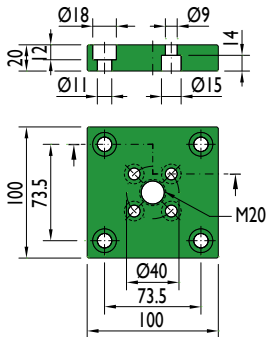
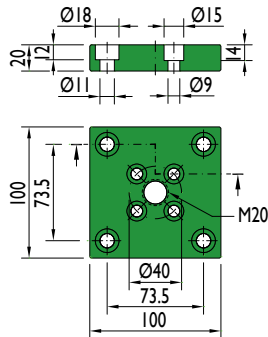


Flanges

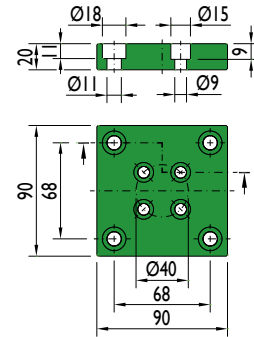
BFE-1500



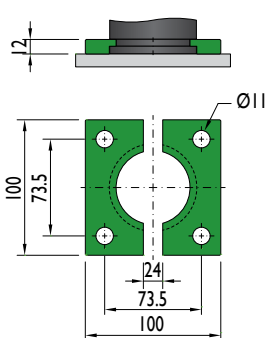
BFI-1500



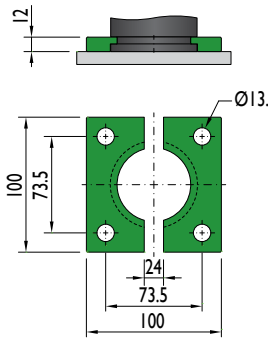
MC-2500



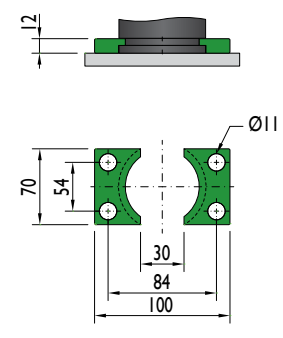
GR-1500



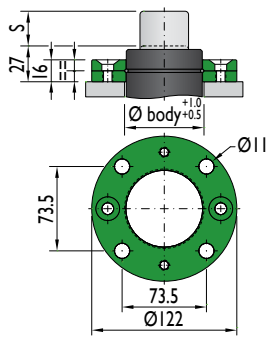
MT-2500



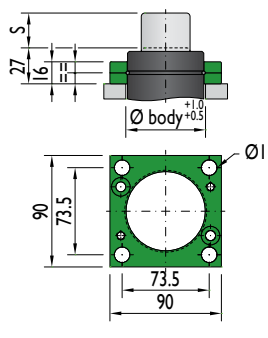
AR-1500



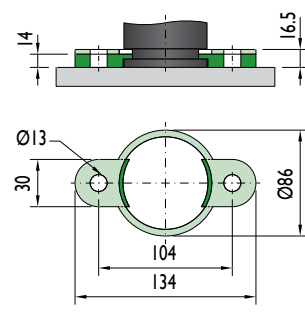
XS-1500



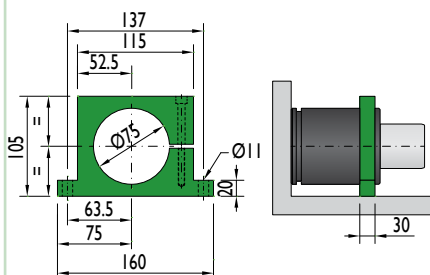
XC-1500



PR-1500

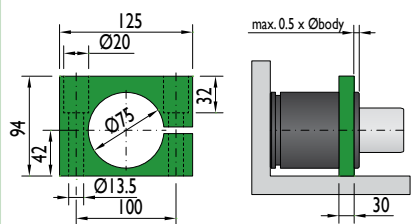


CS-1500



Flange must not support spring's force

CF-1500

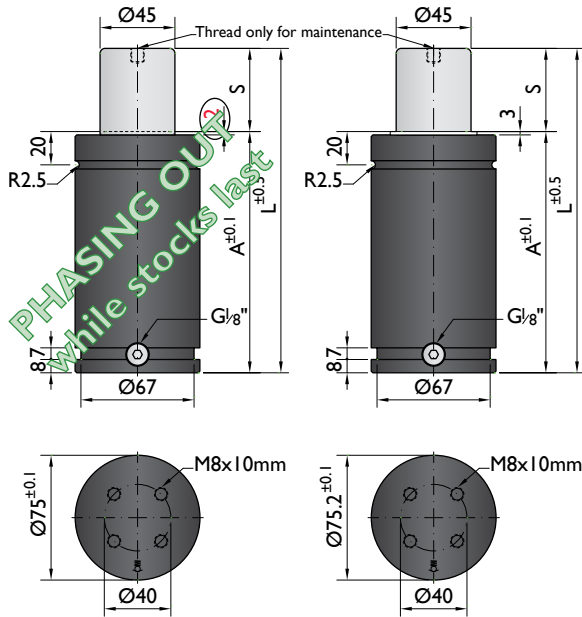


Flange must not support spring's force

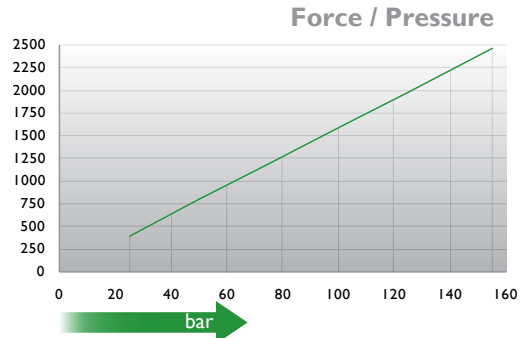


*The new cylinder will be supplied when the stock runs out.

NEW MODEL*

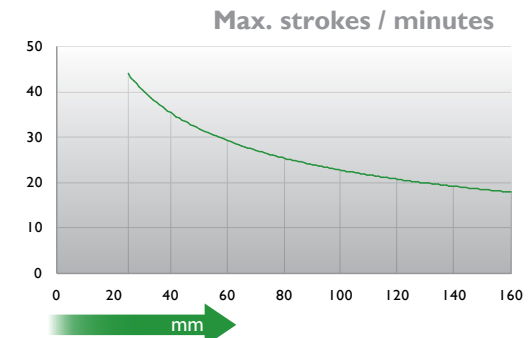


PHASING OUT
While stocks last



↑ daN

→ bar



↑ strokes/min

→ mm

Ordering example: 4 x M-2500-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | ⁽³⁾ | kg |
|------------|------------------------|---------|---------|--------------------------------------|----------|----------------|------|
| M-2500-25 | 25 | 145 | 120 | 2500 | 3300 | No | 2.85 |
| M-2500-38 | 38 | 171 | 133 | | 3500 | No | 3.21 |
| M-2500-50 | 50 | 195 | 145 | | 3600 | No | 3.29 |
| M-2500-63 | 63 | 221 | 158 | | 3700 | No | 3.50 |
| M-2500-80 | 80 | 255 | 175 | | 3900 | Yes | 3.85 |
| M-2500-100 | 100 | 300 | 200 | | 3900 | Yes | 4.30 |
| M-2500-125 | 125 | 350 | 225 | | 3900 | Yes | 4.74 |
| M-2500-160 | 160 | 425 | 265 | | 4000 | Yes | 5.34 |

other strokes ⁽¹⁾ under request

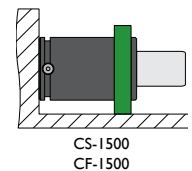
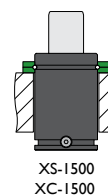
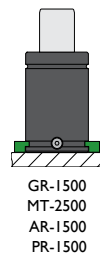
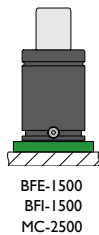
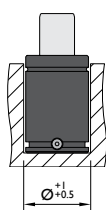
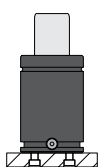
alternative forces ⁽²⁾ upon request

ESK available for other strokes ⁽³⁾



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 155 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT M-2500 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

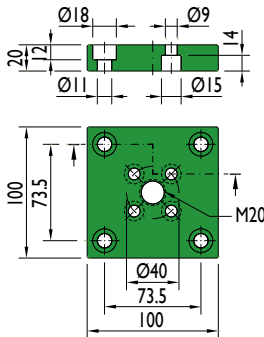
Mounting possibilities



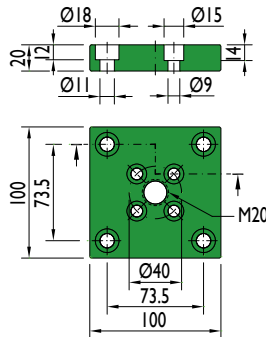
Flange must not support spring's force

Flanges

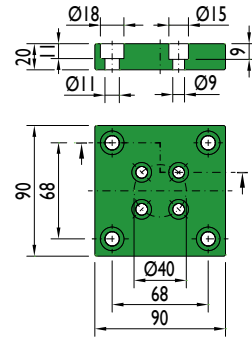
BFE-1500



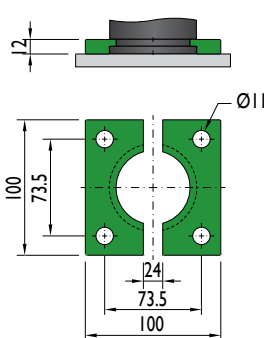
BFI-1500



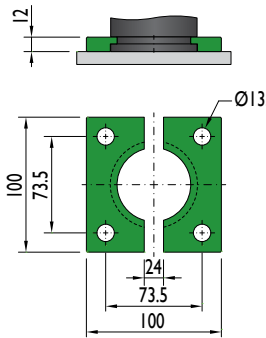
MC-2500



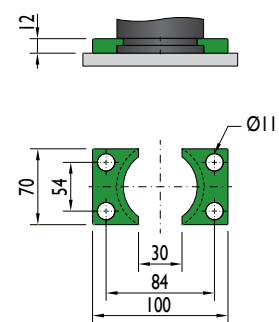
GR-1500



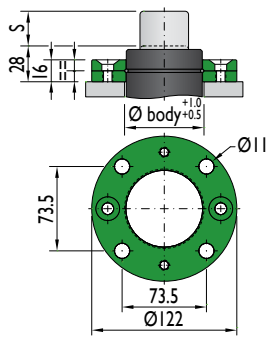
MT-2500



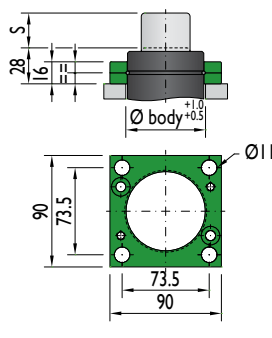
AR-1500



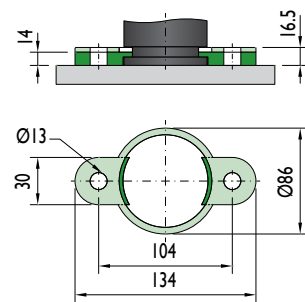
XS-1500



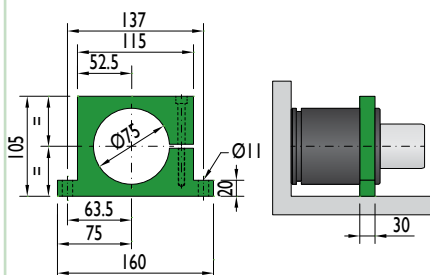
XC-1500



PR-1500

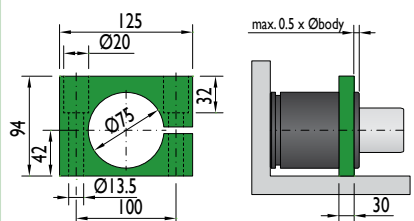


CS-1500



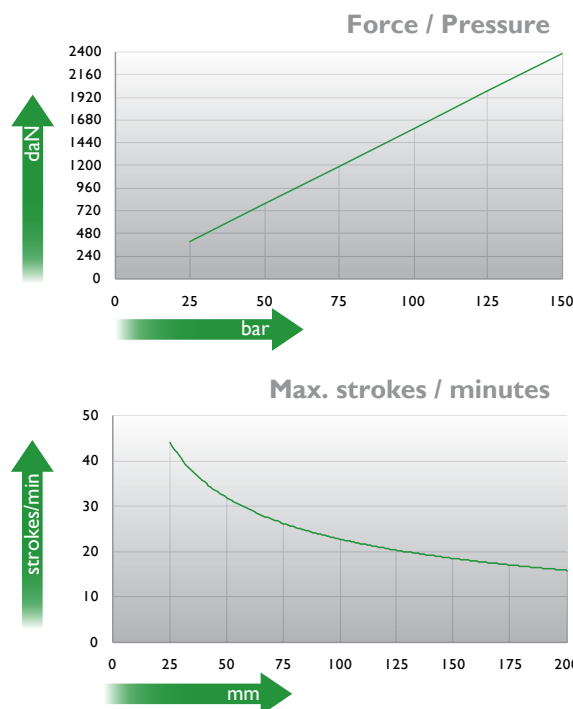
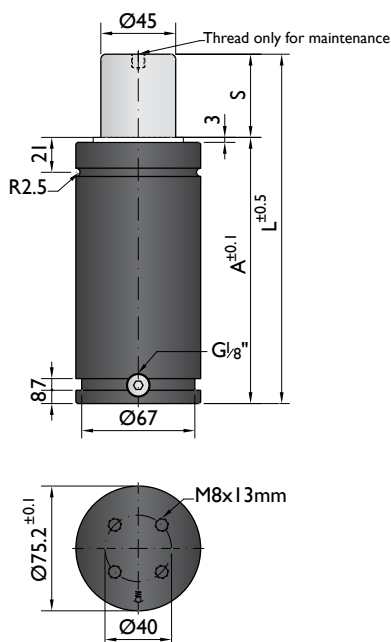
Flange must not support spring's force

CF-1500



Flange must not support spring's force

Special mounts available on
www.nitrogas.com



Ordering example: 4 x HD-2400-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | (3) | kg |
|-------------|------------------------|---------|---------|--------------------------------------|----------|------|------|
| | | | | (20°C, 150 bar) | | | |
| HD-2400-25 | 25 | 160 | 135 | 2400 | 3000 | No | 3.16 |
| HD-2400-38 | 38 | 186 | 148 | | 3200 | No | 3.41 |
| HD-2400-50 | 50 | 210 | 160 | | 3300 | No | 3.75 |
| HD-2400-63 | 63 | 236 | 173 | | 3400 | No | 4.00 |
| HD-2400-80 | 80 | 270 | 190 | | 3600 | Yes | 4.32 |
| HD-2400-100 | 100 | 310 | 210 | | 3600 | Yes | 4.59 |
| HD-2400-125 | 125 | 360 | 235 | | 3700 | Yes | 5.04 |
| HD-2400-160 | 160 | 430 | 270 | | 3800 | Yes | 5.68 |
| HD-2400-200 | 200 | 510 | 310 | | 3900 | Yes | 6.42 |
| HD-2400-250 | 250 | 610 | 360 | | 3900 | Yes | 7.21 |
| HD-2400-300 | 300 | 710 | 410 | 4000 | Yes | 8.00 | |

⁽¹⁾ other strokes under request

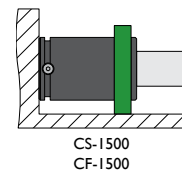
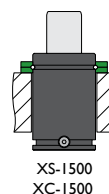
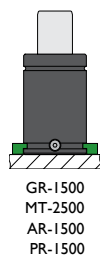
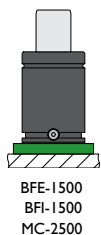
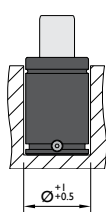
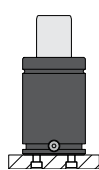
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT HD-2400 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

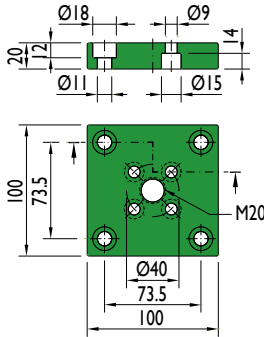
Mounting possibilities



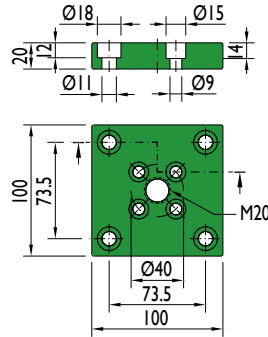
Flange must not support spring's force

Flanges

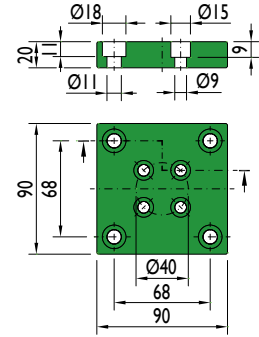
BFE-1500



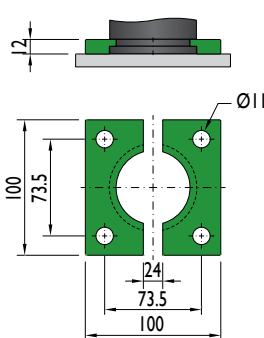
BFI-1500



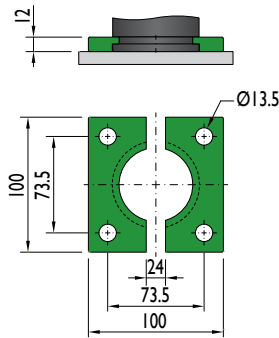
MC-2500



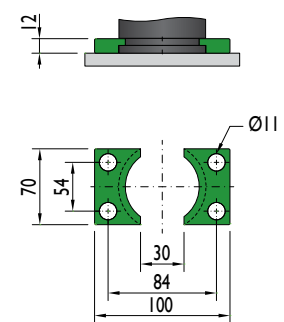
GR-1500



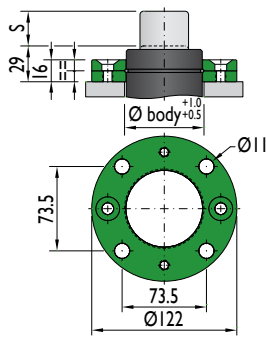
MT-2500



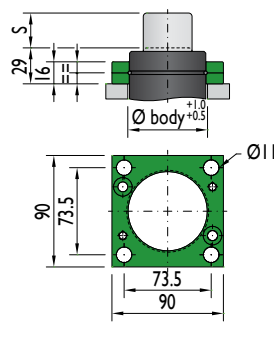
AR-1500



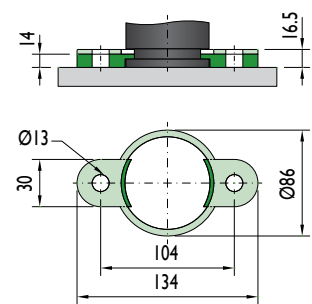
XS-1500



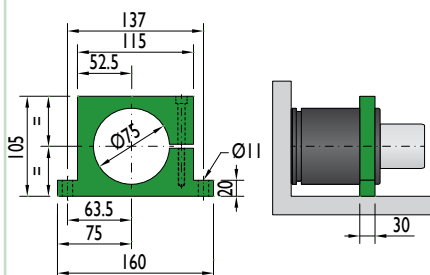
XC-1500



PR-1500

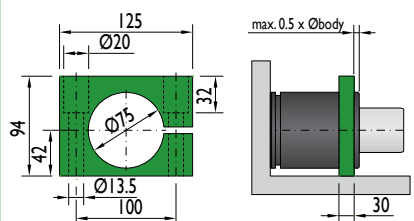


CS-1500



Flange must not support spring's force

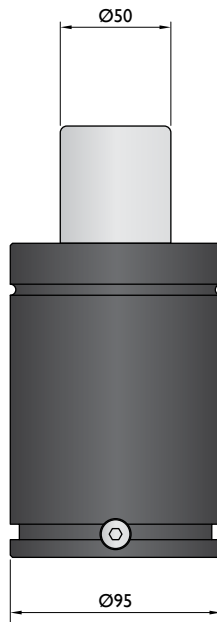
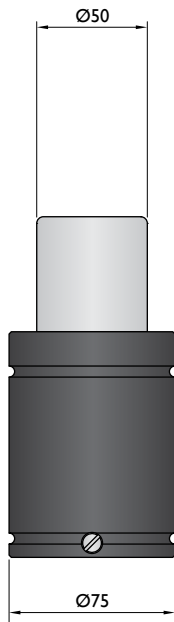
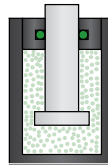
CF-1500



Flange must not support spring's force

Force 3000 daN

Piston Rod Sealed gas springs



| | | | |
|------------------------|----------------|----------------|---------------|
| Model | KC-3000 | HG-3000 | G-3000 |
| Initial F (daN) | 3000 | 3000 | 3000 |
| L max (mm) | 2xStroke+54 | 2xStroke+95 | 2xStroke+120 |
| Stroke (mm) | 12-125 | 25-200 | 25-300 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

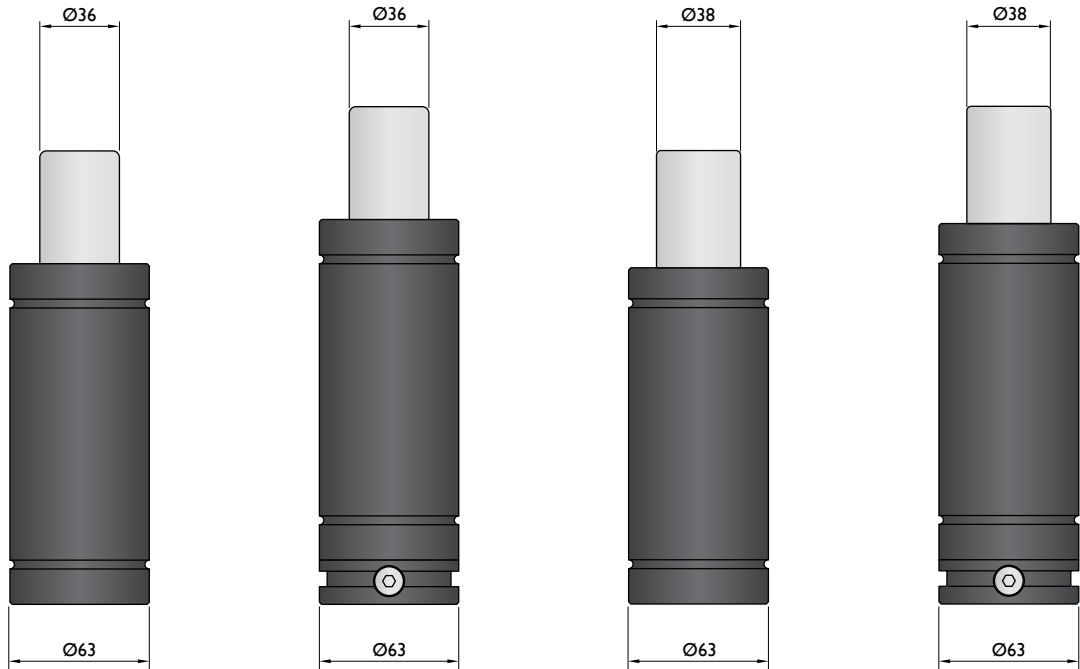
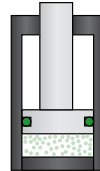
ISO
11901

VDI
3003

CNOMO
EM24.54.700

Force 3000 daN

Bore Sealed gas springs



| Model | T-3000 | TC-3000 | TS-3000 | TSC-3000 |
|-----------------|--------|---------|---------|----------|
| Initial F (daN) | 3000 | 3000 | 3000 | 3000 |
| L max (mm) | 85-205 | 105-225 | 85-256 | 105-276 |
| Stroke (mm) | 10-50 | 10-50 | 10-65 | 10-65 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

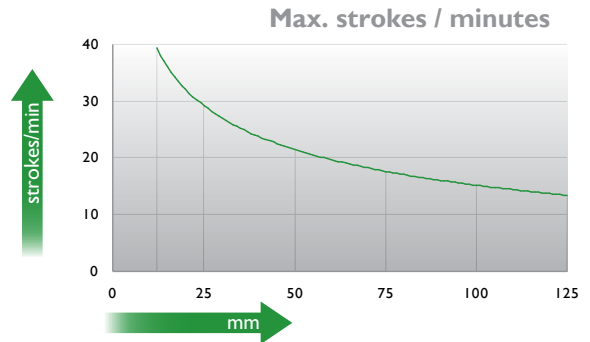
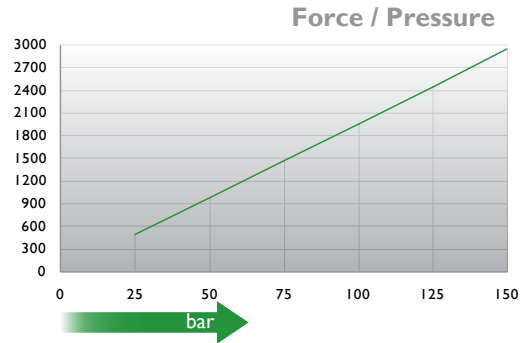
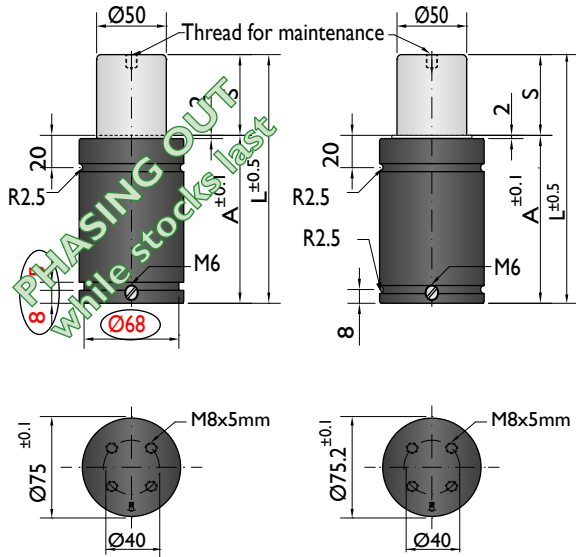
VDI
3003

CNOMO
EM24.54.700




*The new cylinder will be supplied when the stock runs out.

NEW MODEL*



Ordering example: 4 x KC-3000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  | kg |
|-------------|------------------------|---------|---------|---|----------|---|------|
| KC-3000-12 | 12 | 78 | 66 | 3000 | 4300 | No | 1.65 |
| KC-3000-25 | 25 | 104 | 79 | | 4800 | No | 1.87 |
| KC-3000-38 | 38 | 130 | 92 | | 5000 | No | 2.12 |
| KC-3000-50 | 50 | 154 | 104 | | 5300 | Yes | 2.31 |
| KC-3000-63 | 63 | 180 | 117 | | 5300 | Yes | 2.60 |
| KC-3000-80 | 80 | 214 | 134 | | 5300 | Yes | 2.93 |
| KC-3000-100 | 100 | 254 | 154 | | 5300 | Yes | 3.20 |
| KC-3000-125 | 125 | 304 | 179 | | 5400 | Yes | 3.41 |

other strokes ⁽¹⁾ under request

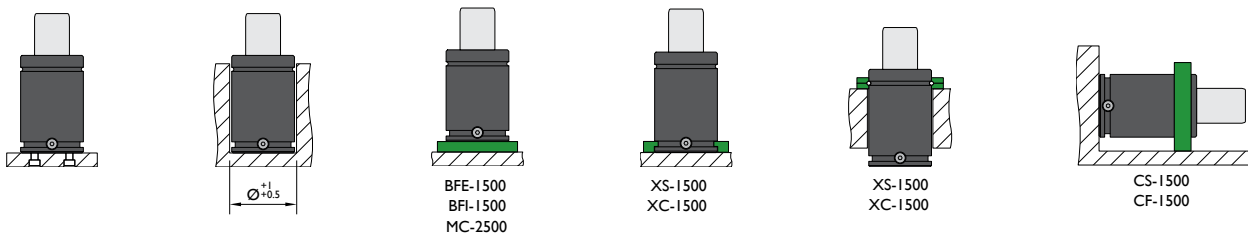
alternative forces ⁽²⁾ upon request

ESK available for other strokes ⁽³⁾



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT KC-3000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | M6 |

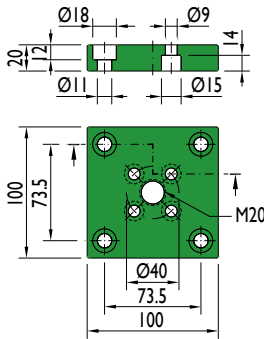
Mounting possibilities



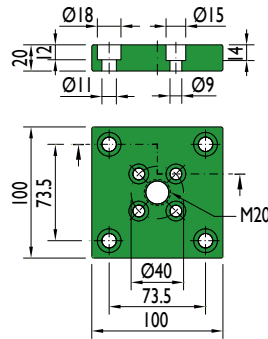
Flange must not support spring's force

Flanges

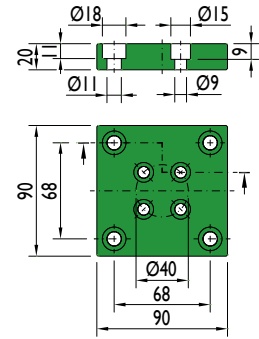
BFE-1500



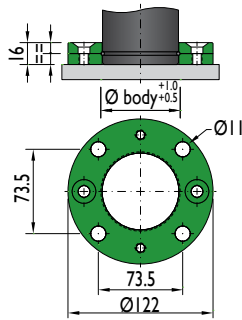
BFI-1500



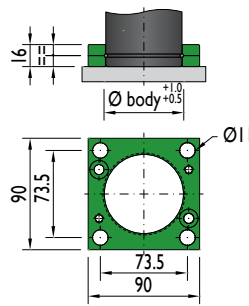
MC-2500



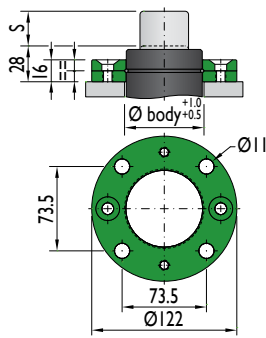
XS-1500



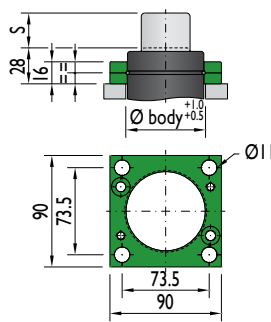
XC-1500



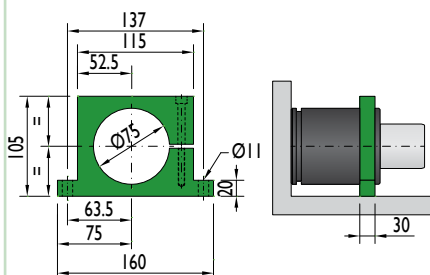
XS-1500



XC-1500

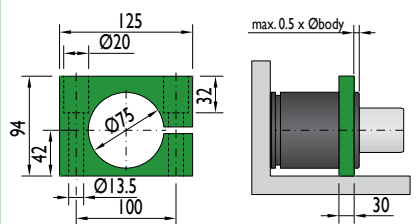


CS-1500

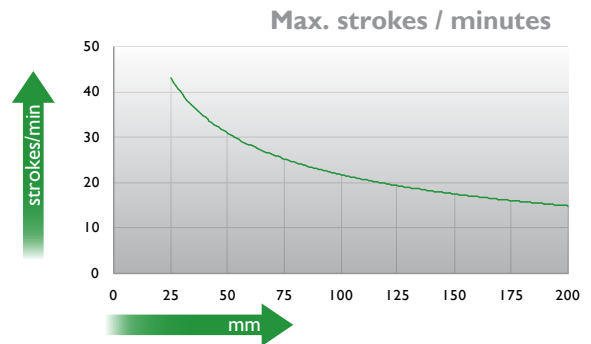
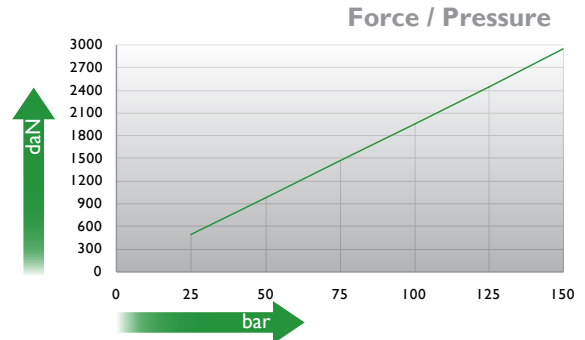
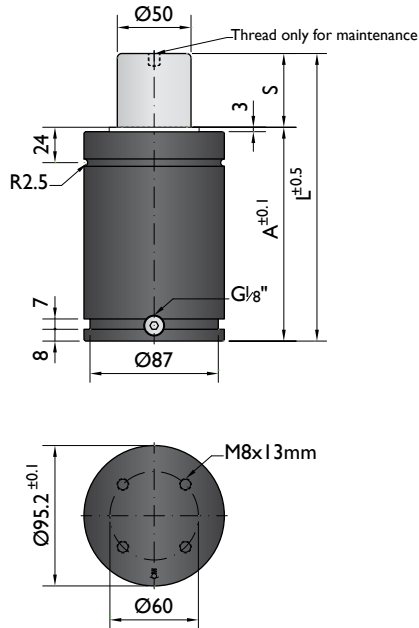


Flange must not support spring's force

CF-1500



Flange must not support spring's force



Ordering example: 4 x HG-3000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN | ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|----------------|------|
| HG-3000-25 | 25 | 145 | 120 | | 4100 | No | 4.42 |
| HG-3000-38 | 37.5 | 170 | 132.5 | | 4300 | No | 4.72 |
| HG-3000-50 | 50 | 195 | 145 | | 4400 | No | 5.03 |
| HG-3000-63 | 62.5 | 220 | 157.5 | | 4500 | No | 5.34 |
| HG-3000-80 | 80 | 255 | 175 | 3000 | 4500 | Yes | 5.76 |
| HG-3000-100 | 100 | 295 | 195 | | 4600 | Yes | 6.25 |
| HG-3000-125 | 125 | 345 | 220 | | 4600 | Yes | 6.87 |
| HG-3000-160 | 160 | 415 | 255 | | 4600 | Yes | 7.72 |
| HG-3000-200 | 200 | 495 | 295 | | 4700 | Yes | 8.70 |

⁽¹⁾ other strokes under request

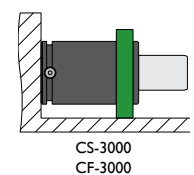
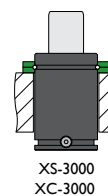
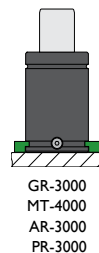
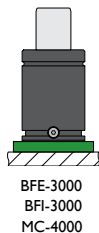
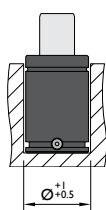
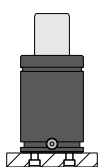
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT HG-3000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

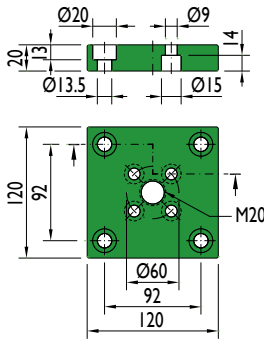
Mounting possibilities



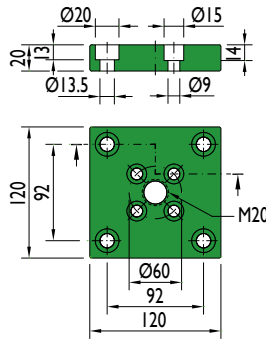
Flange must not support spring's force

Flanges

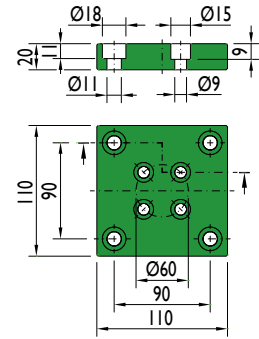
BFE-3000



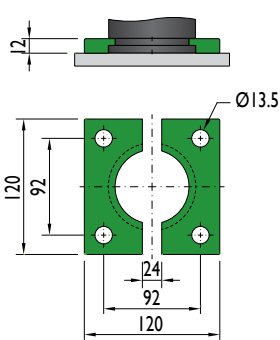
BFI-3000



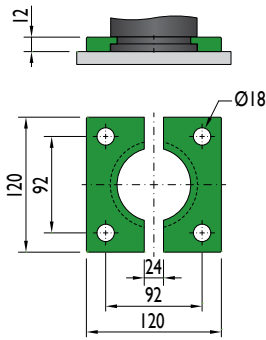
MC-4000



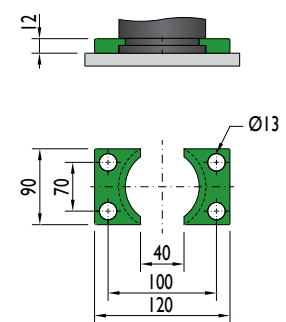
GR-3000



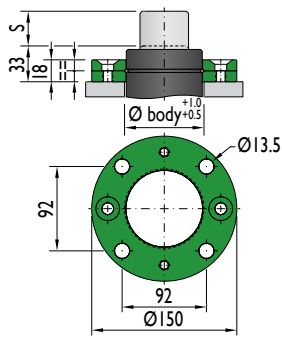
MT-4000



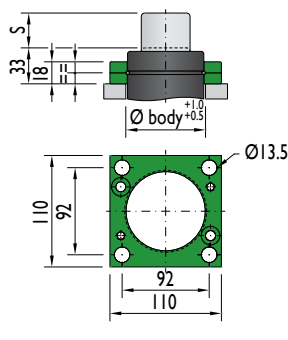
AR-3000



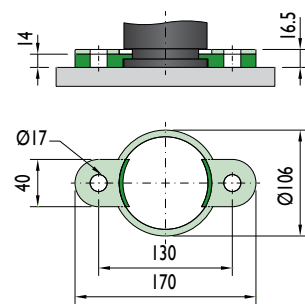
XS-3000



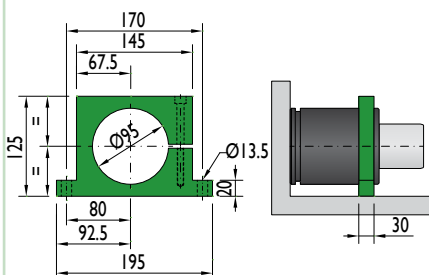
XC-3000



PR-3000

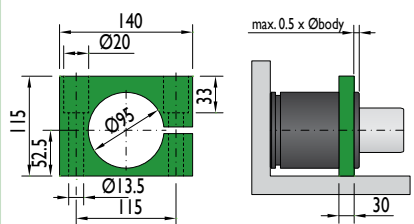


CS-3000



Flange must not support spring's force

CF-3000

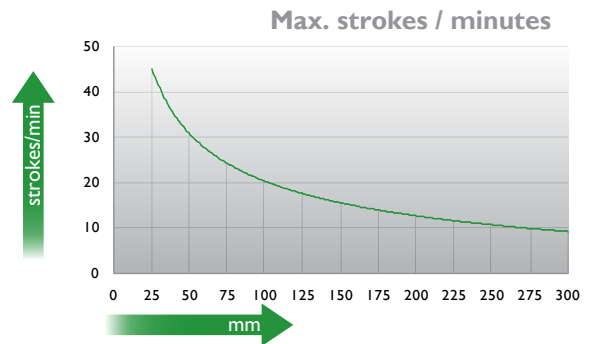
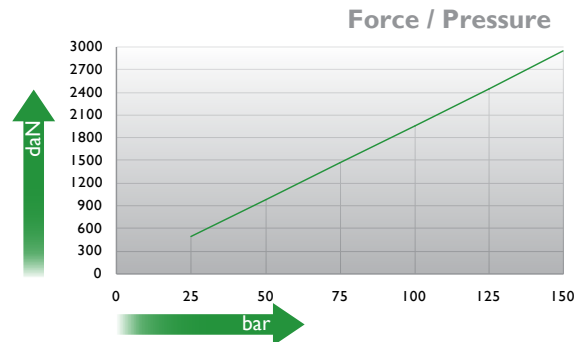
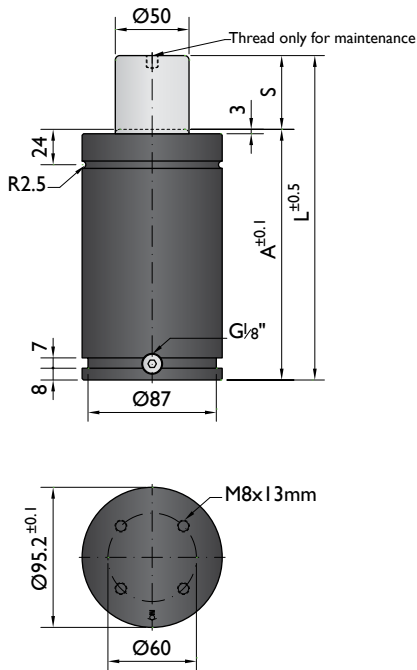


Flange must not support spring's force




CNOMO
EM24.54.700

PSA
E24.54.815.G



Ordering example: 4 x G-3000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|------------|------------------------|---------|---------|---|----------|--|-------|
| G-3000-25 | 25 | 170 | 145 | 3000 | 3500 | No | 5.86 |
| G-3000-38 | 38.1 | 196.2 | 158.1 | | 3700 | No | 6.20 |
| G-3000-50 | 50 | 220 | 170 | | 3800 | No | 6.66 |
| G-3000-63 | 63.5 | 247 | 183.5 | | 3900 | No | 7.00 |
| G-3000-80 | 80 | 280 | 200 | | 4000 | No | 8.28 |
| G-3000-100 | 100 | 320 | 220 | | 4200 | Yes | 8.65 |
| G-3000-125 | 125 | 370 | 245 | | 4200 | Yes | 8.97 |
| G-3000-160 | 160 | 440 | 280 | | 4200 | Yes | 9.86 |
| G-3000-200 | 200 | 520 | 320 | | 4300 | Yes | 10.92 |
| G-3000-250 | 250 | 620 | 370 | | 4300 | Yes | 12.25 |
| G-3000-300 | 300 | 720 | 420 | 4400 | Yes | 13.58 | |

⁽¹⁾ other strokes under request

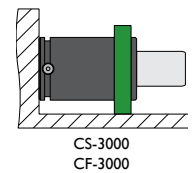
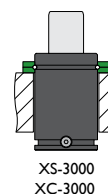
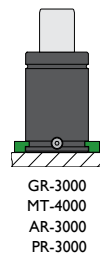
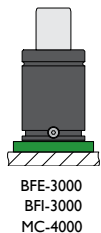
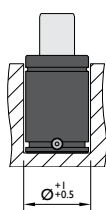
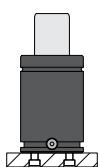
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT G-3000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

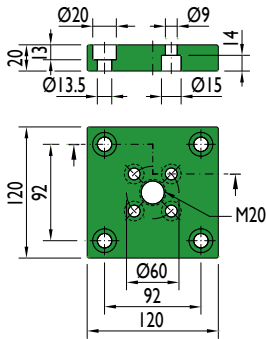
Mounting possibilities



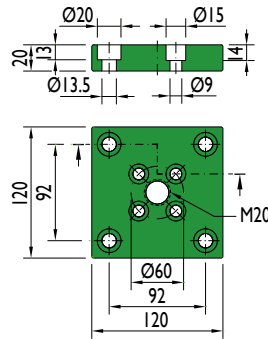
Flange must not support spring's force

Flanges

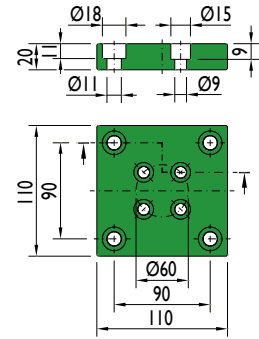
BFE-3000



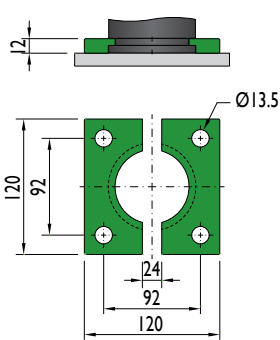
BFI-3000



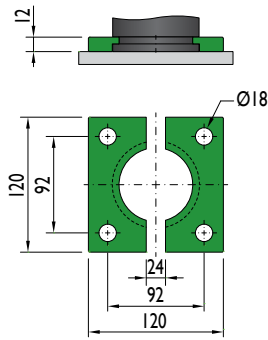
MC-4000



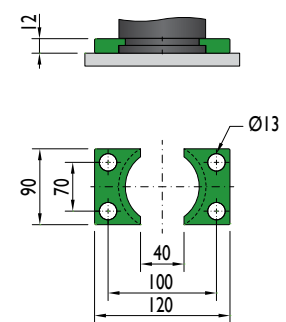
GR-3000



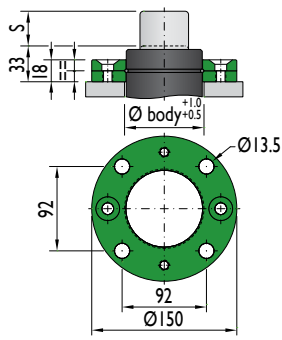
MT-4000



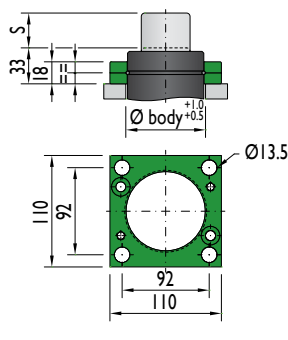
AR-3000



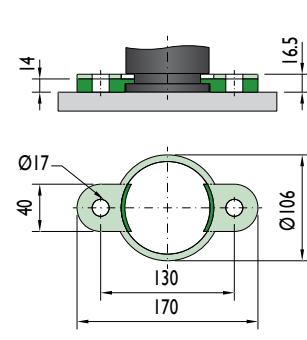
XS-3000



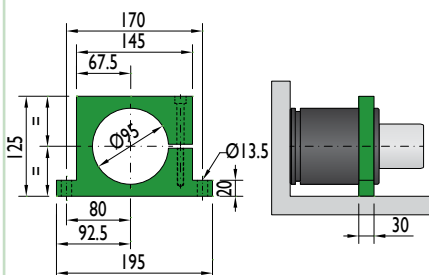
XC-3000



PR-3000

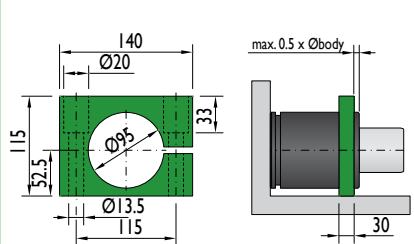


CS-3000



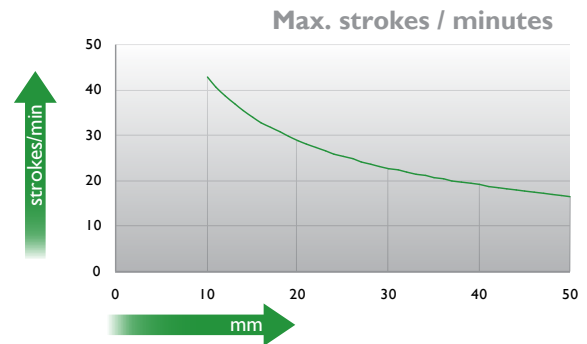
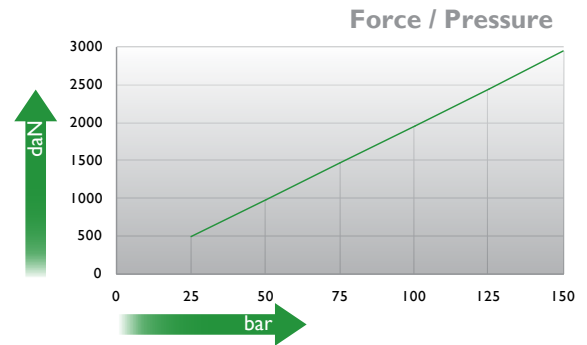
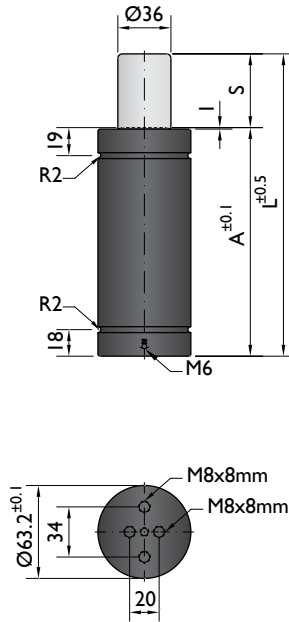
Flange must not support spring's force

CF-3000




Flange must not support spring's force

Special mounts available on
www.nitrogas.com



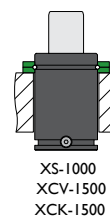
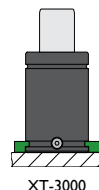
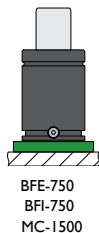
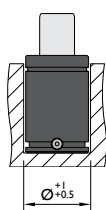
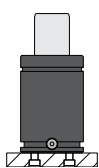
Ordering example: 4 x T-3000-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN |  | kg |
|-----------|------------------------|------------------------------------|---------|--------------------------------------|--|---|--------------------------|
| | | | | (20°C, 150 bar) | | | |
| T-3000-10 | 10 | 85 | 75 | 3000 | 4100 | No | 1.15 |
| T-3000-16 | 16 | 103 | 87 | | 4400 | No | 1.35 |
| T-3000-25 | 25 | 130 | 105 | | 4600 | No | 1.54 |
| T-3000-32 | 32 | 150 | 118 | | 4800 | No | 1.77 |
| T-3000-40 | 40 | 175 | 135 | | 4800 | No | 2.02 |
| T-3000-50 | 50 | 205 | 155 | | 4900 | No | 2.31 |
| | | (1) other strokes under request | | | (2) alternative forces upon request | | (3) ESK under request |



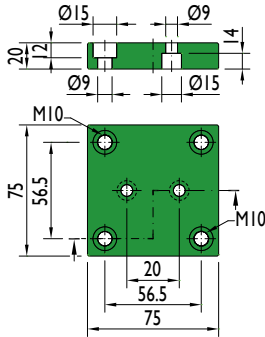
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT T-3000 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

Mounting possibilities

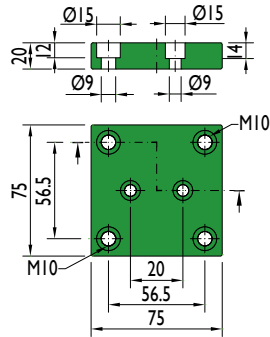


Flanges

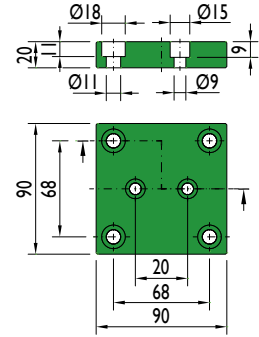
BFE-750



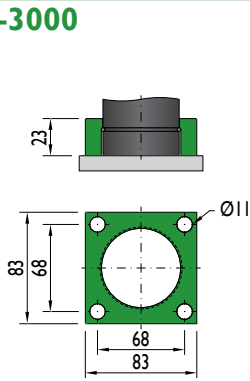
BFI-750



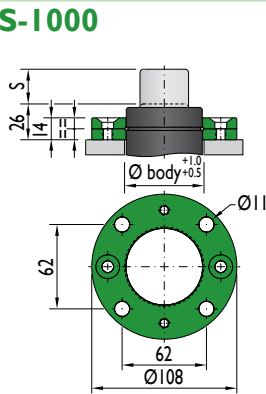
MC-1500



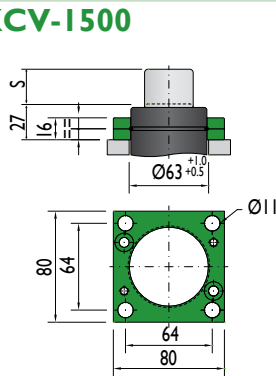
XT-3000



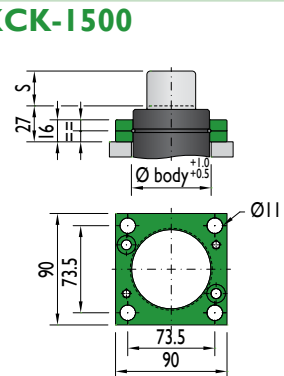
XS-1000

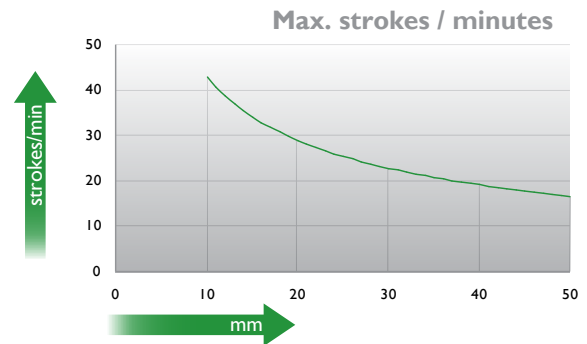
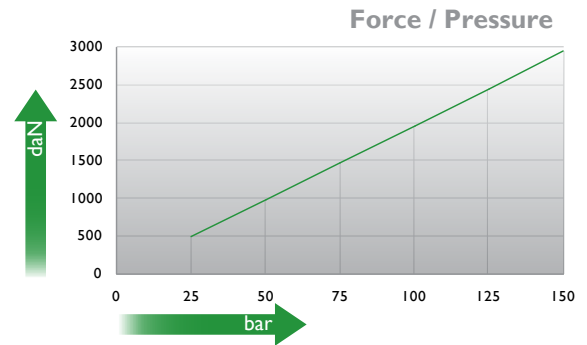
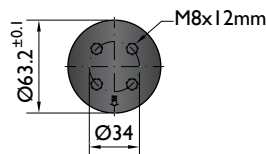
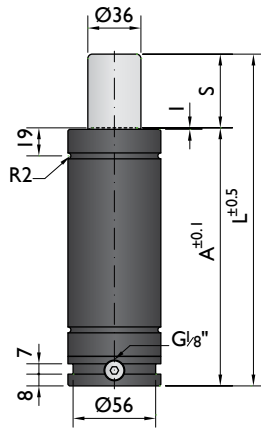


XCV-1500



XCK-1500





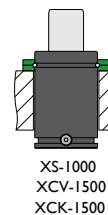
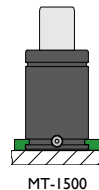
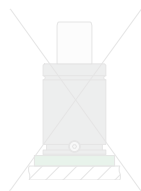
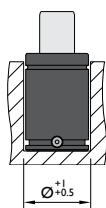
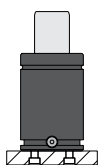
Ordering example: 4 x TC-3000-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | (3) | kg |
|------------|-----------------------------|---------|---------|--------------------------------------|----------------|-------------------|----------------|
| | | | | (20°C, 150 bar) | | | |
| TC-3000-10 | 10 | 105 | 95 | 3000 | 4100 | No | 1.55 |
| TC-3000-16 | 16 | 123 | 107 | | 4400 | No | 1.75 |
| TC-3000-25 | 25 | 150 | 125 | | 4600 | No | 1.94 |
| TC-3000-32 | 32 | 170 | 138 | | 4800 | No | 2.17 |
| TC-3000-40 | 40 | 195 | 155 | | 4800 | No | 2.42 |
| TC-3000-50 | 50 | 225 | 175 | | 4900 | No | 2.71 |
| | ⁽¹⁾ | | | | ⁽²⁾ | | ⁽³⁾ |
| | other strokes under request | | | alternative forces upon request | | ESK under request | |



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TC-3000 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

