

Modelica Plotting Variable Monitor Components

2016-04-08, sf

Red = Variable Monitor Components

Green = Slider Control for Time Variable

The screenshot displays the Modelica software interface with a hydraulic system model. The main workspace shows a diagram with components like 'source', 'pumps', 'reservoir', 'valveOpening', and 'sink'. Several components are highlighted with red circles, indicating they are variable monitor components: 'Time Elapsed: 33min 20s', 'y=1'200', 'level=2.6m', 'p=642 kPa', and 'p=124 kPa'. A green arrow points from the 'Time Elapsed' monitor to the 'time' variable in the Variables Browser. The Variables Browser on the right lists various variables and their values, with 'time' set to 2000. The Messages Browser at the bottom shows a message: 'ica.SIunits.Volume\$reservoir\$V type: Real'.

File Edit View Simulation FMI Export Tools Help

Libraries Browser

Search Classes

Libraries

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- Inc...ork
- Bra...pes
- Non...pes
- Hea...ger
- Tra...ces
- Inv...ion
- Exp...ory
- System

PumpingSystem

Time Elapsed: 33min 20s

RelativePressureGetPoint

k=2e4

controller

PumpRPMGenerator

PT1

y=1'200

level=2.6m

reservoir

p=642 kPa

p=124 kPa

source

pumps

valveOpening

startTime=200

reservoirPressure

userValve

sink

system

Variables Browser

Find Variables

Variables	Value	Unit
<input type="checkbox"/> p_b_start	101325	Pa
<input type="checkbox"/> perimeter	0.942478	m
▼ port_a		
<input type="checkbox"/> h_outflow	84603.4	J/kg
<input type="checkbox"/> m_flow	258.571	kg/s
<input type="checkbox"/> p	642401	Pa
<input type="checkbox"/> port...tate	0	
▼ port_b		
<input type="checkbox"/> h_outflow	84200.5	J/kg
<input type="checkbox"/> m_flow	-258.571	kg/s
<input type="checkbox"/> p	123614	Pa
<input type="checkbox"/> port...tate	0	
<input type="checkbox"/> roughness	2.5e-05	m
<input type="checkbox"/> show...tion	1	
► pumps		
► reservoir		
► reservoirPressure		
► sink		
► source		
► system		
<input checked="" type="checkbox"/> time	2000	
► userValve		
► valveOpening		

Messages Browser

ica.SIunits.Volume\$reservoir\$V type: Real