## MOTO GP | BRAKE CIRCUIT IDENTITY CARDS

## MOTUL GRAND <br> PRIX OF JAPAN



TWIN RING MOTEGI (MOTEGI)


## CIRCUIT DATA

Length: 4,801 m
Number of laps: 24
Number of brakings: 11

## COMMENT

The Japanese circuit, called "Twin Ring", has few fast curves and many slow curves, broken up by medium length straight stretches.
It is maybe the most demanding circuit on brakes because of both the abundance of curves from second gear which intensely engage the brakes and the difficulty in cooling the brakes between one cut out and another.
The perfect base, furthermore, offers a good level of grip which improves the ability to download to ground the braking torque and as a result the stress to which the brakes are subjected.

* Turn 11 is considered the most demanding for the braking system.

| Initial speed | 285 | (Km/h) |
| :---: | :---: | :---: |
| Final speed | 92 | (Km/h) |
| Stopping distance | 225 | (m) |
| Braking time | 4.6 | (sec) |
| Maximum deceleration | 1.5 | (g) |
| Max force on lever | 6.5 | (Kg) |
| 05 |  |  |
| Initial speed | 277 | (Km/h) |
| Final speed | 76 | (Km/h) |
| Stopping distance | 211 | (m) |
| Braking time | 4.5 | (sec) |
| Maximum deceleration | 1.5 | (g) |
| Max force on lever | 6.7 | (Kg) |
| 07 |  |  |
| Initial speed | 230 | (Km/h) |
| Final speed | 125 | (Km/h) |
| Stopping distance | 127 | (m) |
| Braking time | 2.5 | (sec) |
| Maximum deceleration | 1.3 | (g) |
| Max force on lever | 5.2 | (Kg) |
| 09 |  |  |
| Initial speed | 192 | (Km/h) |
| Final speed | 79 | (Km/h) |
| Stopping distance | 115 | (m) |
| Braking time | 3.1 | (sec) |
| Maximum deceleration | 1.2 | (g) |
| Max force on lever | 5.7 | (Kg) |
| 11* |  |  |
| Initial speed | 310 | (Km/h) |
| Final speed | 82 | (Km/h) |
| Stopping distance | 245 | (m) |
| Braking time | 4.9 | (sec) |
| Maximum deceleration | 1.5 | (g) |
| Max force on lever | 7.3 | (Kg) |
| 13 |  |  |
| Initial speed | 140 | (Km/h) |
| Final speed | 99 | (Km/h) |
| Stopping distance | 93 | (m) |
| Braking time | 1.9 | (sec) |
| Maximum deceleration | 0.7 | (g) |
| Max force on lever | 1.6 | (Kg) |


| O3 |  |  |
| :--- | :--- | :--- |
| Initial speed | 277 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 90 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 215 | $(\mathrm{~m})$ |
| Braking time | 4.4 | $(\mathrm{sec})$ |
| Maximum deceleration | 1.5 | $(\mathrm{~g})$ |
| Max force on lever | 6.6 | $(\mathrm{Kg})$ |

06

| Initial speed | 200 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 183 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 47 | $(\mathrm{~m})$ |
| Braking time | 0.8 | $(\mathrm{sec})$ |
| Maximum deceleration | 0.7 | $(\mathrm{~g})$ |
| Max force on lever | 1.2 | $(\mathrm{Kg})$ |

08

| Initial speed | 133 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 112 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 41 | $(\mathrm{~m})$ |
| Braking time | 1.2 | $(\mathrm{sec})$ |
| Maximum deceleration | 0.6 | $(\mathrm{~g})$ |
| Max force on lever | 1.5 | $(\mathrm{Kg})$ |


| 10 |  |  |
| :--- | :--- | :--- |
| Initial speed | 240 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 67 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 171 | $(\mathrm{~m})$ |
| Braking time | 4.2 | $(\mathrm{sec})$ |
| Maximum deceleration | 1.5 | $(\mathrm{~g})$ |
| Max force on lever | 6.6 | $(\mathrm{Kg})$ |

12

| Initial speed | 167 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | :--- | :--- |
| Final speed | 143 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 40 | $(\mathrm{~m})$ |
| Braking time | 0.9 | $(\mathrm{sec})$ |
| Maximum deceleration | 0.9 | $(\mathrm{~g})$ |
| Max force on lever | 2.0 | $(\mathrm{Kg})$ |

