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| **variable** | **description** | **index in *outputCows*** |
| farmtype | Farm type (obsolete) | farmtype |
| id | Id of the cow | id |
| damid | Id of the cows dam | damid |
| sex | Gender of the animal | sex |
| age | Age of the animal | age |
| stat | Variable indicating whether this animal can reproduce | stat |
| bw | Body weight | bw |
| growthlastmonth | Increase in body weight during the previous time step | growthlastmonth |
| minbwagecomb | Minimum body weight possible at current age (minimum growth curve) | minbwagecomb |
| calvind | Calving index | calvind |
| pregind | Pregnancy index | pregind |
| death | Variable indicating whether this animal is dead | death |
| lactind | Lactation index | lactind |
| replaced | Variable indicating whether this animal is replaced | replaced |
| progenitor | Variable indicating whether this animal has reproduced | progenitor |
| probaconception | Calculated chance at conception | probaconception |
| randnbconception | Random chance at conception | randnbconception |
| feeddeficit | Variable indicating whether this animal is underfed | feeddeficit |
| probadeath | Calculated chance at mortality | probadeath |
| randnbmort | Random chance at mortality | randnbmort |
| need$potgrowthme | Metabolisable energy requirement to target potential growth | potgrowthme |
| need$potgrowthmp | Metabolisable protein requirement to target potential growth | potgrowthmp |
| need$maintme | Metabolisable energy required for maintenance | maintme |
| need$growthme | Metabolisable energy required for growth | growthme |
| need$gestme | Metabolisable energy required for gestation | gestme |
| need$lactme | Metabolisable energy required for lactation | lactme |
| need$maintmp | Metabolisable protein required for maintenance | maintmp |
| need$growthmp | Metabolisable protein required for growth | growthmp |
| need$gestmp | Metabolisable protein required for gestation | gestmp |
| need$lactmp | Metabolisable protein required for lactation | lactmp |
| need$basalmaint | Energy required for fasting metabolism and activity (according to AFRC) | basalmaint |
| need$energywalking | Energy expenditure on walking | energywalking |
| input$me | Metabolisable energy intake | me |
| input$mp | Metabolisable protein intake | mp |
| input$dm | Dry matter intake | dm |
| input$cp | Crude protein intake | cp |
| input$milkme | Intake of metabolisable energy from milk | milkme |
| input$milkmp | Intake of metabolisable protein from milk | milkmp |
| input$milkdm | Intake of dry matter from milk | milkdm |
| input$concentratedm | Intake of dry matter from concentrates | concentratedm |
| input$concentratecp | Intake of crude protein from concentrates | concentratecp |
| input$concentrateme | Intake of metabolisable energy from concentrates | concentrateme |
| input$concentratemp | Intake of metabolisable protein from concentrates | concentratemp |
| breedid | Breed Id | breedid |
| out$milk | Milk production | milk |
| out$dry | Variable indicating whether this cow has been dried off | dry |
| out$faecn | Production of faecal nitrogen | faecn |
| out$faecp | Production of faecal phosphorus | faecp |
| out$faeck | Production of faecal potassium | faeck |
| out$urinaryn | Production of urinary nitrogen | urinaryn |
| out$urinaryp | Production of urinary phosphorus | urinaryp |
| out$urinaryk | Production of urinary potassium | urinaryk |
| out$faecdm | Production of faecal dry matter | faecdm |
| out$nbcalv | Number of calves produced by cow | nbcalv |
| out$nblact | Number of lactations | nblact |
| out$cummilk | Cumulative milk production | cummilk |
| out$cumdaymilk | Cumulative number of days of milk production | cumdaymilk |
| out$cumdayopen | Cumulative number of days that animal has been open | cumdayopen |
| out$agefirstconc | Age at first conception | agefirstconc |
| out$agefirstcalv | Age at first calving | agefirstcalv |
| out$agelastcalv | Age at last calving | agelastcalv |
| out$cumme | Cumulative intake of metabolisable energy | cumme |
| out$cumdmi | Cumulative intake of dry matter | cumdmi |
| out$forint | Cumulative intake of forages | forint |
| out$dmoff | Feed dry matter on offer | dmoff |
| bw$average\_bw | Average body weight (= average of current and previous timestep) | average\_bw |