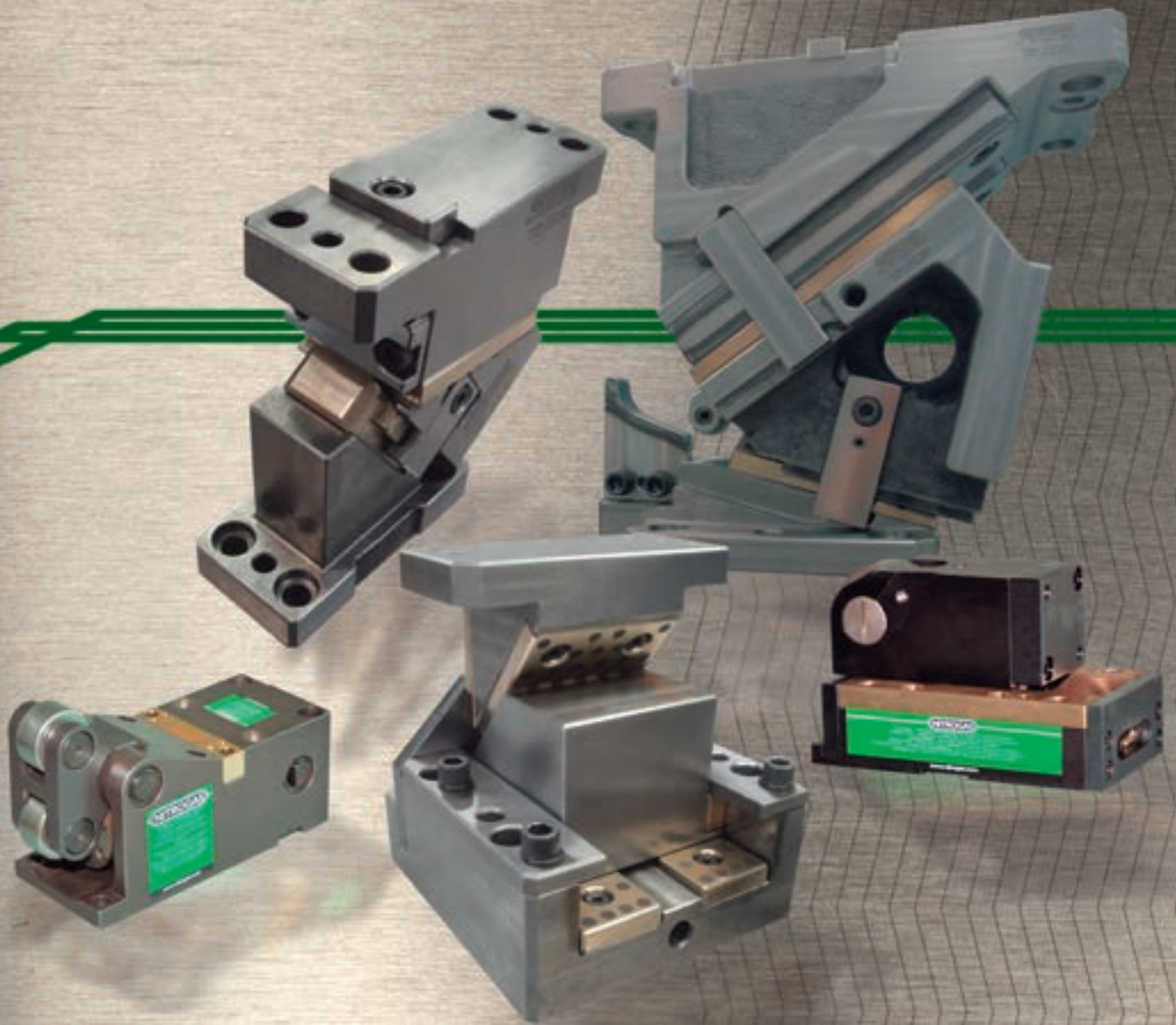


NITROGAS

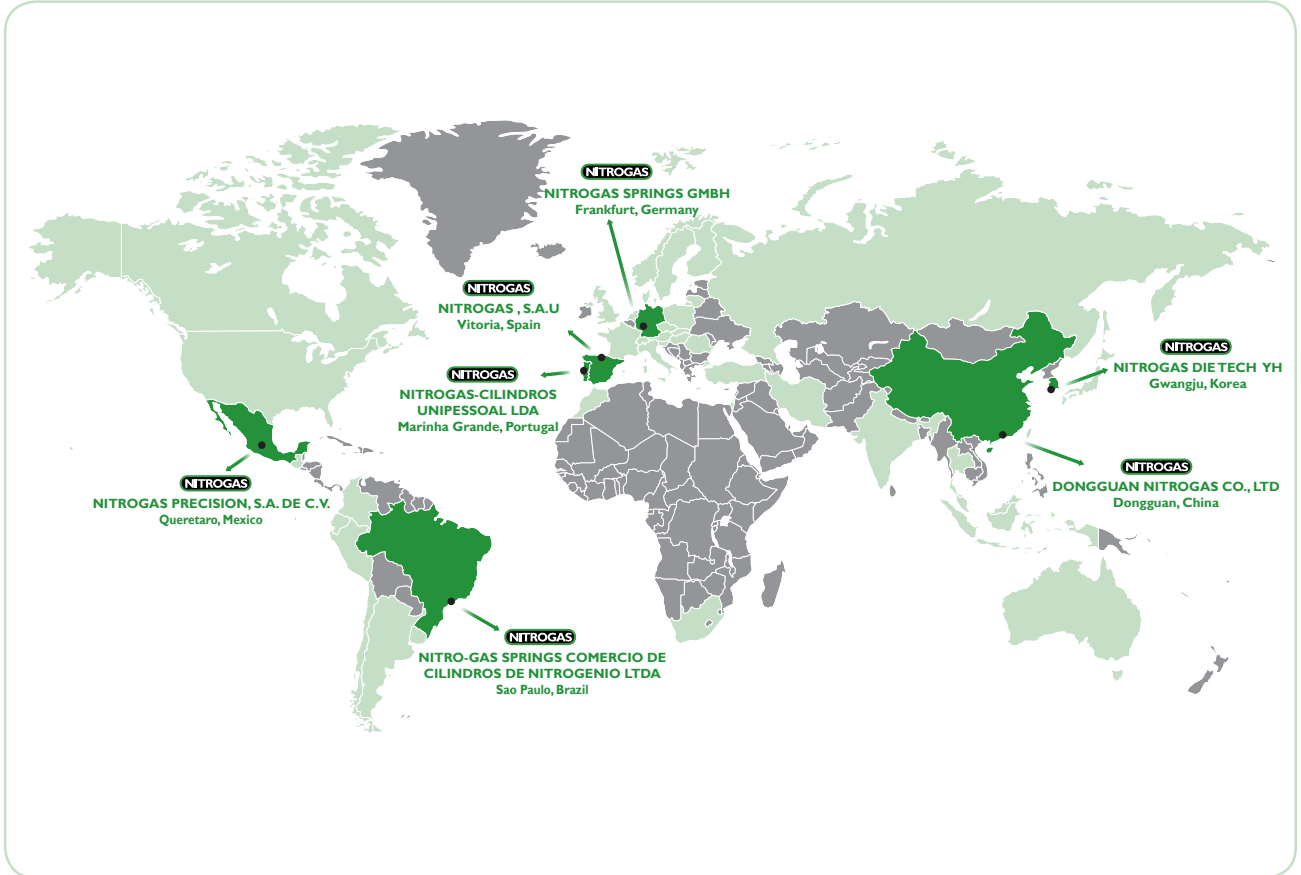
CAM UNITS



Worldwide

NITROGAS is a global company that has a worldwide presence through its own network of subsidiaries and an extensive distributor network.

SUBSIDIARIES



DISTRIBUTORS

WESTERN EUROPE

Austria	Italy	Sweden
Denmark	Netherlands	Switzerland
Finland	Norway	United Kingdom
France	Portugal	
Germany	Spain	

EASTERN EUROPE

Slovakia	Hungary
Slovenia	Czech Republic
Lithuania	Poland
Romania	Turkey
Russia	

AMERICA

Argentina	Guatemala
Brazil	Mexico
Canada	Peru
Chile	Uruguay
Colombia	USA
Ecuador	

ASIA-OCEANIA

Australia	Japan
China	Korea
India	Malaysia
Indonesia	Russia
Iran	Taiwan
Israel	Thailand

AFRICA

Morocco
South Africa

Our customers can learn more about the nearest contact on our website:

www.nitrogas.com/es/Worldwide.aspx

Why Nitrogas?

BEST GAS SPRING IN THE MARKET

NITROGAS's gas springs offer the world's most advanced technology, guaranteeing longer cam unit life than other products on the market.

NITROGAS offers customers products that meet any test of approval, confirming the longest life of our cam units.



25 YEARS OF EXPERIENCE SPEAKS FOR ITSELF



NITROGAS was founded in Vitoria (Spain) in 1988 and has become one of the most important manufacturers of cam units.

For 25 years we have developed this technology.

Today, NITROGAS has his wholly owned subsidiaries in Germany, Portugal, China, Korea, Mexico and Brazil besides its dealer network.

ENGINEERS TO THE SERVICE OF TECHNICAL DEPARTMENTS

NITROGAS ensures maximum technical support to its customers, with prompt response to any application assistance or questions related to their products.



TECHNOLOGICAL PARTNERS – SPECIFIC SOLUTIONS



NITROGAS created the NITROGAS TECHNOLOGY CENTER (NTC), bringing together a group of engineers and technicians to concentrate on the R & D services the company gives to customers with specific projects that may require special solutions or need higher performance than other standard products on the market.

WORLD PRESENCE – PLANT SUPPORT (STOCK, REPAIRS...)

NITROGAS analyzes and diagnoses with its customers any product and service needs required in each customers' facility, formulating a response that meets customer expectations.

NITROGAS structure allows reaching any market in the world.

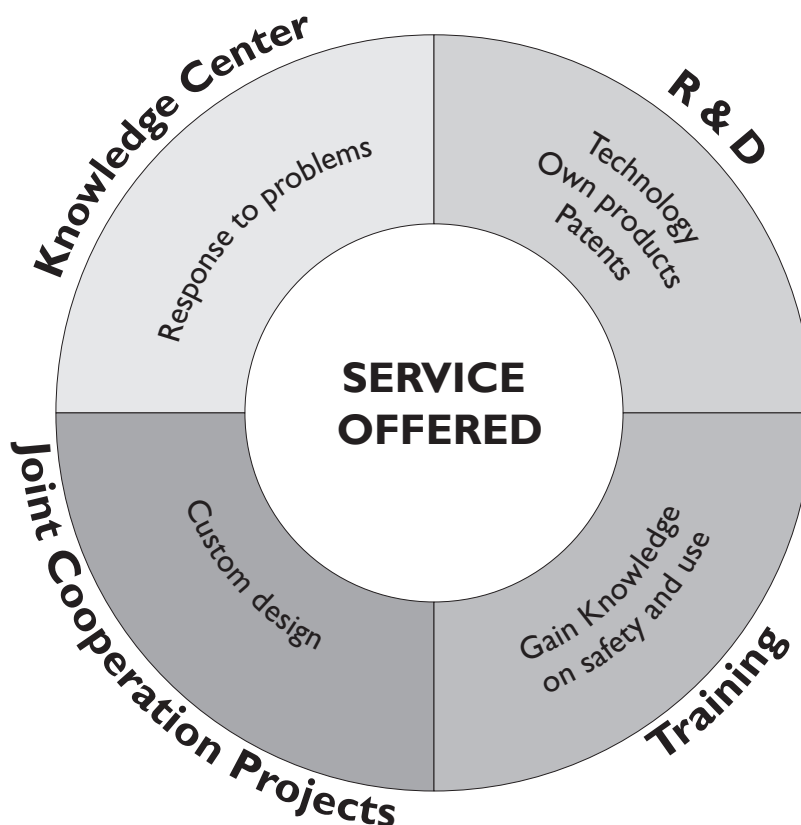


Nitrogas Technology Center



NITROGAS is a company strongly committed to research and innovation. It has the largest Research and Knowledge Center in the world concerning gas springs and cam units: NITROGAS TECHNOLOGY CENTER.

Here a team of experienced engineers investigate and test the latest improvements and technologies related to the development of gas springs and cam units. As a result of hard work, several worldwide patents were obtained, and allow NITROGAS to remain leader in the development of new products, offering high tech solutions. NITROGAS also provides solutions to special request, or response to any question, problem or need of our customer.



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PUNCHING UNIT 6

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COMPACT DESIGN

- ✓ Reduced dimensions
- ✓ Reduced and medium loads
- ✓ Standard life
- ✓ For pierce

Punching Units		CPUN	CPUS
		CDCB	
Aerial Cams		CACS	CACD CACSA

STANDARD DESIGN

- ✓ Standard dimensions
- ✓ Standard loads
- ✓ Standard life
- ✓ For pierce and flange

Roller Cams		CRCN	CRCS
		CDCA	
Aerial Cams		CACT	CACF CACK
		CACC	CACU



LONG LIFE DESIGN

- ✓ Big dimensions
- ✓ Big loads
- ✓ Long life (Interchangeability)
- ✓ For pierce and flange

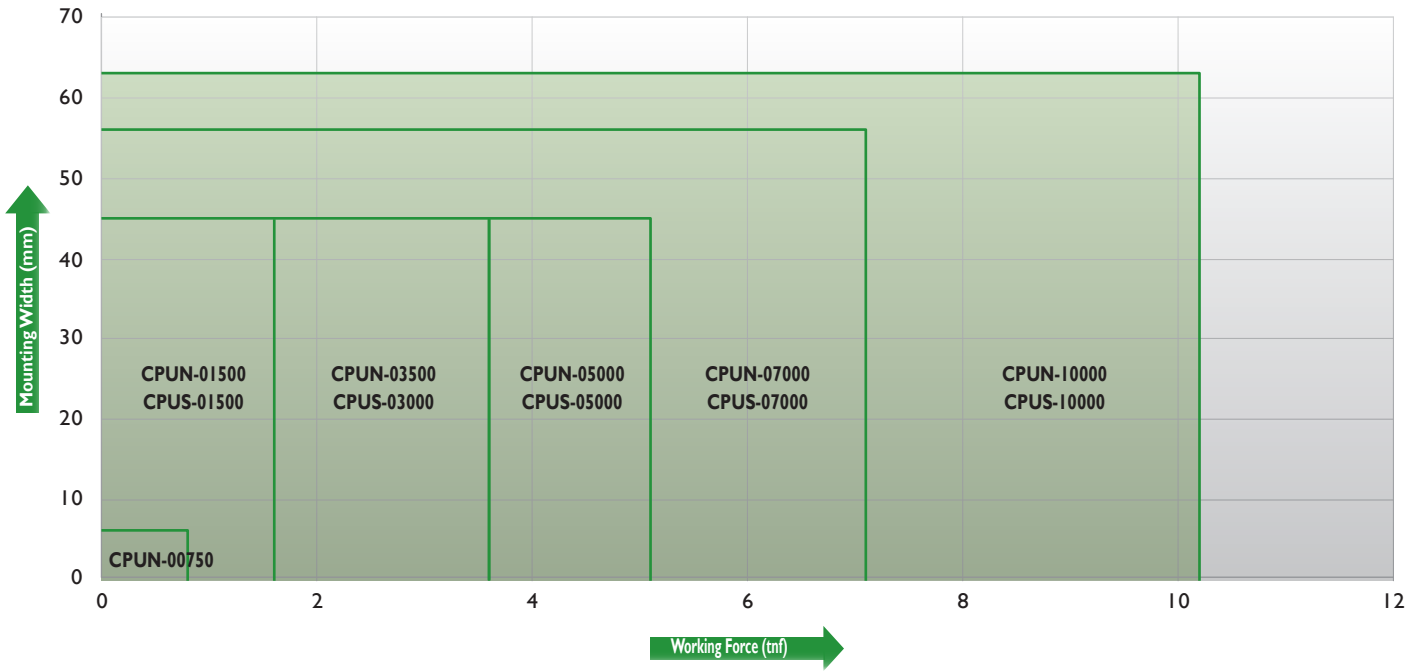
Die Mounted Cams		CDCP	CDCL
		CACW	CACG CACL

NORMATIVE DESIGN

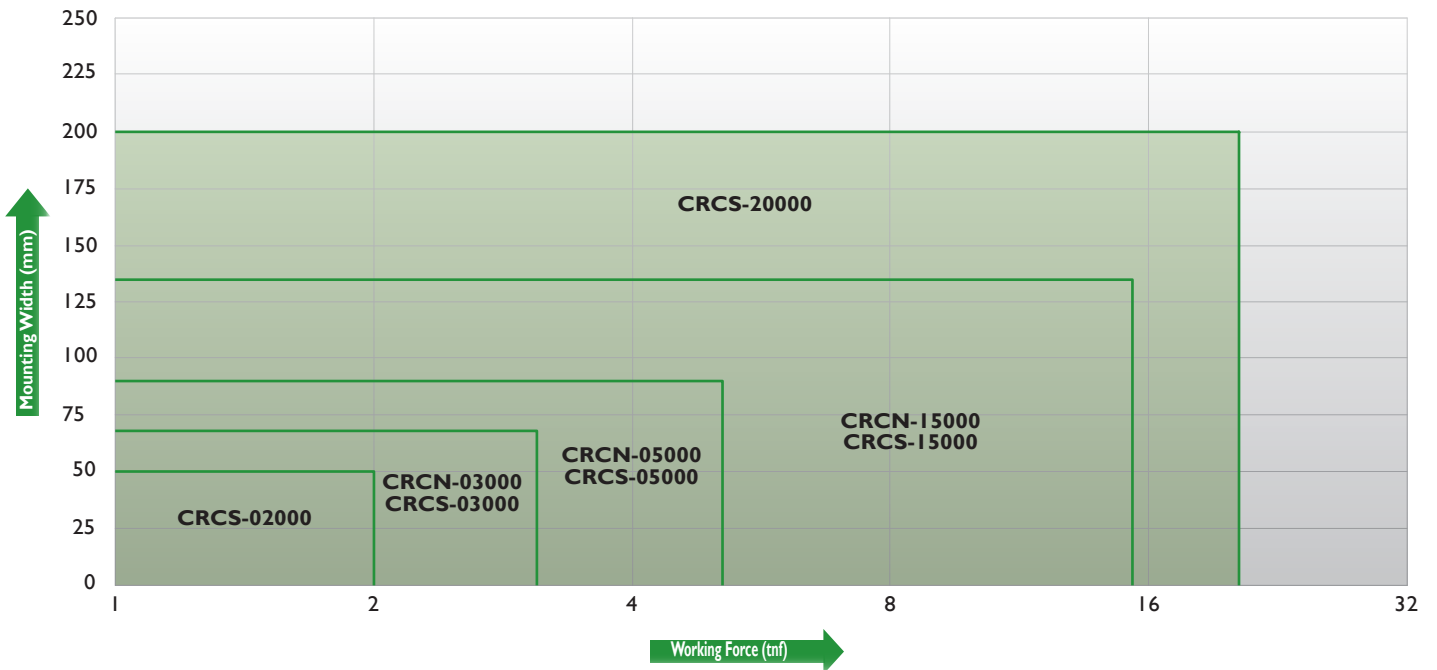
- ✓ All dimensions
- ✓ All type of loads
- ✓ Long life
- ✓ For pierce and flange

	NAAMS STANDARD	VDI STANDARD
Die Mounted Cams		CDCV
		CDCV-F
Aerial Cams		CACV
		CACV-F

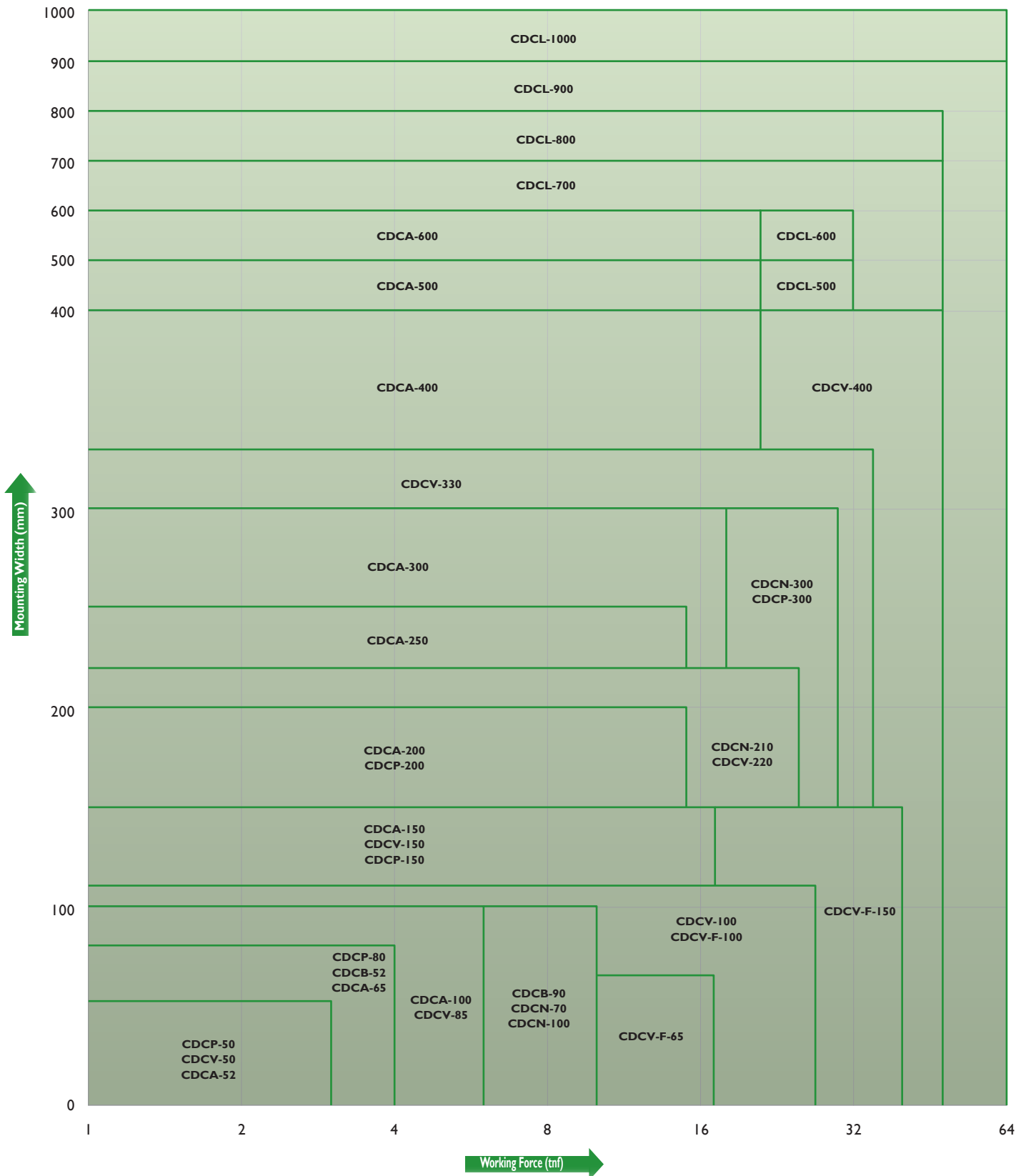
Punching Units



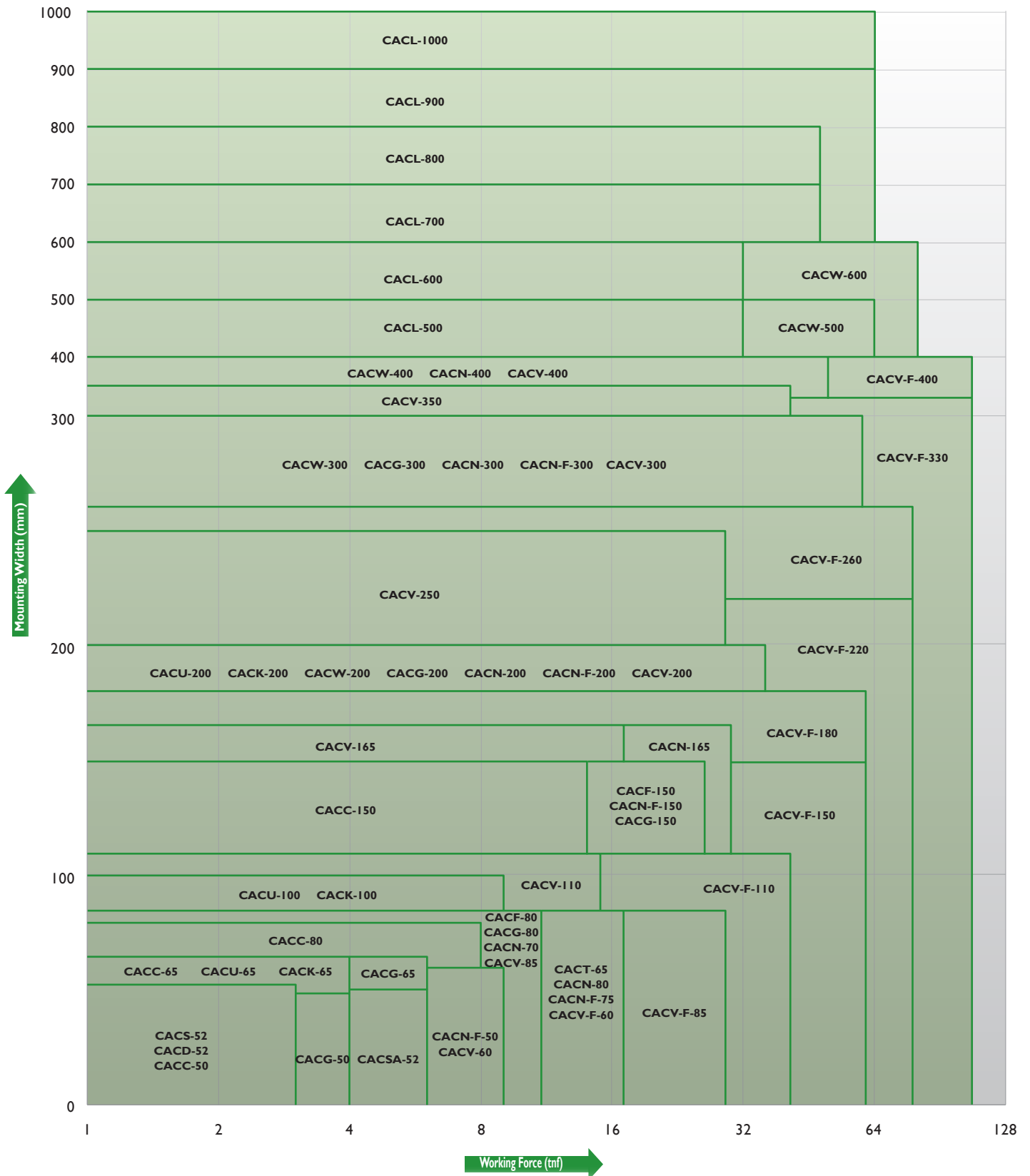
Roller Cam Units



Die Mounted Cam Units



Aerial Cam Units



NITROGAS Punching Units are manufactured to the highest quality. All components are made with hardened steel, resulting in a tough, strong product ready for a long working life in the most exigent working conditions.

Their design allows to be used in any position, making them easy to fit to the work tool. Punching Units are suitable for all types of operations (cutting, punching, bending, etc.), due to the guiding all around the diameter.

The Punching units are equipped with easily adjustable anti-rotation systems, which are needed when using shaped punches (except CPUN-00750-10 model, due to its small size).

The cam units are fitted with gas springs to provide the return force (except the CPUN-00750-10 model, which is fitted with a coil spring) and ensure the return of the rod.

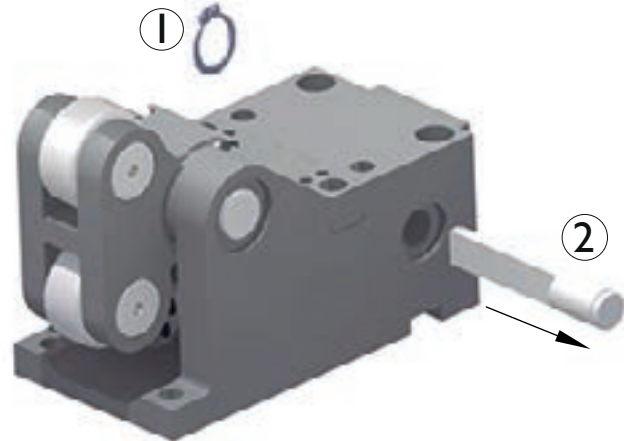
As the movement of the press is transformed by a cam assy, the punching units are applicable for short strokes (<50 mm) and small loads.

Nominal forces of 750 daN, 1500 daN, 5000 daN, 7000 daN, and 10000 daN are available. Choose the solution that best suits to your application.

Punch adjustment

STEP 1

To adjust and line up the punch, remove the bolt circlip (1) and extract the gas spring bolt (2).

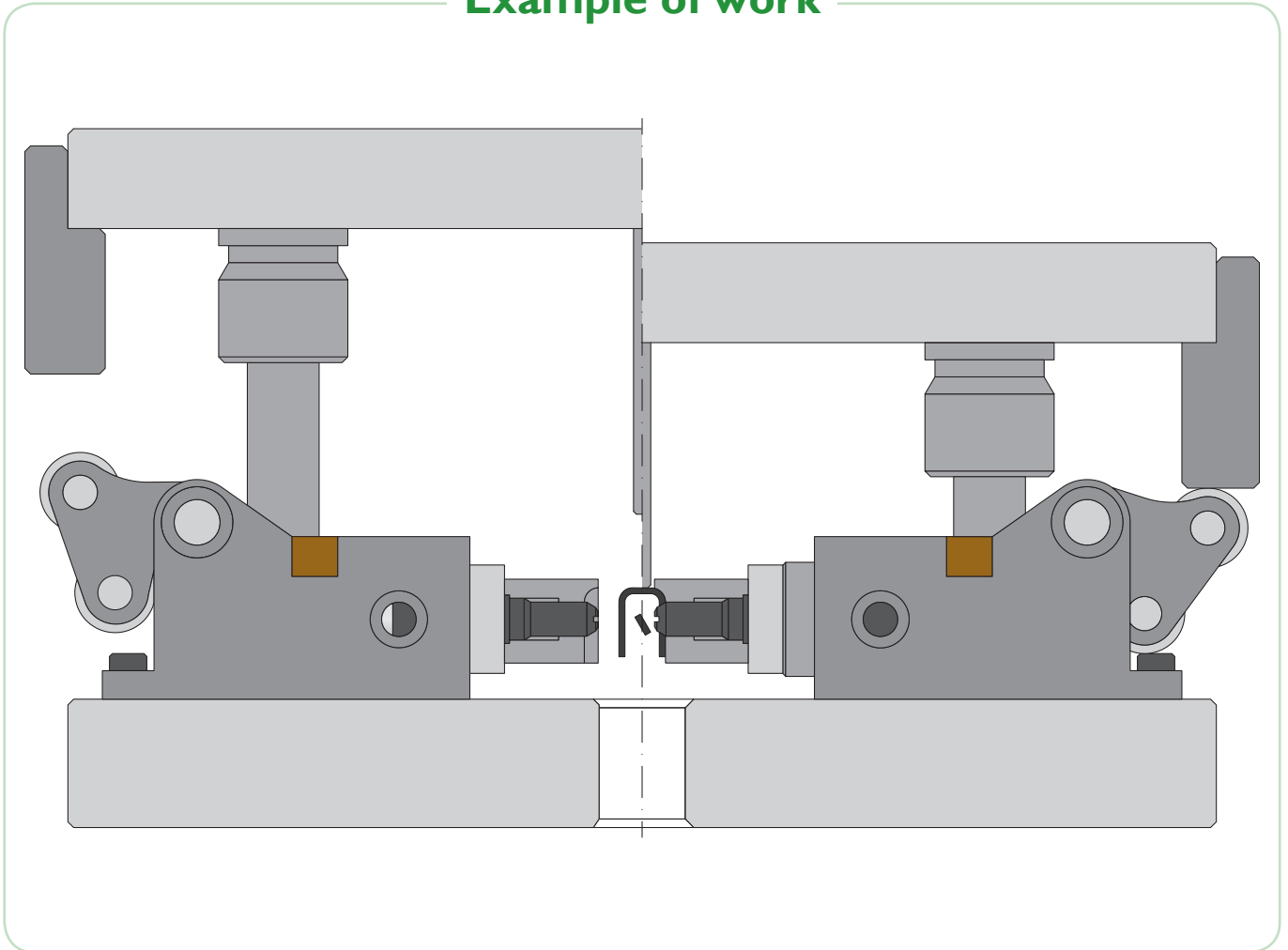


STEP 2

Once the rod is out it is possible to move easily the rod pulling down the cam assy.



Example of work



Spare parts available for all the Punching Units.
The center of the load must be located as much centered as possible.



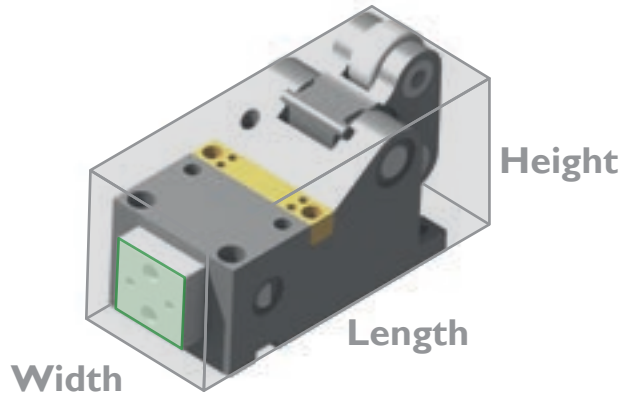
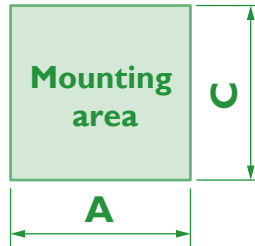
Maximum press speed..... 1.6 m/s
Maximum cadence (at 20°C) 40 strokes/min



NITROGAS offers engineering support referring to cam applications for die designers and builders.

CAD files of Punching Units can be downloaded for FREE from our website:

www.nitrogas.com

Punching units overview



Model	Working Force daN	S mm	θ °	Mounting area		Spring Force daN	Overall Dimensions			Weight kg	
				A mm	C mm		Width mm	Height mm	Length mm		
CPUN 	00750	10	0	44.5	44.5	40	44.5	50	100	0.9	
	01500	12		160	65	76	119	2.6			
	03500	20		310	75	84	167	4.1			
	05000	25	45	45	45	270	80	116	178.5	6.1	
	07000	38						0	56	56	550
	10000	50	0	63	63	96	122	270.5	9.4		
			45				149.5	255.5	13.8		
			45				131	253.5	14.0		
CPUS 	01500	15	0	45	45	280	65	76	132.5	2.8	
			45					65	152.5	2.8	
	03000	20	0	45	45	270	75	98	170	4.7	
			45					75	205	4.9	
	05000	30	0	45	56	56	550	90	121	201	7.9
			45						90	242	8.3
	07000	40	0	63	63	540	105	144	241	12.9	
			45					105	283	13.4	
	10000	50	0	120	167	282	21.2	167	282	21.2	
			45					120	324	21.7	

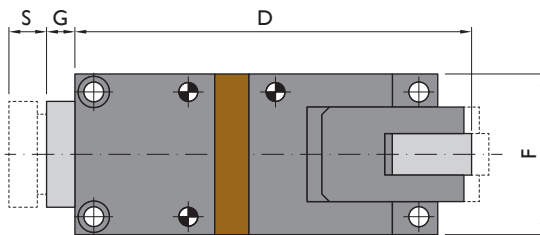
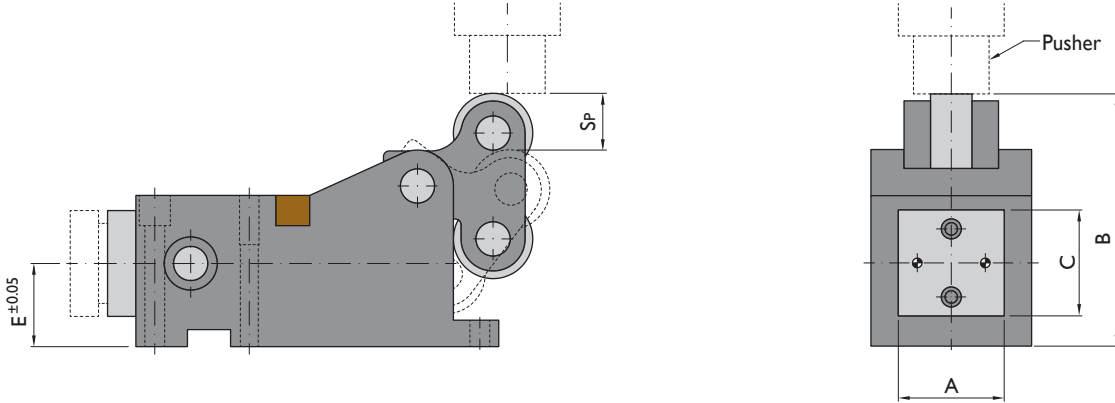


WEB

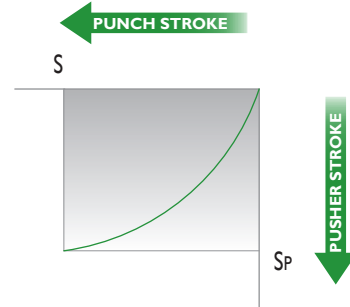


CAD

Structure for horizontal Punching Units



CAM DIAGRAM

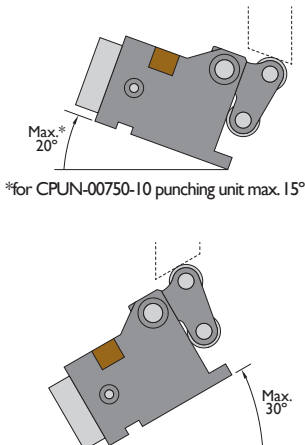


CPUN-00750-10 Cam unit is served with a punch. Maximum punch diameter supplied (6mm) if not specified.

Ordering example: 4 x CPUN-Working Force-Stroke
4 x CPUN-01500-12

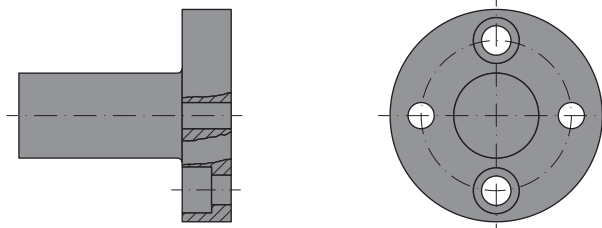
Ordering example: 4 x CPUN-00750-10 x Ø
4 x CPUN-00750-10 x 3.2

Maximum inclination angle



Optional accessories

PUSHER*



* Only for horizontal mounting. For any other installation angle contact with NITROGAS engineering.

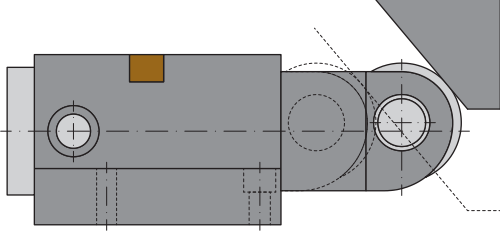
See dimensions on page 18.

Ordering example: SE-I

Order No.			General Dimensions										Accessories ⁽¹⁾
Model	Working Force daN	S mm	Weight kg	Spring Force daN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Sp mm	Pusher
CPUN	00750	10	0.9	40	44.5	50	44.5	80	18	44.5	20	7.5	SE-1
CPUN	01500	12	2.6	160	45	76	45	104	28	65	15	11.5	SE-1
CPUN	03500	20	4.1	310	45	84	45	152	28	75	15	24.5	SE-1
CPUN	05000	25	6.1	270	45	116	45	163.5	37	80	15	25	SE-2
CPUN	07000	38	9.2	550	56	134	56	210	44	85	15	42.5	SE-2
CPUN	10000	50	13.8	550	63	149.5	63	240.5	50	96	15	52.7	SE-3

⁽¹⁾ For more information about accessories contact with NITROGAS engineering at engineering@nitrogas.com

CPUN-20000-50 Punching Unit and Pusher available under request. For more information contact with NITROGAS engineering at engineering@nitrogas.com

CPUN	20000	50											
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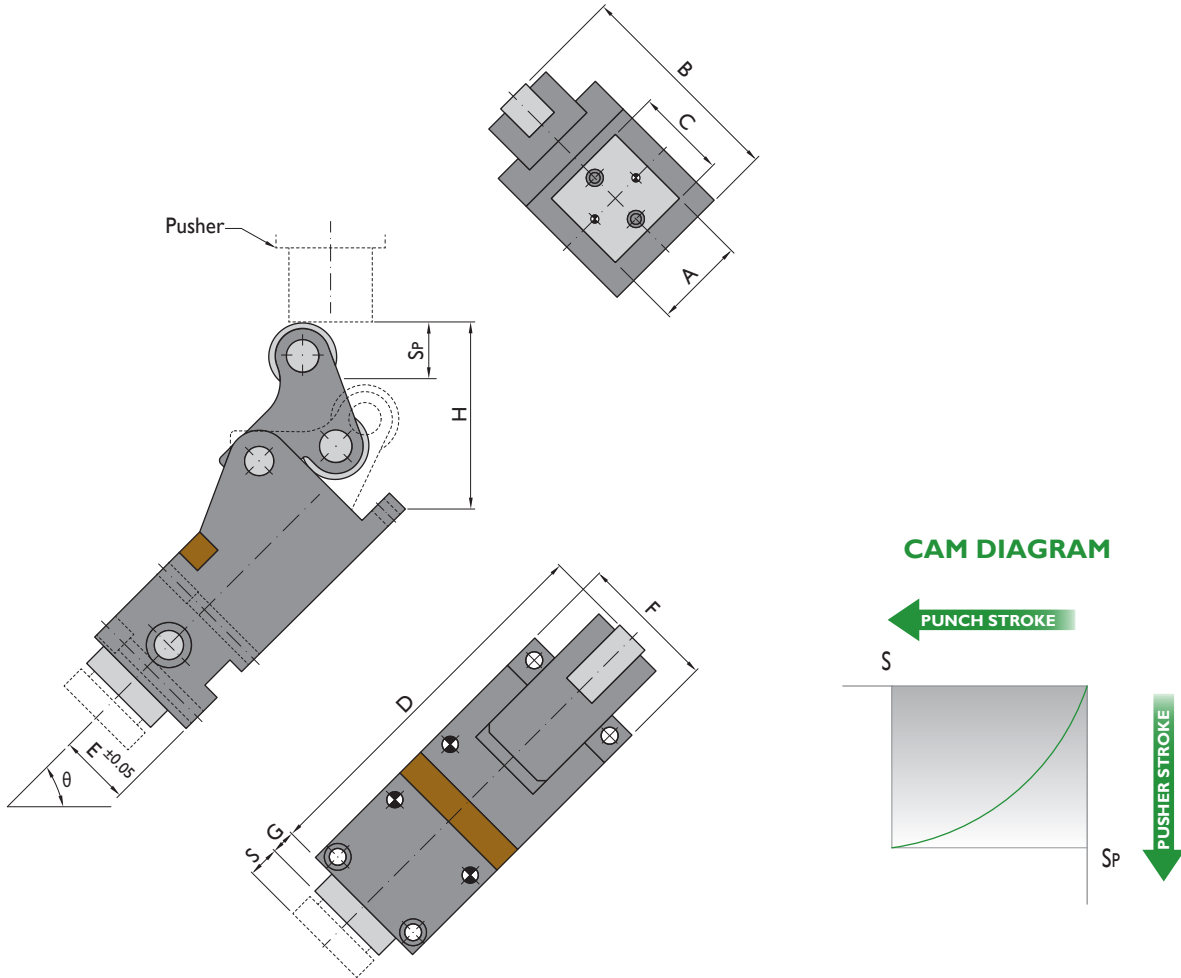


More details about Punching Units and spare parts on our website:

<http://www.nitrogas.com/es/CPUN.aspx>

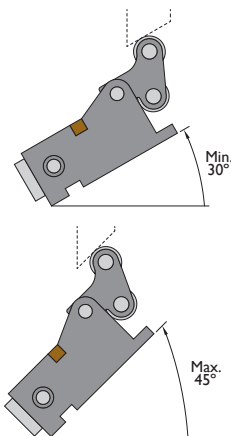


Structure for inclined Punching Units



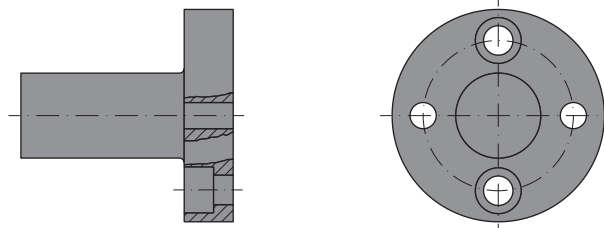
Ordering example: 4 x CPUN-Working Force-Stroke- θ
4 x CPUN-05000-25-45

Maximum inclination angle



Optional accessories

PUSHER*



* Only for 45° degrees mounting. For any other installation angle contact with NITROGAS engineering.

See dimensions on page 18.

