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**Abstract**

Testing stand for experimental researches of the pilot valve of electrohydraulic directional control valve with independent flow control is designed. Characteristics determined experimentally was compared with based on mathematical modeling. Using feedback sensor for reduce the value of the hysteresis coordinate the movement was proposed.

**Keywords:** testing stand for experimental researches, pilot valve, electrohydraulic directional control valve with independent flow control, feedback sensor.

( ),  
[1–2].

[2].

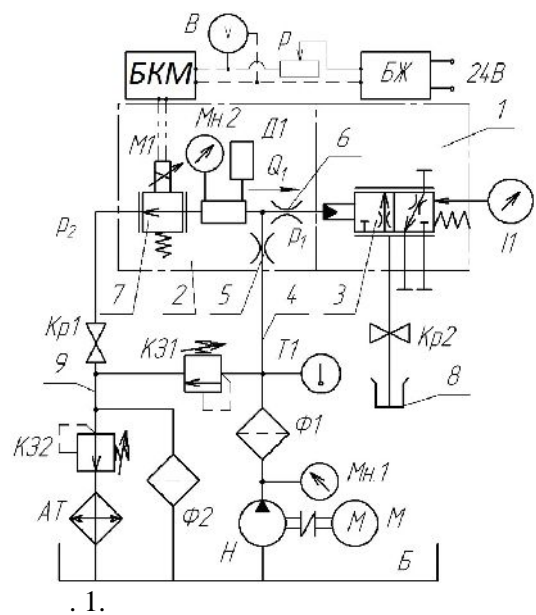
[3, 4].

( . 1),

48-21,

$32 \cdot 10^{-6} \text{ }^3$ ,

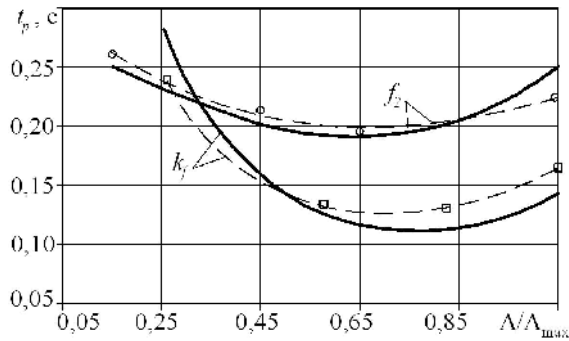
32-2



( -24 )  $\frac{24,83}{R}$  [5].

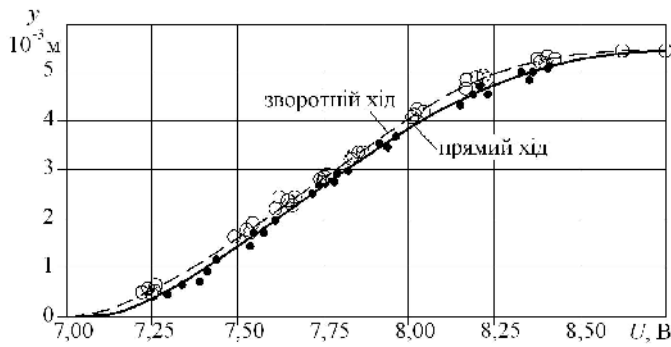
$k_f = 2..3$ ;  $f_2 = (2,0..3,5) \cdot 10^{-6} \frac{1}{2}$

( .2)  $f_2$  11,8%,  $k_f$  16,4%.  $p_1$



.2.  $f_2$   $k_f$  ( )

$U$  4,98%.



.3.  $U$  ( )

1.

2.

$f_2$  11,8%,  $k_f$  16,4%.  $p_1$

3.

$U$   $y = 4,98\%$ .

4.

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