



GASOLINE ENGINE OILS

PREMIUM FS 0W/20 FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



It is an all year multigrade full synthetic motor oil with low viscosity and high stability. It inhibits deposit formation, reduces friction losses and protects against wear, creates better engine performance for modern, and old engines. Most advanced motor oil of new generation, providing superior and long-lasting engine protection, especially for stop and go city traffic use.

PERFORMANCE LEVELS: API SN/CI-4+ -ACEA A3/B3- A3/B4- VW 502.00/503.01/505.00-MB 229.71 - GM-LL-A-025/ GM-LL-B-025

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
8,1 - 8,9	150	200	-40

PREMIUM FS 0W/30 FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



It is an all year multigrade full synthetic motor oil with low viscosity and high stability. It inhibits deposit formation, reduces friction losses and protects against wear, creates better engine performance for modern, and old engines. Most advanced motor oil of new generation, providing superior and long-lasting engine protection, especially for stop and go city traffic use.

PERFORMANCE LEVELS: API SN/CI-4+ -ACEA A3/B3- A3/B4- VW 502.00/503.01/505.00-MB 229.61- GM-LL-A-025/ GM-LL-B-025

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
9,3 - 12,6	150	200	-36

PREMIUM FS 5W/30 FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



Full synthetic motor oil and has been formulated with high-quality synthetic base oils and advanced additive technology. In all weather and road conditions, provides unique engine protection with high viscosity index. Satisfies all the requirements of gasoline, diesel and LPG passenger cars and vans. Shows excellent performance in all seasons.

PERFORMANCE LEVELS: API SN/CI-4+ -ACEA A3- 99,B3-98 ISSUE 2- Daimler/Chrysler 229.1- Volkswagen 500.00/505.00 (1/97)

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
9,3 - 12,6	140	200	-33



GASOLINE ENGINE OILS

PREMIUM FS 5W/40 FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



Full synthetic motor oil developed by formulation of superior quality synthetic additives and base oils. It is produced especially for the requirements of modern cars generating high power. It keeps the engine clean by reducing deposit and ash formation, It prevents the pressure losses and prolongs the engine's lifetime. It provides economization by decreasing the oil and fuel consumption. It can be used in all vehicles with naturally aspirated and turbo-charged motors as well as vehicles with the latest technology catalytic converters. PERFORMANCE LEVELS: API SN/CI-4+ - ACEA A3/B3, A3/B4- VW 502.00/505.00- BMW Longlife 98 -MB 229.3

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	150	200	-33

PREMIUM SS 10W/30 SEMI SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



Semi synthetic motor oil formulated with high-quality base oils and advanced additive technology. Satisfies all the requirements of gasoline, diesel and LPG passenger cars and vans. Shows excellent performance in all season. Provides perfect engine protection in all weather and road conditions with high viscosity index.

PERFORMANCE LEVELS: API SL/CF-ACEA A3-99, B3-98 ISSUE 2- Daimler/Chrysler 229.1

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
9,3 - 12,6	140	200	-27

PREMIUM SS 10W/40 SEMI SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



Low viscosity and high stability semi synthetic motor oil especially formulated to meet the high requirements of modern passenger car motors operating under different running conditions. Due to excellent lubrication feature it protects all equipments of the motor, reduces the for mation of sludge and deposit therefore decreases maintenance costs by extending oil change intervals. In addition, it perfectly meets the needs of high speed and heavy load vehicles, working in extreme conditions such as long road terms and stop and go intense city traffic use.

PERFORMANCE LEVELS: API SL/CF -ACEA A3/B4-VW

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	150	200	-27



GASOLINE ENGINE OILS

EXCELLUS 10W/40

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



It is all-year motor oil suitable for all types of gasoline and diesel motors that operate under different working conditions. It provides effective performance with in oil change intervals by perfectly controlling lubrication function. It is suitable for all types of engines including turbochargers and catalytic converters.

PERFORMANCE LEVELS: API SL/CF -MB 229.1-VW 505.00/505.01-ACEA A3/B3

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	130	200	-27

EXCELLUS 15W/40

- *1 liter 
- *3 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



Produced by high-quality mineral base oils with high-performance additives. It can be used in high-speed motors. Especially suitable for passenger cars and stop-start type of commercial passenger vehicles motor oil.

PERFORMANCE LEVELS: API SL/CF

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	125	200	-24

EXCELLUS 20W/50

- *1 liter 
- *3 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *Barrel 



It is an all year motor oil for all types of modern and old vehicles operating under different running conditions. It keeps the oil system clean, creates better engine compression with less deposits and decreases fuel consumption. It is suitable for use in all types of motors including turbo chargers and catalytic converters.








