UDC 621.316.541:621.315.2

JIS

JAPANESE INDUSTRIAL STANDARD

C 11 type connectors for radio frequency coaxial cables

JIS C 5419–1995

Translated and Published

by

Japanese Standards Association

Printed in Japan

8 S

In the event of any doubt arising,
the original Standard in Japanese is to be final authority

Errata for JIS (English edition) are printed in *Standardization Journal*, published monthly by the Japanese Standards Association.

Errata will be provided upon request, please contact:
Business Department,
Japanese Standards Association
4-1-24, Akasaka, Minato-ku,
Tokyo, JAPAN 107
TEL. 03-3583-8002
FAX. 03-3583-0462

Errata are also provided to subscribers of JIS (English edition) in *Monthly Information*.

UDC 621.316.541 : 621.315.2

JAPANESE INDUSTRIAL STANDARD J I S

C 11 type connectors for radio frequency coaxial cables

C 5419-1995

1. Scope This Japanese Industrial Standard specifies the C 11 type connectors designed for ratings of voltage at impedance mismatching 500 V (effective value) or less, and frequency 200 MHz or less based on JIS C 5410 (hereafter referred to as "connector").

Remarks: The following standards are cited in this Standard.

JIS C 3501 Radio-frequency coaxial cables

JIS C 5401 General rules of connectors for use in electronic equipment

JIS C 5410 General rules of connectors for radio frequency coaxial cables

JIS K 6915 Phenolic molding compounds

2. Definitions For the purposes of this Standard, the definitions given in JIS C 5401 and JIS C 5410 apply.

3. Composition of type designation The composition of type designation shall be in accordance with 4.1 of JIS C 5410.

4. Classification The classification of C 11 type connectors shall be as shown in Table 1.

Table 1.

Type designation	Connector shape	Contact shape	Applicable cable (JIS C 3501)	Shape and dimensions
CN C 11 SPM3	Plug	Male	3C-2V 3D-2V	Attached Fig. 1
CN C 11 SPM5			5C-2V 5D-2V	
CN C 11 SPM5W			5D-2W	
CN C 11 SPM7			7C-2V	
CN C 11 SPM10			10C-2V 10D-2V	Attached Fig. 2
CN C 11 SRF	Receptacle	Female	—	Attached Fig. 3
CN C 11 SAFF	Adaptor	Female-female	—	Attached Fig. 4
CN C 11 LAFM	L type adaptor	Female-male	—	Attached Fig. 5
CN C 11 DC	Cap	—	—	Attached Fig. 6

5. Construction

5.1 Construction, shape and dimensions The dimensions for the mated part shall be as shown in Fig. 1 and Fig. 2. The shapes and dimensions for other parts shall be as shown in the Attached Figures specified in Table 1. The dimensions of metallic portions shall be those after the surface treatment.

The construction and shape of the portion without specified dimension are given as examples. The tolerances on dimensions without specified difference shall be in accordance with 5.1 of JIS C 5410.

