

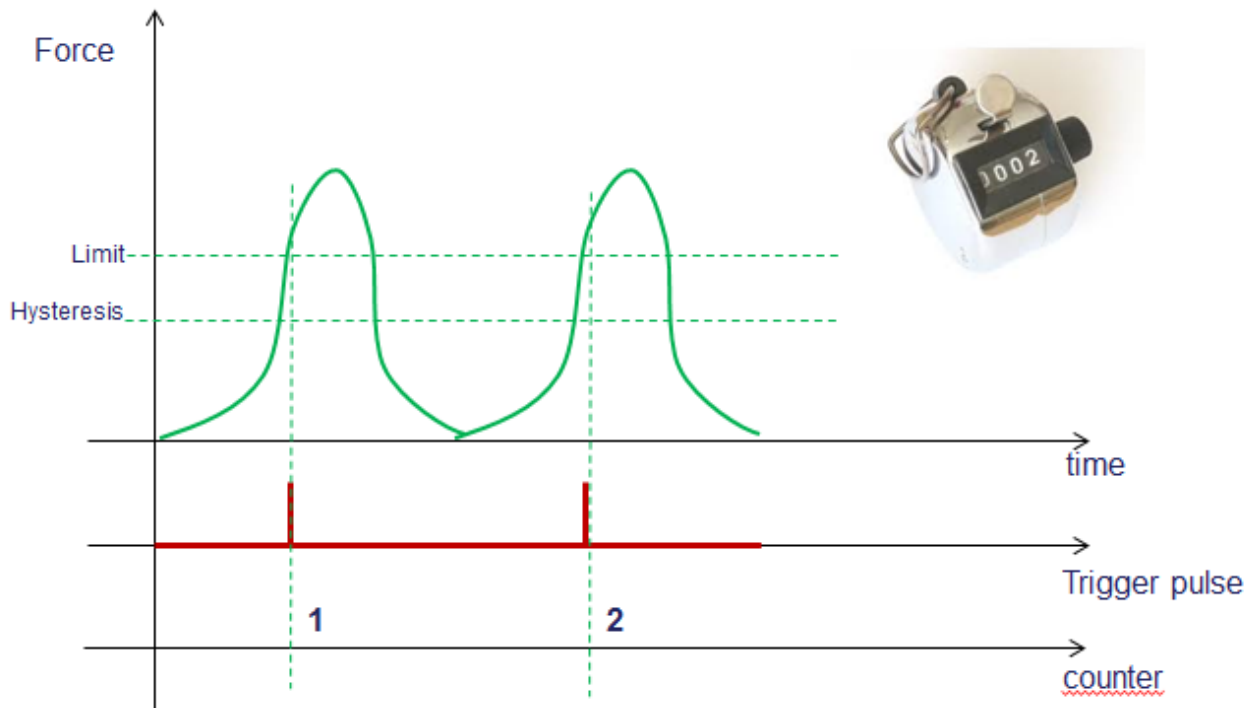
TECH NOTE :: ClipX Event Counter (Trigger)

Version: 2018-10-18
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Status: HBM: Public

Short description

In this example, the overpassing of a force value should to be counted and displayed. Once the count 5 is reached, this should be signaled on a digital output. Then the operator can set the count back to 0 again.

The following example shows how to setup an event counter in ClipX. Two Calculated Channels are required therefore.



Procedure

1. Setup a Calculated Channel „Trigger“

- Select in the menu the item ‘Calculated Channels’
- Create a new function block and choose as function type ‘Trigger’
- Select your sensor as the source (e.g.: S9M/1kN ClipX (Brutto))
- A predefined value can be selected as threshold and entered under ‘Threshold 1’
- Select a calculation channel for the output at "Trigger Flag 1" (e.g. ‘Calculated Channel Flag 1’)

Order	Function	Result Channel
#1	Trigger	

Sources		Function Parameters		Outputs	
Input	S9M/1kN Clip	Hysteresis 1	0.5	Trigger Flag 1	Calculated Ch
Threshold 1	10 (Newton)	Mode Thresh. 1	Above threshold	Trigger Flag 2	--
Threshold 2	0	Hysteresis 2	0		
		Mode Thresh. 2	Above threshold		

DOWN DELETE

2. Setup a Calculated Channel ,Counter'

- Select Calculated Channel-Flag 1 as input signal
- Counted is only with a positive edge
- by setting a threshold value for the flag a signal can be initiated, which will be set active when the limit value is reached.
- This activates Threshold Flag, as soon as the counter reaches a value of 5 or higher.
- Select a output for Threshold Flag (here: Calculated Channel Flag2)
- These Flags can be retrieved by the PLC via a fieldbus
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3. Digital output

If the result, means archiving of a counter value should be signaled at a digital output, this flag is set as input for a digital output. In this example digital output 1 is activated by 'Calculated Channel Flag2'.


