

ISBN-10

10-digit International Standard Book Number.

```
^(?=(?:\D*\d){9}[\dX])\d{1,5}-?\d{1,7}-?\d{1,6}-?[\dX]$
```

Token-by-token breakdown

Token	Meaning
^	start of string (or line in multiline mode)
(?=	start of a positive lookahead — followed by
(?:	start of a non-capturing group
\D*	zero or more: non-digit
\d	any digit (0–9)
{9}	end of group, exactly 9 times
[\dX]	any of: digits (0–9), "X"
)	end of group
\d{1,5}	between 1 and 5 times: digit (0–9)
-?	optional (zero or one): the literal "-"
\d{1,7}	between 1 and 7 times: digit (0–9)
-?	optional (zero or one): the literal "-"
\d{1,6}	between 1 and 6 times: digit (0–9)
-?	optional (zero or one): the literal "-"
[\dX]	any of: digits (0–9), "X"
\$	end of string (or line in multiline mode)

Quick usage in 7 languages

JavaScript	<pre>const re = /^(?=(?:\D*\d){9}[\dX])\d{1,5}-?\d{1,7}-?\d{1,6}-?[\dX]\$/; re.test(value);</pre>
Python	<pre>import re re.match(r"^(?=(?:\D*\d){9}[\dX])\d{1,5}-?\d{1,7}-?\d{1,6}-?[\dX]\$", value)</pre>
Java	<pre>Pattern.compile("^(?=(?:\D*\d){9}[\dX])\d{1,5}-?\d{1,7}-?\d{1,6}-?[\dX]\$").match er(value).matches();</pre>
C# / .NET	<pre>Regex.IsMatch(value, @"^(?=(?:\D*\d){9}[\dX])\d{1,5}-?\d{1,7}-?\d{1,6}-?[\dX]\$");</pre>
Go	<pre>regexp.MustCompile(`^(?=(?:\D*\d){9}[\dX])\d{1,5}-?\d{1,7}-?\d{1,6}-?[\dX]\$`).MatchStri ng(value)</pre>
Ruby	<pre>/^(?=(?:\D*\d){9}[\dX])\d{1,5}-?\d{1,7}-?\d{1,6}-?[\dX]\$/ .match?(value)</pre>
PHP	<pre>preg_match('~^(?=(?:\D*\d){9}[\dX])\d{1,5}-?\d{1,7}-?\d{1,6}-?[\dX]\$~', \$value);</pre>

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 isbn-10 against a source of truth (database, API, or checksum) where it matters.