

GZ-15-V4A to GZ-40-VA

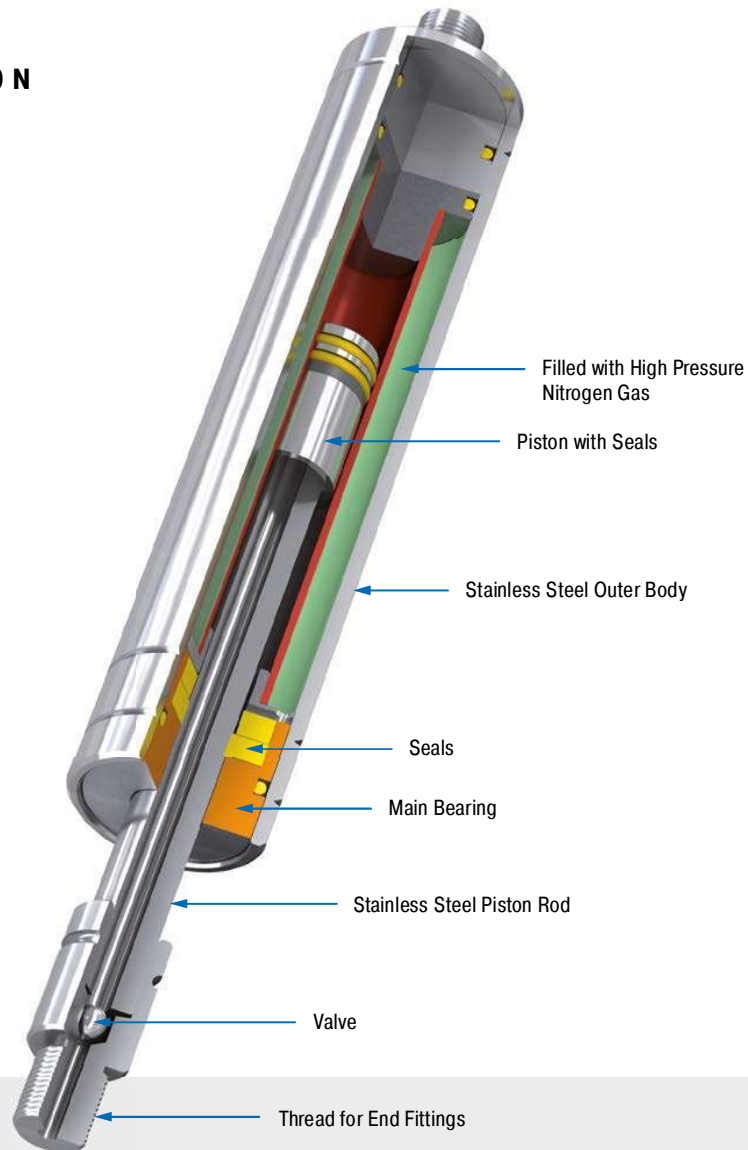
Very low progression rate with FDA approval

Valve Technology, Stainless Steel
Traction force range 40 N to 5,000 N
Stroke 20 mm to 600 mm

Brilliant performance when things become tight: For specific use e.g. in tough surroundings or small spaces, the broad spectrum of ACE industrial pull type gas springs made of stainless steel with body diameters from 15 mm to 40 mm supplements the comprehensive programme of the ACE industrial pull type gas springs with valves.

This high quality design is rust free and is more robust against environmental impact compared with standard gas pull type springs. These stainless steel gas springs are also optically appealing, very durable and available, upon request, in many stroke lengths and are also possible in many traction forces in combination with the suitable stainless steel accessories.

ACE industrial push type springs made of stainless steel are used in industries such as the chemical and food industry, in automobiles, plant engineering and shipbuilding and also in medical, military, environmental and water supply technology.