PERFORMANCE LEVELS: API SL/CF -ACEA A3/B3-VW 505.00-MB 229

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
16,3 - 21,9	120	200	-21



DIESEL ENGINE OILS

HITEC FS 0W20 DPF FULL SYNTHETIC








- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *18 liter Drum 
- *20 liter Drum 
- *180 kg Barrel 



Exhaust Gas Recirculation (EGR) system and exhaust gas treatment systems such as Diesel Particulate Filter (DPF), Diesel Oxidation Catalysts (DOC) and equipped in accordance with exhaust gas emission specifications, modern, high-efficiency and It is an extra high performance diesel engine oil that provides excellent performance in low emission engines, while helping engine efficiency in heavy road and off-road applications.
PERFORMANCE LEVELS: API CI-4+/SN -ACEA A3/B3- A3/B4- VW 502.00/503.01/505.00-MB 229.71 - GM-LL-A-025/ GM-LL-B-025

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
8,8	140	220	-40

HITEC FS 5W/30 DPF FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *18 liter Drum 
- *20 liter Drum 
- *180 kg Barrel 



Exhaust Gas Recirculation (EGR) system and exhaust gas treatment systems such as Diesel Particulate Filter (DPF), Diesel Oxidation Catalysts (DOC) and equipped in accordance with exhaust gas emission specifications, modern, high-efficiency and It is an extra high performance diesel engine oil that provides excellent performance in low emission engines, while helping engine efficiency in heavy road and off-road applications.
PERFORMANCE LEVELS: API CI-4+/SN - MB 229.1-Mack EO-M-Volvo Vds-2

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
9,3 - 12,6	160	200	-33

HITEC FS 5W/30 FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *180 kg Barrel 








It is the fully synthetic high-performance, motor oil designed for long-term use in modern engines. It provides less pressure on the power transmission component and the result is fuel economization and at the same time extended service life with less maintenance cost. Thanks to its constant wide-range viscosity. It ensures an immediate lubrication property at cold start. Innovative technology provides green nature and clean environment responsibility with minimum harmful emissions.
PERFORMANCE LEVELS API CI-4/SL-MB 229.1-Mack EO-M-Volvo Vds-2

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
9,3 - 12,6	160	200	-33



DIESEL ENGINE OILS

HITEC FS 5W/40 FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *180 kg Barrel 








It is the synthetic motor oil with finest additives formulation for passenger cars and light diesel vehicles. Meets all the requirements of modern diesel motors. Unique performance in four seasons. In all weather and road condition, provides unparalleled protection in motor with high viscosity index.

PERFORMANCE LEVELS API CI-4/SL-Renault RVI RXD-Volvo VDS-2/VDS-3-MB 229.5

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	150	200	-33

HITEC FS 10W/30 DPF FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *180 kg Barrel 







Exhaust Gas Recirculation (EGR) system and exhaust gas treatment systems such as Diesel Particulate Filter (DPF), Diesel Oxidation Catalysts (DOC) and equipped in accordance with exhaust gas emission specifications, modern, high-efficiency and It is an extra high performance diesel engine oil that provides excellent performance in low emission engines, while helping engine efficiency in heavy road and off-road applications.

PERFORMANCE LEVELS API CI-4+/SN - Renault RVI RXD-Volvo VDS-2/VDS-3

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
9,3 - 12,6	140	200	-27

HITEC FS 10W/40 DPF FULL SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *180 kg Barrel 



Exhaust Gas Recirculation (EGR) system and exhaust gas treatment systems such as Diesel Particulate Filter (DPF), Diesel Oxidation Catalysts (DOC) and equipped in accordance with exhaust gas emission specifications, modern, high-efficiency and It is an extra high performance diesel engine oil that provides excellent performance in low emission engines, while helping engine efficiency in heavy road and off-road applications.






PERFORMANCE LEVELS API CI-4+/SN -MB 228.5/229.1-Volvo Vds-2-DAF Mtv Type 2+3-Scania Ldf-MAN 32

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	150	200	-27



DIESEL MOTOR OILS

EXTRA SS 10W/30 SEMI SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *180 kg Barrel 








It is semi synthetic motor oil produced with finest additives for passenger cars and light diesel vehicles. Meets all the requirements for diesel motors that are produced with modern methods. Unique performance in four seasons. In all weather and road condition, provides unparalleled protection in motor with high viscosity index.

PERFORMANCE LEVELS API CI-4/SL-Renault RVI RXD Volvo VDS-2/VDS-3-WB 228.5

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
9,3 - 12,6	140	200	-27

EXTRA SS 10W/40 SEMI SYNTHETIC

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *180 kg Barrel 










It is the semi-synthetic motor oil formulated with high quality base oils and ultimate additives. It creates better wear control in low and high temperature. It provides fuel and oil economy. Formulation is fortified by additional additives which neutralize acid formation due to diesel fuel. The result is reduction in corrosion, less deposit formation and friction. It decreases maintenance costs by longer service intervals. Effective detergent and dispersant additives keep the motor clean and allow less exhaust emissions for the environmental care. Compatible with turbo chargers or catalytic converters.

PERFORMANCE LEVELS API CI-4/SL-ACEA E7/E5-MB 228.3-Volvo Vds-3-Renault RLD 2

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	140	200	-27

TURBO 10W/40

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *18 liter Drum 
- *20 liter Drum 
- *180 kg Barrel 



It is super high performance diesel engine oil formulated with high quality base oil and advanced additive technology. It provides excellent engine cleanliness. Thanks to quality additives in formulation no foam occurs. It is a four season motor oil and suitable for all diesel vehicles which are working under heavy duty conditions.

PERFORMANCE LEVELS API CI-4/SL - Volvo VDS-2-MB 228.3/MB 229.1 - MAN M 3275 - Mack EO-M Plus

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	145	200	-27



DIESEL ENGINE YAĞLARI

TURBO SHPD 15W/40

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *16 litre Tin 
- *18 litre Drum 
- *20 litre Drum 
- *180 kg Barrel 



High performance diesel motor oil with low viscosity, high stability for all year use produced to meet the latest requirements of all modern motors. It suits for fleet including high motor power for heavy loads. It shows excellent performance against wear, corrosion and deposit formation. High quality additives ensure long service intervals and high performance during even hard environmental conditions.

