

JIS

JAPANESE INDUSTRIAL STANDARD

AC Solenoids for General Purpose

JIS C 4554—1984

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JAPANESE INDUSTRIAL STANDARD

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AC Solenoids for General Purpose

C 4554-1984

1. Scope

This Japanese Industrial Standard specifies a.c. solenoids for general purpose of laminated type intended to operate various mechanisms in single phase a.c. electric circuit not exceeding 250 V at a frequency of 50 Hz or 60 Hz, hereinafter referred to as the "solenoids".

2. Definitions

For the purpose of this standard the definitions provided in 2. of JIS C 4552 shall apply.

3. Standard Service Condition and Power Source

The standard service condition and power source shall be as given in 3. of JIS C 4552.

4. Ratings

4.1 Rated Voltage The rated voltage shall be as given in Table 1.

Table 1

Unit: V

Rated voltage	
100	200

4.2 Rated Stroke The rated stroke of solenoids shall be as given in Table 2.

Table 2

Unit: mm

Rated stroke				
10	15	20	25	30

Applicable Standard:

JIS C 4552-General Rules for Solenoids

Reference Standard:

JIS C 4553-DC Solenoids for General Purpose

4.3 Rated Attraction Force The rated attraction force of solenoids shall be as given in Table 3.

Table 3

Unit: N

Rated attraction force							
3	5	10	20	25	30	40	50

4.4 Endurance The number of endurance cycles shall be as given in Table 4.

Table 4

Endurance (in ten thousand cycles)							
5	10	30	50	100	150	300	

4.5 Short-time Rating The short-time rating shall be as given in 4.6 of JIS C 4552.

5. Performances

5.1 Operation A solenoid shall operate smoothly when subjected to the test of 7.2.2.

5.2 Attraction Force The attraction force shall be not less than the appropriate value given in Table 5, when a solenoid is subjected to the test of 7.2.3.

5.3 Residual Attraction The residual attraction shall not exceed the appropriate value given in Table 5, when a solenoid is subjected to the test of 7.2.4.

5.4 Holding Current The holding current shall not exceed the appropriate value given in Table 5, when a solenoid is subjected to the test of 7.2.5.

5.5 Starting Current The starting current shall not exceed the appropriate value given in Table 5, when a solenoid is subjected to the test of 7.2.6.

5.6 Temperature Rise The value of temperature rise of the coil shall not exceed the appropriate value given in Table 7 of JIS C 4552, when a solenoid is subjected to the test of 7.2.7 in this standard.