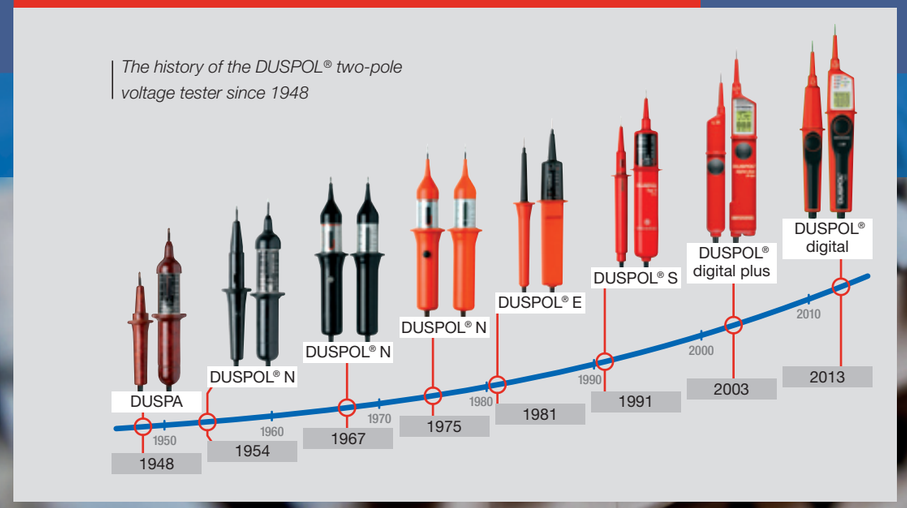
BENNING

75 years of DUSPOL®
– The Original since 1948

Safety and quality for generations

DUSPOL®: For decades, the brand name has become synonymous with a two-pole voltage tester in the electrical trade. In doing so, it has joined the ranks of generic trademarks such as Kleenex® and Post-it®. Our recipe for success: Modern technology, superior production quality and the claim to have every product certified by the VDE testing and certification institute. Since its market launch in 1948, the DUSPOL® has been sold in millions. Let us take a look at DUSPOL®'s unique success story.



DUSPOL® digital – Checking the output voltage of a DC charging device

DUSPOL® digital – the flagship

As early as the 1930s, many new electrical devices and electrical machines found their way into the private and industrial sectors. When the three American scientists Bardeen, Brattain and Shockley invented the field effect transistor in 1947, the development of microelectronics began. This also resulted in new requirement for repair, service or maintenance of electrical devices. Simply checking a voltage with the test lamps (on/off), as had been customary up until this point was often no longer sufficient.

BENNING took on this challenge in 1948 and developed the DUSPA, the world's first industrially mass-produced testing device for determining the absence of voltage. Since then, a small, handy device has made it possible to safely test voltages in the range from 110 V to 750 V AC/DC. The starting point was the invention of a moving coil level indicator.

Six years later, in 1954, BENNING integrated a phase and polarity indicator into the DUSPOL® N, to which the voltage tester owes the brand name we still use today.
In the decades that followed, the DUSPOL® N was unrivalled as a voltage tester. Redesigns in 1967 (black) and 1975 (orange), further improved the device and adapted it to the practical requirements of the constantly changing work environment. The orange DUSPOL® N developed in 1975 became a coveted bestseller. Production continued until 2003, along with the further developed product line. →

DUSPOL®

75 Years Anniversary

In the years that followed, extra-low voltages were increasingly used in industrial and communications engineering. To match this innovation, BENNING launched the DUSPOL® E in 1981, and introduced the possibility to display low voltages from 15 V using LEDs. For the first time, a large button was used to switch on the load.

In 1991, BENNING set new standards once again with the DUSPOL® S. Until then, it was only possible to carry out a rotary field direction test in the three-phase network with three-pole devices.

BENNING engineers solved the problem with an idea that was as simple as it was ingenious. They created a capacitive coupling to ground via the handle. The result was a new measurement method worldwide. In keeping with this new method, BENNING used the most modern LCD technology available at the time to display the rotating field direction and the single-pole phase display. For the first time, the limit values for the extra-low voltage of 50 V AC/120 V DC were displayed using LEDs. From this point onwards, our customers were able to use the DUSPOL® in dusty and damp environments without hesitation, thanks to the high degree of protection to IP 65.

- Rotary field test (left/right)
- Single-pole testing of the outer conductor (phase)
- Measuring point lighting
- Acoustic and optical continuity test
- Frequency display
- Voltage indicator 1 – 1,000 V AC TRUE RMS 1 – 1,200 V DC
- Resistance measurement and diode test with forward voltage display
- Illuminated LC display
- Contactless cable break detector sensor
- Load connection via large push button
- Vibration alarm in the test handle
- Dust and water jet-proof case (protection class IP 65) with rubberised test handles

IEC/EN 61243-3
DIN VDE 0682-401:2015

DUSPOL® digital

DUSPOL® analog – Testing a power outlet

DUSPOL® expert – the all-rounder

The DUSPOL® digital was developed as an advancement in the case of the DUSPOL® S – the first fully digital voltage tester from BENNING. Now it was also possible to continuously measure voltages starting from 1.5 V.

The next milestone followed in 2003: With the market launch of the DUSPOL® digital plus, BENNING fully implemented the requirements of the first internationally binding standard for voltage testers (IEC 61243-3).

Two large pushbuttons (two-handed operation), via which the load is switched on, prevent the user from touching the second tip during the measurement. Due to the wide variety of market requirements, BENNING has integrated a complete product family into this series of devices for the first time, optionally with a moving coil level display, an LED step display, an LC display or any combinations of the aforementioned. Even a solar cell for the power supply was introduced. We also included vibration alarms, test point lighting and acoustic signals, which have already proven themselves a million times over. Today, high system voltages of up to 1,000 V AC and 1,200 V DC in photovoltaic systems, wind turbines and electric/hybrid vehicles are the benchmark for voltage testers. The most recent DUSPOL® generation meets the requirements from many areas of industry and renewable energies. It exceeds the criteria for the casing (IP 65) and overvoltage protection (CAT IV 600 V) required by the current EN standard.

All tried and tested features of the respective versions (DUSPOL® analog, DUSPOL® expert, DUSPOL® digital) are incorporated in the most recent family of devices. We also added many new functions, such as the resistance/frequency display, the diode test, the true effective value measuring method (TRUE RMS) or the non-contact cable break detector.

The design of today's DUSPOL® honours its origins. The pleasantly round shape of the earlier DUSPOL® N has been reintroduced. A second, partially rubberised case component ensures non-slip handling and safe operation. The enlarged display field is intuitive as always and can be read quickly and easily in practice. All in all: "The best DUSPOL® ever made!"

You can experience our products live: Find us at electrical trade fairs or events organized by our partners in the specialist trade. ◻

contact: Frank Spieker
telephone: +49 2871 93 416
e-mail: f.spieker@benning.de

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