

# DLRO10HD and DLRO10HDX CATIII 300V Industrial application kit



- Connect 4mm shrouded plugs to the DLRO10HD and DLRO10HDX
- Ideal for testing in Industrial locations
- Maintains instruments CATIII 300V rating of instrument
- Kelvin probe and clip lead sets supplied
- Bridging lead set supplied for accurately measuring cable resistance
- Supplied in heavy duty, water repellent nylon carry case

## DESCRIPTION

This kit is designed to allow users to get maximum usage from their DLRO10HD and DLRO10HDX, digital low resistance ohmmeters (Ducter) in industrial LV environments. In these environments commissioning testing and scheduled maintenance testing of individual connections can provide real benefits for added safety, energy efficiency and future reliability, including fire prevention.

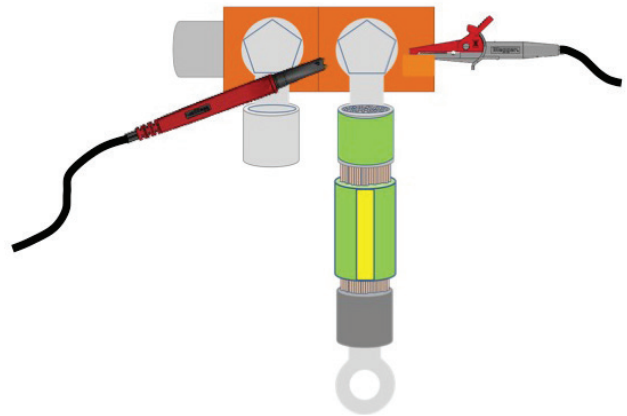
Many applications require making test lead connections to small contacts, which can also be in difficult locations to access. This Industrial application kit allows the connection of 4 mm shrouded plugs of suitably rated building wiring style test leads, maintaining the all-important CATIII rating of the DLRO10HD and DLRO10HDX instruments. A selection of lead sets fulfil the requirements for the vast range of applications in this environment.

This kit enables safe, convenient testing of applications such as measuring power cable core resistance from one end, measuring crimp, cable lug, bus bar connections and circuit breaker / switch contacts plus many more common industrial applications.

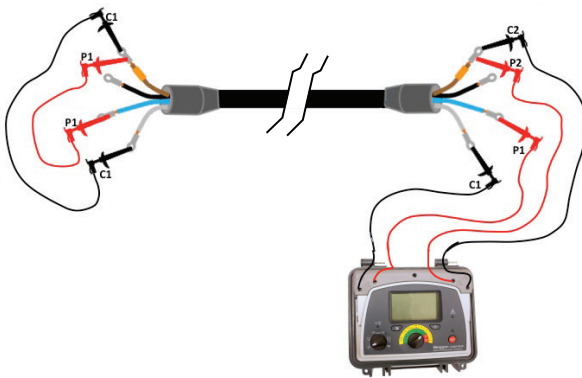
## ADDITIONAL FEATURES

- **Terminal adaptor / cover**
  - May be left fitted to instrument permanently
  - May be fitted and remove in seconds as required
  - Will not affect the instruments accuracy / repeatability
  - Requires a screw to fit and remove to comply with the requirements of EN 61010
- **Test leads, clips and probes specifically selected for the industrial application**

## EXAMPLE APPLICATIONS



- **Bus bar connection / joints resistance measurements**
  - Detect contamination
  - Check for correct nut and bolt torque / tightness
- **Cable lug to bus bar resistance measurements**
  - Detect contamination
  - Check for correct nut and bolt torque / tightness
- **Cable to cable crimp resistance measurements**
  - Detect contamination
  - Detect poor crimping



■ **Cable core resistance measurements (cable with at least three cores)**

- Measure from one end of the cable
- Check for damage
- Check cable joints
- Check for corrosion
- Determine cable length

■ **Circuit breaker / switch contacts**

- Identify contact damage due to arcing / burning
- Identify issues caused by poor contact spring pressure
- Check repeatability of contact resistance

**EXAMPLE INDUSTRY / APPLICATIONS**

- Aviation - assembly of components, Interconnection of equipment, repair and maintenance
- Rail including tram and underground - rolling stock and infrastructure, signalling systems
- Marine - power wiring systems, protection systems, cathode protection system testing
- Oil and gas pipelines - bonding between welded joints, grounding systems
- Automotive and EV - battery connections, weld quality, quality of crimped connections, assembly robot welding cables
- Cable manufacturers - quality control, cable length
- Component manufacturers - quality control
- Space exploration and engineering - structural metal to metal, ground network metal to metal, carbon fibre to metal, carbon fibre to carbon fibre
- During electrical installation of main panel, generator and UPS systems, verification of protective device contact resistance. Verification of protective device contact resistance, busbar parallel feeds, busbar lapped joints, optimum resistance over torque, and cable lug to busbar connections. During maintenance using trending data for all aspects of the above, verification after repair
- Medical earthing and bonding systems for protection against Microshock and Macroshock

- Panel / switchgear manufacturers - end of production line testing, site commissioning, maintenance and fault finding
- Robotics - wiring systems and connections which are subject to stress / movement / vibration, bonding of component parts to minimise static, grounding of machine, welding leads of robot spot welder
- Electrical infrastructure - cable resistance from one end, cable length, identification of parallel supplies while connected, cable to lug to connection fault finding. checking assembled connections main supply cables and panels, switchgear and protective devices, UPS and changeover panels, interlinking busbars, interlinking cables, distribution and PDU boards, lightning protection systems, final circuits

**SPECIFICATION SUMMARY**

**Safety**

- **CATIII 300V to EN 61010**

**Test leads etc. supplied**



2m CATIV 600V rated compact kelvin clips, 4mm shrouded plugs



2m CATIV 600V rated compact kelvin probes, 4mm shrouded plugs

**DLRO10HD and DLRO10HDX**  
Industrial application kit



**0.5m bridging lead set**  
(used to bridge cable cores to the core being measured)



**Terminal adaptor**  
Two parts, P terminal bridge and top cover



**2m current and potential lead set**  
(four wire) with clips and probes



**Carry case**

**ORDERING INFORMATION**

Description	Part number
DLRO10HD and DLRO10HDX CATIII rated industrial application lead kit with terminal cover	1011-376