



NSF Controls

The UK's leading solenoid and electro-mechanical specialists

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Solenoids



Rotary Solenoid

Rotary solenoids offer up to 95 degrees rotation and are available in clockwise and anti-clockwise movement. They are tested up to 25 million actuations and can provide high torque outputs - up to 13.8N.

Features:

- Endurance engineered
- Coils to suit any DC voltage
- Load take off options
- Lead wire
- Armature covers
- Tapped holes
- Return springs



Tubular Solenoid

Tubular solenoids are available in push or pull operation, offering strokes up to 25mm. They have a single hole fixing which is perfect for limited space applications. Our tubulars are best suited to longer stroke long life applications.

Features:

- DC voltage and duty cycle
- Plunger
- Application specific return springs
- Lead wire



Stepping Solenoid

Stepping solenoids have a unique tooth clutch drive with a minimum life expectancy of 10 million steps. Our stepping solenoids have high starting torque and only require a simple pulse operation.

Features:

- 12,18,24 or 36 position
- Foot, flange or stud mountings
- Bi-directional operation
- Uni-directional operation

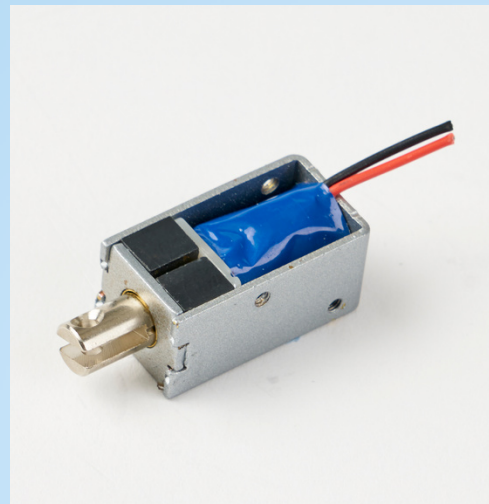


Push-Pull (Low Profile) Solenoid

Push-pull solenoids are very efficient with a rugged compact design for high-force, short-stroke applications. They have a rapid response time, offering strokes of up to 18mm with high holding forces from 7.5N to 133N. When selecting a push-pull solenoid, take into consideration heat, side load, stroke, and the operating environment, to get the maximum lifecycle from the solenoid.

Features:

- Push & pull configurations
- Plunger retention



Magnetic Latching Solenoid

Magnetic latching solenoids are power saving actuation devices combining the magnetic circuit of a conventional solenoid with a permanent magnet. Typically, the solenoid will be energised using a short pulse of energy and held in position by the permanent magnet with no additional power. A reverse polarity pulse is applied returning the solenoid to its de-energised position.

Features:

- Plunger end type
- Return springs



Open Frame Solenoid

Open frame solenoids are available in push or pull operation. We have an extensive range of sizes, starting with dimensions of 8x10x15mm. Manufactured by our partners in the Far East, these offer a cost effective solution for high volume applications.

Features:

- Plunger end types
- Customised terminations
- Return springs

Testimonials

“ProTubeVR and NSF Controls have been working together for 5 years now.

NSF Controls has been part of our story since the very beginning, when we were still prototyping our haptic technology. Today we use their reliable solenoids in our haptic modules dedicated to training simulation and virtual reality gaming.

We’re delighted to be working together, and hope this is just the beginning!”

Gauthier Carnat - COO, ProTubeVR

“When I started developing this system it soon became obvious that nobody’s standard solenoids would be good enough. To my surprise and delight, NSF Controls was willing to create almost anything I wanted. So, we set to work creating a design that suited my needs yet was not awkward for NSF Controls to manufacture. It was a joint effort, and it absolutely achieves the design objectives.”

Richard Shepherd - R Shepherd Consulting

“We are very proud that all our parts are manufactured in the UK, particularly local to us, one such product is the solenoid we use. We worked very closely with NSF as they helped us to develop a solenoid that can work within the constraints of our system. NSF has supported us at every stage and continue to do so, always looking to improve and provide us with the best possible product.”

Jonathan Bond - Managing Director, Base-Flow

“We’ve always had a very pleasant relationship with NSF, with them being incredibly efficient when identifying parts and quoting. They even delivered before the quoted lead time. With everything delivered safe and sound we were able to forward the parts to Turkey to enable our ride to continue providing fun and thrills to park guests.”

