

ANTI-VIBRATION

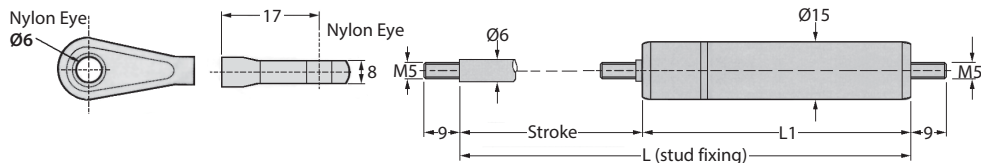
GA6-A
GA8-A

Adjustable Gas Springs

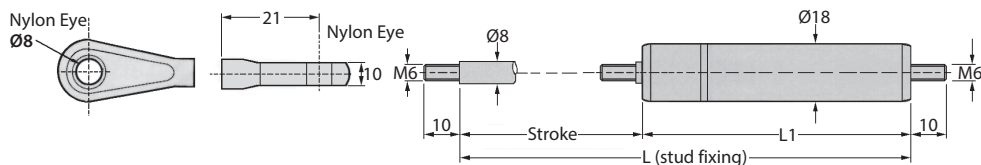
Sizes 6 & 8 : 50 - 650N, 60 - 250mm Stroke



50-400N



100-650N



Discounts: 10+ -5% 25+ -10% 50+ -15% 100+ -20%

Part Number	Extended Length (stud fixing) L	Stroke	Tube Length L1	Oil Zone Length	Set Rate (Newtons)	Price Each 1 - 9
SIZE 6 - ADJUSTABLE						
GA6060A	160	60	95	20	50 - 400	£52.21
GA6100A	240	100	135	20	50 - 400	£52.51
GA6150A	340	150	185	20	50 - 400	£52.51
GA6200A	440	200	235	20	50 - 400	£53.82
SIZE 8 - ADJUSTABLE						
GA8100A	264	100	159	30	100 - 650	£57.11
GA8150A	364	150	209	30	100 - 650	£57.97
GA8200A	464	200	259	30	100 - 650	£59.00
GA8250A	564	250	309	30	100 - 650	£59.86

Material

Body: Semi Matt Black Epoxy Paint. Finish: Black.

Other Info.

Adjusted by grubscrew. Once discharged, the gas is not refillable. Supplied filled to maximum force.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives



sales@ondrives.com



www.ondrives.com

ANTI-VIBRATION

Adjustable Gas Springs

Sizes 6 & 8

What are the applications for gas springs?

The gas spring's most popular use is as support on a horizontally hinged door. Gas springs can also be used as direct support for sliding weights, for tensioning and also for damping. Ideal applications include machine guards, safety covers, access panels, hood supports, fire safety doors and smoke vents.

Life, Temperature and Finish.

What is the life of a gas spring?

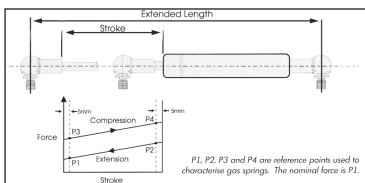
Being self-contained units they require no power source or maintenance, gas springs can provide tens of thousands of operating cycles, when correctly fitted.

What is the effect of temperature?

The force in a gas spring will vary with temperature. Low temperatures will reduce the spring force from the nominal value and high temperatures will increase it. The nominal force is given at 20°C with a force varying by approximately 0.3% per °C. Additionally the viscosity of the oil used in gas springs varies with temperature, resulting in changes in performance. The temperature limits of standard gas springs are as follows:

Storage +100°C to -40°C. In use +80°C to -20°C.

Below is a typical graph showing stroke and force. Please note that gas springs have a high initial force which increases slightly as they are compressed.



The upper line on the graph shows the characteristic as the gas spring is compressed, the lower line shows the characteristic in extension. The difference is the result of friction, which depends on the size and force of the gas spring.

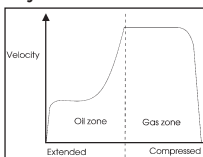
The compressed force is normally 30-40% higher than the force extension, but this does vary according to dimensions, construction and oil damping of the gas spring in question.

The ratio of compression force to extended force for standard size springs is: Model 6-15 - Ratio 1.2, Model 8-18 - Ratio 1.3.

How is a gas spring dampened?

There are two different ways of dampening the extension of a gas spring. Firstly, as the gas spring begins to extend it will be damped by the actual movement of the gas charge through the controlling orifice in the piston. Secondly, during the final part of the extension stroke the piston passes through the oil zone, decelerating the movement vastly and preventing shock loads being generated. The length of this oil zone for standard gas springs is given below.

Model 6-15
Length 20mm,
Model 8-18
Length 30mm.



To enable the oil damping to operate effectively, the gas spring must be mounted rod down within 60° to the vertical.

Gas damping characteristics in general cannot be altered. Standard gas springs are undamped in compression.

Gas springs can be provided with oil damping throughout a longer portion of the stroke. Please contact us for details.

How to select a gas spring

The easiest way to select a gas spring is to follow this simple seven step by step approach. It involves a small amount of trial and error in establishing the correct mounting position.

Selection Steps

1. Decide which of the two examples most closely fits your needs.

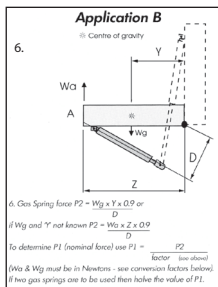
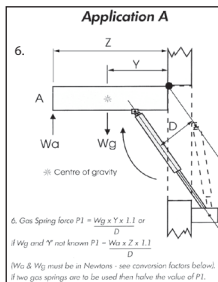
Application A or B below.

2. Make an initial selection of a gas spring using a stroke which is about 20-25% of the dimension 'Z'. The following panel weight information is a general guide to getting the right gas spring size and model dimension.

Approx. Panel Weight	Gas Spring Model
upto 10kg	6-15 (for appl. B use factor 1.2)
10 - 40kg	8-18 (for appl. B use factor 1.3)

3. Record the extended and compressed lengths of the selected gas spring and ensure that it will fit between the fixing points when in the open and closed position. If it does not fit exactly move the gas spring towards or away from the hinge until the desired fit is found. This should be done on a scaled drawing.

4. The panel weight (Wg) and position of its centre of gravity (Y) must then be calculated or measured. If you do not know this, weigh the panel at position A (Wa) and measure distance 'Z'.



5. Measure the distance 'D' on your scale drawing. Now you can calculate the force required.

7. If the force value calculated is too high for the size of the gas spring selected, then take the next larger diameter gas spring or use a larger diameter gas spring or use a longer stroke and repeat steps 3 to 6 above moving the fixing points to suit the new gas spring. If the force value is too low then select the next smaller diameter or use a shorter stroke and repeat steps 3 to 6 above moving the fixing points to suit the new gas spring.

Note:

This is a simplified procedure. Other geometries, characteristics or extremes of sizes and weight will not work with this method.

Please contact us in such cases.

Conversion factors:

Newtons (N) = kilograms (kg) x 9.81 (or pounds (lb) x 4.45).



+44 (0) 1246 455500



+44 (0) 1246 455522

ondrives

<https://amironic.co.il/>



sales@ondrives.com



www.ondrives.com

Product information updated 12/2014. Prices are subject to change. Please contact us for the latest prices and availability.

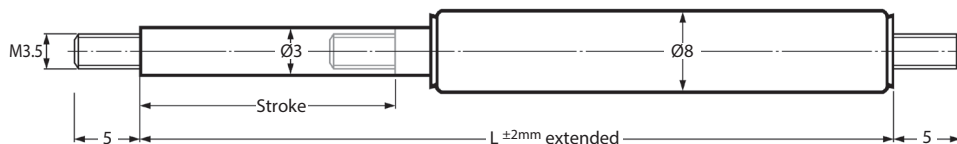
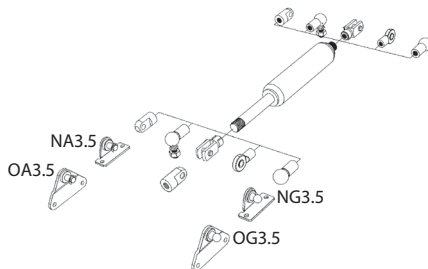
ANTI-VIBRATION TECHNICAL

ANTI-VIBRATION

GSA8-A

Adjustable Gas Springs

Steel: 10N - 100N, 20 - 80mm Stroke : Push Type



Stud Thread

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£23.53
Fixed Eye (370N)	£7.17
Swivel Eye (370N)	£P.O.A
Clevis Fork (370N)	£P.O.A
Angle Ball Joint (370N)	£P.O.A
Ball Socket (370N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed Eyes (180N):	NA3.5	£7.98
For Fixed Eyes (180N):	OA3.5	£9.25
For Ball Sockets (180N):	NG3.5	£P.O.A
For Ball Sockets (180N):	OG3.5	£P.O.A

See Technical for dimensions of mounting brackets.

Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA8-20A	20	72	0.01	£60.66
GSA8-30A	30	92	0.02	£60.66
GSA8-40A	40	112	0.02	£60.66
GSA8-50A	50	132	0.02	£60.66
GSA8-60A	60	152	0.02	£62.68
GSA8-80A	80	192	0.03	£64.64

Material

Piston Rod: 303 Stainless Steel. **Body:** Black coated Steel. **End Fittings & Mounting Brackets:** Zinc plated Steel. **Operating Fluid:** Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. **Progression:** Approx. 28%, F₂ max. 130N. **End Position Damping Length:** Approx. 5mm.

Available Force Range F₁ at 20°C: 10N to 100N (up to 130N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, extended length damping, special force curves and special lengths, P.O.A. Rod shrouds available, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards.

