

Surgeflex 32

Portable cable test and fault location system on low and medium voltage power cables



- **Safe and fast fault location with latest Teleflex SX 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.

The Teleflex SX is operated by the new touchscreen and the wellproven control knob functionality. The interface is shown on a sharp and very bright 10.4" display. The Teleflex SX is specially adapted to the fast events during fault location in power cables. The easyGO operation is reduced to the important and essential steps and runs mostly fully automatically. The new hardware with improved parameters as sampling frequency, pulse width and impulse amplitude guarantees larger ranges and highest resolution.

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.

FEATURES AND BENEFITS

- DC-testing up to 32 kV
- Prelocating
 - Reflection measurement
 - ARM measurement (Arc Reflection Method) up to 32 kV
 - Decay up to 32 kV
 - ICE Impulse Current Method
0 ... 4 / 8 / 16 / 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

MODES

- Symmetrical/unsymmetrical reflection measurement
- Difference measurement/comparison
- ARM Arc Reflection Methods
- All ICE impulse current decoupling methods
- DECAY Travelling wave method
- IFL Intermittent Fault Location

SPECIFICATIONS

Operation	Touchscreen and control knob
Range	20 m ... 160 km @ v/2 = 80 m/μs
Pulse width / Amplitude	20 ns ... 10 μs / 30 ... 50 V
Resolution	0,1 m @ v/2 80 m/μs 1,0 cm @ v/2 <40 m/μs
Sample rate	Up to 400 HHZ
Gain	- 37 ... + 37 dB
De-attenuation	0 ... +22 dB for ProRange (adjustable 0 ... 100%)
Propagation velocity V/2	10 ... 149,9 m/μs, ft/μs or nvp
Dynamic range	>80 dB
Compensation	8 Ω ... 500 Ω, adjustable
ARMside	15 measurments in one ARM shot
Voltage proof input	>400 V
Display	10.4" color TFT XGA 1024 x 768, 600 cd/m2, CCFL-Backlight
Data storage	4 GB mSATA for program and data
Connectors	Ethernet, USB, BNC, CAN (LON optional)
Protection class	IP65 closed, IP54 open lid
Supply	110 ... 240 V, 50/60 Hz, 30 VA, 12 V ext

Dimensions (W x H x D)	362 x 195 x 306 mm (option 19", 6 HU)
Weight	10 kg
Operation temperature	- 10 °C ... + 50 °C
Storage temperature	- 20 °C ... + 60 °C
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	140 kg approx.

ORDERING INFORMATION

Item	Cat. No.	Item	Cat. No.
SPG 32; 0 ... 4 / 8 / 16 / 32 kV	813372	Optional accessories	
Teleflex SX		digiPHONE+	871500500100000
Trolley on wheels		Audio frequency cable tracer and fault locator	
Operating manual		ESG NT	871500200200000
Set of connecting cables		Surge extension to 3500 J (only for vehicle installation)	
		4 kV surging with 1200 J	

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