



### ***Rocky Enterprise Linux 9.2 Manual Pages on command 'sqrtf.3'***

**\$ man sqrtf.3**

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#### NAME

sqrt, sqrtf, sqrtl - square root function

#### SYNOPSIS

```
#include <math.h>
```

```
double sqrt(double x);
```

```
float sqrtf(float x);
```

```
long double sqrtl(long double x);
```

Link with -lm.

Feature Test Macro Requirements for glibc (see feature\_test\_macros(7)):

sqrtf(), sqrtl():

```
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

```
|| /* Since glibc 2.19: */ _DEFAULT_SOURCE
```

```
|| /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

#### DESCRIPTION

These functions return the nonnegative square root of x.

#### RETURN VALUE

On success, these functions return the square root 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, positive infinity is returned.

If x is less than -0, a domain error occurs, and a NaN is returned.

## ERRORS

See `math_error(7)` for information on how to determine whether an error has occurred when calling these functions.

The following errors can occur:

Domain error: x less than -0

errno is set to EDOM. An invalid floating-point exception (FE\_INVALID) is raised.

## ATTRIBUTES

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

??

?Interface            ? Attribute    ? Value    ?

??

?sqrt(), sqrtf(), sqrtl() ? Thread safety ? MT-Safe ?

??

## CONFORMING TO

C99, POSIX.1-2001, POSIX.1-2008.

The variant returning double also conforms to SVr4, 4.3BSD, C89.

## SEE ALSO

`cbrt(3)`, `csqrt(3)`, `hypot(3)`

## COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

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