

HCG-Series, Single-Acting, Gravity-Return Cylinders

- Hardened surface resists side-loading and cyclic wear
- Designed to withstand up to 10% side-load of maximum capacity 1)
- Stop-ring to prevent plunger blow-out
- Weather protected, inside and out
- Upper and lower replaceable bearings enclose the cylinder plunger for support throughout the stroke
- Certified lifting eyes, base mounting holes and collar threads

SELECTION CHART 50 – 300-TON HCG-MODELS

For 400 – 1000-ton models, see pages 42-43.

For full product features see pages 36-37.

| Cylinder Capacity (ton) | Stroke (in) | Model Number | Maximum Cylinder Capacity at 10,150 psi (ton) | Cylinder Effective Area (in ²) | Oil Capacity (in ³) | Collapsed Height A (in) |
|----------------------------|----------------|--------------|---|--|---------------------------------|-------------------------|
| 50 | 1.97 | HCG-502 | 62 | 12.17 | 23.96 | 7.20 |
| | 3.94 | HCG-504 | | | 47.93 | 9.17 |
| | 5.91 | HCG-506 1) | | | 71.89 | 11.14 |
| | 7.87 | HCG-508 | | | 95.86 | 13.62 |
| | 9.84 | HCG-5010 | | | 119.82 | 15.59 |
| | 11.81 | HCG-5012 1) | | | 143.78 | 17.56 |
| 100 | 1.97 | HCG-1002 | 113 | 22.19 | 43.67 | 7.95 |
| | 3.94 | HCG-1004 | | | 87.35 | 9.92 |
| | 5.91 | HCG-1006 | | | 131.02 | 11.89 |
| | 7.87 | HCG-1008 | | | 174.70 | 14.92 |
| | 9.84 | HCG-10010 | | | 218.37 | 16.89 |
| | 11.81 | HCG-10012 | | | 262.05 | 18.86 |
| 150 | 1.97 | HCG-1502 | 168 | 33.14 | 65.24 | 8.66 |
| | 3.94 | HCG-1504 | | | 130.48 | 10.63 |
| | 5.91 | HCG-1506 | | | 195.73 | 12.60 |
| | 7.87 | HCG-1508 | | | 260.97 | 15.63 |
| | 9.84 | HCG-15010 | | | 326.21 | 17.60 |
| | 11.81 | HCG-15012 | | | 391.45 | 19.57 |
| 200 | 1.97 | HCG-2002 | 223 | 43.95 | 86.51 | 9.09 |
| | 3.94 | HCG-2004 | | | 173.02 | 11.06 |
| | 5.91 | HCG-2006 | | | 259.53 | 13.03 |
| | 7.87 | HCG-2008 | | | 346.04 | 16.06 |
| | 9.84 | HCG-20010 | | | 432.55 | 18.03 |
| | 11.81 | HCG-20012 | | | 519.06 | 20.00 |
| 250 | 1.97 | HCG-2502 | 286 | 56.27 | 110.77 | 9.49 |
| | 3.94 | HCG-2504 | | | 221.55 | 11.46 |
| | 5.91 | HCG-2506 | | | 332.32 | 13.43 |
| | 7.87 | HCG-2508 | | | 443.09 | 16.97 |
| | 9.84 | HCG-25010 | | | 553.87 | 18.94 |
| | 11.81 | HCG-25012 | | | 664.64 | 20.91 |
| 300 | 1.97 | HCG-3002 | 341 | 67.23 | 132.34 | 11.65 |
| | 3.94 | HCG-3004 | | | 264.68 | 13.62 |
| | 5.91 | HCG-3006 | | | 397.02 | 15.59 |
| | 7.87 | HCG-3008 | | | 529.36 | 17.56 |
| | 9.84 | HCG-30010 | | | 661.71 | 19.53 |
| | 11.81 | HCG-30012 | | | 794.05 | 21.50 |

| Collar Thread (in) | | |
|------------------------|---------------|-----------------|
| Model / Capacity (ton) | Thread Size W | Thread Length X |
| HCG-50 | M130 x 2 | 1.18 |
| HCG-100 | M175 x 3 | 1.81 |
| HCG-150 | M215 x 3 | 2.17 |
| HCG-200 | M250 x 3 | 2.48 |
| HCG-250 | M280 x 3 | 2.52 |
| HCG-300 | M305 x 3 | 2.87 |

