

The invention relates to a fluid level indicator having two prismatic plate parts lying against each other in the longitudinal direction under pressure, the front one of which is of glass and which, forming a fluid channel sealed towards the outside, are arranged in a tubular housing, having two lateral housing parts which transmit the sealing pressing force and the angled front edges of which co-operate with the flat viewing surface, located on the outside, of the glass plate, and the rear edges of which co-operate with a pressure plate receiving pressure screws. Indicators of this type (see US-A-3817205 and/or FR-A-996279) are very simple in themselves and offer a high degree of operating reliability.

An object of the invention is therefore to facilitate the assembly and disassembly of such indicators, and it is primarily characterised in that the angled portions at the front edge of the lateral housing parts are pivotably connected to one another at their upper and lower ends by means of hinges or the like, and that the rear edges of the lateral housing parts co-operate in a positively coupled manner with the pressure plate.

In this way an indicator construction is produced in which it is easily possible to change the glass in the installed indicator, since after loosening the pressure screws, and the release of the positive connection thus brought about, the two lateral housing parts can be folded outwards about the hinges provided at the ends and can thus be removed. The assembly of longer indicator constructions is also considerably facilitated by the possibility of fitting on the opened-out indicator housing.

The invention is now explained in greater detail with reference to the example illustrated in the drawing, Figures 1 to 3 respectively showing a fluid level indicator according to the invention in plan view, front view and side view.

The indicator has a prismatic central plate 1, having a machined recess 10 extending in the longitudinal direction and merging at the ends into a connection opening 11 provided with a thread. The machined recess 10 is covered over by a glass plate 2 with the interpolation of a seal 3, so that between the two connection ends 11 of the indicator a closed fluid channel covered by the glass is produced. The necessary pressing force for the sealing of the two prismatic plate parts 1,2 is transmitted by means of two lateral housing parts 4 which are made of sheet-metal and which are angled at the front and rear. The front angled portions 4' bear against the glass plate 2 with the interpolation of a soft shim 3'. The angled portions 4" provided at the rear edges enclose an angle of less than 90° with the actual side part and co-operate with a pressure plate 6 which is V-shaped in cross-section and against which the associated angled portions 4" of the lateral housing parts bear. In this simple manner it is ensured that when the pressure screws 7 for the sealing of the fluid channel are tightened, the two rear edges of the lateral housing parts 4 are securely prevented from yielding towards the outside.

This positively coupled co-operation of the rear edges of the lateral housing parts 4 with the pressure plate 4 is so important because, contrary to the known indicators, in this case the two lateral housing parts 4 are pivotably connected at the angled portions 4' of the front edge at the upper and lower end by means of hinges 5, and thus it would be possible for the two lateral housing parts to be hinged out away from each other.

It can be seen from the drawings that the indicator construction according to the invention, with a housing that can be opened out and closed up, offers considerable advantages from the assembly point of view compared with indicators having a one-piece tubular housing.



P a t e n t C l a i m s

1. Fluid level indicator having two prismatic plate parts (1,2) lying against each other in the longitudinal direction under pressure, the front one of which
5 (2) consists of glass and which, forming a fluid channel (10) sealed towards the outside, are arranged in a tubular housing, having two lateral housing parts (4) which transmit the sealing pressing force and the angled front edges (4') of which co-operate with the flat viewing
10 surface, located on the outside, of the glass plate, and the rear edges (4'') of which co-operate with a pressure plate (6) receiving pressure screws (7), characterised in that the angled portions (4') at the front edge of the lateral housing parts (4) are pivotably connected to each
15 other at their upper and lower ends, preferably by means of hinges (5), and that the rear edges of the lateral housing parts (4) co-operate in a positively coupled manner with the pressure plate (6).

2. Fluid level indicator according to Claim 1,
20 characterised in that the rear edges of the lateral housing parts have angled portions (4'') which enclose an angle of less than 90° , and that the pressure plate (6) is V-shaped in cross-section and the associated angled portions (4'') of the lateral housing parts bear against it.