# checkCVal

Check for correct input values

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#### **Syntax**

checkCVal(sObject,pID,CVal,varargin)

### **Description**

checkCVal(sObject,pID,CVal,varargin) checks the input values and retuens validity of the input values. Note: Middle motor have smaller input value range due to its bracket.

## **Input Arguments**

- sObject serial port object
- pID integer
- CVal integer
- varargin integer

### **Function Codes**

```
function checkCVal(sObject, pID, CVal, varargin)

CDiff = getCDiff(sObject,pID);

% Default: Normal range checking if only 3 arguments

if nargin == 3

% Absolute value range (19~1002)

minVal = 19-CDiff;

maxVal = 1002-CDiff;
```

```
%CVal+CDiff = Abs Value
       if (19>(CVal+CDiff) || (CVal+CDiff)>1002)
           error('Value of %d out of operational range!
Range:%d~%d',pID,minVal,maxVal);
       end
   % Special case: Check middle motor specifically due to smaller range (middle
bracket)
   else
       % Absolute value range (105~834)
       minVal = 105-CDiff;
       maxVal = 834-CDiff;
       if (105>(CVal+CDiff) || (CVal+CDiff)>834)
            error('Value of %d out of operational range!
Range:%d~%d',pID,minVal,maxVal);
       end
   end
end
```

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