Mounting possibilities



Flanges



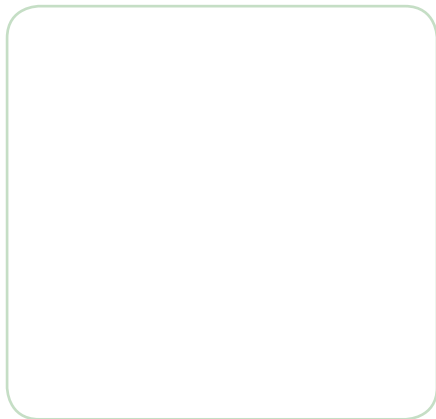
MT-1500

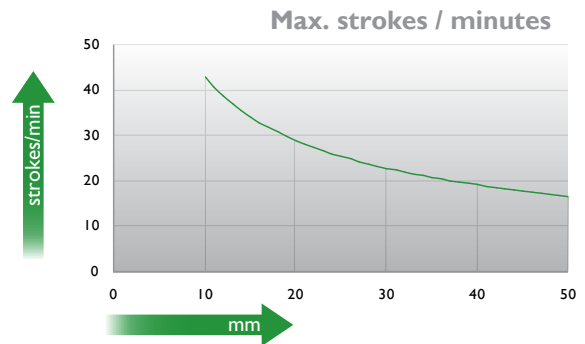
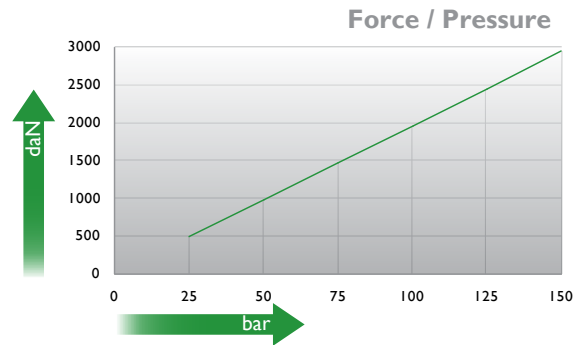
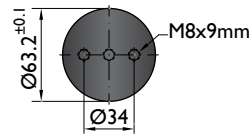
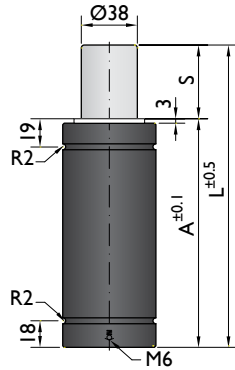


XS-1000

XCV-1500

XCK-1500





Ordering example: 4 x TS-3000-65

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | (3) | kg |
|------------|------------------------|---------|---------|--------------------------------------|----------|-----|------|
| TS-3000-10 | 10 | 85 | 75 | 3000 (20°C, 150 bar) | 4100 | No | 1.15 |
| TS-3000-16 | 16 | 103 | 87 | | 4400 | No | 1.35 |
| TS-3000-25 | 25 | 130 | 105 | | 4600 | No | 1.54 |
| TS-3000-32 | 32 | 150 | 118 | | 4800 | No | 1.77 |
| TS-3000-40 | 40 | 175 | 135 | | 4800 | No | 2.02 |
| TS-3000-50 | 50 | 205 | 155 | | 4900 | No | 2.31 |
| TS-3000-65 | 65 | 256 | 191 | | 4900 | No | 2.50 |

other strokes ⁽¹⁾ under request

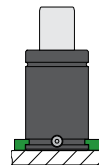
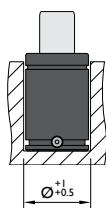
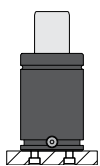
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request

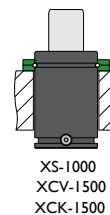


| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TS-3000 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

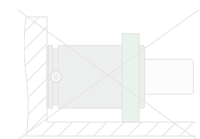
Mounting possibilities



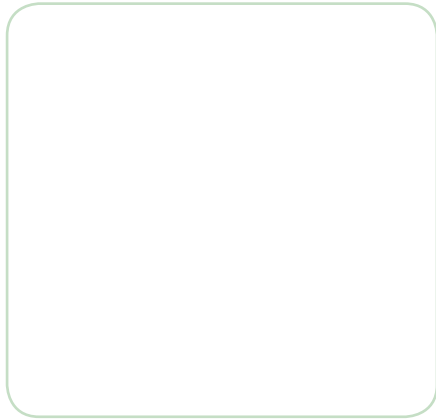
XT-3000



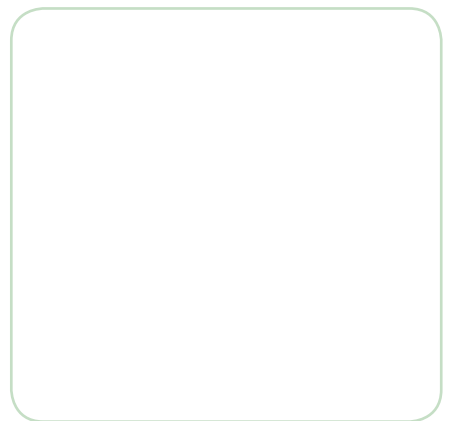
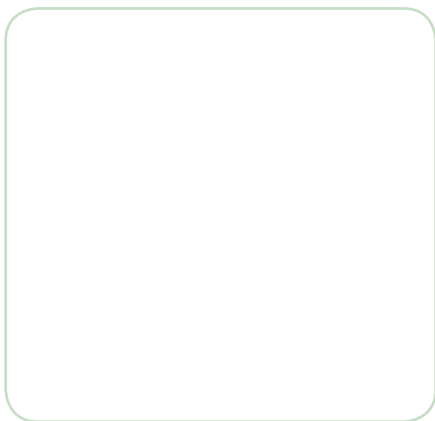
XS-1000
XCV-1500
XCK-1500



Flanges



XT-3000



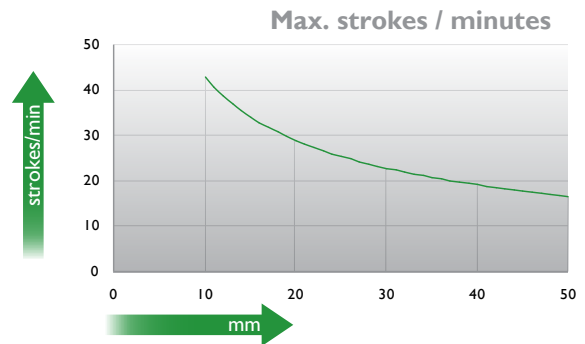
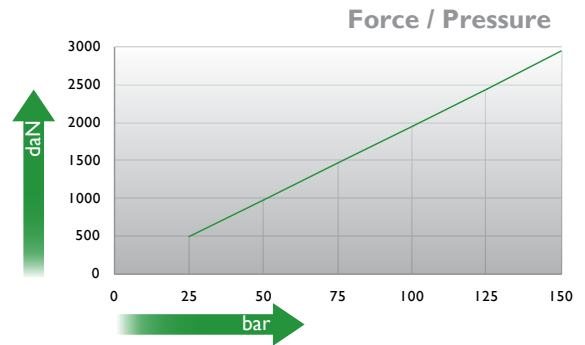
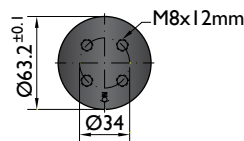
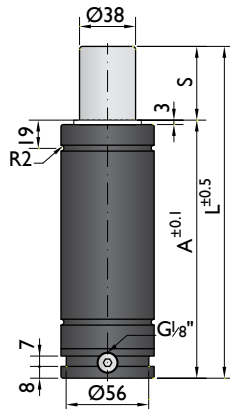
XS-1000

XCV-1500

VDI

XCK-1500





Ordering example: 4 x TSC-3000-65

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | (3) | kg |
|-------------|------------------------|---------|---------|--------------------------------------|----------|-----|------|
| TSC-3000-10 | 10 | 105 | 95 | 3000 (20°C, 150 bar) | 4100 | No | 1.55 |
| TSC-3000-16 | 16 | 123 | 107 | | 4400 | No | 1.75 |
| TSC-3000-25 | 25 | 150 | 125 | | 4600 | No | 1.94 |
| TSC-3000-32 | 32 | 170 | 138 | | 4800 | No | 2.17 |
| TSC-3000-40 | 40 | 195 | 155 | | 4800 | No | 2.42 |
| TSC-3000-50 | 50 | 225 | 175 | | 4900 | No | 2.71 |
| TSC-3000-65 | 65 | 276 | 211 | | 4900 | No | 2.90 |

other strokes ⁽¹⁾ under request

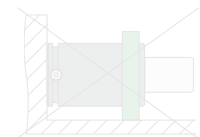
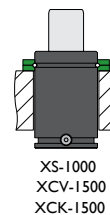
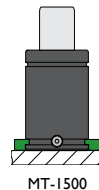
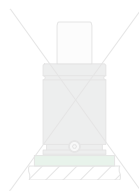
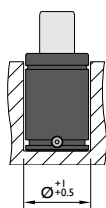
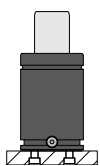
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TSC-3000 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

Mounting possibilities



Flanges



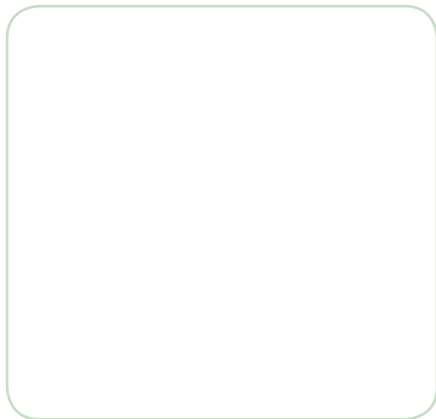
MT-1500



XS-1000

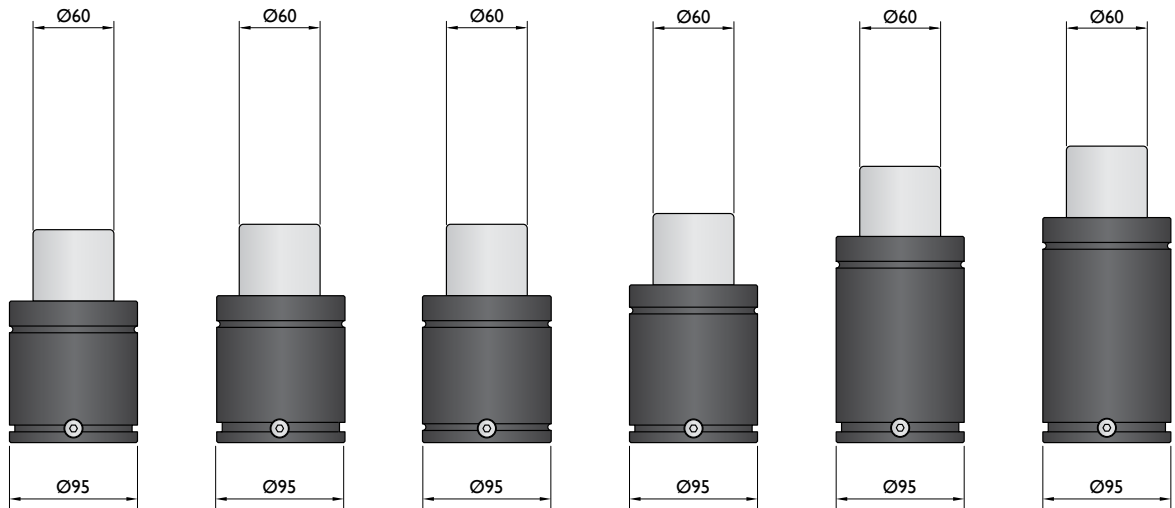
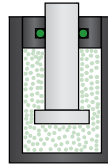
XCV-1500

XCK-1500



Force 4000 daN

Piston Rod Sealed gas springs



| Model | KP-4200 | NR-4200 | NT-4200 | K-4000 | M-4000 | HD-4200 |
|-----------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Initial F (daN) | 4200 | 4200 | 4200 | 4000 | 4000 | 4200 |
| L max (mm) | 2xStroke+58 | 2xStroke+62 | 2xStroke+62 | 2xStroke+70 | 2xStroke+110 | 2xStroke+120 |
| Stroke (mm) | 16-125 | 16-125 | 16-125 | 25-125 | 25-160 | 25-300 |

* other strokes under request

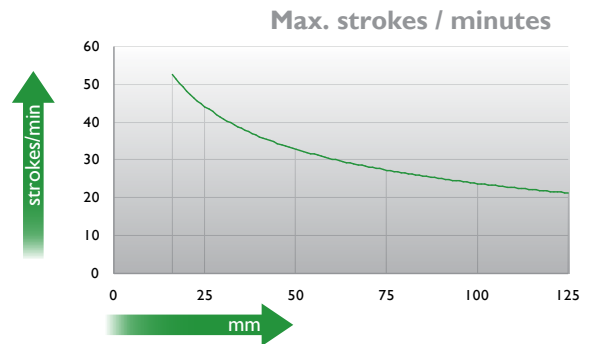
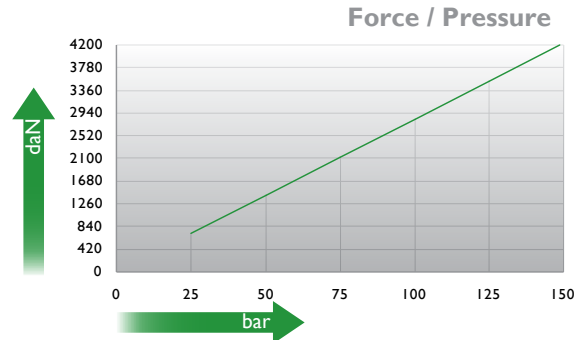
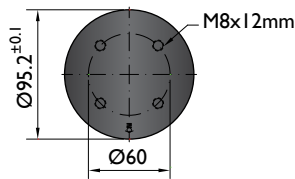
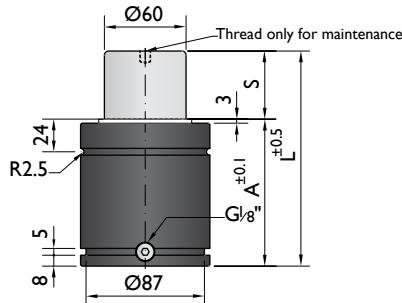
Standards

| PED | PED | PED | PED | PED | PED |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 2014/68/EU | 2014/68/EU | 2014/68/EU | 2014/68/EU | 2014/68/EU | 2014/68/EU |
| ISO 11901 | ISO 11901 | ISO 11901 | ISO 11901 | ISO 11901 | ISO 11901 |
| VDI 3003 | VDI 3003 | VDI 3003 | VDI 3003 | VDI 3003 | VDI 3003 |
| CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 |






PSA
E24.54.815.G



Ordering example: 4 x KP-4200-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|------|
| KP-4200-16 | 16 | 90 | 74 | 4200 | 6500 | No | 2.82 |
| KP-4200-19 | 19 | 96 | 77 | | 6700 | No | 2.90 |
| KP-4200-25 | 25 | 108 | 83 | | 6900 | No | 3.05 |
| KP-4200-32 | 32 | 122 | 90 | | 7000 | No | 3.23 |
| KP-4200-38 | 38 | 134 | 96 | | 7100 | No | 3.38 |
| KP-4200-50 | 50 | 158 | 108 | | 7500 | No | 3.69 |
| KP-4200-63 | 63 | 184 | 121 | | 7600 | Yes | 4.02 |
| KP-4200-75 | 75 | 208 | 133 | | 7700 | Yes | 4.32 |
| KP-4200-80 | 80 | 218 | 138 | | 7800 | Yes | 4.45 |
| KP-4200-100 | 100 | 258 | 158 | | 7900 | Yes | 4.96 |
| KP-4200-125 | 125 | 308 | 183 | 8000 | Yes | 5.60 | |

⁽¹⁾ other strokes under request

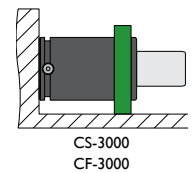
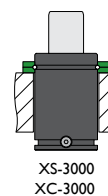
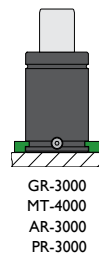
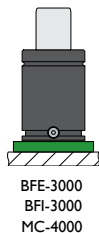
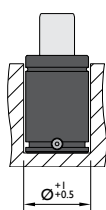
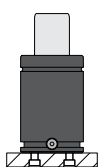
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT KP-4200 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

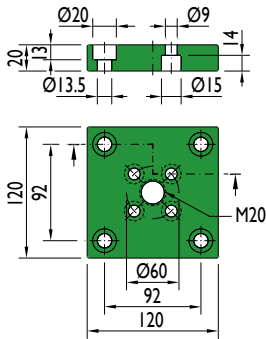
Mounting possibilities



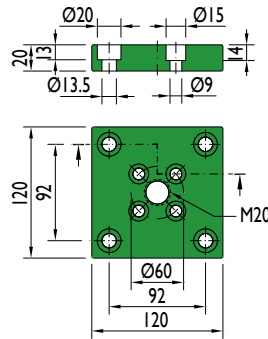
Flange must not support spring's force

Flanges

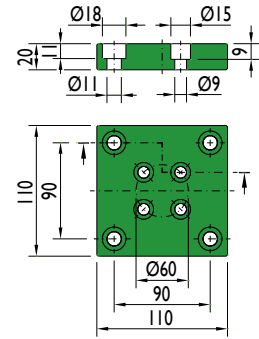
BFE-3000



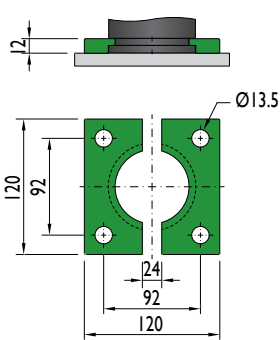
BFI-3000



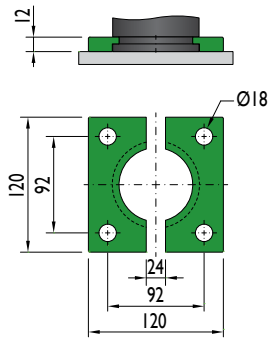
MC-4000



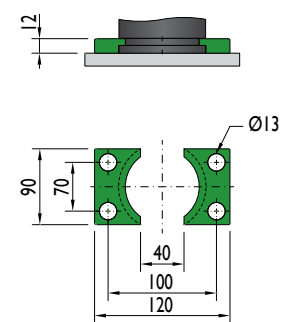
GR-3000



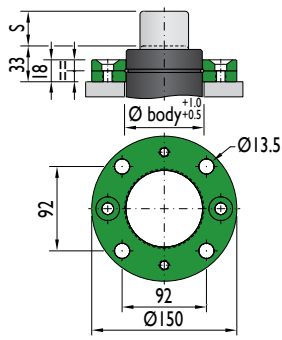
MT-4000



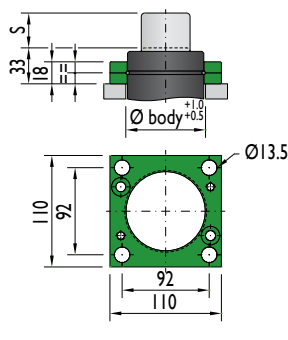
AR-3000



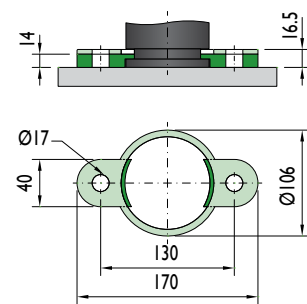
XS-3000



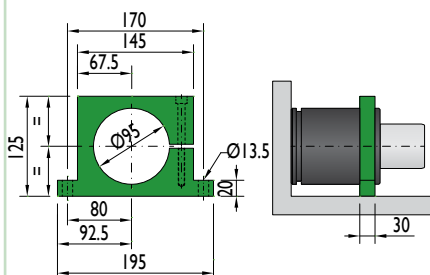
XC-3000



PR-3000

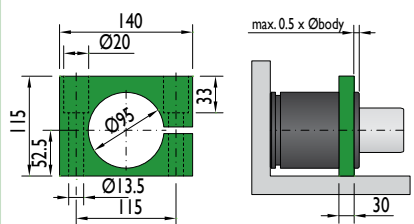


CS-3000

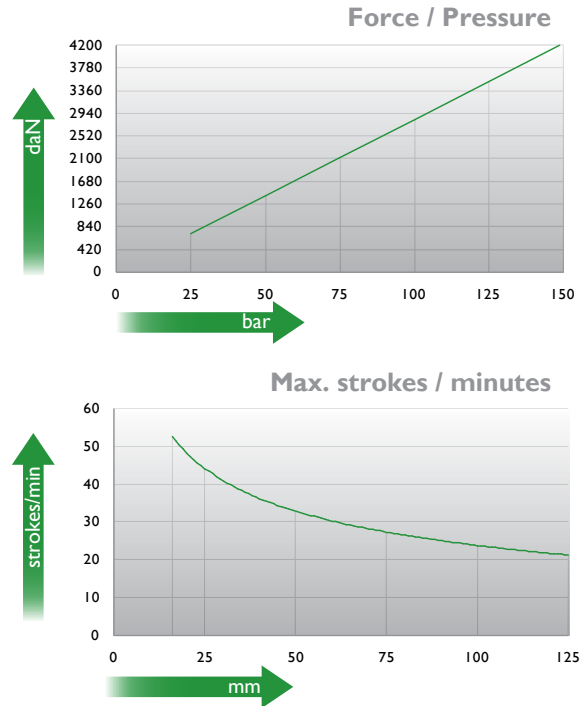
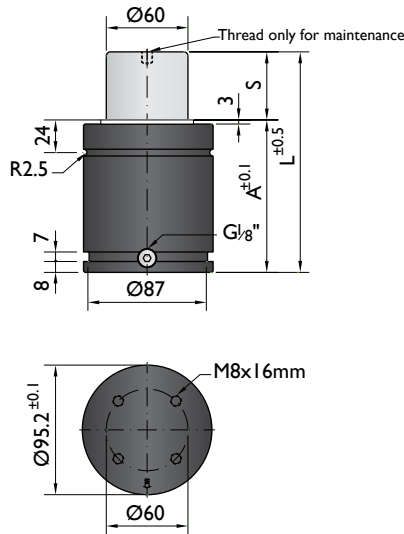


Flange must not support spring's force

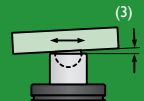
CF-3000



Flange must not support spring's force



Ordering example: 4 x NR-4200-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|------|
| NR-4200-16 | 16 | 94 | 78 | 4200 | 6100 | No | 2.60 |
| NR-4200-19 | 19 | 100 | 81 | | 6300 | No | 2.75 |
| NR-4200-25 | 25 | 112 | 87 | | 6300 | No | 2.95 |
| NR-4200-32 | 32 | 126 | 94 | | 6400 | No | 3.17 |
| NR-4200-38 | 38 | 138 | 100 | | 6500 | No | 3.32 |
| NR-4200-50 | 50 | 162 | 112 | | 7700 | No | 3.76 |
| NR-4200-63 | 63 | 188 | 125 | | 7600 | Yes | 4.12 |
| NR-4200-75 | 75 | 212 | 137 | | 7600 | Yes | 4.50 |
| NR-4200-80 | 80 | 222 | 142 | | 7600 | Yes | 4.67 |
| NR-4200-100 | 100 | 262 | 162 | | 7500 | Yes | 5.30 |
| NR-4200-125 | 125 | 312 | 187 | | 7500 | Yes | 6.10 |

⁽¹⁾ other strokes under request

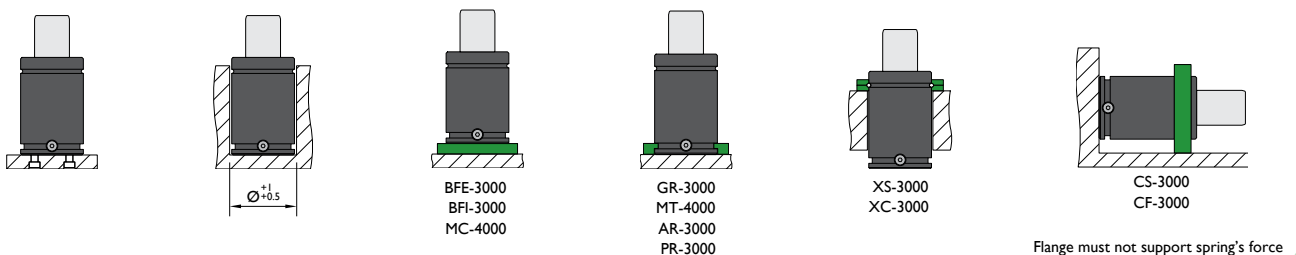
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



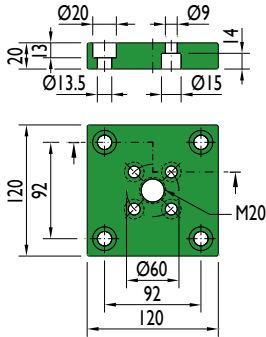
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT NR-4200 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

Mounting possibilities

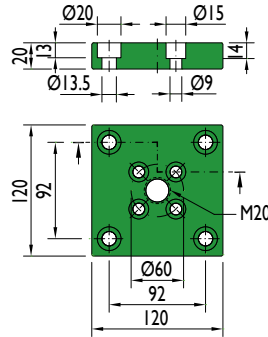


Flanges

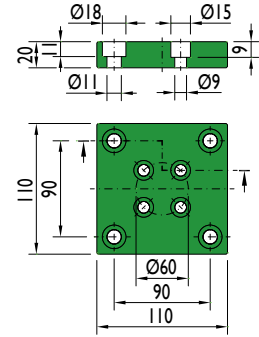
BFE-3000



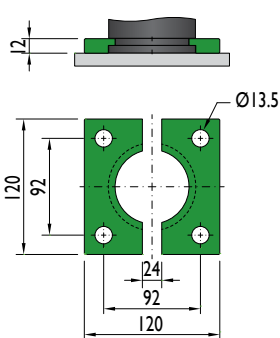
BFI-3000



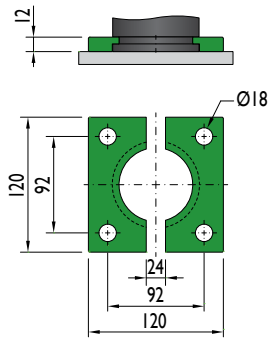
MC-4000



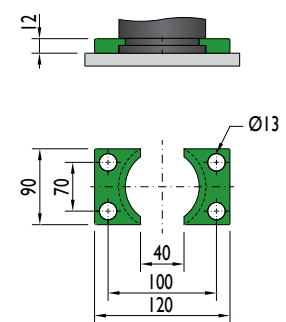
GR-3000



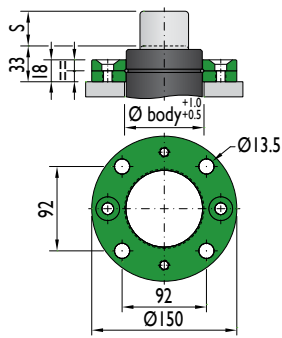
MT-4000



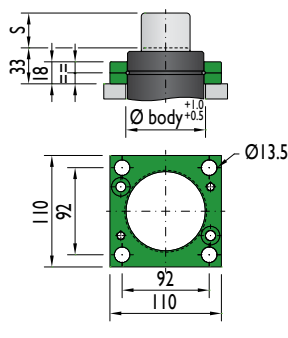
AR-3000



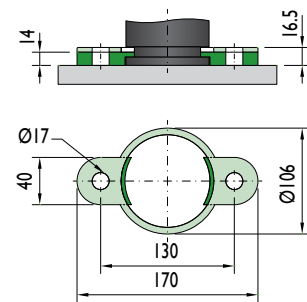
XS-3000



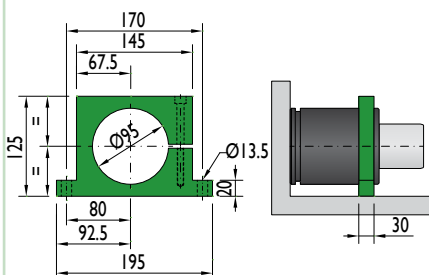
XC-3000



PR-3000

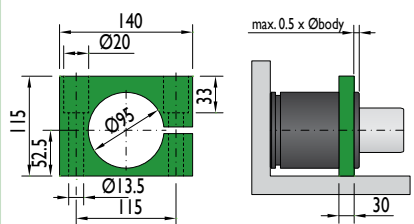


CS-3000



Flange must not support spring's force

CF-3000

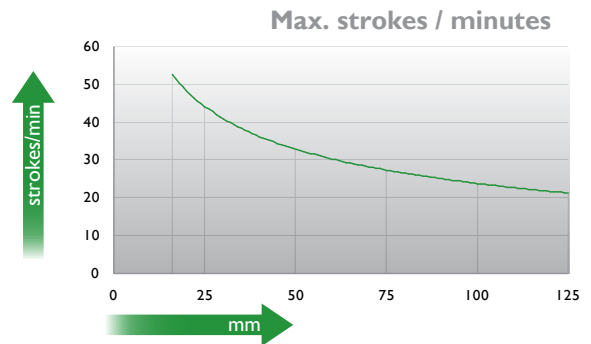
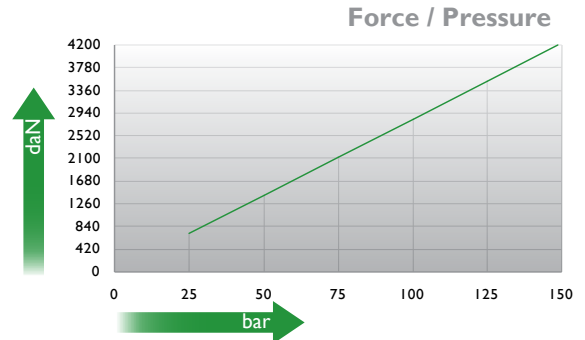
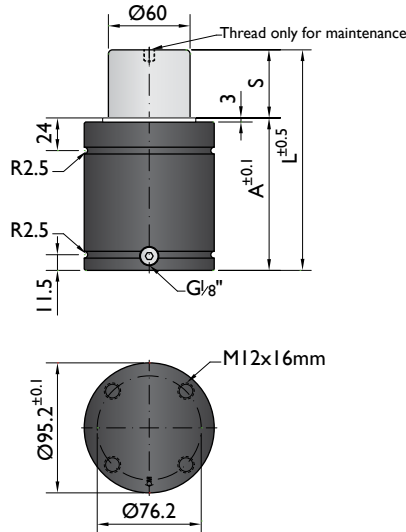


Flange must not support spring's force



PSA
E24.54.815.G

SMS DNH
3203N



Ordering example: 4 x NT-4200-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN | ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|----------------|------|
| NT-4200-16 | 16 | 94 | 78 | 4200 | 6100 | No | 2.60 |
| NT-4200-19 | 19 | 100 | 81 | | 6300 | No | 2.75 |
| NT-4200-25 | 25 | 112 | 87 | | 6300 | No | 2.95 |
| NT-4200-32 | 32 | 126 | 94 | | 6400 | No | 3.17 |
| NT-4200-38 | 38 | 138 | 100 | | 6500 | No | 3.32 |
| NT-4200-50 | 50 | 162 | 112 | | 7700 | No | 3.76 |
| NT-4200-63 | 63 | 188 | 125 | | 7600 | Yes | 4.12 |
| NT-4200-75 | 75 | 212 | 137 | | 7600 | Yes | 4.50 |
| NT-4200-80 | 80 | 222 | 142 | | 7600 | Yes | 4.67 |
| NT-4200-100 | 100 | 262 | 162 | | 7500 | Yes | 5.30 |
| NT-4200-125 | 125 | 312 | 187 | | 7500 | Yes | 6.10 |

⁽¹⁾ other strokes under request

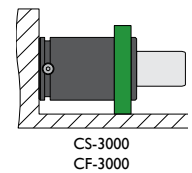
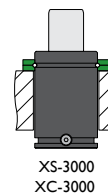
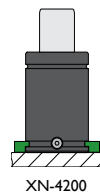
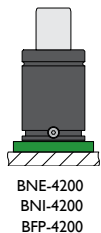
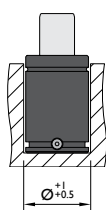
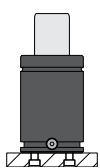
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT NT-4200 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

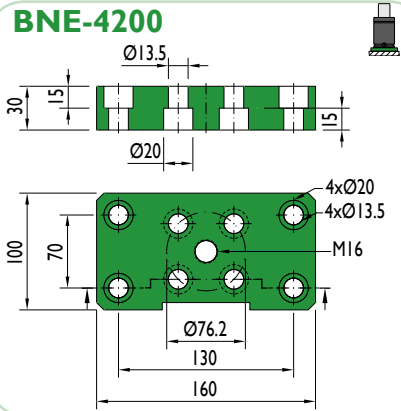
Mounting possibilities



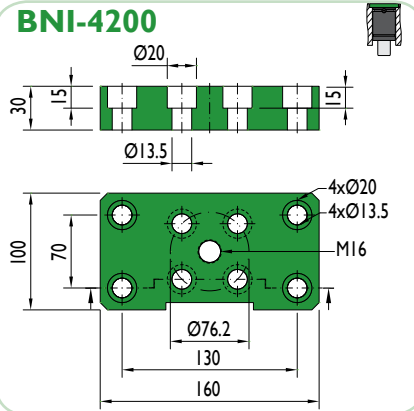
Flange must not support spring's force

Flanges

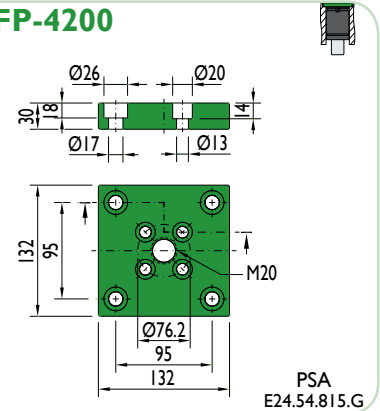
BNE-4200



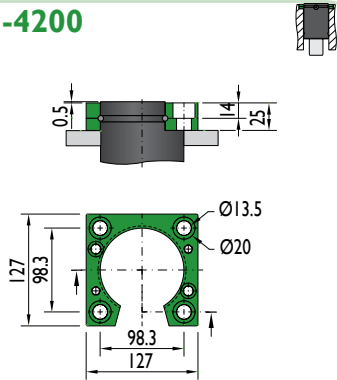
BNI-4200



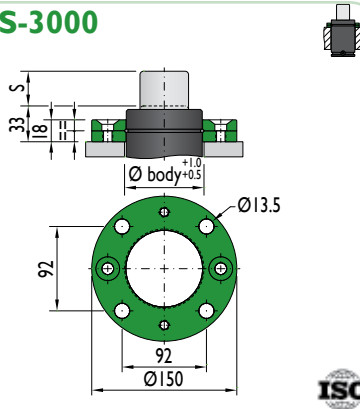
BFP-4200



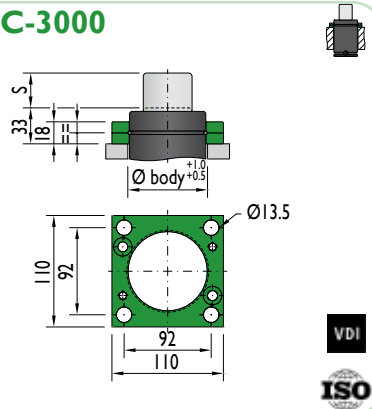
XN-4200



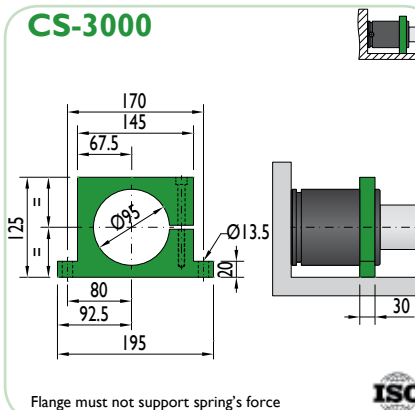
XS-3000



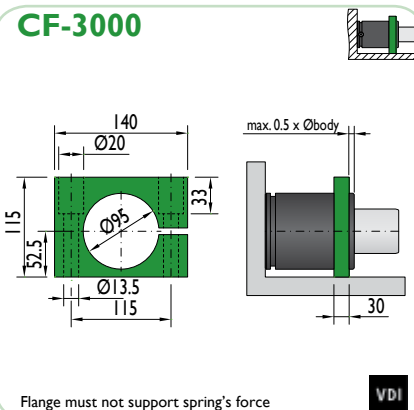
XC-3000

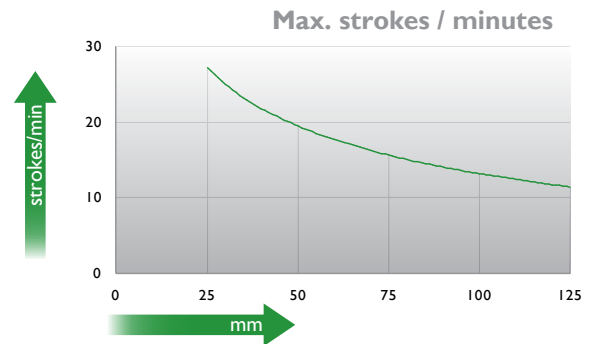
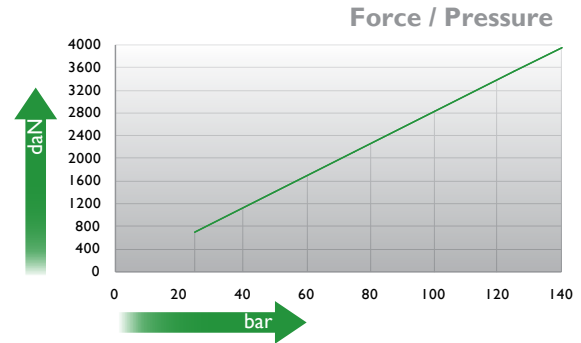
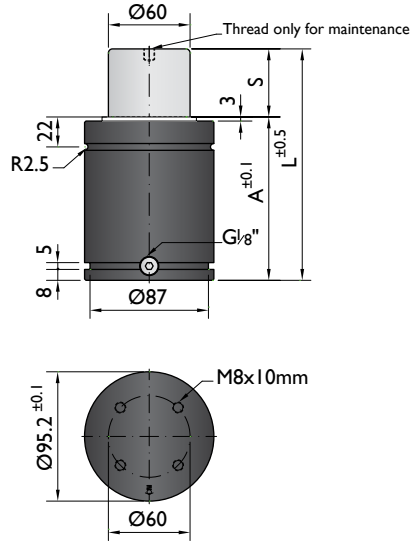


CS-3000



CF-3000





Ordering example: 4 x K-4000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | (3) | kg |
|------------|------------------------|---------|---------|--------------------------------------|----------|-----|------|
| K-4000-25 | 25 | 120 | 95 | 4000 (20°C, 140 bar) | 5800 | No | 3.76 |
| K-4000-38 | 38 | 146 | 108 | | 6200 | No | 4.21 |
| K-4000-50 | 50 | 170 | 120 | | 6300 | No | 4.50 |
| K-4000-63 | 63 | 196 | 133 | | 7100 | Yes | 4.82 |
| K-4000-80 | 80 | 230 | 150 | | 7100 | Yes | 5.26 |
| K-4000-100 | 100 | 270 | 170 | | 7200 | Yes | 5.63 |
| K-4000-125 | 125 | 320 | 195 | | 7200 | Yes | 6.05 |

other strokes ⁽¹⁾ under request

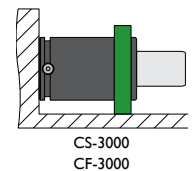
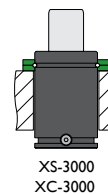
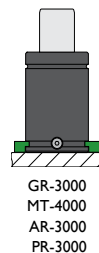
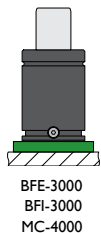
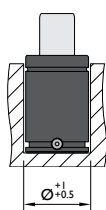
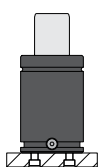
alternative forces ⁽²⁾ upon request

ESK available ⁽³⁾ for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 140 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT K-4000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

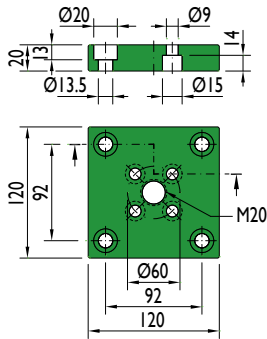
Mounting possibilities



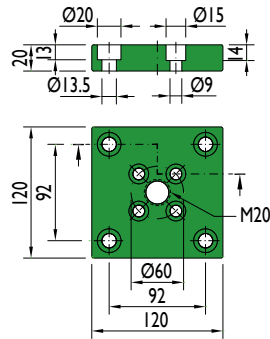
Flange must not support spring's force

Flanges

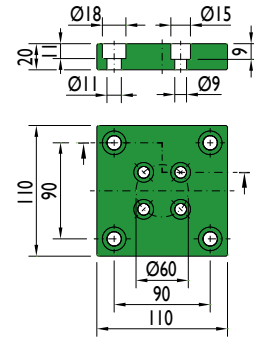
BFE-3000



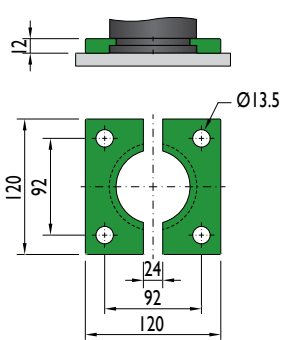
BFI-3000



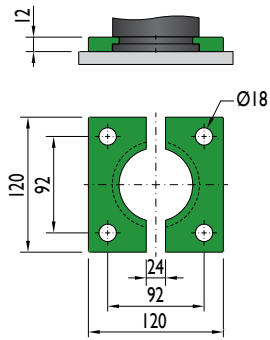
MC-4000



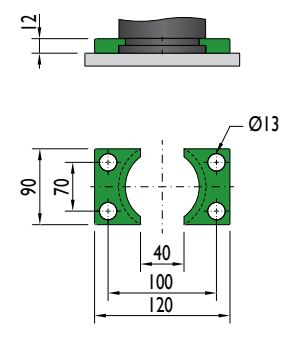
GR-3000



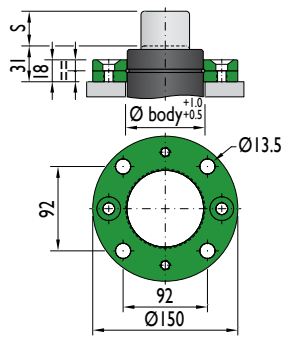
MT-4000



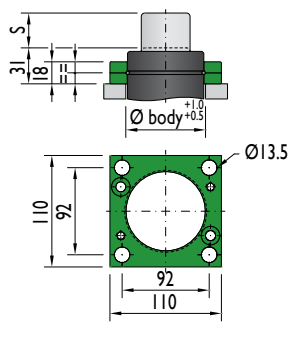
AR-3000



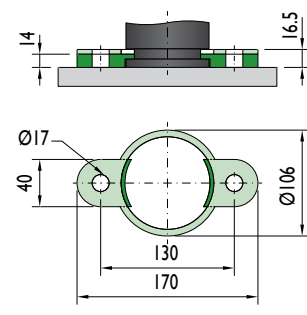
XS-3000



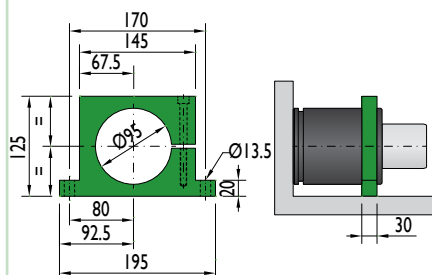
XC-3000



PR-3000

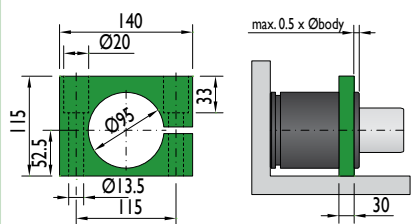


CS-3000



Flange must not support spring's force

CF-3000

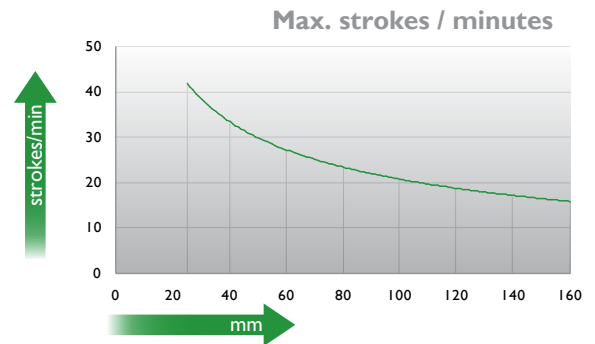
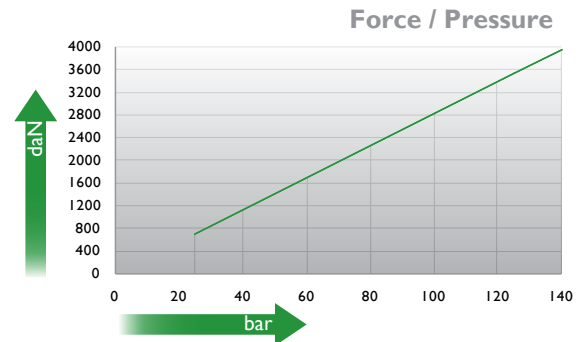
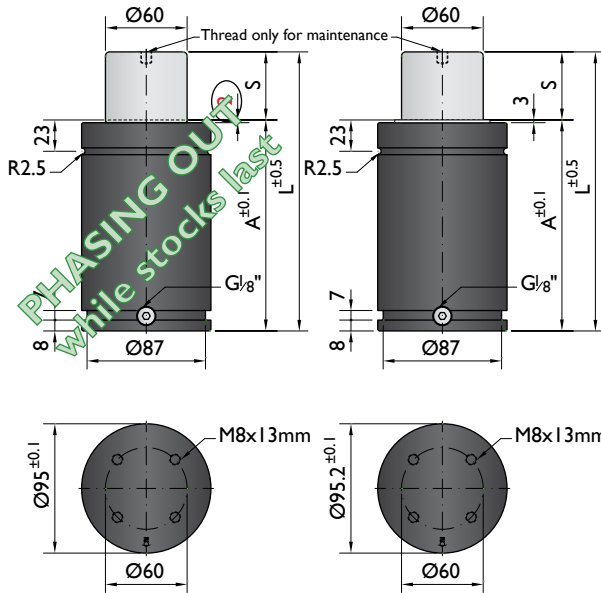


Flange must not support spring's force




*The new cylinder will be supplied when the stock runs out.

NEW MODEL*



Ordering example: 4 x M-4000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN |  | kg |
|------------|------------------------|---------|---------|--------------------------------------|----------|---|------|
| | | | | (20°C, 140 bar) | | | |
| M-4000-25 | 25 | 155 | 130 | 4000 | 5500 | No | 4.90 |
| M-4000-38 | 38 | 181 | 143 | | 5800 | No | 5.41 |
| M-4000-50 | 50 | 205 | 155 | | 6100 | No | 5.91 |
| M-4000-63 | 63 | 236 | 173 | | 6200 | No | 6.22 |
| M-4000-80 | 80 | 270 | 190 | | 6600 | Yes | 6.82 |
| M-4000-100 | 100 | 310 | 210 | | 6700 | Yes | 7.17 |
| M-4000-125 | 125 | 370 | 245 | | 6700 | Yes | 8.30 |
| M-4000-160 | 160 | 440 | 280 | | 6800 | Yes | 8.88 |

other strokes ⁽¹⁾ under request

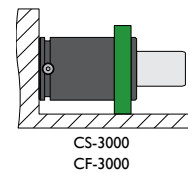
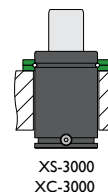
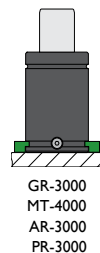
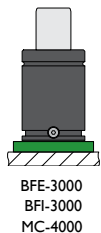
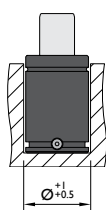
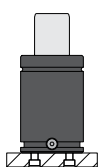
alternative forces ⁽²⁾ upon request

ESK available for other strokes ⁽³⁾



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 140 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT M-4000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

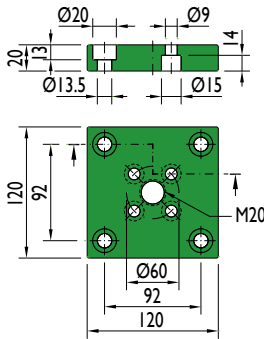
Mounting possibilities



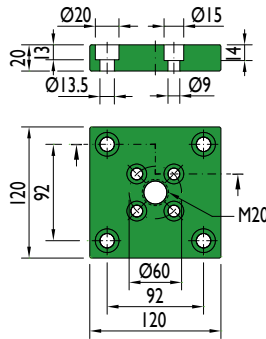
Flange must not support spring's force

Flanges

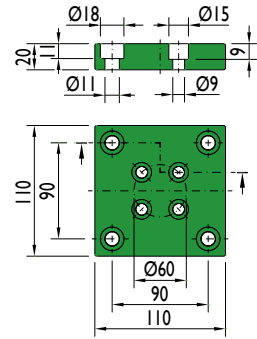
BFE-3000



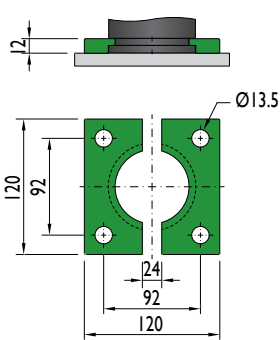
BFI-3000



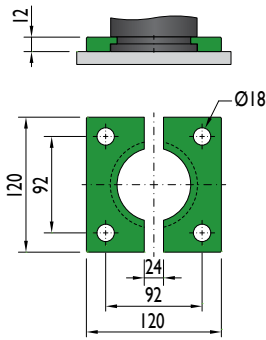
MC-4000



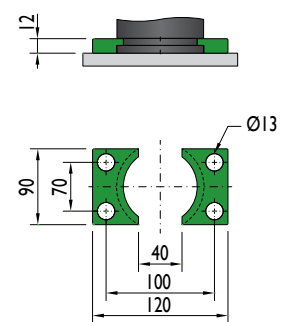
GR-3000



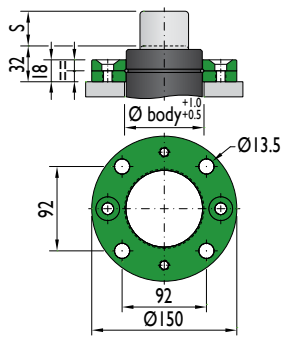
MT-4000



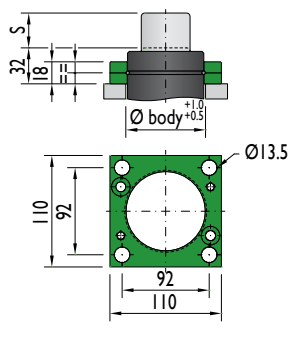
AR-3000



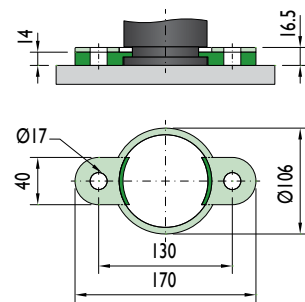
XS-3000



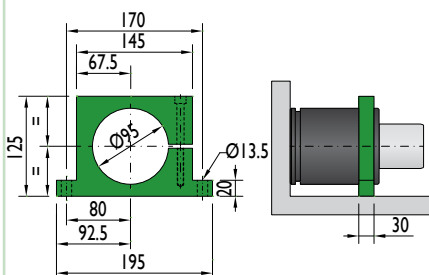
XC-3000



PR-3000

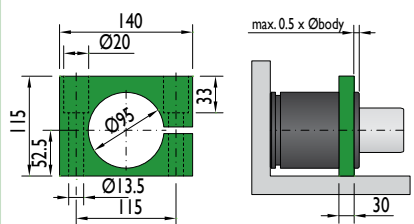


CS-3000



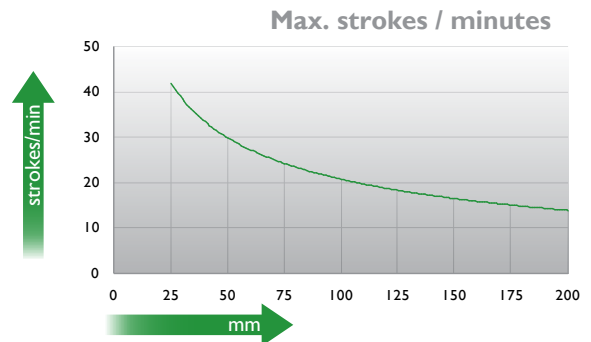
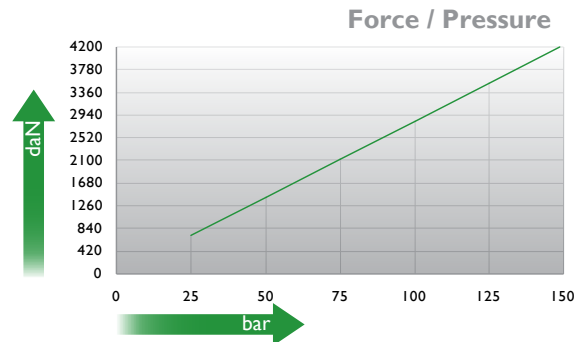
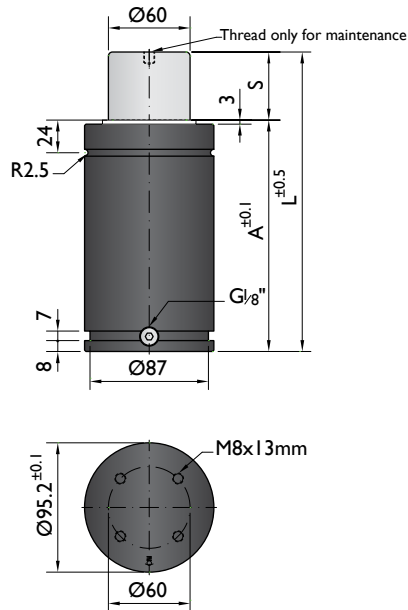
Flange must not support spring's force

CF-3000




Flange must not support spring's force

Special mounts available on
www.nitrogas.com



Ordering example: 4 x HD-4200-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN |  | kg |
|-------------|------------------------|---------|---------|--------------------------------------|----------|---|-------|
| | | | | (20°C, 150 bar) | | | |
| HD-4200-25 | 25 | 170 | 145 | 4200 | 5500 | No | 6.18 |
| HD-4200-38 | 38 | 196 | 158 | | 5900 | No | 6.52 |
| HD-4200-50 | 50 | 220 | 170 | | 6100 | No | 7.20 |
| HD-4200-63 | 63 | 246 | 183 | | 6400 | No | 7.56 |
| HD-4200-80 | 80 | 280 | 200 | | 6900 | Yes | 7.95 |
| HD-4200-100 | 100 | 320 | 220 | | 7100 | Yes | 8.22 |
| HD-4200-125 | 125 | 370 | 245 | | 7300 | Yes | 8.95 |
| HD-4200-160 | 160 | 440 | 280 | | 7500 | Yes | 10.14 |
| HD-4200-200 | 200 | 520 | 320 | | 7600 | Yes | 11.05 |
| HD-4200-250 | 250 | 620 | 370 | | 7700 | Yes | 11.58 |
| HD-4200-300 | 300 | 720 | 420 | 7800 | Yes | 12.65 | |

⁽¹⁾ other strokes under request

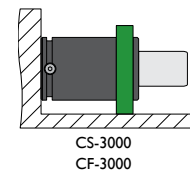
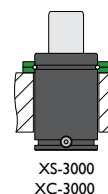
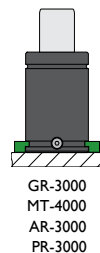
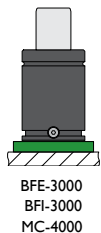
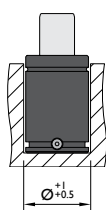
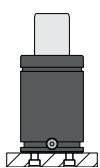
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT HD-4200 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

