



Pressure measurement in fire extinguishing and fire protection technology



Application:

Pressure gauges for fire-extinguishing systems in airplanes and helicopters

for manufacturers of fire-extinguishing systems



There are different ways to extinguish fire. An effective method is to cool it down with extinguishing water. But this method is not suitable for every field of application. Fire-extinguishing systems in airplanes and helicopters have to be designed on the basis of a different method. Removal of oxygen can smother a fire. For this purpose, the gas mixture Inergen is used. In this field of application, pressure gauges also have to meet high demands.

The problem:

There is only limited space in helicopters and airplanes and fire can not be extinguished with water, as it would cause to great a damage. Additionally, flying causes vibrations that can damage the instrument.

In this field of application, extinguishing systems with gas are used. Inergen is a gas mixture (nitrogen, argon, carbon dioxide), which can be applied in closed rooms. One advantage is that, as opposed to pure carbon dioxide, survival in flooded spaces is possible. Furthermore, no residues remain.

Our solution:

We have the right pressure gauge to ensure monitoring of gas pressure in fire extinguishing tanks.

Our pressure gauge of the NCS 40 and a particularly short connecting piece is space-saving and light. So that it withstands turbulences and thus caused vibrations during the flight, we have welded the bayonet ring against unintended release.

A helium leak detection ensures the density of the instrument. Upon customer request we have tested the instrument on other criteria (functionality, pressure) and have issued corresponding certificates.

for fire-extinguishing systems with gas: RCh 40 – 3, rm

- ◆ Accuracy class 1.6
- ◆ Case with bayonet ring, welded
- ◆ Nominal case size 40
- ◆ Pressure range 0 – 160 bar
- ◆ Connection: 1/8" NPT centre back with shortened connecting piece
- ◆ Dual scale 0 – 2,300 psi (black)
- ◆ Helium leak detection (10^{-9} mbar l/s)
- ◆ Tests of and certificates on different criteria according to customer request (functionality, density, pressure test and others)

