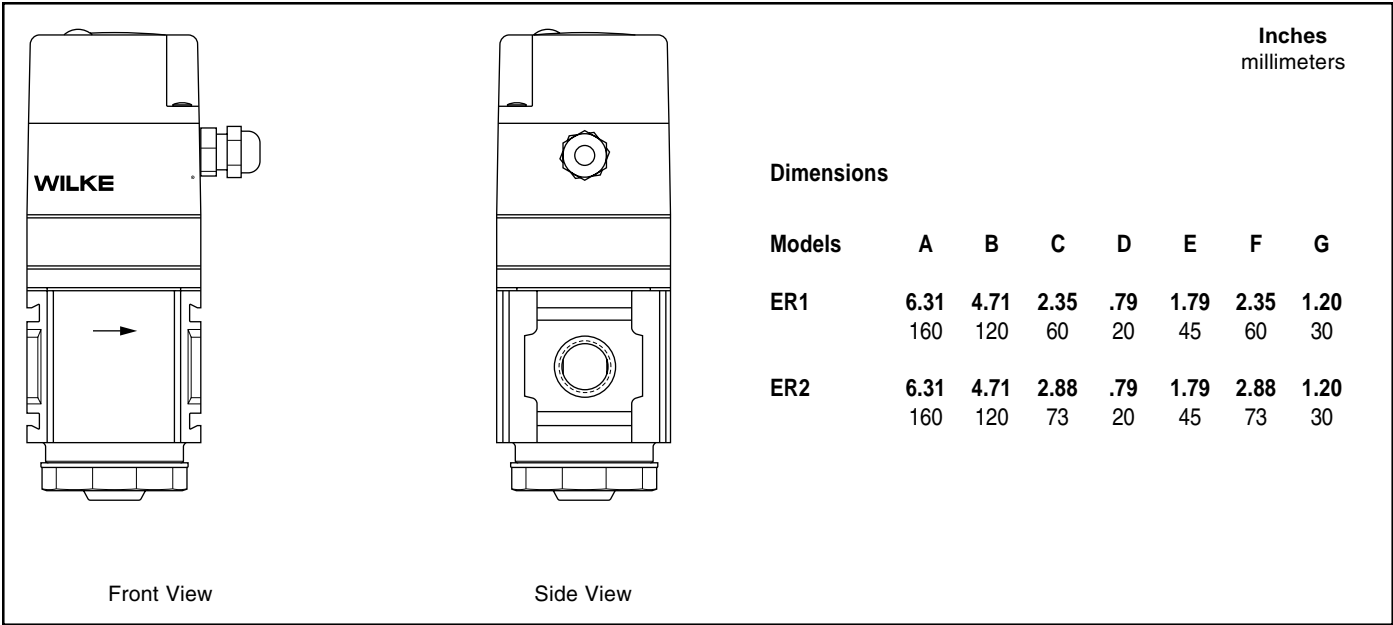


## Maintenance



- 1. DEPRESSURIZE THE AIR LINE PRIOR TO ATTEMPTING ANY SERVICE TO THE UNIT! IT IS ALSO RECOMMENDED THAT POWER TO THE UNIT BE DISCONNECTED PRIOR TO SERVICING.**
- 2. Main Valve:** Remove bottom plug, valve assembly and valve spring. Inspect all the seals and components for damage and replace as required. Clean all seals and components with soft cloth and lightly lubricate the valve O-ring, bottom plug O-ring and valve stem with MAGNALUBE-G lubricant and reassemble in reverse order.
- 3. LCD Display:** Remove the two screws from the LCD cover and carefully remove the cover. Turning the cover over, remove the two screws inside that retain the LCD board to the cover and lift out the LCD board. Unplug the display board from the ribbon cable. If defective replace with a new LCD board and re-connect the ribbon cable. Making sure the LCD lens and seal are in place, replace the LCD board in the cap and secure with the two screws. Replace the cover back on the unit and secure with the two screws.
- 4. Control Board:** If unit is an LCD type, remove the LCD display board from the cap as described in step #3 and unplug the ribbon cable from the LCD board. Now unscrew the three screws that retain the control board housing and unplug the valves from the back of the control board. Carefully lift the housing with the control board still inside. Remove the control board from the bottom of the housing and replace with the new control board. Reassemble in reverse order.
- 5. Valve Replacement:** The electronic valves cannot be serviced internally. If failure occurs, replace the valve. To replace the valves, remove the housing as described in step #4 above. Once the housing is removed, unscrew the defective valve from the cap. Making sure to replace with correct valve [3 position connector for intake valve and 2 position connector for the exhaust valve]



