

# Main [OB1]

## Main Properties

General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Manual		
Information					
Title	SP9-6	Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
▼ Temp		
OB1_EV_CLASS	Byte	
OB1_SCAN_1	Byte	
OB1_PRIORITY	Byte	
OB1_OB_NUMBR	Byte	
OB1_RESERVED_1	Byte	
OB1_RESERVED_2	Byte	
OB1_PREV_CYCLE	Int	
OB1_MIN_CYCLE	Int	
OB1_MAX_CYCLE	Int	
OB1_DATE_TIME	Date_And_Time	
Constant		

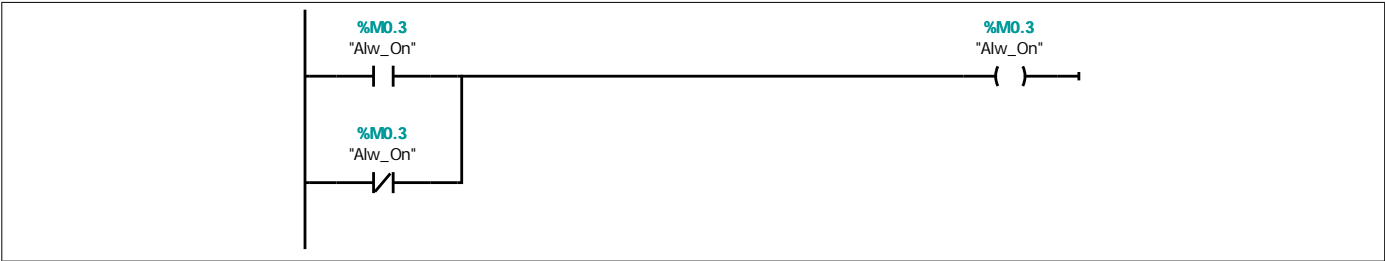
## Network 1: SP9-6

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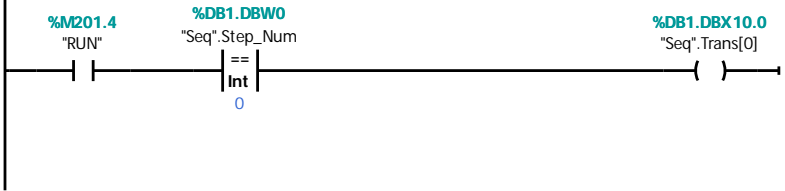
SP9-6 Pressure check station with counter-based sequencer



