



Cam Units CHK  
Schieber CHK  
Unità a Camme CHK

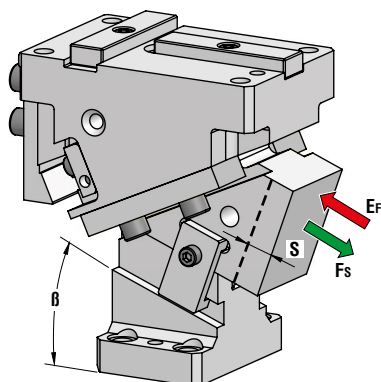
**OMCR<sup>®</sup>**  
STANDARD DIE COMPONENTS

| OMCR<br>CODE | Work Angle         | Slider Width<br>(mm) | Closed<br>Cam Height<br>(mm) | Work Area<br>W x H<br>(mm) | Max Work Force<br>with shoulder<br>10 <sup>6</sup> cycles (kN) | Extraction<br>Force<br>(kN) | Page<br>number |
|--------------|--------------------|----------------------|------------------------------|----------------------------|----------------------------------------------------------------|-----------------------------|----------------|
|              | $\beta$            |                      |                              |                            | F <sub>s</sub>                                                 | E <sub>f</sub>              |                |
| CHK065       | 0°÷70° (5° steps)  | 65                   | 210                          | 65 x "F"                   | 58                                                             | 0,32÷0,85                   | 828            |
| CHK100       | 0°÷70° (10° steps) | 100                  | 280                          | 100 x "F"                  | 96                                                             | 0,99÷2,10                   | 832            |
| CHK200       | 0°÷70° (10° steps) | 200                  | 280                          | 200 x "F"                  | 231                                                            | 1,98÷4,21                   | 836            |



Advanced production tools

## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA



| OMCR CODE | Work Angle | Stroke (mm) | Max Work Force with shoulder (kN) | Extraction Force (kN) |
|-----------|------------|-------------|-----------------------------------|-----------------------|
|           | $\beta$    | S           | F <sub>s</sub>                    | EI<br>Spring          |
| CHK065.00 | 0°         | 26,87       | 58                                | 0,79                  |
| CHK065.05 | 5°         | 26,97       | 58                                | 0,77                  |
| CHK065.10 | 10°        | 31,61       | 58                                | 0,85                  |
| CHK065.15 | 15°        | 32,23       | 58                                | 0,77                  |
| CHK065.20 | 20°        | 33,76       | 58                                | 0,85                  |
| CHK065.25 | 25°        | 35          | 58                                | 0,77                  |
| CHK065.30 | 30°        | 33,46       | 58                                | 0,85                  |
| CHK065.35 | 35°        | 35,38       | 58                                | 0,77                  |
| CHK065.40 | 40°        | 42,91       | 58                                | 0,85                  |
| CHK065.45 | 45°        | 46,49       | 58                                | 0,77                  |
| CHK065.50 | 50°        | 54,45       | 58                                | 0,77                  |
| CHK065.55 | 55°        | 43,59       | 58                                | 0,62                  |
| CHK065.60 | 60°        | 50          | 58                                | 0,54                  |
| CHK065.65 | 65°        | 47,32       | 58                                | 0,39                  |
| CHK065.70 | 70°        | 58,48       | 58                                | 0,32                  |

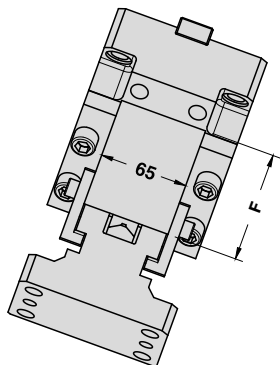


| Art.   | Work Angle = 5° |
|--------|-----------------|
| CHK065 | 05              |

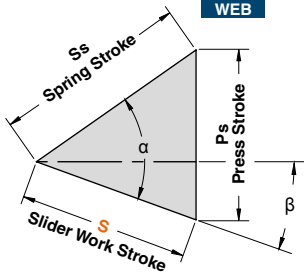
| OMCR CODE | Work Angle | Overall Dimensions (mm) |        |    |     |    |     |
|-----------|------------|-------------------------|--------|----|-----|----|-----|
|           | $\beta$    | A                       | B      | C  | D   | E  | F   |
| CHK065.00 | 0°         | 185,94                  | 56,57  | 75 | 155 | 55 | 80  |
| CHK065.05 | 5°         | 193,01                  | 56,57  | 70 | 150 | 55 | 90  |
| CHK065.10 | 10°        | 196,80                  | 67,58  | 70 | 150 | 40 | 80  |
| CHK065.15 | 15°        | 203,77                  | 68,81  | 67 | 147 | 40 | 90  |
| CHK065.20 | 20°        | 198,10                  | 74,31  | 60 | 140 | 10 | 80  |
| CHK065.25 | 25°        | 204,75                  | 76,73  | 55 | 135 | 10 | 90  |
| CHK065.30 | 30°        | 193,63                  | 89,52  | 50 | 130 | 10 | 80  |
| CHK065.35 | 35°        | 199,76                  | 93,06  | 45 | 125 | 10 | 90  |
| CHK065.40 | 40°        | 188,72                  | 99,62  | 40 | 120 | 15 | 80  |
| CHK065.45 | 45°        | 194,13                  | 104,16 | 34 | 114 | 15 | 90  |
| CHK065.50 | 50°        | 190                     | 110    | 30 | 110 | 10 | 90  |
| CHK065.55 | 55°        | 190                     | 115    | 20 | 100 | 10 | 100 |
| CHK065.60 | 60°        | 190                     | 115    | 20 | 100 | 10 | 100 |
| CHK065.65 | 65°        | 190                     | 130    | 0  | 80  | 10 | 110 |
| CHK065.70 | 70°        | 190                     | 130    | 0  | 80  | 10 | 110 |

## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA

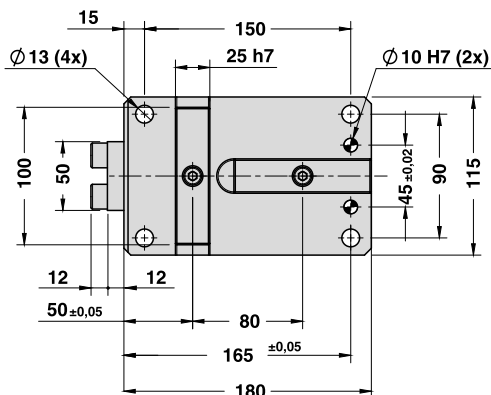
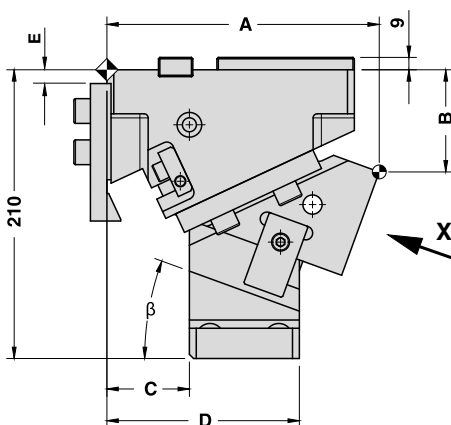
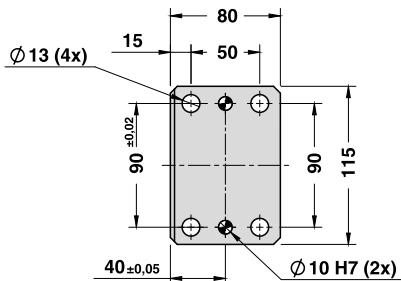
X VIEW

