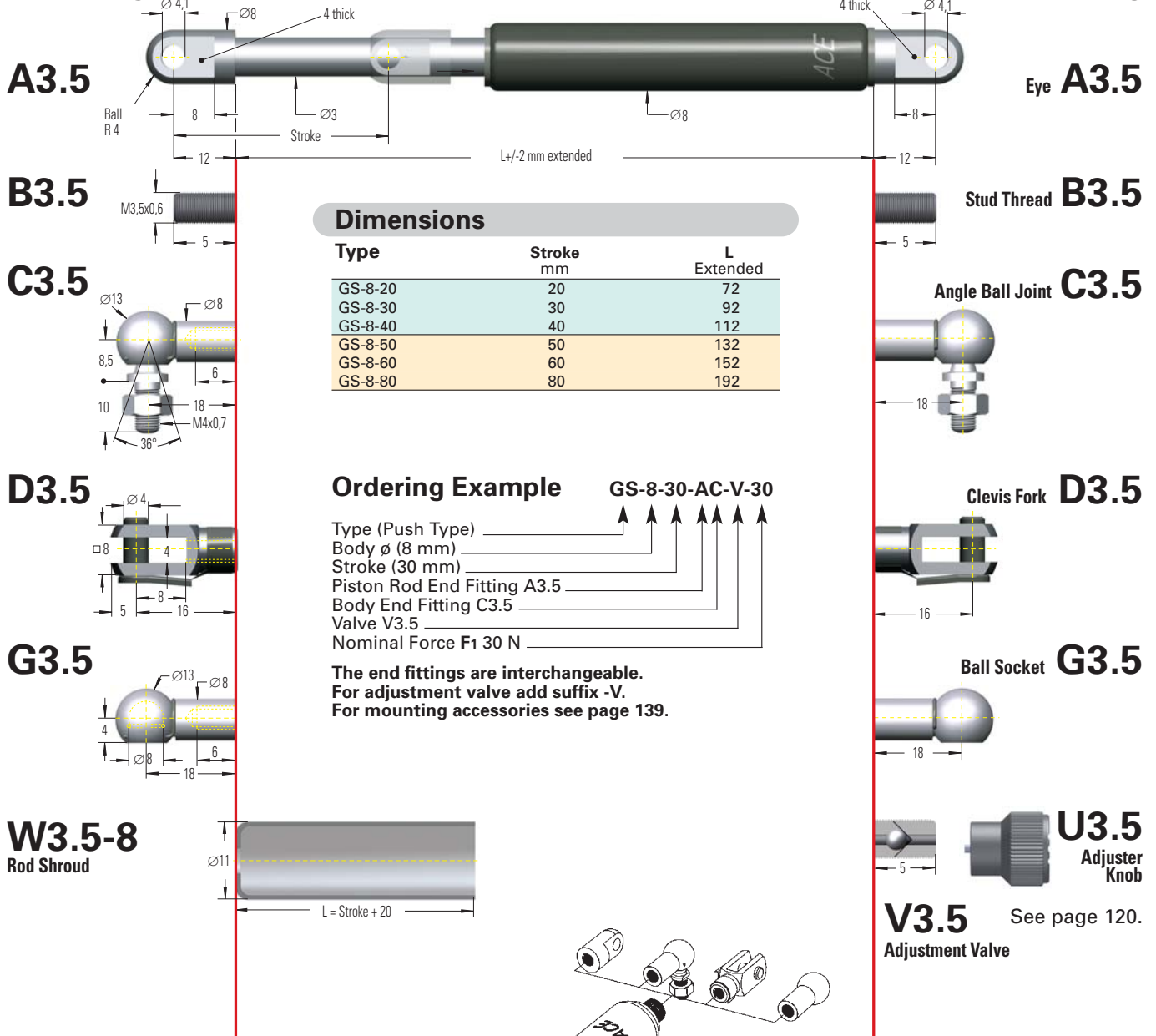


### End Fitting

### Standard Dimensions

### End Fitting



### Dimensions

Type	Stroke mm	L Extended
GS-8-20	20	72
GS-8-30	30	92
GS-8-40	40	112
GS-8-50	50	132
GS-8-60	60	152
GS-8-80	80	192

### Ordering Example

GS-8-30-AC-V-30

Type (Push Type) \_\_\_\_\_  
 Body  $\varnothing$  (8 mm) \_\_\_\_\_  
 Stroke (30 mm) \_\_\_\_\_  
 Piston Rod End Fitting A3.5 \_\_\_\_\_  
 Body End Fitting C3.5 \_\_\_\_\_  
 Valve V3.5 \_\_\_\_\_  
 Nominal Force F1 30 N \_\_\_\_\_

**The end fittings are interchangeable.  
 For adjustment valve add suffix -V.  
 For mounting accessories see page 139.**

GS-8

### Technical Data

ACE gas springs are self-contained and maintenance free. Standard gas springs with valve – ex stock.

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

**End position damping length:** approx. 5 mm.

**Progression:** approx. 28%, F2 max. 130 N.

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

**Operating fluid:** Nitrogen gas and oil (for end damping).

**Available force range F1 at 20°C:** 10 to 100 N.

**Material:** Body: powder coated steel. Piston rod: stainless steel. End fittings: zinc plated steel.

**To special order:** Without damping, extended length damping, special force curves, special lengths, alternative end fittings.

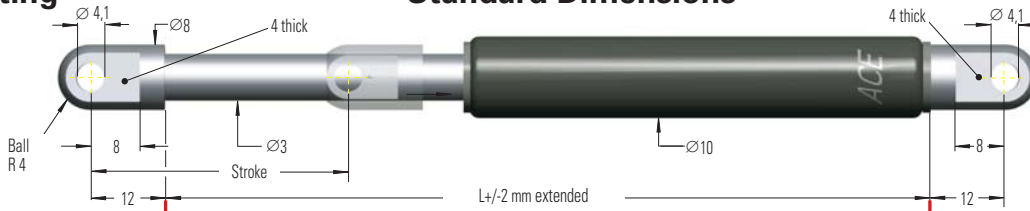
For mounting accessories see page 139.

