Application Name/Version	Labeler_202.kas
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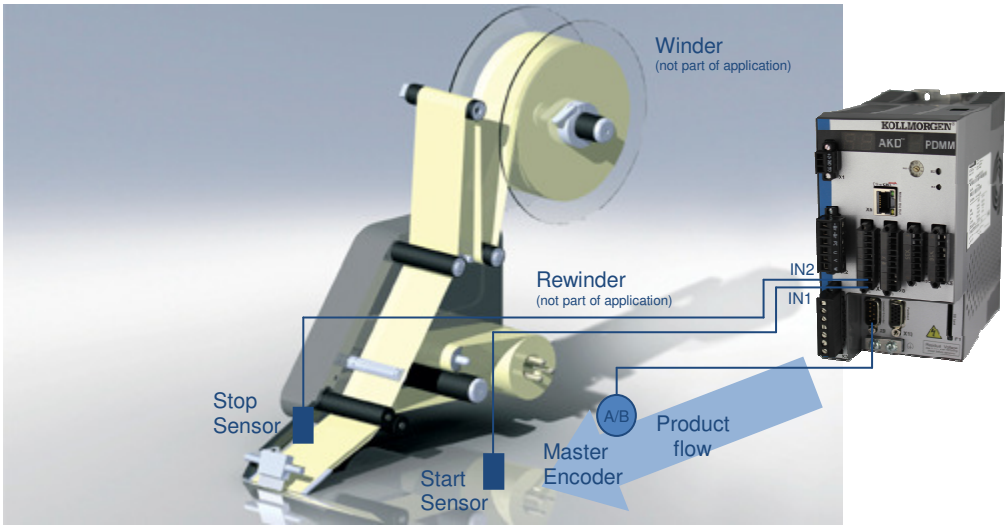
Motion Engine	Pipe Network
Used KAS Build	2.7.3.48580
Used AKD FW	M_01-10-00-003

The Labeler_106.kas is a single axis application prepared for labeling application which looks like below. The labeler can run with a virtual master or real master. For the real master an A/B encoder has to be connected to X9. (The second axis is only for simulation purpose. The second axis emulates A/B encoder signals and an X9-X9 connection has to be equipped to read the emulated A/B encoder signals in the labeler axis.)



The labeling will be started by the start sensor (or product sensor) and will be stopped by the stop sensor (or end of label sensor). Start sensor (IN2) and stop sensor (IN1) are high-speed sensors with an accuracy of 1µs.

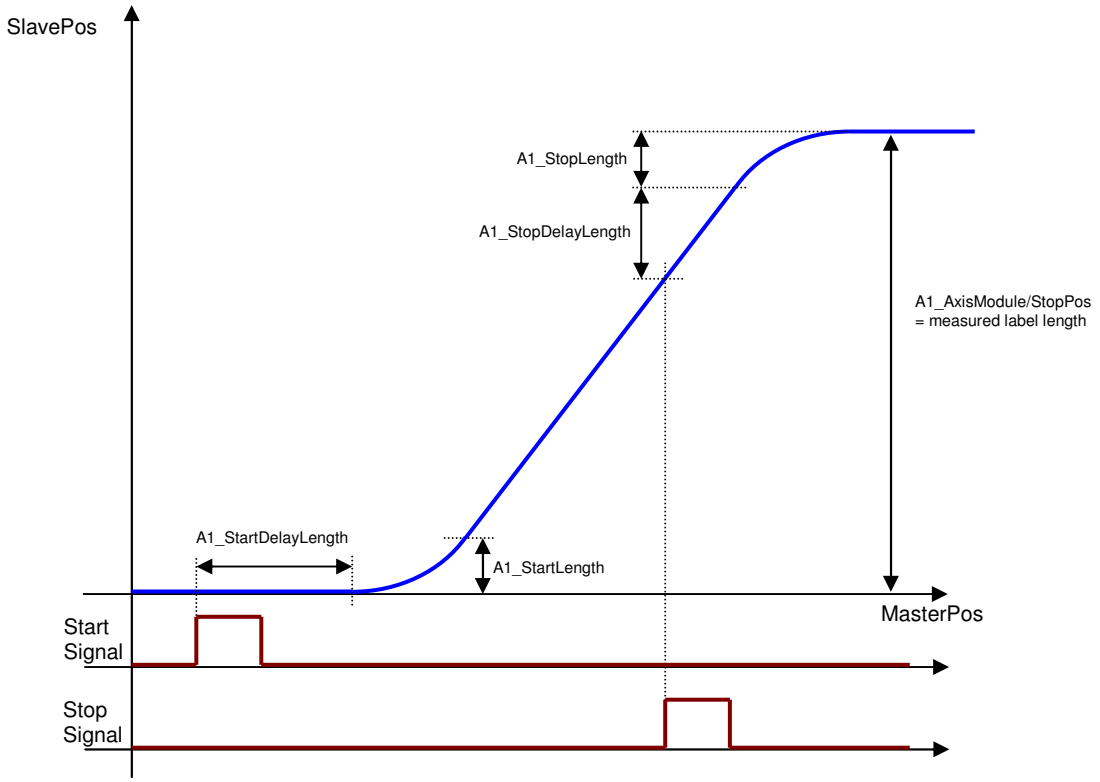
With the parameter bA1_StartRisingEdge and bA1_StopRisingEdge the active edge can be chosen before the labeling function is enabled (in Automatic mode with variable A1_Interface/bA1_EnableLabeler). False is falling edge and True is rising edge. The edges can't be changed during enabled labeling. The labeler has to be disabled to do it.

In Automatic mode there is a second function implemented to start a single label with a virtual master. The speed of the virtual master can be set with the parameter A1_SingleLabelSpeed.

The following parameters can be adjusted (on the fly).

Name	Data type	Description
A1_StartDelayLength	LREAL	Start delay length in mm
A1_StartLength	LREAL	Start length in mm
A1_StartSensorDelayTime	LREAL	Start sensor delay time in µs
A1_StopDelayLength	LREAL	Stop delay length in mm
A1_StopLength	LREAL	Stop length in mm
A1_StopSensorDelayTime	LREAL	Stop sensor delay time in µs
A1_GearRatio	LREAL	Gear ratio of labeling axis (Default 1.0)
A1_MaxLabelLength	LREAL	Maximum label length in mm

The following master position to slave (labeler) position shows how the parameters work.



The start sensor can be placed far away from the labeler (very big A1_StartLengthDelay). Therefore a FIFO of 3 products is implemented. This means 3 products are detected from the start sensor, before the first product will be labeled. An overrun FIFO ends in an error.