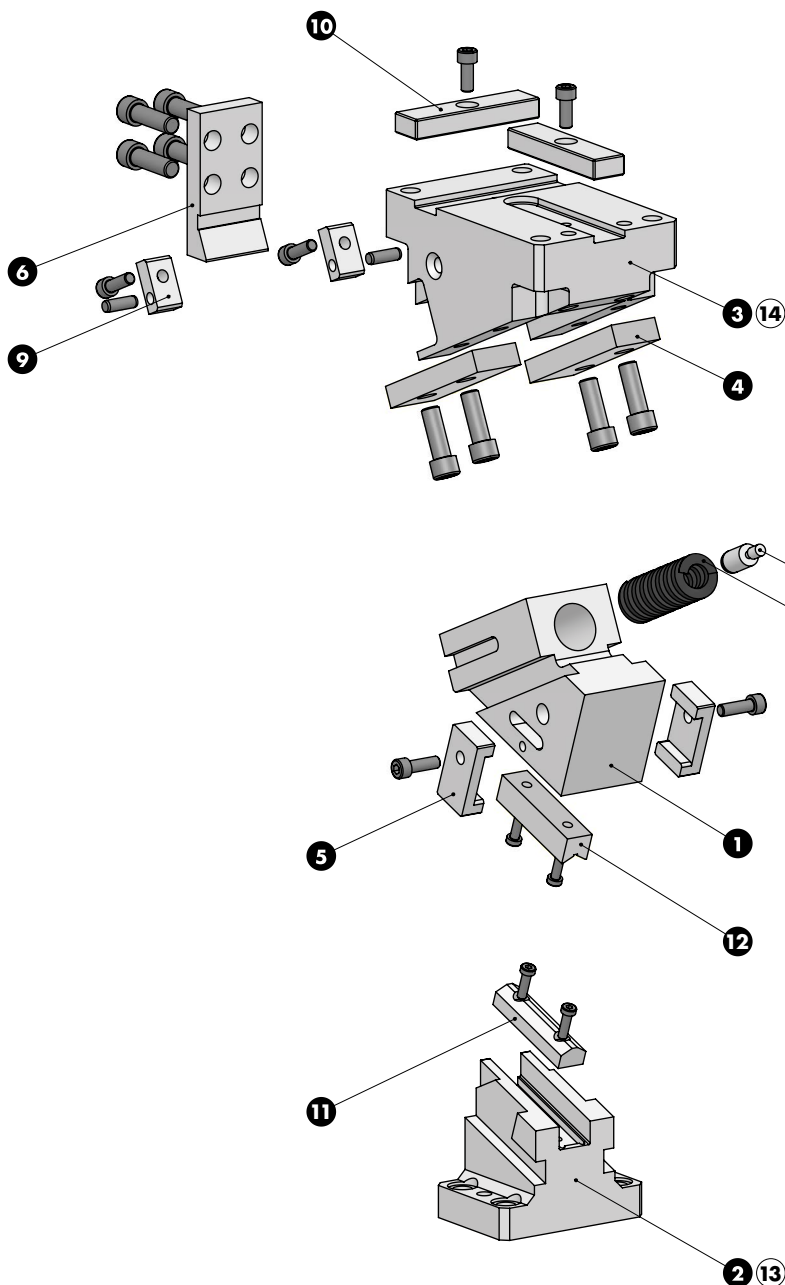


CAM DIAGRAM



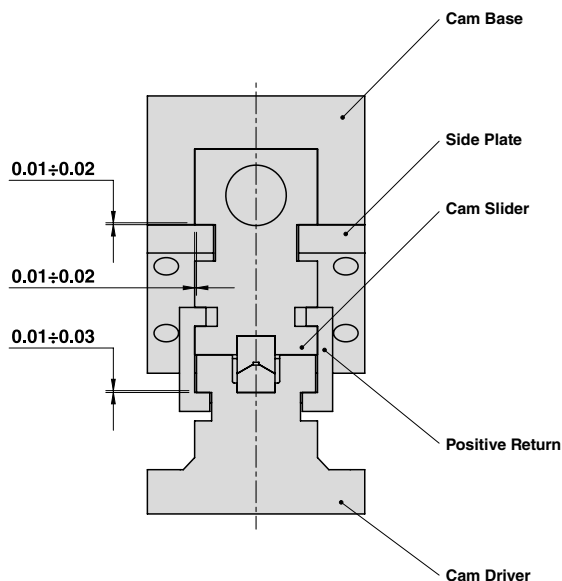
| Work Angle | Inner Angle | Slider Work Stroke (mm) | Press Stroke (mm) | Spring Stroke (mm) |
|------------|-------------|-------------------------|-------------------|--------------------|
| $\beta$    | $\alpha$    | S                       | Ps                | Ss                 |
| 0°         | 45°         | 26,87                   | 26,87             | 38                 |
| 5°         | 50°         | 26,97                   | 29,22             | 38                 |
| 10°        | 45°         | 31,61                   | 27,28             | 38                 |
| 15°        | 50°         | 32,23                   | 30,14             | 38                 |
| 20°        | 45°         | 33,76                   | 26,34             | 35                 |
| 25°        | 50°         | 35,00                   | 29,58             | 35                 |
| 30°        | 45°         | 33,46                   | 24,49             | 30                 |
| 35°        | 50°         | 35,38                   | 28,06             | 30                 |
| 40°        | 45°         | 42,91                   | 30,46             | 33                 |
| 45°        | 50°         | 46,49                   | 35,75             | 33                 |
| 50°        | 50°         | 54,45                   | 41,71             | 35                 |
| 55°        | 55°         | 43,59                   | 35,70             | 25                 |
| 60°        | 60°         | 50,00                   | 43,30             | 25                 |
| 65°        | 65°         | 47,32                   | 42,89             | 20                 |
| 70°        | 70°         | 58,48                   | 54,95             | 20                 |



**AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA**


## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA

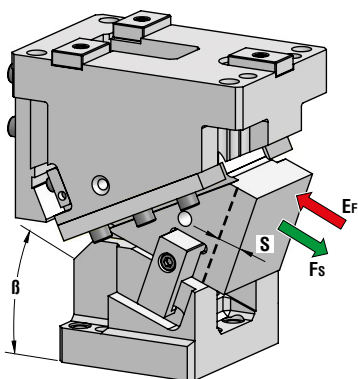
## SLIDER STRUCTURE, POSITIVE RETURN STRUCTURE AND CLEARANCES



## PART LIST

| Particular number | Description                             | Material                        | Quantity |
|-------------------|-----------------------------------------|---------------------------------|----------|
| 1                 | Cam Slider                              | GG-25 + Graphite                | 1        |
| 2                 | Cam Driver                              | GG-25 + Graphite                | 1        |
| 3                 | Cam Base                                | GG-25                           | 1        |
| 4                 | Side Plate                              | CK45 + Graphite                 | 2        |
| 5                 | Positive Return                         | CK45                            | 2        |
| 6                 | Stopper Plate                           | St44                            | 1        |
| 7                 | Spring Guide Pin                        | 34CrMo4                         | 1        |
| 8                 | Spring                                  | -                               | 1        |
| 9                 | Plate                                   | CK45                            | 2        |
| 10                | Key                                     | CK45                            | 2        |
| 11                | Male "V" Driver                         | CK45                            | 1        |
| 12                | Female "V" Driver                       | CuZn25Al5 + Graphite - HB > 190 | 1        |
| 13                | Cam Driver Fixing Screws M12x45 DIN 912 | -                               | 4        |
| 14                | Cam Base Fixing Screws M12x55 DIN 912   | -                               | 4        |

## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA



| OMCR CODE | Work Angle<br>$\beta$ | Stroke<br>(mm)<br>S | Max Work Force with shoulder<br>(kN)<br>Fs | Extraction Force (kN) |
|-----------|-----------------------|---------------------|--------------------------------------------|-----------------------|
|           |                       |                     |                                            | Ef<br>Spring          |
| CHK100.00 | 0°                    | 28,28               | 96                                         | 2,10                  |
| CHK100.10 | 10°                   | 33,27               | 96                                         | 2,10                  |
| CHK100.20 | 20°                   | 30,86               | 96                                         | 1,86                  |
| CHK100.30 | 30°                   | 33,46               | 96                                         | 2,10                  |
| CHK100.40 | 40°                   | 39,01               | 96                                         | 2,10                  |
| CHK100.50 | 50°                   | 46,67               | 96                                         | 1,91                  |
| CHK100.60 | 60°                   | 60                  | 96                                         | 1,48                  |
| CHK100.70 | 70°                   | 58,48               | 96                                         | 0,99                  |

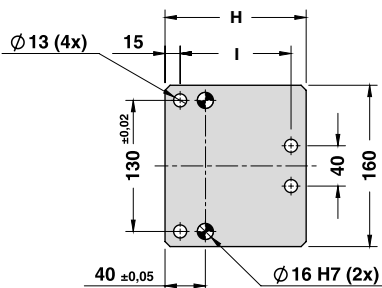
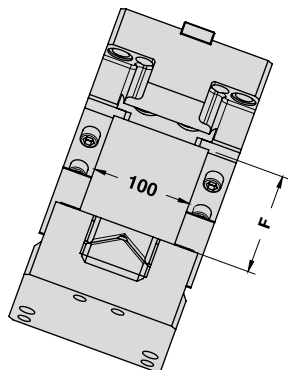


| Art.   | Work Angle = 10° |
|--------|------------------|
| CHK100 | 10               |

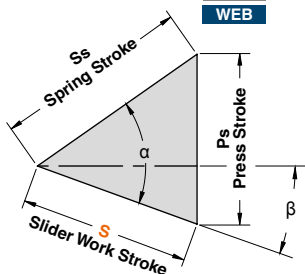
| OMCR CODE | Work Angle<br>$\beta$ | Overall Dimensions<br>(mm) |     |    |     |    |     |    |     |     |
|-----------|-----------------------|----------------------------|-----|----|-----|----|-----|----|-----|-----|
|           |                       | A                          | B   | C  | D   | E  | F   | G  | H   | I   |
| CHK100.00 | 0°                    | 240                        | 85  | 80 | 220 | 55 | 100 | 17 | 140 | 110 |
| CHK100.10 | 10°                   | 240                        | 90  | 60 | 200 | 35 | 100 | 17 | 140 | 110 |
| CHK100.20 | 20°                   | 240                        | 110 | 50 | 190 | 15 | 100 | 18 | 140 | 110 |
| CHK100.30 | 30°                   | 240                        | 110 | 30 | 160 | 10 | 120 | 17 | 130 | 100 |
| CHK100.40 | 40°                   | 240                        | 115 | 30 | 150 | 10 | 120 | 17 | 120 | 90  |
| CHK100.50 | 50°                   | 240                        | 120 | 10 | 130 | 0  | 140 | 16 | 120 | 90  |
| CHK100.60 | 60°                   | 240                        | 145 | 0  | 110 | 0  | 140 | 16 | 110 | 80  |
| CHK100.70 | 70°                   | 240                        | 145 | 0  | 110 | 0  | 140 | 16 | 110 | 80  |

## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA

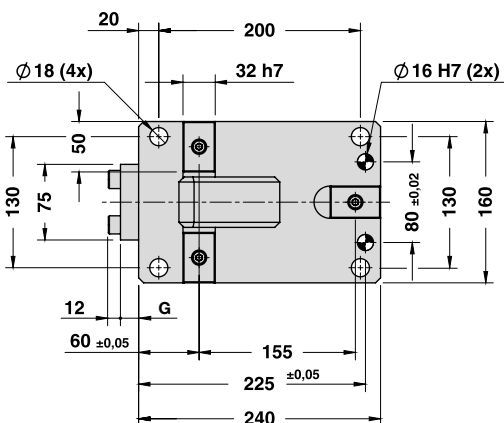
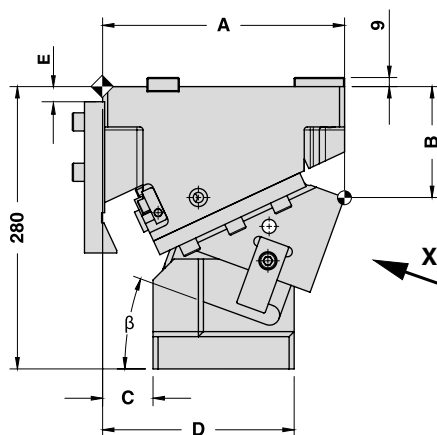
X VIEW



