Periodic Table of Fluid Power Components

The periodic table of chemical elements is something we learn in school and carry with us throughout our lives. Drawing an analogy, LASHIP/UFSC presents the **Periodic Table of Hydraulic and Pneumatic Components**, which aims to be both educational and illustrative.

It is educational because it organizes hydraulic and pneumatic components into Blocks, Groups, and Periods, facilitating the identification of the graphic symbols required for circuit diagram design. Four macro-functions of a hydraulic or pneumatic system give rise to the **BLOCKS**. Within each block, the columns of the table correspond to the **GROUPS** of components that control a specific quantity. Moving down the rows, the number of hydraulic or pneumatic power ports increases, forming the **PERIODS**.

The allusion to the chemical periodic table and the colors used—which reference the structure of a hydraulic or pneumatic system located at the top of this table—is an attempt to popularize hydraulics and pneumatics, attract new professionals to the field, and stimulate the learning, mastery, and application of this technology which, as we know, is present in most processes and machines.

However, unlike chemical elements, hydraulic and pneumatic symbols have many variants depending on the direction of movement, control mechanisms, and the internal auxiliary functions of the components. The H&P Periodic Table contains links to commonly used symbol variants.

We hope you find it useful.

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