

# Useful Maintenance and Technology Reference Links

## Pneumatic Reference

- [Fluid Power World](#)
- [Pneumatic Tips](#)
- [Pneumatic Circuit Symbols Explained](#) (Automation Direct) – Directional air control valves are the building blocks of pneumatic control. Pneumatic circuit symbols representing these valves provide detailed information about the valve they represent. Symbols show the actuation methods, the number of positions, the flow paths, and the number of ports. Here is a brief breakdown of how to read a symbol.
- [Understanding Pneumatic Circuit Symbols](#) (Automation Direct) – Similar to above but different.

## Lubrication Reference

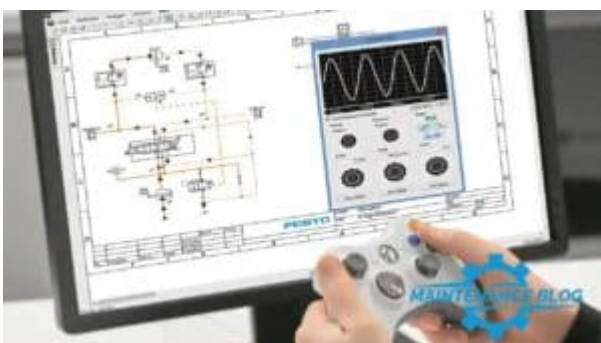
- ipsum

## Safety Reference

- [Safety Standards Update Summer 2020](#) (Automation Direct) – This is the biennial update to major changes to the American National Standards Institute or ANSI code, specifically the B11.0 dedicated to “Safety of Machinery.” Since 1922, the B11 standards for machine safety were first approved with the understanding that machinery design through setup and operations meet specific safety criteria. Overall the major changes to the ANSI code are B11.0 has been updated to B11.0-2020, and B11.19 has been updated to B11.19-2019.

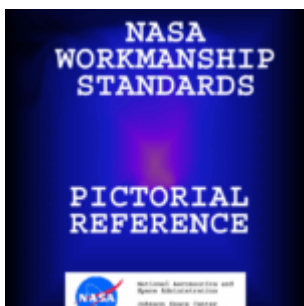
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## Educational, Documentation, Diagram, Schematic, and Training Software, Apps, and Tools



- [Camtasia](#) –
- [Festo Fluidraw](#) – Create electrical and pneumatic circuit diagrams in a quick and easy way with FluidDraw P6. The software makes it easier to document complete machines as well as the creation of simple sketches. Generate professional projects, including drawing frames and text blocks, using FluidDraw P6. To do this, make use of an extensive standard symbol library or add products directly from the integrated Festo product catalog. Identifications are assigned automatically and can be changed if needed. Product and circuit information can be reported in automatically generated lists. If you have special requirements, customize the default templates: Create individual symbols, libraries, product databases, reports, or drawing frames in a quick and easy way.
- [Festo Fluidsim](#) – FluidSIM® is the world's leading circuit diagram design and simulation program for pneumatics, hydraulics, and electronics.
- [Festo Modeling and Virtual Simulation](#) –
- [SmartDraw](#) –
- [Snagit](#) –
- [Weidmüller Configurator](#) – The Weidmüller Configurator (WMC) is a configuration tool for seamless and secure planning of electrical systems as well as simple procurement and assembly of complete solutions. Unlock your potential for automated production from paperless production all the way up to automatic manufacturing – in just one tool.

## NASA Workmanship Problems Pictorial Reference



NASA Workmanship  
Problems Pictorial  
Reference

- [NASA Workmanship Problems Pictorial Reference](#)
- [NASA Workmanship Standard Pictorial Reference](#)
- [NASA Printed Wiring Assembly Problems](#)
- [NASA Wiring & Cabling](#)
- [NASA Parts and Components](#)
- [NASA Fiber Optics](#)
- [NASA Printed Wiring Board Problems](#)