Ordering example: SE-2

Order No.				General Dimensions											Accessories ⁽¹⁾
Model	Working Force daN	S mm	θ °	Weight kg	Spring Force daN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Sp mm	Pusher
CPUN	05000	25	45	6.3	270	45	98	45	198.5	37	80	15	97	37.5	SE-2
CPUN	07000	38	45	9.4	550	56	122	56	255.5	44	85	15	122.6	58.3	SE-3
CPUN	10000	50	45	14	550	63	131	63	283.5	50	96	15	125.7	64.6	SE-4

⁽¹⁾ For more information about accessories contact with NITROGAS engineering at engineering@nitrogas.com

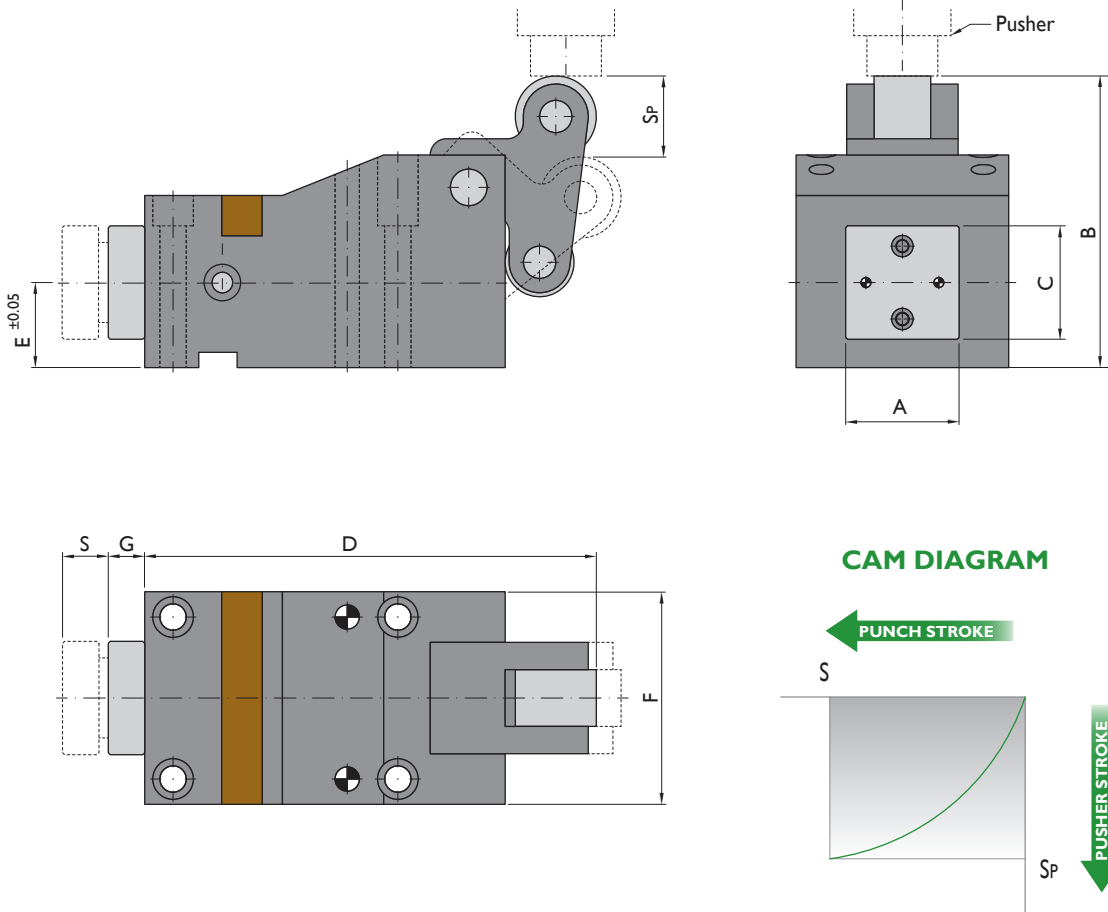


More details about Punching Units and spare parts on our website:

<http://www.nitrogas.com/es/CPUN.aspx>

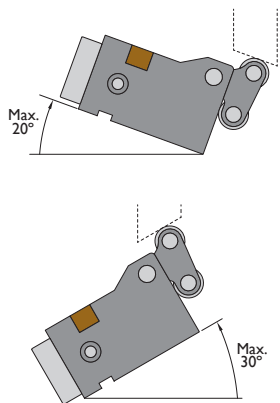


Structure for horizontal Punching Units



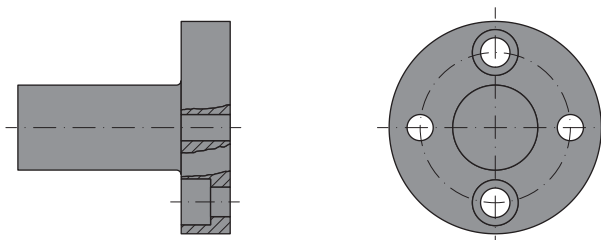
Ordering example: 4 x CPUS-Working Force-Stroke
 4 x CPUS-05000-30

Maximum inclination angle



Optional accessories

PUSHER*



* Only for horizontal mounting. For any other installation angle contact with NITROGAS engineering.

See dimensions on page 18.

Ordering example: SE-2

Order No.		General Dimensions											Accessories ⁽¹⁾
Model	Working Force daN	S mm	Weight kg	Spring Force daN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Sp mm	Pusher
CPUS	01500	15	2.8	280	45	76	45	117.5	26	65	15	13.8	SE-1
CPUS	03000	20	4.7	270	45	98	45	155	28.5	75	15	20.2	SE-1
CPUS	05000	30	7.9	550	45	121	45	186	35	90	15	27	SE-2
CPUS	07000	40	12.9	540	56	144	56	223	42	105	18	41.3	SE-3
CPUS	10000	50	21.2	540	63	167	63	262	48	120	20	51.2	SE-3

⁽¹⁾ For more information about accessories contact with NITROGAS engineering at engineering@nitrogas.com



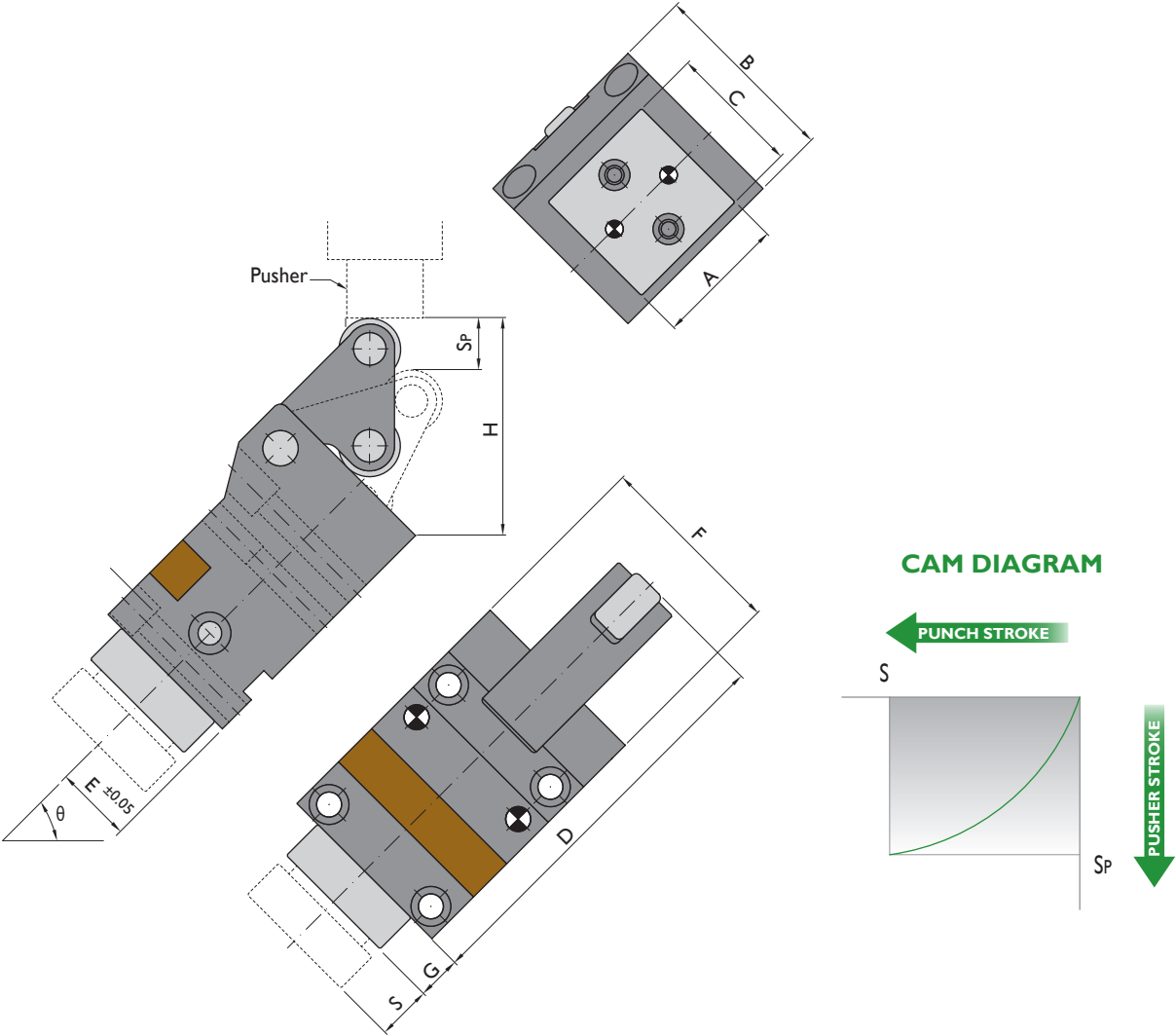
More details about Punching Units and spare parts on our website:

<http://www.nitrogas.com/es/CPUS.aspx>

WEB

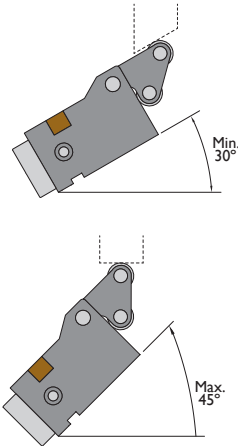
 CAD

Structure for inclined Punching Units



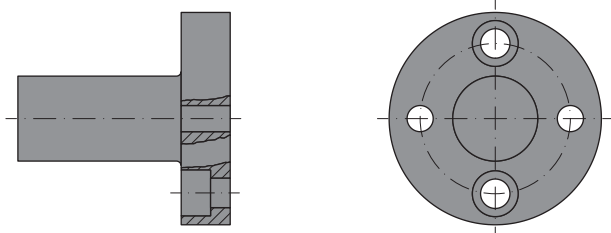
Ordering example: 4 x CPUS-Working Force-Stroke-θ
 4 x CPUS-05000-30-45

Maximum inclination angle



Optional accessories

PUSHER*



* Only for 45° degrees mounting. For any other installation angle contact with NITROGAS engineering.

See dimensions on page 18.

Ordering example: SE-2

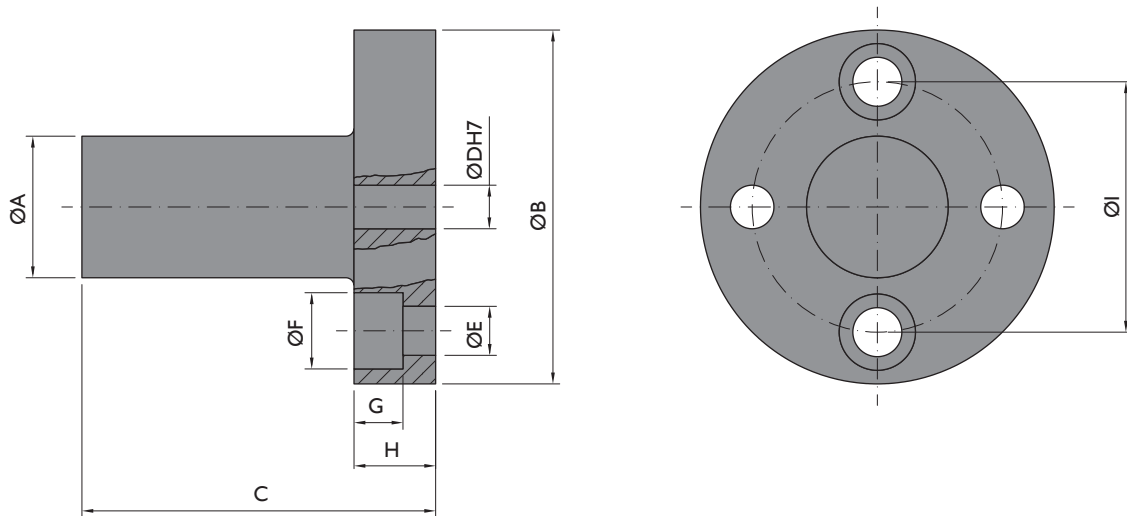
Model	Order No.			Weight kg	Spring Force daN	General Dimensions										Accessories ⁽¹⁾
	Working Force daN	S mm	θ °			A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Sp mm	Pusher	
CPUS	01500	15	45	2.8	280	45	65	45	137.5	26	65	15	74	18.5	SE-1	
CPUS	03000	20	45	4.9	270	45	75	45	190	28.5	75	15	97	30.9	SE-2	
CPUS	05000	30	45	8.3	550	45	90	45	227	35	90	15	116	44.1	SE-2	
CPUS	07000	40	45	13.4	540	56	105	56	265	42	105	18	134.5	60.4	SE-3	
CPUS	10000	50	45	21.7	540	63	120	63	304	48	120	20	150	71.2	SE-3	

⁽¹⁾ For more information about accessories contact with NITROGAS engineering at engineering@nitrogas.com



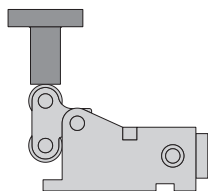
More details about Punching Units and spare parts on our website:

<http://www.nitrogas.com/es/CPUS.aspx>



Note: Pusher for 0° and 45° degrees installation angles. For any other installation angle contact with NITROGAS engineering.

Order No.	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm
SE-1	26	65	60	8	9	14	9	20	46
SE-2	35	75	70	8	9	14	9	20	55
SE-3	45	85	80	10	11	17	11	25	65
SE-4	55	100	80	10	11	17	11	25	78

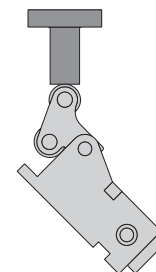


Horizontal Punching Units

Cam Unit Model	SE-1	SE-2	SE-3	SE-4
CPUN-00750-10	✓			
CPUN-1500-12	✓			
CPUN-03500-20	✓			
CPUN-05000-25		✓		
CPUN-07000-38		✓		
CPUN-10000-50			✓	
CPUS-01500-15	✓			
CPUS-03000-20	✓			
CPUS-05000-30		✓		
CPUS-07000-40			✓	
CPUS-10000-50			✓	

CPUN

CPUS



Inclined Punching Units

Cam Unit Model	SE-1	SE-2	SE-3	SE-4
CPUN-05000-25-45		✓		
CPUN-07000-38-45			✓	
CPUN-10000-50-45			✓	
CPUS-01500-15-45	✓			
CPUS-03000-20-45		✓		
CPUS-05000-30-45		✓		
CPUS-07000-40-45			✓	
CPUS-10000-50-45				✓

CPUN

CPUS

Ordering example: SE-1



NITROGAS Roller Cams are compact and cost effective. Designed for a long service life, since the wear surfaces are mounted with Aluminium-Bronze alloy with graphite against steel surfaces hardened to 55-60 HRC.

As the movement of the press is transformed by a roller, the roller cams are applicable for longer strokes (50-100 mm) and for loads up to 20000 daN. Nominal forces of 2000 daN, 3000 daN, 5000 daN, 15000 daN and 20000 daN are available.

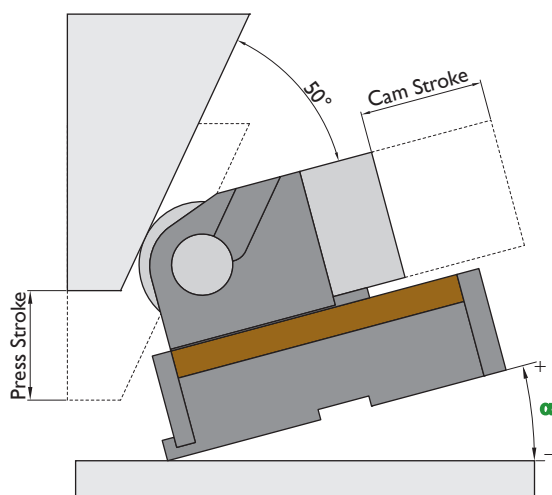
Roller Cams are recommended in case of long strokes and little space. Due to the guiding type they are not recommended for heavy asymmetric loads (see Working Force Distribution on the side page).

The cam units are fitted with gas springs to provide the return force and ensure the return of the body. All models has an easy access to the return spring (see Gas Spring extraction below).

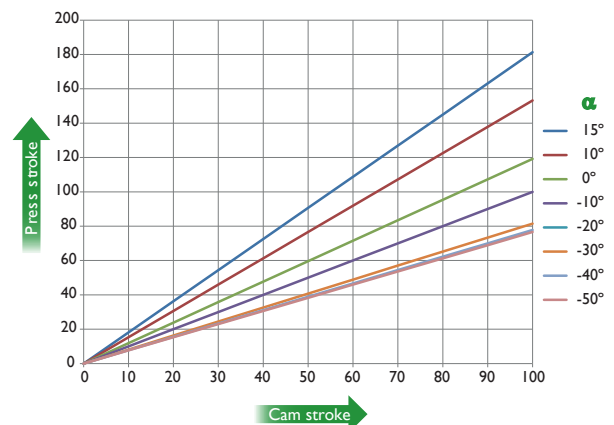
NITROGAS offers engineering support referring to cam applications for die designers and builders.

CAD files of Roller Cams can be downloaded for FREE from our website: www.nitrogas.com

Cam Diagram

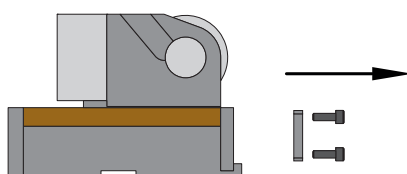


The press stroke depends on the assembly angle (α) of the Roller Cam Unit.

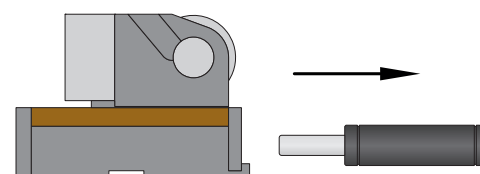


Gas spring extraction

The dismounting of the gas spring allows an easier movement of the cam slide at the adjustment of the Roller Cam Unit.

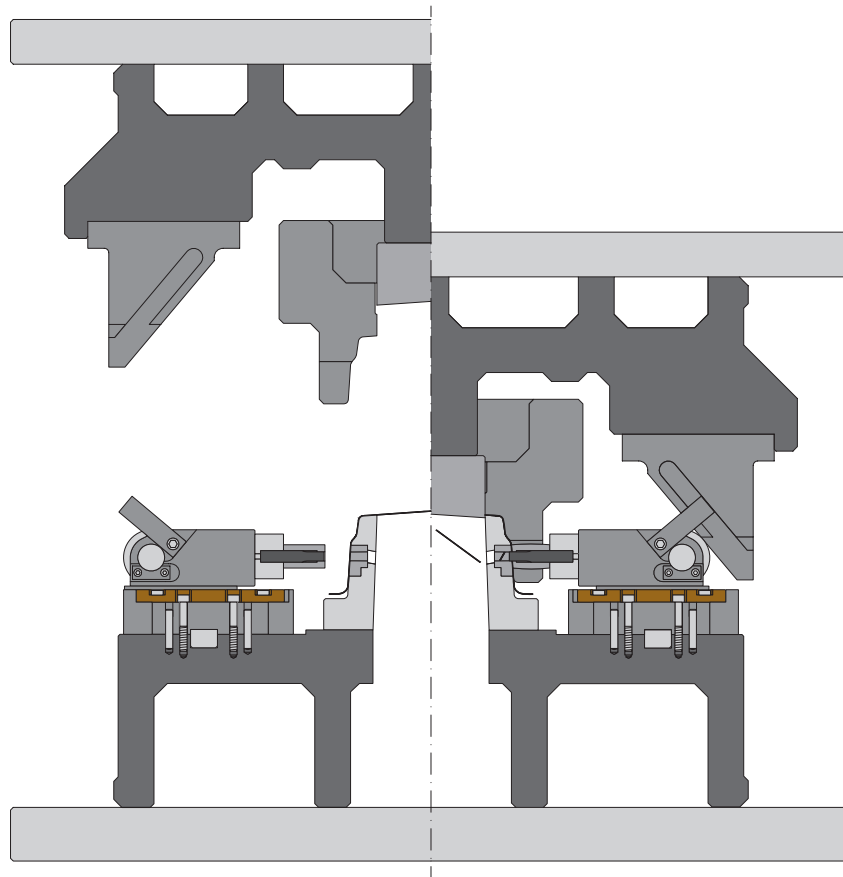


STEP 1
Remove the screws.



STEP 2
Remove the gas spring.

Example of work

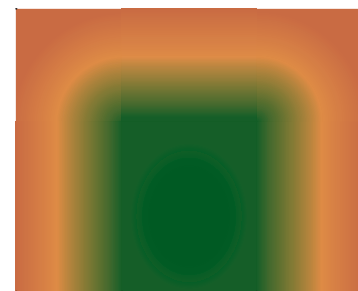
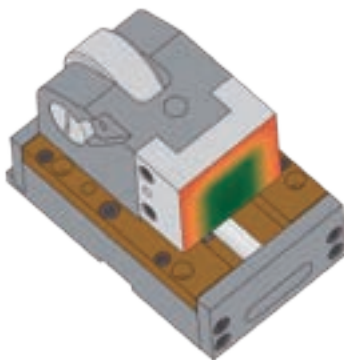


Spare parts available for all the Roller Cams.



Maximum press speed 1.6 m/s
Maximum cadence (at 20°C) 40 strokes/min

Working force distribution

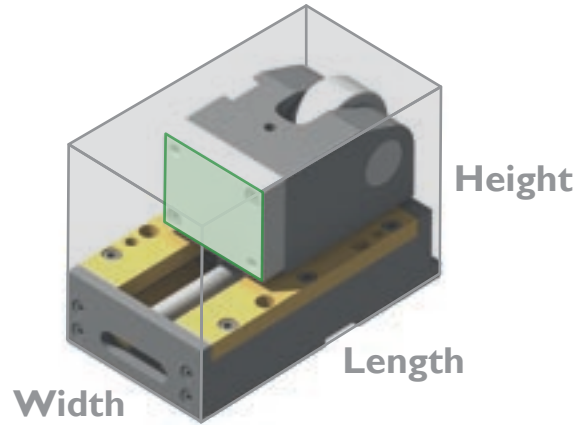
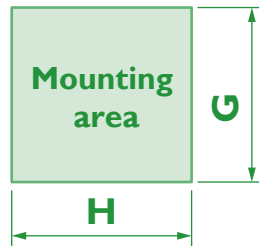


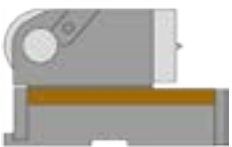
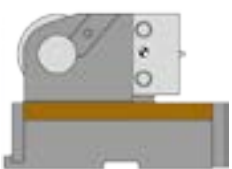
Working Force

100% 80% 50% 10%

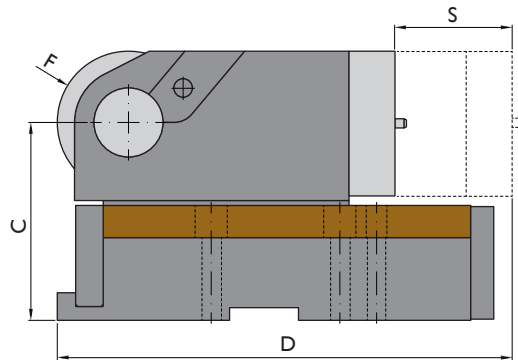
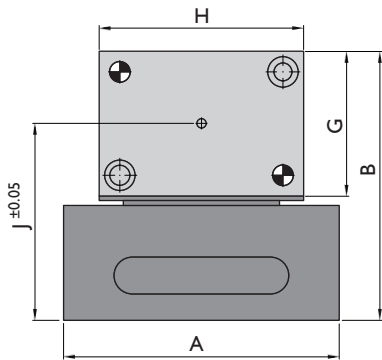
The center of the load must be located as much centered as possible.

Roller cams overview

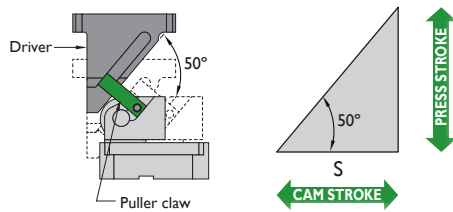


Model	Working Force daN	S mm	Mounting area		Spring Force daN	Overall Dimensions			Weight kg
			H mm	G mm		Width mm	Height mm	Length mm	
 CRCN	03000	50	63	63	390	94	117	190	9.2
		80			540			220	10.3
	05000	50	90	74	390	120	140	190	14.7
		80			540			220	15.7
		100			540			260	22.2
	15000	50	135	90	910	170	165	190	26.7
		80			710			220	28.5
		100			710			260	32.5
	 CRCS	02000	22	50	50	180	75	85	115
35			190			136			3.7
03000		50	68	63	450	100	117	200	10.7
		80			540			230	11.1
		100			540			260	16.9
05000		50	88	74	450	120	140	200	15.4
		80			540			230	17
		100			540			260	18.3
15000		50	132	92	910	170	165	220	28.8
		80			710			250	29
		100			710			270	29.8
20000		50	196	110	1200	240	205	250	61.8
		80			1200			280	62.1
		100			1200			300	65.4

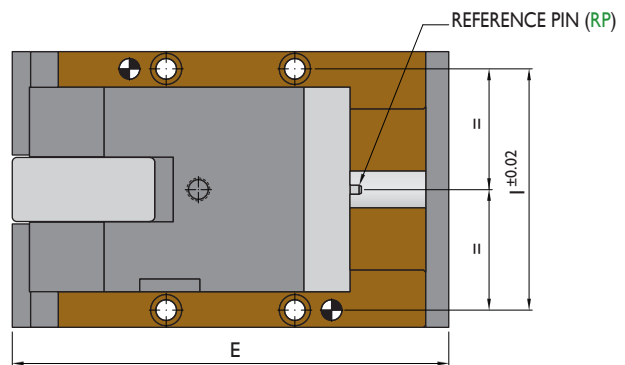




CAM DIAGRAM



If placed in horizontal position:
1 mm. press stroke = 0.85. cam stroke

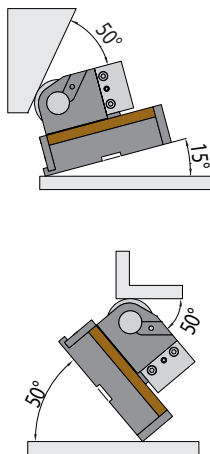


Ordering example: 4 x CRCN-03000-50 - RP (with reference pin)
4 x CRCN-03000-50 (without reference pin)



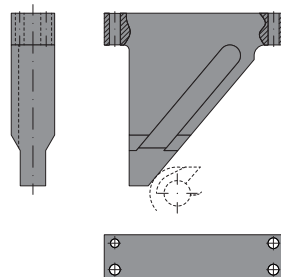
If a reference pin is required, mark it in the order as it is shown in the ordering example.

Maximum inclination angle

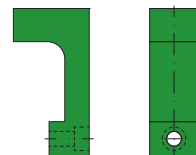


Optional accessories

DRIVER*



PULLER CLAW



See dimensions on page 28.

Ordering example: CRCN-03000-51

Ordering example: CRCN-03000-C1

* Driver for installation angle 0°. For any other installation angle, contact with NITROGAS engineering.

Order No.			General Dimensions												Accessories ⁽¹⁾	
Model	Working Force daN	S mm	Weight kg	Spring Force daN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Driver	Puller Claw
CRCN	03000	50	9.2	390	94	117	86	198	190	31	63	63	79	86	CRCN-03000-51	CRCN-03000-C1
CRCN	03000	80	10.3	540	94	117	86	228	220	31	63	63	79	86	CRCN-03000-52	CRCN-03000-C2
CRCN	05000	50	14.7	390	120	140	103	198	190	36	74	90	105	103	CRCN-05000-51	CRCN-05000-C1
CRCN	05000	80	15.7	540	120	140	103	228	220	36	74	90	105	103	CRCN-05000-52	CRCN-05000-C2
CRCN	05000	100	22.2	540	120	157	120	268	260	36	74	90	105	120	CRCN-05000-53	CRCN-05000-C3
CRCN	15000	50	26.7	910	170	165	120	198	190	45	90	135	155	120	CRCN-15000-51	CRCN-15000-C1
CRCN	15000	80	28.5	710	170	165	120	228	220	45	90	135	155	120	CRCN-15000-52	CRCN-15000-C2
CRCN	15000	100	32.5	710	170	165	120	268	260	45	90	135	155	120	CRCN-15000-53	CRCN-15000-C3

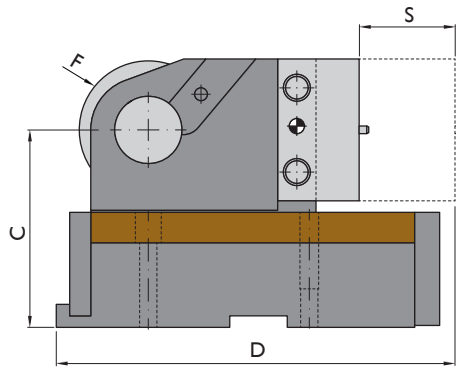
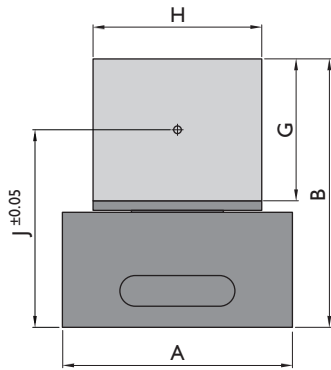
⁽¹⁾ For more information about accessories contact with NITROGAS engineering at engineering@nitrogas.com



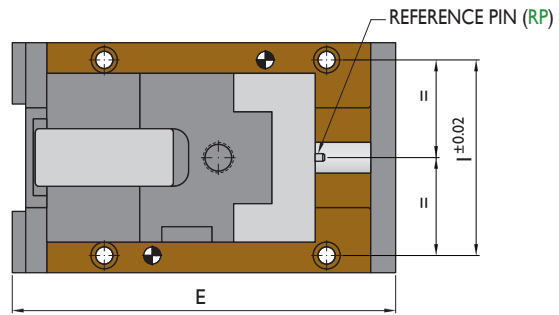
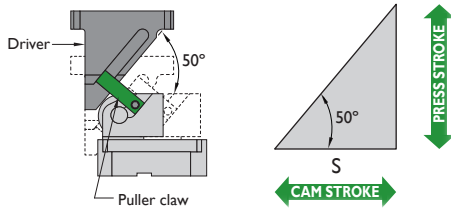
More details about Roller Cam Units and spare parts on our website:

<http://www.nitrogas.com/es/CRCN.aspx>

WEB
↓
CAD



CAM DIAGRAM



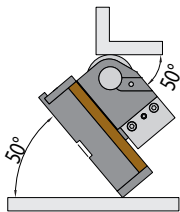
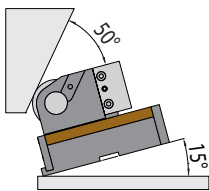
If placed in horizontal position:
1 mm. press stroke = 0.85. cam stroke

Ordering example: 4 x CRCS-03000-80 - RP (with reference pin)
4 x CRCS-03000-80 (without reference pin)



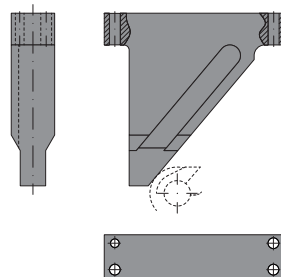
If a reference pin is required, mark it in the order as it is shown in the ordering example.

Maximum inclination angle

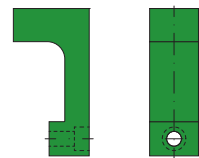


Optional accessories

DRIVER*



PULLER CLAW



See dimensions on page 28.

Ordering example: CRCS-03000-52

Ordering example: CRCS-03000-C2

* Driver for installation angle 0°. For any other installation angle, contact with NITROGAS engineering.

Order No.			General Dimensions												Accessories ⁽¹⁾	
Model	Working Force daN	S mm	Weight kg	Spring Force daN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Driver	Puller Claw
CRCS 02000	22	3	180	75	85	63	103	115	23	50	50	63	63	CRCS-02000-51	CRCS-02000-C1	
CRCS 02000	35	3.7	190	75	85	63	137	136	23	50	50	63	63	CRCS-02000-52	CRCS-02000-C2	
CRCS 03000	50	10.7	450	100	117	86	208	200	31	63	68	82	86	CRCS-03000-51	CRCS-03000-C1	
CRCS 03000	80	11.1	450	100	117	86	238	230	31	63	68	82	86	CRCS-03000-52	CRCS-03000-C2	
CRCS 03000	100	16.9	540	100	117	110	258	260	31	63	68	82	86	CRCS-03000-53	CRCS-03000-C3	
CRCS 05000	50	15.4	450	120	140	103	208	200	36	74	88	102	103	CRCS-05000-51	CRCS-05000-C1	
CRCS 05000	80	17	450	120	140	103	238	230	36	74	88	102	103	CRCS-05000-52	CRCS-05000-C2	
CRCS 05000	100	18.3	540	120	140	103	258	260	36	74	88	102	103	CRCS-05000-53	CRCS-05000-C3	
CRCS 15000	50	28.8	910	170	165	120	216	220	45	92	132	150	120	CRCS-15000-51	CRCS-15000-C1	
CRCS 15000	80	29	910	170	165	120	246	250	45	92	132	150	120	CRCS-15000-52	CRCS-15000-C2	
CRCS 15000	100	29.8	710	170	165	120	266	270	45	92	132	150	120	CRCS-15000-53	CRCS-15000-C3	
CRCS 20000	50	61.8	1200	240	205	150	258	250	55	110	196	222	150	CRCS-20000-51	CRCS-20000-C1	
CRCS 20000	80	62.1	1200	240	205	150	288	280	55	110	196	222	150	CRCS-20000-52	CRCS-20000-C2	
CRCS 20000	100	65.4	1200	240	205	150	308	300	55	110	196	222	150	CRCS-20000-53	CRCS-20000-C3	

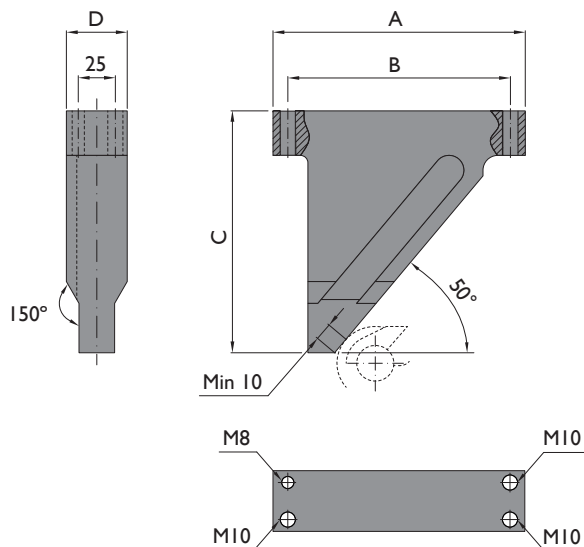
⁽¹⁾ For more information about accessories contact with NITROGAS engineering at engineering@nitrogas.com



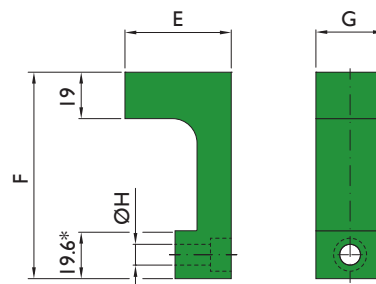
More details about Roller Cam Units and spare parts on our website:

<http://www.nitrogas.com/es/CRCS.aspx>

DRIVER



PULLER CLAW



* For CRCS-02000-22 and CRCS-02000-35 12.1mm

Note: Driver for installation angle 0°. For any other installation angle contact with NITROGAS engineering.

CRCN

ROLLER CAM	DRIVER Order No.	PULLER CLAW Order No.	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm
CRCN-03000-50	CRCN-03000-51	CRCN-03000-C1	170	150	163	41	33	79.1	23	8.5
CRCN-03000-80	CRCN-03000-52	CRCN-03000-C2	200	180	199	41	33	79.1	23	8.5
CRCN-05000-50	CRCN-05000-51	CRCN-05000-C1	170	150	163	45	44	84.5	28	8.5
CRCN-05000-80	CRCN-05000-52	CRCN-05000-C2	200	180	199	45	44	84.5	28	8.5
CRCN-05000-100	CRCN-05000-53	CRCN-05000-C3	220	200	223	45	44	84.5	28	8.5
CRCN-15000-50	CRCN-15000-51	CRCN-15000-C1	170	150	163	51	66	89.5	30	10.5
CRCN-15000-80	CRCN-15000-52	CRCN-15000-C2	200	180	199	51	66	89.5	30	10.5
CRCN-15000-100	CRCN-15000-53	CRCN-15000-C3	220	200	223	51	66	89.5	30	10.5

CRCS

CRCS-02000-22	CRCS-02000-51	CRCS-02000-C1	105	87	98	32	25.5	61.4	15	6.5
CRCS-02000-35	CRCS-02000-52	CRCS-02000-C2	115	97	109	32	25.5	61.4	15	6.5
CRCS-03000-50	CRCS-03000-51	CRCS-03000-C1	170	150	163	41	35.5	80.3	23	8.5
CRCS-03000-80	CRCS-03000-52	CRCS-03000-C2	200	180	199	41	35.5	80.3	23	8.5
CRCS-03000-100	CRCS-03000-53	CRCS-03000-C3	220	200	223	41	35.5	80.3	23	8.5
CRCS-05000-50	CRCS-05000-51	CRCS-05000-C1	170	150	163	45	43	84.4	28	8.5
CRCS-05000-80	CRCS-05000-52	CRCS-05000-C2	200	180	199	45	43	84.4	28	8.5
CRCS-05000-100	CRCS-05000-53*	CRCS-05000-C3	-	-	-	-	43	84.4	28	8.5
CRCS-15000-50	CRCS-15000-51	CRCS-15000-C1	170	150	163	51	64.5	86.8	30	10.5
CRCS-15000-80	CRCS-15000-52	CRCS-15000-C2	200	180	199	51	64.5	86.8	30	10.5
CRCS-15000-100	CRCS-15000-53	CRCS-15000-C3	220	200	223	51	64.5	86.8	30	10.5
CRCS-20000-50	CRCS-20000-51	CRCS-20000-C1	170	150	163	65	98.1	96	35	10.5
CRCS-20000-80	CRCS-20000-52	CRCS-20000-C2	200	180	199	65	98.1	96	35	10.5
CRCS-20000-100	CRCS-20000-53	CRCS-20000-C3	220	200	223	65	98.1	96	35	10.5

* CRCS-05000-53 special driver. For CRCS-05000-100 cam accessories contact with NITROGAS engineering.

Driver ordering example: CRCN-03000-51

Puller Claw ordering example: CRCN-03000-C1



The structural parts of NITROGAS Die Mounted Cams are assembled with high quality cast iron. Designed for a long service life, since the wear surfaces are mounted with CuZn25Al5Mn4Fe3-C bronze plates with embedded solid lubricants against heat treated sliding faces.

The design for easy assembly promotes and prioritizes spare parts interchangeability, ensuring the longest service life of the cam.

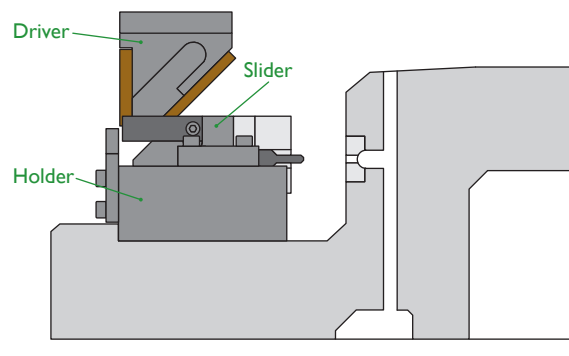
Die Mounted Cam Units are assembled with mechanical positive return, to ensure a secure return. An integrated gas spring ensures the return of the slider.

As the movement of the press is transformed by a wedge, die mounted cam units are applicable for long strokes (<100 mm) and large loads (<64 tnf).

Installation

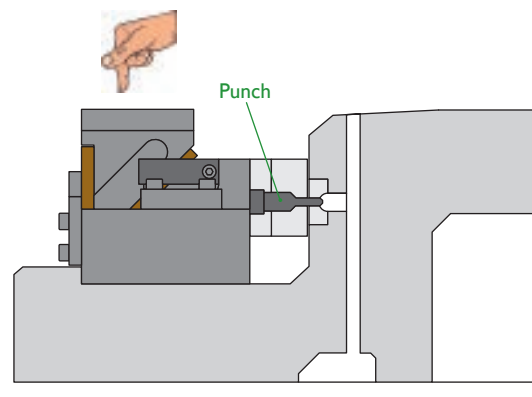
STEP 1

- 1 Remove the gas spring from the cam unit.
- 2 Place and fix the punch retainer on the slider.
- 3 Place the cam unit and drill the required holes in the die to fix the cam holder and the driver.

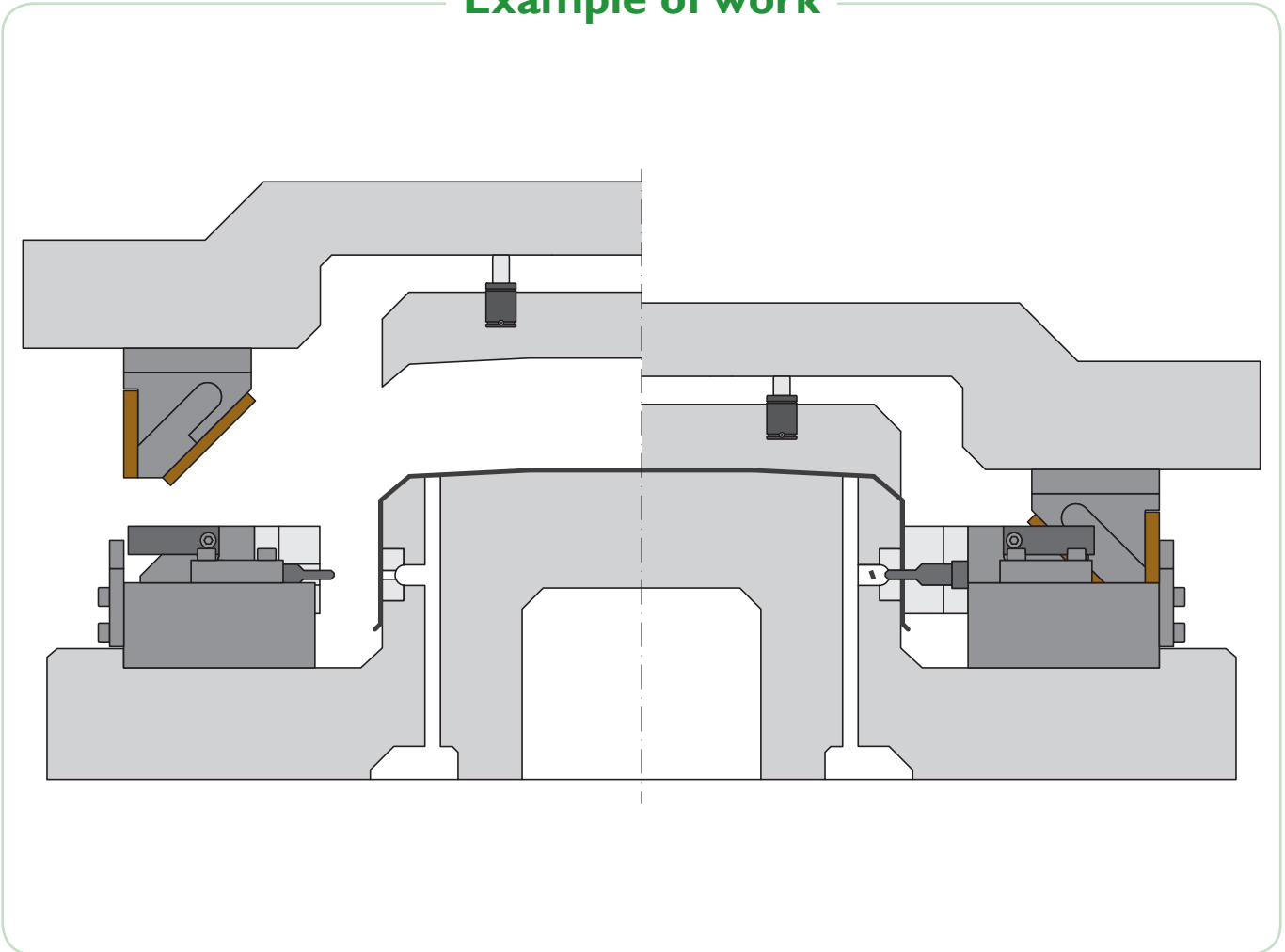


STEP 2

- 4 Move the slider to locate the punch retainer.
- 5 Fix the cam driver.
- 6 Assemble the gas spring in cam unit.



Example of work



Spare parts available for all Die Mounted Cam Units.
The center of the load must be located as much centered as possible.