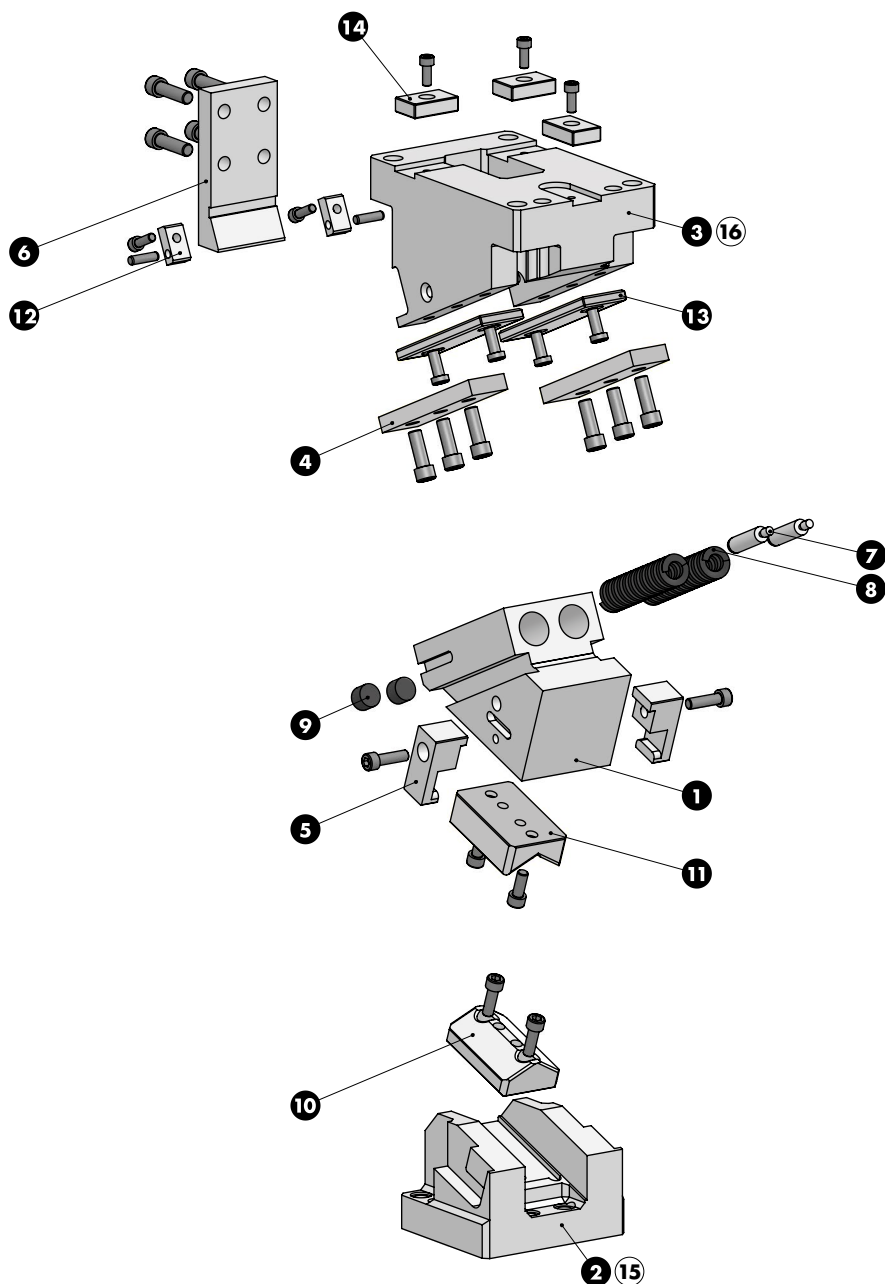
CAM DIAGRAM



| Work Angle | Inner Angle | Slider Work Stroke (mm) | Press Stroke (mm) | Spring Stroke (mm) |
|------------|-------------|-------------------------|-------------------|--------------------|
| $\beta$    | $\alpha$    | S                       | Ps                | Ss                 |
| 0°         | 45°         | 28,28                   | 28,28             | 40                 |
| 10°        | 45°         | 33,27                   | 28,72             | 40                 |
| 20°        | 45°         | 30,86                   | 24,08             | 32                 |
| 30°        | 45°         | 33,46                   | 24,49             | 30                 |
| 40°        | 45°         | 39,01                   | 27,69             | 30                 |
| 50°        | 50°         | 46,67                   | 35,75             | 30                 |
| 60°        | 60°         | 60,00                   | 51,96             | 30                 |
| 70°        | 70°         | 58,48                   | 54,95             | 20                 |

