



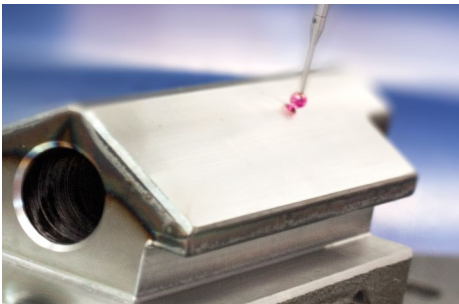
Cam Units CHW  
Schieber CHW  
Unità a Camme CHW



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



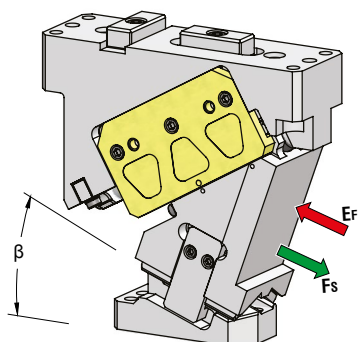
| OMCR CODE | Work Angle        | Slider Width (mm) | Closed Cam Height (mm) | Work Area W x H (mm) | Max Work Force with shoulder 10 <sup>6</sup> cycles (kN) | Extraction Force (kN) | Page number |
|-----------|-------------------|-------------------|------------------------|----------------------|----------------------------------------------------------|-----------------------|-------------|
|           | $\beta$           |                   |                        |                      | F <sub>s</sub>                                           | E <sub>f</sub>        |             |
| CHW065    | 0°÷75° (5° steps) | 65                | 190÷205                | 65x95                | 210÷230                                                  | 5,6÷6,8               | 788         |
| CHW085    | 0°÷75° (5° steps) | 85                | 190÷205                | 65x95                | 210÷230                                                  | 5,6÷6,8               | 792         |
| CHW090    | 0°÷75° (5° steps) | 90                | 205÷240                | 90x100               | 250÷320                                                  | 11÷13,2               | 796         |
| CHW110    | 0°÷75° (5° steps) | 110               | 205÷240                | 90x100               | 250÷320                                                  | 11÷13,2               | 800         |



Precision and accurate dimensions through very strict quality guidelines



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



| OMCR CODE | Work Angle<br>β | Stroke (mm)<br>S | Max Work Force with shoulder (kN)<br>F <sub>s</sub> | Extraction Force (kN)        |
|-----------|-----------------|------------------|-----------------------------------------------------|------------------------------|
|           |                 |                  |                                                     | E <sub>f</sub><br>Gas Spring |
| CHW065.00 | 0°              | 28,9             | 210                                                 | 5,6                          |
| CHW065.05 | 5°              | 31,9             | 212                                                 | 5,6                          |
| CHW065.10 | 10°             | 35               | 214                                                 | 5,8                          |
| CHW065.15 | 15°             | 38,16            | 214                                                 | 5,8                          |
| CHW065.20 | 20°             | 41,47            | 216                                                 | 6,1                          |
| CHW065.25 | 25°             | 45               | 216                                                 | 6,1                          |
| CHW065.30 | 30°             | 48,83            | 218                                                 | 6,3                          |
| CHW065.35 | 35°             | 53,06            | 218                                                 | 6,3                          |
| CHW065.40 | 40°             | 57,85            | 220                                                 | 6,3                          |
| CHW065.45 | 45°             | 63,4             | 222                                                 | 6,5                          |
| CHW065.50 | 50°             | 46,6             | 222                                                 | 6,5                          |
| CHW065.55 | 55°             | 52,3             | 224                                                 | 6,5                          |
| CHW065.60 | 60°             | 46               | 226                                                 | 6,6                          |
| CHW065.65 | 65°             | 54,4             | 228                                                 | 6,6                          |
| CHW065.70 | 70°             | 39,5             | 230                                                 | 6,8                          |
| CHW065.75 | 75°             | 52,16            | 230                                                 | 6,8                          |

15



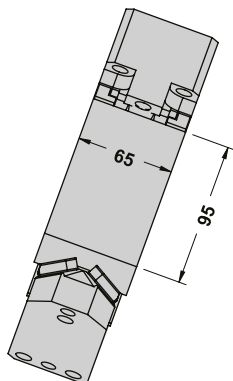
| Art.    | Work Angle = 5° |
|---------|-----------------|
| CHW065. | 05              |

| OMCR CODE | Work Angle<br>β | Overall Dimensions (mm) |        |     |     |     |     |     |     |     |     |
|-----------|-----------------|-------------------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|
|           |                 | A                       | B      | C   | D   | E   | F   | G   | H   | I   | J   |
| CHW065.00 | 0°              | 170,88                  | 55,77  | 44  | 180 | 200 | 136 | 95  | 115 | 164 | 183 |
| CHW065.05 | 5°              | 179,54                  | 57,5   | 55  | 175 | 200 | 120 | 80  | 100 | 173 | 191 |
| CHW065.10 | 10°             | 179,7                   | 59,37  | 40  | 175 | 205 | 135 | 100 | 115 | 175 | 195 |
| CHW065.15 | 15°             | 186,81                  | 59,53  | 40  | 160 | 200 | 120 | 85  | 100 | 183 | 201 |
| CHW065.20 | 20°             | 190,11                  | 69,84  | 35  | 164 | 205 | 129 | 95  | 110 | 190 | 208 |
| CHW065.25 | 25°             | 194,23                  | 68,75  | 30  | 154 | 195 | 124 | 80  | 100 | 195 | 213 |
| CHW065.30 | 30°             | 195,12                  | 71,6   | 25  | 154 | 195 | 129 | 90  | 105 | 195 | 213 |
| CHW065.35 | 35°             | 195,51                  | 75,18  | 10  | 130 | 190 | 120 | 80  | 95  | 200 | 218 |
| CHW065.40 | 40°             | 194,77                  | 85,49  | -   | 120 | 195 | 120 | 80  | 95  | 197 | 215 |
| CHW065.45 | 45°             | 193,55                  | 86,14  | -   | 116 | 195 | 116 | 85  | -   | 197 | 215 |
| CHW065.50 | 50°             | 165,18                  | 94,49  | -21 | 79  | 190 | 100 | 60  | -   | 172 | 190 |
| CHW065.55 | 55°             | 175,74                  | 120,29 | -8  | 82  | 200 | 90  | 45  | -   | 172 | 190 |
| CHW065.60 | 60°             | 181,59                  | 120,71 | -5  | 80  | 200 | 85  | 50  | -   | 172 | 190 |
| CHW065.65 | 65°             | 180,09                  | 131,37 | -5  | 80  | 195 | 85  | 40  | -   | 172 | 190 |
| CHW065.70 | 70°             | 183                     | 142,17 | -5  | 80  | 200 | 85  | 36  | -   | 172 | 190 |
| CHW065.75 | 75°             | 183,62                  | 144,44 | -10 | 76  | 190 | 86  | 45  | -   | 172 | 190 |

