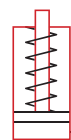




Aluminum Single Acting Cylinders

HU Series - General Purpose, Spring Return, Lightweight



Capacity:

20 - 100 Tons

Stroke:

50 - 254 mm

Max. Operating Pressure:

700 BAR

Min. - Max. Height:

174 - 636 mm



HU10006



HU5506



HU2006

- Lightweight aluminum alloy construction
- Up to 60% lighter than comparable tonnage steel cylinders
- Convenient carry handle on 50 and 100 ton models
- Hard anodized aluminum plunger provides extra protection against corrosion and wear
- Integral steel protective plate
- Maximum working pressure: 10,000 psi / 700 bar



Safety Practices

Good industry practice recommends not exceeding 80% of maximum rated capacities of all our products.



High-Flow Couplers

High-Flow Coupler: CH38F is included on all models (except where specified).

Aluminum vs. Steel Cylinders

Aluminum cylinders provide a great alternative to the traditional steel cylinder in many applications. Being up to 60% lighter in weight, Aluminum cylinders are easier portable and reduce user fatigue and strain. However, due to the finite properties of Aluminum vs. Steel, these cylinders should NOT be used in high cycle applications. The BVA Aluminum cylinders are designed for a maximum safety rating of 5,000 cycles. Under normal lifting applications this should provide a long service life.



HU5506

Aluminum Cylinders

- 60% lighter in weight than steel
- Easier portable and reduces user fatigue
- Not to be used for high cycle applications
- Under normal conditions, the maximum rated safety cycle life is 5,000 cycles
- Base of the cylinder contains a steel plate*



H5506

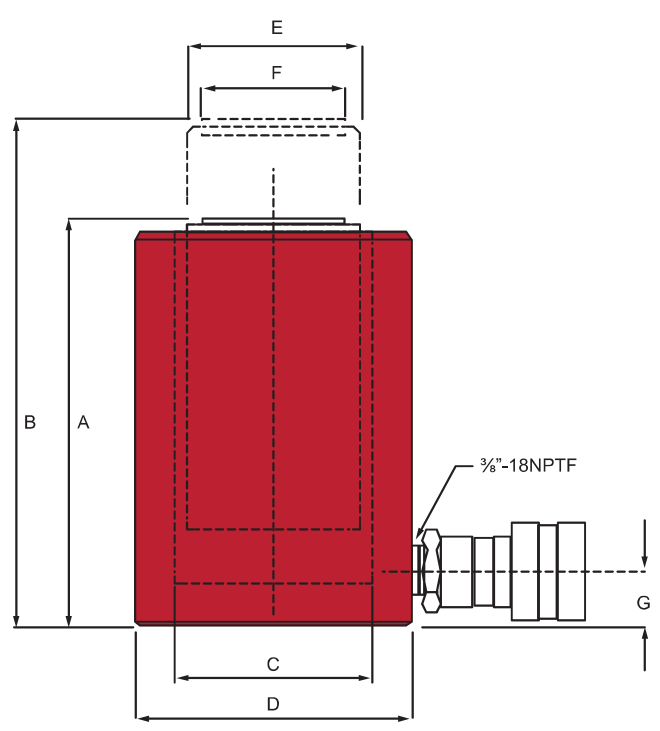
Steel Cylinders

- Much heavier than aluminum cylinders
- Low portability on heavier cylinders which creates user fatigue and strain
- Will out-perform aluminum cylinders in higher cycle applications
- Can exceed aluminum cylinders maximum safety cycle life of 5,000 cycles.

*The base of the cylinders contain a steel plate with mounting holes that are designed to protect the cylinder from damage and should NOT be used in fixturing applications and ONLY be used to attach larger base mounting plates for lifting stability. They are NOT designed to withstand the full ratings of the cylinders.



HU Series



Related Product: Gauges
 Reduce the risk of overloading your product by using a gauge. A variety of graduations and types to suit any need. pg 65

Related Product: Hoses
 We offer a variety of hoses, fittings, lengths and materials. pg 67

