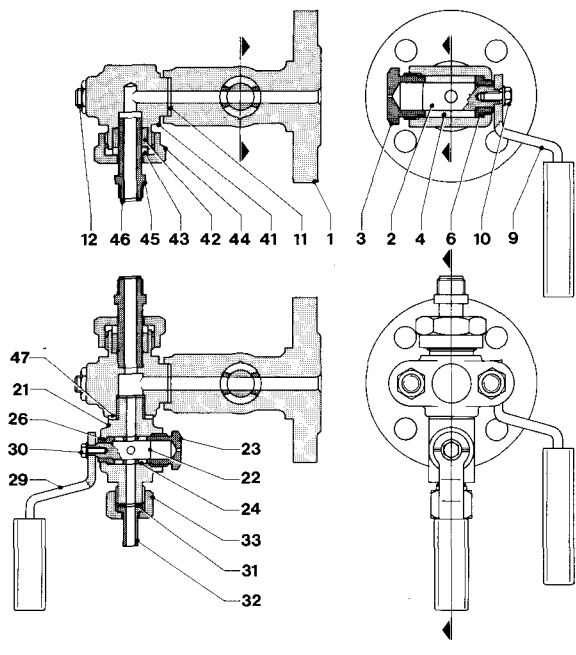


**Set of cocks type G11 and G12  
suitable for ANSI 300 and PN 40 (type G11)  
ANSI 900 and PN 160 (type G12)**

**Fig. 737 Type G11**



**Top and bottom cock**

- 1 Body
- 2 Plug
- 3 Tightening nut
- 4 Packing sleeve with 2 eyelets, type M2.2
- 6 Ring
- 9 Handle
- 10 Screw and washer
- 11 Head joint
- 12 Stud and nut

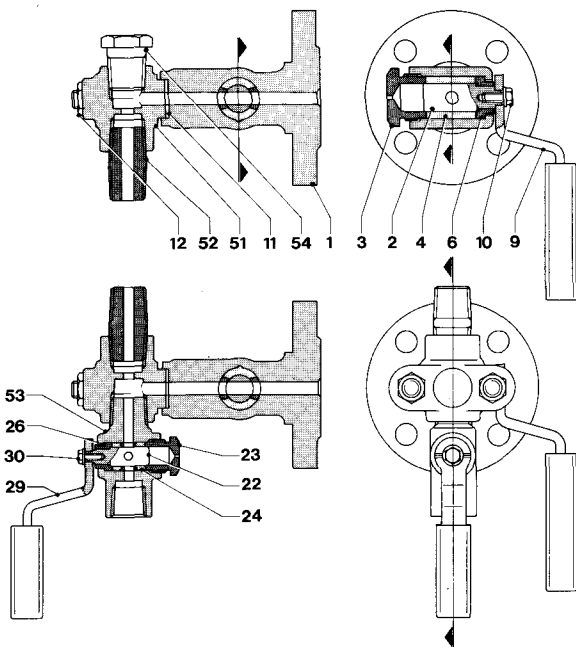
- 26 Ring
- 29 Handle
- 30 Screw and washer
- 31 Tailpipe joint
- 32 Tailpipe
- 33 Union nut
- 41 Stuffing box head
- 42 P16 packing ring (16/23,5/10)
- 43 Stuffing box ring
- 44 Stuffing box nut
- 45 End tube
- 46 Tube joint ring
- 47 Drain joint ring

**Drain cock**

- 21 Body
- 22 Plug
- 23 Tightening nut
- 24 Packing sleeve with 2 eyelets, type M1.2

- 51 NPT head
- 52 NPT nipple
- 53 NPT drain cock body
- 54 NPT vent plug

**Fig. 738 Type G12**



**General information**

These sets of cocks consist usually of:  
- 2 shut-off cocks (1 top and 1 bottom)  
- 1 drain cock.

The cocks are cylindrical plug cocks with soft tightening packing sleeve.

The advantages of this design are:

- circular through flow passage,
- very long life of body and plug, since the elastic packing sleeve is interposed between these two pieces,
- no sensitivity to changes of temperature,
- no possible plug seizure,
- best performances at low and high temperature up to 400 °C,
- possibility of restoring tightness during service by compressing packing sleeve,
- complete interchangeability of worn pieces,
- packing sleeve can be replaced by unskilled personnel without removing the cock from the vessel. After sleeve change the cock is as good as new.

These sets are suitable for:

- **type G11** (connection to gauge body by stuffing box) Fig. 737: ANSI class 300 and PN 40,
- **type G12** (connection to gauge body by screwed nipples) Fig. 738: ANSI class 900 and PN 160.

Maximum service temperature: 400 °C (750 °F).

Handles and plugs are made so that each handle face downwards when the gauge is in service, that is when shut-off (top and bottom) are open and drain cock is closed.

According to the right or the left position of the shut-off cocks handle, the set (and therefore the level gauge) is named right-handed or left-handed. Fig. 737 shows a right-handed level gauge. Usually two level gauges (1 right and 1 left) are installed on steam vessels.

**Connection to the vessel**

Can be:

- flanged to customer requirements. Please state:
  - Standard
  - Size
  - Pressure class
  - Finishing

The flanges are one piece with the body and can be machined up to external diameter 160 mm and thickness 32 mm. Therefore several sizes and finishings of flanges can be obtained according to the most used international Standards (ANSI, AFNOR, BS, DIN, GOST, UNI, etc.).

- screwed:
  - 3/4" NPT male union (standard) Fig. 740
  - 3/4" NPT male union spherical
  - 3/4" NPT male integral
- welded: 3/4" socket welding
- other connections on request.

**Connection to the gauge body**

Can be:

- **type G11:** connection by stuffing boxes and end tubes. Suitable for general purpose (Fig. 737),
- **type G12:** connection by NPT screwed nipples (Fig. 738).

In both choices the connection is made by means of heads (item 41 or 51) and allows easy dismantling of the gauge for servicing and easy rotating on its axis in order to adjust easy reading from control floor, provided cocks are closed even with vessel under pressure.

**Centre to Centre distance**

When these sets of cocks are chosen for the level gauge, the value of the minimum vessel C. to C. distance is given from the formula:

- **type G11:**  
Minimum C. to C. = Length of body + 107 mm  
(CC min = B + 107 mm)  
Exceptionnally: CC min = B + 92 mm,
- **type G12:**  
Minimum C. to C. = Length of body + 56 mm  
(CC min = B + 56 mm).

**Optionals (see also page 29)**

- Double-ended handle for chain operating (Fig. 739),
- Automatic safety ball-check:
  - 1 top and 1 bottom horizontally acting, with 1 removal device for bottom ball (Fig. 741), or
  - 1 top horizontally acting, 1 bottom vertically rising acting,