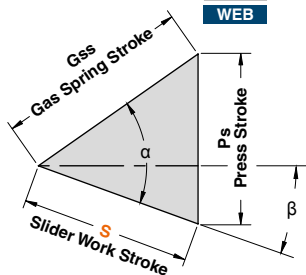


## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA

## X VIEW

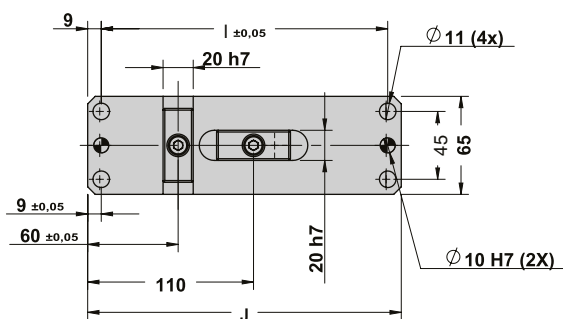
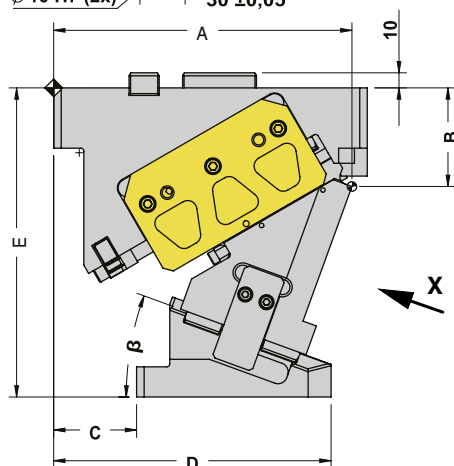
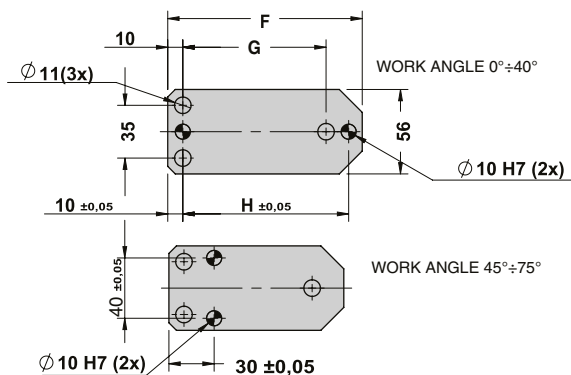


## CAM DIAGRAM



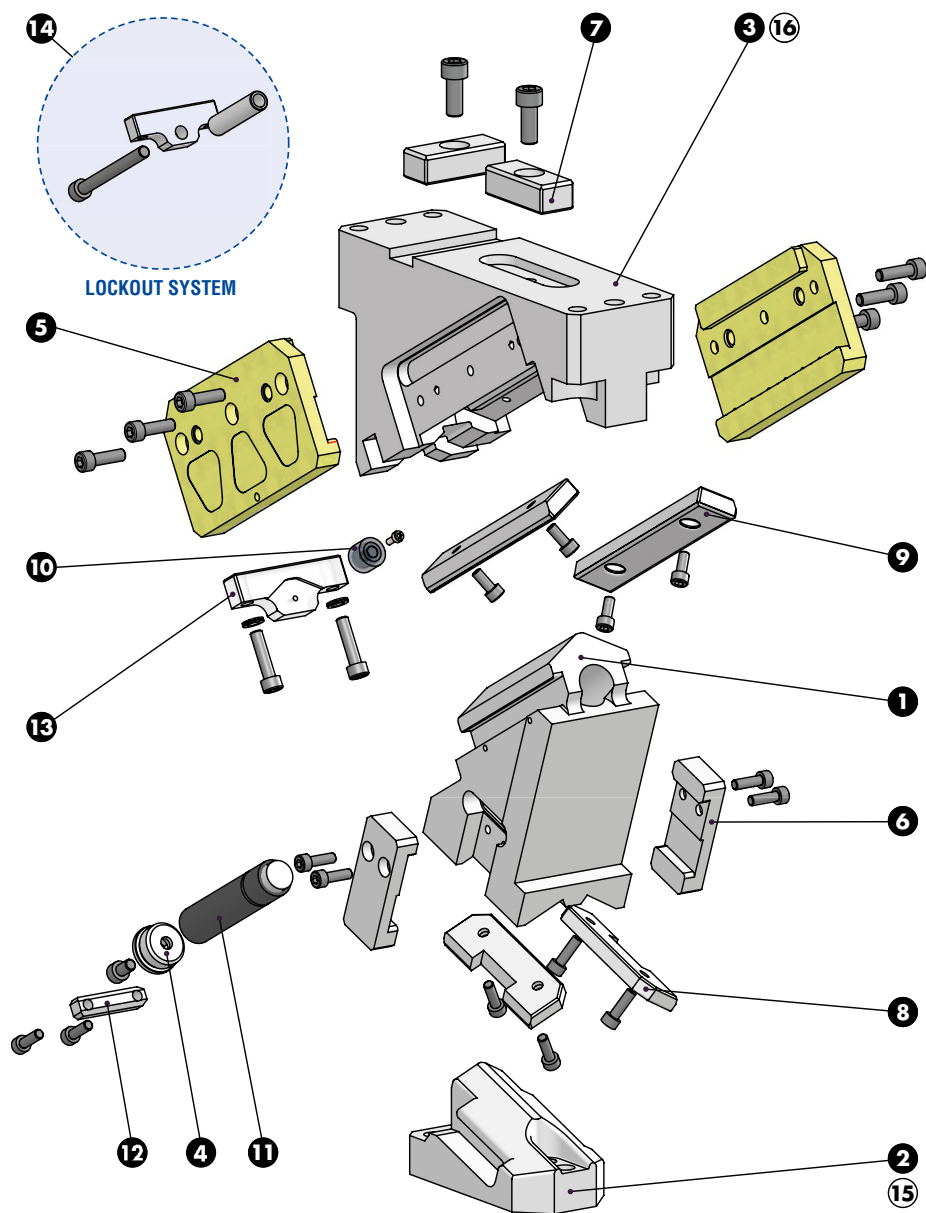
| Work Angle | Inner Angle | Slider Work Stroke (mm) | Press Stroke (mm) | Gas Spring Stroke (mm) |
|------------|-------------|-------------------------|-------------------|------------------------|
| β          | α           | S                       | Ps                | Gss                    |

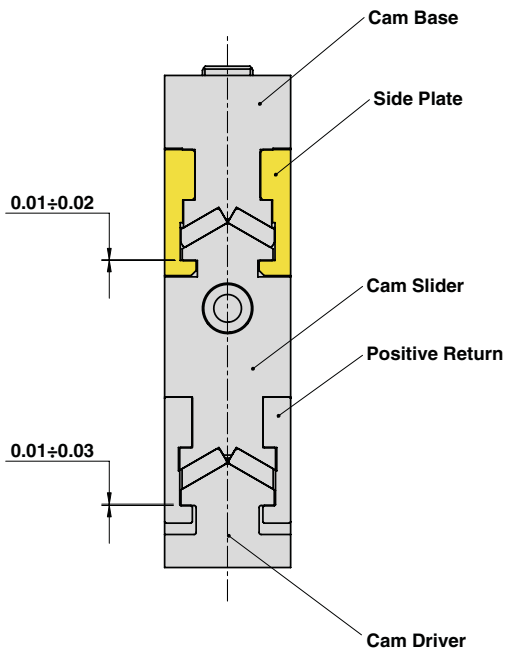
|     |     |       |       |      |
|-----|-----|-------|-------|------|
| 0°  | 50° | 28,9  | 34,5  | 45   |
| 5°  | 50° | 31,9  | 34,5  | 45   |
| 10° | 50° | 35    | 35    | 45   |
| 15° | 50° | 38,16 | 35,69 | 45   |
| 20° | 50° | 41,47 | 36,68 | 45   |
| 25° | 50° | 45    | 38    | 45   |
| 30° | 50° | 48,83 | 39,8  | 45   |
| 35° | 50° | 53,06 | 42,08 | 45   |
| 40° | 50° | 57,85 | 45    | 45   |
| 45° | 50° | 63,4  | 48,75 | 45   |
| 50° | 50° | 46,6  | 35,75 | 30   |
| 55° | 55° | 52,3  | 42,85 | 30   |
| 60° | 60° | 46    | 39,8  | 23   |
| 65° | 65° | 54,4  | 49,3  | 23   |
| 70° | 70° | 39,5  | 37    | 13,5 |
| 75° | 75° | 52,16 | 50,4  | 13,5 |





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

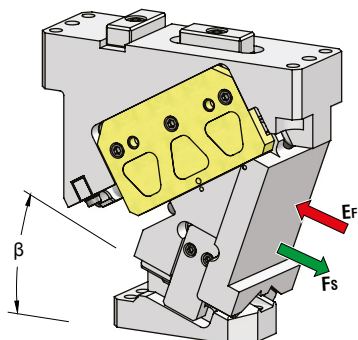



**AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA**
**SLIDER STRUCTURE, POSITIVE RETURN STRUCTURE AND CLEARANCES**