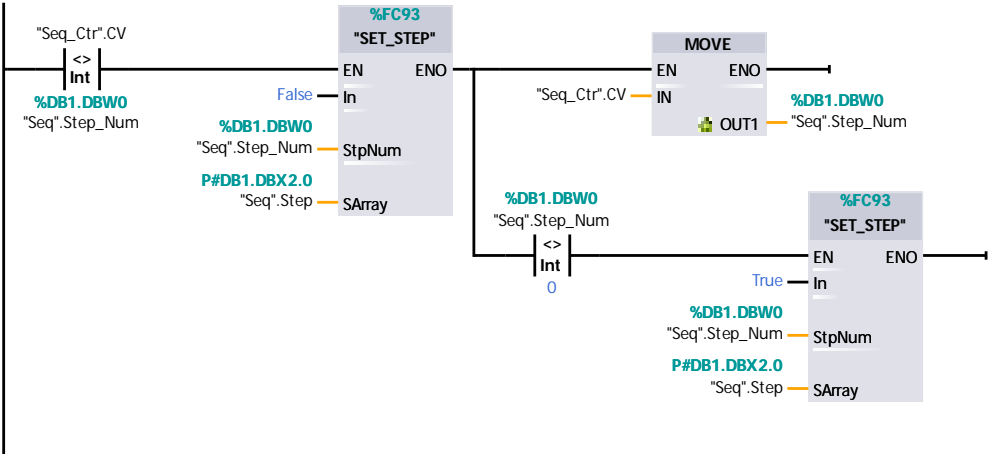
## Network 2: Always On Logic



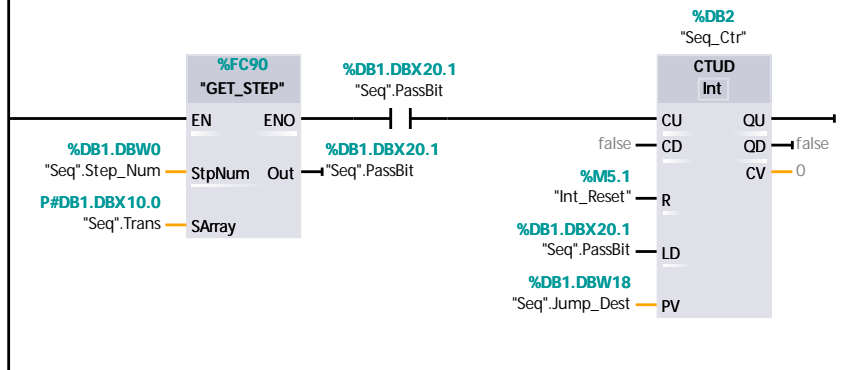
## Network 3: First Start - transition out of initial step to step 1.



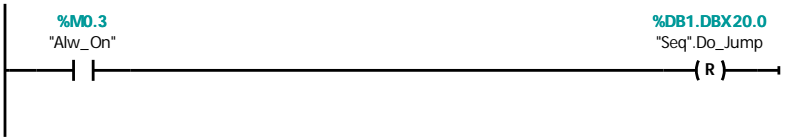
Network 4: Change step-in-progress bit when step changes.



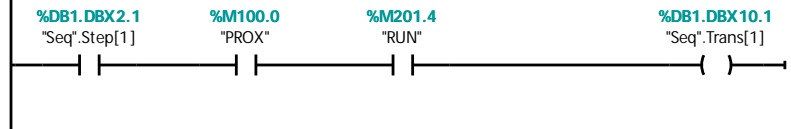
Network 5: Increment to next step when step-done bit set. Also handle jumps.



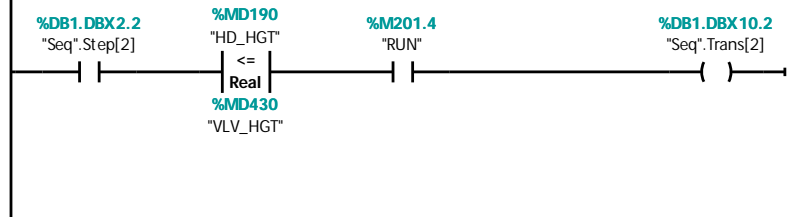
Network 6:



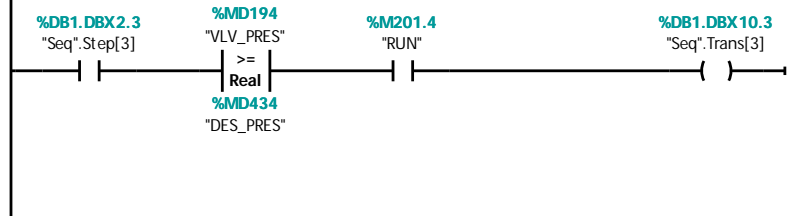
Network 7: Step 1 - Wait for valve.



