Simulation of parameters of hydraulic drive with volumetric type controller

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Abstract

© Published under licence by IOP Publishing Ltd. The article presents a mathematical model of volumetric type hydraulic drive controller that allows to calculate the parameters of forward and reverse motion. According to the results of simulation static characteristics of rod's speed and the force of the hydraulic cylinder rod were built and the influence of the angle of swash plate of the controller at the characteristics profile is shown. The results analysis showed that the proposed controller allows steplessly adjust the speed□ of hydraulic cylinder's rod motion and the force developed on the rod without the use of flow throttling.

References

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