

Neles™ NDX™ intelligent valve controller

Sustainable performance for any valve or actuator

Thousands of valves are responsible for controlling and safeguarding today's process plant operations. They consume a significant amount of compressed air, an essential industrial utility. The systems supplying the air are motor-driven, making them large consumers of electricity and sources of indirect CO₂ emissions. For plants relying on equipment that has been in operation for well over 10 years, planning targeted valve positioner upgrades as part of a comprehensive lifecycle and digitalization plan can generate six-figure annual energy savings and reduce the company's carbon footprint.

Up to 90% reduction of air consumption

Designed for sustainable performance

- ✓ Reduce air consumption
- ✓ Reduce electricity consumption
- ✓ Reduce CO₂ emissions
- ✓ Reduce process variability
- ✓ Reduce process waste
- ✓ Improve yield and profitability



Valve controller energy saving calculator
Estimate your energy savings based on the type of valve controller

€ / SI units
\$/ US units

Neles NDX

 0.1 Nm³/h
Air consumption at 4 bar (58 PSI) system pressure

What is your compressed air cost? ①
0 €/Nm³
200 gCO₂eq/kWh

What are your average CO₂ emissions per kWh consumed? ②
① Conservative current global average 0.07-0.13k/Nm³
② Conservative global average based on 0.5 kWh/Nm³ of compressed air savings

Valve controller type

Other manufacturer's positioner

 0.8 Nm³/h
Air consumption at 4 bar (58 PSI) system pressure

0.70 kWh/h
Energy saving per field device

Quantity (Type in the amount of devices)

100 pieces

Energy savings results

CO₂ reduction results

61 metric tons
CO₂ reduction per year

1,680 Nm³
Air saving per day

613,200 Nm³
Air saving per year

Valve controller energy calculator

Hidden energy costs present a major opportunity for improvement. Discover your potential savings.

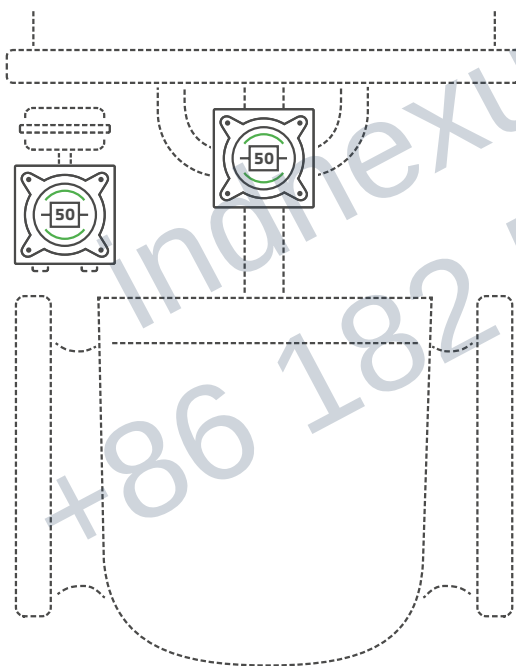


This tool uses conservative indicative values that you can replace with your plant's own valve controller quantities and other information.



One valve controller can do it all.

- ✓ All valves and actuator types
- ✓ All valve sizes
- ✓ All operating environments
- ✓ All major control systems
- ✓ Compatible parts and architecture



Smarter means more responsible

The Neles™ NDX™ intelligent valve controller is an ideal solution to help your plant reach its environmental targets. It can dramatically reduce air consumption, cut emissions, and unlock measurable savings for your plant.

You are able to collect valuable data about the valve from the NDX device, which integrates into any modern control system. The data allows discrepancies to be detected early so maintenance work is avoided, and better scheduling is planned.

A future-proof choice for any industrial process environment

- Based on decades of field-proven experience
- A comprehensive range of international certifications and approvals
- Modular design and standardized connectivity
- Easy installation and commissioning
- Simple construction with easy interface and firmware updates
- Valuable diagnostics improve troubleshooting and maintenance through informed decision-making

Reliability and ease of use

Designed for ease of use with reliable **magnetic sensing** and **potted electronics** as well as a **40 micron** air filtration rating. Experience clear commissioning with simple **intuitive touch screen** actions and easy installation with **three step mounting**. Identify trends and act on recommendations through the **advanced diagnostics**.

Learn more about the Neles NDX valve controller



For more information, please visit valmet.com/flowcontrol

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