Gas Adjustment Knob: Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

Gas springs are self-contained and maintenance free.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives



sales@ondrives.com

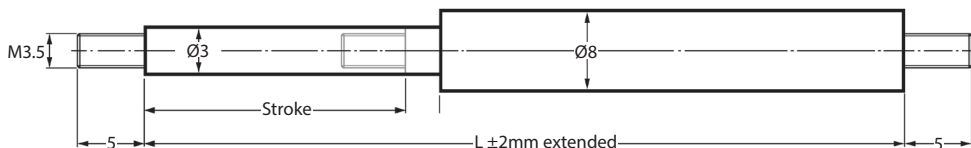
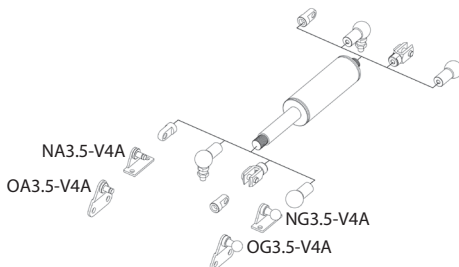


www.ondrives.com

ANTI-VIBRATION

Adjustable Gas Springs

Stainless Steel : 25N - 100N, 20 - 80mm Stroke : Push Type

GSA8-V4A

Stud Thread

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£23.53
Fixed Eye (370N)	£P.O.A
Swivel Eye (370N)	£P.O.A
Clevis Fork (370N)	£P.O.A
Angle Ball Joint (370N)	£P.O.A
Ball Socket (370N)	£P.O.A

Rod shrouds £P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed Eyes (180N):	NA3.5-4VA	£P.O.A
For Fixed Eyes (180N):	OA3.5-4VA	£P.O.A
For Ball Sockets (180N):	NG3.5-4VA	£P.O.A
For Ball Sockets (180N):	OG3.5-4VA	£P.O.A

See Technical for dimensions of mounting brackets.

Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Price Each 1 - 9
GSA8-20V4A	20	72	£P.O.A
GSA8-30V4A	30	92	£P.O.A
GSA8-40V4A	40	112	£P.O.A
GSA8-50V4A	50	132	£P.O.A
GSA8-60V4A	60	152	£P.O.A
GSA8-80V4A	80	192	£P.O.A

Material

Piston Rod: 316L Stainless Steel. **Body:** 316Ti Stainless Steel. **End Fittings & Mounting Brackets:** 316Ti Stainless Steel **Operating Fluid:** Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. **Progression:** Approx. 27%, F₂ max. 130N. **End Position Damping Length:** Approx. 5mm. **Available Force Range F₁ at 20°C:** 25N to 100N (up to 130N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, extended length damping, special force curves and special end fittings, P.O.A. Rod shrouds available, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards.

Gas Adjustment Knob: Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

Gas springs are self-contained and maintenance free.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives<https://amironic.co.il/>

sales@ondrives.com



www.ondrives.com

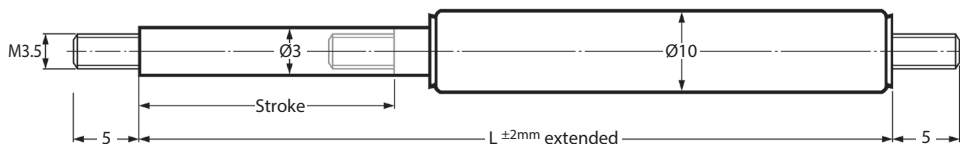
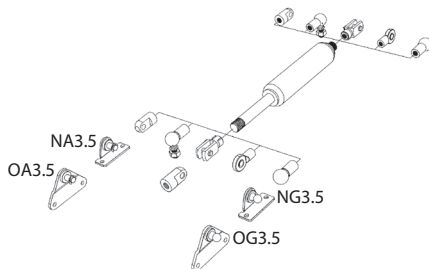
Product information updated 12/2023. Please visit our website for the latest prices and availability.

ANTI-VIBRATION

GSA10-A

Adjustable Gas Springs

Steel : 10N - 100N, 20 - 80mm Stroke : Push Type



Stud Thread

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£23.53
Fixed Eye (370N)	£7.17
Swivel Eye (370N)	£P.O.A
Clevis Fork (370N)	£P.O.A
Angle Ball Joint (370N)	£P.O.A
Ball Socket (370N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed Eyes (180N):	NA3.5	£7.98
For Fixed Eyes (180N):	OA3.5	£9.25
For Ball Sockets (180N):	NG3.5	£P.O.A
For Ball Sockets (180N):	OG3.5	£P.O.A

See Technical for dimensions of mounting brackets.

Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA10-20A	20	72	0.02	£60.66
GSA10-30A	30	92	0.02	£60.66
GSA10-40A	40	112	0.02	£60.66
GSA10-50A	50	132	0.02	£60.66
GSA10-60A	60	152	0.02	£62.68
GSA10-80A	80	192	0.03	£64.64

Material

Piston Rod: 303 Stainless Steel. Body: Black coated Steel. End Fittings & Mounting Brackets: Zinc plated Steel. Operating Fluid: Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. Progression: Approx. 20%, F₂ max. 120N. End Position Damping Length: Approx. 5mm.Available Force Range F₁ at 20°C: 10N to 100N (up to 120N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, extended length damping, special force curves and special lengths, P.O.A. Rod shrouds available, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards.

Gas Adjustment Knob: Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

Gas springs are self-contained and maintenance free.



+44 (0)1246 455500



+44 (0)1246 455522



sales@ondrives.com



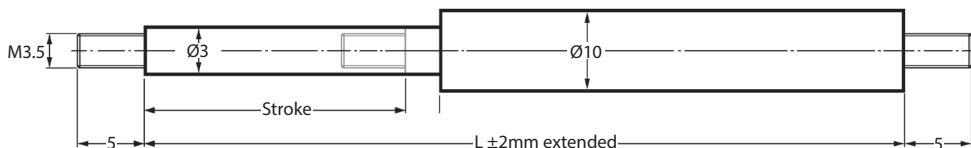
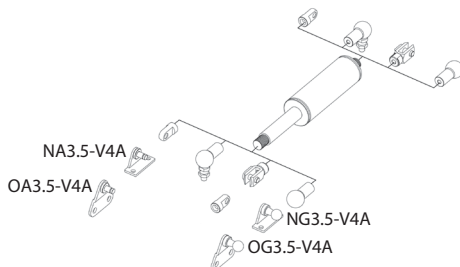
www.ondrives.com

ANTI-VIBRATION

Adjustable Gas Springs

Stainless Steel : 30N - 100N, 20 - 80mm Stroke : Push Type

GSA10-V4A



Stud Thread

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£23.53
Fixed Eye (370N)	£P.O.A
Swivel Eye (370N)	£P.O.A
Clevis Fork (370N)	£P.O.A
Angle Ball Joint (370N)	£P.O.A
Ball Socket (370N)	£P.O.A

Rod shrouds £P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed Eyes (180N):	NA3.5-4VA	£P.O.A
For Fixed Eyes (180N):	OA3.5-4VA	£P.O.A
For Ball Sockets (180N):	NG3.5-4VA	£P.O.A
For Ball Sockets (180N):	OG3.5-4VA	£P.O.A

See Technical for dimensions of mounting brackets.

Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Price Each 1 - 9
GSA10-20V4A	20	72	£P.O.A
GSA10-30V4A	30	92	£P.O.A
GSA10-40V4A	40	112	£P.O.A
GSA10-50V4A	50	132	£P.O.A
GSA10-60V4A	60	152	£P.O.A
GSA10-80V4A	80	192	£P.O.A

Material

Piston Rod: 316L Stainless Steel. Body: 316Ti Stainless Steel. End Fittings & Mounting Brackets: 316Ti Stainless Steel. Operating Fluid: Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. Progression: Approx. 12%, F₂ max. 115N. End Position Damping Length: Approx. 5mm. Available Force Range F₁ at 20°C: 30N to 100N (up to 115N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, extended length damping, special force curves and special end fittings, P.O.A. Rod shrouds available, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards.

Gas Adjustment Knob: Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

Gas springs are self-contained and maintenance free.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives

<https://amironic.co.il/>



sales@ondrives.com



www.ondrives.com

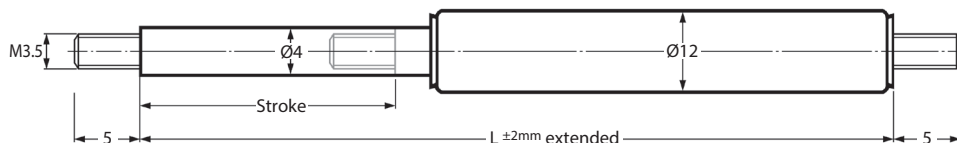
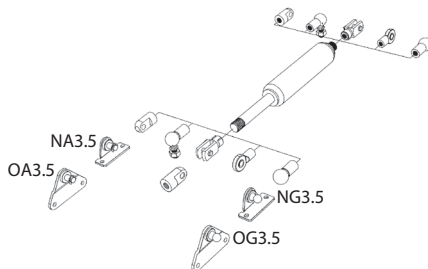
Product information updated 11/2023. Please visit our website for the latest prices and availability.

ANTI-VIBRATION

GSA12-A

Adjustable Gas Springs

Steel : 10N - 180N, 20 - 150mm Stroke : Push Type



Stud Thread

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£23.53
Fixed Eye (370N)	£7.17
Swivel Eye (370N)	£P.O.A
Clevis Fork (370N)	£P.O.A
Angle Ball Joint (370N)	£P.O.A
Ball Socket (370N)	£P.O.A
Rod shrouds	£P.O.A

Optional Mounting Brackets

For Fixed Eyes (180N):	NA3.5	£7.98
For Fixed Eyes (180N):	OA3.5	£9.25
For Ball Sockets (180N):	NG3.5	£P.O.A
For Ball Sockets (180N):	OG3.5	£P.O.A

See Technical for dimensions of mounting brackets.

See Technical for dimensions of optional end fittings.

Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Max F ₁ N	Mass Kg	Price Each 1 - 9
GSA12-20A	20	72	180	0.03	£57.06
GSA12-30A	30	92	180	0.02	£57.07
GSA12-40A	40	112	180	0.04	£57.06
GSA12-50A	50	132	180	0.04	£57.06
GSA12-60A	60	152	180	0.04	£57.85
GSA12-80A	80	192	150	0.05	£59.50
GSA12-100A	100	232	150	0.06	£60.10
GSA12-120A	120	272	120	0.06	£61.02
GSA12-150A	150	332	100	0.08	£62.67

Material

Piston Rod: 303 Stainless Steel. **Body:** Black coated Steel. **End Fittings & Mounting Brackets:** Zinc plated Steel. **Operating Fluid:** Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. **Progression:** Approx. 25%, F₂ max. 225N. **End Position Damping Length:** Approx. 5mm.

