

PRESSURE SETTING PROCEDURES

For SUT Hybrid Hydraulic Unit

Model: SUT**D401630 & SUT**D602130



The following must be completed before any settings and adjustments are made to your SUT unit:

- Apply power to the machine and to the hydraulic unit. The hydraulic unit should be running and the machine should not be cutting any parts (indicating no call of oil).
- If you are using the start/stop signal (Parameter P00, set to 0) ensure your digital inputs are hooked up correctly: common lead hooked up to ICOM terminal and 24VDC connected to DIN 1 terminal.
- At the start up, the control panel will display the current pressure of the unit in Megapascals (MPa).
- Check to ensure there are no leaks.

PH0 = Pressure of High Pressure Pump
 PL0 = Pressure of Low Pressure Pump
 qH0 = Flow Rate of High Pressure Pump
 qL0 = Flow Rate of Low Pressure Pump



DOWN UP RETURN

SETTING THE PRESSURE

1. On the display panel, press the MODE and RETURN keys simultaneously and hold them for 2 seconds to get into parameter mode. You should see "P00" flash on the screen. Use the UP key to scroll to P13 and press RETURN.
2. You will now see "PH0" on the screen. Use the UP or DOWN keys to set your desired pressure.
3. Press the RETURN key and you'll see "qH0" on the screen. Use the UP or DOWN keys to set your desired flow.
4. Press the RETURN key and you'll see "PL0" on the screen. Use the UP or DOWN keys to set your desired pressure.
5. Press the RETURN key and you'll see "qL0" on the screen. Use the UP or DOWN keys to set your desired flow.
6. There will be two more values that appear in P13, UT and DT. These typically do not need to be changed and are for setting response time.
7. Press the RETURN key until you see "P13" flashing. You have now confirmed the numbers you entered.
8. Press the MODE key and you'll see the current pressure of the unit.
9. If using multiple pressure and flow settings, repeat steps 1-8 in Parameters 14 through 28.

Causes of Alarms & Corrective Actions

Alarm Condition	Indication	Cause of Alarm Output	Corrective Action
Output device error	E10	The power device self-protecting function is activated	Turn OFF the power supply once, and then turn it ON again
Instantaneous overcurrent	E11	Detection of instantaneous overcurrent in the current control unit	Turn OFF the power supply once, and then turn it ON again
Over Speed	E12	The motor Rotation speed exceeded the allowable speed. (including reverse rotation)	Make sure that there is no problem in the hydraulic circuit
Regenerative brake overload	E14	The alarm is output when regenerative overload occurs due to regenerative current of the motor	Check the regenerative load integration ratio [n08] in the monitor mode, and reduce the load condition in the process with an increased integration ratio
Under Voltage	E15	The main circuit voltage has dropped below 190 VDC (134VAC) (this is internally on the control-determined by main power)	Check the power supply voltage
Over Voltage	E16	The main circuit voltage has exceeded 400 VDC (this is internally on the control-determined by main power)	Check the power supply voltage
Motor electronic thermal error	E17	Detection of overload in current output status (for 60 seconds at 110%)	The motor output is higher than the normal level
Magnetic pole detection error	E18	Motor initial position detection error	The motor output is higher than the normal level
Encoder cable disconnection	E20	The alarm is output during encoder cable disconnection	Parts replacement may be required
Motor cable disconnection	E21	The alarm is output during motor cable disconnection	
Pressure sensor error	E30	The alarm is output when the pressure sensor feedback value is invalid	
Motor start error	E31	The alarm is output when the actual rotation polarity is different from the command polarity	
Monitor thermistor cable disconnection	E40	The alarm is output when motor thermistor cable disconnection is detected	Parts replacement may be required
Motor temperature abnormal rise	E41	Forced to stop when the motor thermistor temperature reaches the specified temperature (85°C) in the condition specified in "L44"	The heat radiation capacity and cooling capacity of the motor may be lowered. Conduct maintenance
Radiator fin thermistor cable disconnection	E42	The alarm is output when fin thermistor cable disconnection is detected	Parts replacement may be required
Fin temperature abnormal rise	E43	Forced to stop when the motor thermistor temperature reaches the specified temperature (80°C) in the condition specified in "L45"	The heat radiation capacity and cooling capacity of the motor may be lowered. Conduct maintenance
Drying operation error	E64	The alarm is output when the pressure does not increase even if the motor RPM is increased	The stop valve is closed, or the oil level in the tank is low. Check to stop valve opening and the oil level
CPU run-a-way	E91	The alarm is output when the CPU is out of control	
EEPROM data error (1)	E93	The alarm is output when the EEPROM data is invalid	
EEPROM data error (2)	E94	The alarm is output when the EEPROM data is invalid	
Motor temperature abnormal warning	L44	The alarm is output when the motor thermistor temperature exceeds the threshold level (83°C)	The heat radiation capacity and cooling capacity of the motor may be lowered. Conduct maintenance
Fin temperature abnormal warning	L45	The alarm is output when the fin thermistor temperature exceeds the threshold level (78°)	The heat radiation capacity and cooling capacity of the motor may be lowered. Conduct maintenance
Pressure deviation abnormal warning	L60	The alarm is output when the command signal remains ON for 5 seconds or longer	The motor output is higher than the normal level
Pressure drop	L62	The alarm is output when the pressure switch output remains ON for 30 seconds	
Pressure switch activation	L63	The alarm is displayed when the pressure switch is activated. (Selectable with the parameter)	