



## Pressure Measurement in the Automotive Industry



### Application:

## Bourdon tube pressure gauges for filling levels in the automotive industry

for manufacturers of filling systems

There are many fields in the automotive industry where pressure measuring instruments are used. The range of applications is very diverse, and the requirements are very specific. This application is about filling of vehicles with various aggressive media.



### The problem:

The filling of vehicles with fluid media (e.g. brake fluid, motor and gearbox oil, cooling agent, fuel) presents a challenge. At the filling stations a mist forms that emits into the environment. These media are partially aggressive. Therefore, all nonmetallic outer parts of the pressure gauges (window, blow-out, sealings) have to meet higher demands. The resistance of these materials has to be guaranteed. Nonobservance can lead to leakage of the case filling.

### Our solution:

In consultation with our customers, following materials have proven themselves in most cases:

- ◆ Window: laminated safety glass
- ◆ Sealant: Viton, PTFE or others
- ◆ Blow-out: metallic blow-out

In addition, our pressure gauge has a crimped-on ring case. It is better suited for this application than a bayonet ring case, as the sealing is encapsulated in the crimped-on ring.

### With special materials and crimped-on ring: RChgG 63 – 1

- ◆ Case with crimped-on ring
- ◆ Blow-out: screw with cross bore
- ◆ Bottom connection or rm, BFr
- ◆ Laminated safety glass
- ◆ Sealant for window, connection piece
- ◆ Case screws: PTFE, Viton or others

