# Tubing Compatibility Chart

Parker FluidConnectors

| Fitting Line | Copper | Aluminum | Steel | Polyethylene E | Polyethylene FRPE | Nylon N | Nylon PAT | Nylon NR | Polypropylene PP | Polyurethane U | Polyurethane HU | Polyurethane LU | Vinyl | Nylon SAE J844 | Diesel Fuel FL | GPH Hose | SAE J1402 | TFE | FEA | PFA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAE 45° Flare | ✖ | ✖ | ✖ | | | | | | | | | | | | | | | | | |
| Inverted Flare | ✖ | ✖ | ✖ | | | | | | | | | | | | | | | | | |
| Compression | ✖ | ✖ | | ✖† | ✖† | ✖† | ✖† | ✖† | ✖† | | | | | | | | | ✖† | ✖† | ✖† |
| Compress-Align | ✖ | ✖ | | ✖* | ✖* | ✖* | ✖* | ✖* | ✖* | | | | | | | | | ✖* | ✖* | ✖* |
| Metru-Lok | ✖ | ✖ | | ✖* | | ✖ | | ✖ | ✖ | | | | | | | | | | | |
| Poly-Tite® | ✖ | | | ✖ | | ✖++ | | | ✖++ | | | | ✖ | | | | | | | |
| Hi-Duty Fitting | ✖ | ✖ | ✖ | ✖* | ✖* | ✖* | ✖* | ✖* | ✖* | | | | | | | | | | | |
| Dubl-Barb® | | | | ✖ | ✖ | | | | | | | | | | | | | | | |
| Prestolok | | | | ✖ | | ✖ | | | | ✖ | ✖ | | | | | | | | | |
| Prestolok II | | | | ✖ | | ✖ | | | | ✖ | ✖ | | | | | | | | | |
| Microlok | | | | ✖ | | ✖ | | | | ✖ | ✖ | ✖ | | | | | | | | |
| Flow Controls | | | | ✖ | | ✖ | | | | | | | | | | | | | | |
| Prestomatic | | | | ✖ | | ✖ | | | | | | | | ✖ | ✖ | | | | | |
| Diesel Fuel | | | | ✖ | | ✖ | | | | | | | | ✖ | ✖ | | | | | |
| Cartridges | | | | ✖ | | ✖ | | | | | | | | ✖ | ✖ | | | | | |
| Air Brake-AB | ✖ | | | | | | | | | | | | | | | | | | | |
| Air Brake-NTA® | | | | | | ✖ | ✖ | | | | | | | ✖ | ✖ | | | | | |
| Transmission | | | | | | ✖ | | | | | | | | ✖ | | | | | | |
| Ari Brake Hose Ends | | | | | | | | | | | | | | | | ✖ | | | | |
| Vibra-Lok | ✖ | ✖ | ✖ | | | | | | | | | | | | | | | | | |
| DAT | | | | | | ✖ | ✖ | | | | | | | ✖ | ✖ | | | | | |
| Hose Barb | | | | | | | | | | | | | | | ✖** | | | | | |

Ratings are based on static pressure conditions
* Tube support is recommended
** Clamp required
++ Brass sleeve recommended
† Plastic sleeve and brass tube support is recommended

# Tube Line Fabrication Guide for Leak Free Systems

Every hydraulic, pneumatic and lubrication system requires some form of tube line fabrication and fitting installation for completion. Proper fabrication and installation are essential for the overall efficiency, leak free performance, and general appearance of any system.

Start by planning ahead. After sizing the tube lines and selecting the appropriate style of fitting, consider the following in the design of your system:

1. Accessibility of joints
2. Proper routing of lines
3. Adequate tube line supports
4. Available fabricating tools

## Routing of Lines

Routing of lines is probably the most difficult yet most significant of these system design considerations. Proper routing involves getting a connecting line from one point to another through the most logical path.

Always try to leave fitting joints as accessible as possible. Hard to reach joints are hard to assemble and tighten properly. Inaccessible joints are also more difficult and time consuming to service.

The most logical path should have the following characteristics:

- **Avoid excessive strain on joint —** A strained joint will eventually leak. (See Figures A14 through A21.)
- **Allow for expansion and contraction —** Use a “U” bend or a hose in long lines to allow for expansion and contraction. (See Figure A22.)

M