### End Fitting

### Standard Dimensions

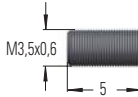
### End Fitting

A3.5



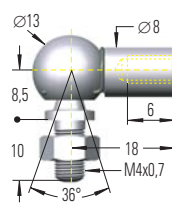
Eye A3.5

B3.5



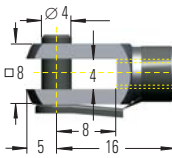
Stud Thread B3.5

C3.5



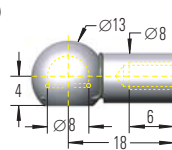
Angle Ball Joint C3.5

D3.5



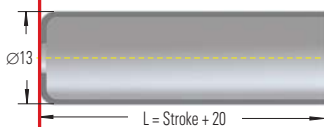
Clevis Fork D3.5

G3.5



Ball Socket G3.5

W3.5-10  
Rod Shroud



### Dimensions

Type	Stroke mm	L Extended
GS-10-20	20	72
GS-10-30	30	92
GS-10-40	40	112
GS-10-50	50	132
GS-10-60	60	152
GS-10-80	80	192

### Ordering Example

GS-10-80-AC-V-60

Type (Push Type) \_\_\_\_\_  
 Body ø (10 mm) \_\_\_\_\_  
 Stroke (80 mm) \_\_\_\_\_  
 Piston Rod End Fitting A3.5 \_\_\_\_\_  
 Body End Fitting C3.5 \_\_\_\_\_  
 Valve V3.5 \_\_\_\_\_  
 Nominal Force F<sub>1</sub> 60 N \_\_\_\_\_

The end fittings are interchangeable.  
 For adjustment valve add suffix -V.  
 For mounting accessories see page 139.

U3.5  
Adjuster Knob

V3.5  
Adjustment Valve

GS-10

### Technical Data

ACE gas springs are self-contained and maintenance free. Standard gas springs with valve – ex stock.

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

**End position damping length:** approx. 5 mm.

**Progression:** approx. 20%, F<sub>2</sub> max. 120 N.

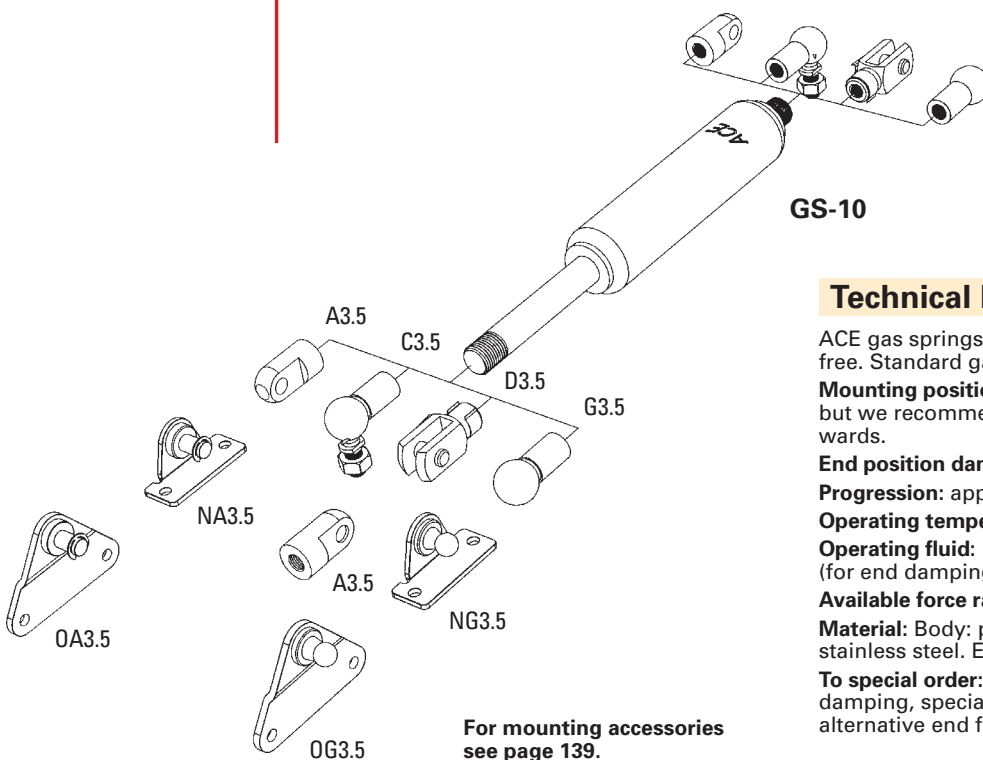
**Operating temperature range:** -20°C to +80°C.

**Operating fluid:** Nitrogen gas and oil (for end damping).

**Available force range F<sub>1</sub> at 20°C:** 10 to 100 N.

**Material:** Body: powder coated steel. Piston rod: stainless steel. End fittings: zinc plated steel.

**To special order:** Without damping, extended length damping, special force curves, special lengths, alternative end fittings.

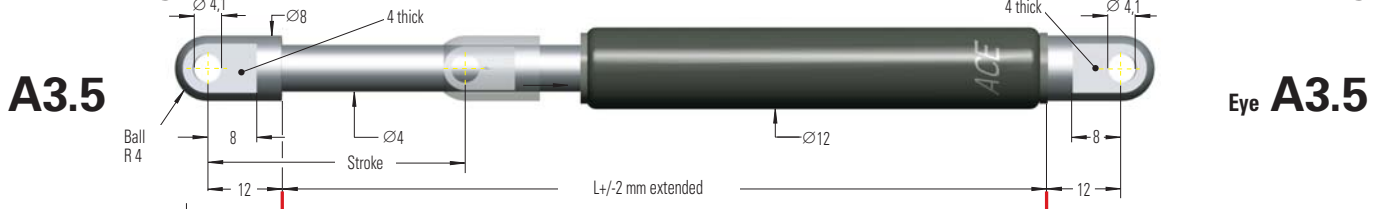


For mounting accessories see page 139.

