

4.5 <sup>(A1)</sup> Suitability for use on fire/smoke doors (fourth character) <sup>(A1)</sup>

Two grades of <sup>(A1)</sup> suitability for use on fire/smoke doors (fourth character) <sup>(A1)</sup> 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 door assemblies. Such assessment is outside the scope of this European Standard (see prEN 1634-1).

<sup>(A1)</sup> Annex A indicates additional requirements for door closers manufactured to grade 1. <sup>(A1)</sup>

4.6 Safety (fifth digit)

All door closers are required to satisfy the Essential Requirement of safety in use. Therefore only grade 1 is identified.

4.7 Corrosion resistance (sixth digit)

Five grades of corrosion resistance are identified according to <sup>(A1)</sup> EN 1670: <sup>(A1)</sup>

- grade 0: No defined corrosion resistance;
- grade 1: Mild resistance;
- grade 2: Moderate resistance;
- grade 3: High resistance;
- grade 4: Very high resistance.

<sup>(A1)</sup> 4.8 Example of classification

The following example denotes a door closer capable of closing doors from at least 105° open, with durability grade 8, with a power size range from size 2 to size 5, not suitable for use on fire/smoke door assemblies, with safety grade 1 and with moderate resistance to corrosion.

3	8	5	0	1	2
		2			

Table 1

1	2	3	4	5	6	7	8	9
Door closer power size	Recommended door leaf width	Test door mass	Closing moment			Opening moment between 0° and 60°	Door closer efficiency between 0° and 4°	
			between 0° and 4°		between 88° and 92°			any other angle of opening
			mm max.	kg	Nm min.	Nm max.		Nm min.
1	<750	20	9	<13	3	2	26	50
2	850	40	13	<18	4	3	36	50
3	950	60	18	<26	6	4	47	55
4	1 100	80	26	<37	9	6	62	60
5	1 250	100	37	<54	12	8	83	65
6	1 400	120	54	<87	18	11	134	65
7	1 600	160	87	<140	29	18	215	65

NOTE 1 The door widths given are for standard installations. In the case of unusually high or heavy doors, windy or draughty conditions, or special installations, a larger power size of door closer should be used.

NOTE 2 The test door masses shown are only related to door closer power sizes for the purpose of the test procedure. These test door masses are not intended to indicate maximum values for actual use. <sup>(A1)</sup>