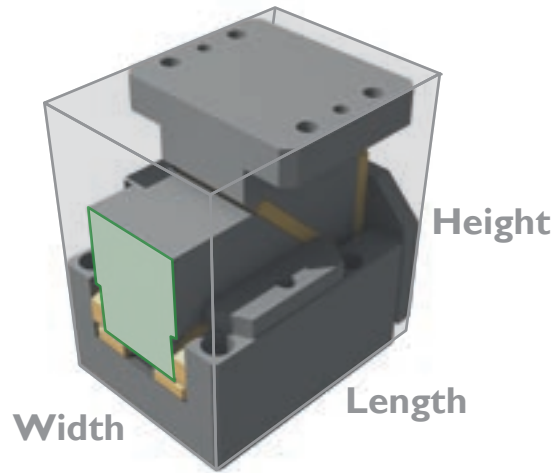
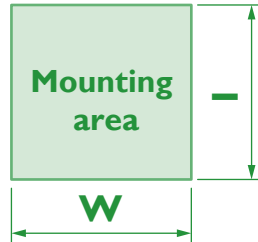
Maximum press speed	1.6 m/s
Maximum cadence (at 20°C)	40 strokes/min

NITROGAS offers engineering support referring to cam applications for die designers and builders.

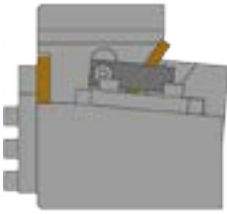




CAD files of Die Mounted Cam Units can be downloaded for FREE from our website:


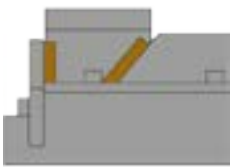
www.nitrogas.com

Die mounted cams overview

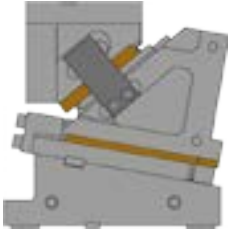


Model	Mounting area			Overall Dimensions										
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg				
CDCA	52	65	00	25	1 - 3	560	98	140	138	8				
				40					153					
				60					198					
			05	40					2 - 4		130	170	20	
				60								160	215	21
				45								175.55	19	
	65	70	10	45	2 - 4	560	130	170	220.38	22.2				
				70					160	179.95	19.6			
			15	45					4 - 8	175	200	224.27	20.5	
				70								183.18	22.3	
				45								226.64		
				70								185.2		
	100	90	00	40	3 - 6	1120	175	200	217	37				
				60					237	38				
				80					277	44				
			05	45					4 - 8	175	200	199.22	33	
				70								234.08	38	
				45								205.12	33	
	150	100	10	70	6 - 9	1080	260	220	239.59	38				
				45					209.67	33				
			20	45					7 - 10	260	220	243.48	38	
				70								212.83	32	
				45								245.72	39	
				70								226	63	
10	70	00	40	6 - 9	1080	260	220	246	69					
			60					229.01	62					
		05	45					253.92	73					
			70					235.55	63					
10	70	10	45	7 - 10	1080	260	220	260.17	73					
			70					260.17	73					

Model	Mounting area				Overall Dimensions					
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg
	150	100	15	45	7 - 10	1080	260	220	240.58	65
				70				230	264.73	77
			20	45				220	244.05	66
				70				230	267.54	75
	200	130	00	40	8 - 12	1680	310	240	236	82
				60				256	84	
	250	130		40	10 - 15	1620	360	270	246	106
				60				266	127	
	300	150	40	12 - 18	1620	410	270	246	106	
			60				266	128		
	400	150	60	14 - 21	2160	525	250	356	203	
	500						625	237		
600	725						361	279		
	52	75	55	2 - 4	280	52	215	235	14.2	
							05	18.5		
							10	19.4		
							15	20		
							20	19.5		
							00	236	24.9	
	90	82	55	4 - 8	560	90	220	251.42	25.9	
							05	261.72	27.3	
							10	275.82	29.3	
							15			
 	70	90	45	7	280	70	225	290	19.5	
								05	20	
								10	292.47	
								15	300.69	21
	100	100	55	12	560	100	275	330	39	
								05	337.47	
								10	350.69	40
								15	385	
	210	130	60	20	540	230	300	347.98	82	
								05	355.91	
								10	363.35	
								15	377.82	83
	300	160	60	37	1120	350	375	390	166	
								05	389.74	
								10	389.41	170
								15	407.23	
								422.95	171	
		50	75	55	3	560	50	250	300	
05									310.76	19
10									318.12	
15									325.02	
20									331.41	20

Model	Mounting area				Overall Dimensions								
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg			
CDCV 	85	85	00	70	6	710	85	290	340	45			
									354.32				
									363.2				
									371.68				
									379.39				
	110	110			05	385	70						
					10	401.59							
					15	417.76							
					20	428.41							
					20	438.46							
	150	110			00	390	99						
					05	407.59							
					10	423.74							
					15	434.37							
					20	444.4							
	220	180			00	390	139						
					05	406.59							
					10	422.76							
					15	433.41							
					20	443.46							
330	180	00	400	251									
		05	424.2										
		10	442.94										
		15	461.09										
		20	478.52										
400	180	00	445	345									
		05	469.2										
		10	487.94										
		15	501.09										
		20	518.52										
CDCV-F 	65	90	00	560	18	134	161	200	19				
		115						230		21			
		135						186			265	29	
		100						207			305		38
	100	90			185		161	200	31				
		115						230		36			
		135						186			265	43	
		150						207			305		56
	150	90			260		161	205	39				
		115						235		43			
		135						186			270	61	
		100						207			310		78
CDCP	50	68	00	60	1	280	50	240	255		17.3		
			05						290	18.1			
			10						297.97			18.5	
			15						308.26				19.2
			20						308.26				

Model	Mounting area				Overall Dimensions												
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg							
CDCP	50	68	25	60	1	280	50	240	308.07	20							
			30						312.32	20.4							
			80						88	00	4	540	80	265	310	33.2	
										05					312.6	33.5	
										10					321.51	34.4	
										15					329.78	35.1	
	20	332.31			35.6												
	25	365			36.3												
	30	378.47			36.7												
	150	120			00	12	1400	290		300					385.01	130	
					05										394.53	134	
					10										396.96	137.4	
					15										397.25	138	
					20										400.35	146	
			25		420				150								
	30	378.47	161														
	200	120	00		15	1400	320	310	365	137							
			05						378.47	142							
			10						385.01	146							
			15						394.53	152							
			20						396.96	160							
			25						397.25	165							
			30						400.35	172							
			300						120	00	30	2800	410	335	442.57	243	
05				449.63						250							
10				454.17						261							
15				461.14						263							
20				465.47						275							
25	465.47	287															
30	465.47	303															
CDCL	500	180	00	60	32	2200	500	385	370	316							
			05						384.93	310							
			10						400.17	306							
			15						413.93	302							
			20						413.93	298							
			00						370	325							
	600		180		05	48	2200	600	385	370	318						
					10					384.93	314						
					15					400.17	310						
					20					413.93	306						
					00					370	436						
					05					384.93	429						
	700		180		10	48	2200	700	385	384.93	421						
					15					400.17	415						
					20					413.93	410						
					00					370	446						
					800					180	05	48	2200	800	385	370	438
											10					384.93	430

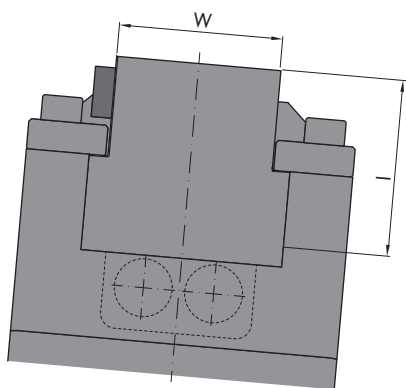
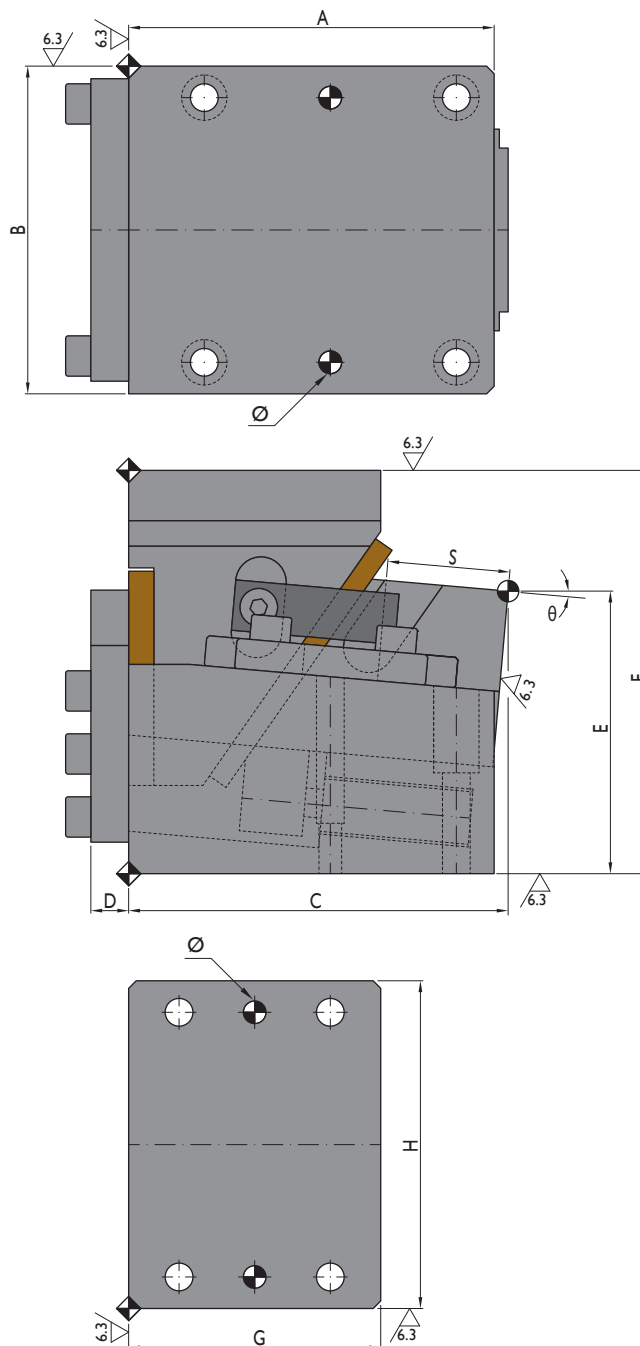
Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
 CDCL	800	180	15	60	48	2200	800	385	400.17	424	
			20						413.93	418	
			00						370	571	
	900		05		64	10	4400		900	384.93	551
			15			400.17				543	
			20			413.93				536	
			00			370				579	
			05			370				569	
			10			384.93				560	
	1000		15		64	15	4400		1000	400.17	551
			20			413.93				544	



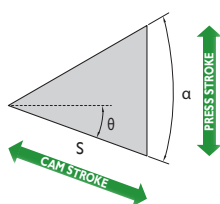
WEB



CAD



CAM DIAGRAM



Available Options

P

Pin holes diameters available

		Standards	Options
CDCA	52	Ø7	P8 (Ø8 H7)
CDCA	65	Ø9	P10 (Ø10 H7)
CDCA	100	Ø11	P12 (Ø12 H7) / P13 (Ø12 H7)
CDCA	150 - ... - 600	Ø15	P16 (Ø16 H7)

Ordering example: CDCA-W-θ-S-P
 CDCA-100-00-40
 CDCA-100-00-40-P12

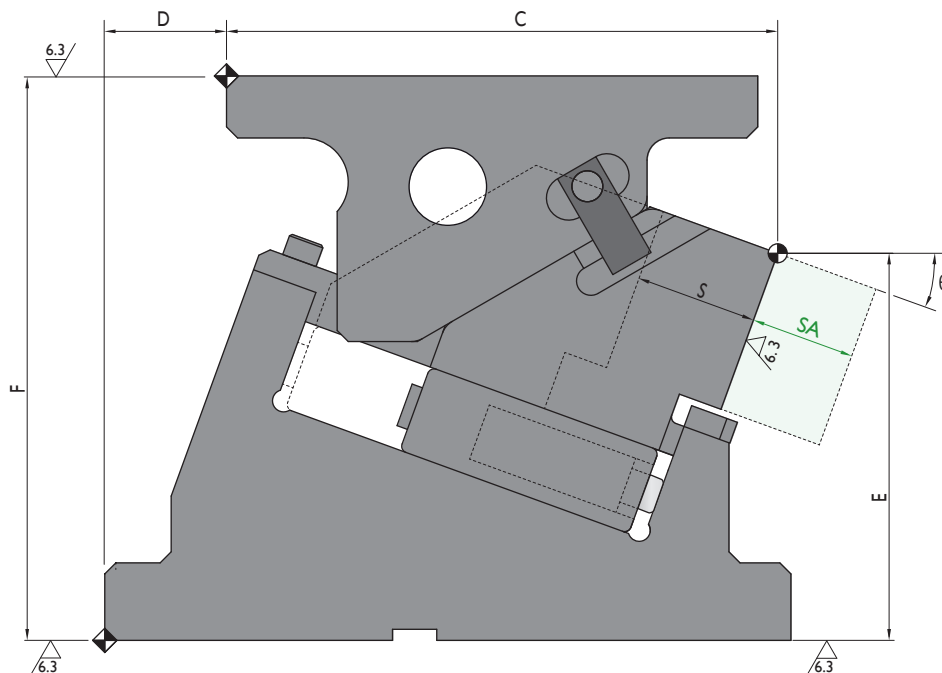
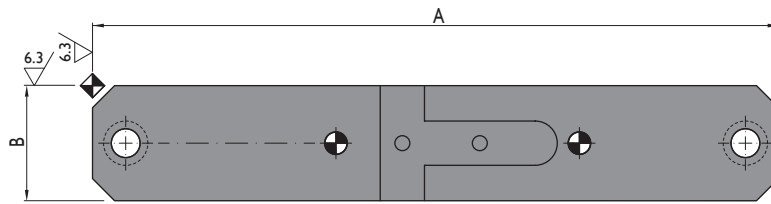
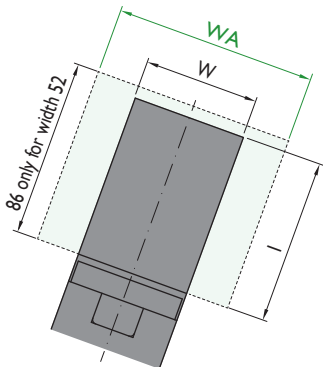
(Standard dimensions)

(Ø12 H7 holes)

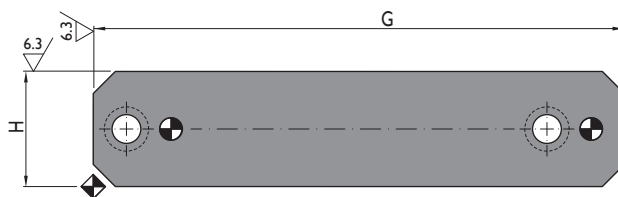
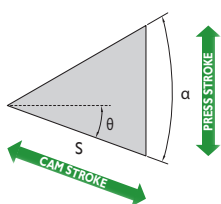
Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	α °
				1.000.000 strokes	300.000 strokes												
CDCA	52	00	25	1	3	8	560	120	98	120	10	100	140	80	98	65	45
CDCA	52	00	40	1	3	8	560	135	98	135	10	100	140	90	98	65	45
CDCA	52	00	60	1	3	14	560	180	98	180	10	100	140	110	98	65	45
CDCA	65	00	40	2	4	20	560	145	130	140	15	115	160	100	130	70	45
CDCA	65	00	60	2	4	21	560	180	130	190	15	115	160	110	130	70	45
CDCA	65	05	45	2	4	19	560	145	130	150.55	15	112.1	160	100	130	70	60
CDCA	65	05	70	2	4	22.2	560	180	130	195.38	15	123.17	170	100	130	70	60
CDCA	65	10	45	2	4	19.6	560	145	130	154.95	15	108.76	160	100	130	70	60
CDCA	65	10	70	2	4	20.5	560	180	130	199.27	15	110.94	170	100	130	70	60
CDCA	65	15	45	2	4	22.3	560	145	130	158.18	15	105.09	170	100	130	70	60
CDCA	65	15	70	2	4	22.3	560	180	130	201.64	15	103.44	170	110	130	70	60
CDCA	65	20	45	2	4	22.3	560	145	130	160.2	15	101.19	170	100	130	70	60
CDCA	65	20	70	2	4	21.3	560	180	130	202.48	15	95.79	170	110	130	70	60
CDCA	100	00	40	3	6	37	1120	190	175	190	15	150	200	120	165	100	45
CDCA	100	00	60	3	6	38	1120	190	175	210	15	150	200	140	165	100	45
CDCA	100	00	80	3	6	44	1120	220	175	250	15	150	200	150	165	100	45
CDCA	100	05	45	4	8	33	1120	160	175	172.22	15	145.28	200	100	165	90	60
CDCA	100	05	70	4	8	38	1120	190	175	207.08	15	147.23	200	120	165	90	60
CDCA	100	10	45	4	8	33	1120	160	175	178.12	15	134.98	200	100	165	90	60
CDCA	100	10	70	4	8	38	1120	190	175	212.59	15	133.9	200	120	165	90	60
CDCA	100	15	45	4	8	33	1120	160	175	182.67	15	129.23	200	110	165	90	60
CDCA	100	15	70	4	8	38	1120	190	175	216.48	15	130.17	200	130	165	90	60
CDCA	100	20	45	4	8	32	1120	160	175	185.83	15	118.14	200	110	165	90	60
CDCA	100	20	70	4	8	39	1120	190	175	218.72	15	121.17	200	130	165	90	60
CDCA	150	00	40	6	9	63	1080	190	260	190	20	170	220	120	230	100	45
CDCA	150	00	60	6	9	69	1080	200	260	210	20	170	220	140	230	100	45
CDCA	150	05	45	7	10	62	1080	190	260	193.01	20	158.5	220	110	230	100	60
CDCA	150	05	70	7	10	73	1080	200	260	217.92	20	166.32	220	130	230	100	60
CDCA	150	10	45	7	10	63	1080	190	260	199.55	20	151.36	220	110	230	100	60
CDCA	150	10	70	7	10	73	1080	200	260	224.17	20	152.02	220	130	230	100	60
CDCA	150	15	45	7	10	65	1080	190	260	204.58	20	143.71	220	120	230	100	60
CDCA	150	15	70	7	10	77	1080	200	260	228.73	20	152.24	230	140	230	100	60
CDCA	150	20	45	7	10	66	1080	190	260	208.05	20	135.7	220	120	230	100	60
CDCA	150	20	70	7	10	75	1080	200	260	231.54	20	137.15	230	140	230	100	60
CDCA	200	00	40	8	12	82	1680	200	310	200	20	180	240	130	280	100	45
CDCA	200	00	60	8	12	84	1680	210	310	220	20	180	240	150	280	100	45
CDCA	250	00	40	10	15	106	1620	200	360	210	20	210	270	140	330	130	45
CDCA	250	00	60	10	15	127	1620	220	360	230	20	210	270	160	330	130	45
CDCA	300	00	40	12	18	106	1620	200	410	210	20	210	270	140	380	130	45
CDCA	300	00	60	12	18	128	1620	220	410	230	20	210	270	160	380	130	45
CDCA	400	00	60	14	21	203	2160	300	525	320	20	195	250	140	360	150	45
CDCA	500	00	60	14	21	237	2160	300	625	320	25	195	250	140	360	150	45
CDCA	600	00	60	14	21	279	2160	300	725	320	25	195	250	140	360	150	45

WEB

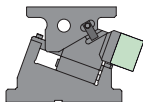
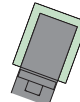
 CAD



CAM DIAGRAM



Available Options

		SA	WA
		 <p>Additional slider length available 5 - 65 mm (5 mm steps)</p>	 <p>Additional mounting width available</p>
CDCB	52	SA5 - SA10 - ... - SA65	WA100
CDCB	90	-	WA120 / WA150

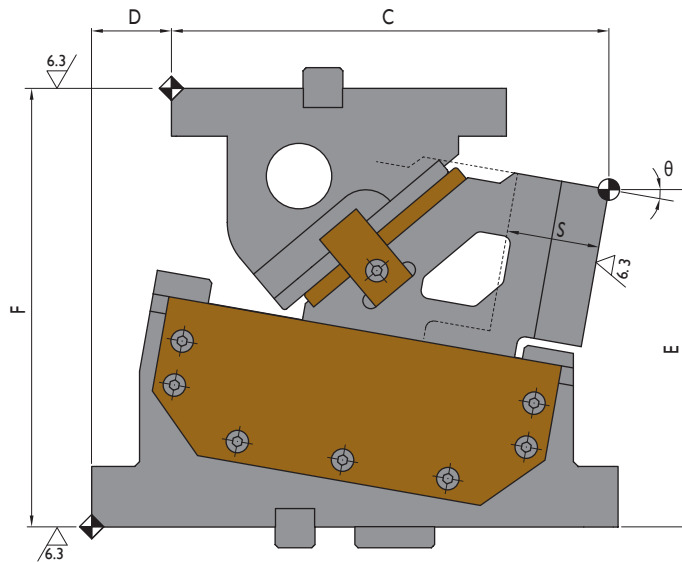
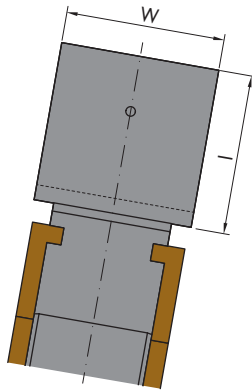
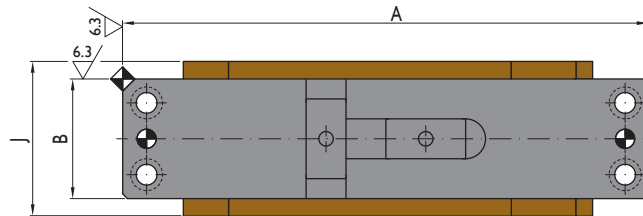
Ordering example: CDCB-W-θ-S-SA-WA

CDCB-52-20-55 (Standard dimensions)

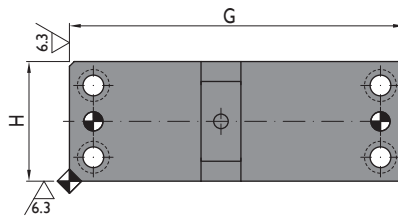
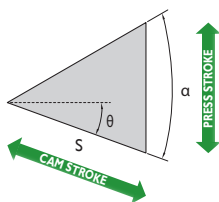
CDCB-52-20-55-SA55-WA100 (Additional slider length (55 mm) and additional mounting width (100 mm))

Order No.				Main Features				General Dimensions									
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	α °
				1,000,000 strokes	300,000 strokes												
CDCB	52	00	55	2	4	14.2	280	235	52	220	0	170	215	210	52	75	50
CDCB	52	05	55	2	4	18.5	280	310	52	234.87	35	195.66	255	225	52	75	50
CDCB	52	10	55	2	4	19.4	280	310	52	244.75	35	195.02	255	235	52	75	50
CDCB	52	15	55	2	4	20	280	310	52	249.51	40	193.09	255	240	52	75	50
CDCB	52	20	55	2	4	19.5	280	310	52	249.05	55	174.88	255	240	52	75	50
CDCB	90	00	55	4	8	24.9	560	233	90	236	0	182	220	210	90	82	50
CDCB	90	05	55	4	8	25.9	560	240	90	251.42	0	166.24	220	225	90	82	50
CDCB	90	10	55	4	8	27.3	560	243	90	261.72	0	164.14	220	235	90	82	50
CDCB	90	15	55	4	8	29.3	560	248	90	260.82	15	160.97	225	235	90	82	50

Structure for cams width 70 - 100 mm

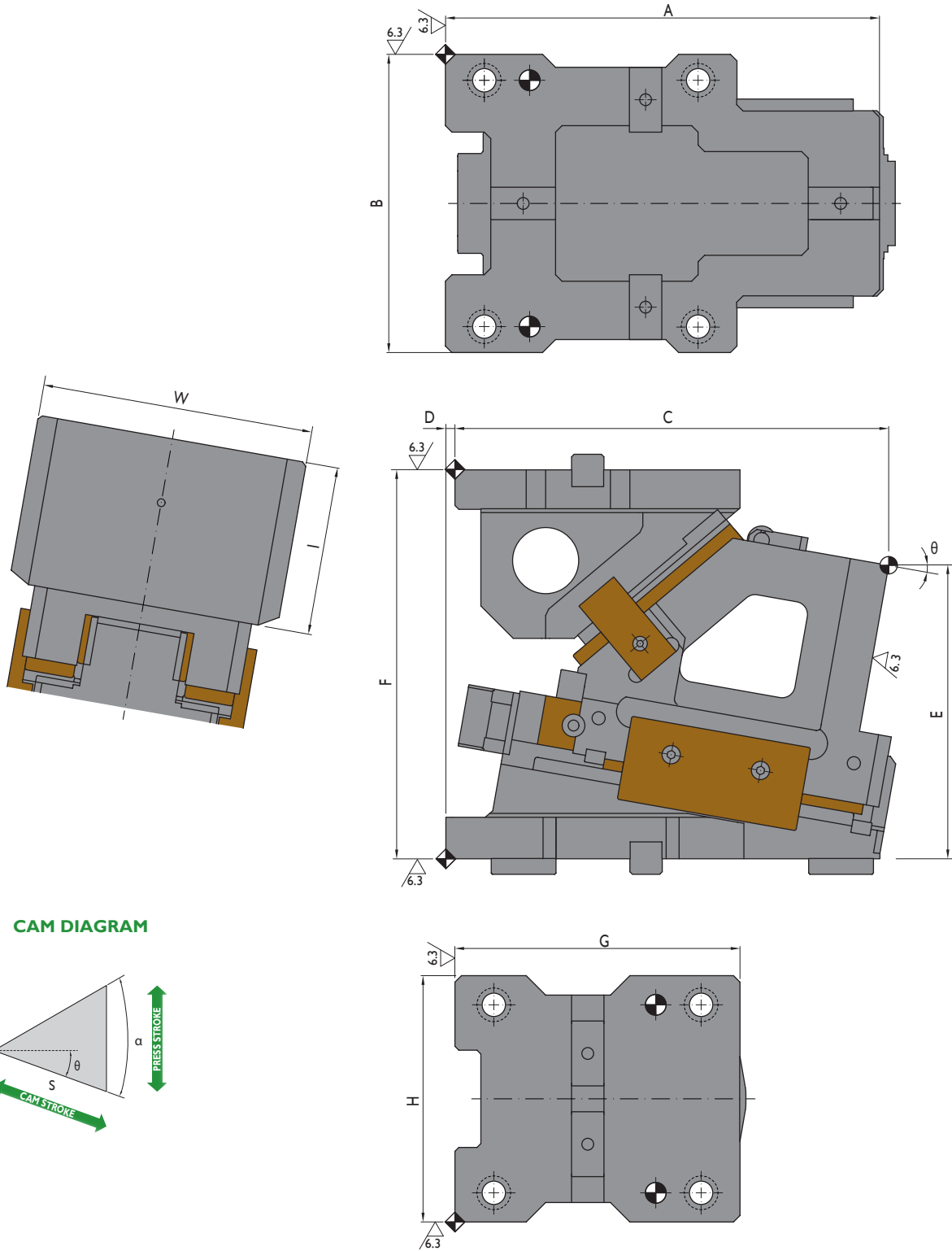


CAM DIAGRAM

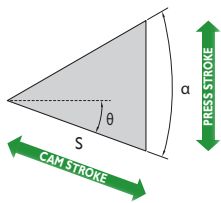


Ordering example: CDCN-W- θ -S
 CDCN-70-05-45

Structure for cams width 210 - 300 mm



CAM DIAGRAM



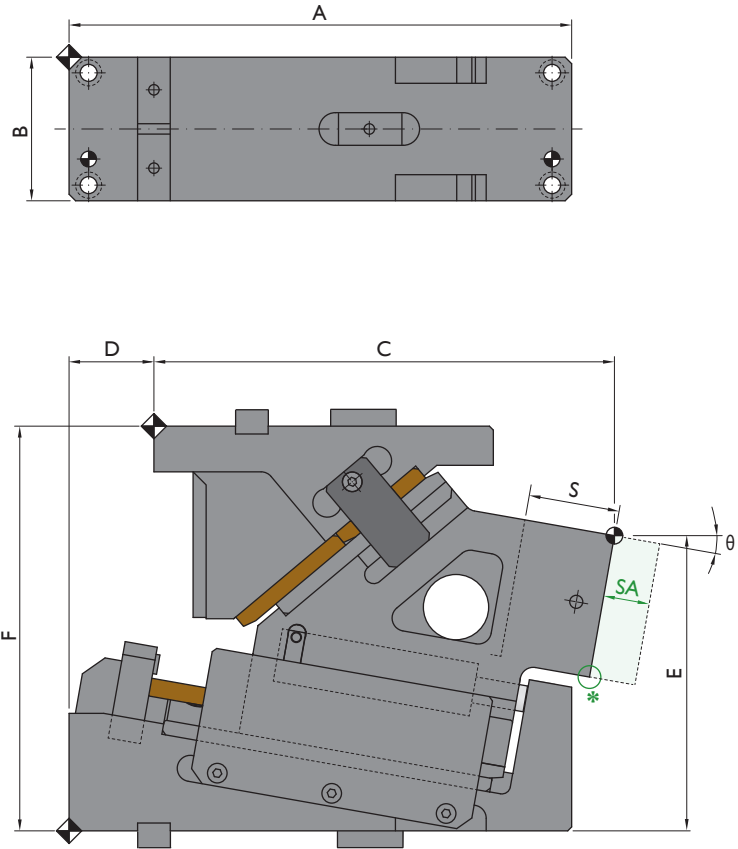
Ordering example: CDCN-W- θ -S
 CDCN-300-15-60

Order No.				Main Features			General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	α °
CDCN	70	00	45	7	19.5	280	290	70	252.5	10	195	225	185	70	90	-	50
CDCN	70	05	45	7	20	280	290	70	250.6	25	185.91	225	185	70	90	-	50
CDCN	70	10	45	7	20	280	290	70	253.76	35	176.55	225	185	70	90	-	50
CDCN	70	15	45	7	20	280	290	70	247.47	45	171.91	225	185	70	90	-	50
CDCN	70	20	45	7	21	280	290	70	243.69	57	166.99	225	185	70	90	-	50
CDCN	100	00	55	12	39	560	330	75	278	25	235	275	210	75	100	97	50
CDCN	100	05	55	12	39	560	330	75	271.1	40	225.91	275	210	75	100	97	50
CDCN	100	10	55	12	39	560	330	75	274.26	50	211.55	275	210	75	100	97	50
CDCN	100	15	55	12	39	560	330	75	277.47	60	201.91	275	210	75	100	97	50
CDCN	100	20	55	12	40	560	330	75	270.69	80	191.99	275	210	75	100	97	50
CDCN	210	00	60	20	82	540	335	230	360	-45	250	300	220	190	130	-	50
CDCN	210	05	60	20	82	540	335	230	352.40	-18	240.86	300	220	190	130	-	50
CDCN	210	10	60	20	82	540	335	230	346.86	7	226.33	300	220	190	130	-	50
CDCN	210	15	60	20	82	540	335	230	341.35	22	216.40	300	220	190	130	-	50
CDCN	210	20	60	20	83	540	335	230	330.82	47	206.09	300	220	190	130	-	50
CDCN	300	00	60	37	166	1120	390	350	360	0	325	375	220	270	160	-	50
CDCN	300	05	60	37	166	1120	380	350	360.71	15	300.80	375	220	270	160	-	50
CDCN	300	10	60	37	170	1120	380	350	356.47	35	291.10	375	220	270	160	-	50
CDCN	300	15	60	37	171	1120	380	350	352.23	55	275.89	375	220	270	160	-	50
CDCN	300	20	60	37	171	1120	380	350	347.95	75	260.18	375	220	270	160	-	50



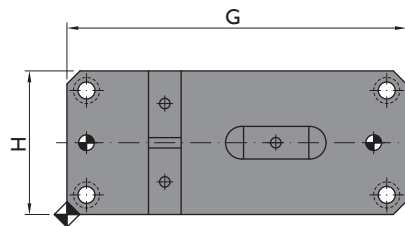
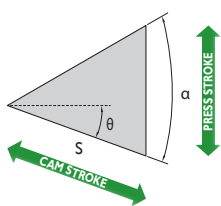
WEB
↓
CAD

VDI



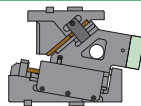
* CDCV-330 and CDCV-400

CAM DIAGRAM



Available Options

SA



Additional slider length available
1 - 40 mm
(1 mm steps)

CDCV	50	SA1 - SA2 - ... - SA40
CDCV	85	SA1 - SA2 - ... - SA40

Ordering example: CDCV-W-θ-S-SA
CDCV-150-05-70
CDCV-150-05-70-SA29

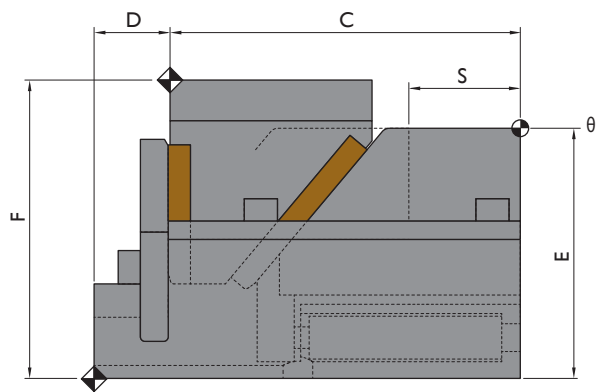
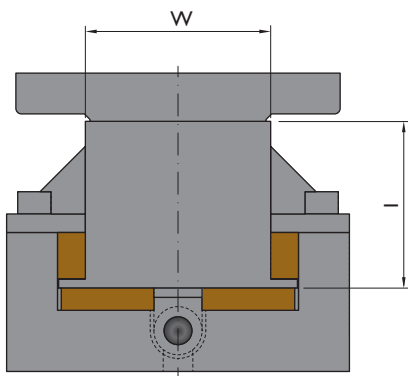
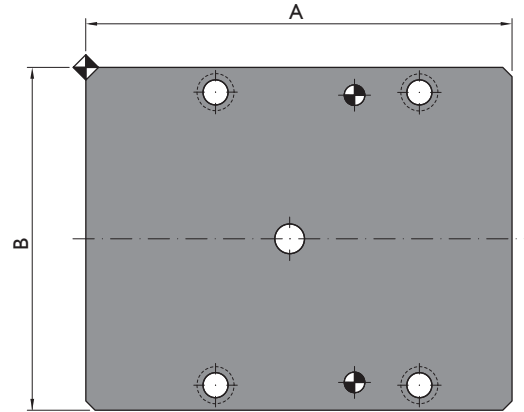
(Standard dimensions)
(Additional slider length (29 mm))

Order No.				Main Features			General Dimensions									
Model	W mm	θ °	S mm	Working Force tnf 300,000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	α °
CDCV	50	00	55	3	19	560	300	50	260	40	191	250	190	50	75	50
CDCV	50	05	55	3	19	560	300	50	260.76	50	180.73	250	190	50	75	50
CDCV	50	10	55	3	19	560	300	50	263.12	55	169.8	250	190	50	75	50
CDCV	50	15	55	3	20	560	300	50	260.02	65	162.25	250	190	50	75	50
CDCV	50	20	55	3	20	560	300	50	261.41	70	155.12	250	190	50	75	50
CDCV	85	00	70	6	45	710	340	85	325	15	235	290	235	80	85	50
CDCV	85	05	70	6	45	710	340	85	324.32	30	225.4	290	235	80	85	50
CDCV	85	10	70	6	45	710	340	85	318.2	45	215.01	290	235	80	85	50
CDCV	85	15	70	6	46	710	340	85	316.68	55	204.86	290	235	80	85	50
CDCV	85	20	70	6	47	710	340	85	309.39	70	195.01	290	235	80	85	50
CDCV	110	00	70	12	70	1100	385	110	360	25	250	310	260	110	110	50
CDCV	110	05	70	12	70	1100	385	110	361.59	40	235.56	310	260	110	110	50
CDCV	110	10	70	12	71	1100	385	110	352.76	65	226.13	310	260	110	110	50
CDCV	110	15	70	12	73	1100	385	110	353.41	75	215.75	310	260	110	110	50
CDCV	110	20	70	12	75	1100	385	110	348.46	90	204.47	310	260	110	110	50
CDCV	150	00	70	17	99	1400	390	150	355	35	250	310	260	150	110	50
CDCV	150	05	70	17	100	1400	390	150	362.59	45	237.48	310	260	150	110	50
CDCV	150	10	70	17	101	1400	390	150	358.74	65	224.96	310	260	150	110	50
CDCV	150	15	70	17	103	1400	390	150	364.37	70	212.49	310	260	150	110	50
CDCV	150	20	70	17	106	1400	390	150	364.4	80	200.13	310	260	150	110	50
CDCV	220	00	70	25	139	2200	390	220	355	35	247	310	260	220	110	50
CDCV	220	05	70	25	140	2200	390	220	356.59	50	234.56	310	260	220	110	50
CDCV	220	10	70	25	141	2200	390	220	347.76	75	223.13	310	260	220	110	50
CDCV	220	15	70	25	145	2200	390	220	348.41	85	211.75	310	260	220	110	50
CDCV	220	20	70	25	150	2200	390	220	346.46	97	200.47	310	260	220	110	50
CDCV	330	00	80	35	251	2800	400	330	335	65	326	380	260	330	180	50
CDCV	330	05	80	35	251	2800	400	330	334.2	90	316.67	380	260	330	180	50
CDCV	330	10	80	35	253	2800	400	330	337.94	105	305.68	380	260	330	180	50
CDCV	330	15	80	35	253	2800	400	330	336.09	125	292.08	380	260	330	180	50
CDCV	330	20	80	35	262	2800	400	330	333.52	145	282.93	380	260	330	180	50
CDCV	400	00	80	44	345	2800	445	400	395	50	341	400	300	400	180	50
CDCV	400	05	80	44	341	2800	445	400	394.2	75	325.67	400	300	400	180	50
CDCV	400	10	80	44	348	2800	445	400	392.94	95	314.68	400	300	400	180	50
CDCV	400	15	80	44	355	2800	445	400	391.09	110	302.08	400	300	400	180	50
CDCV	400	20	80	44	366	2800	445	400	393.52	125	282.93	400	300	400	180	50

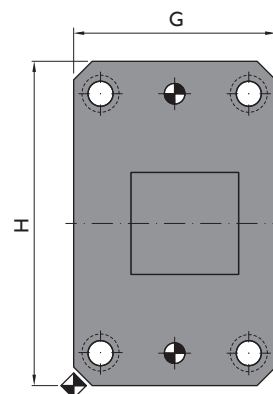
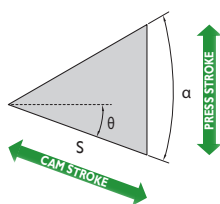
WEB




CAD



CAM DIAGRAM



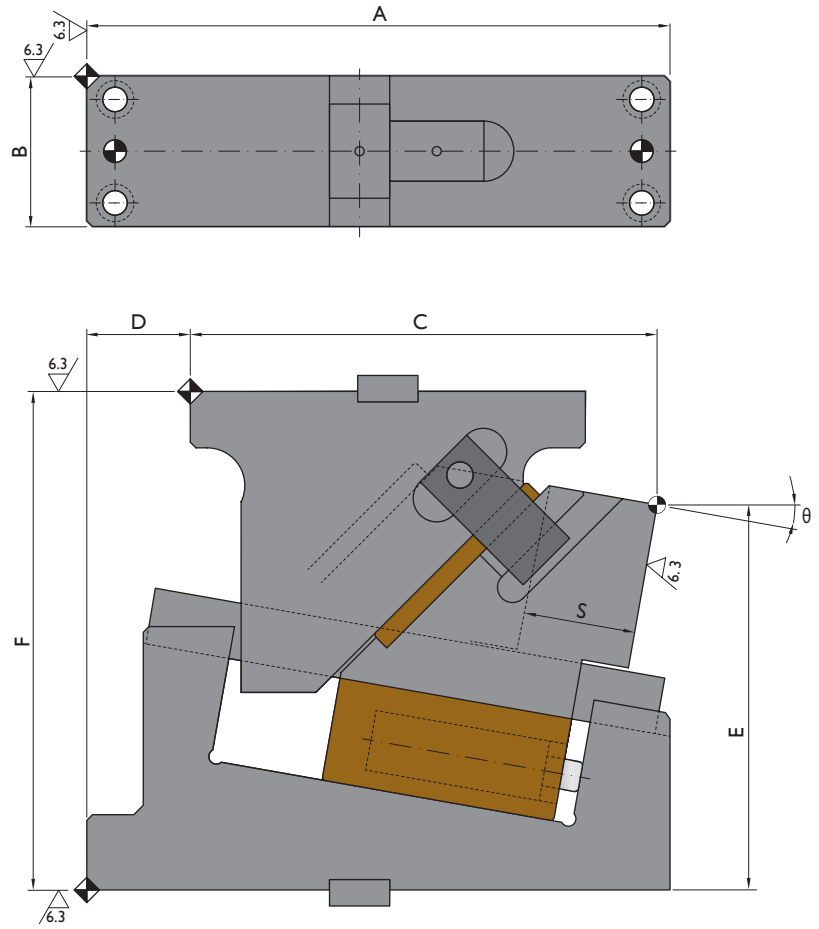
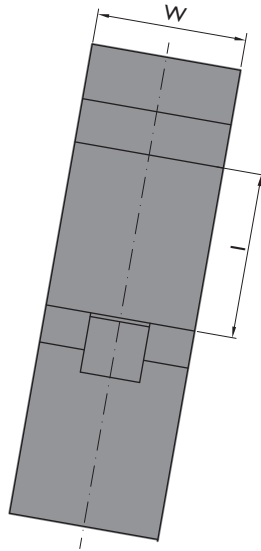
Ordering example: CDCV-F-W- θ -S
CDCV-F-100-00-60

Order No.				Main Features 			General Dimensions									
Model	W mm	θ °	S mm	Working Force tnf 300,000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	α °
CDCV-F	65	00	40	18	19	560	200	134	159	41	135	161	89	130	90	50
CDCV-F	65	00	60	18	21	560	230	134	189	41	135	161	109	130	90	50
CDCV-F	65	00	80	23	29	560	265	134	224	41	160	186	149	130	115	50
CDCV-F	65	00	100	27	38	560	305	134	264	41	180	207	169	130	135	50
CDCV-F	100	00	40	28	31	560	200	185	159	41	135	161	89	175	90	50
CDCV-F	100	00	60	28	36	560	230	185	189	41	135	161	109	175	90	50
CDCV-F	100	00	80	35	43	560	265	185	224	41	160	186	149	175	115	50
CDCV-F	100	00	100	41	56	560	305	185	264	41	180	207	169	175	135	50
CDCV-F	150	00	40	41	39	560	205	260	159	46	135	161	89	250	90	50
CDCV-F	150	00	60	41	43	560	235	260	189	46	135	161	109	250	90	50
CDCV-F	150	00	80	53	61	560	270	260	224	46	160	186	149	250	115	50
CDCV-F	150	00	100	62	78	560	310	260	264	46	180	207	169	250	135	50

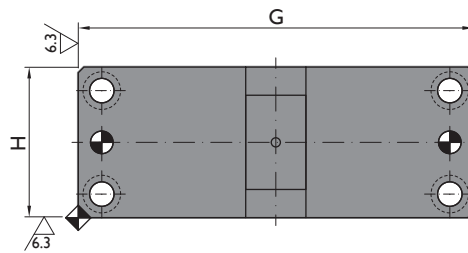
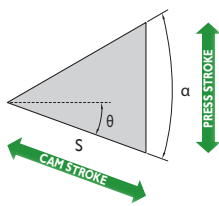
WEB

 CAD

Structure for cams width 50 - 80 mm




CAM DIAGRAM



Available Options

P

 Pin holes diameters available

		Standards	Options
CDCP	50	-	-
CDCP	80	Ø12 H7	P13 (Ø13 H7)

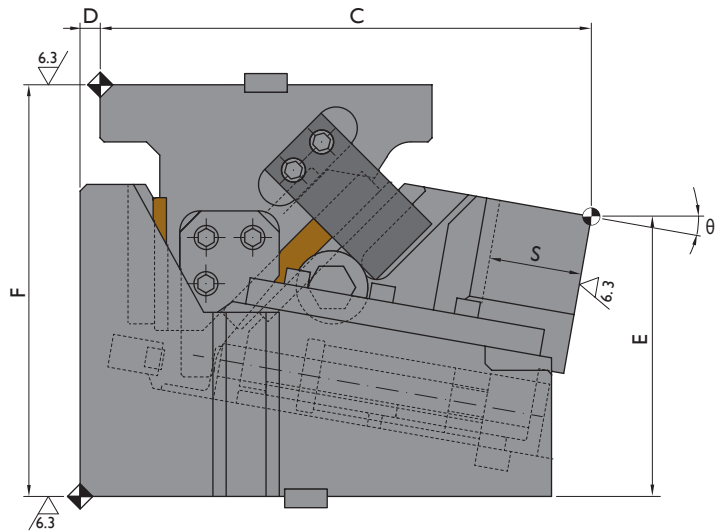
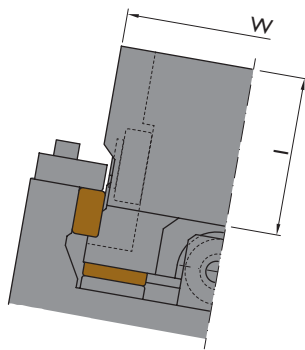
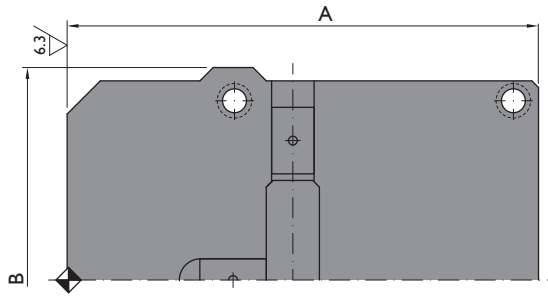
Ordering example: CDCP-W-θ-S-P
 CDCP-80-10-60
 CDCP-80-10-60-P13

(Standard dimensions)
 (Ø13 H7 holes)

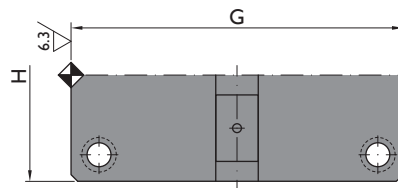
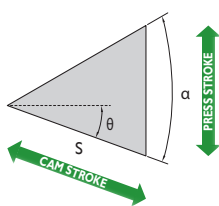
WEB

 CAD

Structure for cams width 150 - 300 mm

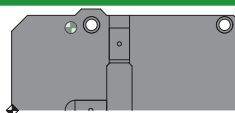


CAM DIAGRAM



Available Options

NP



Ø16 H7 pin holes available for the cam holder and cam driver.