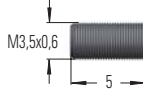
### End Fitting

### Standard Dimensions

### End Fitting

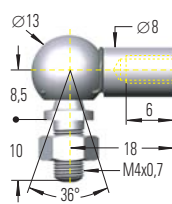


### B3.5



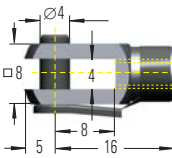
### Stud Thread B3.5

### C3.5



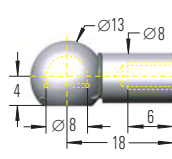
### Angle Ball Joint C3.5

### D3.5



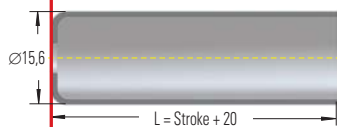
### Clevis Fork D3.5

### G3.5



### Ball Socket G3.5

### W3.5-12 Rod Shroud



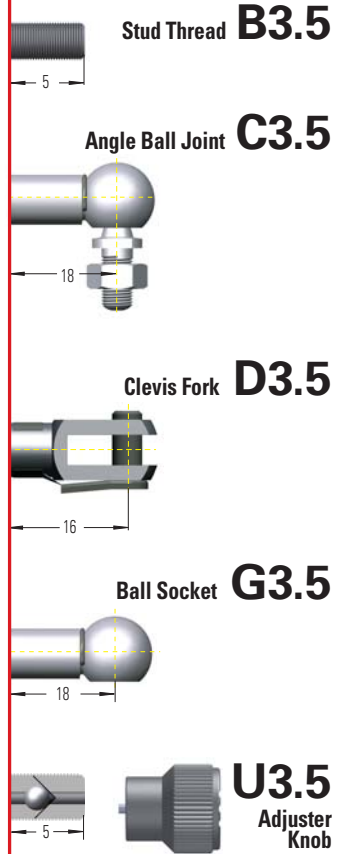
### Dimensions

Type	Stroke mm	L Extended	max. F <sub>1</sub>
GS-12-20	20	72	180 N
GS-12-40	40	112	180 N
GS-12-50	50	132	180 N
GS-12-60	60	152	180 N
GS-12-80	80	192	150 N
GS-12-100	100	232	150 N
GS-12-120	120	272	120 N
GS-12-150	150	332	100 N

### Ordering Example

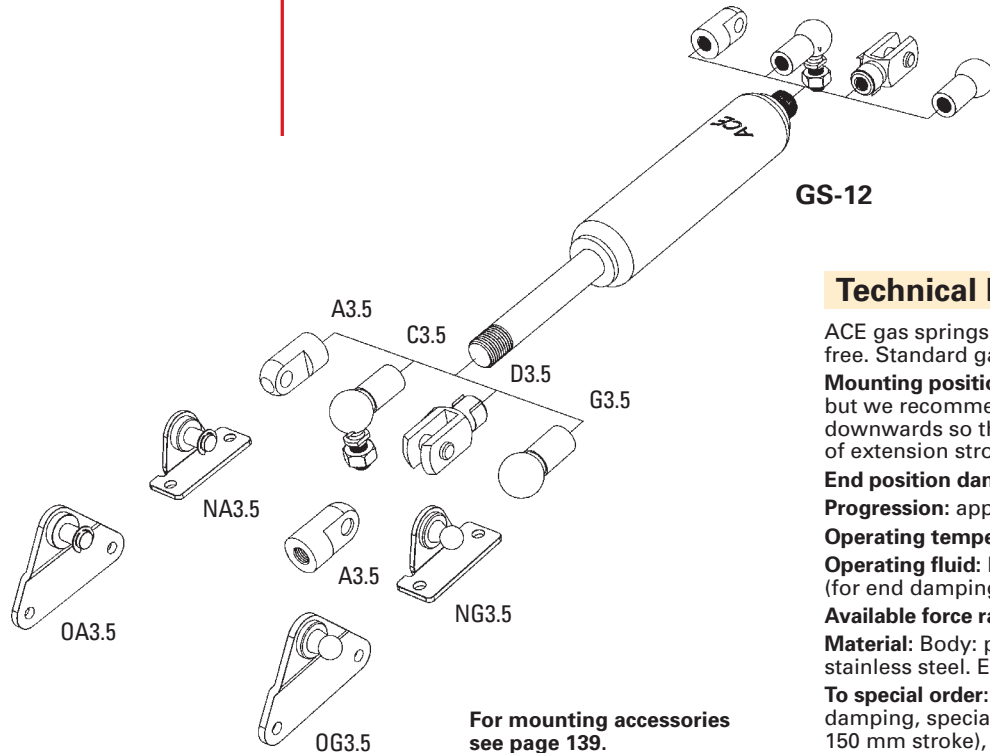
Type (Push Type) \_\_\_\_\_  
 Body ø (12 mm) \_\_\_\_\_  
 Stroke (100 mm) \_\_\_\_\_  
 Piston Rod End Fitting A3.5 \_\_\_\_\_  
 Body End Fitting A3.5 \_\_\_\_\_  
 Valve V3.5 \_\_\_\_\_  
 Nominal Force F<sub>1</sub> 30 N \_\_\_\_\_

The end fittings are interchangeable.  
 For adjustment valve add suffix -V.  
 For mounting accessories see page 139.



### V3.5 See page 120. Adjustment Valve

### GS-12



For mounting accessories see page 139.

### Technical Data

ACE gas springs are self-contained and maintenance free. Standard gas springs with valve – ex stock.

**Mounting position:** can be mounted in any position but we recommend mounting with the piston rod downwards so that the damping is effective at end of extension stroke.

