



HORIZON

GAS SPRING

BUYER CATALOG / 2026

Gas springs. Clearly specified.

Products, connections and application guidance
for distributors, equipment builders and OEM buyers.



VEHICLES

FURNITURE

EQUIPMENT

Your part number. Your dimensions. Your quotation.

horizongasspring.com



START HERE

Find the right function.

Choose the motion first. Then match the application, dimensions and end connections.

01 / LIFT**Compression gas springs**

Outward force to assist lifting and support lids, hatches and covers.

02 / POSITION**Lockable gas springs**

Release to adjust; close the control to hold the specified position.

03 / PULL**Traction gas springs**

Pulling force toward retraction for mechanisms that need tension assistance.

04 / SEATING**Chair gas lifts**

Dedicated height-adjustment units. Match the column, taper and release arrangement.

Configuration options Coated or stainless-steel configurations, end fittings and release controls are specified with the required function. Appearance alone does not identify the internal design.

GO STRAIGHT TO YOUR REQUIREMENT

Vehicle applications**03****Furniture applications****04****Industrial and equipment applications****05****Reference sizes and connections****06****Measurement, structure and RFQ****08**



APPLICATION DIRECTORY

Lift supports for vehicle supply.

Hoods, liftgates and equipment access across passenger and commercial vehicles.

01 / VEHICLES**Cars, SUVs & vans**

Hood, liftgate, trunk lid and opening rear glass. Match year, body style and position.

02 / PICKUP**Caps & bed covers**

Cap rear glass, hard tonneau cover, toolbox and service-body compartments.

03 / RV & TRAILERS**Camping & travel**

Storage hatches, bed lifts, gas-bottle lids and gas-assisted pop-top structures.

04 / COMMERCIAL**Trucks, buses & service**

Luggage doors, engine covers, battery access and equipment compartments.

PUBLISHED APPLICATION EXAMPLES

Vehicle	Model years	Position	StrongArm ref.
Ford F-150	2009-2014	Hood	E6484
Toyota Camry	2012-2017	Hood	C6757
Honda CR-V	2007-2011	Liftgate	C6179

Source: StrongArm SAA_102018 application guide, pp. 16, 19 and 38.

These examples show how vehicle references can identify a requirement. Pickup caps, tonneau covers and RV equipment also need the accessory reference and mounting details.

Reference brands identify published applications; see reference note on page 12.



APPLICATION DIRECTORY

Built into everyday movement.

Support opening, lifting and adjustment across furniture and workspaces.

01 Cabinets & storage

Upward-opening cabinet doors, chests, storage benches and box lids.

02 Beds & foldaway furniture

Storage-bed bases, wall beds and folding mechanisms using gas assistance.

03 Seating

Chair gas lifts, adjustable backrests, headrests and legrests.

04 Tables & office accessories

Gas-assisted worktops, side tables, lift-top tables and monitor arms.



Lockable gas spring
with cable release

PUBLISHED CABINET-FLAP REFERENCES

SUSPA S01625513**80 N**Extended length: **244 +/- 2 mm**Maximum stroke: **85 mm**Flap W x H: **450 x 300-350 mm**Flap mass: **1.6-1.8 kg**Gas springs per flap: **1****SUSPA S01625514****100 N**Extended length: **244 +/- 2 mm**Maximum stroke: **85 mm**Flap W x H: **600 x 501-550 mm**Flap mass: **3.5-3.9 kg**Gas springs per flap: **2**

Source conditions: 18 mm MDF/chipboard, C7/C9 attachments and the source mounting arrangement. Each force, flap size, mass and spring quantity belong together.

Source: SUSPA furniture gas spring program, MDF flaps, p. 1.

APPLICATION DIRECTORY

A clear fit for the equipment.

Match function and connection to the installation, not just to a similar-looking part.

01 Industrial machines

Machine guards, protective covers and maintenance hatches.

02 Construction & agriculture

Engine covers, cab doors/windows and service access.

03 Forklifts & handling

Battery covers, engine access and adjustable control arrangements.

04 Specialist applications

Marine hatches, medical/rehab adjustment, skylights and display covers.



Storage lid support.
Installation example.

PUBLISHED AGRICULTURAL REFERENCES

Equipment brand	Position	OE reference	Force
John Deere	Cab door	AL110629	250 N
John Deere	Rear window	AL114803	130 N
New Holland	Hood	47125540	410 N

Source: Stabilus agriculture specification guide, 2021 edition, pp. 1-2.

Published OE references identify applications. Final dimensions and connections are matched per item.



SIZE REFERENCE

Reference sizes at a glance.

Seven size and force combinations from Horizon's reference range. Final ordering specifications are confirmed for each item.

