

# EN12320:2012

## Padlocks and padlock fittings



### Example of classification:

|          |          |          |          |
|----------|----------|----------|----------|
| <b>1</b> | <b>1</b> | <b>5</b> | <b>3</b> |
| 1°       | 2°       | 3°       | 4°       |

### Category of use (first digit)

**grade 1:** for use by people with a high incentive to exercise care and with a small chance of misuse (e.g. residential doors)

### Durability (second digit)

**grade 0:** no requirements

**grade 1:** 10 000 test cycles

### Corrosion resistance (third digit)

**grade 0:** no defined corrosion resistance

**grade 1:** low corrosion resistance (24h NSS)

**grade 2:** moderate corrosion resistance (48h NSS)

**grade 3:** high corrosion resistance (96h NSS)

**grade 4:** very high corrosion resistance (240h NSS)

**grade 5:** ultra-high corrosion resistance (480h NSS)

### Security (fourth digit)

| (1)             | Key retaining | Min. nr. effective<br>differs | Non interpassing<br>of keys | Plug extraction | Torque on the plug | Pulling of shackle<br>and staple | Twisting of shackle<br>and staple | Cutting of shackle<br>and staple | Impact at low<br>temperature | Resistance to<br>drilling | Resistance to<br>sawing | Manual attack |
|-----------------|---------------|-------------------------------|-----------------------------|-----------------|--------------------|----------------------------------|-----------------------------------|----------------------------------|------------------------------|---------------------------|-------------------------|---------------|
| <b>grade 1:</b> | No            | 300                           | 1,0 Nm                      | -               | -                  | 3 kN                             | 40 Nm                             | 6 kN                             | -                            | -                         | -                       | -             |
| <b>grade 2:</b> | No            | 1.000                         | 1,0 Nm                      | -               | 2,5 Nm             | 5 kN                             | 100 Nm                            | 15 kN                            | -                            | -                         | -                       | -             |
| <b>grade 3:</b> | No            | 2.500                         | 1,5 Nm                      | 4 kN            | 5,0 Nm             | 15 kN                            | 200 Nm                            | 25 kN                            | -20°C<br>1250 g<br>800 mm    | -                         | -                       | -             |
| <b>grade 4:</b> | Yes           | 5.000                         | 1,5 Nm                      | 5 kN            | 15,0 Nm            | 30 kN                            | 600 Nm                            | 45 kN                            | -20°C<br>3050 g<br>1000 mm   | 2 min.                    | 2 min.                  | 3 min.        |
| <b>grade 5:</b> | Yes           | 10.000                        | 1,5 Nm                      | 10 kN           | 20,0 Nm            | 70 kN                            | 1200 Nm                           | 70 kN                            | -40°C<br>6550 g<br>1400 mm   | 4 min.                    | 4 min.                  | 5 min.        |
| <b>grade 6:</b> | Yes           | 20.000                        | 1,5 Nm                      | 15 kN           | 30,0 Nm            | 100 kN                           | 2500 Nm                           | 100 kN                           | -40°C<br>7150 g<br>1500 mm   | 8 min.                    | 8 min.                  | 10 min.       |