

Quick-Connect Pneumatic Fittings

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



Photo: Peter Southwood — CC0 — via Wikimedia Commons (Seatec_quick_disconnect_end_fitting_P8180016.jpg)

Quick-connect pneumatic fittings join hoses, tools and ports instantly without tools: push-in tubing fittings for small air circuits and snap-in couplers for tool hoses. They make air chains fast to build, change and service.

Key Features

- Push-in fittings for 4-10 mm tube
- Industrial quick couplers and plugs
- Brass or nickel-plated bodies
- Elbow, tee, union styles
- High flow designs

Typical Uses in the Workshop

- Build and rebuild pneumatic circuits quickly
- Connect tools to air lines
- Chain valves, cylinders and accessories
- Extend and branch air supplies

Safe Operation

1. Insert the tubing fully into the fitting
2. Pull back the release collar to remove
3. Match the coupler and plug profile
4. Push to connect - it clicks
5. Check for leaks at each joint

SAFETY NOTES

- Depressurise the line before disconnecting
- Check the fitting rating for the pressure
- Do not mix incompatible coupler profiles
- Keep fingers clear of the quick release
- Inspect fittings for wear and leaks

Maintenance & Consumables

- Clean the fittings of grit
- Check the O-rings and seals
- Replace worn couplers
- Keep a test gauge for leaks
- Store fittings sorted by type

Specification & Buying Notes

A starter cabinet of push-in fittings and a couple of industrial couplers covers the workshop. Quality nickel-plated fittings release easily; cheap ones seize.