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# Design and first prototype results of PETRA-IV permanent magnet dipole-quadrupoles

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Permanent magnet-based dipoles will be an essential part of the future PETRA-IV light source at DESY. The bending magnets are combined-function DQ-magnets, which provide moderate focusing with a B/G ratio of about 0.03m. Each DQ consists of several C-shaped modules, one of the three types additionally having a stepwise longitudinal gradient. Several prototype modules have recently been manufactured. The paper describes the magnet design, compares manufacturing peculiarities, and discusses first magnetic measurement results.

## Footnotes

## Paper preparation format

Word

## Region represented

Europe

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