The collar thread length is designed for the full rated cylinder capacity.

| Base Mounting Holes (in) | | | | | |
|--------------------------|---------------|---------------|------------------------|-----------------|--------------------|
| Model / Capacity (ton) | Bolt Circle U | Thread Size V | Minimum Thread Depth Z | Number of Holes | Angle from Coupler |
| HCG-50 | 4.13 | M12 x 1,75 | 0.87 | 2 | 90° |
| HCG-100 | 5.91 | M12 x 1,75 | 0.87 | 2 | 90° |
| HCG-150 | 7.28 | M12 x 1,75 | 0.87 | 2 | 90° |
| HCG-200 | 8.46 | M12 x 1,75 | 0.87 | 3 | 60° |
| HCG-250 | 9.65 | M12 x 1,75 | 0.87 | 3 | 60° |
| HCG-300 | 10.24 | M16 x 2 | 0.98 | 3 | 60° |

1) HCG-506 and HCG-5012: 7% side-load of maximum capacity.

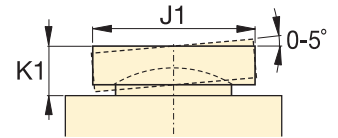
Single-Acting, High-Tonnage Cylinders

Capacity:
50 - 300 ton

Stroke:
1.97 - 11.81 inch

Maximum Operating Pressure:
10,150 psi

HCG Series



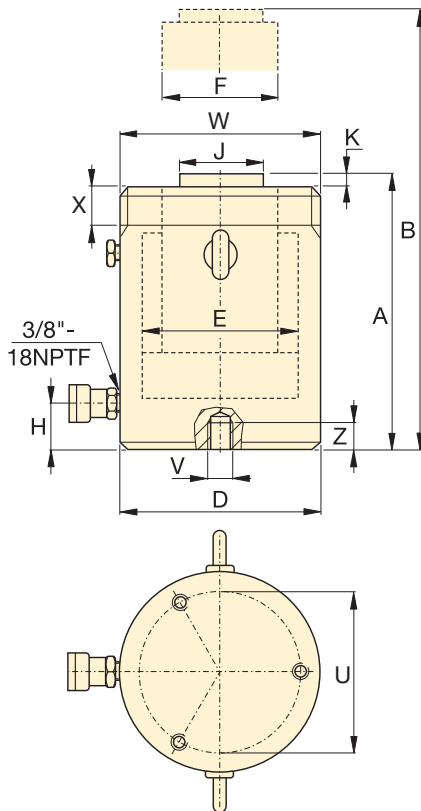
CATG-Series Tilt Saddle

| | Extended Height | Outside Diameter | Cylinder Bore Diameter | Plunger Diameter | Base to Advance Port | Standard Saddle Diameter | Saddle Protusion from Plunger | Wt. | Model Number |
|--|-----------------|------------------|------------------------|------------------|----------------------|--------------------------|-------------------------------|-------|-------------------------|
| | B (in) | D (in) | E (in) | F (in) | H (in) | J (in) | K (in) | (lbs) | |
| | 9.17 | 5.12 | 3.94 | 2.76 | 1.50 | 1.97 | 0.12 | 37 | HCG-502 |
| | 13.11 | | | | | | | 45 | HCG-504 |
| | 17.05 | | | | | | | 53 | HCG-506 ¹⁾ |
| | 21.50 | | | | | | | 64 | HCG-508 |
| | 25.43 | | | | | | | 72 | HCG-5010 |
| | 29.37 | | | | | | | 80 | HCG-5012 ¹⁾ |
| | 9.92 | 6.89 | 5.31 | 3.74 | 1.50 | 2.95 | 0.12 | 73 | HCG-1002 |
| | 13.86 | | | | | | | 88 | HCG-1004 |
| | 17.80 | | | | | | | 102 | HCG-1006 |
| | 22.80 | | | | | | | 128 | HCG-1008 |
| | 26.73 | | | | | | | 142 | HCG-10010 |