Technical Data

Traction force: 40 N to 5,000 N

Piston rod diameter: Ø 4 mm to Ø 28 mm

Progression: approx. 11 % to 45 %

Lifetime: Approx. 2,000 m

Operating temperature range: -20 °C to +80 °C

Material: Outer body, Piston rod, End fittings: stainless steel (1.4301/1.4305, AISI 304/303 and 1.4404/1.4571, AISI 316L/316Ti)

Operating fluid: nitrogen gas

Mounting: with piston rod upwards

End position damping length: Without damping. For end position damping use damping material (e.g. TUBUS or SLAB).

Positive stop: External positive stop in the pulling direction provided by the customer.

Application field: hoods, shutters, machine housing, conveyor systems, control boxes, furniture industry, shipbuilding, food industry, pharmaceutical industry, folding elements

End fittings: They are interchangeable and if necessary must be positively secured by the customer to prevent unscrewing.

On request: Special oils and other special options. Alternative accessories. Traction gas springs with end position damping also available on request. Other traction gas springs material 1.4404/1.4571, AISI 316L/316Ti (V4A) available on request.

End Fitting

Standard Dimensions

End Fitting

Performance and Dimensions

TYPES	Stroke mm	L retracted mm	Traction force max. N
GZ-15-20-V4A	20	87	150
GZ-15-40-V4A	40	107	150
GZ-15-50-V4A	50	117	150
GZ-15-60-V4A	60	127	150
GZ-15-80-V4A	80	147	150
GZ-15-100-V4A	100	167	150
GZ-15-120-V4A	120	187	150
GZ-15-150-V4A	150	217	150

Ordering Example

GZ-15-150-AC-150-V4A

Type (Pull Type) _____
 Body Ø (15.6 mm) _____
 Stroke (150 mm) _____
 Piston Rod End Fitting A3.5-V4A _____
 Body End Fitting C3.5-V4A _____
 Traction Force F₁ 150 N _____
 Material (1.4404/1.4571, AISI 316L/316Ti, V4A) _____

Mounting accessories see from page 208.

Stud Thread B3.5

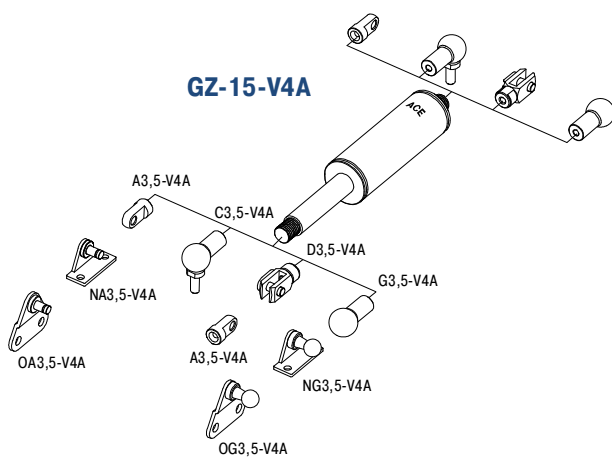
Eye A3.5-V4A
max. force 370 N

Angle Ball Joint C3.5-V4A
max. force 370 N

Clevis Fork D3.5-V4A
max. force 370 N

Ball Socket G3.5-V4A
max. force 370 N

Adjuster Knob DE-GAS-3.5
See page 175.



Technical Data

- Traction force:** 50 N to 150 N (extended up to 182 N)
- Progression:** Approx. 11 % to 21 %
- Lifetime:** Approx. 2,000 m
- Operating temperature range:** -20 °C to +80 °C
- Material:** Outer body, Piston rod, End fittings: stainless steel (1.4404/1.4571, AISI 316L/316Ti)
- Mounting:** with piston rod upwards
- End position damping length:** Without damping. For end position damping use damping material (e.g. TUBUS or SLAB).
- Positive stop:** External positive stop in the pulling direction provided by the customer.
- End fittings:** They are interchangeable and if necessary must be positively secured by the customer to prevent unscrewing.