**End position damping length:** approx. 10 mm.

**Progression:** approx. 25 %, F<sub>2</sub> max. 225 N.

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

**Operating fluid:** Nitrogen gas and oil (for end damping).

**Available force range F<sub>1</sub> at 20°C:** 10 to 180 N.

**Material:** Body: powder coated steel. Piston rod: stainless steel. End fittings: zinc plated steel.

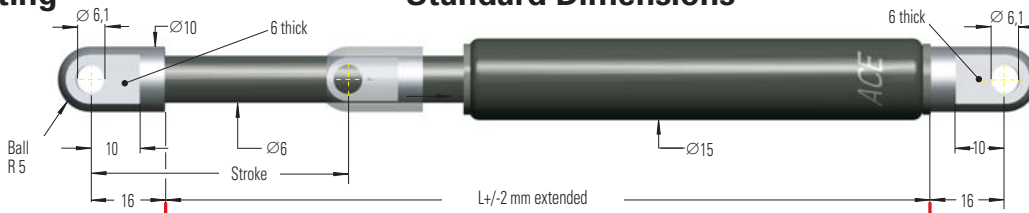
**To special order:** Without damping, extended length damping, special force curves, special lengths (max. 150 mm stroke), alternative end fittings.

### End Fitting

### Standard Dimensions

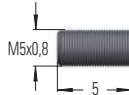
### End Fitting

A5



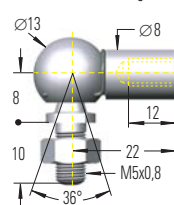
Eye A5

B5



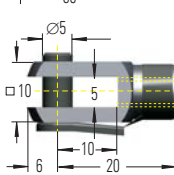
Stud Thread B5

C5



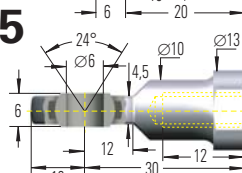
Angle Ball Joint C5

D5



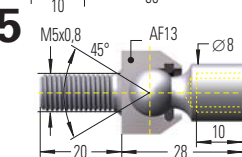
Clevis Fork D5

E5



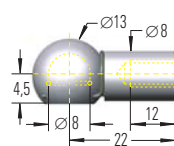
Swivel Eye E5

F5



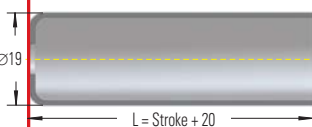
Inline Ball Joint F5

G5



Ball Socket G5

W5-15  
Rod Shroud



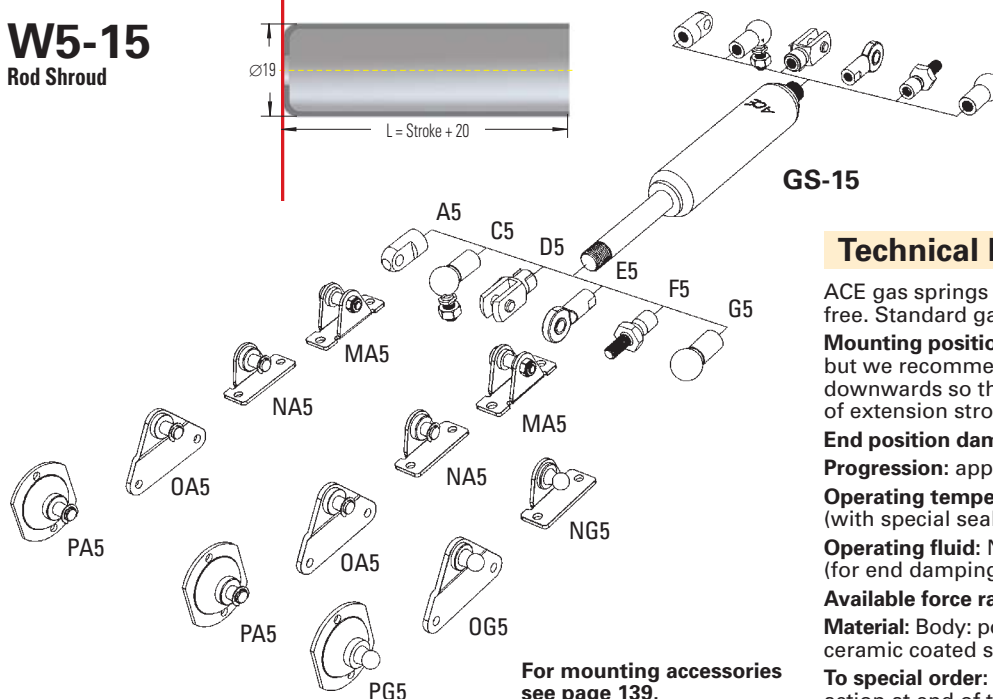
### Dimensions

Type	Stroke mm	L Extended
GS-15-20	20	67
GS-15-40	40	107
GS-15-50	50	127
GS-15-60	60	147
GS-15-80	80	187
GS-15-100	100	227
GS-15-120	120	267
GS-15-150	150	327

### Ordering Example GS-15-150-AC-V-400

Type (Push Type) \_\_\_\_\_  
 Body ø (15 mm) \_\_\_\_\_  
 Stroke (150 mm) \_\_\_\_\_  
 Piston Rod End Fitting A5 \_\_\_\_\_  
 Body End Fitting C5 \_\_\_\_\_  
 Valve V5 \_\_\_\_\_  
 Nominal Force F1 400 N \_\_\_\_\_

The end fittings are interchangeable.  
 For adjustment valve add suffix -V.  
 For mounting accessories see page 139.



For mounting accessories see page 139.

GS-15

### Technical Data

ACE gas springs are self-contained and maintenance free. Standard gas springs with valve – ex stock.

**Mounting position:** Can be mounted in any position but we recommend mounting with the piston rod downwards so that the damping is effective at end of extension stroke.

