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| Re: |  |
| Abstract | This contribution proposes syntax, semantics and example of the step motor actuator capability. |
| Purpose | To start discussion on purpose of the standard |
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# Introduction

This contribution proposes syntaxes, semantics, and examples of the step motor actuator capability description vocabulary.

# Data formats for actuator capabilities

* 1. Step motor actuator capability
     1. General

This Subclause specifies the syntax and semantics of motor capabilities of step motor actuators.

* + 1. Syntax

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| --- |
| "stepMotorActuatorCapabilityData":{  "type": "object",  "properties":{  "stepAngle":{  "type": "number",  "minumum": 0,  "minumum": 360  },  "speedVariationRatio":{  "type": "number",  "minumum": 0  },  "maxSpeed":{  "type": "integer",  "minumum": 0  }  },  "additionalProperty": false  }, |

* + 1. Semantics

The semantics of the stepMotorActuatorCapabilityData:

| *Name* | *Definition* |
| --- | --- |
| stepMotorActuatorCapabilityData | Provide a structure for describing a command for a step motor actuator. |
| stepAngle | Describes the angle that the step motor actuator rotates per step. |
| speedVariationRatio | Describes the ratio that the step motor actuator divides n times to rotate 1 step. |
| maxSpeed | Describes the maximum speed that the step motor actuator can provide in terms of RPM. |

* + 1. Examples

This example shows the description of a step motor capability with the following semantics. The step angle of the motor is 5.625 degrees and the speed variation ratio is 0.015625 with the maximum speed is 14 RPM.

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| {  "actuatorCapabilityBaseData": {},  "stepMotorActuatorCapabilityData": {  "stepAngle": 5.625,  "speedVariationRatio": 0.015625,  "maxSpeed": 14  }  } |