CDCP	150	NP
CDCP	200	NP
CDCP	300	NP

Ordering example: CDCP-W-θ-S-NP
 CDCP-200-10-60
 CDCP-200-10-60-NP

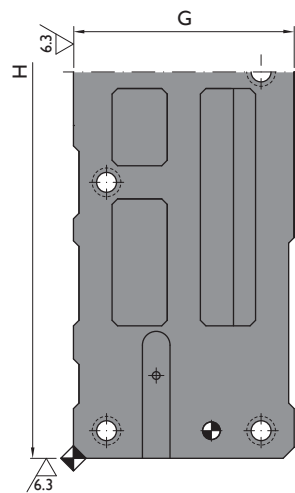
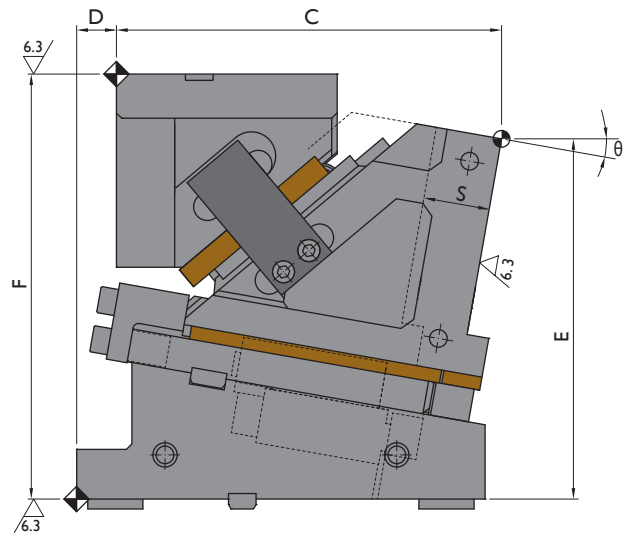
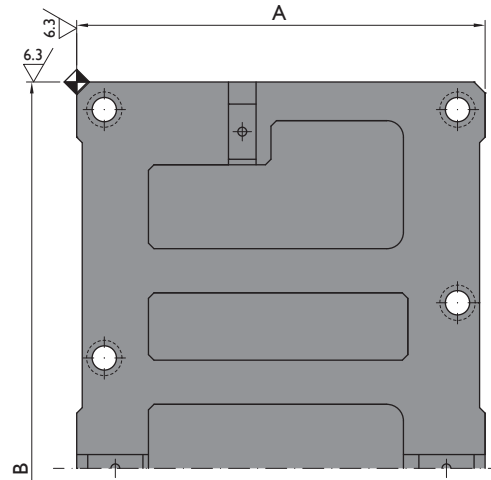
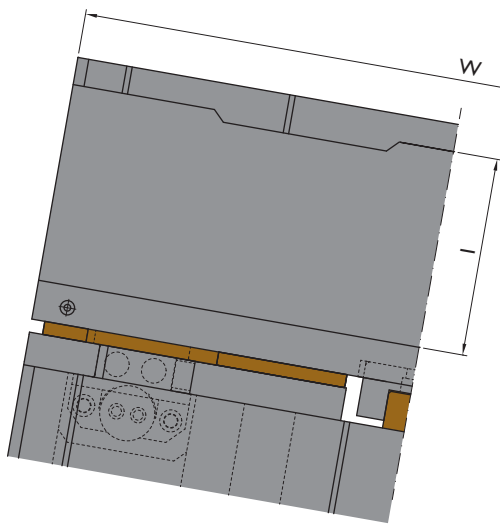
(Standard dimensions)
 (Ø16 H7 additional pin holes drilled for the cam holder and the cam driver)

Order No.				Main Features			General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	α °	
CDCP	50	00	60	1	17.3	280	255	50	230	10	165	240	170	50	68	55	
CDCP	50	05	60	1	18.1	280	290	50	236.25	45	162.76	240	180	50	68	55	
CDCP	50	10	60	1	18.5	280	290	50	237.27	50	159.55	240	180	50	68	55	
CDCP	50	15	60	1	19.2	280	295	50	242.97	55	155.39	240	185	50	68	55	
CDCP	50	20	60	1	19.8	280	295	50	238.26	70	150.32	240	185	50	68	55	
CDCP	50	25	60	1	20	280	295	50	238.07	70	144.37	240	185	50	68	55	
CDCP	50	30	60	1	20.4	280	295	50	232.32	80	137.58	240	185	50	68	55	
CDCP	80	00	60	4	33.2	540	310	80	235	50	210	265	210	80	88	55	
CDCP	80	05	60	4	33.5	540	310	80	238.32	55	208.03	265	210	80	88	55	
CDCP	80	10	60	4	34.4	540	310	80	248.17	55	204.74	265	210	80	88	55	
CDCP	80	15	60	4	35.1	540	310	80	252.6	60	200.15	265	210	80	88	55	
CDCP	80	20	60	4	35.6	540	310	80	251.51	70	194.32	265	210	80	88	55	
CDCP	80	25	60	4	36.3	540	310	80	249.78	80	187.26	265	210	80	88	55	
CDCP	80	30	60	4	36.7	540	310	80	247.31	85	179.05	265	210	80	88	55	
CDCP	150	00	60	12	130	1400	355	290	350	15	230	300	230	150	120	55	
CDCP	150	05	60	12	134	1400	365	290	363.47	15	218.45	300	240	150	120	55	
CDCP	150	10	60	12	137.4	1400	355	290	370.01	15	210.82	310	250	150	120	55	
CDCP	150	15	60	12	138	1400	350	290	379.53	15	202.26	310	265	150	120	55	
CDCP	150	20	60	12	146	1400	345	290	381.96	15	197.96	335	270	150	120	55	
CDCP	150	25	60	12	150	1400	340	290	382.25	15	188.11	345	285	150	120	55	
CDCP	150	30	60	12	161	1400	335	290	385.35	15	177.89	360	295	150	120	55	
CDCP	200	00	60	15	137	1400	355	320	350	15	230	300	230	160	120	55	
CDCP	200	05	60	15	142	1400	365	320	363.47	15	218.45	300	240	160	120	55	
CDCP	200	10	60	15	146	1400	355	320	370.01	15	210.82	310	250	160	120	55	
CDCP	200	15	60	15	152	1400	350	320	379.53	15	202.26	310	265	160	120	55	
CDCP	200	20	60	15	160	1400	345	320	381.96	15	197.96	335	270	160	120	55	
CDCP	200	25	60	15	165	1400	340	320	382.25	15	188.11	345	285	160	120	55	
CDCP	200	30	60	15	172	1400	335	320	385.35	15	177.89	360	295	160	120	55	
CDCP	300	00	60	30	243	2800	380	410	390	30	265	335	270	250	120	55	
CDCP	300	05	60	30	250	2800	375	410	401.84	30	260.69	335	280	250	120	55	
CDCP	300	10	60	30	261	2800	370	410	412.57	30	247.17	355	290	250	120	55	
CDCP	300	15	60	30	263	2800	365	410	419.63	30	238.91	355	300	250	120	55	
CDCP	300	20	60	30	275	2800	360	410	424.17	30	229.71	375	310	250	120	55	
CDCP	300	25	60	30	287	2800	355	410	431.14	30	214.79	385	330	250	120	55	
CDCP	300	30	60	30	303	2800	350	410	435.47	30	204.37	405	350	250	120	55	

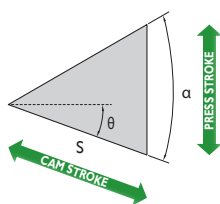


WEB

 CAD



CAM DIAGRAM



Ordering example: CDCL-W-θ-S
 CDCL-700-10-60

Order No.				Main Features			General Dimensions									
Model	W mm	θ °	S mm	Working Force tnf 300,000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	α °
CDCL	500	00	60	32	316	2200	370	500	344	6	360	385	200	500	180	50
CDCL	500	05	60	32	310	2200	370	500	347.2	21	343.27	385	200	500	180	50
CDCL	500	10	60	32	306	2200	370	500	348.93	36	326.32	385	200	500	180	50
CDCL	500	15	60	32	302	2200	370	500	349.17	51	309.29	385	200	500	180	50
CDCL	500	20	60	32	298	2200	370	500	347.93	66	292.3	385	200	500	180	50
CDCL	600	00	60	32	325	2200	370	500	344	6	360	385	200	500	180	50
CDCL	600	05	60	32	318	2200	370	500	347.2	21	343.27	385	200	500	180	50
CDCL	600	10	60	32	314	2200	370	500	348.93	36	326.32	385	200	500	180	50
CDCL	600	15	60	32	310	2200	370	500	349.17	51	309.29	385	200	500	180	50
CDCL	600	20	60	32	306	2200	370	500	347.93	66	292.3	385	200	500	180	50
CDCL	700	00	60	48	436	2200	370	700	344	6	360	385	200	700	180	50
CDCL	700	05	60	48	429	2200	370	700	347.2	21	343.27	385	200	700	180	50
CDCL	700	10	60	48	421	2200	370	700	348.93	36	326.32	385	200	700	180	50
CDCL	700	15	60	48	415	2200	370	700	349.17	51	309.29	385	200	700	180	50
CDCL	700	20	60	48	410	2200	370	700	347.93	66	292.3	385	200	700	180	50
CDCL	800	00	60	48	446	2200	370	700	344	6	360	385	200	700	180	50
CDCL	800	05	60	48	438	2200	370	700	347.2	21	343.27	385	200	700	180	50
CDCL	800	10	60	48	430	2200	370	700	348.93	36	326.32	385	200	700	180	50
CDCL	800	15	60	48	424	2200	370	700	349.17	51	309.29	385	200	700	180	50
CDCL	800	20	60	48	418	2200	370	700	347.93	66	292.3	385	200	700	180	50
CDCL	900	00	60	64	571	4400	370	900	344	6	360	385	200	900	180	50
CDCL	900	05	60	64	560	4400	370	900	347.2	21	343.27	385	200	900	180	50
CDCL	900	10	60	64	551	4400	370	900	348.93	36	326.32	385	200	900	180	50
CDCL	900	15	60	64	543	4400	370	900	349.17	51	309.29	385	200	900	180	50
CDCL	900	20	60	64	536	4400	370	900	347.93	66	292.3	385	200	900	180	50
CDCL	1000	00	60	64	579	4400	370	900	344	6	360	385	200	900	180	50
CDCL	1000	05	60	64	569	4400	370	900	347.2	21	343.27	385	200	900	180	50
CDCL	1000	10	60	64	560	4400	370	900	348.93	36	326.32	385	200	900	180	50
CDCL	1000	15	60	64	551	4400	370	900	349.17	51	309.29	385	200	900	180	50
CDCL	1000	20	60	64	544	4400	370	900	347.93	66	292.3	385	200	900	180	50

The structural parts of NITROGAS Aerial Cams are assembled with high quality cast iron. Designed for a long service life, since the wear surfaces are mounted with CuZn25Al5Mn4Fe3-C bronze plates with embedded solid lubricants against heat treated sliding faces.

The design for easy assembly promotes and prioritizes spare parts interchangeability, ensuring the longest service life of the cam.

Aerial Cam Units are assembled with mechanical positive return, to ensure a secure return. An integrated gas or coil spring ensures the return of the slider.

Aerial Cams are recommended when there is not enough space available in the lower die and when using high working angles ($>20^\circ$). As the movement of the press is transformed by a wedge, aerial cam units are applicable for long strokes (<120 mm) and large loads (<100 tnf).

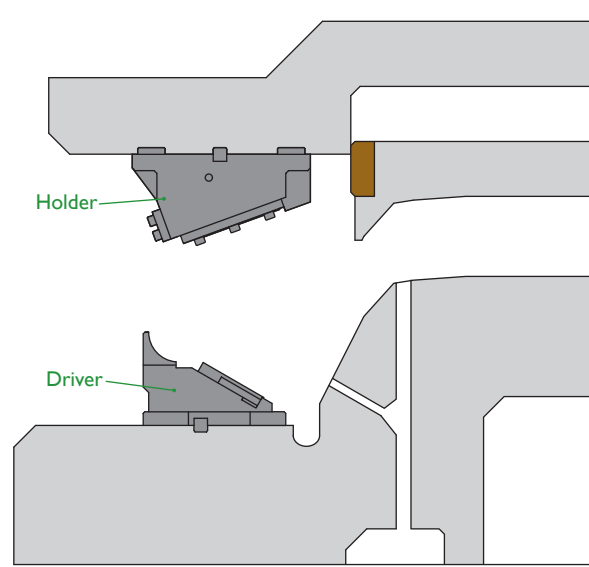
NITROGAS offers engineering support referring to cam applications for die designers and builders.

CAD files of Aerial Cam Units can be downloaded for FREE from our website: www.nitrogas.com

Installation

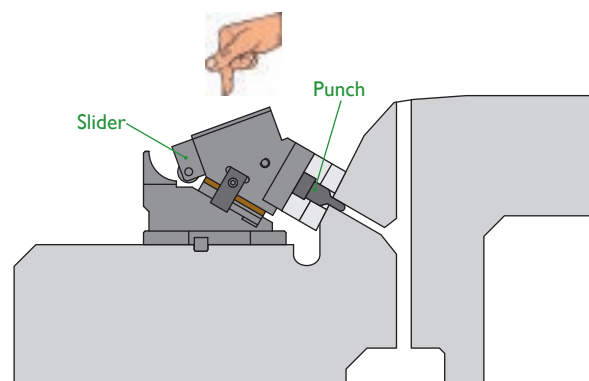
STEP 1

- 1 Drill the required holes in the die for the cam holder and the driver.
- 2 Fix the cam holder and cam driver in the die.
- 3 Remove the cam slider from the cam holder.

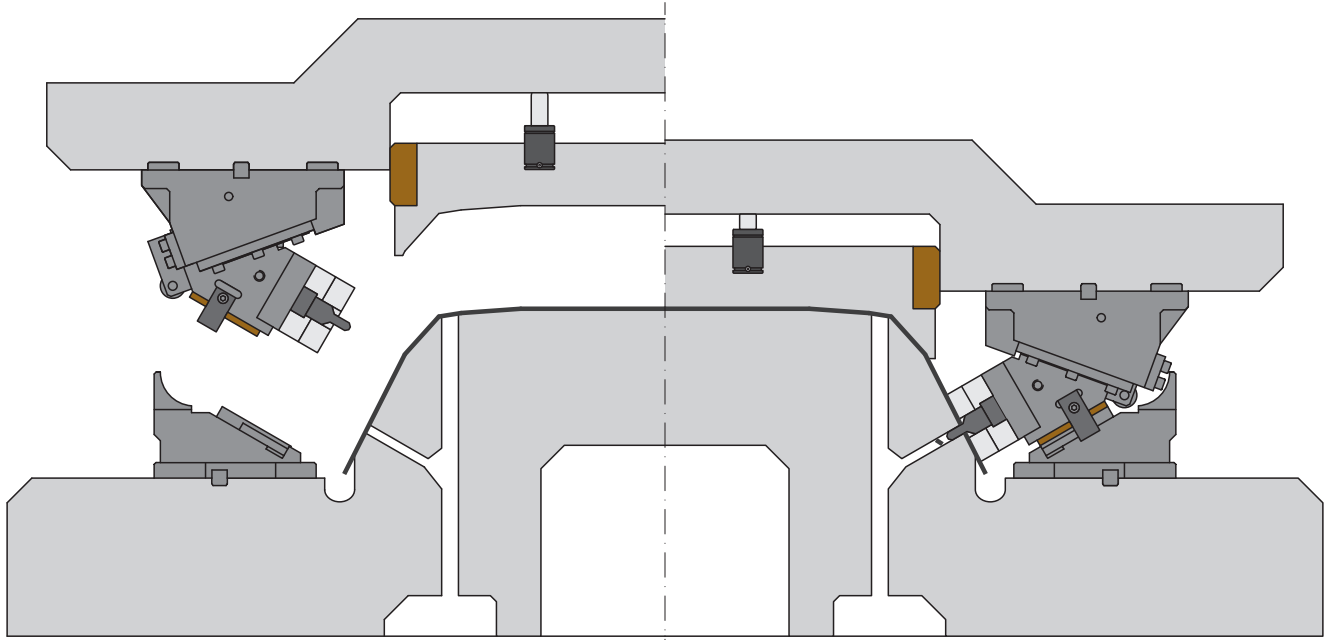


STEP 2

- 4 Locate the punch in the cam slider and set in the fixed driver.
- 5 Move the slider with the punch along the driver and fix the punch to the slider.
- 6 Mount the slider on the cam holder.



Example of work



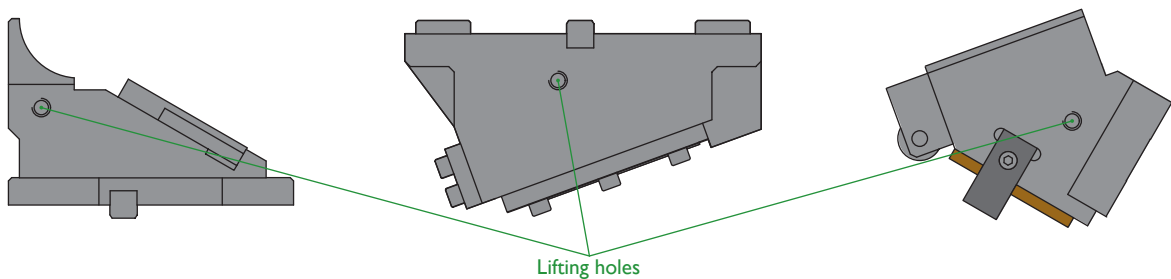
Spare parts available for all Aerial Cam Units.
The center of the load must be located as much centered as possible.



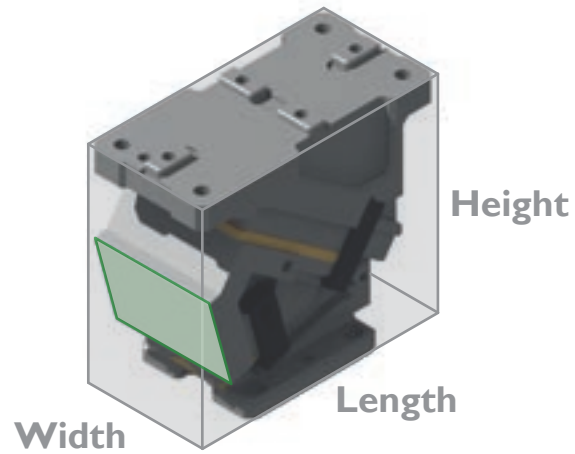
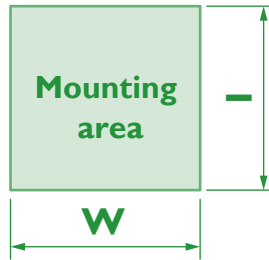
Maximum press speed 1.6 m/s
Maximum cadence (at 20°C) 40 strokes/min


Handling




NITROGAS Aerial Cams include lifting holes for easier handling.



Aerial cams overview






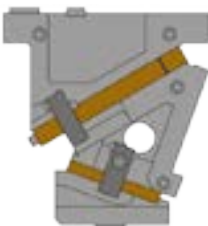
Model	Mounting area		θ °	S mm	Working Force tnf	Spring Force kgf	Overall Dimensions			Weight kg
	W mm	L mm					Width mm	Height mm	Length mm	
 CACD	52	60	00	19.3	1 - 3	100	52	125	175	5.3
			05	21.3						5.2
			10	23.3						5.1
			15	25.4						5
			20	27.6						
			25	30						
			30	32.6						
			35	35.4						
			40	38.6						4.9
			45	42.3						
			50	46.7						
			55	52.3						
			60	60						
			65	47.3						5
		70	58.5							
75	46.3									
80	57.5	150	205	7.8						
	70								7.7	
 CACD	52	60	00	30.2	1 - 3	92	52	135	185	6.4
			05	31.9						6.1
			10	35						6
			15	38.2						5.8
			20	41.5						5.7
			25	45						5.5
			30	48.8						
			35	53.1						
			40	57.9						
			45	54.9						
			50	60.7						192



Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
CACSA 	52	75	00	30.2	3 - 6	317	52	160	196.5	8.8	
			05	33.4					199.35	8.6	
			10	36.6					206.41	8.7	
			15	39.9					210.48	9	
			20	43.3					212.07	8.9	
			25	47					213.68	8.8	
			30	51					215.31	8.6	
			35	55.4					215.99	8.8	
			40	60.4					212.24	8.9	
			45	66.2					213.57	9.1	
			50	73.1					205	8.8	
			55	64.5					215	8.9	
			60	54					200	8.5	
CACT 	65	90	00	22.5	7 - 14	611	65	230	275	18.4	
			05	22.6						18.6	
			10	27.2						17.4	
			15	27.8						17.5	
			20	32.3						16.6	
			25	33.4						16.8	
			30	38					16.9		
			35	40.2					17		
			40	45					16.4		
			45	48.7					16.6		
			50	54.5					15.9		
			55	61					16.1		
			60	70		16.4					
			65	68.5		300			18		
			70	67.2					335	20	
75	69.5	536									
CACC 	50	75	00	30.2	2 - 4	280	50	200	240	12.7	
			05	30.5						250	12.3
			10	30.3						240	11.8
			15	30.5							11.5
			20	30.4							11.3
			25	30						11.1	
			30	32.6						10.9	
			35	35.4						10.6	
			40	38.6						10.8	
	45	42.3	10.8								
	50	46.7	10.8								
	55	52.1	255	11.2							
	60	59.1		272					11.6		
	65	58.3		278					12		
	70	57.6	190	9.5							
	00	15		9.3							
	05	15.1		185					9		
	10	15.2	65	180							


Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
CACC	65	65	15	15.5	2 - 4	280	65	180	180	8.8	
			20	16.5					176.51	8.6	
			25	17.1					172.94	8.5	
			30	18.5					177.78	8.3	
			35	19.6					173.29		
			40	21.5					170.78		
			45	23.3					170	8.1	
			50	26.5				190	175	8.4	
			55	29.7					180		
			60	35					190	9.3	
			65	41.4				210	195	9.5	
			70	51.1					202		
			00	32.1					270		25.9
			80	86				05	38.4	4 - 8	560
	10	38.9			279.92	26.6					
	15	39.7			285.93	25.1					
	20	46.1			285.9	25.3					
	25	47.8			289.8						
	30	54.3			282.59		23.2				
	35	57.4			550	284.27	23.4				
	40	64.3				274.8	22.4				
	45	69.6				274.2					
	50	77.8			270	21.6					
	55	87.2			270	21.7					
	60	98.5			275	23.2					
	65	81.6			275	23.7					
	70	86.4			280	23.9					
	00	32.1	9 - 14	1100	150	270	280	45.4			
	05	32.3					288.26	45.9			
	10	38.9					285.54	44.4			
	15	39.7					291.79	44.9			
	20	46.1					286.97	43.2			
	25	47.8					291.02	43.7			
	30	54.3					283.92	42.2			
	35	57.4					285.66	42.7			
40	64.3	280					41	40.5			
45	69.6						41.4				
50	77.8		40.9								
55	87.2		41.5								
60	98.5	42.2	285	42.2							
65	93.2	43.5									
70	86.4	43.5									
CACF	80	86	00	32.1	6 - 11	700	80	270	270	25.9	
			05	38.4					272.93	26.3	
			10	38.9					279.92	26.6	
			15	39.7					285.93	25.1	
			20	46.1					285.9	25.3	
			25	47.8					289.8		
			30	54.3					282.59		23.2
			35	57.4					284.27	23.4	


Model	Mounting area				Overall Dimensions														
	W mm	L mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg									
CACF	80	86	40	64.3	6 - 11	700	80	270	274.8	22.4									
			45	69.6					274.2										
			50	77.8					270										
			55	87.2					275										
			60	98.5					280										
			65	81.6					288.26										
			70	86.4					285.54										
			00	32.1					291.79										
			05	32.3					286.97										
			10	38.9					291.02										
			15	39.7					283.92										
			20	46.1					285.66										
			25	47.8					280										
			30	54.3					285										
	150	85	35	57.4	13 - 19	1400	150	270	41	41.4									
			40	64.3					41.4										
			45	69.6					40.5										
			50	77.8					40.9										
			55	87.2					41.5										
			60	98.5					42.2										
			65	93.2					42.7										
			70	86.4					285										
			70	86.4					285		43.5								
			CACU	65					80		00	2 - 4	109	115	210	209.94	19.5		
									90		05					27		217.01	
									80		10					31.6		220.8	
									90		15					32.2		227.77	
									80		20					33.8		222.1	
90	25	35			228.75														
80	30	33.5			217.63														
90	35	35.4			223.76														
80	40	42.9			212.72														
90	45	46.5			218.13														
50	54.5	16.8																	
55	43.6	17.8																	
60	50	17.3																	
65	47.3	18.5																	
70	58.5	18.4																	
100	100	00			28.3	3 - 6	106	160	280	214	47								
	140	05		28.4	273														
	100	10		33.3	44.9														
	140	15		33.9	287.35														
	100	20		30.9	274														
	140	25		32	287.26														
	120	30		33.5	273														
	140	35		35.4	285.34														
	120	40		39	273														
	140	45		42.3	280.41														
	50	46.7		41.7															
	50	46.7		41.2															
	100	100		00	28.3					4 - 9		608	160	280	574	45.4			
															140		05	28.4	273
															100		10	33.3	44.9
															140		15	33.9	287.35
100						20	30.9	274											
140			25			32	287.26												
120			30			33.5	273												
140			35			35.4	285.34												
120			40			39	273												
140			45			42.3	280.41												
50			46.7			41.7													
50			46.7			41.2													



Model	Mounting area				Overall Dimensions										
	W mm	L mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg					
CACU 	100	140	55	52.3	5 - 10	572	160	280	272	44					
			60	60						42.5					
			65	47.3						43					
			70	58.5						41.8					
	200	100	00	28.3	10 - 20	2297	260	280	273	81.5					
		130	05	28.4						82.3					
		100	10	33.3						75.7					
		130	15	33.9						287.35	80.5				
		100	20	30.9					2432	274	76.1				
		130	25	32							287.27	80.1			
		120	30	33.5							273	77			
		140	35	35.4							285.34	80.9			
		140	120	40					39	12 - 24	2289	273	280.41	71.4	
			45	42.3					71.6						
				50										46.7	272
				55										52.3	
	60			60											
	65		47.3	77.2											
	70	58.5	2236		72.2										
	CACK 	65	80	00	26.9	2 - 4	550	115	210	209.94	20.5				
90			05	27	217.01					20.8					
80			10	31.6	220.8					20.3					
90			15	32.2	227.77					20.6					
80			20	33.8	222.1					19.1					
90			25	35	228.75					19.4					
80			30	33.5	217.63					18.7					
90			35	35.4	223.76					19					
80			40	42.9	212.72					17.9					
90			45	46.5	218.13					18.1					
90			50	54.5	17.8										
100			55	43.6						18.8					
100			100	60	50						4 - 9	530	160	280	214
			110	65	47.3					19.5					
		100	100	00	28.3	1120	1100	160	280	273					49.4
			140	05	28.4										50.2
			100	10	33.3										47.3
			140	15	33.9										287.35
		100	20	30.9	274	47.2									
		140	25	32		287.26	48.9								
		120	30	33.5		273	46.5								
		140	35	35.4		285.34	47.8								
		120	40	39	273	280.41	708	272	44.1						
		45	42.3	43.6											
		50	46.7						46.4						
		55	52.3												
60		60	44.9												
65		47.3		1060	45.4										

Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
CACK 	100	140	70	58.5	4 - 9	1060	160	280	272	44.2	
		100	00	28.3					273	82.9	
		130	05	28.4						83.7	
	200	100	10	33.3	9 - 19	2200	260	280	273	77.1	
		130	15	33.9					287.35	81.9	
		100	20	30.9					274	77.5	
		130	25	32					287.27	81.5	
		120	30	33.5					273	78.4	
		140	35	35.4					285.34	82.3	
		120	40	39					273	72.8	
		140	45	42.3					280.41	76.1	
			50	46.7					272	73	
			55	52.3						80	
			60	60						75.3	
	65		47.3	78.6							
	70	58.5	2120	73.6							
	CACW 	200	180	00	38.6	12 - 24	1400	200	350	340	95
05				42.6	94.8						
10				46.7	94.6						
15				50.9	93.3						
20				55.3	340.76						92.7
30				65.1	347.83						94.2
40				77.1	351.17						93.7
50				93.3	354.77						97.3
60				120	385						137.2
300		00		38.6	20 - 40	2800	300	350	340	135.9	
		05		42.6						135.7	
		10		46.7						133	
		15		50.9						340.76	131.5
		20		55.3						347.83	131
		30		65.1						351.17	133.3
		40		77.1						354.77	130.9
		50		93.3						385	136.1
		60		120						385	191.1
400		00		38.6	25 - 50	4200	400	350	340	189.3	
		05		42.6						188	
		10		46.7						186.1	
		15		50.9						340.76	185.3
		20		55.3						347.83	185.8
		30		65.1						351.17	191.9
		40		77.1						354.77	191.8
		50		93.3						385	201.1
		60		120						385	222.3
500	00	38.6	32 - 64	4200	500	350	340	220.4			
	05	42.6						218.8			
	10	46.7						216.3			
	15	50.9						216.3			
	20	55.3						340.76	215.1		



Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
 CACW	500	180	30	65.1	32 - 64	4200	500	350	347.83	216.1	
			40	77.1					351.17	220.4	
			50	93.3					354.77	220.1	
			60	120					385	236.5	
	600		00	38.6	40 - 80	5600	600		340	281.4	
			05	42.6						277.9	
			10	46.7						274.1	
			15	50.9						272.3	
			20	55.3						340.76	268.8
			30	65.1						347.83	276.6
			40	77.1						351.17	285.2
			50	93.3						354.77	283.5
	60	120	385	295.6							
	 CACG	50	65	00	15	3 - 6	280	50	180	225	10.6
				05	15.6					220	10.3
				10	17					9.9	
15				17	9.7						
20				18.4	9.4						
25				18	9.2						
30				17.4	9.1						
35				18.9	9						
40			20.6	225	9.5						
55			45	22.5	235					9.7	
			50	23.3	245					10	
			55	26.1	190					10.7	
			60	31.5	185					10.4	
			65	36.6	182.5					10.2	
			65	00	15					175	9.9
				05	15.6					172.4	9.6
		10		17	171.78	9.5					
15		17		170	9.9						
20		18.4		185	11.1						
30		19.5		305	34						
40		23.1		295	32						
50		24.9		280							
80		90	60	32	5 - 10	530	80	270	273.34	29	
			00	30.2					273.34	30	
			05	30.5					277.58	30	
			10	31.1					273.34	29	
			15	33.9					273.34	30	
			20	32.3					273.34	30	
			25	35					273.34	30	
			30	34.7					273.34	30	
35		37.7	273.34	30							
40		39.9	273.34	30							
45	43.7	273.34	30								
50	46.7	273.34	30								
55	53.8	273.34	30								

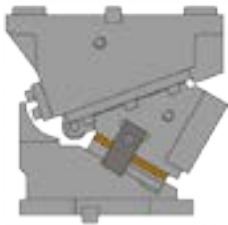
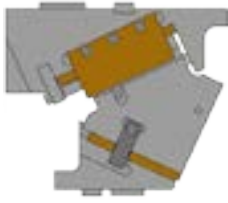
Model	Mounting area				Overall Dimensions					
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg
CACG 	80	90	60	61.1	5 - 10	530	80	270	290	31
			65	70.9					300	32
	150	120	00	28.6	15 - 30	1100	240	355	325	117.6
			05	32.2						114
			10	35.9					113.4	
			15	39.6					111.9	
			20	43.5					326.33	111.3
			25	47.7					329.03	111.2
			30	52.3					325.98	110.2
			35	57.3					340	113.1
			40	63					360	114.7
			45	69.6					375	115.8
			50	77.4					395	117.5
			55	87.1					415	
			60	99.6					430	122
	65	116.5	445	126						
	200	120	00	28.6	15 - 30	1400	270	355	325	129.7
			05	32.2						126.6
			10	35.9					124.8	
			15	39.6					127.4	
			20	43.5					326.33	123.2
			25	47.7					329.03	123
			30	52.3					325.98	121.7
			35	57.3					340	125.3
			40	63					360	126.8
			45	69.6					375	127.9
			50	77.4					395	129.8
			55	87.1					415	132.6
			60	99.6					430	135.1
	65	116.5	445	138.9						
	300	160	00	28.6	30 - 60	2800	340	355	325	184.5
			05	32.2						181
			10	35.9					326.01	178.7
			15	39.6					333.33	177.3
			20	43.5					340.02	176
			25	47.7					345.94	174.9
			30	52.3					345.98	173.8
			35	57.3					360.03	178.7
			40	63					372.97	181.6
			45	69.6					384.71	184.5
			50	77.4					395.15	188.1
			55	87.1					415	193.4
			60	99.6					430	197.6
	65	116.5	445	202.9						

Model	Mounting area				Overall Dimensions					
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg
CACL 	500	180	00	38.6	32	2200	500	385	370	265.6
			05	42.6						262.4
			10	46.7						261
			15	50.9						260.2
			20	55.3						260.7
			25	60						260.8
			30	65.1						264.4
			35	70.8						269.9
			40	77.1						274.5
			45	84.5						281.6
			50	93.3						282
			55	104.6						291.5
	60		120	300.1						
	00		38.6	272.4						
	05		42.6	269.2						
	10		46.7	267.9						
	15		50.9	267.1						
	20		55.3	267.6						
	25		60	267.7						
	30		65.1	271.3						
	35		70.8	276.7						
	40		77.1	281.3						
	45		84.5	288.5						
	50		93.3	288.9						
	55	104.6	299.2							
	60	120	308.7							
	00	38.6	362.6							
	05	42.6	358.9							
	10	46.7	357.2							
	15	50.9	357							
	20	55.3	356.1							
	25	60	357.3							
	30	65.1	362.7							
	35	70.8	370.6							
	40	77.1	377							
	45	84.5	383.6							
	50	93.3	386.5							
	55	104.6	400.8							
	60	120	412.7							
	00	38.6	369.4							
05	42.6	365.7								
10	46.7	364								
15	50.9	363.8								
20	55.3	363								
25	60	364.2								
30	65.1	369.5								
35	70.8	377.4								
40	77.1	383.8								


Model	Mounting area				Overall Dimensions					
	W mm	L mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg
CACL 	800	180	45	84.5	48	3300	800	385	410	390.4
			50	93.3					393.4	
			55	104.6					408.3	
			60	120					421.2	
			00	38.6					463.3	
			05	42.6					459.2	
	10		46.7	457.7						
	15		50.9	457.8						
	20		55.3	459.7						
	25		60	461.5						
	30		65.1	467.8						
	35		70.8	478.9						
	40		77.1	487.3						
	45		84.5	499.4						
	50		93.3	498.4						
	55		104.6	519.2						
	60		120	535.2						
	00		38.6	470.2						
	05		42.6	466.1						
	10		46.7	464.6						
	15		50.9	464.7						
	20		55.3	466.5						
	25		60	468.4						
	30		65.1	474.7						
	35		70.8	485.8						
	40		77.1	494.2						
	45		84.5	506.3						
	50		93.3	505.3						
55	104.6	526.9								
60	120	543.1								
CACN 	70	75	00	19.3	10	280	70	225	252	16.1
			05	21.3					242	15.4
			10	23.3					14.8	
			15	25.4					14.1	
			20	27.6					14	
			25	30					13.8	
			30	32.6					13.7	
			35	35.4					13.8	
			40	38.6					242	13.9
			45	42.3					261	14.1
			50	46.7					263	14.5
			55	43.6					275	27.9
			60	50					305	27.5
			00	32.1					295	26.9
	05		35.5	280	26.5					
	10		38.9	280.48						
	15		42.4							
	80		00	32.1	17	80	275		305	27.9
			05	35.5	17	80	275		295	27.5
			10	38.9	17	80	275		280	26.9
15		42.4	17	80	275	280.48	26.5			


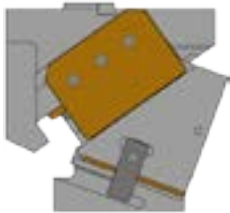
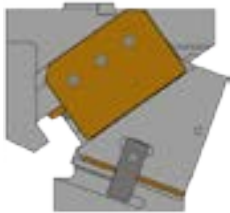
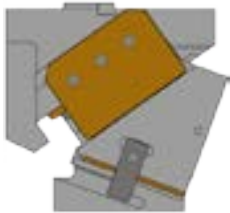
Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
CACN	80	75	20	46.1	17	280	80	275	276.16	26	
			25	50					271.47	25.9	
			30	54.3					270	25.3	
			35	59						25	
			40	64.3						24.7	
			45	70.4						24.9	
			50	77.8						25.8	
			55	78.5						26.2	
			60	80						340	76.1
			00	32.1							74.2
			05	35.5							73.8
			10	38.9							73.1
	15	42.4	72.3								
	20	46.1	72.1								
	25	50	71.9								
	30	54.3	72.2								
	35	59	72.4								
	40	64.3	350	72.4							
	45	70.4	365	65.5							
	50	77.8	355	64.3							
	55	87.2	372	65.2							
	60	100	385	66.6							
	165	120	125	00	32.1	30	540	165	300	90.3	88
				05	35.5					87.5	
				10	38.9					87	
				15	42.4					85.8	
				20	46.1					86.2	
				25	50					85.6	
				30	54.3					86.2	
				35	59					350	86.6
				40	64.3					365	88
				45	70.4					355	78.2
				50	77.8					372	80.5
				55	87.2					385	82.4
	200	120	120	00	38.6	36	710	200	340	328	153.2
				05	42.6					320	152.5
				10	46.7					324.13	151.4
				15	50.9					325.82	154.1
				20	55.3					327.08	148.2
				25	60					334.71	150.2
				30	65.1					327.83	147.3
				35	70.8					334.51	148
				40	77.1					330.46	146.2
				45	84.5					347.84	148.6
				50	79.3					355	122.5
				55	88.9					405	130.9
	60	102	135.3								
	300	160	160	00	38.6	46	1420	300	375	328	153.2
05				42.6	320					152.5	
10				46.7	324.13					151.4	
15				50.9	325.82					154.1	
20				55.3	327.08					148.2	
25				60	334.71					150.2	
30				65.1	327.83					147.3	
35				70.8	334.51					148	
40				77.1	330.46					146.2	
45				84.5	347.84					148.6	
50				79.3	355					122.5	
55				88.9	405					130.9	
60	102	135.3									

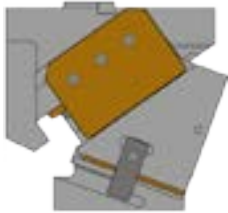
Model	Mounting area				Overall Dimensions					
	W mm	L mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg
 CACN	400	160	00	38.6	46	1420	400	375	328	160.2
			05	42.6					320	159.5
			10	46.7					324.13	158.4
			15	50.9					325.82	161.1
			20	55.3					327.08	155.2
			25	60					334.71	157.3
			30	65.1					327.83	154.3
			35	70.8					334.51	155
			40	77.1					330.46	153.3
			45	84.5					347.84	155.6
			50	79.3					355	127.7
			55	88.9					405	135.9
			60	102						140.4
			 CACN-F	50					80	00
05	28	18.5								
10	31	18								
15	34	17.5								
20	37	17								
25	40	17.5								
30	43	18								
35	47	17.5								
40	51	17								
45	56	17.5								
50	62	18								
55	70	17.5								
60	60	18								
00	32	37.5								
05	35	37								
10	39	36								
15	42	35.8								
20	46	35.3								
25	50	34.5								
30	54	34								
35	59	34.5								
40	64	34.5								
45	70	35								
50	78	35								
55	70	35								
60	80	35								
00	32	34								
05	35	34.1								
10	39	330.08								
15	42	329.2								
20	46	334.82								
25	50	333.88								
30	54	331.32								
35	59	332.11								
00	32	330.69								
05	35	341								
10	39	341								
15	42	341								
20	46	341								
25	50	341								
30	54	341								
35	59	341								

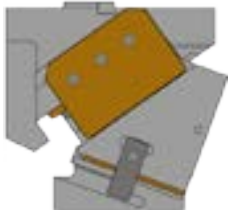
Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
CACN-F 	150		40	64	18	560	165		329.02	72	
			45	70					359.55	71.5	
			50	78					327.74	71	
			55	87					239.05	70	
			60	100					336.45		
			00	32					341	105.5	
	200	120	05	35	27	1120	235	300	330.08	104.8	
			10	39					329.2	108.8	
			15	42					334.82	101	
			20	46					333.88	99.5	
			25	50					331.32	97	
			30	54					332.11	97.8	
			35	59					330.69	97.5	
			40	64					329.02		
			45	70					359.55	97	
			50	78					327.74	96.8	
			55	87					329.05	95	
			60	100					342	94.8	
	300	155	00	38	40	1680	330	375	413	195	
			05	42					393.39	195.6	
			10	46					390.81	193	
			15	51					388.2	191.5	
			20	55					385.51	183.7	
			25	50					372.66	176	
			30	54					369.61	173	
			35	59					367.79		
			40	64					365.66	172	
			45	70					363.15		
			50	78					386	170	
			55	87					413.5	169	
60	100	421	168								
CACV 	60	100	00	19.3	7	280	60	225	277	20.8	
			05	21.3						20.5	
			10	23.3						19.7	
			15	25.4						19.3	
			20	27.6						18.9	
			25	30						18.8	
			30	32.6						18.4	
			35	35.4						17.7	
			40	38.6						17.5	
			45	42.3						17.6	
			50	46.7						17.5	
			55	52.3						17.6	
			60	60						17.9	
			65	71						282	18.6
			70	58.5						292	18.8
			75	77.3						302	19.7

Model	Mounting area				Overall Dimensions												
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg							
CACV	85	110	00	19.3	10	560	85	225	277	28.2							
			05	21.3					27.5								
			10	23.3					26.6								
			15	25.4					277.99	26.3							
			20	27.6					277	26.1							
			25	30						25.3							
			30	32.6						24.4							
			35	35.4						24							
			40	38.6						24.7							
			45	42.3						24.6							
			50	46.7						25.4							
			55	52.3						282	25.7						
			60	60						292	26.2						
			65	71						302	28.3						
			70	58.5						550							
			75	77.3						550							
			110	145						00	32.1	15	560	110	275	330	51.5
										05	35.5					50.4	
	10	38.9			50.2												
	15	42.4			51.3												
	20	46.1			49.7												
	25	50			49												
	30	54.3			360	49.5											
	35	59			48.6												
	40	64.3			46.3												
	45	70.4			46.6												
	50	77.8			45.4												
	55	87.2			345	46.5											
	60	100			47.9												
	65	94.6			355	48.9											
	70	81.9			550	365	50.8										
	75	108.2			550	375	52.6										
	165	115			00	32.1	17	1100	165	300	360					75.1	
			05	35.5	72.9												
			10	38.9	72.1												
15			42.4	71.6													
20			46.1	70.3													
25			50	69.8													
30			54.3	69													
35			59	69.4													
40			64.3	69.3													
45			70.4	70.3													
50			77.8	69.1													
55			61	68.1													
60			40	367	68.3												
65			47.3	375	70												
70			58.5	385	71.7												
75			58	395	73.5												

Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
CACV 	200	115	00	32.1	22	1100	200	300	360	91.6	
			05	35.5						88.9	
			10	38.9						88	
			15	42.4						87	
			20	46.1						85.5	
			25	50						85.9	
			30	54.3						85	
			35	59						84.8	
			40	64.3						85.8	
			45	70.4						85.7	
			50	77.8						84.7	
			55	52.3						85.7	
			60	60						367	84.2
			65	71						375	86.7
			70	58.5						385	88.8
	75	77.3	395	91.1							
	250	115	00	32.1	29	2200	250	300	360	113	
			05	35.5						110.5	
			10	38.9						109.6	
			15	42.4						108.4	
			20	46.1						107.1	
			25	50						106	
			30	54.3						105.8	
			35	59						107	
			40	64.3						108.2	
			45	70.4						108.5	
			50	77.8						107.4	
			55	52.3						106.3	
			60	60						367	106.4
			65	71						375	109.4
			70	58.5						385	112.5
	75	77.3	395	115.5							
	300	155	00	38.6	37	2200	300	375	400	167.1	
			05	42.6						390	163.8
			10	46.7						394.13	161.9
15			50.9	395.82						160.1	
20			55.3	397.08						157.9	
25			60	404.71						158.6	
30			65.1	408.22						157.1	
35			70.8	404.52						158.5	
40			77.1	400.46						159.4	
45			84.5	410						159	
50			93.3	410						157.7	
55			104.6	420						162.3	
60			120	420						166.9	
65			94.6	438						171.7	
70			73.1	455						176.8	
75	96.6	475	182.2								