**End position damping length:** approx. 10 mm.

**Progression:** approx. 27 %, F2 max. 500 N.

**Operating temperature range:** -20°C to +80°C (with special seals up to 200°C).

**Operating fluid:** Nitrogen gas and oil (for end damping).

**Available force range F1 at 20°C:** 20 to 400 N.

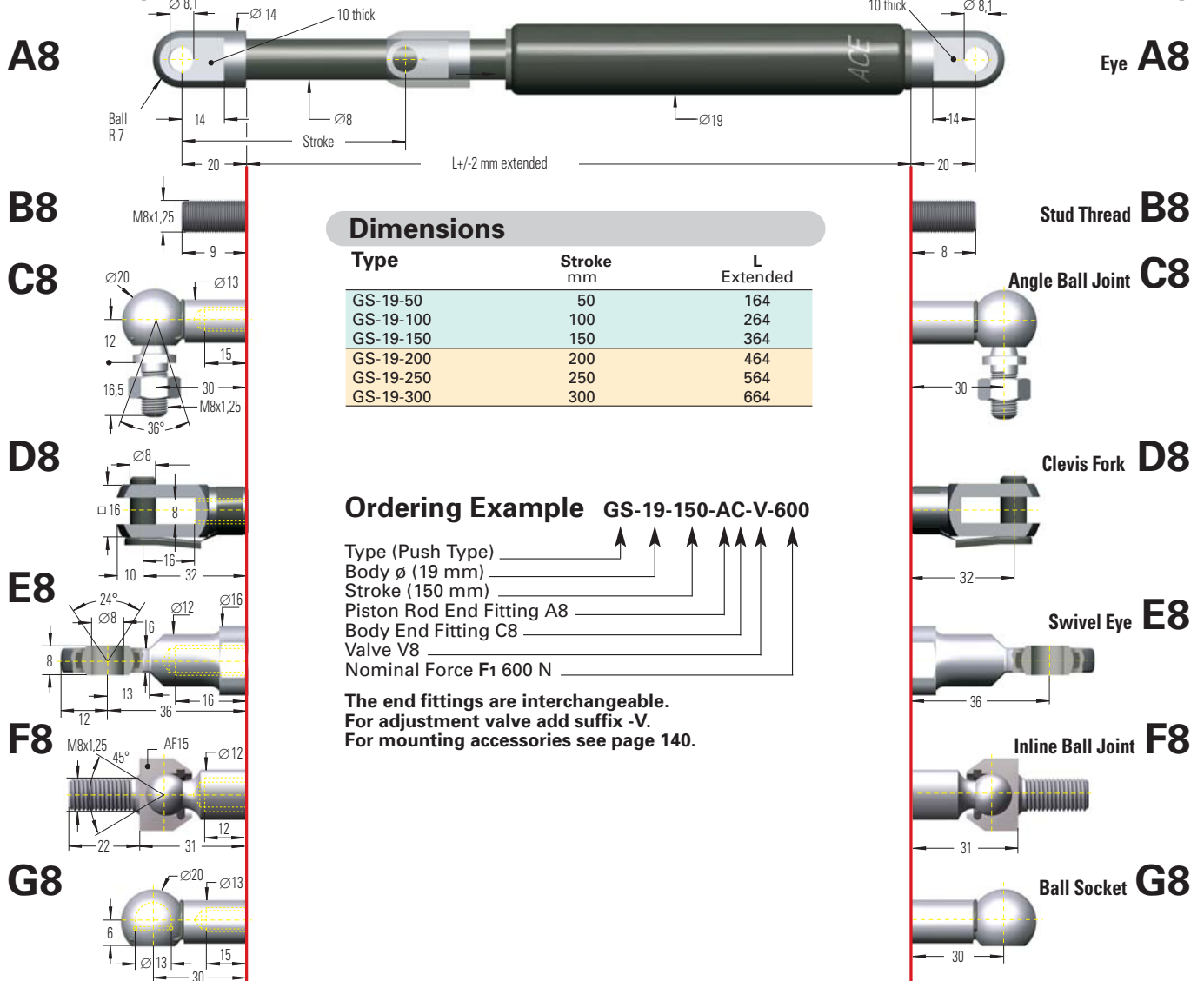
**Material:** Body: powder coated steel. Piston rod: ceramic coated steel. End fittings: zinc plated steel.

**To special order:** Without damping, increased damping action at end of travel, special force curves, special lengths, strokes, alternative end fittings, stainless steel (see page 134 to 137).

### End Fitting

### Standard Dimensions

### End Fitting



### Dimensions

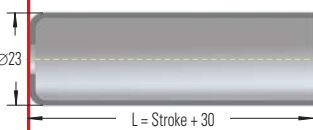
Type	Stroke mm	L Extended
GS-19-50	50	164
GS-19-100	100	264
GS-19-150	150	364
GS-19-200	200	464
GS-19-250	250	564
GS-19-300	300	664

### Ordering Example GS-19-150-AC-V-600

Type (Push Type) \_\_\_\_\_  
 Body  $\phi$  (19 mm) \_\_\_\_\_  
 Stroke (150 mm) \_\_\_\_\_  
 Piston Rod End Fitting A8 \_\_\_\_\_  
 Body End Fitting C8 \_\_\_\_\_  
 Valve V8 \_\_\_\_\_  
 Nominal Force F1 600 N \_\_\_\_\_

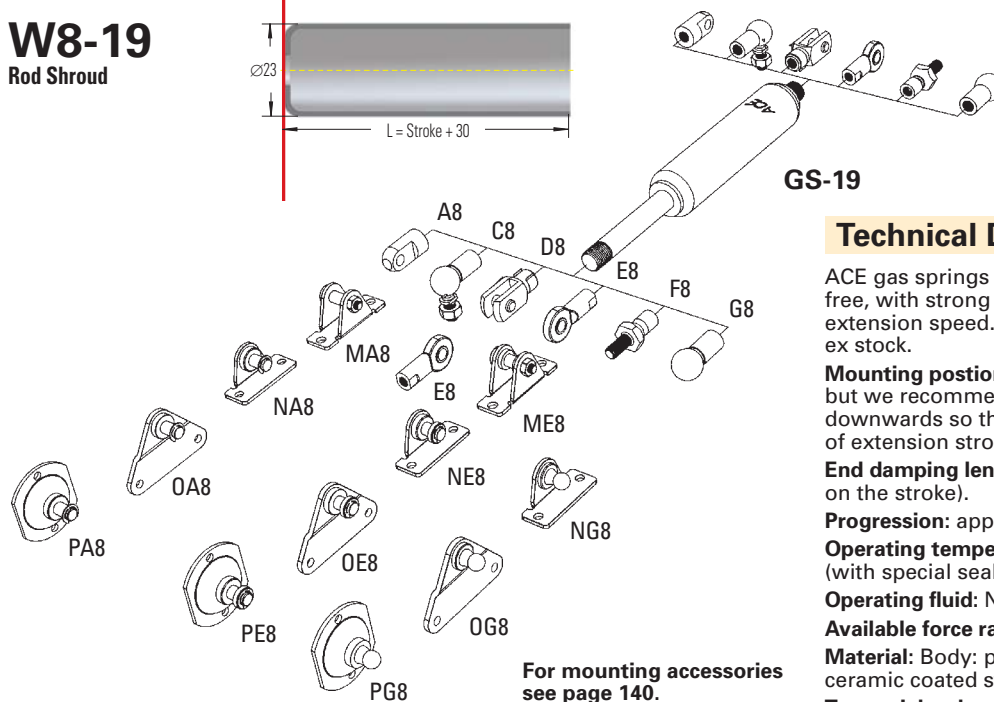
The end fittings are interchangeable.  
 For adjustment valve add suffix -V.  
 For mounting accessories see page 140.

