

# FRC 2018 Software Documentation

Team 5572: The ROSBOTS



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# Chapter 1

## Namespace Index

### 1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

<a href="#">drivetrain</a>	.....	5
<a href="#">math</a>	.....	5



## Chapter 2

# File Index

### 2.1 File List

Here is a list of all files with brief descriptions:

src/drivetrain/ <a href="#">drivetrain.h</a> . . . . .	7
src/util/ <a href="#">math.h</a> . . . . .	8





## Chapter 3

# Namespace Documentation

### 3.1 drivetrain Namespace Reference

### 3.2 math Namespace Reference

#### Functions

- double [wrapping\\_limit](#) (double value, double min, double max)  
*Enforces a wrapping limit on value.*

#### 3.2.1 Function Documentation

3.2.1.1 `double math::wrapping_limit ( double value, double min, double max )` `[inline]`

Enforces a wrapping limit on value.

Wrapping is a constraint in which a minimum is equal to a maximum, and values exceeding either limit "wraps" to the other extremum. An example is angles. The angles 0, and  $2\pi$  are equal in angles, so you may enforce a wrapping limit when checking for a value such as  $\pi$ .

#### Parameters

<i>value</i>	value to limit
<i>min</i>	minimum value
<i>max</i>	maximum value



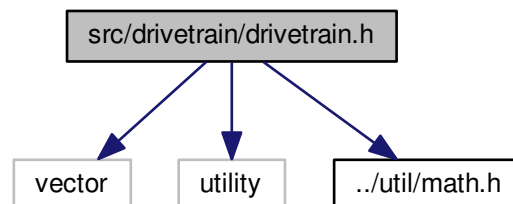
## Chapter 4

# File Documentation

### 4.1 src/drivetrain/drivetrain.h File Reference

```
#include <vector>
#include <utility>
#include "../util/math.h"
```

Include dependency graph for drivetrain.h:



### Namespaces

- [drivetrain](#)

### Macros

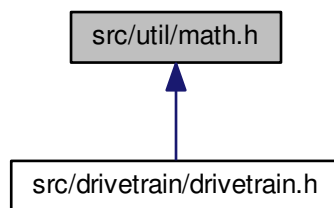
- `#define` [NOWPI](#)

### 4.1.1 Macro Definition Documentation

#### 4.1.1.1 #define NOWPI

## 4.2 src/util/math.h File Reference

This graph shows which files directly or indirectly include this file:



### Namespaces

- [math](#)

### Macros

- #define [PI](#) 3.141592654

### Functions

- double [math::wrapping\\_limit](#) (double value, double min, double max)  
*Enforces a wrapping limit on value.*

### 4.2.1 Macro Definition Documentation

#### 4.2.1.1 #define PI 3.141592654

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