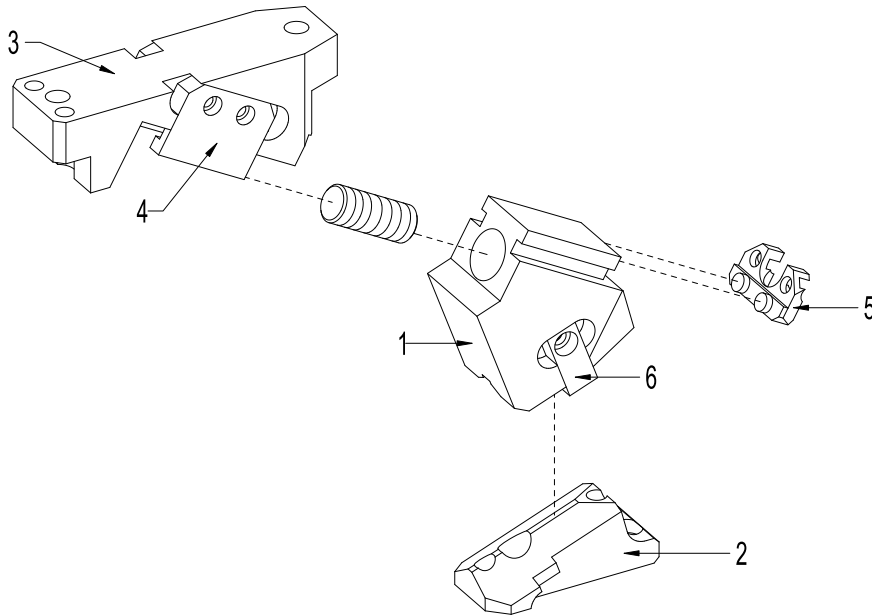


► Compact Arial Cam Unit for Piercing-PCU-CS3



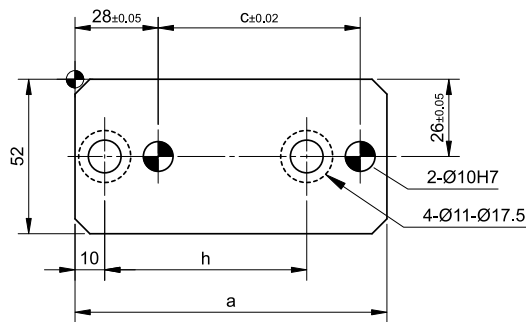
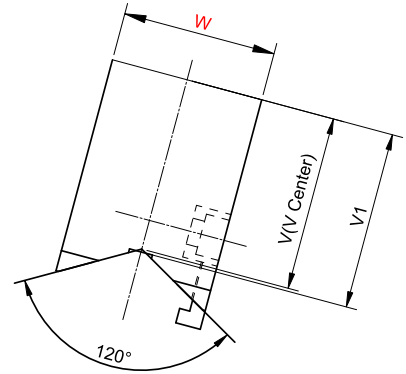
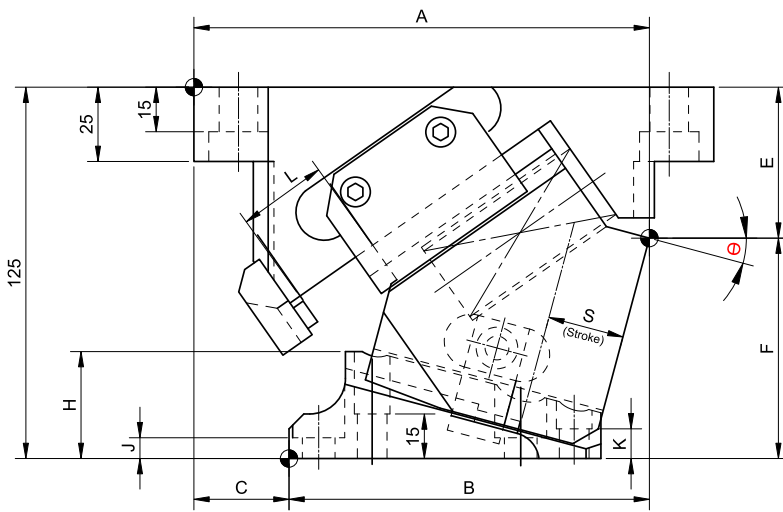
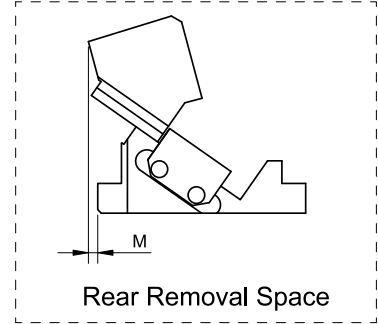
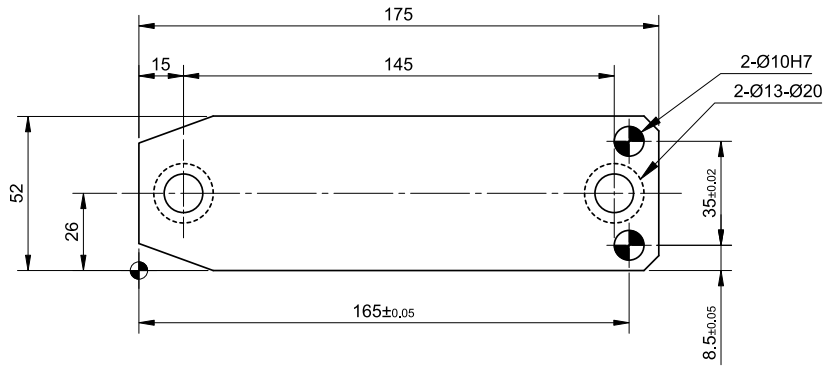
BILL OF MATERIAL

CAM CODE	SR.NO	PART NAME	MATERIAL
CAM UNIT PCU-CS3	1	CAM SLIDER	SG600/3
	2	CAM DRIVER	SG600/3
	3	CAM HOLDER	SG600/3
	4	SLIDE KEEPER	En8
	5	STOPPER PLATE	En8
	6	POSITIVE RETURN FOLLOWER	En8

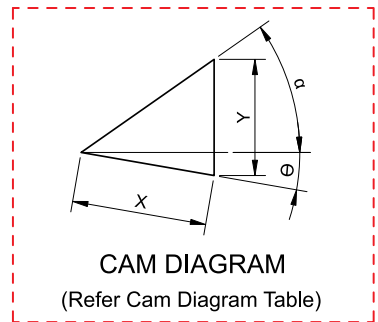
SPRINGS & GAS SPRINGS LIST

CAM UNIT	CODE	COIL SPRING	GAS SPRING (GS)
CS3-52-(00-40)	52-00	PSL 27X100	-
	52-05		
	52-10		
	52-15		
	52-20		
	52-25		
	52-30		
	52-35		
52-40			
CS3-52-(45-80)	52-45	PSL 27X100	
	52-50		
	52-55		
	52-60	PSL 27X75	
	52-65		
	52-70	PSL 27X45	
	52-75		
	52-80		

► Cam Unit - PCU-CS3-52-(00-40)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS3-52-(00-40)**

Cam Dimension																Cam Diagram				
W	θ	A	B	C	E	F	H	J	K	L	V	V1	a	c	h	M	X	Y	α	
52	00°	150	105	45	43	82	21	7	15	30	59	60	105	68	68	15	19.3	22.9	50°	
	05°	153.1	111.1	42	45.21	79.79	26										21.3	23	45°	
	10°	153.55	116.55	37	47.83	77.17	31										23.3	23.3	40°	
	15°	153.32	121.32	32	50.82	74.18	36	7	10								8	25.4	23.7	35°
	20°	153.38	126.38	27	55.10	69.90	40										15	27.6	24.4	30°
	25°	154.71	134.71	20	58.62	66.38	45										20	30	25.4	25°
	30°	153.28	136.28	17	63.31	61.69	49	7	7								27	32.6	26.5	20°
	35°	152.09	142.09	10	67.1	57.9	54										31	35.4	28.1	15°
	40°	149.14	145.14	4	71.93	53.07	58										36	38.6	30	10°

Spring Force											
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ		
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load						
19.3	14.7(1.5)	29.4(3)	245(25)	789(80.4)	980(99.9)	5.3	PCU-CS3	52	00°		
21.3									809(82.4)	5.2	05°
23.3									823(83.9)	5.1	10°
25.4									835(85.2)	5.0	15°
27.6									848(86.4)	5.0	20°
30.0									858(87.4)	5.0	25°
32.6									867(88.4)	5.0	30°
35.4									877(89.4)	4.9	35°
38.6									884(90.2)	5.0	40°

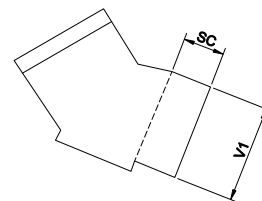
Order Type - Code-Size(W)-θ

Example - PCU-CS3-52-00



Alternations-

Option Code(OC)	Specifications
SC	The mount surface is extended in the range from 1 to 50 mm (in the increments of 1 mm)

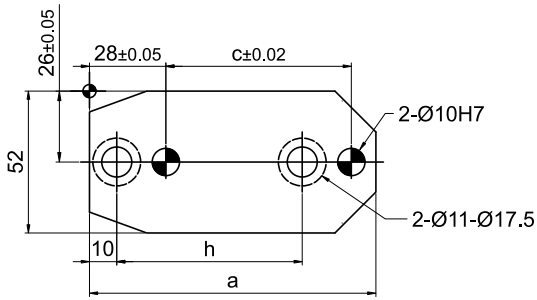
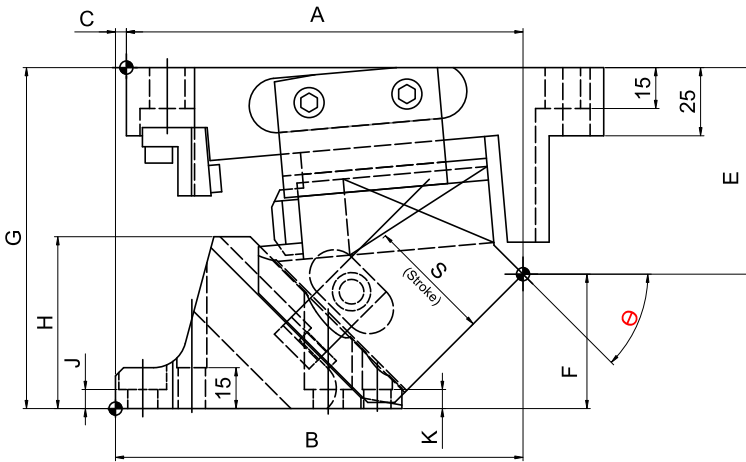
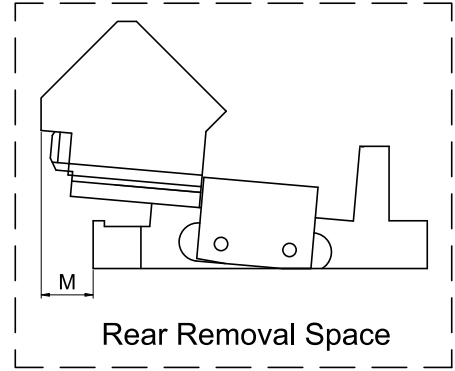
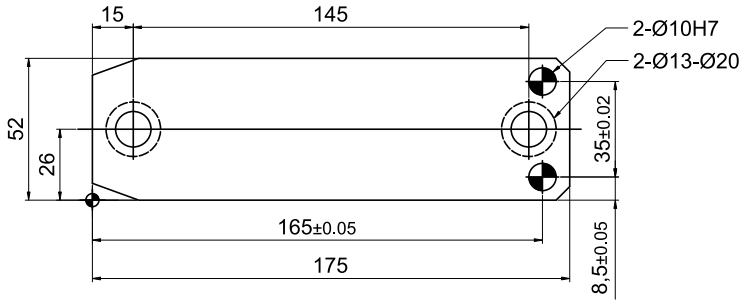


SC

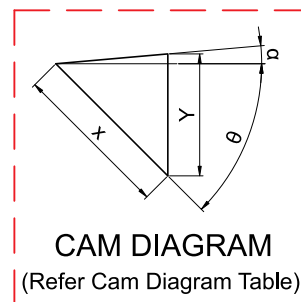
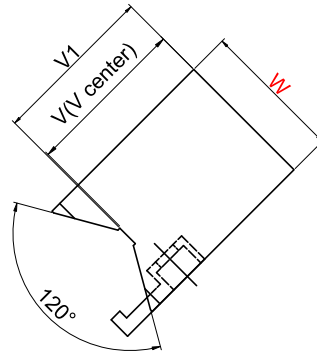
Order Type :- Code-Size(W)-θ-OC

Example :- PCU-CS3-52-00-SC

► Cam Unit - PCU-CS3-52-(45-80)



(Refer Cam Dimension Table)



▶ Cam Unit - PCU-CS3-52-(45-80)