### W8-19 Rod Shroud



### GS-19

### V8 Adjustment Valve



For mounting accessories see page 140.

### Technical Data

ACE gas springs are self-contained and maintenance free, with strong end position damping and slow extension speed. Standard gas springs with valve - ex stock.

**Mounting position:** Can be mounted in any position but we recommend mounting with the piston rod downwards so that the damping is effective at end of extension stroke.

**End damping length:** approx. 20 to 60 mm (depending on the stroke).

**Progression:** approx. 36 to 42 %, F<sub>2</sub> max. 995 N.

**Operating temperature:** -20°C to +80°C (with special seals up to 200°C).

**Operating fluid:** Nitrogen gas and oil (for end damping).

**Available force range F<sub>1</sub> at 20°C:** 50 to 700 N.

**Material:** Body: powder coated steel. Piston rod: ceramic coated steel. End fittings: zinc plated steel.

**To special order:** Without damping, standard length damping, special force curves, special lengths, alternative end fittings, stainless steel (see page 134 to 137).

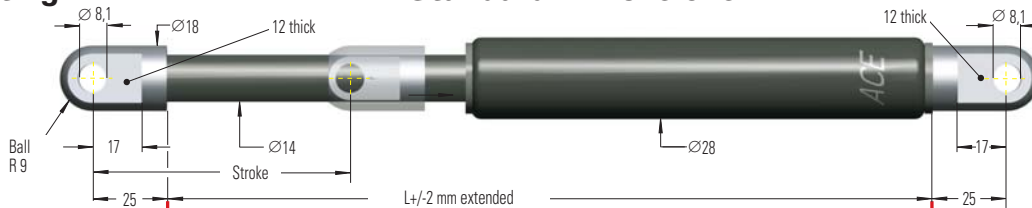


### End Fitting

### Standard Dimensions

### End Fitting

A10



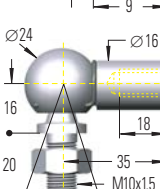
Eye A10

B10



Stud Thread B10

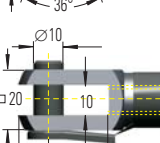
C10



Angle Ball Joint C10

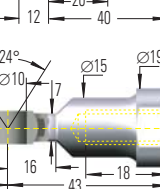
(Max. permitted force 1800 N)

D10



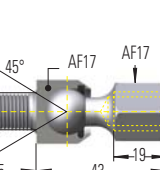
Clevis Fork D10

E10



Swivel Eye E10

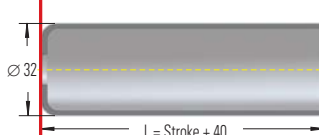
F10



Inline Ball Joint F10

(Max. permitted force 1800 N)

W10-28  
Rod Shroud



### Dimensions

Type	Stroke mm	L Extended
GS-28-100	100	262
GS-28-150	150	362
GS-28-200	200	462
GS-28-250	250	562
GS-28-300	300	662
GS-28-350	350	762
GS-28-400	400	862
GS-28-450	450	962
GS-28-500	500	1062
GS-28-550	550	1162
GS-28-600	600	1262
GS-28-650	650	1362
GS-28-700	700	1462
GS-28-750	750	1562

### Ordering Example GS-28-150-EE-V-1200

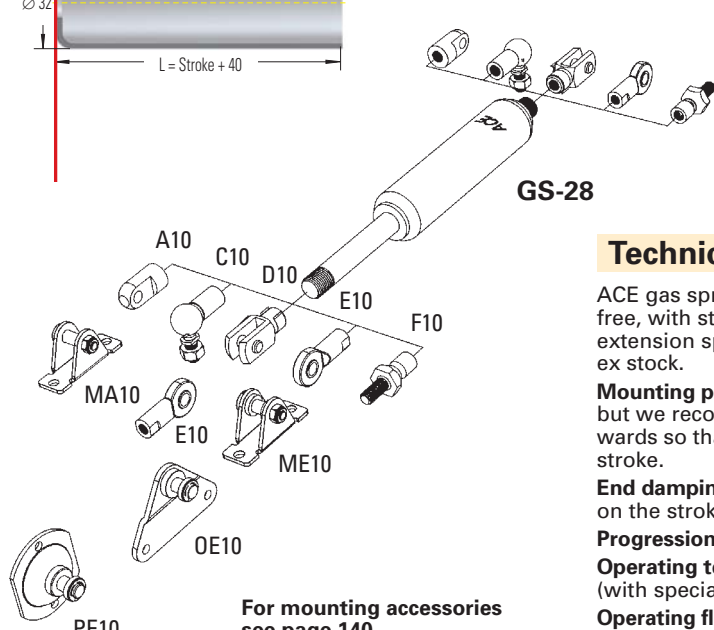
Type (Push type) \_\_\_\_\_  
 Body ø (28 mm) \_\_\_\_\_  
 Stroke (150 mm) \_\_\_\_\_  
 Piston Rod End Fitting E10 \_\_\_\_\_  
 Body End Fitting E10 \_\_\_\_\_  
 Valve V10 \_\_\_\_\_  
 Nominal Force F<sub>1</sub> 1200 N \_\_\_\_\_

The end fittings are interchangeable.  
 For adjustment valve add suffix -V.  
 For mounting accessories see page 140.

