
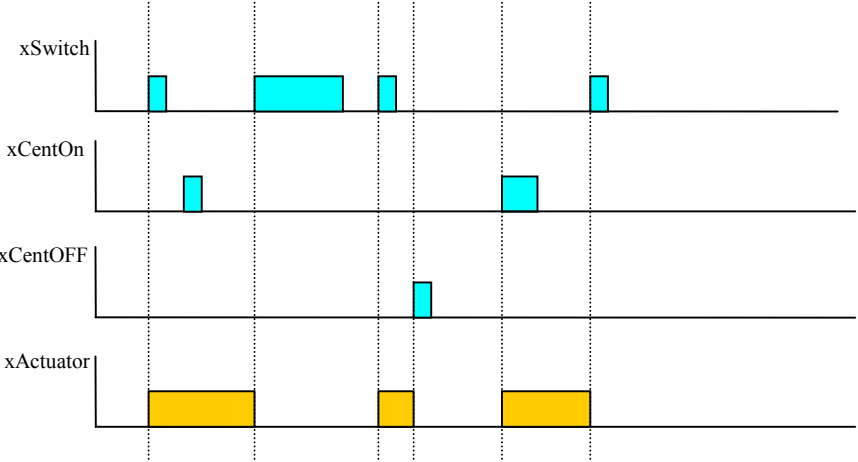


## Latching relay

WAGO-I/O-PRO 32 Library elements		
<b>Category:</b>	Building automation	
<b>Name:</b>	Fb_LatchingRelay	
<b>Type:</b>	Function <input type="checkbox"/>	Function block <input checked="" type="checkbox"/> Program <input type="checkbox"/>
<b>Library name:</b>	LatchingRelay_01.lib	
<b>Applicable to:</b>	All programmable fieldbus controllers	
<b>Input parameter:</b>	<b>Data type:</b>	<b>Comment:</b>
xSwitch	BOOL	Input for switching signal
xCentOFF	BOOL	Switching signal Central OFF
xCentON	BOOL	Switching signal Central ON
bModeOnReset	BYTE	Behavior after reset 0=AUS; 1=EIN; 3 = --- Default setting = 3
<b>Feedback value:</b>	<b>Data type:</b>	<b>Comment:</b>
xActuator	BOOL	Output switching signal
<b>Graphical display:</b>		
		
<b>Time referenced behavior:</b>		
		

**Function description:**

The function module Latching Relay is identical to that of a toggle flip flop. The module reacts on the switching flanks at the “**xSwitch**” input with a switch-over function. The input is protected by a debounce time of approx. 30ms. The output signal “**xActuator**” changes its value with every positive switching flank at the input. The output signal ON and OFF can be switched via the input objects “**xCentON**” or “**xCentOFF**”.

Parameter “**bModeOnReset**” determines the function module behavior following a reset at the coupler. The following settings are possible for this parameter:

0 = Switching OFF following a reset

1 = Switching ON following a reset

3 = No change following a reset (the initial value before reset is restored)

**Note:**

This function block uses some residual variables having a **VAR\_RETAIN** declaration.

## Latching relay with Feedback

WAGO-I/O-PRO 32 Library elements		
<b>Category:</b>	Building automation	
<b>Name:</b>	Fb_LatchingRelayFeedb	
<b>Type:</b>	Function <input type="checkbox"/>	Function block <input checked="" type="checkbox"/> Program <input type="checkbox"/>
<b>Library name:</b>	LatchingRelay_01.lib	
<b>Applicable to:</b>	All programmable fieldbus controllers	
<b>Input parameter:</b>	<b>Data type:</b>	<b>Comment:</b>
xSwitch	BOOL	Input for switching signal
xCentOFF	BOOL	Switching signal Central OFF
xCentON	BOOL	Switching signal Central ON
bFeedback	BOOL	Input for Feedback signal
<b>Feedback value:</b>	<b>Data type:</b>	<b>Comment:</b>
xActuator	BOOL	Output switching signal
<b>Graphical display:</b>		
<b>Time referenced behavior:</b>		

## Latching relay with Feedback

### Function description:

The function module Latching Relay is identical to that of a toggle flip flop. The module reacts on the switching flanks at the “**xSwitch**” input with a switch-over function. The input is protected by a debounce time of approx. 30ms. The output signal “**xActuator**” changes its value with every positive switching flank at the input. The function module can only be used if a feedback signal of the actuator is available. If the values of the output signal **xAktor** and the input signal “**xFeedback**” differ longer than 1 second, the output signal will be set equal to the feedback input signal.

A typical application is the control of an external actuator using several distributed sensors (see example below).

The output signal ON and OFF can be switched via the input objects “**xCentON**” or “**xCentOFF**”.