PERFORMANCE LEVELS: API CI-4/SL- ACEA A3/B4- MB 228.3/229.1-Allison C4-Volvo Vds-3-MTU DDC Type 2-MAN M-3275-CAT ECF-1-MACK EO-M, EO-M Plus

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	140	200	-24

PRESTIGE 15W/40

- *1 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *16 litre Tin 
- *18 litre Drum 
- *20 litre Drum 
- *180 kg Barrel 



High performance diesel motor oil with low viscosity, high stability for all year use produced to meet the latest requirements of all modern motors. It suits for fleet including high motor power for heavy loads. It shows excellent performance against wear, corrosion and deposit formation. High quality additives ensure long service intervals and high performance during even hard environmental conditions.

PERFORMANCE LEVELS: API CF-4/SJ -ACEA A3/B4-MB 228.3/229.1-Allison C4-Volvo Vds-3-MAN M-3275-MACK EO-M, EO-M Plus

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	125	200	-24

SUPER DIESEL 20W/50

- *1 liter 
- *3 liter 
- *4 liter 
- *5 liter 
- *7 liter 
- *16 litre Tin 
- *18 litre Drum 
- *20 litre Drum 
- *180 kg Barrel 



It is high performance diesel and gasoline engine oil suitable for fleet and trucks which have high motor power for heavy loads.



PERFORMANCE LEVELS: API CD/SF

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
16,3 - 21,9	120	200	-21



DIESEL ENGINE OILS

CLASSIC HDX

- *1 liter 
- *16 litre Tin 
- *18 litre Drum 
- *20 litre Drum 
- *180 kg Barrel 



It is prepared with base oils and quality additives that are obtained by modern refining processes. Developed for diesel and gasoline vehicles that are working under difficult conditions. Keeps the motor clean in all weather and road conditions. Protects against oxidation, abrasion and corrosion.

PERFORMANCE LEVELS: API CD/SF. US Military: MIL L-2104C

SAE NO	Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
10	5,0 - 5,7	100	200	-20
30	9,3 - 12,6	100	200	-20
40	12,5 - 16,3	120	200	-20

CLASSIC HD

- *1 liter 
- *16 litre Tin 
- *18 litre Drum 
- *20 litre Drum 
- *180 kg Barrel 



Monograde motor oil for the general use in all types of passenger and commercial diesel engines with normally aspirated or turbo charged engines. It is fortified with additive packages and anti foaming agents to provide high performance. Monograde motor oils are not suitable for all year use therefore they have to be changed according to season and temperature conditions. It contains film stability for being able to use in hydraulic systems. Provides thermo stability, engine cleanliness, good cold start. Prevents from black sludge formation. Compatible with all synthetic, semi synthetic and mineral based motor oils.

PERFORMANCE LEVELS: API CC/SC

SAE NO	Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
10	5,0 - 5,7	100	200	-20
30	9,3 - 12,6	100	200	-20
40	12,5 - 16,3	120	200	-20

CLASSIC H

- *1 liter 
- *16 litre Tin 
- *18 litre Drum 
- *20 litre Drum 
- *180 kg Barrel 



Monograde motor oil for the general use of all types of passenger cars and commercial cars with diesel motors. Monograde engine oils are not suitable for all year use therefore they have to be changed according to season and temperature conditions.

PERFORMANCE LEVELS: API CA/SA

SAE NO	Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
10	5,0 - 5,7	100	200	-20
30	9,3 - 12,6	100	200	-20
40	12,5 - 16,3	120	200	-20



MOTORCYCLE OILS

RACING 4T FS 10W/40 FULL SYNTHETIC



*1 liter 

*Barrel 

It is high-performance, fully synthetic motor oil developed for four-stroke engines. It can be used on wet plate clutches and specially formulated to meet the needs of the world's leading motorcycle manufacturers. Provides excellent protection, easy working and smooth lubrication in cold weather.

PERFORMANCE LEVELS: API SL- JASO MA

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	150	195	-27

RACING 4T 10W/40



*1 liter 

*Barrel 

It is a mineral-based oil formulated with base oil which is obtained with modern rafinal operations, and high quality additives for four-stroke engines. It shows maximum performance with high viscosity index in wide temperature ranges. It provides comfort during first study. It keeps the engine clean for a long time., It can be used in four seasons in all gasoline vehicles and light diesel engines.

PERFORMANCE LEVELS: API SL- JASO MA

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	125	195	-24



MOTORCYCLE OILS

RACING 4T 15W/40

*1 liter 
*Barrel 



It is a mineral-based oil formulated with base oil which is obtained with modern rafinal operations, and high quality additives for four-stroke engines. It shows maximum performance with high viscosity index in wide temperature ranges. It provides comfort during first study. It keeps the engine clean for a long time., It can be used in four seasons in all gasoline vehicles and light diesel engines.

PERFORMANCE LEVELS: API SL/CF-ACEA A3-02-ACEA B3-98 ISSUE 2-Daimler/Chrysler MB 229.1-BMW Long Life 98

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
12,5 - 16,3	125	195	-24

RACING 4T 20W/50

*1 liter 
*Barrel 



It is formulated with selected base oils and ultimate additive technology for four stroke motorcycles engines. It provides high protection against thermal pressure. It contains superior lubricity and detergent additives providing effective protection against, corrosion, rust and oxidation.

