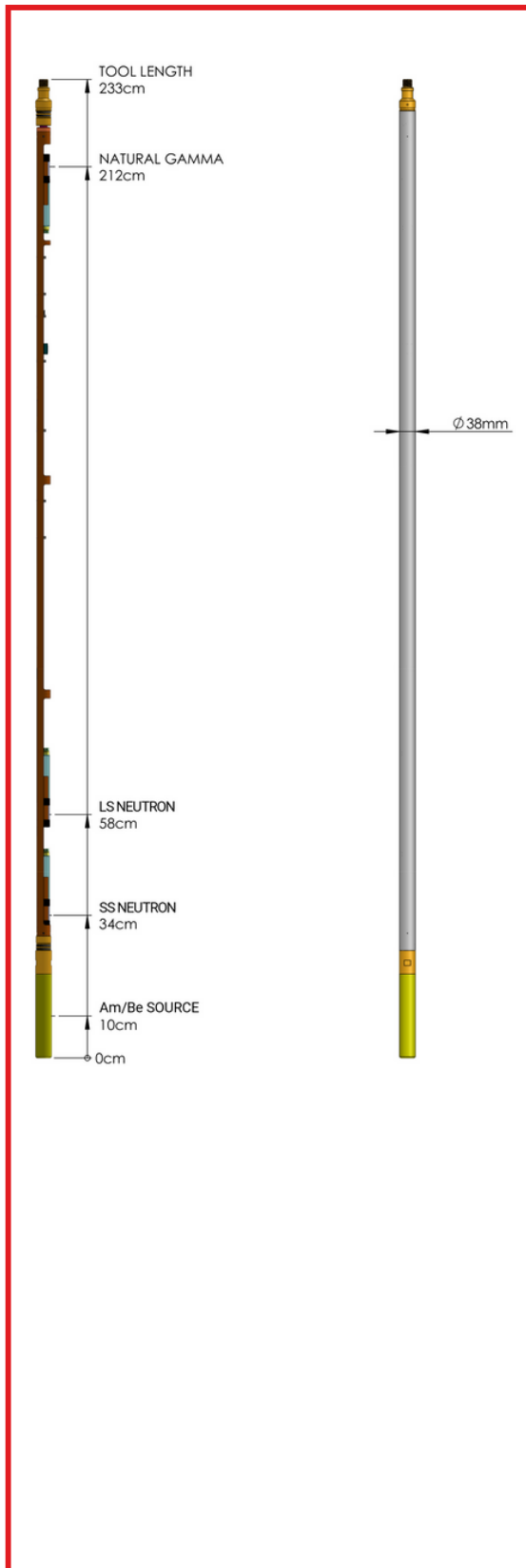


Dual thermal neutron probe



The standard **DTN38** probe provides long-(LSN) and short-spaced(SSN) 4pi thermal neutron measurements.

Since the probe reacts strongly to hydrogen content, the principal application of this method is for formation water content (porosity) measurement. As an option (highly recommended), the probe can be supplied with a natural gamma detector to permit the influence of clay content on the results to be evaluated.

Useful when the probe is deployed for through-tubing oil/water/air contact measurements, a casing collar locator (CCL) detector is also available as a factory-fitted option for this probe.

In cases where the customer is not already in possession of these items, a source holder and Type A-approved source transport container can be supplied with the probe. As standard, the source holder is designed to receive an Am1.N20 capsule manufactured by Eckert & Ziegler Cesio and is shipped empty. Source capsule provisioning, installation of the capsule in the source holder and all necessary licensing remain the responsibility of the customer. We recommend a minimum source activity of 37 GBq (1 Ci) for normal operating conditions.

Specifications

- ✓ Diameter: 38 mm
- ✓ Length: 2330 mm
- ✓ Weight: 12 kg
- ✓ Max. operating temperature: 70°C
- ✓ Max. operating pressure: 200 bar
- ✓ Power supply: 70 à 100 Vdc

Data / sensor parameters

- ✓ Thermal neutron detectors: 25 x 200mm He³ tube (4 bar)
- ✓ Source – detector spacings: 24 cm (SSN), 48 cm (LSN)
- ✓ Source type: Am/Be (mean energy 4MeV)
- ✓ Recommended source activity: 37 GBq (1 Ci)

Accessories / options

- ✓ Source holder
- ✓ Source transport container
- ✓ Natural gamma detector : ø25 x 50mm NaI(Tl) crystal
- ✓ CCL detector

Borehole conditions

- ✓ Fluid-filled b/h recommended
- ✓ Open or cased borehole