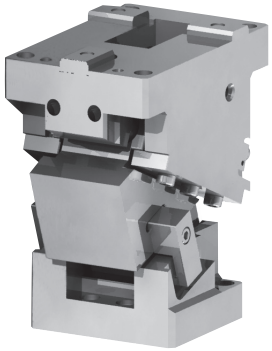
OUTLINE OF UCNBK



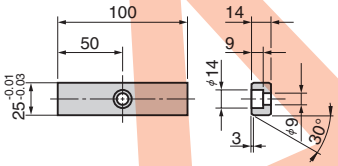
- High rigidity because of the box structure to keep the slider.
- V-shaped guide.
- 65, 100 and 200mm are available for the mounting width.
- Availables angle is 0˚ to 70˚ at increments of 5˚.

■ Option of UCNBK

● **Key Specification (-K)**

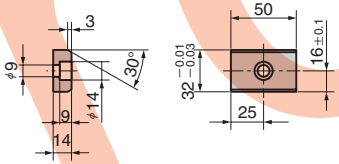
UCNBK65

LKU25-100 (with 2-M8 bolts)



UCNBK100/200

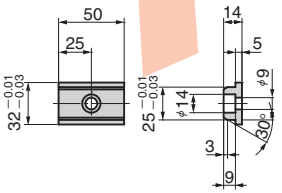
LKU32-50 (with 3-M8 bolts)



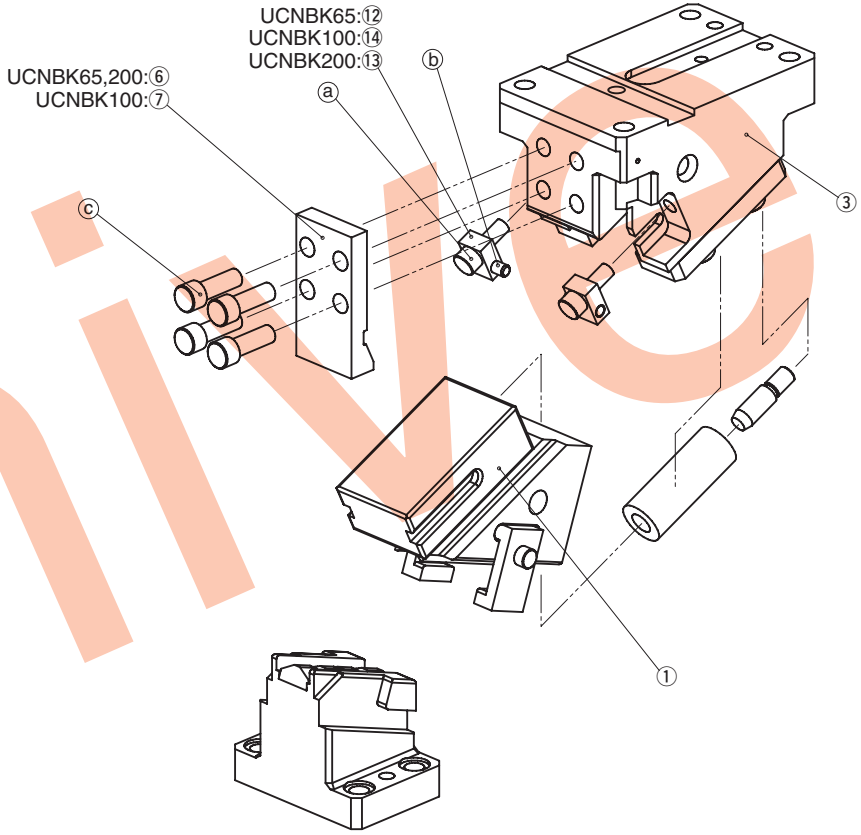
● **Metric Key Specification (-KA)**

UCNBK100/200

LKE25-32-50 (with 3-M8 bolts)



■ UCNBK Structure and Assembly / Disassembly



● Disassembly method of UCNBK

1) Loosen hexagon socket head bolt (ⓐ) and remove plate (UCNBK65:⑫ UCNBK100:⑭ UCNBK200:⑬) and dowel pin (ⓑ).
2) Loosen hexagon socket head bolt (ⓒ) and remove stopper plate (UCNBK65,200:⑥ UCNBK100:⑦).
3) Pull and remove cam slider (①) from cam holder (③) to the rear.

● Assembly method of UCNBK

1) Assemble components in the reverse order of disassembly.
   - Make sure that there is no foreign matter on the sliding area and assemble components.
   - The clearance between the cam slider and the cam holder is controlled. Match the stamped serial number on the holder and slider before assembly.
   - When cam is disassembled and then reassembled, please do not forget to assemble all bolts provided.

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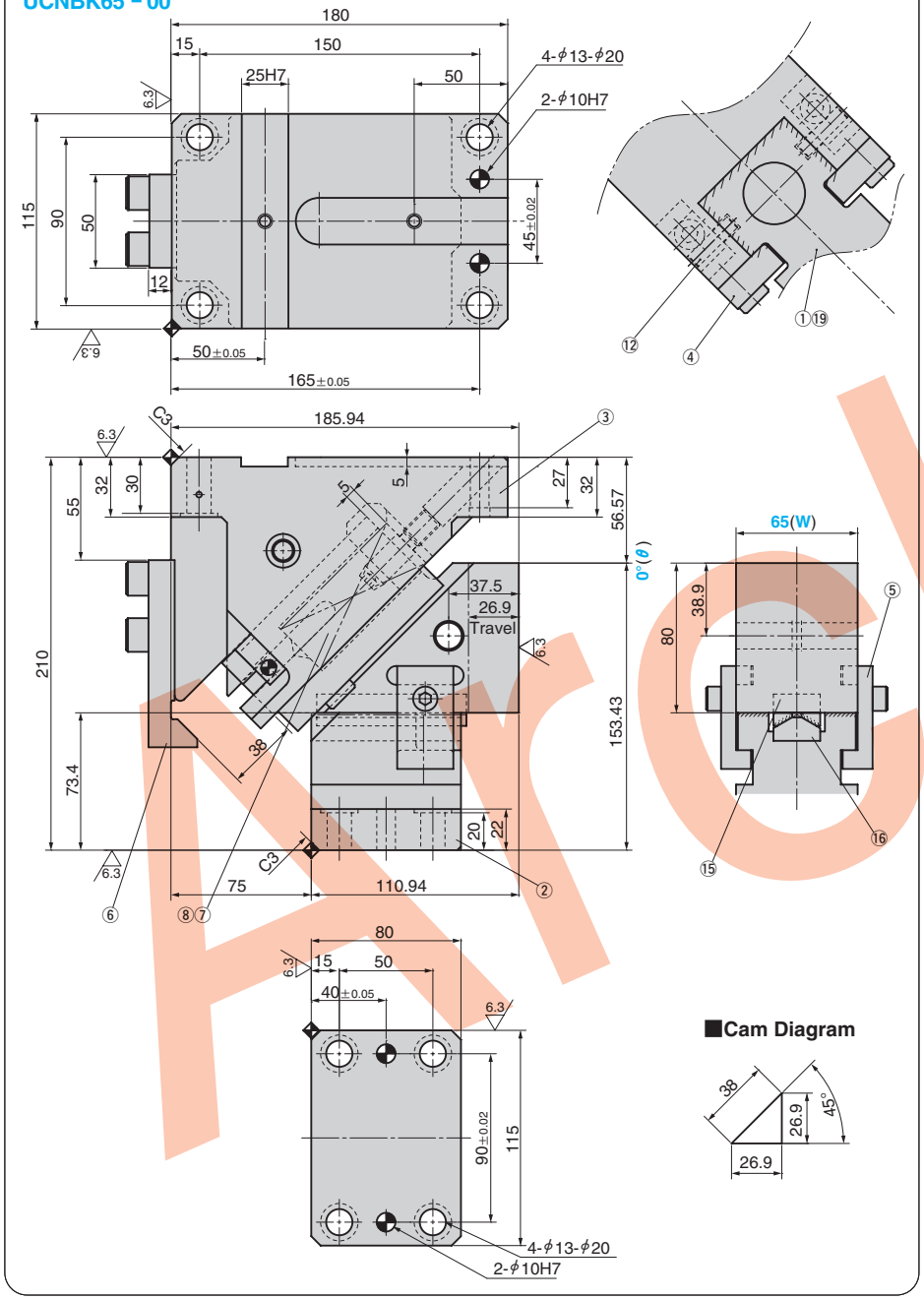
CAD FILE

UCNBK65 – 00



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
26.9	19.6 (2.0)	39.2 (4.0)	166.3 (17.0)	1069.2 (109.0)	1349 (137.6)	UCNBK	65	00

Order

Catalog No.	W	–	θ
UCNBK	65	–	00

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 00 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

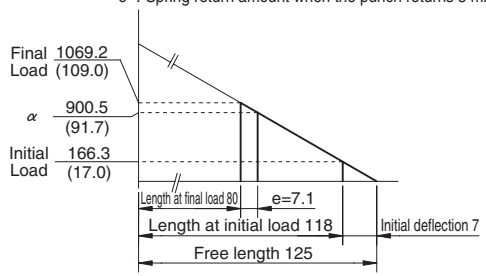
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 500,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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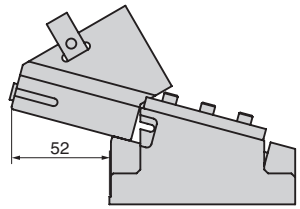

