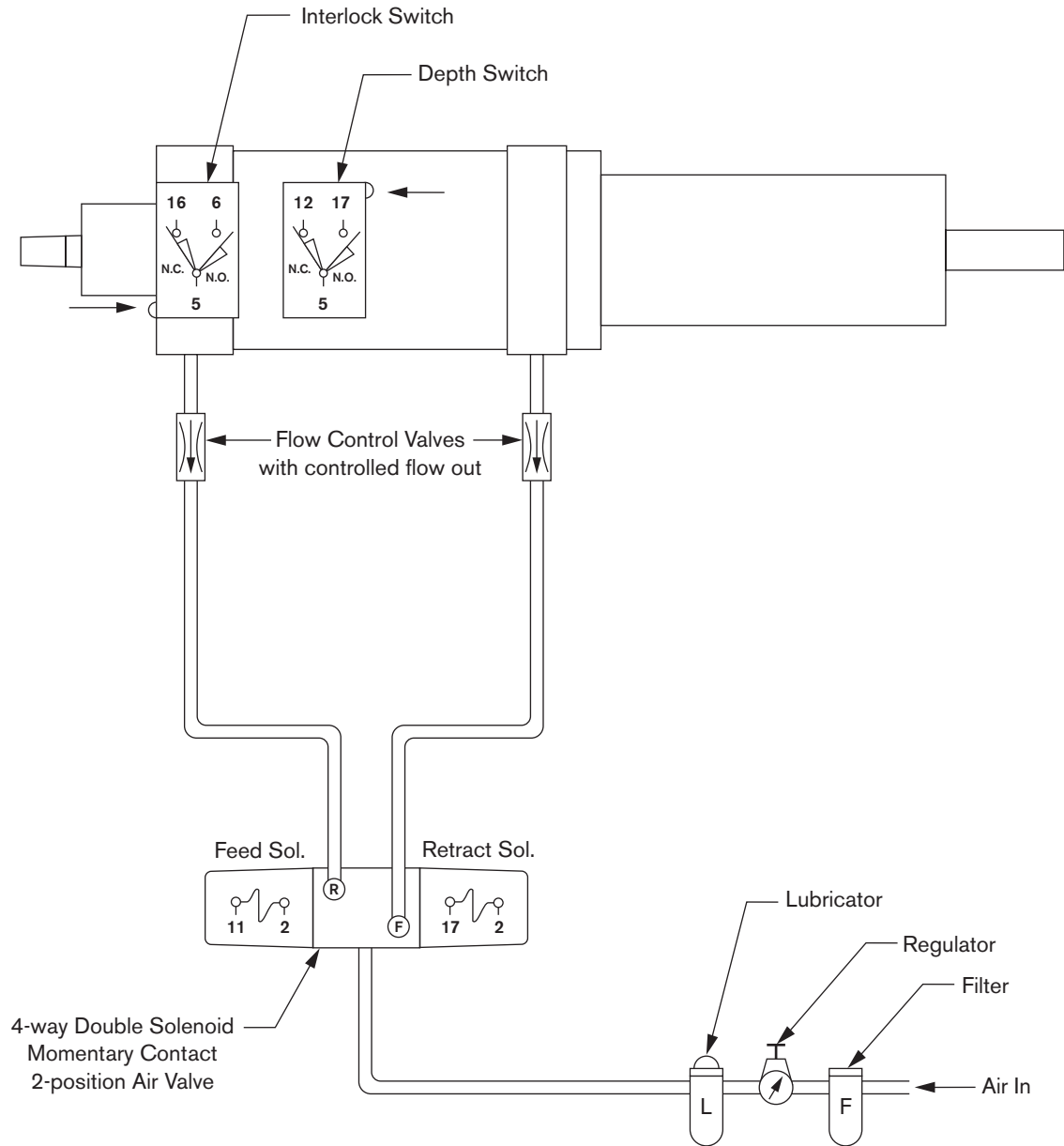


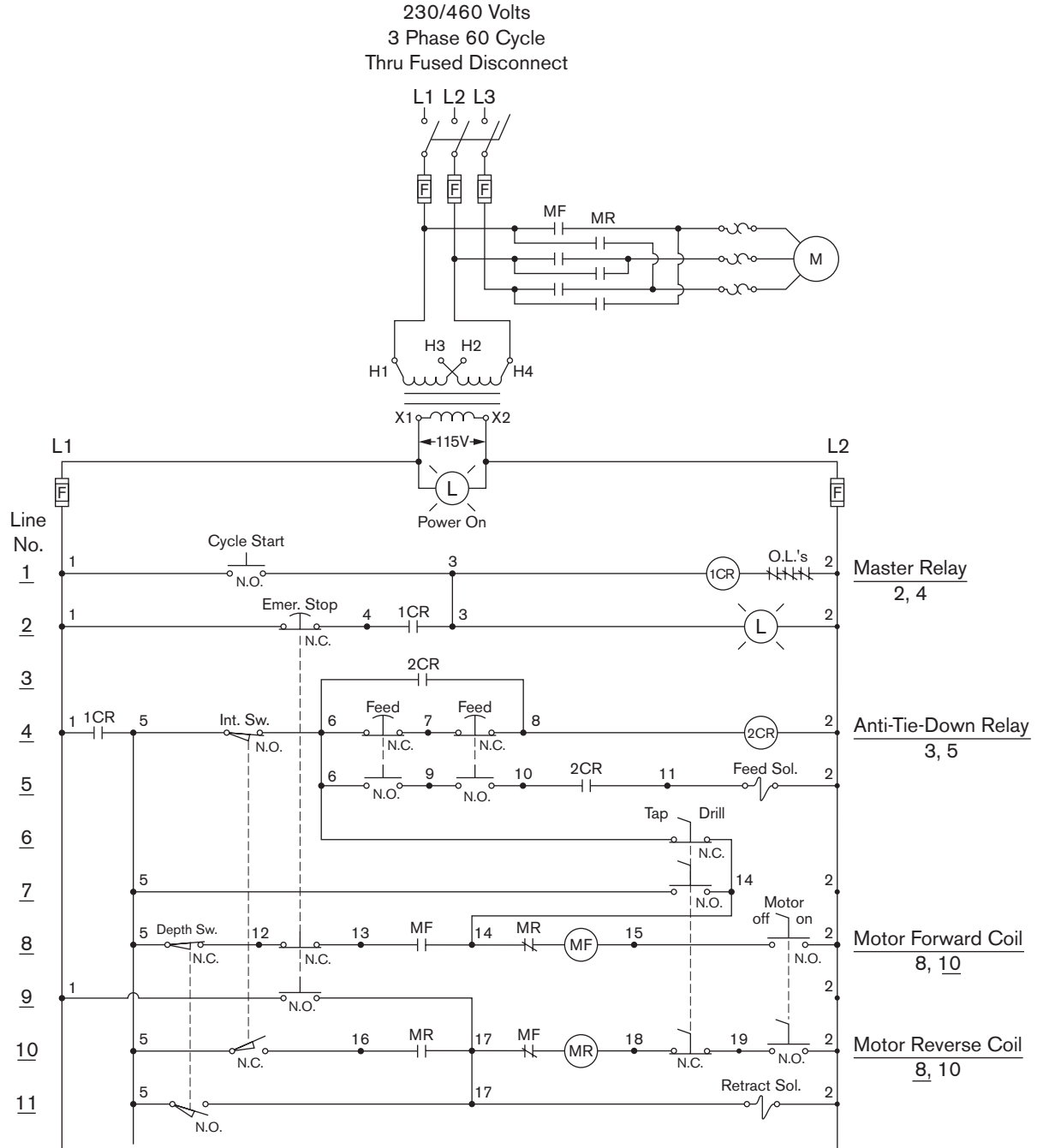
# HYPNEUMAT INC.

AUTOMATIC DRILLING & TAPPING UNITS

## PIPING FOR BASIC AIR DRILLING-TAPPING CIRCUIT



**BASIC AIR DRILLING-TAPPING CIRCUIT**



**IMPORTANT**

THIS CIRCUIT IS A BASIC METHOD OF CONTROLLING HYPNEUMAT EQUIPMENT.  
 CHECK LOCAL, STATE, & OSHA REGULATIONS FOR SPECIFIC CIRCUIT REQUIREMENTS.

## CYCLE SEQUENCE FOR AIR DRILLING-TAPPING CIRCUIT

### DRILL OPERATION SEQUENCE

1. Turn Tap-Drill selector switch to "DRILL"
2. Turn Motor Selector Switch to "ON"
3. Push Cycle start Button
  - a. Supplies power to circuit (1CR)
4. Push Twin Palm feed buttons
  - a. Valve shifts and unit feeds forward
5. Depth Switch is actuated at Depth required
  - a. Valve shifts and unit rapid retracts

### EMERGENCY STOP

1. Push Emergency Stop Button
  - a. 1CR Master Relay drops out
  - b. Motor shuts off and coasts to stop
  - c. Valve shifts and unit rapid retracts

### TAP OPERATION SEQUENCE

1. Turn Tap-Drill Selector Switch to "TAP"
2. Turn Motor Selector Switch to "ON"
3. Push Cycle Start Button
  - a. Supplies power to Circuit (1CR)
  - b. Motor Forward Coil (MF) starts motor in clockwise rotation
4. Push Twin Palm Feed Buttons
  - a. Valve shifts and unit feeds forward
5. Depth Switch is actuated
  - a. Motor Forward Coil (MF) is dropped out
  - b. Motor Reverse Coil (MR) is energized and starts motor in a counterclockwise rotation
  - c. Valve shifts and unit begins to retract
6. Unit Returns to full retract position and actuates Interlock Switch
  - a. Motor Forward Coil (MF) returns motor to clockwise rotation

