Hydrogen Circulation Pump for TOYOTA FCV MIRAI





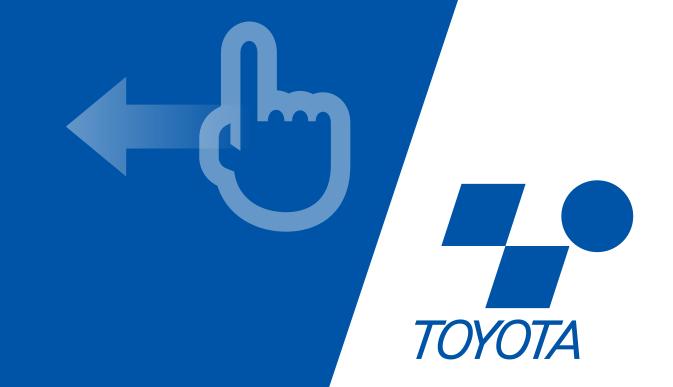
Used on the Toyota MIRAI







- Recirculates a portion of the hydrogen that did not undergo a chemical reaction during electric power generation in the fuel cell stack.
- The water produced from electricity generation is also circulated, contributing to the development of a fuel cell stack without a humidifier.





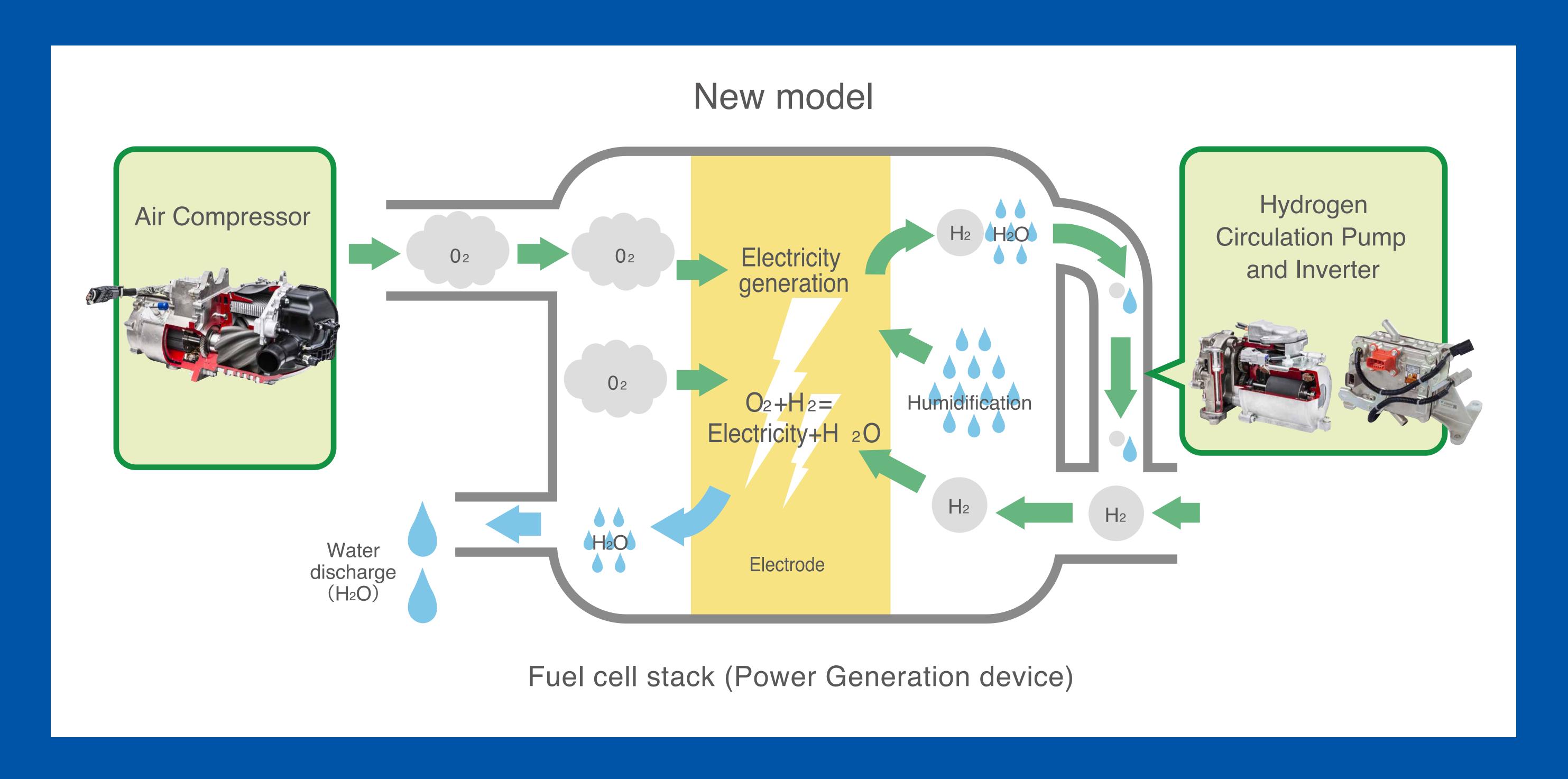
Specifications

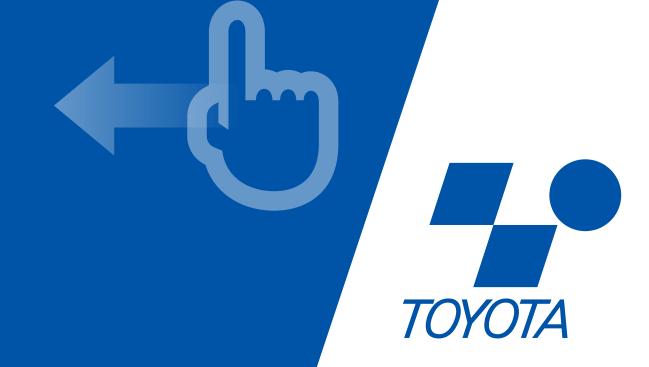
Pump type	2-lobes straight roots type
Maximum output	430W
Maximum speed	6,200r/min
Location	Under the driver's sheet





Mechanism of fuel cell and role of Hydrogen Circulation Pump







smaller

Integrating the pump with the fuel cell stack raises the motor's heat dissipation performance and contributes to 16% smaller size than the previous model.





Inverter



- Electric power consumption losses when operating the hydrogen circulation pump are minimized through efficient control.
- Integration with the water pump inverter contributes to a more compact size and lighter weight.