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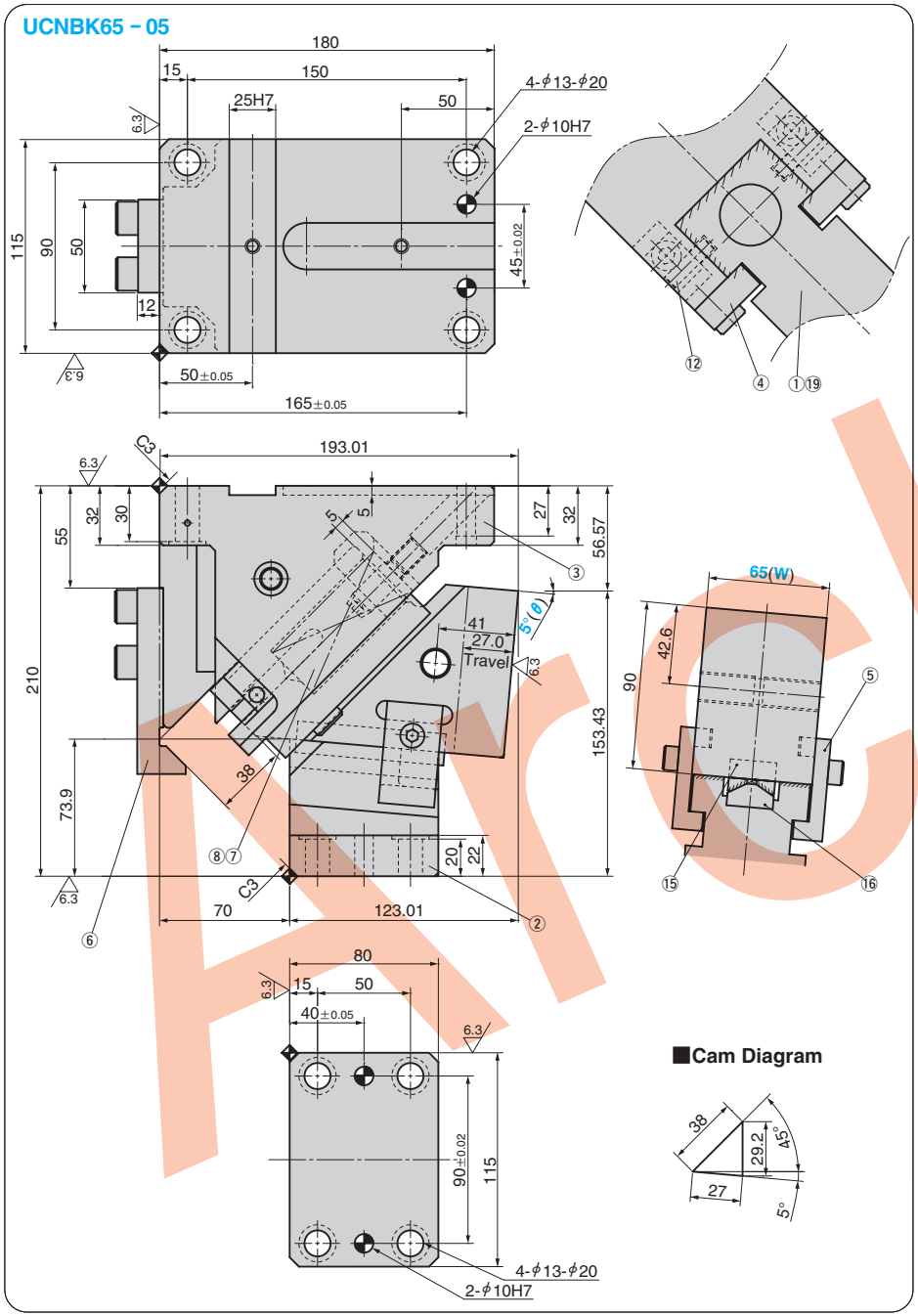
UCNBK65 – 05



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
27.0	19.6 (2.0)	39.2 (4.0)	237.6 (24.2)	1140.5 (116.3)	1544 (157.6)	UCNBK	65	05

Order

Catalog No.	W	–	θ
UCNBK	65	–	05

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 05 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

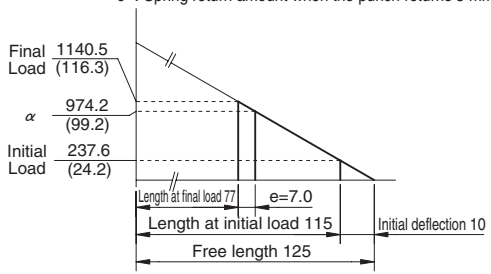
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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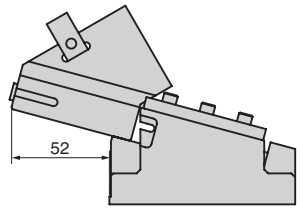

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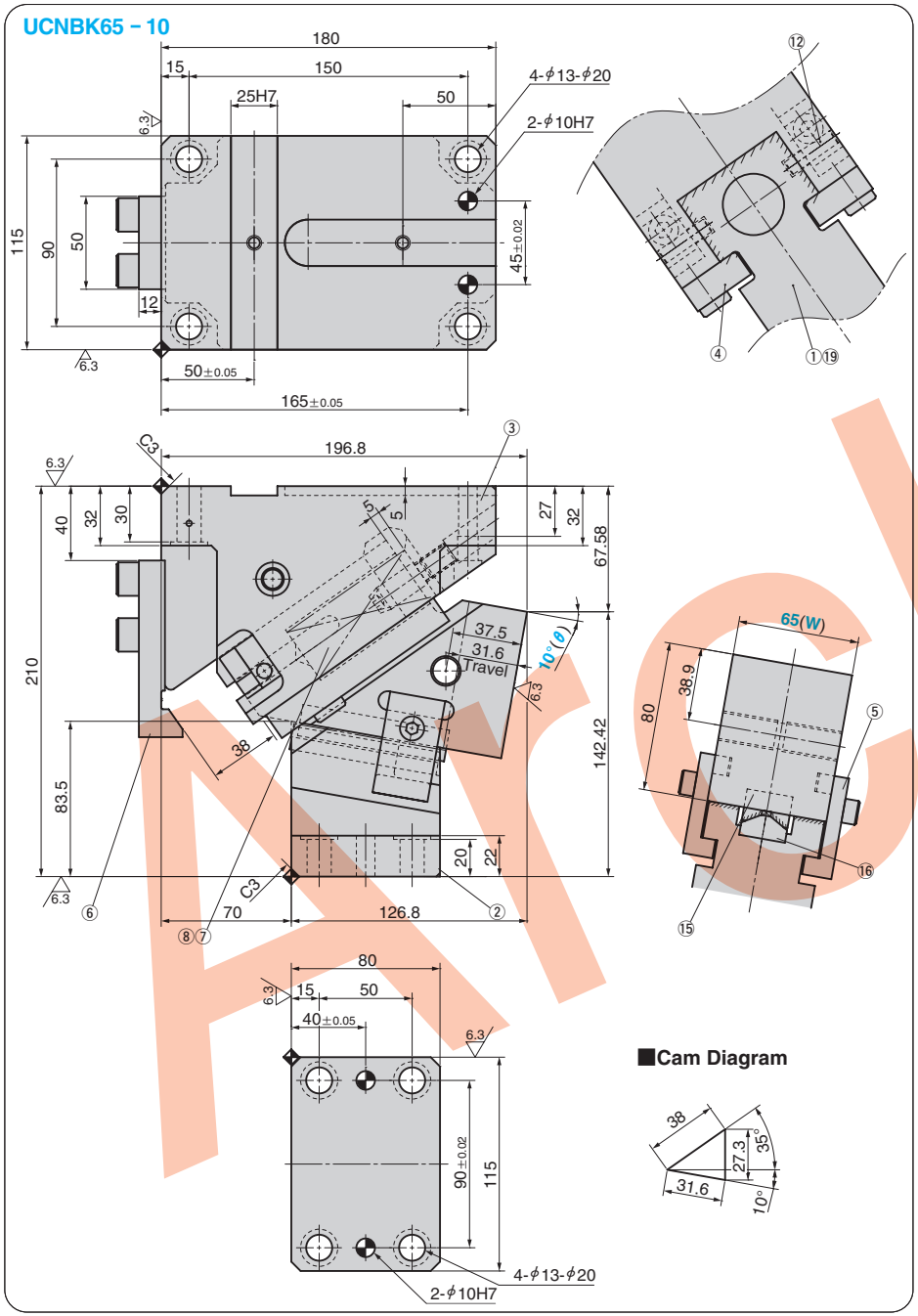
CAD FILE

UCNBK65 – 10



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
31.6	19.6 (2.0)	39.2 (4.0)	237.6 (24.2)	1140.5 (116.3)	1427 (145.6)	UCNBK	65	10

Order

Catalog No.	W	–	θ
UCNBK	65	–	10

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 10 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

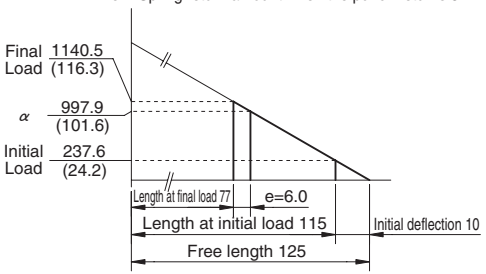
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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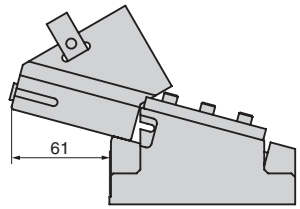

