

TECH NOTE :: ClipX Event Counter (Trigger)

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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')

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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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Start/Stop with	1 🗸	Timeout after	0	ms	Threshold Flag	Calculated Ch 🗸
Reset by	0 ~	Threshold Value for Flag	5	~		
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3. Digital output

If the result, means archiving of a counter value should be signalized 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		
		•
_	Delay	
lnvert	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'

Digital Flags	enabled, 1 bit selected	^
		enabled 🔲 🕻
Digital Inputs		
Digital Inputs Debounced		
Digital Outputs		
Digital Outputs Delayed		
Limit Switches		
Calculated Channels	7 8	

Disclaimer

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