

Particle Number Counters

International developments

Paul Kok

March 2026



Contents

Regulations / standards ..

OIML

OIML Working Draft 1

OIML Time frame

Regulations / standards ..

Proposal Particulate Number Counters implemented in:

- Regulation vehicles (NL) (2019)
- Belgian legislation (2022)
- Partly in EU Recommendation 2023/688

Updated July 2024:

Proposal Particle Number Counters 2024 (Part 1 and Part 2)

- Part 2 used in Netherlands for type examination, improvement experienced

Currently work on OIML Recommendation, Working Draft 1 uploaded for comments

OIML

What is OIML?

Organisation Internationale de Metrologie Legale
(International Organization of Legal Metrology)

Provides legal metrology infrastructure (for example Recommendation) for governments.
Provides international “standards” for measuring instruments used for legal metrology.
since 1955 !

Legal metrology is where measurements are involved such as trade, enforcement, consumer protection, health protection, etc.

www.oiml.org

OIML Working Draft 1

WD1 Part 1 & 2 uploaded to OIML workspace (for members) for comments deadline April 2026

Part 1 Requirements, Part 2 Test methods

Describes measurement of particle number of exhaust of engines (not vehicles)

MPE absolute = 0,5 x Minimum of measuring range (0,5 x Min)

Accuracy classes to cover for:

	MPE in use	Accuracy class
Germany	50%	0,5
EU Recommendation	50%	0,5
Switzerland	30%	0,3
Netherlands / Belgium	25%	0,25
...

OIML Working Draft 1

Open question for OIML members:

Include petrol engines ?

OIML Time frame

Part 3 & 4 (5?) to be developed

Estimation:

1CD early 2027

2CD mid 2027

At BIML end 2027

Publication 2028



