|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PID / (hex)** | **Min value** | **Max value** | **Units** | **Formula**[**[a]**](https://en.wikipedia.org/wiki/OBD-II_PIDs#cite_note-formula-3) |
| 00 |  |  |  | Bit encoded [A7..D0] == [PID $01..PID $20] [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_00) |
| 01 |  |  |  | Bit encoded. [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_01) |
| 02 |  |  |  |  |
| 03 |  |  |  | Bit encoded. [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_03) |
| 04 | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} (or A 2.55 {\displaystyle {\tfrac {A}{2.55}}} ) |
| 05 | -40 | 215 | °C | A − 40 {\displaystyle A-40} |
| 06 | -100 (Reduce Fuel: Too Rich) | 99.2 (Add Fuel: Too Lean) | % | 100 128 A − 100 {\displaystyle {\frac {100}{128}}A-100} / / (or A 1.28 − 100 {\displaystyle {\tfrac {A}{1.28}}-100} ) |
| 07 |
| 08 |
| 09 |
| 0A | 0 | 765 | kPa | 3 A {\displaystyle 3A} |
| 0B | 0 | 255 | kPa | A {\displaystyle A} |
| 0C | 0 | 16,383.75 | rpm | 256 A + B 4 {\displaystyle {\frac {256A+B}{4}}} |
| 0D | 0 | 255 | km/h | A {\displaystyle A} |
| 0E | -64 | 63.5 | ° before [TDC](https://en.wikipedia.org/wiki/Dead_centre_%28engineering%29) | A 2 − 64 {\displaystyle {\frac {A}{2}}-64} |
| 0F | -40 | 215 | °C | A − 40 {\displaystyle A-40} |
| 10 | 0 | 655.35 | grams/sec | 256 A + B 100 {\displaystyle {\frac {256A+B}{100}}} |
| 11 | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} |
| 12 |  |  |  | Bit encoded. [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_12) |
| 13 |  |  |  | [A0..A3] == Bank 1, Sensors 1-4. [A4..A7] == Bank 2... |
| 14 | 0 / -100 | 1.275 / 99.2 | volts / % | A 200 {\displaystyle {\frac {A}{200}}} / / 100 128 B − 100 {\displaystyle {\frac {100}{128}}B-100} / / (if B==$FF, sensor is not used in trim calculation) |
| 15 |
| 16 |
| 17 |
| 18 |
| 19 |
| 1A |
| 1B |
| 1C |  |  |  | Bit encoded. [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_1C) |
| 1D |  |  |  | Similar to PID 13, but [A0..A7] == [B1S1, B1S2, B2S1, B2S2, B3S1, B3S2, B4S1, B4S2] |
| 1E |  |  |  | A0 == [Power Take Off](https://en.wikipedia.org/wiki/Power_Take_Off) (PTO) status (1 == active) / [A1..A7] not used |
| 1F | 0 | 65,535 | seconds | 256 A + B {\displaystyle 256A+B} |
| 20 |  |  |  | Bit encoded [A7..D0] == [PID $21..PID $40] [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_00) |
| 21 | 0 | 65,535 | km | 256 A + B {\displaystyle 256A+B} |
| 22 | 0 | 5177.265 | kPa | 0.079 ( 256 A + B ) {\displaystyle 0.079(256A+B)} |
| 23 | 0 | 655,350 | kPa | 10 ( 256 A + B ) {\displaystyle 10(256A+B)} |
| 24 | 0 / 0 | < 2 / < 8 | ratio / V | 2 65536 ( 256 A + B ) {\displaystyle {\frac {2}{65536}}(256A+B)} / / 8 65536 ( 256 C + D ) {\displaystyle {\frac {8}{65536}}(256C+D)} / |
| 25 |
| 26 |
| 27 |
| 28 |
| 29 |
| 2A |
| 2B |
| 2C | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} |
| 2D | -100 | 99.2 | % | 100 128 A − 100 {\displaystyle {\tfrac {100}{128}}A-100} |
| 2E | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} |
| 2F | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} |
| 30 | 0 | 255 | count | A {\displaystyle A} |
| 31 | 0 | 65,535 | km | 256 A + B {\displaystyle 256A+B} |
| 32 | -8,192 | 8191.75 | Pa | 256 A + B 4 {\displaystyle {\frac {256A+B}{4}}} / (AB is [two's complement](https://en.wikipedia.org/wiki/Two%27s_complement) signed)[[3]](https://en.wikipedia.org/wiki/OBD-II_PIDs#cite_note-4) |
| 33 | 0 | 255 | kPa | A {\displaystyle A} |
| 34 | 0 / -128 | < 2 / <128 | ratio / mA | 2 65536 ( 256 A + B ) {\displaystyle {\frac {2}{65536}}(256A+B)} / / 256 C + D 256 − 128 {\displaystyle {\frac {256C+D}{256}}-128} / / or C + D 256 − 128 {\displaystyle C+{\frac {D}{256}}-128} |
| 35 |
| 36 |
| 37 |
| 38 |
| 39 |
| 3A |