Available Force Range F₁ at 20°C: 10N to 180N (up to 225N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, extended length damping, special force curves and special lengths, P.O.A. Rod shrouds available, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards.

Gas Adjustment Knob: Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

Gas springs are self-contained and maintenance free.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives



sales@ondrives.com



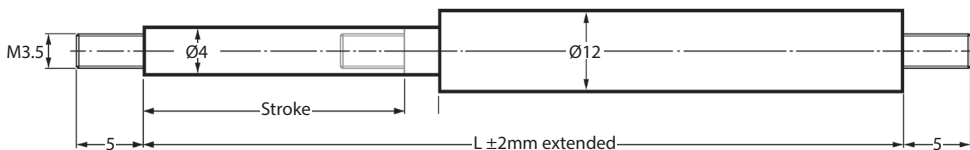
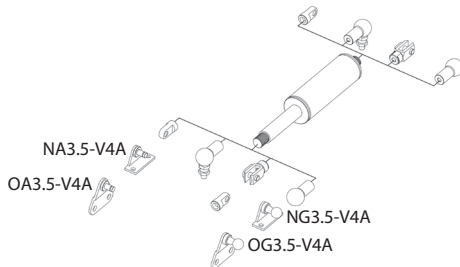
www.ondrives.com

ANTI-VIBRATION

GSA12-V4A

Adjustable Gas Springs

Stainless Steel : 25N - 200N, 20 - 150mm Stroke : Push Type

**Stud Thread**

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£23.53
Fixed Eye (370N)	£P.O.A
Swivel Eye (370N)	£P.O.A
Clevis Fork (370N)	£P.O.A
Angle Ball Joint (370N)	£P.O.A
Ball Socket (370N)	£P.O.A

Optional Mounting Brackets

For Fixed Eyes (180N):	NA3.5-4VA	£P.O.A
For Fixed Eyes (180N):	OA3.5-4VA	£P.O.A
For Ball Sockets (180N):	NG3.5-4VA	£P.O.A
For Ball Sockets (180N):	OG3.5-4VA	£P.O.A

See Technical for dimensions of mounting brackets.

Rod shrouds £P.O.A

See Technical for dimensions of optional end fittings.

Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
---------------------------	----------	----------	-----------

Part Number	Stroke	L	Price Each 1 - 9
GSA12-20V4A	20	72	£P.O.A
GSA12-30V4A	30	92	£P.O.A
GSA12-40V4A	40	112	£P.O.A
GSA12-50V4A	50	132	£P.O.A
GSA12-60V4A	60	152	£P.O.A
GSA12-80V4A	80	192	£P.O.A
GSA12-100V4A	100	232	£P.O.A
GSA12-120V4A	120	272	£P.O.A
GSA12-150V4A	150	332	£P.O.A

Material

Piston Rod: 316L Stainless Steel. Body: 316Ti Stainless Steel. End Fittings & Mounting Brackets: 316Ti Stainless Steel. Operating Fluid: Nitrogen gas & oil (for end damping).

PerformanceOperating Temperature Range: -20°C to +80°C. Progression: Approx. 18%, F₂ max. 235N. End Position Damping Length: Approx. 10mm.Available Force Range F₁ at 20°C: 25N to 200N (up to 235N when piston rod compressed). Supplied with maximum force as standard.**Extras**

Also available without damping, extended length damping, special force curves and special end fittings, P.O.A. Rod shrouds available, P.O.A.

Other Info.**Mounting:** Can be mounted in any position but we recommend mounting with piston rod downwards.**Gas Adjustment Knob:** Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

Gas springs are self-contained and maintenance free.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives
<https://amironic.co.uk/>


sales@ondrives.com



www.ondrives.com

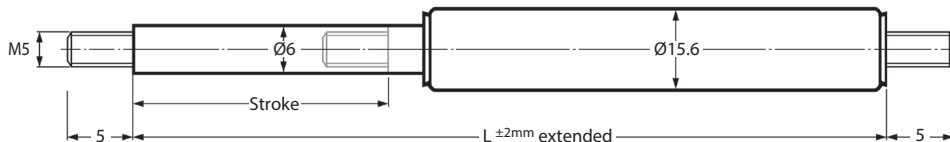
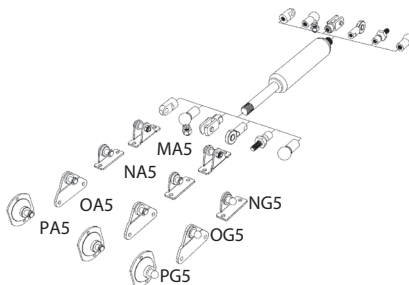
Product information updated 12/2019. See our website for the latest prices and availability.

ANTI-VIBRATION

GSA15-A

Adjustable Gas Springs

Steel : 40N - 400N, 20 - 200mm Stroke : Push Type

**Stud Thread**

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£16.67
Fixed Eye (800N)	£6.55
Swivel Eye (800N)	£P.O.A
Clevis Fork (800N)	£P.O.A
Angle Ball Joint (500N)	£P.O.A
Inline Ball Joint (500N)	£P.O.A
Ball Socket (500N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed & Swivel Eyes (500N):	MA5	£P.O.A
For Fixed & Swivel Eyes (400N):	NA5	£9.56
For Fixed & Swivel Eyes (180N):	OA5	£8.24
For Fixed & Swivel Eyes (500N):	PA5	£P.O.A
For Ball Sockets (400N):	NG5	£P.O.A
For Ball Sockets (180N):	OG5	£P.O.A
For Ball Sockets (500N):	PG5	£P.O.A

See Technical for dimensions of mounting brackets.

Discounts:	10+ -5%	25+ -10%	50+ -15%	100+ -20%
-------------------	----------------	-----------------	-----------------	------------------

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA15-20A	20	67	0.04	£54.15
GSA15-40A	40	107	0.05	£54.15
GSA15-50A	50	127	0.05	£54.15
GSA15-60A	60	147	0.06	£54.56
GSA15-80A	80	187	0.07	£54.91
GSA15-100A	100	227	0.08	£56.48
GSA15-120A	120	267	0.10	£56.86
GSA15-150A	150	327	0.11	£57.24
GSA15-200A	200	427	0.10	£63.74

Material**Piston Rod:** 303 Stainless Steel. **Body:** Black coated Steel. **End Fittings & Mounting Brackets:** Zinc plated Steel.**Operating Fluid:** Nitrogen gas & oil (for end damping).

Also available as a 'pull-type' traction gas spring: GZ15 Series, P.O.A.

**Performance****Operating Temperature Range:** -20°C to +80°C. **Progression:** Approx. 27%, F₂ max. 500N. **End Position Damping Length:** Approx. 10mm.**Available Force Range F₁ at 20°C:** 40N to 400N (up to 500N when piston rod compressed). Supplied with maximum force as standard.**Extras**

Also available without damping, extended length damping, special force curves and special lengths, P.O.A. Rod shrouds available, P.O.A.

Adjustable Length Adaptors (24 - 34mm) available, P.O.A.

Other Info.**Mounting:** Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.**Gas Adjustment Knob:** Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

+44 (0)1246 455500



+44 (0)1246 455522

ondrives

sales@ondrives.com

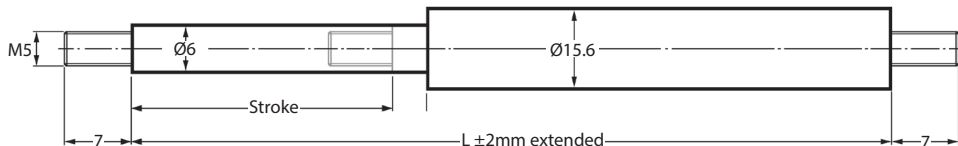
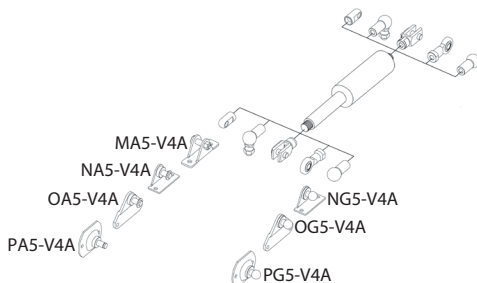


www.ondrives.com

ANTI-VIBRATION

Adjustable Gas Springs

Stainless Steel : 40N - 400N, 20 - 150mm Stroke : Push Type

GSA15-VA**Stud Thread**

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£16.67
Fixed Eye (490N)	£P.O.A
Swivel Eye (490N)	£P.O.A
Clevis Fork (490N)	£P.O.A
Angle Ball Joint (430N)	£P.O.A
Ball Socket (430N)	£P.O.A

Rod shrouds £P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed Eyes (500N):	MA5-V4A	£P.O.A
For Fixed Eyes (400N):	NA5-V4A	£P.O.A
For Fixed Eyes (180N):	OA5-V4A	£P.O.A
For Fixed Eyes (500N):	PA5-V4A	£P.O.A
For Ball Sockets (400N):	NG5-V4A	£P.O.A
For Ball Sockets (180N):	OG5-V4A	£P.O.A
For Ball Sockets (500N):	PG5-V4A	£P.O.A

See Technical for dimensions of mounting brackets.

Discounts: 10+ -5% 25+ -10% 50+ -15% 100+ -20%

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA15-20VA	20	74	0.13	£P.O.A
GSA15-40VA	40	114	0.10	£P.O.A
GSA15-50VA	50	134	0.10	£P.O.A
GSA15-60VA	60	154	0.10	£P.O.A
GSA15-80VA	80	194	0.10	£P.O.A
GSA15-100VA	100	234	0.10	£P.O.A
GSA15-120VA	120	274	0.10	£P.O.A
GSA15-150VA	150	334	0.11	£P.O.A

Material

Piston Rod: 304 Stainless Steel. **Body:** 303 Stainless Steel. **End Fittings :** 303 Stainless Steel.

Mounting Brackets: 316Ti Stainless Steel. **Operating Fluid:** Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. **Progression:** Approx. 18%, F₂ max. 235N. **End Position Damping Length:** Approx. 20mm (depending on the stroke).