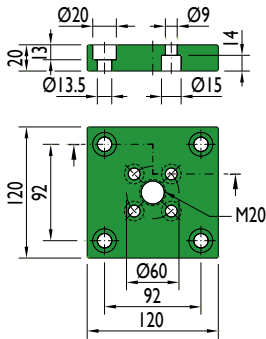
Mounting possibilities



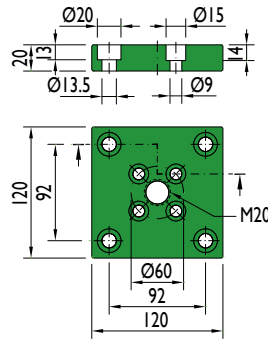
Flange must not support spring's force

Flanges

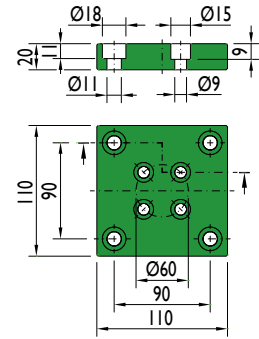
BFE-3000



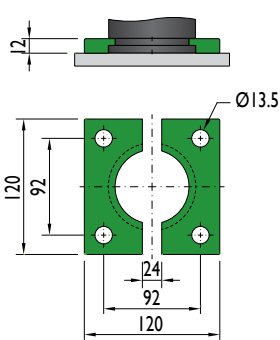
BFI-3000



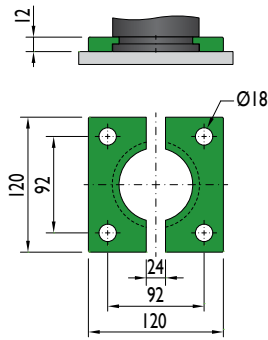
MC-4000



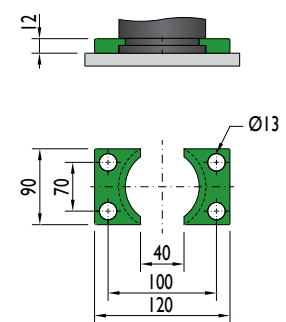
GR-3000



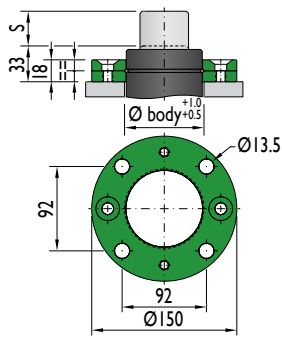
MT-4000



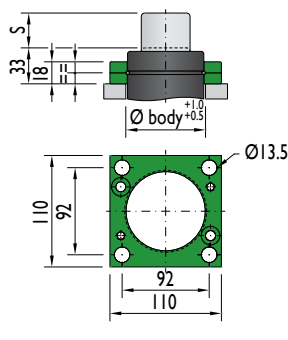
AR-3000



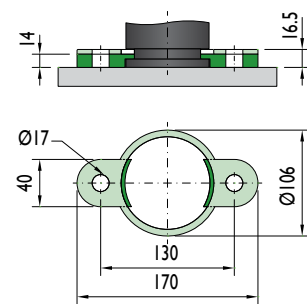
XS-3000



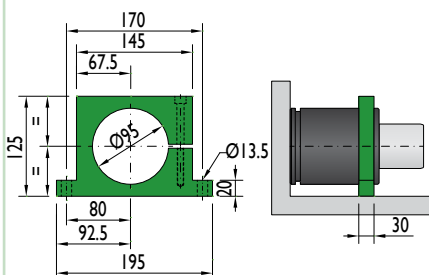
XC-3000



PR-3000

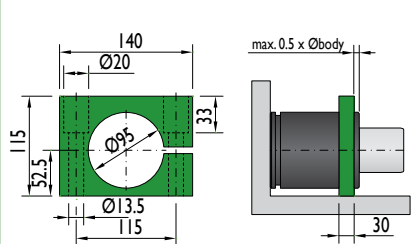


CS-3000



Flange must not support spring's force

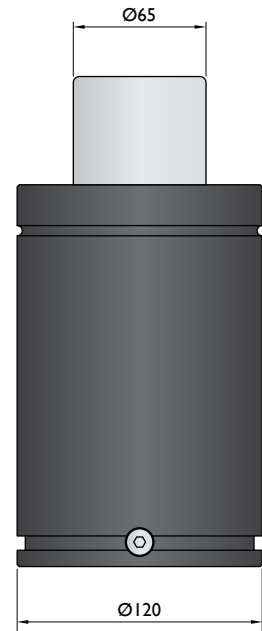
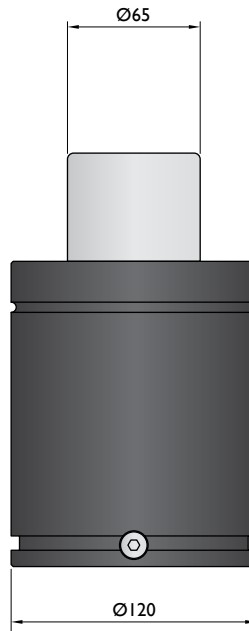
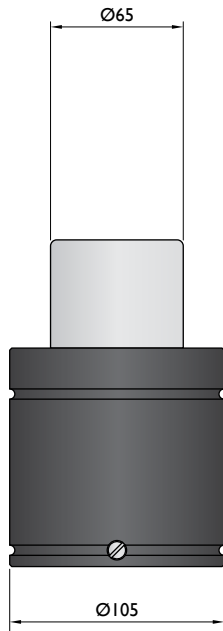
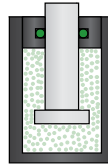
CF-3000



Flange must not support spring's force

Force 5000 daN

Piston Rod Sealed gas springs



| Model | KC-5000 | HG-5000 | G-5000 |
|-----------------|-------------|----------------|--------------|
| Initial F (daN) | 5000 | 5000 | 5000 |
| L max (mm) | 2xStroke+60 | 2xStroke+102.5 | 2xStroke+140 |
| Stroke (mm) | 12-125 | 25-200 | 25-300 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

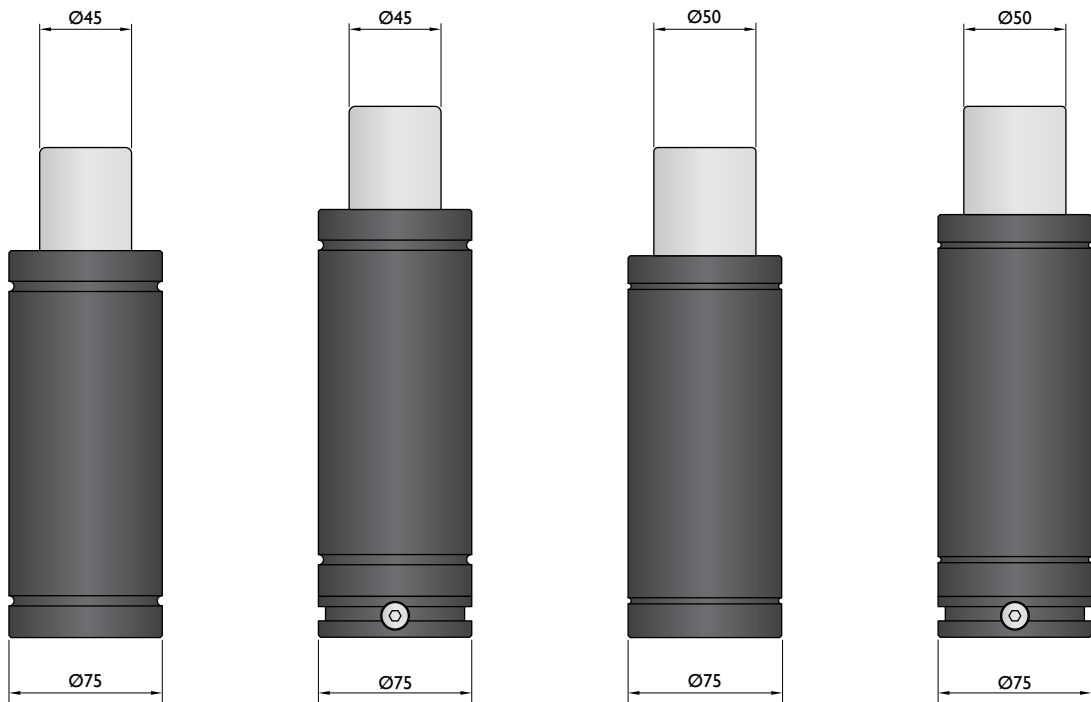
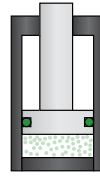
ISO
11901

VDI
3003

CNOMO
EM24.54.700

Force 5000 daN

Bore Sealed gas springs



| Model | T-4700 | TC-4700 | TS-4700 | TSC-4700 |
|-----------------|--------|---------|---------|----------|
| Initial F (daN) | 4700 | 4700 | 4700 | 4700 |
| L max (mm) | 80-240 | 100-260 | 80-273 | 100-293 |
| Stroke (mm) | 10-50 | 10-50 | 10-65 | 10-65 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

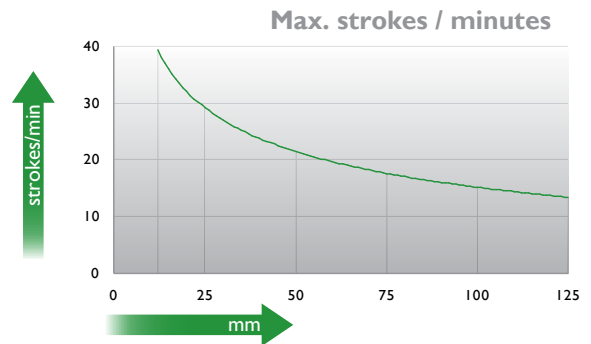
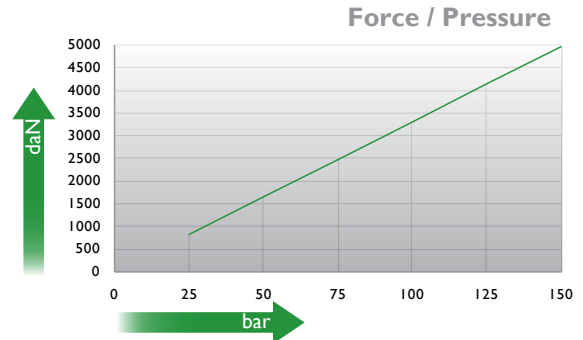
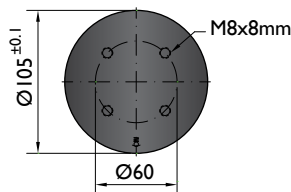
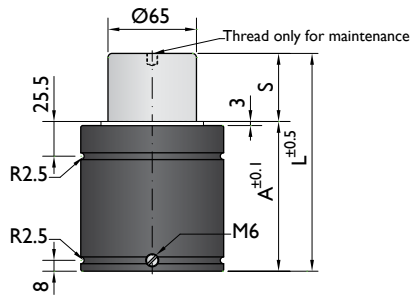
CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700



Ordering example: 4 x KC-5000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | kg |
|-------------|------------------------|---------|---------|--------------------------------------|----------|------|
| KC-5000-12 | 12 | 84 | 72 | 5000 (20°C, 150 bar) | 7200 | 3.77 |
| KC-5000-25 | 25 | 110 | 85 | | 7800 | 4.20 |
| KC-5000-38 | 38 | 136 | 98 | | 7900 | 4.56 |
| KC-5000-50 | 50 | 160 | 110 | | 8800 | 4.90 |
| KC-5000-63 | 63 | 186 | 123 | | 8700 | 5.40 |
| KC-5000-80 | 80 | 220 | 140 | | 8700 | 5.96 |
| KC-5000-100 | 100 | 260 | 160 | | 8700 | 6.74 |
| KC-5000-125 | 125 | 310 | 185 | | 8700 | 7.58 |

other strokes ⁽¹⁾ under request

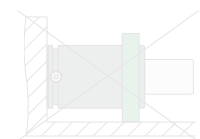
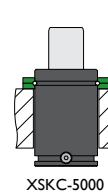
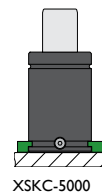
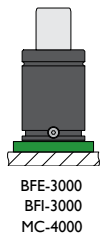
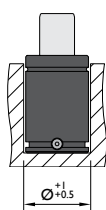
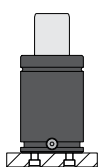
alternative forces ⁽²⁾ upon request

ESK available ⁽³⁾ for other strokes



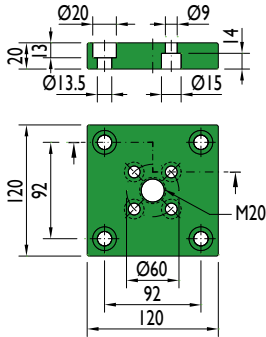
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT KC-5000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | M6 |

Mounting possibilities

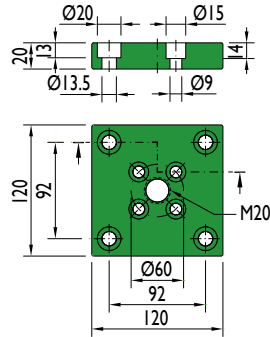


Flanges

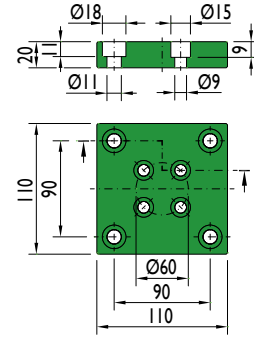
BFE-3000



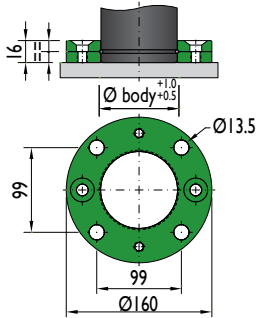
BFI-3000



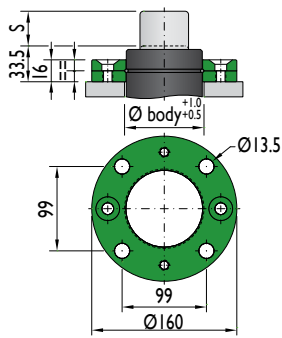
MC-4000

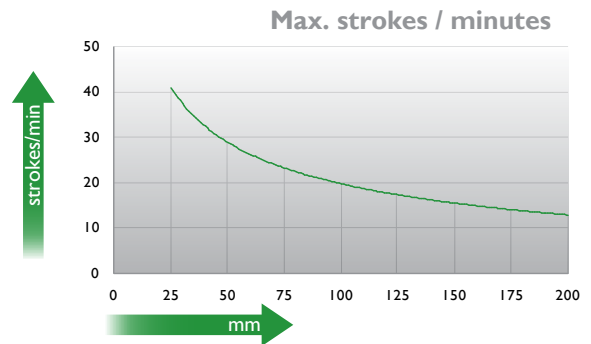
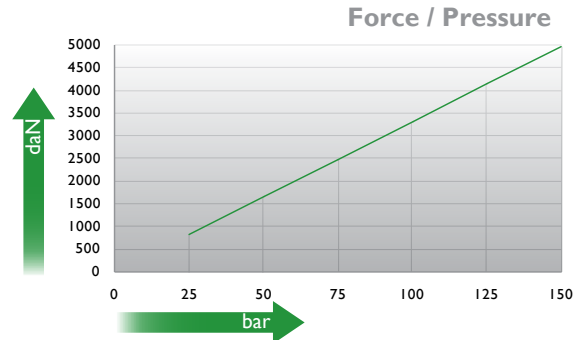
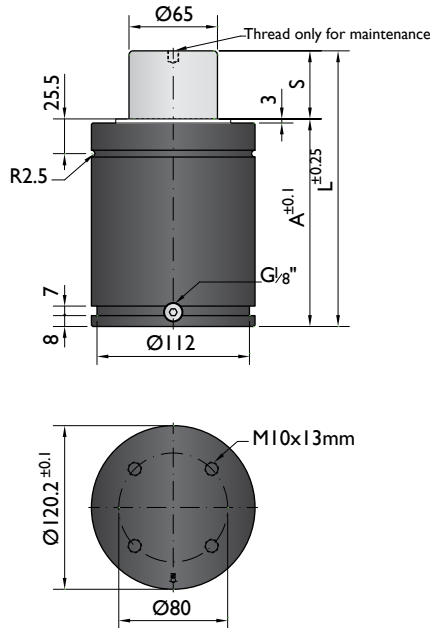


XSKC-5000



XSKC-5000





Ordering example: 4 x HG-5000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN | (3) | kg |
|-------------|------------------------|---------|---------|---|----------|-----|-------|
| HG-5000-25 | 25 | 152.5 | 127.5 | | 8000 | No | 9.04 |
| HG-5000-38 | 37.5 | 177.5 | 140 | | 8100 | No | 9.70 |
| HG-5000-50 | 50 | 202.5 | 152.5 | | 8200 | No | 10.35 |
| HG-5000-63 | 62.5 | 227.5 | 165 | | 8300 | No | 11.01 |
| HG-5000-80 | 80 | 262.5 | 182.5 | 5000 | 8300 | Yes | 11.93 |
| HG-5000-100 | 100 | 302.5 | 202.5 | | 8400 | Yes | 12.98 |
| HG-5000-125 | 125 | 352.5 | 227.5 | | 8400 | Yes | 14.30 |
| HG-5000-160 | 160 | 422.5 | 262.5 | | 8400 | Yes | 16.14 |
| HG-5000-200 | 200 | 502.5 | 302.5 | | 8500 | Yes | 18.25 |

⁽¹⁾ other strokes under request

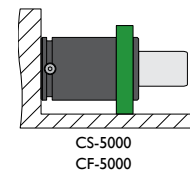
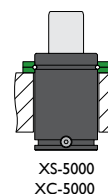
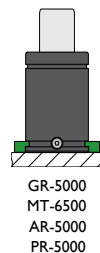
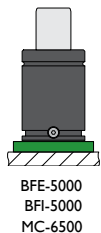
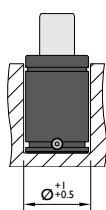
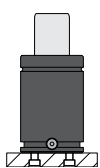
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT HG-5000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

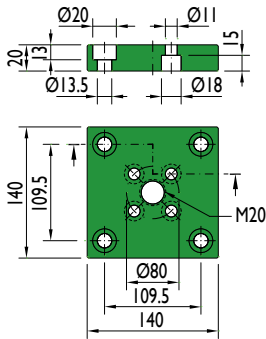
Mounting possibilities



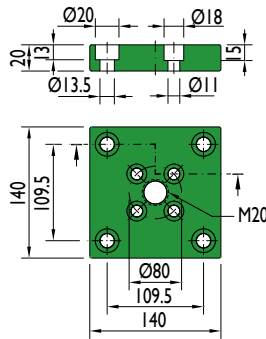
Flange must not support spring's force

Flanges

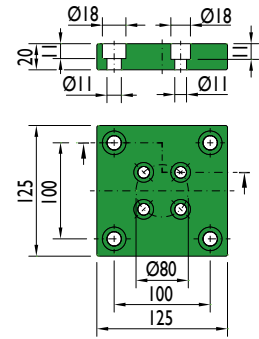
BFE-5000



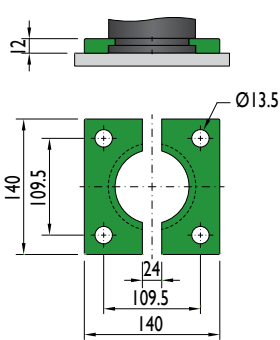
BFI-5000



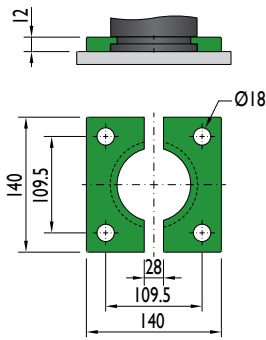
MC-6500



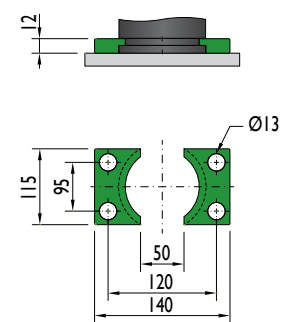
GR-5000



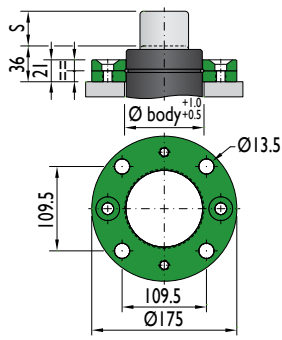
MT-6500



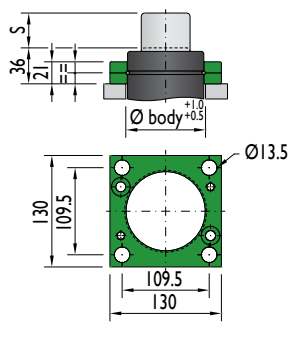
AR-5000



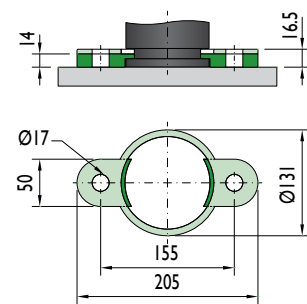
XS-5000



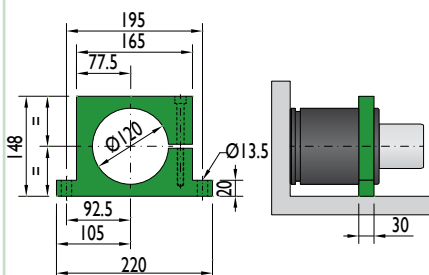
XC-5000



PR-5000

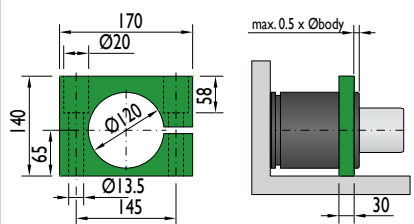


CS-5000



Flange must not support spring's force

CF-5000

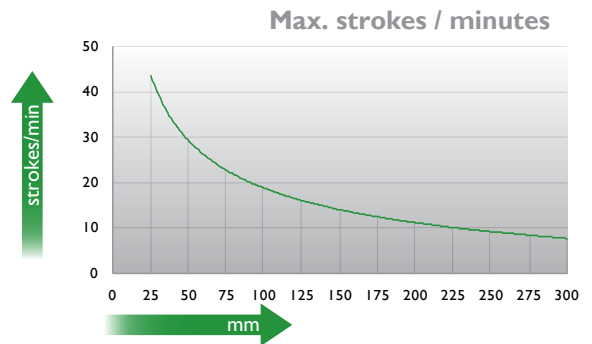
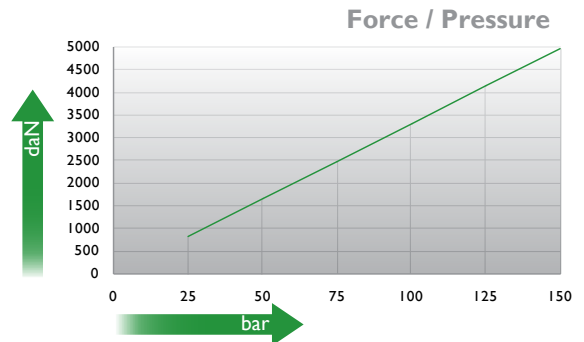
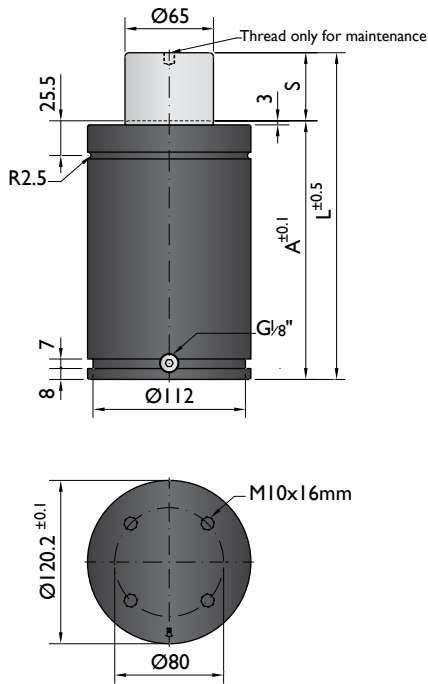


Flange must not support spring's force




CNOMO
EM24.54.700

PSA
E24.54.815.G



Ordering example: 4 x G-5000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN |  ⁽³⁾ | kg |
|------------|------------------------|---------|---------|--------------------------------------|----------|--|-------|
| | | | | (20°C, 150 bar) | | | |
| G-5000-25 | 25 | 190 | 165 | 5000 | 5900 | No | 10.76 |
| G-5000-38 | 38.1 | 216.2 | 178.1 | | 6200 | No | 11.33 |
| G-5000-50 | 50 | 240 | 190 | | 6400 | No | 11.80 |
| G-5000-63 | 63.5 | 267 | 203.5 | | 6600 | No | 12.26 |
| G-5000-80 | 80 | 300 | 220 | | 6700 | No | 13.21 |
| G-5000-100 | 100 | 340 | 240 | | 7200 | Yes | 14.86 |
| G-5000-125 | 125 | 390 | 265 | | 7300 | Yes | 16.25 |
| G-5000-160 | 160 | 460 | 300 | | 7400 | Yes | 17.54 |
| G-5000-200 | 200 | 540 | 340 | | 7500 | Yes | 21.16 |
| G-5000-250 | 250 | 640 | 390 | | 7500 | Yes | 22.61 |
| G-5000-300 | 300 | 740 | 440 | 7600 | Yes | 26.51 | |

⁽¹⁾ other strokes under request

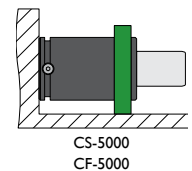
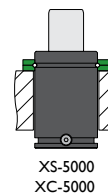
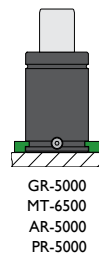
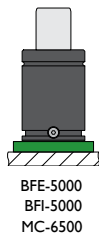
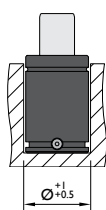
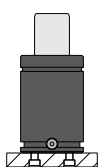
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT G-5000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

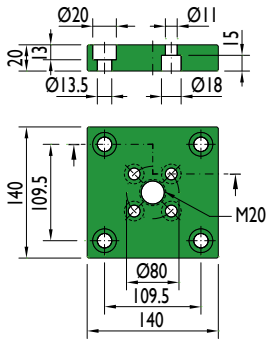
Mounting possibilities



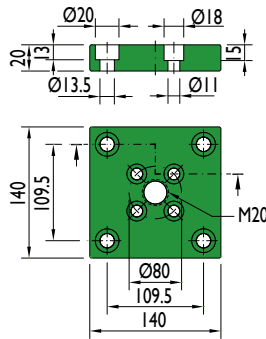
Flange must not support spring's force

Flanges

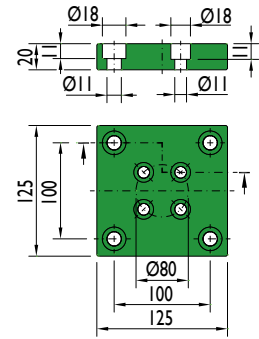
BFE-5000



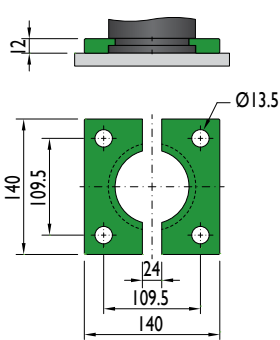
BFI-5000



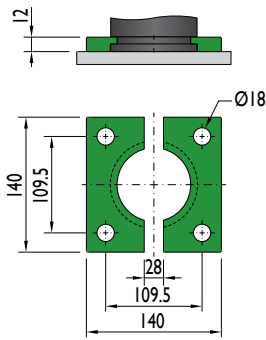
MC-6500



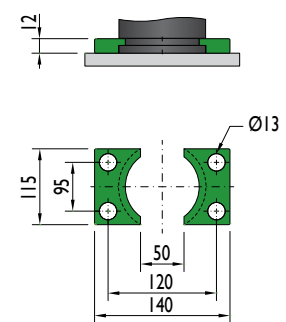
GR-5000



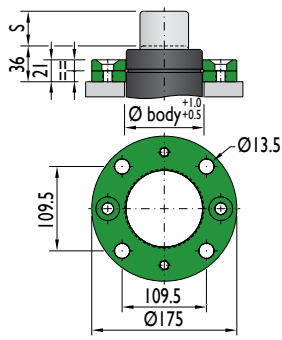
MT-6500



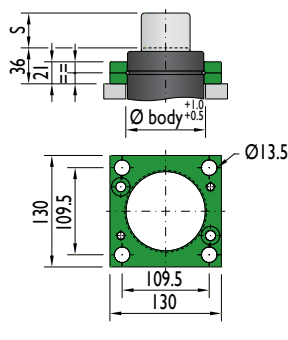
AR-5000



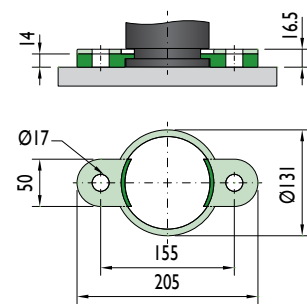
XS-5000



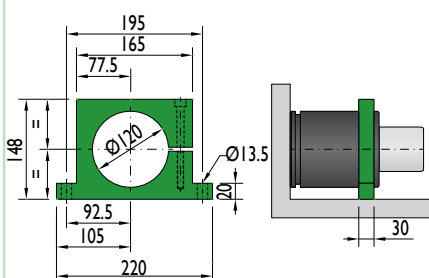
XC-5000



PR-5000

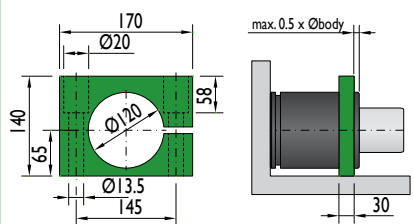


CS-5000



Flange must not support spring's force

CF-5000

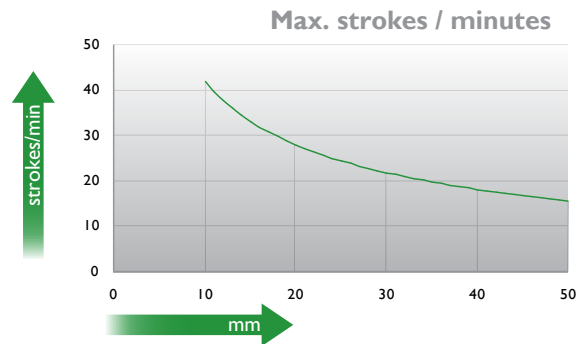
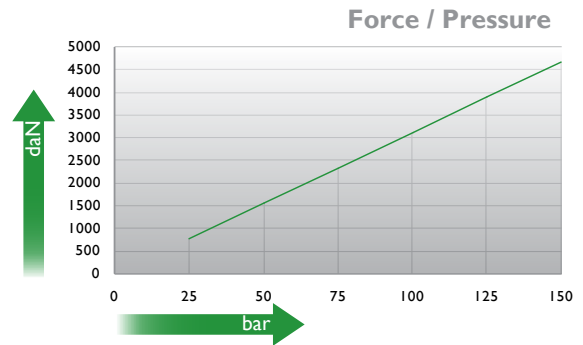
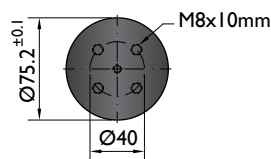
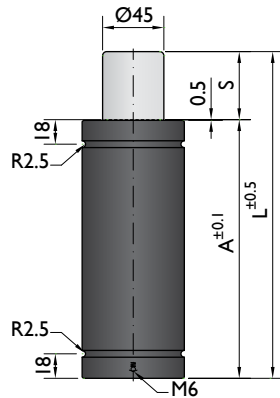


Flange must not support spring's force

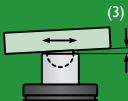
Special mounts available on
www.nitrogas.com



PSA
E24.54.815.G



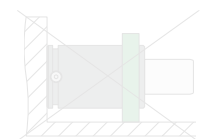
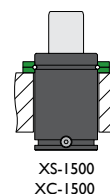
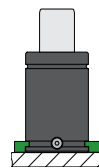
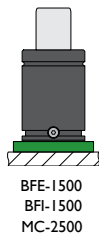
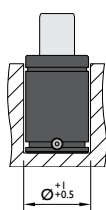
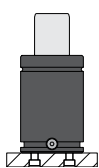
Ordering example: 4 x T-4700-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-----------|---|---------|---------|---|---|--|-------------------------------------|
| T-4700-10 | 10 | 80 | 70 | 4700 | 6800 | No | 1.55 |
| T-4700-16 | 16 | 106 | 90 | | 6800 | No | 1.80 |
| T-4700-25 | 25 | 135 | 110 | | 7000 | No | 2.07 |
| T-4700-32 | 32 | 167 | 135 | | 6800 | No | 2.38 |
| T-4700-40 | 40 | 200 | 160 | | 6800 | No | 2.72 |
| T-4700-50 | 50 | 240 | 190 | | 6800 | No | 3.14 |
| | ⁽¹⁾ other strokes under request | | | | ⁽²⁾ alternative forces upon request | | ⁽³⁾ ESK under request |



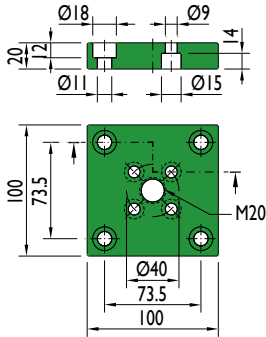
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT T-4700 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

Mounting possibilities

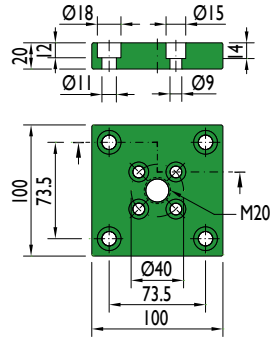


Flanges

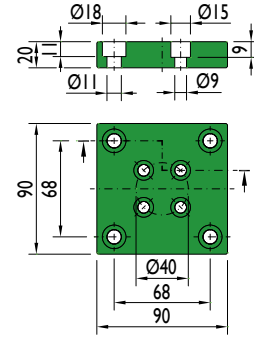
BFE-1500



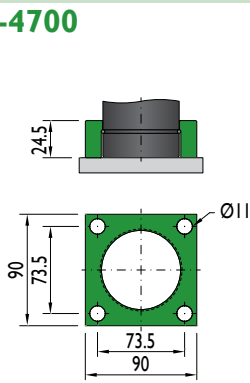
BFI-1500



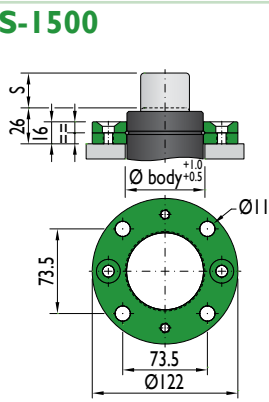
MC-2500



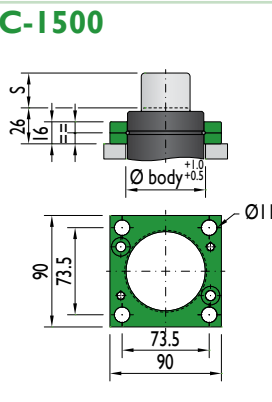
XT-4700

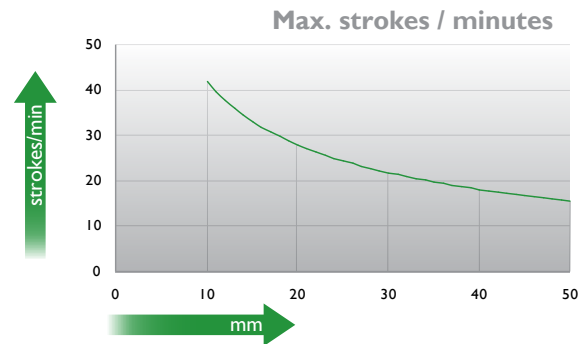
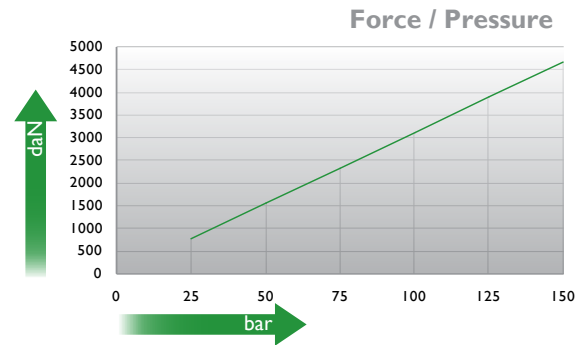
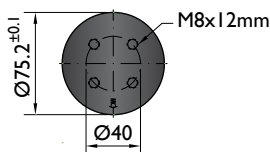
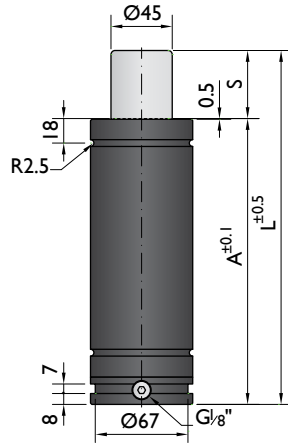


XS-1500

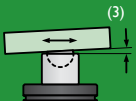


XC-1500





Ordering example: 4 x TC-4700-50

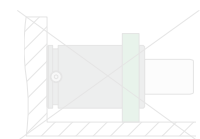
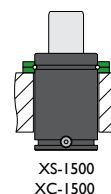
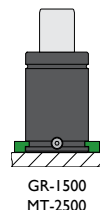
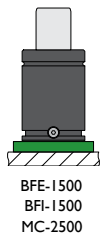
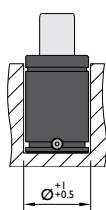
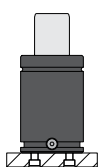
| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|------------|------------------------|---------|---------|---|----------|--|------|
| TC-4700-10 | 10 | 100 | 90 | 4700 | 6800 | No | 2.11 |
| TC-4700-16 | 16 | 126 | 110 | | 6800 | No | 2.36 |
| TC-4700-25 | 25 | 155 | 130 | | 7000 | No | 2.63 |
| TC-4700-32 | 32 | 187 | 155 | | 6800 | No | 2.94 |
| TC-4700-40 | 40 | 220 | 180 | | 6800 | No | 3.28 |
| TC-4700-50 | 50 | 260 | 210 | | 6800 | No | 2.70 |

⁽¹⁾ other strokes under request
 ⁽²⁾ alternative forces upon request
 ⁽³⁾ ESK under request



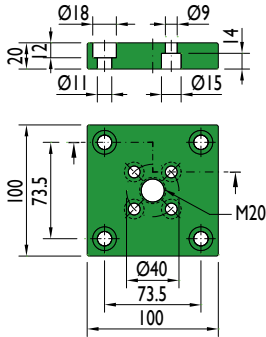
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TC-4700 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

Mounting possibilities

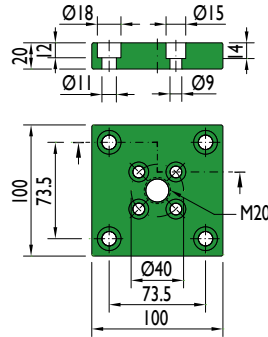


Flanges

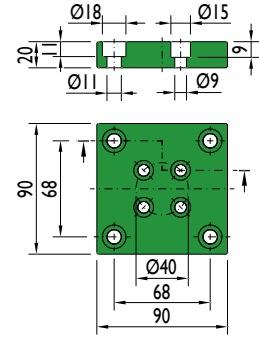
BFE-1500



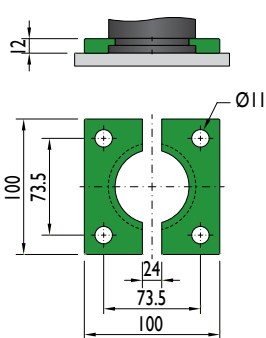
BFI-1500



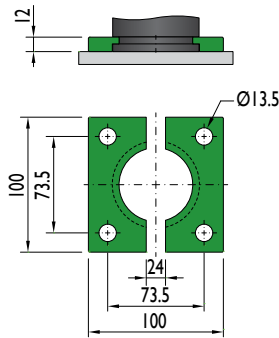
MC-2500



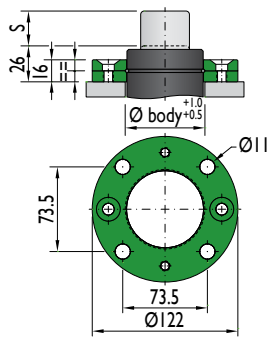
GR-1500



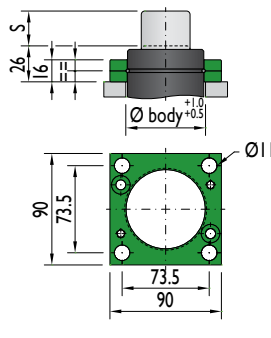
MT-2500

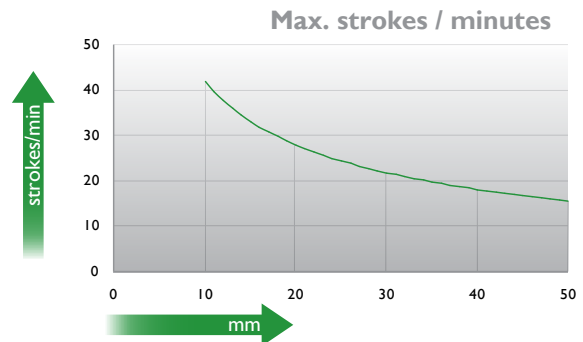
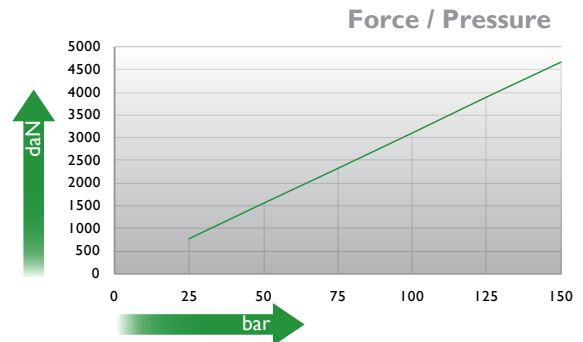
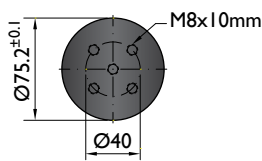
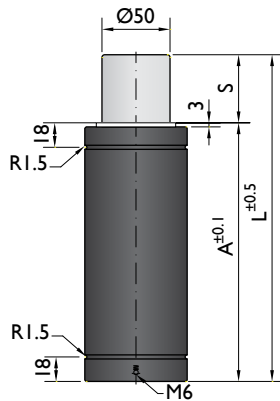


XS-1500



XC-1500





Ordering example: 4 x TS-4700-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN | (3) | kg |
|------------|------------------------|---------|---------|---|----------|-----|------|
| TS-4700-10 | 10 | 80 | 70 | 4700 | 6800 | No | 1.55 |
| TS-4700-16 | 16 | 106 | 90 | | 6800 | No | 1.80 |
| TS-4700-25 | 25 | 135 | 110 | | 7000 | No | 2.07 |
| TS-4700-32 | 32 | 167 | 135 | | 6800 | No | 2.38 |
| TS-4700-40 | 40 | 200 | 160 | | 6800 | No | 2.72 |
| TS-4700-50 | 50 | 240 | 190 | | 6800 | No | 3.14 |
| TS-4700-65 | 65 | 273 | 208 | | 7000 | No | 3.33 |

other strokes ⁽¹⁾ under request

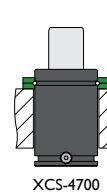
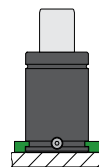
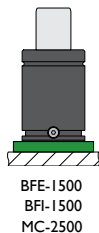
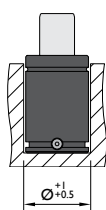
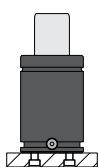
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request



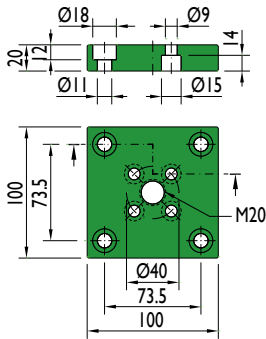
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TS-4700 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

Mounting possibilities

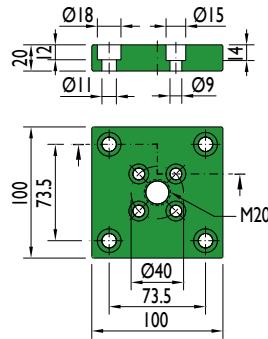


Flanges

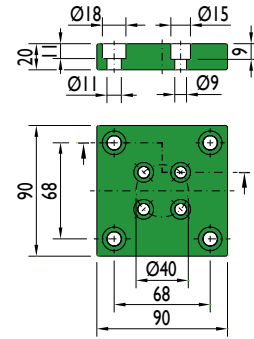
BFE-1500



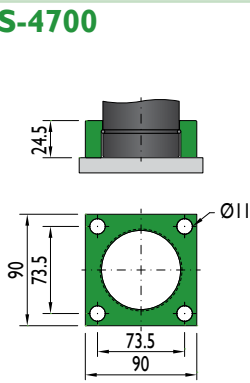
BFI-1500



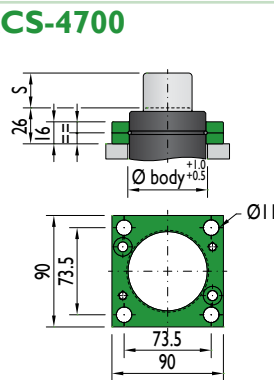
MC-2500

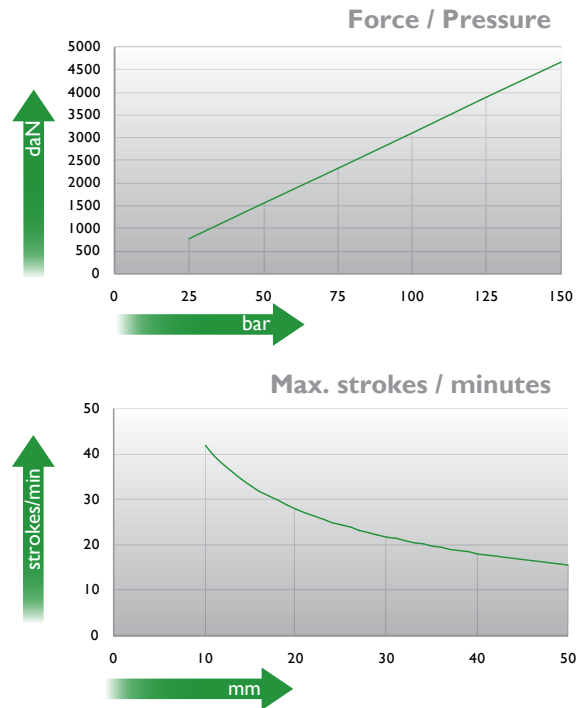
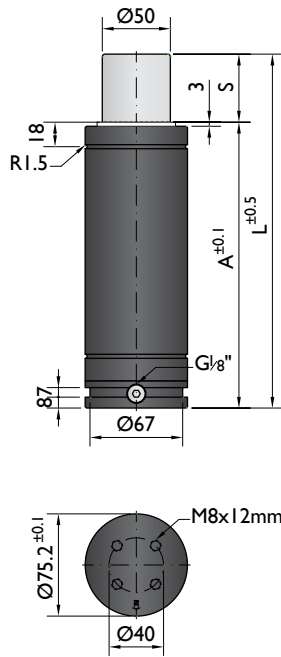


XTS-4700

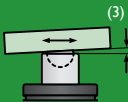


XCS-4700





Ordering example: 4 x TSC-4700-65

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN |  | kg |
|-------------|------------------------|---------|---------|--------------------------------------|----------|---|------|
| TSC-4700-10 | 10 | 100 | 90 | 4700 (20°C, 150 bar) | 6800 | No | 2.11 |
| TSC-4700-16 | 16 | 126 | 110 | | 6800 | No | 2.36 |
| TSC-4700-25 | 25 | 155 | 130 | | 7000 | No | 2.63 |
| TSC-4700-32 | 32 | 187 | 155 | | 6800 | No | 2.94 |
| TSC-4700-40 | 40 | 220 | 180 | | 6800 | No | 3.28 |
| TSC-4700-50 | 50 | 260 | 210 | | 6800 | No | 2.70 |
| TSC-4700-65 | 65 | 293 | 228 | | 7000 | No | 3.98 |

other strokes ⁽¹⁾ under request

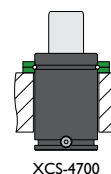
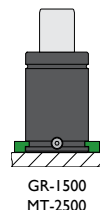
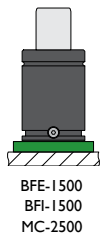
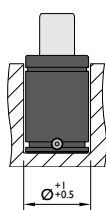
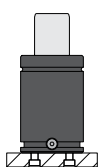
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request



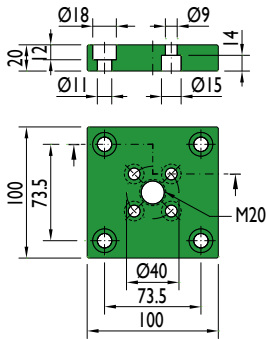
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TSC-4700 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

Mounting possibilities

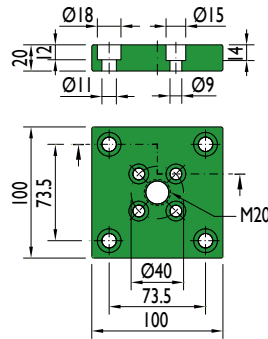


Flanges

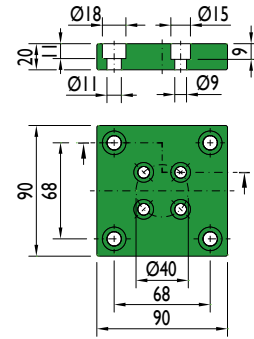
BFE-1500



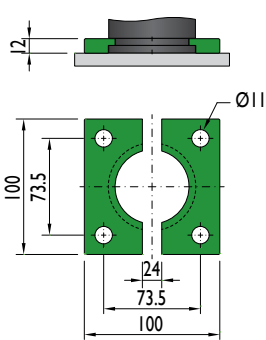
BFI-1500



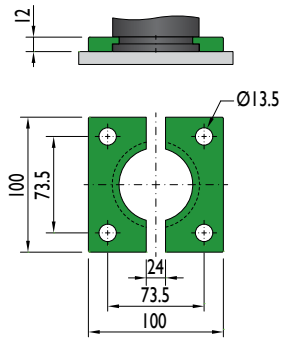
MC-2500



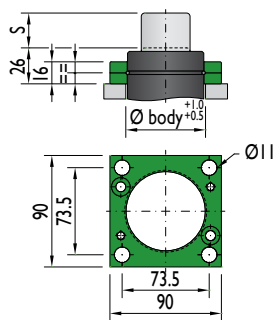
GR-1500



MT-2500

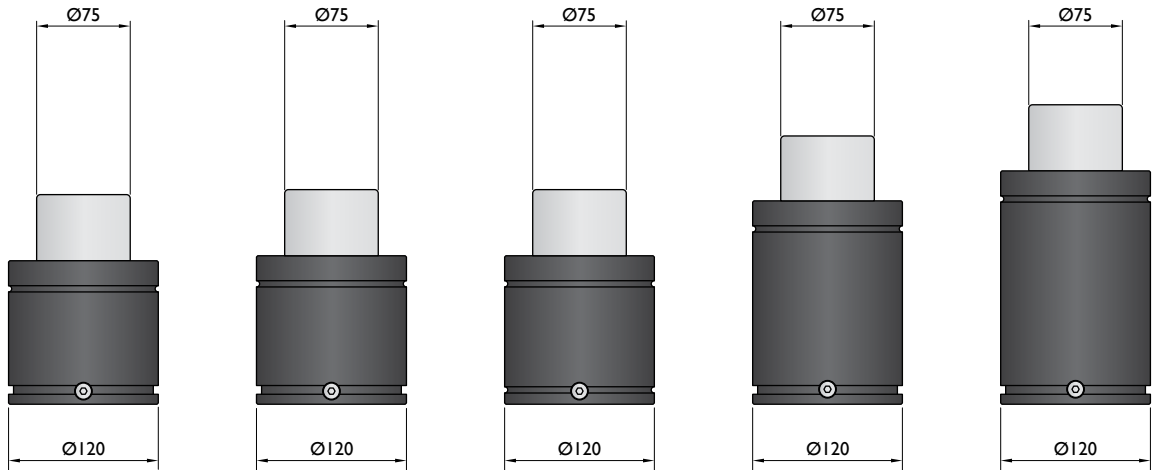
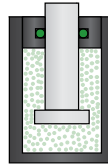


XCS-4700



Force 6500 daN

Piston Rod Sealed gas springs



| | | | | | |
|------------------------|----------------|----------------|----------------|---------------|----------------|
| Model | KP-6600 | NR-6600 | NT-6600 | M-6500 | HD-6600 |
| Initial F (daN) | 6600 | 6600 | 6600 | 6400 | 6600 |
| L max (mm) | 2xStroke+68 | 2xStroke+72 | 2xStroke+72 | 2xStroke+115 | 2xStroke+140 |
| Stroke (mm) | 16-125 | 16-125 | 16-125 | 25-160 | 25-300 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

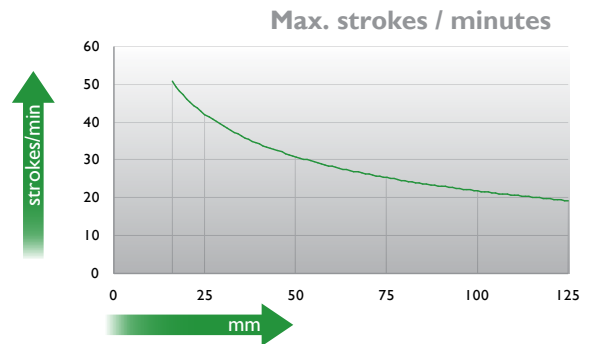
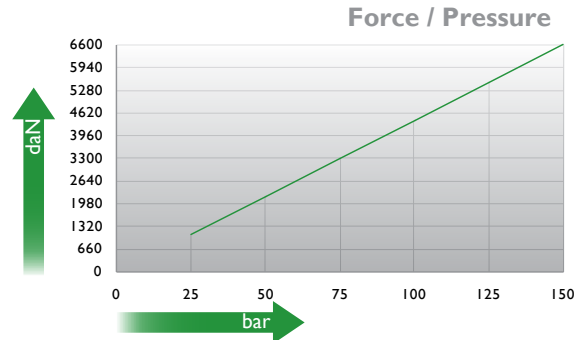
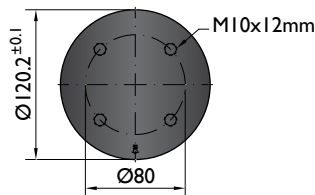
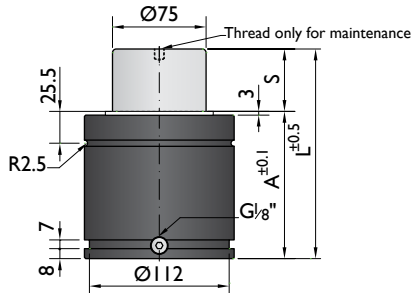
PED
2014/68/EU

ISO
11901


VDI
3003

CNOMO
EM24.54.700





Ordering example: 4 x KP-6600-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|------|
| KP-6600-16 | 16 | 100 | 84 | 6600 | 9800 | No | 5.85 |
| KP-6600-19 | 19 | 106 | 87 | | 10000 | No | 5.98 |
| KP-6600-25 | 25 | 118 | 93 | | 10300 | No | 6.24 |
| KP-6600-32 | 32 | 132 | 100 | | 10600 | No | 6.52 |
| KP-6600-38 | 38 | 144 | 106 | | 10700 | No | 6.79 |
| KP-6600-50 | 50 | 168 | 118 | | 11500 | No | 7.58 |
| KP-6600-63 | 63 | 194 | 131 | | 11500 | Yes | 8.07 |
| KP-6600-75 | 75 | 218 | 143 | | 11100 | Yes | 8.30 |
| KP-6600-80 | 80 | 228 | 148 | | 11100 | Yes | 8.46 |
| KP-6600-100 | 100 | 268 | 168 | | 11000 | Yes | 9.10 |
| KP-6600-125 | 125 | 318 | 193 | | 10900 | Yes | 9.89 |

⁽¹⁾ other strokes under request

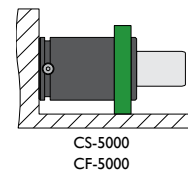
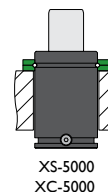
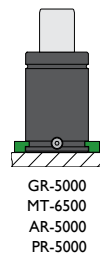
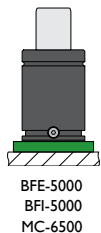
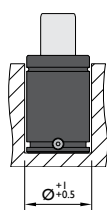
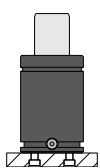
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT KP-6600 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

