PWR Class
2026

Introduction

The BMW CCA Club Racing PWR (**P**ower to **W**eight **R**atio) class is designed to be open to many different BMW race cars with minimal restrictions and ease of complying with the class rules. Cars will be classed primarily based on Horsepower to Weight Ratio. The PWR Class will earn BMW CCA Club Racing points and be eligible for annual awards.

The PWR class was initially envisioned to attract currently existing BMW race cars that were built for some other class or organization utilizing rules that are simple and fair to all. As PWR class racers now begin to entertain optimizing or building new cars for the PWR class, please keep in mind that any car that attains a significant advantage over other cars in class and in violation of the spirit of the rules will prompt a rapid change of rules in order to neutralize the advantage. **In an effort to create a more level playing field within each PWR class category, a new Power Metric (PM) will be phased in starting in 2026. On average, this new PM results in an effectively lower Power input to PWR class ratio so the PWR class ranges have been adjusted to compensate and minimize adjustments to existing race cars. Please read these rules thoroughly to fully comprehend the 2026 changes including the FAQ. The FAQ will answer most of your questions regarding "can I do (fill in the blank) for 2026?"**

Rev 5.0 Changes/clarifications

Rules

A. Specific Rules for the PWR class are contained in this document and will take precedence over any other BMW Club Racing rules.

B. **WARNING:** The PWR Class is intended to allow a wide range of existing BMW race cars to race competitively regardless of initial build target class for the car. The PWR class will be subject to on-going rules modifications, especially in the early phases, in order to facilitate a fair and level playing field.

C. **Safety** – All requirements from the Safety sections of the current BMW CCA Club Racing Rule book (see Section III and Appendices A, B and C) must be followed. Roll Cage design is free as long as the safety requirements are fully met.

D. **Competition/General** – All General Race and procedural rules from the current BMW CCA Club Racing Rule book will apply to the PWR class.

E. **PWR Rules Process** – The PWR class will strive for a consistent and fair ruleset. A dedicated PWR Class rules committee consisting of at least 3 active PWR class racers will be responsible for the PWR class ruleset. The rules may be updated on a quarterly basis in order to quickly address oversights, errors and ensure fair competition.

F. **Rules Convention** – many race classes operate under the guidance of "if the rules don't specify that you can do it, then you can not". The PWR class is different in that the primary competitive differentiator is HP to Weight.

G. **Eligibility** – Any car originally built by BMW is allowed including Mini and Rolls Royce. A BMW engine, transmission or any other major drivetrain component is not required.

H. **Classing** will be determined by a (**Wheel Power Metric to Weight Ratio + Modifier**) system

PWR Class
2026

1.

Class	LBS/PM Ratio + Modifier
PWR5	Greater than or equal to 6 and Less than 9
PWR4	Greater than or equal to 9 and less than 11
PWR3	Greater than or equal to 11 and less than 14
PWR2	Greater than or equal to 14 and less than 17
PWR1	Greater than or equal to 17

2. **Declared Weight** – a car's declared weight is defined as raced with driver and all safety equipment and for compliance reasons, any remaining fuel in the car following a race or qualifying session.

    i. Ballast to meet weight must be placed entirely in the front and/or rear passenger side floor area and/or the spare tire well in the trunk and must be securely bolted to the chassis. Each segment of ballast must weigh not more than 50 pounds and must be fastened with a minimum of two 12 mm bolts and positive lock nuts of metric grade 8.8 or better, and must utilize large diameter, load-distributing washers. Ballast may not be added or removed during any officially timed session.

3. **Declared Wheel Power Metric (PM)** – As measured for the current engine configuration at the wheels by a dynamometer. Please see requirements of the of the dynotest documentation in section I.1 below.

    i. The Power Metric (PM) will be determined as an average of Dyno Measured Wheel Horsepower and Torque sampled across a 3000 RPM range approaching the engine's electronic rev limiter (details are covered in the PWR class on-line disclosure Jotform).

