







<b>Medium:</b>	Diesel & Gas Turbine Publications
<b>Title:</b>	Pressure Monitoring Serie „PLUS“
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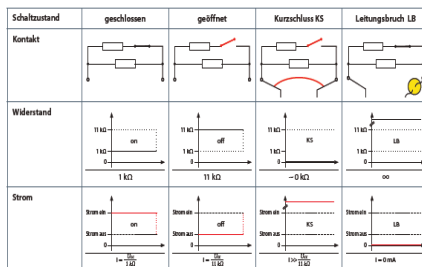
**Text: (ca. 3.000 Zeichen)**



The new so-called “PLUS”-Series represent mechanical pressure switches size hex 24 with intelligent supplementary functions.

SUCO offers the versions NC (normally closed) or NO (normally open) with **integrated connectors** like DEUTSCH 2P or 3P, AMP Superseal, Packard MetriPack 280, AMP Junior Timer, M12 x 1 and others. The electric contact will be easily reached by just putting together the integrated connectors with the counter plug. Don't be worried any longer about inconvenient cable or connection troubles! Thereby these product series are designed according to the **protection degrees IP67 (or IP6K9K)** depending on the connector.

Technical Functionality	Symbol	Application / Functionality
<b>Resistor</b>		<ul style="list-style-type: none"> <li>Additional diagnostic function (fail-safe) with short circuit and loose cable detection</li> <li>NAMUR - configuration</li> </ul>
<b>Varistor</b>		<ul style="list-style-type: none"> <li>Switch contact protection against high transient voltages</li> <li>Active reduction of EMC emissions during switching (on/off) of the pressure switch, with inductive loads, like solenoid valves, relays, motors, etc.</li> </ul>
<b>NTC-Thermistor</b>		<ul style="list-style-type: none"> <li>Cold start functionality</li> <li>switching function depends on temperature</li> </ul>
<b>PTC-Thermistor</b>		<ul style="list-style-type: none"> <li>Protection against overcurrent, like light bulbs, etc.</li> <li>Current is reduced</li> </ul>
<b>LED</b>		<ul style="list-style-type: none"> <li>Displaying the switching functionality (status) via LED for easy diagnosis.</li> </ul>
<b>Multifuse, PPTC</b>		<ul style="list-style-type: none"> <li>Protection against overcurrent (current is switched-off)</li> <li>Self-resetting fuse.</li> <li>After removing the short circuit (e.g. cooling down of the multifuse) the fuse resets itself automatically</li> </ul>



In the version with an additional resistor connection according to **NAMUR** SUCO offers a diagnostic function (fail-safe) with short-circuit and cable break detection. This version is of a special interest for safety systems as for example brake systems, hydrostatics steering systems or fire-fighting systems.

The “PLUS”-Series pressure switches are also available in a version with integrated varistor that allows limiting the flyback voltage efficiently. Flyback voltages occur, for example, by switching of solenoid valves, relays and other inductive loads. Thereby the generated overvoltage protection extends the contact lifecycle. Furthermore, an active reduction of EMI emissions will be reached by switching of the pressure switches.

Along with the actual function of pressure monitoring the next development step will be the **temperature-controlled switching**. This function can be very useful for the filter monitoring in hydraulic systems. Due to this development it is easy to avoid the incorrect switch status at low temperatures and hence high viscosity of the medium, which can prevent the operation of the fully functional equipment. Thereby the system availability can be increased noticeably.

In the future SUCO can also offer a current limitation, for example for the engine's “soft start” or for extreme light bulb loads as well as for capacitor loads. Furthermore SUCO



offers the display of the switching status due to integrated LED. This may be of a particular interest if control units are installed far away from the machines or systems.

Some of those supplementary functions can be combined within one pressure switch.

With the new series "*PLUS*" SUCO has managed to bring together in one product numerous advantages of mechanical and electronic pressure monitoring. Thereby SUCO creates a unique selling proposition and once again proves its exceptional position as one of the leading manufacturers in this area.

From: Peter Stabel (Managing Director), Marcell Kempf (Technical Director)