UCNBK 65

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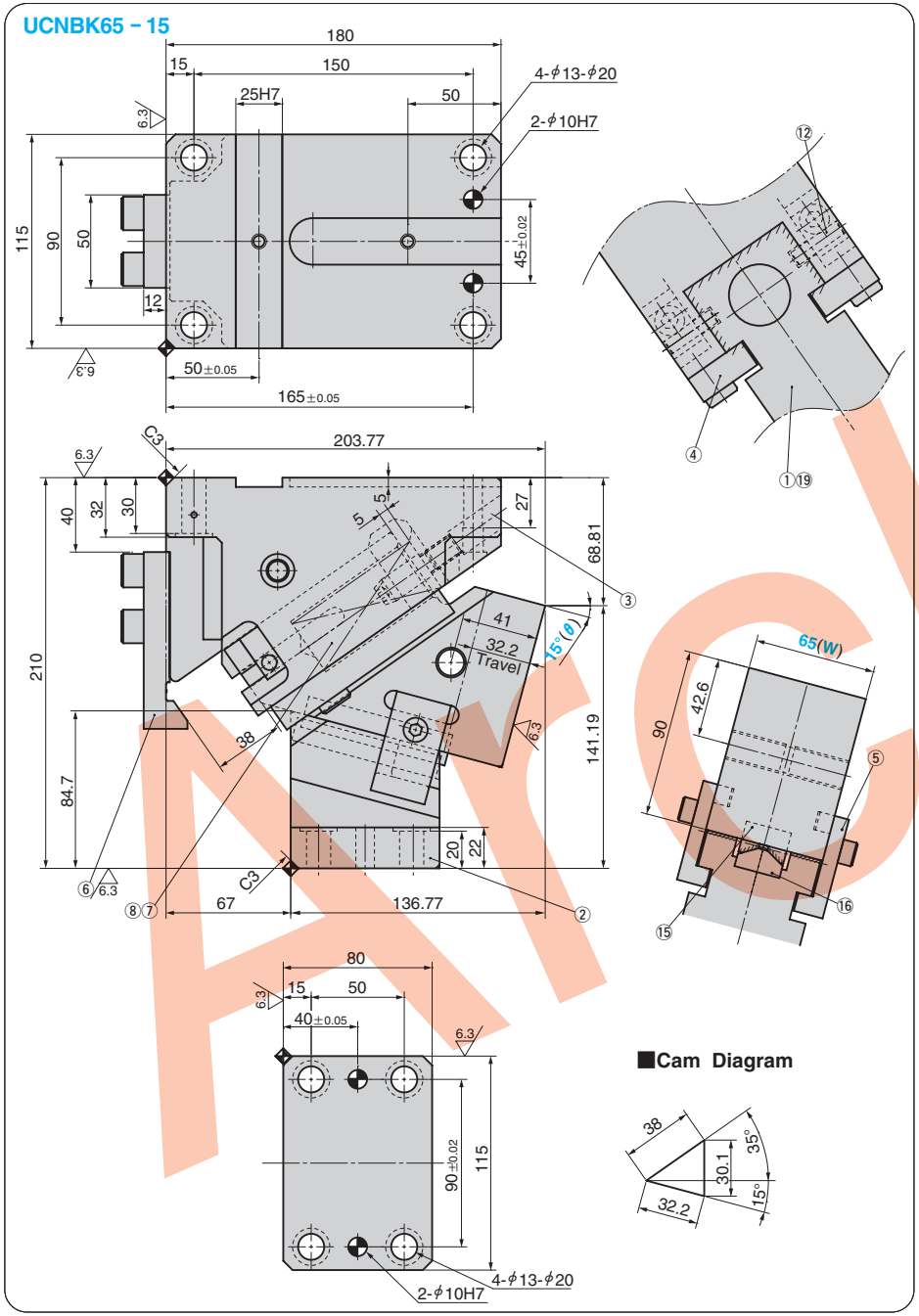
UCNBK65 – 15



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
32.2	19.6 (2.0)	39.2 (4.0)	237.6 (24.2)	1140.5 (116.3)	1533 (156.5)	UCNBK	65	15

Order

Catalog No.	W	–	θ
UCNBK	65	–	15

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 15 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

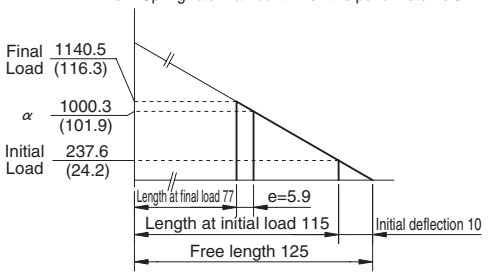
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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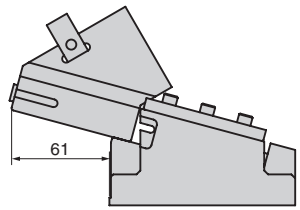

UCNBK 65

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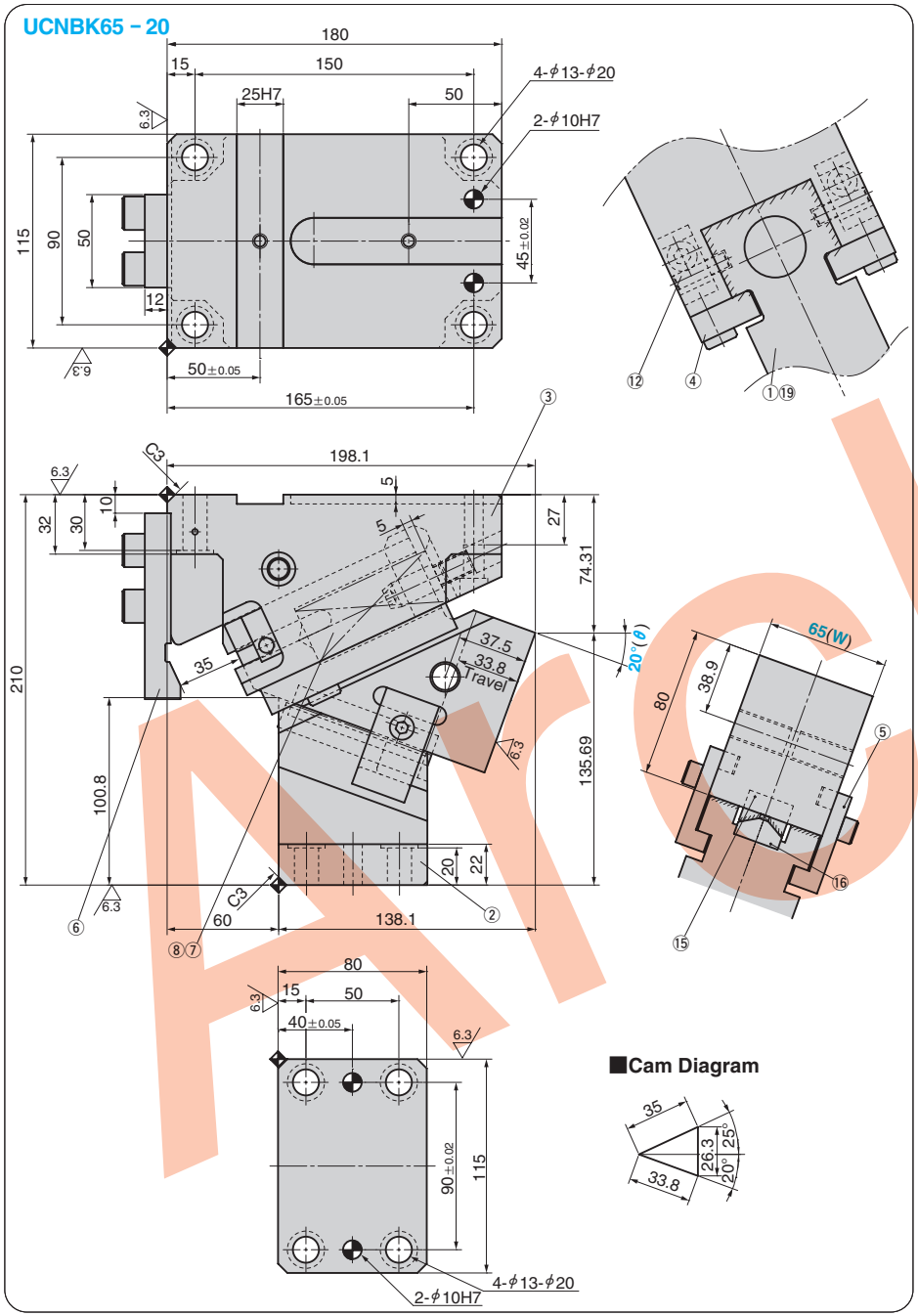


■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
33.8	19.6 (2.0)	39.2 (4.0)	308.9 (31.5)	1140.5 (116.3)	1417 (144.6)	UCNBK	65	20

Order

Catalog No.	W	–	θ
UCNBK	65	–	20

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 20 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

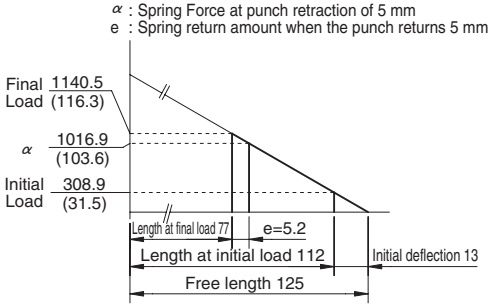
■Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes



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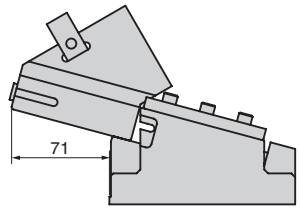