4. **Modifiers - Performance** modifiers which will add or subtract from the WHP to Weight ratio to yield a final classing number. If a higher performance modifier is declared, the racer is permitted to use a lower performance item. For example, if the disclosure sheet was approved for a Non DOT slick, a lesser performance tire can be used (but with no change to the officially declared ratio). Also note in the event rain tires are used, the same (or lower) classification of tires must be used. For example: If a disclosure sheet was approved for a +1 tire modifier (DOT tire greater than 180TW or Toyo Proxes RR/R), then a rain tire must also be a +1 category tire (greater than 180TW or Toyo RR/R/RA1).

    i. **Aerodynamic improvements** – any component or modification that is added to a car to increase downforce or otherwise improve airflow related handling characteristics will be assessed a **modifier of -0.5**. This includes but is not limited to: Wings, splitters, diffusers, canards, dive planes, wheel arch vents, etc. Note: hood vents alone are not considered an Aero improvement. For reasons of respect for historical BMW factory race cars, the E30 M3 with original BMW trunk wing will not be assessed an Aero modifier.

    ii. **Tires (note: if you are not certain on the tire types, please see the definitions section for clarification). Rain tires must be consistent with the selected Dry tire**

modifier categ ory.

Tire	Modifier
Non DOT Slick	**-0.5**
DOT R Compound	**0.0**
DOT Greater than 180 TW and Toyo Proxes RR/Proxes R/Toyo RA1(rain)	**+1.0**

iii. **Transmission** – any transmission other than a traditional H pattern manual with a 3rd pedal clutch will have **a -0.5 modifier**. This includes but is not limited to: DCT, SMG, Automatic, and Sequential race transmissions.

iv. No other modifiers will be in place at this time.

v. The PWR class reserves the right to add additional modifiers or adjust existing modifiers to enable fair competition.

Note: A competitor is always free to use a lower performance category tire than their official tire modifier during a given event. This will have no effect on the official modifier and their PWR declared class. A permanent change to the tire modifier requires a petition to the PWR Rules committee and new disclosure filing.

5. **Vintage cars –** Certain race cars with an established history of competing in a vintage racing series may apply for pre-classing and will not require a dyno test. Pre-classing will be determined by the PWR class rules committee under the guidance of the BMW CR National Tech Steward, or a BMW CR designated representative.

6. **Calculating Class Example –** (Declared Weight/Declared PM) + Modifier A car weighing **2650 lbs.** with **200 WPM** is **13.25 LBS/WHP** and using 200 TW Tires gets a +1 modifier equals **14.25** therefore would be **PWR2**.

I. Dynamometer Testing

1. Dyno test documentation

i. Dyno results must be submitted in a pdf format generated by the dyno system or alternatively a printout may be scanned (at 400dpi or higher) and saved in pdf format. Pictures (jpg files) of the dyno system monitor or printout are not acceptable.

ii. Dyno results should clearly indicate the Racer's name, Car model, Engine code and date of testing. This should be printed by the Dyno operator's software at the time of the test. Adding this information by hand after the fact will not be accepted.

iii. The Dyno test results must adhere to the following:

1. Graph presented in landscape format
2. Must have only one graph (with 3 HP and Torque traces) per page i.e. no extra graphs for Air/Fuel ratio etc.
3. Must have HP and Torque on Y axis and RPM on X axis
4. HP and Torque Scales must match numerically
5. Must start no higher than 2500 RPM
6. 3 runs must demonstrate the consistent electronic Rev limiter action
7. For any Dyno testing performed in 2026 and beyond, the dyno plot data (HP and Torque versus RPM) for the highest HP run must also be printed out in a table form on a second page.

iv. A Dynojet test performed by BMWCCA CR at a race event can be used for submission or re-submission of a PWR Class disclosure. If such dynotest is used, it is the responsibility of the racecar owner to ensure the dynotest results meet all of the requirements as spelled out in this section. There can be no modification of the dynotest documented results after the day of the test.

