



## BALANCE OF PERFORMANCE FOR D TRACKS



### BALANCE OF PERFORMANCE FOR D Tracks:

#### Nürburgring Sprint track

These balance of performance measures are the result of the tests, research, analysis and projections performed by SRO Ltd and are the sole property of SRO Ltd. Other series promoters, race organisers and national sporting authorities cannot use all or part of them without SRO Ltd's prior written consent. Any contravention will result in a legal action.



## Balance of Performance FIA GT3 2018 Specification



| Make    | FIA GT3 Homologation | Model           | Min Weight kg | BOP Ballast kg | Final Weight kg<br>*without driver weight | FIA Restrictor Size mm | RH Front Min mm | RH Rear Min mm | Refueling Rig restrictor mm | Comments                          |
|---------|----------------------|-----------------|---------------|----------------|---|------------------------|-----------------|----------------|-----------------------------|-----------------------------------|
| Bentley | GT3-049              | Continental GT3 | 1275          | +25            | 1300                                      | none                   | 134             | 132            |                             | Max Boost P ratio limit see table |
| BMW     | GT3-043              | M6 GT3          | 1290          | +20            | 1310                                      | none                   | 93              | 93             |                             | Max Boost P ratio limit see table |
| Ferrari | GT3-044              | 488 GT3         | 1260          | +20            | 1280                                      | none                   | 73              | 98             |                             | Max Boost P ratio limit see table |
| Nissan  | GT3-048              | GTR Nismo GT3   | 1285          | +15            | 1300                                      | none                   | 124             | 165            |                             | Max Boost P ratio limit see table |
| Porsche | GT3-041              | 991 GT3-R       | 1225          | +30            | 1255                                      | 2 x 41,5               | 72              | 124            |                             |                                   |

1.1 Additional weight must be installed in accordance with article 257A-4.3 – 2018

1.2 Technical drawings of air restrictors for 2013/2014/2015/2016/2017/2018 cars are registered with FIA. Only restrictors in compliance with this registration are allowed

1.3 Use of catalytic converter compulsory

1.4 Notes on boost control :

- Values are boost pressure ratio and need to be multiplied by the ambient pressure to get the Pboost limit.
- Competitors must adjust boost pressure relative to ambient pressure at each event
- Control of Pboost is FIA GT3 Pboost strategy
- Pboost limits linear interpolation approach

1.5 The SRO Sporting Board is allowed to modify any parameter required to establish the balance of performance.

1.6 Engine reference data (iA, Lambda, Fuel inj, Cam In/Out, airbox pressure) is the one collected during BOP tests and will be used for checks. If noted differently in comments the (e.g. iA, Lambda, Fuel inj, Cam In/Out, airbox pressure) is set as reference.



## Balance of Performance FIA GT3 2018 Specification

Maximum Pressure boost Limit Ratio for Turbo cars



| Engine speed | Bentley Continental GT3     | BMW M6 GT3                  | Ferrari 488 GT3             | Nissan GT-R Nismo GT3       |
|--------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| RPM          | Pboost ratio @ rpm x Lambda | Pboost ratio @ rpm x Lambda | Pboost ratio @ rpm x Lambda | Pboost ratio @ rpm x Lambda |
| 4000         | 1.86 @ 0,90                 | 1.78 @ 0,92                 | 1.47 @ 0,92                 | 1,93 @ 0,88                 |
| 4250         |                             | 1.83@ 0,92                  | 1.49 @ 0,92                 |                             |
| 4500         | 1.76 @ 0,90                 | 1.86 @ 0,92                 | 1.51 @ 0,92                 | 1,92 @ 0,88                 |
| 4750         |                             | 1.88 @ 0,92                 | 1.53 @ 0,92                 |                             |
| 5000         | 1.68 @ 0,90                 | 1.93 @ 0,92                 | 1.56 @ 0,92                 | 1,90 @ 0,88                 |
| 5250         |                             | 1.96 @ 0,92                 | 1.58 @ 0,92                 |                             |
| 5500         | 1.61@ 0,90                  | 1.96 @ 0,92                 | 1.60 @ 0,92                 | 1,89@ 0,88                  |
| 5750         |                             | 1.96 @ 0,92                 | 1.62 @ 0,92                 |                             |
| 6000         | 1.56 @ 0,90                 | 1.90 @ 0,92                 | 1.62 @ 0,92                 | 1,85 @ 0,88                 |
| 6250         |                             | 1.85 @ 0,92                 | 1.62 @ 0,92                 |                             |
| 6500         | 1.47 @ 0,90                 | 1.73 @ 0,92                 | 1.59 @ 0,92                 | 1,83 @ 0,88                 |
| 6750         |                             | 1,66 @ 0,92                 | 1.56 @ 0,92                 |                             |
| 6900         |                             |                             |                             | 1,81@ 0,88                  |
| 7000         | 1,40 @ 0,90                 | 1.65 @ 0,92                 | 1.54 @ 0,92                 | 1,51 @ 0,88                 |
| 7250         | 1.35 @ 0,90                 |                             | 1.49 @ 0,92                 |                             |
| >/7500       |                             | -                           | 1.47 @ 0,92                 |                             |