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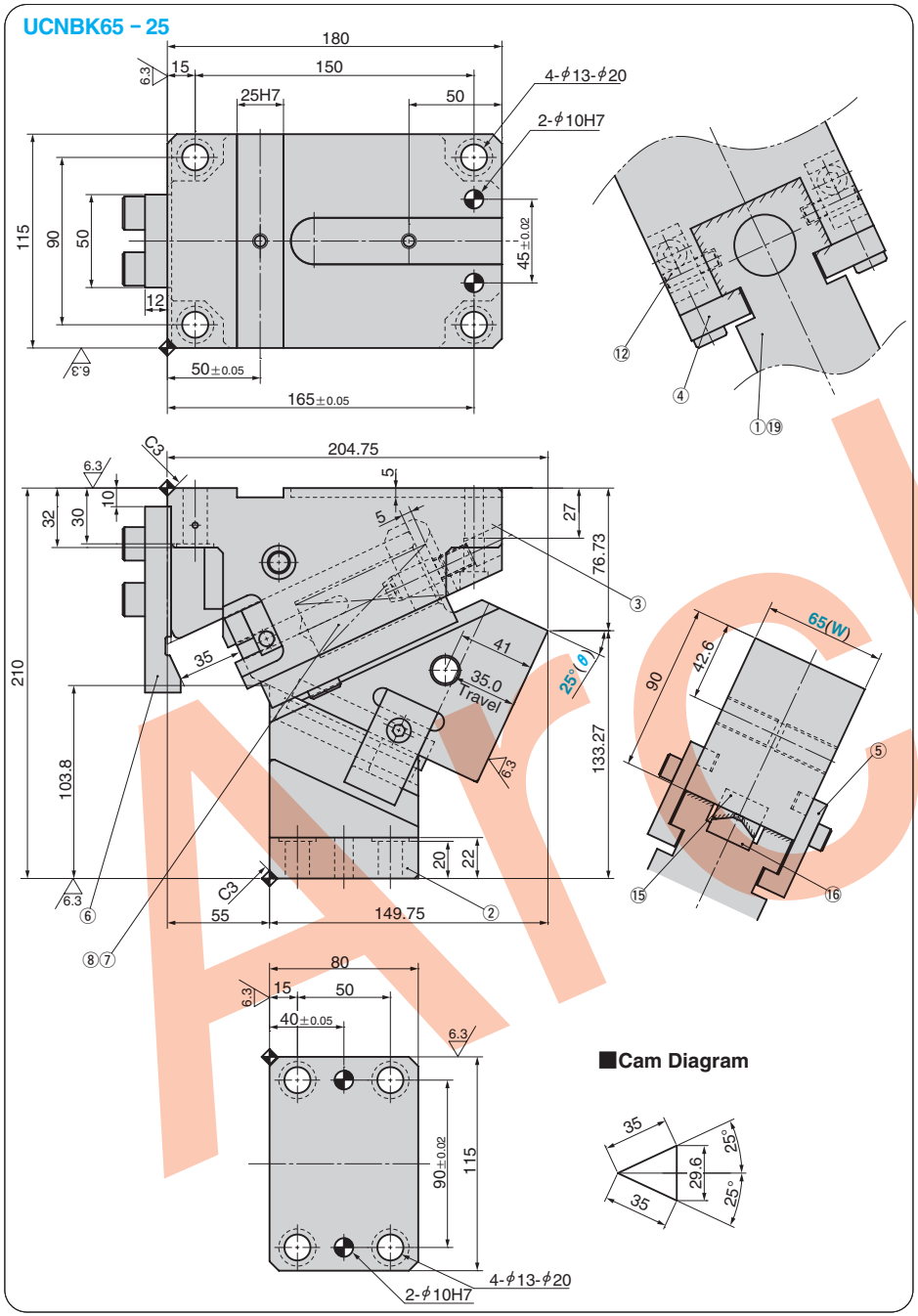
UCNBK65 – 25



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
35.0	19.6 (2.0)	39.2 (4.0)	308.9 (31.5)	1140.5 (116.3)	1522 (155.3)	UCNBK	65	25

Order

Catalog No.	W	–	θ
UCNBK	65	–	25

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 25 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

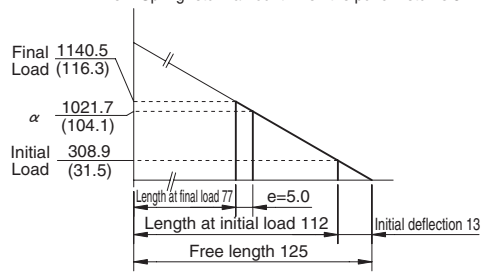
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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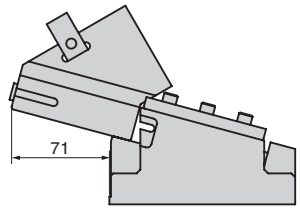

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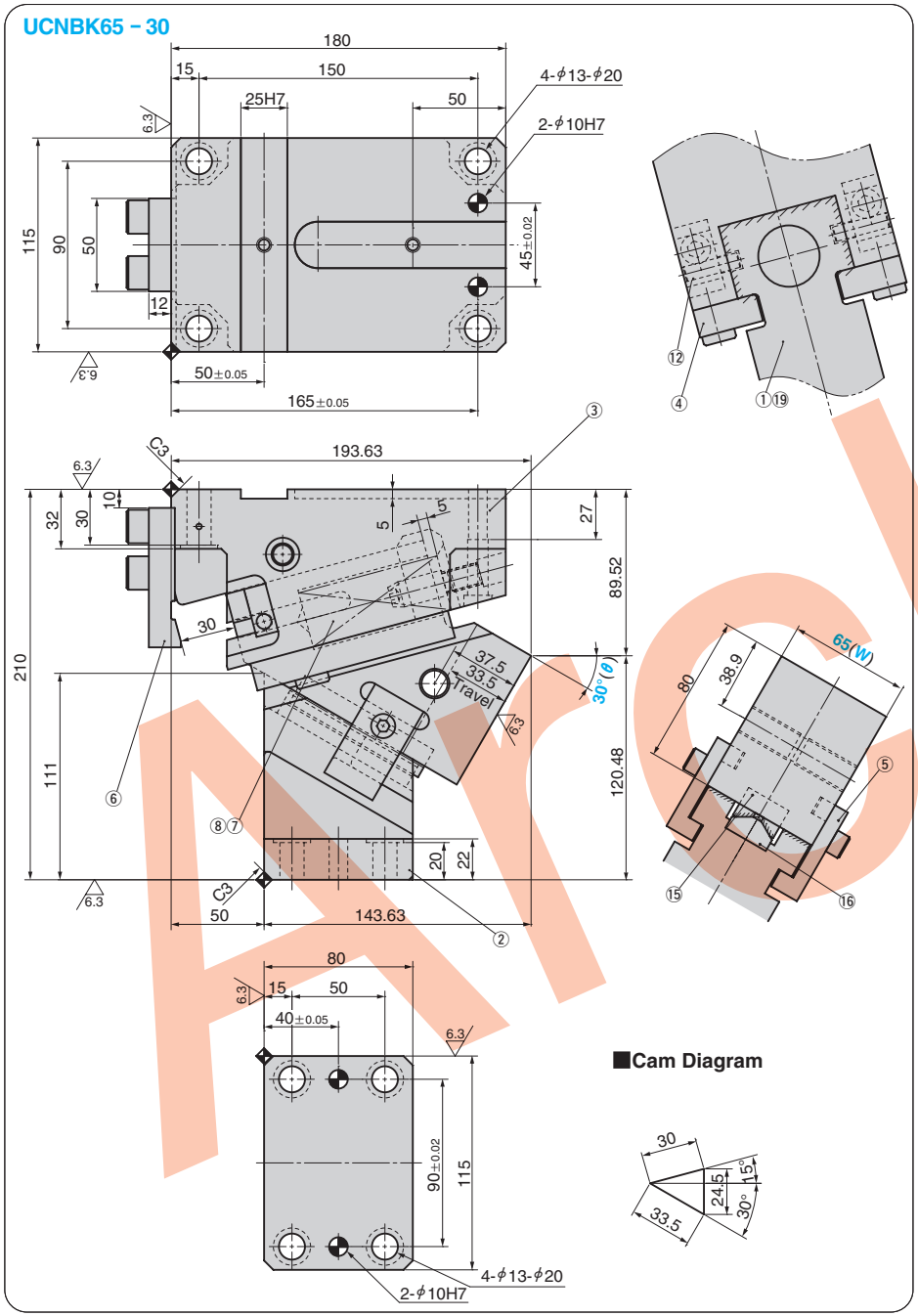
UCNBK65 – 30



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
33.5	19.6 (2.0)	39.2 (4.0)	427.7 (43.6)	1140.5 (116.3)	1406 (143.5)	UCNBK	65	30

Order

Catalog No.	W	–	θ
UCNBK	65	–	30

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 30 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

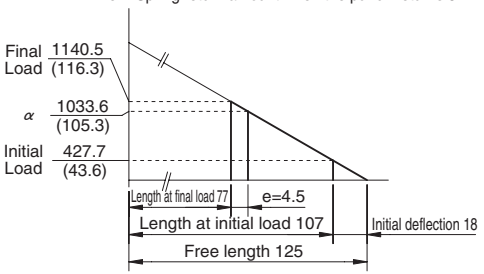
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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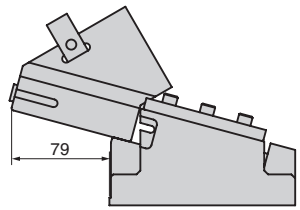