2. Required Dynamometer: Dynojet

   i. Alternatively, if no Dynojet is available, a Mustang Dyno test may be substituted with the following conditions: the Declared Weight of the PWR class car must be input as the vehicle weight for Mustang Dyno testing. Mustang results will need to be multiplied by 1.1 to **approximate** a Dynojet Dyno test result. Note: Competitors are strongly encouraged to utilize a Dynojet Dynamometer for Disclosure Form testing. In cases where a Dyno is utilized for compliance testing at the track, the Dynojet will be used and the results are the official results! No exceptions.

3. Correction: SAE J1349 rev JUN90 (29.23 in/hg, 77F, zero humidity, dyno smoothing plot set to 5)

4. Testing must be performed at operating temperatures and with the same engine modifications, specifications, and configuration as used in competition. The dyno results must be with the engine installed in the car as it will be raced i.e. dyno results prior to an engine swap are not valid.

5. The dyno testing must be performed with the transmission in the gear closest to a 1:1 gear ratio (for a traditional ZF 5 speed, 5th gear is 1:1).

6. The dyno testing must have accurate and directly measured RPM data sensed from an ignition signal (or equivalent signal from the DME) – no calculated RPMs from the dyno drum speed.

7. The **WHP and Torque** numbers required to calculate the PM will be extracted from the graph of the highest HP recorded run of 3 pulls all performed within a 10 minutes session.

8. Replacement of any part that can have an effect on performance such as but not limited to fuel injectors, headers, intake manifold, camshaft(s), etc. will require a new dyno submission and recalculation of the PM rating for classing.

9. Dyno test results expire on December 31 of the year following the date the dyno test was performed. Example: a dyno test performed on January 1, 2024 will expire on December 31, 2025. A dyno test performed on December 15, 2024 will also expire on December 31, 2025.

10. For **initial entry** into the PWR class, an existing Dyno sheet dated within the prior 18 months of an approved application will be accepted provided it meets all the other requirements as spelled out in this section. Note: If a dyno test sheet is submitted for **initial entry** in the PWR class that was performed on a date that would be deemed to be expired by #9 above at the time of submission, it will be valid until December 31 of the year the disclosure is accepted.

11. Details of the official BMW Club Racing Dyno testing for compliance procedure (performed at the track) are included in the main BMW Club Racing Rules document. Racers are encouraged to review this procedure to ensure their pre-race dyno testing is performed consistently to minimize testing discrepancies. This includes details such as required tire pressures and utilizing the 1:1 gear ratio, etc.

J. **Vintage/Historic Cars**

1. Vintage cars may be classed like any other car based on Dyno measured PM and Declared minimum weight

2. Alternatively, Vintage Race cars with a documented history of competing in vintage race series recognized by BMW CCA Club Racing (HSR, VRG, VDCA, etc) will be eligible to apply for Pre-Classing

i. Pre classing will be determined by the PWR Rules Committee (under the direction of the National Tech Steward, or a designated BMW CR representative).

ii. An application for Vintage Pre-Classing will be required which includes:

1. Indication of existing classing in a vintage/historic series.
2. Documented race results within the last 12 month clearly showing lap times achieved from at least 2 venues where BMW Club Racing has held events.
3. A processing fee of $50 is required and 2 weeks lead time for processing.

K. Appearance

1. Livery and Sponsor Decal Display must be in accordance to the currently published requirements in the BMW Club Racing rules. See section II.D.4. Documented Vintage/Historic cars are exempt from sponsor decal requirements.
2. BMW CCA door panels are not required for PWR class cars.
3. PWR class cars must display the PWR X class designation and car number on both door panels, hood and rear of the car. These designations must of significant size and color differentiation from the background color so as to be clearly seen by event officials. Side and hood numbers shall be a minimum of 8 inches high with a 1.5- to 2-inch stroke. The rear number shall be a minimum of 3 inches high with a minimum 0.5-inch stroke. Class identification shall be near the numbers and be a minimum of 3 inches high.
4. PWR class cars must also display their declared min weight on both rear windows in 1 inch (min) white letters along with each element of the Modifier. The weight and modifiers must conform to the following format/order: **W**eight **A**ero **T**ires **Tr**ansmission. The modifier values do not require a leading zero but must include a decimal point as appropriate. If the modifier value is zero a 0 is required to be displayed. . An example **WATT** display is as follows:

   2900 -.5 +1 0

   Adequate spacing should separate the individual modifier values. Note: Club racing may choose to provide a background decal for the PWR class WATT display to facilitate consistency. This is TBD.

L. PWR Class Race Procedures

1. Each PWR class racer will require an officially approved PWR Disclosure sheet that will remain with the car along with the logbook and a copy of the official dyno graph.
2. Each PWR class car will be presented to Tech along with logbook, disclosure sheet and dyno graph with data table. The car may be subjected to a weigh-in to verify the declared weight prior to the first on track session of a race weekend. Any deviation in weight showing the car lighter than the declared weight will need to be corrected before competitive track sessions.
3. PWR class cars will be subjected to impound following randomly selected competitive track sessions (qualification and/or race).

M. **Disclosure Sheet**

1. Disclosure Sheet content must be submitted successfully via the online Jotform submission system (including dyno test documentation) **for approval no less than 10 working days prior to the planned race weekend**. If the disclosure sheet content is submitted within the 10 business day window prior to the planned race weekend, the possible approval of the late disclosure content is on a best effort basis and will be assessed a $100 fee. There is no guarantee of processing/approving a Disclosure sheet within the 10 business day window prior to a race.

2. The officially approved BMW CR PWR class disclosure sheet must be available to Tech at each race weekend **Failure to have the PWR disclosure sheet available for tech at a race event will result in disqualification.**

~~3.~~ The Declared PM submitted must be equal to or greater than calculated PM from the Jotform calculator result which must be based on the most recent dyno test of the car's current engine and installed in the current race car.

4. Once a disclosure sheet has been submitted and a car class determined by an official approval, it cannot be re-classed or change declared modifiers (even within a specific PWR class) during that season without submitting a petition to the PWR Rules committee.

N. Compliance

1. Official Weight and PM confirmations will occur at impound during BMW CCA Club Racing Events.
    i. Impounded cars must go directly to the impound area as directed by the tech stewards. The driver may exit the car, but the car must remain untouched (other than raising the hood) until movement is directed by the stewards. Any car that does not go directly to impound will be disqualified.
    ii. Impounded cars will be weighed to validate the declared weight
    iii. Impounded cars may have WHP and Torque verified by Dyno per the official BMW Club Racing Remote Dyno Testing Procedure found in the main BMW Club Racing Rules document.
    iv. The racer must be prepared to direct the dyno operator to connect a tachometer lead prior to the dyno runs. If work is required to do this, the racer will need to supply tools to accomplish the task.
    v. Ballast will be checked and may be required to be removed for weight verification of the ballast itself.
    vi. Any and all other PWR class rules compliance may be checked during impound.
2. BMW CCA Club Racing officials may move any car to another PWR class OR mandate ballast if it has a demonstrated history of significantly under- or over- performing in its current class. Unless an oversight or omission occurred during the classing process, a car will be moved to another class only after review by the PWR rules committee.

3. Impound
    i. The following impound penalty scenarios apply to competition sessions:

        1. Impound Weight:
            a. Failure to meet minimum declared weight at impound shall result in the disqualification of the competitor for that session in accordance with the general BMWCCA CR rules. Racers shall make weight adjustments to bring the car into compliance for the remainder of race weekend.

