



# Technical Circular

0199-99-01217/4 EN

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## DEUTZ engines

- All DEUTZ diesel engines



## Lubricating oil (Diesel engines)

### Alterations

In comparison to TR 0199-99-01217/3, the following changes have been made:

- Updates
  - Alternative lubricating oil releases [6](#)
  - Lubricating oil viscosity [7](#)
  - Lubricating oil load [8](#)
  - Other lubricating oil load factors [9](#)
  - Lubricating oil change intervals  
2.2 / 2.9 / 3.6 [10](#)
  - TTCD 7.8 L6 (engines with two-stage exhaust gas charging and steel pistons) [11](#)
  - DEUTZ Oil Check [13](#)
- Introduction of a new engine series
  - 1.2 / 1.7 [10](#)
  - 9.0 L / 12.0 L / 13.5 L / 18.0 L [13](#)
- Editorial changes

### Area of application

This documentation applies to all current DEUTZ compact engines. For DEUTZ engines which are no longer in the construction programme, please contact the DEUTZ Service responsible for you.

Lubricating oil recommendations for gas engines are described in the following documentation:



- TR 0199-99-01213  
Operating materials for stationary gas engines  
(CNG motors)



- TR 0199-99-01252  
Operating materials for mobile gas engines  
(CNG motors)



- TR 0199-99-01250  
Operating materials for mobile gas engines  
(LPG motors)



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## Lubricating oil in general

Modern diesel engines place very high demands on the lubricating oil used. The specific engine performance, which has been constantly increased over the last few years, leads to increased thermal stress on the lubricating oil. In addition, the lubricating oil is subject to heavier contamination due to reduced lubricating oil consumption and increased lubricating oil change intervals. For this reason, it is necessary to observe the requirements and recommendations in this Technical Bulletin to avoid reducing the life of the engine.

Lubricating oils always consist of a base oil and an additive package. The most important tasks of a lubricating oil are performed by the additives. The properties of the base oil are also decisive for the quality of the product.

Additives are used, for example, to perform the following tasks:

- Wear protection
- Corrosion protection
- Neutralisation of acids from combustion products
- Prevention of coke and soot deposits on engine components

The base oil, in particular, is responsible for the following properties of the lubricating oil:

- Thermal loading capacity
- Low-temperature performance



Mixtures of engine lubricating oils should be avoided because the worst properties of the mixture always dominate. In principle, all engine lubricating oils are mixable so that a complete lubricating oil change from one type of lubricating oil to another is no problem as far as miscibility is concerned.

### DEUTZ lubricating oil recommendation

We recommend the following DEUTZ lubricating oils of the appropriate quality classes for use in DEUTZ engines (see section Lubricating oil quality [4](#)).

The lubricating oils are specially adapted to the engine requirements and have been proven in hard engine operation.



A1: Original DEUTZ lubricating oil

DEUTZ Quality class	DEUTZ Lubricating oil designation	Container		Part number
DQC II-18	TLS 15W40 D	Canister	5 litres*	01016331
			20 litres	01016332
		Barrel	209 litres	01016333
		Tankers**		01016334
DQC III-18	TLX 10W40 FE	Canister	5 litres*	01016335
			20 litres	01016336
		Barrel	209 litres	01016337
		Tankers**		01016338
DQC IV-18	DQC4 5W30 UHP	Canister	20 litres	01017849
		Barrel	205 litres	01017850

\* only available in 4x5 litre container sizes  
 \*\* loose delivery in the tanker, state order quantity

T1: Original DEUTZ lubricating oil



DEUTZ Quality class	DEUTZ Lubricating oil designation	Container		Part number
		Canister	20 litres	
DQC IV-18 LA	Rodon 10W40 Low SAPS	Barrel	209 litres	01017977
				01017976

T2: Original DEUTZ lubricating oil for engines with exhaust gas after-treatment



– Safety data sheets  
<http://www.deutz-sdb.com/de/sdb-de.html>

## Lubricating oil quality

### General

The lubricating oil quality has a considerable influence on the life, efficiency and thus the economy of the engine. The performance capacity and therefore the quality of the lubricating oil is determined in standardised laboratory and test bench tests.