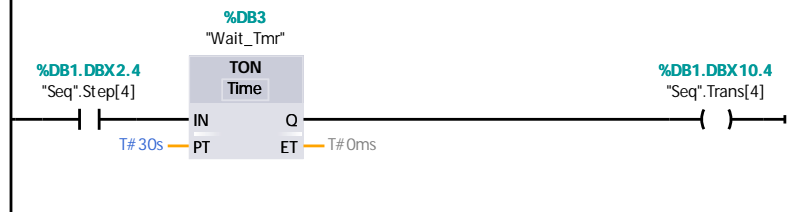
Network 8: Step 2 - Head down



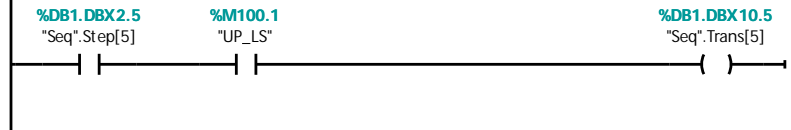
Network 9: Step 3 - Pressurize



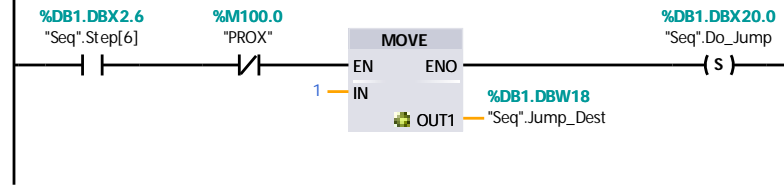
Network 10: Step 4 - Wait for pressure check



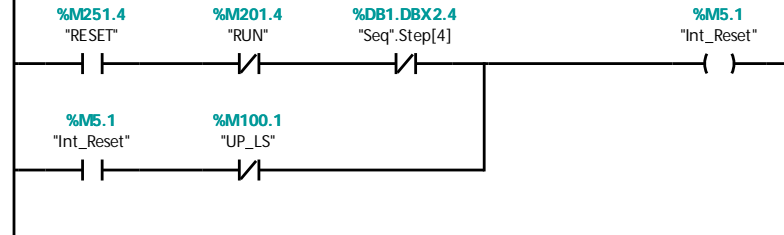
Network 11: Step 5 - Head up



Network 12: Step 6 - Part leaves



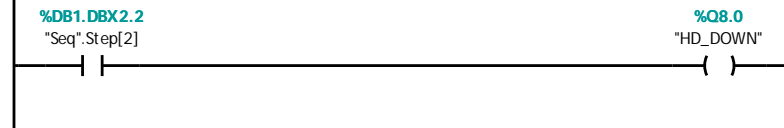
**Network 13: Start/stop for reset operation. One step, no need for counter sequencer.**



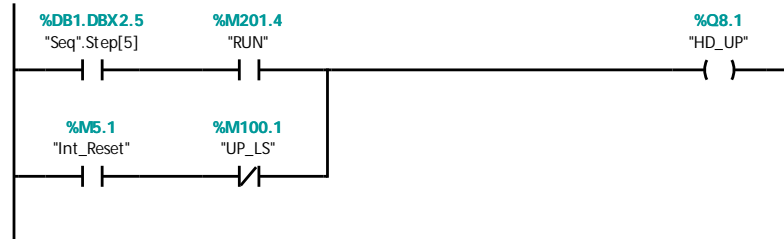
**Network 14: When on, moves the pressurizing head down**

Physical Outputs

Head raise/lower. Off when paused. Raise when reset.



**Network 15: When on, moves the pressurizing head up**

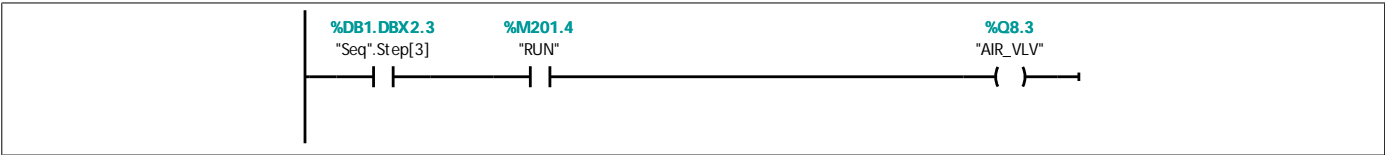


**Network 16: On to move carrier (and valve) up and off the conveyor**

Lift solenoid. Can not turn off when paused.