Reference length mm	Stroke mm	Typical force N	Tube / rod diameter mm
200	60	100-500	15/6 or 18/8
250	85	50-600	15/6 or 18/8
280	100	90-1000	18/8 or 22/10
300	110	100-1200	18/8 or 22/10
400	160	150-600	18/8 or 22/10
500	200	200-700	18/8 or 22/10
600	260	400-900	22/10 or 25/12

Reference combinations, not a stock list. The table does not define the length datum; confirm the assembly length and selected end fittings on the agreed drawing.

USE THE SAME UNITS THROUGHOUT YOUR RFQ**1 inch = 25.4 mm****1 lbf = 4.44822 N**

Provide force and its measurement condition. A force marking is not the supported panel weight.

**END FITTINGS & BRACKETS**

Choose the connection.

Use the illustration ID when discussing a shape. Confirm the thread, hole/ball size, width and mounting offset.

**01** Bracket + ball joint**02** Bracket + ball joint**03** Ball socket + stud**04** Clevis ends**05** Clevis ends**06** Eye ends**07** Bearing eyes**08** Threaded clevis ends**09** Threaded eye ends**10** Bracket-mounted fitting**11** Pivoting brackets**12** Angle brackets**13** Pivoting brackets**14** Ball sockets**15** Bracket + ball joint

Illustration IDs 01-15 are catalog references, not ordering part numbers. Match both ends independently; finishes in photos do not establish material grade.

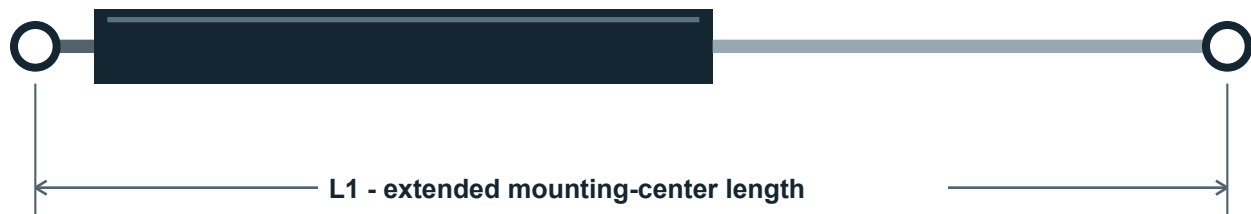


DIMENSION GUIDE

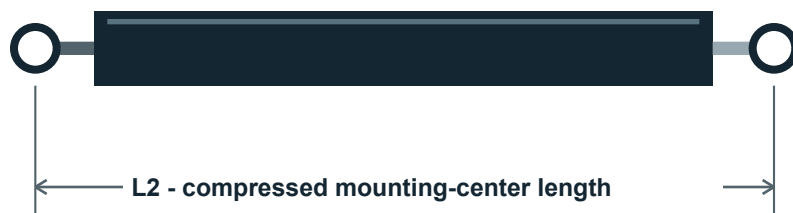
Measure the complete assembly.

Use the same mounting reference centers in both positions. State whether end fittings are included.

FULLY EXTENDED



FULLY COMPRESSED



STROKE = L1 - L2

A short rod neck or end fitting may remain outside the tube at full compression.

ALSO RECORD

Rod and tube

Rod diameter, tube diameter and available clearance.

Both connections

Thread, eye/ball/pin size, width, center offset and orientation.

Schematic only. Final geometry, travel limits and measurement datums belong on the agreed drawing. Do not open, heat or modify a pressurized gas spring.

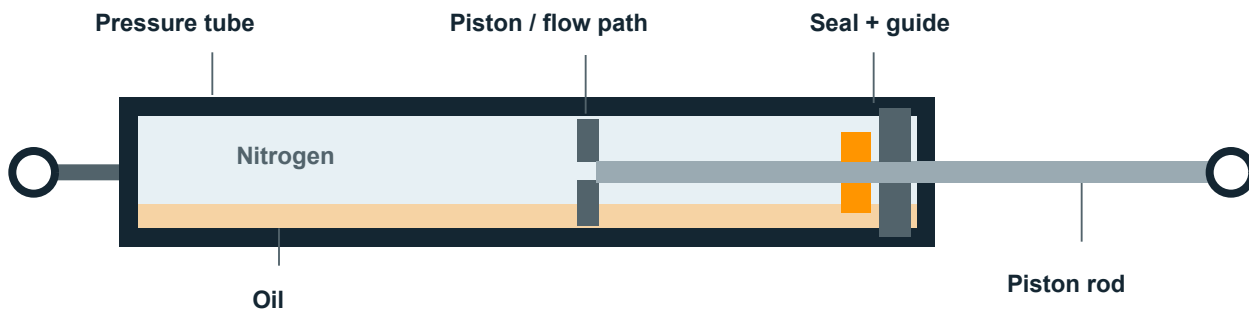


TECHNICAL OVERVIEW

Inside the movement.

