Four-arm caliper probe





The **4AC60** borehole geometry probe incorporates two pairs of caliper arms giving independent, perpendicular X-Y diameter measurements, while a magnetometer/accelerometer orientation system provides the borehole azimuth, inclination and X-Y arm directions.

In a non-circular borehole, because of differing spring tensions in the two pairs of arms, the tool will rotate in the borehole until the X-Y directions coincide with the maximum and minimum diameter axes.

Where a borehole becomes ovalised or develops breakouttype features, it can provide information on stress magnitudes and directions within the geological formations.

As an option, the probe can be supplied with a natural gamma detector to provide additional lithological information or for horizon correlation purposes.

Specifications

✓ Diameter:

✓ Length:

✓ Weight:

✓ Max. operating temperature:

✓ Max. operating pressure:

✓ 200 bar

✓ Power supply: 70 to 100 Vdc

Data / sensor parameters

✓ Diameter measuring range: 60 to 450 mm ✓ Diameter resolution: 0.1 mm

✓ Orientation sensor: Triple magnetometers / accelerometers

✓ Measurement range: full 360° inclination / azimuth
 ✓ Orientation precision: ± 0.1°inclination, ± 0.5°azimuth

Accessories / options

√ Natural gamma detector:
ø25x50 mm NaI(TI) crystal

√ Non-magnetic centralisers

√ Calibration jig

Borehole conditions

✓ Dry or fluid-filled borehole

✓ Open hole or PVC casing: if azimuth required
 ✓ Steel casing: if azimuth not required