| | 30.67 | | | | | | | 157 | HCG-10012 ¹⁾ |
| | 10.63 | 8.46 | 6.50 | 4.72 | 1.61 | 3.70 | 0.12 | 123 | HCG-1502 |
| | 14.57 | | | | | | | 145 | HCG-1504 |
| | 18.50 | | | | | | | 168 | HCG-1506 |
| | 23.50 | | | | | | | 207 | HCG-1508 |
| | 27.44 | | | | | | | 230 | HCG-15010 |
| | 31.38 | | | | | | | 253 | HCG-15012 |
| | 11.06 | 9.84 | 7.48 | 5.51 | 1.85 | 4.45 | 0.12 | 178 | HCG-2002 |
| | 15.00 | | | | | | | 209 | HCG-2004 |
| | 18.94 | | | | | | | 240 | HCG-2006 |
| | 23.94 | | | | | | | 300 | HCG-2008 |
| | 27.87 | | | | | | | 331 | HCG-20010 |
| | 31.81 | | | | | | | 363 | HCG-20012 |
| | 11.46 | 11.02 | 8.46 | 6.69 | 2.09 | 5.71 | 0.16 | 235 | HCG-2502 |
| | 15.39 | | | | | | | 277 | HCG-2504 |
| | 19.33 | | | | | | | 318 | HCG-2506 |
| | 24.84 | | | | | | | 401 | HCG-2508 |
| | 28.78 | | | | | | | 442 | HCG-25010 |
| | 32.72 | | | | | | | 484 | HCG-25012 |
| | 13.62 | 12.01 | 9.25 | 7.87 | 2.28 | 6.97 | 0.16 | 348 | HCG-3002 |
| | 17.56 | | | | | | | 401 | HCG-3004 |
| | 21.50 | | | | | | | 454 | HCG-3006 |
| | 25.43 | | | | | | | 507 | HCG-3008 |
| | 29.37 | | | | | | | 560 | HCG-30010 |
| | 33.31 | | | | | | | 613 | HCG-30012 |

| Optional Tilt Saddle | | |
|----------------------|---------|---------------------|
| Diameter | Height | Saddle Model Number |
| J1 (in) | K1 (in) | |
| 1.97 | 0.94 | CATG-50 |
| 2.87 | 1.14 | CATG-100 |
| 3.57 | 1.22 | CATG-150 |
| 4.64 | 1.37 | CATG-200 |
| 5.67 | 1.85 | CATG-250 |
| 6.30 | 2.51 | CATG-300 |

HCG-Series, Single-Acting, Gravity-Return Cylinders

- Hardened surface resists side-loading and cyclic wear
- Designed to withstand up to 10% side-load of maximum capacity
- Stop-ring to prevent plunger blow-out
- Weather protected, inside and out
- Upper and lower replaceable bearings enclose the cylinder plunger for support throughout the stroke
- Certified lifting eyes, base mounting holes and collar threads



SELECTION CHART 400 – 1000-TON HCG-MODELS

For 50 – 300-ton models, see pages 40-41.

