

Air Filter Regulator Lubricators (FRL units)

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Pneumatics & Air Tools



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An FRL unit cleans, regulates and lubricates the compressed air supplied to pneumatic tools: the filter removes moisture and dirt, the regulator sets working pressure, and the lubricator adds a measured oil mist. It keeps air tools reliable and extends their life.

Key Features

- Filter, regulator and lubricator in one body
- Water separators with drain valves
- Pressure gauges on the regulator
- Oil reservoirs with sight windows
- Flow capacities matched to tool use

Typical Uses in the Workshop

- Protect air tools from moisture and dirt
- Set the working pressure for each tool
- Lubricate nailers, grinders and wrenches
- Keep spray equipment dry and clean

Safe Operation

1. Mount the FRL before the tool supply
2. Set the regulator to the tool's pressure
3. Drain the filter bowl daily
4. Top up the lubricator oil as needed
5. Check the gauge during use

SAFETY NOTES

- Use only approved compressor oil in the lubricator
- Drain the filter away from people
- Do not exceed the FRL rated pressure
- Check the bowl condition for cracks
- Depressurise the line before servicing

Maintenance & Consumables

- Drain the water separator daily
- Clean or replace the filter element
- Check the bowl seals and clamps
- Refill the lubricator on schedule
- Verify the pressure gauge accuracy

Specification & Buying Notes

Size the FRL to the air flow of the tools served. A 1/4 inch unit suits bench tools; 3/8 or 1/2 inch serves workshops. Buy with a pressure gauge and a wall bracket.