**PART LIST**

| Particular number | Description                          | Material                        | Quantity |
|-------------------|--------------------------------------|---------------------------------|----------|
| 1                 | Cam Slider                           | 42CrMo4                         | 1        |
| 2                 | Cam Driver                           | 42CrMo4                         | 1        |
| 3                 | Cam Base                             | 42CrMo4                         | 1        |
| 4                 | Spring spacer                        | CK45                            | 1        |
| 5                 | Side Plate                           | CuZn25Al5 + Graphite - HB > 190 | 2        |
| 6                 | Positive Return                      | 42CrMo4 Nitrided                | 2        |
| 7                 | Key                                  | CK45                            | 2        |
| 8                 | Wear Plate                           | St42 + Syntered layer           | 2        |
| 9                 | Wear Plate                           | St42 + Syntered layer           | 2        |
| 10                | Elastomer                            | Elastomer                       | 1        |
| 11                | Gas Spring                           | -                               | 1        |
| 12                | Safety plate                         | CK45                            | 1        |
| 13                | Stopper plate                        | CK45                            | 1        |
| 14                | <a href="#">LOCKOUT SYSTEM</a>       | (more info on OMCR website)     | 1        |
| 15                | Cam Driver Fixing Screws M10 DIN 912 | -                               | 3        |
| 16                | Cam Base Fixing Screws M10 DIN 912   | -                               | 4        |



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



| OMCR CODE | Work Angle<br>$\beta$ | Stroke (mm)<br>S | Max Work Force with shoulder (kN)<br>$F_s$ | Extraction Force (kN) |
|-----------|-----------------------|------------------|--------------------------------------------|-----------------------|
|           |                       |                  |                                            | $E_f$<br>Gas Spring   |
| CHW085.00 | 0°                    | 28,9             | 210                                        | 5,6                   |
| CHW085.05 | 5°                    | 31,9             | 212                                        | 5,6                   |
| CHW085.10 | 10°                   | 35               | 214                                        | 5,8                   |
| CHW085.15 | 15°                   | 38,16            | 214                                        | 5,8                   |
| CHW085.20 | 20°                   | 41,47            | 216                                        | 6,1                   |
| CHW085.25 | 25°                   | 45               | 216                                        | 6,1                   |
| CHW085.30 | 30°                   | 48,83            | 218                                        | 6,3                   |
| CHW085.35 | 35°                   | 53,06            | 218                                        | 6,3                   |
| CHW085.40 | 40°                   | 57,85            | 220                                        | 6,3                   |
| CHW085.45 | 45°                   | 63,4             | 222                                        | 6,5                   |
| CHW085.50 | 50°                   | 46,6             | 222                                        | 6,5                   |
| CHW085.55 | 55°                   | 52,3             | 224                                        | 6,5                   |
| CHW085.60 | 60°                   | 46               | 226                                        | 6,6                   |
| CHW085.65 | 65°                   | 54,4             | 228                                        | 6,6                   |
| CHW085.70 | 70°                   | 39,5             | 230                                        | 6,8                   |
| CHW085.75 | 75°                   | 52,16            | 230                                        | 6,8                   |



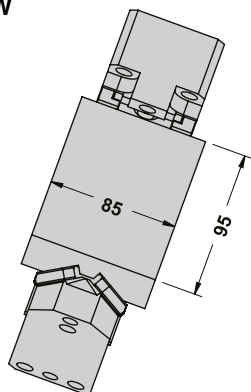
| Art.    | Work Angle = 5° |
|---------|-----------------|
| CHW085. | 05              |

| OMCR CODE | Work Angle<br>$\beta$ | Overall Dimensions (mm) |        |     |     |     |     |     |     |     |     |
|-----------|-----------------------|-------------------------|--------|-----|-----|-----|-----|-----|-----|-----|-----|
|           |                       | A                       | B      | C   | D   | E   | F   | G   | H   | I   | J   |
| CHW085.00 | 0°                    | 170,88                  | 55,77  | 44  | 180 | 200 | 136 | 95  | 115 | 164 | 183 |
| CHW085.05 | 5°                    | 179,54                  | 57,5   | 55  | 175 | 200 | 120 | 80  | 100 | 173 | 191 |
| CHW085.10 | 10°                   | 179,7                   | 59,37  | 40  | 175 | 205 | 135 | 100 | 115 | 175 | 195 |
| CHW085.15 | 15°                   | 186,81                  | 59,53  | 40  | 160 | 200 | 120 | 85  | 100 | 183 | 201 |
| CHW085.20 | 20°                   | 190,11                  | 69,84  | 35  | 164 | 205 | 129 | 95  | 110 | 190 | 208 |
| CHW085.25 | 25°                   | 194,23                  | 68,75  | 30  | 154 | 195 | 124 | 80  | 100 | 195 | 213 |
| CHW085.30 | 30°                   | 195,12                  | 71,6   | 25  | 154 | 195 | 129 | 90  | 105 | 195 | 213 |
| CHW085.35 | 35°                   | 195,51                  | 75,18  | 10  | 130 | 190 | 120 | 80  | 95  | 200 | 218 |
| CHW085.40 | 40°                   | 194,77                  | 85,49  | -   | 120 | 195 | 120 | 80  | 95  | 197 | 215 |
| CHW085.45 | 45°                   | 193,55                  | 86,14  | -   | 116 | 195 | 116 | 85  | -   | 197 | 215 |
| CHW085.50 | 50°                   | 165,18                  | 94,49  | -21 | 79  | 190 | 100 | 60  | -   | 172 | 190 |
| CHW085.55 | 55°                   | 175,74                  | 120,29 | -8  | 82  | 200 | 90  | 45  | -   | 172 | 190 |
| CHW085.60 | 60°                   | 181,59                  | 120,71 | -5  | 80  | 200 | 85  | 50  | -   | 172 | 190 |
| CHW085.65 | 65°                   | 180,09                  | 131,37 | -5  | 80  | 195 | 85  | 40  | -   | 172 | 190 |
| CHW085.70 | 70°                   | 183                     | 142,17 | -5  | 80  | 200 | 85  | 36  | -   | 172 | 190 |
| CHW085.75 | 75°                   | 183,62                  | 144,44 | -10 | 76  | 190 | 86  | 45  | -   | 172 | 190 |

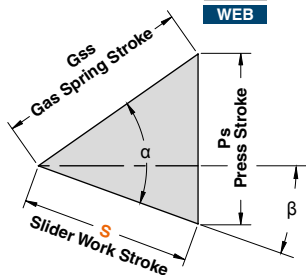


## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA

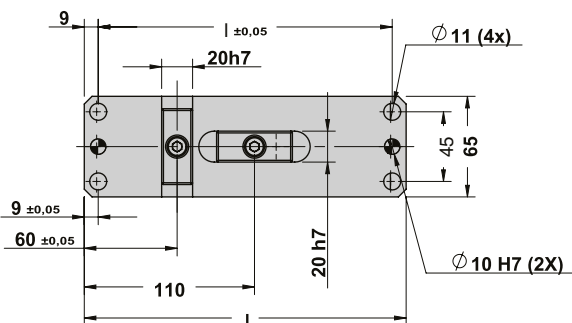
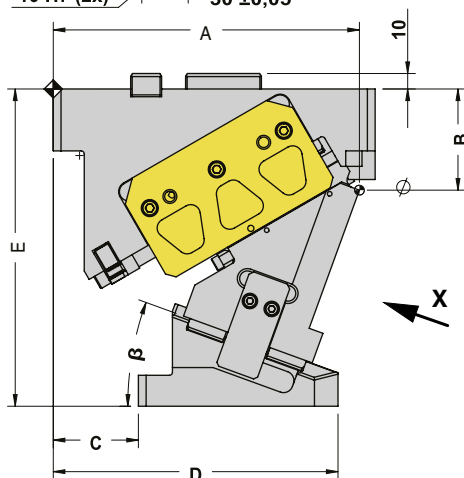
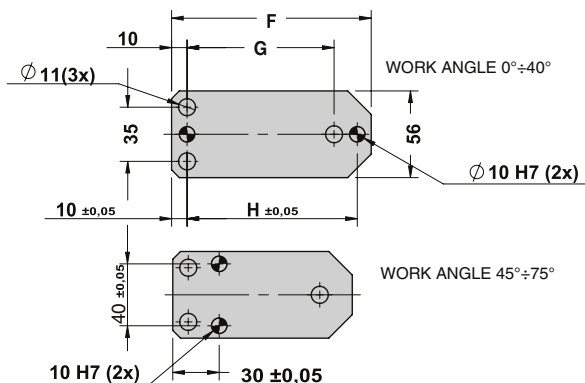
## X VIEW



