

Type	Name	Signification	Value	Unit
Free	x_1	Max capacity of the production store	–	mm
	x_2	Inter-catchment exchange coefficient	–	mm t ⁻¹
	x_3	Max capacity of the routing store	–	mm
	x_4	Base time of the unit hydrograph	–	t
Fixed	α	Production precipitation exponent	2	–
	β	Percolation exponent	5	–
	γ	Routing outflow exponent	5	–
	ω	Exchange exponent	3.5	–
	ϵ	Unit hydrograph coefficient	1.5	–
	Φ	Partition between routing store and direct flow	0.9	–
	ν	Percolation coefficient	$\frac{4}{9}$	–
	U_t	One time step length	1	t
	nres	Number of stores in Nash cascade	11	–