For full product features see pages 36-37.

| Cylinder Capacity (ton) | Stroke (in) | Model Number | Maximum Cylinder Capacity at 10,150 psi (ton) | Cylinder Effective Area (in ²) | Oil Capacity (in ³) | Collapsed Height A (in) |
|-------------------------|-------------|--------------|---|--|---------------------------------|-------------------------|
| 400 | 1.97 | HCG-4002 | 450 | 88.75 | 174.70 | 12.64 |
| | 3.94 | HCG-4004 | | | 349.39 | 14.61 |
| | 5.91 | HCG-4006 | | | 524.09 | 16.57 |
| | 7.87 | HCG-4008 | | | 698.79 | 18.54 |
| | 9.84 | HCG-40010 | | | 873.49 | 20.51 |
| | 11.81 | HCG-40012 | | | 1,048.18 | 22.48 |
| 500 | 1.97 | HCG-5002 | 575 | 113.25 | 222.92 | 13.54 |
| | 3.94 | HCG-5004 | | | 445.85 | 15.51 |
| | 5.91 | HCG-5006 | | | 668.77 | 17.48 |
| | 7.87 | HCG-5008 | | | 891.70 | 19.45 |
| | 9.84 | HCG-50010 | | | 1,114.62 | 21.42 |
| | 11.81 | HCG-50012 | | | 1,337.55 | 23.39 |
| 600 | 1.97 | HCG-6002 | 673 | 132.57 | 260.97 | 13.86 |
| | 3.94 | HCG-6004 | | | 521.94 | 15.83 |
| | 5.91 | HCG-6006 | | | 782.90 | 17.80 |
| | 7.87 | HCG-6008 | | | 1,043.87 | 19.76 |
| | 9.84 | HCG-60010 | | | 1,304.84 | 21.73 |
| | 11.81 | HCG-60012 | | | 1,565.81 | 23.70 |
| 800 | 1.97 | HCG-8002 | 916 | 180.44 | 355.21 | 15.91 |
| | 3.94 | HCG-8004 | | | 710.41 | 17.87 |
| | 5.91 | HCG-8006 | | | 1,065.62 | 19.84 |
| | 7.87 | HCG-8008 | | | 1,420.82 | 21.81 |
| | 9.84 | HCG-80010 | | | 1,776.03 | 23.78 |
| | 11.81 | HCG-80012 | | | 2,131.24 | 25.75 |
| 1000 | 1.97 | HCG-10002 | 1196 | 235.68 | 463.94 | 17.40 |
| | 3.94 | HCG-10004 | | | 927.88 | 19.37 |
| | 5.91 | HCG-10006 | | | 1,391.83 | 21.34 |
| | 7.87 | HCG-10008 | | | 1,855.77 | 23.31 |
| | 9.84 | HCG-100010 | | | 2,319.71 | 25.28 |
| | 11.81 | HCG-100012 | | | 2,783.65 | 27.24 |

| Collar Thread (in) | | |
|------------------------|-------------|---------------|
| Model / Capacity (ton) | Thread Size | Thread Length |
| HCG-400 | M350 x 3 | 3.27 |
| HCG-500 | M400 x 4 | 3.54 |
| HCG-600 | M430 x 4 | 3.94 |
| HCG-800 | M505 x 5 | 4.80 |
| HCG-1000 | M570 x 5 | 5.39 |

The collar thread length is designed for the full rated cylinder capacity.

| Base Mounting Holes (in) | | | | | |
|--------------------------|---------------|---------------|------------------------|-----------------|--------------------|
| Model / Capacity (ton) | Bolt Circle U | Thread Size V | Minimum Thread Depth Z | Number of Holes | Angle from Coupler |
| HCG-400 | 11.81 | M16 x 2 | 0.98 | 3 | 60° |
| HCG-500 | 13.39 | M24 x 3 | 1.42 | 3 | 60° |
| HCG-600 | 14.57 | M24 x 3 | 1.42 | 3 | 60° |
| HCG-800 | 17.32 | M24 x 3 | 1.42 | 3 | 60° |
| HCG-1000 | 19.69 | M24 x 3 | 1.42 | 3 | 60° |

Single-Acting, High-Tonnage Cylinders



▲ Offshore wind turbine leveling: Enerpac's synchronous lifting system was the solution for leveling support cross pieces on 80 wind turbines.