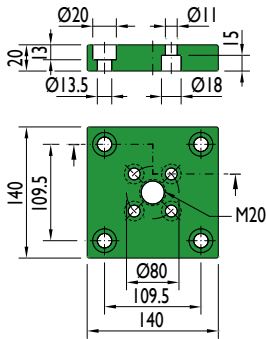
Mounting possibilities



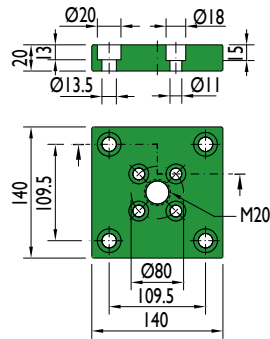
Flange must not support spring's force

Flanges

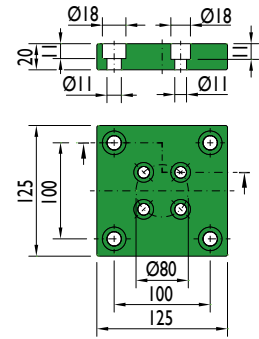
BFE-5000



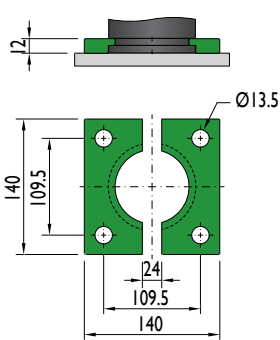
BFI-5000



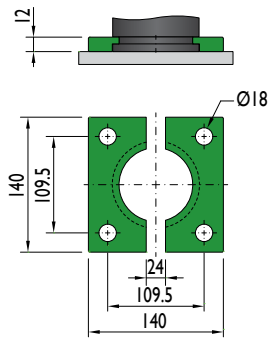
MC-6500



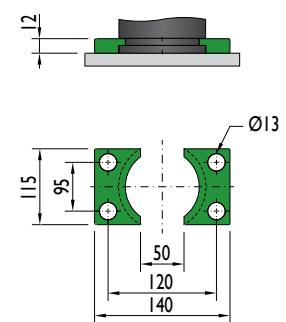
GR-5000



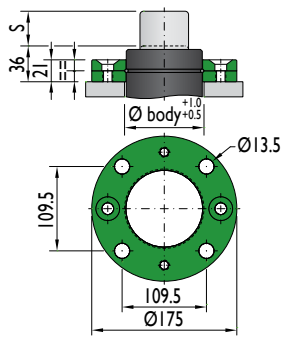
MT-6500



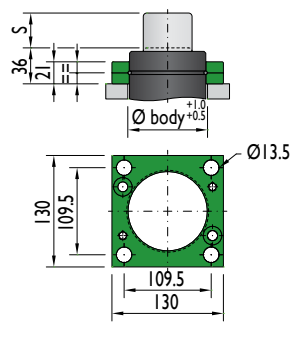
AR-5000



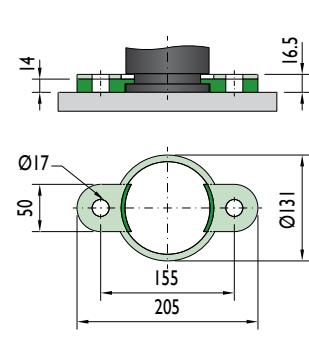
XS-5000



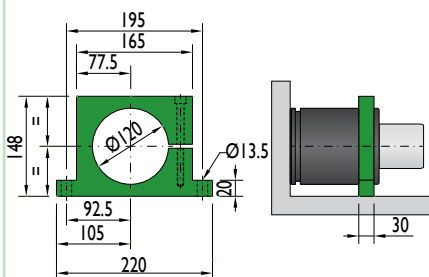
XC-5000



PR-5000

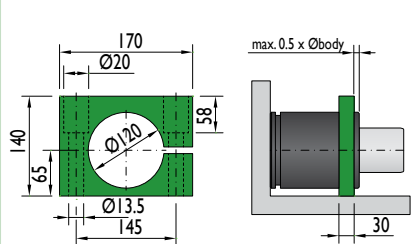


CS-5000

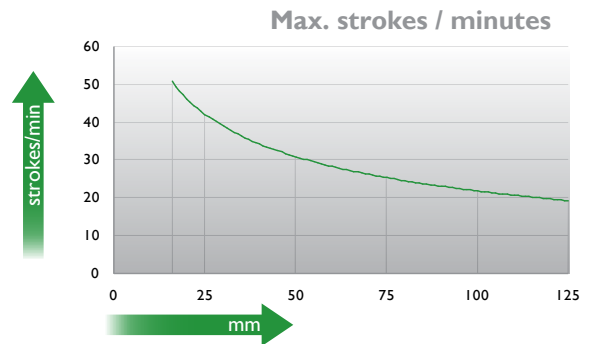
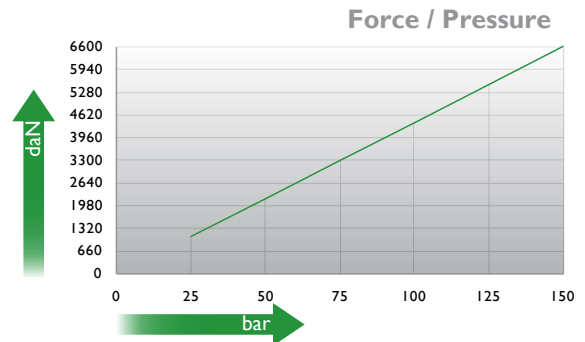
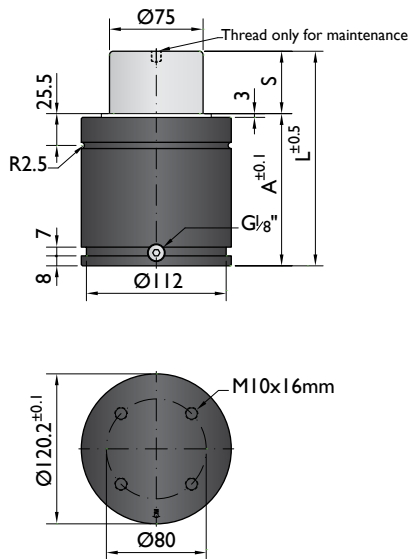


Flange must not support spring's force

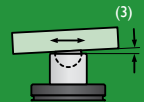
CF-5000



Flange must not support spring's force



Ordering example: 4 x NR-6600-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  | kg |
|-------------|------------------------|---------|---------|---|----------|---|------|
| NR-6600-16 | 16 | 104 | 88 | 6600 | 8900 | No | 5.67 |
| NR-6600-19 | 19 | 110 | 91 | | 9100 | No | 5.81 |
| NR-6600-25 | 25 | 122 | 97 | | 9300 | No | 6.08 |
| NR-6600-32 | 32 | 136 | 104 | | 9600 | No | 6.41 |
| NR-6600-38 | 38 | 148 | 110 | | 9800 | No | 6.68 |
| NR-6600-50 | 50 | 172 | 122 | | 10000 | No | 7.21 |
| NR-6600-63 | 63 | 198 | 135 | | 10200 | Yes | 7.85 |
| NR-6600-75 | 75 | 222 | 147 | | 10300 | Yes | 7.31 |
| NR-6600-80 | 80 | 232 | 152 | | 10400 | Yes | 8.63 |
| NR-6600-100 | 100 | 272 | 172 | | 10500 | Yes | 9.56 |
| NR-6600-125 | 125 | 322 | 197 | 10600 | Yes | 10.72 | |

⁽¹⁾ other strokes under request

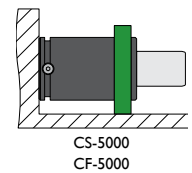
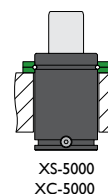
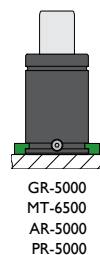
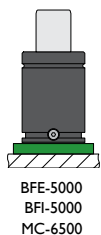
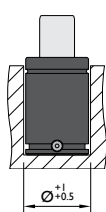
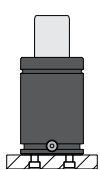
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT NR-6600 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

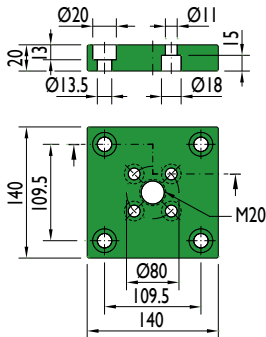
Mounting possibilities



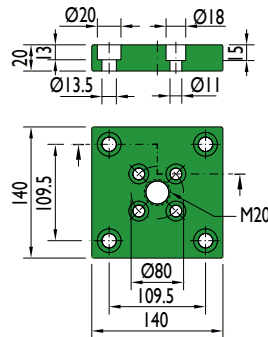
Flange must not support spring's force

Flanges

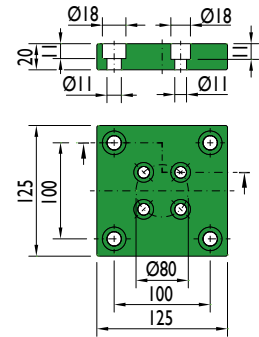
BFE-5000



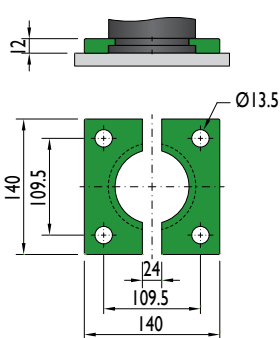
BFI-5000



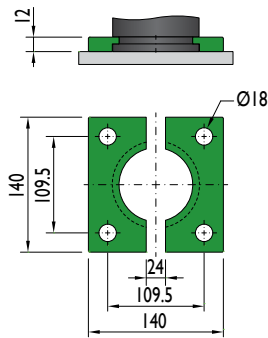
MC-6500



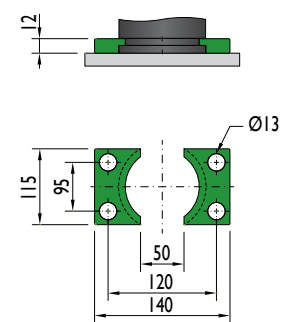
GR-5000



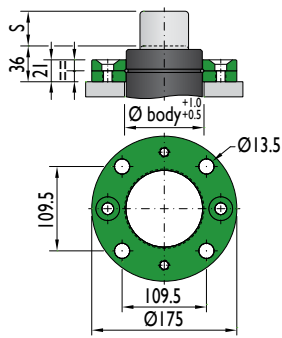
MT-6500



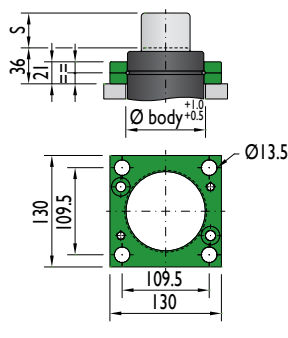
AR-5000



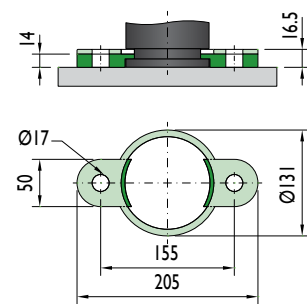
XS-5000



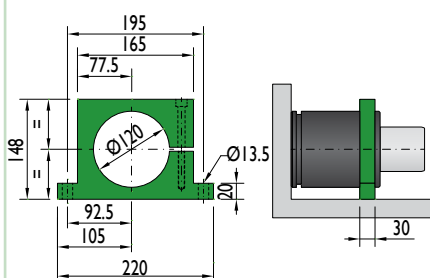
XC-5000



PR-5000

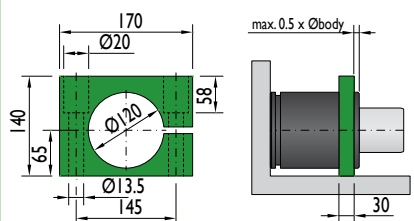


CS-5000

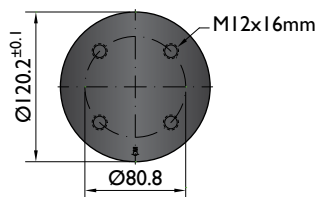
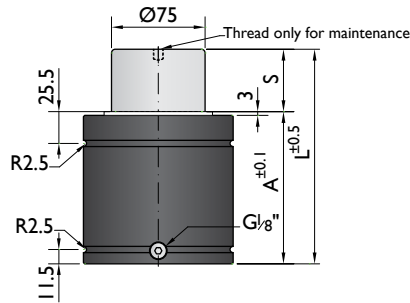


Flange must not support spring's force

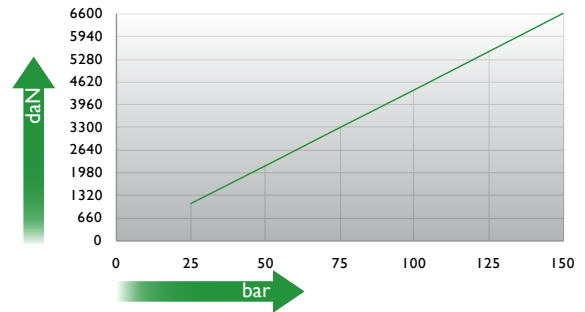
CF-5000



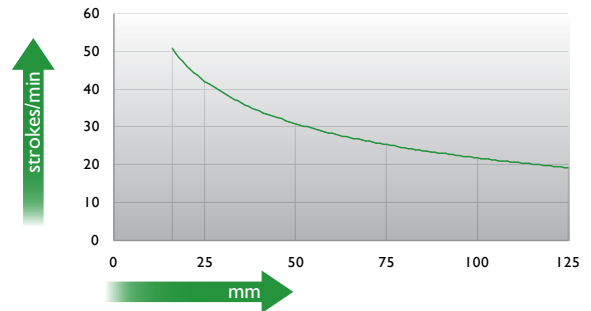
Flange must not support spring's force




Force / Pressure



Max. strokes / minutes



Ordering example: 4 x NT-6600-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|------|
| NT-6600-16 | 16 | 104 | 88 | 6600 | 8900 | No | 5.67 |
| NT-6600-19 | 19 | 110 | 91 | | 9100 | No | 5.81 |
| NT-6600-25 | 25 | 122 | 97 | | 9300 | No | 6.08 |
| NT-6600-32 | 32 | 136 | 104 | | 9600 | No | 6.41 |
| NT-6600-38 | 38 | 148 | 110 | | 9800 | No | 6.68 |
| NT-6600-50 | 50 | 172 | 122 | | 10000 | No | 7.21 |
| NT-6600-63 | 63 | 198 | 135 | | 10200 | Yes | 7.85 |
| NT-6600-75 | 75 | 222 | 147 | | 10300 | Yes | 7.31 |
| NT-6600-80 | 80 | 232 | 152 | | 10400 | Yes | 8.63 |
| NT-6600-100 | 100 | 272 | 172 | | 10500 | Yes | 9.56 |
| NT-6600-125 | 125 | 322 | 197 | 10600 | Yes | 10.72 | |

⁽¹⁾ other strokes under request

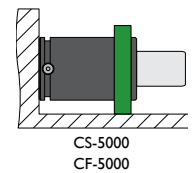
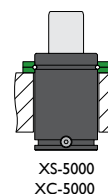
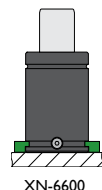
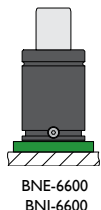
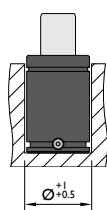
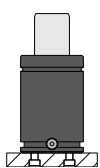
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT NT-6600 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

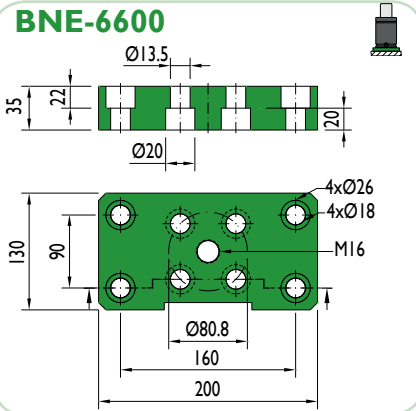
Mounting possibilities



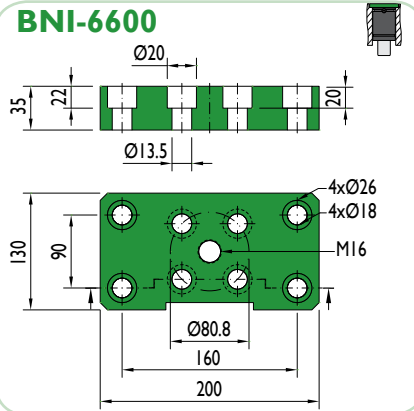
Flange must not support spring's force

Flanges

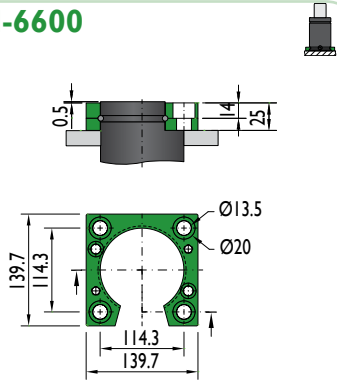
BNE-6600



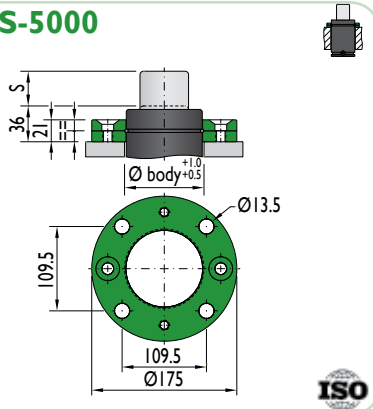
BNI-6600



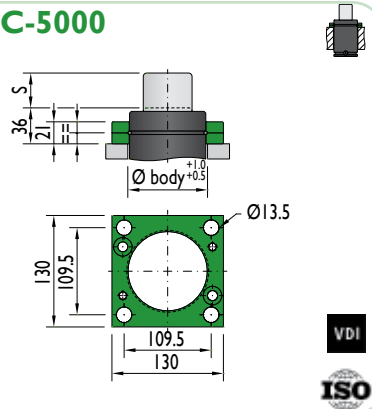
XN-6600



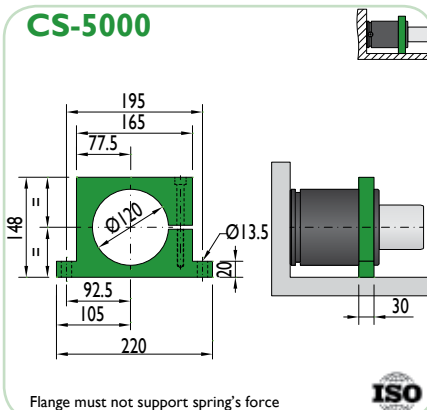
XS-5000



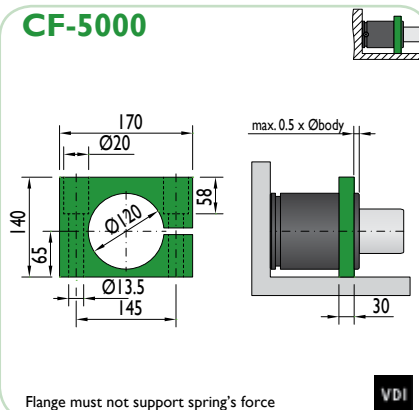
XC-5000



CS-5000



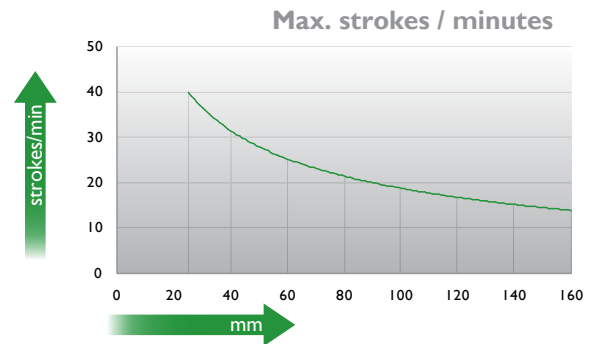
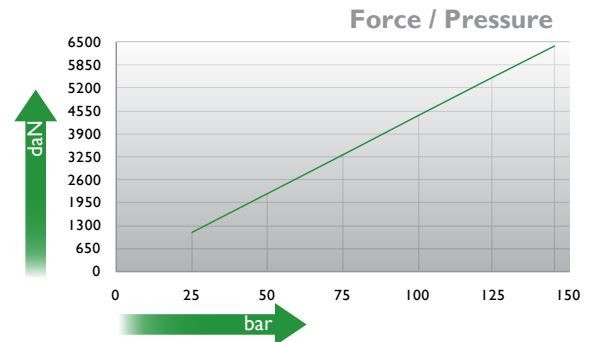
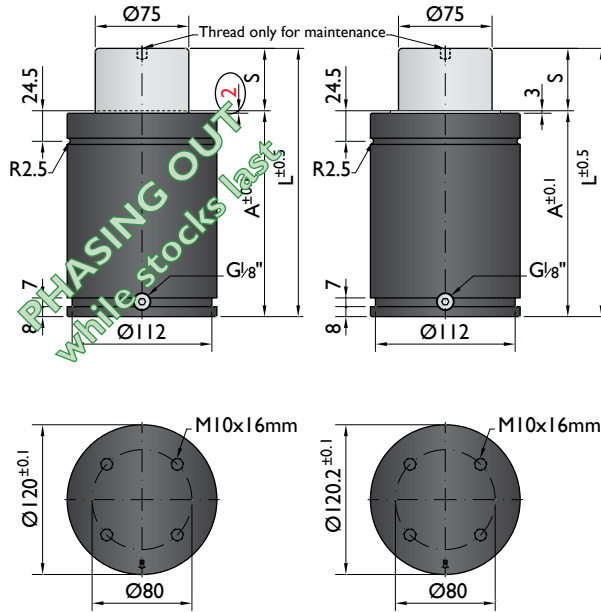
CF-5000






*The new cylinder will be supplied when the stock runs out.

NEW MODEL*



Ordering example: 4 x M-6500-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 145 bar) | F daN |  | kg |
|------------|------------------------|---------|---------|---|----------|---|-------|
| M-6500-25 | 25 | 165 | 140 | 6400 | 8900 | No | 9.18 |
| M-6500-38 | 38 | 191 | 153 | | 9400 | No | 9.72 |
| M-6500-50 | 50 | 215 | 165 | | 9800 | No | 10.40 |
| M-6500-63 | 63 | 241 | 178 | | 10000 | No | 10.36 |
| M-6500-80 | 80 | 275 | 195 | | 10500 | No | 11.61 |
| M-6500-100 | 100 | 315 | 215 | | 10900 | Yes | 12.42 |
| M-6500-125 | 125 | 375 | 250 | | 10600 | Yes | 13.43 |
| M-6500-160 | 160 | 450 | 290 | | 10700 | Yes | 14.84 |

other strokes ⁽¹⁾ under request

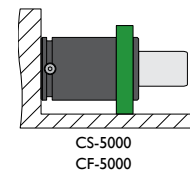
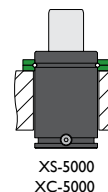
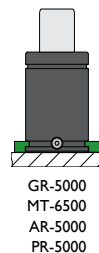
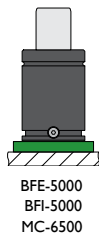
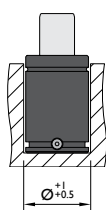
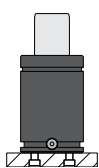
alternative forces ⁽²⁾ upon request

ESK available for other strokes ⁽³⁾



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 145 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT M-6500 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

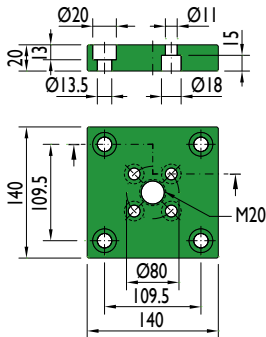
Mounting possibilities



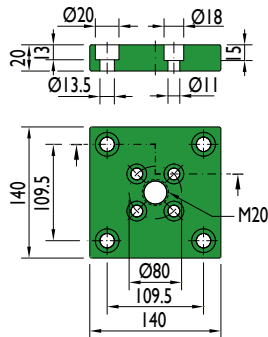
Flange must not support spring's force

Flanges

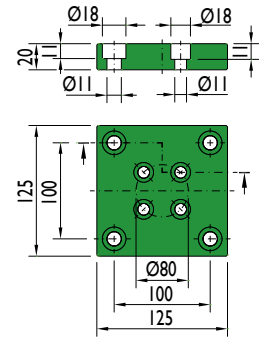
BFE-5000



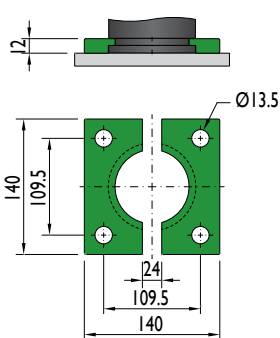
BFI-5000



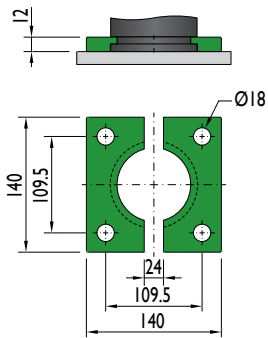
MC-6500



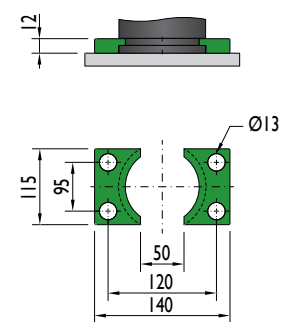
GR-5000



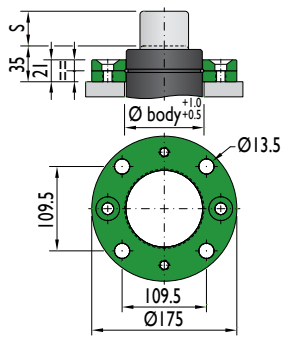
MT-6500



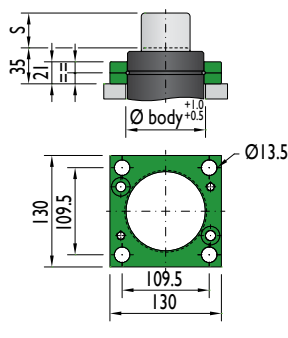
AR-5000



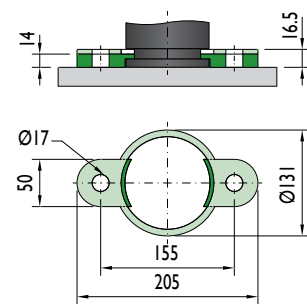
XS-5000



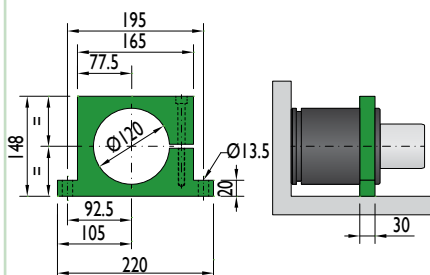
XC-5000



PR-5000

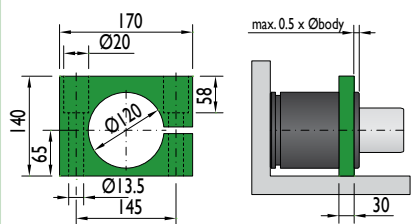


CS-5000



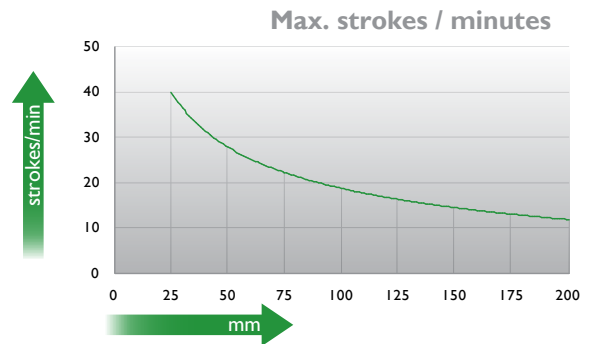
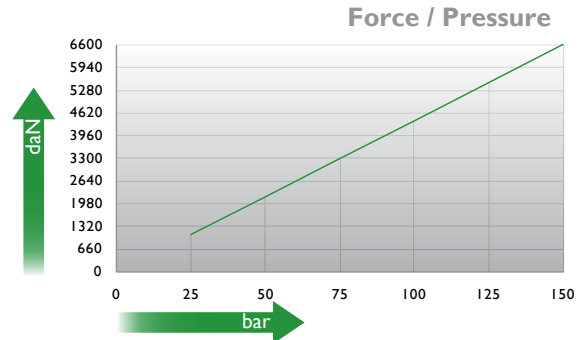
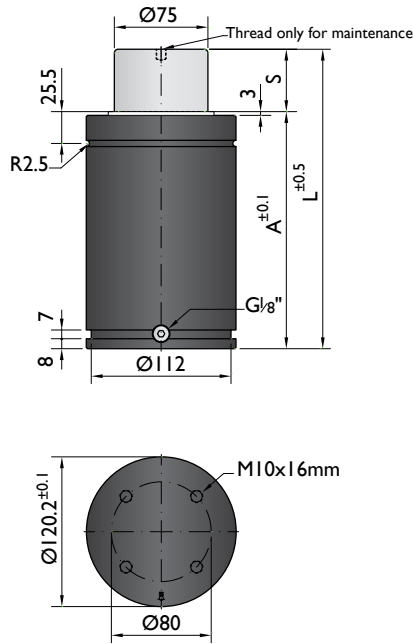
Flange must not support spring's force

CF-5000




Flange must not support spring's force

Special mounts available on
www.nitrogas.com



Ordering example: 4 x HD-6600-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|-------|
| HD-6600-25 | 25 | 190 | 165 | 6600 | 8100 | No | 13.35 |
| HD-6600-38 | 38 | 216 | 178 | | 8600 | No | 14.62 |
| HD-6600-50 | 50 | 240 | 190 | | 9000 | No | 16.55 |
| HD-6600-63 | 63 | 266 | 203 | | 9300 | No | 17.85 |
| HD-6600-80 | 80 | 300 | 220 | | 10000 | No | 18.63 |
| HD-6600-100 | 100 | 340 | 240 | | 10300 | Yes | 19.32 |
| HD-6600-125 | 125 | 390 | 265 | | 10600 | Yes | 19.95 |
| HD-6600-160 | 160 | 460 | 300 | | 10900 | Yes | 20.81 |
| HD-6600-200 | 200 | 540 | 340 | | 11200 | Yes | 21.55 |
| HD-6600-250 | 250 | 640 | 390 | | 11500 | Yes | 23.58 |
| HD-6600-300 | 300 | 740 | 440 | | 11800 | Yes | 25.61 |

⁽¹⁾ other strokes under request

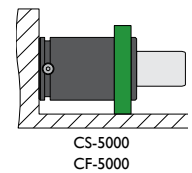
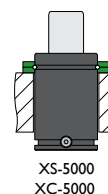
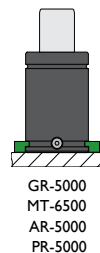
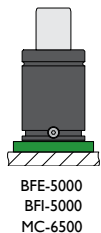
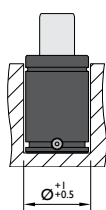
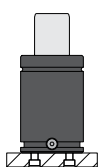
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT HD-6600 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

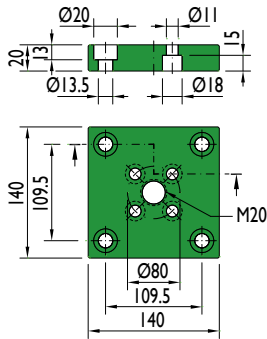
Mounting possibilities



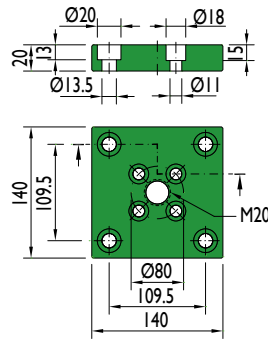
Flange must not support spring's force

Flanges

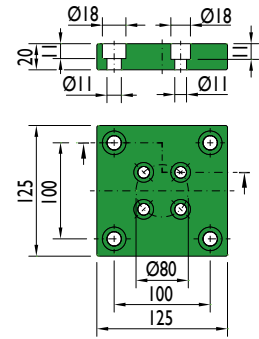
BFE-5000



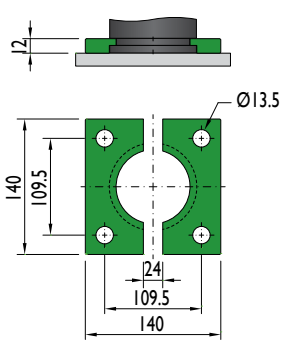
BFI-5000



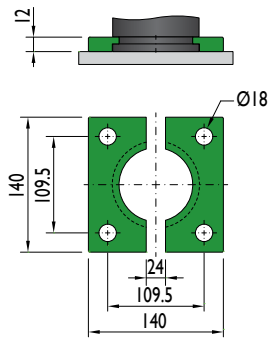
MC-6500



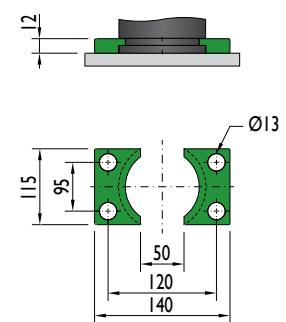
GR-5000



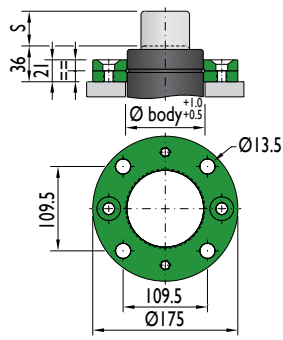
MT-6500



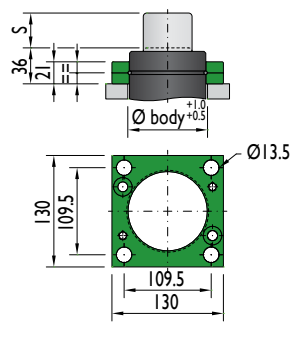
AR-5000



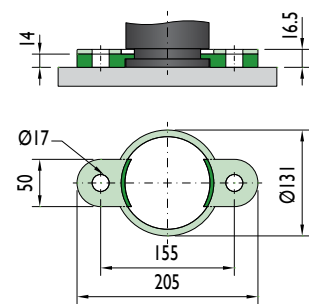
XS-5000



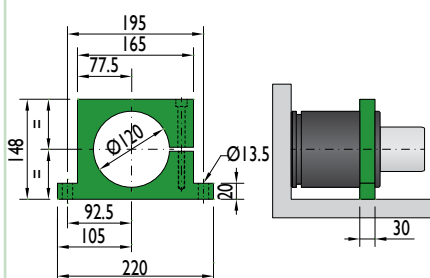
XC-5000



PR-5000

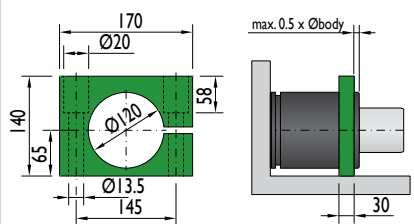


CS-5000



Flange must not support spring's force

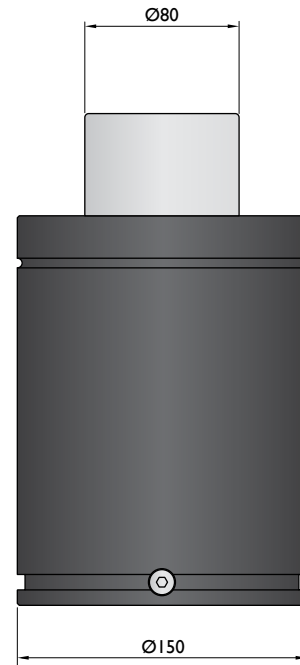
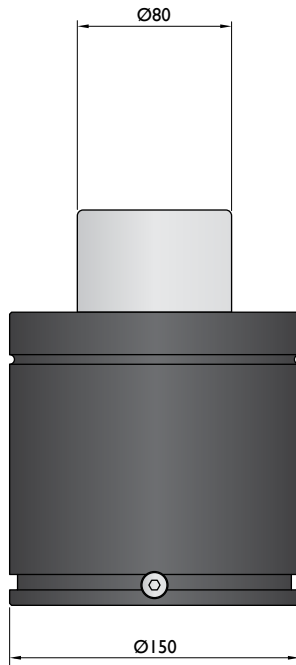
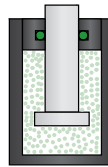
CF-5000



Flange must not support spring's force

Force 7500 daN

Piston Rod Sealed gas springs



| | | |
|------------------------|----------------|----------------|
| Model | HG-7500 | CN-7500 |
| Initial F (daN) | 7500 | 7500 |
| L max (mm) | 2xStroke+105 | 2xStroke+155 |
| Stroke (mm) | 25-200 | 25-300 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

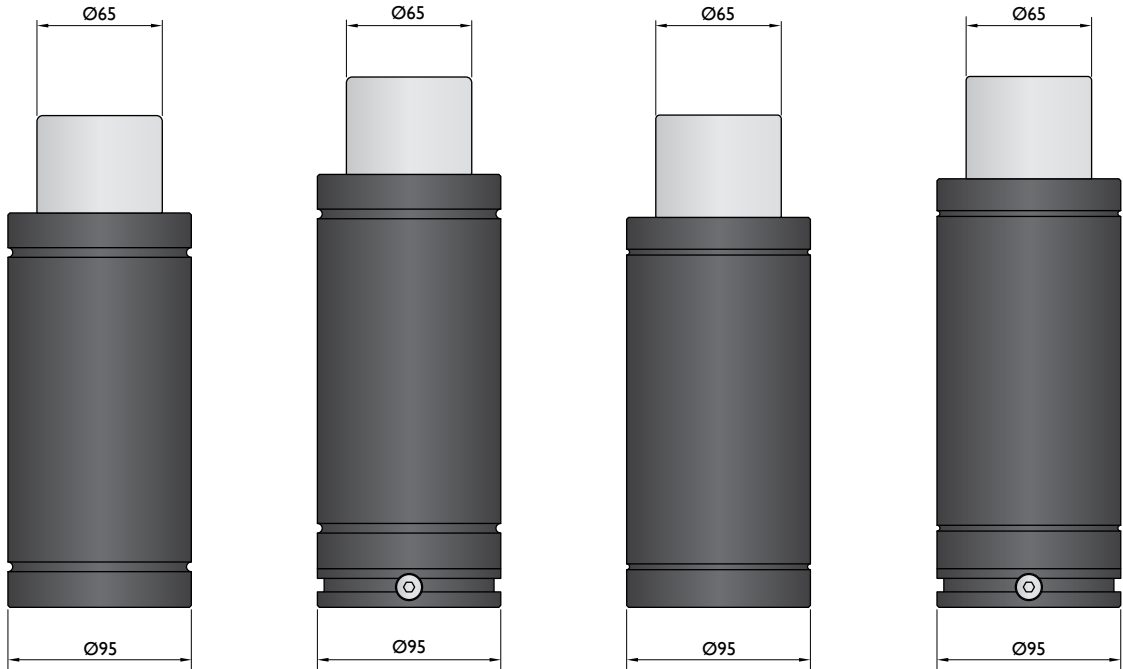
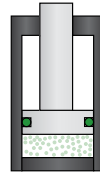
ISO
11901

VDI
3003

CNOMO
EM24.54.700

Force 7500 daN

Bore Sealed gas springs



| Model | T-7500 | TC-7500 | TS-7500 | TSC-7500 |
|-----------------|--------|---------|---------|----------|
| Initial F (daN) | 7500 | 7500 | 7500 | 7500 |
| L max (mm) | 90-255 | 110-275 | 90-279 | 110-299 |
| Stroke (mm) | 10-50 | 10-50 | 10-65 | 10-65 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

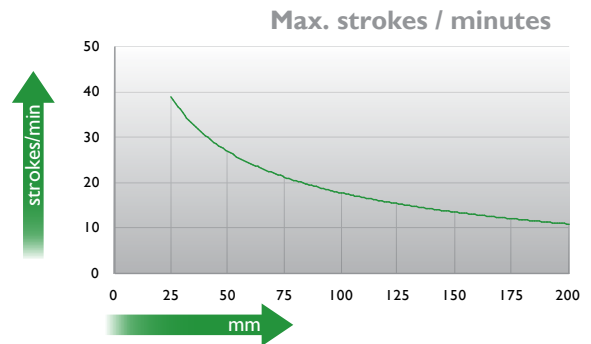
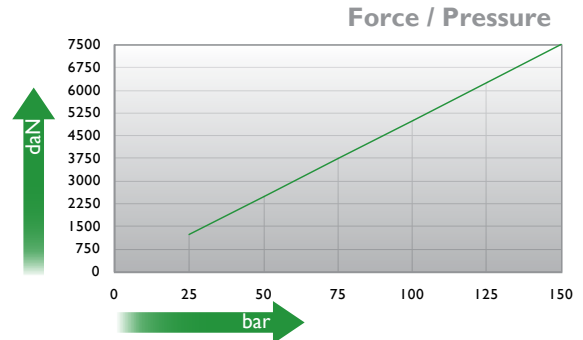
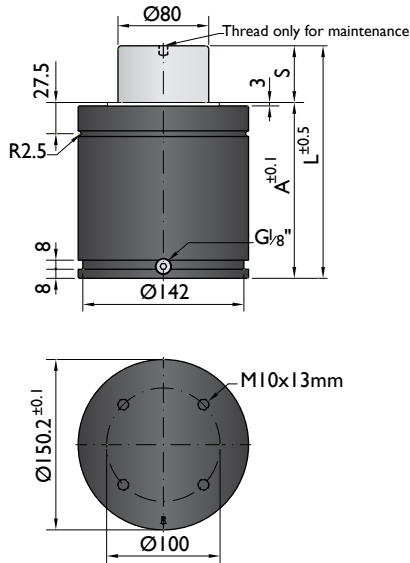
CNOMO
EM24.54.700

PED
2014/68/EU


ISO
11901

VDI
3003

CNOMO
EM24.54.700



Ordering example: 4 x HG-7500-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  | kg |
|-------------|------------------------|---------|---------|---|----------|---|------|
| HG-7500-25 | 25 | 155 | 130 | | 9900 | No | 13.6 |
| HG-7500-38 | 37.5 | 180 | 142.5 | | 10400 | No | 14.5 |
| HG-7500-50 | 50 | 205 | 155 | | 10600 | No | 15.4 |
| HG-7500-63 | 62.5 | 230 | 167.5 | | 10800 | No | 16.3 |
| HG-7500-80 | 80 | 265 | 185 | 7500 | 11500 | No | 17.5 |
| HG-7500-100 | 100 | 305 | 205 | | 11200 | Yes | 18.9 |
| HG-7500-125 | 125 | 355 | 230 | | 11300 | Yes | 20.7 |
| HG-7500-160 | 160 | 425 | 265 | | 11400 | Yes | 23.2 |
| HG-7500-200 | 200 | 505 | 305 | | 11500 | Yes | 26.1 |

⁽¹⁾ other strokes under request

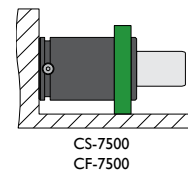
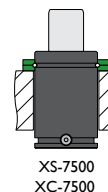
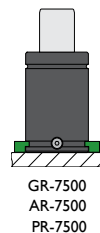
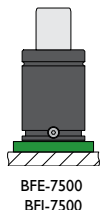
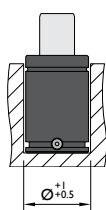
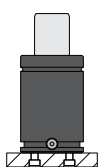
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT HG-7500 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

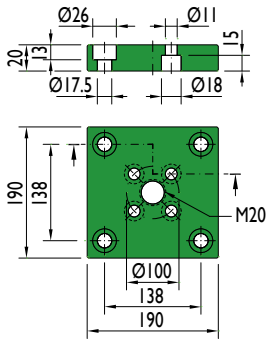
Mounting possibilities



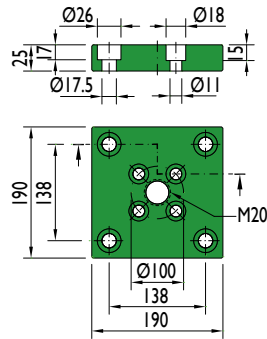
Flange must not support spring's force

Flanges

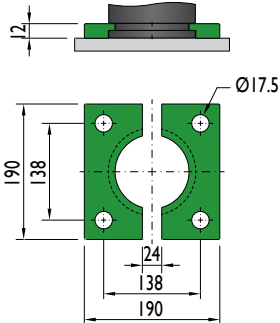
BFE-7500



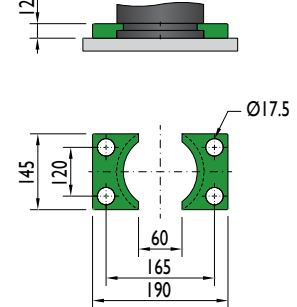
BFI-7500



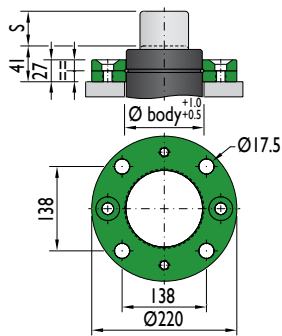
GR-7500



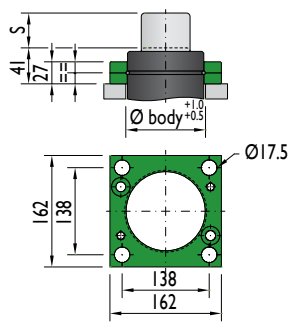
AR-7500



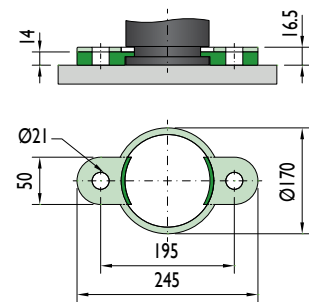
XS-7500



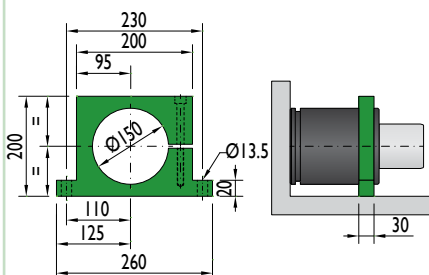
XC-7500



PR-7500

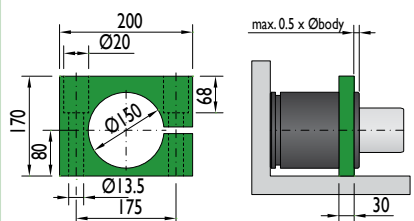


CS-7500



Flange must not support spring's force

CF-7500

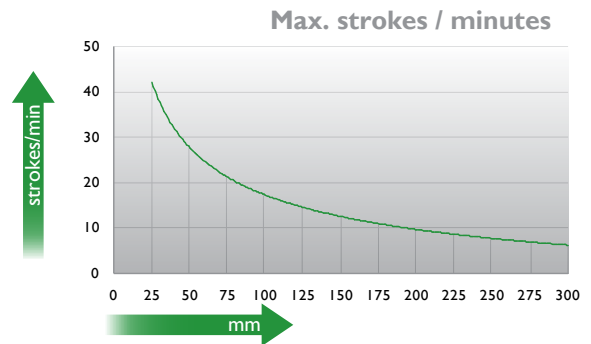
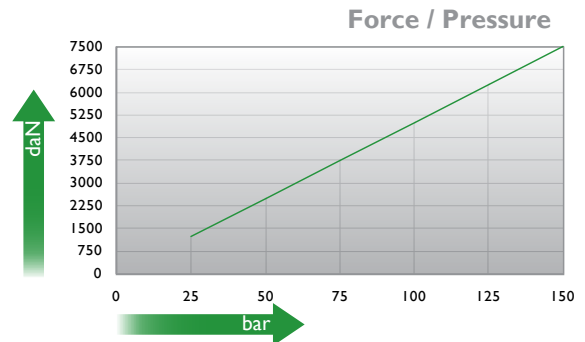
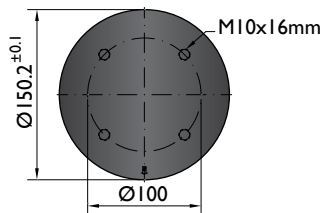
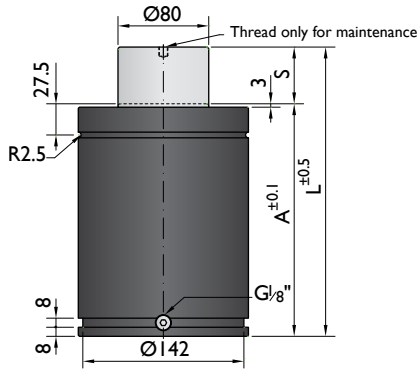


Flange must not support spring's force




CNOMO
EM24.54.700

PSA
E24.54.815.G



Ordering example: 4 x CN-7500-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|-------|
| CN-7500-25 | 25 | 205 | 180 | 7500 | 9000 | No | 18.06 |
| CN-7500-38 | 38.1 | 231.2 | 193.1 | | 9400 | No | 18.93 |
| CN-7500-50 | 50 | 255 | 205 | | 9700 | No | 20.30 |
| CN-7500-63 | 63.5 | 282 | 218.5 | | 9900 | No | 21.08 |
| CN-7500-80 | 80 | 315 | 235 | | 10100 | No | 22.21 |
| CN-7500-100 | 100 | 355 | 255 | | 10500 | Yes | 23.47 |
| CN-7500-125 | 125 | 405 | 280 | | 10700 | Yes | 24.96 |
| CN-7500-160 | 160 | 475 | 315 | | 10900 | Yes | 27.01 |
| CN-7500-200 | 200 | 555 | 355 | | 11100 | Yes | 29.81 |
| CN-7500-250 | 250 | 655 | 405 | | 11200 | Yes | 33.01 |
| CN-7500-300 | 300 | 755 | 455 | | 11300 | Yes | 36.11 |

⁽¹⁾ other strokes under request

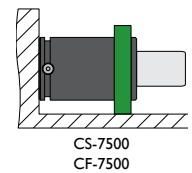
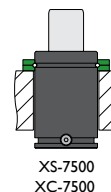
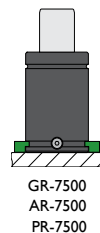
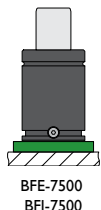
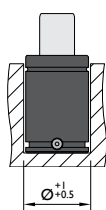
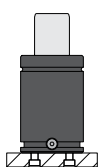
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT CN-7500 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

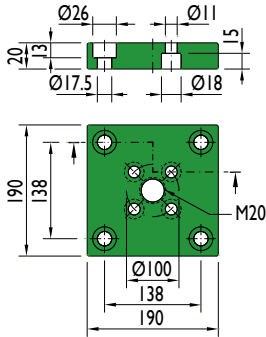
Mounting possibilities



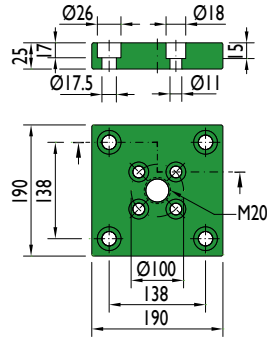
Flange must not support spring's force

Flanges

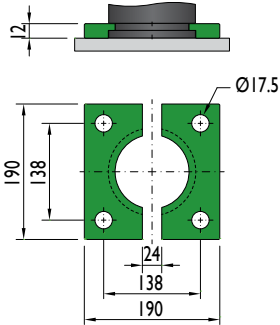
BFE-7500



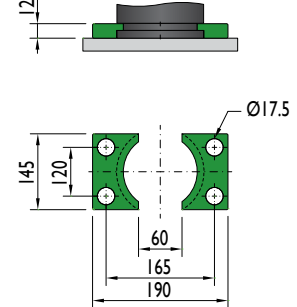
BFI-7500



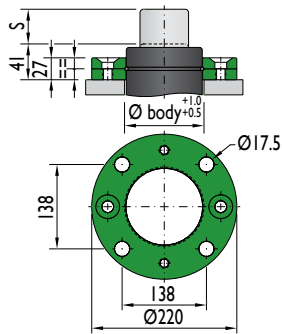
GR-7500



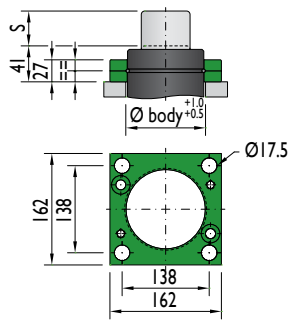
AR-7500



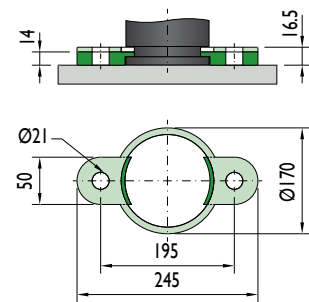
XS-7500



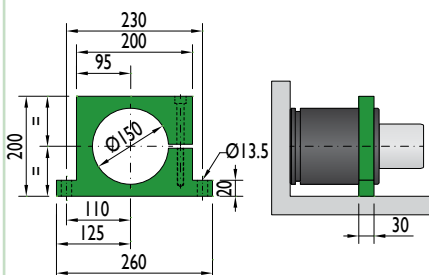
XC-7500



PR-7500

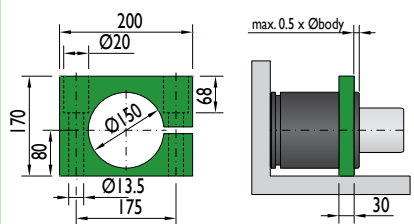


CS-7500

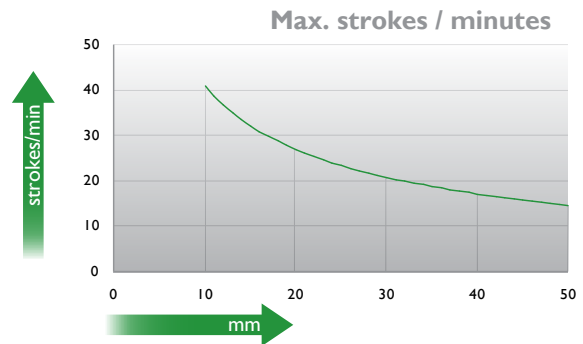
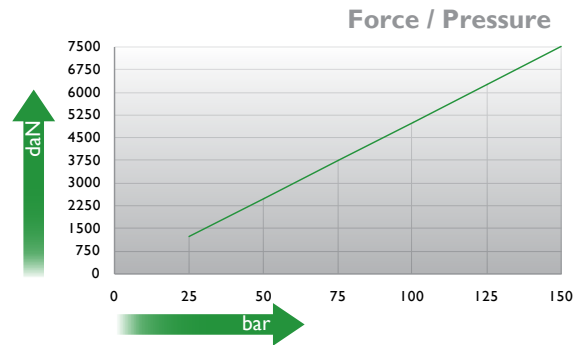
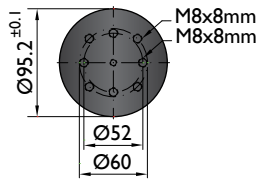
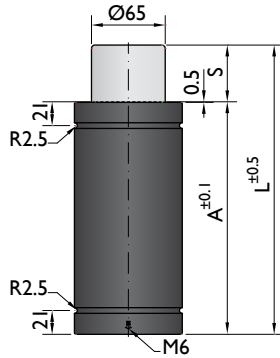


Flange must not support spring's force

CF-7500



Flange must not support spring's force



Ordering example: 4 x T-7500-50

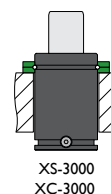
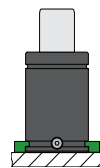
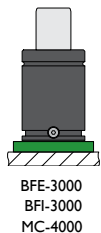
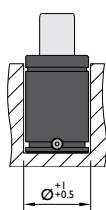
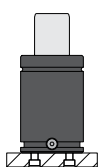
| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | (3) | kg |
|-----------|------------------------|---------|---------|--------------------------------------|----------|-----|------|
| T-7500-10 | 10 | 90 | 80 | 7500 (20°C, 150 bar) | 11100 | No | 2.52 |
| T-7500-16 | 16 | 116 | 100 | | 9900 | No | 3.03 |
| T-7500-25 | 25 | 145 | 120 | | 10400 | No | 3.83 |
| T-7500-32 | 32 | 182 | 150 | | 10400 | No | 3.90 |
| T-7500-40 | 40 | 210 | 170 | | 10400 | No | 4.03 |
| T-7500-50 | 50 | 255 | 205 | | 10400 | No | 4.14 |

(1) other strokes under request (2) alternative forces upon request (3) ESK under request



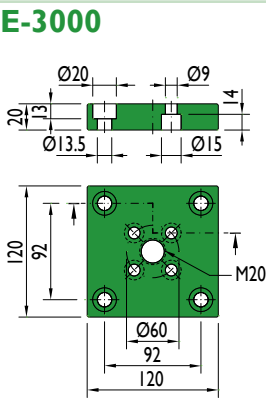
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT T-7500 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

