

Example 7.5 Simple operator interface/alarm system for tank. Addition to Example 7.4, simple tank level control

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0 [NOP]

Convert level measurement

Level of tank in
feet

CPT	
Dest	LT428_Val 0.0
Expression	$((LT428_Meas)/(100.0-0.0))*(15-1)+1$

Valve control

Level of tank in
feet

LES	
Source A	LT428_Val 0.0
Source B	T428_Min 0.0

Level of tank in
feet

LEQ	
Source A	LT428_Val 0.0
Source B	T428_Max 0.0

Enables level
control
T428_Cntrl

Inlet valve control
XV427_OPEN
<Local:2:O.Data.0>

Inlet valve control
XV427_OPEN
<Local:2:O.Data.0>

Make sure T428_Min is at least 2.1 and no more than 13.4. If too low, set to 2.1. If too high, set to 13.4

CMP	
Expression	T428_Min<2.1

Minimum tank level
for control

MOV	
Source	2.1
Dest	T428_Min 0.0

CMP	
Expression	T428_Min>13.4

Minimum tank level
for control

MOV	
Source	13.4
Dest	T428_Min 0.0

Calculate maximum level.

Maximum tank level
for control

CPT	
Dest	T428_Max 0.0
Expression	T428_Min+1.5

Low alarm lamp when level < 4 feet.

CMP	
Expression	LT428_Val<4.0

Low level indication
T428_LOLA