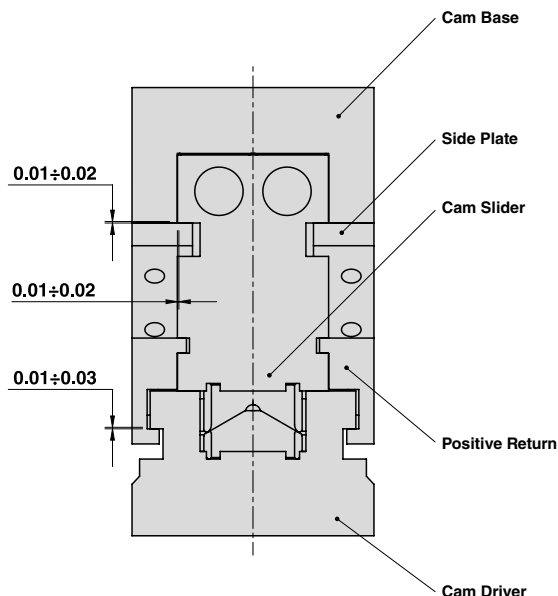


## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA



## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA

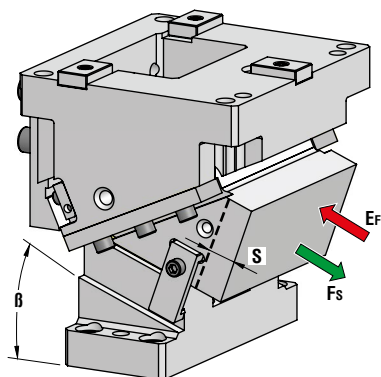
## SLIDER STRUCTURE, POSITIVE RETURN STRUCTURE AND CLEARANCES



## PART LIST

| Particular number | Description                             | Material                        | Quantity |
|-------------------|-----------------------------------------|---------------------------------|----------|
| 1                 | Cam Slider                              | GGG-25 + Graphite               | 1        |
| 2                 | Cam Driver                              | GGG-25 + Graphite               | 1        |
| 3                 | Cam Base                                | GGG-25                          | 1        |
| 4                 | Side Plate                              | CK45 + Graphite                 | 2        |
| 5                 | Positive Return                         | CK45                            | 2        |
| 6                 | Stopper Plate                           | St44                            | 1        |
| 7                 | Spring Guide Pin                        | 34CrMo4                         | 2        |
| 8                 | Spring                                  | -                               | 2        |
| 9                 | Elastomer Cap                           | Elastomer 92SH                  | 2        |
| 10                | Male "V" Driver                         | CK45                            | 1        |
| 11                | Female "V" Driver                       | CuZn25Al5 + Graphite - HB > 190 | 1        |
| 12                | Plate                                   | CK45                            | 2        |
| 13                | Wear Plate                              | CuZn25Al5 + Graphite - HB > 190 | 2        |
| 14                | Key                                     | CK45                            | 3        |
| 15                | Cam Driver Fixing Screws M12x55 DIN 912 | -                               | 4        |
| 16                | Cam Base Fixing Screws M16x70 DIN 912   | -                               | 4        |

## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA



| OMCR CODE | Work Angle<br>$\beta$ | Stroke<br>(mm)<br>S | Max Work Force with shoulder<br>(kN)<br>Fs | Extraction Force (kN) |
|-----------|-----------------------|---------------------|--------------------------------------------|-----------------------|
|           |                       |                     |                                            | Ef<br>Spring          |
| CHK200.00 | 0°                    | 28,28               | 231                                        | 4,21                  |
| CHK200.10 | 10°                   | 33,27               | 231                                        | 4,21                  |
| CHK200.20 | 20°                   | 30,86               | 231                                        | 3,71                  |
| CHK200.30 | 30°                   | 33,46               | 231                                        | 4,20                  |
| CHK200.40 | 40°                   | 39,01               | 231                                        | 4,20                  |
| CHK200.50 | 50°                   | 46,67               | 231                                        | 3,81                  |
| CHK200.60 | 60°                   | 60                  | 231                                        | 2,97                  |
| CHK200.70 | 70°                   | 58,48               | 231                                        | 1,98                  |

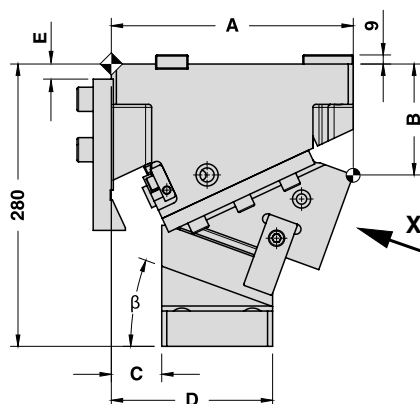
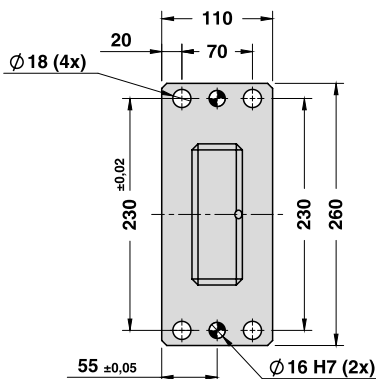
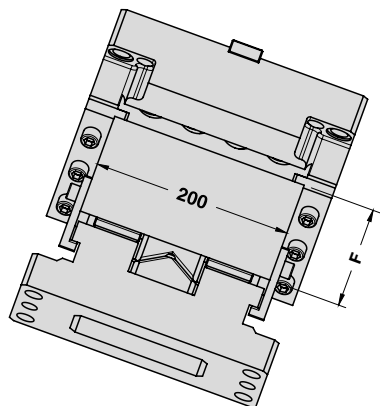


| Art.   | Work Angle = 10° |
|--------|------------------|
| CHK200 | 10               |