PERFORMANCE LEVELS: API SL-JASO MA

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
16,3 - 21,9	125	195	-21

RACING 2T

*1 liter 
*Barrel 



Motocycle oil produced with combination of base oils and special additives developed for the demand of two stroke engines with sepearte or oil in gasoline lubrication.

PERFORMANCE LEVELS: API TC

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
8,6	98	200	-19



GEAR AND TRANSMISSION OILS

TRANSMISSION OIL FS 75W/90

- *1 litre 
- *3 litre 
- *16 litre Tin 
- *Barrel 



It is fully synthetic, high performance gear oil developed for use in passenger cars', heavy vehicles and construction equipments' gearboxes (with or without synchromesh) and differentials. It provides efficient lubrication and superior oxidation resistance at high temperatures without losing its property. Its extreme pressure (EP) feature protects the equipment against corrosion even at sudden load shocks, and minimizes maintenance costs. PERFORMANCE LEVELS : API GL-4 / API GL-5 / MIL-PRF-2105E-/MIL-L-2105D /SAE J 2360 / MACK GO-J/MAN M-3343 Type S

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
13,5 - 24	155	200	-25

TRANSMISSION OIL SS 75W/90

- *1 litre 
- *3 litre 
- *16 litre Tin 
- *Barrel 



It is high-performance, multi-grade semi synthetic oil that is used in lubrication of heavy-duty gears. Suitable for axles, reduction gears, synchronized & not synchronized manual gearboxes.

PERFORMANCE LEVELS : API GL-4 / API GL-5

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
13,5 - 24	155	200	-25

TRANSMISSION OIL 75W/80

- *1 litre 
- *3 litre 
- *16 litre Tin 
- *Barrel 



It is mineral based automotive gear oil designed for passenger cars' buses', heavy duty trucks' manual gear boxes, transmissions and rear axles use. Through its high viscosity index it provides superior lubrication even in wide temperature ranges. Extreme pressure (EP) additives prolong gear box life. Excellent thermal stability creates oxidation and corrosion protection even in high temperatures and makes the gear change easier in cold weather. Low viscosity feature provides fuel economization.

PERFORMANCE LEVELS API GL-4 / PSA : PEUGEOT / CITROEN B 71 2330

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
7 - 13,5	155	200	-25



GEAR AND TRANSMISSION OILS

GEAR OIL GL 5

- *1 litre 
- *3 litre 
- *16 litre Tin 
- *Barrel 



Multi-functional gear oil formulated with the latest technology additives and base oil to meet the lubrication and performance requirements of front-rear differentials, transfer boxes, transaxles, manual transmissions, oil lubricated wheel bearings and steering gear boxes. It is recommended for passenger cars, light or heavy construction equipments and industrial machinery operating under high speed/shock load, low speed/high torque. It is suitable for four season use and also it performs extreme resistance against oxidation. Its sheer stable structure and extreme pressure (EP) feature creates a thick film layer against wear formation, prolongs equipment life.

PERFORMANCE LEVELS: API GL-5- MT-1 - Scania ST0:1

SAE NO	Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
80W/90	13,5 - 24	160	200	-20
85W/140	24 - 41	160	200	-15

GEAR OIL GL 4

- *1 litre 
- *3 litre 
- *16 litre Tin 
- *Barrel 



It is mineral gear oil that contains extreme pressure additives. It is produced for transmission, differential and gear boxes that are exposed to excessive load while working under average torque, high speed conditions. With its rust, oxidation and corrosion protective properties makes the years remain clean and prolongs the equipment life.

PERFORMANCE LEVELS: API GL-4- MIL-L-2105

SAE NO	Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
80	7 - 13,5	100	200	-12
90	13,5 - 24	100	200	-10
140	24 - 41	100	200	-5

GEAR OIL GL 1

- *1 litre 
- *3 litre 
- *16 litre Tin 
- *Barrel 



It is mono grade mineral based gear oil developed for differentials, transmissions and gear boxes of automobiles, heavy vehicles and construction equipments that are not working under high pressure. It keeps the equipments clean by preventing the formation of deposits with its oxidation stability.

PERFORMANCE LEVELS: API GL-1

SAE NO	Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
80	7 - 13,5	100	200	-12
90	13,5 - 24	100	200	-10
140	24 - 41	100	200	-5



GEAR AND TRANSMISSION OILS

KFLD 422

*16 litre Tin 
*Barrel 



It is general use oil that meets the requirements of gearbox, axle, transmissions, hydraulic systems and wet brakes of mainly agricultural and forestry machinery. It decreases fuel consumption. Friction improver additives ensure smooth and quiet braking. Thanks to its high viscosity index it can be used for four seasons. It keeps the system clean against deposit formation, foaming and minimizes maintenance costs.

PERFORMANCE LEVELS: API CF-4/GL-4-FORD-ESEN M2C 86B-MASSEY FERGUSON CMS M1135

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
7 - 11	100	210	-30

ATF DEXRON III

*1 litre 
*3 litre 
*16 litre Tin 
*Barrel 



Multipurpose power transmission fluid produced for light & heavy passenger & commercial vehicles' steering wheels, some of the manual transmissions and hydraulic systems. It protects automatic transmissions against the formation of varnish, sludge, foam and harmful deposits. With its high viscosity index, it shows full performance while maintaining its fluidity in low temperatures and its lubrication ability in high temperatures. Due to its contents of rust, corrosion and oxidation inhibiting additives, it extends the equipment life in automatic transmission system.

