Note: The PROV published in November 2018 replaces OPSS 2409 COMMON, November 2014 with no technical content changes.

MATERIAL SPECIFICATION FOR TRAFFIC SIGNAL CABLE

TABLE OF CONTENTS

2409.01 SCOPE

This specification covers the requirements for traffic signal runner cable and traffic signal riser cable.

2409.02 REFERENCES

This specification refers to the following standards, specifications, or publications:

CSA Standards

C22.2 No. 239-17 Control and Instrumentation Cables

2409.03 DEFINITIONS

For the purposes of this specification, the following definitions apply:

Traffic Signal Runner Cable means the polyethylene insulated polyvinyl chloride jacketed multi-conductor cable, for use in traffic signal systems, suitable for direct burial or aerial installation and rated at 600 volts.

Traffic Signal Riser Cable means the polyethylene insulated polyethylene jacketed multi-conductor cable, for use in traffic signal systems, suitable for use on traffic signal pole installation and rated at 600 volts.

2409.05 MATERIALS

2409.05.01 Cable

Traffic signal cable shall be according to CSA C22.2 No. 239, rated 600 volts.

Conductors of the traffic signal runner cable shall be #14 AWG solid copper.

Conductors of the traffic signal riser cable shall be #14 AWG, minimum of 19 strands or #14 AWG solid copper.

2409.05.02 Insulation

Insulation of the conductors shall be according to CSA C22.2 No. 239.

2409.05.03 Jacket

Outside jacket of the traffic signal runner cable shall be as shown in Table 1 and the polyvinyl chloride shall be according to CSA C22.2 No. 239.

2409.05.04 Conductor Identification

Conductor identification shall be according to CSA C22.2 No. 239.

Colour coding and printing of the conductors shall be as shown in Table 2 to 7.

2409.07 PRODUCTION

2409.07.01 General

Traffic signal runner cable and traffic signal riser cable shall be according to CSA C22.2 No. 239.

2409.07.02 Marking

Cable shall be permanently marked according CSA C22.2 No. 239.

TABLE 1
Traffic Signal Runner Cable Outside Jacket Thickness

Diameter of Completed Conductor Assembly mm	Average Jacket Thickness mm	Minimum Jacket Thickness mm
0 - 10.9	2.0	1.6
11 - 17.9	2.4	2.0
18 - 26.9	2.8	2.2
27 - 38.9	3.2	2.6
39 - 50.9	3.6	3.0
51 - 75.9	4.0	3.2
76 and over	4.8	4.0

TABLE 2
4 Conductor Runner Cable

Conductor	Insulation Colour
#1	White
#2	Red
#3	Yellow
#4	Blue

TABLE 3
7 Conductor Runner Cable

Conductor	Insulation Colour	Lettering
#1	White	-
#2	Red	Red one
#3	Red	Red two
#4	Yellow	Amber one
#5	Yellow	Amber two
#6	Blue	Green one
#7	Blue	Green two

TABLE 4
12 Conductor Runner Cable

Conductor	Insulation Colour	Lettering
#1	White	-
#2	Black	-
#3	Orange	-
#4	Red	Red one
#5	Red	Red two
#6	Red	Red three
#7	Yellow	Amber one
#8	Yellow	Amber two
#9	Yellow	Amber three
#10	Blue	Green one
#11	Blue	Green two
#12	Blue	Green three

TABLE 5
19 Conductor Runner Cable

Conductor	Insulation Colour	Lettering
#1	White	White one
#2	White	White two
#3	Black	-
#4	Orange	-
#5	Red	Red one
#6	Red	Red two
#7	Red	Red three
#8	Red	Red four
#9	Red	Red five
#10	Yellow	Amber one
#11	Yellow	Amber two
#12	Yellow	Amber three
#13	Yellow	Amber four
#14	Yellow	Amber five
#15	Blue	Green one
#16	Blue	Green two
#17	Blue	Green three
#18	Blue	Green four
#19	Blue	Green five

TABLE 6
5 Conductor Riser Cable

Conductor	Insulation Colour
#1	White
#2	Red
#3	Yellow
#4	Blue
#5	Green with Yellow Tracer

TABLE 7
7 Conductor Riser Cable

Conductor	Insulation Colour	Lettering
#1	White	-
#2	Red	-
#3	Yellow	Amber one
#4	Yellow	Amber two
#5	Blue	Green one
#6	Blue	Green two
#7	Green with Yellow Tracer	-