U10  
Adjuster Knob

See page 120.

V10  
Adjustment Valve



For mounting accessories see page 140.

### Technical Data

ACE gas springs are self-contained and maintenance free, with strong end position damping and slow extension speed. Standard gas springs with valve - ex stock.

**Mounting position:** Can be mounted in any position but we recommend mounting with piston rod downwards so that damping is effective at end of extension stroke.

**End damping length:** approx. 30 to 70 mm (depending on the stroke).

**Progression:** approx. 60 to 95 %, F<sub>2</sub> max. 4875 N.

**Operating temperature range:** -20°C to +80°C (with special seals up to 200°C).

**Operating fluid:** Nitrogen gas and oil (for end damping).

**Available force range F<sub>1</sub> at 20°C:** 150 to 2500 N.

**Material:** Body: powder coated steel. Piston rod: ceramic coated steel. End fittings: zinc plated steel.

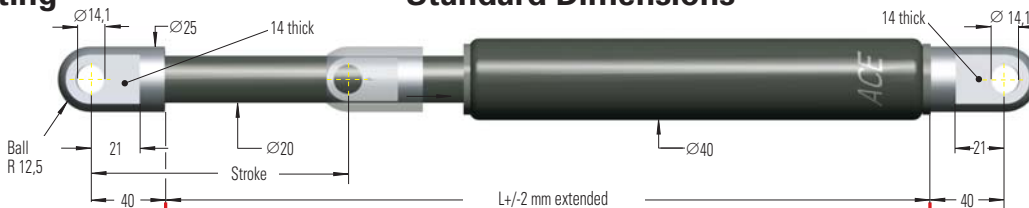
**To special order:** without damping, standard length damping, special force curves, special lengths, alternative end fittings, stainless steel.

### End Fitting

### Standard Dimensions

### End Fitting

A14

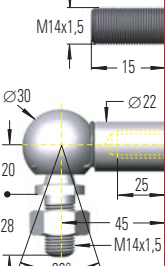


Eye A14

B14

Stud Thread B14

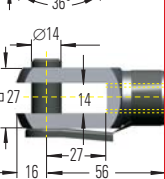
C14



Angle Ball Joint C14

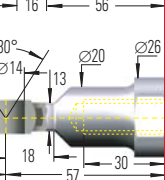
(Max. permitted force 3200 N)

D14



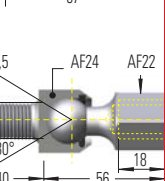
Clevis Fork D14

E14



Swivel Eye E14

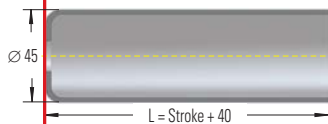
F14



Inline Ball Joint F14

(Max. permitted force 3200 N)

W14-40  
Rod Shroud



### Dimensions

Type	Stroke mm	L Extended
GS-40-100	100	317
GS-40-150	150	417
GS-40-200	200	517
GS-40-300	300	717
GS-40-400	400	917
GS-40-500	500	1117
GS-40-600	600	1317
GS-40-800	800	1717
GS-40-1000	1000	2117

### Ordering Example GS-40-150-DD-V-3500

Type (Push type) \_\_\_\_\_  
 Body  $\phi$  (40 mm) \_\_\_\_\_  
 Stroke (150 mm) \_\_\_\_\_  
 Piston Rod End Fitting D14 \_\_\_\_\_  
 Body End Fitting D14 \_\_\_\_\_  
 Valve V14 \_\_\_\_\_  
 Nominal Force  $F_1$  3500 N \_\_\_\_\_

The end fittings are interchangeable.  
 For adjustment valve add suffix -V.  
 For mounting accessories see page 141.

### Technical Data

ACE gas springs are self-contained and maintenance free, with strong end position damping and slow extension speed. Standard gas springs with valve - ex stock.

**Mounting position:** Can be mounted in any position but we recommend mounting with piston rod downwards so that damping is effective at end of extension stroke.

**End damping length:** approx. 30-70 mm (depending on the stroke).

**Progression:** approx. 47 to 53%,  $F_2$  max. 7650 N.

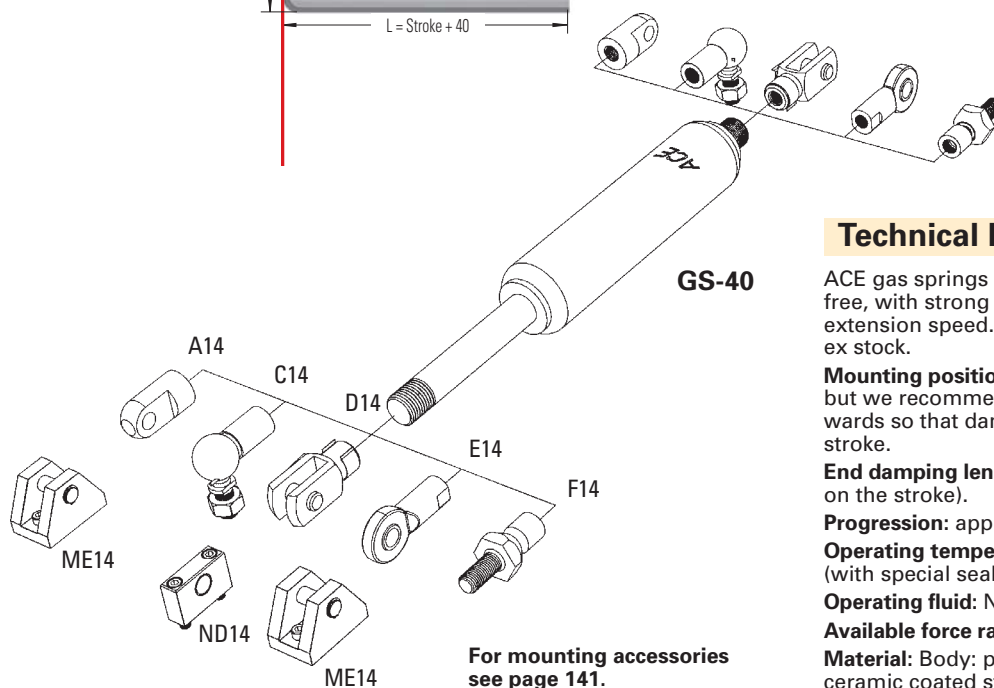
**Operating temperature range:** -20°C to +80°C (with special seals up to 200°C).

