

VARIABLES

VAR_GLOBAL

```

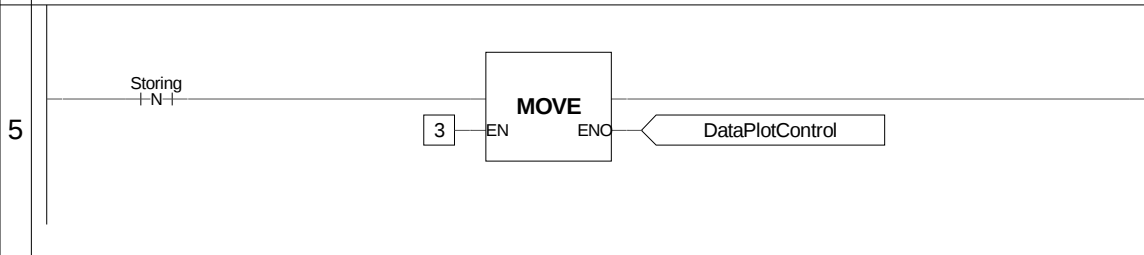
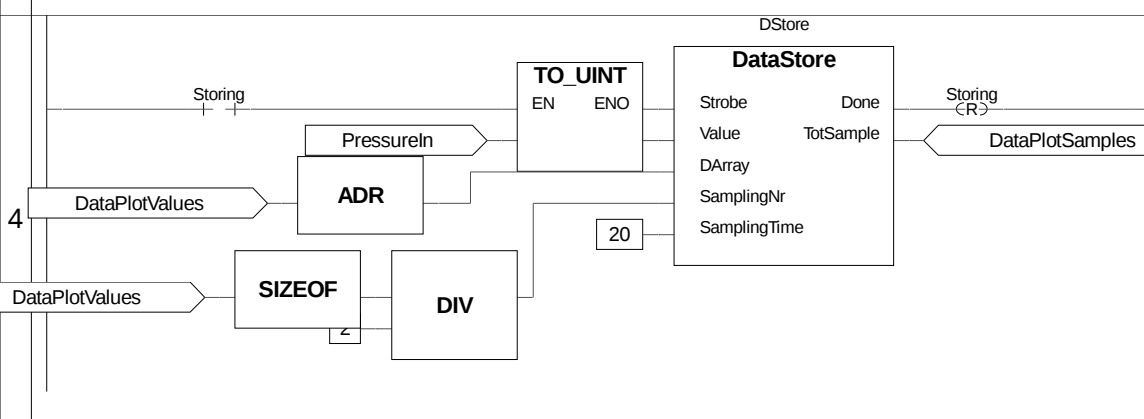
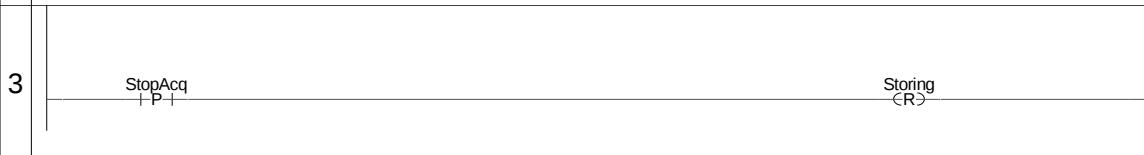
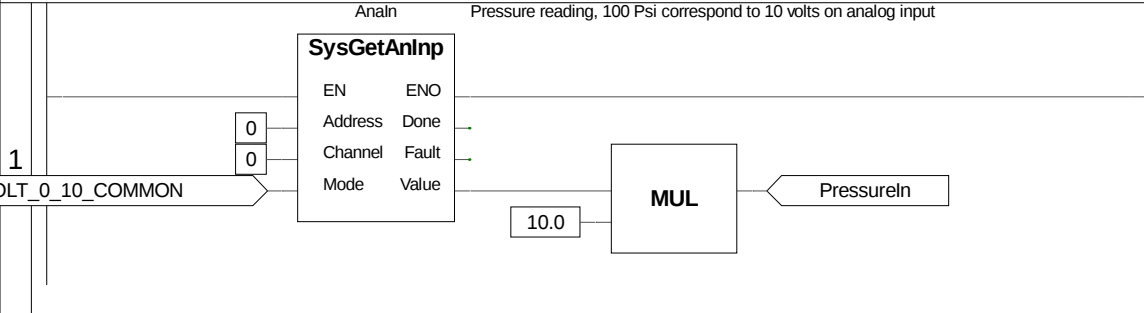
PresureIn : REAL; (* Pressure input (Psi) *)
StartAcq AT %IX0.0 : BOOL; (* Start acquisition command *)
Storing AT %QX0.0 : BOOL; (* Acquisition Ok *)
DataPlotValues AT %MW100.32 : ARRAY[ 0..255 ] OF UINT; (* Data plot values *)
DataPlotControl AT %MW100.16 : WORD; (* Data plot control word *)
DataPlotSamples AT %MW100.18 : UINT := 100; (* Data plot number of samples *)
StopAcq AT %IX0.1 : BOOL; (* Stop acquisition command *)
END_VAR