Lubricating oils which are intended mainly for the European market are tested and classified according to ACEA regulations (ACEA = Association des Constructeurs European d'Automobiles). Testing includes laboratory tests for determining physical-chemical properties of the lubricating oils and extensive engine tests on European engines which represent the advanced state-of-the-art.

Accordingly, lubricating oils for the US market are classified according to the API (American Petroleum Institute) guidelines. DEUTZ-specific criteria are additionally checked.

### DEUTZ Quality Class (DQC)

Use of the DQC release list should make the choice of lubricating oils for DEUTZ engines easier for the customer and ensure a quality level that is tailor made for the requirements of DEUTZ engines. The exact allocation of the permissible lubricating oil qualities to the current DEUTZ engines is given in the tables in the "Lubricating oil change intervals" section (see [9](#)).

Please contact your responsible DEUTZ Service in regions where none of these qualities is available.

Further information is available on the DEUTZ homepage.

[www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oele/deutz-quality-class/](http://www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oele/deutz-quality-class/)



- DQC lubricating oil release list
- DQC lubricating oil release list for engines with two-stage exhaust gas charging and steel piston (TTCD 6.1 / TTCD 7.8)
- DQC release procedure with corresponding documents for the lubricant and additive industry
- Lubricating oil change intervals and allocation of permissible lubricating oil qualities for older engine series and for vehicle engines



### ATTENTION

For engines which require a lubricating oil quality of DQC III or DQC IV and/or DQC III LA or DQC IV LA according to the specifications of this technical bulletin, only the respective DEUTZ lubricating oils or the lubricating oils of the DQC lubricating oil release list on the DEUTZ homepage may be used. DEUTZ is not liable for damage caused by the use of lubricants that have not been released.



As the lubricating oil manufacturers often change or adapt the lubricating oil formulations at regular intervals for marketing and cost reasons, solely the lubricating oils on the DQC lubricating oil release list on the DEUTZ homepage apply. These are updated every month.



### Engines without exhaust aftertreatment system

DEUTZ Quality class	Application
DQC I-02	Lubricating oil - Minimum quality for older engines - partly with shortened lubricating oil change intervals
DQC II-18	Lubricating oil - usually for older engines with open crankcase ventilation
DQC III-18	High performance lubricating oil - Standard lubricating oil quality - Diesel engines - closed crankcase ventilation - Engines with high thermal loads
DQC IV-18	Ultra high performance lubricating oil - Diesel engines - closed crankcase ventilation - Engines with the highest levels of output - Engines with highest thermal loads - Engines with two-stage exhaust gas charging and steel pistons (TTCD engines)

T3: DEUTZ lubricating oil quality classes for engines without exhaust gas after-treatment system



Low-ash / low SAPS lubricating oils may only be used in engines without exhaust gas after-treatment systems if the sulphur content in the fuel does not exceed max. 50 mg/kg. However, low-ash lubricating oils may be used up to sulphur contents of 500 mg/kg if the base number (TBN) is  $\geq 9$  mg KOH/g. A corresponding note regarding suitable lubricating oils is published in the DQC lubricating oil release list on the DEUTZ homepage.

Lubricating oils which are released according to higher DQC classes may also be used in the respective lower DQC classes.

Examples:

- Lubricating oil according to DQC IV-18 LA possible instead of a lubricating oil according to DQC III-18 LA
- Lubricating oil according to DQC IV-18 LA possible instead of a lubricating oil according to DQC IV-10 LA (if the sulphur content is low)

### Engines with exhaust aftertreatment system

Owing to strict exhaust gas regulations for Europe and the USA, and the associated widespread use of exhaust gas after-treatment systems, for example diesel particle filters (DPF), SCR systems, diesel oxidation catalysts (DOC) or combinations of these exhaust gas after-treatment systems, the use of low-ash engine lubricating oils is required.