**Dimensions**

Models	A	B	C	D	E	F	G
ER1	6.31	4.71	2.35	.79	1.79	2.35	1.20
	160	120	60	20	45	60	30
ER2	6.31	4.71	2.88	.79	1.79	2.88	1.20
	160	120	73	20	45	73	30

**Repair Kits and Replacement Parts**

- Control Board LCD 30/60 psig (2.0/4.0 bar) ..... **ERP-95-786**
- Control Board LCD 90/125 psig (6.0/8.6 bar) ... **ERP-95-788**
- Control Board, STD, 30/60 psig (2.0/4.0 bar) ... **ERP-95-798**
- Control Board, STD, 90/125 psig (6.0/8.6 bar) ... **ERP-95-799**
- LCD Board and Ribbon ..... **ERP-95-787**
- Intake Valve ..... **ERP-95-790**
- Exhaust Valve ..... **ERP-95-791**
- Diaphragm Kit, ER1 ..... **ERP-95-792**
- Diaphragm Kit, ER2 ..... **ERP-95-793**
- Bottom Valve and Valve Spring ..... **ERP-95-794**

**Specifications**

	Min	Max	Nom	Units
<b>Supply Voltage</b>	12	28	—	VDC
<b>Supply Current</b>	—	250	80	mA
<b>Control Signal</b>				
Voltage	0	10	—	VDC
Impedance	—	—	200	KOHM
Current	4	20	—	mA
Impedance	—	—	600	OHM
Internal	—	—	—	—
<b>Monitor Output</b>	0	10	—	VDC
<b>Overall Accuracy</b>	—	—	1.5%	SCALE
<b>Supply Pressure</b>	20	150	—	psig
	(1.4)	(10.3)	—	(bar)
<b>Output Pressure</b>	0		30/60/90/125	psig
	(0.0)		(2/4/6/8.6)	(bar)
<b>Temperature</b>	40	125	—	°F
	(4.4)	(51.6)	—	(°C)

**Flow Rate [150 psig (10 bar) inlet and 90 psig (6 bar) outlet with a 5 psid (0.3 bar)]**

ER1 .....	200 SCFM (94.3 dm <sup>3</sup> /s)
ER2 .....	200 SCFM (94.3 dm <sup>3</sup> /s)

**Note:** For optimum operation, inlet pressure should be a minimum of 15 psig (1.0 bar) above the controlled pressure.

**Troubleshooting**

**Unit Fails to Operate**

- 1) Verify supply voltage
- 2) Verify control voltage
- 3) Intake valve or controller failure
- 4) Apply 12 VDC to valve and listen for slight click indicating valve is working
- 5) Replace control board

**Unit Remains Pressurized**

- 1) Verify control voltage
- 2) Exhaust valve or controller failure
- 3) Apply 12 VDC to valve and listen for slight click indicating valve is working
- 4) Replace control board

**LCD Fails to Display Pressure**

- 1) Verify supply voltage
- 2) Verify that ribbon cable is secure on both ends
- 3) Have dealer check LCD board and replace if necessary
- 4) Replace control board

**Unit Has Constant Leak or is Unstable**

- 1) Inspect and clean bottom valve seals and lubricate bottom valve
- 2) Inspect and clean diaphragmsA B