

Intelligent on/off valves Neles SwitchGuard™



SG9000 (Offline Parameterize)

SG9000™

DTM Disconnected

Device Status Unknown

 Device Type
SG9000H
Device Revision
1

- Device Information
- Configuration
 - Assembly Related
 - Signal Modification
 - Stroke Profile Open
 - Stroke Profile Close
- Lifecycle Diagnostics
- Counter Diagnostics
- Online Diagnostics
- Advanced

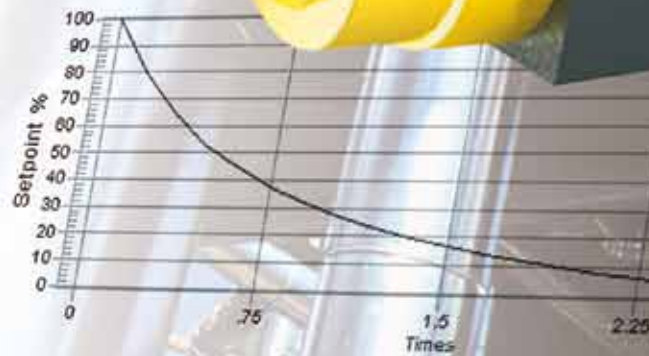
Stroke Profile Close

Stroke Time

Stroke Profile

Profile

Custom



Switching goes intelligent

In many applications, on/off valves are the most critical for process availability. However, in most of the on/off applications failures cannot be predicted. If a component in a traditional switching solution fails to perform, it can seriously affect overall process control. In the worst case, failure can cause process shutdown.

Neles SwitchGuard™ is Metso's new intelligent controller for pneumatic on/off valves. Its innovative diagnostics features enable you to predict failures in process-critical on/off applications and make it possible to check the valve condition remotely. With this unprecedented visibility of on/off performance, you can practise predictive maintenance and plan your maintenance actions well before any problems affect the process.



Stainless steel version

Neles SwitchGuard SG9300 Stainless Steel version is a new addition to the SwitchGuard family of intelligent on-off valve controllers. SG9300 is manufactured in a stainless steel housing and developed for use in corrosive environments, especially offshore applications.



Enhanced availability

- Intelligent diagnostics enable predictive on/off valve maintenance
- Design based on proved technology
- Highly reliable pneumatics unit

Designed for switching applications

- Speed control with different opening and closing profiles
- Exact valve opening and closing times
- Minimized pressure impact on piping, a.k.a. water hammering effect
- High pneumatics capacity

Economical in use

- Few components to maintain
- Less engineering work

Simple to install

- Easy to mount on any type of actuator
- Fast commissioning with autocalibration
- Suitable for:
 - single- and double acting actuators
 - small and large actuators
 - rotary and linear valves

Easy to maintain

- Modular design of maintenance components
- Replaceable pneumatics and communications
- Fewer components requiring maintenance than in a traditional instrumentation solution
- Condition monitoring of the whole on/off valve package

Neles SwitchGuard -

perfect solution for all critical and high-cycle switching applications

Neles SwitchGuard is one of the latest additions to Neles SmartSolutions product range. It can be mounted on any pneumatic on/off valve actuator in all industry areas. The benefits of SwitchGuard are best capitalized in high-cycling and process-critical applications, where excellent reliability is a must.

The high pneumatics capacity and the possibility to install limit switches within the SwitchGuard enclosure help

to reduce installation costs by eliminating the need for external limit switches and additional instrumentation components, such as volume boosters and quick exhaust valves.

Diagnostics boost maintenance

The controller's superb features and unique, embedded diagnostics guarantee high availability in on/off applications. SwitchGuard analyzes the

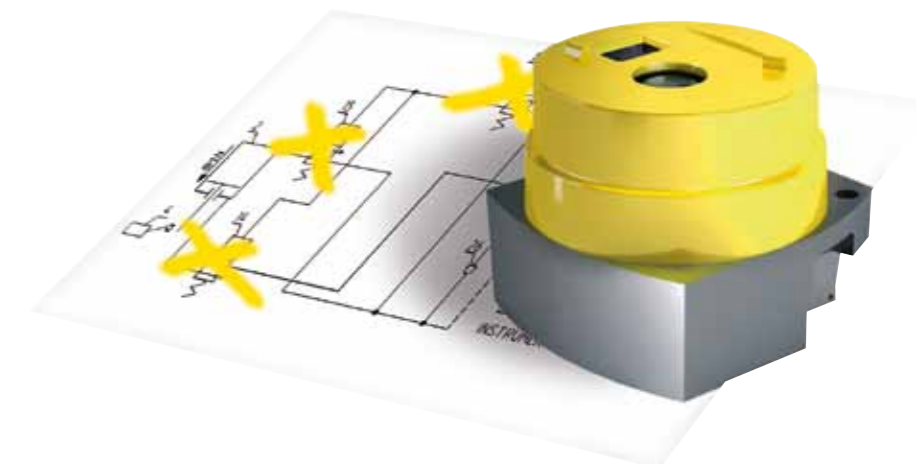
operations of an automated on/off valve online and stores this data for further use.

With open FDT/DTM communication technology and compatible software, such as Metso's Neles FieldCare field-device configuration and condition-monitoring tool, the valuable diagnostic information can be used to improve the planning of your maintenance activities. This, in turn, ensures the high process availability and high reliability in valves.

Controlled valve opening and closing

With SwitchGuard, you can use ramp profiles to control valve opening and closing. This feature is especially useful in minimizing the pressure impact on piping, a.k.a. water hammering effect.

For example, valve opening can be set to occur in 3 seconds, starting very fast and then slowing after the process medium has started to flow through the valve. The duration and speed of the closing profile can then be set independently of the opening profile.



With Neles SwitchGuard you can reduce installation costs by having fewer instrumentation components.

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