

# SM-970550 HIGH-PRESSURE AIR SWITCH



The **SM-970550 High-Pressure Air Switch** allows vacuum and low pressure operation to work trouble free even with a high-pressure air network or local compressor of up to 35 bar connected to our high-pressure testers. In fact, a permanent high-pressure (>10 bar) connected directly to the machine input has two issues:

- First, machine's internal vacuum generator is optimized for an input pressure of 5 to 8 bar. The higher the pressure, the higher is the degradation of its performance, resulting in a longer time to reach vacuum pressure lower than -0.5 bar. Moreover operation up to -0.75 bar cannot be guaranteed. In fact during pressure build-up, when the machine detects that pressure does not increase (decrease for a vacuum test) of an amount of at least 0.01 bar per second for a period of 5 seconds (resulting in 0.05 bar for a period of 5 seconds), the machine stops the building up process, shows the error message "E35" and starts the test at the pressure reached.
- Second, test pressure lower than +0.5 bar may not be guaranteed with this high-pressure, because the input solenoid valve cannot react quickly enough to stop input pressure, resulting in a test pressure higher than the one programmed (i.e. +0.4 bar instead of +0.25 bar).

The **High-Pressure Air Switch** connects low pressure input port to output port, allowing proper low-pressure operation, while on demand by the machine and through the control of the internal built-in solenoid valve, switches dynamically high-pressure input port to output port, allowing proper high-pressure operation.

Optimized for use with our SM-8850 High-Pressure Water-Resistance Testers series, the High-Pressure Air Switch features a low-pressure (up to 10 bar) input port with  $\varnothing$  5.5mm Quick Lock ISO 6150 B Profile female fitting, a high-pressure (up to 35 bar) input port with  $\varnothing$ 8mm Quick Lock ISO 6150 B Profile female fitting, a high-pressure (up to 35 bar) output port with  $\varnothing$ 8mm Quick Lock ISO 6150 B Profile male fitting, a control socket to drive the internal solenoid valve and a LED to indicate when high-pressure source is active. Delivery includes all required fittings, pipes (2 meters long each) and the control cable (2 meters long).

Dimensions (W, H, D): 100x78x190mm / Weight: 0.8kg / Case: die cast aluminium alloy, black powder paint.

**PLEASE CONTACT US FOR FURTHER INFORMATION**

**SWISS MADE **  
**HIGH QUALITY PRODUCTS**

ANY CHANGE RESERVED



**SIGMA ELECTRONIC SA**  
GÜTERSTRASSE 27 / P.O. BOX 1119  
CH - 2501 BIEL-BIENNE / SWITZERLAND  
TEL: +41 32 322 9177 / FAX: +41 32 323 1756  
www.sigma-electronic.com info@sigma-electronic.com

