



SERVICE AND OPERATING MANUAL

WARREN RUPP, INC.

Solenoid Valves

AC Solenoids

AC Solenoid Kits designed for use with the Warren Rupp Stroke Counter/Batch Controller, Warren Rupp Pulse Output Interface Kits, and customer-supplied VAC controllers (PLCs).

Kit 894-001-000

110/120 VAC Solenoid

Kit 894-002-000

220/240 VAC Solenoid

Kit 894-005-000

110/120 VAC Solenoid

Kit 894-006-000

220/240 VAC Solenoid

Kit 894-009-000

110/120 VAC Solenoid

Kit 894-010-000

220/240 VAC Solenoid

DC Solenoids

DC Solenoid Kits designed for use with customer-supplied VDC controllers ONLY (PLCs).

Kit 894-003-000

12 VDC Solenoid

Kit 894-004-000

24 VDC Solenoid

Kit 894-008-000

24 VDC Solenoid

Kit 894-011-000

12 VDC Solenoid

Kit 894-012-000

24 VDC Solenoid

Operating Principle

The interfaceable solenoid kits offer easy on/off operation of air-driven diaphragm pumps, via the pump air inlet.

All AC solenoid units can be used with the Warren Rupp Batch Control/Stroke Counters, Warren Rupp Pulse Output Interface Kits, or customer-supplied VAC controls. DC kits are designed for use with customer-supplied VDC controls only.

Before Installation

Before installing the Solenoid Kit, make certain it is compatible with your specific pump model and system voltage.

Solenoid Kit Selection

Before installing the Solenoid Kit, make certain it is compatible with your specific pump model and voltage.

894-001-000 · 894-002-000**894-003-000 · 894-004-000**

Fit pump models:

| | | |
|---------------------|---------------------|---------------------|
| PB $\frac{1}{4}$ -A | PB $\frac{1}{2}$ -A | PB $\frac{1}{2}$ -T |
| PB $\frac{3}{4}$ -A | EB $\frac{1}{2}$ -A | EB $\frac{1}{2}$ -T |
| MP01P | MP02P | MP02T |
| MP02M | MP03P | S05 |
| M05 | S07 | M07 |
| S10 | M10 | |

894-005-000 · 894-006-000**894-008-000**

Fit pump models:

| | | |
|---------------------|-----------------------|-----------------------|
| PB1-A | PB1 $\frac{1}{2}$ -A | PB2-A |
| EB1-SM | EB1-M | EB1 $\frac{1}{2}$ -SM |
| SE $\frac{1}{2}$ -A | SB1-A | SA1-A |
| ET1-M | ET1 $\frac{1}{2}$ -SM | ST1-A |
| SB25-A | SA25A | ST25-A |
| MP04P | MP07P | MP03M |
| MP04M | MP05M | MP04D |
| MP05D | S1F | M1F |

894-009-000 · 894-010-000**894-011-000 · 894-012-000**

Fit pump models:

| | | |
|----------------------|--------|----------------------|
| EB2-SM | EB2-M | SB1 $\frac{1}{2}$ -A |
| SB2-A | SA2-A | SA2-M |
| SA3-A | SA3-M | SA4-A |
| SA4-M | W09 | W15 |
| ET1 $\frac{1}{2}$ -M | ET2-M | ST1 $\frac{1}{2}$ -A |
| EB3-SM | EB3-M | EB4-M |
| SB3-A | SB4-A | ET3-SM |
| ET3-M | SB40-A | SA40-A |
| MP07D | MP08M | MP08B |
| MP08D | MP10M | MP12M |
| MP12D | MP14M | MP14D |
| S15 | M15 | S20 |
| M20 | S30 | M30 |

Kit 894-001-000**110/120 VAC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-085-000 | Valve (includes knurled nut) | 1 |
| 219-002-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-002-000**220/240 VAC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-085-000 | Valve (includes knurled nut) | 1 |
| 219-003-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-003-000**12VDC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-085-000 | Valve (includes knurled nut) | 1 |
| 219-004-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-004-000**24VDC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-085-000 | Valve (includes knurled nut) | 1 |
| 219-001-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-005-000**110/120 VAC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-086-000 | Valve (includes knurled nut) | 1 |
| 219-002-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-006-000**220/240 VAC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-086-000 | Valve (includes knurled nut) | 1 |
| 219-003-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-008-000**24VDC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-086-000 | Valve (includes knurled nut) | 1 |
| 219-001-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Solenoid Kit Repair Parts

All parts available in kit form, or individually.