- 2. Control of Pboost FIA
- 3. Pboost limits linear interpolation approach



# Balance of Performance FIA GT3 2017 Specification



| Make    | FIA GT3 Homologation | Model   | Min Weight kg | BOP Ballast kg | Final Weight Kg *without driver weight | FIA Restrictor Size mm | RH Front Min mm | RH Rear Min mm | Fuel Rig Restrictor mm | Comments                           |
|---------|----------------------|---------|---------------|----------------|--|------------------------|-----------------|----------------|------------------------|------------------------------------|
| Acura   | GT3-047              | NSX GT3 | 1240          | +40            | 1280                                   |                        | 66              | 66             |                        | Max Boost P ration limit see table |
| LEXUS   | GT3-046              | RCF GT3 | 1300          | +10            | 1310                                   | 2 x 38                 | 90              | 280            |                        |                                    |
| McLaren | GT3-037              | 650S    | 1240          | +20            | 1260                                   | 2 x 36                 | 67              | 74             |                        | Max Boost P ratio limit see table  |

- 1.1 Additional weight must be installed in accordance with article 257A-4.3 – 2018
- 1.2 Technical drawings of air restrictors for 2013/2014/2015/2016/2017/2018 cars are registered with FIA. Only restrictors in compliance with this registration are allowed
- 1.3 Use of catalytic converter compulsory
- 1.4 Notes on boost control :
- Values are boost pressure ratio and need to be multiplied by the ambient pressure to get the Pboost limit.
  - Competitors must adjust boost pressure relative to ambient pressure at each event
  - Control of Pboost is FIA GT3 Pboost strategy
  - Pboost limits linear interpolation approach
- 1.5 The SRO Sporting Board is allowed to modify any parameter required to establish the balance of performance.
- 1.6 Engine reference data (iA, Lambda, Fuel inj, Cam In/Out, airbox pressure) is the one collected during BOP tests and will be used for checks. If noted differently in comments the (e.g. iA, Lambda, Fuel inj, Cam In/Out, airbox pressure) is set as reference.

2. Control of Pboost strategy FIA
3. Pboost limits linear interpolation

| Engine speed | McLaren 650S                      | Acura NSX GT3                     |
|--------------|-----------------------------------|-----------------------------------|
| RPM          | Pboost ratio limit @ rpm x lambda | Pboost ratio limit @ rpm x lambda |
| 4000         | 1.82 @ 0,88                       | 1.87 @ 0,85                       |
| 4500         | 1.80 @ 0,88                       | 1.87 @ 0,85                       |
| 5000         | 1.78 @ 0,88                       | 1.98 @ 0,85                       |
| 5500         | 1.76 @ 0,88                       | 2.02 @ 0,85                       |
| 6000         | 1.73 @ 0,88                       | 2.04 @ 0,85                       |
| 6200         | 1.73 @ 0,88                       | 2.06 @ 0,85                       |
| 6500         | 1.63 @ 0,88                       | 2.06 @ 0,85                       |
| 6600         | 1.63 @ 0,88                       | 2.06 @ 0,85                       |
| >/7000       | 1.60 @ 0,88                       | 2.04 @ 0,85                       |
| >/7500       | 1.53 @ 0,88                       | 2.02 @ 0,85                       |

