



# This MotoCAP safety rating applies to:

Brand Rev'it

Model Peninsula

Type Pants - Textile

Date purchased 22 February 2023

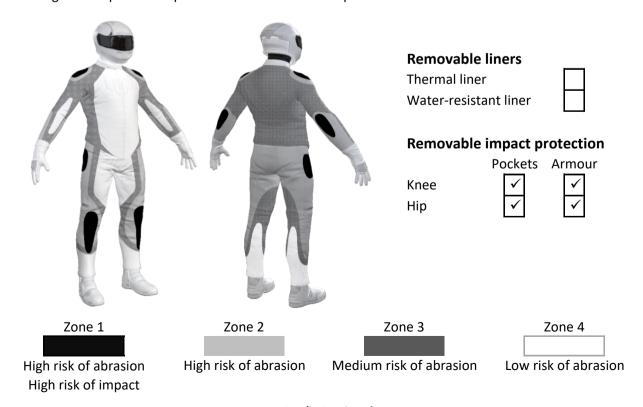
Sizes tested XL
Test garment gender Male
Style All Purpose
RRP \$399.00

Test Results Summary	Rating	Score
MotoCAP Protection Rating	*	22.5
Abrasion	1/10	0.56
Burst	9/10	979
Impact	5/10	32.8
MotoCAP Breathability Rating	****	0.743
Moisture Vapour Resistance	-	21.0
Thermal Resistance	-	0.260
Water resistance	N/A	N/A

This garment is fitted with impact protectors for the knees and hips. Replacing the hip armour with higher performing impact protectors would improve the protection levels of this garment. There are zipped vents and perforated textile in the upper legs to allow controlled airflow movement through the garment. The breathability rating is based on tests of the garment's materials when all vents are closed. The breathability of this product may be better when the vents can be opened.

# **Jacket and Pants - Crash Impact Risk Zones**

This diagram is a pictorial representation of the crash impact risk Zones.





## **Abrasion Resistance**

These pants were tested for abrasion resistance in accordance with MotoCAP test protocols. The diagram below is a visual indication of the likely abrasion performance of the materials in each zone calculated from the data in the table below. The colour coding is based on the worst performing material in each zone.



#### **Abrasion Resistance Performance**

Abrasion rating	1/10
Abrasion score	0.56

<b>Determining Criteria</b>	Area	Good	Acceptable	Marginal	Poor
High abrasion risk	Zones 1 & 2	> 5.6	3.0 - 5.6	1.3 - 2.9	< 1.3
Medium abrasion risk	Zone 3	> 2.5	1.8 - 2.5	0.8 - 1.7	< 0.8
Low abrasion risk	Zone 4	>1.5	1.0 - 1.5	0.4 - 0.9	< 0.4

**Individual Abrasion Resistance Results:** - The table below shows the test results for time to abrade through all layers of the materials. Calculated for each sample by Zone, type and area coverage of each material as a proportion of that Zone. Abrasion times are capped at a maximum of 10.00s.

#### Abrasion time for each test (seconds)

Zones 1 & 2	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average
Material A	100%	0.58	0.50	0.68	0.48	0.51	0.79	0.59
Zone 3	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average L
Material A	90%	0.58	0.50	0.68	0.48	0.51	0.79	0.59
Material B	10%	0.13	0.29	0.32	0.35			0.27
Zone 4	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average
Material A	10%	0.58	0.50	0.68	0.48	0.51	0.79	0.59
Material C	90%	0.49	0.47	0.43	0.36	0.38	0.55	0.45

#### Details of materials used in pant

Material A	Woven fabric shell with mesh inner liner
Material B	Perforated woven fabric shell with mesh inner liner
Material C	Knitted fabric shell with mesh inner liner



# **Burst Strength**

These pants were tested for burst strength in accordance with MotoCAP test protocols. The diagram below illustrates the burst strength results in terms of the likely performance of the garment in an impact and is a pictorial representation of the data from the table below.



Burst Strength Performance					
Burst rating	9/10				

979

Burst score

<b>Determining Criteria</b>	Unit	Good	Acceptable	Marginal	Poor
Burst strength	(kPa)	> 1000	800 - 1000	500 - 799	< 500

**Individual Burst Strength Results:** - The table below shows the burst pressure in kilopascals (kPA) for each sample tested by Zone and the average result for each zone.

# Burst pressure for each seam (kPA)

Area	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Zones 1 & 2	578	1077	628	1479	1552		1063	3
Zones 3 & 4	892	455	825	530	943	234	646	V



# **Impact Protection**

These pants were tested for impact protection and coverage in accordance with MotoCAP test protocols. The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table below. The colour coding is based on the worst performing score for average or maximum force for each impact zone. Areas shaded black are not considered for impact protection ratings.



# Impact Protection Performance Impact rating 5/10

Impact rating	5/10
Impact score	32.8

<b>Determining Criteria</b>	Unit	Good	Acceptable	Marginal	Poor*
Impact force	(kN)	< 15	15 - 24	25 - 30	> 30

<sup>\*</sup> Poor may also indicate that no impact protector, or impact protector pocket is present in the garment

**Impact Protector Results:** - The table below shows the average and maximum force transmitted through each impact protector type in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone.

Impact protector type	Knee		Hi	p
Average force (kN)	20.6	A	27	.1 M
Maximum force (kN)	22.3	A	29	.8 M
Coverage of Zone 1 area	105%	<del></del>	110	)%
Coverage of Zone after displacement	90%		100	)%

**Individual Impact Protector Results:** - The table below shows the test results for each strike on individual impact protectors in kilonewtons (kN) and the position of the strike. Individual strike results are capped at a maximum of 50kN.

## Force transfer for each impact strike (kN)

Impact protector type	Knee	•		Hip		
Strike location	Centre	Mid	Edge	Centre	Mid	Edge
Impact Protector 1	20.5	20.7	22.3	24.2	27.8	29.8
Impact Protector 2	19.9	21.0	19.2	25.3	27.4	27.0
Impact Protector 3	20.5	20.2	21.0	26.0	27.8	28.8



# **Breathability**

These pants were tested for breathability following the MotoCAP test protocols. The table below shows the moisture vapour resistance and the thermal resistance values obtained.

Without removable liners		With water-resistant liner		
****	Breathability rating		N/A	
0.743	Breathability score		N/A	
stance - R <sub>et</sub> (kPa.m²/W)	1	2	Average	
rs	21.0	21.0	21.0	
er	N/A	N/A	N/A	
R <sub>ct</sub> (K.m <sup>2</sup> /W)	1	2	Average	
rs	0.259	0.261	0.260	
er	N/A	N/A	N/A	
	****	★★★★       Bream         0.743       Bream         istance - Ret (kPa.m²/W)       1         rs       21.0         er       N/A         Rct (K.m²/W)       1         rs       0.259	Breathability rating 0.743  Breathability rating Breathability score  stance - Ret (kPa.m²/W)  rs  21.0  N/A  N/A  Rct (K.m²/W)  1  2  rs  0.259  0.261	

# Water spray and rain resistance

This pants have not been advertised as water-resistant so has not been tested for water spray and rain resistance.

# **Assessment Details.**

Brand Rev'it

Model Peninsula

Type Pants - Textile

Date purchased 22 February 2023

Texted by

Tested by AMCAF, Deakin University Report approved by MotoCAP Chief Scientist

Garment test reference P23T08
Rating first published June 2023
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