Solenoid Kit Selection

Before installing the Solenoid Kit, make certain it is compatible with your specific pump model and voltage.

894-001-000 · 894-002-000**894-003-000 · 894-004-000**

Fit pump models:

| | | |
|---------------------|---------------------|---------------------|
| PB $\frac{1}{4}$ -A | PB $\frac{1}{2}$ -A | PB $\frac{1}{2}$ -T |
| PB $\frac{3}{4}$ -A | EB $\frac{1}{2}$ -A | EB $\frac{1}{2}$ -T |
| MP01P | MP02P | MP02T |
| MP02M | MP03P | S05 |
| M05 | S07 | M07 |
| S10 | M10 | |

894-005-000 · 894-006-000**894-008-000**

Fit pump models:

| | | |
|---------------------|-----------------------|-----------------------|
| PB1-A | PB1 $\frac{1}{2}$ -A | PB2-A |
| EB1-SM | EB1-M | EB1 $\frac{1}{2}$ -SM |
| SE $\frac{1}{2}$ -A | SB1-A | SA1-A |
| ET1-M | ET1 $\frac{1}{2}$ -SM | ST1-A |
| SB25-A | SA25A | ST25-A |
| MP04P | MP07P | MP03M |
| MP04M | MP05M | MP04D |
| MP05D | S1F | M1F |

894-009-000 · 894-010-000**894-011-000 · 894-012-000**

Fit pump models:

| | | |
|----------------------|--------|----------------------|
| EB2-SM | EB2-M | SB1 $\frac{1}{2}$ -A |
| SB2-A | SA2-A | SA2-M |
| SA3-A | SA3-M | SA4-A |
| SA4-M | W09 | W15 |
| ET1 $\frac{1}{2}$ -M | ET2-M | ST1 $\frac{1}{2}$ -A |
| EB3-SM | EB3-M | EB4-M |
| SB3-A | SB4-A | ET3-SM |
| ET3-M | SB40-A | SA40-A |
| MP07D | MP08M | MP08B |
| MP08D | MP10M | MP12M |
| MP12D | MP14M | MP14D |
| S15 | M15 | S20 |
| M20 | S30 | M30 |

Kit 894-009-000**110/120 VAC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-087-000 | Valve (includes knurled nut) | 1 |
| 219-002-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-010-000**220/240 VAC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-087-000 | Valve (includes knurled nut) | 1 |
| 219-003-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-011-000**12DC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-087-000 | Valve (includes knurled nut) | 1 |
| 219-004-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Kit 894-012-000**24VDC Solenoid · Kit includes:**

| Part No. | Description | Qty |
|-------------|------------------------------|-----|
| 893-087-000 | Valve (includes knurled nut) | 1 |
| 219-001-000 | Coil | 1 |
| 241-001-000 | Connector | 1 |
| 541-001-000 | Nut, Knurled | 1 |

Solenoid Kit Repair Parts

All parts available in kit form, or individually.

Solenoid Kit Selection

Before installing the Solenoid Kit, make certain it is compatible with your specific pump model and voltage.

894-001-000 · 894-002-000**894-003-000 · 894-004-000**

Fit pump models:

| | | |
|---------------------|---------------------|---------------------|
| PB $\frac{1}{4}$ -A | PB $\frac{1}{2}$ -A | PB $\frac{1}{2}$ -T |
| PB $\frac{3}{4}$ -A | EB $\frac{1}{2}$ -A | EB $\frac{1}{2}$ -T |
| MP01P | MP02P | MP02T |
| MP02M | MP03P | S05 |
| M05 | S07 | M07 |
| S10 | M10 | |

894-005-000 · 894-006-000**894-008-000**

Fit pump models:

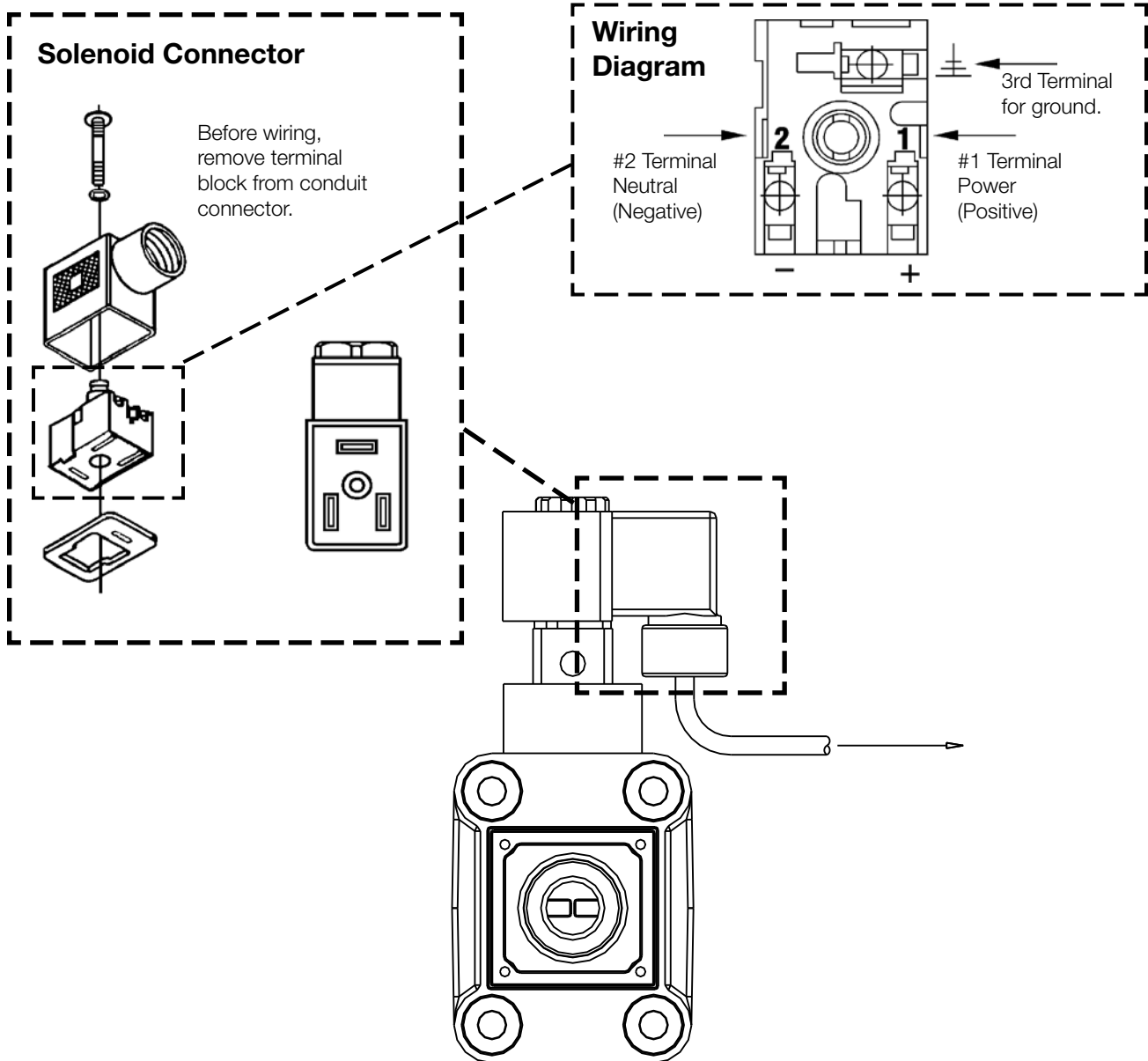
| | | |
|---------------------|-----------------------|-----------------------|
| PB1-A | PB1 $\frac{1}{2}$ -A | PB2-A |
| EB1-SM | EB1-M | EB1 $\frac{1}{2}$ -SM |
| SE $\frac{1}{2}$ -A | SB1-A | SA1-A |
| ET1-M | ET1 $\frac{1}{2}$ -SM | ST1-A |
| SB25-A | SA25A | ST25-A |
| MP04P | MP07P | MP03M |
| MP04M | MP05M | MP04D |
| MP05D | S1F | M1F |

894-009-000 · 894-010-000**894-011-000 · 894-012-000**

Fit pump models:

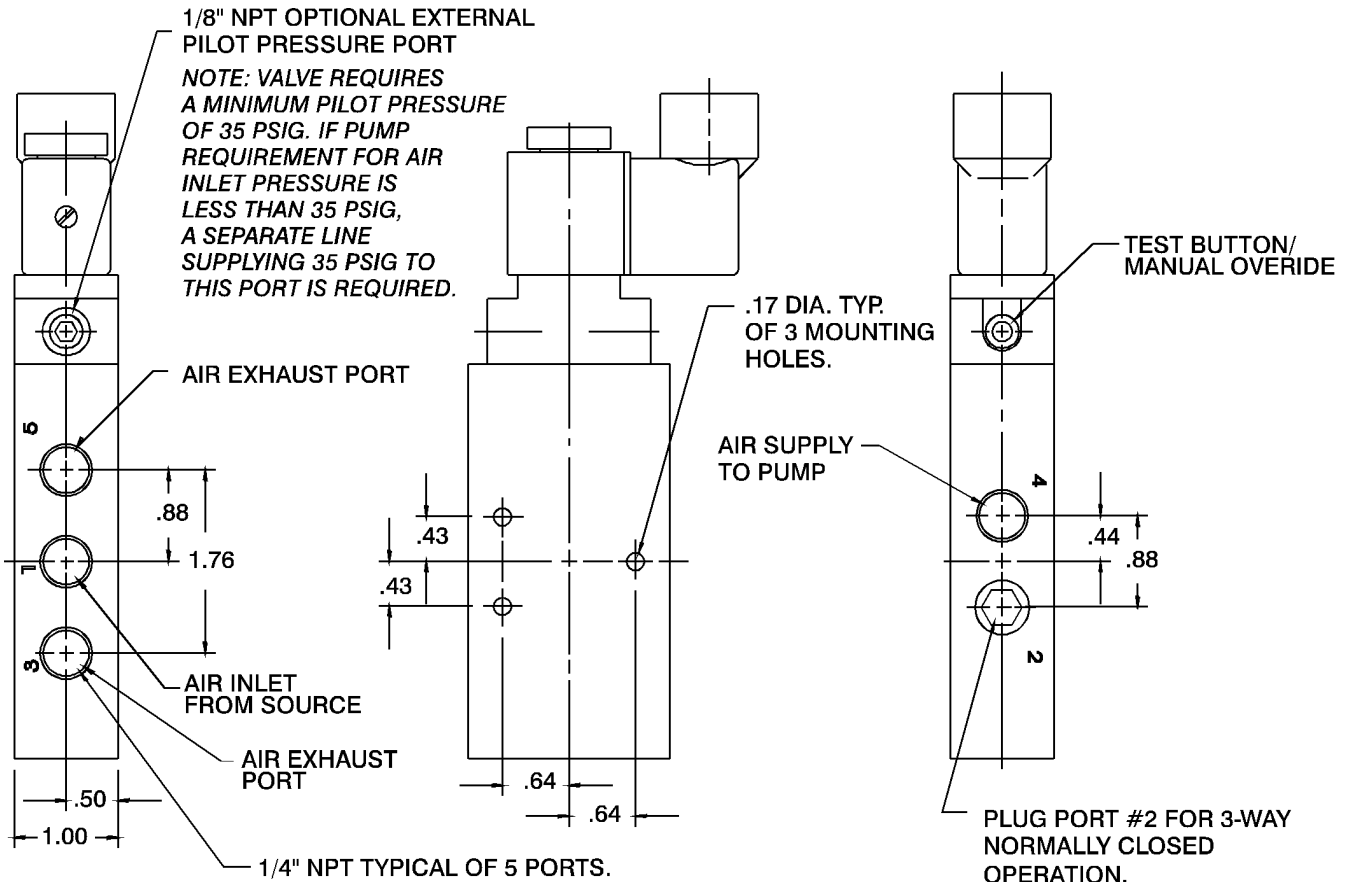
| | | |
|----------------------|--------|----------------------|
| EB2-SM | EB2-M | SB1 $\frac{1}{2}$ -A |
| SB2-A | SA2-A | SA2-M |
| SA3-A | SA3-M | SA4-A |
| SA4-M | W09 | W15 |
| ET1 $\frac{1}{2}$ -M | ET2-M | ST1 $\frac{1}{2}$ -A |
| EB3-SM | EB3-M | EB4-M |
| SB3-A | SB4-A | ET3-SM |
| ET3-M | SB40-A | SA40-A |
| MP07D | MP08M | MP08B |
| MP08D | MP10M | MP12M |
| MP12D | MP14M | MP14D |
| S15 | M15 | S20 |
| M20 | S30 | M30 |

