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Magnetic diagnostic measurements of the first plasma operation for KSTAR¹ S.G. LEE, J.G. BAK, E.M. KA, National Fusion Research Institute, Korea, THE KSTAR TEAM — Magnetic diagnostics include Rogowski coils, flux loops, and magnetic field probes have been utilized for the first plasma operation on KSTAR. These magnetic diagnostics provide the plasma current, loop voltage and poloidal flux, and local poloidal magnetic field which are essential measurements for the first plasma operation. The expected plasma current of about 100 kA for the first plasma on the KSTAR tokamak was successfully achieved with an ECH pre-ionization. Magnetic diagnostic measurements for the plasma current, loop voltage and flux, and poloidal magnetic field under various plasma discharges will be discussed.

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