        2. Impound Dynotest:
            a. If the maximum impound PM exceeds the declared PM, a Power to Weight calculation (including modifiers) shall be made by the assigned tech steward, using the impound PM and the actual impound weight. The PWR ratio result shall be rounded to the nearest tenth decimal (e.g. a resulting number of 13.96 shall be rounded to 14.0. A resulting number of 13.94 shall be rounded to 13.9. and would not meet the required minimum ratio for the PWR2 class in this example, and result in a DQ per 2.b below)

b. Failure to meet the minimum declared ratio for the specific class based on such calculation shall result in, as a minimum, the disqualification of the competitor for that session in accordance with the general BMWCCA CR rules. Egregious violations will incur additional penalties per the Penalties section in the main club racing rules.
c. In the case of a PWR Ratio violation, in order to continue racing, the racer/racecar owner is required:
    i. Race weekend of the violation - the racer will increase the weight of the car to achieve the required PWR ratio for its declared class based on the impound Dyno test results. The racer must present the corrected car to the tech stewards for verification before the racer is allowed to continue for that event.
    ii. Subsequent race events: the racer/racecar owner is required to resubmit a disclosure sheet reflecting the most recent impound dynosheet results (properly identified) and increased weight or by making other changes to bring the car into compliance and having a new dynotest performed along with submitting a new disclosure sheet.

3. Each driver is encouraged to carry enough ballast in the car to satisfy any potential Dyno variance and meet declared weight. There is no grace allowance for weight or HP/Wt ratio.

O. Prohibited Elements

1. Electric powered cars are not allowed.
2. Compressed fuel powered cars are not allowed.
3. Driver or automatically controlled Aerodynamic devices are not allowed.
4. Cockpit/Driver adjustable Fuel Management Systems are not allowed.
5. Adjustment of the power, torque or maximum RPMs electronically (remotely or wired) or by any other means during a race weekend is not allowed.
6. During the race weekend, it is not permitted to connect (by any means including wirelessly) any device to the engine management system that is capable of altering the engine control data or program.
7. Cockpit/Driver adjustable Suspension Systems are not allowed,
8. Nitrous Fuel Assist systems are not allowed.
9. Methanol/Alcohol-water injection systems are not allowed.

P. Definitions

1. Documented Historic/Vintage race car – Any car that has a valid Vintage Organization logbook, issued prior application to the PWR class and with actual race results in the last 5 years.
2. DOT R compound Tires – A non-or Semi-treaded race compound tire that is frequently used in club racing and High Performance Driving Schools. These tires typically have a Treadwear rating between 40 and 100 along with a Temp and Traction Rating. Sizing is in a standard metric format such as 245/40/17. To avoid confusion, these should not be referred to as a “slick” in spite of the fact they have little or no tread. Examples of these tires are: BFG R1 (NLA), Hankook Z214, Hoosier A8, Hoosier R8, Yokohama A055, etc.

3. Non DOT Slicks - Also referred to as road racing slicks. In addition to having no tread, these tires have no DOT rating as required to be street legal and generally carry a European size format such as 280/650/18. They are purely a racing tire. Examples are: Hoosier Road Racing Slicks S80/S100, Michelin Racing Slicks SM8/9 , Hankook F200, Yokohama A005 and Pirelli DHB.
4. Aerodynamic elements:
    i. Wing – any device mounted to the trunk consisting of multiple uprights with an air gap between the trunk lid and the aerodynamic element.

PWR Class Rules FAQ

	Questions	Answers
	Why are you no longer using peak Horsepower for the Horsepower to weight ratio?	The PWR class in the early days needed to have simple rules in order to allow Club Racing to ramp up on the additional overhead required by the PWR class. It was well known and understood that utilizing Peak Horsepower would not result in a level playing field for non restricted NA engines versus Forced Induction engines and/or engines with artificially limited power curves. At the request of racers along with the development of an online submission tool, we are now ready to utilize a more accurate metric for the power to weight ratio. **We reserve the right to revise this Power Metric (PM) as needed to maintain fair competition.**
	Can I use my existing Dyno test results to submit the power inputs needed to calculate the new PM.	Yes as long as the existing Dyno test meets **all of the requirements spelled out in Section I above** (note many do not meet these requirements so please check carefully before you plan on this path). In order to use an existing Dyno graph, the HP and Torque numbers will need to be annotated on the submitted dyno graph at the specified RPMs as called for in the