Available Force Range F₁ at 20°C: 25N to 200N (up to 235N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, extended length damping, special force curves and special end fittings, P.O.A. Rod shrouds available, P.O.A.

Also available in 316L / 316Ti Stainless Steel, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.

Gas Adjustment Knob: Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

Also available as a 'pull-type' traction gas spring: GZ15-V4A Series, P.O.A.



+44 (0)1246 455500

+44 (0)1246 455522

ondrives<https://amironic.co.uk/>

sales@ondrives.com

www.ondrives.com

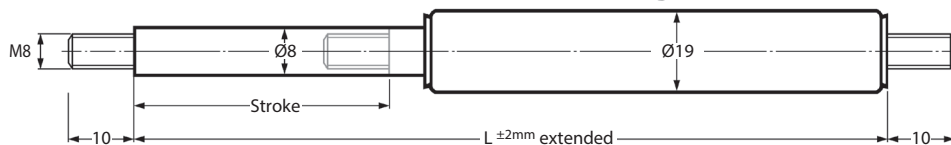
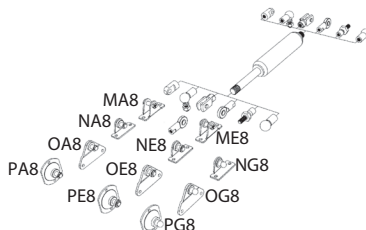
Product information updated 12/01/2021. See our website for the latest prices and availability.

ANTI-VIBRATION

GSA19-A

Adjustable Gas Springs

Steel : 50N - 700N, 50 - 300mm Stroke : Push Type

**Stud Thread**

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£17.49
Fixed Eye (3,000N)	£6.55
Swivel Eye (3,000N)	£P.O.A
Clevis Fork (3,000N)	£P.O.A
Angle Ball Joint (1,200N)	£P.O.A
Inline Ball Joint (1,200N)	£P.O.A
Ball Socket (1,200N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed Eyes (1,800N):	MA8	£P.O.A
For Fixed Eyes (1,000N):	NA8	£9.56
For Fixed Eyes (1,200N):	OA8	£9.56
For Fixed Eyes (1,200N):	PA8	£P.O.A
For Swivel Eyes (1,800N):	ME8	£P.O.A
For Swivel Eyes (1,000N):	NE8	£P.O.A
For Swivel Eyes (1,200N):	OE8	£P.O.A
For Swivel Eyes (1,200N):	PE8	£P.O.A
For Ball Sockets (1,000N):	NG8	£P.O.A
For Ball Sockets (1,200N):	OG8	£P.O.A
For Ball Sockets (1,200N):	PG8	£P.O.A

See Technical for dimensions of mounting brackets.

Also available as a 'pull-type' traction gas spring: GZ19 Series, P.O.A.

**Discounts:** 10+ -5% 25+ -10% 50+ -15% 100+ -20%

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA19-50A	50	164	0.14	£60.29
GSA19-100A	100	264	0.18	£60.29
GSA19-150A	150	364	0.24	£61.48
GSA19-200A	200	464	0.30	£63.01
GSA19-250A	250	564	0.36	£65.31
GSA19-300A	300	664	0.40	£107.67

Material

Piston Rod: Black coated Steel with wear resistant coating. **Body:** Black coated Steel. **End Fittings & Mounting Brackets:** Zinc plated Steel.
Operating Fluid: Nitrogen gas & oil (for end damping).

Performance**Operating Temperature Range:** -20°C to +80°C. **Progression:** Approx. 36% to 42%, F₂ max. 995N.**End Position Damping Length:** Strong end position damping approx. 20-60mm (depending on stroke) and slow extension speed.**Available Force Range F₁ at 20°C:** 50N to 700N (up to 995N when piston rod compressed). Supplied with maximum force as standard.**Extras**

Also available without damping, extended length damping, special force curves and special lengths, P.O.A. Rod shrouds available, P.O.A.
 Adjustable Length Adaptors (24 - 34mm) available, P.O.A.

Other Info.**Mounting:** Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.**Gas Adjustment Knob:** Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

+44 (0)1246 455500



+44 (0)1246 455522

ondrives

sales@ondrives.com



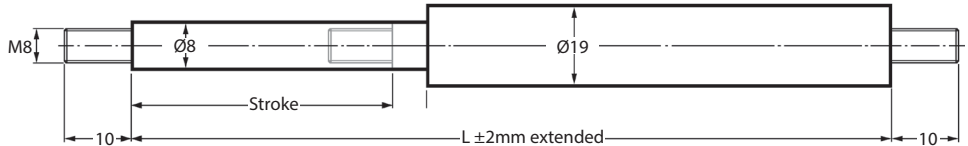
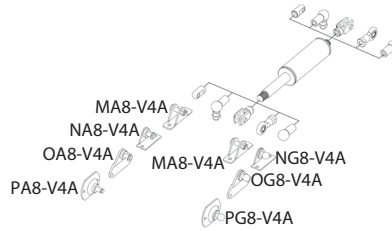
www.ondrives.com

ANTI-VIBRATION

GSA19-VA

Adjustable Gas Springs

Stainless Steel : 50N - 700N, 50 - 300mm Stroke : Push Type



Stud Thread

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£16.67
Fixed Eye (1,560N)	£P.O.A
Swivel Eye (1,560N)	£P.O.A
Clevis Fork (1,560N)	£P.O.A
Angle Ball Joint (1,140N)	£P.O.A
Ball Socket (1,140N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed & Swivel Eyes (1,800N):	MA8-V4A	£P.O.A
For Fixed Eyes (1,000N):	NA8-V4A	£P.O.A
For Fixed Eyes (1,200N):	OA8-V4A	£P.O.A
For Fixed Eyes (1,200N):	PA8-V4A	£P.O.A
For Ball Sockets (1,000N):	NG8-V4A	£P.O.A
For Ball Sockets (1,200N):	OG8-V4A	£P.O.A
For Ball Sockets (1,200N):	PG8-V4A	£P.O.A

See Technical for dimensions of mounting brackets.

Also available as a 'pull-type' traction gas spring: GZ19-VA Series, P.O.A.



Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA19-50VA	50	164	0.20	£P.O.A
GSA19-100VA	100	264	0.20	£P.O.A
GSA19-150VA	150	364	0.26	£P.O.A
GSA19-200VA	200	464	0.30	£P.O.A
GSA19-250VA	250	564	0.26	£P.O.A
GSA19-300VA	300	664	0.20	£P.O.A

Material

Piston Rod: 304 Stainless Steel. **Body:** 303 Stainless Steel. **End Fittings :** 303 Stainless Steel. **Mounting Brackets:** 316Ti Stainless Steel.**Operating Fluid:** Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. **Progression:** Approx. 33%, F₂ max. 910N.**End Position Damping Length:** Approx. 20mm (depending on the stroke).**Available Force Range F₁ at 20°C:** 50N to 700N (up to 910N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, extended length damping, special force curves and special end fittings, P.O.A. Rod shrouds available, P.O.A.

Also available in 316L / 316Ti Stainless Steel, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.**Gas Adjustment Knob:** Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

+44 (0)1246 455500

+44 (0)1246 455522

ondrives<https://amironic.co.uk/>

sales@ondrives.com

www.ondrives.com

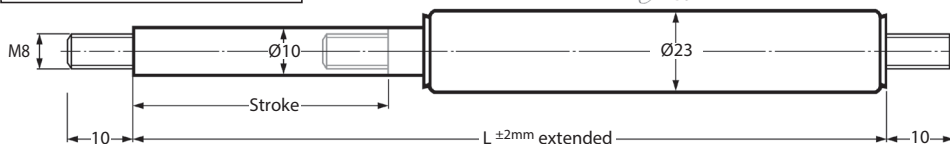
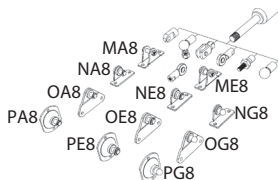
Product information updated 12/2022. Please visit our website for the latest prices and availability.

ANTI-VIBRATION

GSA22-A

Adjustable Gas Springs

Steel : 80N - 1,300N, 50 - 700mm Stroke : Push Type

**Stud Thread**

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£17.49
Fixed Eye (3,000N)	£6.55
Swivel Eye (3,000N)	£P.O.A
Clevis Fork (3,000N)	£P.O.A
Angle Ball Joint (1,200N)	£P.O.A
Inline Ball Joint (1,200N)	£P.O.A
Ball Socket (1,200N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of
optional end fittings
and mounting brackets.

Optional Mounting Brackets

For Fixed Eyes (1,800N):	MA8	£P.O.A
For Fixed Eyes (1,000N):	NA8	£9.56
For Fixed Eyes (1,200N):	OA8	£9.56
For Fixed Eyes (1,200N):	PA8	£P.O.A
For Swivel Eyes (1,800N):	ME8	£P.O.A
For Swivel Eyes (1,000N):	NE8	£P.O.A
For Swivel Eyes (1,200N):	OE8	£P.O.A
For Swivel Eyes (1,200N):	PE8	£P.O.A
For Ball Sockets (1,000N):	NG8	£P.O.A
For Ball Sockets (1,200N):	OG8	£P.O.A
For Ball Sockets (1,200N):	PG8	£P.O.A

Discounts: 10+ -5% 25+ -10% 50+ -15% 100+ -20%

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA22-50A	50	164	0.18	£63.42
GSA22-100A	100	264	0.26	£63.42
GSA22-150A	150	364	0.32	£64.50
GSA22-200A	200	464	0.40	£65.55
GSA22-250A	250	564	0.46	£67.64
GSA22-300A	300	664	0.54	£91.13
GSA22-350A	350	764	0.52	£109.26
GSA22-400A	400	864	0.68	£116.22
GSA22-450A	450	964	0.76	£165.85
GSA22-500A	500	1,064	0.84	£165.85
GSA22-550A	550	1,164	0.88	£191.38
GSA22-600A	600	1,264	0.94	£191.38
GSA22-650A	650	1,364	1.00	£231.05
GSA22-700A	700	1,464	1.08	£231.05

Material**Piston Rod:** Black coated Steel with wear resistant coating. **Body:** Black coated Steel. **End Fittings & Mounting Brackets:** Zinc plated Steel.**Operating Fluid:** Nitrogen gas & oil (for end damping).**Performance****Operating Temperature Range:** -20°C to +80°C. **Progression:** Approx. 39% to 50%, F₂ max. 1,950N.**End Position Damping Length:** Strong end position damping approx. 20-70mm (depending on stroke) and slow extension speed.**Available Force Range F₁ at 20°C:** 80N to 1,300N (up to 1,950N when piston rod compressed). Supplied with maximum force as standard.**Extras**

Also available without damping, extended length damping, special force curves and special lengths, P.O.A. Adjustable Length Adaptors (24 - 34mm) available, P.O.A.

