

## HIGH TONNAGE CYLINDERS WITH SAFETY RING NUT, LOAD RETURN

### FEATURES

These cylinders are particularly suitable for applications in which the load has to be supported for long periods. The lock nut can be screwed down onto the cylinder body to hold the load mechanically. This ensures that **operation under load is absolutely safe**.

**CGG** cylinders have concentric grooves machined into the end of the rod to improve load grip, models above 30 tonne have lifting eyelets for ease of transport. From 50 tonnes upwards, the cylinders are plunging type and have device which prevents any over-stroke. The rod has a coloured zone which becomes visible 10 mm before the end of the piston stroke.

All models can operate with off-centred load up to **8%** of their nominal capacity.



### OPTIONS

- **T - Version**, cylinder with integrated tilt saddle.
- **F - Version** cylinder with base mounting holes for fixing purposes.
- **N - Version**, (optional starting from 50 t) cylinders with end of stroke ring nut. This version is in compliance with **ANSI B30.1**.
- **M - Version**, cylinder with spring return. This version is available for N - version cylinders up to 150 tons (i.e., CMG50N100)



### OPERATIONAL AREAS

These cylinders are ideal for use in the Construction Industry, e.g. Bridge repair and construction, foundations and underpinning etc.

**The anti-corrosion treatment applied to these cylinders during manufacture makes them suitable for use in harsh and aggressive environments.**



ACCESSORIES

p. 15

- **Separate ZTT tilt saddle** to help combat possible side loading.



p. 16

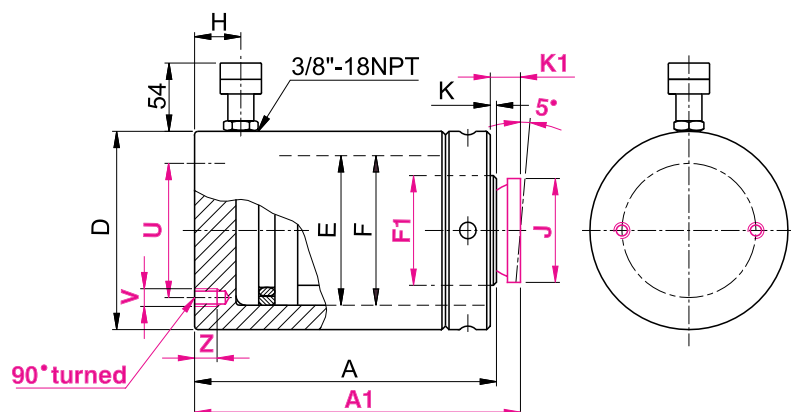


Whenever working space is restricted, **CGR** low profile cylinders offer a perfect solution.



For **P version** cylinders without end of stroke nut, it is very important that the operator is in a position to observe when the coloured zone of the piston appears, indicating the end of the piston stroke.

## HIGH TONNAGE CYLINDERS WITH SAFETY RING NUT, LOAD RETURN



Force	30 - 500 t
Stroke	25 - 300 mm
Max working pressure	700 bar

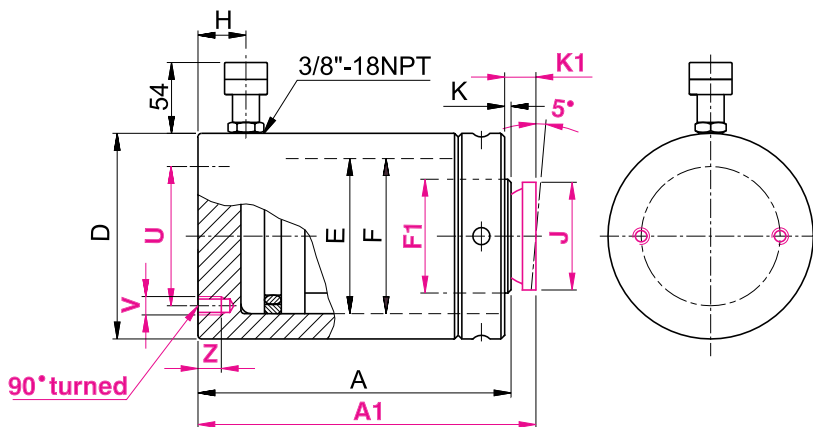
Cylinders with non standard **force** and **stroke** can be supplied upon request

### SELECTION CHART

Pushing force	Stroke	Oil volume	MODEL	Closed height	Closed height with integrated tilt saddle	External Dia.	Piston Dia.	P rod version Dia.	N rod version Dia.	Coupler height	Integrated tilt saddle Dia.	Rod projection	Rod projection with integrated tilt saddle	PCD mounting holes	Mounting holes_Depth	Weight
				A	A1	D	E	F	F1	H	J	K	K1	U	V / Z	kg
t* kN	mm	cm <sup>3</sup>		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
30 309	100	442	CGG30N100	189	193	102	75	-	Tr 65x6	19	53	1	5	65	2xM10 13	11
	100	709	CGG50P100	208	213	127	95	Tr 95x6	Tr 85x6	22	68	1	6	95	2xM12 15	19
50 496	150	1063	CGG50P150	258	263											23
100 929	100	1327	CGG100P100	236	243	175	130	Tr 130x10	Tr 110x10	22	88	2	9	130	2xM12 17	38
	150	1991	CGG100P150	286	293											45
150 1407	25	503	CGG150P25	184	193	213	160	Tr 160x10	Tr 130x10	30	118	3	12	130	4xM12 17	47
	50	1005	CGG150P50	209	218											52
	100	2011	CGG150P100	259	268											66
	150	3016	CGG150P150	309	318											74
	200	4021	CGG150P200	359	368											85
	250	5026	CGG150P250	409	418											95
200 1984	25	709	CGG200P25	205	214	252	190	Tr 190x10	Tr 165x10	32	148	3	12	140	4xM16 20	75
	50	1418	CGG200P50	230	239											84
	100	2835	CGG200P100	280	289											100
	150	4253	CGG200P150	330	339											116
	200	5670	CGG200P200	380	389											133
	250	7088	CGG200P250	430	439											149
	300	8506	CGG200P300	480	489											165

