

Indian Standard
**PVC INSULATED CABLES FOR WORKING
VOLTAGES UP TO AND INCLUDING
1100 VOLTS - SPECIFICATION**
(*Third Revision*)

1 SCOPE

1.1 This standard covers the requirements and tests for the following types of unarmoured PVC insulated cables with copper or aluminium conductors and flexible cords with copper conductors for electric power and lighting (including weather proof cables and cables for low temperature conditions) for voltages up to and including 1100V.

NOTES

1 For use as weatherproof cables, the cables shall meet the requirements of additional ageing test [see 15.4 c)].

2 The cables intended for low-temperature conditions shall meet the requirements of cold bend or cold impact test whichever is applicable [see 15.4 (a) and (b)].

1.1.1 Type of Cables

a) Cables for fixed wiring:

- i) Single core (unsheathed);
- ii) Single core (sheathed);
- iii) Circular twin, three and four core (sheathed);
- iv) Flat twin with or without ECC (sheathed); and
- v) Flat three core (sheathed).

b) Flexible cables, single core (unsheathed).

c) Flexible cords:

- i) Single core (unsheathed);
- ii) Single core (sheathed);
- iii) Parallel twin (unsheathed);
- iv) Twisted twin (unsheathed);
- v) Circular twin, three, four and five core (sheathed); and
- vi) Flat twin (sheathed).

1.2 The cables covered in this standard are suitable for use on ac single phase or three phase (earthed or unearthed) systems for rated voltages up to and including 1100 V. These cables may be used on dc systems for rated voltages up to and including 1500V.

1.3 The cables covered in this standard are suitable for use where the combination of ambient temperature and temperature rise due to load results in a continuous conductor temperature not exceeding 70°C.

1.4 The cables covered in this standard are also suitable for use under outdoor or low temperature conditions provided these meet the additional requirements as given under type tests. For still lower temperature, the purchaser may specify the additional requirements.

1 REFERENCES

1.1 The standards given in Annex A are necessary adjuncts to this standard.

ANNEX A

(*Clause 2.1*)

LIST of REFERRED INDIAN STANDARDS

<i>IS No.</i>	<i>Title</i>
1885(Part 32): 1971	Electrotechnical vocabulary Cables, conductors and accessories for electricity supply

3035 (Part 1):
1965

Specification for thermoplastic
insulated weatherproof cables:
Part 1 PVC insulated and PVC 10418'. 1982
sheathed

4905 : 1968
5831: 1984

Methods for random sampling
Specification for PVC insulation
and sheath of electric cables
(*first revision*)

8130 : 1984

Specification for conductors for
insulated electric cables and
flexible cords (*first revision*)

10418:1982
10810 : 1984

Specification for drums for electric cables
Method of test for cables