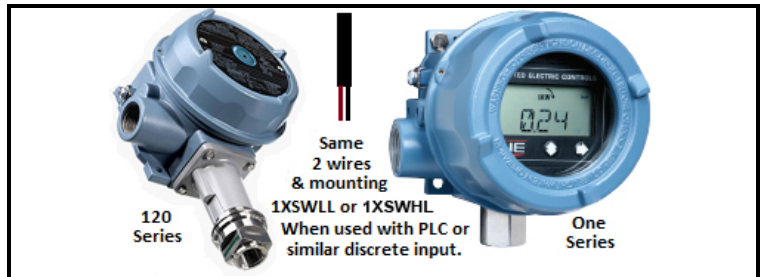


## TECHNICAL DOCUMENT

Use this document as a guide in upgrading from an United Electric Controls Type J120 or H121 electromechanical pressure switch to the "One Series" solid-state switch when interfacing with a logic solver such as a PLC (programmable logic controller) or DCS (distributed control system).\*

### Advantages

- Easily performed. Use same mounting and same 2 wires.
- Very high solid-state reliability vs. electromechanical.
- IAW "I Am Working" self-diagnostics detects faults before they become a process monitoring problem.
- LCD Display: Local indication of pressure and IAW.
- Set Point adjustable across full range.
- Dead Band adjustable across full range.
- Cost effective vs. a transmitter.



**1. Choose the "One Series" model need for the logic solver (PLC / DCS) input voltage.**

7.8 to 50 VDC	70 to 240 VAC / VDC
Model: 1XSWLL	Model: 1XSWHL

**2. Select the needed "One Series" sensor using tables below (P06...P20).**

For example, the part number required for use with a 120 VAC logic solver having a 300 PSI range is 1XSWHLP15.

**3. Verify the "One Series" 316L Wetted Material, 1/2" NPT Female Pressure Connection, Over Range and other relevant specifications are suitable for the application.**

J120 / H121 Part Number		Set Point Range	Over Range	J120 H121 Conn.	ONE SERIES Sensor
J120-126	H121-126	Vacuum	80 "wc	1/4" NPT Female	P06
J120-134	H121-134	Vac to 20 psi	20 psi		P06
J120-137	H121-137	80 "wc	80 "wc		P10
J120-144	H121-144	20 psi	20 psi		P12
	H121-146	30 psi	30 psi		P12
J120-152		50 psi	50 psi		P13
J120-156	H121-156	100 psi	100 psi		P14
J120-164	H121-164	200 psi	200 psi		P15
J120-S126B	H121-S126B	Vacuum	80 "wc	1/2" NPT Female	P06
J120-S134B	H121-S134B	Vac to 20 psi	20 psi		P06
J120-S137B	H121-S137B	80 "wc	80 "wc		P10
J120-S144B	H121-S144B	20 psi	20 psi		P12
	H121-S146B	30 psi	30 psi		P12
J120-S152B		50 psi	50 psi		P13
J120-S156B	H121-S156B	100 psi	100 psi		P14
J120-S164B	H121-S164B	200 psi	200 psi		P15
J120-171	J120-171	20 psi	500 psi	1/2" NPT Female	P12**
J120-172	J120-172	50 psi	500 psi		P13**
J120-173	J120-173	100 psi	500 psi		P14**
J120-174	J120-174	200 psi	500 psi		P15

J120 / H121 Part Number		Set Point Range	Over Range	J120 H121 Conn.	ONE SERIES Sensor
J120-183	J120-483	20 psi	500 psi	1/2" NPT Female	P12**
J120-184	J120-484	50 psi	500 psi		P13**
J120-185	J120-485	100 psi	500 psi		P14**
J120-186	J120-486	200 psi	500 psi		P15
J120-188	J120-488	1000 psi	2000 psi		P17
J120-189	J120-489	3500 psi	4000 psi		P19
J120-190	J120-490	30 psi	1500 psi	1/2" NPT Female	P13**
J120-191	J120-491	100 psi	1500 psi		P14**
J120-192	J120-492	300 psi	1500 psi		P15**
J120-193	J120-493	500 psi	1500 psi		P16**
J120-194	J120-494	1700 psi	2000 psi		P18
J120-270	H121-270	200 psi	200 psi	1/4" NPT Female	P15
J120-274	H121-274	300 psi	300 psi	1/4" NPT Female	P15
J120-356		100 psi	100 psi	1/4" NPT Female	P14
J120-358	H121-358	200 psi	200 psi		P15
J120-361	H121-361	300 psi	300 psi		P15
J120-376	H121-376	500 psi	500 psi		P16
J120-450	H121-450	Vacuum	80"wc	1/4" NPT Female	P06
J120-451	J120-451	80"wc	80"wc		P10
J120-452	H121-452	Vac to 20 psi	20 psi		P06
J120-453	H121-453	20 psi	20 psi		P12
J120-454	H121-454	30 psi	30 psi		P12

### "ONE SERIES" SENSOR RANGES

	Set Range	Over Range		Set Range	Over Range		Set Range	Over Range		Set Range	Over Range		Set Range	Over Range			
P06	-14.7 to 30 psi	60 psi	P11	0-15 psi	30 psi	P13	0-50 psi	100 psi	P15	0-300 psi	600 psi	P17	0-1000 psi	2000 psi	P19	0-4500 psi	9000 psi
P08	-14.7 to 100 psi	200 psi	P12	0-30 psi	60 psi	P14	0-100 psi	200 psi	P16	0-500 psi	1000 psi	P18	0-3000 psi	6000 psi	P20	0-6000 psi	12000 psi
P10	0-5 psi	10 psi															

\*\* Verify the "One Series" Over Range pressure is suitable for the application.



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