Model	Mounting area				Overall Dimensions													
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg								
CACV 	350	155	00	38.6	41	2800	350	375	395	212.4								
			05	42.6					409.62	214.7								
			10	46.7					414.52	207								
			15	50.9					408.6	204.5								
			20	55.3					422.92	205.3								
			25	60					421.53	203.9								
			30	65.1					418.5	203.5								
			35	70.8					415.89	204.6								
			40	77.1					410.78	207.1								
			45	84.5					410	209.7								
			50	93.3					420	210.9								
			55	87.2					430	208.7								
			60	90					445	214.1								
			65	94.6					450	218.5								
			70	87.7					460	225.5								
	CACV-F 	400	155	75	96.6	45	3300	400	375	465	230.9							
				00	38.6					395	224.6							
				05	42.6					390	221.3							
				10	46.7					394.13	218.7							
				15	50.9					395.82	215.7							
				20	55.3					397.08	212.8							
				25	60					404.71	214							
				30	65.1					408.22	212.7							
				35	70.8					404.52	215							
				40	77.1					400.46	216.2							
				45	84.5					400	217.3							
				50	93.3					410	216.6							
				55	104.6					423	224							
				60	120					440	232.2							
				65	94.6					458	239.3							
				70	73.1					475	247.6							
				75	96.6					495	252.9							
				CACV-F 	60					100	00	19.3	14	280	60	210	205	13
											05	21.3						
											10	21.5						
15	23.8																	
20	24.5																	
25	27.1																	
30	30																	
35	31.7																	
40	35.5																	
45	38.5																	
50	43.9																	
55	49.2																	
60	58																	
65	68.6																	
70	70.6																	
CACV-F 	60	100					14	280	60		210	220					14	
												235						
					220	15												
			14															

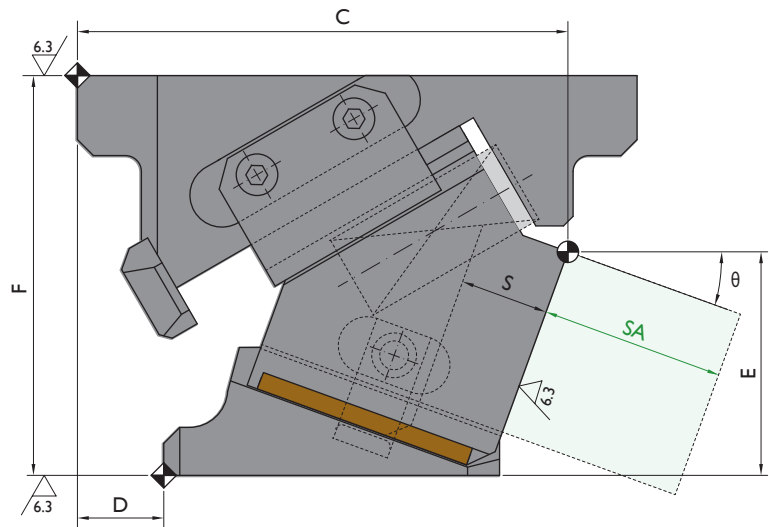
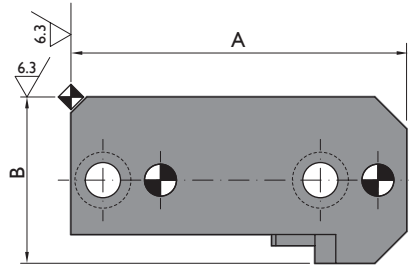
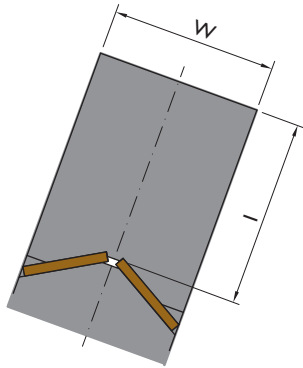
Model	Mounting area				Overall Dimensions									
	W mm	L mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg				
CACV-F 	60	100	75	76.1	14	280	60	210	235	15				
			00	30.9						27				
			05	34.1						255	26			
			10	34.5										
			15	38.1										
			20	41.8						259.24	25			
			25	43.4						285	27			
	30	48												
	35	50.8												
	85	120	40	56.8	29	560	85	225	265	25				
			45	42.3										
			50	48.2										
			55	54.1										
			60	63.8										
			65	75.4										
			70	95										
			75	95.1										
			00	30.9						41	275	110	290	49
			05	34.1										
	10	34.5												
	15	38.1												
	20	41.8												
	25	43.4												
	30	48												
	35	50.8												
	40	56.8												
	45	61.5												
	50	48.2												
	55	54.1												
	60	63.8												
	65	75.4												
	70	95												
	75	95.1												
	110	160	00	32.1	59	710	150	300	310	65				
			05	35.5										
			10	35.9										
			15	39.7										
			20	43.6										
			25	45.2										
			30	50										
			35	52.9										
			40	59.2										
			45	64.1										
			50	73.1										
			55	81.9										
			60	96.6										
			65	91.4										
70	84.7													
150		00	32.1	59	710	150	300	340	68					
		05	35.5											
		10	35.9											
		15	39.7											
		20	43.6											
		25	45.2											
		30	50											
		35	52.9											
		40	59.2											
		45	64.1											
50	73.1													
55	81.9													
60	96.6													
65	91.4													
70	84.7													

Model	Mounting area				Overall Dimensions					
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg
CACV-F 	150	160	75	76.1	59	710	150	300	340	68
			00	32.1					310	78
			05	35.5					313.81	77
			10	35.9					321.7	78
			15	39.7					329.51	80
			20	43.6					350	83
	180		25	45.2	352.11		80			
			30	50	364.66		83			
			35	52.9	371.87		78			
			40	59.2	340		80			
			45	64.1	347.32		78			
			50	73.1	353.59		81			
			55	81.9	359.15		83			
			60	96.6	340		85			
			65	91.4	320		94			
			70	84.7	323.81		94			
			75	76.1	331.7		95			
			220	00	32.1		337.8		98	
				05	35.5		360		99	
				10	35.9		362.94		99	
	15			39.7	373.16		98			
	20			43.6	365		98			
	25			45.2	371.66		99			
	30			50	367.84		99			
	35			52.9	372.05		100			
	40			59.2	365		110			
	45			64.1	320		111			
	50			73.1	323.81		112			
	55			81.9	331.7		114			
	60			96.6	337.8		115			
	260			65	91.4		360		116	
			70	100.8	362.94		116			
			00	32.1	373.16		115			
			05	35.5	365		117			
			10	35.9	371.66		117			
			15	39.7	367.84		118			
			20	43.6	372.05		118			
			25	45.2	365		119			
			30	50	320		119			
			35	52.9	323.81		119			
			40	59.2	331.7		119			
			45	64.1	337.8		119			
50		73.1	360	119						
55		81.9	362.94	119						
60	96.6	373.16	119							
65	91.4	365	119							
70	100.8	371.66	119							

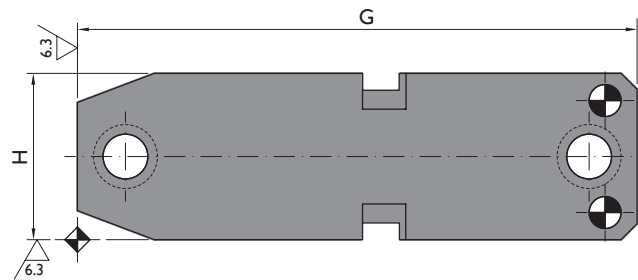
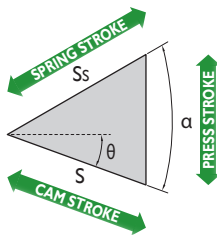
Model	Mounting area				Overall Dimensions						
	W mm	l mm	θ °	S mm	Working Force tnf	Spring Force kgf	Width mm	Height mm	Length mm	Weight kg	
CACV-F 	260	160	75	95.1	78	2400	260	300	365	119	
			00	37.3					415	224	
			05	41.2						216	
			10	41.6					4000	418.81	214
			15	46						426.7	
			20	50.6						415	209
			25	52.4						417.16	205
			30	58						424.61	204
			35	61.3						427.78	
			40	68.6						438.66	203
	45	74.3	3900		201						
	50	84.8			208						
	55	95		450	211						
	60	112.1			224						
	65	102.9			228						
	70	127.1			223						
	75	114.2			223						
	00	37.3		104	330	375		269			
	05	41.2					415	263			
	10	41.6									
	15	46	4000				418.81	262			
	20	50.6					426.7				
	25	52.4					415	254			
	30	58					417.16	248			
	35	61.3					424.61	249			
	40	68.6					427.78	248			
	45	74.3					438.66	250			
	50	84.8		107	400	450		244			
	55	95						252			
	60	112.1						250			
	65	102.9					256				
	70	127.1					274				
	75	114.2					273				
										268	



WEB
↓
CAD

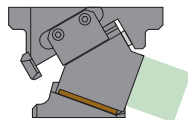


CAM DIAGRAM



Available Options

SA



Additional slider length available
l - 60 mm
(1 mm steps)

CACS 52

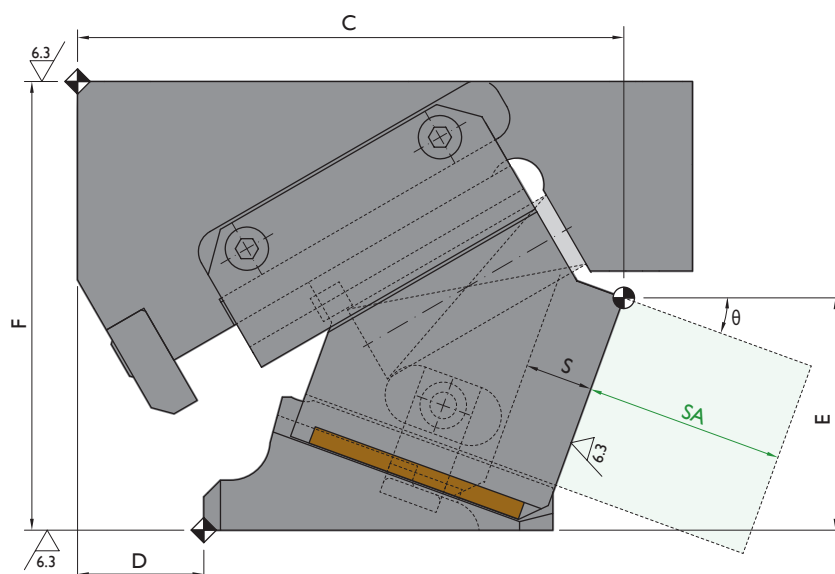
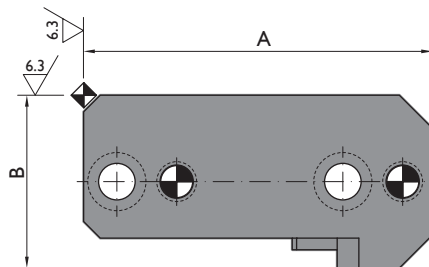
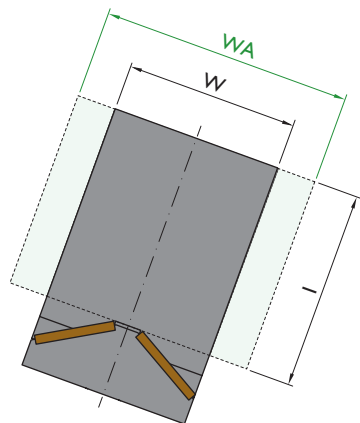
SA1 - SA2 - ... - SA60

Ordering example: CACS-W-θ-SA
CACS-52-20
CACS-52-20-SA45

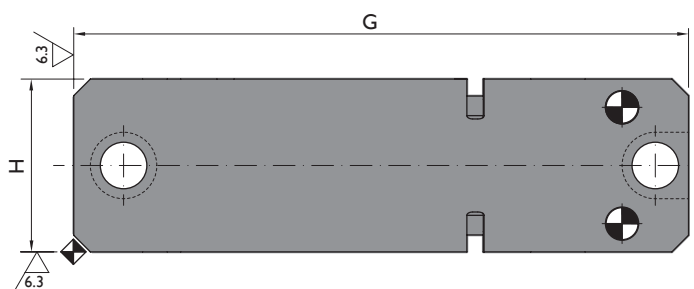
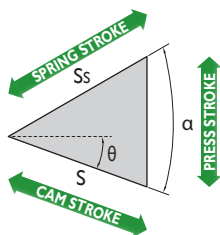
(Standard dimensions)
(Additional slider length (45 mm))

Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
				1,000,000 strokes	300,000 strokes													
CACS 52 00	52	00	19.3	1	3	5.3	100	105	52	150	45	82	125	175	52	60	30	50
CACS 52 05	52	05	21.3	1	3	5.2	100	105	52	153.1	42	79.79	125	175	52	60	30	50
CACS 52 10	52	10	23.3	1	3	5.1	100	105	52	153.55	37	77.17	125	175	52	60	30	50
CACS 52 15	52	15	25.4	1	3	5	100	105	52	153.32	32	74.18	125	175	52	60	30	50
CACS 52 20	52	20	27.6	1	3	5	100	105	52	153.38	27	69.9	125	175	52	60	30	50
CACS 52 25	52	25	30	1	3	5	100	105	52	154.71	20	66.38	125	175	52	60	30	50
CACS 52 30	52	30	32.6	1	3	5	100	105	52	153.28	17	61.69	125	175	52	60	30	50
CACS 52 35	52	35	35.4	1	3	4.9	100	105	52	152.09	10	57.9	125	175	52	60	30	50
CACS 52 40	52	40	38.6	1	3	5	100	105	52	149.14	4	53.07	125	175	52	60	30	50
CACS 52 45	52	45	42.3	1	3	5	100	105	52	145.41	-4	49.27	125	175	52	60	30	50
CACS 52 50	52	50	46.7	1	3	5	100	105	52	143.92	-9	45.57	125	175	52	60	30	50
CACS 52 55	52	55	52.3	1	3	5	100	105	52	144.67	-10	42.03	125	175	52	60	30	55
CACS 52 60	52	60	60	1	3	5.2	100	105	52	150.69	-9	34.72	125	175	52	60	30	60
CACS 52 65	52	65	47.3	1	3	5.9	100	105	52	130.16	-45	25.46	125	175	52	60	20	65
CACS 52 70	52	70	58.5	1	3	5.9	100	105	52	133.62	-40	18.03	125	175	52	60	20	70
CACS 52 75	52	75	46.3	1	3	7.8	100	111	52	148.74	-30	25.41	150	175	52	70	12	75
CACS 52 80	52	80	57.5	1	3	7.7	100	110	52	148.74	-30	25.41	150	175	52	70	10	80

WEB
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CAD



CAM DIAGRAM



Available Options

SA		WA	
	Additional slider length available l - 60 mm (1 mm steps)		Additional mounting width available
CACD 52	SA1 - SA2 - ... - SA60		WA65

Ordering example: CACD-W-θ-SA-WA

CACD-52-05

(Standard dimensions)

CACD-80-05-SA59-WA65

(Additional slider length (59 mm) and additional mounting width (65mm))

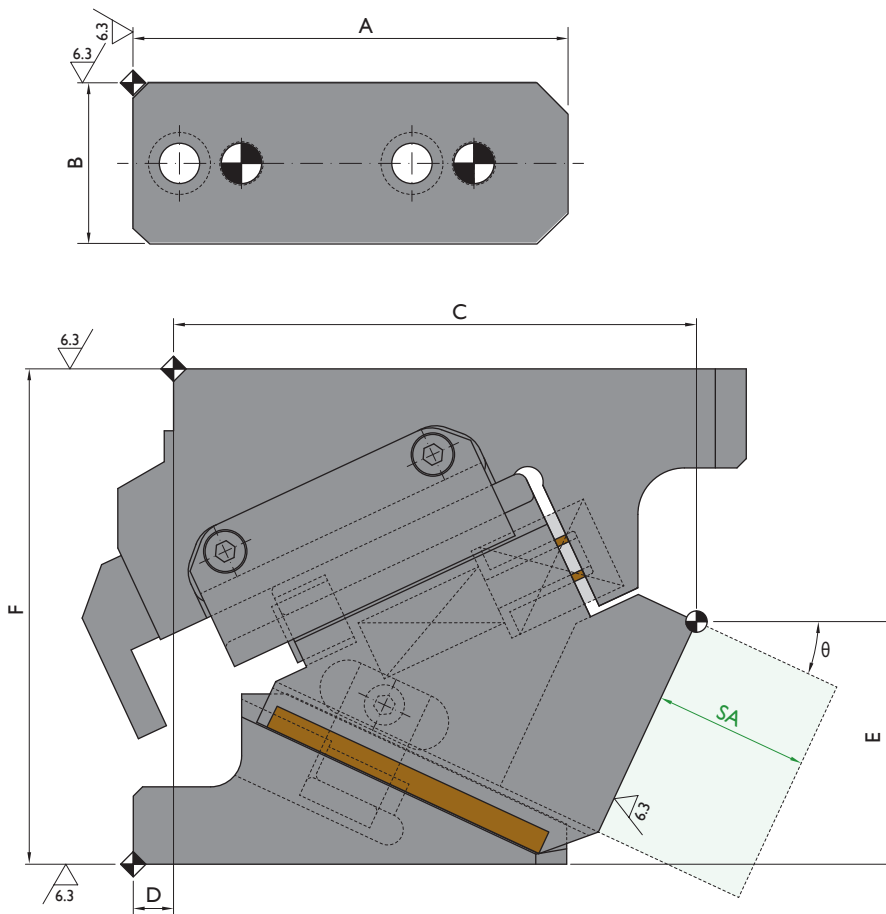
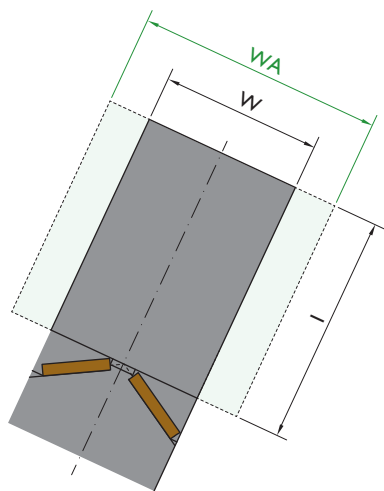


Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
				1,000,000 strokes	300,000 strokes													
CACD 52 00	52	00	30.2	1	3	6.4	92	105	52	161	56	82	135	185	52	60	47	50
CACD 52 05	52	05	31.9	1	3	6.1	92	105	52	162.1	51	79.79	135	185	52	60	45	50
CACD 52 10	52	10	35	1	3	6	92	105	52	162.55	46	77.17	135	185	52	60	45	50
CACD 52 15	52	15	38.2	1	3	5.8	92	105	52	164.32	43	74.18	135	185	52	60	45	50
CACD 52 20	52	20	41.5	1	3	5.7	92	105	52	164.38	38	69.9	135	185	52	60	45	50
CACD 52 25	52	25	45	1	3	5.5	92	105	52	162.71	28	66.38	135	185	52	60	45	50
CACD 52 30	52	30	48.8	1	3	5.5	92	105	52	160.28	24	61.69	135	185	52	60	45	50
CACD 52 35	52	35	53.1	1	3	5.4	92	105	52	158.09	16	57.9	135	185	52	60	45	50
CACD 52 40	52	40	57.9	1	3	5.5	92	105	52	153.14	8	53.07	135	185	52	60	45	50
CACD 52 45	52	45	54.9	1	3	5.3	92	105	52	139.41	-10	49.27	135	175	52	60	39	50
CACD 52 50	52	50	60.7	1	3	5.4	92	105	52	135.92	-17	45.57	135	175	52	60	39	50

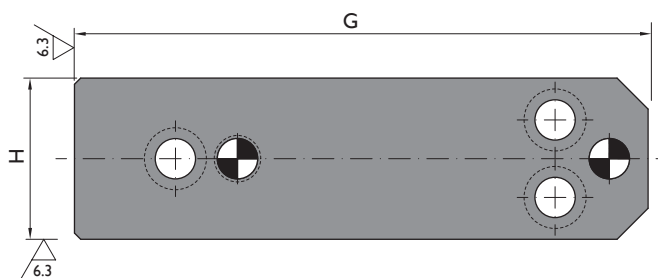
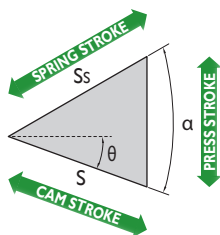
WEB



CAD



CAM DIAGRAM



Available Options

SA		WA		P	
	Additional slider length available l - 50 mm (1 mm steps)		Additional mounting width available	Pin holes diameters available	
				Standards	Options
CACSA	52	SA1 - SA2 - ... - SA50	WA80 / WA120	Ø13 H7	P12 (Ø12 H7)

Ordering example: CACSA-W-θ-SA-WA-P

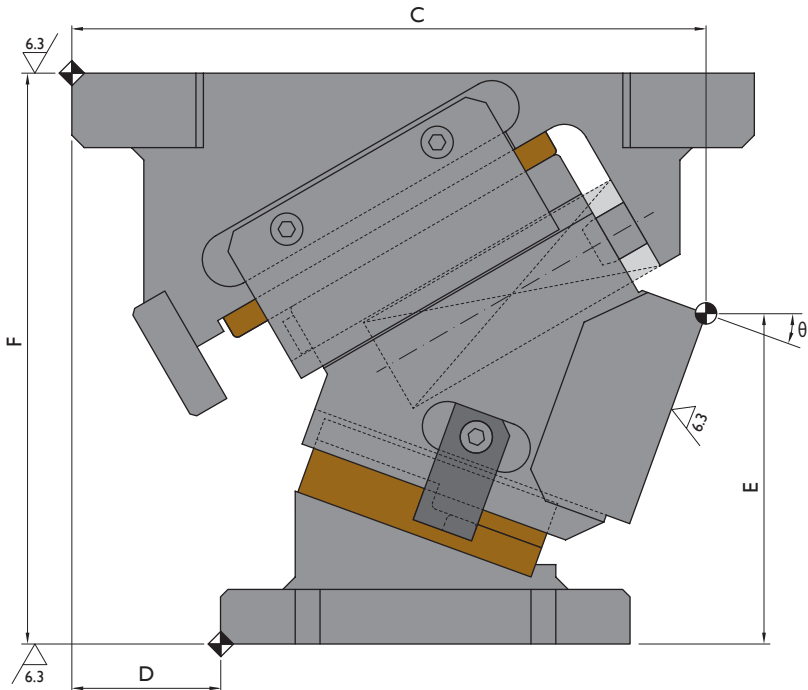
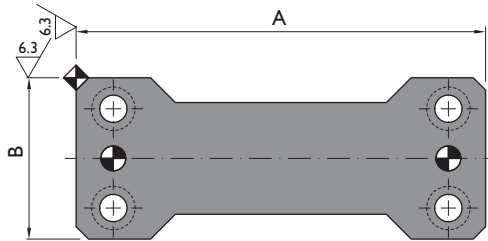
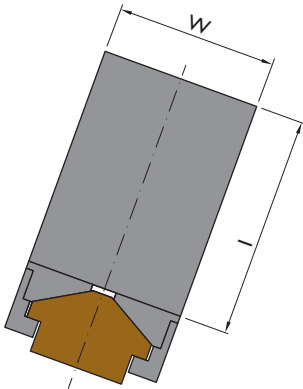
CACSA-52-30 (Standard dimensions)

CACSA-52-30-SA38-WA120 (Additional slider length (38 mm), additional mounting width (120mm), pin holes Ø12 H7)

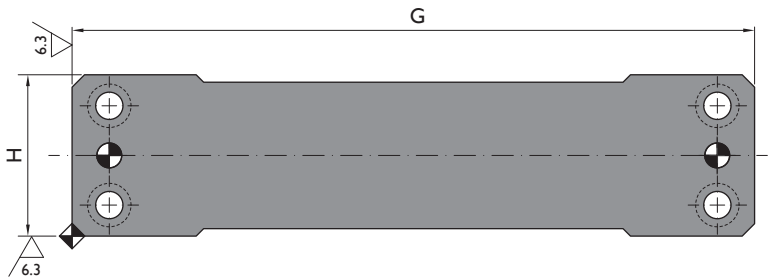
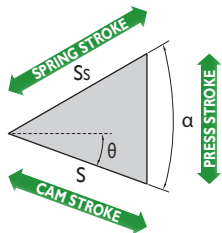


Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
				1,000,000 strokes	300,000 strokes													
CACSA	52	00	30.2	3	6	8.8	317	125	52	160	-35	118	160	175	52	75	47	50
CACSA	52	05	33.4	3	6	8.6	317	130	52	161.1	-25	106.69	160	175	52	75	47	50
CACSA	52	10	36.6	3	6	8.7	317	130	52	159.28	-15	97.89	160	175	52	75	47	60
CACSA	52	15	39.9	3	6	9	317	130	52	168.99	-17.5	93.68	160	185	52	75	47	50
CACSA	52	20	43.3	3	6	8.9	317	140	52	169.72	0	83.14	160	185	52	75	47	50
CACSA	52	25	47	3	6	8.8	317	140	52	168.92	13	78.37	160	185	52	75	47	50
CACSA	52	30	51	3	6	8.6	317	140	52	166.59	17.5	74.45	160	185	52	75	47	50
CACSA	52	35	55.4	3	6	8.8	317	140	52	163.72	30	67.48	160	185	52	75	47	50
CACSA	52	40	60.4	3	6	8.9	317	115	52	163.8	10	61.53	160	185	52	75	47	50
CACSA	52	45	66.2	3	6	9.1	317	115	52	157.35	23	55.22	160	185	52	75	47	50
CACSA	52	50	73.1	3	6	8.8	317	115	52	159.37	15	56.11	160	185	52	75	47	50
CACSA	52	55	64.5	3	6	8.9	317	115	52	152.53	30	48.91	160	185	52	75	37	55
CACSA	52	60	54	3	6	8.5	317	90	52	142.95	15	46.9	160	185	52	75	27	60

WEB
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CAD

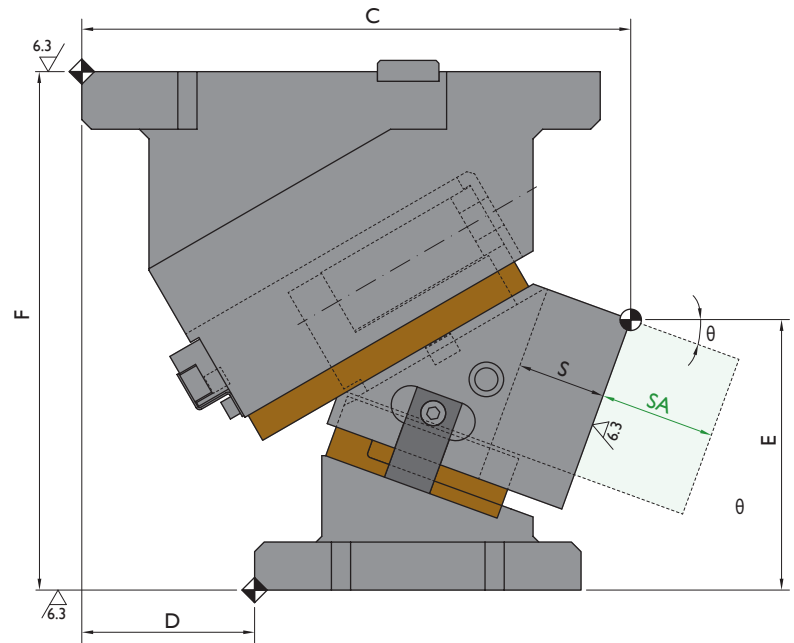
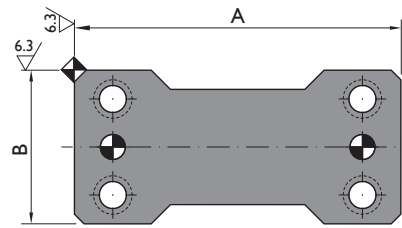
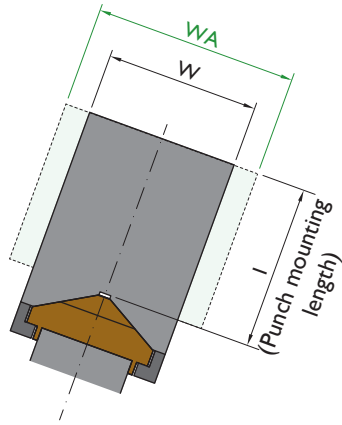


CAM DIAGRAM

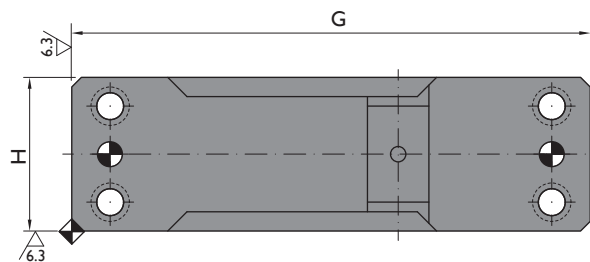
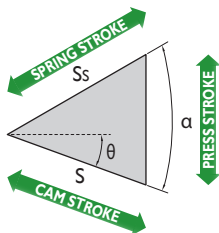


Ordering example: CACT-W-θ
CACT-65-10

Order No.			Main Features					General Dimensions											
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °	
				1,000,000 strokes	300,000 strokes														
CACT 65 00	65	00	22.5	7	14	18.4	611	165	65	255	95	150.8	230	275	65	90	35	50	
CACT 65 05	65	05	22.6	7	14	18.6	611	165	65	265.68	95	147.71	230	275	65	90	35	55	
CACT 65 10	65	10	27.2	7	14	17.4	611	165	65	256.04	75	143.71	230	275	65	90	35	50	
CACT 65 15	65	15	27.8	7	14	17.5	611	165	65	266.02	75	138.82	230	275	65	90	35	55	
CACT 65 20	65	20	32.3	7	14	16.6	611	165	65	255.53	60	133.07	230	275	65	90	35	50	
CACT 65 25	65	25	33.4	7	14	16.8	611	165	65	264.51	60	126.52	230	275	65	90	35	55	
CACT 65 30	65	30	38	7	14	16.9	611	165	65	252.88	40	119.21	230	290	65	90	35	50	
CACT 65 35	65	35	40.2	7	14	17	611	165	65	260.58	40	111.2	230	290	65	90	35	55	
CACT 65 40	65	40	45	7	14	16.4	611	165	65	242.56	20	107.55	230	290	65	90	35	50	
CACT 65 45	65	45	48.7	7	14	16.6	611	165	65	248.75	20	98.33	230	290	65	90	35	55	
CACT 65 50	65	50	54.5	7	14	15.9	611	165	65	236.28	0	104.02	230	290	65	90	35	50	
CACT 65 55	65	55	61	7	14	16.1	611	165	65	240.78	0	93.86	230	290	65	90	35	55	
CACT 65 60	65	60	70	7	14	16.4	611	165	65	234.5	-10	84.69	230	290	65	90	35	60	
CACT 65 65	65	65	68.5	7	14	18	605	165	65	231.79	-45	83.28	230	290	65	90	29	65	
CACT 65 70	65	70	67.2	7	14	18	598	165	65	228.97	-45	82.11	230	290	65	90	23	70	
CACT 65 75	65	75	69.5	7	14	20	536	165	65	233.82	-45	62.21	230	290	65	90	18	75	



CAM DIAGRAM



Available Options

		SA	WA	TAK	P	
		Additional slider length available l - 60 mm (1 mm steps)	Additional mounting width available	Additional key available for holder and driver (T shaped)	Pin holes diameters available	
					Standards	Options
CACC	50	SA1 - SA2 - ... - SA60	WA65	-	Ø13 H7	P12 (Ø12 H7)
CACC	65	SA1 - SA2 - ... - SA60	-	-	Ø10 H7	-
CACC	80	SA1 - SA2 - ... - SA60	WA100 / WA120	-	Ø13 H7	P16 (Ø16 H7)
CACC	150	-	-	TAK	Ø13 H7	P16 (Ø16 H7)

Ordering example: CACC-W-θ-SA-WA-TAK-P

CACC-80-20

(Standard dimensions)

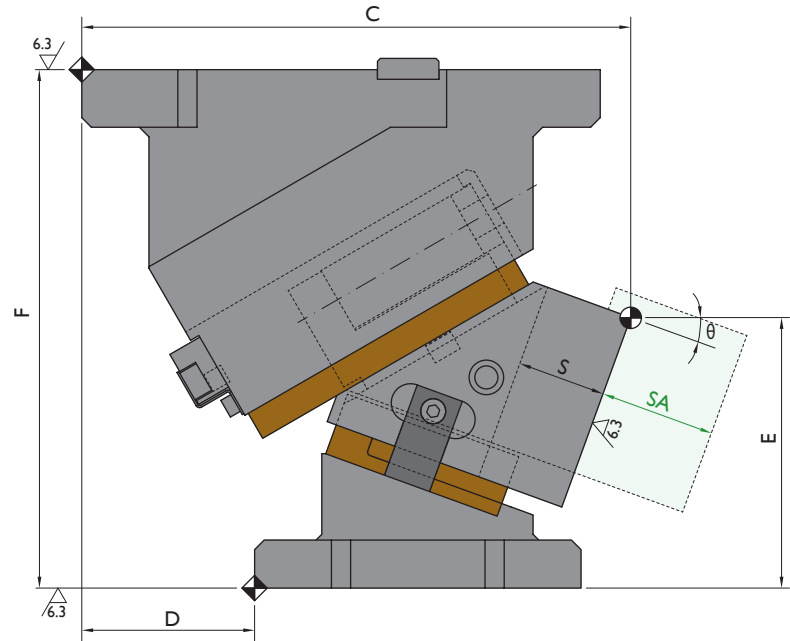
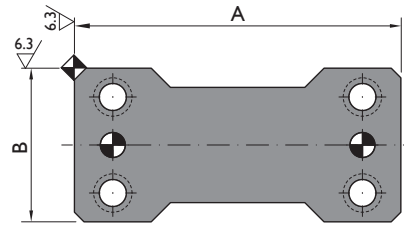
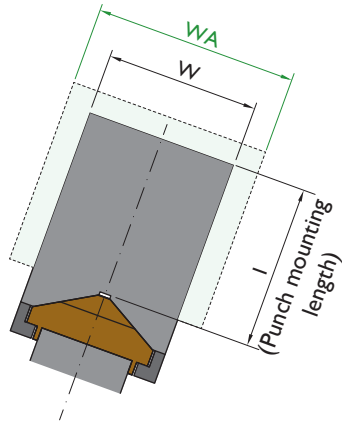
CACC-80-20-SA57-WA100

(Additional slider length (57 mm) and additional mounting width (100 mm))

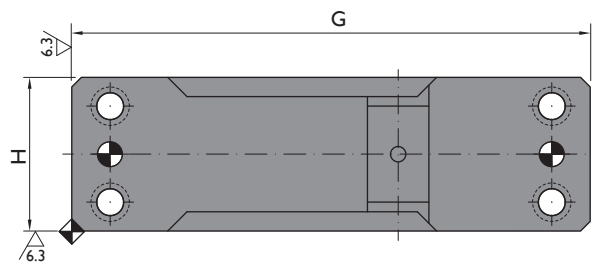
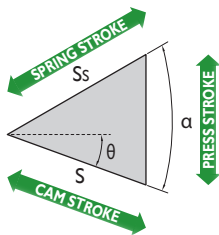
Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Sping Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
				1,000,000 strokes	300,000 strokes													
CACC	50	00	30.2	2	4	12.7	280	150	50	225	107	122.5	200	240	50	75	47	50
CACC	50	05	30.5	2	4	12.3	280	150	50	226.91	100	121.67	200	240	50	75	43	50
CACC	50	10	30.3	2	4	11.8	280	150	50	223.72	90	120.07	200	240	50	75	39	50
CACC	50	15	30.5	2	4	11.8	280	150	50	224.36	85	117.71	200	240	50	75	36	50
CACC	50	20	30.4	2	4	11.5	280	150	50	220.76	70	114.61	200	240	50	75	33	50
CACC	50	25	30	2	4	11.3	280	150	50	215.85	58	110.78	200	240	50	75	30	50
CACC	50	30	32.6	2	4	11.1	280	150	50	213.58	55	105.27	200	240	50	75	30	50
CACC	50	35	35.4	2	4	10.9	280	150	50	204.89	35	103.1	200	240	50	75	30	50
CACC	50	40	38.6	2	4	10.9	280	150	50	206.72	30	97.31	200	240	50	75	30	50
CACC	50	45	42.3	2	4	10.6	280	150	50	202.01	20	96.94	200	240	50	75	30	50
CACC	50	50	46.7	2	4	10.6	280	150	50	195.73	10	94.06	200	240	50	75	30	50
CACC	50	55	52.1	2	4	10.8	280	150	50	189.83	0	83.7	200	240	50	65	30	50
CACC	50	60	59.1	2	4	11.2	280	150	50	179.27	-15	74.92	200	240	50	65	30	50
CACC	50	65	58.3	2	4	11.6	280	150	50	176.6	-32	73.13	200	240	50	75	25	55
CACC	50	70	57.6	2	4	12	280	150	50	177	-38	64.17	200	240	50	75	20	60
CACC	65	00	15	2	4	9.5	280	130	65	170	60	127	180	170	65	65	21.2	45
CACC	65	05	15.1	2	4	9.3	280	130	65	171.41	55	119.73	180	170	65	65	19.6	45
CACC	65	10	15.2	2	4	9	280	130	65	177.16	55	116.94	180	170	65	65	18.3	45
CACC	65	15	15.5	2	4	8.8	280	130	65	177.2	50	113.67	180	170	65	65	17.3	45
CACC	65	20	16.5	2	4	8.6	280	130	65	176.51	40	109.99	180	170	65	65	17.1	45
CACC	65	25	17.1	2	4	8.5	280	130	65	172.94	35	104.36	180	170	65	65	17.1	50
CACC	65	30	18.5	2	4	8.3	280	130	65	177.78	30	101.68	180	170	65	65	16.6	45
CACC	65	35	19.6	2	4	8.3	280	130	65	173.29	20	96.75	180	170	65	65	16.6	50
CACC	65	40	21.5	2	4	8.1	280	130	65	170.78	10	97.56	180	170	65	65	16.5	45
CACC	65	45	23.3	2	4	8.1	280	130	65	165.5	2.5	93.49	180	170	65	65	16.5	50
CACC	65	50	26.5	2	4	8.4	280	130	65	165.41	-5	93.21	190	170	65	65	17.1	45
CACC	65	55	29.7	2	4	8.4	280	130	65	159.51	-10	90.11	190	170	65	65	17.1	50
CACC	65	60	35	2	4	9.3	280	130	65	156.68	-20	89.22	210	170	65	65	18.1	45
CACC	65	65	41.4	2	4	9.3	280	130	65	150.33	-25	87.2	210	170	65	65	18.1	50
CACC	65	70	51.1	2	4	9.5	280	130	65	146.45	-32	78.32	210	170	65	65	18.1	55
CACC	80	00	32.1	4	8	25.9	560	165	80	260	100	171	270	270	80	86	50	50
CACC	80	05	38.4	4	8	26.3	560	165	80	272.93	100	160.61	270	270	80	86	50	45
CACC	80	10	38.9	4	8	26.6	560	165	80	279.92	100	149.57	270	270	80	86	50	50
CACC	80	15	39.7	4	8	25.1	560	165	80	285.93	100	137.96	270	270	80	86	50	55
CACC	80	20	46.1	4	8	25.3	560	165	80	285.9	90	140.88	270	270	80	86	50	50
CACC	80	25	47.8	4	8	25.3	560	165	80	289.8	90	128.4	270	270	80	86	50	55
CACC	80	30	54.3	4	8	23.2	560	165	80	282.59	75	135.64	270	270	80	86	50	50
CACC	80	35	57.4	4	8	23.4	560	165	80	284.27	75	122.68	270	270	80	86	50	55
CACC	80	40	64.3	4	8	22.4	560	165	80	274.8	60	129.62	270	270	80	86	50	50
CACC	80	45	69.6	4	8	22.4	560	165	80	274.2	60	116.56	270	270	80	86	50	55
CACC	80	50	77.8	4	8	21.6	560	165	80	262.46	35	118.61	270	270	80	86	50	50
CACC	80	55	87.2	4	8	21.7	560	165	80	259.6	35	105.86	270	270	80	86	50	55
CACC	80	60	98.5	4	8	23.2	560	165	80	240.64	0	93.41	270	270	80	86	50	50
CACC	80	65	81.6	4	8	23.7	550	165	80	235.61	-5	81.35	270	270	80	86	35	55
CACC	80	70	86.4	4	8	23.9	550	165	80	227.83	-10	74.47	270	270	80	86	30	60

Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
				1,000,000 strokes	300,000 strokes													
CACC 150 00	150	00	32.1	9	14	45.4	1100	150	150	280	120	185	270	280	150	85	50	50
CACC 150 05	150	05	32.3	9	14	45.9	1100	150	150	288.26	115	174.16	270	280	150	85	50	55
CACC 150 10	150	10	38.9	9	14	44.4	1100	150	150	285.54	105	167.64	270	280	150	85	50	50
CACC 150 15	150	15	39.7	9	14	44.9	1100	150	150	291.79	105	155.53	270	280	150	85	50	55
CACC 150 20	150	20	46.1	9	14	43.2	1100	150	150	286.97	90	147.93	270	280	150	85	50	50
CACC 150 25	150	25	47.8	9	14	43.7	1100	150	150	291.02	90	134.92	270	280	150	85	50	55
CACC 150 30	150	30	54.3	9	14	42.2	1100	150	150	283.92	70	131.6	270	280	150	85	50	50
CACC 150 35	150	35	57.4	9	14	42.7	1100	150	150	285.66	70	118.09	270	280	150	85	50	55
CACC 150 40	150	40	64.3	9	14	41	1100	150	150	276.2	45	114.47	270	280	150	85	50	50
CACC 150 45	150	45	69.6	9	14	41.4	1100	150	150	275.56	45	100.86	270	280	150	85	50	55
CACC 150 50	150	50	77.8	9	14	40.5	1100	150	150	263.74	25	102.35	270	280	150	85	50	50
CACC 150 55	150	55	87.2	9	14	40.9	1100	150	150	260.74	25	89.06	270	280	150	85	50	55
CACC 150 60	150	60	98.5	9	14	41.5	1100	150	150	246.6	0	76.08	270	280	150	85	50	50
CACC 150 65	150	65	93.2	9	14	42.2	1100	150	150	241.35	0	63.51	270	280	150	85	40	55
CACC 150 70	150	70	86.4	9	14	43.5	1100	150	150	240.01	-5	51.44	270	280	150	85	30	60

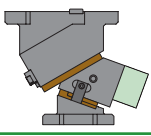

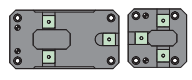





CAM DIAGRAM



Available Options

		SA	WA	TAK	P	
		 Additional slider length available 1 - 60 mm (1 mm steps)	 Additional mounting width available	 Additional key available for holder and driver (T shaped)	 Pin holes diameters available	
					Standards	Options
CACF	80	SA1 - SA2 - ... - SA60	WA100 / WA120	-	Ø13 H7	P16 (Ø16 H7)
CACF	150	-	-	TAK	Ø13 H7	P16 (Ø16 H7)

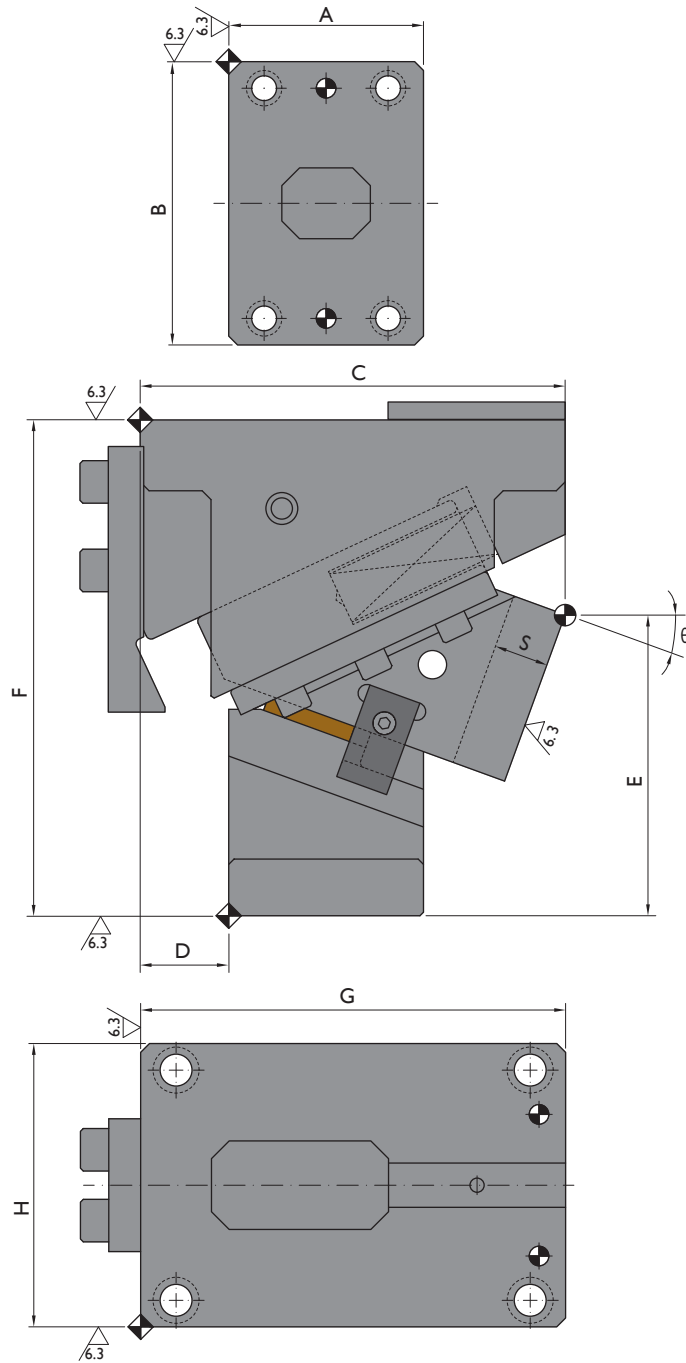
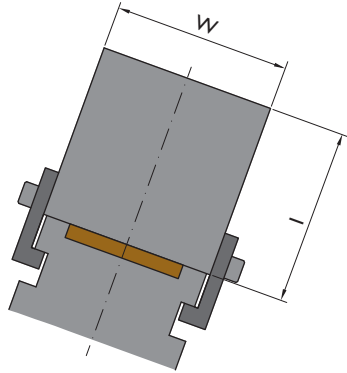
Ordering example: CACF-W-θ-SA-WA-TAK-P