## CAM DIAGRAM

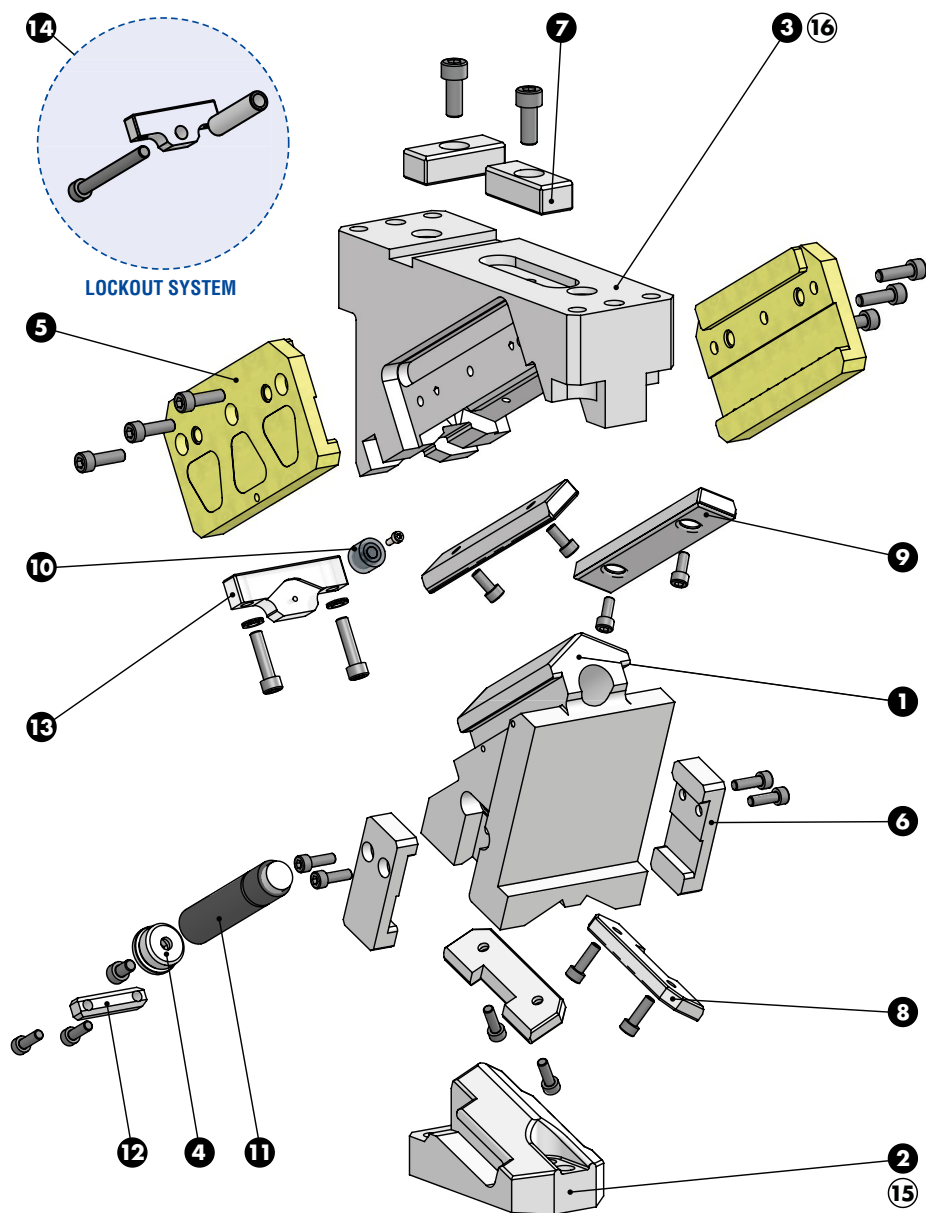


| Work Angle | Inner Angle | Slider Work Stroke (mm) | Press Stroke (mm) | Gas Spring Stroke (mm) |
|------------|-------------|-------------------------|-------------------|------------------------|
| β          | α           | S                       | Ps                | Gss                    |
| 0°         | 50°         | 28,9                    | 34,5              | 45                     |
| 5°         | 50°         | 31,9                    | 34,5              | 45                     |
| 10°        | 50°         | 35                      | 35                | 45                     |
| 15°        | 50°         | 38,16                   | 35,69             | 45                     |
| 20°        | 50°         | 41,47                   | 36,68             | 45                     |
| 25°        | 50°         | 45                      | 38                | 45                     |
| 30°        | 50°         | 48,83                   | 39,8              | 45                     |
| 35°        | 50°         | 53,06                   | 42,08             | 45                     |
| 40°        | 50°         | 57,85                   | 45                | 45                     |
| 45°        | 50°         | 63,4                    | 48,75             | 45                     |
| 50°        | 50°         | 46,6                    | 35,75             | 30                     |
| 55°        | 55°         | 52,3                    | 42,85             | 30                     |
| 60°        | 60°         | 46                      | 39,8              | 23                     |
| 65°        | 65°         | 54,4                    | 49,3              | 23                     |
| 70°        | 70°         | 39,5                    | 37                | 13,5                   |
| 75°        | 75°         | 52,16                   | 50,4              | 13,5                   |





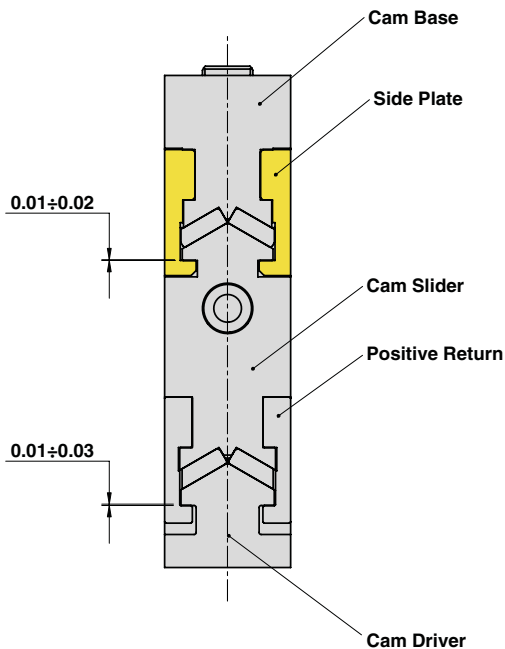
## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA





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

## SLIDER STRUCTURE, POSITIVE RETURN STRUCTURE AND CLEARANCES

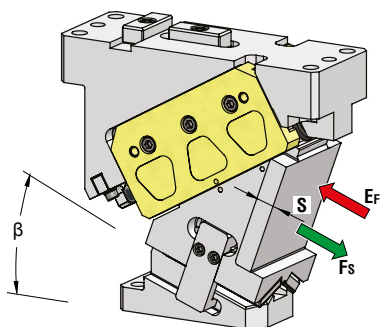


### PART LIST

| Particular number | Description                          | Material                        | Quantity |
|-------------------|--------------------------------------|---------------------------------|----------|
| 1                 | Cam Slider                           | 42CrMo4                         | 1        |
| 2                 | Cam Driver                           | 42CrMo4                         | 1        |
| 3                 | Cam Base                             | 42CrMo4                         | 1        |
| 4                 | Spring spacer                        | CK45                            | 1        |
| 5                 | Side Plate                           | CuZn25Al5 + Graphite - HB > 190 | 2        |
| 6                 | Positive Return                      | 42CrMo4 Nitrided                | 2        |
| 7                 | Key                                  | CK45                            | 2        |
| 8                 | Wear Plate                           | St42 + Syntered layer           | 2        |
| 9                 | Wear Plate                           | St42 + Syntered layer           | 2        |
| 10                | Elastomer                            | Elastomer                       | 1        |
| 11                | Gas Spring                           | -                               | 1        |
| 12                | Safety plate                         | CK45                            | 1        |
| 13                | Stopper plate                        | CK45                            | 1        |
| 14                | LOCKOUT SYSTEM                       | (more info on OMCR website)     | 1        |
| 15                | Cam Driver Fixing Screws M10 DIN 912 | -                               | 3        |
| 16                | Cam Base Fixing Screws M10 DIN 912   | -                               | 4        |



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



| OMCR CODE | Work Angle<br>$\beta$ | Stroke (mm)<br>S | Max Work Force with shoulder (kN)<br>$F_s$ | Extraction Force (kN) |
|-----------|-----------------------|------------------|--------------------------------------------|-----------------------|
|           |                       |                  |                                            | $E_f$<br>Gas Spring   |
| CHW090.00 | 0°                    | 28               | 250                                        | 11                    |
| CHW090.05 | 5°                    | 30,8             | 255                                        | 11                    |
| CHW090.10 | 10°                   | 33,84            | 260                                        | 11,5                  |
| CHW090.15 | 15°                   | 36,89            | 260                                        | 11,5                  |
| CHW090.20 | 20°                   | 40               | 265                                        | 11,5                  |
| CHW090.25 | 25°                   | 43,5             | 270                                        | 12                    |
| CHW090.30 | 30°                   | 47,2             | 275                                        | 12                    |
| CHW090.35 | 35°                   | 51,29            | 280                                        | 12,4                  |
| CHW090.40 | 40°                   | 55,92            | 280                                        | 12,4                  |
| CHW090.45 | 45°                   | 61,28            | 285                                        | 12,6                  |
| CHW090.50 | 50°                   | 66,9             | 290                                        | 12,6                  |
| CHW090.55 | 55°                   | 57,53            | 300                                        | 12,8                  |
| CHW090.60 | 60°                   | 66               | 305                                        | 12,8                  |
| CHW090.65 | 65°                   | 78,08            | 310                                        | 13                    |
| CHW090.70 | 70°                   | 67,25            | 318                                        | 13                    |
| CHW090.75 | 75°                   | 61,82            | 320                                        | 13,2                  |

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| Art.    | Work Angle = 5° |
|---------|-----------------|
| CHW090. | 05              |

| OMCR CODE | Work Angle<br>$\beta$ | Overall Dimensions (mm) |        |      |       |     |     |     |     |     |     |
|-----------|-----------------------|-------------------------|--------|------|-------|-----|-----|-----|-----|-----|-----|
|           |                       | A                       | B      | C    | D     | E   | F   | G   | H   | I   | J   |
| CHW090.00 | 0°                    | 196,69                  | 70,15  | 72   | 208   | 230 | 136 | 105 | 75  | 191 | 215 |
| CHW090.05 | 5°                    | 206,69                  | 74,45  | 70   | 260   | 235 | 135 | 90  | 110 | 201 | 225 |
| CHW090.10 | 10°                   | 215,17                  | 79,64  | 65   | 205   | 240 | 140 | 95  | 115 | 211 | 235 |
| CHW090.15 | 15°                   | 216,42                  | 86,42  | 55   | 195   | 240 | 140 | 95  | 115 | 216 | 240 |
| CHW090.20 | 20°                   | 217,31                  | 83,67  | 50,5 | 185,5 | 230 | 135 | 90  | 110 | 221 | 245 |
| CHW090.25 | 25°                   | 220,17                  | 86,39  | 45   | 180   | 230 | 135 | 90  | 110 | 221 | 245 |
| CHW090.30 | 30°                   | 223,69                  | 91,43  | 30   | 165   | 225 | 135 | 90  | 110 | 226 | 250 |
| CHW090.35 | 35°                   | 222,78                  | 94,02  | 20   | 155   | 220 | 135 | 90  | 110 | 226 | 250 |
| CHW090.40 | 40°                   | 217,88                  | 96,41  | 15   | 150   | 220 | 135 | 90  | 110 | 226 | 250 |
| CHW090.45 | 45°                   | 218,48                  | 94,32  | 5    | 140   | 205 | 135 | 90  | 110 | 226 | 250 |
| CHW090.50 | 50°                   | 206,61                  | 106,51 | 1,5  | 116,5 | 205 | 115 | 63  | 50  | 216 | 240 |
| CHW090.55 | 55°                   | 203,78                  | 107,91 | 0    | 105   | 210 | 105 | 60  | 50  | 216 | 240 |
| CHW090.60 | 60°                   | 216,26                  | 112,73 | -5   | 100   | 210 | 105 | 60  | 50  | 216 | 240 |
| CHW090.65 | 65°                   | 217,57                  | 136,11 | -10  | 95    | 220 | 105 | 50  | 50  | 216 | 240 |
| CHW090.70 | 70°                   | 207,35                  | 139,74 | -20  | 83    | 215 | 102 | 40  | 50  | 216 | 240 |
| CHW090.75 | 75°                   | 206,25                  | 154,43 | -15  | 80    | 210 | 95  | 40  | 50  | 216 | 240 |



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

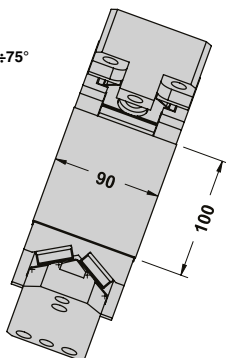
## X VIEW

WORK ANGLE 0°

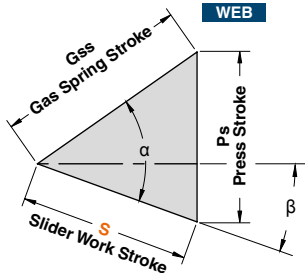
K=15

WORK ANGLE 5°÷75°

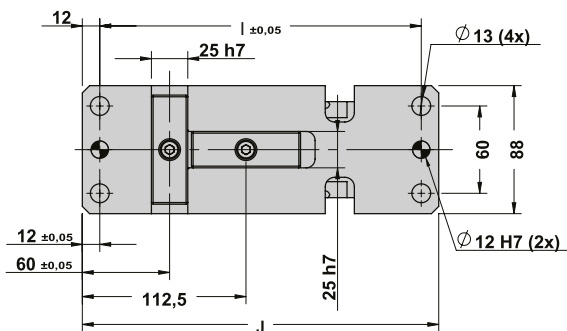
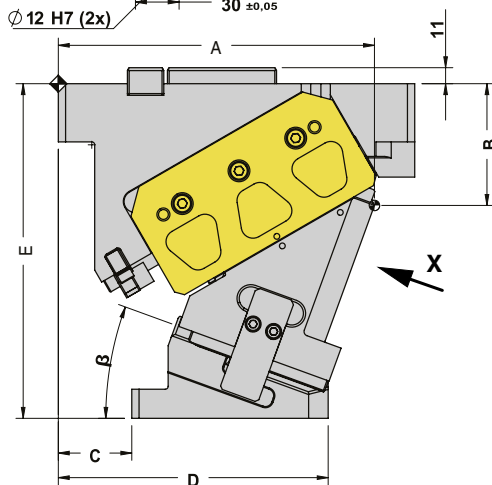
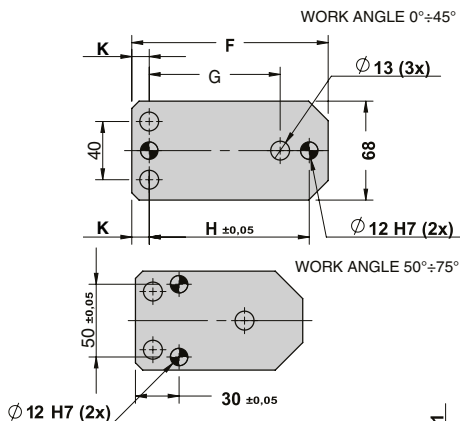
K=12