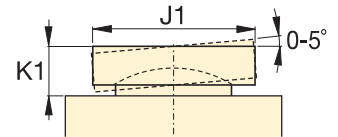
HCG Series



Capacity:
400 - 1000 ton

Stroke:
1.97 - 11.81 inch

Maximum Operating Pressure:
10,150 psi



CATG-Series Tilt Saddle

| Extended Height | Outside Diameter | Cylinder Bore Diameter | Plunger Diameter | Base to Advance Port | Standard Saddle Diameter | Saddle Protrusion from Plunger | Wt. | Model Number |
|-----------------|------------------|------------------------|------------------|----------------------|--------------------------|--------------------------------|-------|--------------|
| B (in) | D (in) | E (in) | F (in) | H (in) | J (in) | K (in) | (lbs) | |
| 14.61 | 13.78 | 10.63 | 8.66 | 2.91 | 7.72 | 0.16 | 500 | HCG-4002 |
| 18.54 | | | | | | | 566 | HCG-4004 |
| 22.48 | | | | | | | 633 | HCG-4006 |
| 26.42 | | | | | | | 699 | HCG-4008 |
| 30.35 | | | | | | | 766 | HCG-40010 |
| 34.29 | | | | | | | 833 | HCG-40012 |
| 15.51 | 15.75 | 12.01 | 9.84 | 3.11 | 8.98 | 0.16 | 704 | HCG-5002 |
| 19.45 | | | | | | | 792 | HCG-5004 |
| 23.39 | | | | | | | 880 | HCG-5006 |
| 27.32 | | | | | | | 968 | HCG-5008 |
| 31.26 | | | | | | | 1,056 | HCG-50010 |
| 35.20 | | | | | | | 1,144 | HCG-50012 |
| 15.83 | 16.93 | 12.99 | 10.63 | 3.35 | 9.72 | 0.16 | 834 | HCG-6002 |
| 19.76 | | | | | | | 935 | HCG-6004 |
| 23.70 | | | | | | | 1,036 | HCG-6006 |
| 27.64 | | | | | | | 1,137 | HCG-6008 |
| 31.57 | | | | | | | 1,239 | HCG-60010 |
| 35.51 | | | | | | | 1,340 | HCG-60012 |
| 17.87 | 19.88 | 15.16 | 12.60 | 3.94 | 11.69 | 0.16 | 1,336 | HCG-8002 |
| 21.81 | | | | | | | 1,479 | HCG-8004 |
| 25.75 | | | | | | | 1,621 | HCG-8006 |
| 29.69 | | | | | | | 1,763 | HCG-8008 |
| 33.62 | | | | | | | 1,905 | HCG-80010 |
| 37.56 | | | | | | | 2,047 | HCG-80012 |
| 19.37 | 22.44 | 17.32 | 13.39 | 4.49 | 12.72 | 0.16 | 1,852 | HCG-10002 |
| 23.31 | | | | | | | 2,020 | HCG-10004 |
| 27.24 | | | | | | | 2,188 | HCG-10006 |
| 31.18 | | | | | | | 2,355 | HCG-10008 |
| 35.12 | | | | | | | 2,523 | HCG-100010 |
| 39.06 | | | | | | | 2,691 | HCG-100012 |

| Optional Tilt Saddle | | |
|----------------------|---------|---------------------|
| Diameter | Height | Saddle Model Number |
| J1 (in) | K1 (in) | |
| 7.59 | 2.32 | CATG-400 |
| 8.98 | 2.48 | CATG-500 |
| 9.47 | 3.08 | CATG-600 |
| 11.28 | 3.41 | CATG-800 |
| 12.26 | 3.65 | CATG-1000 |