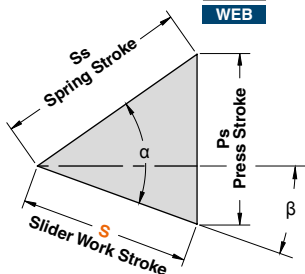
| OMCR CODE | Work Angle<br>$\beta$ | Overall Dimensions<br>(mm) |     |    |     |    |     |    |     |
|-----------|-----------------------|----------------------------|-----|----|-----|----|-----|----|-----|
|           |                       | A                          | B   | C  | D   | E  | F   | G  | H   |
| CHK200.00 | 0°                    | 240                        | 85  | 80 | 190 | 55 | 100 | 17 | 190 |
| CHK200.10 | 10°                   | 240                        | 90  | 60 | 170 | 35 | 100 | 17 | 150 |
| CHK200.20 | 20°                   | 240                        | 110 | 50 | 160 | 15 | 100 | 18 | 150 |
| CHK200.30 | 30°                   | 240                        | 110 | 30 | 140 | 10 | 120 | 17 | 150 |
| CHK200.40 | 40°                   | 240                        | 115 | 30 | 140 | 10 | 120 | 17 | 150 |
| CHK200.50 | 50°                   | 240                        | 120 | 10 | 120 | 0  | 140 | 16 | 150 |
| CHK200.60 | 60°                   | 240                        | 145 | 0  | 110 | 0  | 140 | 16 | 150 |
| CHK200.70 | 70°                   | 240                        | 145 | 0  | 110 | 0  | 140 | 16 | 150 |

## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA

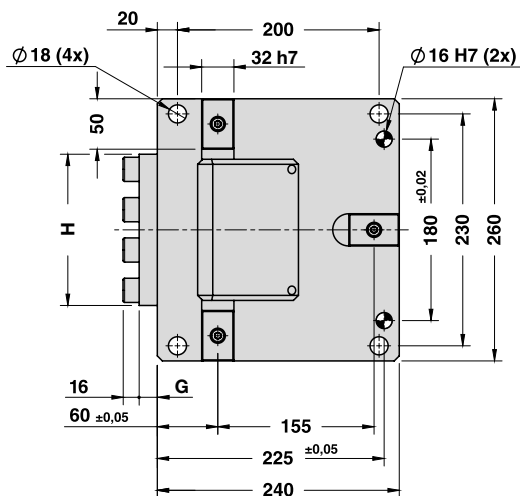
### X VIEW



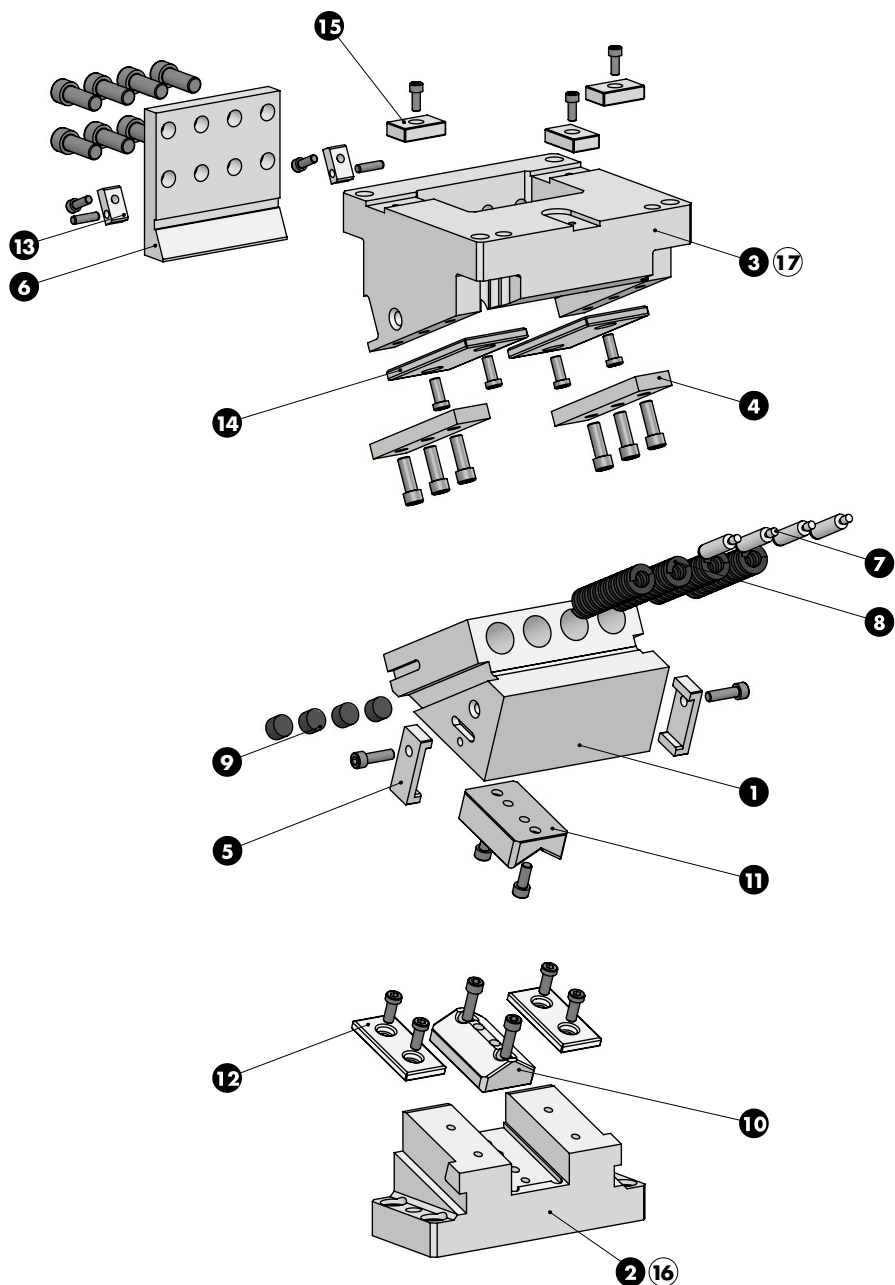
### CAM DIAGRAM



| Work Angle | Inner Angle | Slider Work Stroke (mm) | Press Stroke (mm) | Spring Stroke (mm) |
|------------|-------------|-------------------------|-------------------|--------------------|
| $\beta$    | $\alpha$    | S                       | Ps                | Ss                 |
| 0°         | 45°         | 28,28                   | 28,28             | 40                 |
| 10°        | 45°         | 33,27                   | 28,72             | 40                 |
| 20°        | 45°         | 30,86                   | 24,08             | 32                 |
| 30°        | 45°         | 33,46                   | 24,49             | 30                 |
| 40°        | 45°         | 39,01                   | 27,69             | 30                 |
| 50°        | 50°         | 46,67                   | 35,75             | 30                 |
| 60°        | 60°         | 60,00                   | 51,96             | 30                 |
| 70°        | 70°         | 58,48                   | 54,95             | 20                 |

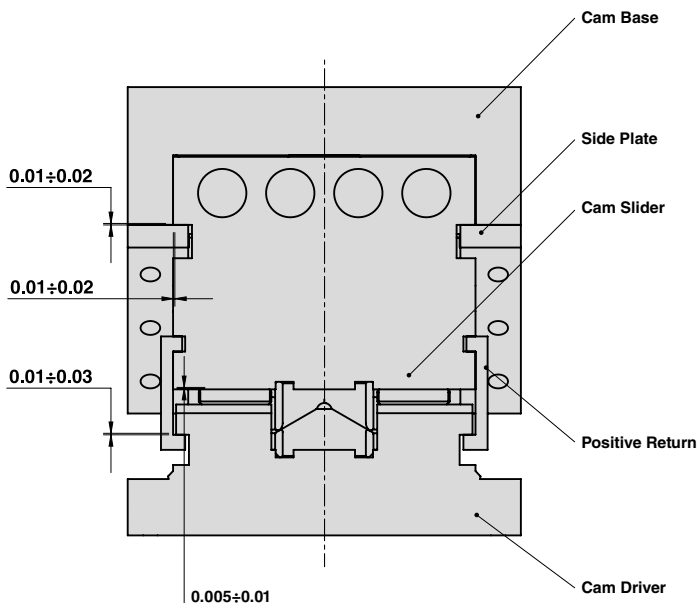


## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA



## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA

## SLIDER STRUCTURE, POSITIVE RETURN STRUCTURE AND CLEARANCES



## PART LIST

| Particular number | Description                             | Material                       | Quantity |
|-------------------|-----------------------------------------|--------------------------------|----------|
| 1                 | Cam Slider                              | GG-25 + Graphite               | 1        |
| 2                 | Cam Driver                              | GG-25 + Graphite               | 1        |
| 3                 | Cam Base                                | GG-25                          | 1        |
| 4                 | Side Plate                              | CK45 + Graphite                | 2        |
| 5                 | Positive Return                         | CK45                           | 2        |
| 6                 | Stopper Plate                           | St44                           | 1        |
| 7                 | Spring Guide Pin                        | 34CrMo4                        | 4        |
| 8                 | Spring                                  | -                              | 4        |
| 9                 | Elastomer Cap                           | Elastomer 92SH                 | 4        |
| 10                | Male "V" Driver                         | CK45                           | 1        |
| 11                | Female "V" Driver                       | CuZn25Al5+ Graphite - HB > 190 | 1        |
| 12                | Wear Plate                              | CuZn25Al5+ Graphite - HB > 190 | 2        |
| 13                | Plate                                   | CK45                           | 2        |
| 14                | Wear Plate                              | CuZn25Al5 - HB > 190           | 2        |
| 15                | Key                                     | CK45                           | 3        |
| 16                | Cam Driver Fixing Screws M16x60 DIN 912 | -                              | 4        |
| 17                | Cam Base Fixing Screws M16x70 DIN 912   | -                              | 4        |