Cam Dimension																	Cam Diagram			
W	θ	A	B	C	E	F	G	H	J	K	L	V	V1	a	c	h	M	X	Y	α
52	45°	145.41	149.41	4	75.73	49.27	125	63	7	7	30	59	60	105	68	68	31	42.3	32.5	5°
	50°	143.92	152.92	9	79.43	45.57		67	32								46.7	35.7		
	55°	144.67	154.67	10	82.97	42.03		73	33								52.3	42.8		
	60°	150.69	159.69	9	90.28	34.72		74	26								60	51.9		
	65°	130.16	175.16	45	99.54	25.46	73	12	15	20	70	70	111	55	55	43	47.3	42.9	0°	
	70°	133.62	173.62	40	106.97	18.03	72.5	38								58.5	54.9			
	75°	148.74	178.74	30	124.59	25.41	150	83	12	10	110	47	46.3	44.8						
	80°			30					10	110	55	55	47	57.5	56.7					

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
42.3	14.7(1.5)	29.4(3.0)	245(25.0)	894(91.2)	980(99.9)	5.0	PCU-CS3	52	45°
46.7				902(91.9)		5.0			50°
52.3				909(92.7)		5.0			55°
60.0				919(93.7)		5.2			60°
47.3			327(33.3)	981(100.0)	912(93.0)	5.9			65°
58.5					925(94.4)	5.9			70°
46.3					910(92.8)	7.8			75°
57.5					436(44.5)	556(56.7)			7.7

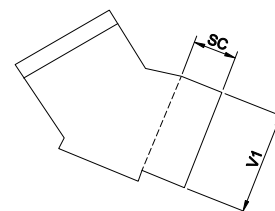
Order Type - Code-Size(W)-θ
Example - PCU-CS3-52-45



Alternations-

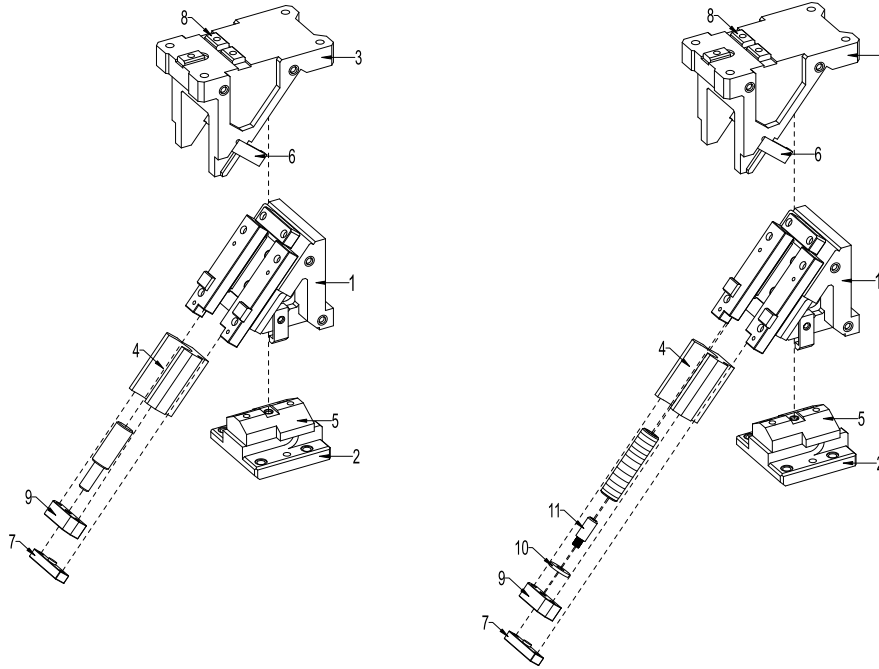
Option Code(OC)	Specifications
SC	The mount surface is extended in the range from 1 to 50 mm (in the increments of 1 mm)

Order Type :- Code-Size(W)-θ-OC
Example :- PCU-CS3-52-45-SC



SC

► Wide Arial Cam Unit for Piercing-PCU-CS4



BILL OF MATERIAL

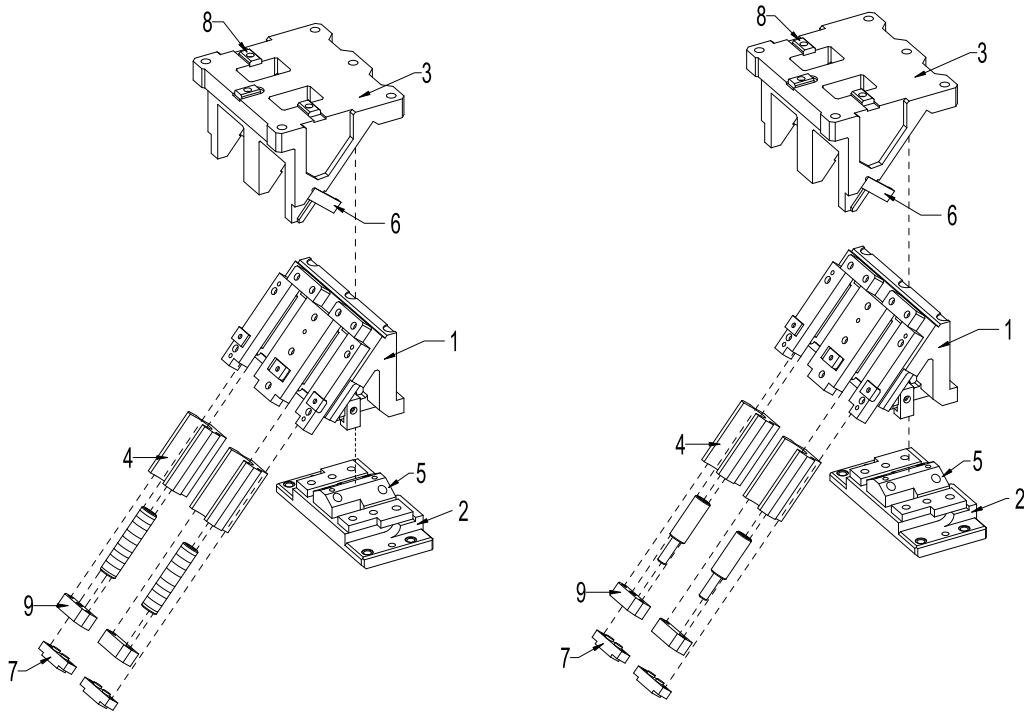
CAM CODE	SR.NO.	PART NAME	MATERIAL
CAM UNIT PCU-CS4	1	CAM SLIDER	SG600/3
	2	CAM DRIVER	SG600/3
	3	CAM HOLDER	SG600/3
	4	SPRING GUIDE BLOCK	SG600/3
	5	BASE PALTE C-L	BRONZE
	6	POSITIVE RETURN FOLLOWER	En8
	7	SAFETY PLATE	En8
	8	KEY	En8
	9	STOPPER PLATE	En8
	10	WASHER	En8
	11	SPRING GUIDE PIN	En8

SPRINGS & GAS SPRINGS LIST

CAM UNIT	CODE	COIL SPRING	GAS SPRING (GS)
CS4-200-(00-40)	200-00	PSM 50X225	NFS-S1-750-63
	200-05		
	200-10		
	200-15		
	200-20		
	200-30		
CS4-200-(50-60)	200-50	PSM 50X225	NFS-S1-750-63
	200-60		
	200-40		
CS4-300-(00-40)	300-00	PSM 50X225	NFS-S1-750-63
	300-05		
	300-10		
	300-15		
	300-20		
	300-30		
CS4-300-(50-60)	300-50	PSM 50X225	NFS-S1-750-63
	300-60		
CS4-400-(00-40)	400-00	PSM 50X225	NFS-S1-750-63
	400-05		
	400-10		
	400-15		
	400-20		
	400-30		

CAM UNIT	CODE	COIL SPRING	GAS SPRING (GS)
CS4-400-(00-40)	400-30	PSM 50X225	NFS-S1-750-63
	400-40		
CS4-400-(50-60)	400-50	PSM 50X225	NFS-S1-750-63
	400-60		
CS4-500-(00-40)	500-00	PSM 50X225	NFS-S1-750-63
	500-05		
	500-10		
	500-15		
	500-20		
CS4-500-(50-60)	500-30	PSM 50X225	NFS-S1-750-63
	500-40		
	500-50		
	500-60		
CS4-600-(00-40)	600-00	PSM 50X225	NFS-S1-750-63
	600-05		
	600-10		
	600-15		
	600-20		
	600-30		
CS4-600-(50-60)	600-50	PSM 50X225	NFS-S1-750-63
	600-60		

► Wide Arial Cam Unit for Piercing-PCU-CS4



BILL OF MATERIAL

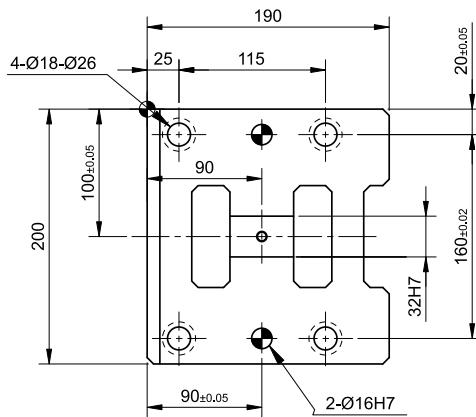
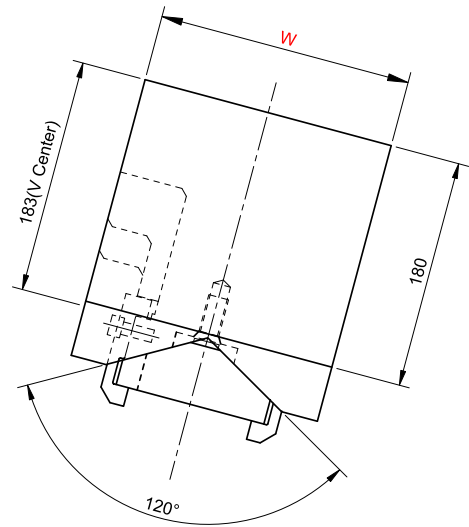
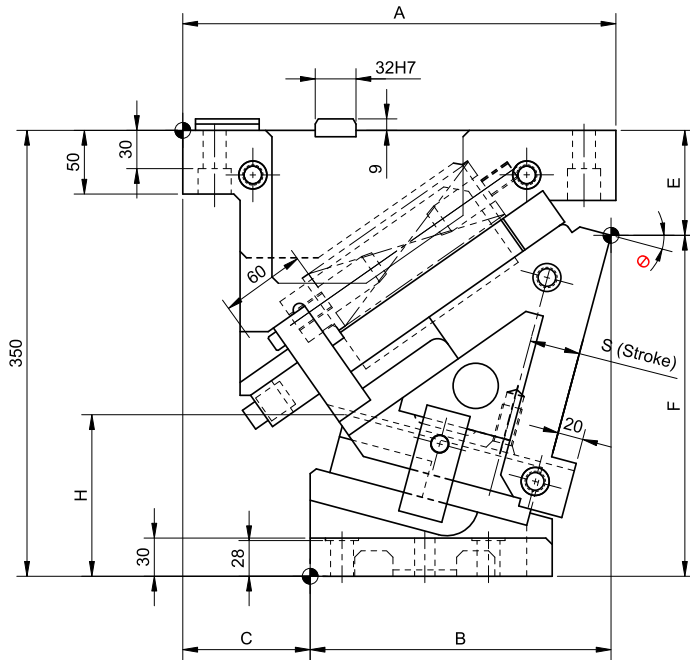
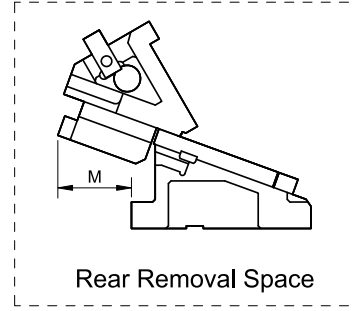
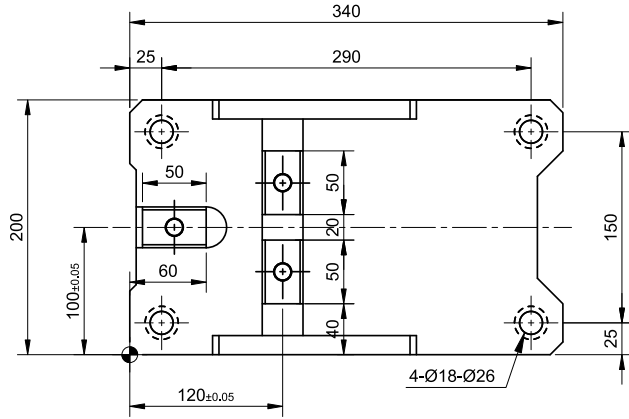
CAM CODE	SR. NO.	PART NAME	MATERIAL
CAM UNIT PCU-CS4	1	CAM SLIDER	SG600/3
	2	CAM DRIVER	SG600/3
	3	CAM HOLDER	SG600/3
	4	SPRING GUIDE BLOCK	SG600/3
	5	BASE PALTE C-L	BRONZE
	6	POSITIVE RETURN FOLLOWER	En8
	7	SAFETY PLATE	En8
	8	KEY A	En8
	9	STOPPER PLATE	En8