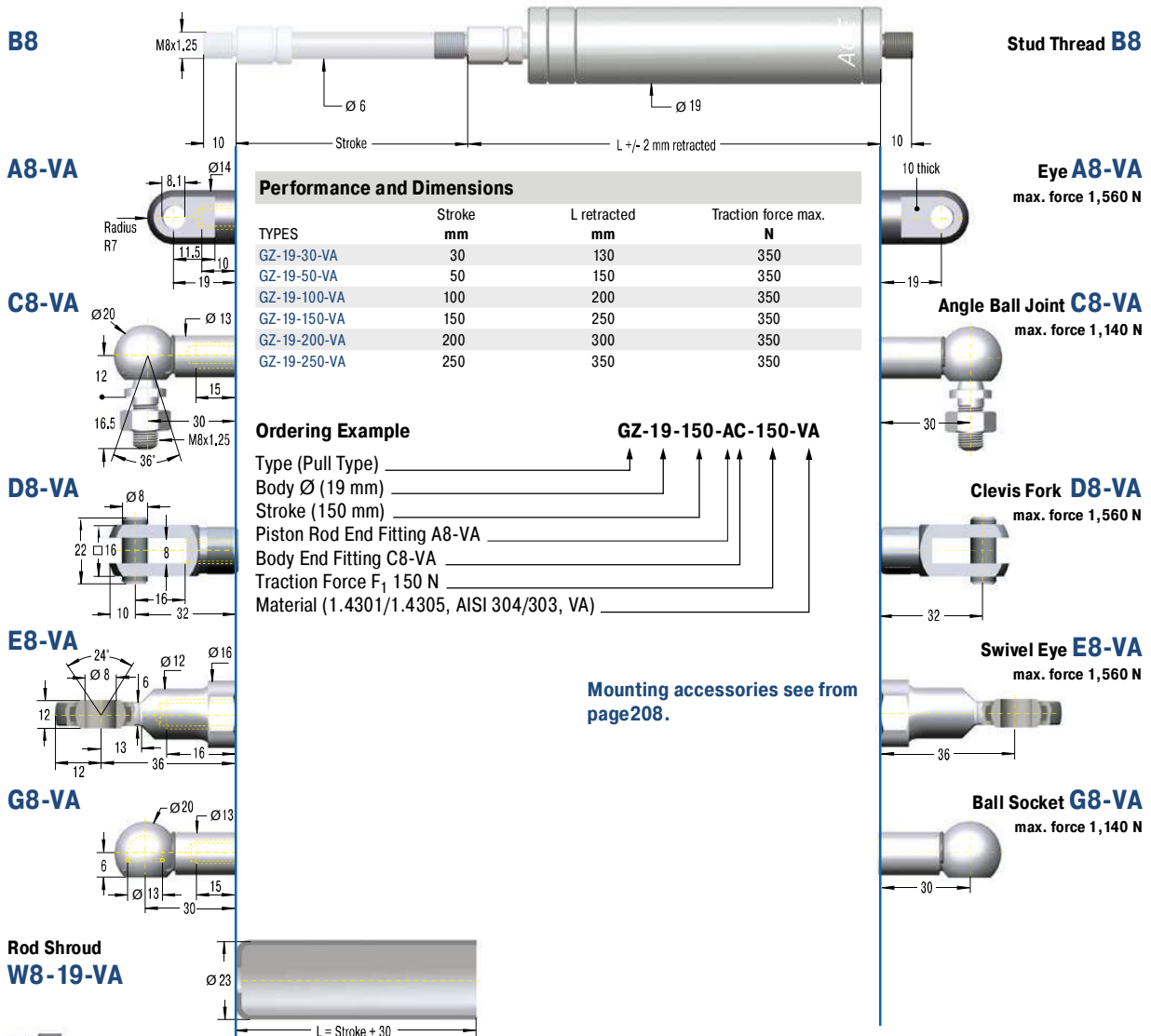
Issue 07.2017 – Specifications subject to change