UCNBK 65

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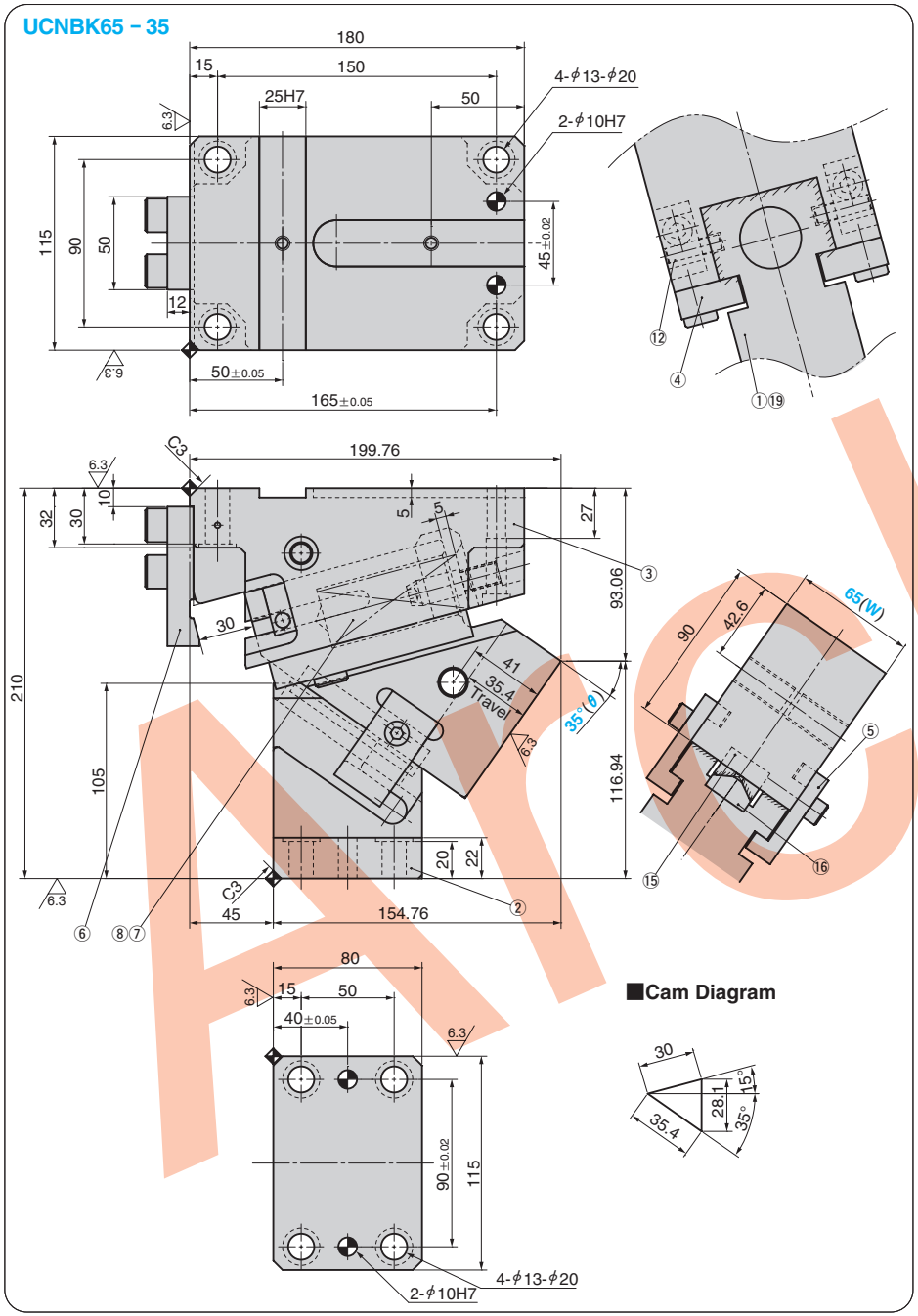
Aerial Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

UCNBK65 – 35



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
35.4	19.6 (2.0)	39.2 (4.0)	427.7 (43.6)	1140.5 (116.3)	1510 (154.0)	UCNBK	65	35

Order

Catalog No.	W	–	θ
UCNBK	65	–	35

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 35 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

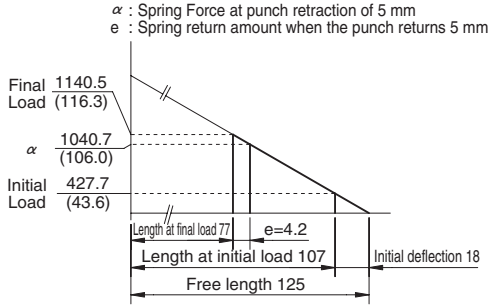
■Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes



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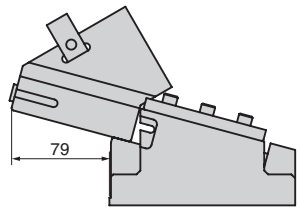

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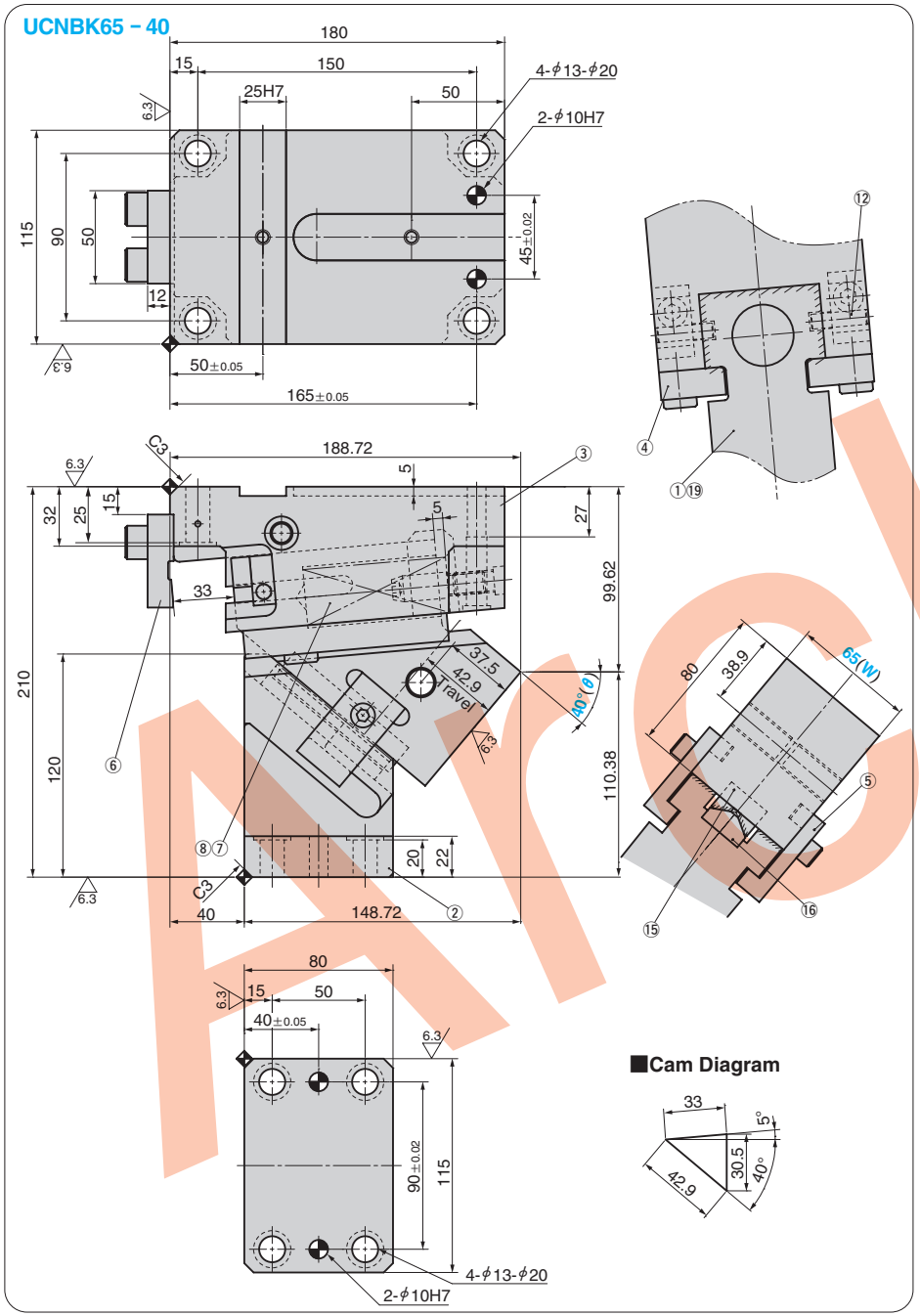
Aerial Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

UCNBK65 – 40



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
42.9	19.6 (2.0)	39.2 (4.0)	356.4 (36.3)	1140.5 (116.3)	1395 (142.4)	UCNBK	65	40

Order

Catalog No.	W	–	θ
UCNBK	65	–	40

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 40 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

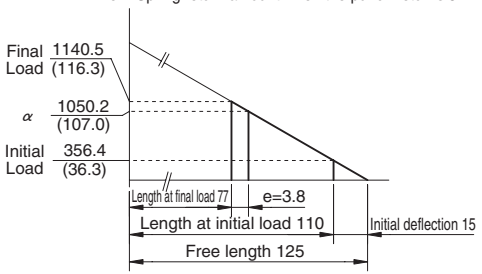
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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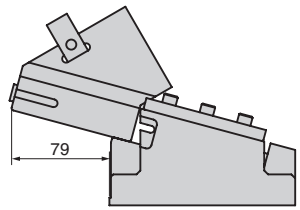