Mounting possibilities

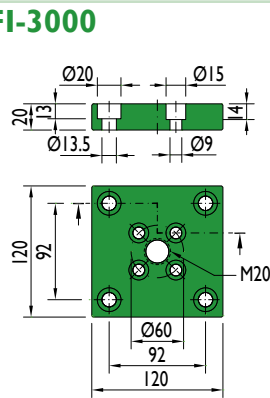


Flanges

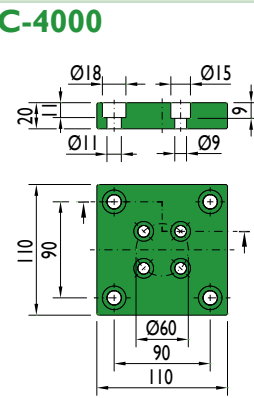
BFE-3000



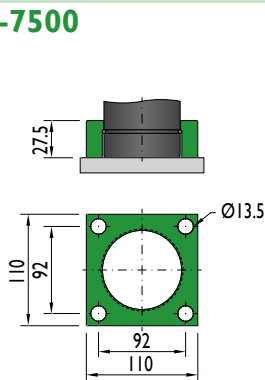
BFI-3000



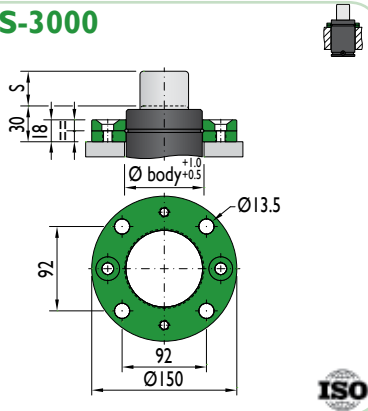
MC-4000



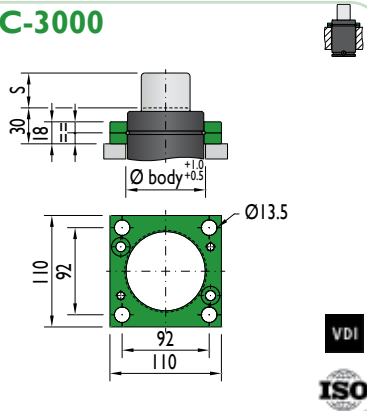
XT-7500

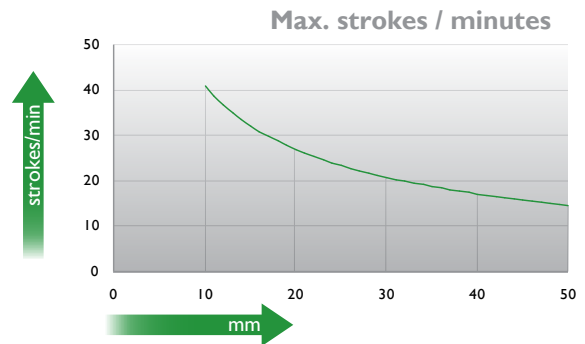
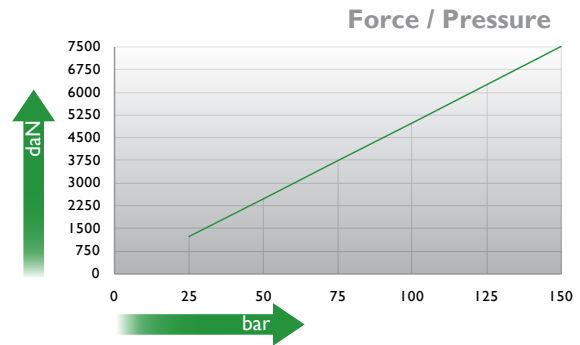
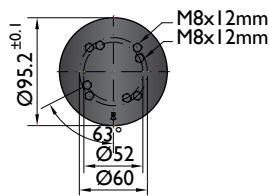
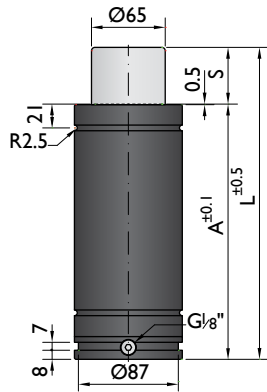


XS-3000

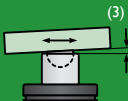


XC-3000





Ordering example: 4 x TC-7500-50

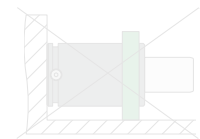
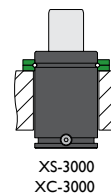
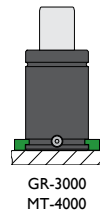
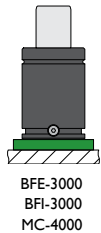
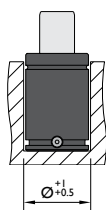
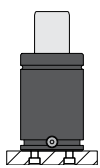
| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|------------|------------------------|---------|---------|---|----------|--|------|
| TC-7500-10 | 10 | 110 | 100 | 7500 | 11100 | No | 3.47 |
| TC-7500-16 | 16 | 136 | 120 | | 9900 | No | 3.98 |
| TC-7500-25 | 25 | 165 | 140 | | 10400 | No | 4.78 |
| TC-7500-32 | 32 | 202 | 170 | | 10400 | No | 4.85 |
| TC-7500-40 | 40 | 230 | 190 | | 10400 | No | 4.98 |
| TC-7500-50 | 50 | 275 | 225 | | 10400 | No | 5.09 |

(1) other strokes under request (2) alternative forces upon request (3) ESK under request



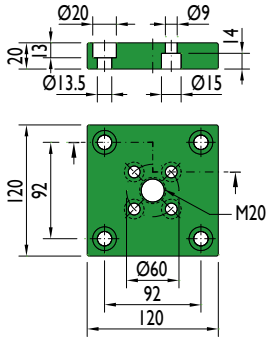
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TC-7500 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

Mounting possibilities

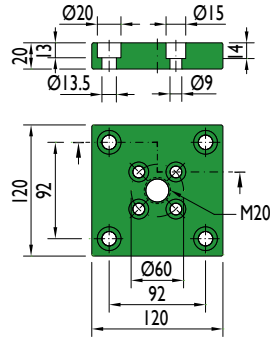


Flanges

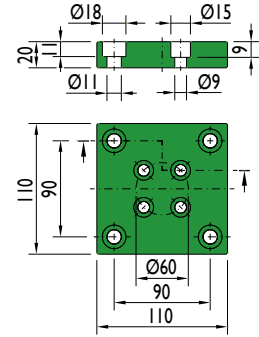
BFE-3000



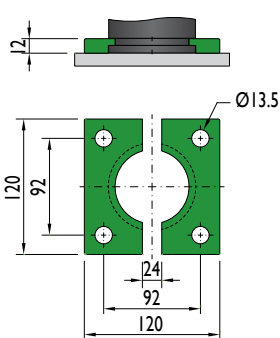
BFI-3000



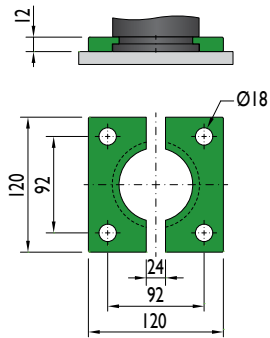
MC-4000



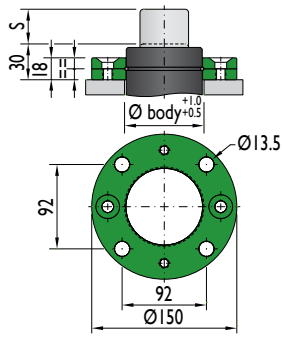
GR-3000



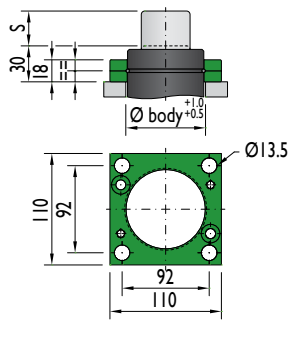
MT-4000



XS-3000



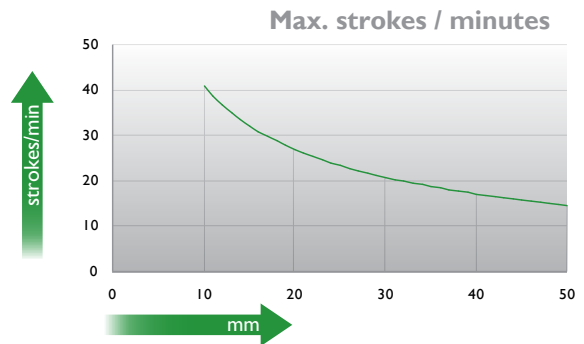
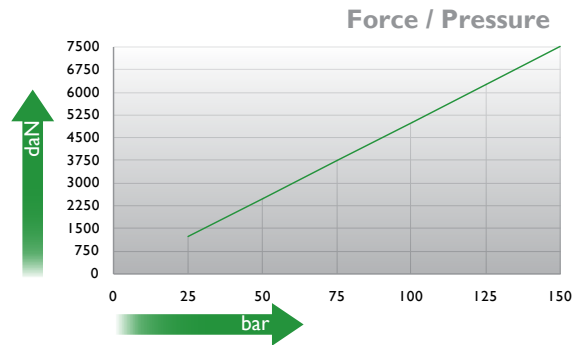
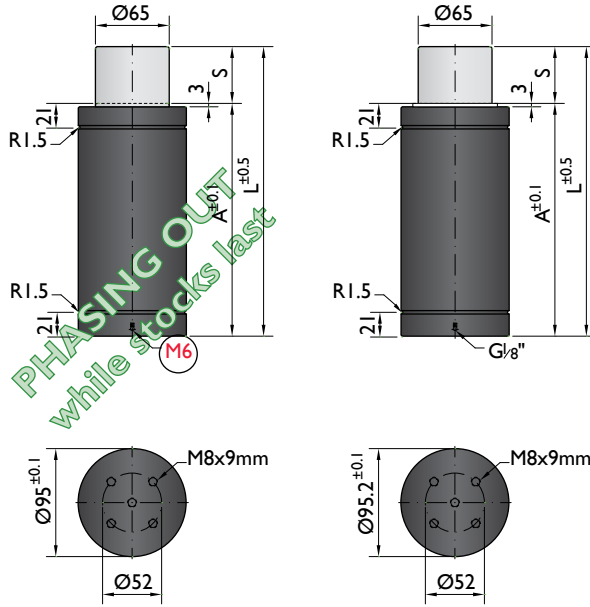
XC-3000






*The new cylinder will be supplied when the stock runs out.

NEW MODEL*



Ordering example: 4 x TS-7500-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  | kg |
|------------|------------------------|---------|---------|---|----------|---|------|
| TS-7500-10 | 10 | 90 | 80 | 7500 | 11100 | No | 2.52 |
| TS-7500-16 | 16 | 116 | 100 | | 9900 | No | 3.03 |
| TS-7500-25 | 25 | 145 | 120 | | 10400 | No | 3.83 |
| TS-7500-32 | 32 | 182 | 150 | | 10400 | No | 3.90 |
| TS-7500-40 | 40 | 210 | 170 | | 10400 | No | 4.03 |
| TS-7500-50 | 50 | 255 | 205 | | 10400 | No | 4.14 |
| TS-7500-65 | 65 | 279 | 214 | | 11000 | No | 4.33 |

other strokes ⁽¹⁾ under request

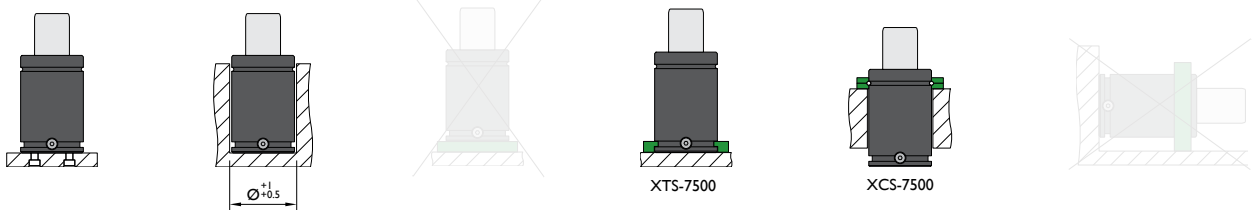
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request

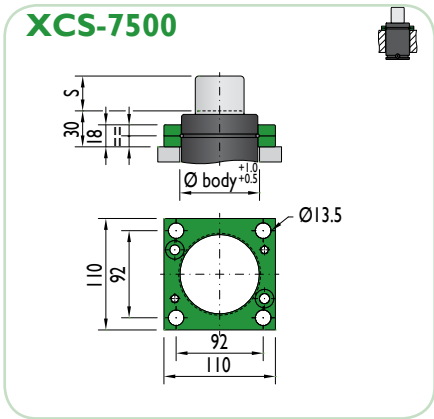
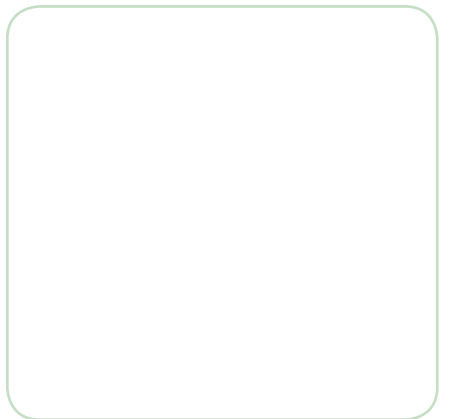
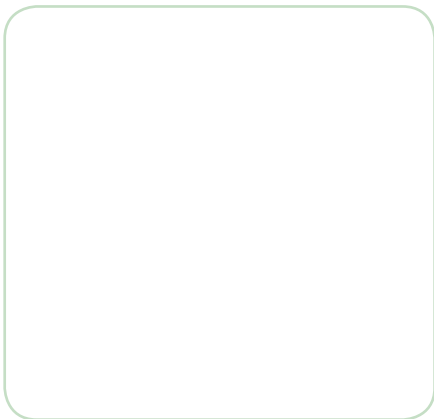
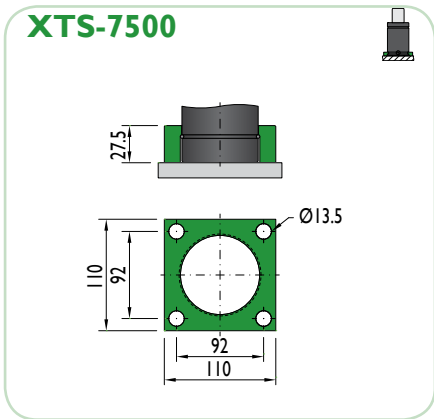


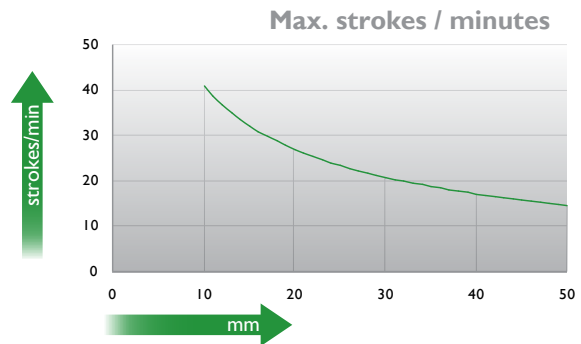
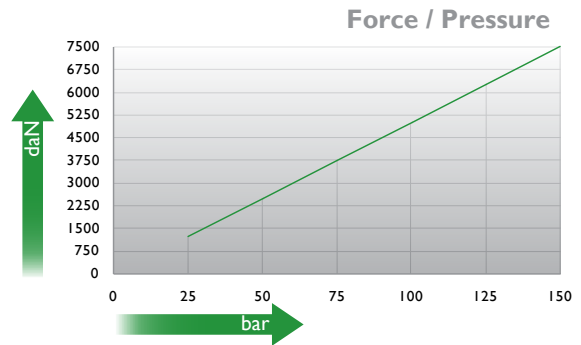
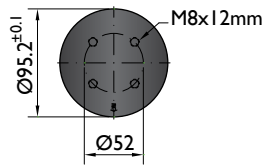
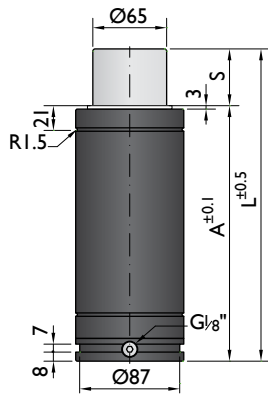
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TS-7500 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

Mounting possibilities



Flanges





Ordering example: 4 x TSC-7500-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | (3) | kg |
|-------------|------------------------|---------|---------|--------------------------------------|----------|-----|------|
| TSC-7500-10 | 10 | 110 | 100 | 7500 | 11100 | No | 3.47 |
| TSC-7500-16 | 16 | 136 | 120 | | 9900 | No | 3.98 |
| TSC-7500-25 | 25 | 165 | 140 | | 10400 | No | 4.78 |
| TSC-7500-32 | 32 | 202 | 170 | | 10400 | No | 4.85 |
| TSC-7500-40 | 40 | 230 | 190 | | 10400 | No | 4.98 |
| TSC-7500-50 | 50 | 275 | 225 | | 10400 | No | 5.09 |
| TSC-7500-65 | 65 | 299 | 234 | | 11000 | No | 5.28 |

other strokes ⁽¹⁾ under request

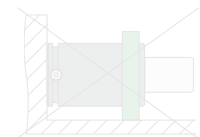
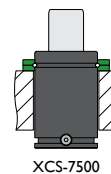
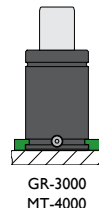
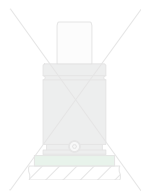
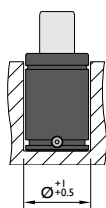
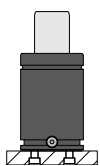
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TSC-7500 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

Mounting possibilities



Flanges



GR-3000

12

Ø13.5

120

92

24

92

120

VDI

ISO

MT-4000

12

Ø18

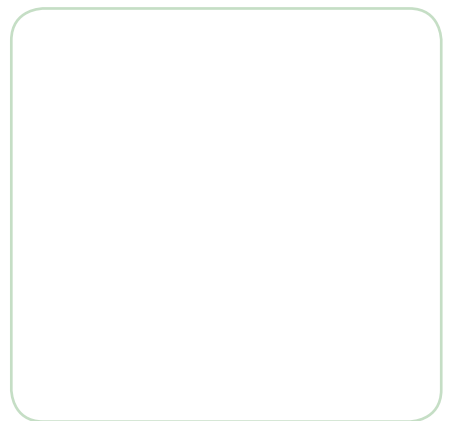
120

92

24

92

120



XCS-7500

S

30

18

Ø body +0.10 / +0.03

Ø13.5

110

92

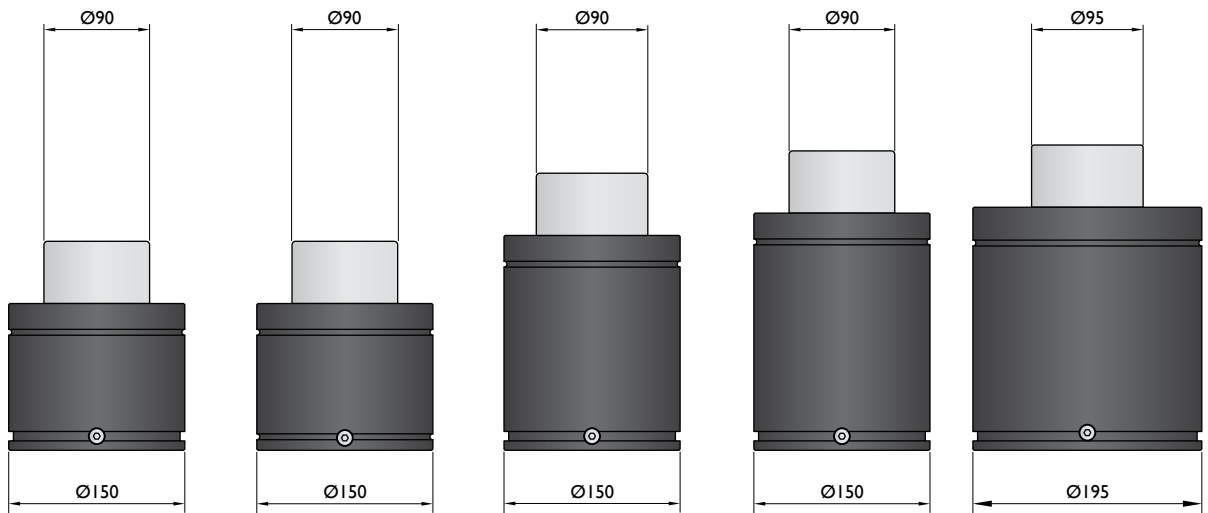
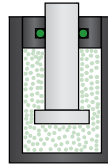
92

110



Force 10000 daN

Piston Rod Sealed gas springs



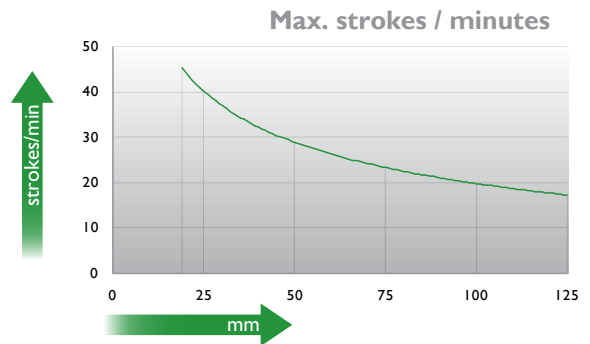
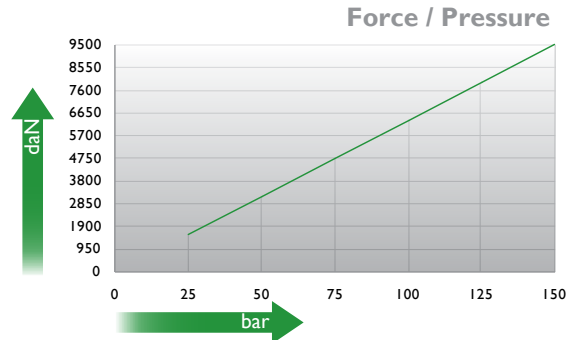
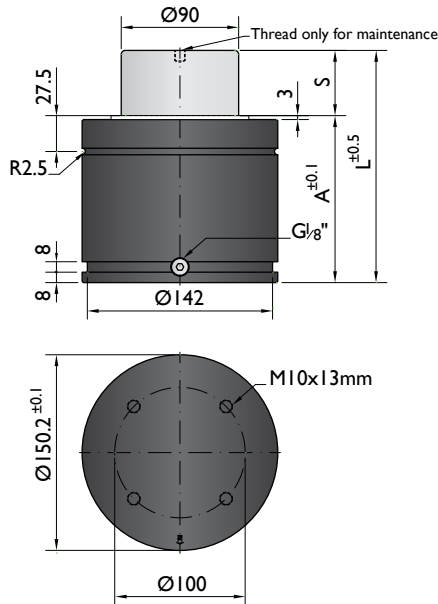
| | | | | | |
|------------------------|----------------|----------------|----------------|----------------|-----------------|
| Model | KP-9500 | NT-9500 | G-10000 | HD-9500 | CN-10000 |
| Initial F (daN) | 9500 | 9500 | 9500 | 9500 | 10600 |
| L max (mm) | 2xStroke+78 | 2xStroke+78 | 2xStroke+136 | 2xStroke+155 | 2xStroke+160 |
| Stroke (mm) | 19-125 | 25-125 | 25-160 | 25-300 | 25-300 |

* other strokes under request


Standards

| | | | | |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| PED 2014/68/EU | PED 2014/68/EU | PED 2014/68/EU | PED 2014/68/EU | PED 2014/68/EU |
| ISO 11901 | ISO 11901 | ISO 11901 | ISO 11901 | ISO 11901 |
| VDI 3003 | VDI 3003 | VDI 3003 | VDI 3003 | VDI 3003 |
| CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 |





Ordering example: 4 x KP-9500-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|-------|
| KP-9500-19 | 19 | 116 | 97 | 9500 | 12800 | No | 9.90 |
| KP-9500-25 | 25 | 128 | 103 | | 13200 | No | 10.25 |
| KP-9500-32 | 32 | 142 | 110 | | 13600 | No | 11.03 |
| KP-9500-38 | 38 | 154 | 116 | | 13800 | No | 12.16 |
| KP-9500-50 | 50 | 178 | 128 | | 14200 | No | 13.77 |
| KP-9500-63 | 63 | 204 | 141 | | 17400 | Yes | 14.73 |
| KP-9500-75 | 75 | 228 | 153 | | 17300 | Yes | 15.63 |
| KP-9500-80 | 80 | 238 | 158 | | 17300 | Yes | 15.97 |
| KP-9500-100 | 100 | 278 | 178 | | 17200 | Yes | 16.53 |
| KP-9500-125 | 125 | 328 | 203 | | 17100 | Yes | 17.15 |

⁽¹⁾ other strokes under request

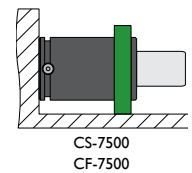
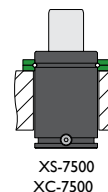
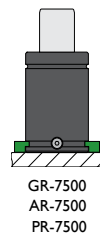
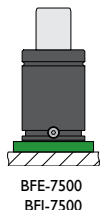
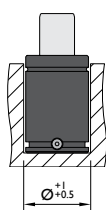
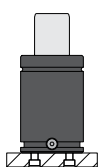
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT KP-9500 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

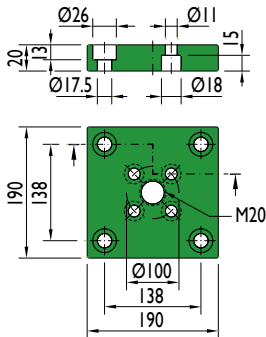
Mounting possibilities



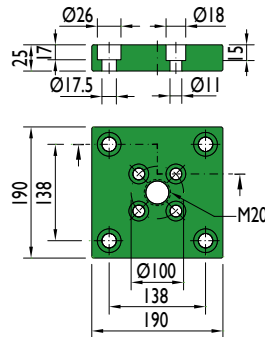
Flange must not support spring's force

Flanges

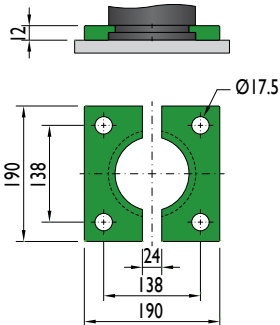
BFE-7500



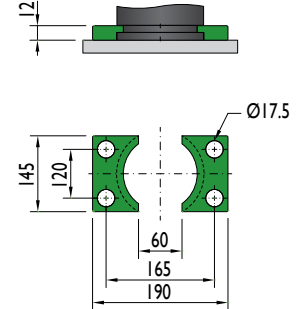
BFI-7500



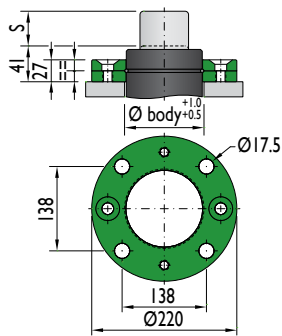
GR-7500



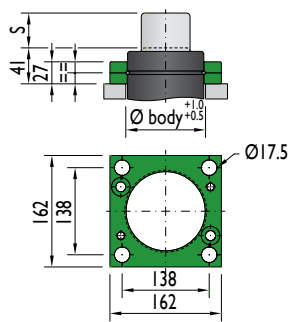
AR-7500



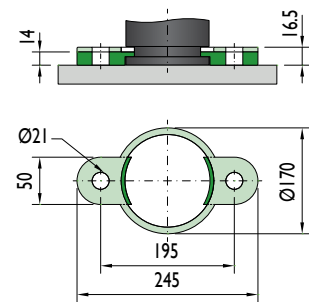
XS-7500



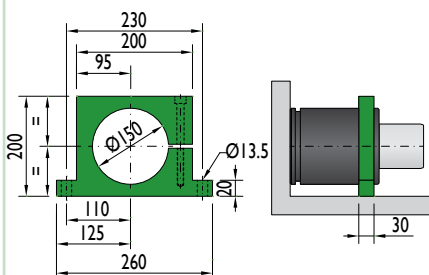
XC-7500



PR-7500

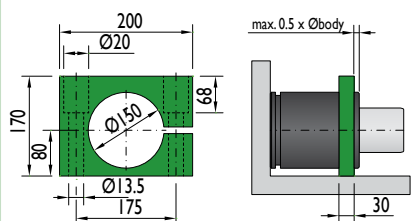


CS-7500

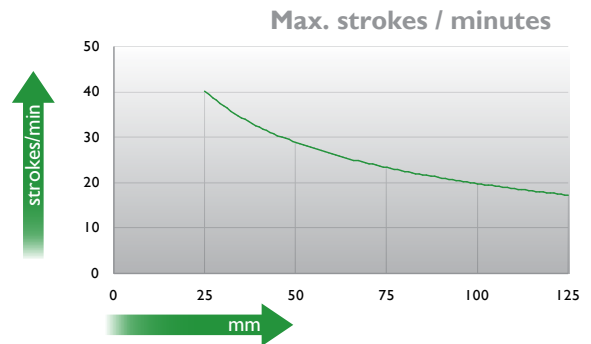
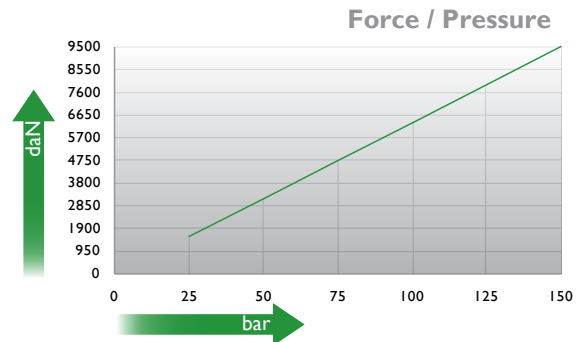
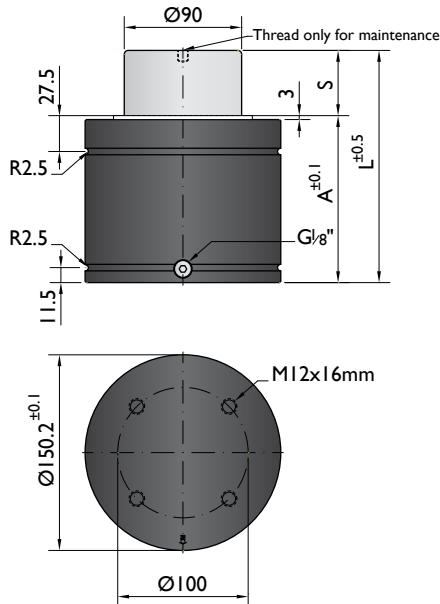


Flange must not support spring's force

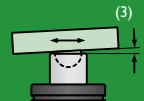
CF-7500



Flange must not support spring's force



Ordering example: 4 x NT-9500-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|-------|
| NT-9500-25 | 25 | 128 | 103 | | 13200 | No | 11.60 |
| NT-9500-32 | 32 | 142 | 110 | | 13600 | No | 12.18 |
| NT-9500-38 | 38 | 154 | 116 | | 13800 | No | 12.67 |
| NT-9500-50 | 50 | 178 | 128 | | 14200 | No | 13.66 |
| NT-9500-63 | 63 | 204 | 141 | 9500 | 17400 | Yes | 14.73 |
| NT-9500-75 | 75 | 228 | 153 | | 17300 | Yes | 15.72 |
| NT-9500-80 | 80 | 238 | 158 | | 17300 | Yes | 14.14 |
| NT-9500-100 | 100 | 278 | 178 | | 17200 | Yes | 17.78 |
| NT-9500-125 | 125 | 328 | 203 | | 17100 | Yes | 19.85 |

⁽¹⁾ other strokes under request

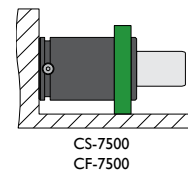
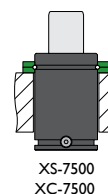
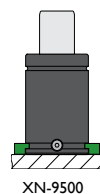
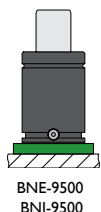
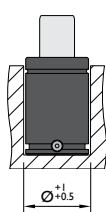
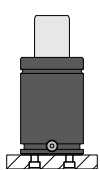
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT NT-9500 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

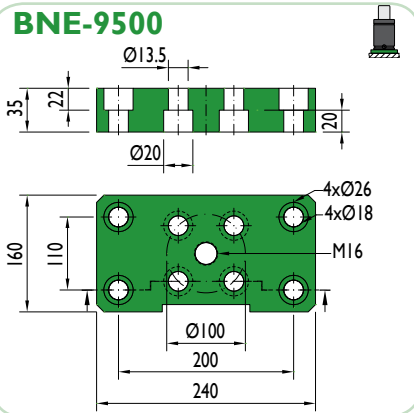
Mounting possibilities



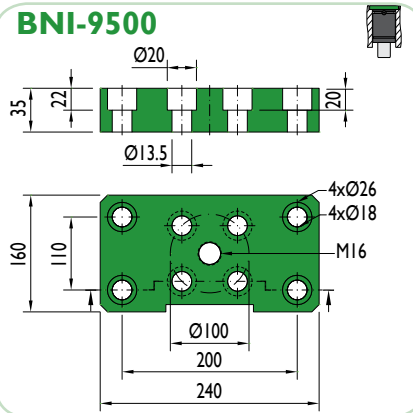
Flange must not support spring's force

Flanges

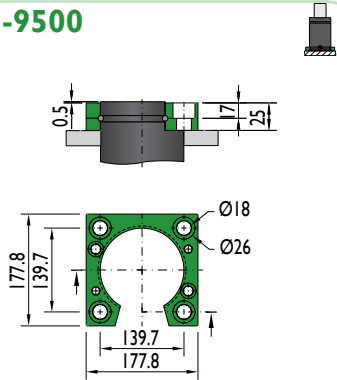
BNE-9500



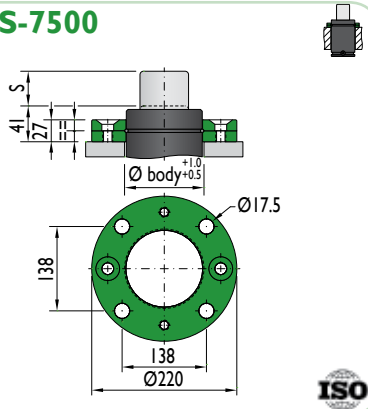
BNI-9500



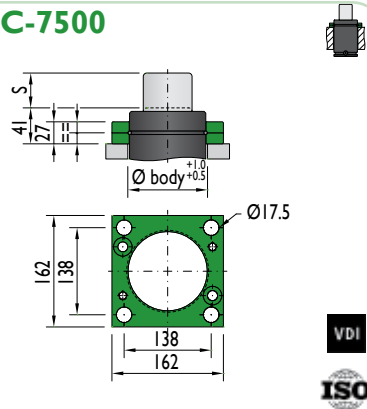
XN-9500



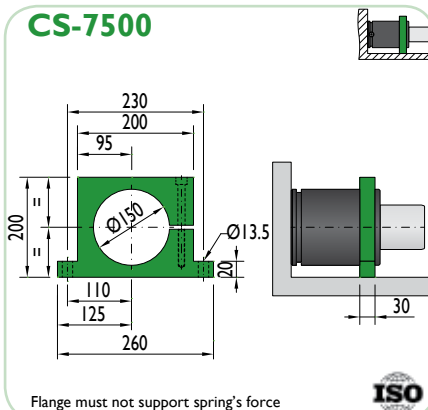
XS-7500



XC-7500

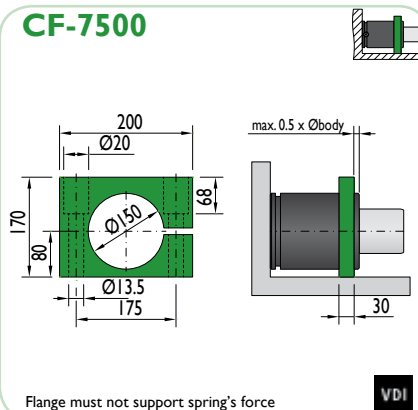


CS-7500



Flange must not support spring's force

CF-7500

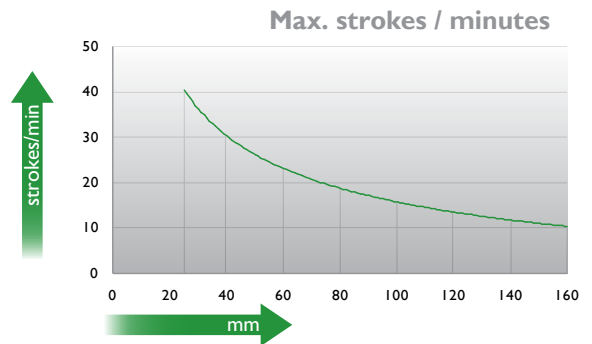
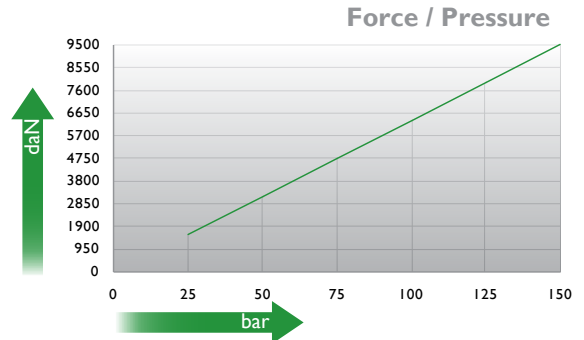
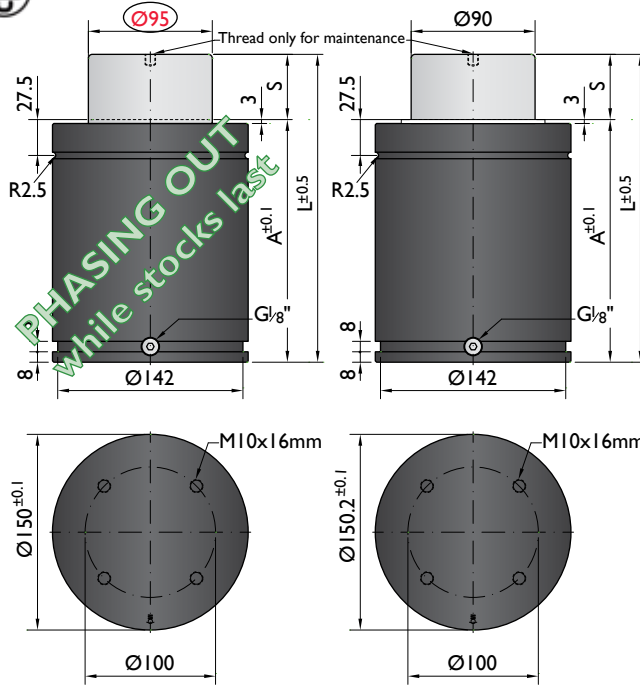


Flange must not support spring's force




*The new cylinder will be supplied when the stock runs out.

NEW MODEL*



Ordering example: 4 x G-10000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  | kg |
|-------------|------------------------|---------|---------|---|----------|---|-------|
| G-10000-25 | 25 | 186 | 161 | 9500 | 12400 | No | 16.63 |
| G-10000-38 | 38 | 212 | 174 | | 13100 | No | 17.48 |
| G-10000-50 | 50 | 236 | 186 | | 13550 | No | 18.28 |
| G-10000-63 | 63 | 262 | 199 | | 14000 | No | 19.15 |
| G-10000-80 | 80 | 296 | 216 | | 14230 | No | 20.28 |
| G-10000-100 | 100 | 336 | 236 | | 15200 | Yes | 22.55 |
| G-10000-125 | 125 | 386 | 261 | | 15400 | Yes | 24.22 |
| G-10000-160 | 160 | 456 | 296 | | 15500 | Yes | 26.55 |

other strokes ⁽¹⁾ under request

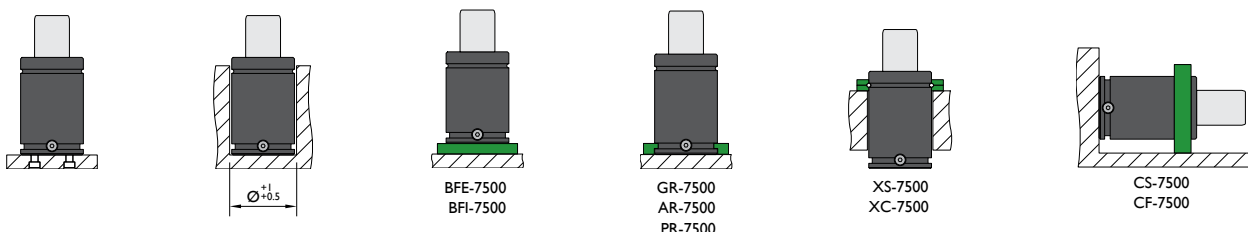
alternative forces ⁽²⁾ upon request

ESK available ⁽³⁾ for other strokes



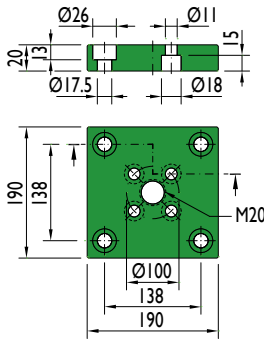
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT G-10000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

Mounting possibilities

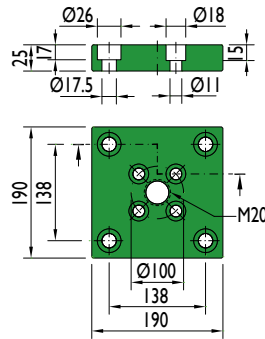


Flanges

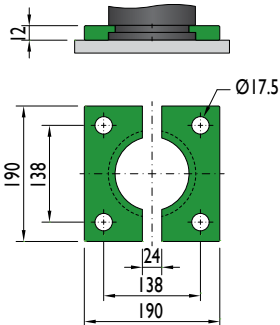
BFE-7500



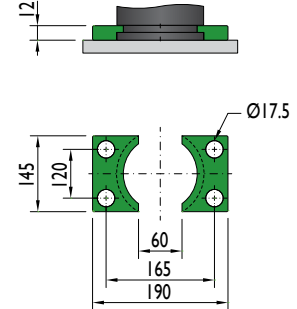
BFI-7500



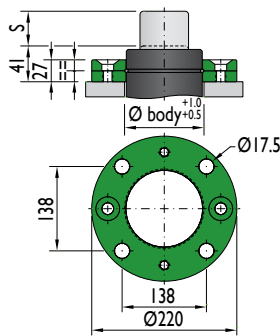
GR-7500



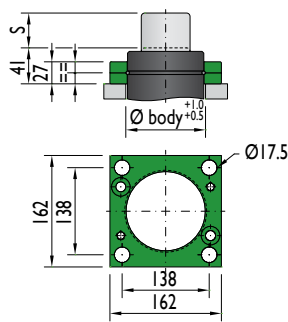
AR-7500



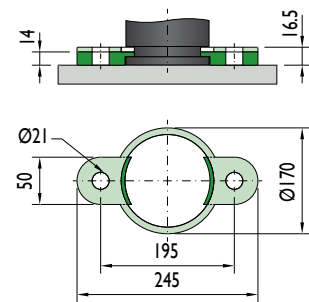
XS-7500



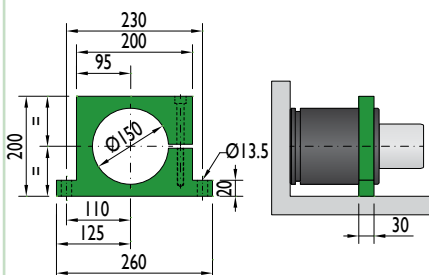
XC-7500



PR-7500

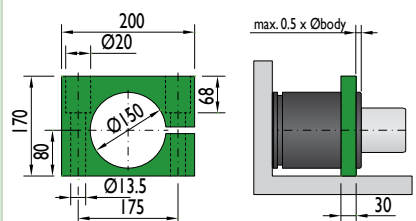


CS-7500

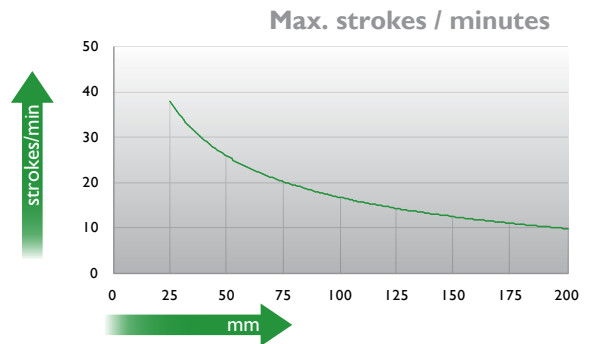
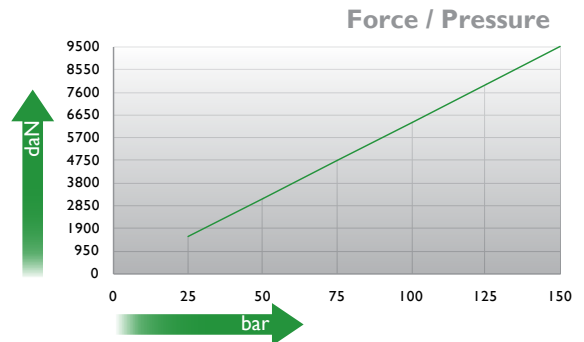
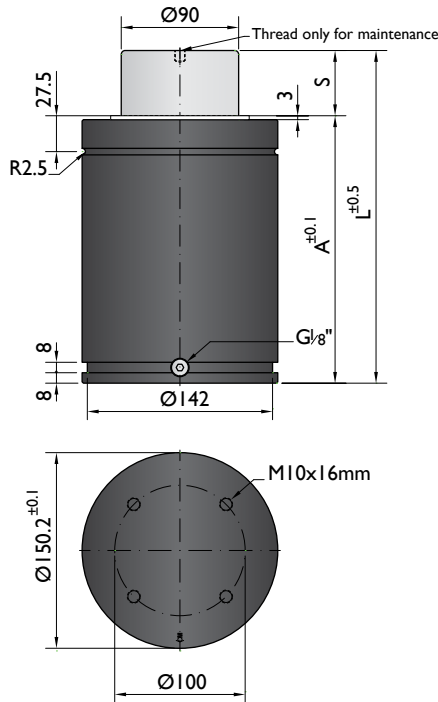


Flange must not support spring's force


CF-7500



Flange must not support spring's force



Ordering example: 4 x HD-9500-200

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|-------|
| HD-9500-25 | 25 | 205 | 180 | 9500 | 11700 | No | 17.96 |
| HD-9500-38 | 38 | 231 | 193 | | 12400 | No | 18.95 |
| HD-9500-50 | 50 | 255 | 205 | | 12900 | No | 20.62 |
| HD-9500-63 | 63 | 281 | 218 | | 13300 | No | 21.60 |
| HD-9500-80 | 80 | 315 | 235 | | 13800 | No | 22.88 |
| HD-9500-100 | 100 | 355 | 255 | | 15100 | Yes | 24.84 |
| HD-9500-125 | 125 | 405 | 280 | | 15400 | Yes | 26.74 |
| HD-9500-160 | 160 | 475 | 315 | | 15800 | Yes | 29.37 |
| HD-9500-200 | 200 | 555 | 355 | | 16000 | Yes | 32.38 |
| HD-9500-250 | 250 | 655 | 405 | | 16300 | Yes | 35.63 |
| HD-9500-300 | 300 | 755 | 455 | 16500 | Yes | 38.87 | |

⁽¹⁾ other strokes under request

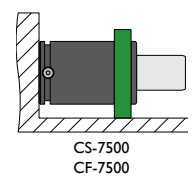
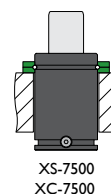
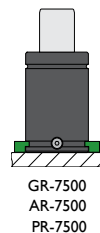
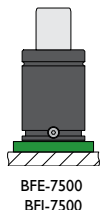
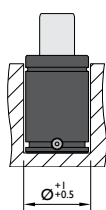
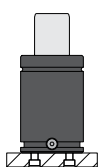
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT HD-9500 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

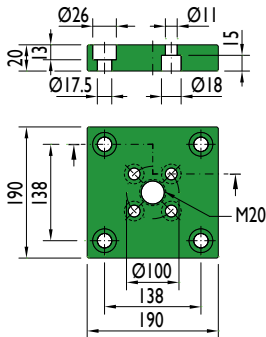
Mounting possibilities



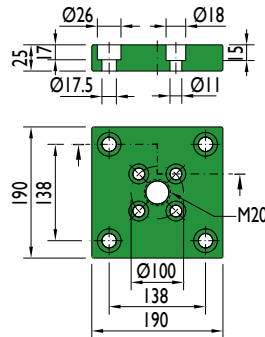
Flange must not support spring's force

Flanges

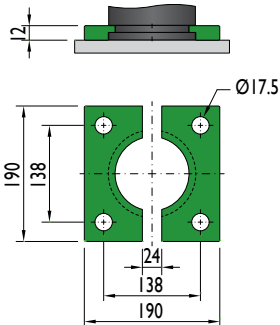
BFE-7500



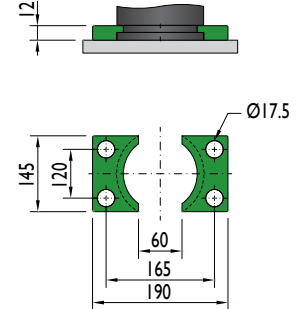
BFI-7500



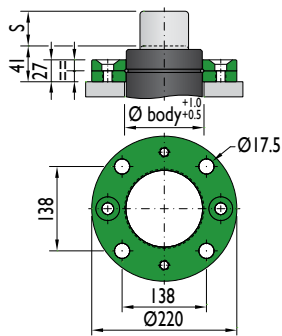
GR-7500



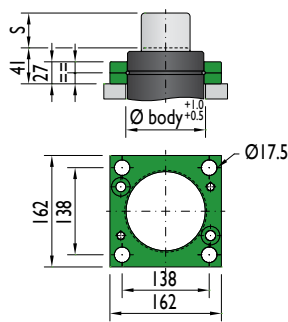
AR-7500



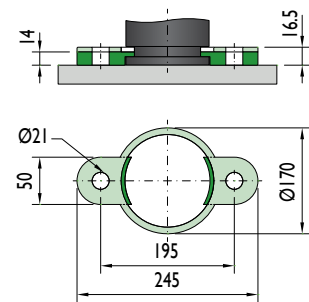
XS-7500



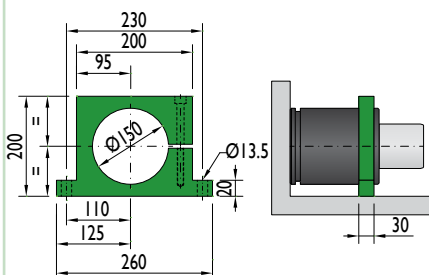
XC-7500



PR-7500

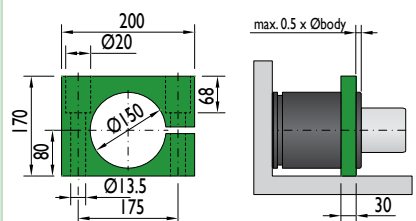


CS-7500



Flange must not support spring's force

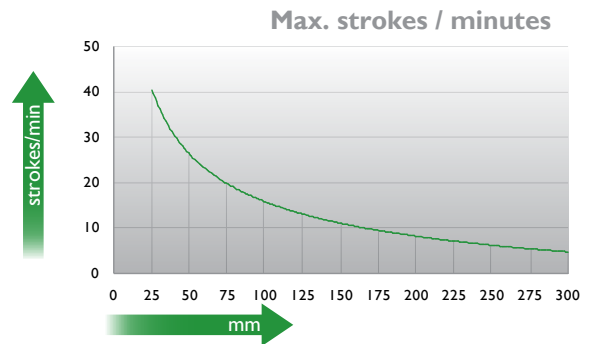
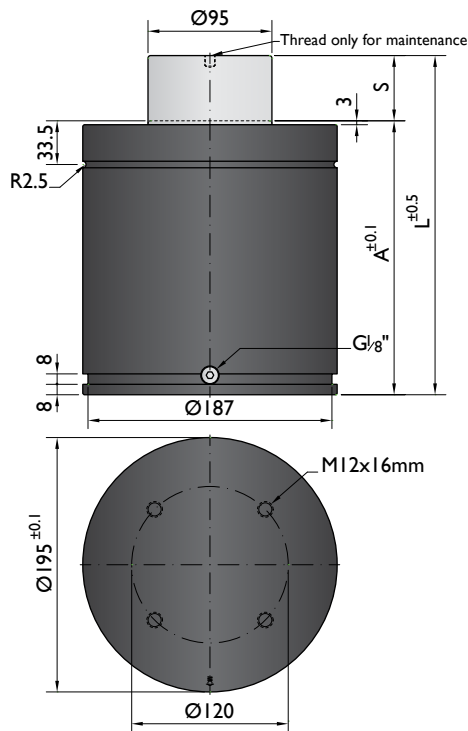
CF-7500




Flange must not support spring's force



CNOMO
EM24.54.700



Ordering example: 4 x CN-10000-200

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  | kg |
|--------------|------------------------|---------|---------|---|----------|---|-------|
| CN-10000-25 | 25 | 210 | 185 | | 13000 | No | 32.40 |
| CN-10000-38 | 38.1 | 236.2 | 198.1 | | 13500 | No | 34.30 |
| CN-10000-50 | 50 | 260 | 210 | | 13800 | No | 36.20 |
| CN-10000-63 | 63.5 | 287 | 223.5 | | 14000 | No | 38.10 |
| CN-10000-80 | 80 | 320 | 240 | | 14200 | No | 40.70 |
| CN-10000-100 | 100 | 360 | 260 | 10600 | 14400 | No | 43.80 |
| CN-10000-125 | 125 | 410 | 285 | | 14800 | Yes | 47.60 |
| CN-10000-160 | 160 | 480 | 320 | | 14900 | Yes | 52.90 |
| CN-10000-200 | 200 | 560 | 360 | | 15200 | Yes | 59.10 |
| CN-10000-250 | 250 | 660 | 410 | | 15200 | Yes | 66.60 |
| CN-10000-300 | 300 | 760 | 460 | | 15200 | Yes | 74.20 |

⁽¹⁾ other strokes under request

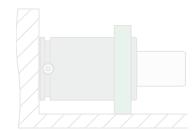
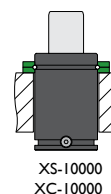
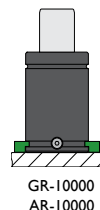
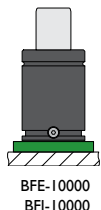
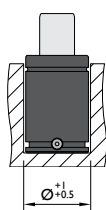
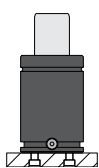
⁽²⁾ alternative forces upon request

⁽³⁾ ESK available for other strokes



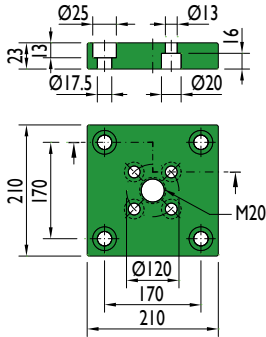
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT CN-10000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