Decisions taken by the SRO GT Bureau 15/07/2018



## Balance of Performance FIA GT3 2016/2015 Specification



| Make         | FIA GT3 Homologation | Model           | Min Weight kg | BOP Ballast kg | Final Weight kg<br>*without driver weight | FIA Restrictor Size mm | RH Front Min mm | RH Rear Min mm | Fuel Rig Restrictor mm | Comments              |
|--------------|----------------------|-----------------|---------------|----------------|---|------------------------|-----------------|----------------|------------------------|-----------------------|
| Aston Martin | GT3-032              | Vantage GT3     | 1230          | +80            | 1310                                      | 41,5                   | 75              | 180            |                        | Restrictor 2015       |
| Audi         | GT3-038              | R8 LMS          | 1225          | +55            | 1280                                      | 2 x 39                 | 65,5            | 128            |                        |                       |
| Bentley      | GT3-035              | Continental GT3 | 1300          | +0             | 1300                                      | 2 x 38                 | 70              | 80             |                        | Max Boost P See table |
| BMW          | GT3-043              | M6 GT3          | 1290          | +20            | 1310                                      | none                   | 89              | 92             |                        | Max Boost P see table |
| Chevrolet    | GT3-045              | Corvette C7     | 1250          | +55            | 1305                                      | 50                     | 65              | 72             |                        |                       |
| Ferrari      | GT3-044              | 488 GT3         | 1260          | +10            | 1270                                      | none                   | 73              | 98             |                        | Max Boost P see table |
| Lamborghini  | GT3-040              | HURACAN GT3     | 1230          | +70            | 1300                                      | 2 x 39                 | 65,5            | 128            |                        |                       |
| Mercedes     | GT3-042              | AMG GT GT3      | 1285          | +30            | 1315                                      | 2 x 34,5               | 81              | 87             |                        | Lambda 0,91           |
| Porsche      | GT3-041              | 991 GT3-R       | 1220          | +30            | 1250                                      | 2 x 41,5               | 72              | 124            |                        |                       |

1.1 Additional weight must be installed in accordance with article 257A-4.3 – 2018

1.2 Technical drawings of air restrictors for 2013/2014/2015/2016/2017/2018 cars are registered with FIA. Only restrictors in compliance with this registration are allowed

1.3 Use of catalytic converter compulsory

1.4 Notes on boost control :

- Values are boost pressure ratio and need to be multiplied by the ambient pressure to get the Pboost limit.
- Competitors must adjust boost pressure relative to ambient pressure at each event
- Control of Pboost is FIA GT3 Pboost strategy
- Pboost limits linear interpolation approach

1.5 The SRO Sporting Board is allowed to modify any parameter required to establish the balance of performance.

1.6 Engine reference data (iA, Lambda, Fuel inj, Cam In/Out, airbox pressure) is the one collected during BOP tests and will be used for checks. If noted differently in comments the (e.g. iA, Lambda, Fuel inj, Cam In/Out, airbox pressure) is set as reference.



## Balance of Performance FIA GT3 2016 Specification

Maximum Pressure boost Limit Ratio for Turbo cars



| Engine speed | Bentley Continental GT3     | BMW M6 GT3                  | Ferrari 488 GT3             |
|--------------|-----------------------------|-----------------------------|-----------------------------|
| RPM          | Pboost ratio @ rpm x lambda | Pboost ratio @ rpm x Lambda | Pboost ratio @ rpm x Lambda |
| 4000         | 2.02                        | 1.78 @ 0,92                 | 1.47 @ 0,92                 |
| 4250         |                             | 1.83 @ 0,92                 | 1.49 @ 0,92                 |
| 4500         | 2.00                        | 1.85 @ 0,92                 | 1.51 @ 0,92                 |
| 4750         |                             | 1.87 @ 0,92                 | 1.53 @ 0,92                 |
| 5000         | 1.90                        | 1.93 @ 0,92                 | 1.56 @ 0,92                 |
| 5250         |                             | 1.96 @ 0,92                 | 1.58 @ 0,92                 |
| 5500         | 1.82                        | 1.96 @ 0,92                 | 1.60 @ 0,92                 |
| 5750         |                             | 1.96 @ 0,92                 | 1.62 @ 0,92                 |
| 6000         | 1.72                        | 1.88 @ 0,92                 | 1.62 @ 0,92                 |
| 6250         |                             | 1.81 @ 0,92                 | 1.62 @ 0,92                 |
| 6500         | 1.62                        | 1.73 @ 0,92                 | 1.59 @ 0,92                 |
| 6750         |                             | 1,66 @ 0,92                 | 1.57 @ 0,92                 |
| 7000         | 1.52                        | 1.60 @ 0,92                 | 1.54 @ 0,92                 |
| 7250         | 1.52                        |                             | 1.49 @ 0,92                 |
| >/7350       | 1.30                        | -                           | 1.45 @ 0,92                 |

- 2. Control of Pboost strategy FIA
- 3. Pboost limits linear interpolation approach



LED Boost Control Strategy

LED Boost control strategy  
V9