PERFORMANCE LEVELS: MAN 339 Z1+V1 - MB 236.9. Volvo STD 1273.41 (97341)

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
7,3	160	180	-42



GEAR AND TRANSMISSION OILS

ATF DEXRON II



It is combination of excellent base oils with special additives which provide thermal and oxidation stability, rust, corrosion and wear protection. By its thermal stability feature it minimizes the friction caused by operating in different weather conditions, so it ensures smooth and quiet operation at all speeds and also prevents shudder. By forming a protective oil layer, it ensures an excellent lubrication which results in longer transmission life and high performance during all year long.

PERFORMANCE LEVELS: MAN 339 Z1+V1, MB 236.9, Volvo STD 1273.41 (97341)

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
7,4	160	180	-39

ATF DEXRON



It is produced for the passenger vehicles', light-heavy commercial vehicles' steering wheels, transmissions and hydraulic systems. It contains additives providing high oxidation resistance, low friction and protection against foam, rust, corrosion formation.

PERFORMANCE LEVELS: MAN 339 Z1+V1

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
7,7	140	180	-30



INDUSTRIAL OILS

MILLUS HYDRAULIC SYSTEM OILS



*16 litre Tin 
*Barrel 

It is used as pressure oils in hard working hydraulic systems to defeat the effects of high pressure and high load. It contains ingredients which increase the levels of aging stability and corrosion protection. Due to special anti wear additives and rust inhibitors it provides optimum protection for expensive equipments. It reduces maintenance costs by extending drain interval. It has excellent water separating properties to minimize the formation of emulsions.

SAE NO	Kinematic Viscosity 40°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
32	28,8 - 35,2	95	190	-20
46	41,4 - 50,6	95	190	-20
68	61,2 - 74,8	95	190	-20
100	90 - 110	95	190	-20

INDUSTRIAL GEAR OILS



*16 litre Tin 
*Barrel 

High quality industrial gear box oil developed for gear systems requiring extreme pressure feature. It provides protection against scratch, wear and micro pitting by preventing the friction that may occur on the surface of gears. It helps the gears to work more efficiently, It provides maximum protection against wear during the first start at low temperatures. As it certainly does not mix with water when they are in contact, it provides excellent protection against rust, corrosion and formation of foam.

SAE NO	Kinematic Viscosity 40°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
68	61,2 - 74,8	98	190	-24
100	90 - 110	95	190	-24
150	135 - 165	120	190	-22
220	198 - 242	120	190	-18
320	288 - 352	120	190	-12
460	414 - 506	120	190	-12

COMPRESSOR OILS



*16 litre Tin 
*Barrel 

High performance compressor oil for the lubrication and cooling needs of screw, vane and reciprocating air compressors used in industrial, commercial and special cooling systems. Even at low temperatures it does not become slimy, at high air output removes the possibility of explosion and fire by minimizing the formation of carbon related to the oxidation. 68 is designed for the screw and vane compressors, 220 is designed for reciprocating compressors.

SAE NO	Kinematic Viscosity 40°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
32	28,8 - 33,5	90	180	-12
46	41,4 - 47,5	90	190	-12
68	61,2 - 74,8	90	230	-20



INDUSTRIAL OILS

TEXTILE OIL

*16 litre Tin 
*Barrel 



It is formulated with special additives and quality base oils obtained with modern refining processes. It makes the lubrication task on various machines used in textile industry and provides protection for a long time.

Kinematic Viscosity 100°C (cSt)	Kinematic Viscosity 40°C (cSt)	Viskozite İndeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
4	19,8	95	170	-15

BLEND OIL

*16 litre Tin 
*Barrel 



Blend Oil is formulated with combination of high quality Paraffanic base oils, appropriate additives and emulsifiers. It is used in cotton and woolen industry for production of yarns, in spinning machines that transforms the wool and synthetic fibers into yarns. Its feature of easily dissolution in water enables the yarns to be combed and to be washed easily, It can be easily seperated from fabric when it is washed. Its antistatic feature reduces formation of static electricity. It is used by forming an emulsion with water.

Kinematic Viscosity 100°C (cSt)	Kinematic Viscosity 40°C (cSt)	Viscosity İndeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
3,8	-	-	200	-15

DAMPER OIL

*16 litre Tin 
*Barrel 



It is qualified oil formulated from mineral based quality base Oils for lubrication in truck damper.

Kinematic Viscosity 100°C (cSt)	Kinematic Viscosity 40°C (cSt)	Viscosity İndeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
4-7	-	95	210	-18

SAW OIL

*16 litre Tin 
*Barrel 



It is qualified oil formulated with mineral base oils. It en sures a perfect lubrication in saw machines that are used in wood cutting.

Kinematic Viscosity 100°C (cSt)	Kinematic Viscosity 40°C (cSt)	Viscosity İndeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
4-7	-	100	220	-18

MOLD OIL

*16 litre Tin 
*Barrel 



High quality oil used for the lubrication of steel, plastic and wooden molds in the construction sector and concrete industry. With its low viscosity, it creates a thin film layer in the mold and ensures a smooth surface by preventing the concrete sticking to the mold. In addition, by not leaving residue within the mold, it eliminates the need for cleaning and enables them to be used again. It prevents corrosion of metal parts such as nails and iron.