Sulphate and oxide ashes from metal-organic additives significantly shorten the life of diesel particle filters. Phosphor from wear-protection additives as well as sulphur and sulphur compounds can have negative influences on the catalyst activity in exhaust aftertreatment systems. The mineral oil industry has therefore developed low-ash lubricating oils (low SAPS lubricating oils - low **S**ulphated **A**sh, **P**hosphorus, **S**ulphur), which are classified according to the general specifications API CJ-4, API CK-4, JASO DH-2, ACEA E6 and ACEA E9.

DEUTZ lists these low-ash lubricating oils in the DEUTZ lubricating oil release system DQC under the classes DQC II-18 LA, DQC III-18 LA and DQC IV-18 LA (LA = low ash).



DEUTZ Quality class	Application
DQC II-18 LA	Low-ash lubricating oil - usually for older engines with closed crankcase ventilation - partly with shortened lubricating oil change intervals
DQC III-18 LA	Low-ash high performance lubricating oil - Standard lubricating oil quality - Diesel and gas engines - closed crankcase ventilation - Engines with high thermal loads
DQC IV-18 LA	Low-ash ultra high performance lubricating oil - Diesel and gas engines - closed crankcase ventilation - Engines with two-stage exhaust gas charging and steel pistons (TTCD engines) - extended lubricating oil change intervals

T4: DEUTZ lubricating oil quality classes for engines with exhaust gas after-treatment system



Low-ash lubricating oils are mandatory for engines from EU Stage IIIB and/or US EPA tier 4 interim emission levels with the following exhaust gas after-treatment systems or the combination of these exhaust gas after-treatment systems:

- Diesel oxidation catalyst (DOC)
- diesel particle filter (DPF)
- SCR systems  
(SCR = selective catalytic reduction)

### Alternative lubricating oil releases

Release lists are also available for the lubricating oil quality classes DQC I, DQC II and DQC II LA, for which application is recommended but not absolutely mandatory.

As an alternative to the release lists, lubricating oils as per ACEA, API, JASO DH or DHD-1 can also be used exclusively for DQC I, DQC II and DQC II LA corresponding to the following table:

Releases	DEUTZ lubricating oil quality class						
	DQC I	DQC II	DQC III	DQC IV	DQC II LA	DQC III LA	DQC IV LA
DEUTZ release list	DQC I-02	DQC II-18 DQC II-10	DQC III-18 DQC III-10	DQC IV-18 DQC IV-10	DQC II-18 LA DQC II-10 LA	DQC III-18 LA DQC III-10 LA	DQC IV-18 LA DQC IV-10 LA
ACEA specification	E2 E3 E5	E4 E7	—	—	E6 E8 E9 E11	—	—
API specification	CF CF-4 CG-4	CH-4 CI-4 CI-4 Plus	—	—	CJ-4 CK-4	—	—
world-wide/other specification	—	JASO DH-1 DHD-1	—	—	JASO DH-2	—	—

T5: Alternative lubricating oil releases



### Notes:

- Lubricating oils of the specification DQC I-02 can no longer be newly registered because the corresponding ACEA and API specifications are outdated. Stock lubricating oils can still be sold.
- Lubricating oils of the specification DQC I-05 to DQC IV-05 are no longer valid since 01/02/2014.
- Lubricating oils of the specification DQC II-10 (LA) to DQC IV-10 (LA) are no longer valid from 01/01/2025, as releases valid until then may be extended for the last time by 3 years as of 31/12/2021.
- Lubricating oils for which no special DEUTZ release has been applied for or which do not meet the additional requirements for classes DQC III, DQC III LA, DQC IV or DQC IV LA are listed in class DQC II and/or DQC II LA respectively.

Further information on the transitional arrangement from DQC XX-10 (LA) to DQC XX-18 (LA) is available on the DEUTZ homepage.



– Company standard H 0685-3

[www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oele/deutz-quality-class/](http://www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oele/deutz-quality-class/)

### Lubricating oil for initial commissioning

As a matter of principle, the OEM / genset manufacturer must ensure that, when filling the engines at the factory for the first time, all of them are filled with the respective permissible lubricating oil quality. This is already guaranteed by DEUTZ when using engines delivered with DEUTZ lubricating oil FFA 10W40 LA.

