

## GENERAL INSTRUCTIONS FOR THE INSTALLATION OF DIAPHRAGM SEAL ASSEMBLIES

### DO NOT

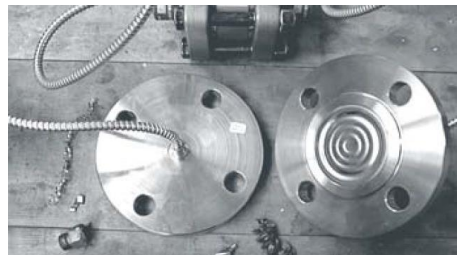
Touch the diaphragm if at all possible.

Let the diaphragm come into contact with any sharp objects.



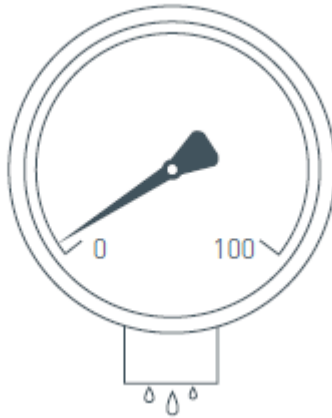
### DO NOT

Place exposed diaphragms directly onto the floor or worktops.



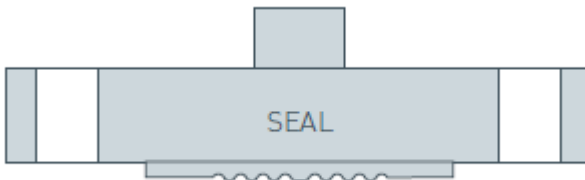
## GENERAL INSTRUCTIONS FOR THE INSTALLATION OF DIAPHRAGM SEAL ASSEMBLIES (CONTINUED)

### WARNING



#### WARNING

DO NOT separate a Diaphragm Seal System

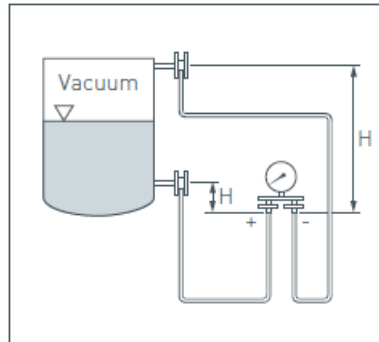
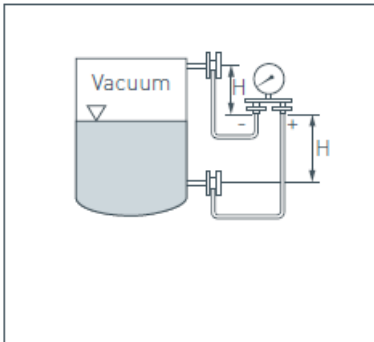
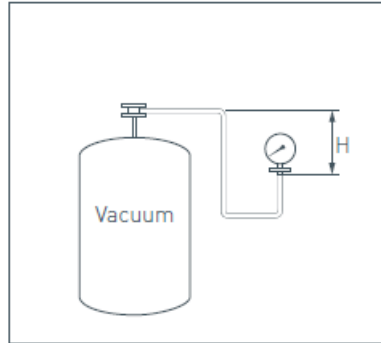
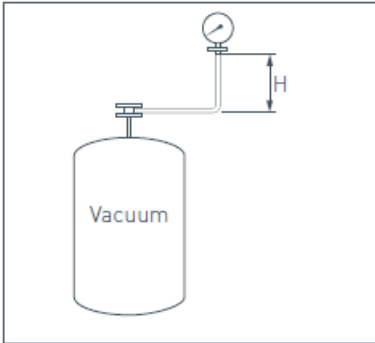


1. If separated the instrument will fail and will need to be returned to BKW for re-assembly, re-filling and re-calibrating.
2. No attempts should be made to remove a pressurised seal instrument – the pressure system must be totally relieved or isolated.
3. Goods returned to BKW must have a COSHH Cleanliness Certificate, where appropriate, to show that the goods have been properly decontaminated.

## VACUUM APPLICATIONS

### WARNING

The negative pressure head in the instrument capillary added to the negative process pressure can be greater than  $-1$  bar. This is not possible and the instrument will not function correctly, also the diaphragm can be damaged beyond repair.



## INSTALLATION OF INSTRUMENTS FOR LEVEL APPLICATION

Measurement H not to exceed:

7 metres for fill types:

Silicon Oils

-KN2, KN3.2, KN17

Vegetable Oil -KN13

Glycerine Oils - KN7, KN12

White FDA Hygienic Oil

- KN62

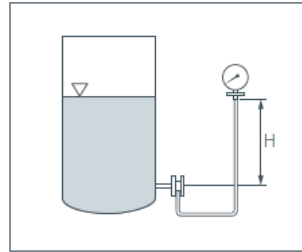
Halocarbon Inert Oil

- KN21

4 metres for fill type:

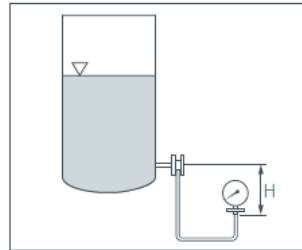
### OPEN VESSEL

Instrument above point of measurement



### OPEN VESSEL

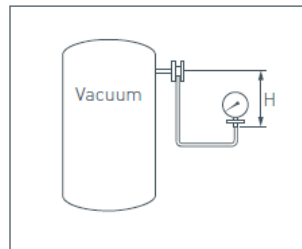
Instrument below point of measurement



### SEALED VESSEL

Absolute pressure, instrument must always be below point of measurement

'H' usually = 200mm



## INSTALLATION OF INSTRUMENTS FOR LEVEL APPLICATION (CONTINUED)

Measurement H not to exceed:

7 metres for fill types:

Silicon Oils

-KN2, KN3.2, KN17

Vegetable Oil -KN13

Glycerine Oils - KN7, KN12

White FDA Hygienic Oil

- KN62

4 metres for fill type:

Halocarbon Inert Oil

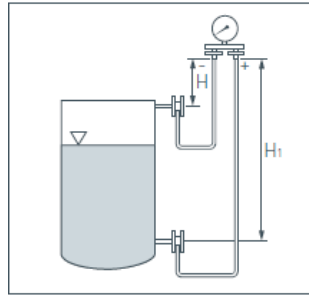
- KN21

### SEALED VESSEL

Differential instrument above upper point of measurement.  
Not suitable for vacuum.

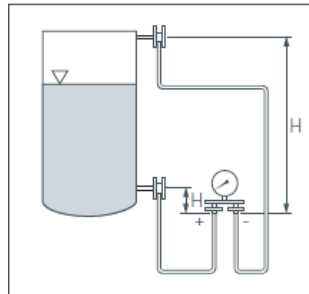
#### WARNING

Beware  $H_1$  measurement – see above.



### SEALED VESSEL

Differential instrument below lower point of measurement.  
Suitable for vacuum.

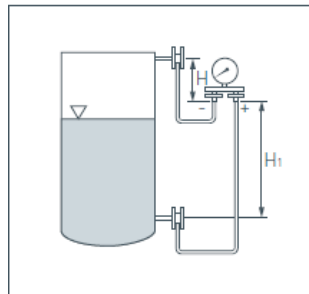


### SEALED VESSEL

Differential instrument between points of measurement.  
Not suitable for vacuum.

#### WARNING

Beware  $H_1$  measurement – see above.



## INSTALLATION OF INSTRUMENTS FOR FLOW MEASUREMENT & FILTER MONITORING

Measurement H not to exceed:

7 metres for fill types:

Silicon Oils -KN2, KN3.2, KN17

Vegetable Oil -KN13

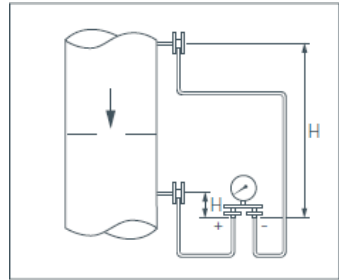
Glycerine Oils - KN7, KN12

White FDA Hygienic Oil - KN62

Halocarbon Inert Oil - KN21

4 metres for fill type:

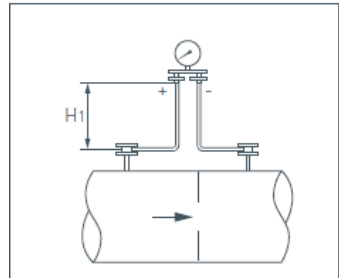
Suitable for vacuum



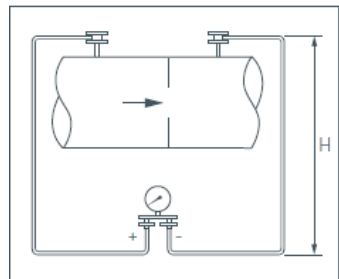
Not suitable for vacuum

**WARNING**

Beware  $H_1$  measurement – see above.

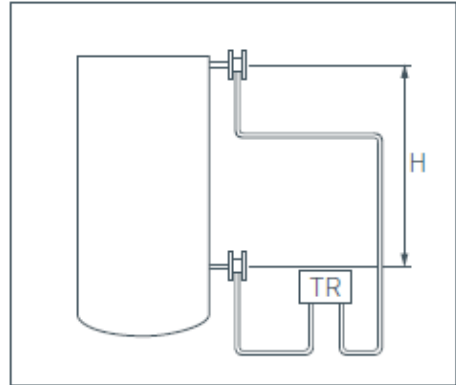
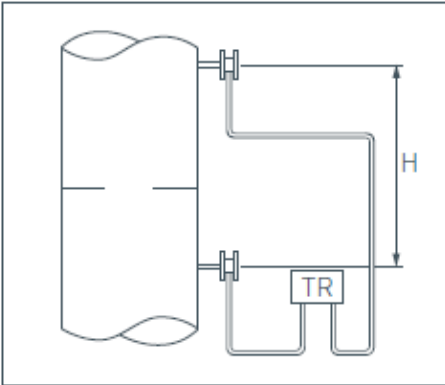


Suitable for vacuum.



## INSTRUMENT OUT OF RANGE

### WARNING



Make sure the installation does not take the instrument out of its adjustable range.  
 Maximum Instrument Range > H x Specific Gravity (Fill Fluid)

### COMMON FILL FLUID SPECIFIC GRAVITIES (S.G.FILL)

Fill Fluid		Specific Gravity (S.G.) G/CM <sup>3</sup>	Temperature °C
Silicon Oil	KN 2	0.96	25
Silicon Oil	KN 17	0.914	20
Silicon Oil	KN 3.1	1.07	20
Silicon Oil	KN 3.2	1.07	20
Halocarbon	KN 21	1.968	20
Glycerine	KN 7	1.26	20
Glycerine	KN 12	1.22	20
Vegetable Oil	KN 13	0.94	15
White FDA Hygienic Oil	KN 62	0.851	20