Kinematic Viscosity 100°C (cSt)	Kinematic Viscosity 40°C (cSt)	Viscosity İndeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
-	7 - 10	100	200	-10



INDUSTRIAL OILS

SLIDE OIL



*16 litre Tin 

*Barrel 

It is produced for workbenches and trays running under heavy loads. It minimizes friction between surfaces of all horizontal or vertical slide ways and it also allows them to work properly, continuous, flicker free and silence even under heavy load. By its excellent sliding feature and low pour point it does not drip and allows the slides to run efficiently for a long time.

SAE NO	Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
2	8,8	95	220	-12
4	19,5	95	240	-9

CUTTING OIL



*16 litre Tin 

*Barrel 

High quality cutting oil for all kinds of metal processing operations such as cutting, drilling and threading. It can be used for cast, steel and aluminum alloys. It reduces the chip formation and loss of metal and increases the production efficiency. It extends the cutting tools life by preventing wear that may occur on the tools. However, it should be taken into account that sulphur content of extreme pressure additives can leave stains on the yellow metals. It prevents metal to metal knitting. As it is suitable for multi purpose use reduces the product variety and minimizes the production costs.

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
4-5	110	186	-21

HEAT TRANSFER OIL



*16 litre Tin 

*Barrel 

High performance heat transfer oil for the systems that needs thermal conductivity such as food, plastics, building materials, paint industries. Its high thermal stability prevent from oxidation, and deposit formation that may occur in extreme temperatures. Due to its high viscosity index caused by its paraffinic feature the evaporation is less in high temperatures and it provides comfort by making circulation in low temperatures. During usage, heat transfer oil temperature should not be more than 320 °C and the oil film temperature should not exceed 340 °C, therefore the circulation must be initiated before heating and should be maintained at least two hours. The heating pipes should not be contacted with direct flame to prevent molecular cracking due to sudden temperature rises. An expansion tank must be located at the top of the system due to expansion capability of heated mineral Oils. The temperature of the oil in this tank should not exceed 60 °C. The first heating up to 110 °C should be done slowly; the water vapor and trapped air should be discarded out through the ventilation valves.

Kinematic Viscosity 100°C (cSt)	Viscosity Indeks (min)	Flash Point (min)(°C)	Pour Point (max) (°C)
5-7	100	217	-11



INDUSTRIAL OILS

BORON OIL



*16 litre Tin 

*Barrel 



Multi purpose metal working oil which is used by mixing with water. Besides its usage as lubricant and coolant in cutting, drilling, grinding operations of metals such as steel, aluminum, cast iron and copper alloys, it is suitable for the usage of light, medium and heavy metal removal operations. It provides a long emulsion life by reducing the growth of bacteria. It protects the metal surface against rust and corrosion. It keeps the surfaces clean and smooth. It protects its performance even in harsh water by its emulsion stability. To get the best result, 5 - 10 % of product should be added slowly in to water. It should never be applied adding the water into the oil.

kinematic Viscosity 10°C (cSt)	Density g/cm ³ (min - max)	Emulsion Test 95/5	Emulsion Appearance
-5	0,890	Stable	Milky White



BRAKE FLUIDS

DOT 4



*0,5 kg 
*Barrel 



Brake systems in vehicles have great vital importance. So brake fluids are especially designed to meet the requirements of high temperature operations causing oxidation and corrosion on metallic brake components. High boiling points ensure excellent safety also in ABS brake systems It is supported by ultimate additives increasing the lifetime of hydraulic brake and clutch systems.

Kinematic Viscosity 100°C (cSt)	Kinematic Viscosity 40°C (cSt)	Specific Gravity (g/cm ³)	pH (%50 vol.)
2,1	1400	1,04	8,0

DOT 3

*0,5 kg 
*Barrel 



Brake systems in vehicles have great vital importance. So brake fluids are especially designed to meet the requirements of high temperature operations causing oxidation and corrosion on metallic brake components. High boiling points ensure excellent safety also in ABS brake systems It is supported by ultimate additives increasing the lifetime of hydraulic brake and clutch systems.

Kinematic Viscosity 100°C (cSt)	Kinematic Viscosity 40°C (cSt)	Specific Gravity (g/cm ³)	pH (%50 vol.)
1,4	1350	1,03	9,8



ANTIFREEZES

PLUS ANTIFREEZE



It is formulated by mixture of high tech corrosion preventive additives. It provides better long term operations against rust, corrosion and wear in cooling systems and it protects radiator water against freezing in cold weather and boiling in hot weather conditions. It can be used in all type of radiators.

Density (g/cm3)	Freezing Point (°C)	Colour
1,13	-37	Green / Blue / Pink

SUPER ANTIFREEZE



It is formulated by mixture of high tech corrosion preventive additives. It provides better long term operations against rust, corrosion and wear in cooling systems and it protects radiator water against freezing in cold weather and boiling in hot weather conditions. It can be used in all type of radiators.

Density (g/cm3)	Freezing Point (°C)	Colour
1,13	{1/1}-37	Green / Blue / Pink



GREASE

WHITE GREASE



*1 kg 

*4 kg 

*14 kg Aquarius 

*Barrel 



It provides effective lubrication in terms of operating temperature is not too high. It reduces consumption due to fibrous structure. Its recommended to use in hydraulic turbine lubrication and ball bearings which are not exceeding 70oC. It is suitable for the lubrication of chassis. It meets the requirements of TS 11584 LA.