SPRINGS & GAS SPRINGS LIST

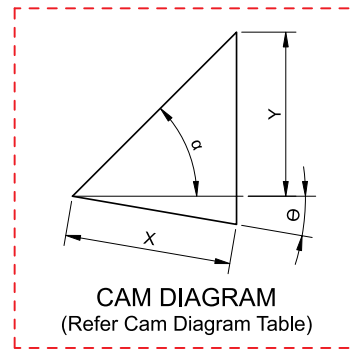
CAM UNIT	CODE	COIL SPRING	GAS SPRING (GS)
CS4-200-(00-40)	200-00	PSM 50X225	NFS-S1-750-63
	200-05		
	200-10		
	200-15		
	200-20		
	200-30		
CS4-200-(50-60)	200-40	PSM 50X225	NFS-S1-750-63
	200-50		
	200-60		
CS4-300-(00-40)	300-00	PSM 50X225	NFS-S1-750-63
	300-05		
	300-10		
	300-15		
	300-20		
	300-30		
CS4-300-(50-60)	300-40	PSM 50X225	NFS-S1-750-63
	300-50		
	300-60		
CS4-400-(00-40)	400-00	PSM 50X225	NFS-S1-750-63
	400-05		
	400-10		
	400-15		
	400-20		
	400-30		

CAM UNIT	CODE	COIL SPRING	GAS SPRING (GS)
CS4-400-(00-40)	400-30	PSM 50X225	NFS-S1-750-63
	400-40		
CS4-400-(50-60)	400-50	PSM 50X225	NFS-S1-750-63
	400-60		
CS4-500-(00-40)	500-00	PSM 50X225	NFS-S1-750-63
	500-05		
	500-10		
	500-15		
	500-20		
	500-30		
CS4-500-(50-60)	500-40	PSM 50X225	NFS-S1-750-63
	500-50		
	500-60		
CS4-600-(00-40)	600-00	PSM 50X225	NFS-S1-750-63
	600-05		
	600-10		
	600-15		
	600-20		
	600-30		
CS4-600-(50-60)	600-40	PSM 50X225	NFS-S1-750-63
	600-50		
	600-60		

► Wide Arial Cam Unit for Piercing-PCU-CS4



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-200-(00-40)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
200	00°	313	175	138	58	292	102	47	38.6	46	50°
	05°	320.64	195.64	125	64.34	285.66	110.8	61	42.6	46.1	45°
	10°	331.08	216.08	115	72.47	277.53	119.1	70	46.7	46.7	40°
	15°	336.17	236.17	100	82.37	267.63	126.8	80	50.9	47.6	35°
	20°	340.76	255.76	85	94	256	133.9	88	55.3	48.9	30°
	30°	347.83	292.83	55	112.25	237.75	155.7	103	65.1	53.1	20°
	40°	351.17	326.17	25	136.66	213.34	173.9	116	77.1	60	10°

Spring Force											
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ		
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load						
38.6	117.7(12)	235.4(24)	817(83.3)	4372(445.8)	4903(500)	95.0	PCU-CS4	200	00°		
42.6									4427(451.4)	94.8	05°
46.7									4467(455.5)	94.6	10°
50.9									4501(459.0)	93.3	15°
55.3									4535(462.5)	92.7	20°
65.1									4590(468.0)	92.7	30°
77.1									4638(472.9)	94.2	40°

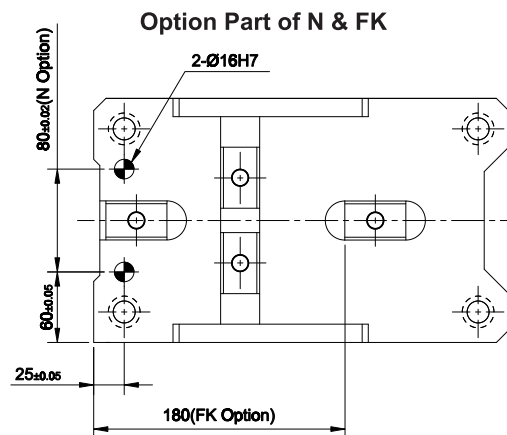
Order Type - Code-Size(W)- θ
Example - PCU-CS4-200-00



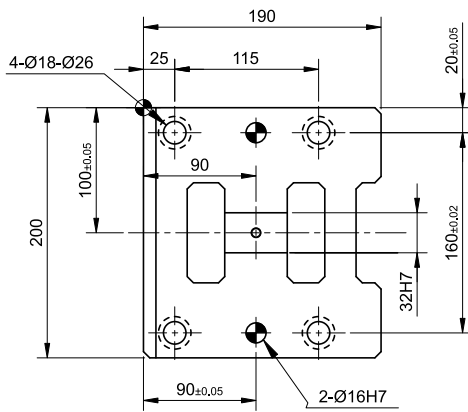
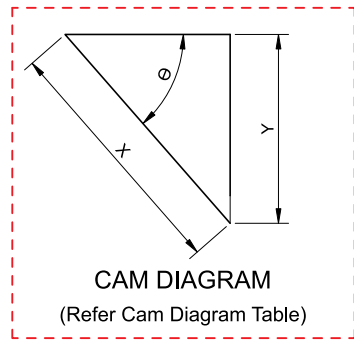
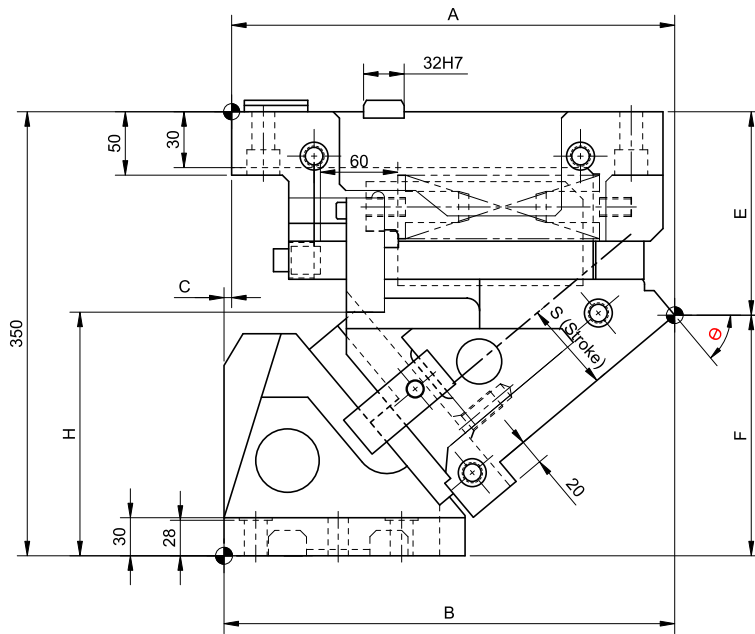
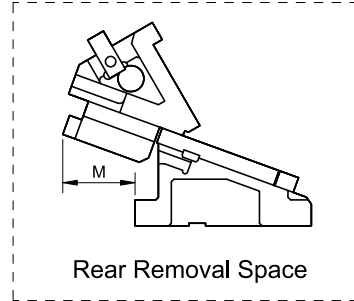
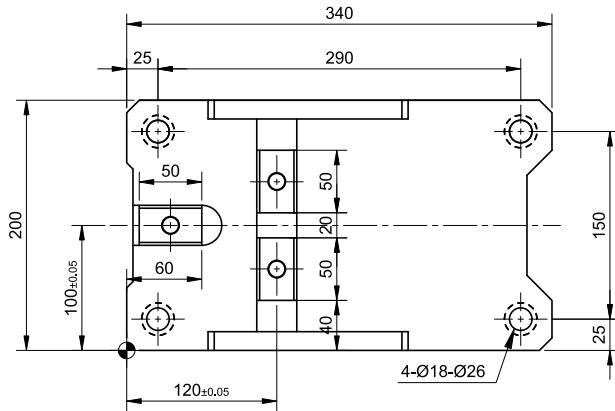
Alternations-

Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2- ϕ 16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

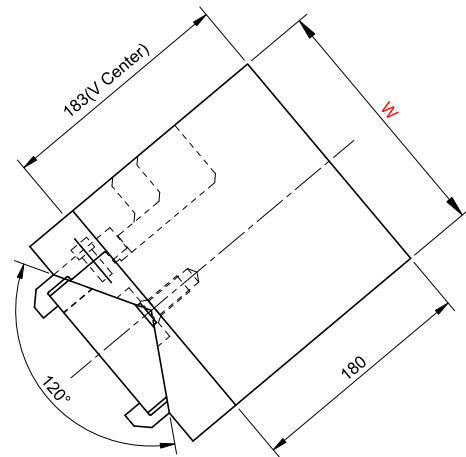
Order Type:- Code-Size(W)- θ -OC
Example:- PCU-CS4-200-00-N



► Cam Unit - PCU-CS4-200-(50-60)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-200-(50-60)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
200	50°	348.77	354.77	6	161.49	188.51	192.8	126	93.3	71.5	0°
	60°	332.75	377.75	45	195.83	154.17	202.1	152	120	103.9	

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
93.3	117.7(12.0)	235.4(24.0)	817(83.3)	4685(477.8)	4903(500.0)	93.7	PCU-CS4	200	50°
120.0				4733(482.6)		97.3			60°

Order Type - Code-Size(W)-θ
Example - PCU-CS4-200-50

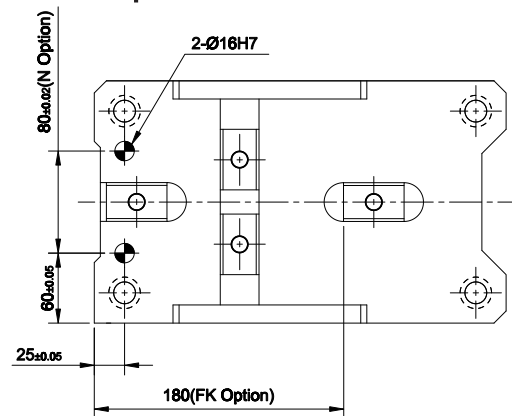


Alternations-

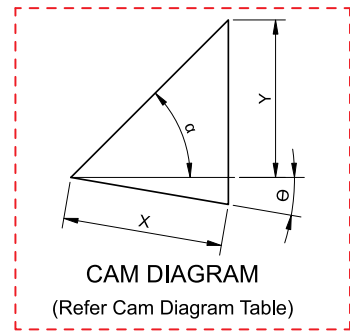
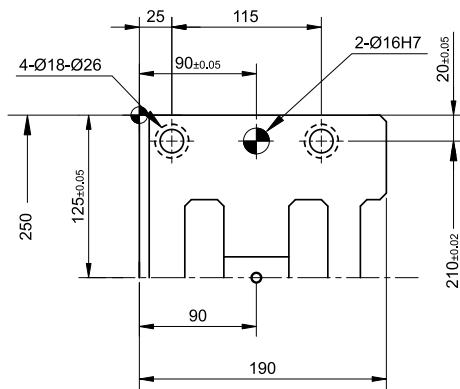
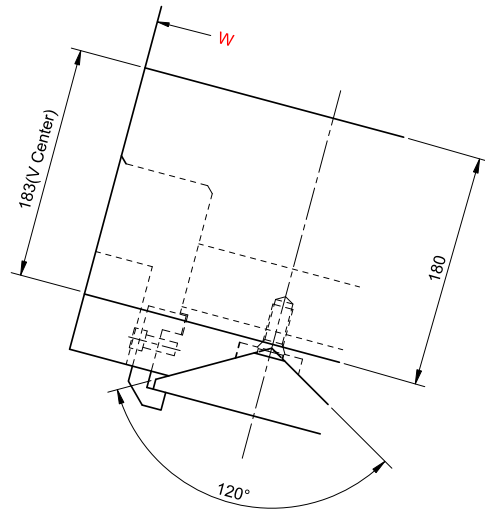
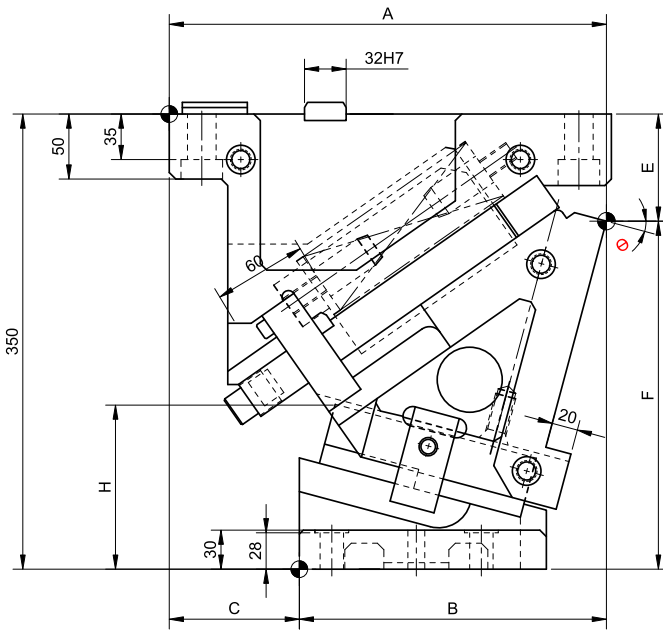
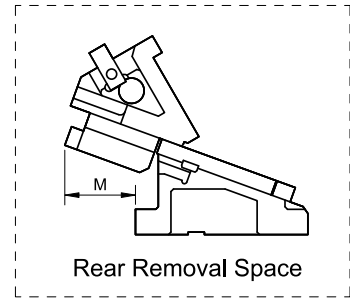
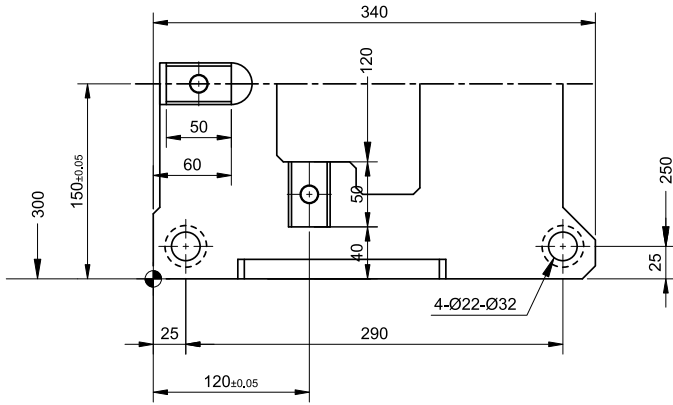
Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2-ø16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

