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**JIS C 3612** : 2002  
(JCMA)

**600V Flame retardant polyethylene  
insulated wires**

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## Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee, as the result of proposal for establishment of Japanese Industrial Standard submitted by the Japanese Electric Wire and Cable Maker's Association (JCMA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

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In the event of any doubts arising as to the contents,  
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## 600V Flame retardant polyethylene insulated wires

**1 Scope** This Japanese Industrial Standard specifies single core wires insulated with flame retardant compound mainly composed of polyethylene resin (hereafter referred to as “flame retardant polyethylene”) which are mainly used for wiring of general electrical structures and electric machinery and equipment not exceeding 600 V (hereafter these wires are referred to as “wires”).

**2 Normative references** The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS C 0081 *Environmental testing—Electrotechnical products—Fire hazard testing—Smoke obscuration—Small scale static method—Materials*

Remarks : **IEC 60695-6-31** : 1999 *Fire hazard testing—Part 6-31 : Smoke obscuration—Small-scale static test—Materials* is identical with the said standard.

JIS C 3005 *Test methods for rubber or plastic insulated wires and cables*

JIS C 3101 *Hard-drawn copper wires for electrical purposes*

JIS C 3102 *Annealed copper wires for electrical purposes*

JIS C 3666-2 *Test on gases evolved during combustion of electric cables—Part 2 : Determination of degree of acidity of gases evolved during the combustion of materials taken from electric cables by measuring pH and conductivity*

Remarks : **IEC 60754-2** : 1991 *Test on gases evolved during combustion of electric cables—Part 2 : Determination of degree of acidity of gases evolved during the combustion of materials taken from electric cables by measuring pH and conductivity*, Amendment 1 (1997) is identical with the said standard.

**3 Symbol** The symbol is IE/F<sup>(1)</sup> <sup>(2)</sup>.

Notes <sup>(1)</sup> The meaning of the symbol is as follows:

IE : polyethylene insulated wire

/F : flame retardance (limited to those not containing halogen elements and of low smoke-evolution)

<sup>(2)</sup> The popular name is EM-IE.

**4 Characteristics** The characteristics of the cables shall be as stated in Table 1 when the tests of clause 6 are carried out.