Test	Unit	Test Method	Ideal Values	
NLGI	-	ASTM D 217	2	3
Soap Type	-	-	Calcium	Calcium
Base oil Type	-	-	Mineral	Mineral
Processed Penetration, 25° C'de	mm/10	ASTM D 217	265-295	220-250
Color	-	byeye	Yellowish/ Brown	Yellowish/ Brown
Density, 15° C'de	g/cm3	ASTM D 4052	0,98	0,98
Oil Separation	% m/m	ASTM D 1742	0,3	1
Water Resistance	% m/m	ASTM D 1264	2,5	2,5
Dropping Point	°C	ASTM D 2265	95	95
Recommended Operating Temperature	°C	ASTM D 2896	-9/+70	-9/+70

RED GREASE



*1 kg 

*4 kg 

*14 kg Aquarius 

*Barrel 



Suitable for use in medium speed and do not exceed 75oC. Suitable for general-purpose chassis connection units. It meets TS 11584 Type 1 LA requirements. In various penetrations its dropping point is min 95oC.

Test	Unit	Test Method	Ideal Values	
NLGI	-	ASTM D 217	2	3
Soap Type	-	-	Calcium	Calcium
Base oil Type	-	-	Mineral	Mineral
Processed Penetration, 25° C'de	mm/10	ASTM D 217	265-295	220-250
Color	-	by eye	Red	Red
Density, 15° C'de	g/cm3	ASTM D 4052	0,98	0,98
Oil Separation	% m/m	ASTM D 1742	0,3	1
Water Resistance	% m/m	ASTM D 1264	2,5	2,5
Dropping Point	°C	ASTM D 2265	95	95
Recommended Operating Temperature	°C	ASTM D 2896	-9/+70	-9/+70




GREASE

GREEN GREASE



*1 kg 

*4 kg 

*14 kg Aquarius 

*Barrel 

It is waterproof fiber green grease for slow and medium loaded bearings. Thanks to the long fibers, it adheres to the metal and provide protective lubrication. It meets the requirements of TS 11584 Tip 1 LA. In various penetrations its dropping point is min 100oC.

Test	Unit	Ideal Values		
		1	2	3
NLGI	-	1	2	3
Soap Type	-	Calcium	Calcium	Calcium
Color	-	Yellow	Yellow	Yellow
Finished Penetration, 25°C	-	310-340	265-295	220-250
Dropping Point	°C	95	95	95
Maximum Operating temperature	°C	-10/+80	-10/+80	-10/+80
Water Strength	-	Excellent	Excellent	Excellent
At Low Temperature Use	-	Middle	Middle	Middle

LITHIUM GREASE



*1 kg 

*4 kg 

*14 kg Aquarius 

*Barrel 

Lithium soap grease is high quality product including antioxidant, anti-wear and rust inhibitor additives. It can be used in automobile lubrication and plain or rolling bearings at industrial working areas that do not require heavy lift. Provides economy by reducing the grease variety in the wide range applications of factories and vehicle fleets.

Test	Unit	Test Metodu	Ideal Values			
			0	1	2	3
NLGI	-	ASTM D 217	0	1	2	3
Soap Type	-	-	Lithium	Lithium	Lithium	Lithium
Base oil Type	-	-	Mineral	Mineral	Mineral	Mineral
Processed Penetration at 25°C	mm/10	ASTM D 217	355-385	310-340	265-295	220-250
Color	-	byeye	Yellow Brown	Yellow Brown	Light Brown	Light Brown
Density at 15°C	g/cm ³	ASTM D 4052	0,89	0,89	0,89	0,89
Four Ball Boiling Load	kgf	ASTM D 2596	200	200	200	200
Four Ball Wear Diameter, 40 kg 60 min	mm	ASTM D 2266	0,5	0,5	0,5	0,5
Oil Separation	% m/m	ASTM D 1742	3	2,8	2,2	2
Water Resistance	% m/m	ASTM D 1264	4,7	4,5	4,3	3,5
Dropping Point	°C	ASTM D 2265	175	185	185	185
Recommended Operating Temperature	°C	-	-20/+120	-20/+120	-20/+120	-20/+120



MILPET

ENGINE OIL CLASSIFICATIONS (API)

Oils have been classified according to performances by American Petroleum Institute (API) in 1960. Accordingly, motor oils have been divided into two groups as gasoline engines "S" and diesel engines "C". According to developed engine technology, each group has been classified as A, B, C and etc. letters.