Order Type:- Code-Size(W)-θ-OC
Example:- PCU-CS4-200-50-N

Option Part of N & FK



► **Cam Unit - PCU-CS4-300-(00-40)**



(Refer Cam Dimension Table)

► **Cam Unit - PCU-CS4-300-(00-40)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
300	00°	313	175	138	58	292	102	47	38.6	46	50°
	05°	320.64	195.64	125	64.34	285.66	110.8	61	42.6	46.1	45°
	10°	331.08	216.08	115	72.47	277.53	119.1	70	46.7	46.7	40°
	15°	336.17	236.17	100	82.37	267.63	126.8	80	50.9	47.6	35°
	20°	340.76	255.76	85	94	256	133.9	88	55.3	48.9	30°
	30°	347.83	292.83	55	112.25	237.75	155.7	103	65.1	53.1	20°
	40°	351.17	326.17	25	136.66	213.34	173.9	116	77.1	60	10°

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
38.6	196.1(20)	392.3(40)	1634(166.7)	8744(891.6)	9806(1000)	137.2	PCU-CS4	300	00°
42.6				8853(902.8)		135.9			05°
46.7				8935(911.1)		135.7			10°
50.9				9003(918)		133.0			15°
55.3				9071(925)		131.5			20°
65.1				9180(936.1)		131.0			30°
77.1				9275(945.8)		133.3			40°

Order Type - Code-Size(W)-θ

Example - PCU-CS4-300-00



Alternations-

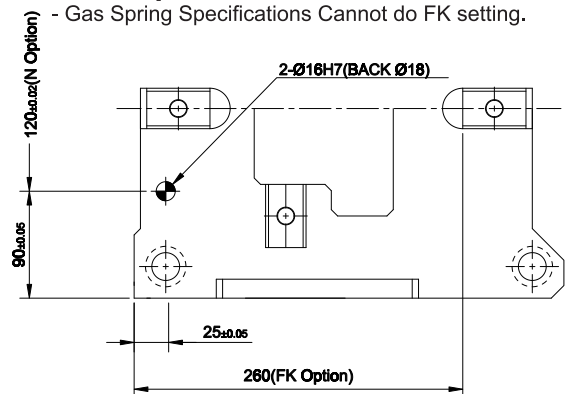
Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2-ø16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

Order Type:- Code-Size(W)-θ-OC

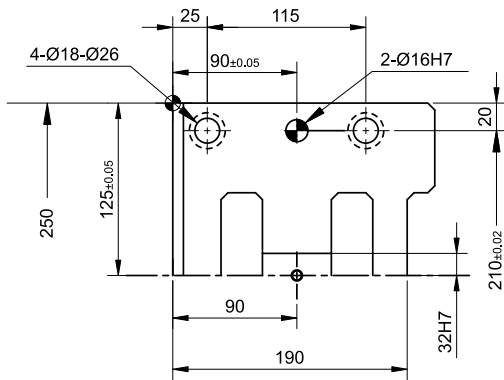
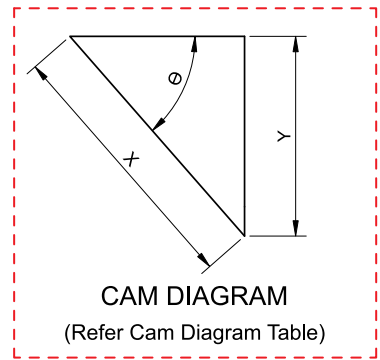
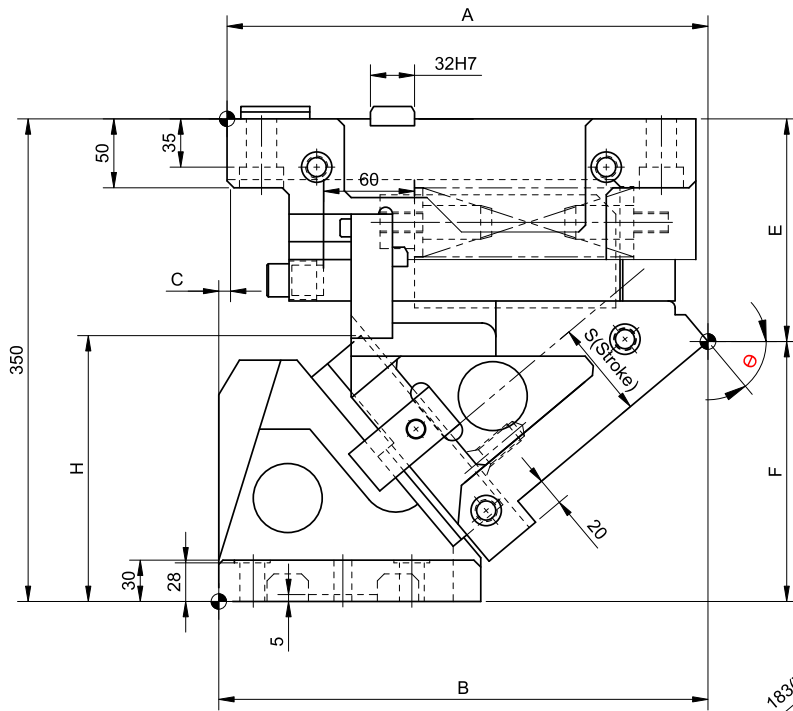
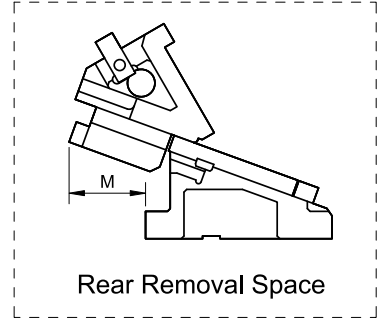
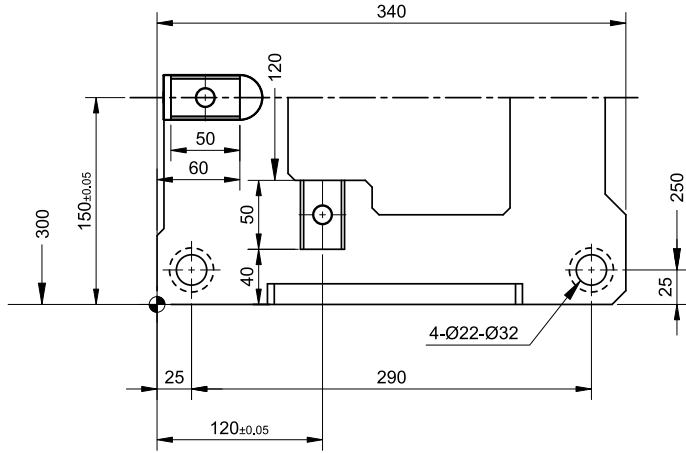
Example:- PCU-CS4-300-00-N

Option Part of N & FK

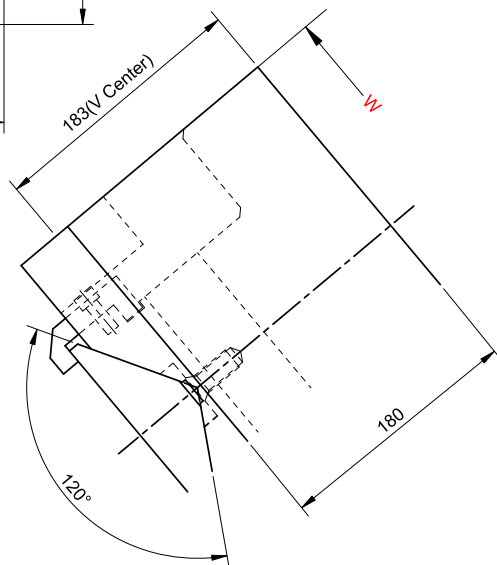
- Gas Spring Specifications Cannot do FK setting.



► Cam Unit - PCU-CS4-300-(50-60)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-300-(50-60)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
300	50°	348.77	354.77	6	161.49	188.51	192.8	126	93.3	71.5	0°
	60°	332.75	377.75	45	195.83	154.17	202.1	152	120	103.9	

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog No.	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
93.3	196.1(20.0)	392.3(40.0)	1634(166.7)	9371(955.5)	9806(1000.0)	130.9	PCU-CS4	300	50°
120.0				9466(965.3)		136.1	PCU-CS4		60°

Order Type - Code-Size(W)-θ
Example - PCU-CS4-300-50



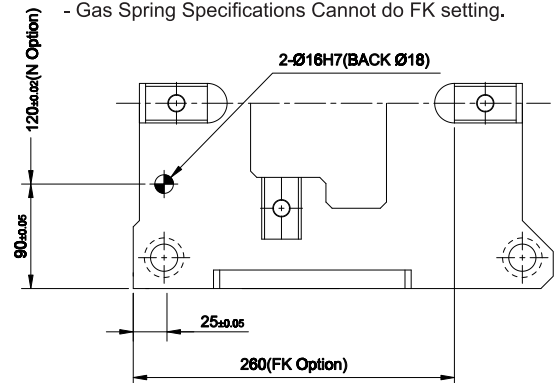
Alternations-

Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2-∅16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