CACF-80-30 (Standard dimensions)

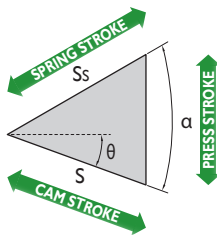
CACF-80-30-SA15-WA120-P16 (Additional slider length (15 mm), additional mounting width (120 mm) and Ø16 H7 pin holes)

Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
				1,000,000 strokes	300,000 strokes													
CACF	80	00	32.1	6	11	25.9	700	165	80	260	100	171	270	270	80	86	50	50
CACF	80	05	38.4	6	11	26.3	700	165	80	272.93	100	160.61	270	270	80	86	50	45
CACF	80	10	38.9	6	11	26.6	700	165	80	279.92	100	149.57	270	270	80	86	50	50
CACF	80	15	39.7	6	11	25.1	700	165	80	285.93	100	137.96	270	270	80	86	50	55
CACF	80	20	46.1	6	11	25.3	700	165	80	285.9	90	140.88	270	270	80	86	50	50
CACF	80	25	47.8	6	11	25.3	700	165	80	289.8	90	128.4	270	270	80	86	50	55
CACF	80	30	54.3	6	11	23.2	700	165	80	282.59	75	135.64	270	270	80	86	50	50
CACF	80	35	57.4	6	11	23.4	700	165	80	284.27	75	122.68	270	270	80	86	50	55
CACF	80	40	64.3	6	11	22.4	700	165	80	274.8	60	129.62	270	270	80	86	50	50
CACF	80	45	69.6	6	11	22.4	700	165	80	274.2	60	116.56	270	270	80	86	50	55
CACF	80	50	77.8	6	11	21.6	700	165	80	262.46	35	118.61	270	270	80	86	50	50
CACF	80	55	87.2	6	11	21.7	700	165	80	259.6	35	105.86	270	270	80	86	50	55
CACF	80	60	98.5	6	11	23.2	700	165	80	240.64	0	93.41	270	270	80	86	50	50
CACF	80	65	81.6	6	11	23.7	700	165	80	235.61	-5	81.35	270	270	80	86	35	55
CACF	80	70	86.4	6	11	23.9	700	165	80	227.83	-10	74.47	270	270	80	86	30	60
CACF	150	00	32.1	13	19	45.4	1400	150	150	280	120	185	270	280	150	85	50	50
CACF	150	05	32.3	13	19	45.9	1400	150	150	288.26	115	174.16	270	280	150	85	50	55
CACF	150	10	38.9	13	19	44.4	1400	150	150	285.54	105	167.64	270	280	150	85	50	50
CACF	150	15	39.7	13	19	44.9	1400	150	150	291.79	105	155.53	270	280	150	85	50	55
CACF	150	20	46.1	13	19	43.2	1400	150	150	286.97	90	147.93	270	280	150	85	50	50
CACF	150	25	47.8	13	19	43.7	1400	150	150	291.02	90	134.92	270	280	150	85	50	55
CACF	150	30	54.3	13	19	42.2	1400	150	150	283.92	70	131.6	270	280	150	85	50	50
CACF	150	35	57.4	13	19	42.7	1400	150	150	285.66	70	118.09	270	280	150	85	50	55
CACF	150	40	64.3	13	19	41	1400	150	150	276.2	45	114.47	270	280	150	85	50	50
CACF	150	45	69.6	13	19	41.4	1400	150	150	275.56	45	100.86	270	280	150	85	50	55
CACF	150	50	77.8	13	19	40.5	1400	150	150	263.74	25	102.35	270	280	150	85	50	50
CACF	150	55	87.2	13	19	40.9	1400	150	150	260.74	25	89.06	270	280	150	85	50	55
CACF	150	60	98.5	13	19	41.5	1400	150	150	246.6	0	76.08	270	280	150	85	50	50
CACF	150	65	93.2	13	19	42.2	1400	150	150	241.35	0	63.51	270	280	150	85	40	55
CACF	150	70	86.4	13	19	43.5	1400	150	150	240.01	-5	51.44	270	280	150	85	30	60

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CAM DIAGRAM



Available Options

P



Pin holes diameters available for both holder and driver

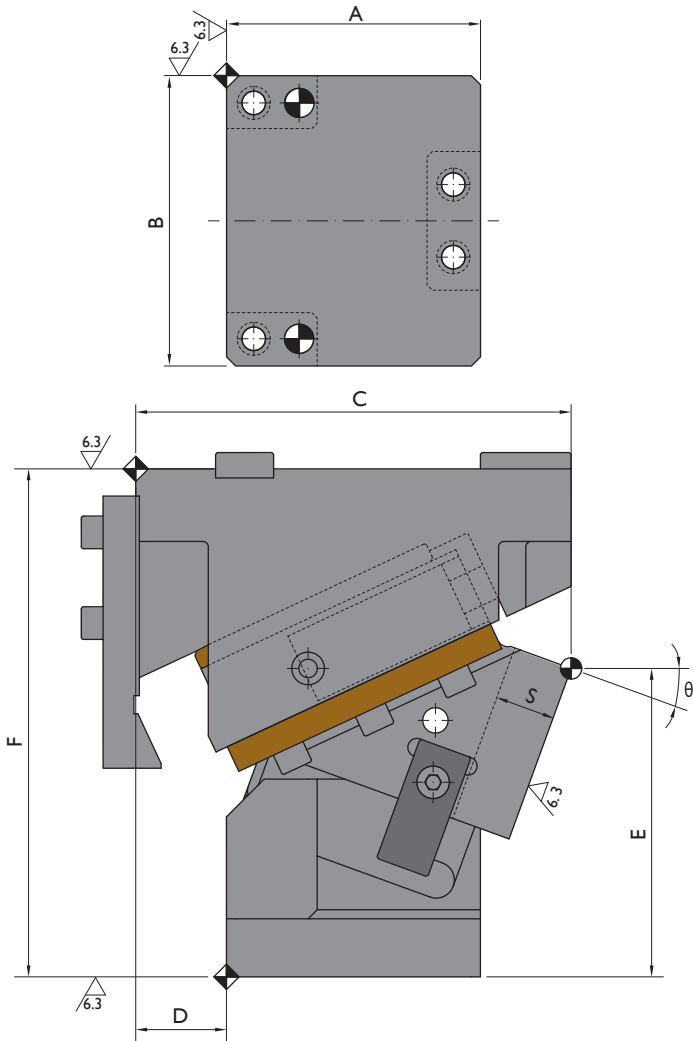
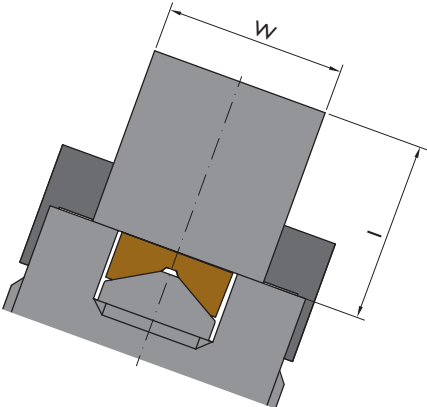
		Standards	Options			
CACU	65	Ø9	P10 (Ø10 H7)	P12 (Ø12 H7)	P13 (Ø13 H7)	-
CACU	100	Ø11	-	P12 (Ø12 H7)	P13 (Ø13 H7)	-
CACU	200	Ø11	-	P12 (Ø12 H7)	P13 (Ø13 H7)	P16 (Ø16 H7)

Ordering example: CACU-W-θ-P
CACU-65-10
CACU-65-10-P10

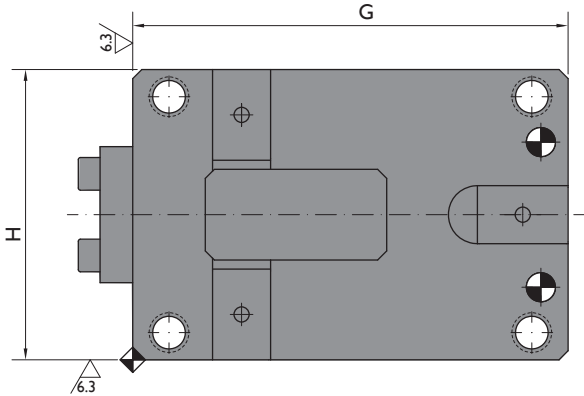
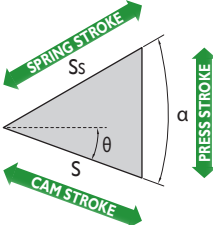
(Standard dimensions)
(Ø10 H7 pin holes)

Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	S _s mm	α °
				1,000,000 strokes	300,000 strokes													
CACU 65 00	65	00	26.9	2	4	19.5	109	80	115	185.94	75	153.43	210	180	115	80	38	45
CACU 65 05	65	05	27	2	4	19.8	116	80	115	193.01	70	153.43	210	180	115	90	38	50
CACU 65 10	65	10	31.6	2	4	19.3	116	80	115	196.8	70	142.42	210	180	115	80	38	45
CACU 65 15	65	15	32.2	2	4	19.6	116	80	115	203.77	67	141.19	210	180	115	90	38	50
CACU 65 20	65	20	33.8	2	4	18.1	116	80	115	198.1	60	135.69	210	180	115	80	35	45
CACU 65 25	65	25	35	2	4	18.4	116	80	115	204.75	55	133.27	210	180	115	90	35	50
CACU 65 30	65	30	33.5	2	5	17.7	116	80	115	193.63	50	120.48	210	180	115	80	30	45
CACU 65 35	65	35	35.4	2	5	18	116	80	115	199.76	45	116.94	210	180	115	90	30	50
CACU 65 40	65	40	42.9	2	5	16.9	116	80	115	188.72	40	110.38	210	180	115	80	33	45
CACU 65 45	65	45	46.5	2	5	17.1	116	80	115	194.13	34	105.84	210	180	115	90	33	50
CACU 65 50	65	50	54.5	3	6	16.8	116	80	115	190	30	100	210	180	115	90	35	50
CACU 65 55	65	55	43.6	3	6	17.8	106	80	115	190	20	95	210	180	115	100	25	55
CACU 65 60	65	60	50	3	6	17.3	106	80	115	190	20	95	210	180	115	100	25	60
CACU 65 65	65	65	47.3	3	6	18.5	91	80	115	190	0	80	210	180	115	110	20	65
CACU 65 70	65	70	58.5	3	6	18.4	91	80	115	190	0	80	210	180	115	110	20	70
CACU 100 00	100	00	28.3	4	9	47	574	110	160	240	60	195	280	240	160	100	40	45
CACU 100 05	100	05	28.4	4	9	47.8	627	110	160	236.89	60	206.18	280	240	160	140	40	50
CACU 100 10	100	10	33.3	4	9	44.9	627	110	160	240	60	190	280	240	160	100	40	45
CACU 100 15	100	15	33.9	4	9	47.1	627	110	160	254.35	60	198.49	280	240	160	140	40	50
CACU 100 20	100	20	30.9	4	9	44.8	608	110	160	240	50	170	280	240	160	100	32	45
CACU 100 25	100	25	32	4	9	46.5	608	110	160	253.26	50	177.4	280	240	160	140	32	50
CACU 100 30	100	30	33.5	4	9	44.1	608	110	160	240	30	170	280	240	160	120	30	45
CACU 100 35	100	35	35.4	4	9	45.4	572	110	160	252.34	30	170.31	280	240	160	140	30	50
CACU 100 40	100	40	39	4	9	45.4	572	110	160	240	30	165	280	240	160	120	30	45
CACU 100 45	100	45	42.3	4	9	41.7	572	110	160	247.41	30	165.32	280	240	160	140	30	50
CACU 100 50	100	50	46.7	5	10	41.2	572	110	160	240	10	160	280	240	160	140	30	50
CACU 100 55	100	55	52.3	5	10	44	572	110	160	240	0	135	280	240	160	140	30	55
CACU 100 60	100	60	60	5	10	42.5	572	110	160	240	0	135	280	240	160	140	30	60
CACU 100 65	100	65	47.3	5	10	43	559	110	160	240	0	135	280	240	160	140	20	65
CACU 100 70	100	70	58.5	5	10	41.8	559	110	160	240	0	135	280	240	160	140	20	70
CACU 200 00	200	00	28.3	10	20	81.5	2297	110	260	240	60	190	280	240	260	100	40	45
CACU 200 05	200	05	28.4	10	20	82.3	2506	110	260	263.82	60	201.16	280	240	260	130	40	50
CACU 200 10	200	10	33.3	10	20	75.7	2506	110	260	240	60	190	280	240	260	100	40	45
CACU 200 15	200	15	33.9	10	20	80.5	2506	110	260	254.35	60	198.49	280	240	260	130	40	50
CACU 200 20	200	20	30.9	10	20	76.1	2432	110	260	240	50	170	280	240	260	100	32	45
CACU 200 25	200	25	32	10	20	80.1	2432	110	260	253.27	50	177.4	280	240	260	130	32	50
CACU 200 30	200	30	33.5	10	20	77	2289	110	260	240	30	170	280	240	260	120	30	45
CACU 200 35	200	35	35.4	10	20	80.9	2289	110	260	252.34	30	170.31	280	240	260	140	30	50
CACU 200 40	200	40	39	10	20	71.4	2289	110	260	240	30	165	280	240	260	120	30	45
CACU 200 45	200	45	42.3	10	20	74.7	2289	110	260	247.41	30	165.32	280	240	260	140	30	50
CACU 200 50	200	50	46.7	12	24	71.6	2289	110	260	240	10	160	280	240	260	140	30	50
CACU 200 55	200	55	52.3	12	24	78.6	2289	110	260	240	0	135	280	240	260	140	30	55
CACU 200 60	200	60	60	12	24	73.9	2289	110	260	240	0	135	280	240	260	140	30	60
CACU 200 65	200	65	47.3	12	24	77.2	2236	110	260	240	0	135	280	240	260	140	20	65
CACU 200 70	200	70	58.5	12	24	72.2	2236	110	260	240	0	135	280	240	260	140	20	70

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CAM DIAGRAM



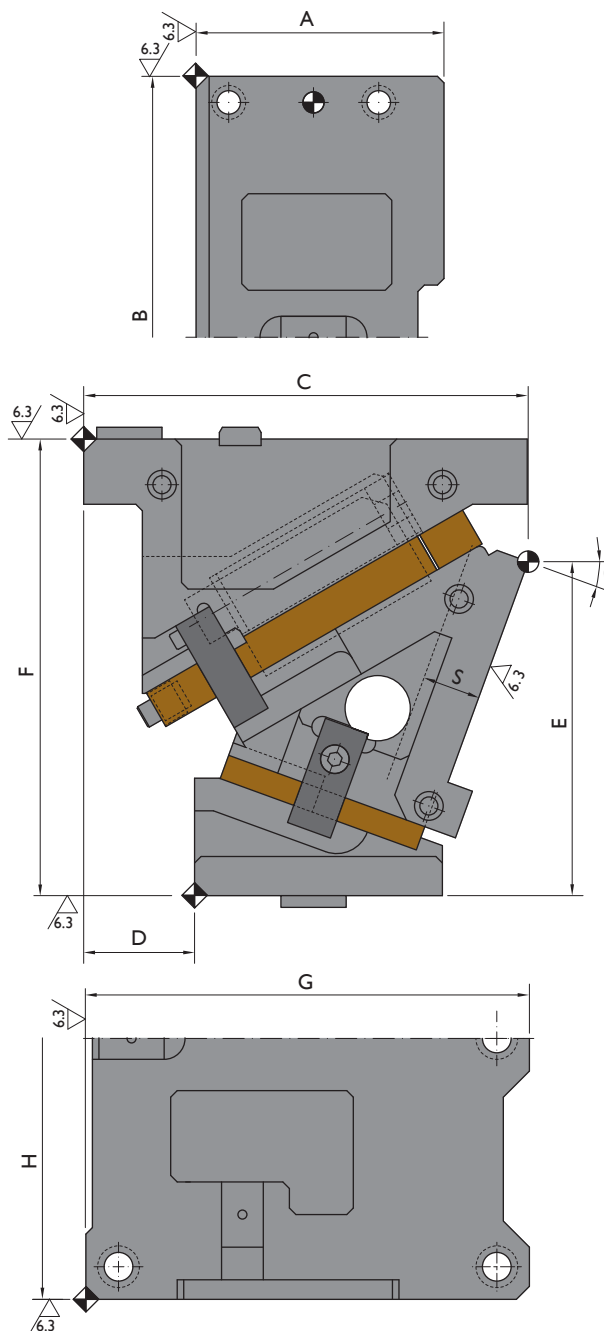
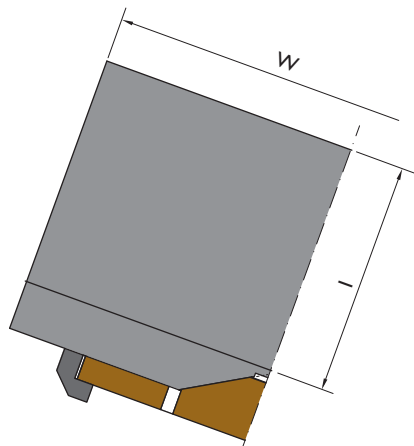
Ordering example: CACK-W- θ
CACK-65-70

Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	S _s mm	α °
				1.000.000 strokes	300.000 strokes													
CAACK	65	00	26.9	2	4	20.5	550	80	115	185.94	75	153.43	210	180	115	80	38	45
CAACK	65	05	27	2	4	20.8	550	80	115	193.01	70	153.43	210	180	115	90	38	50
CAACK	65	10	31.6	2	4	20.3	550	80	115	196.8	70	142.42	210	180	115	80	38	45
CAACK	65	15	32.2	2	4	20.6	550	80	115	203.77	67	141.19	210	180	115	90	38	50
CAACK	65	20	33.8	2	4	19.1	550	80	115	198.1	60	135.69	210	180	115	80	35	45
CAACK	65	25	35	2	4	19.4	550	80	115	204.75	55	133.27	210	180	115	90	35	50
CAACK	65	30	33.5	2	4	18.7	550	80	115	193.63	50	120.48	210	180	115	80	30	45
CAACK	65	35	35.4	2	4	19	550	80	115	199.76	45	116.94	210	180	115	90	30	50
CAACK	65	40	42.9	2	4	17.9	550	80	115	188.72	40	110.38	210	180	115	80	33	45
CAACK	65	45	46.5	2	4	18.1	550	80	115	194.13	34	105.84	210	180	115	90	33	50
CAACK	65	50	54.5	2	4	17.8	550	80	115	190	30	100	210	180	115	90	35	50
CAACK	65	55	43.6	2	4	18.8	530	80	115	190	20	95	210	180	115	100	25	55
CAACK	65	60	50	2	4	18.3	530	80	115	190	20	95	210	180	115	100	25	60
CAACK	65	65	47.3	2	4	19.5	530	80	115	190	0	80	210	180	115	110	20	65
CAACK	65	70	58.5	2	4	19.4	530	80	115	190	0	80	210	180	115	110	20	70
CAACK	100	00	28.3	4	9	49.4	1120	140	160	240	80	195	280	240	160	100	40	45
CAACK	100	05	28.4	4	9	50.2	1120	140	160	236.89	60	206.18	280	240	160	140	40	50
CAACK	100	10	33.3	4	9	47.3	1120	140	160	240	60	190	280	240	160	100	40	45
CAACK	100	15	33.9	4	9	49.5	1100	140	160	254.35	60	198.49	280	240	160	140	40	50
CAACK	100	20	30.9	4	9	47.2	1100	140	160	240	50	170	280	240	160	100	32	45
CAACK	100	25	32	4	9	48.9	1100	140	160	253.26	50	177.4	280	240	160	140	32	50
CAACK	100	30	33.5	4	9	46.5	1100	130	160	240	30	170	280	240	160	120	30	45
CAACK	100	35	35.4	4	9	47.8	1100	130	160	252.34	30	170.31	280	240	160	140	30	50
CAACK	100	40	39	4	9	47.8	1100	120	160	240	30	165	280	240	160	120	30	45
CAACK	100	45	42.3	4	9	44.1	1100	120	160	247.41	30	165.32	280	240	160	140	30	50
CAACK	100	50	46.7	4	9	43.6	1100	120	160	240	10	160	280	240	160	140	30	50
CAACK	100	55	52.3	4	9	46.4	1100	120	160	240	0	135	280	240	160	140	30	55
CAACK	100	60	60	4	9	44.9	1100	110	160	240	0	135	280	240	160	140	30	60
CAACK	100	65	47.3	4	9	45.4	1060	110	160	240	0	135	280	240	160	140	20	65
CAACK	100	70	58.5	4	9	44.2	1060	110	160	240	0	135	280	240	160	140	20	70
CAACK	200	00	28.3	9	19	82.9	2240	110	260	240	80	195	280	240	260	100	40	45
CAACK	200	05	28.4	9	19	83.7	2240	110	260	236.82	60	201.16	280	240	260	130	40	50
CAACK	200	10	33.3	9	19	77.1	2240	110	260	240	60	190	280	240	260	100	40	45
CAACK	200	15	33.9	9	19	81.9	2200	110	260	254.35	60	198.49	280	240	260	130	40	50
CAACK	200	20	30.9	9	19	77.5	2200	110	260	240	50	170	280	240	260	100	32	45
CAACK	200	25	32	9	19	81.5	2200	110	260	253.27	50	177.4	280	240	260	130	32	50
CAACK	200	30	33.5	9	19	78.4	2200	110	260	240	30	170	280	240	260	120	30	45
CAACK	200	35	35.4	9	19	82.3	2200	110	260	252.34	30	170.31	280	240	260	140	30	50
CAACK	200	40	39	9	19	72.8	2200	110	260	240	30	165	280	240	260	120	30	45
CAACK	200	45	42.3	9	19	76.1	2200	110	260	247.41	30	165.32	280	240	260	140	30	50
CAACK	200	50	46.7	9	19	73	2200	110	260	240	10	160	280	240	260	140	30	50
CAACK	200	55	52.3	9	19	80	2200	110	260	240	0	135	280	240	260	140	30	55
CAACK	200	60	60	9	19	75.3	2200	110	260	240	0	135	280	240	260	140	30	60
CAACK	200	65	47.3	9	19	78.6	2120	110	260	240	0	135	280	240	260	140	20	65
CAACK	200	70	58.5	9	19	73.6	2120	110	260	240	0	135	280	240	260	140	20	70

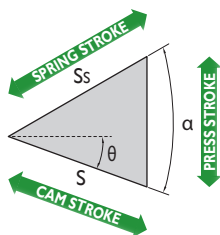
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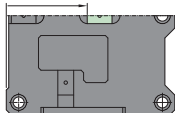
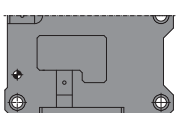
CAD



CAM DIAGRAM



Available Options

		FAK	NP
		 <p>Different key positions available (Forward distance)</p>	 <p>Additional $\varnothing 16$ H7 pin holes available for cam holder</p>
CACW	200	FAK (180 mm)	NP
CACW	300	FAK (260 mm)	NP
CACW	400	FAK (215 mm)	NP
CACW	500	FAK (280 mm)	NP
CACW	600	FAK (215 mm)	NP

Ordering example: CACW-W- θ -FAK-NP

CACW-300-10 (Standard dimensions)

CACW-300-10-FAK-NP (Key position 260 mm forward and $\varnothing 16$ H7 additional pin holes)

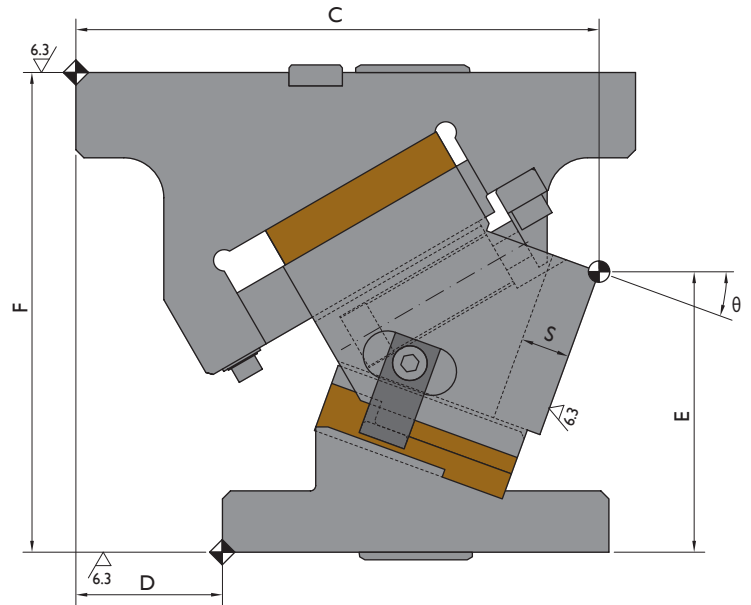
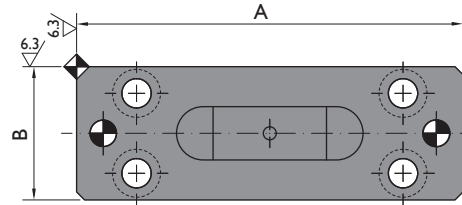
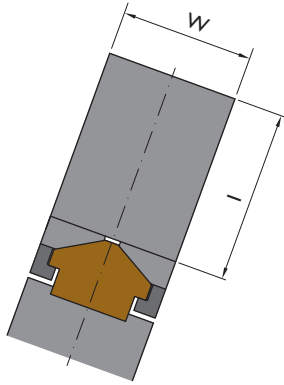
Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
				1,000,000 strokes	300,000 strokes													
CACW 200 00	200	00	38.6	12	24	95	1400	190	200	313	138	292	350	340	200	180	60	50
CACW 200 05	200	05	42.6	12	24	94.8	1400	190	200	320.64	125	285.66	350	340	200	180	60	50
CACW 200 10	200	10	46.7	12	24	94.6	1400	190	200	331.08	115	277.53	350	340	200	180	60	50
CACW 200 15	200	15	50.9	12	24	93.3	1400	190	200	336.17	100	267.63	350	340	200	180	60	50
CACW 200 20	200	20	55.3	12	24	92.7	1400	190	200	340.76	85	256	350	340	200	180	60	50
CACW 200 30	200	30	65.1	12	24	92.7	1400	190	200	347.83	55	237.75	350	340	200	180	60	50
CACW 200 40	200	40	77.1	12	24	94.2	1400	190	200	351.17	25	213.34	350	340	200	180	60	50
CACW 200 50	200	50	93.3	12	24	93.7	1400	190	200	348.77	-6	188.51	350	340	200	180	60	50
CACW 200 60	200	60	120	12	24	97.3	1400	190	200	332.75	-45	154.17	350	340	200	180	60	60
CACW 300 00	300	00	38.6	20	40	137.2	2800	190	250	313	138	292	350	340	300	180	60	50
CACW 300 05	300	05	42.6	20	40	135.9	2800	190	250	320.64	125	285.66	350	340	300	180	60	50
CACW 300 10	300	10	46.7	20	40	135.7	2800	190	250	331.08	115	277.53	350	340	300	180	60	50
CACW 300 15	300	15	50.9	20	40	133	2800	190	250	336.17	100	267.63	350	340	300	180	60	50
CACW 300 20	300	20	55.3	20	40	131.5	2800	190	250	340.76	85	256	350	340	300	180	60	50
CACW 300 30	300	30	65.1	20	40	131	2800	190	250	347.83	55	237.75	350	340	300	180	60	50
CACW 300 40	300	40	77.1	20	40	133.3	2800	190	250	351.17	25	213.34	350	340	300	180	60	50
CACW 300 50	300	50	93.3	20	40	130.9	2800	190	250	348.77	-6	188.51	350	340	300	180	60	50
CACW 300 60	300	60	120	20	40	136.1	2800	190	250	332.75	-45	154.17	350	340	300	180	60	60
CACW 400 00	400	00	38.6	25	50	191.1	2800	190	400	313	138	292	350	340	400	180	60	50
CACW 400 05	400	05	42.6	25	50	189.3	2800	190	400	320.64	125	285.66	350	340	400	180	60	50
CACW 400 10	400	10	46.7	25	50	188	2800	190	400	331.08	115	277.53	350	340	400	180	60	50
CACW 400 15	400	15	50.9	25	50	186.1	2800	190	400	336.17	100	267.63	350	340	400	180	60	50
CACW 400 20	400	20	55.3	25	50	185.3	2800	190	400	340.76	85	256	350	340	400	180	60	50
CACW 400 30	400	30	65.1	25	50	185.8	2800	190	400	347.83	55	237.75	350	340	400	180	60	50
CACW 400 40	400	40	77.1	25	50	191.9	2800	190	400	351.17	25	213.34	350	340	400	180	60	50
CACW 400 50	400	50	93.3	25	50	191.8	2800	190	400	348.77	-6	188.51	350	340	400	180	60	50
CACW 400 60	400	60	120	25	50	201.1	2800	190	400	332.75	-45	154.17	350	340	400	180	60	60
CACW 500 00	500	00	38.6	32	64	222.3	4200	190	400	313	138	292	350	340	500	180	60	50
CACW 500 05	500	05	42.6	32	64	220.4	4200	190	400	320.64	125	285.66	350	340	500	180	60	50
CACW 500 10	500	10	46.7	32	64	218.8	4200	190	400	331.08	115	277.53	350	340	500	180	60	50
CACW 500 15	500	15	50.9	32	64	216.3	4200	190	400	336.17	100	267.63	350	340	500	180	60	50
CACW 500 20	500	20	55.3	32	64	215.1	4200	190	400	340.76	85	256	350	340	500	180	60	50
CACW 500 30	500	30	65.1	32	64	216.1	4200	190	400	347.83	55	237.75	350	340	500	180	60	50
CACW 500 40	500	40	77.1	32	64	220.4	4200	190	400	351.17	25	213.34	350	340	500	180	60	50
CACW 500 50	500	50	93.3	32	64	220.1	4200	190	400	348.77	-6	188.51	350	340	500	180	60	50
CACW 500 60	500	60	120	32	64	236.5	4200	190	400	332.75	-45	154.17	350	340	500	180	60	60
CACW 600 00	600	00	38.6	40	80	281.4	5600	190	550	313	138	292	350	340	600	180	60	50
CACW 600 05	600	05	42.6	40	80	277.9	5600	190	550	320.64	125	285.66	350	340	600	180	60	50
CACW 600 10	600	10	46.7	40	80	274.1	5600	190	550	331.08	115	277.53	350	340	600	180	60	50
CACW 600 15	600	15	50.9	40	80	272.3	5600	190	550	336.17	100	267.63	350	340	600	180	60	50
CACW 600 20	600	20	55.3	40	80	268.8	5600	190	550	340.76	85	256	350	340	600	180	60	50
CACW 600 30	600	30	65.1	40	80	276.6	5600	190	550	347.83	55	237.75	350	340	600	180	60	50
CACW 600 40	600	40	77.1	40	80	285.2	5600	190	550	351.17	25	213.34	350	340	600	180	60	50
CACW 600 50	600	50	93.3	40	80	283.5	5600	190	550	348.77	-6	188.51	350	340	600	180	60	50
CACW 600 60	600	60	120	40	80	295.6	5600	190	550	332.75	-45	154.17	350	340	600	180	60	60

WEB

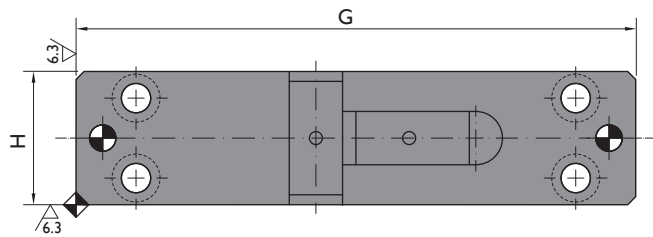
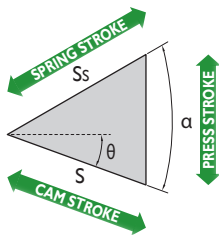


CAD

Structure for cams width 50 - 80 mm



CAM DIAGRAM



Available Options

P



Pin holes diameters available

		Standards	Options
CACG	50	Ø10 H7	P13 (Ø13 H7)
CACG	65	Ø10 H7	-
CACG	80	Ø13 H7	P12 (Ø12 H7)

Ordering example: CACG-W-θ-P

CACG-50- 20

(Standard dimensions)

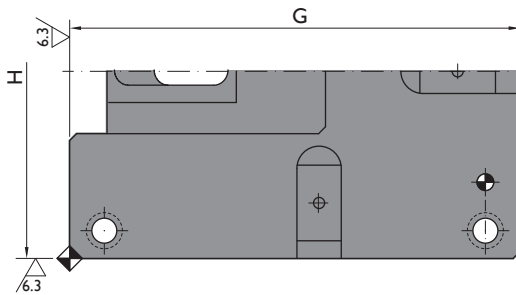
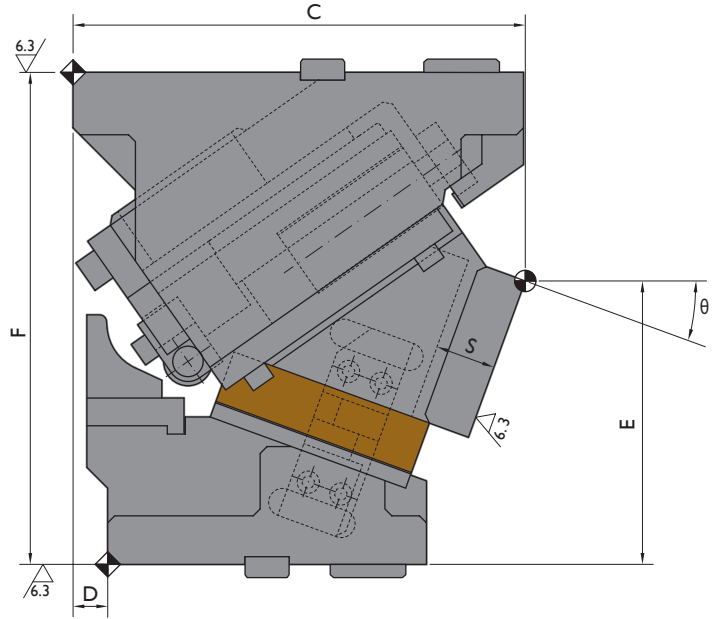
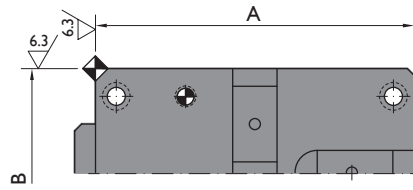
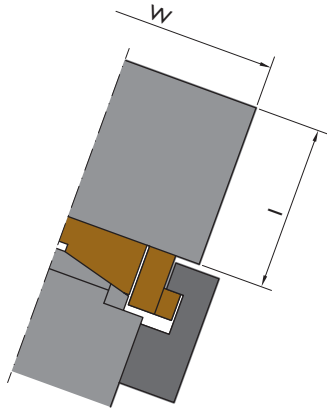
CACG-50-20-P13

(Ø13 H7 holes)

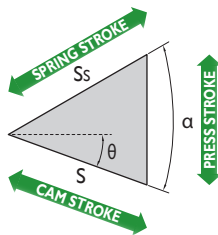
WEB

 CAD

Structure for cams width 150 - 300 mm



CAM DIAGRAM



Available Options

P



Pin holes diameters available

		Standards	Options
CACG	150	Ø12 H7	P13 (Ø13 H7)
CACG	200	Ø12 H7	P13 (Ø13 H7)
CACG	300	Ø16 H7	-

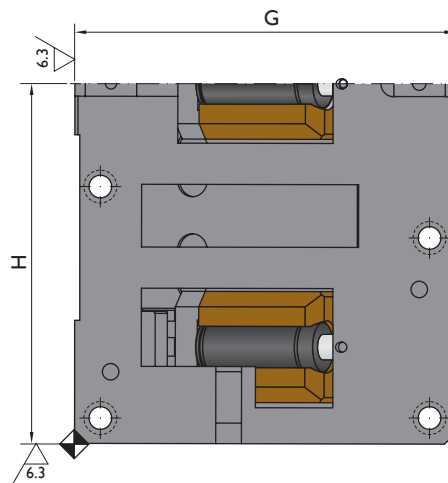
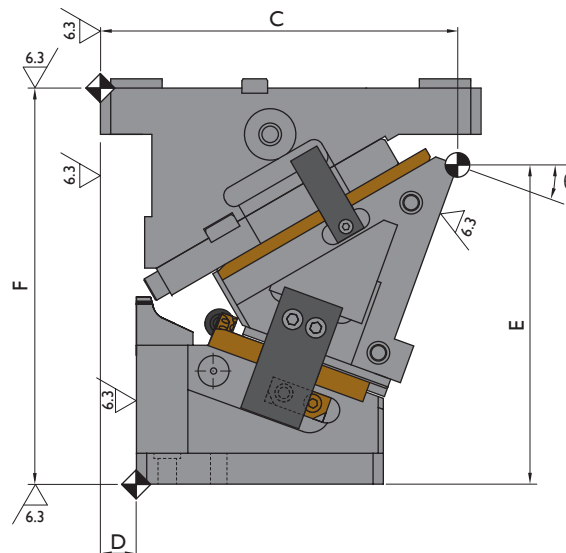
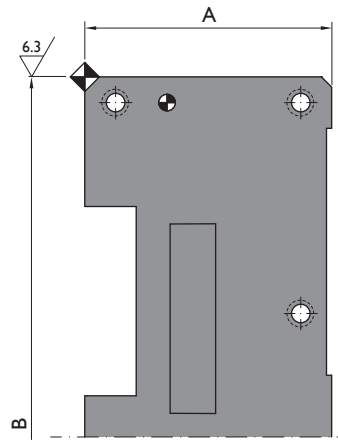
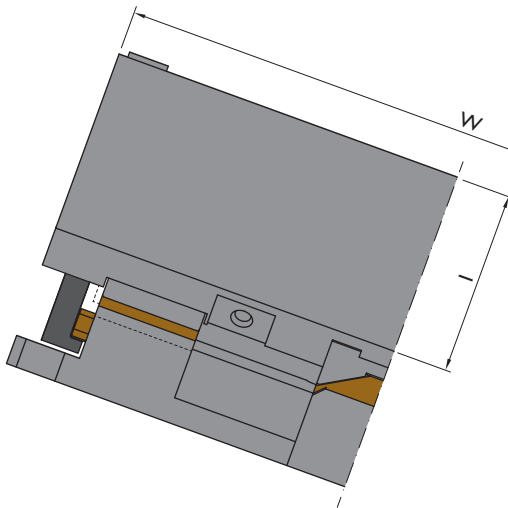
Ordering example: CACG-W-θ-P
 CACG-200- 20
 CACG-200-20-P13

(Standard dimensions)
 (Ø13 H7 holes)

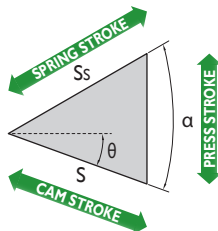
Order No.			Main Features					General Dimensions											
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °	
				1,000,000 strokes	300,000 strokes														
CACG 50 00	50	00	15	3	6	10.6	280	145	50	195	80	112.5	180	210	50	65	23.3	50	
CACG 50 05	50	05	15.6	3	6	10.3	280	145	50	198.04	75	111.71	180	210	50	65	22	50	
CACG 50 10	50	10	15.6	3	6	9.9	280	145	50	195.99	65	110.23	180	210	50	65	20	50	
CACG 50 15	50	15	17	3	6	9.7	280	145	50	198.77	65	108.05	180	210	50	65	20	50	
CACG 50 20	50	20	18.4	3	6	9.4	280	145	50	196.34	55	105.21	180	210	50	65	20	50	
CACG 50 25	50	25	18	3	6	9.4	280	145	50	191.62	41	99.72	180	210	50	65	18	50	
CACG 50 30	50	30	17.4	3	6	9.2	280	145	50	190.58	40	94.61	180	210	50	65	16	50	
CACG 50 35	50	35	18.9	3	6	9.2	280	145	50	187.15	25	89.9	180	210	50	65	16	50	
CACG 50 40	50	40	20.6	3	6	9.1	280	145	50	183.29	22.5	84.65	180	210	50	55	16	50	
CACG 50 45	50	45	22.5	3	6	9.1	280	145	50	179.94	10	81.87	180	210	50	55	16	50	
CACG 50 50	50	50	23.3	3	6	9	280	145	50	174.07	5	80.63	180	210	50	55	15	50	
CACG 50 55	50	55	26.1	3	6	9.5	280	145	50	168.64	-15	68.96	180	210	50	55	15	50	
CACG 50 60	50	60	31.5	3	6	9.7	280	145	50	162.61	-25	61.92	180	210	50	55	16	50	
CACG 50 65	50	65	36.6	3	6	10	280	145	50	155.95	-35	54.56	180	210	50	55	16	50	
CACG 65 00	65	00	15	3	6	10.7	280	120	65	170	70	115	175	170	65	56	23.3	50	
CACG 65 05	65	05	15.6	3	6	10.4	280	120	65	170.36	65	107.78	175	170	65	56	22	50	
CACG 65 10	65	10	15.6	3	6	10.2	280	120	65	175.07	62.5	105.12	175	170	65	56	20	50	
CACG 65 15	65	15	17	3	6	9.9	280	120	65	174.09	55	102.08	175	170	65	56	20	50	
CACG 65 20	65	20	18.4	3	6	9.9	280	120	65	172.4	45	98.72	175	170	65	56	20	50	
CACG 65 30	65	30	19.5	3	6	9.6	280	120	65	171.78	35	91.29	175	170	65	56	18	50	
CACG 65 40	65	40	23.1	3	6	9.5	280	120	65	163.07	20	83.37	175	170	65	56	18	50	
CACG 65 50	65	50	24.9	3	6	9.9	280	120	65	156.22	5	70.5	175	170	65	56	16	50	
CACG 65 60	65	60	32	3	6	11.1	280	120	65	146.29	-15	58.22	175	170	65	56	16	60	
CACG 80 00	80	00	30.2	5	10	34	540	170	80	277	135	160	270	270	80	90	47	50	
CACG 80 05	80	05	30.5	5	10	32	540	170	80	278.32	125	154.33	270	270	80	90	43	50	
CACG 80 10	80	10	31.1	5	10	32	540	170	80	274.54	110	152.68	270	270	80	90	40	50	
CACG 80 15	80	15	33.9	5	10	32	540	170	80	277.58	105	150.05	270	270	80	90	40	50	
CACG 80 20	80	20	32.3	5	10	32	530	170	80	273.34	95	146.48	270	270	80	90	35	50	
CACG 80 25	80	25	35	5	10	30	530	170	80	268.75	80	141.97	270	270	80	90	35	50	
CACG 80 30	80	30	34.7	5	10	30	530	170	80	261.73	65	136.58	270	270	80	90	32	50	
CACG 80 35	80	35	37.7	5	10	30	530	170	80	258.2	55	130.34	270	270	80	90	32	50	
CACG 80 40	80	40	39.9	5	10	29	530	170	80	245.09	35	123.3	270	270	80	90	31	50	
CACG 80 45	80	45	43.7	5	10	29	530	170	80	245.34	30	115.51	270	270	80	90	31	50	
CACG 80 50	80	50	46.7	5	10	30	530	170	80	225.87	5	107.03	270	270	80	90	30	50	
CACG 80 55	80	55	53.8	5	10	30	530	170	80	229.64	0	97.93	270	270	80	90	31	50	
CACG 80 60	80	60	61.1	5	10	31	530	170	80	208.58	-20	88.27	270	270	80	90	31	50	
CACG 80 65	80	65	70.9	5	10	32	530	170	80	203.67	-30	78.13	270	270	80	90	31	50	

