WDS Components Help Desk

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Fixed Force Gas Struts

2026-05-21 - Mark Moody - Sales and Marketing Director - New Products

Fixed Force Precisely Calibrated

WDS Components Ltd is pleased to announce the launch of a new, comprehensive range of fixed force gas struts. These struts are factory set at pre-determined pressures, meaning the output force is constant and precisely calibrated to suit specific applications.

These gas struts are manufactured using robust materials and sealed for maintenance-free operation. They come in a wide range of force ratings, stroke lengths, and sizes, allowing customers to choose the perfect match for equipment or design requirements.

Fixed force gas struts are especially suited to repeat-use, high-volume, or production-line environments where repeatability is crucial.

What Are Fixed Force Gas Struts?

Fixed force gas struts are factory-pressurised mechanical devices designed to provide controlled lifting, lowering, and/or counterbalancing of panels, lids, hatches, or other moving components. Each strut is filled with gas to a predetermined pressure: this makes fixed force gas struts ideal for scenarios where repeatable, consistent motion is required.

WDS fixed force gas struts are available in a variety of end fittings including angle joints, brackets, clevis fork & eyelet types. They are manufactured from steel with powder coated black bodies and nitride hardening rods.

By eliminating the need for adjustment, these struts reduce installation complexity and improve process efficiency, particularly in production lines and high-volume environments where reliability and repeatability are essential.

“For many years, our adjustable force struts have been the go-to solution for customers needing flexibility” explained Sam Wilkinson, Technical Manager at WDS. “However, we’ve consistently heard from customers that when projects require struts at scale, reliability and simplicity become even more important. That’s why we’ve developed our new range of pre-pressurised fixed force struts: to give customers a straightforward, dependable option that saves time in production. For example, one of our fabricator customers fits two struts into every HVAC assembly they produce. With fixed force struts, they can order in volume knowing each unit will perform consistently without adjustment, which streamlines their process and improves efficiency."

Application Uses Of Fixed Force Gas Struts

Fixed force gas struts are widely used across a variety of industries:

Automotive:

Smooth lifting and controlled holding of bonnets, boots, and tailgates.

Industrial Machinery

: Safe and efficient operation of access panels, conveyor system covers, and machine guards.

Furniture and Enclosures:

Soft, controlled opening of hinged lids, cabinets, and hatches.

Medical and Laboratory Equipment:

Reliable support for height adjustable components, ensuring stability and preventing drift.

Aerospace:

Accessibility solutions for critical panels and hatches.

Fixed force gas struts are ideal for OEMs, distributors, and end users looking to enhance performance, safety, and user experience in their designs.