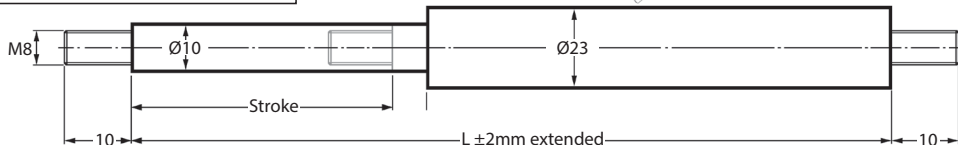
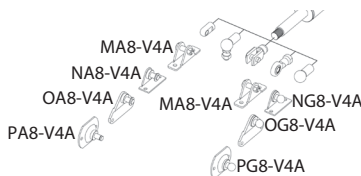
Other Info.**Mounting:** Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.**Gas Adjustment Knob:** Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.**+44 (0)1246 455500****+44 (0)1246 455522****ondrives****sales@ondrives.com****www.ondrives.com**

ANTI-VIBRATION

Adjustable Gas Springs

Stainless Steel : 100N - 1,200N, 50 - 700mm Stroke : Push Type

GSA22-VA



Stud Thread

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£16.67
Fixed Eye (1,560N)	£P.O.A
Swivel Eye (1,560N)	£P.O.A
Clevis Fork (1,560N)	£P.O.A
Angle Ball Joint (1,140N)	£P.O.A
Ball Socket (1,140N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed & Swivel Eyes (1,800N):	MA8-V4A	£P.O.A
For Fixed Eyes (1,000N):	NA8-V4A	£P.O.A
For Fixed Eyes (1,200N):	OA8-V4A	£P.O.A
For Fixed Eyes (1,200N):	PA8-V4A	£P.O.A
For Ball Sockets (1,000N):	NG8-V4A	£P.O.A
For Ball Sockets (1,200N):	OG8-V4A	£P.O.A
For Ball Sockets (1,200N):	PG8-V4A	£P.O.A

See Technical for dimensions of mounting brackets.

Discounts: 10+ -5% 25+ -10% 50+ -15% 100+ -20%

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA22-50VA	50	164	0.18	£P.O.A
GSA22-100VA	100	264	0.28	£P.O.A
GSA22-150VA	150	364	0.36	£P.O.A
GSA22-200VA	200	464	0.42	£P.O.A
GSA22-250VA	250	564	0.52	£P.O.A
GSA22-300VA	300	664	-	£P.O.A
GSA22-350VA	350	764	-	£P.O.A
GSA22-400VA	400	864	-	£P.O.A
GSA22-450VA	450	964	-	£P.O.A
GSA22-500VA	500	1,064	-	£P.O.A
GSA22-550VA	550	1,164	-	£P.O.A
GSA22-600VA	600	1,264	-	£P.O.A
GSA22-650VA	650	1,364	-	£P.O.A
GSA22-700VA	700	1,464	-	£P.O.A

Material

Piston Rod: 304 Stainless Steel. **Body:** 303 Stainless Steel. **End Fittings :** 303 Stainless Steel. **Mounting Brackets:** 316Ti Stainless Steel.

Operating Fluid: Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. **Progression:** Approx. 32%, F₂ max. 1,560N.

End Position Damping Length: Approx. 20mm (depending on the stroke).

Available Force Range F₁ at 20°C: 100N to 1,200N (up to 1,560N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, extended length damping, special force curves and special end fittings, P.O.A. Also available in 316L / 316Ti Stainless Steel, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.

Gas Adjustment Knob: Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.



+44 (0) 1246 455500

+44 (0) 1246 455522

ondrives

<https://amironic.co.il/>



sales@ondrives.com

www.ondrives.com

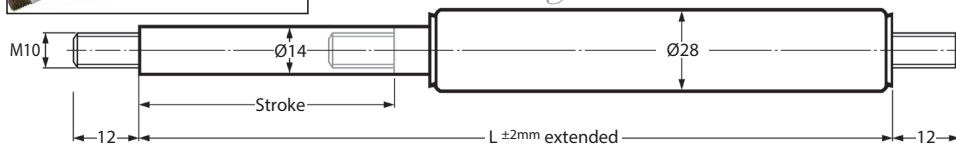
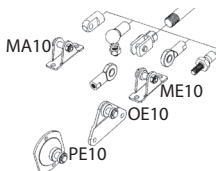
Product information updated 12/2022. Please visit our Sales for the latest prices and availability.

ANTI-VIBRATION

GSA28-A

Adjustable Gas Springs

Steel : 150N - 2,500N, 100 - 750mm Stroke : Push Type

**Stud Thread**

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob	£17.49
Fixed Eye (10,000N)	£6.55
Swivel Eye (10,000N)	£P.O.A
Clevis Fork (10,000N)	£P.O.A
Angle Ball Joint (1,800N)	£P.O.A
Inline Ball Joint (1,800N)	£P.O.A
Rod shrouds	£P.O.A

Optional Mounting Brackets

For Fixed Eyes (1,800N):	MA10	£P.O.A
For Swivel Eyes (1,800N):	ME10	£P.O.A
For Swivel Eyes (1,200N):	OE10	£P.O.A
For Swivel Eyes (1,200N):	PE10	£P.O.A

See Technical for dimensions of optional end fittings and mounting brackets.

Also available as a 'pull-type' traction gas spring: GZ28 Series, P.O.A.

**Discounts:** 10+ -5% 25+ -10% 50+ -15% 100+ -20%

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA28-100A	100	262	0.48	£77.97
GSA28-150A	150	362	0.62	£90.65
GSA28-200A	200	462	0.74	£94.97
GSA28-250A	250	562	0.86	£96.93
GSA28-300A	300	662	1.00	£114.38
GSA28-350A	350	762	1.12	£129.82
GSA28-400A	400	862	1.26	£143.75
GSA28-450A	450	962	1.38	£165.21
GSA28-500A	500	1,062	1.52	£191.37
GSA28-550A	550	1,162	1.62	£215.23
GSA28-600A	600	1,262	1.76	£235.24
GSA28-650A	650	1,362	1.86	£284.59
GSA28-700A	700	1,462	2.02	£284.59
GSA28-750A	750	1,562	2.14	£330.43

Material**Piston Rod:** Black coated Steel with wear resistant coating. **Body:** Black coated Steel. **End Fittings & Mounting Brackets:** Zinc plated Steel.**Operating Fluid:** Nitrogen gas & oil (for end damping).**Performance****Operating Temperature Range:** -20°C to +80°C. **Progression:** Approx. 60% to 95%, F₂ max. 4,875N.**End Position Damping Length:** Strong end position damping approx. 20-70mm (depending on stroke) and slow extension speed.**Available Force Range F₁ at 20°C:** 150N to 2,500N (up to 4,875N when piston rod compressed). Supplied with maximum force as standard.**Extras**

Also available without damping, extended length damping, special force curves and special lengths, P.O.A. Rod shrouds and adjustable Length Adaptors (24 - 34mm) available, P.O.A.

Other Info.**Mounting:** Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.**Gas Adjustment Knob:** Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

+44 (0)1246 455500



+44 (0)1246 455522

ondrives

sales@ondrives.com



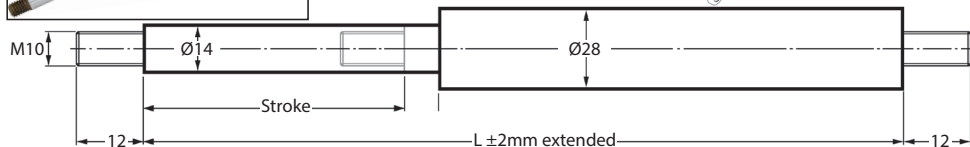
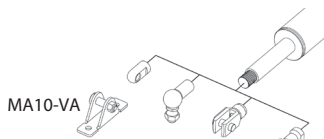
www.ondrives.com

ANTI-VIBRATION

GSA28-VA

Adjustable Gas Springs

Stainless Steel : 150N - 2,500N, 100 - 650mm Stroke : Push Type

**Stud Thread**

Fitted as standard both sides

Optional End Fittings

Gas Adjustment Knob £17.49
 Fixed Eye (3,800N) £P.O.A
 Swivel Eye (3,800N) £P.O.A
 Clevis Fork (3800N) £P.O.A
 Angle Ball Joint (1,750N) £P.O.A

Rod shrouds £P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed Eyes (1,800N): MA10-V4A £P.O.A

See Technical for dimensions of mounting brackets.

Also available as a 'pull-type' traction gas spring: GZ28-VA Series, P.O.A.

**Discounts: 10+ -5% 25+ -10% 50+ -15% 100+ -20%**

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA28-100VA	100	262	0.48	£P.O.A
GSA28-150VA	150	362	0.62	£P.O.A
GSA28-200VA	200	462	0.74	£P.O.A
GSA28-250VA	250	562	0.86	£P.O.A
GSA28-300VA	300	662	1.00	£P.O.A
GSA28-350VA	350	762	1.12	£P.O.A
GSA28-400VA	400	862	1.26	£P.O.A
GSA28-450VA	450	962	1.38	£P.O.A
GSA28-500VA	500	1,062	1.52	£P.O.A
GSA28-550VA	550	1,162	1.62	£P.O.A
GSA28-600VA	600	1,262	1.76	£P.O.A
GSA28-650VA	650	1,362	1.86	£P.O.A

Material

Piston Rod: 304 Stainless Steel. Body: 303 Stainless Steel. End Fittings : 303 Stainless Steel. Mounting Brackets: 316Ti Stainless Steel.

Operating Fluid: Nitrogen gas & oil (for end damping).

