

# DST 10

ZUMBACH's new DST 10 series is a direct current spark tester designed to detect faults in insulation or sheathing layers of electrical cables. The spark tester is in compliance with the IEC 62230 and further standards.

## Features

- Controlled, adjustable output voltage from 0.5...10 kVdc
- Bead chain electrode for cable testing, flat electrode for flat cables.
- Pin hole and bare patch detection
- Device versions with one of the following interfaces:
  - RS: RS-232/-422/-485:  
for USYS 200, USYS IPC 1e / 2e or Host
  - DP: Profibus DP
  - EN: Ethernet TCP/IP
  - PN: Profinet IO
  - EI: EtherNet/IP
- Digital / analogue inputs / outputs as well as Ethernet service port are standard to all models

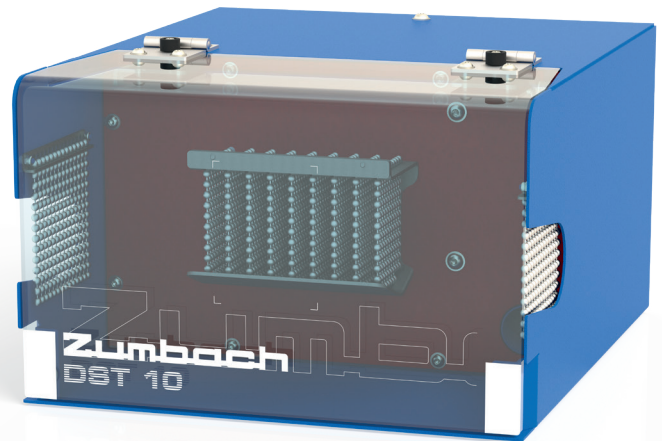
## Operating Modes

### Extrusion

- Captures each insulation fault and sends an alarm message via interface or activation of a potential free contact "Alarm"
- After the fault travels out of the electrode, the sparker resumes operation and the test voltage recovers to the preset value

### Rewinding

- Fault count and switch off of the test voltage after fault detection
- Alarm message sent via interface or activation of the potential free contact "Alarm"
- A test voltage off-on sequence reactivates the test voltage and deactivates the potential free contact "Alarm"



## System Components

### Electrode unit

This unit comprises the electrode, a regulated high voltage generator, a fault detector and one of the following interfaces: RS, Profibus DP, Ethernet TCP/IP, Profinet IO or EtherNet/IP.

### VISU-Touch – display and control unit (Option)

This unit allows the manual control of the electrode unit. The VISU-Touch can be affixed on the electrode unit or used separately. For applications where the spark tester is controlled via an interface, the VISU-Touch can be used as a local display.

- Graphic backlit display, signalization, input keyboard
- Power supply from spark tester via Ethernet (PoE)
- Ethernet network cable cat. 6 S/FTP with RJ45 connectors

Main Data	
Output voltage	0.5...10 kVdc
Max. product diameter	Bead chain electrodes: 30 mm (1.18 in.) Flat electrode: 30x30 mm (1.18x1.18 in.)
Max. line speed	Electrode length: 102 mm (4 in.) IEC 62230: 6120 m/min (20079 ft/min) UL 1581/2556: 30192–3019* m/min (99056–9905* ft/min)
Polarity of high voltage output	Negative
Accuracy of voltage calibration	Better than 4% at 5 and 10 kV, with 100 MΩ load resistance (accuracy limit +/- 5% of the indicated value given in IEC 62230)
Power supply	Universal input 100...240 VAC, 45...63 Hz
Dimensions (w x d x h)	300 x 350 x 190 mm (11.8 x 13.8 x 7.5 in.)

\* Depends on the load capacitance, values given are for 100 pF to 1 nF



• Technical specifications are subject to change without notice