```

	Project : SSDataPlot	
	VARIABLES :	
	Release : DataPlot	Ver :1.00
	Author :	Date:14/02/2014
	Note :	Page:1 of 1

```
PROGRAM PressureAcq
```

```
VAR
AnaIn : SysGetAnInp; (* Analog input FB *)
DStore : DataStore; (* Data store FB *)
PressureIn : REAL; (* Pressure (Psi) *)
END_VAR
```

Page:1 of 1

```
VAR_INPUT
Strobe : BOOL; (* Data strobe *)
Value : UINT; (* Input value *)
DArray : @UINT; (* Data array pointer *)
SamplingNr : UDINT; (* Number of sampling *)
SamplingTime : UINT; (* Sampling time (mS) *)
END_VAR
```

```
VAR_OUTPUT
Done : BOOL; (* Done *)
TotSample : UINT; (* Total sample *)
END_VAR
```

```
VAR_EXTERNAL
SysTime : UDINT; (* System Time (mS) *)
END_VAR
```

```
VAR
TimeBf : UDINT; (* Time buffer (ms) *)
Ptr : @UINT; (* Internal pointer *)
StrPulse : BOOL; (* Strobe pulse *)
END_VAR
```

```
1 (* ***** *)
2 (* FUNCTION BLOCK "DataStore" *)
3 (* ***** *)
4 (* Il blocco funzione esegue la memorizzazione del valore in ingresso in un *)
5 (* array dati. I dati memorizzati saranno acquisiti dal pannello operatore. *)
6 (* ----- *)
7 (* Controllo se fronte disattivazione strobe. *)
8
9     IF NOT(Strobe) THEN
10
11         (* Controllo se fronte disattivazione strobe. *)
12
13         IF (StrPulse) THEN
14             Done:=FALSE; (* Done *)
15             StrPulse:=FALSE; (* Strobe pulse *)
16         END_IF;
17         RETURN;
18     ELSE;
19
20         (* Controllo se fronte attivazione strobe. *)
21
22         IF NOT(StrPulse) THEN
23             StrPulse:=TRUE; (* Strobe pulse *)
24             TimeBf:=SysTime; (* Time buffer *)
25             Ptr:=DArray; (* Internal pointer *)
26             TotSample:=0; (* Total sample *)
27         END_IF;
28     END_IF;
29
30 (* Controllo se terminato numero di campionamenti. *)
31
32     IF (Done) THEN RETURN; END_IF;
33
34 (* Arrivo se strobe attivo controllo tempo campionamento. *)
```

Project : SSDataPlot

FUNCTION BLOCK : DataStore

Release : DataPlot

Ver :1.00

Author :

Date:14/02/2014

Note :

Page:1 of 2

```
35
36     IF (SysTime < (TimeBf+SamplingTime)) THEN RETURN; END_IF;
37
38 (* Tempo di campionamento trascorso, memorizzo valore. *)
39
40     TimeBf:=SysTime; (* Time buffer *)
41     @Ptr:=Value; (* Internal pointer *)
42     Ptr:=Ptr+2; (* Internal pointer *)
43
44 (* Controllo numero di campionamenti. *)
45
46     TotSample:=TotSample+1; (* Total sample *)
47     IF (TotSample >= SamplingNr) THEN Done:=TRUE; END_IF;
48
49 (* [End of file] *)
50
51
```

	Project : SSDataPlot	
	FUNCTION BLOCK : DataStore	
	Release : DataPlot	Ver :1.00
	Author :	Date:14/02/2014
	Note :	Page:2 of 2