



Linux Ubuntu 26.04 Manual Pages on command 'asinh.3'

\$ man asinh.3

asinh(3) Library Functions Manual asinh(3)

NAME

asinh, asinhf, asinhl - inverse hyperbolic sine function

LIBRARY

Math library (libm, -lm)

SYNOPSIS

```
#include <math.h>

double asinh(double x);

float asinhf(float x);

long double asinhl(long double x);
```

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

```
asinh():

    _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
    || _XOPEN_SOURCE >= 500
    || /* Since glibc 2.19: */ _DEFAULT_SOURCE
    || /* glibc <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

```
asinhf(), asinhl():

    _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
    || /* Since glibc 2.19: */ _DEFAULT_SOURCE
    || /* glibc <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

These functions calculate the inverse hyperbolic sine of x; that is the value whose hyperbolic sine is x.

RETURN VALUE

On success, these functions return the inverse hyperbolic sine of x .

If x is a NaN, a NaN is returned.

If x is +0 (-0), +0 (-0) is returned.

If x is positive infinity (negative infinity), positive infinity (negative infinity) is re-turned.

ERRORS

No errors occur.

ATTRIBUTES

For an explanation of the terms used in this section, see `attributes(7)`.

[illegible]

?	Interface	?	Attribute	?	Value	?
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[illegible]

? asinh(), asinhf(), asinhl() ? Thread safety ? MT-Safe ?

[illegible]

STANDARDS

C11, POSIX.1-2008.

HISTORY

C99, POSIX.1-2001.

The variant returning double also conforms to SVr4, 4.3BSD.

SEE ALSO

acosh(3), atanh(3), casinh(3), cosh(3), sinh(3), tanh(3)

Linux man-pages 6.17

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 $\operatorname{asinh}(3)$