Valve Technology, Stainless Steel, Traction force 40 N to 350 N (extended up to 448 N)

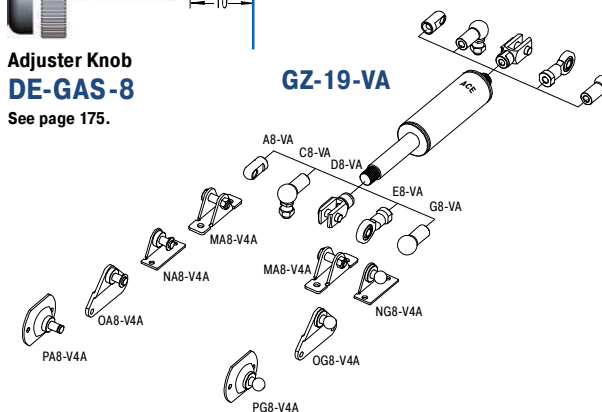
End Fitting

Standard Dimensions

End Fitting



Adjuster Knob DE-GAS-8
 See page 175.



Technical Data

- Traction force:** 40 N to 350 N (extended up to 448 N)
- Progression:** Approx. 23 % to 28 %
- Lifetime:** Approx. 2,000 m
- Operating temperature range:** -20 °C to +80 °C
- Material:** Outer body, Piston rod, End fittings: stainless steel (1.4301/1.4305, AISI 304/303)
- Mounting:** with piston rod upwards
- End position damping length:** Without damping. For end position damping use damping material (e.g. TUBUS or SLAB).
- Positive stop:** External positive stop in the pulling direction provided by the customer.
- End fittings:** They are interchangeable and if necessary must be positively secured by the customer to prevent unscrewing.

Issue 07.2017 – Specifications subject to change

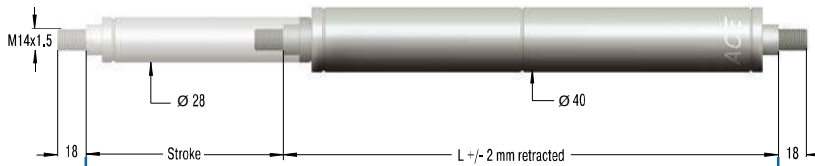
Valve Technology, Stainless Steel, Traction force 500 N to 5,000 N (extended up to 7,250 N)

End Fitting

Standard Dimensions

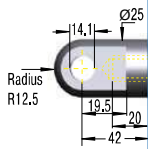
End Fitting

B14



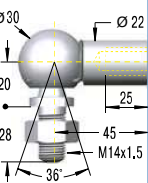
Stud Thread B14

A14-VA



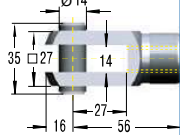
Eye A14-VA
max. force 7,000 N

C14-VA



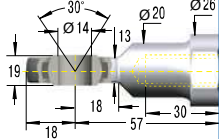
Angle Ball Joint C14-VA
max. force 3,200 N

D14-VA



Clevis Fork D14-VA
max. force 7,000 N

E14-VA



Swivel Eye E14-VA
max. force 7,000 N

Performance and Dimensions

TYPES	Stroke mm	L retracted mm	Traction force max. N
GZ-40-100-VA	100	250	5,000
GZ-40-150-VA	150	325	5,000
GZ-40-200-VA	200	400	5,000
GZ-40-250-VA	250	475	5,000
GZ-40-300-VA	300	550	5,000
GZ-40-400-VA	400	700	5,000
GZ-40-500-VA	500	850	5,000
GZ-40-600-VA	600	1,000	5,000

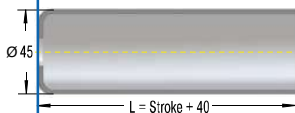
Ordering Example

GZ-40-150-EE-800-VA

Type (Pull Type) _____
 Body Ø (40 mm) _____
 Stroke (150 mm) _____
 Piston Rod End Fitting E14-VA _____
 Body End Fitting E14-VA _____
 Traction Force F₁ 800 N _____
 Material (1.4301/1.4305, AISI 304/303, VA) _____

Mounting accessories see from page 208.