\* Nominal value, see kN for the exact force

## HIGH TONNAGE CYLINDERS WITH SAFETY RING NUT, LOAD RETURN



- Force **30 - 500 t**
- Stroke **25 - 300 mm**
- Max working pressure **700 bar**

Cylinders with non standard **force** and **stroke** can be supplied upon request

### SELECTION CHART

Pushing force	Stroke	Oil volume	MODEL	Closed height	Closed height with integrated tilt saddle	External Dia.	Piston Dia.	P rod version Dia.	N rod version Dia.	Coupler height	Integrated tilt saddle Dia.	Rod projection	Rod projection with integrated tilt saddle	PCD mounting holes	Mounting holes_Depth	Weight	
				A	A1	D	E	F	F1	H	J	K	K1	U	V/Z	kg	
t* kN	mm	cm <sup>3</sup>		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
250 2424	25	866	CGG250P25	224	233											95	
	50	1732	CGG250P50	249	258											104	
	100	3464	CGG250P100	299	308											127	
	150	5195	CGG250P150	349	358	280	210	Tr 210x10	Tr 175x10	34	158	3	12	150	4xM16 20	140	
	200	6927	CGG250P200	399	408											158	
	250	8659	CGG250P250	449	458											176	
300 2908	300	10391	CGG250P300	499	508											194	
	25	1039	CGG300P25	240	249											126	
	50	2077	CGG300P50	265	274											137	
	100	4155	CGG300P100	315	324											160	
	150	6232	CGG300P150	365	374	305	230	Tr 230x10	Tr 195x10	38	158	3	12	170	4xM16 20	183	
	200	8310	CGG300P200	415	424											205	
350 3436	250	10387	CGG300P250	465	474											228	
	300	12464	CGG300P300	515	524											251	
	25	1227	CGG350P25	250	262											149	
	50	2454	CGG350P50	275	287											162	
	100	4909	CGG350P100	325	337											188	
	150	7363	CGG350P150	375	387	332	250	Tr 250x10	Tr 215x10	42	196	3	15	200	4xM16 20	215	
200	9817	CGG350P200	425	437											241		
250	12272	CGG350P250	475	487											267		
300	14726	CGG350P300	525	537											293		

\* Nominal value, see kN for the exact force

## HIGH TONNAGE CYLINDERS WITH SAFETY RING NUT, LOAD RETURN

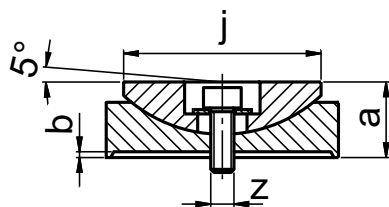
### SELECTION CHART

Pushing force	Stroke	Oil volume	MODEL	Closed height	Closed height with integrated tilt saddle	External Dia.	Piston Dia.	P rod version Dia.	N rod version Dia.	Coupler height	Integrated tilt saddle Dia.	Rod projection	Rod projection with integrated tilt saddle	PCD mounting holes	Mounting holes_Depth	Weight
				A mm	A1 mm	D mm	E mm	F mm	F1 mm	H mm	J mm	K mm	K1 mm	U mm	V/Z mm	kg
400 4008	25	1431	CGG400P25	260	272	356	270	Tr 270x10	Tr 235x10	42	196	3	15	230	4xM16 20	187
	50	2863	CGG400P50	285	297											203
	100	5726	CGG400P100	335	247											234
	150	8588	CGG400P150	385	397											266
	200	11451	CGG400P200	435	447											298
	250	14314	CGG400P250	485	497											330
	300	17177	CGG400P300	535	547											362
500 4948	25	1767	CGG500P25	275	287	396	300	Tr 300x10	Tr 260x10	50	196	3	15	250	4xM16 20	257
	50	3534	CGG500P50	300	312											278
	100	7069	CGG500P100	350	362											319
	150	10603	CGG500P150	400	412											360
	200	14137	CGG500P200	450	462											402
	250	17651	CGG500P250	500	512											443
	300	21206	CGG500P300	550	562											484

\* Nominal value, see kN for the exact force

### ACCESSORIES: ZTT TILT SADDLES

MODEL	For use with	a	b	j	z	kg
ZTT30	CGG30N100	19	1	53	M5	0,3
ZTT50	CGG50 # # # #	25		68	M8	0,9
ZTT100	CGG100 # # # #	34		88	M10	1,7
ZTT150	CGG150 # # # #	45	118	3,4		
ZTT200	CGG200 # # # #	54	148	7,0		
ZTT250	CGG250 # # # #	58		158		9,5
ZTT300	CGG300 # # # #		71		196	M12
ZTT350	CGG350 # # # #	18,0				
ZTT400	CGG400 # # # #	20,7				
ZTT500	CGG500 # # # #	23,8				



### MODEL CODING

C#G	30	N	###	#
Series G (gravity) Series M (spring)	Pushing force in tonne	N = With end of stroke nut P = With no end of stroke nut (Plunging)	Stroke in mm	F = with base mounting holes T = with integrated tilt saddle**

\*\* Cylinders with a force below 100 tonne can be supplied subject to a minimum production batch, to be advised