

Anexa 1. Raspunsul în timp a termenilor tip

Nr crt	Denumirea termenului tip / Funcția de transfer	Răspunsul termenului	
		$I(t)$	t
0	1	2	3
1.	Termen constant sau proporțional $H_K(s) = K$	<p>Graph showing the input $u(t)$ as a step function from 0 to K at $t=0$, and the output $y(t)$ as a straight line starting at 0 and passing through the point $(1, K)$.</p>	<p>Graph showing the input $u(t)$ as a step function from 0 to 1 at $t=0$, and the output $y(t)$ as a straight line starting at 0 and passing through the point $(1, K)$.</p>
2.	Termen liber la numărător sau derivativ $H_D(s) = s$	<p>Graph showing the input $u(t)$ as a step function from 0 to 1 at $t=0$, and the output $y(t)$ as a straight line starting at 0 and passing through the point $(1, K)$.</p>	<p>Graph showing the input $u(t)$ as a step function from 0 to K at $t=0$, and the output $y(t)$ as a straight line starting at 0 and passing through the point $(1, K)$.</p>
3.	Termen liber la numitor sau integrator $H_I(s) = \frac{1}{s}$	<p>Graph showing the input $u(t)$ as a step function from 0 to 1 at $t=0$, and the output $y(t)$ as a straight line starting at 0 and passing through the point $(1, K)$.</p>	<p>Graph showing the input $u(t)$ as a step function from 0 to K at $t=0$, and the output $y(t)$ as a straight line starting at 0 and passing through the point $(1, K)$.</p>
4.	Termen liniar la numărător (de anticipare de ordinul 1) $H_{La}(s) = 1 + sT$	<p>Graph showing the input $u(t)$ as a step function from 0 to 1 at $t=0$, and the output $y(t)$ as a straight line starting at 0 and passing through the point $(1, K)$.</p>	<p>Graph showing the input $u(t)$ as a step function from 0 to K at $t=0$, and the output $y(t)$ as a straight line starting at 0 and passing through the point $(1, K)$.</p>

0	1	2	3
5.	<p>Termen liniar la numitor (de intarziere de ordinul 1)</p> $H_{Li}(s) = \frac{1}{1+sT}$		
6.	<p>Termen cuadratic la numărător (de anticipare de ordinul 2)</p> $H_{Qa}(s) = T^2 s^2 + 2\xi Ts + 1$		
7.	<p>Termen cuadratic la numitor (de intarziere de ordinul 2)</p> $H_{Qi}(s) = \frac{1}{T^2 s^2 + 2\xi Ts + 1}$		

Anexa2: Reprezentarea în frecvență a termenilor tip

nr crt	Denumirea termenului tip Funcția de transfer	Locul de transfer	Caracteristici semilogaritmice
1	Element constant: $H_k(j\omega) = k$		
2	Element derivativ $H_{l_d}(j\omega) = j\omega$		
3	Element integrator $H_{l_i}(j\omega) = \frac{1}{j\omega};$		
4	Element de anticipare de ordinul 1: $H_{L_1}(j\omega) = j\omega T + 1$		
5	Element de întârziere de ordinul 1: $H_{L_2}(j\omega) = \frac{1}{j\omega T + 1};$		
6	Element de anticipare de ordinul 2: $H_{Q_1}(j\omega) = (1 - T^2 \omega^2) + j\omega 2\zeta T;$		
7	Element de întârziere de ordinul 2: $H_{Q_2}(j\omega) = \frac{k}{(1 - T^2 \omega^2) + j\omega 2\zeta T};$		