Safety Instructions
 Visit our DO'S and DON'TS section to review the best methods of operation. Always be prepared. pg 102

| Cylinder Capacity | Stroke (mm) | Model Number | Cylinder Effective Area (cm ²) | Oil Capacity (cc) | Collapsed Height A (mm) | Extended Height B (mm) | Cylinder Bore Dia. C (mm) | Outside Dia. D (mm) | Plunger Dia. E (mm) | Saddle Dia. F (mm) | Base to Inlet Port G (mm) | Weight (kg) |
|-------------------|-------------|--------------|--|-------------------|-------------------------|------------------------|---------------------------|---------------------|---------------------|--------------------|---------------------------|-------------|
| 20 Ton 178 kN | 50 | HU2002 | 31.2 | 156 | 174 | 224 | 63 | 85 | 51 | 40 | 27 | 3.0 |
| | 100 | HU2004 | 31.2 | 312 | 224 | 324 | 63 | 85 | 51 | 40 | 27 | 3.7 |
| | 150 | HU2006 | 31.2 | 468 | 274 | 424 | 63 | 85 | 51 | 40 | 27 | 4.4 |
| 30 Ton 267 kN | 50 | HU3002 | 44.2 | 221 | 181 | 231 | 75 | 100 | 60 | 40 | 34 | 4.7 |
| | 100 | HU3004 | 44.2 | 442 | 231 | 331 | 75 | 100 | 60 | 40 | 34 | 5.4 |
| | 150 | HU3006 | 44.2 | 663 | 281 | 431 | 75 | 100 | 60 | 40 | 34 | 6.1 |
| 50 Ton 445 kN | 50 | HU5502* | 70.9 | 354 | 186 | 236 | 95 | 130 | 80 | 70 | 30 | 7.6 |
| | 100 | HU5504* | 70.9 | 709 | 236 | 336 | 95 | 130 | 80 | 70 | 30 | 10.3 |
| | 150 | HU5506* | 70.9 | 1063 | 286 | 436 | 95 | 130 | 80 | 70 | 30 | 11.6 |
| | 200 | HU5508* | 70.9 | 1418 | 336 | 536 | 95 | 130 | 80 | 70 | 30 | 12.3 |
| | 250 | HU5510* | 70.9 | 1772 | 386 | 636 | 95 | 130 | 80 | 70 | 30 | 14.2 |
| 100 Ton 890 kN | 51 | HU10002* | 133.6 | 678 | 165 | 216 | 130 | 203 | 109 | 89 | 38 | 16.3 |
| | 102 | HU10004* | 133.6 | 1357 | 216 | 318 | 130 | 203 | 109 | 89 | 38 | 19.5 |
| | 152 | HU10006* | 133.6 | 2039 | 267 | 419 | 130 | 203 | 109 | 89 | 38 | 23.1 |
| | 254 | HU10010* | 133.6 | 3392 | 368 | 622 | 130 | 203 | 109 | 89 | 38 | 30.8 |

* Are equipped with carrying handles.



Aluminum Double Acting Cylinders

HDU Series - General Purpose, Lightweight

- Lightweight aluminum alloy construction
- Up to 60% lighter than comparable tonnage steel cylinders
- Convenient carry handle
- Hard anodized aluminum plunger provides extra protection against corrosion and wear
- Steel protective plate on cylinder base
- Maximum working pressure: 700 bar



Capacity:

20 - 30 Tons

Stroke:

50 - 150 mm

Max. Operating Pressure:

700 BAR

Min. - Max. Height:

189 - 451 mm



HDU2006



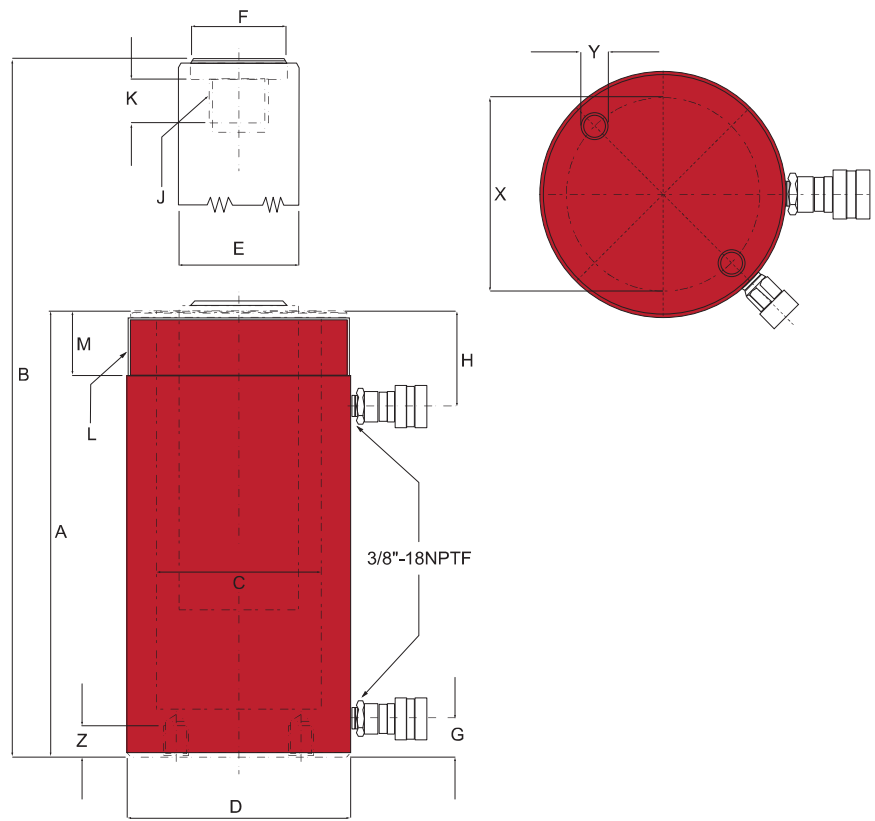
HDU3006

| Cylinder Capacity | Stroke (mm) | Model Number | Maximum Cylinder Capacity (ton) | | Cylinder Effective Area (cm ²) | | Oil Capacity (cc) | | Weight (kg) | Collapsed Height A (mm) | Extended Height B (mm) | Cylinder Bore Dia. C (mm) |
|-------------------|-------------|--------------|---------------------------------|------|--|------|-------------------|------|-------------|-------------------------|------------------------|---------------------------|
| | | | Push | Pull | Push | Pull | Push | Pull | | | | |
| 20 Ton 178 kN | 50 | HDU2002 | 20 | 13 | 41.9 | 16.1 | 156 | 93 | 5.7 | 189 | 239 | 63 |
| | 100 | HDU2004 | 20 | 13 | 41.9 | 16.1 | 312 | 186 | 6.9 | 239 | 339 | 63 |
| | 150 | HDU2006 | 20 | 13 | 38.7 | 16.1 | 468 | 279 | 8.0 | 289 | 439 | 63 |
| 30 Ton 267 kN | 50 | HDU3002 | 30 | 17 | 66.5 | 17.4 | 221 | 123 | 7.6 | 201 | 251 | 75 |
| | 100 | HDU3004 | 30 | 17 | 66.5 | 17.4 | 442 | 240 | 9.0 | 251 | 351 | 75 |
| | 150 | HDU3006 | 30 | 17 | 66.5 | 17.4 | 663 | 368 | 10.4 | 301 | 451 | 75 |

* The base of the cylinders contain a Steel plate with mounting holes and is designed to protect the cylinder from damage and should NOT be used in fixturing applications and ONLY be used to attach a larger base mounting plate for lifting stability. They are NOT designed to withstand the full rating of the cylinder.



HDU Series



Related Product: Gauges
 Reduce the risk of overloading your product by using a gauge. A variety of graduations and types to suit any need. pg 65

Safety Instructions
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Safety Practices
 Good industry practice recommends not exceeding 80% of maximum rated capacities of all our products.

High-Flow Couplers
 High-Flow Coupler: CH38F is included on all models (except where specified).

Relief Valve
 All double acting cylinders are equipped with a pressure relief valve located next to the retract port. These pressure relief valves help prevent cylinder over pressurization on the return port side of the cylinder.

| Model Number | Collapsed Height A (mm) | Extended Height B (mm) | Cylinder Bore Dia. C (mm) | Outside Dia. D (mm) | Plunger Dia. E (mm) | Saddle Dia. F (mm) | Base To Advance Port G (mm) | Top To Retract Port H (mm) |
|--------------|-------------------------|------------------------|---------------------------|---------------------|---------------------|--------------------|-----------------------------|----------------------------|
| HDU2002 | 189 | 239 | 63 | 113 | 40 | 30 | 28 | 42 |
| HDU2004 | 239 | 339 | 63 | 113 | 40 | 30 | 28 | 42 |
| HDU2006 | 289 | 439 | 63 | 113 | 40 | 30 | 28 | 42 |
| HDU3002 | 201 | 251 | 75 | 125 | 50 | 40 | 34 | 43 |
| HDU3004 | 251 | 351 | 75 | 125 | 50 | 40 | 34 | 43 |
| HDU3006 | 301 | 451 | 75 | 125 | 50 | 40 | 34 | 43 |

NOTE: The base of the aluminum cylinders contain a Steel plate with mounting holes and is designed to protect the cylinder from damage and should NOT be used in fixturing applications and ONLY be used to attach larger base mounting plates for lifting stability. The threads are NOT designed to withstand the full rating of the cylinder.