		Jotform PWR disclosure system – see an example properly annotated dyno graph at the end of this document.
	My existing Dyno and disclosure is valid for one more year (until the end of 2026). Can I continue to race with the current disclosure sheet?	Yes you may continue to use your existing classification and disclosure sheet until they expire. This allowance is only good for 1 year (until the end of 2026). If you continue to use the existing dyno test and Peak Horsepower, you will be using the old ratio ranges as spelled out on your existing disclosure sheet. Note the new PM system and PWR ranges attempt to achieve a more level playing field so you may be giving up a competitive advantage by sticking with the old classification.
	I need a new Dyno test for 2026. Can I use the old Peak HP method and submit a disclosure sheet using the old ratio ranges.	No. Any new Dyno test will need to meet all of the requirements spelled out in Section J above and will be required to utilize the new online Jotform submission system and PM calculations.
	Why do I have to submit a petition to change the classing of my car?	The PWR class brings additional complexity and overhead to running our events. Excessive and/or unnecessary changing of classes can easily overload our volunteers.
	Why is the PWR class weight specified with the driver and doesn't specify how much fuel like some endurance series do?	There are many ways to specify race weight. For efficiency reasons, the PWR class weight specifications match the post race weight requirements of other BMW Club Race classes. This will allow Tech Stewards to easily handle the PWR classes as well as the traditional CR classes at impound.
	Why are cars with non BMW motors allowed in BMW Club Racing?	We want to include all BMW chassis to race with BMW Club Racing.
	What if my car is underweight at the initial weigh-in for the weekend?	The initial weigh-in is intended to validate that the declared weight in in the ball park. Each competitor is responsible to ensure their declared weight is fully met at the completion of each competitive on-track session. Failure to do so will result in disqualification.

	Can I register my traditional class Club Racing car for PWR and choose which class to run on a weekend to weekend basis?	Yes you may submit a disclosure sheet for your car and have a dual class car (Ex DMOD and PWR3). You will only be allowed submit one PWR class disclosure per car per calendar year. Your car must run in one class per event weekend i.e. no class changes during the weekend. Note: points will only be awarded in the class actually participated in during the event.
Vintage/Historic Cars?	Why are vintage cars not required to have a dyno test to be classed in PWR?	Club Racing is committed to mapping vintage classes to PWR to make their transition easier.
	How will the class for a vintage car be determined? What if it's not right?	Club Racing has engaged with Vintage Racing Organizations to understand the relative performance of the vintage classes that encompass most BMWs. Lap times from "known" tracks will be used as a sanity check as well.
	Why does classing a vintage car require $50 but not other cars in PWR?	Club Racing will have to invest a significant amount of time to properly class the vintage cars. Vintage cars are always welcome to class their cars with Dyno and Weight data like other cars in the PWR class.
	I have a Historic/Vintage car with period correct livery. Do I have to put all the BMW Club Racing sponsor decals on my car?	Not at this time.
	Why is the PWR 5 class no longer unlimited?	Club Racing has a desire to limit the speed disparity in mixed class racing. Limiting PWR5 to the specified ratio is a responsible way to accomplish this goal.
	I no longer see the Hoosier Track Attack Pro listed in the DOT R compound tire modifier category?	Correct, for the 2026 season, the Track Attack Pro with its 200 TW rating will be included in the 180 TW category along with all other available 180+ TW tires

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The below graph illustrates the data points used for calculating the new Power Metric (PM). If you have a new Dyno test done after January 1, 2026, you will need to submit a dyno graph AND data table generated by the dynojet software. If you plan to use an existing dyno test graph (only allowed in 2026 for dyno test done prior to 12/31/2025), it will need to be annotated like the example below.