

**INSTRUCTIONS FOR INSTALLATION AND  
OPERATION OF REFLEX LEVEL GAUGES  
TYPE**

**- R 25 -**

## SERVICE MAINTENANCE

- After the level gauge is first put into service, or after change of glasses, once the level gauge has reached its normal operating temperature and pressure, carefully compress the glass joints by following up the tightening bolts, working at apposite sides alternately, starting from the middle. **THIS MUST BE REPEATED SEVERAL TIMES WITHIN THE FIRST HOURS**, and in case any sign of leaks should appear.
- If perfect sealing cannot be obtained in this way it will be necessary to replace the joints and eventually the glass too.

## DISMANTLING

- Shut off the cocks and remove the level gauge body from the cocks.
- Loosen the tightening bolts and remove all component pieces.
- Clean the sealing and cushion surface very carefully, making sure that they are clear of any remnants of joints.
- Smear the threads with a thin layer of graphitized grease.

## REASSEMBLING

- Pit in new glasses with new joints (never re-use joints which have already been in service!)
- Reassemble all components in the right sequence and tighten the bolts thoroughly.
- Never grip the level gauge body in a vice during the reassembling, but put it on a plane surface.
- Never use adhesive or hermetic mastics. Remember that all surfaces must be perfectly clean.

## SPARE PARTS

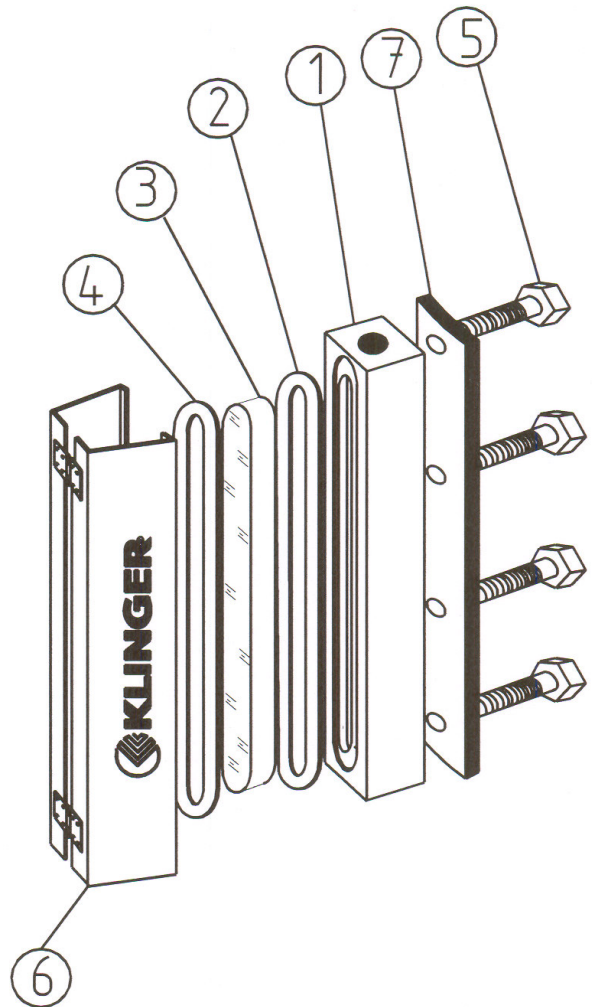
- When ordering spare parts please state:
- Type and size of the level gauge
- Item number of the spare part, as shown in the above list.
- Construction material
- As regard reflex glasses and their joints please remember that:
- in each body type LDR a suitable reflex glass type A or type B is mounted.

NOTE: The models shown are typical exemples for the maintenance of our level gauges.

