

# Coverage Report for ABS\_v1

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## Analysis Information

### Coverage Data Information

Collected in version (R2022a)

### Model Information

Model version 1.19  
Author DELL  
Last saved Sat Mar 26 16:49:44 2022

### Harness information

Harness model(s) Not Unique  
Harness model owner ABS\_v1

### Simulation Optimization Options

Default parameter behavior tunable  
Block reduction forced off  
Conditional branch optimization on

### Coverage Options

Analyzed model ABS\_v1  
Logic block short circuiting off

### Aggregated Tests

Run	Test Name	Date
Model: "ABS_v1"		
T1	<a href="#">Run 1</a>	26-Mar-2022 17:06:48

## Summary

### Model Hierarchy/Complexity

	Decision	TBL	Execution
1. <a href="#">ABS_v1</a>	NA	86% <div><div></div></div>	100% <div><div></div></div>
2. . . . <a href="#">ABS control System</a>	NA	86% <div><div></div></div>	100% <div><div></div></div>
3. . . . . <a href="#">relative slip calculator</a>	NA	NA	100% <div><div></div></div>
4. . . . . <a href="#">wheel speed calculator</a>	NA	NA	100% <div><div></div></div>
5. . . . . . <a href="#">bang-bang controller</a>	NA	NA	100% <div><div></div></div>

## Details

### 1. Model "ABS\_v1"

Child Systems: [ABS control System](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Decision	NA	NA
Lookup Table	NA	86% (19/22) interpolation/extrapolation intervals
Execution	NA	100% (26/26) objective outcomes

### Full Coverage

Model Object	Metric
Step block " <a href="#">Step</a> "	Execution

### 2. SubSystem block "[ABS control System](#)"

[Justify or Exclude](#)

Parent: [/ABS\\_v1](#)

Child Systems: [relative slip calculator](#), [wheel speed calculator](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Lookup Table	NA	86% (19/22) interpolation/extrapolation intervals
Execution	NA	100% (25/25) objective outcomes

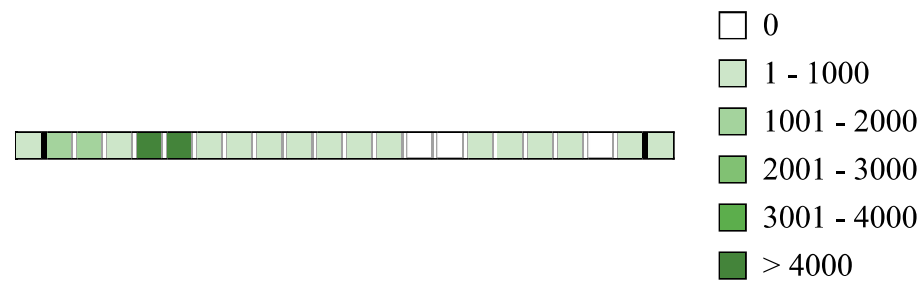
Lookup\_n-D block "[mu-slip lookup table](#)"

[Justify or Exclude](#)

Parent: [ABS\\_v1/ABS control System](#)

Metric	Coverage
Cyclomatic Complexity	0
Lookup Table	86% (19/22) interpolation/extrapolation intervals
Execution	100% (1/1) objective outcomes

Look-up Table Details



Full Coverage

Model Object	Metric
Gain block " <a href="#">Gain</a> "	Execution
Gain block " <a href="#">Relative Slip</a> "	Execution
Gain block " <a href="#">angular vehicle speed</a> "	Execution
Gain block " <a href="#">normal force</a> "	Execution
Gain block " <a href="#">wheel radius</a> "	Execution
Sum block " <a href="#">Sum</a> "	Execution
Stop block " <a href="#">Stop Simulation</a> "	Execution
Integrator block " <a href="#">ang vehicle speed</a> "	Execution
Integrator block " <a href="#">stopping distance</a> "	Execution

3. SubSystem block "[relative slip calculator](#)"

[Justify or Exclude](#)

Parent: [ABS\\_v1/ABS control System](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (3/3) objective outcomes

## Full Coverage

Model Object	Metric
Product block " <a href="#">Divide</a> "	Execution
Sum block " <a href="#">Sum1</a> "	Execution
Constant block " <a href="#">Constant</a> "	Execution

## 4. SubSystem block "[wheel speed calculator](#)"

### [Justify or Exclude](#)

Parent: [ABS\\_v1/ABS control System](#)

Child Systems: [bang-bang controller](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (12/12) objective outcomes

## Full Coverage

Model Object	Metric
Gain block " <a href="#">Gain</a> "	Execution
Gain block " <a href="#">force and torque</a> "	Execution
Sum block " <a href="#">Sum1</a> "	Execution
Integrator block " <a href="#">Integrator Limited</a> "	Execution
Integrator block " <a href="#">braking.pressure</a> "	Execution
TransferFcn block " <a href="#">hydraulic lag</a> "	Execution

## 5. SubSystem block "[bang-bang controller](#)"

### [Justify or Exclude](#)

Parent: [ABS\\_v1/ABS control System/wheel speed calculator](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (6/6) objective outcomes

## Full Coverage

Model Object	Metric
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DataTypeConversion block " <a href="#">Data Type Conversion</a> "	Execution
DataTypeConversion block " <a href="#">Data Type Conversion1</a> "	Execution
Sum block " <a href="#">Sum1</a> "	Execution
RelationalOperator block " <a href="#">Greater Than</a> "	Execution
RelationalOperator block " <a href="#">Less Than</a> "	Execution
Constant block " <a href="#">Constant</a> "	Execution