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C1Po1A-08 [18]: Test of a submersible liquid helium transfer pump

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Most laboratory scale helium plants use pressurization of the storage Dewar to achieve the subsequent transfer of the liquefied helium. The unavoidable throttling in the transfer line in combination with cold gas displacement leads to high flash gas losses of up to 30 % of the transferred helium. Furthermore, filling rates are limited. A transfer pump in combination with a double-flow transfer line can overcome these shortcomings. A test setup was established between two mobile Dewars. This allows assessing basic performance parameters of the pump. An overview of the setup and first measurement results are presented.

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