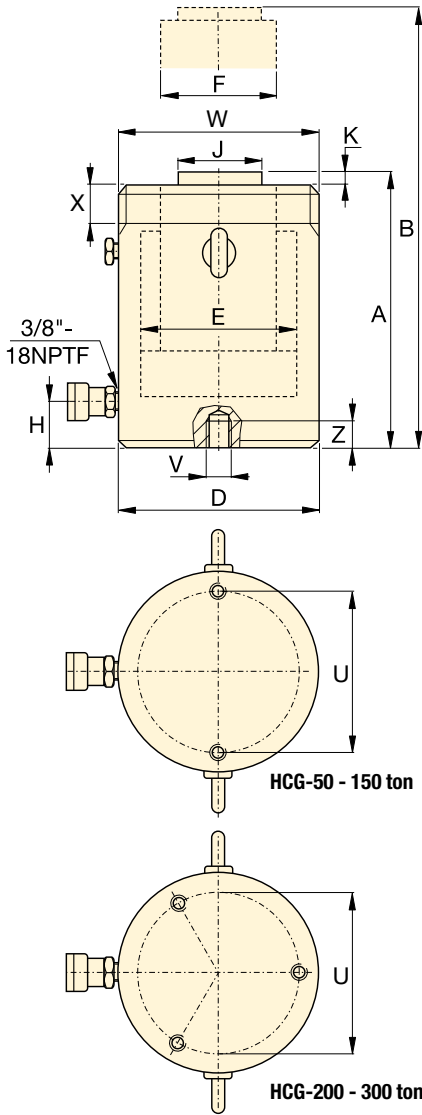


# HCG-Series, High Tonnage Cylinders



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

- Hardened surface resists side-loading and cyclic wear
- Designed to withstand 10% side-load of maximum capacity <sup>1)</sup>
- 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 46-47.

For full product features see pages 40-41.

Cylinder Capacity ton	Stroke (mm)	Model Number	Maximum Cylinder Capacity at 700 bar ton (kN)	Cylinder Effective Area (cm <sup>2</sup> )	Oil Capacity (cm <sup>3</sup> )	Collapsed Height A (mm)
50	50	HCG-502	56 (550)	78,5	393	183
	100	HCG-504			785	233
	150	HCG-506 <sup>1)</sup>			1178	283
	200	HCG-508			1571	346
	250	HCG-5010			1963	396
	300	HCG-5012 <sup>1)</sup>			2356	446
100	50	HCG-1002	102 (1002)	143,1	716	202
	100	HCG-1004			1431	252
	150	HCG-1006			2147	302
	200	HCG-1008			2863	379
	250	HCG-10010			3578	429
	300	HCG-10012			4294	479
150	50	HCG-1502	153 (1497)	213,8	1069	220
	100	HCG-1504			2138	270
	150	HCG-1506			3207	320
	200	HCG-1508			4276	397
	250	HCG-15010			5346	447
	300	HCG-15012			6415	497
200	50	HCG-2002	202 (1985)	283,5	1418	231
	100	HCG-2004			2835	281
	150	HCG-2006			4253	331
	200	HCG-2008			5671	408
	250	HCG-20010			7088	458
	300	HCG-20012			8506	508
250	50	HCG-2502	259 (2541)	363,1	1815	241
	100	HCG-2504			3631	291
	150	HCG-2506			5446	341
	200	HCG-2508			7261	431
	250	HCG-25010			9076	481
	300	HCG-25012			10.892	531
300	50	HCG-3002	310 (3036)	433,7	2169	296
	100	HCG-3004			4337	346
	150	HCG-3006			6506	396
	200	HCG-3008			8675	446
	250	HCG-30010			10.843	496
	300	HCG-30012			13.012	546

Collar Thread (mm)		
Model / Capacity ton	Thread Size	Thread Length
	W	X
HCG-50	M130 x 2	30
HCG-100	M175 x 3	46
HCG-150	M215 x 3	55
HCG-200	M250 x 3	63
HCG-250	M280 x 3	64
HCG-300	M305 x 3	73

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

Base Mounting Holes (mm)					
Model / Capacity ton	Bolt Circle	Thread Size	Minimum Thread Depth	Number of Holes	Angle from Coupler
	U	V	Z		
HCG-50	105	M12 x 1,75	22	2	90°
HCG-100	150	M12 x 1,75	22	2	90°
HCG-150	185	M12 x 1,75	22	2	90°
HCG-200	215	M12 x 1,75	22	3	60°
HCG-250	245	M12 x 1,75	22	3	60°
HCG-300	260	M16 x 2	25	3	60°

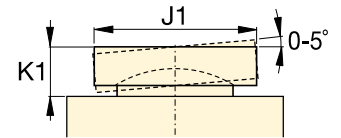
<sup>1)</sup> HCG-506 and HCG-5012: 7% side-load of maximum capacity.

