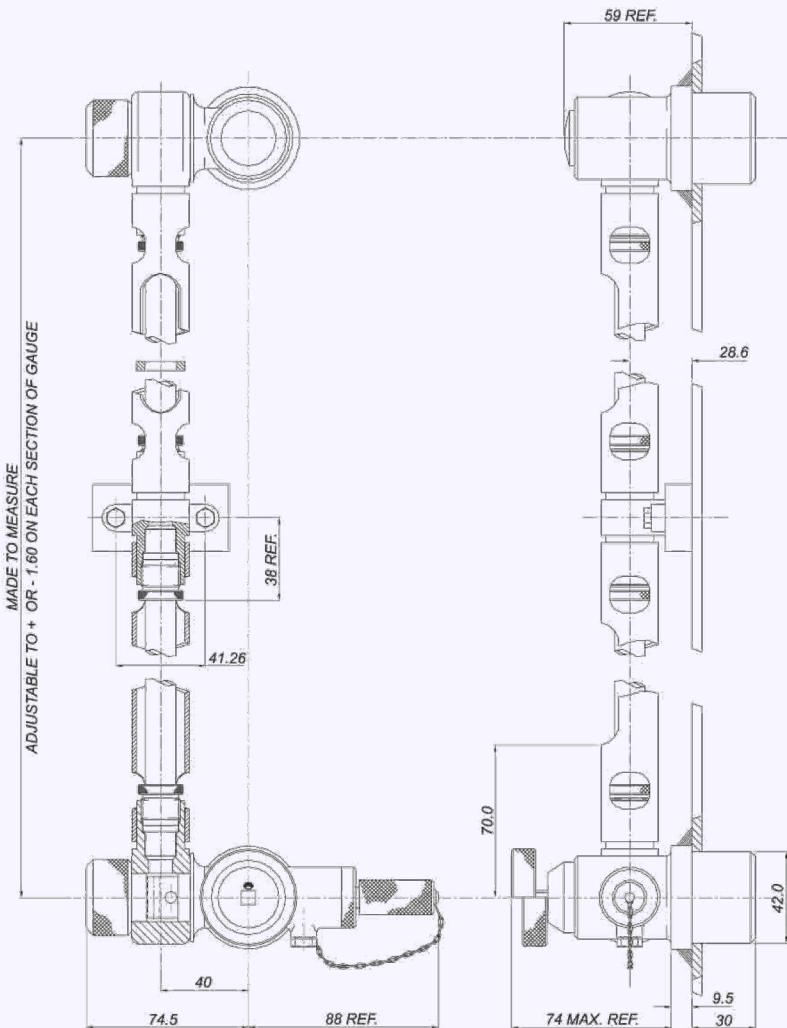
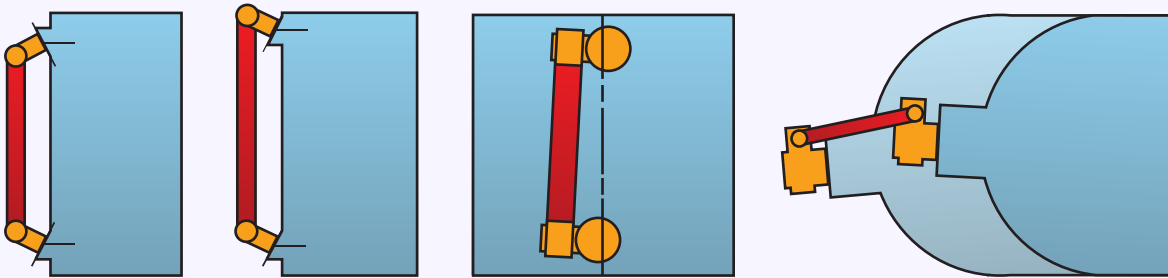


This unique gauge allows installation on misaligned tank connections as may, for example, be found on marine or other storage tanks of light walled construction which can deform or bulge. The tank connection valve fittings can accommodate misalignment vertically and along two mutually perpendicular axes horizontally through an adjustable fitting which enables correction of misalignment at the time of fitting or subsequently\*. The valve fittings each form, in fact, a universal joint which gives the gauge its adaptability for difficult conditions of installation.

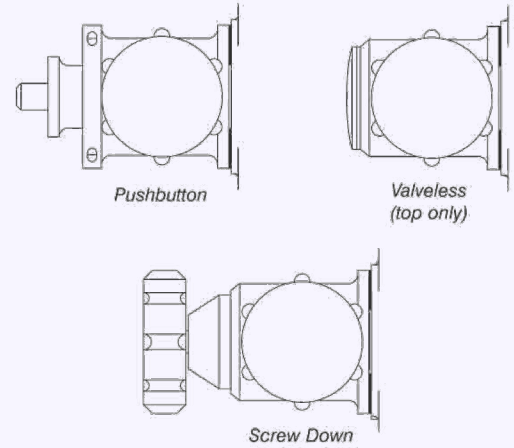
In the push-button version, the self closing valve is situated in the rear portion of the valve body which projects into the tank. This ensures leak-proof protection whatever damage occurs to the gauge parts on the outside of the tank.