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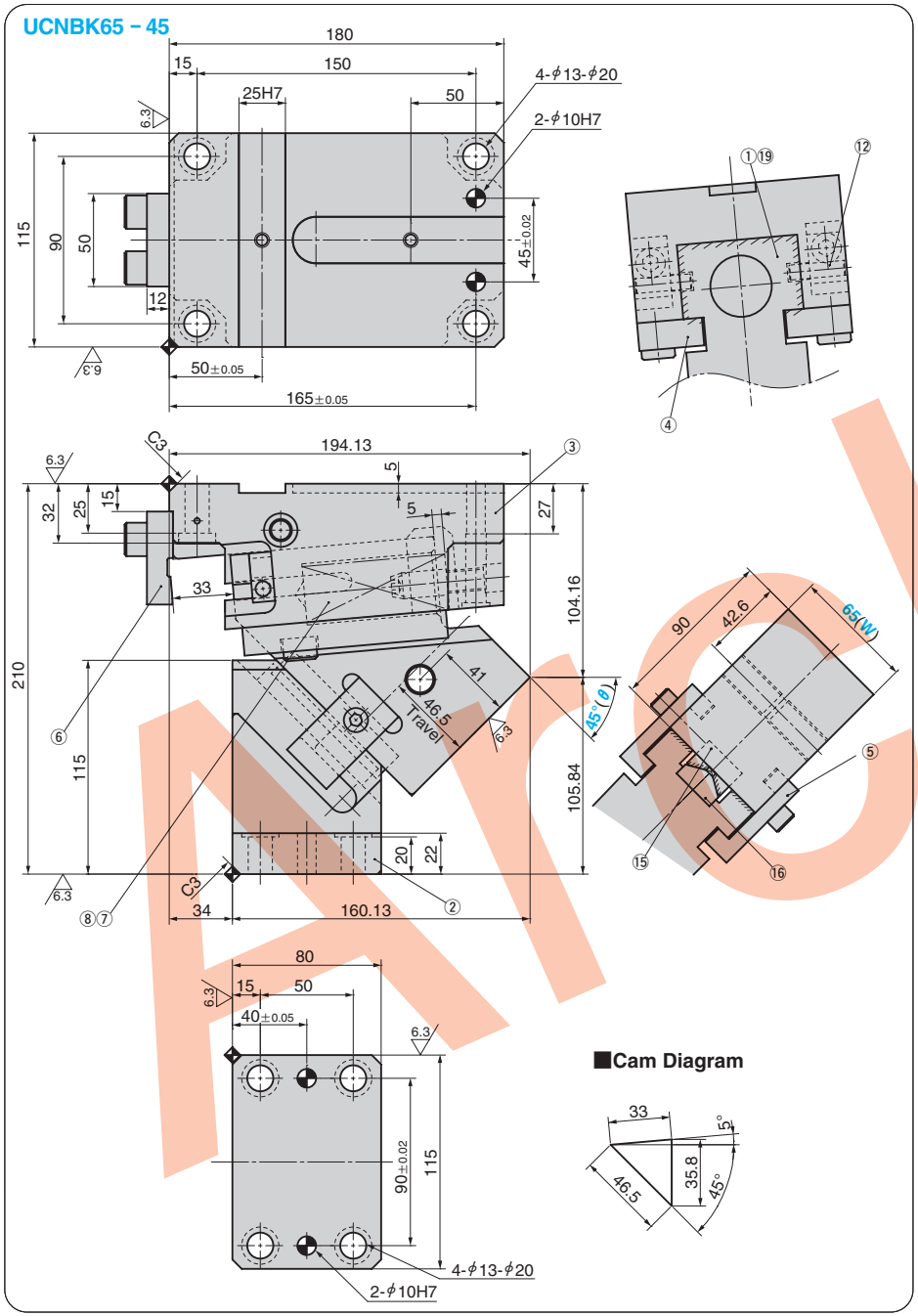
Aerial Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

UCNBK65 – 45



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
46.5	19.6 (2.0)	39.2 (4.0)	356.4 (36.3)	1140.5 (116.3)	1497 (152.8)	UCNBK	65	45

Order

Catalog No.	W	–	θ
UCNBK	65	–	45

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 45 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

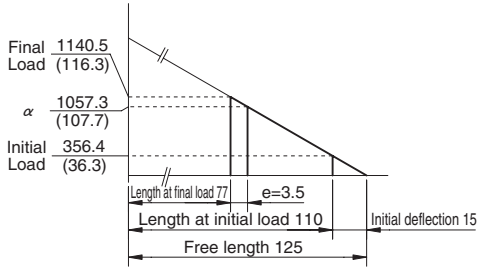
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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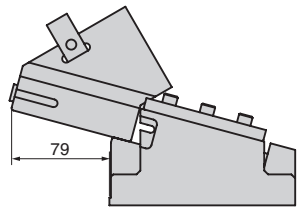

UCNBK 65

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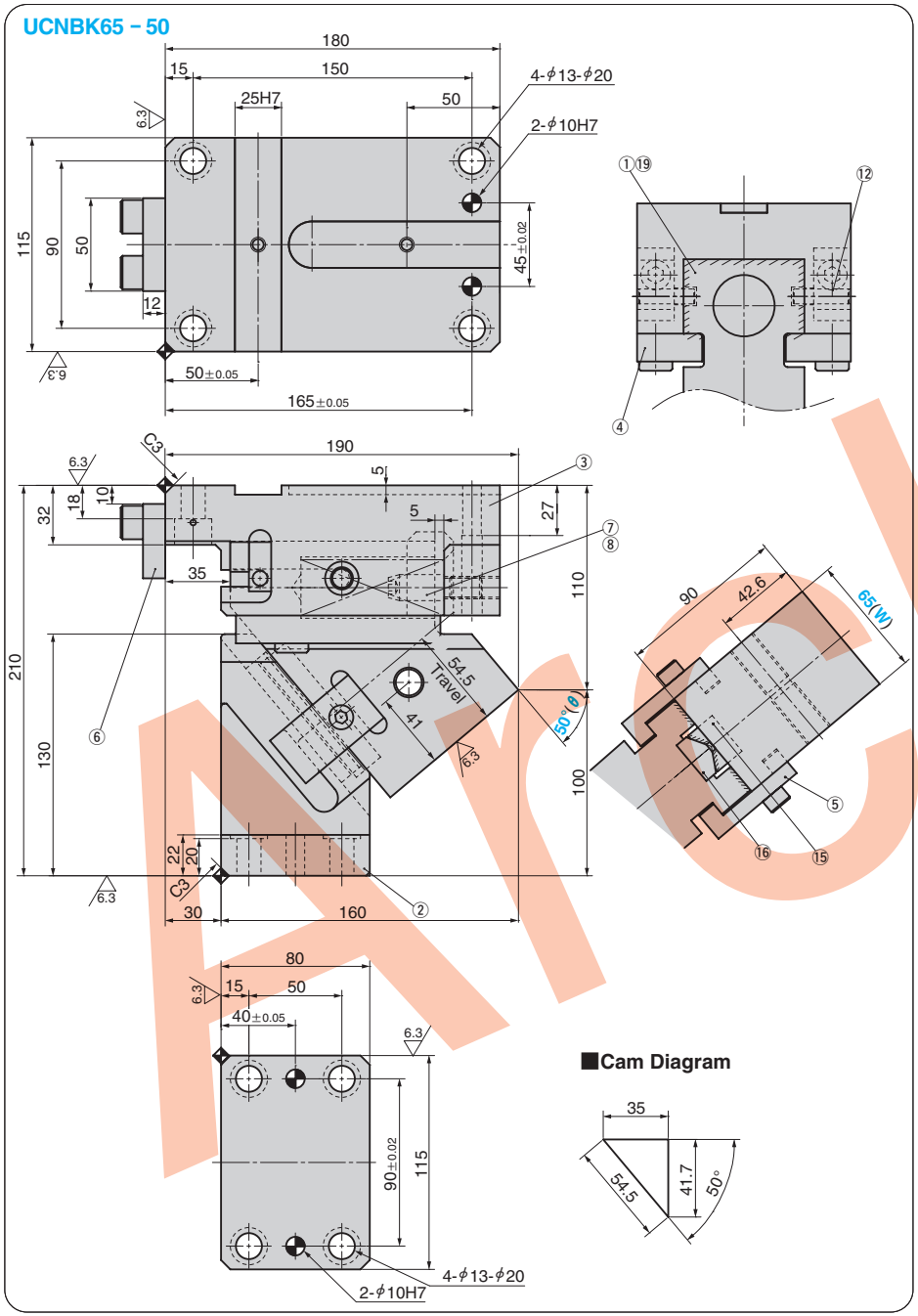
Aerial Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

UCNBK65 – 50



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
54.5	19.6 (2.0)	39.2 (4.0)	308.9 (31.5)	1140.5 (116.3)	1491 (152.1)	UCNBK	65	50

Order

Catalog No.	W	–	θ
UCNBK	65	–	50

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 50 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

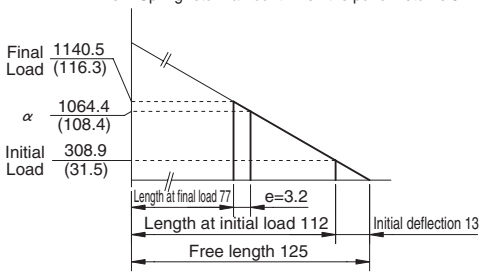
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-125
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-125 (1 piece)
- Spring constant 23.76N/mm (2.42kgf/mm)
- Guideline of spring durability 300,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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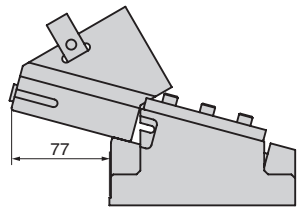