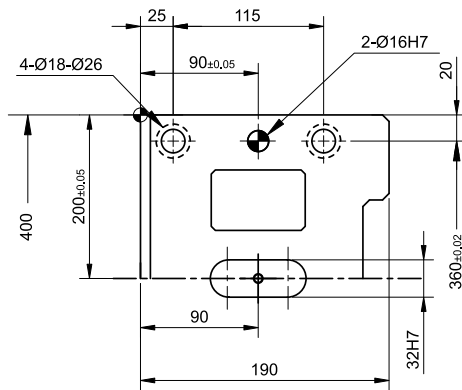
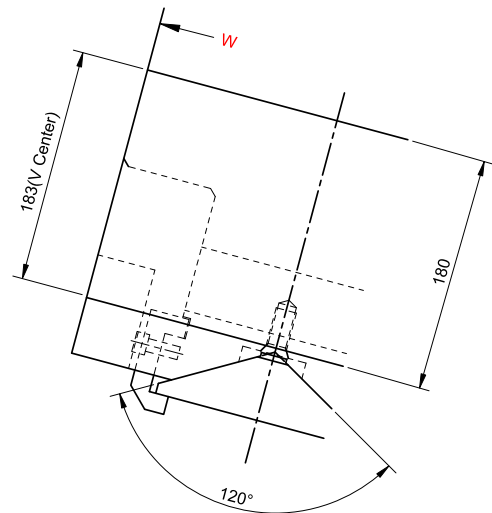
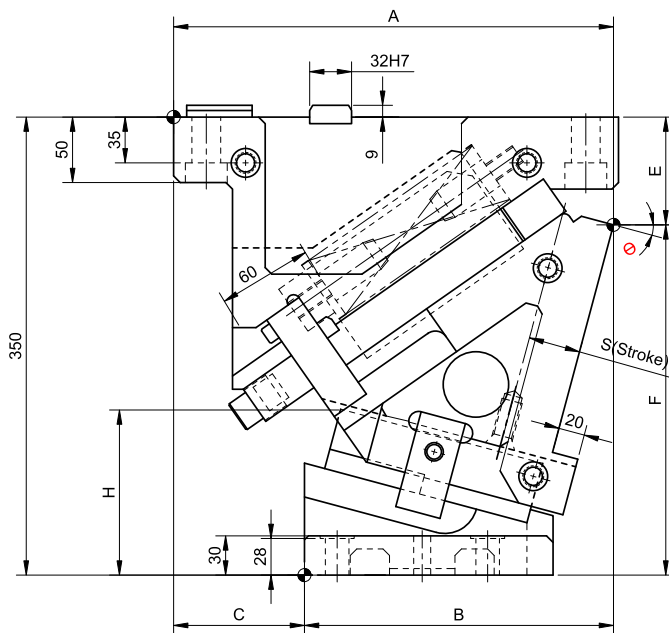
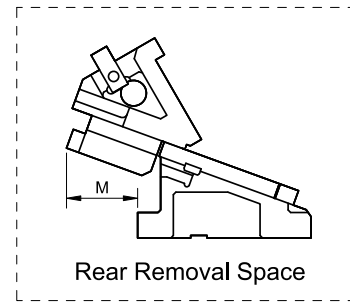
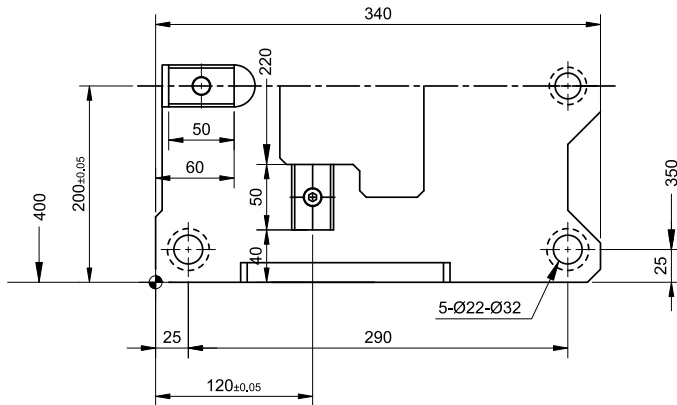
Order Type:- Code-Size(W)-θ-OC
Example:- PCU-CS4-300-50-N

Option Part of N & FK

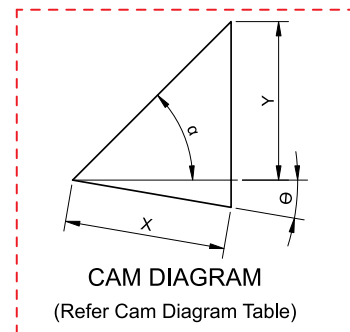
- Gas Spring Specifications Cannot do FK setting.



► Cam Unit - PCU-CS4-400-(00-40)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-400-(00-40)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
400	00°	313	175	138	58	292	102	47	38.6	46	50°
	05°	320.64	195.64	125	64.34	285.66	110.8	61	42.6	46.1	45°
	10°	331.08	216.08	115	72.47	277.53	119.1	70	46.7	46.7	40°
	15°	336.17	236.17	100	82.37	267.63	126.8	80	50.9	47.6	35°
	20°	340.76	255.76	85	94	256	133.9	88	55.3	48.9	30°
	30°	347.83	292.83	55	112.25	237.75	155.7	103	65.1	53.1	20°
	40°	351.17	326.17	25	136.66	213.34	173.9	116	77.1	60	10°

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog No.	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
38.6	245.2(25)	490.3(50)	1634(166.7)	8744(891.6)	9806(1000)	191.1	PCU-CS4	400	00°
42.6				8853(902.8)		189.3			05°
46.7				8935(911.1)		188.0			10°
50.9				9003(918)		186.1			15°
55.3				9071(925)		185.3			20°
65.1				9180(936.1)		185.8			30°
77.1				9275(945.8)		191.9			40°

Order Type - Code-Size(W)-θ
Example - PCU-CS4-400-00



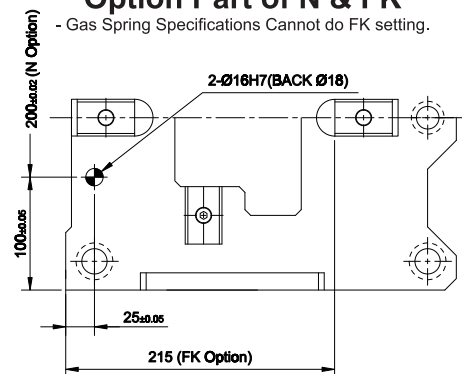
Alternations-

Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2-∅16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

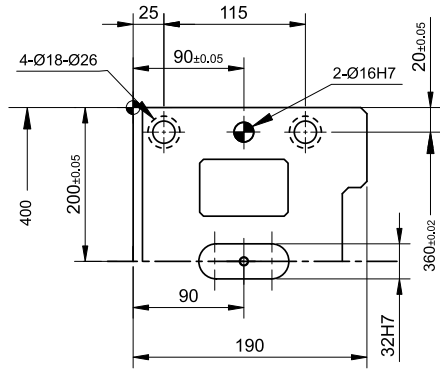
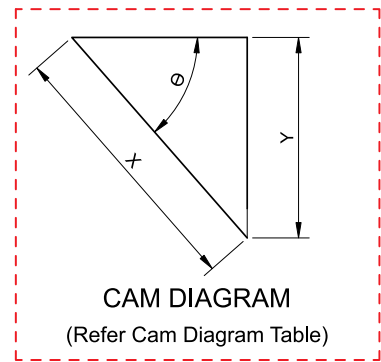
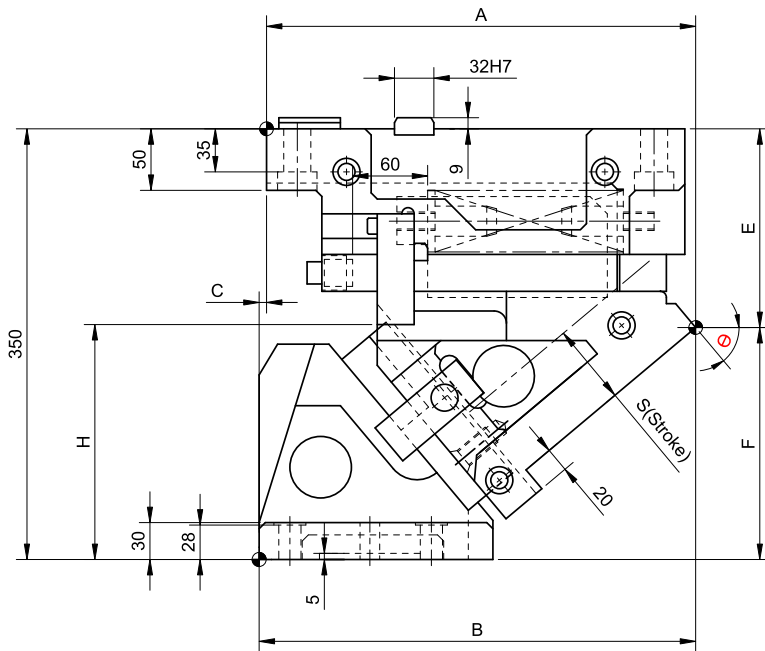
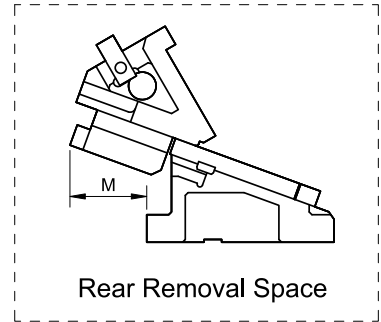
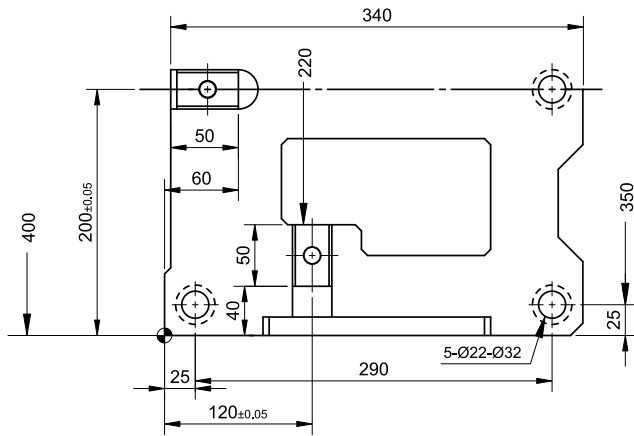
Order Type:- Code-Size(W)-θ-OC
Example:- PCU-CS4-400-00-N

Option Part of N & FK

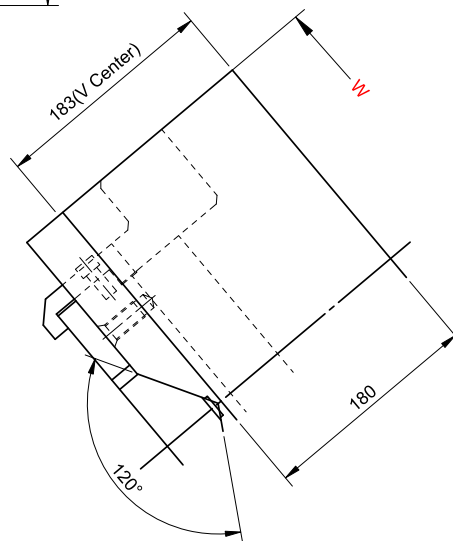
- Gas Spring Specifications Cannot do FK setting.



► Cam Unit - PCU-CS4-400-(50-60)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-400-(50-60)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
400	50°	348.77	354.77	6	161.49	188.51	192.8	126	93.3	71.5	0°
	60°	332.75	377.75	45	195.83	154.17	202.1	152	120	103.9	

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
93.3	245.2(25.0)	490.3(50.0)	1634(166.7)	9371(955.5)	9806(1000.0)	191.8	PCU-CS4	400	50°
120.0				9466(965.3)		201.1			60°

Order Type - Code-Size(W)- θ

Example - PCU-CS4-400-50

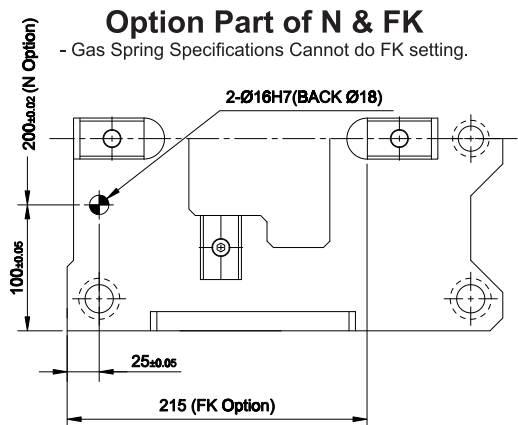


Alternations-

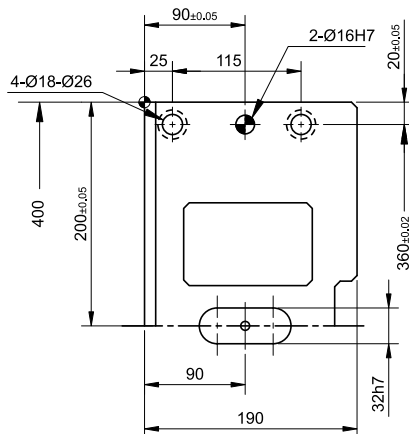
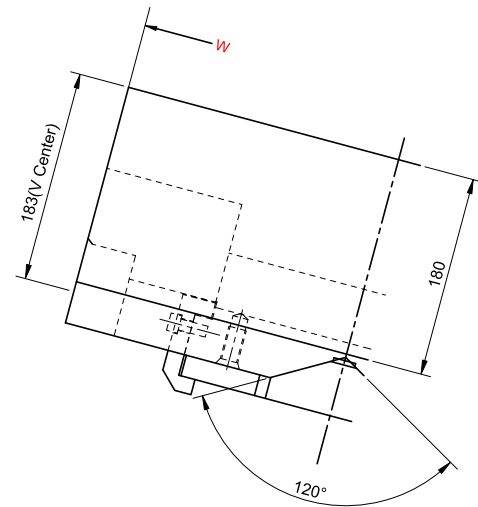
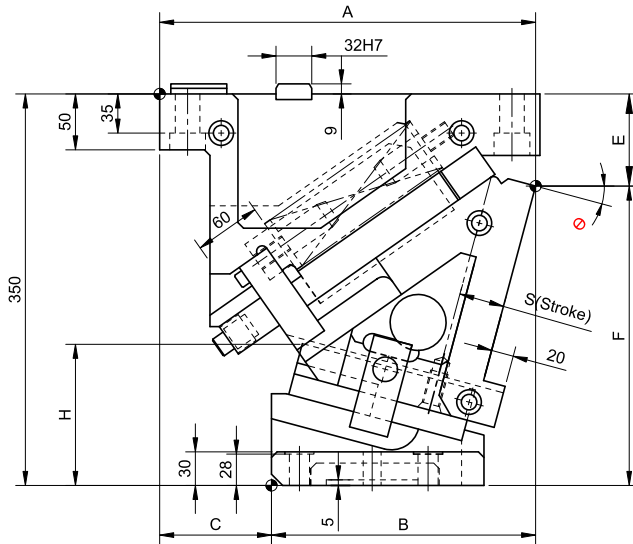
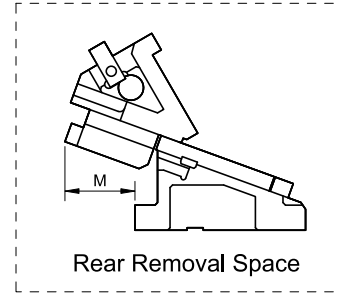
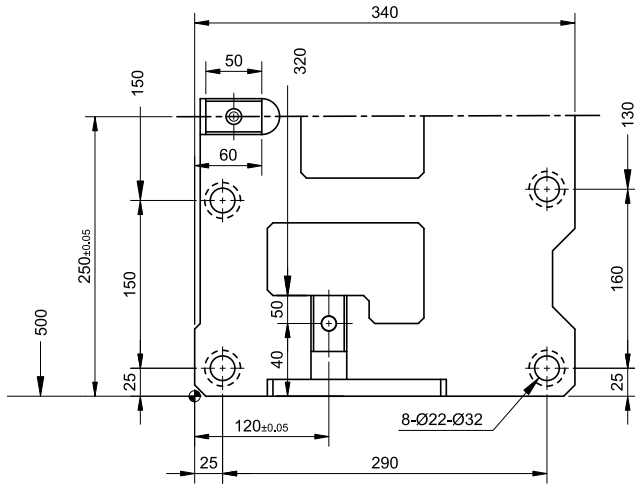
Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2- ϕ 16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