PerformanceOperating Temperature Range: -20°C to +80°C. Progression: Approx. 52%, F₂ max. 3,800N. End Position Damping Length: Approx. 20mm (depending on the stroke).Available Force Range F₁ at 20°C: 150N to 2,500N (up to 3,800N when piston rod compressed). Supplied with maximum force as standard.**Extras**

Also available without damping, extended length damping, special force curves, special lengths, special end fittings and wipers P.O.A. Rod shrouds available, P.O.A.

Also available in 316L / 316Ti Stainless Steel, P.O.A.

Other Info.**Mounting:** Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.**Gas Adjustment Knob:** Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.

+44 (0)1246 455500



+44 (0)1246 455522

ondrives<https://amironic.co.uk/>

sales@ondrives.com



www.ondrives.com

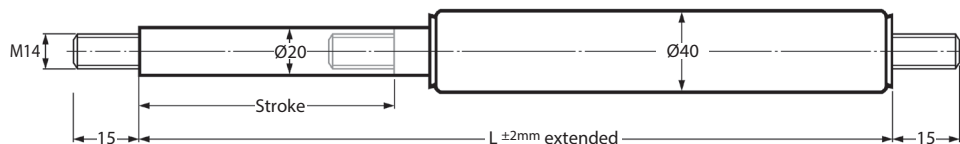
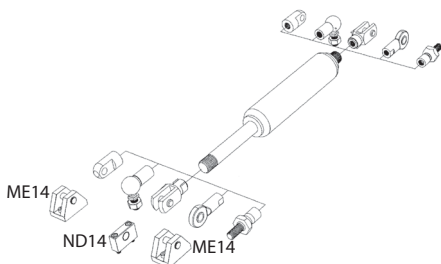
Product information updated 12/2018. See our website for the latest prices and availability.

ANTI-VIBRATION

GSA40-A

Adjustable Gas Springs

Steel : 500N - 5,000N, 100 - 1,000mm Stroke : Push Type

**Stud Thread**

Fitted as standard

Optional End Fittings

Gas Adjustment Knob	£18.84
Fixed Eye (10,000N)	£20.02
Swivel Eye (10,000N)	£P.O.A
Clevis Fork (10,000N)	£P.O.A
Angle Ball Joint (3,200N)	£P.O.A
Inline Ball Joint (3,200N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed & Swivel Eyes (10,000N): ME14 £P.O.A

For Clevis Forks (10,000N): ND14 £P.O.A

See Technical for dimensions of mounting brackets.

Also available as a 'pull-type' traction gas spring: GZ40 Series, P.O.A.

Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA40-100A	100	317	1.30	£220.21
GSA40-150A	150	417	1.50	£240.39
GSA40-200A	200	517	1.56	£259.16
GSA40-300A	300	717	1.94	£298.20
GSA40-400A	400	917	2.40	£344.40
GSA40-500A	500	1,117	2.86	£408.65
GSA40-600A	600	1,317	3.05	£525.94
GSA40-800A	800	1,717	4.18	£607.36
GSA40-1000A	1,000	2,117	5.02	£800.76

Material**Piston Rod:** Black coated Steel with wear resistant coating. **Body:** Black coated Steel. **End Fittings:** Zinc plated Steel. **Operating Fluid:** Nitrogen gas & oil (for end damping).**Performance****Operating Temperature Range:** -20°C to +80°C. **Progression:** Approx. 47% to 53%, F₂ max. 7,650N.**End Position Damping Length:** Strong end position damping approx. 30-70mm (depending on stroke) and slow extension speed.**Available Force Range F₁ at 20°C:** 500N to 5,000N (up to 7,650N when piston rod compressed). Supplied with maximum force as standard.**Extras**

Also available without damping, extended length damping, special force curves, special lengths and wiper, P.O.A. Rod shrouds available, P.O.A.

Other Info.**Mounting:** Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.

+44 (0)1246 455500



+44 (0)1246 455522

ondrives<https://amironic.co.il/>

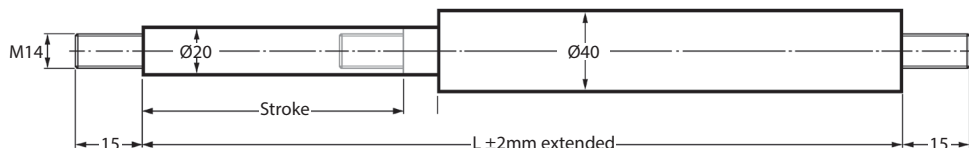
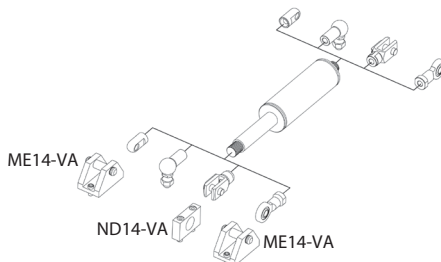
sales@ondrives.com

www.ondrives.com

ANTI-VIBRATION

Adjustable Gas Springs

Stainless Steel : 500N - 5,000N, 100 - 600mm Stroke : Push Type

GSA40-VA**Stud Thread**

Fitted as standard

Optional End Fittings

Gas Adjustment Knob	£18.84
Fixed Eye (7,000N)	£P.O.A
Swivel Eye (7,000N)	£P.O.A
Clevis Fork (7,000N)	£P.O.A
Angle Ball Joint (3,200N)	£P.O.A
Rod shrouds	£P.O.A

See Technical for dimensions of optional end fittings.

Optional Mounting Brackets

For Fixed & Swivel Eyes (10,000N): ME14-VA £P.O.A

For Clevis Forks (10,000N): ND14-VA £P.O.A

See Technical for dimensions of mounting brackets.

Also available as a 'pull-type' traction gas spring: GZ40-VA Series, P.O.A.



Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA40-100VA	100	317	1.30	£P.O.A
GSA40-150VA	150	417	1.50	£P.O.A
GSA40-200VA	200	517	1.56	£P.O.A
GSA40-300VA	300	717	1.94	£P.O.A
GSA40-400VA	400	917	2.40	£P.O.A
GSA40-500VA	500	1,117	2.86	£P.O.A
GSA40-600VA	600	1,317	3.05	£P.O.A

Material

Piston Rod: 304 Stainless Steel. **Body:** 303 Stainless Steel. **End Fittings & Mounting Brackets:** 303 Stainless Steel. **Operating Fluid:** Nitrogen gas & oil (for end damping).

Performance

Operating Temperature Range: -20°C to +80°C. **Progression:** Approx. 40%, F₂ max. 7,000N. **End Position Damping Length:** Approx. 30mm (depending on the stroke). **Available Force Range F₁ at 20°C:** 500N to 5,000N (up to 7,000N when piston rod compressed). Supplied with maximum force as standard.

Extras

Also available without damping, increased end position damping, special force curves, special lengths, special end fittings and wipers P.O.A. Rod shrouds available, P.O.A. Also available in 316L / 316Ti Stainless Steel, P.O.A.

Other Info.

Mounting: Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.

Gas Adjustment Knob: Required to release gas pressure to reduce the force. Higher forces cannot be achieved after this. Preset forces are available to order.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives
<https://amironic.co.il/>



sales@ondrives.com



www.ondrives.com

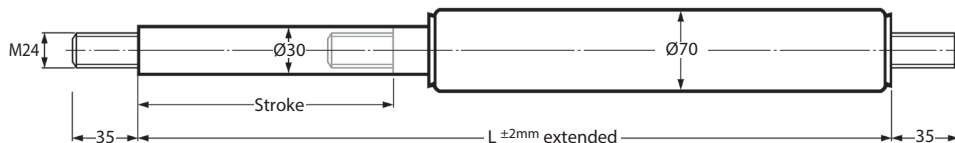
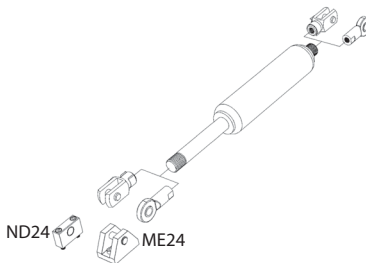
Product information updated 12/2018. Prices are subject to change without notice. Please check our website for the latest prices and availability.

ANTI-VIBRATION

GSA70-A

Adjustable Gas Springs

Steel : 2,000N - 13,000N, 100 - 800mm Stroke : Push Type with Valve

**Stud Thread**

Fitted as standard

Optional End Fittings

Swivel Eye (50,000N) £P.O.A

Clevis Fork (50,000N) £P.O.A

Rod shrouds £P.O.A

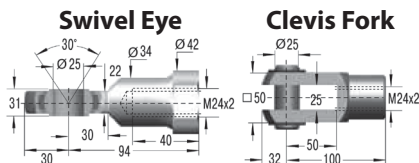
Optional Mounting Brackets

For Swivel Eyes (50,000N): ME24 £P.O.A

For Clevis Forks (50,000N): ND24 £P.O.A

See Technical for dimensions of mounting brackets.

See below for dimensions of optional end fittings.



Discounts: 10+ -5%	25+ -10%	50+ -15%	100+ -20%
--------------------	----------	----------	-----------

Part Number	Stroke	L	Mass Kg	Price Each 1 - 9
GSA70-100A	100	320	4.8	£849.72
GSA70-200A	200	520	6.0	£1,042.45
GSA70-300A	300	720	7.2	£1,144.28
GSA70-400A	400	920	8.4	£1,333.58
GSA70-500A	500	1,120	9.6	£1,479.87
GSA70-600A	600	1,320	10.8	£1,698.34
GSA70-700A	700	1,520	12.0	£1,841.20
GSA70-800A	800	1,720	13.2	£1,978.86

MaterialPiston Rod: Hard Chrome plated Steel **Body:** Black coated or Zinc Plated Steel. **Optional End Fittings:** Zinc plated Steel **Operating Fluid:** Nitrogen gas & oil (for end damping).**Performance****Operating Temperature Range:** -20°C to +80°C. **Progression:** Approx. 25%, F₂ max. 16,250N. **End Position Damping Length:** Approx. 10mm.**Available Force Range F₁ at 20°C:** 2,000N to 13,000N (up to 16,250N when piston rod compressed). Supplied with maximum force as standard.**Extras**

Also available without damping, extended length damping, special force curves, special lengths and wiper, P.O.A. Rod shrouds available, P.O.A.