- Engines without exhaust gas after-treatment
  - DQC III or DQC IV
  - or
  - DQC III LA or DQC IV LA
  - with a base number  $\geq 9$  mg KOH/g, when it is ensured that engines / gensets are exported to countries where the sulphur content does not exceed max. 500 mg/kg.
- Engines with exhaust aftertreatment: Basically, low-ash / low SAPS lubricating oils
  - DQC III LA or DQC IV LA

### Lubricating oil qualities for authorities vehicles and special vehicles

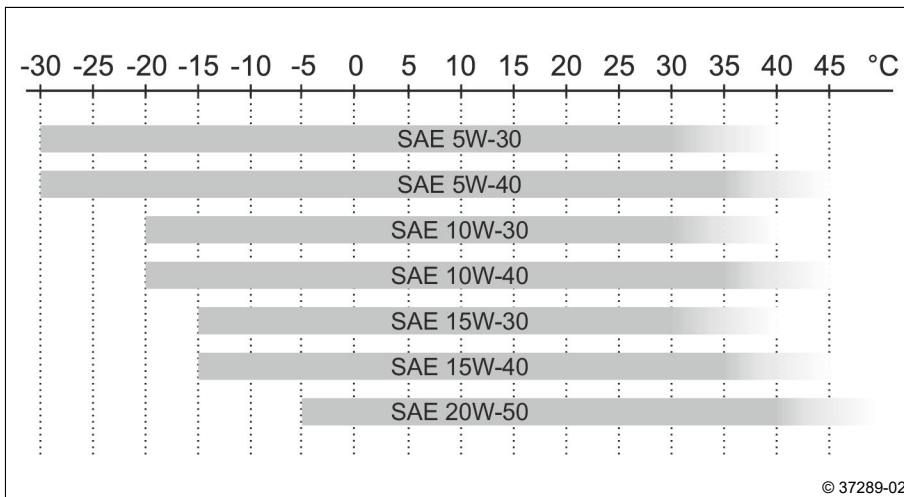
Normally, special lubricants, which have to meet the specific operating conditions (long-term corrosion protection, use of kerosene, logistics), are used for these applications.

For new customers, it must be ensured before initial use of these lubricating oils that a release is available from the head office.

### Lubricating oil viscosity

The viscosity is classified according to SAE. The ambient temperature at the installation site/in the area of application of the engine is decisive for selecting the right viscosity class. Too high a viscosity can lead to difficulties in starting. Too low a viscosity can compromise the lubricating effect, resulting in high lubricating oil consumption. At ambient temperatures below  $-30\text{ }^{\circ}\text{C}$ , the lubricating oil must be pre-heated (for example, by storing the vehicle or the machine in a hall and/or using an optionally available lubricating oil preheater).

Depending on the ambient temperature we recommend the following common viscosity classes:



A2: Viscosity classes according to ambient temperature

At higher ambient temperatures than those specified in the diagram the risk of premature oil ageing under full load operation is avoided by an automatically activated power reduction if insufficient heat dissipation is not ensured.

## Lubricating oil change intervals

The lubricating oil change intervals depend on the lubricating oil quality, the lubricating oil load (engine load) and the operating conditions (e.g. ambient temperature, lubricating oil temperature, sulphur content in fuel, operation with biodiesel).



### ATTENTION

The prescribed lubricating oil change intervals may not be exceeded.

If the prescribed lubricating oil change intervals are not reached within a year, the lubricating oil change must be made at least once a year. If lubricating oil with specification DQC IV-18 and DQC IV-18 LA and DEUTZ long-life lubricating oil filters are used, the lubricating oil should be changed at least every 2 years.

An extension of the lubricating oil change intervals is not permitted if using bypass filters and/or additionally installed filter systems, or using cleaning procedures of the customer carried out externally!

The customer must reckon with a loss of warranty if damage occurs.

## Lubricating oil load

Engines with low to middle workload (performance group 1) have a normal lubricating oil load.