Order Type:- Code-Size(W)- θ -OC

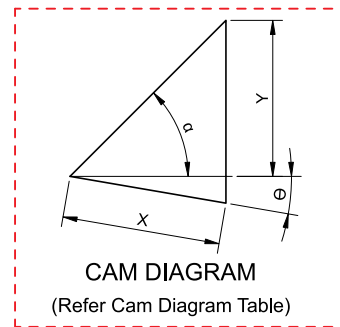
Example:- PCU-CS4-400-50-N



► Cam Unit - PCU-CS4-500-(00-40)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-500-(00-40)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
500	00°	313	175	138	58	292	102	47	38.6	46	50°
	05°	320.64	195.64	125	64.34	285.66	110.8	61	42.6	46.1	45°
	10°	331.08	216.08	115	72.47	277.53	119.1	70	46.7	46.7	40°
	15°	336.17	236.17	100	82.37	267.63	126.8	80	50.9	47.6	35°
	20°	340.76	255.76	85	94	256	133.9	88	55.3	48.9	30°
	30°	347.83	292.83	55	112.25	237.75	155.7	103	65.1	53.1	20°
	40°	351.17	326.17	25	136.66	213.34	173.9	116	77.1	60	10°

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
38.6	313.8(32)	627.6(64)	2452(250)	13116(1337.5)	14710(1500)	222.3	PCU-CS4	500	00°
42.6				13280(1354.1)		220.4			05°
46.7				13402(1366.6)		218.8			10°
50.9				13504(1377.0)		216.3			15°
55.3				13606(1387.5)		215.1			20°
65.1				13770(1404.1)		216.1			30°
77.1				13913(1418.7)		220.4			40°

Order Type - Code-Size(W)-θ
Example - PCU-CS4-500-00



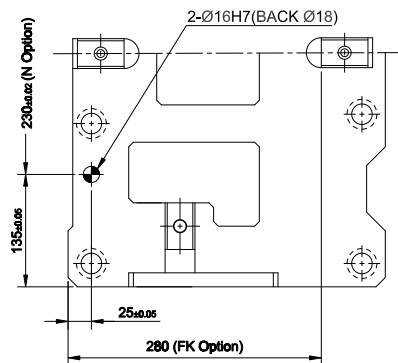
Alternations-

Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2-∅16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

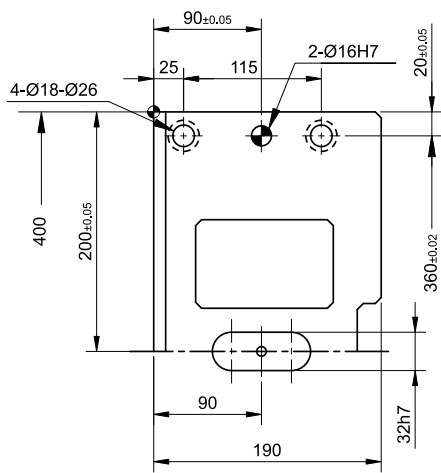
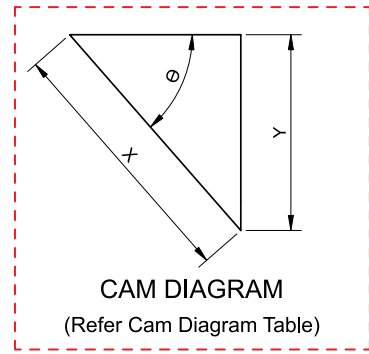
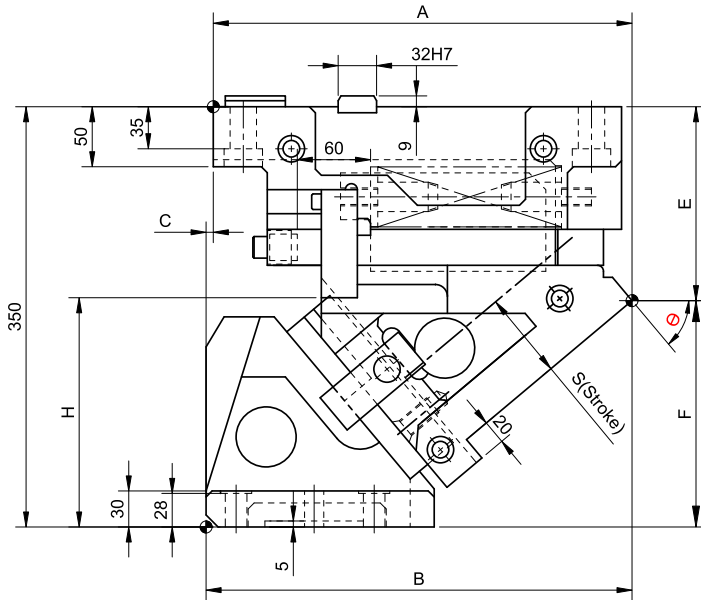
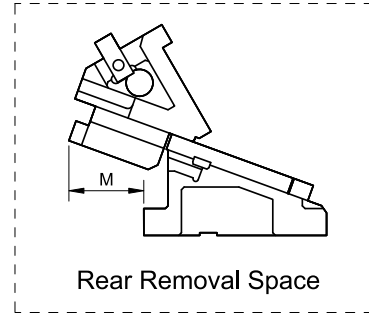
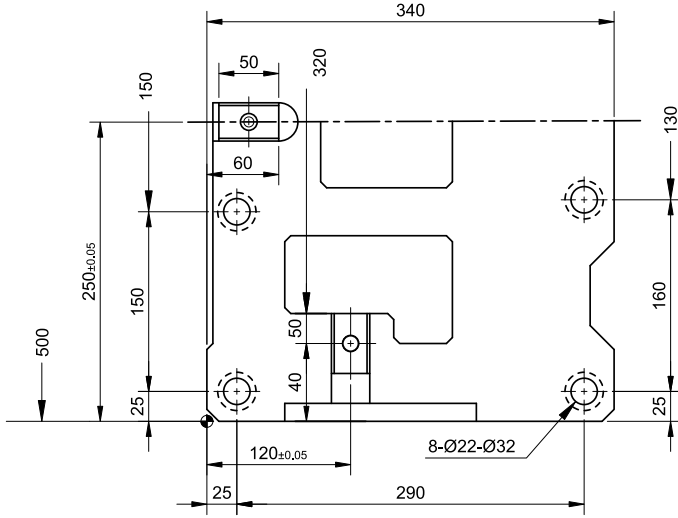
Order Type:- Code-Size(W)-θ-OC
Example:- PCU-CS4-500-00-N

Option Part of N & FK

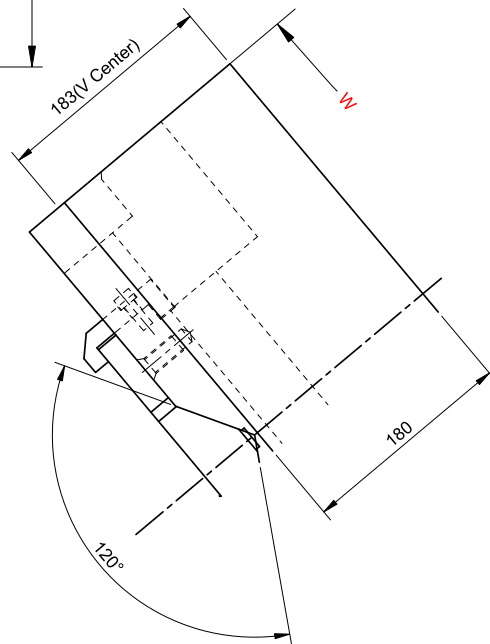
- Gas Spring Specifications Cannot do FK setting.



► Cam Unit - PCU-CS4-500-(50-60)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-500-(50-60)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
500	50°	348.77	354.77	6	161.49	188.51	192.8	126	93.3	71.5	0°
	60°	332.75	377.75	45	195.83	154.17	202.1	152	120	103.9	

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
93.3	313.8(32.0)	627.6(64.0)	2452(250.0)	14056(1433.3)	14710(1500.0)	220.1	PCU-CS4	500	50°
120.0				14199(1447.9)		236.5			60°

Order Type - Code-Size(W)- θ
Example - PCU-CS4-500-50



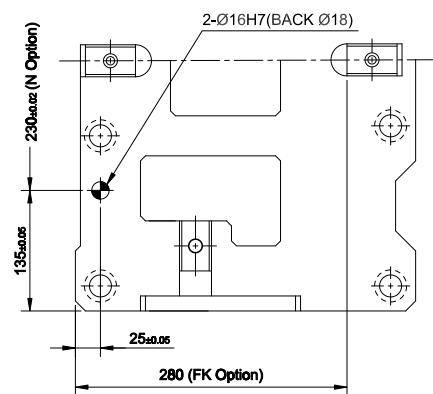
Alternations-

Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2- ϕ 16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

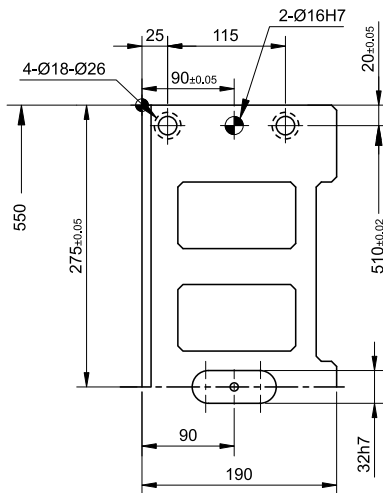
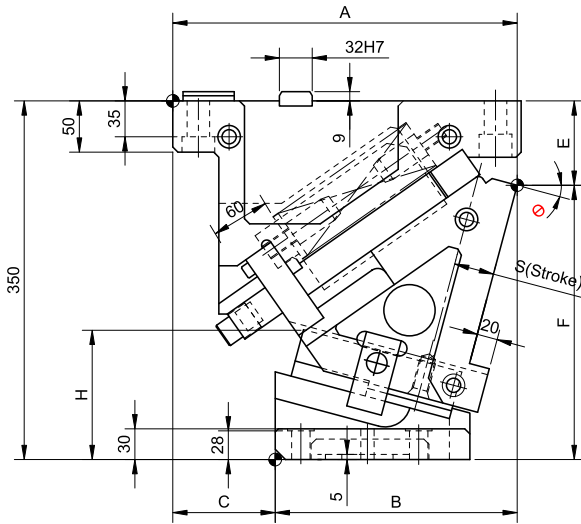
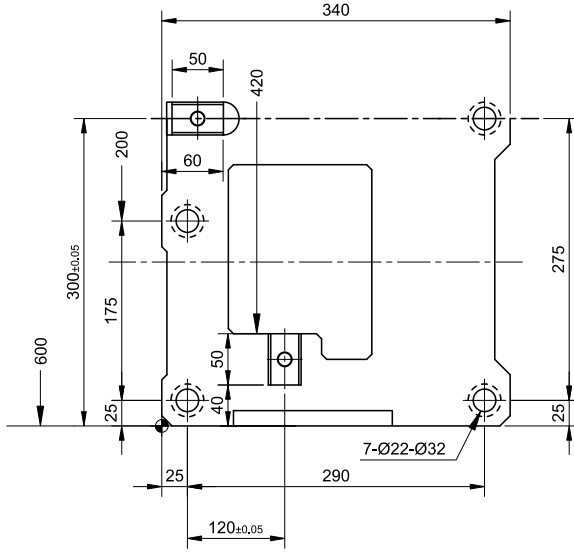
Order Type:- Code-Size(W)- θ -OC
Example:- PCU-CS4-500-50-N

Option Part of N & FK

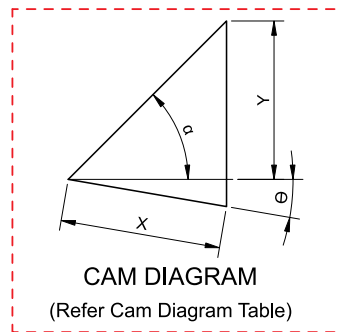
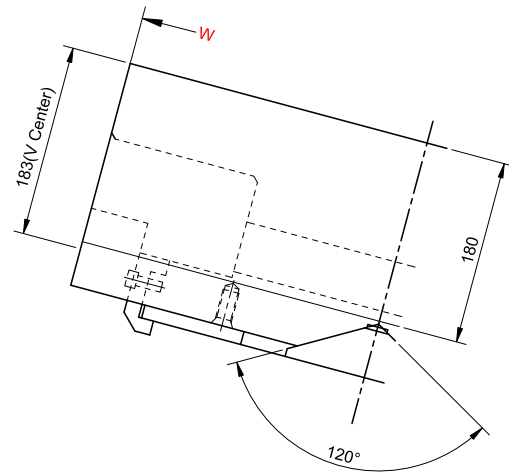
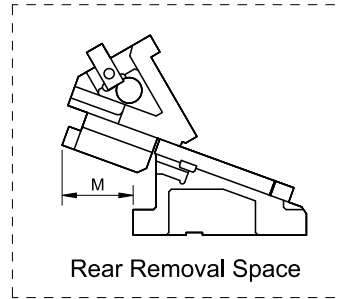
- Gas Spring Specifications Cannot do FK setting.



