

# SPT Cylinders

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## Overview

Collection of Cylinder function blocks implementing `I_ComponentBase` for use in PackML-based projects. All components follow the pattern laid out in [HMI DUT Pattern](#).

The first Cylinder in the project is a simple cylinder that has one output and no feedback inputs. The timers used in this is just a how long before we can assume that the cylinder is actually retracted or extended. As this project grows, other cylinders can extend from this one and add the needed IO and logic but use the same interface.

## Simple Cylinder

```
FUNCTION_BLOCK FB_SimpleCylinder EXTENDS FB_ComponentBase IMPLEMENTS I_SimpleCylinder
```

Wrapper function block that extends `FB_ComponentBase` with `I_SimpleCylinder` properties.

## See Also

- [SPT Component Base](#)

## I\_SimpleCylinder

### Properties

Property	Type	Access	Description
Extended	BOOL	RO	Get the status of the cylinder being extended
Retracted	BOOL	RO	Get the status of the cylinder being retracted
ExtendedTime	LREAL	RW	Get/Set the time used for extending the Cylinder. In the simple cylinder, this is used for sending the feedback of when the cylinder is extended
RetractedTime	LREAL	RW	Get/Set the time used for retracting the Cylinder. In the simple cylinder, this is used for sending the feedback of when the cylinder is retracted

## Methods

Methods	Type	Description
Extend	None	This method is called to start the cylinder to extend
Retract	None	This method is called to start the cylinder to retract

## HMI Interface

