

BS EN 1154 : 1997

BS EN 1154 : 1997 Controlled door closing devices

Products tested to British and European standards provide greater durability, longer warranty periods, peace of mind and evidence of professional specification.

The standard covers all controlled surface mounted, concealed, or transom mounted closers as well as both single and double action floor springs. It should be noted that devices such as spring hinges which do not exert a checking control during door closing are outside the scope of this standard.

Under the standard each product is tested and classified accordingly to show its compliance. The identification of a 6-digit code is visible on the individual product. Each digit represents a category and how it measured against the standard to which it was tested.

Digit 1 - Category of use

For all internal and external doors for use by the public, and others, with little incentive to take care, i.e. where there is some chance of misuse of the door.

Grade 3: For closing doors from at least 105° open

Grade 4: For closing doors from 180° open

Note 1: Grade 4 classification assumes standard installation according to the manufacturer's instructions.

Note 2: For applications subject to extremes of abuse, or for particular limitations of opening angle, door closers incorporating a backcheck function or provision of a separate doorstop should be considered.

Digit 2 - Number of Test Cycles

Only one test duration is identified for door closing devices manufactured to this standard:

Grade 8: 500,000 test cycles.

Digit 3 - Test door mass/size

Seven test door mass grades and related door closer power sizes are identified as the table below illustrates. Where a door closer provides a range of power sizes both the minimum and the maximum sizes shall be identified.

Test Door Mass & Recommended Door Widths		
Power size of closer	Maximum mass of hinged leaf	Width of test door leaf
1	20kg	<750mm
2	40kg	850mm
3	60kg	950mm
4	80kg	1100mm
5	100kg	1250mm
6	120kg	1400mm
7	160kg	1600mm

Digit 4 - Fire behaviour

Two grades of fire behaviour are identified for door closing devices manufactured to this standard:

Grade 0: Not suitable for use on fire/smoke door assemblies.

Grade 1: Suitable for use on fire/smoke door assemblies, subject to satisfactory assessment of the contribution of the door closer to the fire resistance of specified fire/smoke assemblies.

Digit 5 - Safety

All door closers are required to satisfy the Essential Requirement of safety in use contained in the Construction Products Directive issued by the EU.

Digit 6 - Corrosion Resistance

Five grades of corrosion resistance are identified according to BS EN 1670:

Grade 0: No defined corrosion resistance

Grade 1: Mild resistance

Grade 2: Moderate resistance

Grade 3: High resistance

Grade 4: Very high resistance

Example

3 8 2 0 1 0
5

The above code signifies a door closer capable of opening to at least 105°, and with a range of power size from 2 to 5. The closer would not be suitable for use on a fire door.



Product Marking

This standard requires that each door closer and separately supplied accessory manufactured to the standard be marked with the following:

- a: manufacturer's name or trademark, or other means of identification
- b: product model identification
- c: the 6 digit classification listed above
- d: number of this European standard
- e: the year and week of manufacture (may be coded)

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