- Performance group 1
  - Workload: maximum 40 %

Engines with high workload (performance group 2 or special performances) have a high lubricating oil load.

- Performance group 2
  - Workload: maximum 55 %
  - blocked performance: maximum 90 % of the performance on the envelope curve
- Special performance
  - Capacity utilisation: > 55 % (for example cogeneration unit)
  - unrestricted continuous performance 100 % of the time
  - blocked performance: maximum 75 % of the performance on the envelope curve





A high engine workload can typically occur in the following applications:

- Trenchers
- Drilling machines
- Compressors > 100 kW
- Pumps
- Mining equipment
- Grader
- Waste compressors



The assignment of the workload to the applications is an example. The assignment may be different in the concrete case.

A high lubricating oil load also occurs at:

- highly dynamic operation
- Swirl chamber engines with two-stage combustion
  - for example engine series 912W / 913W

The workload limit can be calculated by the customer based on the fuel consumption as follows:

Lubricating oil load	Workload limit
normal (≤ 40 %)	Fuel consumption [litres/hour] < nominal power [kW] x 0.11
high (> 40 %)	Fuel consumption [litres/hour] > nominal power [kW] x 0.11

### Other lubricating oil load factors

The lubricating oil replacement interval must be halved if at least one of the following conditions applies:

- Permanent ambient temperatures < -10 °C (< +14 °F)
  - or
  - Lubricating oil temperature < 60 °C (+140 °F)
- Permanent ambient temperatures > 40 °C (> +104 °F) with high engine workloads
  - or
  - Lubricating oil temperature > 125 °C (> +257 °F)
- Sulphur content in the fuel > 0.2 to 1.0 % by weight
- Operation with biodiesel (FAME) / biodiesel blends (biodiesel content > 30 percent by volume)
- very high dust levels

### Lubricating oil change intervals for built-in and marine engines

Lubricating oil change intervals for older DEUTZ engine series are available on the DEUTZ homepage.



– Lubricating oil change intervals and allocation of permissible lubricating oil qualities for older engine series and for vehicle engines

[www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oel/deutz-quality-class/](http://www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oel/deutz-quality-class/)



1.2 / 1.7

Engine type: D 1.2 L3 / D 1.7 L3									
Engine version	Lubricating oil load	DEUTZ lubricating oil quality DQC							
		I	II	III	IV	II LA	III LA	IV-10 LA	IV-18 LA
all engines	normal	—	200*	200*	200*	200*	200*	200*	200*
	high	—	200*	200*	200*	200*	200*	200*	200*

Lubricating oil change interval first time filling: maximum 50 Bh  
\* No additional halving if other lubricating oil load factors apply [9](#)

T6: Lubricating oil change intervals in operating hours

2.2 / 2.9 / 3.6

Engine type: D 2.2 L3 / D 2.9 L4									
Engine version	Lubricating oil load	DEUTZ lubricating oil quality DQC							
		I	II	III	IV	II LA	III LA	IV-10 LA	IV-18 LA
with exhaust gas after-treatment	normal	—	—	—	—	500	1000	1000	1000
	high	—	—	—	—	—	500*	500*	
without exhaust gas after-treatment	normal	—	500	1000	1000	500	1000	1000	1000
	high	—	250*	500*	500*	—	500*	500*	

\* No additional halving if other lubricating oil load factors apply [9](#)

T7: Lubricating oil change intervals in operating hours

Engine type: TD 2.2 L3 / TCD 2.2 L3 / TD 2.9 L4 / TCD 2.9 L4									
Engine version	Lubricating oil load	DEUTZ lubricating oil quality DQC							
		I	II	III	IV	II LA	III LA	IV-10 LA	IV-18 LA
only TD 2.2 L3 ≥ 36 kW with closed crankcase ventilation									
EU Stage V US EPA Tier 4 final	normal	—	—	—	—	—	—	500	500
	high	—	—	—	—	—	—	500	500
EU Stage IIIA US EPA Tier 3	normal	—	—	—	500	—	—	—	—
	high	—	—	—	500	—	—	—	—
all other engines									
with exhaust gas after-treatment	normal	—	—	—	—	250*	500	500	500
	high	—	—	—	—	—	500	500	500
without exhaust gas after-treatment	normal	—	500	500	500	250*	500	500	500
	high	—	250*	500	500	—	500	500	500

\* No additional halving if other lubricating oil load factors apply [9](#)

T8: Lubricating oil change intervals in operating hours



To approve an engine configuration for an 1000 Bh lubricating oil change interval, please contact your responsible sales executive.