Mounting possibilities

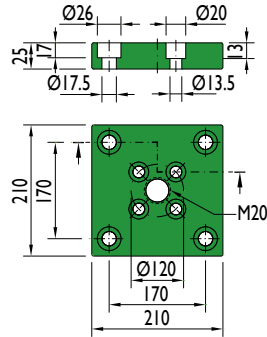


Flanges

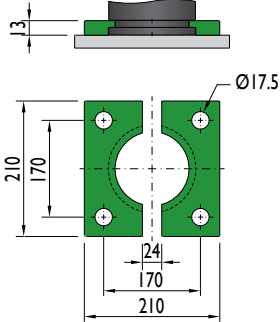
BFE-10000



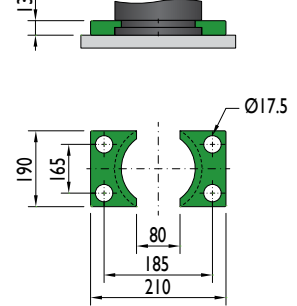
BFI-10000



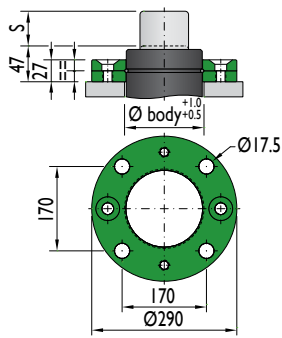
GR-10000



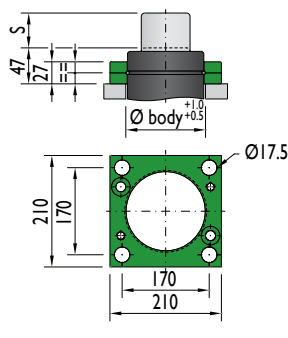
AR-10000



XS-10000

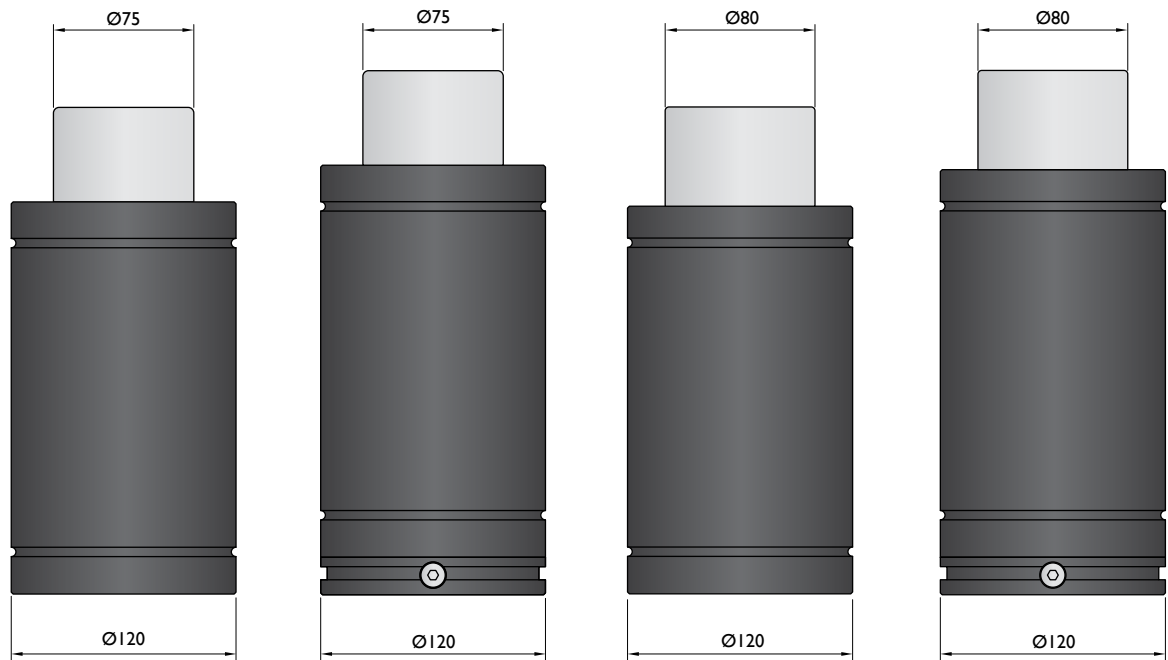
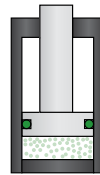


XC-10000



Force 12000 daN

Bore Sealed gas springs



| Model | T-II1800 | TC-II1800 | TS-II1800 | TSC-II1800 |
|-----------------|----------|-----------|-----------|------------|
| Initial F (daN) | 11800 | 11800 | 11800 | 11800 |
| L max (mm) | 100-260 | 120-280 | 100-320 | 120-340 |
| Stroke (mm) | 10-50 | 10-50 | 10-65 | 10-65 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

ISO
11901

VDI
3003

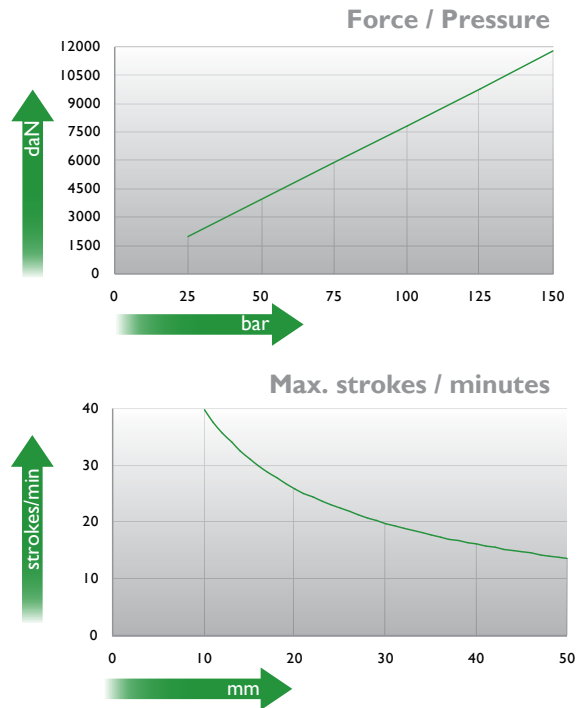
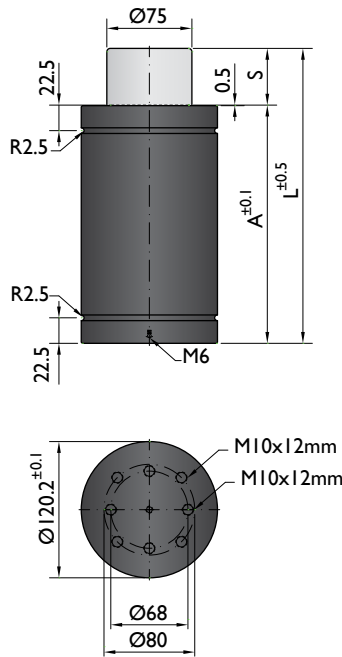
CNOMO
EM24.54.700

PED
2014/68/EU

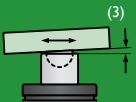
ISO
11901

VDI
3003

CNOMO
EM24.54.700



Ordering example: 4 x T-11800-50

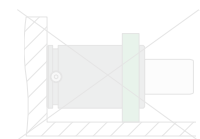
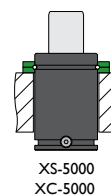
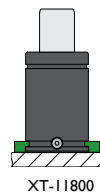
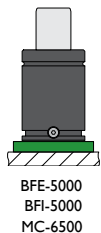
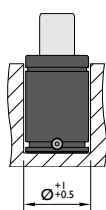
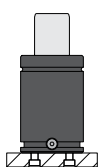
| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|------------|------------------------|---------|---------|---|----------|--|------|
| T-11800-10 | 10 | 100 | 90 | 11800 | 15500 | No | 4.60 |
| T-11800-16 | 16 | 126 | 110 | | 15700 | No | 5.74 |
| T-11800-25 | 25 | 155 | 130 | | 16600 | No | 6.48 |
| T-11800-32 | 32 | 187 | 155 | | 16600 | No | 7.30 |
| T-11800-40 | 40 | 220 | 180 | | 16600 | No | 8.14 |
| T-11800-50 | 50 | 260 | 210 | | 16600 | No | 9.16 |

⁽¹⁾ other strokes under request
 ⁽²⁾ alternative forces upon request
 ⁽³⁾ ESK under request



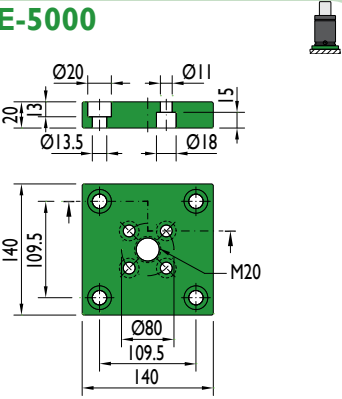
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT T-11800 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

Mounting possibilities

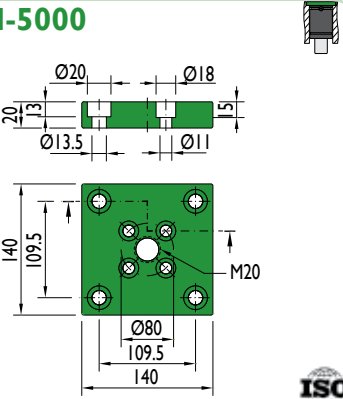


Flanges

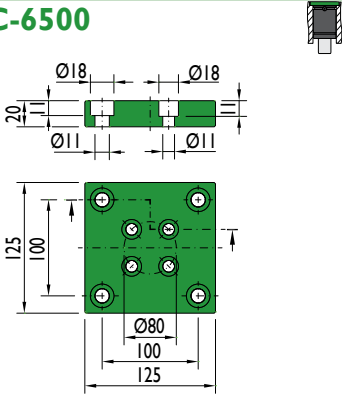
BFE-5000



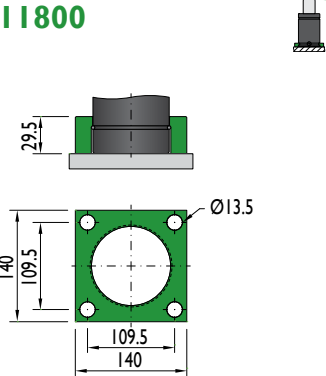
BFI-5000



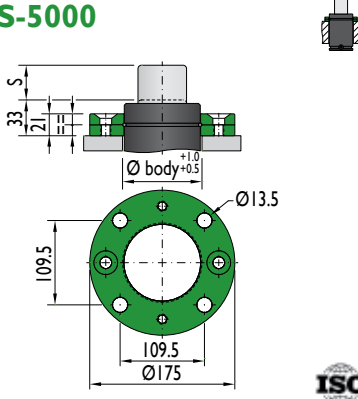
MC-6500



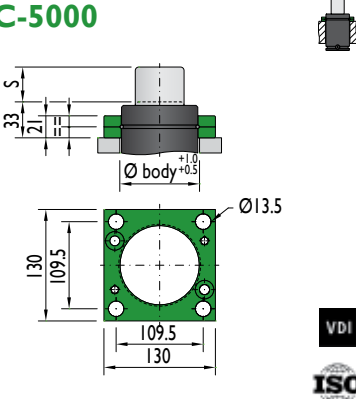
XT-11800

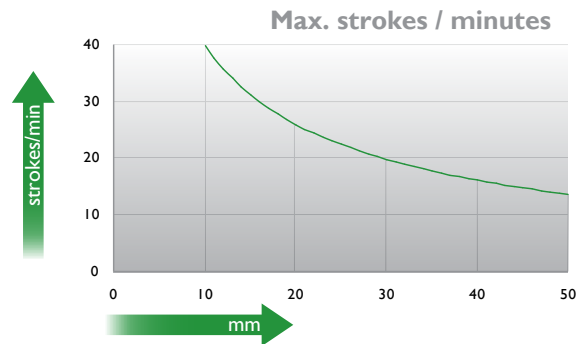
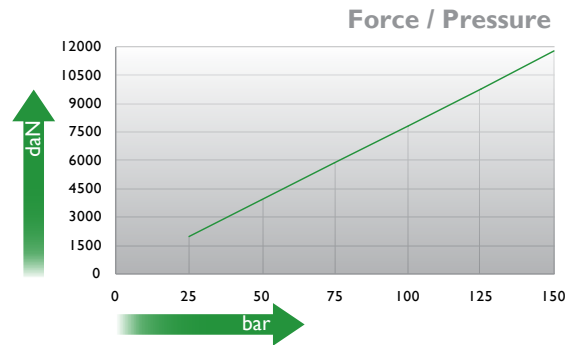
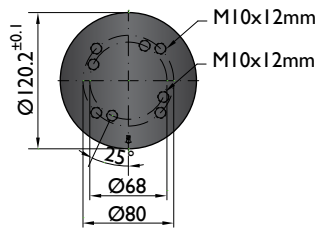
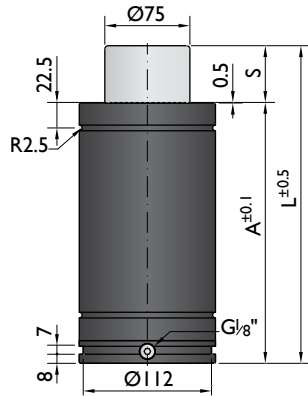


XS-5000



XC-5000





Ordering example: 4 x TC-11800-50

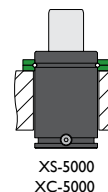
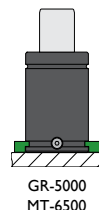
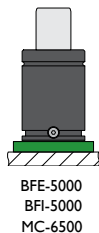
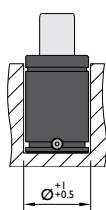
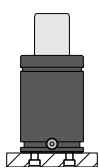
| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN | (3) | kg |
|-------------|------------------------|---------|---------|--------------------------------------|----------|-----|-------|
| | | | | (20°C, 150 bar) | | | |
| TC-11800-10 | 10 | 120 | 110 | 11800 | 15500 | No | 6.16 |
| TC-11800-16 | 16 | 146 | 130 | | 15700 | No | 7.30 |
| TC-11800-25 | 25 | 175 | 150 | | 16600 | No | 8.04 |
| TC-11800-32 | 32 | 207 | 175 | | 16600 | No | 8.80 |
| TC-11800-40 | 40 | 240 | 200 | | 16600 | No | 9.70 |
| TC-11800-50 | 50 | 280 | 230 | | 16600 | No | 10.72 |

(1) other strokes under request (2) alternative forces upon request (3) ESK under request



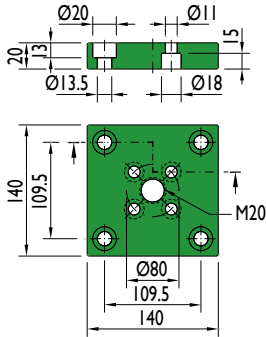
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TC-11800 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

Mounting possibilities

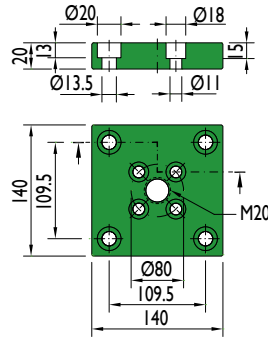


Flanges

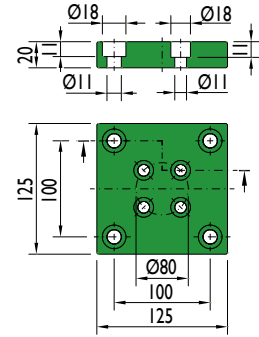
BFE-5000



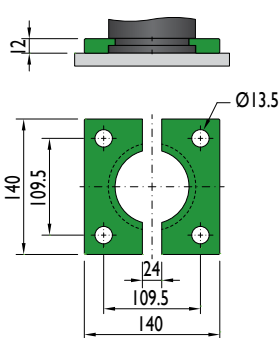
BFI-5000



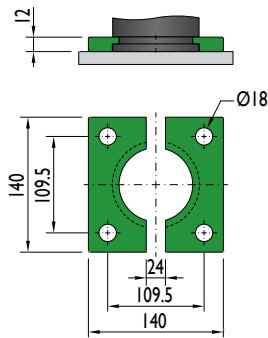
MC-6500



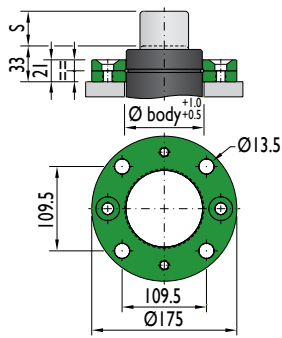
GR-5000



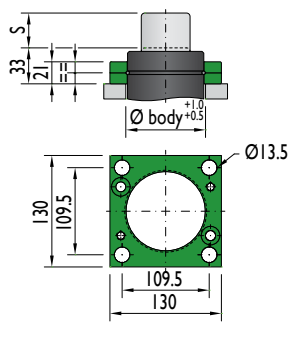
MT-6500

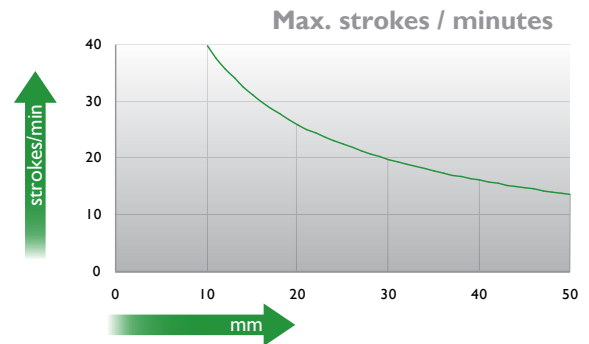
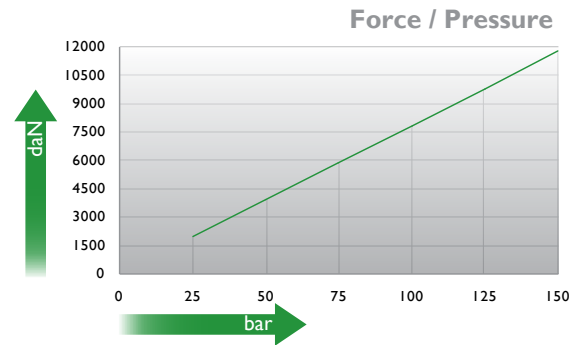
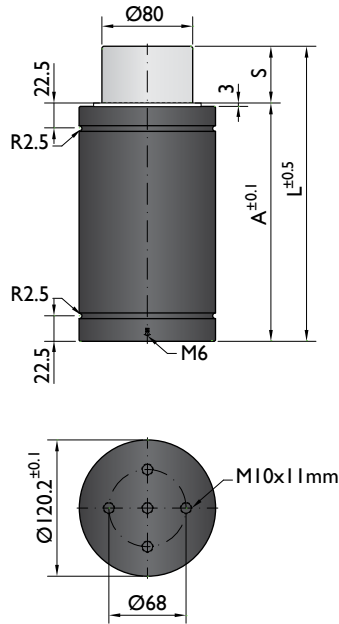


XS-5000

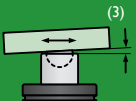


XC-5000





Ordering example: 4 x TS-11800-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN |  | kg |
|-------------|------------------------|---------|---------|--------------------------------------|----------|---|-------|
| TS-11800-10 | 10 | 100 | 90 | 11800 (20°C, 150 bar) | 15500 | No | 4.60 |
| TS-11800-16 | 16 | 126 | 110 | | 15700 | No | 5.74 |
| TS-11800-25 | 25 | 155 | 130 | | 16600 | No | 6.48 |
| TS-11800-32 | 32 | 187 | 155 | | 16600 | No | 7.30 |
| TS-11800-40 | 40 | 220 | 180 | | 16600 | No | 8.14 |
| TS-11800-50 | 50 | 260 | 210 | | 16600 | No | 9.16 |
| TS-11800-65 | 65 | 320 | 255 | | 16600 | No | 10.14 |

other strokes ⁽¹⁾ under request

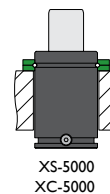
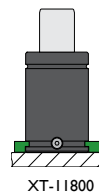
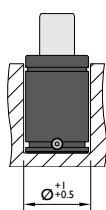
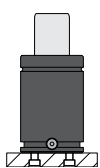
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TS-11800 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

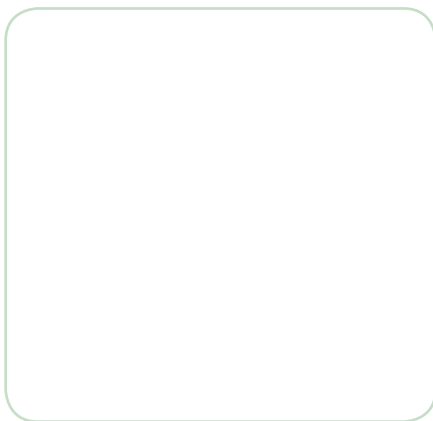
Mounting possibilities



Flanges



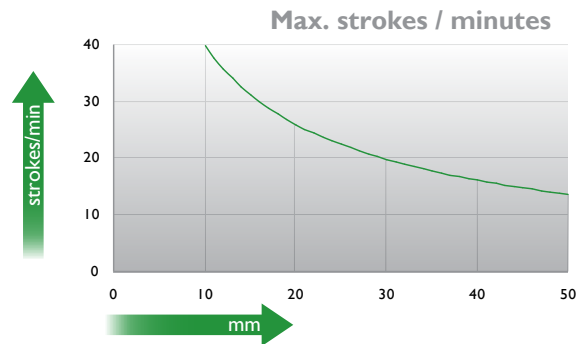
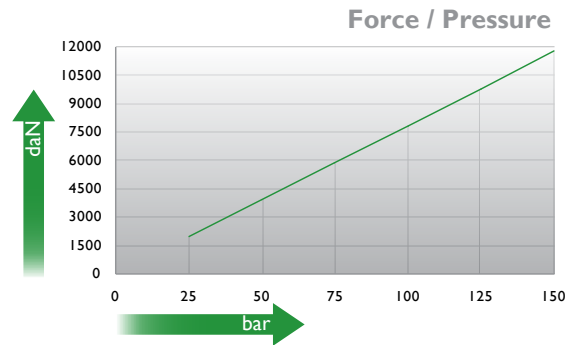
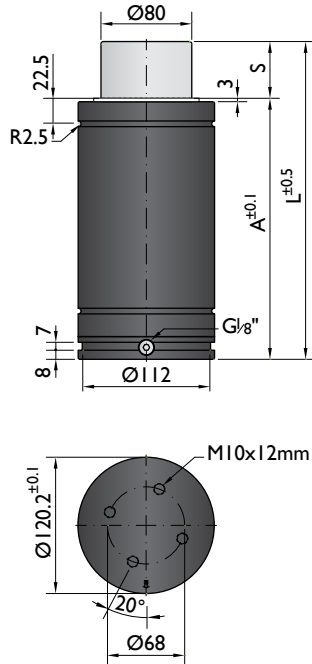
XT-11800



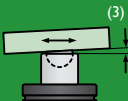
XS-5000

XC-5000





Ordering example: 4 x TSC-I 1800-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|---------------|------------------------|---------|---------|---|----------|--|-------|
| TSC-I 1800-10 | 10 | 120 | 110 | 11800 | 15500 | No | 6.16 |
| TSC-I 1800-16 | 16 | 146 | 130 | | 15700 | No | 7.30 |
| TSC-I 1800-25 | 25 | 175 | 150 | | 16600 | No | 8.04 |
| TSC-I 1800-32 | 32 | 207 | 175 | | 16600 | No | 8.80 |
| TSC-I 1800-40 | 40 | 240 | 200 | | 16600 | No | 9.70 |
| TSC-I 1800-50 | 50 | 280 | 230 | | 16600 | No | 10.72 |
| TSC-I 1800-65 | 65 | 340 | 275 | | 16600 | No | 11.70 |

other strokes ⁽¹⁾ under request

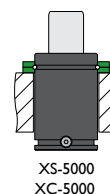
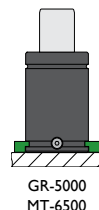
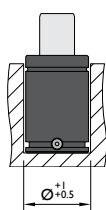
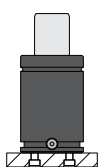
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|----------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TSC-I 1800 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

Mounting possibilities

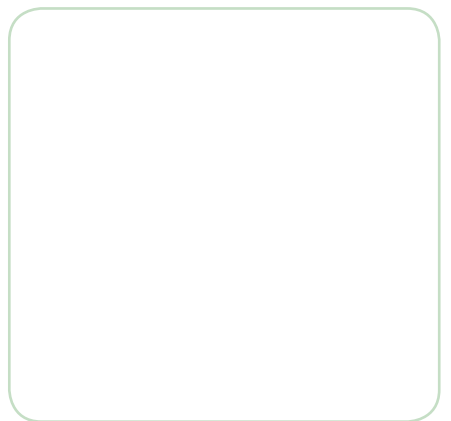


Flanges



GR-5000

MT-6500



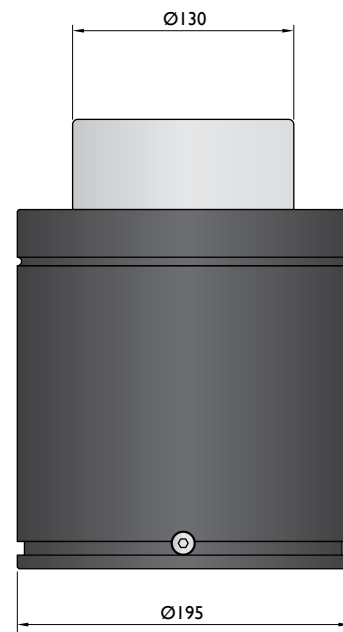
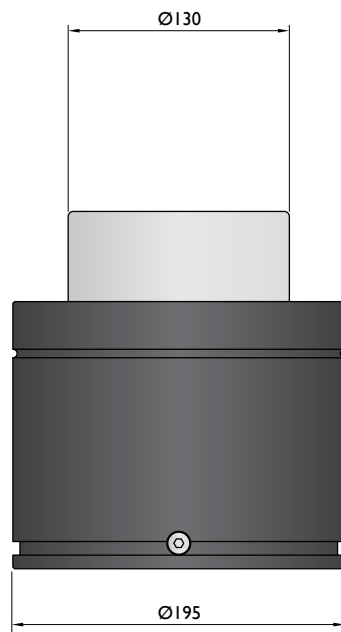
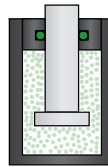
XS-5000

XC-5000



Force 20000 daN

Piston Rod Sealed gas springs



| | | |
|------------------------|-----------------|-----------------|
| Model | KP-20000 | HD-20000 |
| Initial F (daN) | 20000 | 20000 |
| L max (mm) | 2xStroke+110 | 2xStroke+160 |
| Stroke (mm) | 19-125 | 25-300 |

* other strokes under request

Standards

PED
2014/68/EU

ISO
11901

VDI
3003

CNOMO
EM24.54.700

PED
2014/68/EU

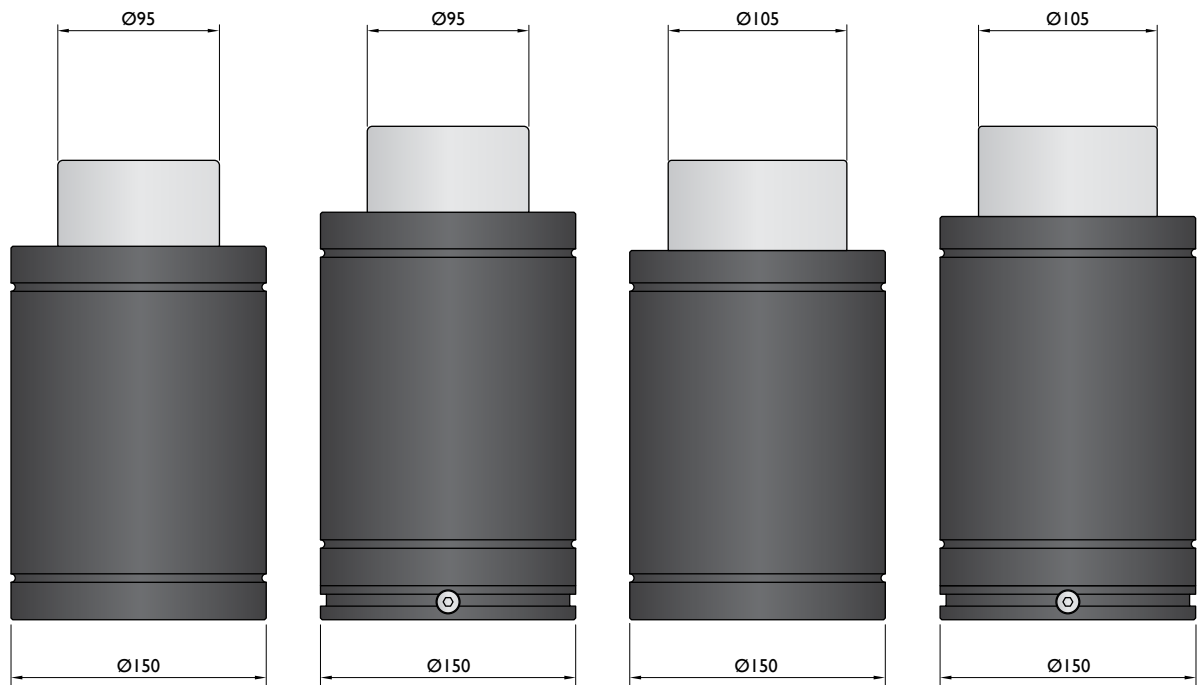
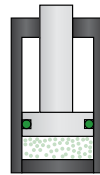
ISO
11901

VDI
3003

CNOMO
EM24.54.700

Force 20000 daN

Bore Sealed
gas springs

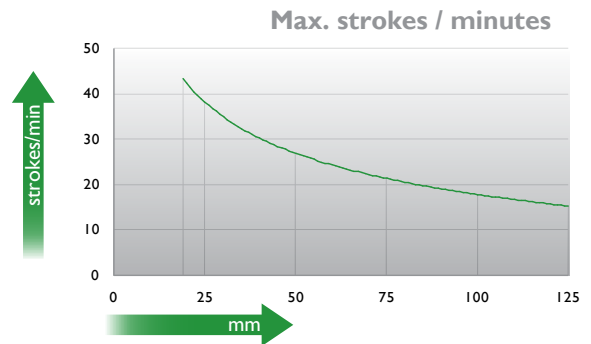
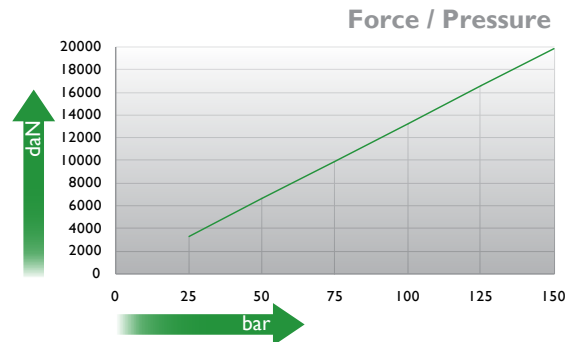
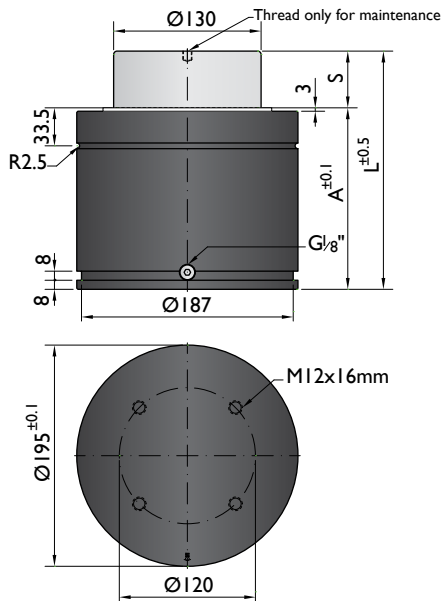


| Model | T-18300 | TC-18300 | TS-18300 | TSC-18300 |
|-----------------|---------|----------|----------|-----------|
| Initial F (daN) | 18300 | 18300 | 18300 | 18300 |
| L max (mm) | 110-270 | 130-290 | 110-323 | 130-343 |
| Stroke (mm) | 10-50 | 10-50 | 10-65 | 10-65 |

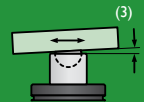
* other strokes under request

Standards

| Model | T-18300 | TC-18300 | TS-18300 | TSC-18300 |
|----------|-------------------|-------------------|-------------------|-------------------|
| Standard | ISO 11901 | ISO 11901 | ISO 11901 | ISO 11901 |
| Standard | VDI 3003 | VDI 3003 | VDI 3003 | VDI 3003 |
| Standard | CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 |



Ordering example: 4 x KP-20000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|--------------|------------------------|---------|---------|---|----------|--|-------|
| KP-20000-19 | 19 | 148 | 129 | 20000 | 28200 | No | 22.63 |
| KP-20000-25 | 25 | 160 | 135 | | 29500 | No | 23.16 |
| KP-20000-32 | 32 | 174 | 142 | | 30700 | No | 23.76 |
| KP-20000-38 | 38 | 186 | 148 | | 31500 | No | 25.66 |
| KP-20000-50 | 50 | 210 | 160 | | 32700 | No | 27.31 |
| KP-20000-63 | 63 | 236 | 173 | | 39200 | No | 28.02 |
| KP-20000-75 | 75 | 260 | 185 | | 39200 | No | 29.53 |
| KP-20000-80 | 80 | 270 | 190 | | 39200 | No | 31.45 |
| KP-20000-100 | 100 | 310 | 210 | | 39200 | No | 32.70 |
| KP-20000-125 | 125 | 360 | 235 | | 39200 | No | 35.30 |

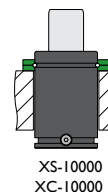
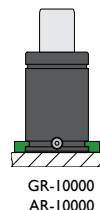
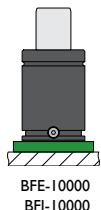
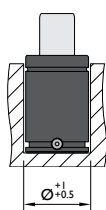
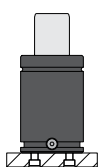
⁽¹⁾ other strokes under request

⁽²⁾ alternative forces upon request



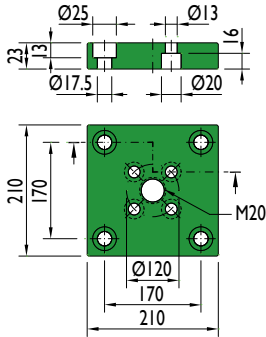
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT KP-20000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

Mounting possibilities

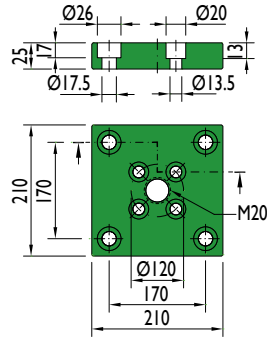


Flanges

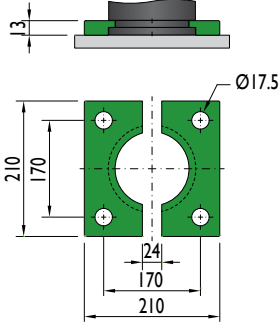
BFE-10000



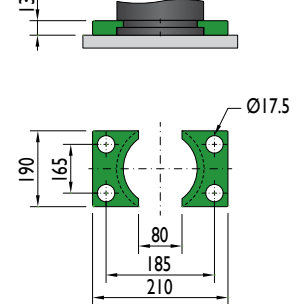
BFI-10000



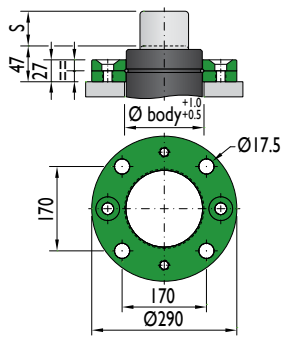
GR-10000



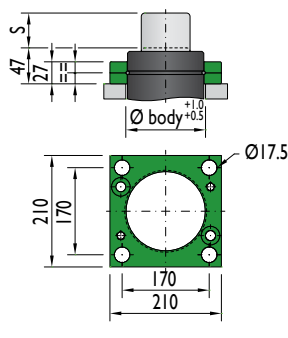
AR-10000

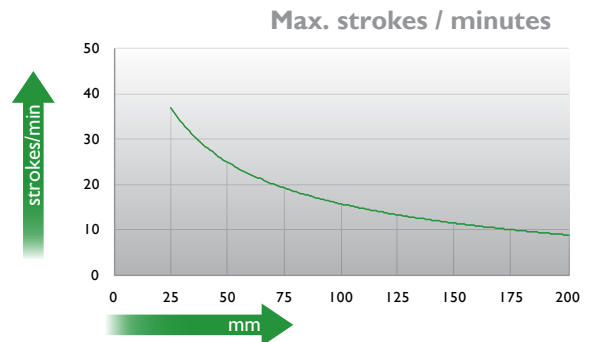
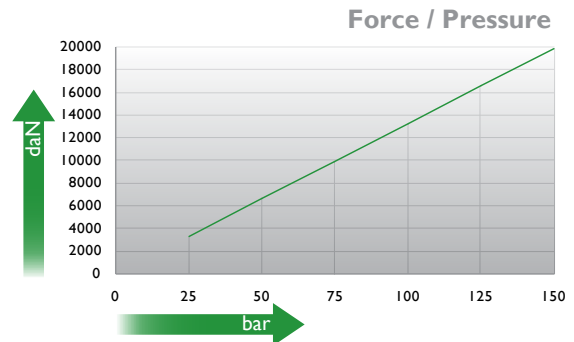
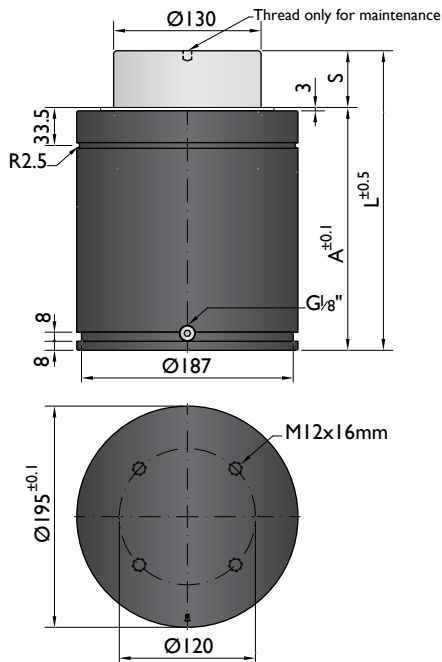


XS-10000



XC-10000





Ordering example: 4 x HD-20000-125

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN | ⁽³⁾ | kg |
|--------------|------------------------|---------|---------|---|----------|----------------|-------|
| HD-20000-25 | 25 | 210 | 185 | 20000 | 26000 | No | 23.66 |
| HD-20000-38 | 38 | 236 | 198 | | 27600 | No | 26.16 |
| HD-20000-50 | 50 | 260 | 210 | | 29000 | No | 27.81 |
| HD-20000-63 | 63 | 286 | 223 | | 29700 | No | 28.52 |
| HD-20000-80 | 80 | 320 | 240 | | 30700 | No | 31.95 |
| HD-20000-100 | 100 | 360 | 260 | | 31500 | No | 33.20 |
| HD-20000-125 | 125 | 410 | 285 | | 32200 | No | 35.80 |
| HD-20000-160 | 160 | 480 | 320 | | 33000 | No | 38.40 |
| HD-20000-200 | 200 | 560 | 360 | | 33500 | No | 41.00 |
| HD-20000-250 | 250 | 660 | 410 | | 34200 | No | 57.45 |
| HD-20000-300 | 300 | 760 | 460 | 35000 | No | 62.7 | |

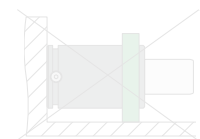
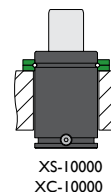
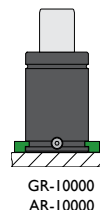
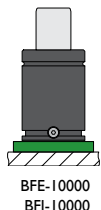
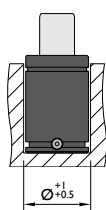
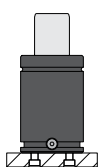
⁽¹⁾ other strokes under request

⁽²⁾ alternative forces upon request



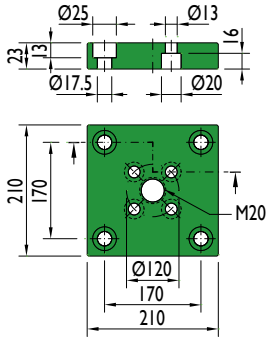
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT HD-20000 |
| Min. Charging pressure | 25 bar | Max. working speed | 1.6 m/s | Linkable | G1/8" |

Mounting possibilities

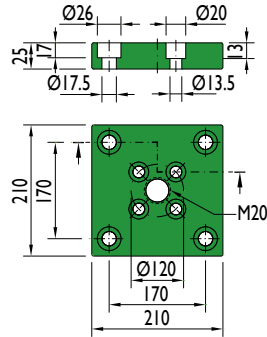


Flanges

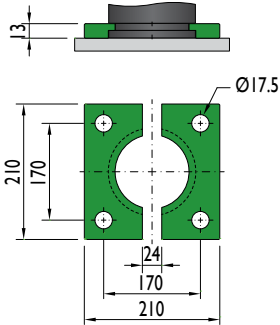
BFE-10000



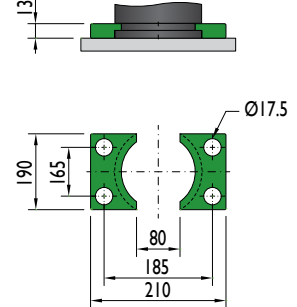
BFI-10000



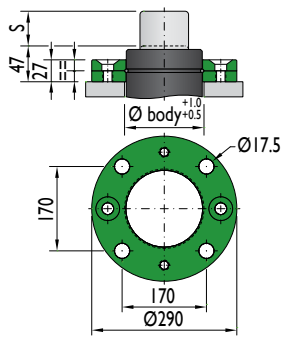
GR-10000



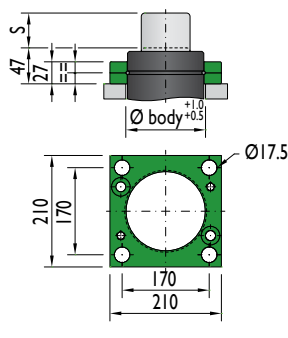
AR-10000

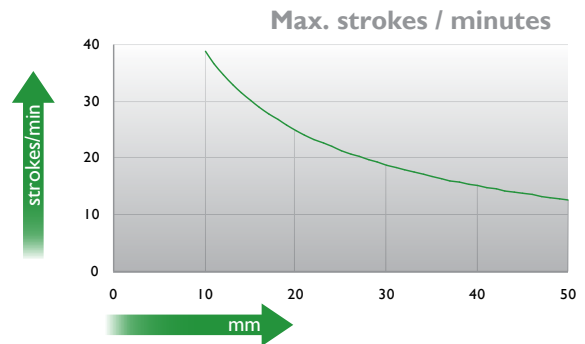
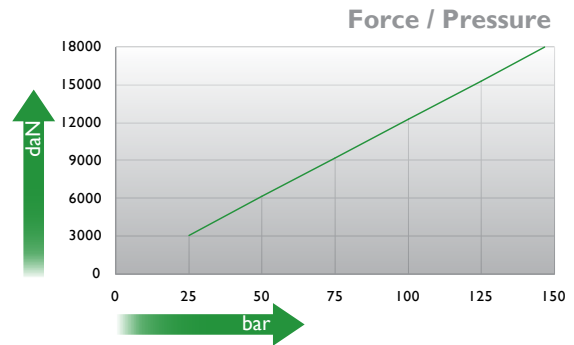
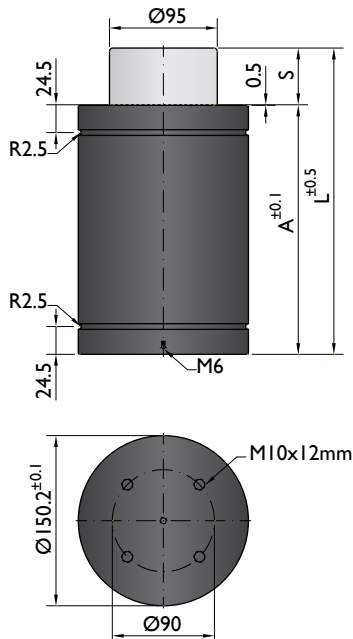


XS-10000

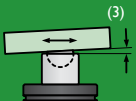


XC-10000





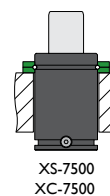
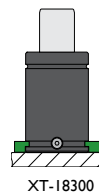
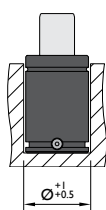
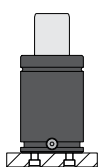
Ordering example: 4 x T-18300-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN | F daN |  | kg |
|------------|-----------------------------|---------|---------|--------------------------------------|----------|---|-------|
| | | | | (20°C, 150 bar) | | | |
| T-18300-10 | 10 | 110 | 100 | 18300 | 23200 | No | 8.66 |
| T-18300-16 | 16 | 136 | 120 | | 23800 | No | 9.13 |
| T-18300-25 | 25 | 165 | 140 | | 25200 | No | 10.69 |
| T-18300-32 | 32 | 197 | 165 | | 25100 | No | 12.41 |
| T-18300-40 | 40 | 235 | 195 | | 24900 | No | 14.46 |
| T-18300-50 | 50 | 270 | 220 | | 25400 | No | 16.34 |
| | ⁽¹⁾ | | | ⁽²⁾ | | ⁽³⁾ | |
| | other strokes under request | | | alternative forces upon request | | ESK under request | |



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|-------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT T-18300 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

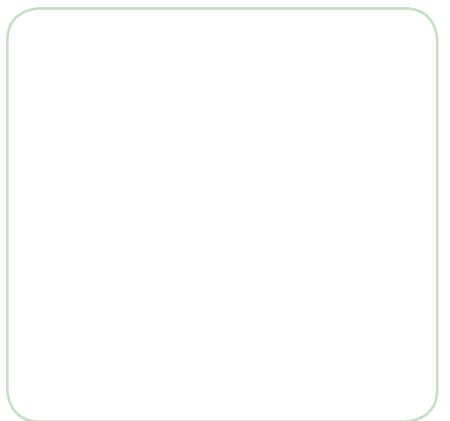
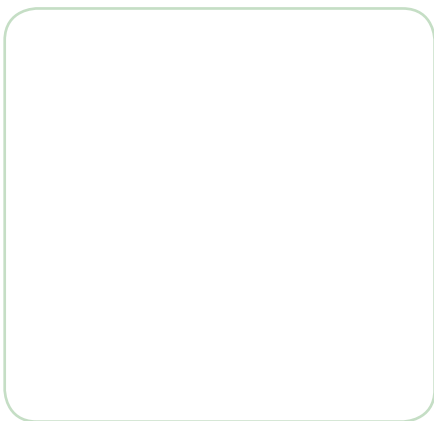
Mounting possibilities



Flanges



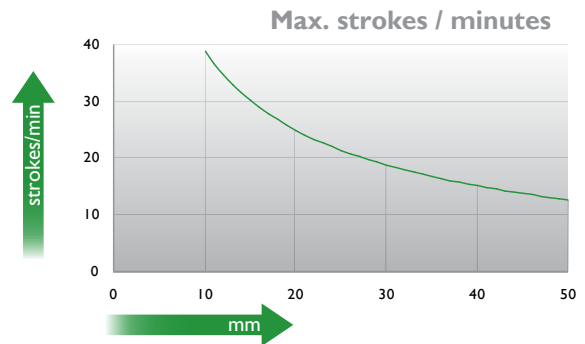
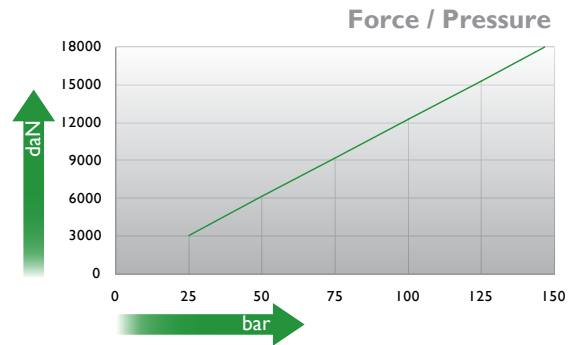
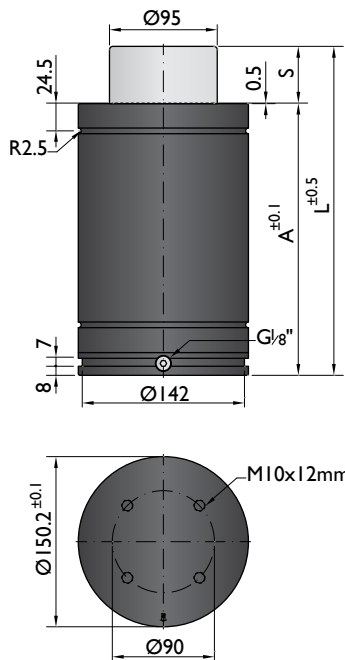
XT-18300




XS-7500

XC-7500





Ordering example: 4 x TC-18300-50

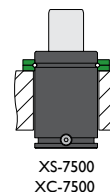
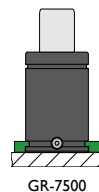
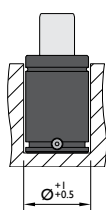
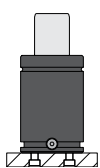
| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|-------|
| TC-18300-10 | 10 | 130 | 120 | 18300 | 23200 | No | 11.36 |
| TC-18300-16 | 16 | 156 | 140 | | 23800 | No | 11.83 |
| TC-18300-25 | 25 | 185 | 160 | | 25200 | No | 13.39 |
| TC-18300-32 | 32 | 217 | 185 | | 25100 | No | 15.11 |
| TC-18300-40 | 40 | 255 | 215 | | 24900 | No | 17.16 |
| TC-18300-50 | 50 | 290 | 240 | | 25400 | No | 19.04 |

⁽¹⁾ other strokes under request
 ⁽²⁾ alternative forces upon request
 ⁽³⁾ ESK under request



| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TC-18300 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5m/s | Linkable | G1/8" |

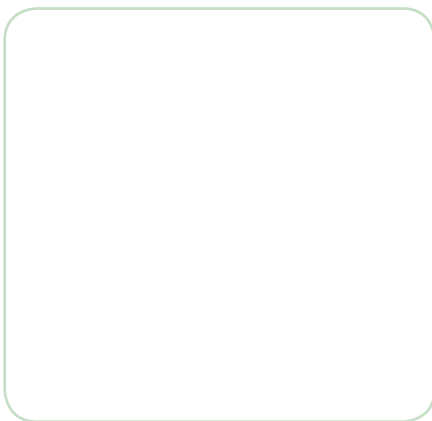
Mounting possibilities



Flanges



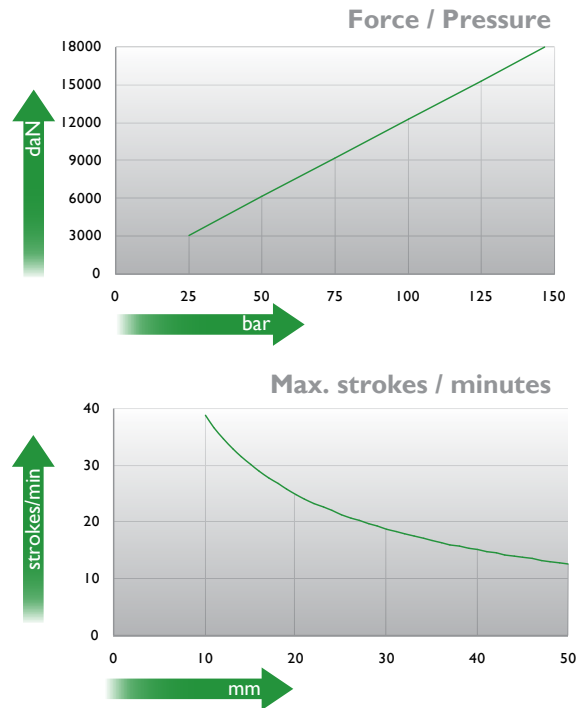
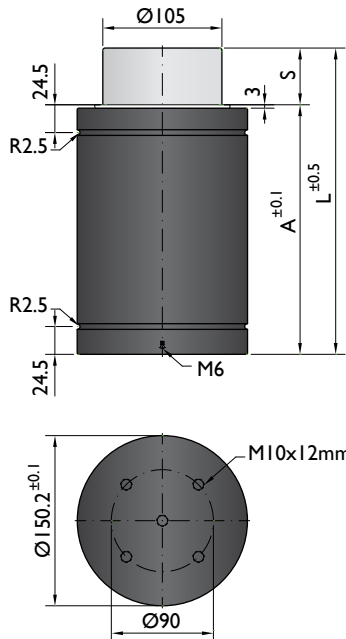
GR-7500



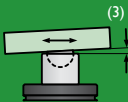
XS-7500

XC-7500





Ordering example: 4 x TS-18300-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  ⁽³⁾ | kg |
|-------------|------------------------|---------|---------|---|----------|--|-------|
| TS-18300-10 | 10 | 110 | 100 | 18300 | 23200 | No | 8.66 |
| TS-18300-16 | 16 | 136 | 120 | | 23800 | No | 9.13 |
| TS-18300-25 | 25 | 165 | 140 | | 25200 | No | 10.69 |
| TS-18300-32 | 32 | 197 | 165 | | 25100 | No | 12.41 |
| TS-18300-40 | 40 | 235 | 195 | | 24900 | No | 14.46 |
| TS-18300-50 | 50 | 270 | 220 | | 25400 | No | 16.34 |
| TS-18300-65 | 65 | 323 | 258 | | 25900 | No | 18.22 |

other strokes ⁽¹⁾ under request

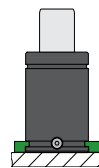
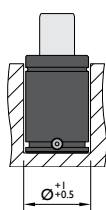
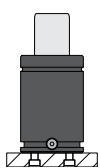
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request

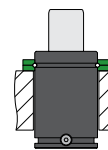


| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|--------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TS-18300 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | No |

Mounting possibilities



XT-18300



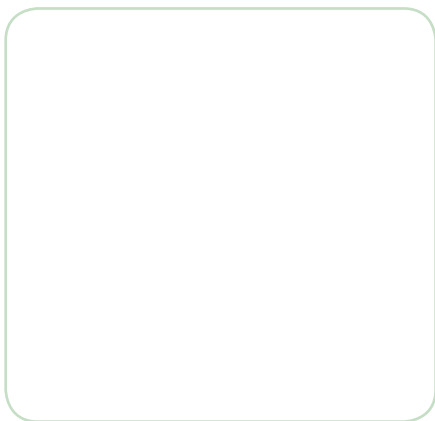
XS-7500
XC-7500



Flanges



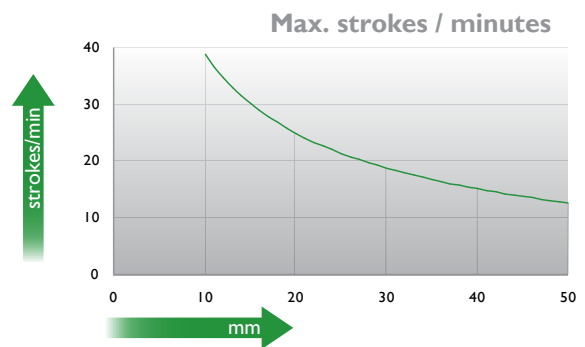
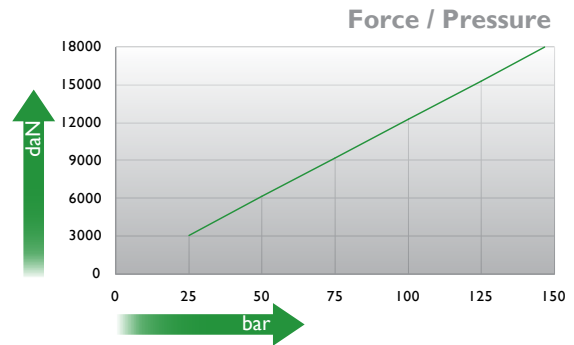
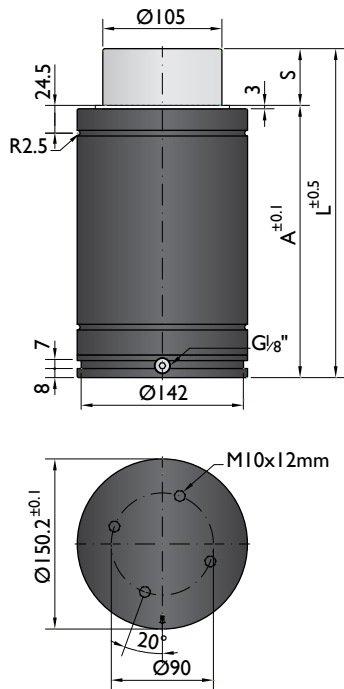
XT-18300



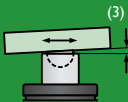
XS-7500

XC-7500





Ordering example: 4 x TSC-18300-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | F daN |  | kg |
|--------------|------------------------|---------|---------|---|----------|---|-------|
| TSC-18300-10 | 10 | 130 | 120 | 18300 | 23200 | No | 11.36 |
| TSC-18300-16 | 16 | 156 | 140 | | 23800 | No | 11.83 |
| TSC-18300-25 | 25 | 185 | 160 | | 25200 | No | 13.39 |
| TSC-18300-32 | 32 | 217 | 185 | | 25100 | No | 15.11 |
| TSC-18300-40 | 40 | 255 | 215 | | 24900 | No | 17.16 |
| TSC-18300-50 | 50 | 290 | 240 | | 25400 | No | 19.04 |
| TSC-18300-65 | 65 | 343 | 278 | | 25900 | No | 20.92 |

other strokes ⁽¹⁾ under request

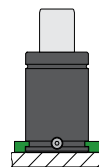
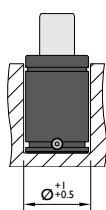
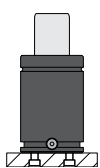
alternative forces ⁽²⁾ upon request

ESK ⁽³⁾ under request

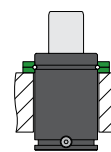


| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|---------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperature related force increase | +0.34%/°C | Repair Kit | KIT TSC-18300 |
| Min. Charging pressure | 25 bar | Max. working speed | 0.5 m/s | Linkable | G1/8" |