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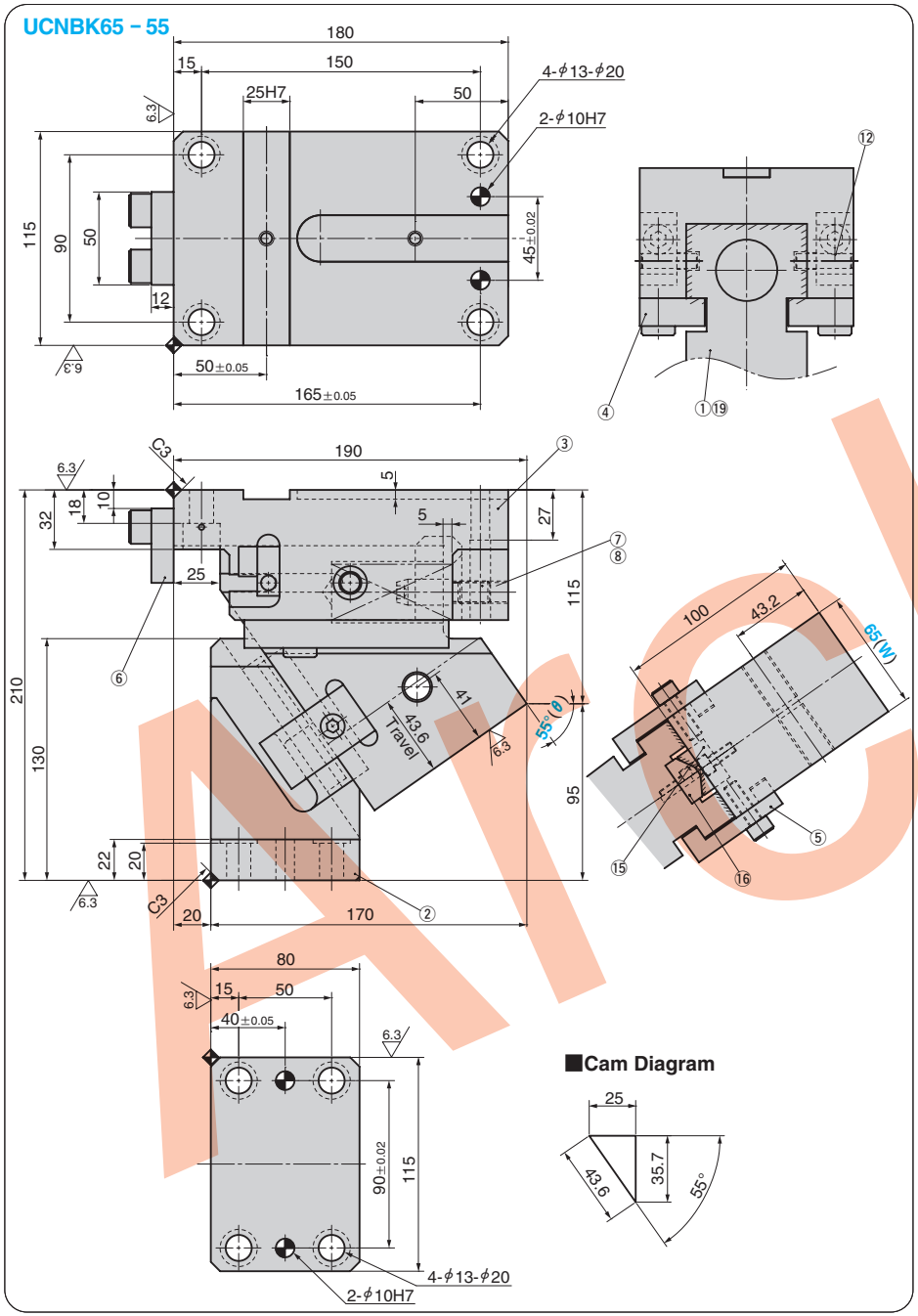
FOR PIERCE AND FLANGE

CAD FILE

UCNBK65 – 55



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
43.6	19.6 (2.0)	39.2 (4.0)	296.9 (30.3)	1039.2 (106.0)	1480 (151.0)	UCNBK	65	55

Order

Catalog No.	W	–	θ
UCNBK	65	–	55

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 55 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

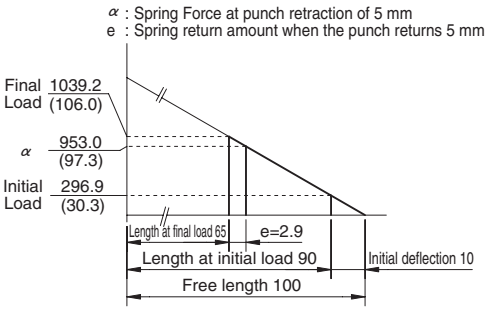
■Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-100
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-100 (1 piece)
- Spring constant 29.69N/mm (3.03kgf/mm)
- Guideline of spring durability 500,000 strokes



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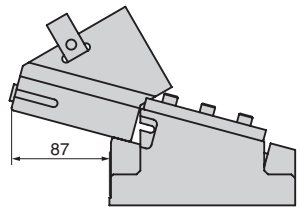

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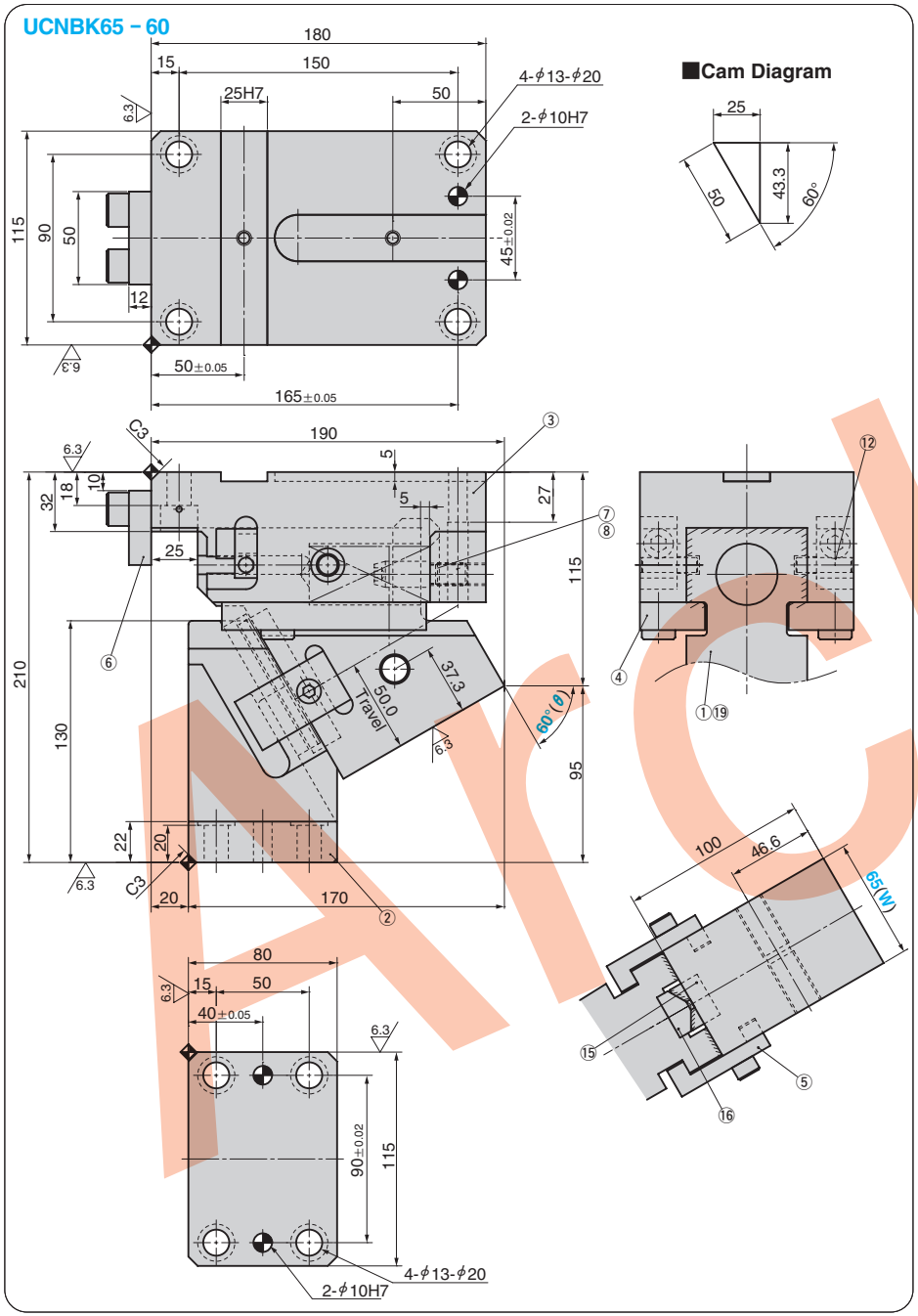
CAD FILE

UCNBK65 – 60



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
50.0	19.6 (2.0)	39.2 (4.0)	296.9 (30.3)	1039.2 (106.0)	1637 (167.0)	UCNBK	65	60

Order

Catalog No.	W	–	θ
UCNBK	65	–	60

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 60 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

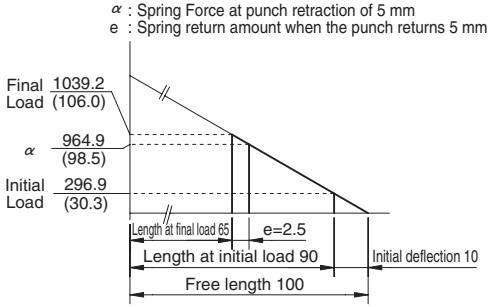
■Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-100
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-100 (1 piece)
- Spring constant 29.69N/mm (3.03kgf/mm)
- Guideline of spring durability 500,000 strokes



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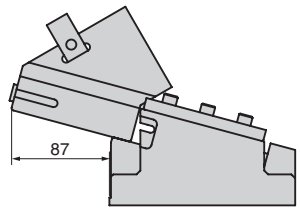