Engine type: TD 3.6 L4 / TCD 3.6 L4									
Engine version	Lubricating oil load	DEUTZ lubricating oil quality DQC							
		I	II	III	IV	II LA	III LA	IV-10 LA	IV-18 LA
with exhaust gas after-treatment	normal	—	—	—	—	250*	500	500	500
	high	—	—	—	—	—			
without exhaust gas after-treatment	normal	—	500	500	500	250*	500	500	500
	high		250*			—			

\* No additional halving if other lubricating oil load factors apply 9

T9: Lubricating oil change intervals in operating hours



To approve an engine configuration for an 1000 Bh lubricating oil change interval, please contact your responsible sales executive.

**4.1 / 6.1 / 7.8**

Engine type: TCD 4.1 L4 / TCD 6.1 L6 / TCD 7.8 L6									
Engine version	Lubricating oil load	DEUTZ lubricating oil quality DQC							
		I	II	III	IV	II LA	III LA	IV-10 LA	IV-18 LA
Industry with exhaust gas after-treatment	normal	—	—	—	—	250*	500	500	500 or 1000**
	high					—			
Industry without exhaust gas after-treatment	normal	—	500	500	500	250*	500	500	500
	high		250*			—			
Agricultural engineering EU Stage IV / V US EPA Tier 4 final	normal	—	—	—	—	—	500	500	500 or 1000**
	high								
Agricultural engineering EU Stage IIIB US EPA Tier 4 interim	normal	—	—	500	500	250*	500	500	500
	high					—			
Agricultural engineering without exhaust gas after-treatment	normal	—	—	500	500	250*	500	500	500
	high					—			

\* No additional halving if other lubricating oil load factors apply 9  
\*\* Engine configuration for 1000 Bh lubricating oil change interval – observe the requirements for extending the lubricating oil change intervals.

T10: Lubricating oil change intervals in operating hours



Engine type: TTCD 6.1 L6 / TTCD 7.8 L6 (engines with two-stage exhaust gas charging and steel pistons)											
Engine version	Lubricating oil load	DEUTZ lubricating oil quality DQC									
		I	II	III	IV-10	IV-18	II LA	III LA	IV-10 LA	IV-18 LA	
EU Stage IV / V US EPA Tier 4 final	normal	—	—	—	—	—	—	—	—	500	500 or 1000**
	high	—	—	—	—	—	—	—	—	500*	500
without exhaust gas after-treatment	normal	—	—	—	500*	500	—	—	500*	500	500
	high	—	—	—	500*	500	—	—	500*	500	500

\* See separate DQC lubricating oil release list for TTCD engines on the DEUTZ homepage [www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oele/deutz-quality-class/](http://www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oele/deutz-quality-class/)

\*\* Engine configuration for 1000 Bh lubricating oil change interval – observe the requirements for extending the lubricating oil change intervals.

T11: Lubricating oil change intervals in operating hours

#### 4.1 / 6.1 / 7.8

#### Requirement for the extension of the lubricating oil change intervals (engine configuration for 1000 Bh lubricating oil change interval)



#### ATTENTION

The extended lubricating oil change interval can only be applied for engines that were already configured for extended lubricating oil change intervals when they were ordered. It is not necessary to use the DEUTZ Oil Check (see [13](#)) in this case.

