

UK National Insurance Number

NI number — 2 letters + 6 digits + 1 letter.

```
^(?!BG|GB|NK|KN|TN|NT|ZZ)[A-CEGHJ-PR-TW-Z][A-CEGHJ-NPR-TW-Z]\d{6}[A-D]?$
```

Token-by-token breakdown

Token	Meaning
^	start of string (or line in multiline mode)
(?!)	start of a negative lookahead — NOT followed by
BG	literal text "BG"
	OR — try the alternative
GB	literal text "GB"
	OR — try the alternative
NK	literal text "NK"
	OR — try the alternative
KN	literal text "KN"
	OR — try the alternative
TN	literal text "TN"
	OR — try the alternative
NT	literal text "NT"
	OR — try the alternative
ZZ	literal text "ZZ"
)	end of group
[A-CEGHJ-PR-TW-Z]	any of: A–C, "E", "G", "H", J–P, R–T, W–Z
[A-CEGHJ-NPR-TW-Z]	any of: A–C, "E", "G", "H", J–N, "P", R–T, W–Z
\d{6}	exactly 6 times: digit (0–9)
[A-D]?	optional (zero or one): any of: A–D
\$	end of string (or line in multiline mode)

Quick usage in 7 languages

JavaScript	<pre>const re = /^(?!BG GB NK KN TN NT ZZ)[A-CEGHJ-PR-TW-Z][A-CEGHJ-NPR-TW-Z]\d{6}[A-D]?\$/; re.test(value);</pre>
Python	<pre>import re re.match(r"^(?!BG GB NK KN TN NT ZZ)[A-CEGHJ-PR-TW-Z][A-CEGHJ-NPR-TW-Z]\d{6}[A-D]?\$", value)</pre>
Java	<pre>Pattern.compile("^(?!BG GB NK KN TN NT ZZ)[A-CEGHJ-PR-TW-Z][A-CEGHJ-NPR-TW-Z]\\d{6}[A-D]?\$").matcher(value).matches();</pre>

C# / .NET	<code>Regex.IsMatch(value, @"^(?!BG GB NK KN TN NT ZZ)[A-CEGHJ-PR-TW-Z][A-CEGHJ-NPR-TW-Z]\d{6}[A-D]?\$");</code>
Go	<code>regexp.MustCompile(`^(?!BG GB NK KN TN NT ZZ)[A-CEGHJ-PR-TW-Z][A-CEGHJ-NPR-TW-Z]\d{6}[A-D]?\$`).MatchString(value)</code>
Ruby	<code>/^(?!BG GB NK KN TN NT ZZ)[A-CEGHJ-PR-TW-Z][A-CEGHJ-NPR-TW-Z]\d{6}[A-D]?\$/ .match?(value)</code>
PHP	<code>preg_match('~^(?!BG GB NK KN TN NT ZZ)[A-CEGHJ-PR-TW-Z][A-CEGHJ-NPR-TW-Z]\d{6}[A-D]?\$~', \$value);</code>

Common pitfalls

- **Anchored to the whole string.** This pattern uses `^` and `$`, so it requires the entire input to match. To find it inside a longer text, drop the anchors and use the global (`g`) flag.
- **Escape it correctly per language.** In Java and JavaScript strings each backslash must be doubled (`\\d`); in Python, Go, and C# use raw/verbatim strings so the backslashes survive.
- **Validate beyond format.** Matching the format doesn't guarantee the value is real. Confirm the uk national insurance number against a source of truth (database, API, or checksum) where it matters.