



EVERY TRACK

QSK19 TIER 3 / STAGE IIIA

FOR RAIL APPLICATIONS

FEATURES AND BENEFITS

Modular Common Rail Fuel System (MCRS): Maintains high injection pressures regardless of engine speed for exceptional performance at every rpm. Provides improved response and load pickup with lower noise and vibration compared to unit injection systems.

Advanced Electronics: Programmable engine controls optimize combustion at all altitudes and conditions. They provide advanced monitoring, diagnostic, prognostic and reporting capabilities. Plus, they include integrated engine protection features.

Single-Stage Holset Turbocharger: Adaptive technology adjusts to high altitudes with better transient response. It eliminates the need for a twin-turbo setup even at 750 hp (559 kW). Water-cooled bearings increase turbo life and reduce downtime.

Single Piece Piston: 30% longer durability, lower rebuild cost with improved reliability and combustion.

FCD Power Cylinder: Proven single-piece ferrous cast ductile iron pistons for maximum durability and reliability. Individual, 7-bolt, cross-flow cylinder heads offer high efficiency and pressure capability.

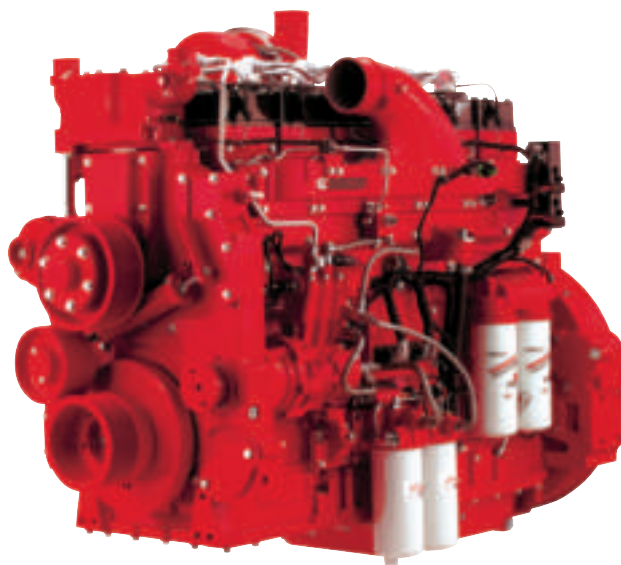
Extra-Wide Gear Train: Quieter, longer-lasting with greater surface area to handle increased load and drive higher injection pressures.

ELIMINATOR™: Self cleaning filter core which helps to eliminate oil filter change and disposal headaches. Saves up to 90% of lube system maintenance costs and increase productivity. Requires servicing only every 1,500 hours.

CENTINEL™: Constantly monitors engine duty cycle and load factors, removing small amounts of used oil as required and replenishing with new oil. The removed oil is blended into the fuel system to be burned during combustion. Extends oil change intervals up to 4,500 hours.

Air to Air Charge Air Cooling: Lower temperatures improve performance, fuel economy and durability while reducing emissions.

Swirl-Port Cylinder Head: Taller head with improved air management helps increase fuel efficiency.



MCRS

300,000 gallons to overhaul: Proven power cylinder, one-piece cast iron block, heavy duty crankshaft and connecting rods allow a life to overhaul of up to 300,000 gallons (1,135,624 liters) of fuel burned with no mid-life overhaul required.

Maintenance Intervals:

ELIMINATOR re-usable filter core	1500 hours
Engine Oil w/ CENTINEL	up to 4500 hours*
Fuel filtration	up to 1500 hours

*oil sampling required

Ratings:

Application	Available Ratings bhp (kW) @ rpm	Emissions US EPA Loco / EU
Locomotive	755 (563) @ 1800	Tier 3/Stage IIIA
Locomotive	700 (522) @ 2000	MOH
Track Machinery	700 (522) @ 2000	Tier 3
Track Machinery	760 (567) @ 2100	Tier 2

Other ratings may be available. Please contact Cummins for more information.

The new Tier 3/Stage IIIA QSK19 with Modular Common Rail Fuel System (MCRS) is one of the first engines in the all-new Quantum Series from Cummins with innovative technology that delivers more for less.

The QSK19 with MCRS offers more power, more torque and higher durability, all while achieving lower fuel consumption, lower emissions and less servicing. Life cycle costs are significantly reduced, and with a highly advanced electronic management system, the engine sets unbeatable standards in rail diesel productivity.

Released specifically for the shunting/switching locomotive engine market, the QSK19 with MCRS has been designed with features which include:

- improved fuel economy
- 30% improved durability
- high power and torque
- lower total life costs of ownership

The benefits of QSK19 with MCRS advanced engineering are apparent on the balance sheet improving on the high standards set by the Cummins K Series 19 liter engine.

CELECT™ – Electronic Management System Benefits:

- optimizes fuel consumption, power and torque within the emissions limits
- diagnostic and fleet monitoring benefits
- over 65 programmable features
- customized to each individual application
- continuously monitors and manages information from the engine mounted sensors compatible with fleet management software INSITE™ and INFORM™

Specifications:

Engine type	In-line, 4-cycle, 6-cylinder	
Displacement	1,159 CU inches, 19 liters	
Bore and stroke	6.25 x 6.25 inches, 159 x 159mm	
Aspiration	Air-to-air charge air cooled	
Oil system capacity	80 U.S. QT, 76 liters	
Unaided cold start capability	10°F, (-12°C)	

Dimensions*:

Length	66.1 inches	1,679mm
Width	34.3 inches	872mm
Height	63.6 inches	1,616mm
Wet weight	4,250 lb	1,891 kg

*dependent on customer specific options



QSK19 powered locomotive in South Africa

WORLDWIDE SUPPORT. EVERYTIME.

Global Support Network – Backed by the strength of the Cummins global network of over 5,500 service locations in 160 countries.

Comprehensive Warranty Coverage – Cummins engines include comprehensive, worldwide warranty. Extended coverage options are available. See your distributor for more details.

Every Part. Online – Cummins QuickServe Online provides access to one of the most comprehensive and powerful parts and service tools in the industry.

Cummins Online Product Registration – Register your Cummins engine quickly and easily on www.cumminsengines.com to ensure quality parts and service.

Distributor Expertise – The best source for service, parts, and application assistance. To find your nearest Cummins distributor, go to the Worldwide Service Locator at wsl.cummins.com. If you need further assistance, contact Cummins directly:



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MCRS