### EMERGENCY STOP

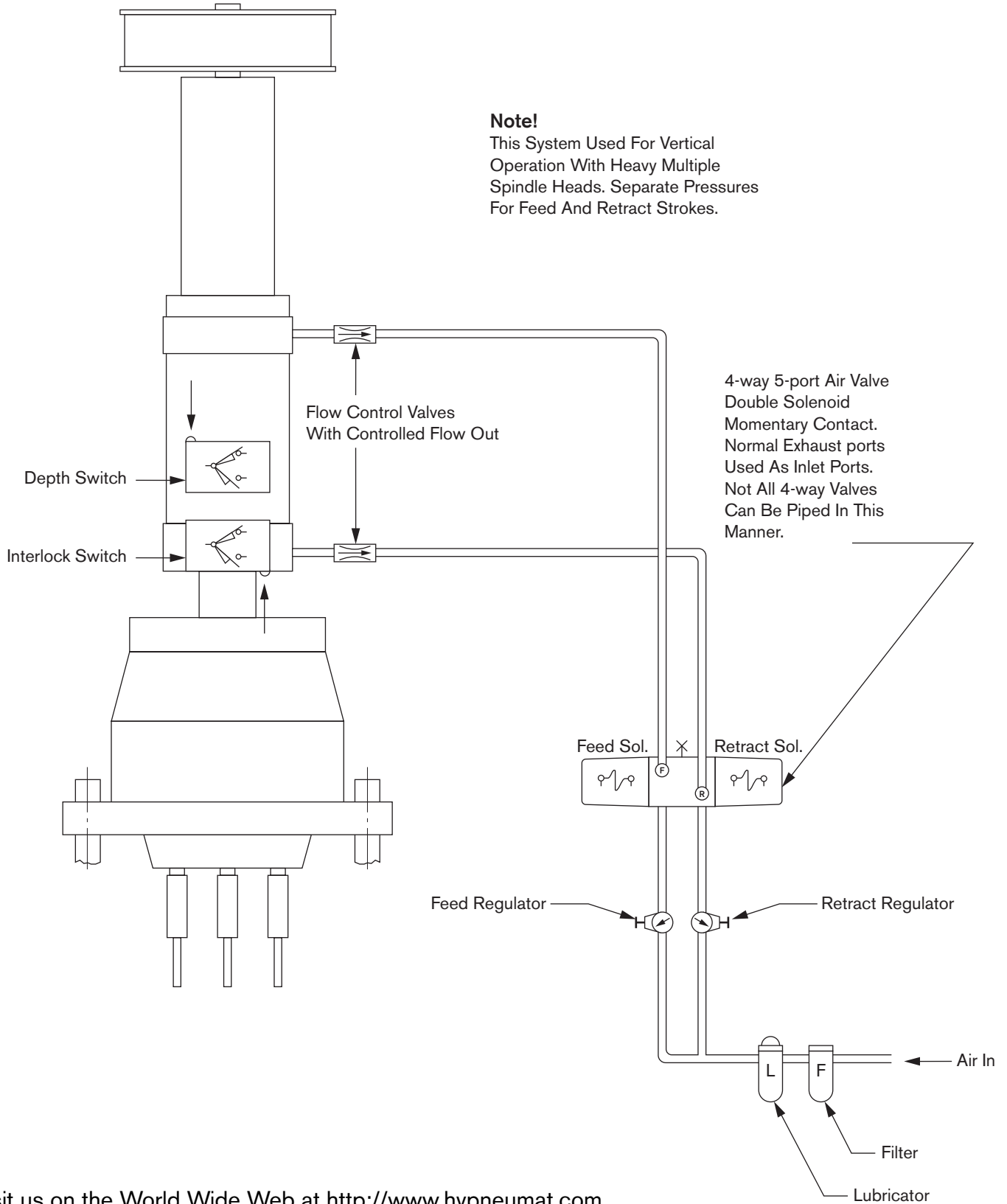
1. Push Emergency Stop Button
  - a. 1CR Master Relay drops out
  - b. Motor Forward Coil (MF) is dropped out
  - c. Valve shifts to retract position

NOTE: A. If Tap is "NOT" in part, unit will rapid retract and motor coasts to stop

NOTE: B. If Tap is "IN" part, motor will stop and unit will not rapid retract (see operation #2 for tap removal from part)

2. To return unit to full retract position, if tap is "IN" part
  - a. Push Emergency Stop button and hold down
  - b. Motor Reverse Coil (MR) is actuated and motor rotates counterclockwise
  - c. Tap leaves part and unit returns to full retract position
  - d. Release Emergency Stop Button

## OPTIONAL PIPING FOR DUAL PRESSURE SYSTEM



Visit us on the World Wide Web at <http://www.hypneumat.com>

Hypneumat Inc.  
5900 West Franklin Drive  
Franklin, WI 53132-9178  
Phone: (414) 423-7400  
Fax: (414) 423-7414

**HYPNEUMAT INC.**  
AUTOMATIC DRILLING & TAPPING UNITS