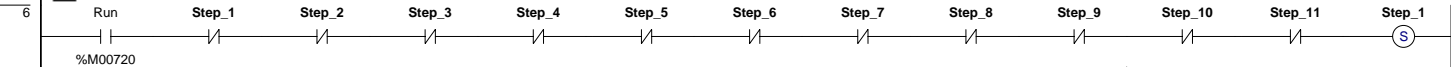


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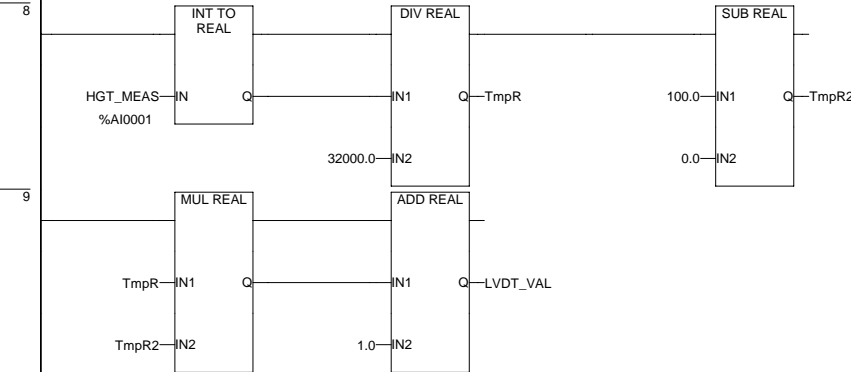
Part Height Sorter Control with parallel branching

Additional internal variable declarations:	
Variables	Data Type
Step_1 to Step_11	BOOL
Down_Tmr	TON
Bin1_Tmr	TON
Bin2_Tmr	TON
Bin3_Tmr	TON
Bin4_Tmr	TON
LVDT_VAL	REAL
HEIGHT_60	BOOL
HEIGHT_75	BOOL
HEIGHT_90	BOOL
HEIGHT_OTHER	BOOL
Step-in-progress bits	
Times lowering of measurement ram	
Times eject pulse for Bin 1	
Times eject pulse for Bin 2	
Times eject pulse for Bin 3	
Times eject pulse for Bin 4	
LVDT measurement in mm	
Height in range of 56 - 64	
Height in range of 71 - 79	
Height in range of 86 - 94	
Height in range not covered above	

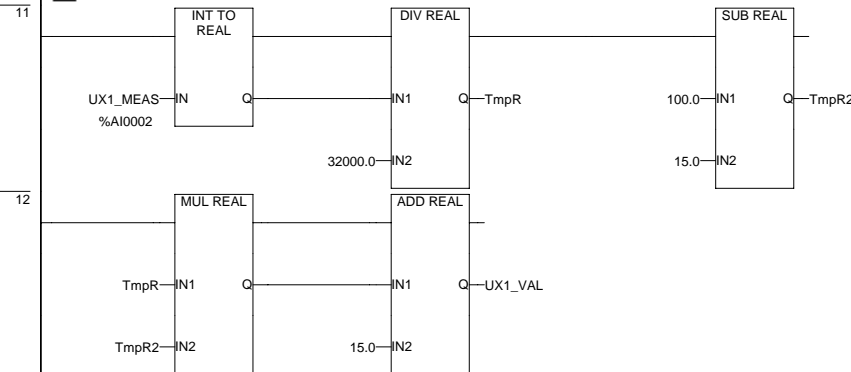
Conversion formulas  
 $UX1\_VAL = (UX1\_MEAS / 32000) * (100 - 15) + 15$   
 $LVDT\_VAL = (HGT\_MEAS / 32000) * (100 - 15) + 15$   
 $HGT\_VAL = 150 - LVDT\_VAL$  (calculated on transition from Step\_2 to Step\_3)  
Start/stop and initial start. During reset prevent start. Step 15 also unlatches Run.



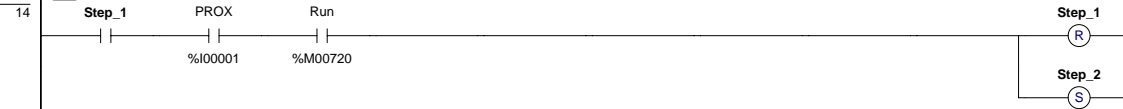
Conversion of LVDT reading to height in mm



Conversion of distance reading to distance in cm



Step 1 - Wait for part in measurement position



Step 2 - Move down. Measure height on transition.

