# KALLER





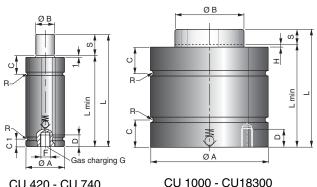
Super Compact CU 420-18300

by

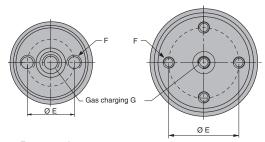


# KALLE

### **Dimensions**



CU 420 - CU 740



Bottom view CU 740 - CU 2900

Bottom view CU 4700 - CU18300

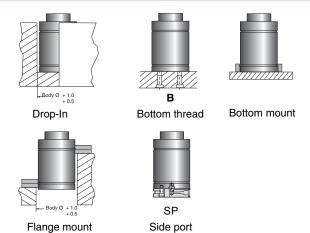
CU gas springs are very compact bore sealed springs, which provide the highest force per cylinder diameter.

CU gas springs are ideal where space is limited in the die and very high forces are required.

CU gas springs can be linked together and charged remotely using a control block and hose system. Repair kits are also available for all CU models except the CU 420 and CU 740.

For more information, see our main KALLER catalogue.

## **Mounting options**



Model	Drop in	В	Bottom mount						
			BFCU	BFP	FC	FCS FCX	FCR	FK	SP
CU 420	Х	Χ					Х		
CU 740	Х	Х			Х				
CU 1000	Х	Х	Χ		Χ	Х			Х
CU 1800	Х	Х	Х		Х	Х			Х
CU 2900	Х	Х				Х			Х
CU 4700	Х	Х		Х				Х	Х
CU 7500	Х	Х		Χ				Х	Х
CU 11800	Х	Х	Х		Х	Х			Х
CU 18300	Х	Х	Х		Х	Х			Х

X = Mount is available for this model

### **Basic Information**

Pressure medium	. Nitrogen
Max. charging pressure	•
Min. charging pressure	
Operating temperature	. 0 - +80°C
Force increase by temperature	. ±0.3%/°C
Recommended max strokes/min	. ~ 100 (at 20° C)
Max piston rod velocity	. 0.5 m/s
Repair Kit	. Available for
	model sizes CU
	1000 to CU 18300

Note! See main catalouge for more information.

### **Initial force**

Calculation of charge pressure for CU, to achieve desired initial force:

X = Desired initial force in N

Charge pressure = 150 •  $\frac{X}{\text{Initial force at 150 bar}}$ 

Example: CU 4700 to have a desired initial force of 25000 N

Charge pressure =  $150 \cdot \frac{25000}{47000} \approx 80 \text{ bar}$ 



Dimensions														
		Force in N at 150 bar/+20°C												
Order No.	S Stroke	Initial	End force**	L ± 0.25	L min	Ø A ±0.1	ØВ	C/C1	D	ØE	F	G	н	R
CU 420-006	6		7000	56	50	±0.1	0.0	0/01		, DL	'	<u> </u>	- "	n
CU 420-010	10	4250	6900	70	60	24.9	12		5		М6	M6	1	1
CU 420-016	16		6900	91	75			11.5/5						
CU 420-025	25		6900	120	95									
CU 420-032	32*		7600	140	108									
CU 420-040	40*		7600	165	125									
CU 420-050	50*		7600	195	145									
CU 740-006	6		9800	63	57									
CU 740-010	10		10000	75	65									
CU 740-016	16		11000	93	77									
CU 740-025	25	7400	12000	120	95	31.9	20	11.5/10.5	5.5	15	M6	M6	1	1
CU 740-032	32*		12000	140	108									
CU 740-040	40*		12000	165	125									
CU 740-050	50*		12000	195	145									
CU 1000-06	6		16000	61	55									
CU 1000-10	10		16000	78	68	07.0	00							
CU 1000-16	16		16000	100	84									
CU 1000-25	25	10600	16000	135	110	37.9	20	10.5	6.5	17	M6	M6	0.5	1
CU 1000-32	32*		16000	167	135									
CU 1000-40	40* 50*		16000 16000	195 230	155									l
CU 1000-50 CU 1800-06	6		25000	66	180 60									
CU 1800-10	10		26000	80	70	50.2	30		6.5	26	M6	G1/8"	0.5	2
CU 1800-16	16	18000	26000	106	90			14.5						
CU 1800-25	25		27000	135	110									
CU 1800-32	32*		27000	162	130									
CU 1800-40	40*		28000	190	150									
CU 1800-50	50*		29000	220	170									
CU 2900-010	10		38500	85	75									
CU 2900-016	16		41000	103	87									
CU 2900-025	25	29500	43000	130	105	63.2	45	19/18	9	34	M8	G 1/8"	1	2
CU 2900-032	32*	29300	44200	150	118	03.2	45	19/10	9	34	IVIO	G 1/6	ļ !	
CU 2900-040	40*		45200	175	135									
CU 2900-050	50*		45800	205	155									
CU 4700-10	10		67000	80	70									
CU 4700-16	16		66000	106	90									
CU 4700-25	25	47000	68000	135	110	75.2	50	18	9	40	M8	G1/8"	0.5	1.5
CU 4700-32	32*		67000	167	135									
CU 4700-40	40*		67000	200	160									
CU 4700-50	50*		67000	240	190									
CU 7500-10 CU 7500-16	10 16		104000 104000	90 116	100									
CU 7500-16	25	1	109000	145	120									
CU 7500-32	32*	75000	105000	182	150	95.2	55	21	9	52	M8	G1/8"	0.5	1.5
CU 7500-40	40*		107000	210	170									
CU 7500-50	50*		106000	255	205									
CU 11800-10	10		155000	100	90									
CU 11800-16	16	1	158000	126	110									
CU 11800-25	25	118000	170000	155	130	120.2	70	00.5	11	68	M10	G1/8"	0.5	2.5
CU 11800-32	32*		164000	187	155			22.5						
CU 11800-40	40*		165000	220	180									
CU 11800-50	50*		166000	260	210									
CU 18300-10	10		235000	110	100									
CU 18300-16	16		252000	136	120									
CU 18300-25	25	184000	254000	165	140	150.2	90	24.5	11	90	M10	G1/8"	0.5	2.5
CU 18300-32	32*		251000	197	165						0		0.5	
CU 18300-40	40*	4	250000	235	195	4								
CU 18300-50	50*		255000	270	220									

Note! \*

New!

New!

New!



For stroke lengths over 25 mm, the spring should be attached to the tool using the tapped holes in the bottom or using flanges. We also recommend shorter stroke springs to be fastened for optimal service-life.

<sup>\*\*</sup> At full stroke

# KALLER

# The Safe Choice



#### **Gas Springs**

Kaller developed the first nitrogen gas spring for press tools and today offers a comprehensive selection of high quality gas springs for use in different tool & die applications.



#### Flex Cam™

The Flex Cam is used for piercing, cutting, forming and flanging operations. The system allows for a flexible distribution of forces with optimal direction and velocity. By using a Flex Cam, fewer tools are required in production.



#### Controllable Gas Springs-KF2

Kaller controllable springs are a family of gas springs, for use in press tools, that can be locked in their bottom position and where the return stroke of the spring can be controlled.



#### **Roller Cam**

Kaller Roller Cam is used for piercing, trimming, flanging and restriking. The Roller Cam can be mounted in both vertical and horizontal angles.



#### Flange Stripper Unit

Kaller Flange Stripper Unit is used in flanging dies for stripping/lifting a flanged part after forming. It provides 200 daN of stripping force, can be top or bottom mounted and is self guiding.



#### **Counter Balance**

Kaller Counter Balance gas springs can be used to lift, lower, assist, balance, and hold in a multitude of applications.



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