This robust direct reading sight tube gauge has substantial passages and is suitable for use on any storage tanks or bunkers for up to medium heavy fuel oil.

## Typical Misalignments accommodated

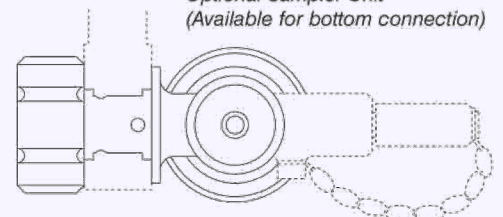


## Connection Options (Top and Bottom)



Contact Seetru for detailed advice on selection of gauge and configuration options to meet application requirements

## Optional Sampler Unit (Available for bottom connection)



\*The Admiralty gauges can only accommodate misalignments which occur subsequent to installation if no intermediate supports are fitted.



**Push-button operation**

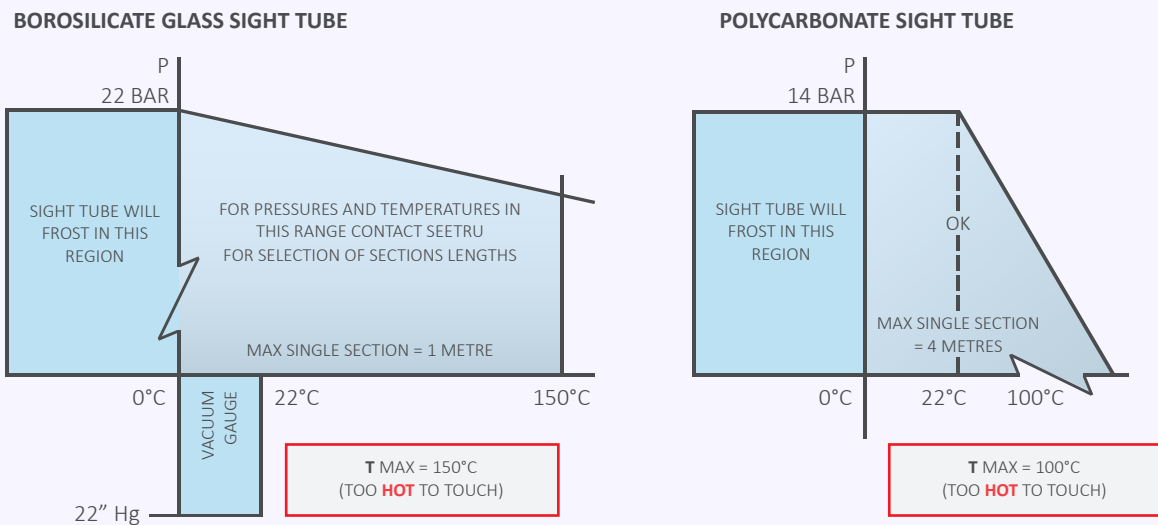
Except when a reading is being taken, the gauge is permanently isolated from the contents of the tank. To take a reading the spring-loaded valve is opened by pressing a push-button; when released, the connection between the tank and gauge is automatically resealed.

**Safe from external damage**

Due to the design of the push-button isolation valve, no amount of damage to the gauge or external fittings on the tanks can break the liquid seals. In such an event the fluids cannot escape.

**Graduation**

Where a measure of the precise storage volume is required, an engraved scale plate can be provided marked with the capacity units.



The above constraints are approved for water and other non-aggressive liquids only. For any liquid or for any constraint in excess of those given above, please consult Seetru.

**Suggestions for fitting the Admiralty Gauge**

The Seetru Admiralty gauge is supplied complete with tank bosses either for welding in position or for fitting by means of special sealing nuts without welding. Where the welded pattern bosses are used it is suggested that the gauge, complete with the bosses, be offered to the holes in the tank wall. The bosses can then be tack-welded to ensure correct positioning.

The gauge and mounting fittings can then be removed and the inside of the bosses protected with graphite grease to prevent oxidation during final welding. After welding the grease should be removed, and the fittings and gauge can then be re-assembled to the tank. Where the alternative non-weld pattern bosses are supplied, these can be positioned and tightened without removing the gauge. If, after fitting the tank bosses, a length adjustment of the gauge is still required, this can be achieved by slackening the sight tube gland nuts and re-tightening after the gauge collars have been correctly aligned.

The intermediate support brackets shown in the diagram are supplied typically for gauges longer than 1 m when fitted with Borosilicate glass sight tubes. The intermediate support brackets may not be necessary when Polycarbonate sight tubes are fitted (contact Seetru for further information).

When fitted with support brackets the gauge is supplied in sections, marked for easy assembly. In this way Seetru gauges are also safeguarded against damage in transit.