

# JIS

## JAPANESE INDUSTRIAL STANDARD

### DC Solenoids for General Purpose

### JIS C 4553—1984

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## JAPANESE INDUSTRIAL STANDARD

J I S

## DC Solenoids for General Purpose

C 4553-1984

1. Scope

This Japanese Industrial Standard specifies d.c. solenoids for general purpose intended to operate various mechanisms in d.c. electric circuit not exceeding 150 V, 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 |    |    |    |     |
|---------------|----|----|----|-----|
| 6             | 12 | 24 | 48 | 100 |

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Applicable Standard:

JIS C 4552-General Rules for Solenoids

## Reference Standard:

JIS C 4554-AC Solenoids for General Purpose

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

Table 2

Unit: mm

| Rated stroke |   |   |   |   |   |   |  |
|--------------|---|---|---|---|---|---|--|
| 1            | 2 | 3 | 4 | 5 | 6 | 8 |  |

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 |   |   |   |   |   |    |    |
|------------------------|---|---|---|---|---|----|----|
| 1                      | 2 | 3 | 5 | 7 | 8 | 12 | 15 |

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 | 300 | 500 | 1000 | 3000 |

4.5 Short-time Rating The short-time ratings 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 Rated Power Consumption The rated power consumption shall not exceed the appropriate value given in Table 5, when a solenoid is subjected to the test of 7.2.3.

5.3 Holding Force The holding force shall be not less than the appropriate value given in Table 5, when a solenoid is subjected to the test of 7.2.4.

5.4 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 7.2.5.