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**Specification (Measurement)**

# Transport and Main Roads Specifications
# MRS256 Power Cables

**May 2026**

Queensland Government

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# 1 Introduction

This Specification applies to the supply and installation of power cables for the supply of electrical power to electrical installations, including traffic signal installations and Rates-2 and Rate-3 road lighting installations.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications*, MRTS256 *Power Cables* and other Specifications as appropriate.

This Specification forms part of the Transport and Main Roads Specifications Manual.

# 2 Measurement of works

## *2.1 Standard Work Items*

In accordance with the provisions of Clause 2.1.3 of MRS01 *Introduction to Specifications*, the Standard Work Items covered by this Specification are listed in Table 2.1.

***Table 2.1 – Standard Work Items***

| Standard Item No. | Description | Unit of Measurement |
|---|---|---|
| 67101 | Supply of underground road lighting cable, [*conductor size*], [*number of core*s] cores, [*core insulation*], [*sheath insulation*], [*conductor material*] | m |
| 67102 | Supply of aerial road lighting cable, [*conductor size*], [*number of cores*] cores, [*core insulation*], [*sheath insulation*], [*conductor material*] | m |
| 67103 | Supply of traffic signal cable, [*conductor size*], [*number of cores*] cores, [*core insulation*], [*sheath insulation*], [*conductor material*] | m |
| 67104 | Supply of cable, [*usage*], [*conductor size*], [*number of cores*] cores, [*core insulation*], [*sheath insulation*], [*conductor material*] | m |
| 67105 | Supply of cable joint, [*fused* / *unfused*] | each |
| 67106 | Supply of aerial cable strain clamp | each |
| 67107 | Supply of aerial cable connector, [*type*] | each |
| 67108 | Supply of right angle strain relief bushing (to suit 26 mm diameter hole) | each |
| 67109 | Installation, jointing and termination of underground road lighting cable, [*cores*] | m |

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| Standard Item No. | Description | Unit of Measurement |
|---|---|---|
| 67110 | Installation, jointing and termination of traffic signal cable, [*cores*] | m |
| 67111 | Installation, jointing and termination of loop detector cable, [*cores*] | m |
| 67112 | Installation, jointing and termination of cable, [*usage*], [*cores*] | m |
| 67113 | Installation, jointing and termination of aerial road lighting cable, [*cores*] | m |
| 67191 | Removal of underground cable | m |
| 67192 | Removal of aerial cable | m |

## *2.2 Work Operations*

**Item 67101 Supply of underground road lighting cable, [*conductor size*], [*number of cores*] cores, [*core insulation*], [*sheath insulation*], [*conductor material*]**

**Item 67102 Supply of aerial road lighting cable, [*conductor size*], [*number of cores*] cores, [*core insulation*], [*sheath insulation*], [*conductor material*]**

**Item 67103 Supply of traffic signal cable, [*conductor size*], [*number of cores*] cores, [*core insulation*], [*sheath insulation*], [*conductor material*]**

**Item 67104 Supply of cable, [*usage*], [*conductor size*], [*number of cores*] cores, [*core insulation*], [*sheath insulation*], [*conductor material*]**

**Item 67105 Supply of cable joint, [*fused / unfused*]**

**Item 67106 Supply of aerial cable strain clamp**

**Item 67107 Supply of aerial cable connector, [*type*]**

**Item 67108 Supply of right angle strain relief bushing (to suit 26 mm diameter hole)**

Work Operations incorporated in the above items include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*, and

b) supply of all materials to the Site.

**Item 67109 Installation, jointing and termination of underground road lighting cable, [*cores*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) installation of cables through ducting

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c) connection and termination of cables

d) replacement of draw ropes in ducting, and

e) testing of installation.

**Item 67110 Installation, jointing and termination of traffic signal cable, [*cores*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) installation of cables through ducting, posts, mast arms and poles

c) connection and termination of cables, including the connection and termination of cables at the appropriate terminal assembly within the traffic signal post, mast arm or joint use pole

d) replacement of draw ropes in ducting, and

e) testing of installation.

**Item 67112 Installation, jointing and termination of cable, [*usage*], [*cores*]**

Work Operations incorporated in the above items include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) installation of cables

c) connection and termination of cables, and

d) testing of installation.

**Item 67113 Installation, jointing and termination of aerial road lighting cable, [*cores*]**

Work Operations incorporated in the above item include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) installation of cable

c) connection and termination of cables, and

d) testing of installation.

**Item 67191 Removal of underground cable**

**Item 67192 Removal of aerial cable**

Work Operations incorporated in the above items include:

a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*

b) de-energisation of circuit

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c) removal of cable, and

d) transport to Transport and Main Roads' storage Site.

## *2.3 Calculation of quantities*

Quantities for the supply and installation of underground cable for traffic signals (other than multicore) and road lighting cable shall be the sum of the measured duct length plus 4 m for each pit through which the cable passes.

Quantities for the supply and installation of traffic signal multicore cable shall be the sum of the measured duct length plus 12 m for each pit at controller, posts, joint-use poles and mast arm columns and 2 m at each intermediate pit through which cable passes plus 5 m from pit to terminal connection.

Quantities for the supply and installation of aerial cable shall be the sum of measured span lengths plus 2 m for each span, for each type of cable specified.

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