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Subject: Definition of Actuators (Point machines) for switches, crossings and derailleurs

Posted by [Georg Boasson](#) on Thu, 02 Jun 2022 07:58:45 GMT

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The Interlocking elements <switchIL>, <derailerIL>, <movableCrossings> contains attributes to define the number of actuators:

- numberOfBladeSwitchActuators: number of switch actuators controlled from interlocking to throw the switch
- numberOfFrogSwitchActuators: number of switch actuators controlled from interlocking to throw the frog nose(s)

See railML3 Wiki for more details

We very much like the possibility to define position, name and maybe also other actuator-related data in the railML format. Since the actuator is both a physical and a functional element, implementation in both the Infrastructure- and Interlocking-schema must be considered.

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Subject: Re: Definition of Actuators (Point machines) for switches, crossings and derailleurs

Posted by [christian.rahmig](#) on Tue, 14 Jun 2022 09:01:50 GMT

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Dear Georg,

actuators for switches and switch frogs indeed have an infrastructure and interlocking dimension. The question is: how detailed shall the model of an actuator be? Apart from name and position, which information for an actuator do you want to have modelled?

As usual, any comment from the railML community is highly appreciated...

Best regards  
Christian

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Subject: Re: Definition of Actuators (Point machines) for switches, crossings and derailleurs

Posted by [Jörg von Lingen](#) on Tue, 14 Jun 2022 12:05:29 GMT

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Just as information:

In interlocking domain one can specify the number of actuators for switch blades and for frog. This is just in relation to the power supply of the signalBox which limits the number of concurrently activated

actuators (current limitation).

```
<rail3:switchIL numberOfBladeSwitchActuators="1"  
numberOfFrogSwitchActuators="0" ..>
```

```
<rail3:powerSupplyIL numberOfSimultaneousSwitchingActuators="1" ..>
```

Any further details like model of actuator, mounting position etc. does not matter in interlocking domain.

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Altplauen 19h; 01187 Dresden; Germany [www.railml.org](http://www.railml.org)  
On 14.06.2022 11:01, Christian Rahmig wrote:

> Dear Georg,  
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> infrastructure and interlocking dimension. The question is:  
> how detailed shall the model of an actuator be? Apart from  
> name and position, which information for an actuator do you  
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