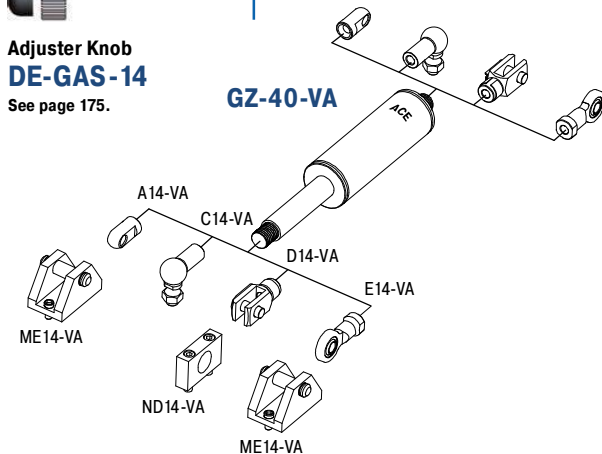
Rod Shroud W14-40-VA



Adjuster Knob DE-GAS-14
See page 175.



GZ-40-VA



Technical Data

- Traction force:** 500 N to 5,000 N (extended up to 7,250 N)
- Progression:** Approx. 43 % to 45 %
- Lifetime:** Approx. 2,000 m
- Operating temperature range:** -20 °C to +80 °C
- Material:** Outer body, Piston rod, End fittings: stainless steel (1.4301/1.4305, AISI 304/303)
- Mounting:** with piston rod upwards
- End position damping length:** Without damping. For end position damping use damping material (e.g. TUBUS or SLAB).
- Positive stop:** External positive stop in the pulling direction provided by the customer.
- End fittings:** They are interchangeable and if necessary must be positively secured by the customer to prevent unscrewing.

Stainless Steel Gas Springs (Pull Type), V4A

TYPES	Stroke mm	L retracted mm	Dimensions see Page
GZ-19-30-V4A	30	130	168
GZ-19-50-V4A	50	150	168
GZ-19-100-V4A	100	200	168
GZ-19-150-V4A	150	250	168
GZ-19-200-V4A	200	300	168
GZ-19-250-V4A	250	350	168
GZ-28-50-V4A	50	165	169
GZ-28-100-V4A	100	215	169
GZ-28-150-V4A	150	265	169
GZ-28-200-V4A	200	315	169
GZ-28-250-V4A	250	365	169
GZ-28-300-V4A	300	415	169
GZ-28-350-V4A	350	465	169
GZ-28-400-V4A	400	515	169
GZ-28-450-V4A	450	565	169
GZ-28-500-V4A	500	615	169
GZ-28-550-V4A	550	665	169
GZ-28-600-V4A	600	715	169
GZ-40-100-V4A	100	250	170
GZ-40-150-V4A	150	325	170
GZ-40-200-V4A	200	400	170
GZ-40-250-V4A	250	475	170
GZ-40-300-V4A	300	550	170
GZ-40-400-V4A	400	700	170
GZ-40-500-V4A	500	850	170
GZ-40-600-V4A	600	1,000	170

Stainless Steel Accessories, V4A

TYPES	Dimensions see Page
A5-V4A	210
C5-V4A	210
D5-V4A	210
E5-V4A	210
G5-V4A	210
A8-V4A	211
C8-V4A	211
D8-V4A	211
E8-V4A	211
G8-V4A	212
A10-V4A	212
C10-V4A	212
D10-V4A	212
E10-V4A	212
A14-V4A	213
C14-V4A	213
D14-V4A	213
E14-V4A	213