## CAM DIAGRAM

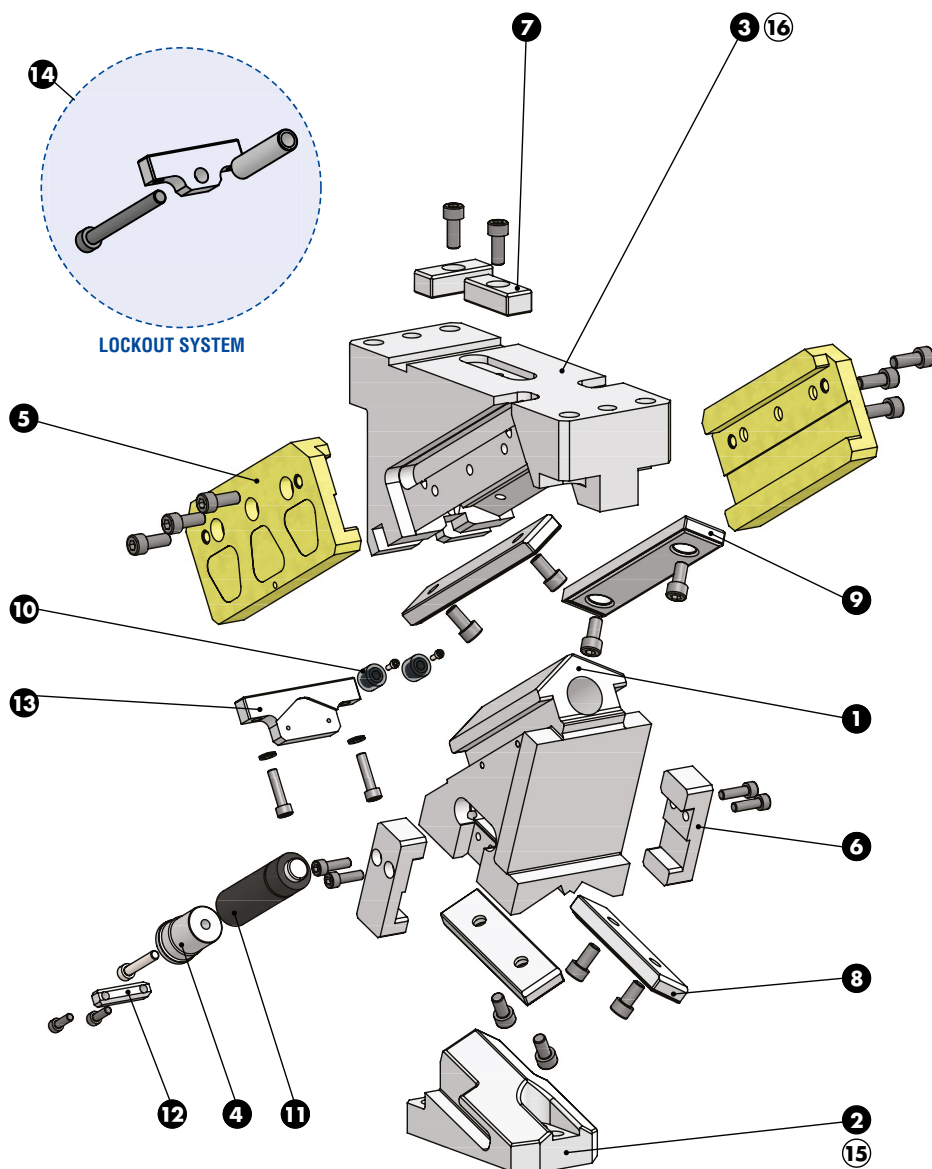


| Work Angle | Inner Angle | Slider Work Stroke (mm) | Press Stroke (mm) | Gas Spring Stroke (mm) |
|------------|-------------|-------------------------|-------------------|------------------------|
| β          | α           | S                       | Ps                | Gss                    |
| 0°         | 50°         | 28                      | 33,33             | 43,5                   |
| 5°         | 50°         | 30,8                    | 33,45             | 43,5                   |
| 10°        | 50°         | 33,84                   | 33,84             | 43,5                   |
| 15°        | 50°         | 36,89                   | 34,5              | 43,5                   |
| 20°        | 50°         | 40                      | 35,46             | 43,5                   |
| 25°        | 50°         | 43,5                    | 36,77             | 43,5                   |
| 30°        | 50°         | 47,2                    | 38,48             | 43,5                   |
| 35°        | 50°         | 51,29                   | 40,68             | 43,5                   |
| 40°        | 50°         | 55,92                   | 43,5              | 43,5                   |
| 45°        | 50°         | 61,28                   | 47,13             | 43,5                   |
| 50°        | 50°         | 66,9                    | 51,25             | 43                     |
| 55°        | 55°         | 57,53                   | 47,13             | 33                     |
| 60°        | 60°         | 66                      | 57,16             | 33                     |
| 65°        | 65°         | 78,08                   | 70,77             | 33                     |
| 70°        | 70°         | 67,25                   | 63,19             | 23                     |
| 75°        | 75°         | 61,82                   | 59,71             | 16                     |





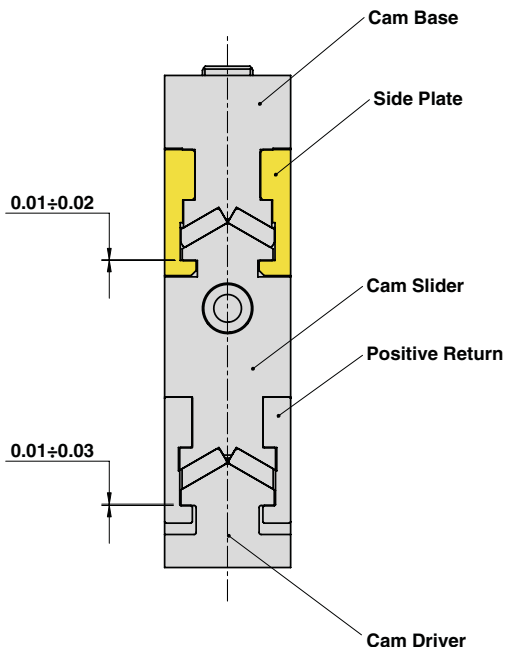
## AERIAL CAM UNIT - OBEN HÄNGENDER SCHIEBER - UNITÀ A CAMME SOSPESA





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

## SLIDER STRUCTURE, POSITIVE RETURN STRUCTURE AND CLEARANCES



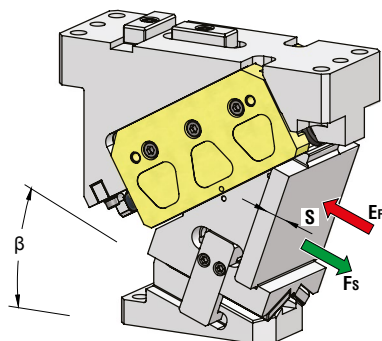
Cam Units CHW

## PART LIST

| Particular number | Description                          | Material                        | Quantity |
|-------------------|--------------------------------------|---------------------------------|----------|
| 1                 | Cam Slider                           | 42CrMo4                         | 1        |
| 2                 | Cam Driver                           | 42CrMo4                         | 1        |
| 3                 | Cam Base                             | 42CrMo4                         | 1        |
| 4                 | Spring spacer                        | CK45                            | 1        |
| 5                 | Side Plate                           | CuZn25Al5 + Graphite - HB > 190 | 2        |
| 6                 | Positive Return                      | 42CrMo4 Nitrided                | 2        |
| 7                 | Key                                  | CK45                            | 2        |
| 8                 | Wear Plate                           | St42 + Syntered layer           | 2        |
| 9                 | Wear Plate                           | St42 + Syntered layer           | 2        |
| 10                | Elastomer                            | Elastomer                       | 2        |
| 11                | Gas Spring                           | -                               | 1        |
| 12                | Safety plate                         | CK45                            | 1        |
| 13                | Stopper plate                        | CK45                            | 1        |
| 14                | <a href="#">LOCKOUT SYSTEM</a>       | (more info on OMCR website)     | 1        |
| 15                | Cam Driver Fixing Screws M12 DIN 912 | -                               | 3        |
| 16                | Cam Base Fixing Screws M12 DIN 912   | -                               | 4        |



