



A Division of Transnet SOC Limited

INFRASTRUCTURE MAINTENANCE

SPECIFICATION

Extension Leads and Reels

Author:	Engineer	Fulufhelo Mbaimbai
	Mechanical Technology	
Approved:	Senior Engineering Technologist	Molefi Moeketsane
	Mechanical Technology	
Authorised:	Senior Engineering Technologist	Molefi Moeketsane
	Mechanical Technology	
Date:		24 January 2024

pp
.....
.....
24 January 2024

Circulation Restricted To:

Transnet Freight Rail - Infrastructure

© This document as a whole is protected by copyright. The information herein is the sole property of Transnet Ltd. It may not be used, disclosed or reproduced in part or in whole in any manner whatsoever, except with the written permission of and in a manner permitted by the proprietors.

Contents

1	Scope	3
2	Operating Conditions	3
3	Qualification	3
4	Technical Requirements	3
5	Documentation	4
6	Data Plate	4
7	Quality Control	4
8	Legal and Operational	5

1 Scope

This specification outlines the requirements for extension leads and reels to be used by Transnet Freight Rail infrastructure maintenance teams.

2 Operating Conditions

- 2.1 The equipment will be used in all weather conditions having altitudes varying from sea level to 1850m above sea level, relative humidity 0% to 90% and atmospheric conditions which vary from heavily saline to dry and dusty.
- 2.2 Ambient air temperatures ranging from -10 ° C to 50° C.

3 Qualification

- 3.1. The design of the components as per user requirements is to be that of the manufacturer but must be of robust construction in order to meet sustained operational duty demands, yet they must be light and easy for each to be used safely.
- 3.2. The tools and components will be acceptable in standard factory production finish and colour. Details to be furnished in the operator's manual supplied by the manufacturer.
- 3.3. The components or tools are to be easily and economically maintained/repaired with standard workshop tools and equipment when necessary.

4 Technical Requirements

4.1 General Requirements

- 4.1.1. Extension cords lengths 3m, 5m, 10m, 15m, 20m, 25m and 30m may be required; the length of extension cord supplied must be as specified in the schedule of requirements.
- 4.1.2. The extension leads and reels must have a maximum current rating of 16 Amp.
- 4.1.3. The extension leads and reels must have a voltage rating of 230V @ 50Hz.
- 4.1.4. The extension cord shall comprise of 2.5mm x 3 core flexible cable.
- 4.1.5. Each extension cord shall have a minimum IP44 rating.

4.2 Extension Leads

- 4.1.1. The extension leads must be a multi-plug extension cord with coupler consisting of two 3-pin socket outlets next to each other (side by side).
- 4.1.2. The extension cord shall allow for connection of multiple devices simultaneously.

4.3 Extension Reels

- 4.1.1. The extension reel shall consist of a plastic reel body, galvanized steel frame and handle for winding and unwinding the cable.
- 4.1.2. The extension reel shall have a maximum diameter of 300mm.
- 4.1.3. The extension reel shall have built-in surge protection.
- 4.1.4. The extension reel must come with the following features.
 - 2 x 3-pin 16A plugs, 1 x 2-pin Euro, 1 x 2-pin Round
 - Safety thermal cut-off
 - Power on/off switch
 - Power LED on indicator

5 Documentation

The supplier shall submit the following documentation with the delivery of each device:

- 5.1 Operator Manual.
- 5.2 Maintenance guide.
- 5.3 Guarantee certificate.
- 5.4 Calibration certificate

6 Data Plate

- 7.1 Each extension cord must come with a data plate.
- 7.2 The brand, model and serial number of the tool must be clearly shown.

7 Quality Control

- 7.1 All machines must be manufactured in an environment that complies to the latest ISO 9001 to ISO 9004 or similar quality control standards. Details must be furnished.
- 7.2 Transnet Freight Rail shall where necessary subject machines to a technical evaluation and testing, final decision will, amongst others, be based on these findings.

8 Legal and Operational

- 8.1 All machines must comply with the requirements of the Machinery and Occupational Safety Act, (Act 85 of 1993 – General Machinery Regulations), relevant SANS codes and The Machinery Directive 2006/42/EC.
- 8.2 The petrol generator unit must be completely assembled and filled with lubricants and ready for service in all respects.
- 8.3 Where grease nipples are fitted these are to be to DIN 71412 in easily accessible positions. Full details of lubrication applicable to machines on offer to be submitted.
- 8.4 An operator's handbook, service manual and spare parts list must be supplied with each machine in order to ensure that the machine is operated in accordance to the manufacturer's instructions.
- 8.5 All machines and equipment must be supplied complete with essential/specialized tools such as Allen keys, spanners etc. to make essential adjustments where necessary.
- 8.6 Full details of technical support organisation is to be submitted. Technical support organizations of such equipment must be within the geographical borders of the RSA as set out in the Constitution of RSA ACT 200 of 1993.
- 8.7 All machines and equipment are to be guaranteed for a minimum period of 12 months against faulty material and workmanship - fair wear and tear excluded. Full details of guarantee are to be submitted.
- 8.8 The information as requested by the various clauses in this specification are to be supplied in the form of technical data, pamphlets and/or drawings. If this is not complied to, offers may be overlooked.
- 8.9 All machines shall come with data plate indicating the relevant information as set out in section 8 of SANS 1007:2010.
- 8.10 Notwithstanding the requirements as set out above, all bidders shall adhere to the requirements of the standard terms and conditions for supply of goods and services or other terms and condition as provided in the tender.

End of Specification