Gasoline Engine Oil API Quality Classification

API Service Class	Definition
SA	Pure mineral oil. Recommended for older engines, which are working with additive-free oil.
SB	Detergent additive-free oil, contains a small amount of oil additive that prevents oxidation and bearing corrosion. When suggest by the car manufacturer, should be used.
SC	Designed for the requirements of 1964-1967 model vehicles. Prevents rust, oxidation, corrosion and abrasion. Provides deposit control.
SD	Designed for the requirements of 1968-1970 model vehicles. More superior than SC, prevents abrasion, oxidation, rust and corrosion. Provides better deposit control and resistants than SC.
SE	Designed for the requirements of 1971-1979 model vehicles. More superior than SD, prevents abrasion, oxidation, rust and corrosion. Provides better deposit control than SD.
SF	In 1980, passed the American automobile manufacturers warranty tests. More superior than SE, Prevents abrasion, oxidation rust and corrosion. Provides deposit control than SE.
SG	In 1989, passed the American automobile manufacturers warranty tests. More superior than SF. Prevents abrasion, oxidation rust and corrosion. Provides deposit control than SF. Meets the CC diesel engine oil category of API. In this category oils are used, when recommended by API SE, SF, SF/CC and SE/CC category engines.
SH	In 1994, passed the American automobile manufacturers warranty tests. In addition to the SG's performance; test and production is made appropriate according to CMA (Chemical Manufacturers Association) product approval code.
SJ	Designed for the requirements of 1997 model vehicles. In addition to SH's performance; less volatile, more compliant with catalyst, low temperature properties are higher.
SL	Designed for the requirements of 2001-2002 model vehicles. Also, it can be used in vehicles that manufactured before. At high temperature, provides better deposit control and low oil consumption.

Diesel Engine Oil API Quality Classification

API Service Class	Definition
CA	Published in 1940; designed for older diesel engines that usually working in mild conditions and use good quality fuel.
CB	In 1949, published for diesel engines requirements that are worked in light and medium conditions. Against abrasion and deposit, provides better protection than CA category.
CD	Published in 1955, it is high abrasion and deposit control category. Developed for diesel engines that are working with high sulfur rate fuel; turbo-supercharged and naturally aspirated. At high temperatures, provides protection against deposit formation and bearing corrosion.
CD II	Responds to the needs of two-stroke diesel engines. Also API CD category is suitable. Rrevised in 1985.
CC	Published in 1961 developed for diesel engines that are worked in light and medium conditions; turbo-supercharged and naturally aspirated. Prevents abrasion, rust and corrosion; makes deposit contro. Passes MIL-L-2104 B and 46152 B tests.
CE	Published in 1983; designed for diesel engines that are working under heavy duty, turbocharged and supercharged, low speed heavy load and high speed heavy load conditions. Provides effective protection than the CD level against abrasion, oil reduction and deposit formation.
CF-4	In addition to performance of CE, provides less deposit formation and oil consumption, in 1990. Designed for diesel engines that are working under heavy duty, turbocharged and supercharged, low speed heavy load and high speed heavy load conditions.
CF	Published in 1994, has been developed for diesel engines that are indirect injection, turbocharged, supercharged and using high-sulfur fuel. Better than CD, shows piston deposit control and prevents bearing corrosion.
CF-2	In addition to the performance requirements of CF, published in 1994, prevents deposit formation better with cylinder and piston ring abrasion in two-stroke diesel engines.
CG-4	It is Heavy Duty Motor Service category which is published in 1994. According to CF-4, provides more piston deposit control and less carbon accumulation. Meets the needs of four-stroke, direct injection, turbocharged, high speed, heavy-duty and used in low sulfur rate fuel of diesel engines that are used in both highway and land.
CH-4	Published on 1 December 1998; meets exhaust emission standards and used in 4 stroke engines. Especially has been developed for high speed and 4 stroke diesel engines, that work maximum 0.5% sulfur content. Meets standardizations of CD, CE, CF-4 and CG-4.
CI-4	Published in 2002, very heavy duty diesel engine oil. Engine oil used in high-speed 4-stroke engines, that meet 2004 exhaust emission standards. High and low temperature stability, piston deposit control, soot control, corro sion control and oil consumption property is more.



MILPET

Automotive Gear Oils API Quality Classifications

Class	Definition
GL-1	Under light working conditions, special additive oil for spiral, bevel and worm gear type differential and manual transmissions.
GL-2	Under normal working conditions, special additive oil for worm gear type differential.
GL-3	Under normal working conditions, special additive oil for spiral and bevel gear type differential and manual transmission.
GL-4	Under severe working conditions; involves extreme pressure and other special additives for hypoid gear type transmission and passes MIL-L-2105 specifications.
GL-5	Under severe working conditions; involves additives that meet extreme pressure and impact loads for hypoid gear type transmission and appropriate to MIL-L-2105 D specification.

AUTOMOTIVE GEAR OILS SAE VISCOSITY CLASSIFICATIONS

SAE Viscosity Class		Max. Temperature for 60.000 cP Viscosity (°C)	100 °C Viscosity (cSt)	
Winter	Summer		Min.	Max.
75 W	-	-40	4,1	-
80 W	-	-26	7	-
85 W	-	-12	11	-
-	90	-	13,5	<24
-	140	-	24	<41
-	250	-	41	-

SAE ENGINE OIL VISCOSITY CLASSIFICATIONS

SAE Viscosity Class		At °C Temperature Max. Viscosity (cP)		Max. Pumpable Limit Temperature for 60.000 cP (°C)	100 °C Viscosity (cSt)	
Winter	Summer	cP	°C		Min.	Max.
0 W	-	6200	-35	-40	3, 8	-
5 W	-	6600	-30	-35	3, 8	-
10 W	-	7000	-25	-30	4, 1	-
15 W	-	7000	-20	-25	5, 6	-
20 W	-	9500	-15	-20	5, 6	-
25 W	-	13000	-10	-15	9, 3	-
-	20	-	-	-	5, 6	< 9, 3
-	30	-	-	-	9, 3	< 12, 5
-	40	-	-	-	12, 5	< 16, 3
-	50	-	-	-	16, 3	< 21, 9
-	60	-	-	-	21, 9	< 26, 1