



Surgeflex 32

Portable cable test and fault location system up to 32 kV for medium and low voltage power cables

Benefits

- ▶ **Safe and fast fault location with latest TDR technology**
- ▶ **High surge energy for effective pinpoint locating**
- ▶ **Various fault location methods included**



Description

The Surgeflex 32 is a mobile system for testing and fault locating on low and medium voltage cables. The powerful ARM (Arc Reflection Method) is used for prelocation of high resistance faults up to 32 kV. Conditioning faults - if necessary - is possible by short-term burning in all voltage levels. Low resistance faults can be located with only the TDR Teleflex T 30-E and without having to use high voltage methods.

The Teleflex T 30-E offers convenient operator support with online help and one-button-operation. It automatically shows the far end of cable and fault distance in the ARM-Mode. Even inexperienced users can easily locate faults with the "Step-by-Step Easy Mode". The operator is guided through the fault locating process. On the other hand, the "Expert-Mode" provides free access to all parameters for comprehensive fault locating even under difficult conditions.

1750 Joules of surge energy provide the necessary power for accurately pinpointing cable faults with the acoustic method. Big wheels make the unit suitable for easy operation in the field. Connecting cables for earthing, mains, and HV are conveniently accessible at the rear of the unit.

Technical Features

- ▶ DC-testing up to 32 kV
- ▶ Prelocating
 - Reflection measurement
 - ARM – Measurement (Arc Reflection Method) up to 32 kV
 - ICE Impulse Current Method 0 ... 4 / 8 / 16 / 32 kV
 - Decay up to 32 kV
- ▶ Burning (fault conditioning) up to 32 kV
- ▶ Cable tracing (optional)
- ▶ Pinpointing
 - Distance and acoustic measurement
 - 0 ... 8 / 16 / 32 kV at 1750 J
 - 0 ... 4 kV at 1200 J*
 - Sheath fault locating (0 ... 5 kV power regulated)
 - Audio frequency methods (optional)

* 4 kV is optional

Scope of Delivery

- ▶ SPG 32; 0 ... 4 / 8 / 16 / 32 kV
- ▶ Teleflex T 30-E
- ▶ Mounting frame on wheels
- ▶ Operating manual
- ▶ Set of connecting cables

Technical Data

TDR Teleflex T 30-E

Range	TDR 10 m ... 50 km Transient 20 m ... 100 km
Pulse width	35 ns to 4 µs
Sampling rate	200 MHz
Time Base Accuracy	± 0.01%
Display	10.4" VGA colour TFT display
V/2	50 m/µs ... 150 m/µs
Modes	Direct L1, Direct L2, Comparison L1 / L2, Difference L1 ... L2, ARM-Mode, Impulse current method, Voltage decay
Memory	100 traces
Interface	RS 232 for PC and USB for Printer
Impedance matching	12 Ω ... 150 Ω
Operating temperature	-15 °C ... 50 °C
Supply	NiMh battery, 230 V; 50/60 Hz (110 V optional), 12 V DC
Dimensions (W x H x D)	360 x 160 x 270 mm
Weight	6 kg

HV-Module SPG 32

Testing	0 ... 32 kV DC
Surge	0 ... 4 kV: 1200 J (Optional) 0 ... 8 kV; 1750 J (3500 J Optional) 0 ... 16 kV; 1750 J (3500 J Optional) 0 ... 32 kV; 1750 J (3500 J Optional)
Surge rate	3 ... 10 s, Single pulse
Burning	0 ... 32 kV; 160 mA
Sheath fault locating	0 ... 5 kV; 160 mA

Technical Data of System

Connecting cable	6 m (standard)
Mains supply	230 V; 50, 2 kVA (110 V optional)
Dimensions (W x H x D)	800 x 1280 x 800 mm
Weight	Approx. 140 kg

Options/Accessories

- ▶ Pinpointing receiver Digiphone
- ▶ Audio frequency cable tracer and fault locator Ferrolux
- ▶ Earth fault locator ESG NT
- ▶ Surge extension to 3500 J (only for vehicle installation)
- ▶ 4 kV surging with 1200 J