Order No.			Main Features					General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf		Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
				1,000,000 strokes	300,000 strokes													
CACG 150 00	150	00	28.6	15	30	117.6	1100	230	150	325	80	225	355	325	240	120	50	55
CACG 150 05	150	05	32.2	15	30	114	1100	230	150	319.7	60	221.74	355	325	240	120	50	55
CACG 150 10	150	10	35.9	15	30	113.4	1100	230	150	319.06	45	217.21	355	325	240	120	50	55
CACG 150 15	150	15	39.6	15	30	111.9	1100	230	150	322.98	35	211.44	355	325	240	120	50	55
CACG 150 20	150	20	43.5	15	30	111.3	1100	230	150	326.33	25	204.49	355	325	240	120	50	55
CACG 150 25	150	25	47.7	15	30	111.2	1100	230	150	329.03	15	196.39	355	325	240	120	50	55
CACG 150 30	150	30	52.3	15	30	110.2	1100	230	150	325.98	0	187.22	355	325	240	120	50	55
CACG 150 35	150	35	57.3	15	30	113.1	1100	230	150	322.08	-15	162.05	355	325	240	120	50	55
CACG 150 40	150	40	63	15	30	114.7	1100	230	150	312.26	-35	150.94	355	325	240	120	50	55
CACG 150 45	150	45	69.6	15	30	115.8	1100	230	150	306.42	-50	138.99	355	325	240	120	50	55
CACG 150 50	150	50	77.4	15	30	117.5	1100	230	150	294.51	-70	126.29	355	325	240	120	50	55
CACG 150 55	150	55	87.1	15	30	117.5	1100	230	150	281.46	-90	112.93	355	325	240	120	50	55
CACG 150 60	150	60	99.6	15	30	122	1100	230	150	272.22	-105	99.02	355	325	240	120	50	55
CACG 150 65	150	65	116.5	15	30	126	1100	230	150	261.75	-120	84.66	355	325	240	120	50	55
CACG 200 00	200	00	28.6	15	30	129.7	1400	230	150	325	80	225	355	325	270	120	50	55
CACG 200 05	200	05	32.2	15	30	126.6	1400	230	150	319.7	60	221.74	355	325	270	120	50	55
CACG 200 10	200	10	35.9	15	30	124.8	1400	230	150	319.06	45	217.21	355	325	270	120	50	55
CACG 200 15	200	15	39.6	15	30	127.4	1400	230	150	322.98	35	211.44	355	325	270	120	50	55
CACG 200 20	200	20	43.5	15	30	123.2	1400	230	150	326.33	25	204.49	355	325	270	120	50	55
CACG 200 25	200	25	47.7	15	30	123	1400	230	150	329.03	15	196.39	355	325	270	120	50	55
CACG 200 30	200	30	52.3	15	30	121.7	1400	230	150	325.98	0	187.22	355	325	270	120	50	55
CACG 200 35	200	35	57.3	15	30	125.3	1400	230	150	322.08	-15	162.05	355	325	270	120	50	55
CACG 200 40	200	40	63	15	30	126.8	1400	230	150	312.26	-35	150.94	355	325	270	120	50	55
CACG 200 45	200	45	69.6	15	30	127.9	1400	230	150	306.42	-50	138.99	355	325	270	120	50	55
CACG 200 50	200	50	77.4	15	30	129.8	1400	230	150	294.51	-70	126.29	355	325	270	120	50	55
CACG 200 55	200	55	87.1	15	30	132.6	1400	230	150	281.46	-90	112.93	355	325	270	120	50	55
CACG 200 60	200	60	99.6	15	30	135.1	1400	230	150	272.22	-105	99.02	355	325	270	120	50	55
CACG 200 65	200	65	116.5	15	30	138.9	1400	230	150	261.75	-120	84.66	355	325	270	120	50	55
CACG 300 00	300	00	28.6	30	60	184.5	2800	230	250	325	80	265	355	325	340	160	50	55
CACG 300 05	300	05	32.2	30	60	181	2800	230	250	323.19	60	261.59	355	325	340	160	50	55
CACG 300 10	300	10	35.9	30	60	178.7	2800	230	250	326.01	45	256.6	355	325	340	160	50	55
CACG 300 15	300	15	39.6	30	60	177.3	2800	230	250	333.33	35	250.08	355	325	340	160	50	55
CACG 300 20	300	20	43.5	30	60	176	2800	230	250	340.02	25	242.07	355	325	340	160	50	55
CACG 300 25	300	25	47.7	30	60	174.9	2800	230	250	345.94	15	232.65	355	325	340	160	50	55
CACG 300 30	300	30	52.3	30	60	173.8	2800	230	250	345.98	0	221.87	355	325	340	160	50	55
CACG 300 35	300	35	57.3	30	60	178.7	2800	230	250	345.03	-15	194.81	355	325	340	160	50	55
CACG 300 40	300	40	63	30	60	181.6	2800	230	250	337.97	-35	181.59	355	325	340	160	50	55
CACG 300 45	300	45	69.6	30	60	184.5	2800	230	250	334.71	-50	167.28	355	325	340	160	50	55
CACG 300 50	300	50	77.4	30	60	188.1	2800	230	250	325.15	-70	152	355	325	340	160	50	55
CACG 300 55	300	55	87.1	30	60	193.4	2800	230	250	314.23	-90	135.88	355	325	340	160	50	55
CACG 300 60	300	60	99.6	30	60	197.6	2800	230	250	306.87	-105	119.02	355	325	340	160	50	55
CACG 300 65	300	65	116.5	30	60	202.9	2800	230	250	298	-120	101.56	355	325	340	160	50	55

WEB
↓
CAD



CAM DIAGRAM



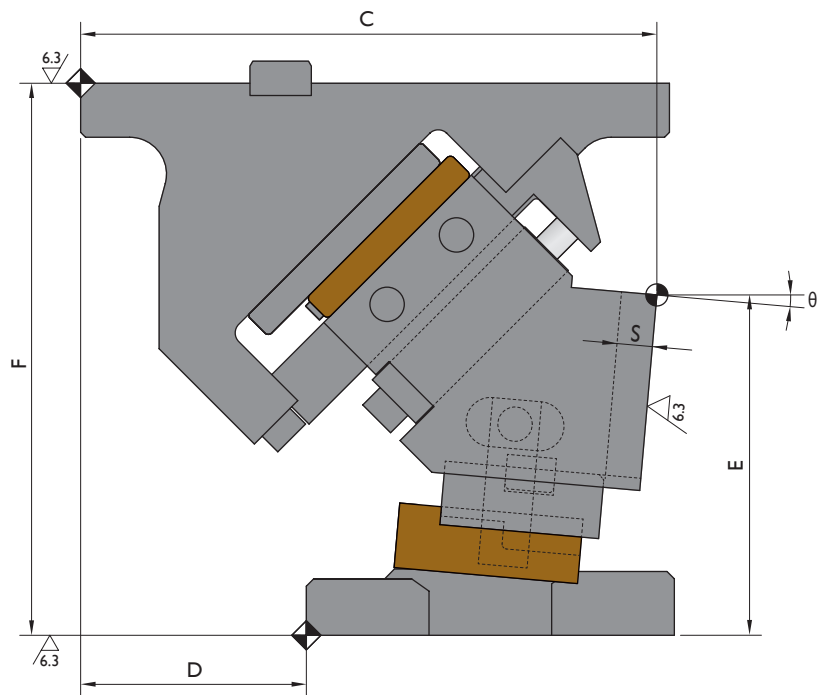
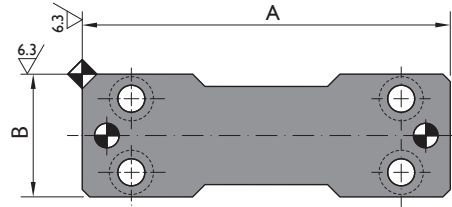
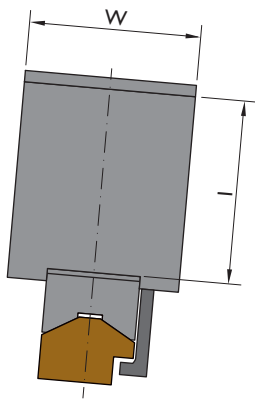
Ordering example: CACL-W-θ
CACL-500-05

Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
CACL	500	00	38.6	32	265.6	2200	240	500	323	95	328	385	370	500	180	60	50
CACL	500	05	42.6	32	262.4	2200	240	500	329.58	80	326.36	385	370	500	180	60	50
CACL	500	10	46.7	32	261	2200	240	500	335.94	65	322.84	385	370	500	180	60	50
CACL	500	15	50.9	32	260.2	2200	240	500	341.91	50	317.48	385	370	500	180	60	50
CACL	500	20	55.3	32	260.7	2200	240	500	347.34	35	310.31	385	370	500	180	60	50
CACL	500	25	60	32	260.8	2200	240	500	347.06	15	301.38	385	370	500	180	60	50
CACL	500	30	65.1	32	264.4	2200	240	500	350.93	0	280.77	385	370	500	180	60	50
CACL	500	35	70.8	32	269.9	2200	240	500	353.8	-15	268.56	385	370	500	180	60	50
CACL	500	40	77.1	32	274.5	2200	240	500	355.54	-30	254.84	385	370	500	180	60	50
CACL	500	45	84.5	32	281.6	2200	240	500	361.02	-40	239.71	385	370	500	180	60	50
CACL	500	50	93.3	32	282	2200	240	500	355.12	-60	223.28	385	370	500	180	60	50
CACL	500	55	104.6	32	291.5	2200	240	500	367.74	-60	205.69	385	370	500	180	60	55
CACL	500	60	120	32	300.1	2200	240	500	378.77	-60	187.07	385	370	500	180	60	60
CACL	600	00	38.6	32	272.4	2200	240	500	323	95	328	385	370	500	180	60	50
CACL	600	05	42.6	32	269.2	2200	240	500	329.58	80	326.36	385	370	500	180	60	50
CACL	600	10	46.7	32	267.9	2200	240	500	335.94	65	322.84	385	370	500	180	60	50
CACL	600	15	50.9	32	267.1	2200	240	500	341.91	50	317.48	385	370	500	180	60	50
CACL	600	20	55.3	32	267.6	2200	240	500	347.34	35	310.31	385	370	500	180	60	50
CACL	600	25	60	32	267.7	2200	240	500	347.06	15	301.38	385	370	500	180	60	50
CACL	600	30	65.1	32	271.3	2200	240	500	350.93	0	280.77	385	370	500	180	60	50
CACL	600	35	70.8	32	276.7	2200	240	500	353.8	-15	268.56	385	370	500	180	60	50
CACL	600	40	77.1	32	281.3	2200	240	500	355.54	-30	254.84	385	370	500	180	60	50
CACL	600	45	84.5	32	288.5	2200	240	500	361.02	-40	239.71	385	370	500	180	60	50
CACL	600	50	93.3	32	288.9	2200	240	500	355.12	-60	223.28	385	370	500	180	60	50
CACL	600	55	104.6	32	299.2	2200	240	500	367.74	-60	205.69	385	370	500	180	60	55
CACL	600	60	120	32	308.7	2200	240	500	378.77	-60	187.07	385	370	500	180	60	60
CACL	700	00	38.6	48	362.6	3300	240	700	323	95	328	385	370	700	180	60	50
CACL	700	05	42.6	48	358.9	3300	240	700	329.58	80	326.36	385	370	700	180	60	50
CACL	700	10	46.7	48	357.2	3300	240	700	335.94	65	322.84	385	370	700	180	60	50
CACL	700	15	50.9	48	357	3300	240	700	341.91	50	317.48	385	370	700	180	60	50
CACL	700	20	55.3	48	356.1	3300	240	700	347.34	35	310.31	385	370	700	180	60	50
CACL	700	25	60	48	357.3	3300	240	700	347.06	15	301.38	385	370	700	180	60	50
CACL	700	30	65.1	48	362.7	3300	240	700	350.93	0	280.77	385	370	700	180	60	50
CACL	700	35	70.8	48	370.6	3300	240	700	353.8	-15	268.56	385	370	700	180	60	50
CACL	700	40	77.1	48	377	3300	240	700	355.54	-30	254.84	385	370	700	180	60	50
CACL	700	45	84.5	48	383.6	3300	240	700	361.02	-40	239.71	385	370	700	180	60	50
CACL	700	50	93.3	48	386.5	3300	240	700	355.12	-60	223.28	385	370	700	180	60	50
CACL	700	55	104.6	48	400.8	3300	240	700	367.74	-60	205.69	385	370	700	180	60	55
CACL	700	60	120	48	412.7	3300	240	700	378.77	-60	187.07	385	370	700	180	60	60

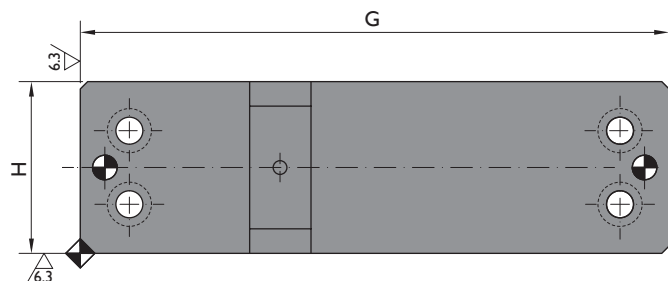
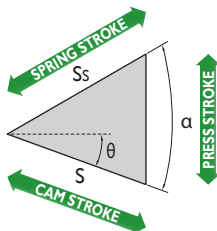
Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
CACL	800	00	38.6	48	369.4	3300	240	700	323	95	328	385	370	700	180	60	50
CACL	800	05	42.6	48	365.7	3300	240	700	329.58	80	326.36	385	370	700	180	60	50
CACL	800	10	46.7	48	364	3300	240	700	335.94	65	322.84	385	370	700	180	60	50
CACL	800	15	50.9	48	363.8	3300	240	700	341.91	50	317.48	385	370	700	180	60	50
CACL	800	20	55.3	48	363	3300	240	700	347.34	35	310.31	385	370	700	180	60	50
CACL	800	25	60	48	364.2	3300	240	700	347.06	15	301.38	385	370	700	180	60	50
CACL	800	30	65.1	48	369.5	3300	240	700	350.93	0	280.77	385	370	700	180	60	50
CACL	800	35	70.8	48	377.4	3300	240	700	353.8	-15	268.56	385	370	700	180	60	50
CACL	800	40	77.1	48	383.8	3300	240	700	355.54	-30	254.84	385	370	700	180	60	50
CACL	800	45	84.5	48	390.4	3300	240	700	361.02	-40	239.71	385	370	700	180	60	50
CACL	800	50	93.3	48	393.4	3300	240	700	355.12	-60	223.28	385	370	700	180	60	50
CACL	800	55	104.6	48	408.3	3300	240	700	367.74	-60	205.69	385	370	700	180	60	55
CACL	800	60	120	48	421.2	3300	240	700	378.77	-60	187.07	385	370	700	180	60	60
CACL	900	00	38.6	64	463.3	4400	240	900	323	95	328	385	370	900	180	60	50
CACL	900	05	42.6	64	459.2	4400	240	900	329.58	80	326.36	385	370	900	180	60	50
CACL	900	10	46.7	64	457.7	4400	240	900	335.94	65	322.84	385	370	900	180	60	50
CACL	900	15	50.9	64	457.8	4400	240	900	341.91	50	317.48	385	370	900	180	60	50
CACL	900	20	55.3	64	459.7	4400	240	900	347.34	35	310.31	385	370	900	180	60	50
CACL	900	25	60	64	461.5	4400	240	900	347.06	15	301.38	385	370	900	180	60	50
CACL	900	30	65.1	64	467.8	4400	240	900	350.93	0	280.77	385	370	900	180	60	50
CACL	900	35	70.8	64	478.9	4400	240	900	353.8	-15	268.56	385	370	900	180	60	50
CACL	900	40	77.1	64	487.3	4400	240	900	355.54	-30	254.84	385	370	900	180	60	50
CACL	900	45	84.5	64	499.4	4400	240	900	361.02	-40	239.71	385	370	900	180	60	50
CACL	900	50	93.3	64	498.4	4400	240	900	355.12	-60	223.28	385	370	900	180	60	50
CACL	900	55	104.6	64	519.2	4400	240	900	367.74	-60	205.69	385	370	900	180	60	55
CACL	900	60	120	64	535.2	4400	240	900	378.77	-60	187.07	385	370	900	180	60	60
CACL	1000	00	38.6	64	470.2	4400	240	900	323	95	328	385	370	900	180	60	50
CACL	1000	05	42.6	64	466.1	4400	240	900	329.58	80	326.36	385	370	900	180	60	50
CACL	1000	10	46.7	64	464.6	4400	240	900	335.94	65	322.84	385	370	900	180	60	50
CACL	1000	15	50.9	64	464.7	4400	240	900	341.91	50	317.48	385	370	900	180	60	50
CACL	1000	20	55.3	64	466.5	4400	240	900	347.34	35	310.31	385	370	900	180	60	50
CACL	1000	25	60	64	468.4	4400	240	900	347.06	15	301.38	385	370	900	180	60	50
CACL	1000	30	65.1	64	474.7	4400	240	900	350.93	0	280.77	385	370	900	180	60	50
CACL	1000	35	70.8	64	485.8	4400	240	900	353.8	-15	268.56	385	370	900	180	60	50
CACL	1000	40	77.1	64	494.2	4400	240	900	355.54	-30	254.84	385	370	900	180	60	50
CACL	1000	45	84.5	64	506.3	4400	240	900	361.02	-40	239.71	385	370	900	180	60	50
CACL	1000	50	93.3	64	505.3	4400	240	900	355.12	-60	223.28	385	370	900	180	60	50
CACL	1000	55	104.6	64	526.9	4400	240	900	367.74	-60	205.69	385	370	900	180	60	55
CACL	1000	60	120	64	543.1	4400	240	900	378.77	-60	187.07	385	370	900	180	60	60



Structure for cams width 70 - 80 mm

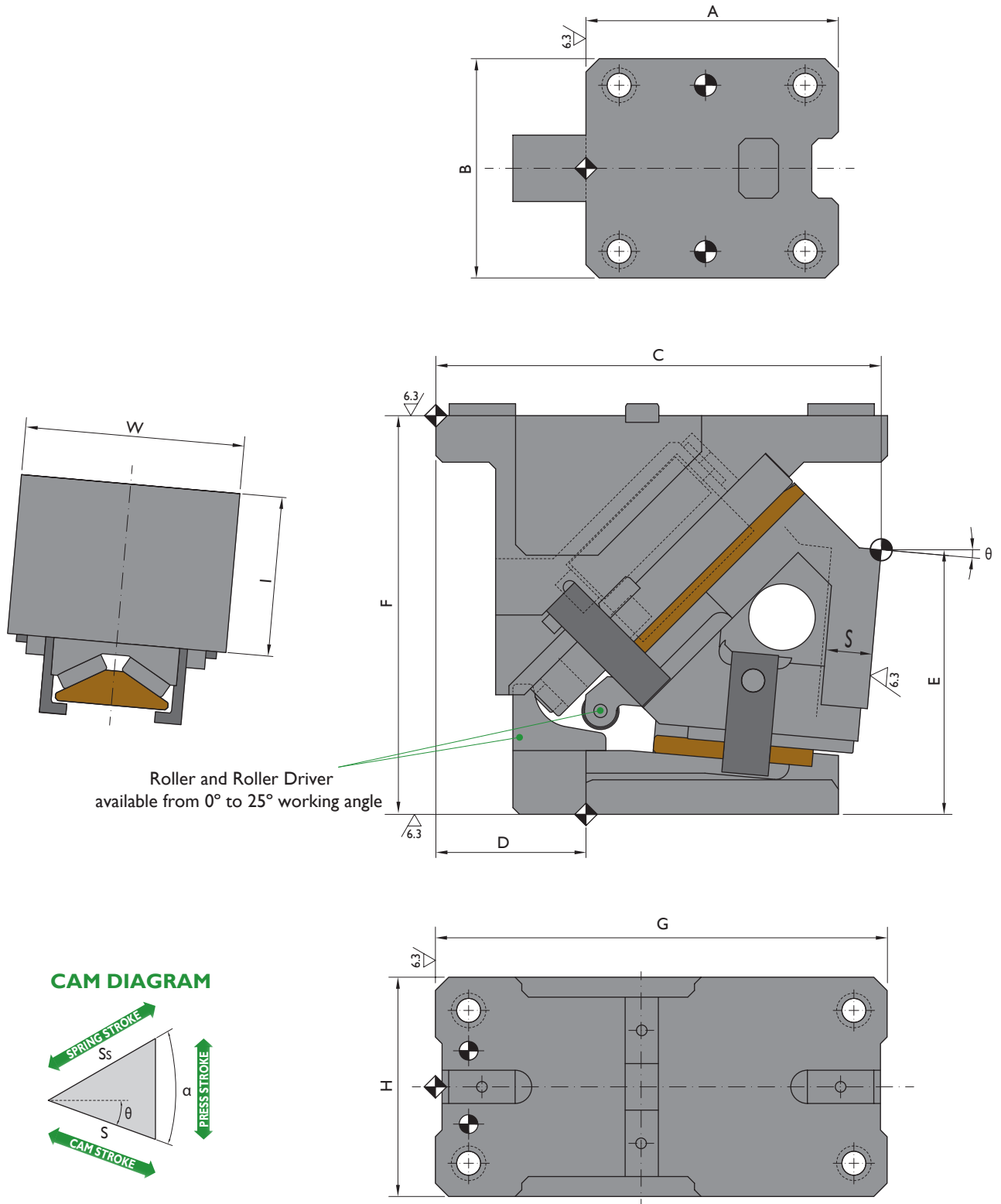


CAM DIAGRAM



Ordering example: CACN-W- θ
 CACN-80-60

Structure for cams width 165 - 400 mm



Ordering example: CACN-W-θ
 CACN-200-00

Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
CACN	70	00	19.3	10	16.1	280	150	50	237.37	102	140	225	240	70	75	30	50
CACN	70	05	21.3	10	15.4	280	150	50	234.87	92	138.72	225	240	70	75	30	50
CACN	70	10	23.3	10	14.8	280	150	50	232.82	81	136.24	225	240	70	75	30	50
CACN	70	15	25.4	10	14.1	280	150	50	217.54	57	128.41	225	240	70	75	30	50
CACN	70	20	27.6	10	14.1	280	150	50	224.52	52	125.33	225	240	70	75	30	50
CACN	70	25	30	10	14	280	150	50	223.46	42	119.55	225	240	70	75	30	50
CACN	70	30	32.6	10	13.8	280	150	50	211.54	30	112.01	225	240	70	75	30	50
CACN	70	35	35.4	10	13.7	280	150	50	210.68	17	107.8	225	240	70	75	30	50
CACN	70	40	38.6	10	13.8	280	150	50	204.84	4	99.93	225	240	70	75	30	50
CACN	70	45	42.3	10	13.8	280	150	50	198.15	-2	93.72	225	240	70	75	30	50
CACN	70	50	46.7	10	13.9	280	150	50	190.95	-21	89.85	225	240	70	75	30	50
CACN	70	55	43.6	10	14.1	280	150	50	190.51	-23	79	225	240	70	75	25	55
CACN	70	60	50	10	14.5	280	150	50	185.81	-35	69.14	225	240	70	75	25	60
CACN	80	00	32.1	17	27.9	280	170	80	280	135	165	275	270	80	75	50	50
CACN	80	05	35.5	17	27.5	280	170	80	281.31	125	159.07	275	270	80	75	50	50
CACN	80	10	38.9	17	26.9	280	170	80	277.5	110	157.16	275	270	80	75	50	50
CACN	80	15	42.4	17	26.5	280	170	80	280.48	105	154.28	275	270	80	75	50	50
CACN	80	20	46.1	17	26	280	170	80	276.16	95	150.45	275	270	80	75	50	50
CACN	80	25	50	17	25.9	280	170	80	271.47	80	145.71	275	270	80	75	50	50
CACN	80	30	54.3	17	25.3	280	170	80	264.33	65	140.08	275	270	80	75	50	50
CACN	80	35	59	17	25	280	170	80	260.66	55	133.62	275	270	80	75	50	50
CACN	80	40	64.3	17	24.7	280	170	80	252.32	35	127.24	275	270	80	75	50	50
CACN	80	45	70.4	17	24.7	280	170	80	247.46	30	118.39	275	270	80	75	50	50
CACN	80	50	77.8	17	24.9	280	170	80	237.8	15	109.73	275	270	80	75	50	50
CACN	80	55	78.5	17	25.8	280	170	80	231.36	0	100.47	275	270	80	75	45	55
CACN	80	60	80	17	26.2	280	170	80	233.95	0	89.11	275	270	80	75	40	60
CACN	165	00	32.1	30	76.1	540	190	165	335.84	128	203.02	300	340	165	120	50	50
CACN	165	05	35.5	30	74.2	540	190	165	335.25	113	199.09	300	340	165	120	50	50
CACN	165	10	38.9	30	73.8	540	190	165	337.27	101	188.91	300	340	165	120	50	50
CACN	165	15	42.4	30	73.1	540	190	165	329.78	80	177.54	300	340	165	120	50	50
CACN	165	20	46.1	30	72.3	540	190	165	332.68	70	170.01	300	340	165	120	50	50
CACN	165	25	50	30	72.1	540	190	165	332.88	58	161.38	300	340	165	120	50	50
CACN	165	30	54.3	30	71.9	540	190	165	334.28	48	151.72	300	340	165	120	50	50
CACN	165	35	59	30	72.2	540	190	165	329.8	33	141.11	300	340	165	120	50	50
CACN	165	40	64.3	30	72.4	540	190	165	321.35	15	129.62	300	340	165	120	50	50
CACN	165	45	70.4	30	65.5	540	190	165	314.86	0	117.34	300	340	165	120	50	50
CACN	165	50	77.8	30	64.3	540	190	165	307.27	-15	104.37	300	340	165	120	50	50
CACN	165	55	87.2	30	65.2	540	190	165	296.59	-32	89.7	300	340	165	125	50	55
CACN	165	60	100	30	66.6	540	190	165	288.56	-45	77.74	300	340	165	125	50	60

Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
CACN	200	00	32.1	36	90.3	710	190	200	335.84	128	203.02	300	340	200	120	50	50
CACN	200	05	35.5	36	88	710	190	200	335.25	113	199.09	300	340	200	120	50	50
CACN	200	10	38.9	36	87.5	710	190	200	337.27	101	188.91	300	340	200	120	50	50
CACN	200	15	42.4	36	87	710	190	200	329.78	80	177.54	300	340	200	120	50	50
CACN	200	20	46.1	36	85.8	710	190	200	332.68	70	170.01	300	340	200	120	50	50
CACN	200	25	50	36	86.2	710	190	200	332.88	58	161.38	300	340	200	120	50	50
CACN	200	30	54.3	36	85.6	710	190	200	334.28	48	151.72	300	340	200	120	50	50
CACN	200	35	59	36	86.2	710	190	200	329.8	33	141.11	300	340	200	120	50	50
CACN	200	40	64.3	36	86.6	710	190	200	321.35	15	129.62	300	340	200	120	50	50
CACN	200	45	70.4	36	88	710	190	200	314.86	0	117.34	300	340	200	120	50	50
CACN	200	50	77.8	36	78.2	710	190	200	307.27	-15	104.37	300	340	200	120	50	50
CACN	200	55	87.2	36	80.5	710	190	200	296.59	-32	89.7	300	340	200	120	50	55
CACN	200	60	100	36	82.4	710	190	200	288.56	-45	77.74	300	340	200	120	50	60
CACN	300	00	38.6	46	153.2	1420	190	250	313	138	277	375	320	300	160	60	50
CACN	300	05	42.6	46	152.5	1420	190	250	317.15	125	270.82	375	320	300	160	60	50
CACN	300	10	46.7	46	151.4	1420	190	250	324.13	115	263.14	375	320	300	160	60	50
CACN	300	15	50.9	46	154.1	1420	190	250	325.82	100	253.99	375	320	300	160	60	50
CACN	300	20	55.3	46	148.2	1420	190	250	327.08	85	243.41	375	320	300	160	60	50
CACN	300	25	60	46	150.2	1420	190	250	334.71	75	236.35	375	320	300	160	60	50
CACN	300	30	65.1	46	147.3	1420	190	250	327.83	55	228.11	375	320	300	160	60	50
CACN	300	35	70.8	46	148	1420	190	250	334.51	45	215.83	375	320	300	160	60	50
CACN	300	40	77.1	46	146.2	1420	190	250	325.46	25	207.7	375	320	300	160	60	50
CACN	300	45	84.5	46	148.6	1420	190	250	324.84	7	195.77	375	320	300	160	60	50
CACN	300	50	79.3	46	122.5	1420	190	250	306.63	-35	178.16	375	320	300	160	51	50
CACN	300	55	88.9	46	130.9	1420	190	250	277.93	-85	145.71	375	320	300	160	51	55
CACN	300	60	102	46	135.3	1420	190	250	286.45	-85	129.36	375	320	300	160	51	60
CACN	400	00	38.6	46	160.2	1420	190	250	313	138	277	375	320	300	160	60	50
CACN	400	05	42.6	46	159.5	1420	190	250	317.15	125	270.82	375	320	300	160	60	50
CACN	400	10	46.7	46	158.4	1420	190	250	324.13	115	263.14	375	320	300	160	60	50
CACN	400	15	50.9	46	161.1	1420	190	250	325.82	100	253.99	375	320	300	160	60	50
CACN	400	20	55.3	46	155.2	1420	190	250	327.08	85	243.41	375	320	300	160	60	50
CACN	400	25	60	46	157.3	1420	190	250	334.71	75	236.35	375	320	300	160	60	50
CACN	400	30	65.1	46	154.3	1420	190	250	327.83	55	228.11	375	320	300	160	60	50
CACN	400	35	70.8	46	155	1420	190	250	334.51	45	215.83	375	320	300	160	60	50
CACN	400	40	77.1	46	153.3	1420	190	250	325.46	25	207.7	375	320	300	160	60	50
CACN	400	45	84.5	46	155.6	1420	190	250	324.84	7	195.77	375	320	300	160	60	50
CACN	400	50	79.3	46	127.7	1420	190	250	306.63	-35	178.16	375	320	300	160	51	50
CACN	400	55	88.9	46	135.9	1420	190	250	277.93	-85	145.71	375	320	300	160	51	55
CACN	400	60	102	46	140.4	1420	190	250	286.45	-85	129.36	375	320	300	160	51	60

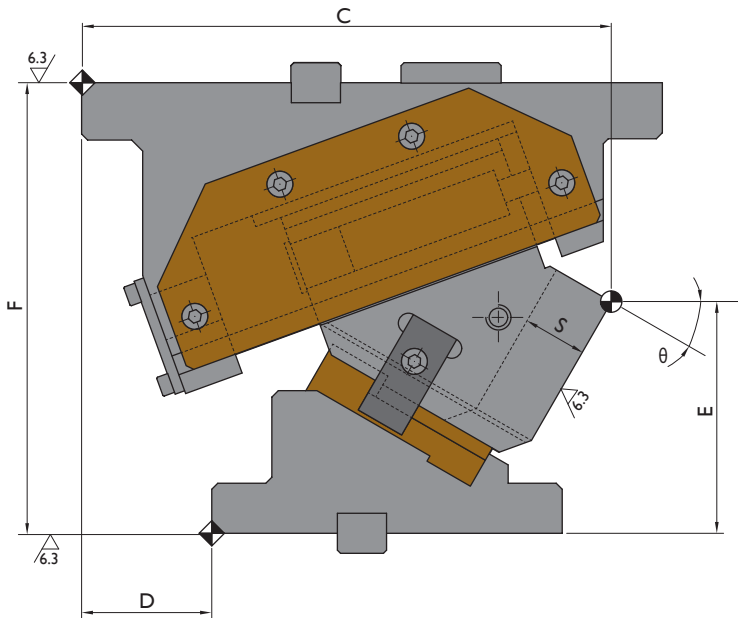
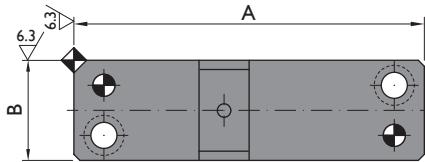
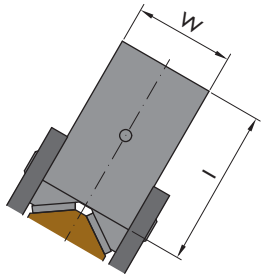
WEB



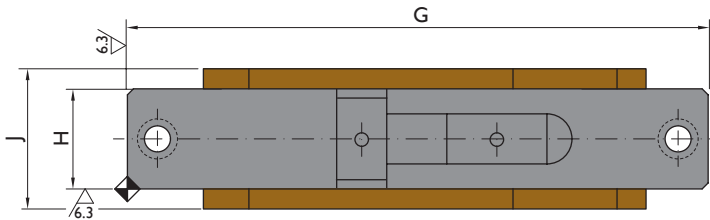
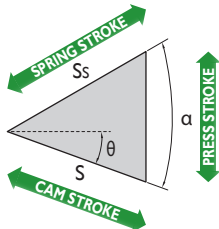
CAD

GLOBAL STANDARD COMPONENTS
NAAMS

Structure for cams width 50 - 75 mm

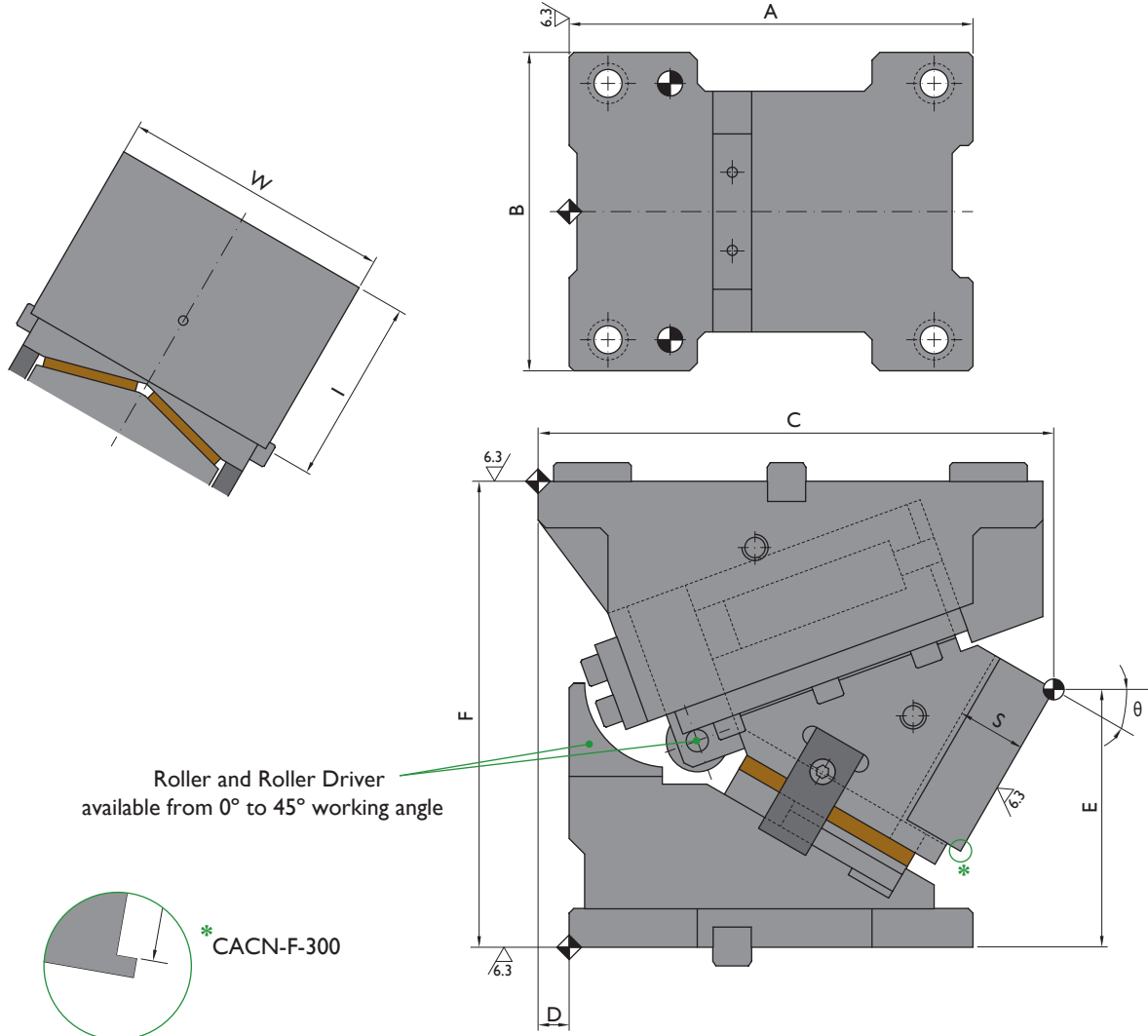


CAM DIAGRAM

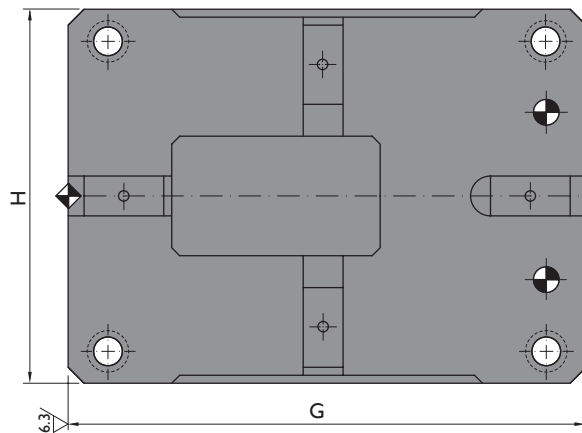
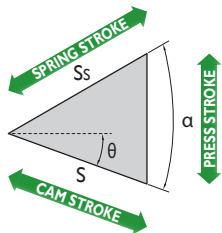


Ordering example: CACN-F-W-θ
CACN-F-75-25

Structure for cams width 150 - 300 mm



CAM DIAGRAM



Ordering example: CACN-F-W-θ
 CACN-F-150-60

Order No.			Main Features				General Dimensions												
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Ss mm	α °	
CACN-F	50	00	26	9	19	280	175	50	252	110	155	225	290	50	80	70	40	50	
CACN-F	50	05	28	9	19	280	175	50	256.4	105	150.86	225	290	50	80	70	40	50	
CACN-F	50	10	31	9	18.5	280	175	50	261	95	141.4	225	290	50	80	70	40	50	
CACN-F	50	15	34	9	18.5	280	175	50	268.06	89	136.57	225	290	50	80	70	40	50	
CACN-F	50	20	37	9	18	280	175	50	267.11	80	131.39	225	290	50	80	70	40	50	
CACN-F	50	25	40	9	17.5	280	175	50	266.03	70	121.32	225	290	50	80	70	40	50	
CACN-F	50	30	43	9	17.5	280	175	50	264.61	65	115.64	225	290	50	80	70	40	50	
CACN-F	50	35	47	9	17	280	175	50	260.11	52	109.65	225	290	50	80	70	40	50	
CACN-F	50	40	51	9	17	280	175	50	256.52	45	103.36	225	290	50	80	70	40	50	
CACN-F	50	45	56	9	17.5	280	175	50	254.8	40	96.77	225	290	50	80	70	40	50	
CACN-F	50	50	62	9	17.5	280	175	50	247.93	20	89.9	225	290	50	80	70	40	50	
CACN-F	50	55	70	9	18	280	175	50	245.07	5	88.51	225	290	50	80	70	40	55	
CACN-F	50	60	60	9	18	280	175	50	237.97	-5	77.89	225	290	50	80	70	30	60	
CACN-F	75	00	32	15	37.5	560	200	75	314	156	185	275	320	75	100	97	50	50	
CACN-F	75	05	35	15	37	560	200	75	314.28	141	175.82	275	320	75	100	97	50	50	
CACN-F	75	10	39	15	36	560	200	75	314.6	131	171.17	275	320	75	100	97	50	50	
CACN-F	75	15	42	15	35.8	560	200	75	305.94	109	166.06	275	320	75	100	97	50	50	
CACN-F	75	20	46	15	35.3	560	200	75	309.24	100	160.49	275	320	75	100	97	50	50	
CACN-F	75	25	50	15	34.5	560	200	75	304.48	85	154.45	275	320	75	100	97	50	50	
CACN-F	75	30	54	15	34	560	200	75	304.61	80	147.96	275	320	75	100	97	50	50	
CACN-F	75	35	59	15	34	560	200	75	301.58	67	141.03	275	320	75	100	97	50	50	
CACN-F	75	40	64	15	34.5	560	200	75	299.37	55	133.68	275	320	75	100	97	50	50	
CACN-F	75	45	70	15	34.5	560	200	75	293.94	40	125.91	275	320	75	100	97	50	50	
CACN-F	75	50	78	15	35	560	200	75	286.25	23	117.76	275	320	75	100	97	50	50	
CACN-F	75	55	70	15	35	560	200	75	275.27	0	109.24	275	320	75	100	97	40	55	
CACN-F	75	60	80	15	35	560	200	75	267.97	-14	92.89	275	320	75	100	97	40	60	
CACN-F	150	00	32	18	78	560	260	165	341	95	205	300	325	165	120	-	50	50	
CACN-F	150	05	35	18	77.5	560	260	165	330.08	60.5	200.76	300	325	165	120	-	50	50	
CACN-F	150	10	39	18	76	560	260	165	329.2	45.5	195.94	300	325	165	120	-	50	50	
CACN-F	150	15	42	18	74.5	560	260	165	334.82	37	190.55	300	325	165	120	-	50	50	
CACN-F	150	20	46	18	73.5	560	260	165	333.88	27	184.58	300	325	165	120	-	50	50	
CACN-F	150	25	50	18	71.7	560	260	165	331.32	17	178.04	300	325	165	120	-	50	50	
CACN-F	150	30	54	18	72.3	560	260	165	332.11	20	165.95	300	325	165	120	-	50	50	
CACN-F	150	35	59	18	72	560	260	165	330.69	10	153.32	300	325	165	120	-	50	50	
CACN-F	150	40	64	18	72	560	260	165	329.02	0	140.17	300	325	165	120	-	50	50	
CACN-F	150	45	70	18	71.5	560	260	165	328.55	-31	126.52	300	325	165	120	-	50	50	
CACN-F	150	50	78	18	71	560	210	165	327.74	8	112.4	300	325	165	120	-	50	50	
CACN-F	150	55	87	18	70	560	210	165	327.05	-2	97.85	300	325	165	120	-	50	55	
CACN-F	150	60	100	18	70	560	210	165	319.45	-17	82.89	300	325	165	120	-	50	60	

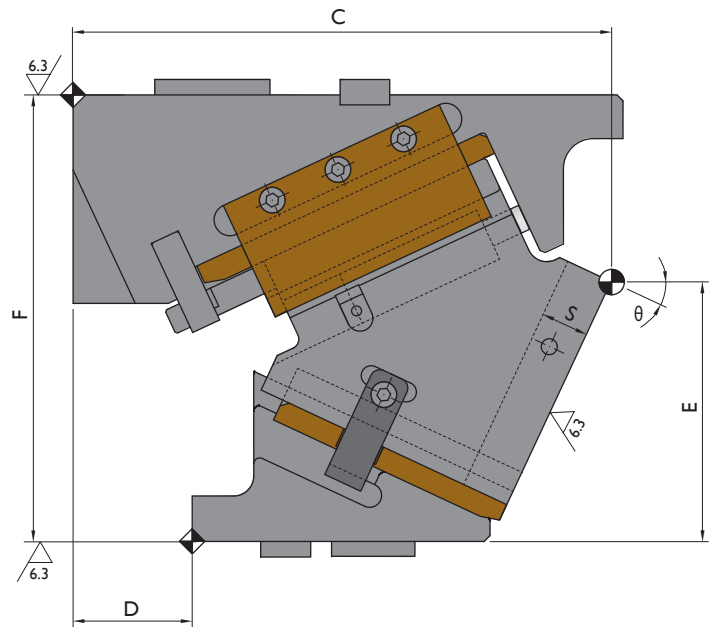
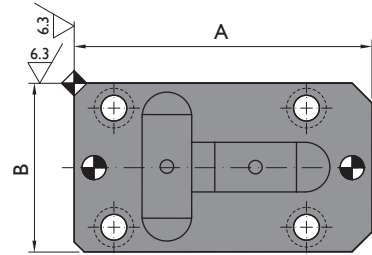
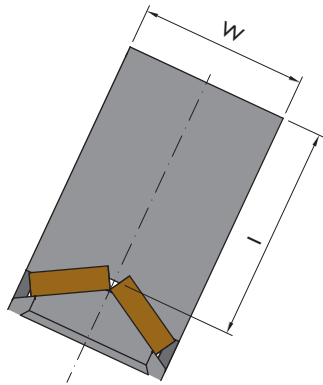
Order No.			Main Features				General Dimensions													
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Ss mm	α °		
CACN-F 200 00	200	00	32	27	105.5	1120	260	205	341	95	205	300	325	235	120	-	50	50		
CACN-F 200 05	200	05	35	27	104.8	1120	260	205	330.08	60.5	200.76	300	325	235	120	-	50	50		
CACN-F 200 10	200	10	39	27	108.8	1120	260	205	329.2	45.5	195.94	300	325	235	120	-	50	50		
CACN-F 200 15	200	15	42	27	101	1120	260	205	334.82	37	190.55	300	325	235	120	-	50	50		
CACN-F 200 20	200	20	46	27	99.5	1120	260	205	333.88	27	184.58	300	325	235	120	-	50	50		
CACN-F 200 25	200	25	50	27	97	1120	260	205	331.32	17	178.04	300	325	235	120	-	50	50		
CACN-F 200 30	200	30	54	27	97.8	1120	260	205	332.11	20	165.95	300	325	235	120	-	50	50		
CACN-F 200 35	200	35	59	27	97.5	1120	260	205	330.69	10	153.32	300	325	235	120	-	50	50		
CACN-F 200 40	200	40	64	27	97.5	1120	260	205	329.02	0	140.17	300	325	235	120	-	50	50		
CACN-F 200 45	200	45	70	27	97	1120	260	205	328.55	-31	126.52	300	325	235	120	-	50	50		
CACN-F 200 50	200	50	78	27	96.8	1120	210	205	327.74	8	112.4	300	325	235	120	-	50	50		
CACN-F 200 55	200	55	87	27	95	1120	210	205	327.05	-2	97.85	300	325	235	120	-	50	55		
CACN-F 200 60	200	60	100	27	94.8	1120	210	205	319.45	-17	82.89	300	325	235	120	-	50	60		
CACN-F 300 00	300	00	38	40	195	1680	280	270	396	133	285	375	360	330	155	-	60	50		
CACN-F 300 05	300	05	42	40	195.6	1680	280	270	393.39	112.5	280.7	375	360	330	155	-	60	50		
CACN-F 300 10	300	10	46	40	193	1680	280	270	390.81	92	275.72	375	360	330	155	-	60	50		
CACN-F 300 15	300	15	51	40	191.5	1680	280	270	388.2	71.5	270.04	375	360	330	155	-	60	50		
CACN-F 300 20	300	20	55	40	183.7	1680	280	270	385.51	51	263.68	375	360	330	155	-	60	50		
CACN-F 300 25	300	25	50	40	176	1680	280	270	372.66	30.5	256.64	375	360	330	155	-	50	50		
CACN-F 300 30	300	30	54	40	173	1680	280	270	369.61	30	243.94	375	360	330	155	-	50	50		
CACN-F 300 35	300	35	59	40	173	1680	280	270	367.79	16	230.61	375	360	330	155	-	50	50		
CACN-F 300 40	300	40	64	40	172	1680	280	270	365.66	12	216.66	375	360	330	155	-	50	50		
CACN-F 300 45	300	45	70	40	172	1680	280	270	363.15	3	202.12	375	360	330	155	-	50	50		
CACN-F 300 50	300	50	78	40	170	1680	230	270	355.23	-26	177.04	375	360	330	155	-	50	50		
CACN-F 300 55	300	55	87	40	169	1680	230	270	353.34	-53.5	151.45	375	360	330	155	-	50	55		
CACN-F 300 60	300	60	100	40	168	1680	230	270	350.94	-61	130.39	375	360	330	155	-	50	60		