Other Info.**Mounting:** Can be mounted in any position but we recommend mounting with piston rod downwards. Gas springs are self-contained and maintenance free.

+44 (0)1246 455500



+44 (0)1246 455522

ondrives

sales@ondrives.com



www.ondrives.com

ANTI-VIBRATION

Adjustable Gas Springs

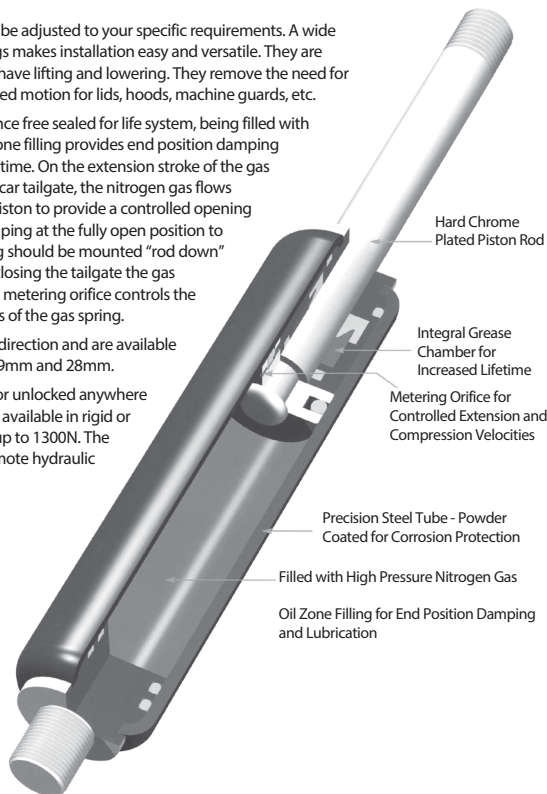
These Gas Springs are maintenance free and self contained with body diameters from 10mm up to 40mm and forces from 10N up to 5000N. They have an integral front grease chamber which provides a very low break away force, low friction and extremely long life compared with conventional gas springs. It also allows them to be mounted in any orientation, although rod downwards is preferable if you want to take advantage of the built-in end position damping.

The original valve allows the force to be adjusted to your specific requirements. A wide variety of interchangeable end fittings makes installation easy and versatile. They are universally applicable wherever you have lifting and lowering. They remove the need for "muscle power" and provide controlled motion for lids, hoods, machine guards, etc.

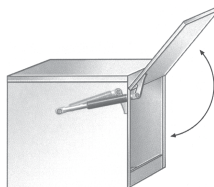
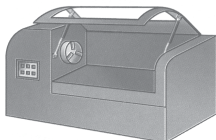
The Gas Springs provide a maintenance free sealed for life system, being filled with high pressure nitrogen gas. The oil zone filling provides end position damping and internal lubrication for a long lifetime. On the extension stroke of the gas spring, for example when opening a car tailgate, the nitrogen gas flows through the metering orifice in the piston to provide a controlled opening speed and the oil zone provides damping at the fully open position to avoid impact damage. The gas spring should be mounted "rod down" for this damping to be effective. On closing the tailgate the gas spring helps support the weight. The metering orifice controls the extension and compression velocities of the gas spring.

Traction gas springs work in the pull direction and are available on request with body diameters of 19mm and 28mm.

Lockable Gas Springs can be locked or unlocked anywhere through their stroke length. They are available in rigid or 'spring' locking versions with forces up to 1300N. The lock release can be operated by a remote hydraulic push-button or manually operated.



Typical Applications



The pair of Gas Springs act as safety elements to prevent the accidental falling of the guard. They also hold the guard in its open position to allow machine access. They also help the operator by considerably reducing the hand effort necessary to manually open the guard.

By virtue of their mounting geometry with eccentric pivot point the Gas Springs provide assistance in manually opening or closing the heavy bin lid. Lifting the flap is made a lot easier but it still remains positively closed when required due to the eccentric position of the gas spring mounting points.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives
<https://amironic.co.il/>



sales@ondrives.com



www.ondrives.com

Product information updated 1st April 2018. Please visit our website for the latest prices and availability.

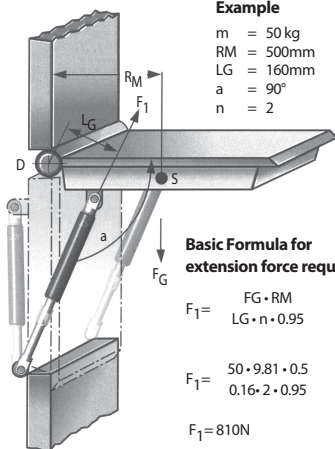
TECHNICAL

ANTI-VIBRATION

Adjustable Gas Springs

Mounting Examples

Selection Formulae and Mounting Tips



Required extension force:
 $F_1 = 810 \text{ N}$

Required gas spring:
 GS-22-220-AA-870N

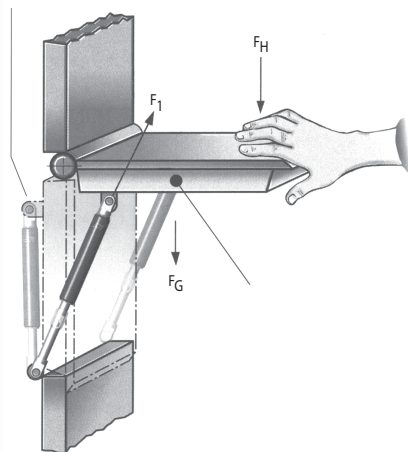
Industrial Gas Springs can be selected knowing the following facts:-

1. Weight of the Flap kg
2. Radius of centre of gravity mm
3. Propelling force N
4. Angle of opening °
5. Sketch of the application layout

Symbols used in formulae

FG	Force due to weight of flap (m·g)	N
RM	Radius of centre of gravity	mm
LG	Radius of gas spring force	mm
n	Number of gas springs in parallel	-
a	Angle of opening	°

The basic formulae given left enables an approximate calculation of the required gas spring force for one mounting position geometry only.



Gas springs contain nitrogen gas at very high pressure.

Under no circumstances should they be opened or subjected to excessive tensile loads. Gas Springs must not be exposed to bending forces or side loads. These can be avoided choosing suitable end fittings and leaving some bearing "float" on eye fittings. We recommend using ball joints on most applications as these help eliminate any misalignment.

Mounting orientation: if possible mount rod downwards to achieve end position damping on extension stroke.

Force tolerance: plus or minus 5% of nominal F1 force at 20°C.

Choose a standard available gas spring before fixing your mounting positions. Preferably allow us to provide a printout showing the most suitable mode.

Protect the piston rod from impact damage, scratches, dirt or paint contamination. (Protective rod shrouds are available). The gas spring barrel must not be damaged or deformed.

Note: Initial breakaway force may be higher if units are stored for a long period without use.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives

https://amironic.co.uk/



sales@ondrives.com

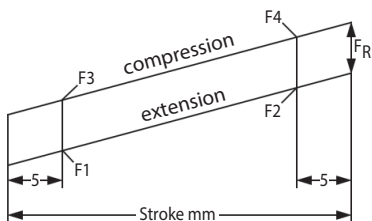
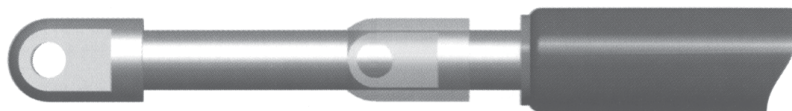
www.ondrives.com

ANTI-VIBRATION

Adjustable Gas Springs

Gas Spring Force-Stroke Characteristics

Standard Gas Spring (Push Type)



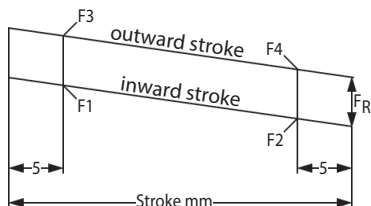
Spring Force F in N

F1 = Nominal Force at 20°C (this is force figure normally used when specifying Gas Spring)

F2 to F1 = Force on extension stroke. F3 to F4 = Force on compression stroke.

Model	*Progression approx. %	Friction FR approx. in N
GSA-10	20	10
GSA-12	25	20
GSA-15	27	20
GSA-19	33	30
GSA-22	38	30
GSA-28	52	40
GSA-40	30	50

Traction Gas Spring (Pull Type) - P.O.A.



Spring Force F in N

F1 = Nominal Force at 20°C (this is force figure normally used when specifying Gas Spring)

F2 to F1 = Pulling force on inward stroke. F3 to F4 = Pulling force on outward stroke.

Model	*Progression approx. %	Friction FR approx. in N
GZ-19	10	30
GZ-28	20	40

***The progression** (the slope of the force line in the diagrams above) is due to the reduction of the internal gas volume as the piston rod moves from its initial position to its fully stroked position. The approx. progression values given above for standard springs can be altered on request.

Effect of Temperature: The nominal F1 figure is given at 20°C. an increase of 10°C will increase force by 3.4%.

Filling Tolerance on F1 Force: plus or minus 5% of nominal force.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives

<https://amironic.co.il/>



sales@ondrives.com



www.ondrives.com

Product information updated 12/2022. Prices and availability subject to change without notice. Sales for the latest prices and availability.