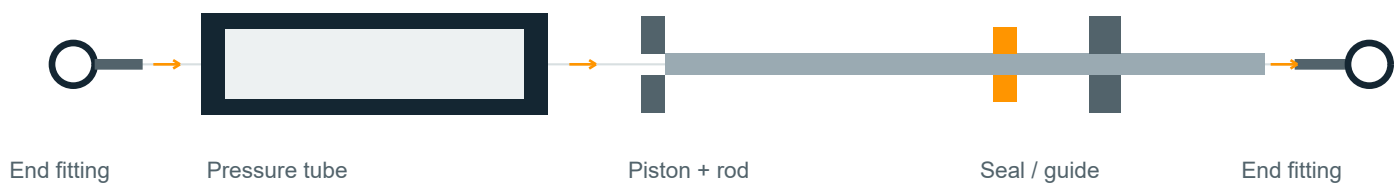
A conventional compression gas spring, shown as an educational concept.

SECTION CONCEPT



Pressurized nitrogen provides the outward force. The seal and guide support rod movement; the piston flow path influences motion. Oil supports lubrication and, in suitable designs, end cushioning.

COMPONENT ARRANGEMENT

**Concept, not a production drawing.**

The actual piston, valve, seal and oil arrangement varies by design. This diagram is not a disassembly or service instruction.



CONTROLS & INTERFACES

Details that define the assembly.

Identify the release control, both ends and the required behavior before matching a unit.



LOCKABLE ASSEMBLY

Release.
Adjust.
Hold.

Cable-operated release shown. Confirm control travel, connection and locking behavior.



Release interface

Match pin/control geometry and access.



Mounting interface

Match hole, width, thread and center position.



Articulating connection

Match ball/socket and retention arrangement.

Extension force and locking load are separate specifications. Identify elastic or rigid locking and the required load direction.

**FROM SPECIFICATION TO SHIPMENT**

Assembly. Inspection. Packaging.

Discuss the checks, identification and packaging that your order requires.



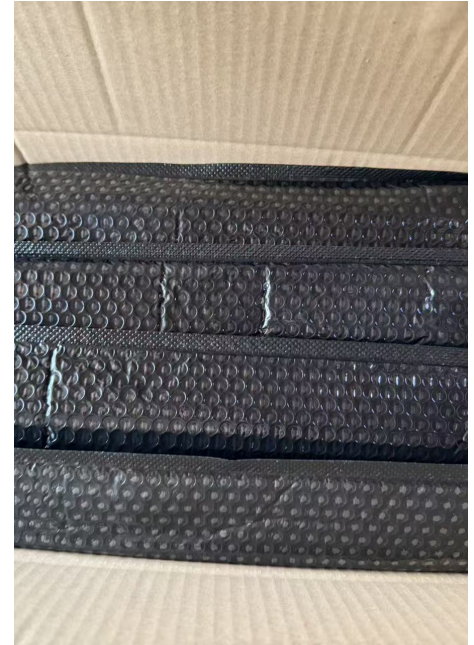
Assembly

Component assembly and handling.



Inspection

Force and stroke requirements.



Protection

Individual protection and carton packing.

AGREE BEFORE RELEASE

Drawing / reference part and revision

Force specification and agreed inspection conditions

Quantity, identification and packaging

Sample approval, delivery terms and shipment requirements

Process photographs illustrate supplied production and packing materials. Order-specific test records and acceptance requirements are confirmed with the quotation.

[SEND A CLEAR RFQ](#)

Your next quotation starts here.

Send a known part number, drawing or sample photos with quantities. We can help confirm missing details.

Tianjin Horizon Machinery Trading Co., Ltd.

sales@horizongasspring.com

www.horizongasspring.com

01 Part or application

Existing part / OE / equipment reference, or a drawing.

02 Dimensions

Extended and compressed length, stroke, tube/rod diameter.

03 Force and function

Force marking and units; lift, lock, pull or chair adjustment.

04 Connections

Both ends: photos, thread, hole/ball size, width and offset.

05 Order details

Quantity by item, destination and packaging requirements.

Many items? Send one spreadsheet with one row per part, plus labeled photos or drawings. Keep the same reference number on every attachment.

Reference note: third-party names/numbers identify published applications and specifications. They are not Horizon stock codes, authorized-brand claims or a guarantee of interchangeability.