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



| OMCR CODE | Work Angle<br>$\beta$ | Stroke (mm)<br>S | Max Work Force with shoulder (kN)<br>$F_s$ | Extraction Force (kN) |
|-----------|-----------------------|------------------|--------------------------------------------|-----------------------|
|           |                       |                  |                                            | $E_f$<br>Gas Spring   |
| CHW110.00 | 0°                    | 28               | 250                                        | 11                    |
| CHW110.05 | 5°                    | 30,8             | 255                                        | 11                    |
| CHW110.10 | 10°                   | 33,84            | 260                                        | 11,5                  |
| CHW110.15 | 15°                   | 36,89            | 260                                        | 11,5                  |
| CHW110.20 | 20°                   | 40               | 265                                        | 11,5                  |
| CHW110.25 | 25°                   | 43,5             | 270                                        | 12                    |
| CHW110.30 | 30°                   | 47,2             | 275                                        | 12                    |
| CHW110.35 | 35°                   | 51,29            | 280                                        | 12,4                  |
| CHW110.40 | 40°                   | 55,92            | 280                                        | 12,4                  |
| CHW110.45 | 45°                   | 61,28            | 285                                        | 12,6                  |
| CHW110.50 | 50°                   | 66,9             | 290                                        | 12,6                  |
| CHW110.55 | 55°                   | 57,53            | 300                                        | 12,8                  |
| CHW110.60 | 60°                   | 66               | 305                                        | 12,8                  |
| CHW110.65 | 65°                   | 78,08            | 310                                        | 13                    |
| CHW110.70 | 70°                   | 67,25            | 318                                        | 13                    |
| CHW110.75 | 75°                   | 61,82            | 320                                        | 13,2                  |

15



| Art.    | Work Angle = 5° |
|---------|-----------------|
| CHW110. | 05              |

| OMCR CODE | Work Angle<br>$\beta$ | Overall Dimensions (mm) |        |      |       |     |     |     |     |     |     |
|-----------|-----------------------|-------------------------|--------|------|-------|-----|-----|-----|-----|-----|-----|
|           |                       | A                       | B      | C    | D     | E   | F   | G   | H   | I   | J   |
| CHW110.00 | 0°                    | 196,69                  | 70,15  | 72   | 208   | 230 | 136 | 105 | 75  | 191 | 215 |
| CHW110.05 | 5°                    | 206,69                  | 74,45  | 70   | 260   | 235 | 135 | 90  | 110 | 201 | 225 |
| CHW110.10 | 10°                   | 215,17                  | 79,64  | 65   | 205   | 240 | 140 | 95  | 115 | 211 | 235 |
| CHW110.15 | 15°                   | 216,42                  | 86,42  | 55   | 195   | 240 | 140 | 95  | 115 | 216 | 240 |
| CHW110.20 | 20°                   | 217,31                  | 83,67  | 50,5 | 185,5 | 230 | 135 | 90  | 110 | 221 | 245 |
| CHW110.25 | 25°                   | 220,17                  | 86,39  | 45   | 180   | 230 | 135 | 90  | 110 | 221 | 245 |
| CHW110.30 | 30°                   | 223,69                  | 91,43  | 30   | 165   | 225 | 135 | 90  | 110 | 226 | 250 |
| CHW110.35 | 35°                   | 222,78                  | 94,02  | 20   | 155   | 220 | 135 | 90  | 110 | 226 | 250 |
| CHW110.40 | 40°                   | 217,88                  | 96,41  | 15   | 150   | 220 | 135 | 90  | 110 | 226 | 250 |
| CHW110.45 | 45°                   | 218,48                  | 94,32  | 5    | 140   | 205 | 135 | 90  | 110 | 226 | 250 |
| CHW110.50 | 50°                   | 206,61                  | 106,51 | 1,5  | 116,5 | 205 | 115 | 63  | 50  | 216 | 240 |
| CHW110.55 | 55°                   | 203,78                  | 107,91 | 0    | 105   | 210 | 105 | 60  | 50  | 216 | 240 |
| CHW110.60 | 60°                   | 216,26                  | 112,73 | -5   | 100   | 210 | 105 | 60  | 50  | 216 | 240 |
| CHW110.65 | 65°                   | 217,57                  | 136,11 | -10  | 95    | 220 | 105 | 50  | 50  | 216 | 240 |
| CHW110.70 | 70°                   | 207,35                  | 139,74 | -20  | 83    | 215 | 102 | 40  | 50  | 216 | 240 |
| CHW110.75 | 75°                   | 206,25                  | 154,43 | -15  | 80    | 210 | 95  | 40  | 50  | 216 | 240 |



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

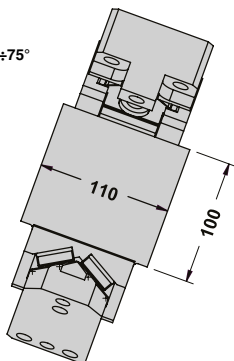
## X VIEW

WORK ANGLE 0°

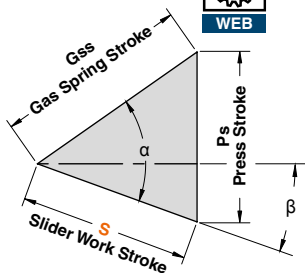
K=15

WORK ANGLE 5°÷75°

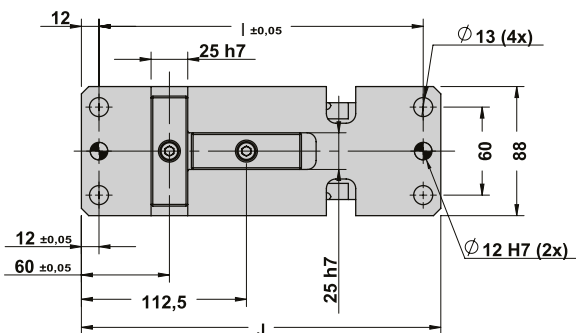
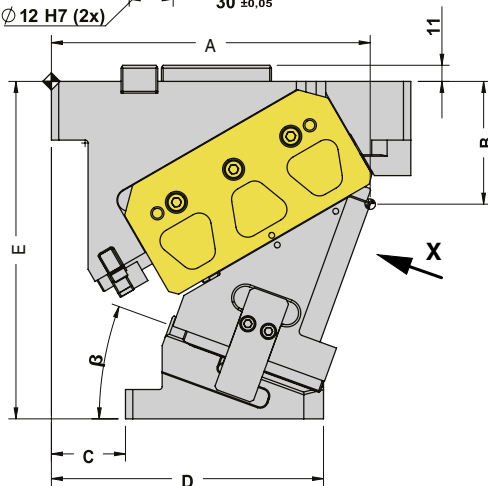
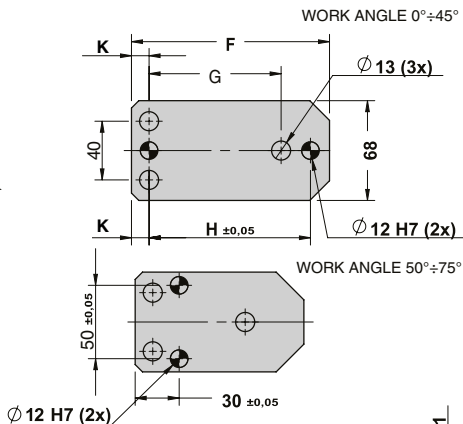
K=12