Tracy Challis - Service Coordinator, Simworx

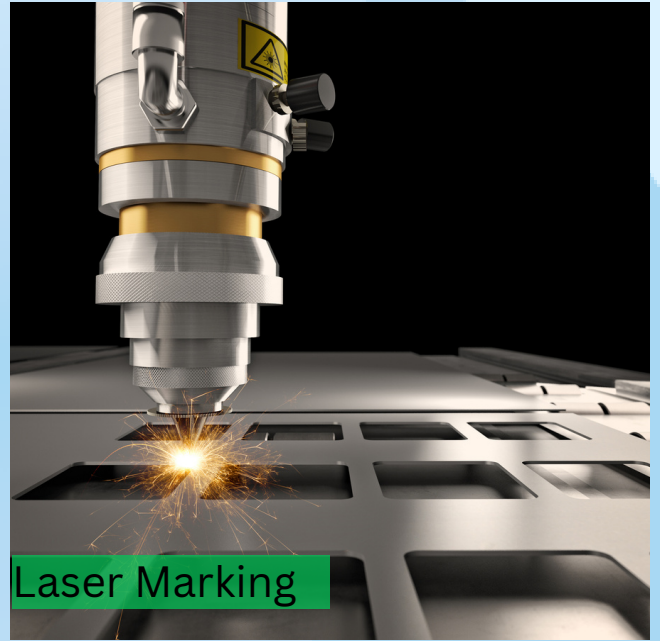
“Working with a UK based manufacturer for our solenoid supply has allowed us to have a consultative relationship with a supplier to ensure that we can obtain the ideal parts for our equipment and to help fill gaps in our knowledge with NSF’s expertise.”

Neil Benn - Managing Director, Customer Since 2018

Applications



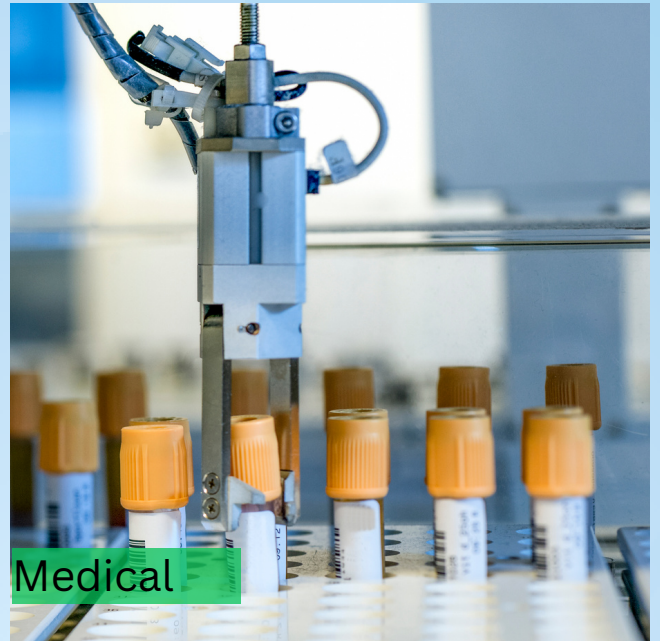
Drones



Laser Marking



Industrial Automation



Medical



Security



Aerospace & Defence

Electro-Mechanical Assembly

At NSF, our expertise goes beyond crafting high-quality solenoids, we excel in assembly work. If you're grappling with in-house sub-assembly challenges, whether it's a combination of NSF and your products or exclusively yours, let's explore how we can streamline your processes.

We have produced over 15 million solenoid valve assemblies, over 13 years of the product life cycle, with no failures in the field. Our integrated machine shop and multi skilled workers ensure reliable and high-quality products are made right here in the UK.

Our mechanical workshop includes:

- 3D printing
- CNC machining
- Injection moulding
- Tool making
- Coil winding
- Power pressing
- Refinement machinery
- Wire erosion
- Build to print



CNC Machine

Company

Based in Keighley, West Yorkshire since 1946 we are the UK's leading specialist in the design and manufacturing of solenoids, switches, and electro-mechanical services.

NSF Controls produces over a million components per annum, including custom piece parts and sub-assemblies.

We have a vast standard range of products, and as a result of years of expertise in manufacturing, we can create custom solutions for your specific application needs.

Our integrated manufacturing facilities, procurement team, and engineering experts, are all based at one site ensuring an efficient process from design concept to end assembly, with exceptional customer service.

We offer consistent high quality manufacturing standards to a wide range of industries across the globe. NSF continues to apply its central principles of reliability and superior quality throughout production processes, making it the world class manufacturer it is today.

NSF Controls is ISO 9001 and ISO 14001 accredited. We are committed to producing high-quality products and aim to continuously reduce any impact we may have on the environment.



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