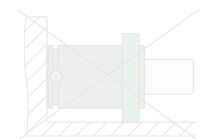
Mounting possibilities



GR-7500



XS-7500
XC-7500

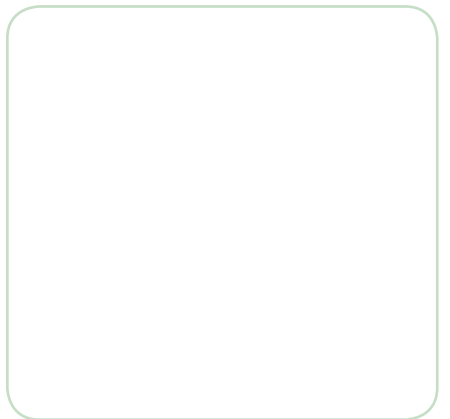
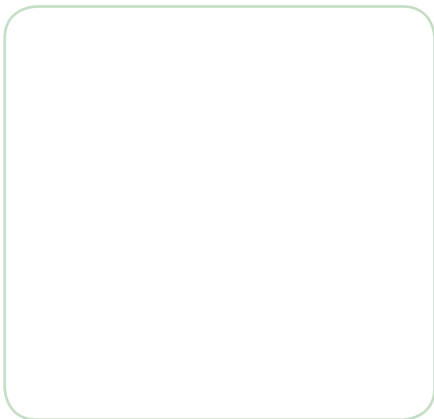


Flanges



GR-7500

ISO



XS-7500

ISO

XC-7500

VDI
ISO






Spring Plunger Selection Guide

THREADED

| Model | Description | Ø | S mm | Page |
|-------|--|----------|-----------|------|
| E-201 |  With ball and slot | M2 - M24 | 0.3 - 5.5 | 288 |
| E-202 |  With internal hexagon | M3 - M24 | 1 - 10 | 289 |
| E-205 |  With ball and internal hexagon | M3 - M24 | 0.4 - 5.5 | 292 |
| E-206 |  Plastic | M6 - M10 | 0.9 - 1.9 | 293 |
| E-207 |  With pin and internal hexagon | M4 - M24 | 1.5 - 8 | 294 |
| E-208 |  With pin and slot | M4 - M24 | 1.5 - 8 | 295 |
| E-209 |  With internal hexagon and seal | M8 - M16 | 3 - 5 | 296 |

SMOOTH

| | | | | |
|-------|---|----------|-----------|-----|
| E-203 |  Smooth | Ø6 - Ø12 | 3.5 - 6.5 | 290 |
| E-204 |  Smooth with collar and ball | Ø3 - Ø12 | 0.55 - 4 | 291 |
| E-210 |  Smooth without collar | Ø2 - Ø6 | 0.3 - 1.5 | 297 |

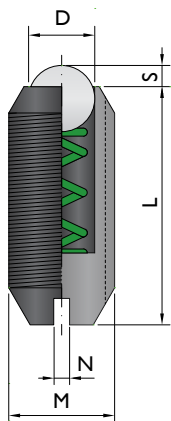


Spring Plunger with ball and slot

FINISH



| FI | F2 | F3 | F4 |
|---------------------------------------|------------------------------------|---------------------------------------|------------------------------------|
| Free cutting steel, blackened | Free cutting steel, blackened | Stainless steel 1.4305 | Stainless steel 1.4305 |
| Ball-bearing steel, hardened | Ball-bearing steel, hardened | Stainless steel, hardened | Stainless steel, hardened |
| Stainless steel, standard spring load | Stainless steel, heavy spring load | Stainless steel, standard spring load | Stainless steel, heavy spring load |

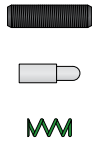


| Order No. | M | S mm | D mm | L mm | N mm | F S=0 N | F Smax N |
|-----------|-----|------|------|------|------|---------|----------|
| E-201-03 | M 3 | 0.4 | 1.5 | 7 | 0.40 | 3 | 4.5 |
| E-201-04 | M 4 | 0.8 | 2.5 | 9 | 0.6 | 8.5 | 14 |
| E-201-05 | M 5 | 0.9 | 3 | 12 | 0.8 | 8 | 14 |
| E-201-06 | M 6 | 1 | 3.5 | 14 | 1 | 11 | 18 |
| E-201-08 | M 8 | 1.5 | 4.5 | 16 | 1.2 | 18 | 31 |
| E-201-10 | M10 | 2 | 6 | 19 | 1.5 | 24 | 45 |
| E-201-12 | M12 | 2.5 | 8 | 22 | 2 | 26 | 49 |
| E-201-16 | M16 | 3.5 | 10 | 24 | 2 | 41 | 86 |
| E-201-20 | M20 | 4.5 | 12 | 30 | 2.5 | 56 | 111 |
| E-201-24 | M24 | 5.5 | 15 | 34 | 3 | 81 | 151 |
| E-201-05 | M 5 | 0.9 | 3 | 12 | 0.8 | 15 | 22 |
| E-201-06 | M 6 | 1 | 3.5 | 14 | 1 | 19 | 28 |
| E-201-08 | M 8 | 1.5 | 4.5 | 16 | 1.2 | 36 | 62 |
| E-201-10 | M10 | 2 | 6 | 19 | 1.5 | 57 | 104 |
| E-201-12 | M12 | 2.5 | 8 | 22 | 2 | 61 | 110 |
| E-201-16 | M16 | 3.5 | 10 | 24 | 2 | 68 | 142 |
| E-201-20 | M20 | 4.5 | 12 | 30 | 2.5 | 84 | 166 |
| E-201-24 | M24 | 5.5 | 15 | 34 | 3 | 127 | 237 |
| E-201-02 | M 2 | 0.3 | 1 | 4 | 0.25 | 0.8 | 1.5 |
| E-201-03 | M 3 | 0.4 | 1.5 | 7 | 0.4 | 3 | 4.5 |
| E-201-04 | M 4 | 0.8 | 2.5 | 9 | 0.6 | 8.5 | 14 |
| E-201-05 | M 5 | 0.9 | 3 | 12 | 0.8 | 8 | 14 |
| E-201-06 | M 6 | 1 | 3.5 | 14 | 1 | 11 | 18 |
| E-201-08 | M 8 | 1.5 | 4.5 | 16 | 1.2 | 18 | 31 |
| E-201-10 | M10 | 2 | 6 | 19 | 1.5 | 24 | 45 |
| E-201-12 | M12 | 2.5 | 8 | 22 | 2 | 26 | 49 |
| E-201-16 | M16 | 3.5 | 10 | 24 | 2 | 41 | 86 |
| E-201-20 | M20 | 4.5 | 12 | 30 | 2.5 | 56 | 111 |
| E-201-24 | M24 | 5.5 | 15 | 34 | 3 | 81 | 151 |
| E-201-05 | M 5 | 0.9 | 3 | 12 | 0.8 | 15 | 22 |
| E-201-06 | M 6 | 1 | 3.5 | 14 | 1 | 19 | 28 |
| E-201-08 | M 8 | 1.5 | 4.5 | 16 | 1.2 | 36 | 62 |
| E-201-10 | M10 | 2 | 6 | 19 | 1.5 | 57 | 104 |
| E-201-12 | M12 | 2.5 | 8 | 22 | 2 | 61 | 110 |
| E-201-16 | M16 | 3.5 | 10 | 24 | 2 | 68 | 142 |
| E-201-20 | M20 | 4.5 | 12 | 30 | 2.5 | 84 | 166 |
| E-201-24 | M24 | 5.5 | 15 | 34 | 3 | 127 | 237 |

Ordering example: 4 x E-201-05-F3

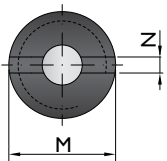
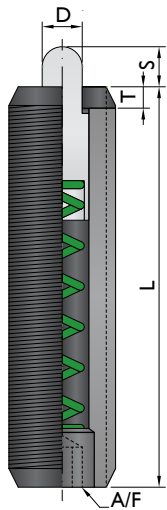
Spring Plunger with internal hexagon

FINISH



| F1 | F2 | F3 | F4 | F5 |
|---|---|---------------------------------------|---------------------------------------|---------------------------------------|
| Free cutting steel, blackened | Free cutting steel, blackened | Free cutting steel, blackened | Stainless steel 1.4305 | Stainless steel 1.4305 |
| Free cutting steel, hardened, blackened | Free cutting steel, hardened, blackened | Thermoplastic POM, white | Thermoplastic POM, white | Stainless steel 1.4305 |
| Stainless steel, standard spring load | Stainless steel, heavy spring load | Stainless steel, standard spring load | Stainless steel, standard spring load | Stainless steel, standard spring load |

| Order No. | M | S mm | D mm | L mm | A/F | N mm | T mm | F S=0 N | F Smax N |
|-----------|-----|------|------|------|-----|------|------|---------|----------|
| E-202-03 | M 3 | 1 | 1 | 12 | 0.7 | 0.4 | 0.5 | 2 | 4 |
| E-202-04 | M 4 | 1.5 | 1.5 | 15 | 1.3 | 0.6 | 0.6 | 4.5 | 16 |
| E-202-05 | M 5 | 2.3 | 2.4 | 18 | 1.5 | 1.2 | 0.8 | 6 | 19 |
| E-202-06 | M 6 | 2.5 | 2.7 | 20 | 2 | 1.3 | 0.9 | 6 | 19 |
| E-202-08 | M 8 | 3 | 3.5 | 22 | 2.5 | 1.5 | 1.4 | 10 | 39 |
| E-202-10 | M10 | 3 | 4 | 22 | 3 | 1.5 | 1.4 | 10 | 39 |
| E-202-12 | M12 | 4 | 6 | 28 | 4 | 2.7 | 2 | 12 | 53 |
| E-202-16 | M16 | 5 | 7.5 | 32 | 5 | 3.2 | 2.5 | 45 | 100 |
| E-202-20 | M20 | 7 | 10 | 40 | 6 | 3.7 | 3 | 52 | 125 |
| E-202-24 | M24 | 10 | 12 | 52 | 8 | 3.7 | 3 | 70 | 170 |
| E-202-05 | M 5 | 2.3 | 2.4 | 18 | 1.5 | 1.2 | 0.8 | 11 | 40 |
| E-202-06 | M 6 | 2.5 | 2.7 | 20 | 2 | 1.3 | 0.9 | 15 | 43 |
| E-202-08 | M 8 | 3 | 3.5 | 22 | 2.5 | 1.5 | 1.4 | 20 | 75 |
| E-202-10 | M10 | 3 | 4 | 22 | 3 | 1.5 | 1.4 | 20 | 75 |
| E-202-12 | M12 | 4 | 6 | 28 | 4 | 2.7 | 2 | 45 | 120 |
| E-202-16 | M16 | 5 | 7.5 | 32 | 5 | 3.2 | 2.5 | 64 | 160 |
| E-202-20 | M20 | 7 | 10 | 40 | 6 | 3.7 | 3 | 75 | 195 |
| E-202-24 | M24 | 10 | 12 | 52 | 8 | 3.7 | 3 | 75 | 245 |
| E-202-04 | M 4 | 1.5 | 1.5 | 15 | 1.3 | 0.6 | 0.6 | 4.5 | 16 |
| E-202-05 | M 5 | 2.3 | 2.4 | 18 | 1.5 | 1.2 | 0.8 | 6 | 19 |
| E-202-06 | M 6 | 2.5 | 2.7 | 20 | 2 | 1.3 | 0.9 | 6 | 19 |
| E-202-08 | M 8 | 3 | 3.5 | 22 | 2.5 | 1.5 | 1.4 | 10 | 39 |
| E-202-10 | M10 | 3 | 4 | 22 | 3 | 1.5 | 1.4 | 10 | 39 |
| E-202-12 | M12 | 4 | 6 | 28 | 4 | 2.7 | 2 | 12 | 53 |
| E-202-16 | M16 | 5 | 7.5 | 32 | 5 | 3.2 | 2.5 | 45 | 100 |
| E-202-04 | M 4 | 1.5 | 1.5 | 15 | 1.3 | 0.6 | 0.6 | 4.5 | 16 |
| E-202-05 | M 5 | 2.3 | 2.4 | 18 | 1.5 | 1.2 | 0.8 | 6 | 19 |
| E-202-06 | M 6 | 2.5 | 2.7 | 20 | 2 | 1.3 | 0.9 | 6 | 19 |
| E-202-08 | M 8 | 3 | 3.5 | 22 | 2.5 | 1.5 | 1.4 | 10 | 39 |
| E-202-10 | M10 | 3 | 4 | 22 | 3 | 1.5 | 1.4 | 10 | 39 |
| E-202-12 | M12 | 4 | 6 | 28 | 4 | 2.7 | 2 | 12 | 53 |
| E-202-16 | M16 | 5 | 7.5 | 32 | 5 | 3.2 | 2.5 | 45 | 100 |
| E-202-04 | M 4 | 1.5 | 1.5 | 15 | 1.3 | 0.6 | 0.6 | 4.5 | 16 |
| E-202-05 | M 5 | 2.3 | 2.4 | 18 | 1.5 | 1.2 | 0.8 | 6 | 19 |
| E-202-06 | M 6 | 2.5 | 2.7 | 20 | 2 | 1.3 | 0.9 | 6 | 19 |
| E-202-08 | M 8 | 3 | 3.5 | 22 | 2.5 | 1.5 | 1.4 | 10 | 39 |
| E-202-10 | M10 | 3 | 4 | 22 | 3 | 1.5 | 1.4 | 10 | 39 |
| E-202-12 | M12 | 4 | 6 | 28 | 4 | 2.7 | 2 | 12 | 53 |
| E-202-16 | M16 | 5 | 7.5 | 32 | 5 | 3.2 | 2.5 | 45 | 100 |
| E-202-04 | M 4 | 1.5 | 1.5 | 15 | 1.3 | 0.6 | 0.6 | 4.5 | 16 |
| E-202-05 | M 5 | 2.3 | 2.4 | 18 | 1.5 | 1.2 | 0.8 | 6 | 19 |
| E-202-06 | M 6 | 2.5 | 2.7 | 20 | 2 | 1.3 | 0.9 | 6 | 19 |
| E-202-08 | M 8 | 3 | 3.5 | 22 | 2.5 | 1.5 | 1.4 | 10 | 39 |
| E-202-10 | M10 | 3 | 4 | 22 | 3 | 1.5 | 1.4 | 10 | 39 |
| E-202-12 | M12 | 4 | 6 | 28 | 4 | 2.7 | 2 | 12 | 53 |
| E-202-16 | M16 | 5 | 7.5 | 32 | 5 | 3.2 | 2.5 | 45 | 100 |
| E-202-04 | M 4 | 1.5 | 1.5 | 15 | 1.3 | 0.6 | 0.6 | 4.5 | 16 |
| E-202-05 | M 5 | 2.3 | 2.4 | 18 | 1.5 | 1.2 | 0.8 | 6 | 19 |
| E-202-06 | M 6 | 2.5 | 2.7 | 20 | 2 | 1.3 | 0.9 | 6 | 19 |
| E-202-08 | M 8 | 3 | 3.5 | 22 | 2.5 | 1.5 | 1.4 | 10 | 39 |
| E-202-10 | M10 | 3 | 4 | 22 | 3 | 1.5 | 1.4 | 10 | 39 |
| E-202-12 | M12 | 4 | 6 | 28 | 4 | 2.7 | 2 | 12 | 53 |
| E-202-16 | M16 | 5 | 7.5 | 32 | 5 | 3.2 | 2.5 | 45 | 100 |
| E-202-20 | M20 | 7 | 10 | 40 | 6 | 3.7 | 3 | 52 | 125 |



See keys on page 316.

Ordering example: 4 x E-202-05-F3

Smooth Spring plunger

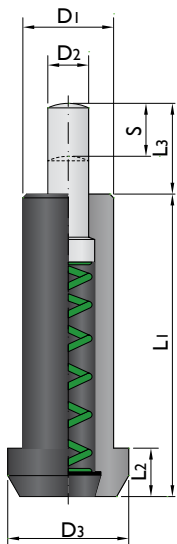
FINISH



| FI |
|---------------------------------|
| Free cutting steel, blackened |
| Steel, case-hardened, blackened |
| Stainless steel |

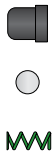
| Order No. | | D ₁ mm | S mm | D ₂ mm | D ₃ mm | L ₁ mm | L ₂ mm | L ₃ mm | F S=0 N | F Smax N |
|-----------|----|----------------------|---------|----------------------|----------------------|----------------------|----------------------|----------------------|------------|-------------|
| E-203-06 | FI | 6 | 3.5 | 2.7 | 8 | 20 | 3.2 | 6 | 10 | 22 |
| E-203-08 | | 8 | 4.5 | 3.9 | 10 | 24 | 3.2 | 8 | 30 | 88 |
| E-203-10 | | 10 | 5.5 | 5.9 | 13 | 30 | 4 | 10 | 42 | 110 |
| E-203-12 | | 12 | 6.5 | 7.9 | 16 | 36 | 5 | 12 | 50 | 130 |

Ordering example: 4 x E-203-06-FI



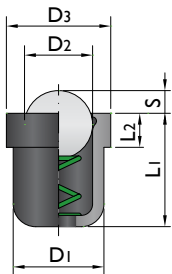
Smooth Spring Plunger with collar and ball

FINISH



| | F1 | F2 | F3 | F4 |
|--|--------------------------|---------------------------|---------------------------|---------------------------|
| | Thermoplastic POM, blue | Thermoplastic POM, blue | Brass | Stainless steel I.4303 |
| | Thermoplastic POM, white | Stainless steel, hardened | Stainless steel, hardened | Stainless steel, hardened |
| | Stainless steel | Stainless steel | Stainless steel | Stainless steel |

| Order No. | D ₁ mm | S mm | D ₂ mm | D ₃ mm | L ₁ mm | L ₂ mm | F S=0 N | F Smax N |
|-----------|----------------------|---------|----------------------|----------------------|----------------------|----------------------|------------|-------------|
| E-204-04 | 4 | 0.8 | 3 | 4.6 | 5 | 1 | 3 | 6.5 |
| E-204-05 | 5 | 1 | 4 | 5.6 | 6 | 1 | 6 | 9.4 |
| E-204-06 | 6 | 1.6 | 5 | 6.5 | 7 | 1 | 6.2 | 12.6 |
| E-204-08 | 8 | 1.9 | 6.5 | 8.5 | 9 | 1 | 10 | 20.4 |
| E-204-10 | 10 | 2.4 | 8 | 11 | 13.5 | 1.5 | 11.9 | 22.3 |
| E-204-12 | 12 | 3.3 | 10 | 13 | 16 | 1.5 | 14 | 25 |
| E-204-03 | 3 | 0.55 | 2 | 3.6 | 4 | 0.6 | 1.7 | 3.5 |
| E-204-04 | 4 | 0.8 | 3 | 4.6 | 5 | 1 | 3 | 6.5 |
| E-204-05 | 5 | 1 | 4 | 5.6 | 6 | 1 | 6 | 9.4 |
| E-204-06 | 6 | 1.6 | 5 | 6.5 | 7 | 1 | 6.2 | 12.6 |
| E-204-08 | 8 | 1.9 | 6.5 | 8.5 | 9 | 1 | 10 | 20.4 |
| E-204-10 | 10 | 2.4 | 8 | 11 | 13.5 | 1.5 | 11.9 | 22.3 |
| E-204-12 | 12 | 3.3 | 10 | 13 | 16 | 1.5 | 14 | 25 |
| E-204-03 | 3 | 0.6 | 2.38 | 3.6 | 4 | 0.6 | 1.8 | 3.5 |
| E-204-04 | 4 | 0.8 | 3 | 4.5 | 5 | 1 | 3 | 6 |
| E-204-05 | 5 | 1 | 4 | 5.5 | 6 | 1 | 4 | 6.5 |
| E-204-06 | 6 | 1.6 | 5 | 6.5 | 7 | 1 | 6 | 11.5 |
| E-204-08 | 8 | 1.9 | 6.5 | 8.5 | 9 | 1 | 8 | 12.5 |
| E-204-03 | 3 | 0.7 | 2.38 | 3.5 | 4 | 0.75 | 1.8 | 3.5 |
| E-204-04 | 4 | 1 | 3 | 4.6 | 5 | 0.9 | 2.5 | 6 |
| E-204-05 | 5 | 1.4 | 4 | 5.6 | 6 | 0.9 | 3 | 6.5 |
| E-204-06 | 6 | 1.8 | 5 | 6.5 | 7 | 1 | 5.5 | 11.5 |
| E-204-08 | 8 | 2.4 | 6.5 | 8.5 | 9 | 1.1 | 7 | 12.5 |
| E-204-10 | 10 | 3.3 | 8.5 | 11 | 13 | 1.5 | 8.5 | 18.5 |
| E-204-12 | 12 | 4 | 10 | 13 | 16 | 2.3 | 12 | 26.5 |



Ordering example: 4 x E-204-04-F2

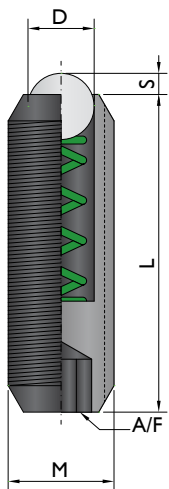


Spring Plunger with ball and internal hexagon

FINISH



| F1 | F2 | F3 | F4 |
|---------------------------------------|------------------------------------|---------------------------------------|------------------------------------|
| Free cutting steel, blackened | Free cutting steel, blackened | Stainless steel 1.4305 | Stainless steel 1.4305 |
| Ball-bearing steel, hardened | Ball-bearing steel, hardened | Stainless steel, hardened | Stainless steel, hardened |
| Stainless steel, standard spring load | Stainless steel, heavy spring load | Stainless steel, standard spring load | Stainless steel, heavy spring load |

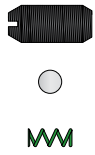


| Order No. | M | S mm | D mm | L mm | A/F | F S=0 N | F Smax N |
|-----------|-----|------|------|------|-----|---------|----------|
| E-205-03 | M 3 | 0.4 | 1.5 | 8 | 1.5 | 3 | 4.5 |
| E-205-04 | M 4 | 0.8 | 2.5 | 12 | 2 | 8.5 | 14 |
| E-205-05 | M 5 | 0.9 | 3 | 14 | 2.5 | 8 | 14 |
| E-205-06 | M 6 | 1 | 3.5 | 15 | 3 | 11 | 18 |
| E-205-08 | M 8 | 1.5 | 4.5 | 18 | 4 | 18 | 31 |
| E-205-10 | M10 | 2 | 6 | 23 | 5 | 24 | 45 |
| E-205-12 | M12 | 2.5 | 8 | 26 | 6 | 26 | 49 |
| E-205-16 | M16 | 3.5 | 10 | 33 | 8 | 41 | 86 |
| E-205-20 | M20 | 4.5 | 12 | 43 | 10 | 56 | 111 |
| E-205-24 | M24 | 5.5 | 15 | 48 | 12 | 81 | 151 |
| E-205-05 | M 5 | 0.9 | 3 | 14 | 2.5 | 15 | 22 |
| E-205-06 | M 6 | 1 | 3.5 | 15 | 3 | 19 | 28 |
| E-205-08 | M 8 | 1.5 | 4.5 | 18 | 4 | 36 | 62 |
| E-205-10 | M10 | 2 | 6 | 23 | 5 | 57 | 104 |
| E-205-12 | M12 | 2.5 | 8 | 26 | 6 | 61 | 110 |
| E-205-16 | M16 | 3.5 | 10 | 33 | 8 | 68 | 142 |
| E-205-20 | M20 | 4.5 | 12 | 43 | 10 | 84 | 166 |
| E-205-24 | M24 | 5.5 | 15 | 48 | 12 | 127 | 237 |
| E-205-03 | M 3 | 0.4 | 1.5 | 8 | 1.5 | 3 | 4.5 |
| E-205-04 | M 4 | 0.8 | 2.5 | 12 | 2 | 8.5 | 14 |
| E-205-05 | M 5 | 0.9 | 3 | 14 | 2.5 | 8 | 14 |
| E-205-06 | M 6 | 1 | 3.5 | 15 | 3 | 11 | 18 |
| E-205-08 | M 8 | 1.5 | 4.5 | 18 | 4 | 18 | 31 |
| E-205-10 | M10 | 2 | 6 | 23 | 5 | 24 | 45 |
| E-205-12 | M12 | 2.5 | 8 | 26 | 6 | 26 | 49 |
| E-205-16 | M16 | 3.5 | 10 | 33 | 8 | 41 | 86 |
| E-205-20 | M20 | 4.5 | 12 | 43 | 10 | 56 | 111 |
| E-205-24 | M24 | 5.5 | 15 | 48 | 12 | 81 | 151 |
| E-205-05 | M 5 | 0.9 | 3 | 14 | 2.5 | 15 | 22 |
| E-205-06 | M 6 | 1 | 3.5 | 15 | 3 | 19 | 28 |
| E-205-08 | M 8 | 1.5 | 4.5 | 18 | 4 | 36 | 62 |
| E-205-10 | M10 | 2 | 6 | 23 | 5 | 57 | 104 |
| E-205-12 | M12 | 2.5 | 8 | 26 | 6 | 61 | 110 |
| E-205-16 | M16 | 3.5 | 10 | 33 | 8 | 68 | 142 |
| E-205-20 | M20 | 4.5 | 12 | 43 | 10 | 84 | 166 |
| E-205-24 | M24 | 5.5 | 15 | 48 | 12 | 127 | 237 |

Ordering example: 4 x E-205-03-F3

Plastic Spring Plunger

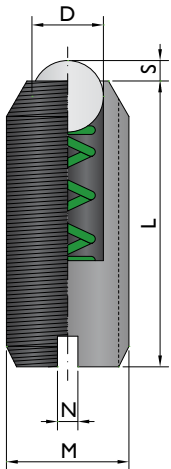
FINISH



| | F1 | F2 |
|--|--------------------------|---------------------------|
| | Thermoplastic POM, blue | Thermoplastic POM, blue |
| | Thermoplastic POM, white | Stainless steel, hardened |
| | Stainless steel | Stainless steel |

| Order No. | | M | S mm | D mm | L mm | N mm | F S=0 N | F Smax N |
|-----------|----|-----|---------|---------|---------|---------|------------|-------------|
| E-206-06 | | M 6 | 0.9 | 3.5 | 14 | 1 | 12 | 17 |
| E-206-08 | F1 | M 8 | 1.5 | 5 | 16 | 1.2 | 20 | 35 |
| E-206-10 | | M10 | 1.9 | 6 | 19 | 1.5 | 25 | 45 |
| E-206-06 | | M 6 | 0.9 | 3.5 | 14 | 1 | 12 | 17 |
| E-206-08 | F2 | M 8 | 1.5 | 5 | 16 | 1.2 | 20 | 35 |
| E-206-10 | | M10 | 1.9 | 6 | 19 | 1.5 | 25 | 45 |

Ordering example: 4 x E-206-06-F1

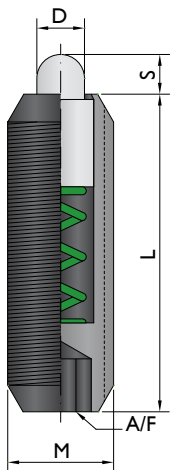


Spring Plunger with pin and internal hexagon

FINISH



| FI | F2 | F3 | F4 |
|---|---|---------------------------------------|------------------------------------|
| Free cutting steel, blackened | Free cutting steel, blackened | Stainless steel I.4305 | Stainless steel I.4305 |
| Free cutting steel, hardened, blackened | Free cutting steel, hardened, blackened | Stainless steel I.4305 | Stainless steel I.4305 |
| Stainless steel, standard spring load | Stainless steel, heavy spring load | Stainless steel, standard spring load | Stainless steel, heavy spring load |



| Order No. | M | S mm | D mm | L mm | A/F | F S=0 N | F Smax N |
|-----------|--------|------|------|------|-----|---------|----------|
| E-207-04 | M 4 | 1.5 | 1.8 | 12 | 2 | 4.5 | 12.5 |
| E-207-05 | M 5 | 2 | 2.4 | 14 | 2.5 | 5 | 13 |
| E-207-06 | M 6 | 2 | 2.7 | 15 | 3 | 6 | 17 |
| E-207-08 | M 8 | 2 | 3.8 | 18 | 4 | 16 | 33 |
| E-207-10 | FI M10 | 2.5 | 4.5 | 23 | 5 | 19 | 42 |
| E-207-12 | M12 | 3.5 | 6.2 | 26 | 6 | 22 | 57 |
| E-207-16 | M16 | 4.5 | 8.5 | 33 | 8 | 38 | 78 |
| E-207-20 | M20 | 6.5 | 10 | 43 | 10 | 39 | 81 |
| E-207-24 | M24 | 8 | 13 | 48 | 12 | 72 | 155 |
| E-207-06 | M 6 | 2 | 2.7 | 15 | 3 | 11 | 25 |
| E-207-08 | M 8 | 2 | 3.8 | 18 | 4 | 23 | 59 |
| E-207-10 | M10 | 2.5 | 4.5 | 23 | 5 | 20 | 54 |
| E-207-12 | F2 M12 | 3.5 | 6.2 | 26 | 6 | 38 | 96 |
| E-207-16 | M16 | 4.5 | 8.5 | 33 | 8 | 50 | 100 |
| E-207-20 | M20 | 6.5 | 10 | 43 | 10 | 52 | 133 |
| E-207-24 | M24 | 8 | 13 | 48 | 12 | 91 | 223 |
| E-207-04 | M 4 | 1.5 | 1.8 | 12 | 2 | 4.5 | 12.5 |
| E-207-05 | M 5 | 2 | 2.4 | 14 | 2.5 | 5 | 13 |
| E-207-06 | M 6 | 2 | 2.7 | 15 | 3 | 6 | 17 |
| E-207-08 | M 8 | 2 | 3.8 | 18 | 4 | 16 | 33 |
| E-207-10 | F3 M10 | 2.5 | 4.5 | 23 | 5 | 19 | 42 |
| E-207-12 | M12 | 3.5 | 6.2 | 26 | 6 | 22 | 57 |
| E-207-16 | M16 | 4.5 | 8.5 | 33 | 8 | 38 | 78 |
| E-207-20 | M20 | 6.5 | 10 | 43 | 10 | 39 | 81 |
| E-207-24 | M24 | 8 | 13 | 48 | 12 | 72 | 155 |
| E-207-06 | M 6 | 2 | 2.7 | 15 | 3 | 11 | 25 |
| E-207-08 | M 8 | 2 | 3.8 | 18 | 4 | 23 | 59 |
| E-207-10 | M10 | 2.5 | 4.5 | 23 | 5 | 20 | 54 |
| E-207-12 | F4 M12 | 3.5 | 6.2 | 26 | 6 | 38 | 96 |
| E-207-16 | M16 | 4.5 | 8.5 | 33 | 8 | 50 | 100 |
| E-207-20 | M20 | 6.5 | 10 | 43 | 10 | 52 | 133 |
| E-207-24 | M24 | 8 | 13 | 48 | 12 | 91 | 223 |

Ordering example: 4 x E-207-06-F3

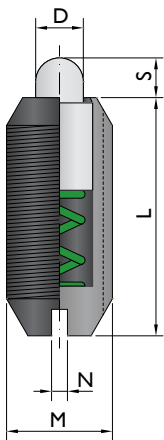
Spring Plunger with pin and slot

FINISH



| FI | F2 | F3 | F4 |
|---|---|---------------------------------------|------------------------------------|
| Free cutting steel, blackened | Free cutting steel, blackened | Stainless steel I.4305 | Stainless steel I.4305 |
| Free cutting steel, hardened, blackened | Free cutting steel, hardened, blackened | Stainless steel I.4305 | Stainless steel I.4305 |
| Stainless steel, standard spring load | Stainless steel, heavy spring load | Stainless steel, standard spring load | Stainless steel, heavy spring load |

| Order No. | M | S mm | D mm | L mm | N mm | F S=0 N | F Smax N |
|-----------|--------|------|------|------|------|---------|----------|
| E-208-04 | M 4 | 1.5 | 1.8 | 9 | 0.6 | 4.5 | 12.5 |
| E-208-05 | M 5 | 2 | 2.4 | 12 | 0.8 | 5 | 13 |
| E-208-06 | M 6 | 2 | 2.7 | 14 | 1 | 6 | 17 |
| E-208-08 | M 8 | 2 | 3.8 | 16 | 1.2 | 16 | 33 |
| E-208-10 | FI M10 | 2.5 | 4.5 | 19 | 1.5 | 19 | 42 |
| E-208-12 | M12 | 3.5 | 6.2 | 22 | 2 | 22 | 57 |
| E-208-16 | M16 | 4.5 | 8.5 | 24 | 2 | 38 | 78 |
| E-208-20 | M20 | 6.5 | 10 | 30 | 2.5 | 39 | 81 |
| E-208-24 | M24 | 8 | 13 | 34 | 3 | 72 | 155 |
| E-208-06 | M 6 | 2 | 2.7 | 14 | 1 | 11 | 25 |
| E-208-08 | M 8 | 2 | 3.8 | 16 | 1.2 | 23 | 59 |
| E-208-10 | M10 | 2.5 | 4.5 | 19 | 1.5 | 20 | 54 |
| E-208-12 | F2 M12 | 3.5 | 6.2 | 22 | 2 | 38 | 96 |
| E-208-16 | M16 | 4.5 | 8.5 | 24 | 2 | 50 | 100 |
| E-208-20 | M20 | 6.5 | 10 | 30 | 2.5 | 52 | 133 |
| E-208-24 | M24 | 8 | 13 | 34 | 3 | 91 | 223 |
| E-208-04 | M 4 | 1.5 | 1.8 | 9 | 0.6 | 4.5 | 12.5 |
| E-208-05 | M 5 | 2 | 2.4 | 12 | 0.8 | 5 | 13 |
| E-208-06 | M 6 | 2 | 2.7 | 14 | 1 | 6 | 17 |
| E-208-08 | M 8 | 2 | 3.8 | 16 | 1.2 | 16 | 33 |
| E-208-10 | F3 M10 | 2.5 | 4.5 | 19 | 1.5 | 19 | 42 |
| E-208-12 | M12 | 3.5 | 6.2 | 22 | 2 | 22 | 57 |
| E-208-16 | M16 | 4.5 | 8.5 | 24 | 2 | 38 | 78 |
| E-208-20 | M20 | 6.5 | 10 | 30 | 2.5 | 39 | 81 |
| E-208-24 | M24 | 8 | 13 | 34 | 3 | 72 | 155 |
| E-208-06 | M 6 | 2 | 2.7 | 14 | 1 | 11 | 25 |
| E-208-08 | M 8 | 2 | 3.8 | 16 | 1.2 | 23 | 59 |
| E-208-10 | M10 | 2.5 | 4.5 | 19 | 1.5 | 20 | 54 |
| E-208-12 | F4 M12 | 3.5 | 6.2 | 22 | 2 | 38 | 96 |
| E-208-16 | M16 | 4.5 | 8.5 | 24 | 2 | 50 | 100 |
| E-208-20 | M20 | 6.5 | 10 | 30 | 2.5 | 52 | 133 |
| E-208-24 | M24 | 8 | 13 | 34 | 3 | 91 | 223 |

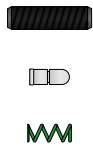


Ordering example: 4 x E-208-05-F3



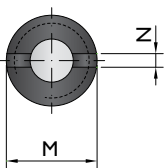
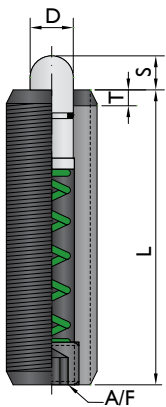
Spring Plunger with internal hexagon and seal

FINISH



| FI | F2 | F3 |
|---|---|---------------------------------------|
| Free cutting steel, blackened | Free cutting steel, blackened | Stainless steel I.4305 |
| Free cutting steel, hardened, blackened | Free cutting steel, hardened, blackened | Stainless steel I.4305 |
| Stainless steel, standard spring load | Stainless steel, heavy spring load | Stainless steel, standard spring load |

| Order No. | M | S mm | D mm | L mm | A/F | N mm | T mm | F S=0 N | F Smax N |
|-----------|-----|---------|---------|---------|-----|---------|---------|------------|-------------|
| E-209-08 | M 8 | 3 | 3.8 | 26 | 2.5 | 1.5 | 1.4 | 9 | 24 |
| E-209-10 | M10 | 3.5 | 4 | 28 | 3 | 1.5 | 1.4 | 15 | 30 |
| E-209-12 | M12 | 4 | 6 | 35 | 4 | 2.7 | 2 | 24 | 50 |
| E-209-16 | M16 | 5 | 7.5 | 40 | 5 | 3.2 | 2.5 | 36 | 58 |
| E-209-08 | M 8 | 3 | 3.8 | 26 | 2.5 | 1.5 | 1.4 | 17 | 39 |
| E-209-10 | M10 | 3.5 | 4 | 28 | 3 | 1.5 | 1.4 | 22 | 43 |
| E-209-12 | M12 | 4 | 6 | 35 | 4 | 2.7 | 2 | 40 | 80 |
| E-209-16 | M16 | 5 | 7.5 | 40 | 5 | 3.2 | 2.5 | 44 | 113 |
| E-209-08 | M 8 | 3 | 3.8 | 26 | 2.5 | 1.5 | 1.4 | 9 | 24 |
| E-209-10 | M10 | 3.5 | 4 | 28 | 3 | 1.5 | 1.4 | 15 | 30 |
| E-209-12 | M12 | 4 | 6 | 35 | 4 | 2.7 | 2 | 24 | 50 |
| E-209-16 | M16 | 5 | 7.5 | 40 | 5 | 3.2 | 2.5 | 36 | 58 |

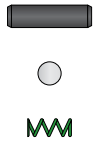


Ordering example: 4 x E-209-08-F3

See keys on page 316.

Smooth Spring Plunger without collar

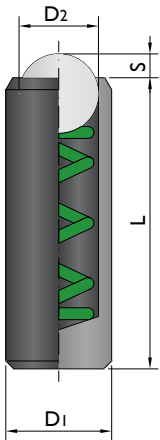
FINISH



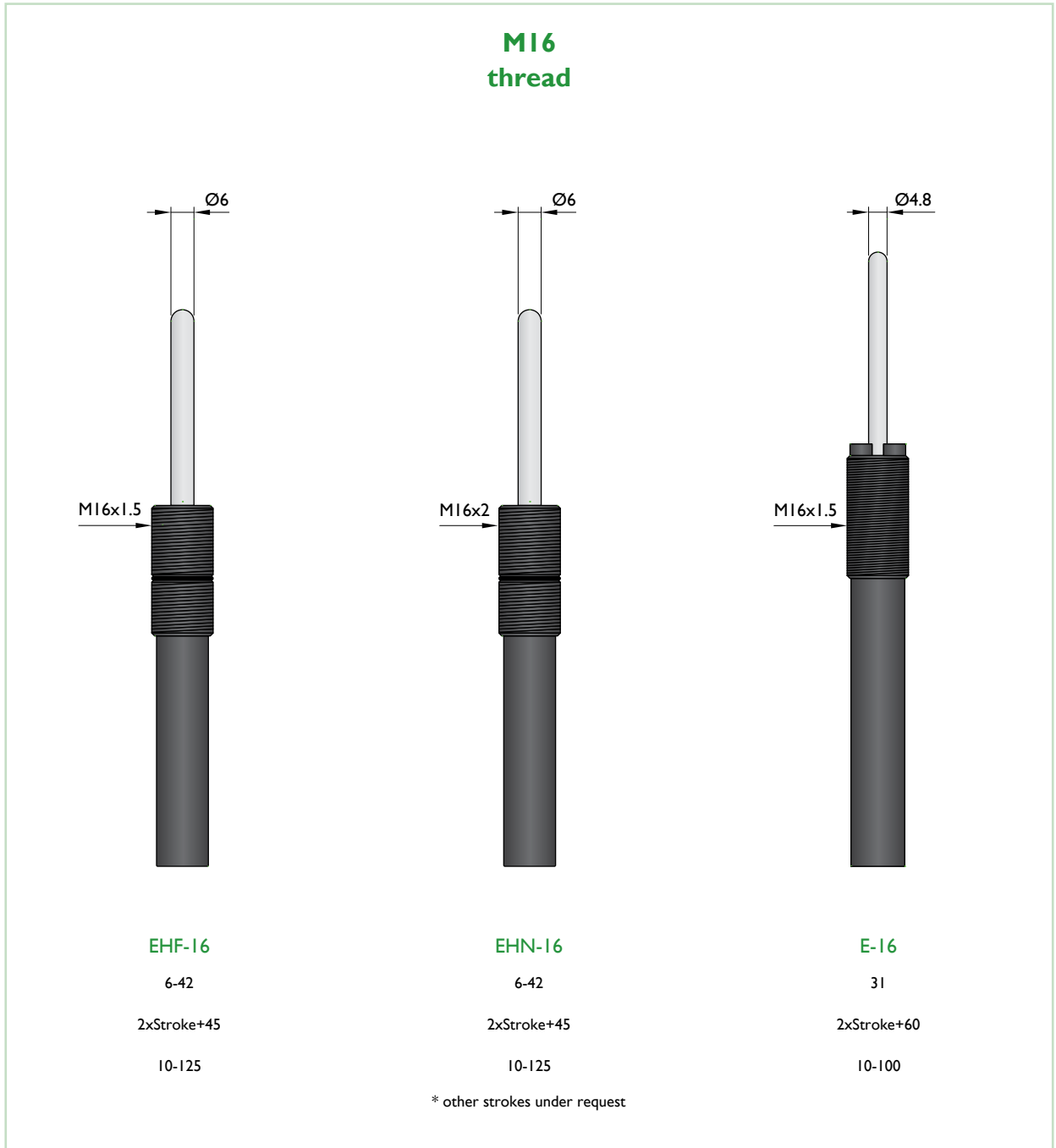
| FI |
|------------------------------|
| Stainless steel 1.4305 |
| Stainless steel, hardened |
| Stainless steel |

| Order No. | | D ₁ mm | S mm | D ₂ mm | L mm | F S=0 N | F Smax N |
|-----------|----|----------------------|---------|----------------------|---------|------------|-------------|
| E-210-020 | | 2 | 0.3 | 1 | 3.5 | 0.8 | 1.5 |
| E-210-025 | | 2.5 | 0.4 | 1.5 | 5 | 2.8 | 4.7 |
| E-210-030 | | 3 | 0.65 | 2 | 7 | 4.5 | 7.5 |
| E-210-035 | | 3.5 | 0.8 | 2.5 | 9 | 6 | 14.5 |
| E-210-040 | FI | 4 | 0.9 | 3 | 11 | 8 | 14 |
| E-210-045 | | 4.5 | 0.95 | 3.2 | 12 | 9.5 | 16.5 |
| E-210-050 | | 5 | 1 | 3.5 | 13 | 11 | 18 |
| E-210-055 | | 5.5 | 1.2 | 4 | 14 | 15.5 | 25 |
| E-210-060 | | 6 | 1.5 | 4.5 | 15 | 18 | 31 |

Ordering example: 4 x E-210-04-FI



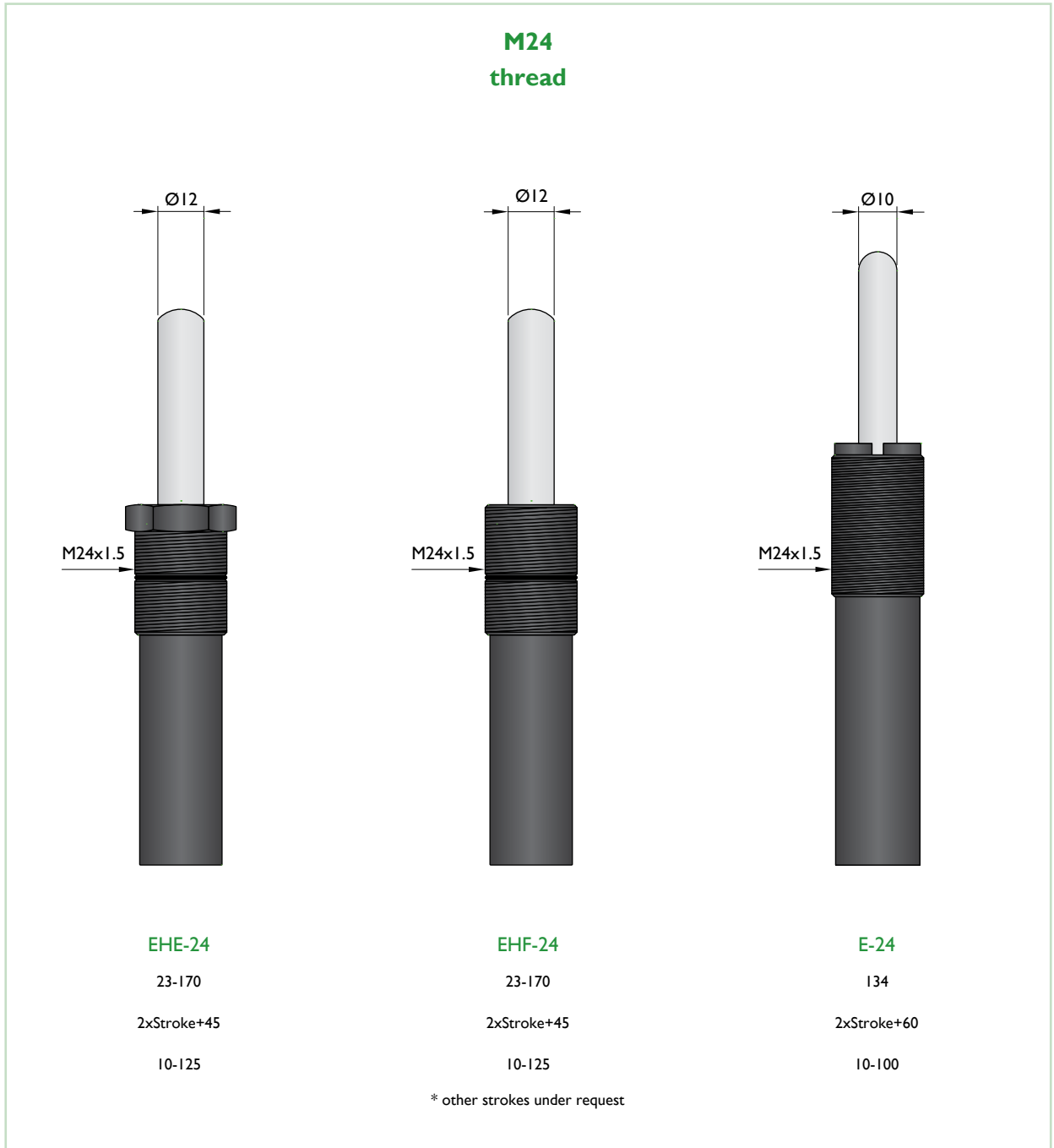
Ejector Pin Units



Standards

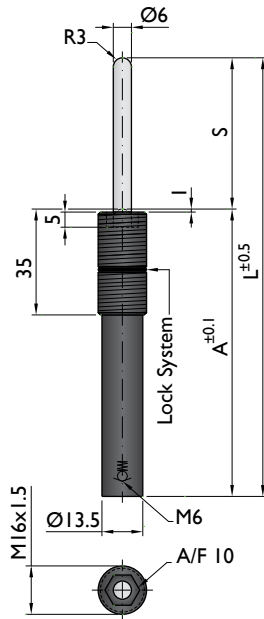
| | | |
|--------------------------|--------------------------|--------------------------|
| PED 2014/68/EU | PED 2014/68/EU | PED 2014/68/EU |
| ISO 11901 | ISO 11901 | ISO 11901 |
| VDI 3004 | VDI 3004 | VDI 3004 |
| CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 |

Ejector Pin Units



Standards

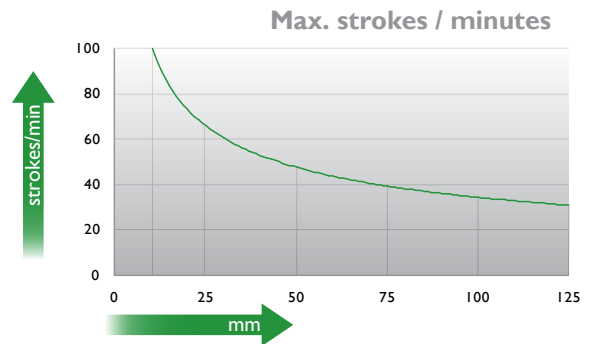
| | | |
|-----------------------------|-----------------------------|-----------------------------|
| PED 2014/68/EU | PED 2014/68/EU | PED 2014/68/EU |
| ISO 11901 | ISO 11901 | ISO 11901 |
| VDI 3004 | VDI 3004 | VDI 3004 |
| CNOMO EM24.54.700 | CNOMO EM24.54.700 | CNOMO EM24.54.700 |



Force / Pressure

| | | daN | bar (20°C) |
|---|--------|-----|------------|
| V | GREEN | 6 | 20 |
| Z | BLUE | 11 | 40 |
| R | RED | 21 | 75 |
| A | YELLOW | 42 | 150 |

* maximum force if not specified



Ordering example: 4 x EHF-16-50 A

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | |
|------------|------------------------|---------|---------|---|----------|
| | | | | | F daN |
| EHF-16-10 | 10 | 65 | 55 | | 73 |
| EHF-16-20 | 20 | 85 | 65 | | 66 |
| EHF-16-30 | 30 | 105 | 75 | | 64 |
| EHF-16-40 | 40 | 125 | 85 | | 64 |
| EHF-16-50 | 50 | 145 | 95 | 42 | 67 |
| EHF-16-60 | 60 | 165 | 105 | | 66 |
| EHF-16-70 | 70 | 185 | 115 | | 65 |
| EHF-16-80 | 80 | 205 | 125 | | 65 |
| EHF-16-100 | 100 | 245 | 145 | | 64 |
| EHF-16-125 | 125 | 295 | 170 | | 64 |

⁽¹⁾ other strokes under request

⁽²⁾ alternative forces upon request

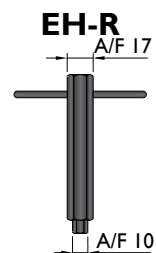


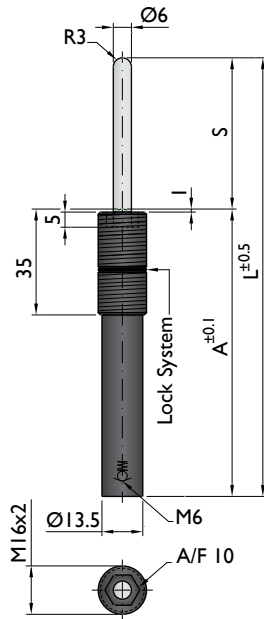
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|----------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperatura related force increase | +0.34%/°C | Repair Kit | Non-repairable |
| Min. Charging pressure | 20 bar | Max. working speed | 1.6 m/s | Linkable | No |

Mounting possibilities



Key



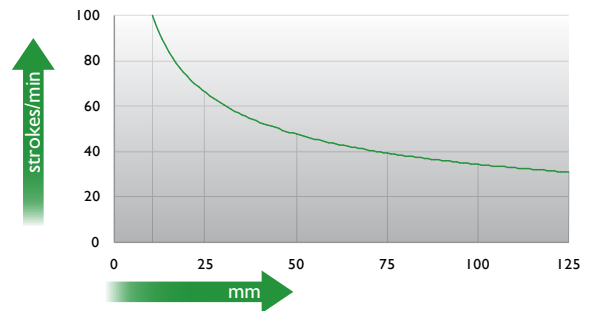


Force / Pressure

| | | daN | bar (20°C) |
|---|--------|-----|------------|
| V | GREEN | 6 | 20 |
| Z | BLUE | 11 | 40 |
| R | RED | 21 | 75 |
| A | YELLOW | 42 | 150 |

* maximum force if not specified

Max. strokes / minutes



Ordering example: 4 x EHN-16-50 Z

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | |
|------------|------------------------|---------|---------|---|----|
| | | | | | |
| EHN-16-10 | 10 | 65 | 55 | | 73 |
| EHN-16-20 | 20 | 85 | 65 | | 66 |
| EHN-16-30 | 30 | 105 | 75 | | 64 |
| EHN-16-40 | 40 | 125 | 85 | | 64 |
| EHN-16-50 | 50 | 145 | 95 | 42 | 67 |
| EHN-16-60 | 60 | 165 | 105 | | 66 |
| EHN-16-70 | 70 | 185 | 115 | | 65 |
| EHN-16-80 | 80 | 205 | 125 | | 65 |
| EHN-16-100 | 100 | 245 | 145 | | 64 |
| EHN-16-125 | 125 | 295 | 170 | | 64 |

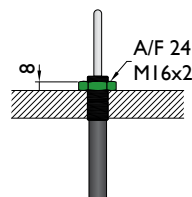
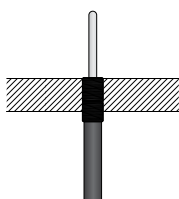
⁽¹⁾ other strokes under request

⁽²⁾ alternative forces upon request

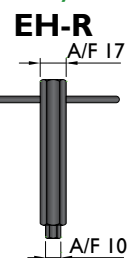


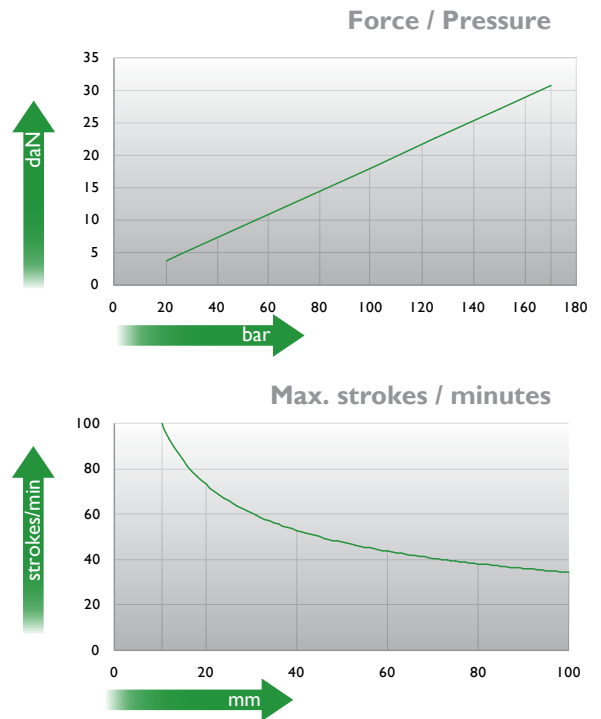
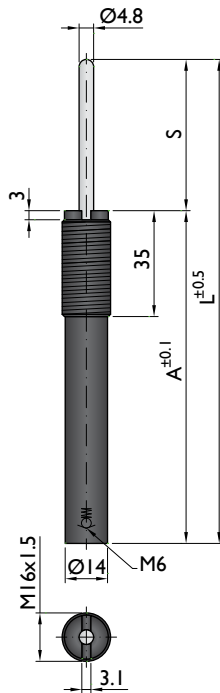
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|----------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperatura related force increase | +0.34%/°C | Repair Kit | Non-repairable |
| Min. Charging pressure | 20 bar | Max. working speed | 1.6 m/s | Linkable | No |

Mounting possibilities



Key





Ordering example: 4 x E-16-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 170 bar) | |
|-----------|------------------------|---------|---------|---|----|
| | | | | | |
| E-16-10 | 10 | 80 | 70 | | 34 |
| E-16-20 | 20 | 100 | 80 | | 35 |
| E-16-30 | 30 | 120 | 90 | | 36 |
| E-16-40 | 40 | 140 | 100 | | 36 |
| E-16-50 | 50 | 160 | 110 | 31 | 36 |
| E-16-60 | 60 | 180 | 120 | | 37 |
| E-16-70 | 70 | 200 | 130 | | 37 |
| E-16-80 | 80 | 220 | 140 | | 37 |
| E-16-100 | 100 | 260 | 160 | | 38 |

⁽¹⁾ other strokes under request

⁽²⁾ alternative forces upon request



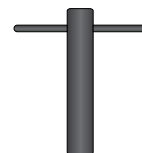
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|----------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 170 bar | Temperatura related force increase | +0.34%/°C | Repair Kit | Non-repairable |
| Min. Charging pressure | 20 bar | Max. working speed | 1.6 m/s | Linkable | No |