- 1 Centre piece
- 2 Sealing joint
- 3 Reflex glass
- 4 Cushion joint
- 5 Cover plates
- 6 Tightening bolts
- 7 Tightening plate

Standard ends:

- screwed for end tube



## SERVICE MAINTENANCE

- After the cocks are first put into service or after change of packing sleeves, OPEN THE COCKS and tighten the tightening nuts to compress the packing sleeve firmly around the plug, ensuring that the handle can still be moved without undue effort being required. Compress the stuffing box by means of the stuffing box nuts and the head joints by means of the nuts of the studs.
- When the cocks have attained their normal working pressure and temperature repeat aforesaid operations whilst the cocks are still under pressure.

## DISMANTLING

- Isolate line
- Remove the gauge by unscrewing the nuts from the studs
- Unscrew tightening nut
- Unscrew handle securing screw, remove washer and handle
- Tap top of plug with a wooden drift until it is clear of the cock body
- Screw the tightening nut back into cock body to clear the threads of any particles which may be remaining from the old packing sleeve, then remove it again
- Remove the split ring from the plug and slip off the old packing sleeve. Examine the plug and inside the cock body for scoring sign of damage, corrosion etc.
- Clean all component pieces very carefully.

## REASSEMBLING

- Insert plug into a new packing sleeve. Replace split ring and push the packing sleeve up towards it, to hold it in position.
- Insert plug (together with packing sleeve, eyelets and split ring) into the bottom of the cock body ensuring that the ridge of the packing sleeve enters the corresponding groove in the cock body. Push in plug and packing sleeve together using a wooden drift if necessary until the tightening nut can be engaged with the thread inside the cock body.
- Replace handle on the plug and tighten handle securing screw with the washer in place. Handle has a mark for indicating position of the passage through the plug. Handle can be removed from cock without damages whilst under pressure.

## SPARE PARTS

- When ordering spare parts please state:
  - type of cock (top-bottom or drain)
  - item number of the spare parts as shown in the above list
  - construction material

As regard sealing elements, a complete set for 1 level gauge consists of:

- 2 packing sleeves type AB 18/2 (item 5)
- 1 packing sleeve type AB 12/2 (item 25)
- 2 head joints
- 2 packing rings type KU 16 (item 16) for cocks type D only.

KLINGER LEVEL GAUGES  
COCKS TYPE D AND DG

1. NPT vent plug
2. NPT head
3. NPT nipple
4. AB 18 tightening nut
5. AB 18/2 packing sleeve
6. AB 18 split ring
7. AB 18 cock plug
8. Top and bottom cock b
9. Handle washer
10. Handle screw
11. AB 18 handle
12. Stud
13. Head joint
14. Heat insulation cover
15. Stuffing box head
16. KU 16 packing ring
17. Stuffing box ring
18. Stuffing box nut
19. Stud nut
20. End tube
21. Tube joint ring
22. NPT drain cock body
23. Drain cock joint
24. AB 12 tightening nut
25. AB 12/2 packing sleeve
26. AB 12 cock plug
27. AB 12 split ring
28. Drain cock body
29. AB 12 handle
30. Tube joint ring
31. Union tailpipe
32. Handle washer
33. Handle screw
34. Union nut
35. Heat insulation cover