WEB

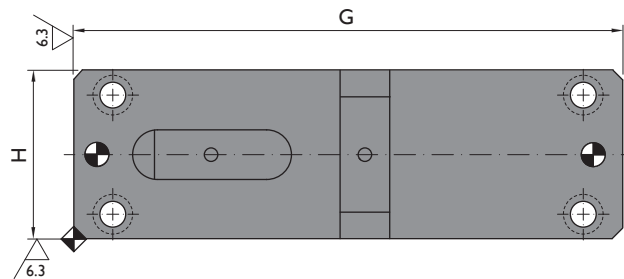
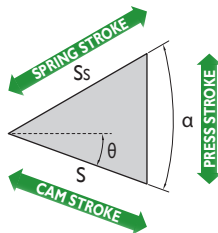


VDI

Structure for cams width 60 - 110 mm



CAM DIAGRAM



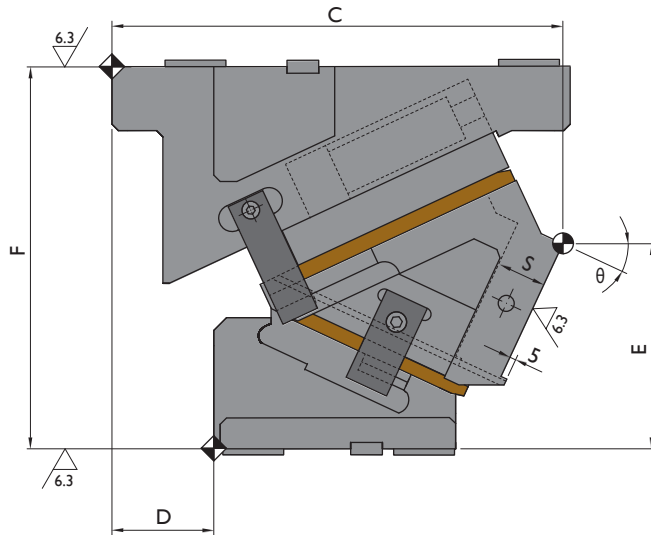
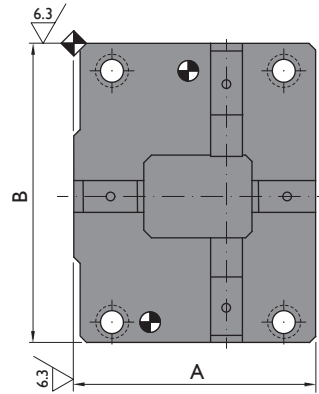
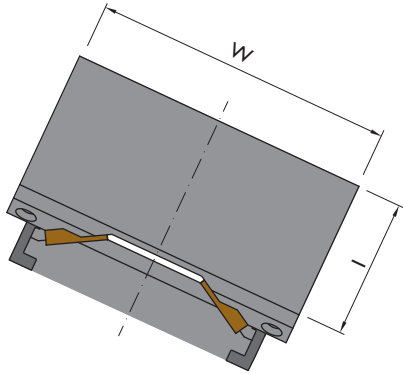
Ordering example: CACV-W-θ
CACV-85-60

WEB

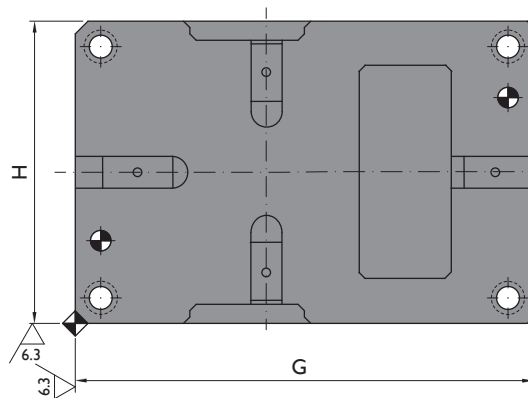
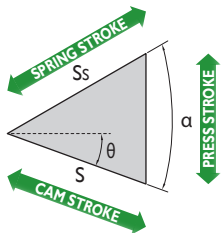


VDI

Structure for cams width 165 - 300 mm



CAM DIAGRAM



Ordering example: CACV-W-θ
CACV-400-65

Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300,000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ss mm	α °
CACV	60	00	19.3	7	20.8	280	165	60	267	100	156	225	277	60	100	30	50
CACV	60	05	21.3	7	20.5	280	165	60	274.45	95	151.92	225	277	60	100	30	50
CACV	60	10	23.3	7	19.7	280	165	60	272.04	86	147.44	225	277	60	100	30	50
CACV	60	15	25.4	7	19.3	280	165	60	273.74	77	142.56	225	277	60	100	30	50
CACV	60	20	27.6	7	18.9	280	165	60	273.5	69	136.27	225	277	60	100	30	50
CACV	60	25	30	7	18.8	280	165	60	271.28	56	131.47	225	277	60	100	30	50
CACV	60	30	32.6	7	18.4	280	165	60	270.02	48	126.43	225	277	60	100	30	50
CACV	60	35	35.4	7	17.7	280	145	60	266.76	49	119.85	225	277	60	100	30	50
CACV	60	40	38.6	7	17.5	280	145	60	262.47	39	112.9	225	277	60	100	30	50
CACV	60	45	42.3	7	17.6	280	145	60	256.13	31	98.5	225	277	60	100	30	50
CACV	60	50	46.7	7	17.5	280	130	60	249.8	23	90.22	225	277	60	100	30	50
CACV	60	55	52.3	7	17.6	280	130	60	247.39	16	83.06	225	277	60	100	30	55
CACV	60	60	60	7	17.9	280	130	60	237.95	5	75.64	225	277	60	100	30	60
CACV	60	65	71	7	18.6	280	130	60	235	-5	61.32	225	277	60	100	30	65
CACV	60	70	58.5	7	18.8	280	130	60	230	-15	47.05	225	277	60	100	20	70
CACV	60	75	77.3	7	19.7	280	130	60	222	-25	37.27	225	277	60	100	20	75
CACV	85	00	19.3	10	28.2	560	150	85	267	115	162	225	277	85	110	30	50
CACV	85	05	21.3	10	27.5	560	150	85	272.39	110	157.84	225	277	85	110	30	50
CACV	85	10	23.3	10	26.6	560	150	85	275.07	101	153.23	225	277	85	110	30	50
CACV	85	15	25.4	10	26.3	560	150	85	277.99	92	145.28	225	277	85	110	30	50
CACV	85	20	27.6	10	26.1	560	150	85	273.08	69	136.57	225	277	85	110	30	50
CACV	85	25	30	10	26.1	560	150	85	271.3	60	130.85	225	277	85	110	30	50
CACV	85	30	32.6	10	25.3	560	150	85	269.61	52	124.74	225	277	85	110	30	50
CACV	85	35	35.4	10	24.4	560	150	85	265.99	47	121.54	225	277	85	110	30	50
CACV	85	40	38.6	10	24	560	140	85	262.39	37	114.47	225	277	85	110	30	50
CACV	85	45	42.3	10	24.7	560	140	85	256.82	23	107.03	225	277	85	110	30	50
CACV	85	50	46.7	10	24.7	560	130	85	249.24	20	91.52	225	277	85	110	30	50
CACV	85	55	52.3	10	24.6	560	130	85	250.67	19	84.21	225	277	85	110	30	55
CACV	85	60	60	10	25.4	560	130	85	240.1	4	75.65	225	277	85	110	30	60
CACV	85	65	71	10	25.7	560	130	85	235	-5	65.95	225	277	85	110	30	65
CACV	85	70	58.5	10	26.2	550	130	85	230	-15	56.12	225	277	85	110	20	70
CACV	85	75	77.3	10	28.3	550	130	85	228	-25	38.01	225	277	85	110	20	75
CACV	110	00	32.1	15	51.5	560	165	85	318	138	205	275	330	110	145	50	50
CACV	110	05	35.5	15	50.4	560	165	85	324.46	130	195.74	275	330	110	145	50	50
CACV	110	10	38.9	15	50.2	560	165	85	330.22	121	190.87	275	360	110	145	50	50
CACV	110	15	42.4	15	51.3	560	165	85	336.2	114	180.55	275	360	110	145	50	50
CACV	110	20	46.1	15	49.7	560	165	85	339.32	105	174.58	275	360	110	145	50	50
CACV	110	25	50	15	49	560	165	85	340.51	94	165.33	275	360	110	145	50	50
CACV	110	30	54.3	15	49.5	560	180	85	348.36	70	154.46	275	360	110	145	50	50
CACV	110	35	59	15	48.6	560	180	85	343.52	54	147.18	275	360	110	145	50	50
CACV	110	40	64.3	15	46.3	560	150	85	332.59	64	135.59	275	360	110	145	50	50
CACV	110	45	70.4	15	46.6	560	150	85	322.52	45	125.56	275	360	110	145	50	50
CACV	110	50	77.8	15	45.4	560	150	85	309.47	25	118.83	275	345	110	140	50	50
CACV	110	55	87.2	15	46.5	560	150	85	311.07	18	105.21	275	345	110	140	50	55
CACV	110	60	100	15	47.9	560	150	85	327.93	7	106.15	275	345	110	140	50	60
CACV	110	65	94.6	15	48.9	560	150	85	317.17	-10	90	275	345	110	140	40	65
CACV	110	70	81.9	15	50.8	550	150	85	313.12	-20	70	275	345	110	140	28	70
CACV	110	75	108.2	15	52.6	550	150	85	306.76	-30	50	275	345	110	140	28	75

Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300,000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	S _s mm	α °
CACV	165	00	32.1	17	75.1	1100	190	165	360	150	205	300	360	165	115	50	50
CACV	165	05	35.5	17	72.9	1100	190	165	356.25	134	199.09	300	360	165	115	50	50
CACV	165	10	38.9	17	72.1	1100	190	165	359.27	118	188.91	300	360	165	115	50	50
CACV	165	15	42.4	17	71.6	1100	190	165	355.78	111	177.53	300	360	165	115	50	50
CACV	165	20	46.1	17	70.3	1100	190	165	355.68	93	170	300	360	165	115	50	50
CACV	165	25	50	17	69.8	1100	190	165	354.25	80	161.08	300	360	165	115	50	50
CACV	165	30	54.3	17	69	1100	190	165	357.28	70	151.72	300	360	165	115	50	50
CACV	165	35	59	17	69.4	1100	190	165	345.8	64	141.11	300	360	165	115	50	50
CACV	165	40	64.3	17	69.3	1100	190	165	344.27	58	129.62	300	360	165	115	50	50
CACV	165	45	70.4	17	70.3	1100	190	165	344.86	40	117.34	300	360	165	115	50	50
CACV	165	50	77.8	17	69.1	1100	190	165	327.27	10	104.37	300	360	165	115	50	50
CACV	165	55	61	17	68.1	1100	190	165	324.39	0	89.8	300	360	165	115	35	55
CACV	165	60	40	17	68.3	1100	190	165	317.59	-7	84.37	300	360	165	115	20	60
CACV	165	65	47.3	17	70	1100	190	165	314.23	-15	68.6	300	360	165	115	20	65
CACV	165	70	58.5	17	71.7	1100	190	165	308.07	-25	54.33	300	360	165	115	20	70
CACV	165	75	58	17	73.5	1100	190	165	301.08	-35	39.76	300	360	165	115	15	75
CACV	200	00	32.1	22	91.6	1100	190	200	360	150	205	300	360	200	115	50	50
CACV	200	05	35.5	22	88.9	1100	190	200	356.25	134	199.09	300	360	200	115	50	50
CACV	200	10	38.9	22	88	1100	190	200	359.27	118	188.91	300	360	200	115	50	50
CACV	200	15	42.4	22	87	1100	190	200	355.78	111	177.53	300	360	200	115	50	50
CACV	200	20	46.1	22	85.5	1100	190	200	355.68	93	170	300	360	200	115	50	50
CACV	200	25	50	22	85.9	1100	190	200	354.88	80	161.38	300	360	200	115	50	50
CACV	200	30	54.3	22	85	1100	190	200	357.28	70	151.72	300	360	200	115	50	50
CACV	200	35	59	22	84.8	1100	190	200	345.8	64	141.11	300	360	200	115	50	50
CACV	200	40	64.3	22	85.8	1100	190	200	344.27	58	129.62	300	360	200	115	50	50
CACV	200	45	70.4	22	85.7	1100	190	200	344.86	40	117.34	300	360	200	115	50	50
CACV	200	50	77.8	22	84.7	1100	190	200	327.27	10	104.37	300	360	200	115	50	50
CACV	200	55	52.3	22	85.7	1100	190	200	324.39	0	89.8	300	360	200	115	30	55
CACV	200	60	60	22	84.2	1100	190	200	317.59	-7	84.37	300	360	200	115	30	60
CACV	200	65	71	22	86.7	1100	190	200	319.23	-15	68.6	300	360	200	115	30	65
CACV	200	70	58.5	22	88.8	1100	190	200	313.07	-25	54.33	300	360	200	115	20	70
CACV	200	75	77.3	22	91.1	1100	190	200	306.08	-35	39.76	300	360	200	115	20	75
CACV	250	00	32.1	29	113	2200	190	250	360	150	205	300	360	250	115	50	50
CACV	250	05	35.5	29	110.5	2200	190	250	356.43	134	201.08	300	360	250	115	50	50
CACV	250	10	38.9	29	109.6	2200	190	250	359.62	118	190.88	300	360	250	115	50	50
CACV	250	15	42.4	29	108.4	2200	190	250	356.3	111	179.47	300	360	250	115	50	50
CACV	250	20	46.1	29	107.1	2200	190	250	356.37	93	171.88	300	360	250	115	50	50
CACV	250	25	50	29	106	2200	190	250	355.73	80	163.19	300	360	250	115	50	50
CACV	250	30	54.3	29	105.8	2200	190	250	358.28	70	153.45	300	360	250	115	50	50
CACV	250	35	59	29	107	2200	190	250	346.94	64	142.75	300	360	250	115	50	50
CACV	250	40	64.3	29	108.2	2200	190	250	345.56	58	131.15	300	360	250	115	50	50
CACV	250	45	70.4	29	108.5	2200	190	250	346.27	40	118.76	300	360	250	115	50	50
CACV	250	50	77.8	29	107.4	2200	190	250	328.8	10	105.66	300	360	250	115	50	50
CACV	250	55	52.3	29	106.3	2200	190	250	326.84	0	91.52	300	360	250	115	30	55
CACV	250	60	60	29	106.4	2200	190	250	320.19	-7	85.87	300	360	250	115	30	60
CACV	250	65	71	29	109.4	2200	190	250	319.23	-15	68.6	300	360	250	115	30	65
CACV	250	70	58.5	29	112.5	2200	190	250	313.07	-25	54.33	300	360	250	115	20	70
CACV	250	75	77.3	29	115.5	2200	190	250	306.08	-35	39.76	300	360	250	115	20	75

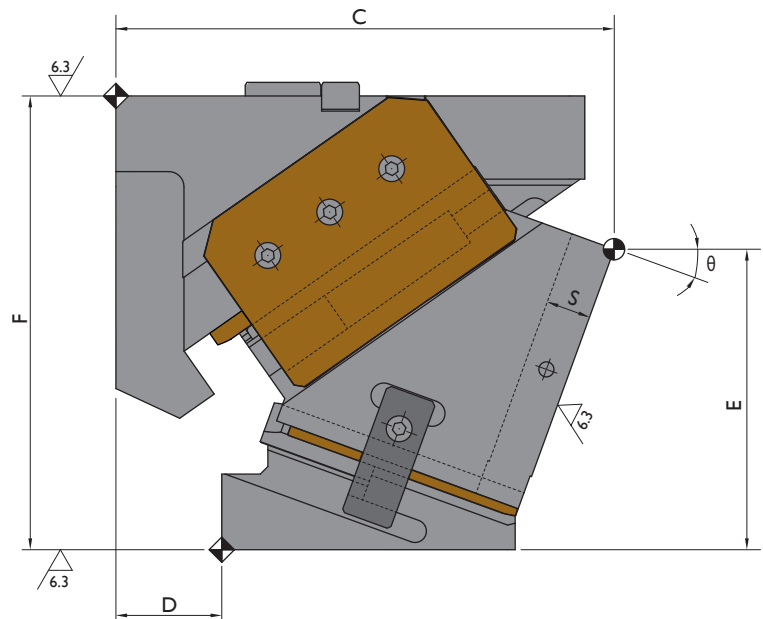
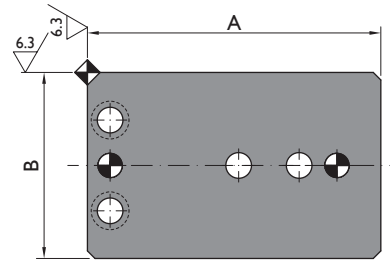
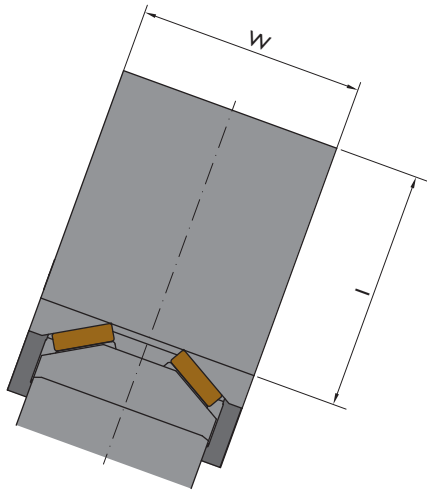
Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300,000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	S _s mm	α °
CACV 300 00	300	00	38.6	37	167.1	2200	230	250	395	163	277	375	390	300	155	60	50
CACV 300 05	300	05	42.6	37	163.8	2200	230	250	387.15	155	270.81	375	390	300	155	60	50
CACV 300 10	300	10	46.7	37	161.9	2200	230	250	394.13	145	263.14	375	390	300	155	60	50
CACV 300 15	300	15	50.9	37	160.1	2200	230	250	395.82	135	253.99	375	390	300	155	60	50
CACV 300 20	300	20	55.3	37	157.9	2200	230	250	397.08	120	243.41	375	390	300	155	60	50
CACV 300 25	300	25	60	37	158.6	2200	230	250	404.71	110	236.35	375	400	300	155	60	50
CACV 300 30	300	30	65.1	37	157.1	2200	230	250	408.22	85	228.11	375	400	300	155	60	50
CACV 300 35	300	35	70.8	37	158.5	2200	230	250	404.52	70	215.83	375	400	300	155	60	50
CACV 300 40	300	40	77.1	37	159.4	2200	230	250	400.46	55	207.7	375	400	300	155	60	50
CACV 300 45	300	45	84.5	37	159	2200	230	250	394.84	40	195.76	375	400	300	155	60	50
CACV 300 50	300	50	93.3	37	157.7	2200	230	250	393.35	17	178.96	375	410	300	155	60	50
CACV 300 55	300	55	104.6	37	162.3	2200	230	250	393.35	0	152.25	375	410	300	155	60	55
CACV 300 60	300	60	120	37	166.9	2200	230	250	393.35	-10	125.39	375	410	300	155	60	60
CACV 300 65	300	65	94.6	37	171.7	2200	230	250	387.48	-28	108.51	375	410	300	155	40	65
CACV 300 70	300	70	73.1	37	176.8	2200	230	250	378.65	-45	93.01	375	410	300	155	25	70
CACV 300 75	300	75	96.6	37	182.2	2200	230	250	364.72	-65	78.12	375	410	300	155	25	75
CACV 350 00	350	00	38.6	41	212.4	2800	230	350	395	160	290	375	390	350	155	60	50
CACV 350 05	350	05	42.6	41	214.7	2800	230	350	409.62	155	279.98	375	390	350	155	60	50
CACV 350 10	350	10	46.7	41	207	2800	230	350	414.52	140	270.33	375	390	350	155	60	50
CACV 350 15	350	15	50.9	41	204.5	2800	230	350	408.6	115	261.24	375	390	350	155	60	50
CACV 350 20	350	20	55.3	41	205.3	2800	230	350	422.92	110	252.79	375	410	350	155	60	50
CACV 350 25	350	25	60	41	203.9	2800	230	350	421.53	90	245.04	375	410	350	155	60	50
CACV 350 30	350	30	65.1	41	203.5	2800	230	350	418.5	70	238.06	375	410	350	155	60	50
CACV 350 35	350	35	70.8	41	204.6	2800	230	350	415.89	50	221.88	375	410	350	155	60	50
CACV 350 40	350	40	77.1	41	207.1	2800	230	350	410.78	30	206.57	375	410	350	155	60	50
CACV 350 45	350	45	84.5	41	209.7	2800	230	350	405.25	10	192.16	375	410	350	155	60	50
CACV 350 50	350	50	93.3	41	210.9	2800	230	350	397.37	-10	173.68	375	410	350	155	60	50
CACV 350 55	350	55	87.2	41	208.7	2800	230	350	398.61	-20	160.31	375	410	350	155	50	55
CACV 350 60	350	60	90	41	214.1	2800	230	350	392.76	-35	139.33	375	410	350	155	45	60
CACV 350 65	350	65	94.6	41	218.5	2800	230	350	398.83	-40	119.69	375	410	350	155	40	65
CACV 350 70	350	70	87.7	41	225.5	2800	230	350	394.78	-50	100.47	375	410	350	155	30	70
CACV 350 75	350	75	96.6	41	230.9	2800	230	350	394.55	-55	79.79	375	410	350	155	25	75
CACV 400 00	400	00	38.6	45	224.6	3300	230	350	395	158	287	375	390	400	155	60	50
CACV 400 05	400	05	42.6	45	221.3	3300	230	350	387.15	155	280.81	375	390	400	155	60	50
CACV 400 10	400	10	46.7	45	218.7	3300	230	350	394.13	145	268.14	375	390	400	155	60	50
CACV 400 15	400	15	50.9	45	215.7	3300	230	350	395.82	135	256.99	375	390	400	155	60	50
CACV 400 20	400	20	55.3	45	212.8	3300	230	350	397.08	100	243.41	375	390	400	155	60	50
CACV 400 25	400	25	60	45	214	3300	230	350	404.71	85	236.35	375	400	400	155	60	50
CACV 400 30	400	30	65.1	45	212.7	3300	230	350	408.22	65	228.11	375	400	400	155	60	50
CACV 400 35	400	35	70.8	45	215	3300	230	350	404.52	50	215.83	375	400	400	155	60	50
CACV 400 40	400	40	77.1	45	216.2	3300	230	350	400.46	40	207.7	375	400	400	155	60	50
CACV 400 45	400	45	84.5	45	217.3	3300	230	350	394.84	20	195.76	375	400	400	155	60	50
CACV 400 50	400	50	93.3	45	216.6	3300	230	350	393.35	2	178.96	375	410	400	155	60	50
CACV 400 55	400	55	104.6	45	224	3300	230	350	392.76	-13	153.17	375	410	400	155	60	55
CACV 400 60	400	60	120	45	232.2	3300	230	350	393.35	-30	125.39	375	410	400	155	60	60
CACV 400 65	400	65	94.6	45	239.3	3300	230	350	387.48	-48	108.51	375	410	400	155	40	65
CACV 400 70	400	70	73.1	45	247.6	3300	230	350	378.65	-65	93.01	375	410	400	155	25	70
CACV 400 75	400	75	96.6	45	252.9	3300	230	350	364.72	-85	78.12	375	410	400	155	25	75



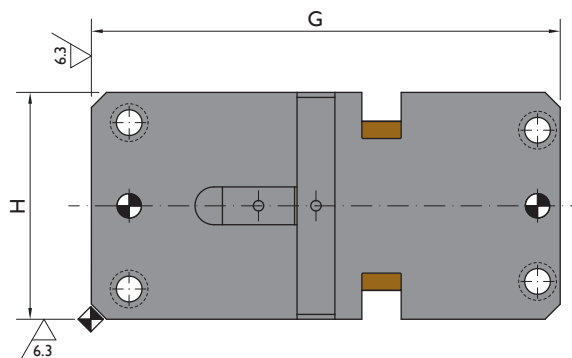
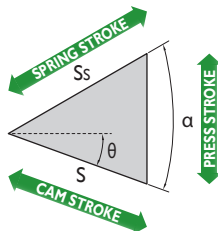
WEB



VDI



CAM DIAGRAM



Ordering example: CACV-F-W-θ
CACV-F-85-75

Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	S _s mm	α °
CACV-F 60 00	60	00	19.3	14	13	280	155	60	175	25	155	210	205	60	100	30	50
CACV-F 60 05	60	05	21.3	14	13	280	150	60	179.26	25	152.63	210	205	60	100	30	50
CACV-F 60 10	60	10	21.5	14	13	280	145	60	183.3	25	149.9	210	205	60	100	30	55
CACV-F 60 15	60	15	23.8	14	13	280	140	60	189.68	25	146.49	210	205	60	100	30	55
CACV-F 60 20	60	20	24.5	14	13	280	140	60	190.59	25	133.43	210	205	60	100	30	60
CACV-F 60 25	60	25	27.1	14	13	280	125	60	193.79	25	129.75	210	205	60	100	30	60
CACV-F 60 30	60	30	30	14	13	280	125	60	196.65	25	125.8	210	205	60	100	30	60
CACV-F 60 35	60	35	31.7	14	13	280	115	60	199.16	25	121.62	210	205	60	100	30	65
CACV-F 60 40	60	40	35.5	14	13	280	110	60	198.08	10	113.4	210	220	60	100	30	65
CACV-F 60 45	60	45	38.5	14	14	280	105	60	225.96	40	105.61	210	235	60	100	30	70
CACV-F 60 50	60	50	43.9	14	14	280	105	60	211.71	10	96.56	210	220	60	100	30	70
CACV-F 60 55	60	55	49.2	14	14	280	105	60	212.11	10	92.46	210	220	60	100	30	75
CACV-F 60 60	60	60	58	14	14	280	92	60	203.48	10	83.35	210	220	60	100	30	75
CACV-F 60 65	60	65	68.6	14	15	280	85	60	202.75	10	80.02	210	220	60	100	30	80
CACV-F 60 70	60	70	70.6	14	14	280	85	60	205.54	10	63.61	210	220	60	100	25	85
CACV-F 60 75	60	75	76.1	14	15	280	80	60	204.77	10	58.79	210	235	60	100	25	85
CACV-F 85 00	85	00	30.9	29	27	560	175	60	238	55	165	225	255	85	120	48	50
CACV-F 85 05	85	05	34.1	29	26	560	170	60	243.28	55	160.82	225	255	85	120	48	50
CACV-F 85 10	85	10	34.5	29	26	560	160	60	247.73	55	151.25	225	255	85	120	48	55
CACV-F 85 15	85	15	38.1	29	25	560	155	60	252.64	55	146.23	225	255	85	120	48	55
CACV-F 85 20	85	20	41.8	29	25	560	155	60	259.24	55	145.49	225	255	85	120	48	55
CACV-F 85 25	85	25	43.4	29	27	560	155	60	262.37	40	134.92	225	285	85	120	48	60
CACV-F 85 30	85	30	48	29	26	560	155	60	272.11	40	137.29	225	285	85	120	48	60
CACV-F 85 35	85	35	50.8	29	25	560	155	60	277.45	40	130.13	225	285	85	120	48	65
CACV-F 85 40	85	40	56.8	29	25	560	155	60	282.59	40	122.51	225	285	85	120	48	65
CACV-F 85 45	85	45	42.3	29	25	560	150	60	245.41	0	107.38	225	265	85	120	33	70
CACV-F 85 50	85	50	48.2	29	24	560	135	60	247.12	0	97.62	225	265	85	120	33	70
CACV-F 85 55	85	55	54.1	29	25	560	135	60	263	0	98.26	225	265	85	120	33	75
CACV-F 85 60	85	60	63.8	29	24	560	135	60	267.02	0	88.89	225	265	85	120	33	75
CACV-F 85 65	85	65	75.4	29	25	560	126	60	257.06	0	77.85	225	265	85	120	33	80
CACV-F 85 70	85	70	95	29	26	560	109	60	248.86	5	64.19	225	275	85	120	33	80
CACV-F 85 75	85	75	95.1	29	26	560	109	60	251.61	5	43.93	225	275	85	120	25	85
CACV-F 110 00	110	00	30.9	41	49	560	210	87	278	60	205	275	290	110	160	48	50
CACV-F 110 05	110	05	34.1	41	49	560	205	87	285.45	60	200.72	275	290	110	160	48	50
CACV-F 110 10	110	10	34.5	41	48	560	195	87	292.94	60	195.79	275	290	110	160	48	55
CACV-F 110 15	110	15	38.1	41	48	560	190	87	300.41	60	190.21	275	290	110	160	48	55
CACV-F 110 20	110	20	41.8	41	47	560	185	87	307.8	60	183.98	275	290	110	160	48	55
CACV-F 110 25	110	25	43.4	41	45	560	178	87	302.93	50	172.58	275	300	110	160	48	60
CACV-F 110 30	110	30	48	41	47	560	172	87	309.61	50	165.28	275	300	110	160	48	60
CACV-F 110 35	110	35	50.8	41	47	560	167	87	316.06	50	157.42	275	300	110	160	48	65
CACV-F 110 40	110	40	56.8	41	45	560	163	87	322.23	50	149	275	300	110	160	48	65
CACV-F 110 45	110	45	61.5	41	45	560	183	87	311.62	10	143.59	275	295	110	160	48	70
CACV-F 110 50	110	50	48.2	41	46	560	172	87	309.74	10	127.4	275	295	110	160	33	70
CACV-F 110 55	110	55	54.1	41	45	560	157	87	302.27	10	109.24	275	295	110	160	33	75
CACV-F 110 60	110	60	63.8	41	46	560	155	87	305.96	10	100.39	275	295	110	160	33	75
CACV-F 110 65	110	65	75.4	41	45	560	137	87	285.71	0	79.89	275	295	110	160	33	80
CACV-F 110 70	110	70	95	41	47	560	135	87	288.18	0	66.67	275	295	110	160	33	80
CACV-F 110 75	110	75	95.1	41	45	560	134	87	290.36	0	63.24	275	310	110	160	25	85

Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	S _s mm	α °
CACV-F 150 00	150	00	32.1	59	65	710	220	123	298	70	235	300	310	150	160	50	50
CACV-F 150 05	150	05	35.5	59	63	710	210	123	307.2	70	230.65	300	310	150	160	50	50
CACV-F 150 10	150	10	35.9	59	65	710	200	123	313.81	70	210.72	300	310	150	160	50	55
CACV-F 150 15	150	15	39.7	59	64	710	195	123	321.7	70	205.04	300	310	150	160	50	55
CACV-F 150 20	150	20	43.6	59	63	710	194	123	329.51	70	198.68	300	310	150	160	50	55
CACV-F 150 25	150	25	45.2	59	67	710	202	123	342.93	60	182.58	300	350	150	160	50	60
CACV-F 150 30	150	30	50	59	68	710	199	123	352.11	60	174.61	300	350	150	160	50	60
CACV-F 150 35	150	35	52.9	59	68	710	201	123	364.66	60	169.7	300	350	150	160	50	65
CACV-F 150 40	150	40	59.2	59	67	710	197	123	371.87	60	155.49	300	350	150	160	50	65
CACV-F 150 45	150	45	64.1	59	64	710	182	123	325.76	20	147.73	300	340	150	160	50	70
CACV-F 150 50	150	50	73.1	59	65	710	179	123	332.72	20	131.69	300	340	150	160	50	70
CACV-F 150 55	150	55	81.9	59	65	710	186	123	347.32	20	120.79	300	340	150	160	50	75
CACV-F 150 60	150	60	96.6	59	67	710	183	123	353.59	20	102.89	300	340	150	160	50	75
CACV-F 150 65	150	65	91.4	59	70	710	183	123	359.15	20	94.48	300	340	150	160	40	80
CACV-F 150 70	150	70	84.7	59	68	710	168	123	334.26	0	73.9	300	340	150	160	30	85
CACV-F 150 75	150	75	76.1	59	68	710	167	123	338.15	0	65.06	300	340	150	160	20	85
CACV-F 180 00	180	00	32.1	61	78	710	220	153	298	70	235	300	310	180	160	50	50
CACV-F 180 05	180	05	35.5	61	77	710	210	153	307.2	70	230.65	300	310	180	160	50	50
CACV-F 180 10	180	10	35.9	61	77	710	200	153	313.81	70	210.72	300	310	180	160	50	55
CACV-F 180 15	180	15	39.7	61	77	710	195	153	321.7	70	205.04	300	310	180	160	50	55
CACV-F 180 20	180	20	43.6	61	78	710	191	153	329.51	70	198.68	300	310	180	160	50	55
CACV-F 180 25	180	25	45.2	61	80	710	199	153	342.93	60	182.58	300	350	180	160	50	60
CACV-F 180 30	180	30	50	61	80	710	199	153	352.11	60	174.61	300	350	180	160	50	60
CACV-F 180 35	180	35	52.9	61	83	710	201	153	364.66	60	169.7	300	350	180	160	50	65
CACV-F 180 40	180	40	59.2	61	83	710	197	153	371.87	60	155.49	300	350	180	160	50	65
CACV-F 180 45	180	45	64.1	61	78	710	182	153	325.76	20	147.73	300	340	180	160	50	70
CACV-F 180 50	180	50	73.1	61	80	710	179	153	332.72	20	131.69	300	340	180	160	50	70
CACV-F 180 55	180	55	81.9	61	78	710	186	153	347.32	20	120.79	300	340	180	160	50	75
CACV-F 180 60	180	60	96.6	61	81	710	182	153	353.59	20	102.89	300	340	180	160	50	75
CACV-F 180 65	180	65	91.4	61	83	710	181	153	359.15	20	94.48	300	340	180	160	40	80
CACV-F 180 70	180	70	84.7	61	85	710	168	153	334.26	0	73.9	300	340	180	160	30	85
CACV-F 180 75	180	75	76.1	61	85	710	172	153	338.15	0	65.06	300	340	180	160	20	85
CACV-F 220 00	220	00	32.1	74	94	1100	215	188	308	80	240	300	320	220	160	50	50
CACV-F 220 05	220	05	35.5	74	94	1100	210	188	317.63	80	235.63	300	320	220	160	50	50
CACV-F 220 10	220	10	35.9	74	94	1100	200	188	323.81	80	210.72	300	320	220	160	50	55
CACV-F 220 15	220	15	39.7	74	94	1100	190	188	331.7	80	205.04	300	320	220	160	50	55
CACV-F 220 20	220	20	43.6	74	94	1100	185	188	337.8	80	193.98	300	320	220	160	50	55
CACV-F 220 25	220	25	45.2	74	95	1100	195	188	345.05	60	187.11	300	360	220	160	50	60
CACV-F 220 30	220	30	50	74	98	1100	190	188	357.11	60	183.27	300	360	220	160	50	60
CACV-F 220 35	220	35	52.9	74	99	1100	185	188	362.94	60	167.24	300	360	220	160	50	65
CACV-F 220 40	220	40	59.2	74	99	1100	180	188	373.16	60	157.02	300	360	220	160	50	65
CACV-F 220 45	220	45	64.1	74	99	1100	160	188	348.64	45	145.61	300	365	220	160	50	70
CACV-F 220 50	220	50	73.1	74	98	1100	160	188	355.42	45	129.76	300	365	220	160	50	70
CACV-F 220 55	220	55	81.9	74	99	1100	161	188	361.67	45	113.33	300	365	220	160	50	75
CACV-F 220 60	220	60	96.6	74	99	1100	159	188	371.66	45	98.89	300	365	220	160	50	75
CACV-F 220 65	220	65	91.4	74	99	1100	161	188	367.84	45	86.87	300	365	220	160	40	80
CACV-F 220 70	220	70	100.8	74	99	1100	163	188	372.05	45	79.45	300	365	220	160	35	80
CACV-F 220 75	220	75	95.1	74	100	1100	145	188	352.07	35	53.07	300	365	220	160	25	85

Order No.			Main Features				General Dimensions										
Model	W mm	θ °	S mm	Working Force tnf 300.000 strokes	Weight kg	Spring Force kgf	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	S _s mm	α °
CACV-F 260 00	260	00	32.1	78	110	2400	215	226	308	80	240	300	320	260	160	50	50
CACV-F 260 05	260	05	35.5	78	111	2400	210	226	317.63	80	235.63	300	320	260	160	50	50
CACV-F 260 10	260	10	35.9	78	112	2400	200	226	323.81	80	210.72	300	320	260	160	50	55
CACV-F 260 15	260	15	39.7	78	112	2400	190	226	331.7	80	205.04	300	320	260	160	50	55
CACV-F 260 20	260	20	43.6	78	112	2400	185	226	337.8	80	193.98	300	320	260	160	50	55
CACV-F 260 25	260	25	45.2	78	114	2400	195	226	345.05	60	187.11	300	360	260	160	50	60
CACV-F 260 30	260	30	50	78	115	2400	190	226	357.11	60	183.27	300	360	260	160	50	60
CACV-F 260 35	260	35	52.9	78	116	2400	185	226	362.94	60	167.24	300	360	260	160	50	65
CACV-F 260 40	260	40	59.2	78	115	2400	180	226	373.16	60	157.02	300	360	260	160	50	65
CACV-F 260 45	260	45	64.1	78	115	2400	160	226	348.64	45	145.61	300	365	260	160	50	70
CACV-F 260 50	260	50	73.1	78	115	2400	160	226	355.42	45	129.76	300	365	260	160	50	70
CACV-F 260 55	260	55	81.9	78	117	2400	170	226	361.67	45	113.33	300	365	260	160	50	75
CACV-F 260 60	260	60	96.6	78	117	2400	160	226	371.66	45	98.89	300	365	260	160	50	75
CACV-F 260 65	260	65	91.4	78	118	2400	166	226	367.84	45	86.87	300	365	260	160	40	80
CACV-F 260 70	260	70	100.8	78	119	2400	165	226	372.05	45	79.45	300	365	260	160	35	80
CACV-F 260 75	260	75	95.1	78	119	2400	150	226	352.07	35	53.07	300	365	260	160	25	85
CACV-F 330 00	330	00	37.3	104	224	4000	280	285	403	130	300	375	415	330	180	58	50
CACV-F 330 05	330	05	41.2	104	216	4000	268	285	410.89	130	280.7	375	415	330	180	58	50
CACV-F 330 10	330	10	41.6	104	214	4000	254	285	418.81	130	275.72	375	415	330	180	58	55
CACV-F 330 15	330	15	46	104	214	4000	255	285	426.7	130	270.04	375	415	330	180	58	55
CACV-F 330 20	330	20	50.6	104	209	4000	245	285	409.51	105	263.68	375	415	330	180	58	55
CACV-F 330 25	330	25	52.4	104	205	4000	259	285	417.16	80	256.64	375	415	330	180	58	60
CACV-F 330 30	330	30	58	104	204	4000	250	285	424.61	80	243.94	375	415	330	180	58	60
CACV-F 330 35	330	35	61.3	104	203	3900	237	285	427.78	80	224.87	375	415	330	180	58	65
CACV-F 330 40	330	40	68.6	104	203	3900	232	285	438.66	80	216.66	375	415	330	180	58	65
CACV-F 330 45	330	45	74.3	104	201	3900	225	285	395.15	30	202.12	375	450	330	180	58	70
CACV-F 330 50	330	50	84.8	104	201	3900	222	285	412.72	30	186.69	375	450	330	180	58	70
CACV-F 330 55	330	55	95	104	208	3900	226	285	423.22	30	162.92	375	450	330	180	58	75
CACV-F 330 60	330	60	112.1	104	211	3900	228	285	433.59	30	142.89	375	450	330	180	58	75
CACV-F 330 65	330	65	102.9	104	224	3800	242	330	434.62	0	132.36	375	450	330	180	45	80
CACV-F 330 70	330	70	127.1	104	228	3800	232	330	429.87	0	120.48	375	450	330	180	45	85
CACV-F 330 75	330	75	114.2	104	223	3800	221	330	418.49	0	112.47	375	450	330	180	30	85
CACV-F 400 00	400	00	37.3	107	269	4000	280	338	403	130	300	375	415	400	180	58	50
CACV-F 400 05	400	05	41.2	107	263	4000	280	338	410.89	130	280.7	375	415	400	180	58	50
CACV-F 400 10	400	10	41.6	107	263	4000	255	338	418.81	130	275.72	375	415	400	180	58	55
CACV-F 400 15	400	15	46	107	262	4000	255	338	426.7	130	270.04	375	415	400	180	58	55
CACV-F 400 20	400	20	50.6	107	254	4000	245	338	409.51	105	263.68	375	415	400	180	58	55
CACV-F 400 25	400	25	52.4	107	248	4000	260	338	417.16	80	256.64	375	415	400	180	58	60
CACV-F 400 30	400	30	58	107	249	4000	250	338	424.61	80	243.94	375	415	400	180	58	60
CACV-F 400 35	400	35	61.3	107	248	3900	237	338	427.78	80	224.87	375	415	400	180	58	65
CACV-F 400 40	400	40	68.6	107	250	3900	230	338	438.66	80	216.66	375	415	400	180	58	65
CACV-F 400 45	400	45	74.3	107	244	3900	225	338	395.15	30	202.12	375	450	400	180	58	70
CACV-F 400 50	400	50	84.8	107	252	3900	215	338	412.72	30	186.69	375	450	400	180	58	70
CACV-F 400 55	400	55	95	107	250	3900	226	338	423.22	30	162.92	375	450	400	180	58	75
CACV-F 400 60	400	60	112.1	107	256	3900	230	338	433.59	30	142.89	375	450	400	180	58	75
CACV-F 400 65	400	65	102.9	107	274	3800	242	400	434.62	0	132.36	375	450	400	180	45	80
CACV-F 400 70	400	70	127.1	107	273	3800	226	400	429.87	0	120.48	375	450	400	180	45	85
CACV-F 400 75	400	75	114.2	107	268	3800	214	400	418.49	0	112.47	375	450	400	180	30	85

Products

Gas Springs



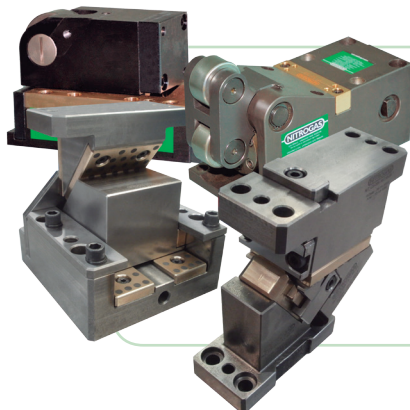
A wide range of high quality gas springs and accessories to use in press dies or injection moulds.

Controllable gas springs (CPC)



CPC gas spring allows a controlled stop at the end of rod stroke. This stop is highly reliable, always performing at the same position and with a 100% guarantee.

Cam units



Designed to use the power of the press to punch, blend or form in different directions from the direction of the press tool.



Solutions for the storage tools

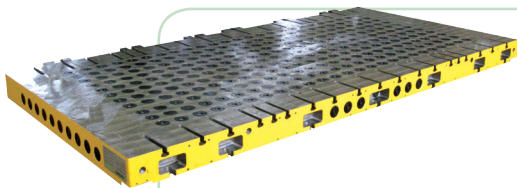
Designed to replace conventional distance blocks.

CS gas springs: Die storage cylinder

- Do not work during the production

SG gas springs: Stocking cylinder

- Work as a standard gas spring
- ISO standard dimensions but longer life than standard gas springs



Manifold plates

Designed to replace the hosing connection of gas springs by threading the gas springs directly on the plate. The system allows a more flexible distribution of the gas springs, reduces the leaking points and guarantees that all the gas springs have the same pressure.



Guide rail lifters

Designed to replace and simplify the guide pillar, gas spring and retainer screw structure when raising the sheet or the workpiece.



CAD files of the product can be downloaded for FREE from our website:
<http://www.nitrogas.com/es/Downloads.aspx>



Commercial

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Training

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Engineering

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Maintenance

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Contact hours

NITROGAS offers 24 hs contact service.



NITROGAS

ISO 9001
BUREAU VERITAS
Certification



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