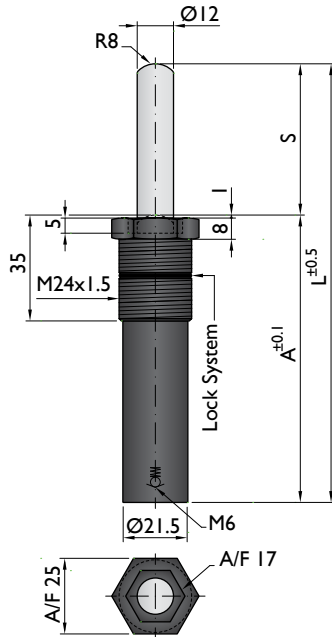
Mounting possibilities



Key

E-16-R



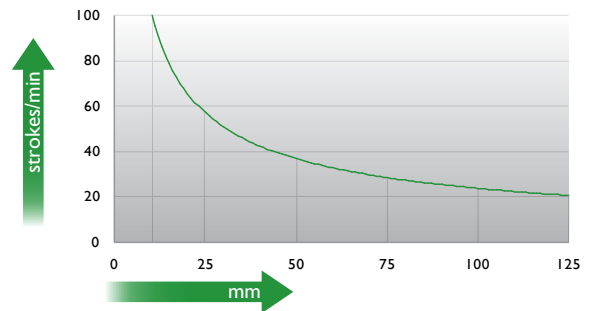


Force / Pressure

| | | daN | bar (20°C) |
|---|--------|-----|------------|
| V | GREEN | 23 | 20 |
| Z | BLUE | 45 | 40 |
| R | RED | 85 | 75 |
| A | YELLOW | 170 | 150 |

* maximum force if not specified

Max. strokes / minutes



Ordering example: 4 x EHE-24-50 R

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ (20°C, 150 bar) | |
|------------|------------------------|---------|---------|--|----------|
| | | | | daN | F daN |
| EHE-24-10 | 10 | 65 | 55 | | 243 |
| EHE-24-16 | 16 | 77 | 61 | | 275 |
| EHE-24-20 | 20 | 85 | 65 | | 269 |
| EHE-24-25 | 25 | 95 | 70 | | 292 |
| EHE-24-30 | 30 | 105 | 75 | | 281 |
| EHE-24-38 | 38 | 121 | 83 | | 305 |
| EHE-24-40 | 40 | 125 | 85 | 170 | 289 |
| EHE-24-50 | 50 | 145 | 95 | | 313 |
| EHE-24-60 | 60 | 165 | 105 | | 314 |
| EHE-24-70 | 70 | 185 | 115 | | 315 |
| EHE-24-80 | 80 | 205 | 125 | | 315 |
| EHE-24-100 | 100 | 245 | 145 | | 316 |
| EHE-24-125 | 125 | 295 | 170 | | 317 |

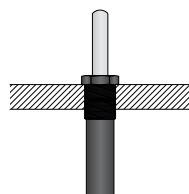
⁽¹⁾ other strokes under request

⁽²⁾ alternative forces upon request

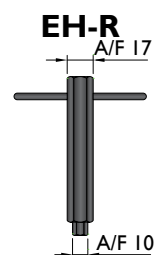


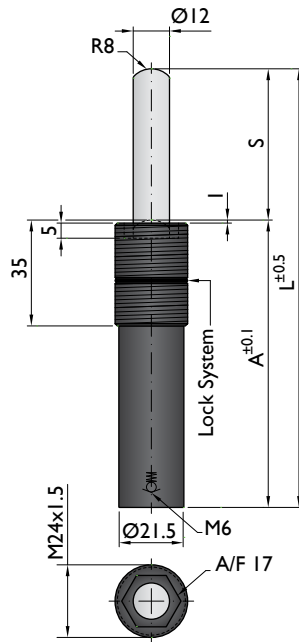
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|----------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperatura related force increase | +0.34%/°C | Repair Kit | Non-repairable |
| Min. Charging pressure | 20 bar | Max. working speed | 1.6 m/s | Linkable | No |

Mounting possibilities



Key



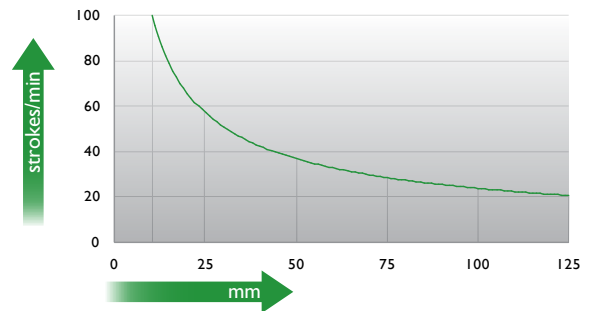


Force / Pressure

| | | daN | bar (20°C) |
|---|--------|-----|------------|
| V | GREEN | 23 | 20 |
| Z | BLUE | 45 | 40 |
| R | RED | 85 | 75 |
| A | YELLOW | 170 | 150 |

* maximum force if not specified

Max. strokes / minutes



Ordering example: 4 x EHF-24-50 V

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 150 bar) | |
|------------|------------------------|---------|---------|---|----------|
| | | | | | F daN |
| EHF-24-10 | 10 | 65 | 55 | | 245 |
| EHF-24-20 | 20 | 85 | 65 | | 269 |
| EHF-24-30 | 30 | 105 | 75 | | 282 |
| EHF-24-40 | 40 | 125 | 85 | | 291 |
| EHF-24-50 | 50 | 145 | 95 | 170 | 314 |
| EHF-24-60 | 60 | 165 | 105 | | 314 |
| EHF-24-70 | 70 | 185 | 115 | | 316 |
| EHF-24-80 | 80 | 205 | 125 | | 316 |
| EHF-24-100 | 100 | 245 | 145 | | 318 |
| EHF-24-125 | 125 | 295 | 170 | | 318 |

⁽¹⁾ other strokes under request

⁽²⁾ alternative forces upon request

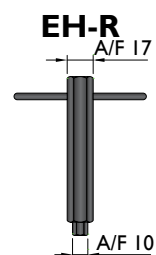


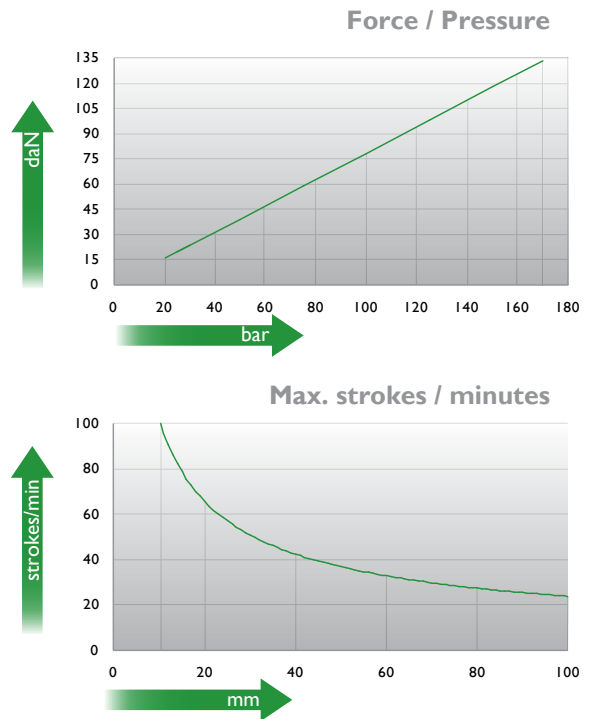
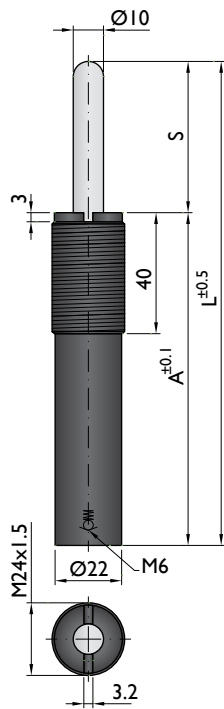
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|----------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 150 bar | Temperatura related force increase | +0.34%/°C | Repair Kit | Non-repairable |
| Min. Charging pressure | 20 bar | Max. working speed | 1.6 m/s | Linkable | No |

Mounting possibilities



Key





Ordering example: 4 x E-24-50

| Order No. | S ⁽¹⁾ mm | L mm | A mm | F ₀ ⁽²⁾ daN (20°C, 170 bar) | |
|-----------|------------------------|---------|---------|---|-----|
| | | | | | |
| E-24-10 | 10 | 80 | 70 | | 152 |
| E-24-20 | 20 | 100 | 80 | | 161 |
| E-24-30 | 30 | 120 | 90 | | 168 |
| E-24-40 | 40 | 140 | 100 | | 172 |
| E-24-50 | 50 | 160 | 110 | 134 | 175 |
| E-24-60 | 60 | 180 | 120 | | 177 |
| E-24-70 | 70 | 200 | 130 | | 179 |
| E-24-80 | 80 | 220 | 140 | | 180 |
| E-24-100 | 100 | 260 | 160 | | 182 |

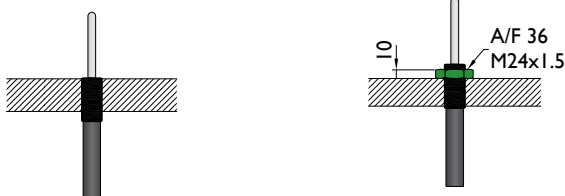
⁽¹⁾ other strokes under request

⁽²⁾ alternative forces upon request



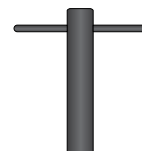
| | | | | | |
|------------------------|----------------|------------------------------------|-----------|----------------------|----------------|
| Pressure medium | N ₂ | Working temperature | 0-80°C | Min. security stroke | 10% |
| Max. Charging pressure | 170 bar | Temperatura related force increase | +0.34%/°C | Repair Kit | Non-repairable |
| Min. Charging pressure | 20 bar | Max. working speed | 1.6 m/s | Linkable | No |

Mounting possibilities



Key

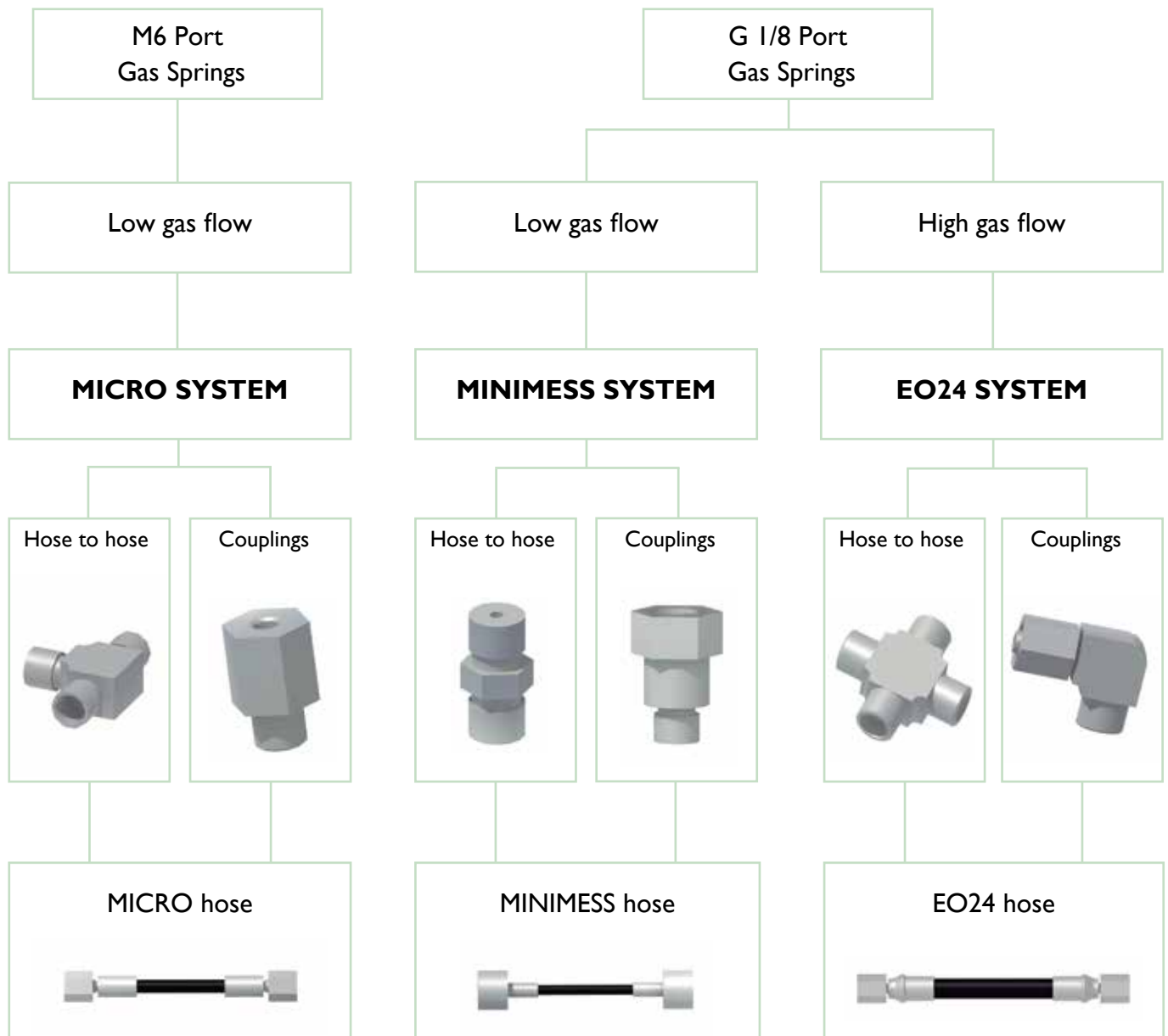
E-24-R



Linking system selection

Linking gas springs allows to monitor and adjust pressure as well as charge and discharge the gas springs from outside the die. It also ensures a balanced force among several gas springs (with similar technical features).

NITROGAS offers various types of hoses, adapters and control panels to design a customized linked system. Those components are divided into 3 different systems: Micro Systems, EO24 Systems and Minimes Systems.



The possibility of being or not connecting, as well as the connection type (M6 or G1/8") of each gas spring model is indicated in the specification sheet of each model.



Safety standards

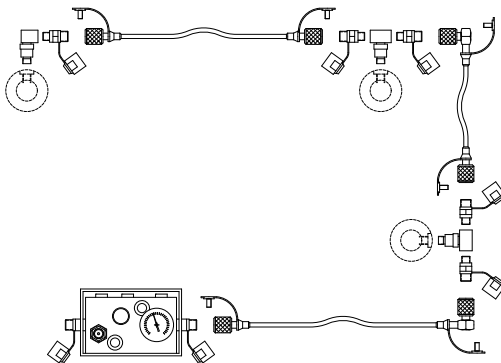
When looking for safety and optimum performance life in a hose system creation, it is important to consider the following points:

- Before converting gas springs from self-contained to linked mode and remove the valve, **ensure the gas spring is completely discharged.**
- Place the control panel in the tool where it will be protected from mechanical damage, and on a higher level than the gas springs to minimize loss of lubrication oil when discharging the gas.
- Use only nitrogen (N_2) gas. The use of other types of gas can result in personal injury or failure of the gas spring/control panel.
- Do not exceed the maximum pressures and temperatures given for the hoses and gas springs.
- All valves on the control panel should be closed during operation.
- All gas springs hosed together should be of the same size and model.

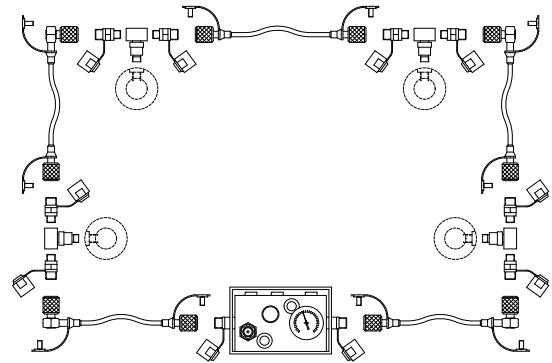
NITROGAS provides training courses on piping gas springs systems.

Mounting arrangement

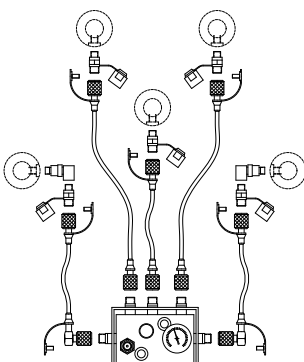
Open line



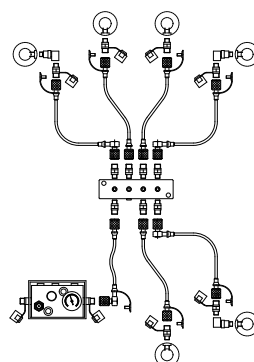
Closed ring line



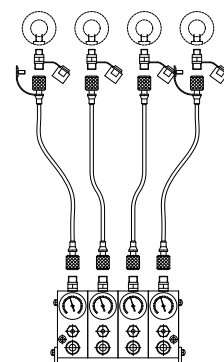
Group series



Group series
with distribution block



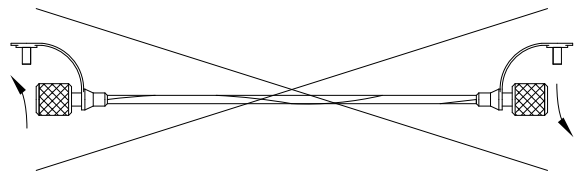
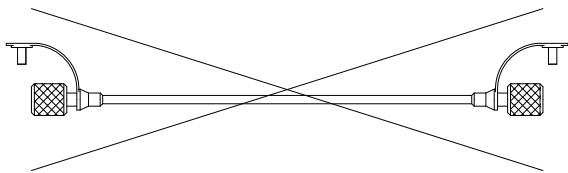
Group series
with multiple control panel



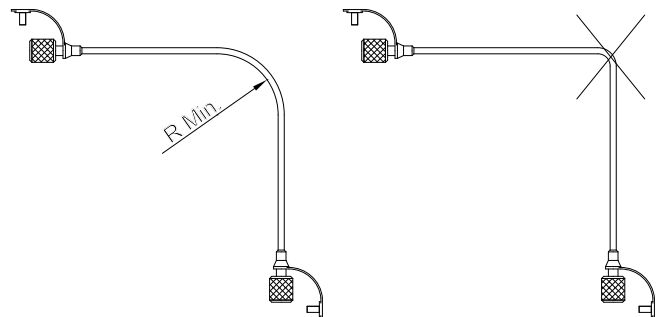
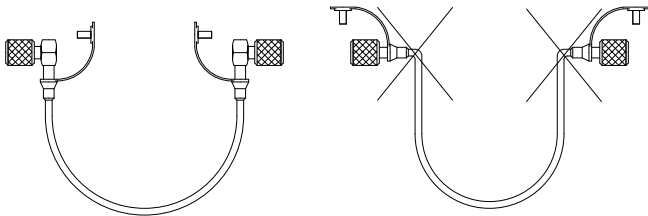
Specification for installation

Follow the instruction below to ensure functionality and maximum service life for hose connection. Ensure that all hoses and adaptors are perfectly clean before assembling.

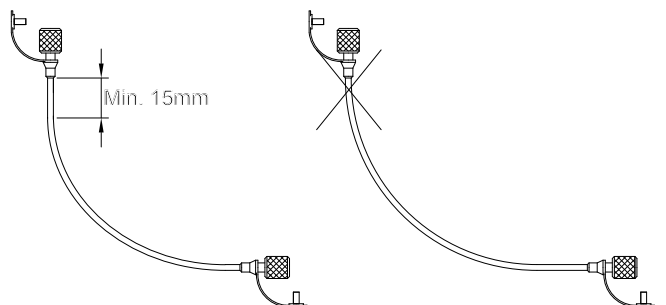
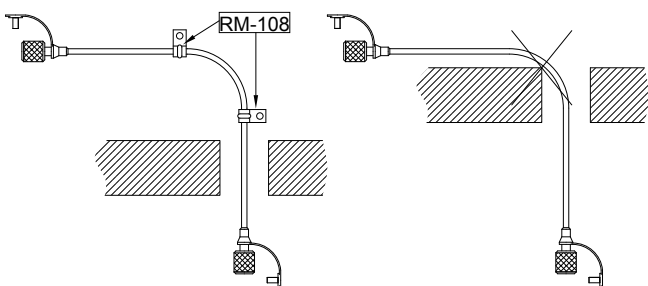
1. The hose length must provide a certain amount of play.
2. Do not twist the longitudinal marking during assembly.



3. Choose the appropriate fittings to avoid sharp bends in the hose.
4. Any bends in the hose must have at least the recommended minimum radius.



5. Fix the hose correctly to avoid mechanical damage. We recommend using RM-108 clips to fix the hose.
6. The hose must have at least a minimum drop length.

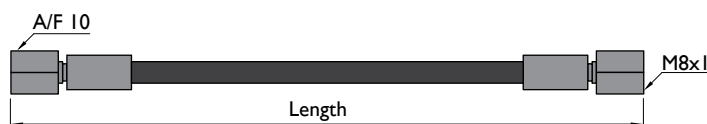


Micro System

Hoses

| Basic information | |
|-----------------------|--------------------------------------|
| Material | Polyamide |
| Dimension | External Ø 4.9 mm Internal Ø 2 mm |
| Min. bend radius | 20 mm |
| Max. working pressure | 630 bar |
| Min. burst pressure | 1900 bar |
| Operating temperature | -40°C / +100°C |
| Minimum length | 200 mm |

LKI



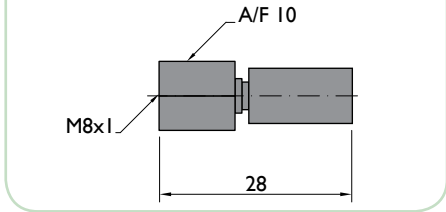
Ordering example: LKI-Length in mm

4 x LKI-750

Micro System

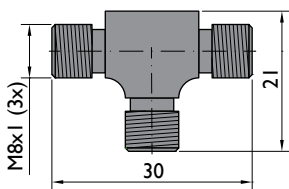
Terminals

TERM-LK

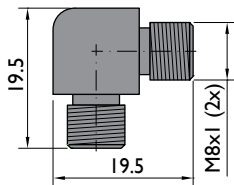


Hose to hose

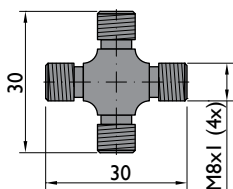
RC-605



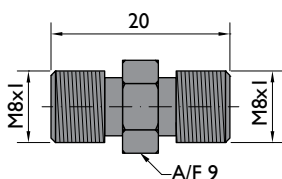
RC-606



RC-607

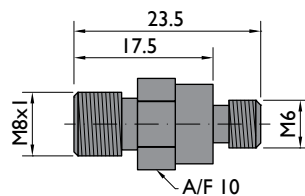


RM-609

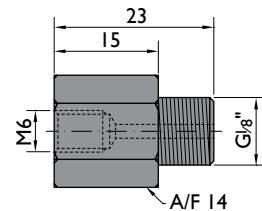


Couplings

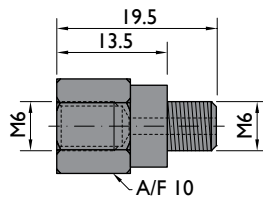
RM-601



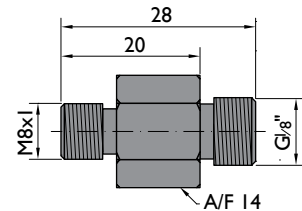
RM-602



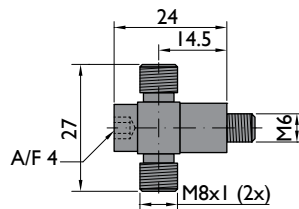
RM-603



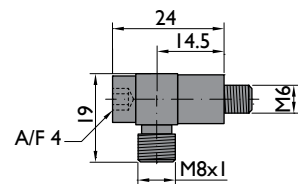
RM-604



RM-605



RM-606

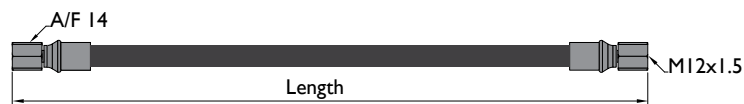


EO24 System

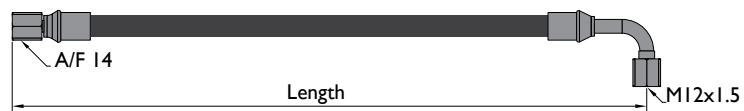
Hoses

| Basic information | |
|-----------------------|---|
| Material | Polyamide |
| Dimension | External Ø 10.7 mm Internal Ø 4.8 mm |
| Min. bend radius | 40 mm |
| Max. working pressure | 345 bar |
| Min. burst pressure | 1380 bar |
| Operating temperature | -40°C / +100°C |
| Minimum length | 300 mm |

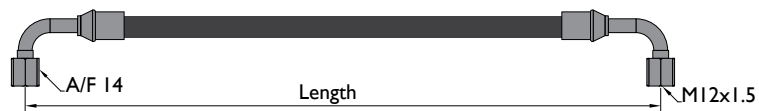
LD1



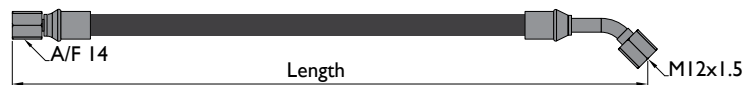
LD2



LD3



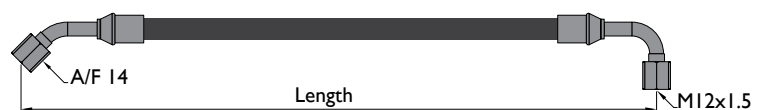
LD4



LD5



LD6



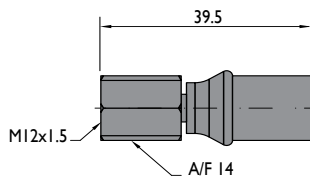
Ordering example: LD(1,2,3,4,5,6)-Length in mm

4 x LD1-750

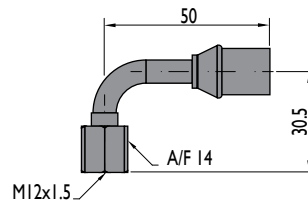
EO24 System

Terminals

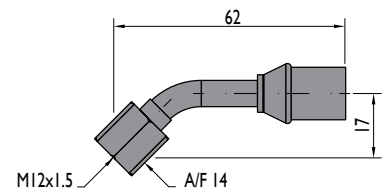
TERM-LDR



TERM-LDC

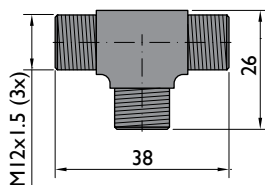


TERM-LDA

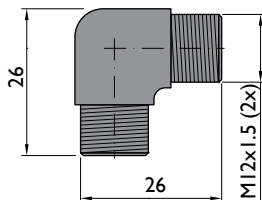


Hose to hose

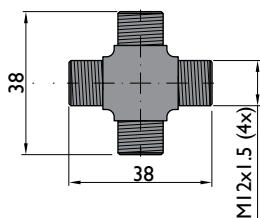
RC-505



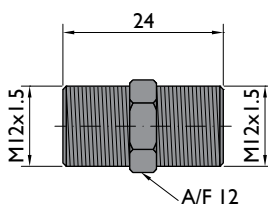
RC-506



RC-507

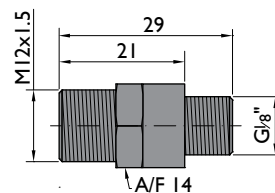


RM-509

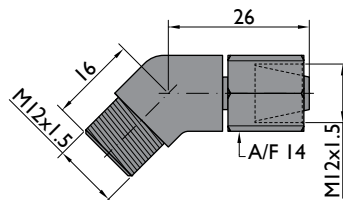


Couplings

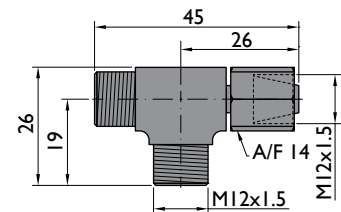
RM-501



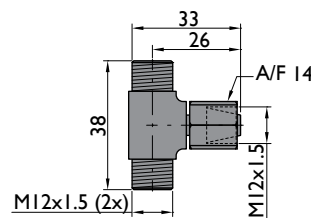
RM-503



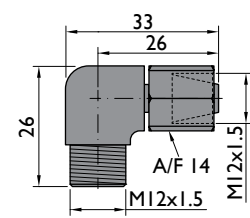
RM-504



RM-505



RM-506

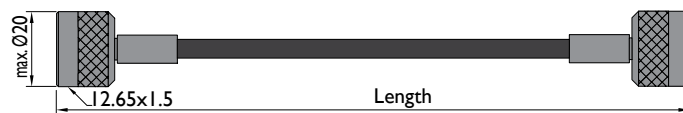


Minimess System

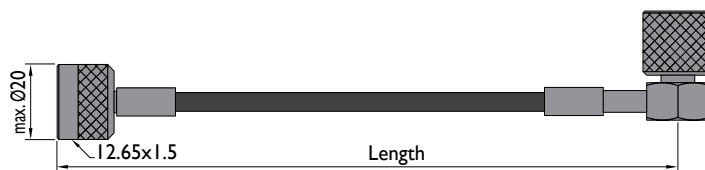
Hoses

| Basic information | |
|-----------------------|--------------------------------------|
| Material | Polyamide |
| Dimension | External Ø 4.9 mm Internal Ø 2 mm |
| Min. bend radius | 20 mm |
| Max. working pressure | 630 bar |
| Min. burst pressure | 1900 bar |
| Operating temperature | -40°C / +100°C |
| Minimum length | 200 mm |

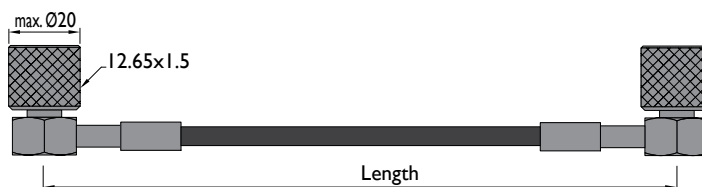
LM1



LM2



LM3



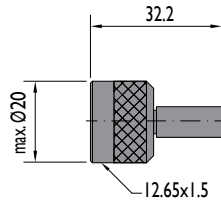
Ordering example: LM(1,2,3)-Length in mm

4 x LM1-750

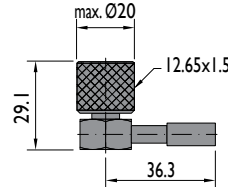
Minimess System

Terminals

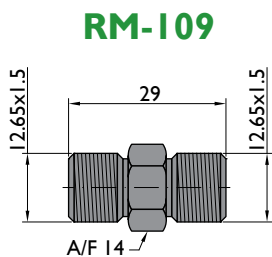
TERM-RECTO



TERM-CODO

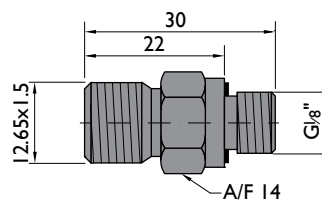


Hose to hose

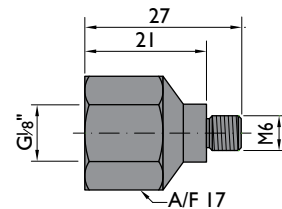


Couplings

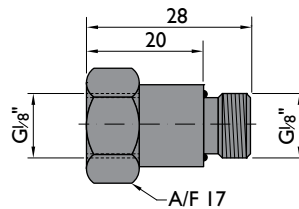
RM-101*



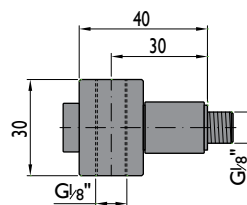
RM-201



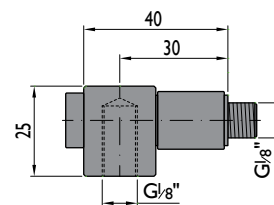
RM-103



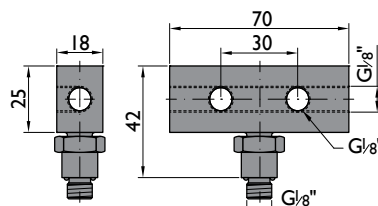
RM-105



RM-106



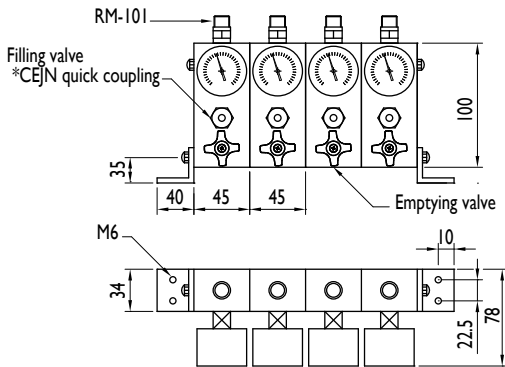
MP-125



* Includes a non-return valve to keep the pressure on each gas spring individually when removing the hoses.

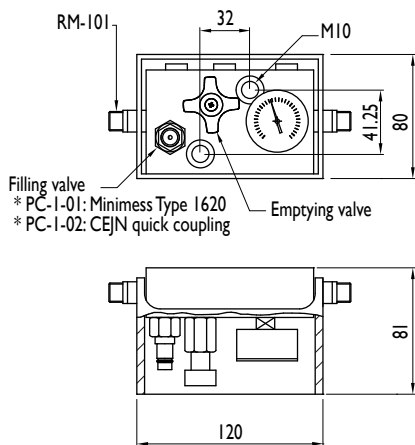
Control panels

PCM-8



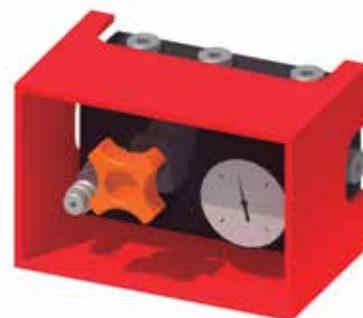
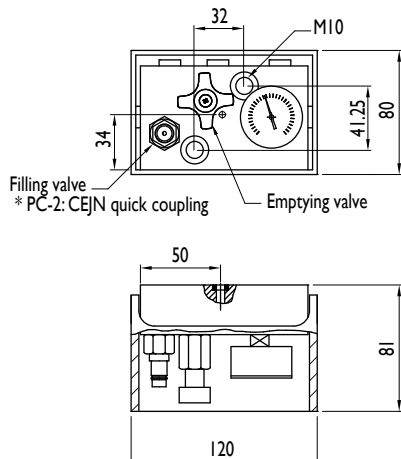
Minimess

PC-I



Minimess

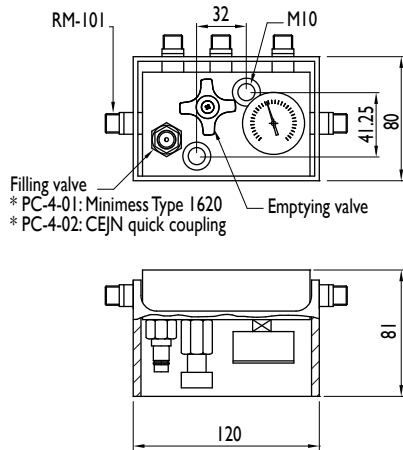
PC-2



Minimess

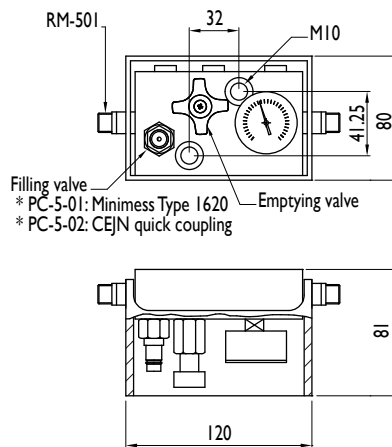
Control panels

PC-4



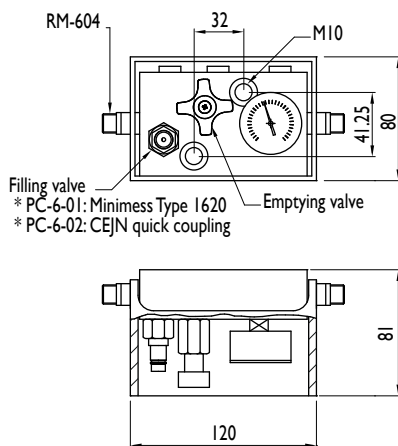
Minimes

PC-5



EO24

PC-6

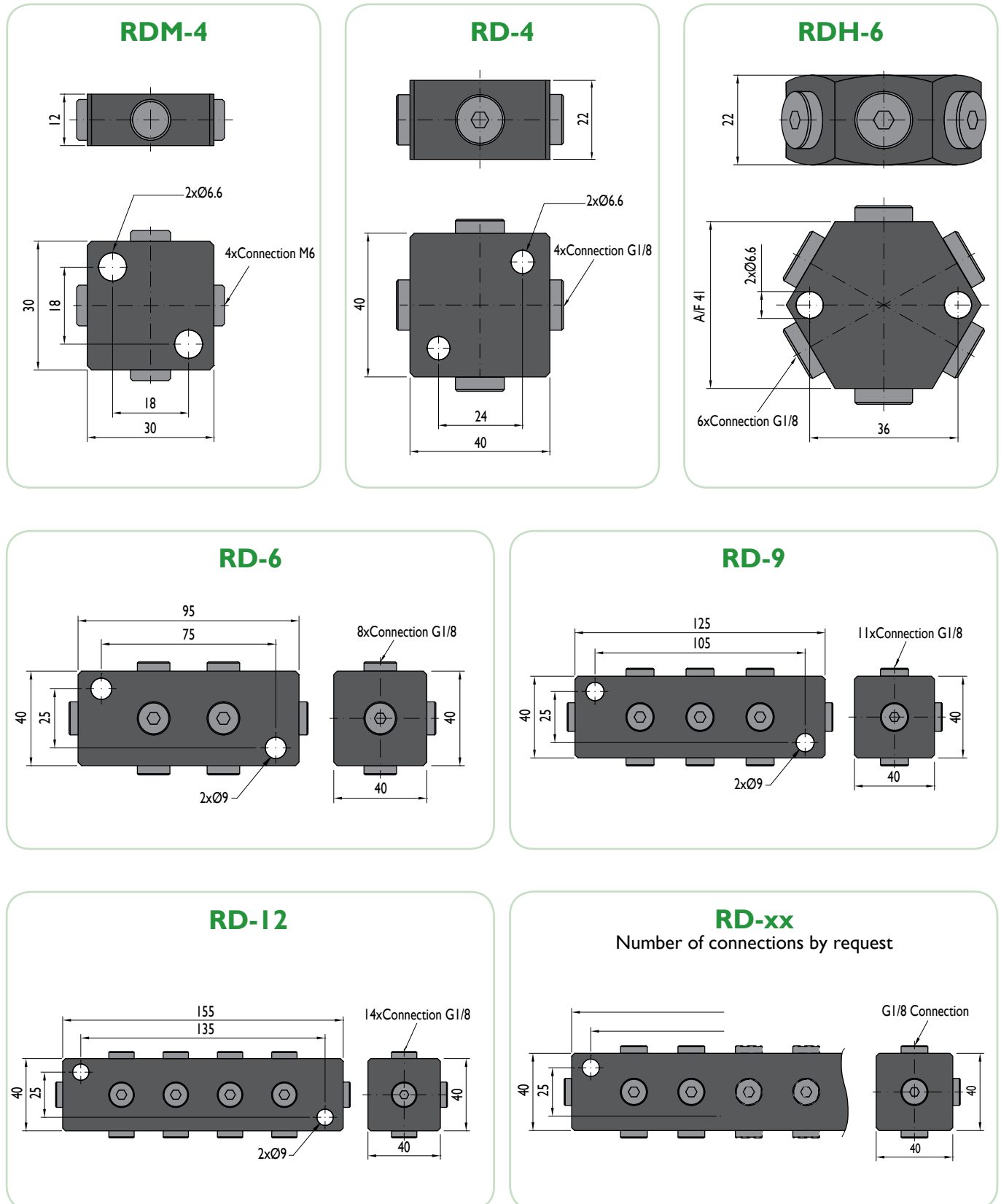


Micro



Distribution blocks

Distribution blocks simplify piping to multiple cylinders with a uniform system pressure. NITROGAS offers distribution blocks with M6 and G 1/8 connections.



Charging equipment

EC-100



Loading equipment

CP-218 1/8



Pressure tester regulator

ED-150



Hose for loading equipment 1,5m.

RP-106



Pressure regulator

Quick coupling

Female



Quick coupling female adapter

| Port | Reference |
|-------|-----------|
| G1/4" | QCF-1/4 |

Quick coupling

Male



Quick coupling male adapter

| Port | Reference |
|-------|-----------|
| G1/4" | QCM-1/4 |
| G1/8" | QCM-1/8 |

DF-01



Leak detector spray

MP-122



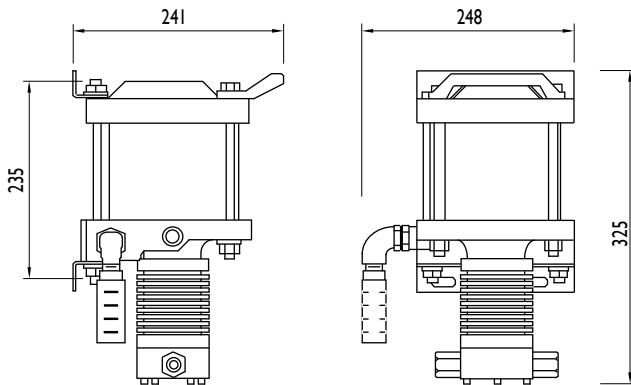
Pressure gauge

| Dimensions | |
|------------|--------|
| Diameter | 40 mm |
| Width | 27 mm |
| Port | G1/8 " |



Booster

MP30



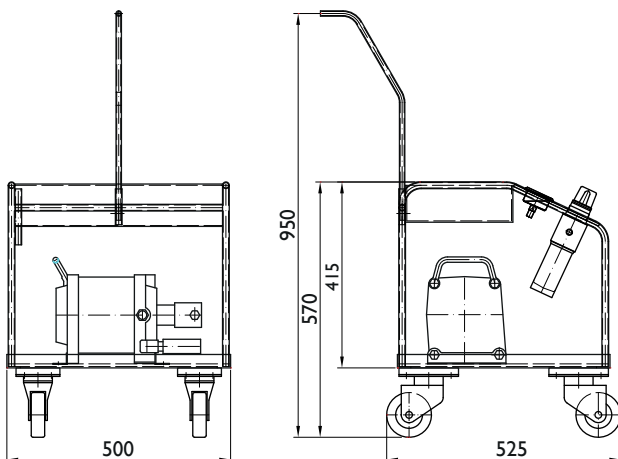
Basic information

| | |
|------------------------|------------------|
| Pressure medium | N ₂ |
| Drive compressed air | 3-10 bar |
| Stall pressure formula | 30x Air pressure |
| Max. outlet pressure | 300 bar |

Characteristics

Pressure multiplier increases gas pressure for a maximum utilization of the bottles

CC-MP30



Basic information

| | |
|------------------------|------------------|
| Pressure medium | N ₂ |
| Drive compressed air | 3-10 bar |
| Stall pressure formula | 30x Air pressure |
| Max. outlet pressure | 300 bar |

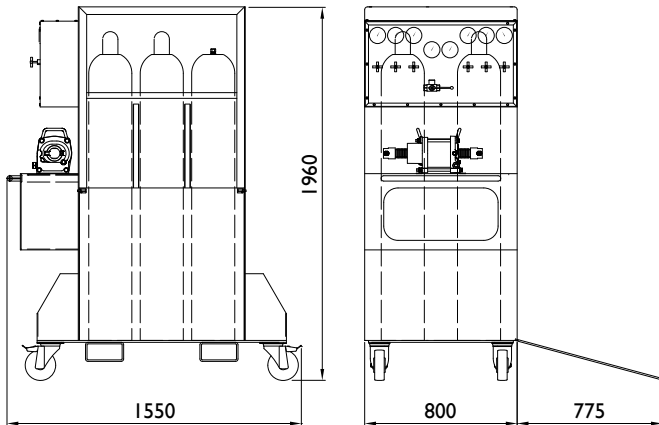
Characteristics

Compact pressure multiplier consisting of a cart, a pressure multiplier and manometers for measuring bottle's pressure and charging pressure

Easily transportable

Booster

CC-6B-MP30



Basic information

| | |
|------------------------|------------------|
| Pressure medium | N ₂ |
| Drive compressed air | 3-10 bar |
| Stall pressure formula | 30x Air pressure |
| Max. outlet pressure | 200 bar |

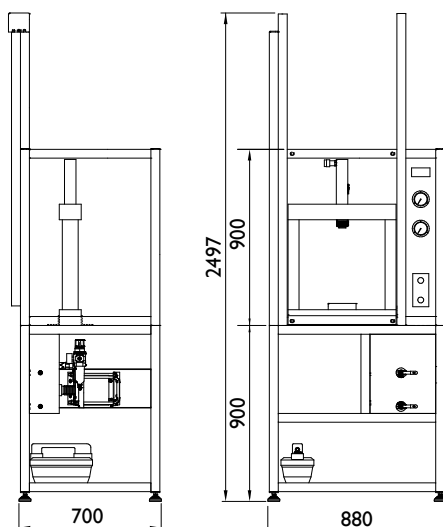
Characteristics

Nitrogen charging cart with pressure multiplier, appropriate for charging manifold plates with large nitrogen volumes (6 bottles capacity)

With security mechanism: The multiplier stops if the load pressure reaches 200 bar

Easily transportable

P-MP30



Basic information

| | |
|------------------------|------------------|
| Pressure medium | N ₂ |
| Drive compressed air | 3-10 bar |
| Stall pressure formula | 30x Air pressure |
| Max. outlet pressure | 300 bar |

Characteristics

Press with integrated pressure multiplier for charging and checking gas springs

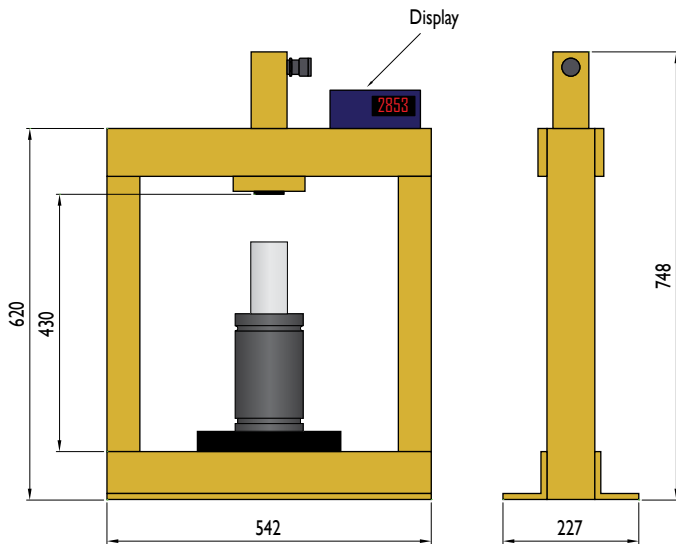
Load protected cab

Includes test press P-I 17



Test press

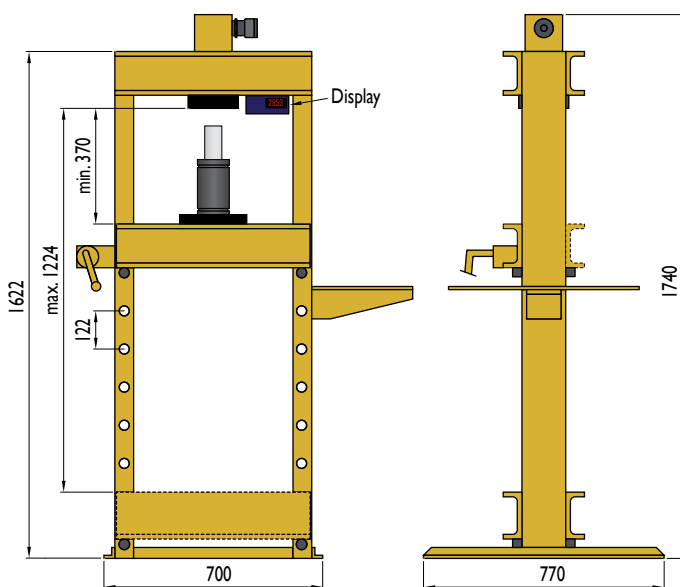
P-117



Basic information

| | | |
|----------|------------------|--------|
| Capacity | Maximum force | 10 ton |
| | Maximum stroke | 156 mm |
| Pusher | Manual/Pneumatic | |
| Display | Digital | |

P-118



Basic information

| | | |
|----------|------------------|--------|
| Capacity | Maximum force | 25 ton |
| | Maximum stroke | 158 mm |
| Pusher | Manual/Pneumatic | |
| Display | Digital | |

Hose crimping press

PLM-01

Use hose crimping press to create permanent hose assemblies.



Basic information

| Dimensions | Basic information | |
|------------|-----------------------|--------|
| | Length | 260 mm |
| Width | 200 mm | |
| Height | 145 mm | |
| Weight | 19 kg | |
| | Number of jaws | 8 |
| | Max. working pressure | 48 MPa |
| | Stroke | 38 mm |

Using different dies enables creating hoses of the three different systems.

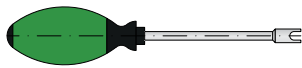
| System | Crimping |
|---------|----------|
| Minimes | G-PLM |
| EO24 | G-PLD |
| Micro | G-PLK |



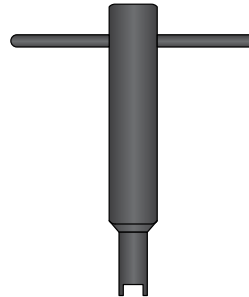
Tools

Small Spring Plunger Key

| Order No. | d _i | Order No. | d _i | Order No. | d _i |
|-----------|----------------|-----------|----------------|-----------|----------------|
| DE-3-R | M3 | DE-6-R | M6 | DE-12-R | M12 |
| DE-4-R | M4 | DE-8-R | M8 | DE-16-R | M16 |
| DE-5-R | M5 | DE-10-R | M10 | DE-20-R | M20 |

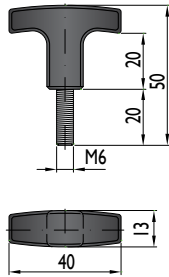


Big Spring Plunger Key



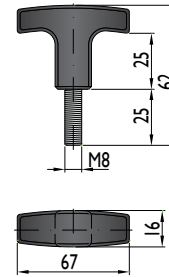
| Order No. | d _i |
|-----------|----------------|
| DE-24-R | M24 |

ER-01 (M6)



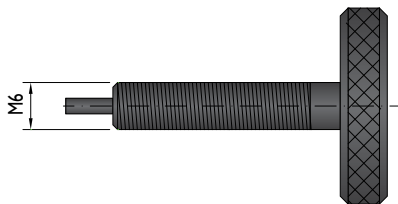
Extractor

ER-02 (M8)



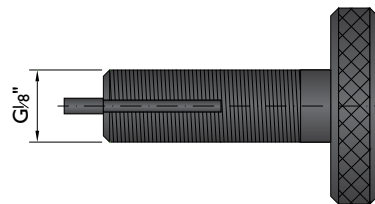
Extractor

BD-M6-113



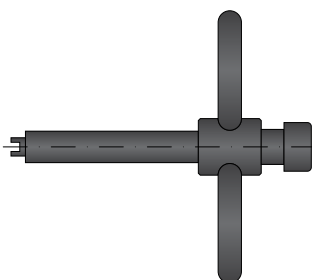
M6 unload nozzle

BD-1/8-114



Gas 1/8 unload nozzle

T-116



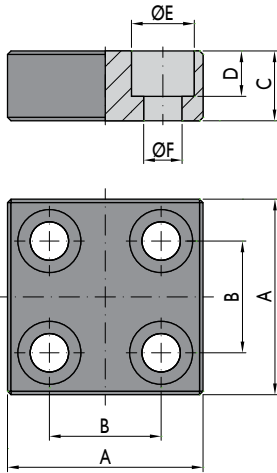
Valve extraction key

DYNAMOMETRIC TOOL

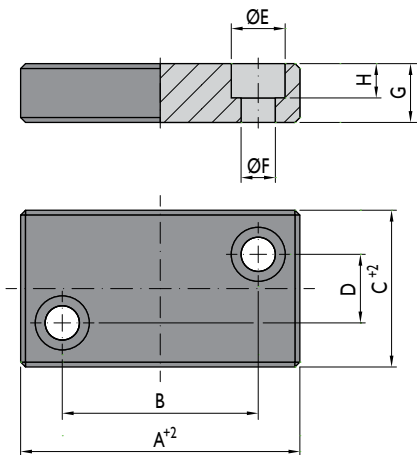


| Order No. | Valve |
|-------------------|------------|
| LLAVE-DIN-VALV-M6 | V-M6 42970 |
| LLAVE -DIN-VAL | VN-116 |

Support plates

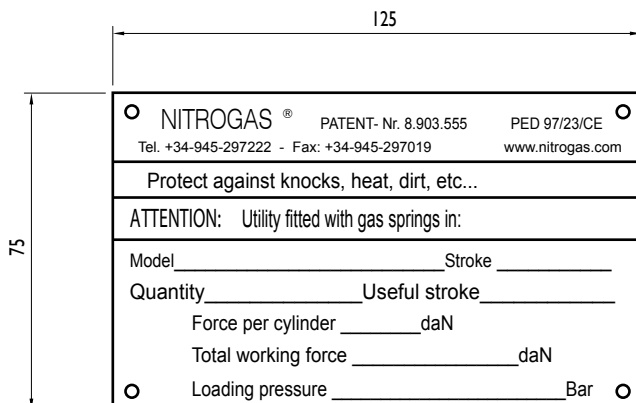


| | A mm | B mm | C mm | D mm | E mm | F mm |
|-----------|---------|---------|---------|---------|---------|---------|
| SPC-150 | 40 | 21 | 15 | 10 | 15 | 9 |
| SPC-250 | 40 | 21 | 15 | 10 | 15 | 9 |
| SPC-500 | 40 | 21 | 15 | 10 | 15 | 9 |
| SPC-750 | 56 | 32 | 20 | 13 | 18 | 11 |
| SPC-1500 | 56 | 32 | 20 | 13 | 18 | 11 |
| SPC-3000 | 90 | 67 | 20 | 13 | 18 | 11 |
| SPC-5000 | 90 | 67 | 20 | 13 | 18 | 11 |
| SPC-7500 | 140 | 110 | 20 | 13 | 18 | 11 |
| SPC-10000 | 140 | 110 | 20 | 13 | 18 | 11 |



| | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| SPV-150 | 50 | 32 | 25 | 8 | 11 | 7 | 12 | 7 |
| SPV-250 | 50 | 32 | 25 | 8 | 11 | 7 | 12 | 7 |
| SPV-500 | 55 | 40 | 30 | 14 | 11 | 7 | 12 | 7 |
| SPV-750 | 70 | 48 | 35 | 14 | 15 | 9 | 15 | 9 |
| SPV-1500 | 75 | 56 | 50 | 30 | 15 | 9 | 15 | 9 |
| SPV-3000 | 85 | 66 | 60 | 40 | 15 | 9 | 15 | 9 |
| SPV-5000 | 100 | 72 | 80 | 56 | 18 | 11 | 20 | 11 |
| SPV-7500 | 110 | 85 | 100 | 75 | 18 | 11 | 20 | 11 |
| SPV-10000 | 130 | 100 | 110 | 80 | 18 | 11 | 20 | 11 |

Identification plates



NITROGAS recommends identifying tools containing high pressure nitrogen gas springs to ensure the proper handling of the gas springs.

| Reference | Language |
|-----------|----------|
| PI-119-1 | Spanish |
| PI-119-2 | English |
| PI-119-3 | German |
| PI-119-4 | French |

Products

Gas Springs



A wide range of high quality gas springs and accessories to use in press dies or injection moulds.



Controllable gas springs (CPC)

CPC gas spring allows a controlled stop at the end of rod stroke. This stop is highly reliable, always performing at the same position and with a 100% guarantee.



Cam units

Designed to use the power of the press to punch, blend or form in different directions from the direction of the press tool.



Solutions for the storage tools

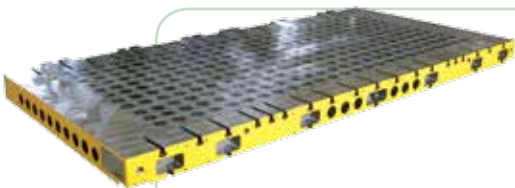
Designed to replace conventional distance blocks.

CS gas springs: Die storage cylinder

- Do not work during the production

SG gas springs: Stocking cylinder

- Work as a standard gas spring
- ISO standard dimensions but longer life than standard gas springs



Manifold plates

Designed to replace the hosing connection of gas springs by threading the gas springs directly on the plate. The system allows a more flexible distribution of the gas springs, reduces the leaking points and guarantees that all the gas springs have the same pressure.



Guide rail lifters

Designed to replace and simplify the guide pillar, gas spring and retainer screw structure when raising the sheet or the workpiece.

Contacts



CAD files of the product can be downloaded FREE from our website:
<http://www.nitrogas.com/es/Downloads.aspx>



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