Capacity:  
**50 - 300 ton**


Stroke:  
**50 - 300 mm**

Maximum Operating Pressure:  
**700 bar**

**HCG Series**



CATG-Series Tilt Saddle

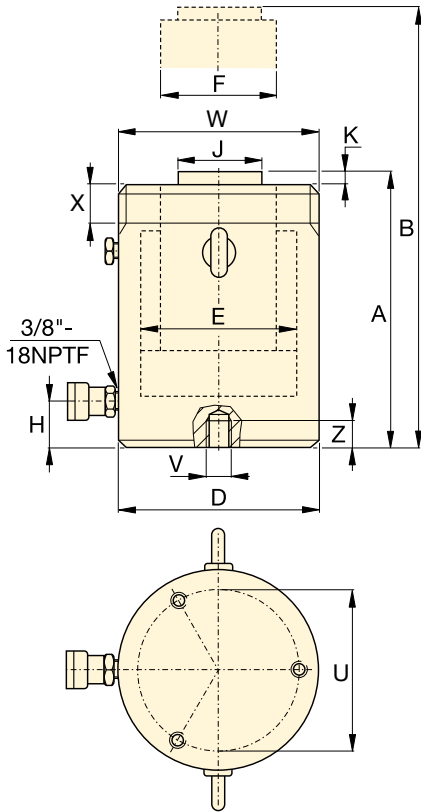
	Extended Height B (mm)	Outside Diameter D (mm)	Cylinder Bore Diameter E (mm)	Plunger Diameter F (mm)	Base to Advance Port H (mm)	Standard Saddle Diameter J (mm)	Saddle Protrusion from Plunger K (mm)	 (kg)	Model Number	Optional Tilt Saddle		
										Diameter J1 (mm)	Height K1 (mm)	Saddle Model Number
	233	130	100	70	38	50	3	17	HCG-502	50	24	CATG-50
	333							20	HCG-504			
	433							24	HCG-506 <sup>1)</sup>			
	546							29	HCG-508			
	646							32	HCG-5010			
	746							36	HCG-5012 <sup>1)</sup>			
	252	175	135	95	38	75	3	33	HCG-1002	73	29	CATG-100
	352							40	HCG-1004			
	452							46	HCG-1006			
	579							58	HCG-1008			
	679							65	HCG-10010			
	779							71	HCG-10012			
	270	215	165	120	41	94	3	56	HCG-1502	91	31	CATG-150
	370							66	HCG-1504			
	470							76	HCG-1506			
	597							94	HCG-1508			
	697							104	HCG-15010			
	797							115	HCG-15012			
	281	250	190	140	47	113	3	81	HCG-2002	118	35	CATG-200
	381							95	HCG-2004			
	481							109	HCG-2006			
	608							136	HCG-2008			
	708							150	HCG-20010			
	808							164	HCG-20012			
	291	280	215	170	53	145	4	107	HCG-2502	144	47	CATG-250
	391							125	HCG-2504			
	491							144	HCG-2506			
	631							182	HCG-2508			
	731							201	HCG-25010			
	831							219	HCG-25012			
	346	305	235	200	58	177	4	158	HCG-3002	160	64	CATG-300
	446							182	HCG-3004			
	546							206	HCG-3006			
	646							230	HCG-3008			
	746							254	HCG-30010			
	846							278	HCG-30012			

# HCG-Series, High Tonnage Cylinders



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

- Hardened surface resists side-loading and cyclic wear
- Designed to withstand 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
- Optional collar threads on 400 ton models and higher capacities.



Optional Collar Thread (mm)		
Model / Capacity ton	Thread Size	Thread Length
	W	X
HCG-400	M350 x 3	83
HCG-500	M400 x 4	90
HCG-600	M430 x 4	100
HCG-800	M505 x 5	122
HCG-1000	M570 x 5	137

Collar thread is optional on 400 ton models and higher. For collar thread on cylinder add suffix "E002" to model number. Example: **HCG4006E002**

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

Base Mounting Holes (mm)					
Model / Capacity ton	Bolt Circle	Thread Size	Minimum Thread Depth	Number of Holes	Angle from Coupler
	U	V	Z		
HCG-400	300	M16 x 2	25	3	60°
HCG-500	340	M24 x 3	36	3	60°
HCG-600	370	M24 x 3	36	3	60°
HCG-800	440	M24 x 3	36	3	60°
HCG-1000	500	M24 x 3	36	3	60°

## SELECTION CHART 400 - 1000 TON HCG-MODELS

For 50 - 300 ton models, see pages 44-45.