Fig. 1. Unit: mm

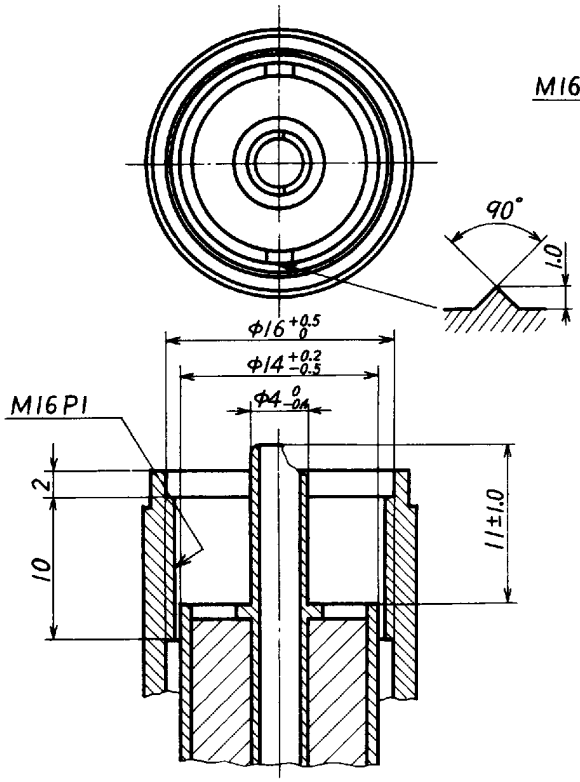
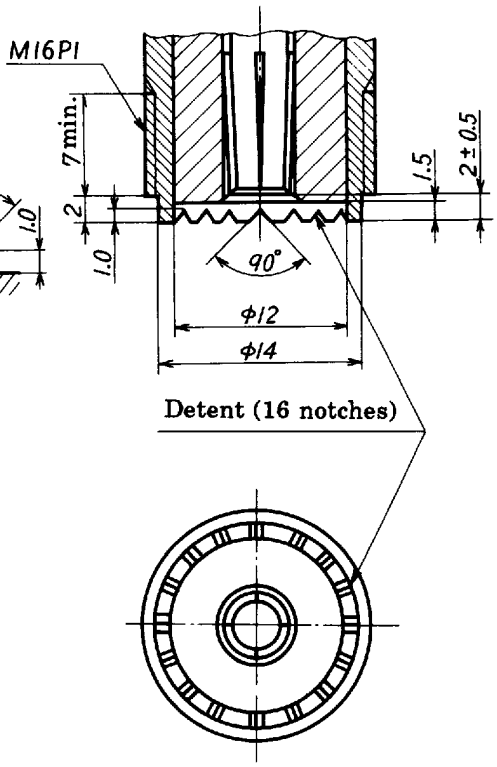


Fig. 2. Unit: mm



5.2 Material The material shall meet the requirements of 8.3.1 of JIS C 5410. The materials of insulation shall be as specified in JIS K 6915, or those at least equivalent.

5.3 Finish The finish shall be in accordance with 8.3.2 of JIS C 5410.

6. Performances

6.1 Electrical performances

(1) Insulation resistance When the insulation resistance is measured with approx. 500 V d.c. according to 7.2.1 of JIS C 5410, it shall be 100 MΩ or more.

(2) Voltage proof When a voltage of 1000 V (effective value) is applied according to 7.2.2 of JIS C 5410, no abnormality shall appear.

(3) Contact resistance When the contact resistance is measured based on 7.2.3 of JIS C 5410, it shall be 3 mΩ or less.

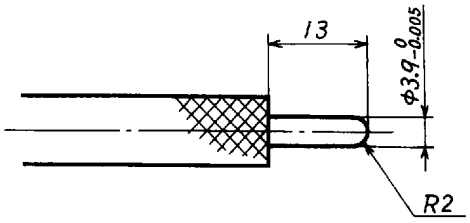
6.2 Mechanical performances

(1) Interchangeability As for the interchangeability, the connector with the mated part shown in Fig. 1 shall be connected with those shown in Fig. 2 without any abnormality.

(2) Retention force of female contact When the retention force of female contact is measured according to 7.3.4 of JIS C 5410 using a pingauge shown in Fig. 3, it shall be 1.0 N or more.

Fig. 3.

Unit: mm



(3) Fixing force of contact with stopper When a force of 10 N or more is applied, the fixing force of contact with a stopper shall meet the requirement in 7.3.5 of JIS C 5410.

(4) Robustness of mated part When a tensile force of 300 N is applied, the robustness of mated part shall meet the requirement in 7.3.8 of JIS C 5410.

(5) Robustness of mounting part When a tensile force of 500 N is applied, the robustness of mounting part shall meet the requirement in 7.3.9 of JIS C 5410.

(6) Repetitive operation After repeating 5000 times connecting and disconnecting the connector according to 7.3.10 of JIS C 5410, the contact resistance shall be 10 mΩ or less.

6.3 Corrosion resistance After the test for the corrosion resistance was carried out based on 7.4.5 of JIS C 5410, the voltage proof shall meet the requirement in 6.1 (2), and the contact resistance shall be 50 mΩ or less.

7. Test

7.1 Standard condition of testing place The standard condition of testing place shall conform to 9.1 of JIS C 5410.

7.2 Test item The test item shall be in accordance with the Attached Table 1.

8. Marking The marking shall conform to 11. of JIS C 5410.