Solenoid Wiring Diagram



Solenoid Valves

894-001-000
 894-002-000
 894-003-000
 894-004-000



THESE INSTRUCTIONS ARE FOR USE WITH THE FOLLOWING VALVE ASSEMBLIES:

| | |
|-------------|----------------------|
| 894-001-000 | 120VAC Solenoid Coil |
| 894-002-000 | 230VAC Solenoid Coil |
| 894-003-000 | 12VDC Solenoid Coil |
| 894-004-000 | 24VAC Solenoid Coil |

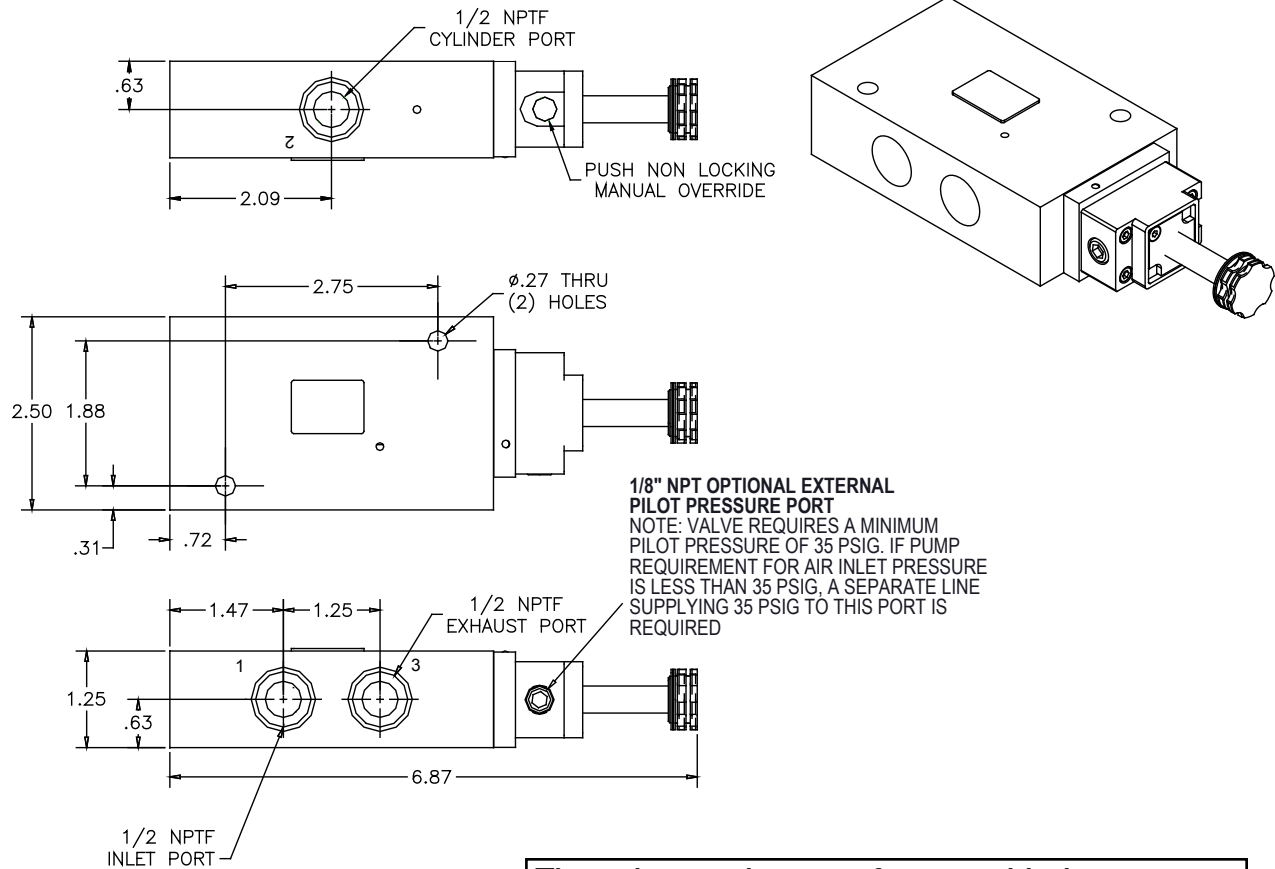
e1:\sol1.cdr

Solenoid Valves

894-005-000

894-006-000

894-008-000

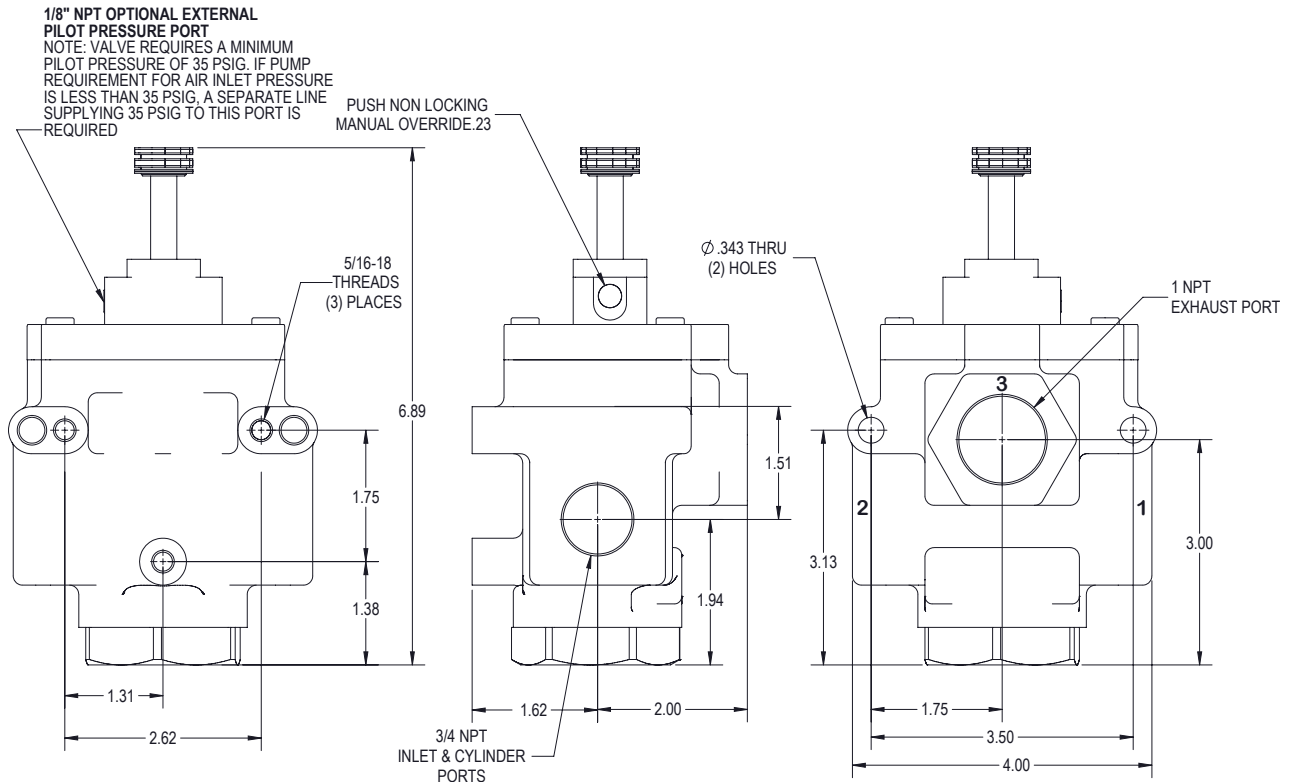


These instructions are for use with the following valve assemblies:

| | |
|-------------|----------------------|
| 894-005-000 | 120VAC Solenoid Coil |
| 894-006-000 | 230VAC Solenoid Coil |
| 894-008-000 | 24VAC Solenoid Coil |

Solenoid Valves

894-009-000
 894-010-000
 894-011-000
 894-012-000



| PORT | SIZE | FUNCTION |
|------|----------|--------------------|
| 1 | 3/4" NPT | AIR INLET |
| 2 | 3/4" NPT | AIR SUPPLY TO PUMP |
| 3 | 1" NPT | EXHAUST |

These instructions are for use with the following valve assemblies:

894-009-000 120VAC Solenoid Coil
 894-010-000 230VAC Solenoid Coil
 894-011-000 12VDC Solenoid Coil
 894-012-000 24VAC Solenoid Coil