Mechanical Pressure Measurement

Bourdon tube pressure gauge Hammer Union with chemical seal NPS 2" Class 15000

Extremely difficult conditions prevail during drilling for and production of oil and natural gas so that pressure gauges have to meet highest demands regarding pressure, resistance against abrasion, impacts, shocks and vibrations. The liquid with the loose rock particles, which is transported to the surface by the mud pumps, is very abrasive and is extracted under high pressure.

The chemical seals that separate the pressure gauges from the medium have to be very robust, and the pressure gauge has to withstand the weather conditions, impacts and vibrations. Nevertheless, the measuring instruments have to operate with high accuracy and have to be easily readable, even from greater distances and under difficult weather conditions. Besides the application in oil and gas production, there are also other fields of application, such as pumping of concrete or other highly abrasive media, which are transported in large pipelines under high pressure. Instead of a pressure gauge, the attachment of pressure transmitters is also possible.

Features

- Pressure gauge NCS 160 (readable from great distances)
- Case with crimped-on ring, case/connecting piece welded to chemical seal as robust version
- Diaphragm made of 316L or special materials such as Hastelloy, tantalum, PTFE coating of the diaphragm
- Optional dual scale, also with pressure ranges in kPa, MPa, kg/cm²
- With case filling upon request

for pressure measurement on mud pumps on drilling rigs

Technical Data

Accuracy class

Nominal case size 160 mm (6")

Pressure ranges

0 - 1000 bar or

0 - 15000 psi

bottom connection

Safety category

S1 according to **DIN EN 837-1**

Permissible ambient temperature

-40 °C to +60 °C (-40 °F to +140 °F)

Chemical seal and process connection stainless steel 316L

Diaphragm

stainless steel 316L, flush welded

Process connection NPS 2" Class 15000



ARMANO Messtechnik GmbH

Am Gewerbepark 9 08344 Grünhain-Beierfeld Tel.: +49 2803 9130 - 0



ocation Wesel · Germany Manometerstraße 5 46487 Wesel-Ginderich Tel.: +49 2803 9130 - 0



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