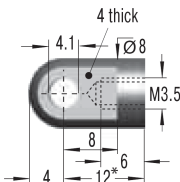
ANTI-VIBRATION

Adjustable Gas Springs & Hydraulic Dampers

Optional End Fittings

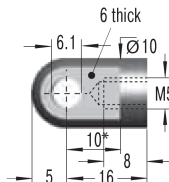
Fixed Eye

GSA8 to 12, HB-12



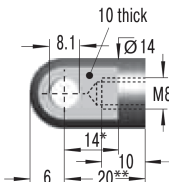
* 11 (Stainless)

GSA15, HB-15



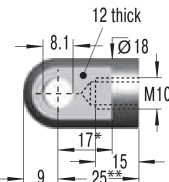
* 9 (Stainless)

GSA19 to 22, HB-22 to 28



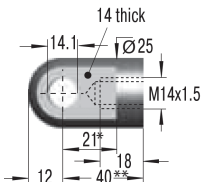
* 11.5, ** 19 (Stainless)

GSA28



* 15, ** 27 (Stainless)

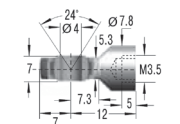
GSA40, HB-40



* 19.5, ** 42 (Stainless)

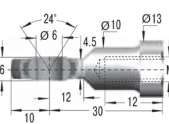
Swivel Eye

GSA8 to 12, HB-12

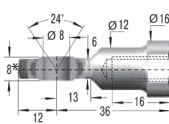


Available in Steel only

GSA15, HB-15

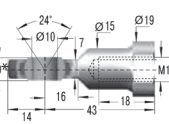


GSA19 to 22, HB-22 to 28



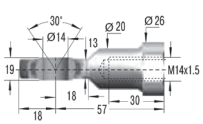
* 12 (Stainless)

GSA28



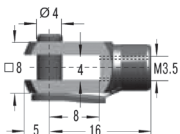
* 14 (Stainless)

GSA40, HB-40

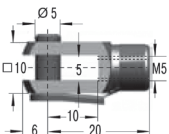


Clevis Fork

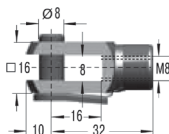
GSA8 to 12, HB-12



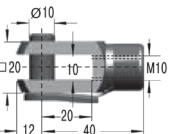
GSA15, HB-15



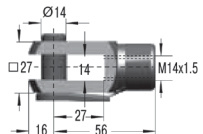
GSA19 to 22, HB-22 to 28



GSA28

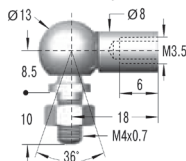


GSA40, HB-40

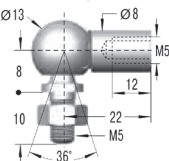


Angle Ball Joint

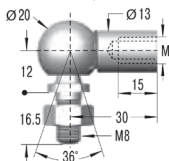
GSA8 to 12, HB-12



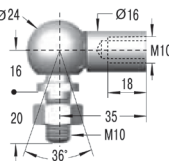
GSA15, HB-15



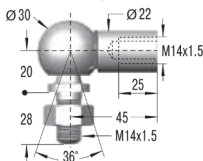
GSA19 to 22, HB-22 to 28



GSA28

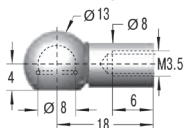


GSA40, HB-40

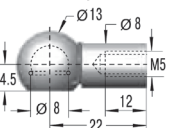


Ball Socket

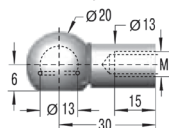
GSA8 to 12, HB-12



GSA15, HB-15

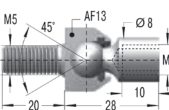


GSA19 to 22, HB-22 to 28



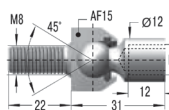
Inline Ball Joint

GSA15



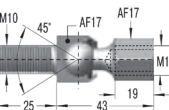
Available in Steel only

GSA19 & GSA22



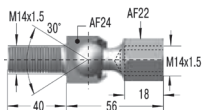
Available in Steel only

GSA28



Available in Steel only

GSA40



Available in Steel only

For GSA8-V4A to GSA12-V4A Gas Springs, add -V4A suffix for Stainless Steel end fittings.

For GSA15-V4A to GSA40-V4A Gas Springs, add -VA suffix for Stainless Steel end fittings.



+44 (0)1246 455500



+44 (0)1246 455522

ondrives

<https://amironic.co.il/>



sales@ondrives.com



www.ondrives.com

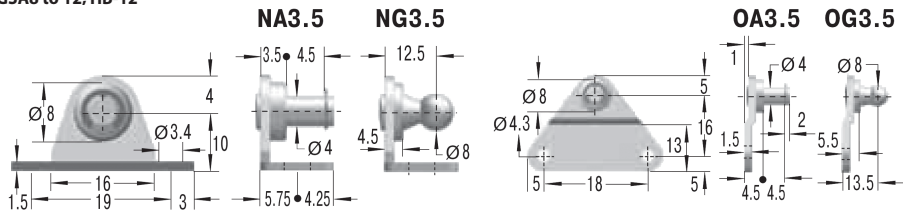
Product information updated 11/2022. Prices are subject to change without notice. Sales for the latest prices and availability.

ANTI-VIBRATION

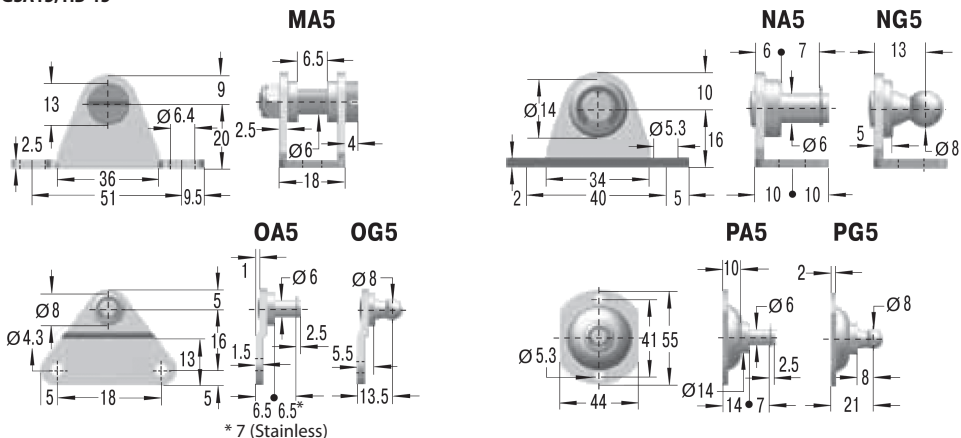
Adjustable Gas Springs & Hydraulic Dampers

Optional Mounting Brackets

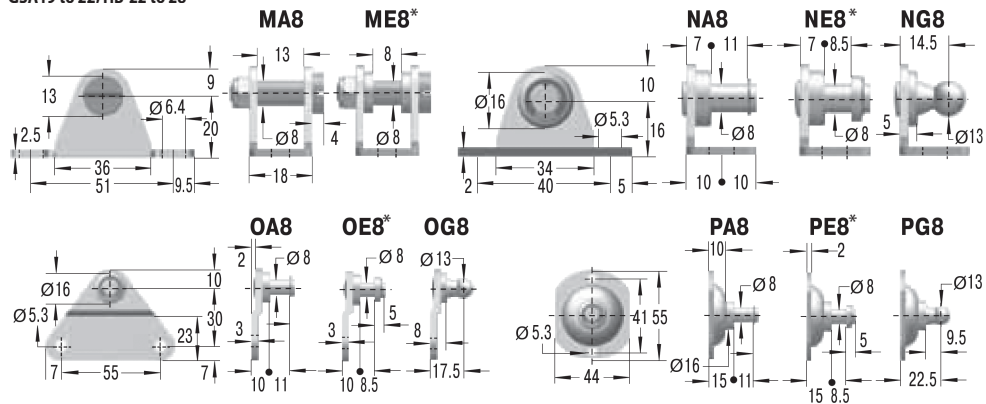
GSA8 to 12, HB-12



GSA15, HB-15



GSA19 to 22, HB-22 to 28



* ME8, NE8, OE8 & PE8 are available in Steel only,

For GSA8-V4A to GSA28-VA Gas Springs, add -V4A suffix for Stainless Steel mounting brackets (where available).

For GSA40-VA Gas Springs, add -VA suffix for Stainless Steel mounting brackets (where available).



+44 (0)1246 455500



+44 (0)1246 455522

ondrives



sales@ondrives.com



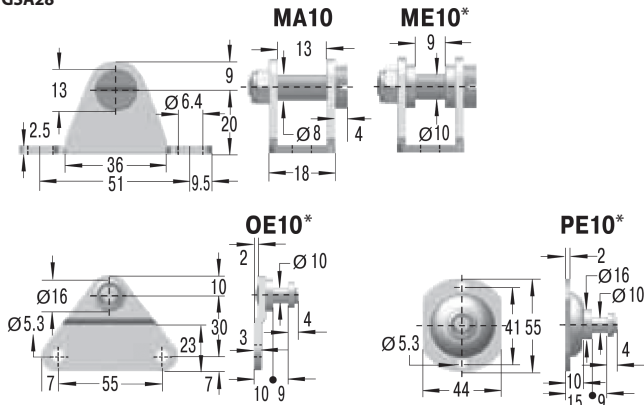
www.ondrives.com

ANTI-VIBRATION

Adjustable Gas Springs & Hydraulic Dampers

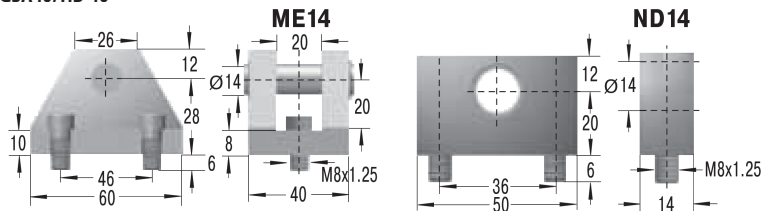
Optional Mounting Brackets

GSA28

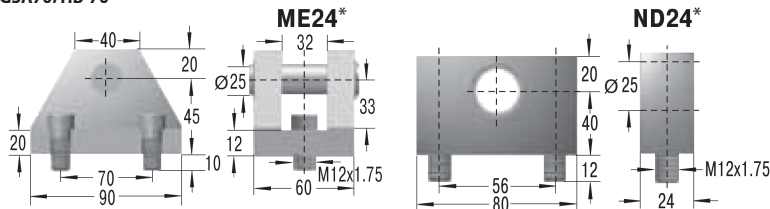


* ME10, OE10 & PE10 are available in Steel only,

GSA40. HB-40



GSA70. HB-70



* ME24 & ND24 are available in Steel only,

For GSA8-V4A to GSA28-VA Gas Springs, add -V4A suffix for Stainless Steel mounting brackets (where available).
For GSA40-VA Gas Springs, add -VA suffix for Stainless Steel mounting brackets (where available).



+44 (0)1246 455500



+44 (0)1246 455522

ondrives

<https://amironic.co.il/>



sales@ondrives.com



www.ondrives.com

Product information updated to 2024. For the latest prices and availability, please visit our website.