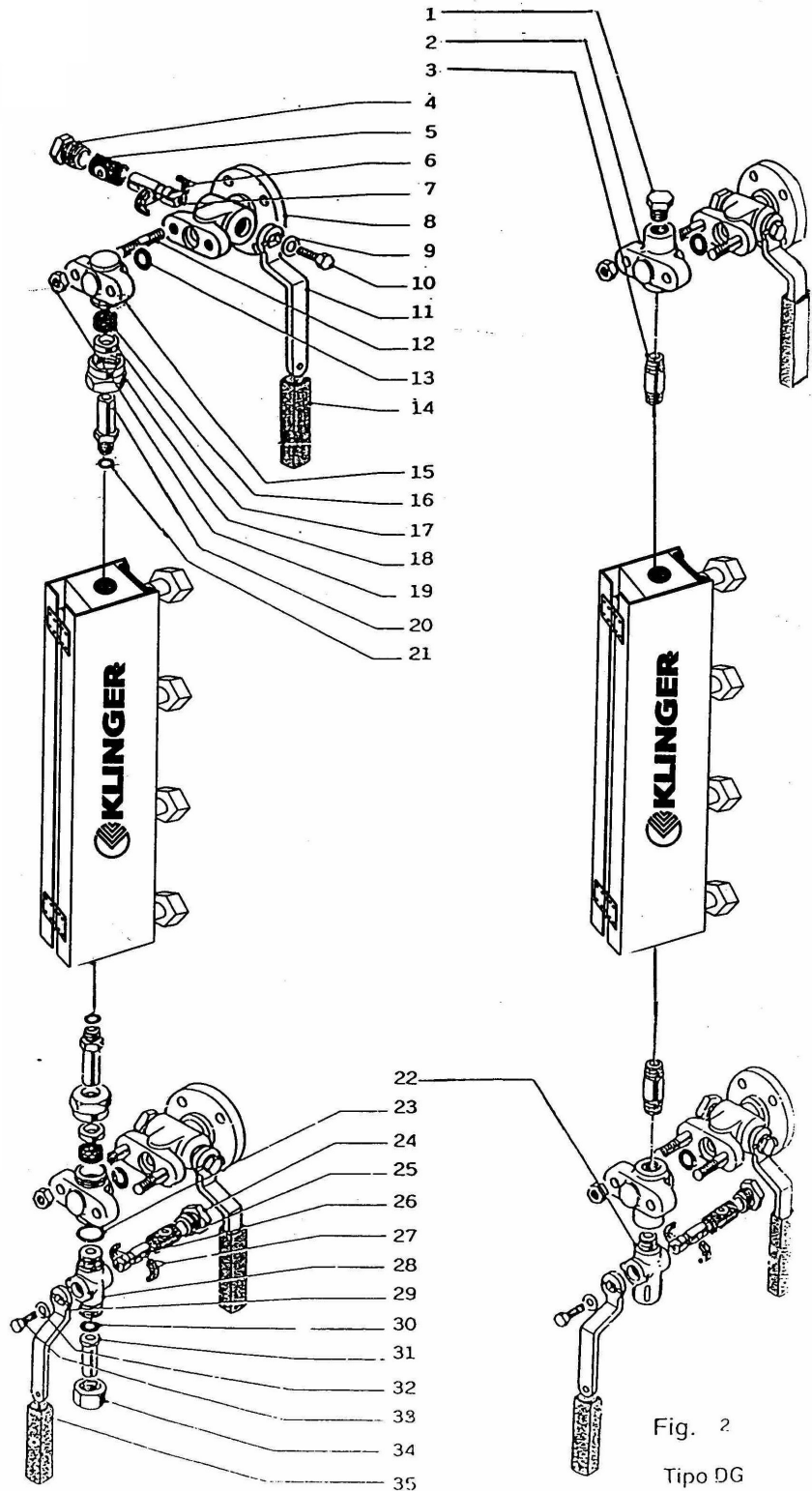


Fig. 1  
Tipo D

Fig. 2  
Tipo DG

## **INDICATORI DI LIVELLO KLINGER**

### **KLINGER LEVEL GAUGE**

#### **ISTRUZIONI ED IMMAGAZZINAMENTO MATERIALI**

1. Immagazzinare in luogo asciutto per evitare l'ossidazione delle parti metalliche.
2. Proteggere da urti per evitare la rottura dei cristalli.

#### **NOTA IMPORTANTE**

L'imballo ed il materiale devono essere periodicamente controllati durante i lunghi periodi di immagazzinamento (almeno ogni 3 mesi), per verificare l'integrità, mantenendo adeguata documentazione delle citate attività di controllo.

#### **STORE INSTRUCTION**

Store the goods in dry place in order to avoid the oxidation of metallic elements.

Protect the goods against pushes in order to avoid the breakage of the glass.

#### **IMPORTANT NOTE**

The package and the material have to be periodically checked during long storage (at least every three months), to verify its integrity, keeping suitable documentation as above activities.