| 3B |
| 3C | -40 | 6,513.5 | °C | 256 A + B 10 − 40 {\displaystyle {\frac {256A+B}{10}}-40} |
| 3D |
| 3E |
| 3F |
| 40 |  |  |  | Bit encoded [A7..D0] == [PID $41..PID $60] [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_00) |
| 41 |  |  |  | Bit encoded. [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_41) |
| 42 | 0 | 65.535 | V | 256 A + B 1000 {\displaystyle {\frac {256A+B}{1000}}} |
| 43 | 0 | 25,700 | % | 100 255 ( 256 A + B ) {\displaystyle {\tfrac {100}{255}}(256A+B)} |
| 44 | 0 | < 2 | ratio | 2 65536 ( 256 A + B ) {\displaystyle {\tfrac {2}{65536}}(256A+B)} |
| 45 | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} |
| 46 | -40 | 215 | °C | A − 40 {\displaystyle A-40} |
| 47 | 0 | 100 | % | 100 255 A {\displaystyle {\frac {100}{255}}A} |
| 48 |
| 49 |
| 4A |
| 4B |
| 4C |
| 4D | 0 | 65,535 | minutes | 256 A + B {\displaystyle 256A+B} |
| 4E |
| 4F | 0, 0, 0, 0 | 255, 255, 255, 2550 | ratio, V, mA, kPa | A, B, C, D\*10 |
| 50 | 0 | 2550 | g/s | A\*10, B, C, and D are reserved for future use |
| 51 |  |  |  | From fuel type table [see below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Fuel_Type_Coding) |
| 52 | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} |
| 53 | 0 | 327.675 | kPa | 256 A + B 200 {\displaystyle {\frac {256A+B}{200}}} |
| 54 | -32,767 | 32,768 | Pa | ((A\*256)+B)-32767 |
| 55 | -100 | 99.2 | % | 100 128 A − 100 {\displaystyle {\frac {100}{128}}A-100} / 100 128 B − 100 {\displaystyle {\frac {100}{128}}B-100} |
| 56 |
| 57 |
| 58 |
| 59 | 0 | 655,350 | kPa | 10 ( 256 A + B ) {\displaystyle 10(256A+B)} |
| 5A | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} |
| 5B | 0 | 100 | % | 100 255 A {\displaystyle {\tfrac {100}{255}}A} |
| 5C | -40 | 210 | °C | A − 40 {\displaystyle A-40} |
| 5D | -210.00 | 301.992 | ° | 256 A + B 128 − 210 {\displaystyle {\frac {256A+B}{128}}-210} |
| 5E | 0 | 3276.75 | L/h | 256 A + B 20 {\displaystyle {\frac {256A+B}{20}}} |
| 5F |  |  |  | Bit Encoded |
| 60 |  |  |  | Bit encoded [A7..D0] == [PID $61..PID $80] [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_00) |
| 61 | -125 | 125 | % | A-125 |
| 62 | -125 | 125 | % | A-125 |
| 63 | 0 | 65,535 | Nm | 256 A + B {\displaystyle 256A+B} |
| 64 | -125 | 125 | % | A-125 Idle / B-125 Engine point 1 / C-125 Engine point 2 / D-125 Engine point 3 / E-125 Engine point 4 |
| 65 |  |  |  | Bit Encoded |
| 66 |  |  |  |  |
| 67 |  |  |  |  |
| 68 |  |  |  |  |
| 69 |  |  |  |  |
| 6A |  |  |  |  |
| 6B |  |  |  |  |
| 6C |  |  |  |  |
| 6D |  |  |  |  |
| 6E |  |  |  |  |
| 6F |  |  |  |  |
| 70 |  |  |  |  |
| 71 |  |  |  |  |
| 72 |  |  |  |  |
| 73 |  |  |  |  |
| 74 |  |  |  |  |
| 75 |  |  |  |  |
| 76 |  |  |  |  |
| 77 |  |  |  |  |
| 78 |  |  |  | Special PID. [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_78) |
| 79 |  |  |  | Special PID. [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_78) |
| 7A |  |  |  |  |
| 7B |  |  |  |  |
| 7C |  |  |  |  |
| 7D |  |  |  |  |
| 7E |  |  |  |  |
| 7F |  |  |  |  |
| 80 |  |  |  | Bit encoded [A7..D0] == [PID $81..PID $A0] [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_00) |
| 81 |  |  |  |  |
| 82 |  |  |  |  |
| 83 |  |  |  |  |
| 84 |  |  |  |  |
| 85 |  |  |  |  |
| 86 |  |  |  |  |
| 87 |  |  |  |  |
| A0 |  |  |  | Bit encoded [A7..D0] == [PID $A1..PID $C0] [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_00) |
| C0 |  |  |  | Bit encoded [A7..D0] == [PID $C1..PID $E0] [See below](https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_1_PID_00) |
| C3 | ? | ? | ? | Returns numerous data, including Drive Condition ID and Engine Speed\* |
| C4 | ? | ? | ? | B5 is Engine Idle Request / B6 is Engine Stop Request\* |

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