- Select the menu item 'Digital-I/O'
- Then define a digital flag for the digital output

Digital output 1

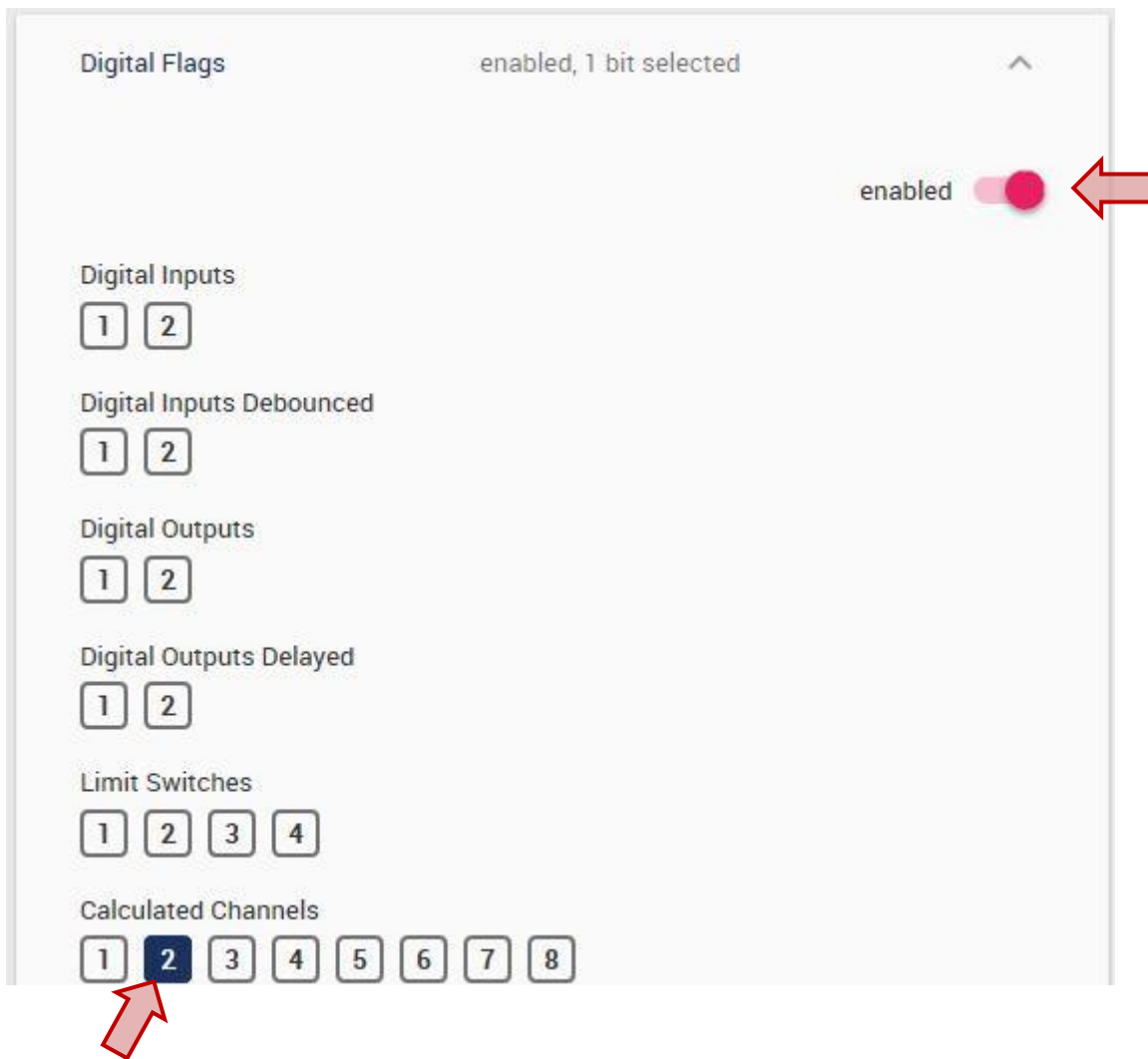
1 bit enabled

Invert Delay: 0 ms

Measurement Status	disabled, no bits selected	▼
System Status	disabled, no bits selected	▼
Digital Flags	enabled, 1 bit selected	▼
Parameter Set Number	disabled, no bits selected	▼



- Select the calculation channel you defined and set the digital flag 'enabled'



Disclaimer

These examples are simply for the purpose of illustration. They cannot be used as the basis for any warranty or liability claims.