► Cam Unit - PCU-CS4-600-(00-40)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-600-(00-40)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
600	00°	313	175	138	58	292	102	47	38.6	46	50°
	05°	320.64	195.64	125	64.34	285.66	110.8	61	42.6	46.1	45°
	10°	331.08	216.08	115	72.47	277.53	119.1	70	46.7	46.7	40°
	15°	336.17	236.17	100	82.37	267.63	126.8	80	50.9	47.6	35°
	20°	340.76	255.76	85	94	256	133.9	88	55.3	48.9	30°
	30°	347.83	292.83	55	112.25	237.75	155.7	103	65.1	53.1	20°
	40°	351.17	326.17	25	136.66	213.34	173.9	116	77.1	60	10°

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
38.6	392.3(40)	783.6(79.9)	3269 (333.3)	17488(1783.3)	19613(1999.9)	281.4	PCU-CS4	600	00°
42.6				17706(1805.5)		277.9			05°
46.7				17869(1822.2)		274.1			10°
50.9				18006(1836.1)		272.3			15°
55.3				18142(1850)		268.8			20°
65.1				18360(1872.2)		276.6			30°
77.1				18550(1891.6)		285.2			40°

Order Type - Code-Size(W)-θ

Example - PCU-CS4-600-00

Option Part of N & FK

- Gas Spring Specifications Cannot do FK setting.

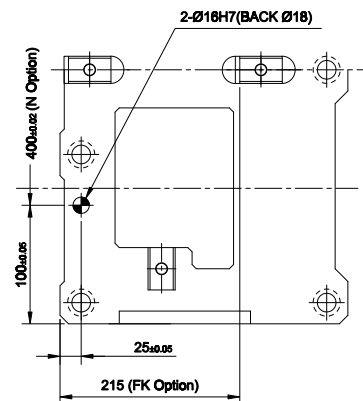


Alternations-

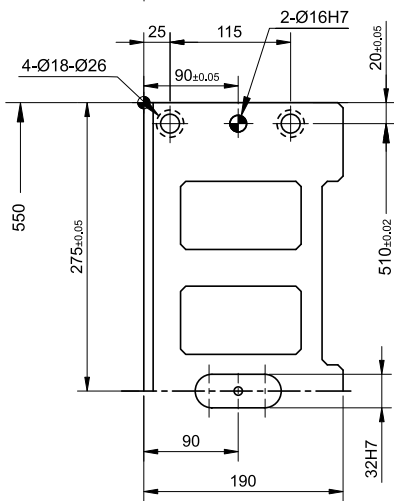
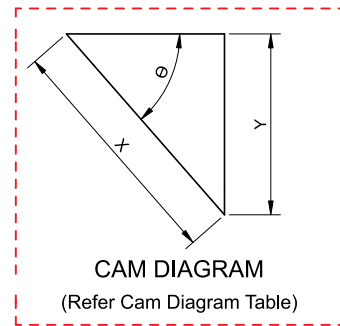
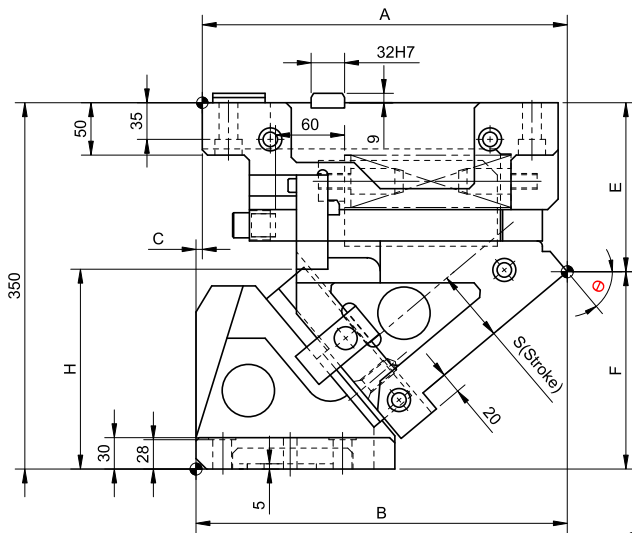
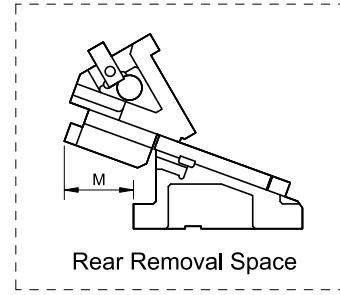
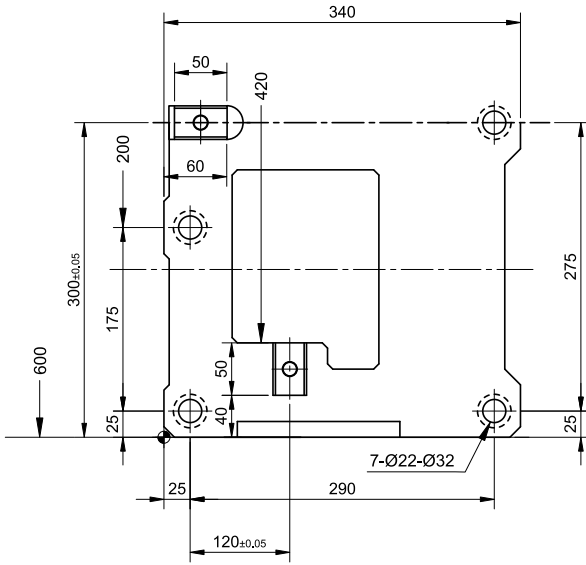
Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2-ø16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

Order Type:- Code-Size(W)-θ-OC

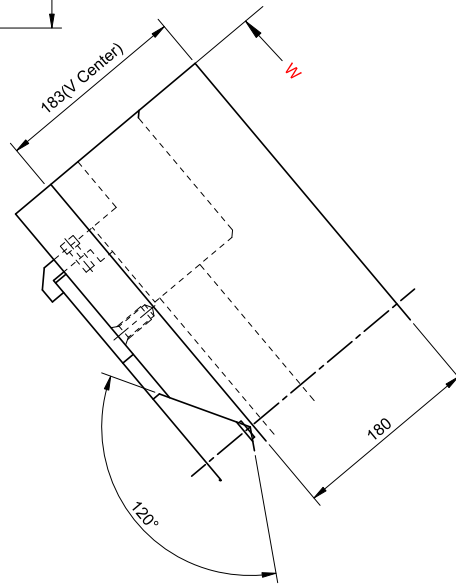
Example:- PCU-CS4-600-00-N



► Cam Unit - PCU-CS4-600(50-60)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS4-600(50-60)**

Cam Dimension									Cam Diagram		
W	θ	A	B	C	E	F	H	M	X	Y	α
600	50°	348.77	354.77	6	161.49	188.51	192.8	126	93.3	71.5	0°
	60°	332.75	377.75	45	195.83	154.17	202.1	152	120	103.9	

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5mm before bottom dead center	Max. load				
93.3	392.3(40.0)	783.6(79.9)	3269(333.3)	18741(1911.1)	19613(1999.9)	283.5	PCU-CS4	600	50°
120.0				18932(1930.5)		295.6			60°

Order Type - Code-Size(W)-θ

Example - PCU-CS4-600-50



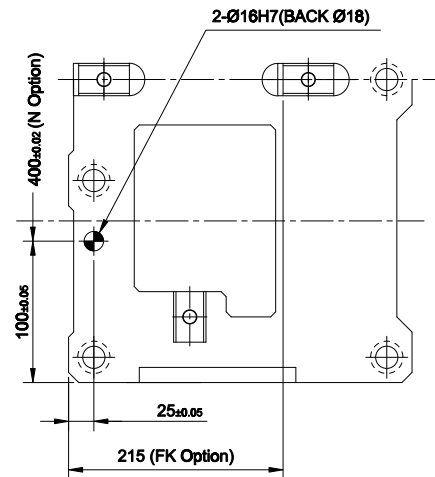
Alternations-

Option Code(OC)	Specifications
K	A key for driver is attached.(It is not assembled to the main unit)
N	Add Dowel Hole 2-ø16 H7 Dowel Holes On Cam Holder
FK	Move Key Position Move Forward The Locating Key On Cam Holder
GS	CAM With Gas Spring. NFS-S1-750-63

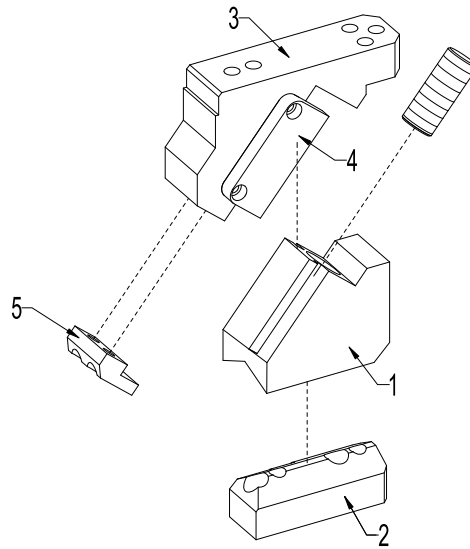
Order Type:- Code-Size(W)-θ-OC

Example:- PCU-CS4-600-50-N

Option Part of N & FK
- Gas Spring Specifications Cannot do FK setting.