- Engine configuration for extended lubricating oil change intervals
- Emission stage
  - EU Stage IV
  - EU Stage V
  - US EPA Tier 4 final
- Lubricating oil quality
  - DEUTZ Quality Class DQC IV-18 LA
- Lubricating oil filter
  - DEUTZ Premium Long-Life Filter

#### 12.0 V / 16.0 V

Engine type: TCD 12.0 V6 / TCD 16.0 V8										
Engine version	Lubricating oil load	DEUTZ lubricating oil quality DQC								
		I	II	III	IV	II LA	III LA	IV-10 LA	IV-18 LA	
EU Stage IIIB US EPA Tier 4 interim	normal	—	—	500	1000	—	500	1000	1000	
	high	—	—	250*	500*	—	250*	500*		
EU Stage IV / V US EPA Tier 4 final	normal	—	—	—	—	—	500	1000	1000	
	high	—	—	—	—	—	250*	500*		

\* No additional halving if other lubricating oil load factors apply [9](#)

T12: Lubricating oil change intervals in operating hours



9.0 L / 12.0 L / 13.5 L / 18.0 L

Engine type: TCD 9.0 L4 / TCD 12.0 L6 / TCD 13.5 L6 / TCD 18.0 L6									
Engine version	Lubricating oil load	DEUTZ lubricating oil quality DQC							
		I	II	III	IV	II LA	III LA	IV-10 LA	IV-18 LA
EU Stage IIIA EU Stage 0	normal	—	—	500	1000	—	500	1000	1000
	high	—	—	—	—	—	750	1500	1500
EU Stage V US EPA Tier 4 final	normal	—	—	—	—	—	750	1500	1500
	high	—	—	—	—	—	750	1500	1500

T13: Lubricating oil change intervals in operating hours

### Lubricating oil change intervals for vehicle engines

If lubricating oil changes are carried out according to operating hour intervals in vehicles, the lubricating oil change intervals for normal lubricating oil load apply (see [8](#)).

Lubricating oil change intervals for vehicle engines are available on the DEUTZ homepage.



– Lubricating oil change intervals and allocation of permissible lubricating oil qualities for older engine series and for vehicle engines

[www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oele/deutz-quality-class/](http://www.deutz.com/service/ersatzteile-und-betriebsstoffe/betriebsstoffe/oele/deutz-quality-class/)

### Lubricating oil filter maintenance

The lubricating oil filter/lubricating oil filter insert must be replaced each time the lubricating oil is changed.



– Operating manual

### DEUTZ Oil Check

An extension of the prescribed lubricating oil change intervals is only possible when using the DEUTZ Oil Check.



– TR 0199-99-01119  
DEUTZ Oil Check



#### ATTENTION

For engines for which a standard lubricating oil change interval of  $\geq 1000$  operating hours is permissible, the lubricating oil change interval must not be extended any further.



The DEUTZ Oil Check can be ordered via the DEUTZ dealer network.

### Notes

#### Biologically degradable lubricating oils

Biologically degradable lubricating oils may be used in DEUTZ engines if they meet the requirements of this Technical Bulletin.



For biologically degradable lubricating oils released according to the DQC system, an appropriate reference is made in the lubricating oil release list.

### Tractor universal lubricating oils

To simplify the storage in agricultural enterprises, universal lubricating oils have been developed for agriculture which can be used in the engine, gears, hydraulic system and in oil-cooled, so-called wet brakes. These lubricating oils which are known as STOU (**S**uper **T**ractor **O**il **U**niversal) may only be used in the engine when the specifications in this Technical Bulletin are observed and at the same time the relevant specifications for all oil-lubricated tractor components must be satisfied.

For STOU lubricating oils released according to the DQC system an appropriate reference is made in the lubricating oil release list.

### Additives

The lubricating oils described in this Technical Bulletin contain additives for all tasks in the engine which are carefully coordinated to each other and finally tested extensively as a finished product. The effects of other additives are not typically tested as extensively, meaning that unforeseeable side-effects cannot be ruled out. The use of additives in DEUTZ engines is therefore prohibited.

### Contact

If you have questions about any of the topics mentioned here, please contact us using the details given below:

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or  
DEUTZ Ticket System (DTS): <https://www.dts-deutz.com> (for registered users only)

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