**Operating fluid:** Nitrogen gas and oil (for end damping).

**Available force range  $F_1$  at 20°C:** 500 to 5000 N.

**Material:** Body: powder coated steel. Piston rod: ceramic coated steel. End fittings: zinc plated steel.

**To special order:** Without damping, standard length damping, special force curves, special lengths, alternative end fittings, stainless steel.



For mounting accessories see page 141.

V14  
Adjustment Valve

U14  
Adjuster Knob

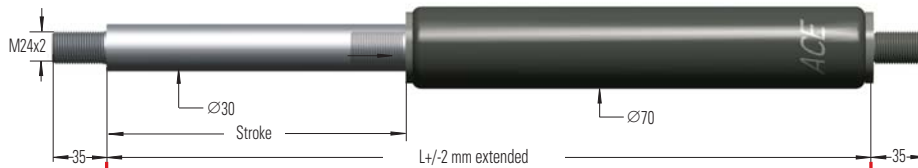
See page 120.

### End Fitting

### Standard Dimensions

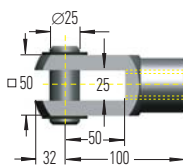
### End Fitting

**B24**



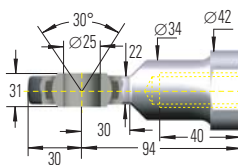
Stud Thread **B24**

**D24**



Clevis Fork **D24**

**E24**



Swivel Eye **E24**

### Dimensions

Type	Stroke mm	L Extended
GS-70-100	100	320
GS-70-200	200	520
GS-70-300	300	720
GS-70-400	400	920
GS-70-500	500	1120
GS-70-600	600	1320
GS-70-700	700	1520
GS-70-800	800	1720

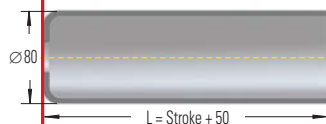
### Ordering Example GS-70-200-EE-8000

Type (Push Type) \_\_\_\_\_  
 Body ø (70 mm) \_\_\_\_\_  
 Stroke (200 mm) \_\_\_\_\_  
 Piston Rod End Fitting E24 \_\_\_\_\_  
 Body End Fitting E24 \_\_\_\_\_  
 Nominal Force F<sub>1</sub> 8000 N \_\_\_\_\_

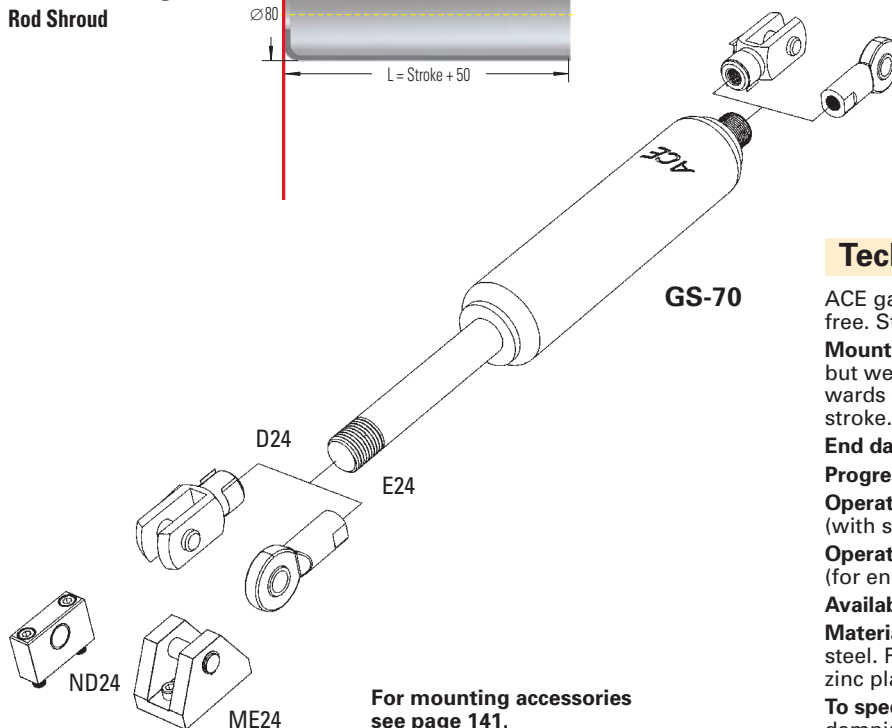
The end fittings are interchangeable.  
 For mounting accessories see page 141.  
 Standard version includes valve.

**W24-70**

Rod Shroud



**GS-70**



For mounting accessories see page 141.

### Technical Data

ACE gas springs are self-contained and maintenance free. Standard gas springs with valve.

**Mounting position:** Can be mounted in any position but we recommend mounting with piston rod downwards so that damping is effective at end of extension stroke.

**End damping length:** approx. 10 mm.

**Progression:** approx. 25%, F<sub>2</sub> max. 16 250 N.

**Operating temperature range:** -20°C to +80°C (with special seals up to 200°C).

**Operating fluid:** Nitrogen gas and oil (for end damping).

**Available force range F<sub>1</sub> at 20°C:** 2 000 to 13 000 N.

**Material:** Body: powder coated steel or zinc plated steel. Piston rod: hard chrome plated. End fittings: zinc plated steel.

**To special order:** Without damping, extended length damping, special force curves, special lengths, alternative end fittings, stainless steel.