



Fault Location Measuring Bridge DMB 5

A special feature of the small and handy measuring bridge DMB 5 is its high measuring accuracy. It can be used for fault location in low, medium and high voltage cables and also for location of sheath faults. Measurements can be made up to 6 kV maximum.

Different measuring methods e.g. according to Glaser, Murray and Wheatstone are applicable just by changing cable terminals. The galvanometer indication of the measuring bridge DMB 5 is high voltage stable and shockproof. For suppression of transient and mains frequent interference an LC filter is connected in series with the measuring circuit.

The amplifier is fed by a 9 V battery. For supply of measuring voltage an internal source is provided with 6 V; As option an external, switchable power supply unit BS 3000 with 6 voltage steps from 10 V to 2500 V DC and incorporated current limitation is available. For high voltage measurements a HV testing set of series PGK can be used for voltage supply.

Features:

- measuring voltage up to 6 kV
- direct indication of fault distance in ‰ of total cable length
- resistance measurement according to Wheatstone
- especially applicable for sheath fault location
- highly accurate measuring method in four-wire technique



Technical data

| | DMB 5 |
|---|------------------------|
| Measuring voltage Battery internal Battery external | 6 V 0...6000 V DC |
| Measuring current | 1...50 mA |
| Measuring sensitivity (3 steps) of the galvanometer every 0,5 scale graduation | 200 pA / 2 nA / 20 nA |
| Measuring range; 10-turn-potentiometer | 0...999 ‰ |
| Measuring accuracy | ± 1 % at 20 ° C |
| Reference resistances | 1 and 1000 Ω ± 0,1 % |
| Limiting frequency of amplifier | 0...1,5 Hz |
| Operating temperature | - 10 up to + 55 ° C |
| Measuring voltage supply; Battery (IEC R20) | 4 x 1,5 V |
| Power supply for amplifier; Battery (IEC 6 F 22) | 1 x 9 V |
| Dimensions (W x H x D) | ca. 280 x 280 x 195 mm |
| Weight with accessories | approx. 5 kg |

Order instructions

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|---|---------|
| Fault Location Measuring Bridge DMB 5 with accessories | 413-013 |
| Delivery includes: | |
| 4 Batteries 1,5 V, IEC R20 | 567-008 |
| Battery E-Block 9 V, IEC 6F22 | 567-012 |
| 4 Test clamps 24 mm wide | 551-133 |
| Ground line with ground clamp; 3 m long | 460-741 |
| Short - circuit cable 1,5 mm ² ; 1 m long | 460-740 |
| Short - circuit cable 25 mm ² ; 1 m long | 460-745 |
| High voltage connection cable; open end; 3 m long | 460-787 |
| Cable and accessories bag | 670-002 |
| Option: | |
| Power Supply Unit BS 3000 with accessories | 413-012 |
| Delivery includes: | |
| Connection cable BS 3000 - DMB 5; 1,5 m long | 460-785 |
| Ground line; 2,5 m | 460-461 |
| Charging unit for lead acid battery 12 V; 800 mA | 567-020 |
| Option: | |
| High voltage plug | 552-263 |

