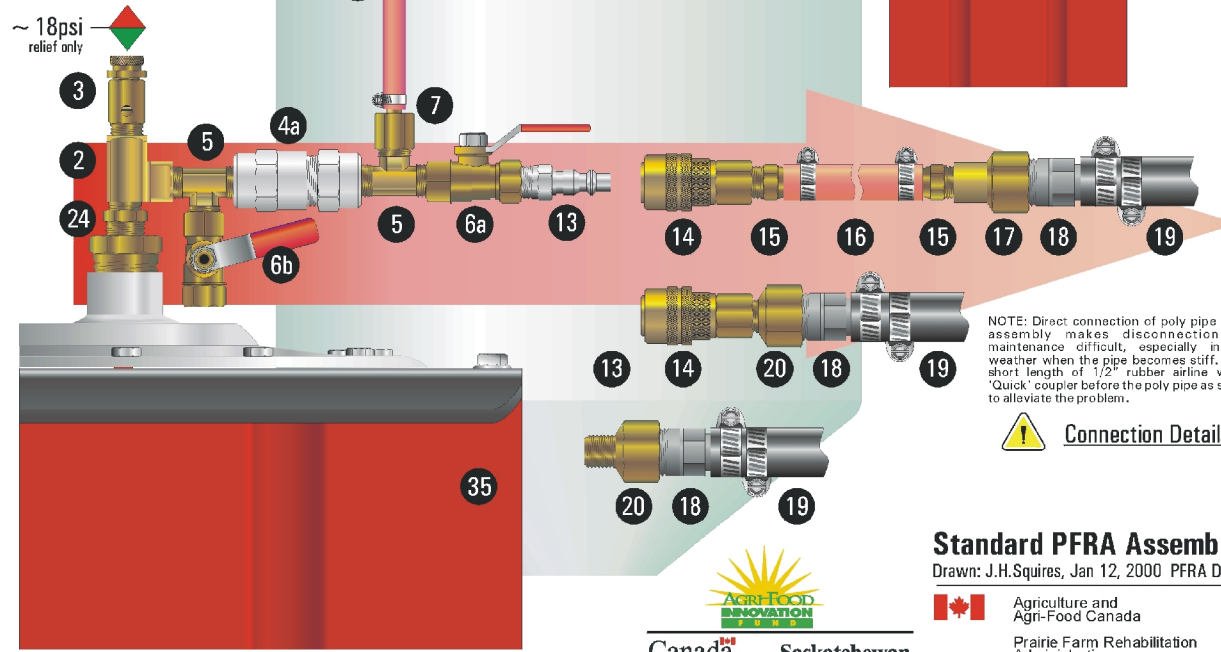


NOTE: When using gauges without header tanks, keep gauge shut-off valve closed when not in use to isolate gauge from pulsation. Use liquid filled gauges when connecting directly to line. Use direct connection with Koenders EL2 compressors with caution.

Alternate Pressure Gauge Detail

~ 18psi relief only



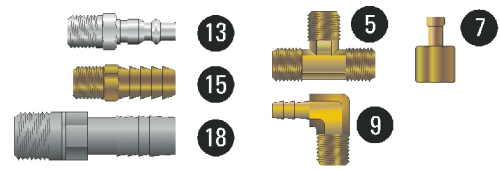
NOTE: Direct connection of poly pipe to the assembly makes disconnection and maintenance difficult, especially in cold weather when the pipe becomes stiff. Use a short length of 1/2" rubber airline with a "Quick" coupler before the poly pipe as shown to alleviate the problem.

Connection Details

Koenders EL2 Aeration Compressor

Shown with Standard PFRA Assembly and Gauge Header Tank (Koenders).

- 2 Branch Tee 1/4" fpt x fpt x mpt
- 3 Pressure Relief Valve 1/4" mpt
Use Valves with brass or stainless steel mechanisms, aluminum is subject to corrosion.
- 4a Check Valve (Rubber Diaphragm Mechanism) 1/4" fpt x fpt
Koenders Check valve shown. Piston valves are subject to failure this close to the compressor.
- 5 Male Tee 1/4" mpt x mpt x mpt
- 6a Ball Valve (Assembly Shut-off Valve) 1/4" fpt x fpt
Allows setting of the Pressure Relief Valve and the Bleeder Valve.
- 6b Ball Valve (Bleeder Valve) 1/4" fpt x fpt
A Bleeder Valve is required to allow the low torque compressor motors to start under load.
- 6c Ball Valve (Gauge Shut-off Valve) fpt x fpt
Gauges are subject to damage from compressor pulsation. When mounting directly to assembly a shut-off valve must be used when the gauge is not being read. Using Header Tanks is a better solution.
- 7 Connector - Tube to Female Pipe 1/8" tube x 1/4" fpt
- 8 Rubber Air Line 1/4"
- 9 90deg Elbow - Hose Barb to Male Pipe 1/4" barb x 1/4" mpt
- 10 Gauge Header Tank
Koenders EL2 compressors require approx. 800in³ of line volume to eliminate pulsation effects at the gauge. Pulsation and vibration will eventually fail most gauges within months or even weeks. Liquid gauges are also subject to the same damage. Header tanks will eliminate the problem in most cases. Koenders manufactures a suitable tank shown here.
- 11 Pressure Gauge 4" Face 0-30psi 1/4" mpt
- 13 Coupler Male Plug (M Style) 1/4" mpt
- 14 Coupler Female Body (M Style) 1/4" fpt
- 15 Coupler - Hose Barb to Male Pipe 1/4" barb x 1/4" mpt
- 16 Rubber Air Line 1/2"
- 17 Reducing Coupling 1/4" fpt x 1/2" fpt
- 18 Coupler - Poly Insert to Male Pipe 1/2" Poly Insert x 1/2" Male Pipe
- 19 Polyethylene Pipe 1/2"
Note that 1/2" polyethylene pipe is not dimensionally the same as 1/2" tubing or hose. Poly "insert" couplers are required to connect to poly pipe.
- 20 Reducing Adapter - 1/4" mpt x 1/2" fpt
- 21 Pressure Gauge 2 1/2" Face 0-30-psi Liquid Filled 1/4" mpt
Although mounting directly with liquid gauges is more convenient, pulsation and vibration from the compressor will eventually fail most gauges. A shut-off Valve that isolates the gauge when not in use eliminates pulsation damage, but not vibration. The use of a remotely mounted header tank eliminates both.
- 24 Bushing 3/8" mpt x 1/4" fpt
- 25 Bushing 3/4" mpt x 1/4" fpt
- 36 Koenders EL2 Aeration Compressor



Standard PFRA Assembly for Koenders EL2 Aeration Compressors

Drawn: J.H.Squires, Jan 12, 2000 PFRA DRAWING No. 265021 rev 1.00



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