For full product features see pages 40-41.

Cylinder Capacity ton	Stroke (mm)	Model Number	Maximum Cylinder Capacity at 700 bar ton (kN)	Cylinder Effective Area (cm <sup>2</sup> )	Oil Capacity (cm <sup>3</sup> )	Collapsed Height A (mm)
400	50	HCG-4002	409 (4008)	572,6	2863	321
	100	HCG-4004			5726	371
	150	HCG-4006			8588	421
	200	HCG-4008			11.451	471
	250	HCG-40010			14.314	521
	300	HCG-40012			17.177	571
500	50	HCG-5002	522 (5114)	730,6	3653	344
	100	HCG-5004			7306	394
	150	HCG-5006			10.959	444
	200	HCG-5008			14.612	494
	250	HCG-50010			18.265	544
	300	HCG-50012			21.918	594
600	50	HCG-6002	611 (5987)	855,3	4276	352
	100	HCG-6004			8553	402
	150	HCG-6006			12.829	452
	200	HCG-6008			17.106	502
	250	HCG-60010			21.382	552
	300	HCG-60012			25.659	602
800	50	HCG-8002	831 (8149)	1164,2	5821	404
	100	HCG-8004			11.642	454
	150	HCG-8006			17.462	504
	200	HCG-8008			23.283	554
	250	HCG-80010			29.104	604
	300	HCG-80012			34.925	654
1000	50	HCG-10002	1085 (10.644)	1520,5	7603	442
	100	HCG-10004			15.205	492
	150	HCG-10006			22.808	542
	200	HCG-10008			30.411	592
	250	HCG-100010			38.013	642
	300	HCG-100012			45.616	692



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

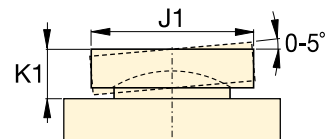
## HCG Series




Capacity:  
**400 - 1000 ton**

Stroke:  
**50 - 300 mm**

Maximum Operating Pressure:  
**700 bar**



CATG-Series Tilt Saddle

Extended Height B (mm)	Outside Diameter D (mm)	Cylinder Bore Diameter E (mm)	Plunger Diameter F (mm)	Base to Advance Port H (mm)	Standard Saddle Diameter J (mm)	Saddle Protrusion from Plunger K (mm)	 Model Number (kg)
371	350	270	220	74	196	4	227 <b>HCG-4002</b>
471							257 <b>HCG-4004</b>
571							287 <b>HCG-4006</b>
671							317 <b>HCG-4008</b>
771							347 <b>HCG-40010</b>
871							378 <b>HCG-40012</b>
394	400	305	250	79	228	4	319 <b>HCG-5002</b>
494							359 <b>HCG-5004</b>
594							399 <b>HCG-5006</b>
694							439 <b>HCG-5008</b>
794							479 <b>HCG-50010</b>
894							519 <b>HCG-50012</b>
402	430	330	270	85	247	4	378 <b>HCG-6002</b>
502							424 <b>HCG-6004</b>
602							470 <b>HCG-6006</b>
702							516 <b>HCG-6008</b>
802							562 <b>HCG-60010</b>
902							608 <b>HCG-60012</b>
454	505	385	320	100	297	4	606 <b>HCG-8002</b>
554							671 <b>HCG-8004</b>
654							735 <b>HCG-8006</b>
754							800 <b>HCG-8008</b>
854							864 <b>HCG-80010</b>
954							929 <b>HCG-80012</b>
492	570	440	340	114	323	4	840 <b>HCG-10002</b>
592							916 <b>HCG-10004</b>
692							992 <b>HCG-10006</b>
792							1068 <b>HCG-10008</b>
892							1145 <b>HCG-100010</b>
992							1221 <b>HCG-100012</b>

Optional Tilt Saddle		
Diameter J1 (mm)	Height K1 (mm)	Saddle Model Number
193	59	<b>CATG-400</b>
228	63	<b>CATG-500</b>
241	78	<b>CATG-600</b>
287	87	<b>CATG-800</b>
311	93	<b>CATG-1000</b>