## CAM DIAGRAM

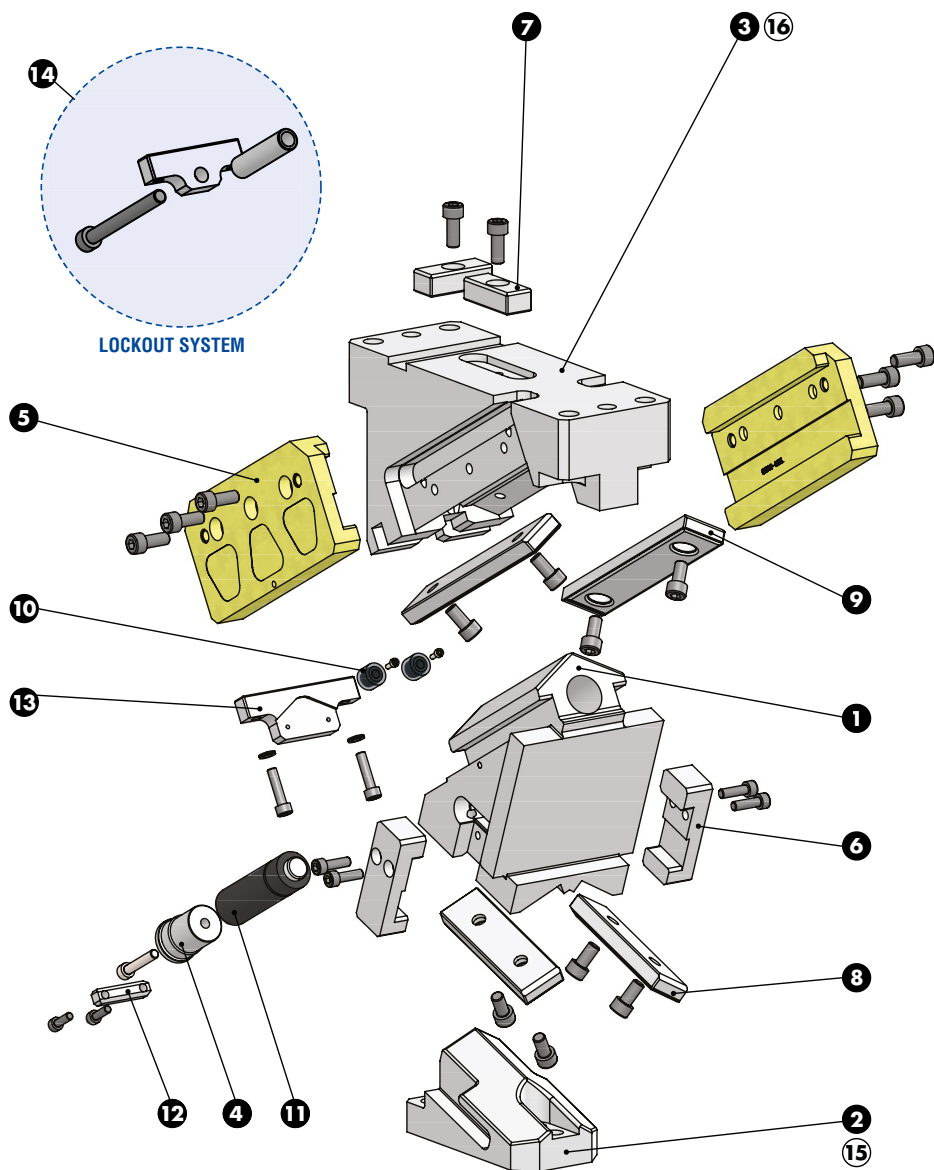


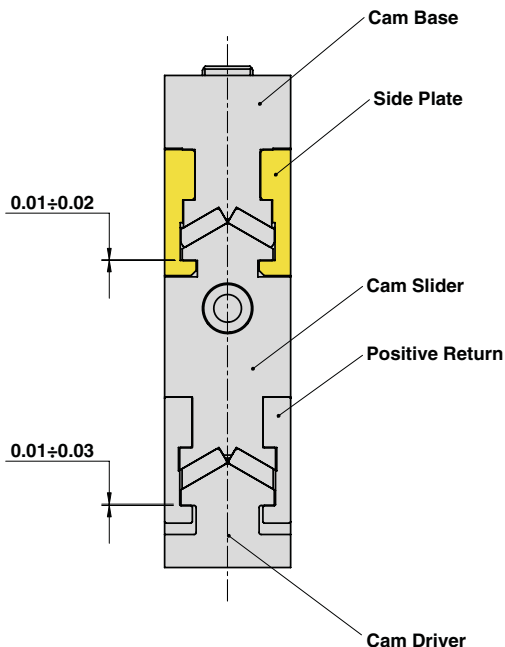
| Work Angle | Inner Angle | Slider Work Stroke (mm) | Press Stroke (mm) | Gas Spring Stroke (mm) |
|------------|-------------|-------------------------|-------------------|------------------------|
| β          | α           | S                       | Ps                | Gss                    |
| 0°         | 50°         | 28                      | 33,33             | 43,5                   |
| 5°         | 50°         | 30,8                    | 33,45             | 43,5                   |
| 10°        | 50°         | 33,84                   | 33,84             | 43,5                   |
| 15°        | 50°         | 36,89                   | 34,5              | 43,5                   |
| 20°        | 50°         | 40                      | 35,46             | 43,5                   |
| 25°        | 50°         | 43,5                    | 36,77             | 43,5                   |
| 30°        | 50°         | 47,2                    | 38,48             | 43,5                   |
| 35°        | 50°         | 51,29                   | 40,68             | 43,5                   |
| 40°        | 50°         | 55,92                   | 43,5              | 43,5                   |
| 45°        | 50°         | 61,28                   | 47,13             | 43,5                   |
| 50°        | 50°         | 66,9                    | 51,25             | 43                     |
| 55°        | 55°         | 57,53                   | 47,13             | 33                     |
| 60°        | 60°         | 66                      | 57,16             | 33                     |
| 65°        | 65°         | 78,08                   | 70,77             | 33                     |
| 70°        | 70°         | 67,25                   | 63,19             | 23                     |
| 75°        | 75°         | 61,82                   | 59,71             | 16                     |





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                           | 42CrMo4                         | 1        |
| 2                 | Cam Driver                           | 42CrMo4                         | 1        |
| 3                 | Cam Base                             | 42CrMo4                         | 1        |
| 4                 | Spring spacer                        | CK45                            | 1        |
| 5                 | Side Plate                           | CuZn25Al5 + Graphite - HB > 190 | 2        |
| 6                 | Positive Return                      | 42CrMo4 Nitrided                | 2        |
| 7                 | Key                                  | CK45                            | 2        |
| 8                 | Wear Plate                           | St42 + Syntered layer           | 2        |
| 9                 | Wear Plate                           | St42 + Syntered layer           | 2        |
| 10                | Elastomer                            | Elastomer                       | 2        |
| 11                | Gas Spring                           | -                               | 1        |
| 12                | Safety plate                         | CK45                            | 1        |
| 13                | Stopper plate                        | CK45                            | 1        |
| 14                | <a href="#">LOCKOUT SYSTEM</a>       | (more info on OMCR website)     | 1        |
| 15                | Cam Driver Fixing Screws M12 DIN 912 | -                               | 3        |
| 16                | Cam Base Fixing Screws M12 DIN 912   | -                               | 4        |