▶ Compact Arial Cam Unit for Heavy Load Piercing-PCU-CS5



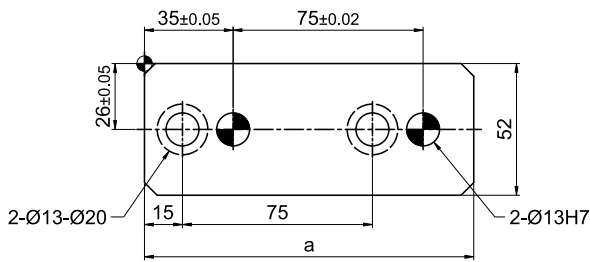
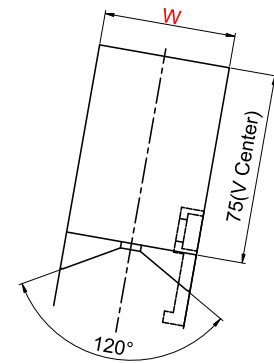
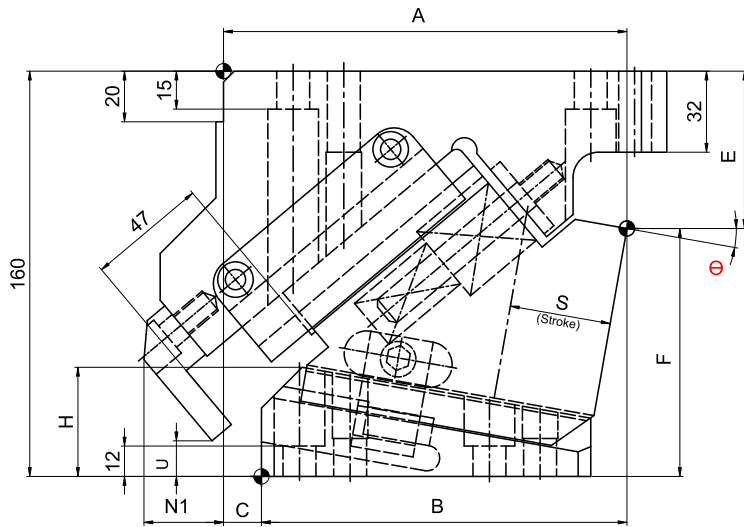
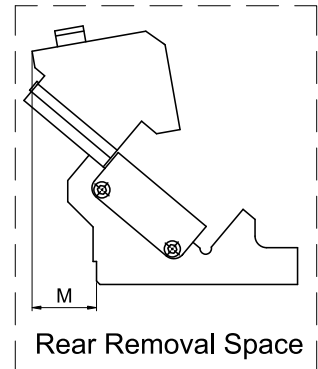
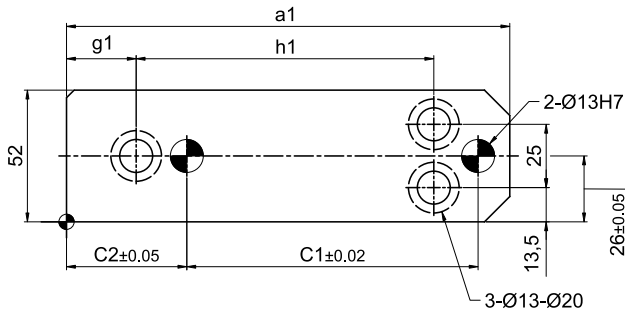
BILL OF MATERIAL

CAM CODE	SR. NO	PART NAME	MATERIAL
CAM UNIT PCU-CS5	1	CAM SLIDER	SG600/3
	2	CAM DRIVER	SG600/3
	3	CAM HOLDER	SG600/3
	4	SLIDE KEEPER	En8
	5	STOPPER PLATE	En8

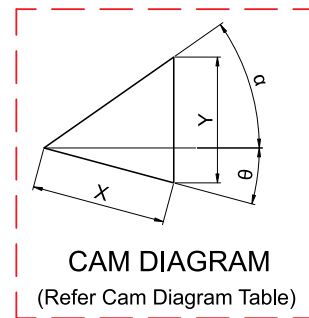
SPRINGS & GAS SPRINGS LIST

CAM UNIT	CODE	COIL SPRING	GAS SPRING (GS)
CS5-52-(00-20)	52-00	PSF 20X80	-
	52-05		
	52-10		
	52-15		
	52-20		
CS5-52-(25-60)	52-25	PSF 20X80	
	52-30		
	52-35		
	52-40		
	52-45		
	52-50		
	52-55	PSF 20X70	
	52-60	PSF 20X45	

► Cam Unit - PCU-CS5-52-(00-20)



(Refer Cam Dimension Table)



CAM DIAGRAM
(Refer Cam Diagram Table)

► Cam Unit - PCU-CS5-52-(00-20)

Cam Dimension																	Cam Diagram			
W	θ	A	B	C	E	F	H	N1	U	a	a1	c1	c2	g1	h1	M	X	Y	α	
52	00°	160	125	35	42	118	41	21.5	10.73	125	175	115	47.5	27.5	117.5	43	30.2	36	50°	
	05°	161.1	136.1	25	53.31	106.69	40.1	24.35	13.01	54						33.4	36.1	45°		
	10°	159.28	144.28	15	62.11	97.89	42	31.41	17.9	65						36.6	36.6	50°		
	15°	168.99	151.49	17.5	66.32	93.68	49	25.48	25.1	185	120	52.5	32.5	122.5	64	39.9	37.3	35°		
	20°	169.72	169.72	0	76.86	83.14	48	27.07	29.7						69	43.3	38.3	30°		

Spring Force									
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ
	Standard working force	Max. working force	Preload	5 mm before bottom dead center	Max. load				
30.2	29.4(3)	58.8(6)	30(3.1)	1378(140.5)	3111(317.2)	8.8	PCU-CS5	52	00°
33.4				1555(158.6)		8.6			05°
36.6				1689(172.2)		8.7			10°
39.9				1800(183.5)		9.0			15°
43.3				1911(194.9)		8.9			20°

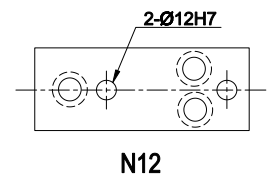
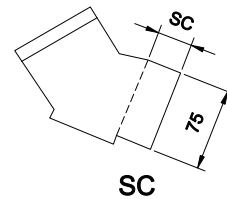
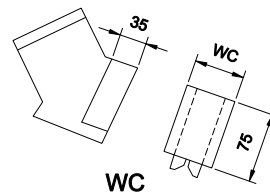
Order Type - Code-Size(W)- θ

Example - PCU-CS5-52-00



Alternations-

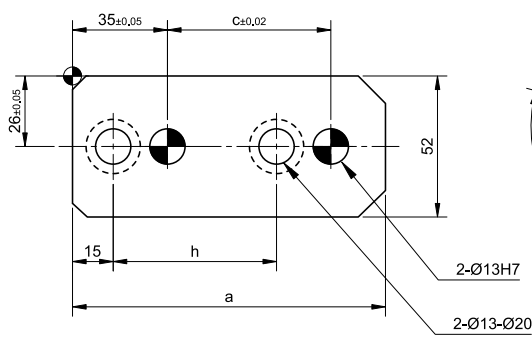
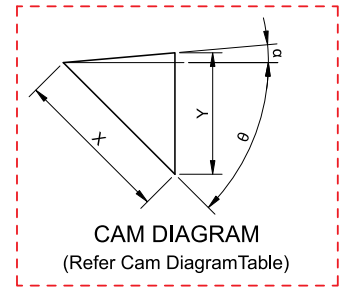
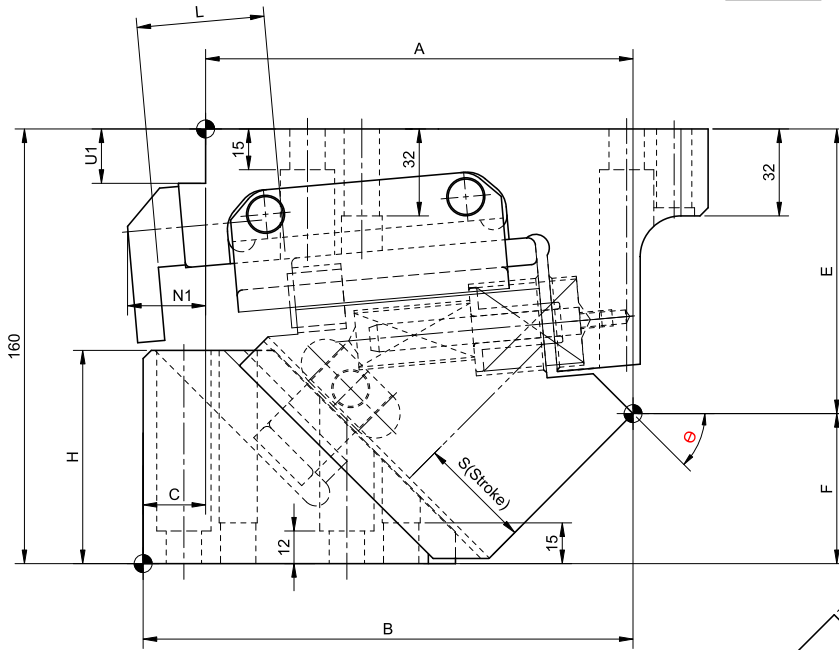
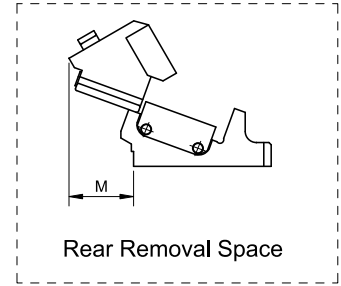
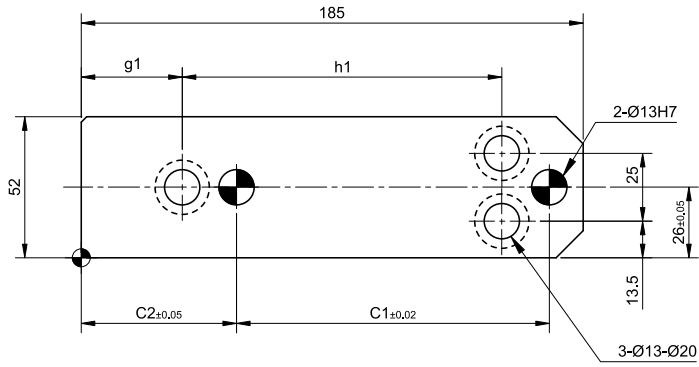
Option Code(OC)	Specifications
WC	The mounting surface width (W) is changed within the range 53 mm-120 mm (1mm increments)
SC	The mount surface is extended in the range from 1 to 50 mm (in the increments of 1 mm)
N12	Dowel Pin holes of cam holder and cam driver are changed to $\varnothing 12H7$



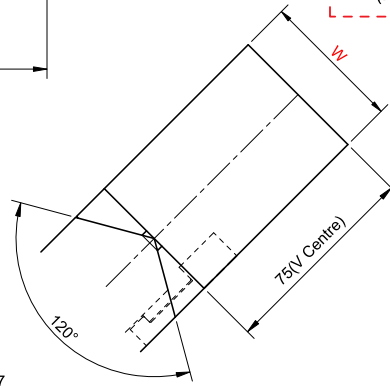
Order Type:- Code-Size(W)- θ -OC

Example:- PCU-CS5-52-00-WC

► Cam Unit - PCU-CS5-52-(25-60)



(Refer Cam Dimension Table)



► **Cam Unit - PCU-CS5-52-(25-60)**

Cam Dimension																			Cam Diagram			
W	θ	A	B	C	E	F	H	L	N1	U1	a	c	c1	c2	g1	h	h1	M	X	Y	α	
52	25°	168.92	181.92	13	81.63	78.37	55	47	28.68	20	140	75	120	52.5	32.5	75	122.5	78	47	39.7	25°	
	30°	166.59	184.09	17.5	85.55	74.45	63		30.31									87	51	41.6	20°	
	35°	163.72	193.72	30	92.52	67.48	68		30.99									94	55.4	44	15°	
	40°	163.80	173.80	10	98.47	61.53	70		27.24									96	60.4	47	10°	
	45°	157.35	180.35	23	104.78	55.22	78.5	28.57	103		66.2	50.9	5°									
	50°	159.37	174.37	15	103.89	56.11	93	20	99		73.1	56	0°									
	55°	152.53	182.53	30	111.09	48.91		37	15		100	64.5		52.8								
	60°	142.95	157.95	15	113.10	46.90		27	15		105	54		46.8								

Spring Force												
Slide Stroke S	Working force KN (tonf)		Spring load N (kgf)			Total weight kg	Catalog code	W	θ			
	Standard working force	Max. working force	Preload	5 mm before bottom dead center	Max. load							
47.0	29.4(3)	58.8(6)	30(3.1)	2000(203.9)	3111(317.2)	8.8	PCU-CS5	52	25°			
51.0									2089(213.0)	8.6	30°	
55.4									2178(222.0)	8.8	35°	
60.4									2244(228.8)	8.9	40°	
66.2									2333(237.9)	9.1	45°	
73.1									2400(244.7)	8.8	50°	
64.5									61(6.2)	2466(251.5)	8.9	55°
54.0									92(9.3)	2555(260.6)	8.5	60°

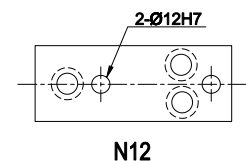
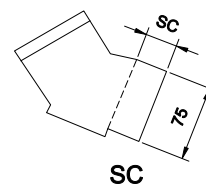
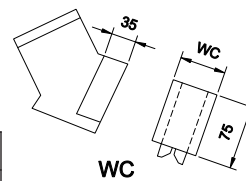
Order Type - Code-Size(W)-θ
Example - PCU-CS5-52-25



Alternations-

Option Code(OC)	Specifications
WC	The mounting surface width (W) is changed within the range 53 mm-120 mm (1mm increments)
SC	The mount surface is extended in the range from 1 to 50 mm (in the increments of 1 mm)
N12	Dowel Pin holes of cam holder and cam driver are changed to ø12H7

Order Type:- Code-Size(W)-θ-OC
Example:- PCU-CS5-52-25-WC



▶ Cam Unit Accessories



- Cam Upper Plates
- Cam Side Blocks
- Cam Slide Plates
- Cam Side Plates
- Cam Bottom Guide Plates
- Cam Bottom Slide Plates
- Cam Slide Guides Block
- Cam Center Upper Plates
- Cam Center Blocks
- Cam Stroke Plates
- Cam Pad Guide Plates
- Cam Positive Return Followers-Blocks
- Cam Positive Return Plates Copper Alloy
- Cam Positive Return Plates Sintered Type