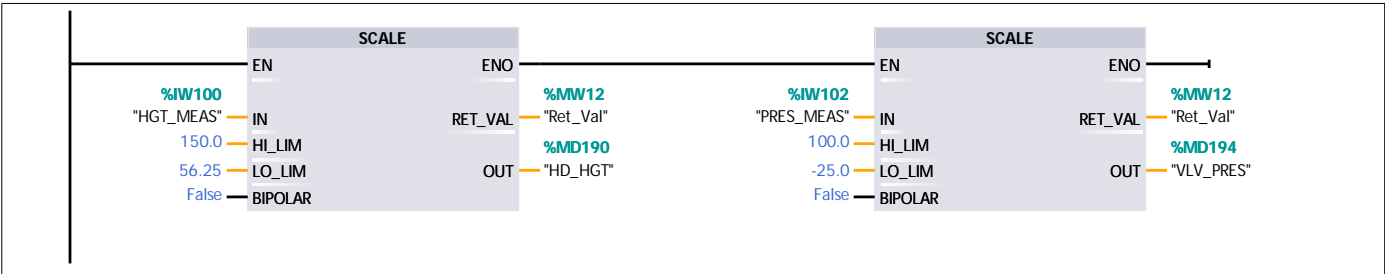


**Network 17: Opens air valve pressurize tested valve**



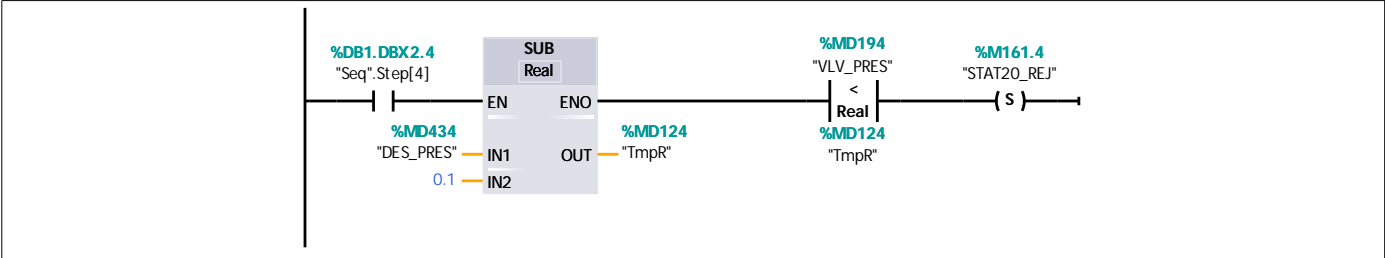
**Network 18: Convert height measurement to mm and pressure measurement to psi.**

Uses SCALE block. Note that the lo\_lim input is 25% lower than zero weight to account for this block assuming the minimum value of the analog in is zero rather than the 5530 (which corresponds to 4 mA).



**Network 19: Set if valve is to be rejected because it will not hold pressure**

Check valve pressure during step 4. If falling, set reject bit.



# GET\_STEP [FC90]

## GET\_STEP Properties

### General

Name	GET_STEP	Number	90	Type	FC
Language	SCL	Numbering	Manual		

### Information

Title		Author		Comment	
Family		Version	0.0	User-defined ID	

Name	Data type	Default value
▼ Input		
StpNum	Int	
SArray	Array[0..63] of Bool	
▼ Output		
Out	Bool	
InOut		
Temp		
Constant		
▼ Return		
GET_STEP	Void	

```
0001
0002   #Out := #SArray[#StpNum];
0003   ENO := TRUE;
0004
```

# SET\_STEP [FC93]

## SET\_STEP Properties

General					
Name	SET_STEP	Number	93	Type	FC
Language	SCL	Numbering	Manual		
Information					
Title		Author		Comment	
Family		Version	0.0	User-defined ID	

Name	Data type	Default value
▼ Input		
In	Bool	
StpNum	Int	
Output		
▼ InOut		
SArray	Array[0..63] of Bool	
Temp		
Constant		
▼ Return		
SET_STEP	Void	

```
0001
0002   #SArray[#StpNum] := #In;
0003   ENO := TRUE;
0004
```