

rate of change ratio

The quotient of two rates where the quantities are of the same kind in the same system for different components:

$$(dQ_1/dt)/(dQ_2/dt)$$

For finite time intervals, mean rate of change ratio is:

$$(\Delta Q_1/\Delta t)/(\Delta Q_2/\Delta t) = (\Delta Q_1/\Delta Q_2)\Delta t$$

Rate of change ratio has the dimension one. The denominator is often called the reference quantity.

Examples are: mass rate ratio, $(dm_1/dt)/(dm_2/dt)$; amount of substance rate ratio, $(dn_1/dt)/(dn_2/dt)$.

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