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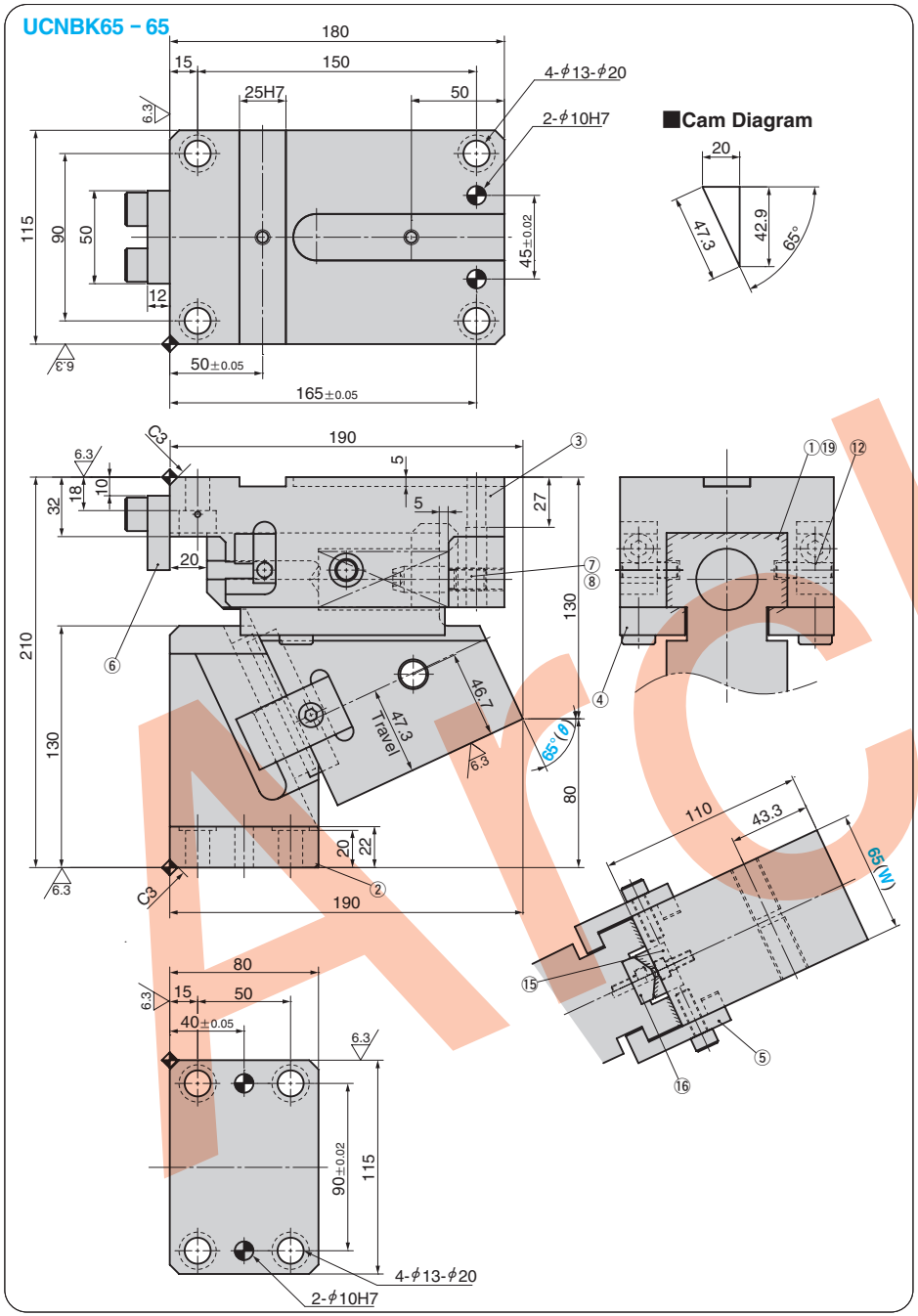


Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
47.3	19.6 (2.0)	39.2 (4.0)	296.9 (30.3)	890.7 (90.8)	1576 (160.8)	UCNBK	65	65

Order

Catalog No.	W	–	θ
UCNBK	65	–	65

Option

Option Code	Specification
K	Key attached for holder.

Order UCNBK65 – 65 – K

For key specification, refer to page 737.

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

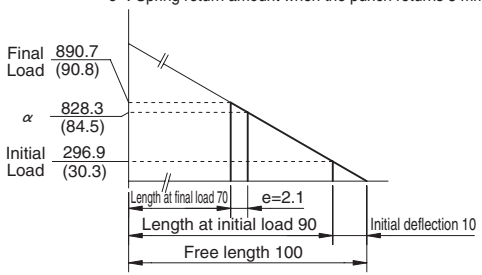
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-100
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

⚠ Bolts for assembly are not indicated.

■Spring Diagram

- Spring used TL30-100 (1 piece)
- Spring constant 29.69N/mm (3.03kgf/mm)
- Guideline of spring durability 1,000,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



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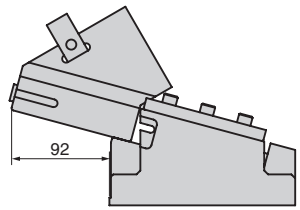

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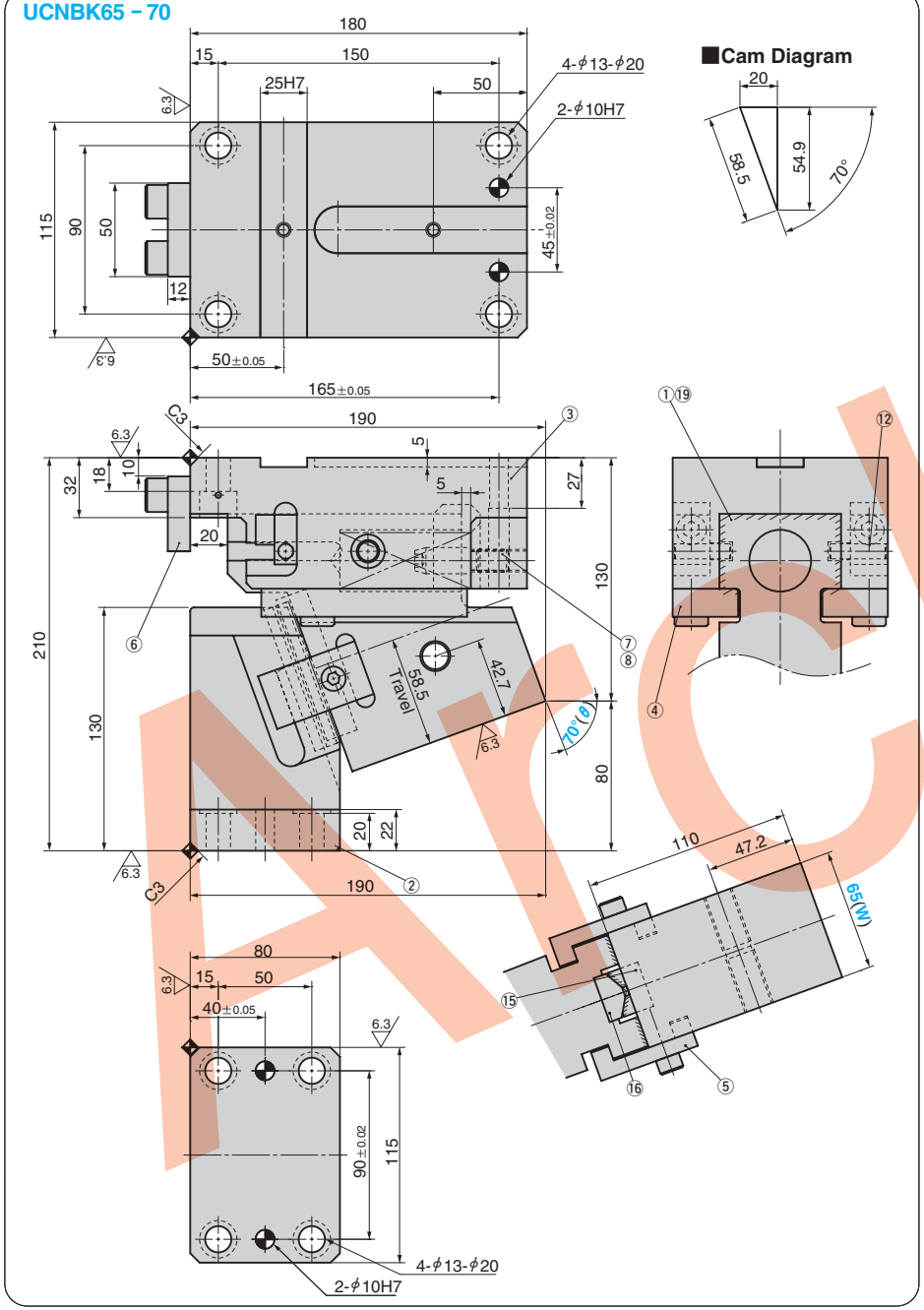
UCNBK65 – 70



■Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
58.5	19.6 (2.0)	39.2 (4.0)	296.9 (30.3)	890.7 (90.8)	1824 (186.1)	UCNBK	65	70

Order

Catalog No.	W	–	θ
UCNBK	65	–	70

Option

Option Code	Specification
K	Key attached for holder.

For key specification, refer to page 737.

Order UCNBK65 – 70 – K

Refer to page 389 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

■Table of Components

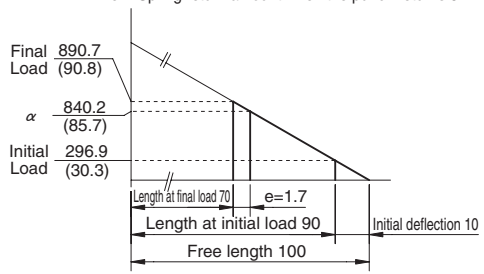
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Positive Return Follower	2	S45C(1045)
⑥	Stopper Plate	1	S45C(1045)
⑦	Spring Guide Pin	1	φ14×50
⑧	Coil Spring	1	TL30-100
⑫	Plate	2	S45C(1045)
⑮	Cam Bottom Guide Plate	1	Bronze with Graphite
⑯	Cam Bottom Slide Plate	1	S45C(1045)
⑲	Stopper	2	Urethane

Bolts for assembly are not indicated.

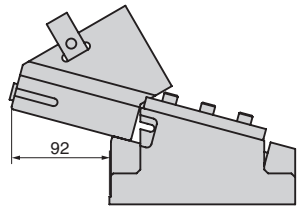
■Spring Diagram

- Spring used TL30-100 (1 piece)
- Spring constant 29.69N/mm (3.03kgf/mm)
- Guideline of spring durability 1,000,000 strokes

α : Spring Force at punch retraction of 5 mm
e : Spring return amount when the punch returns 5 mm



■Space for removing



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