



O-KS COMPACT CAM UNIT

The premium model for highest
precision and performance





voestalpine Camtec

Your innovative and reliable partner

voestalpine Camtec is a global leader with many years of experience in the production of cam units and maintenance free cam sliders.

Our sector-specific expertise and knowledge of the manufacturing processes of our customers have established us as a reliable partner to renowned companies in the automotive and mechanical engineering industries. We provide our customers with innovative products and high-quality

service. Our team of technical specialists is dedicated to providing effective solutions worldwide. Our state-of-the-art sliding elements and technologies, our spare parts management and rapid response times and our comprehensive services put us one step ahead.

WORLDWIDE CUSTOMER SERVICE AND PRODUCT AVAILABILITY

The headquarters of voestalpine Camtec is located in Linz, Austria. Our international locations, subsidiaries and investment in other companies make it possible for us to flexibly respond to your needs and provide high-quality services at your specific location. Our dedicated warehouses in Linz, Canada and China can react quickly to orders within 24 to 48 hours in the event of incidents involving machine downtime.



Our international team of experts remains at your service: Please find your contact partner online at www.voestalpine.com/camtec or contact us at sales.camtec@voestalpine.com

O-KS – OPTIMIZED COMPACT CAM UNIT

For highest precision and long service life

The new and perfected compact cam unit is of the highest quality and is equipped with innovative features. Our premium model combines effective product design with optimized applications. The result is a perfectly designed and efficient cam unit with added value.

HIGHLY COMPACT DESIGN AND REDUCED COMPLEXITY

resulting from reduced number of components

STRONG RETRACTION FORCES

for the processing of high-strength steels

PATENTED 1° ANGLE

of side plates

CONVINCING MANUFACTURING QUALITY

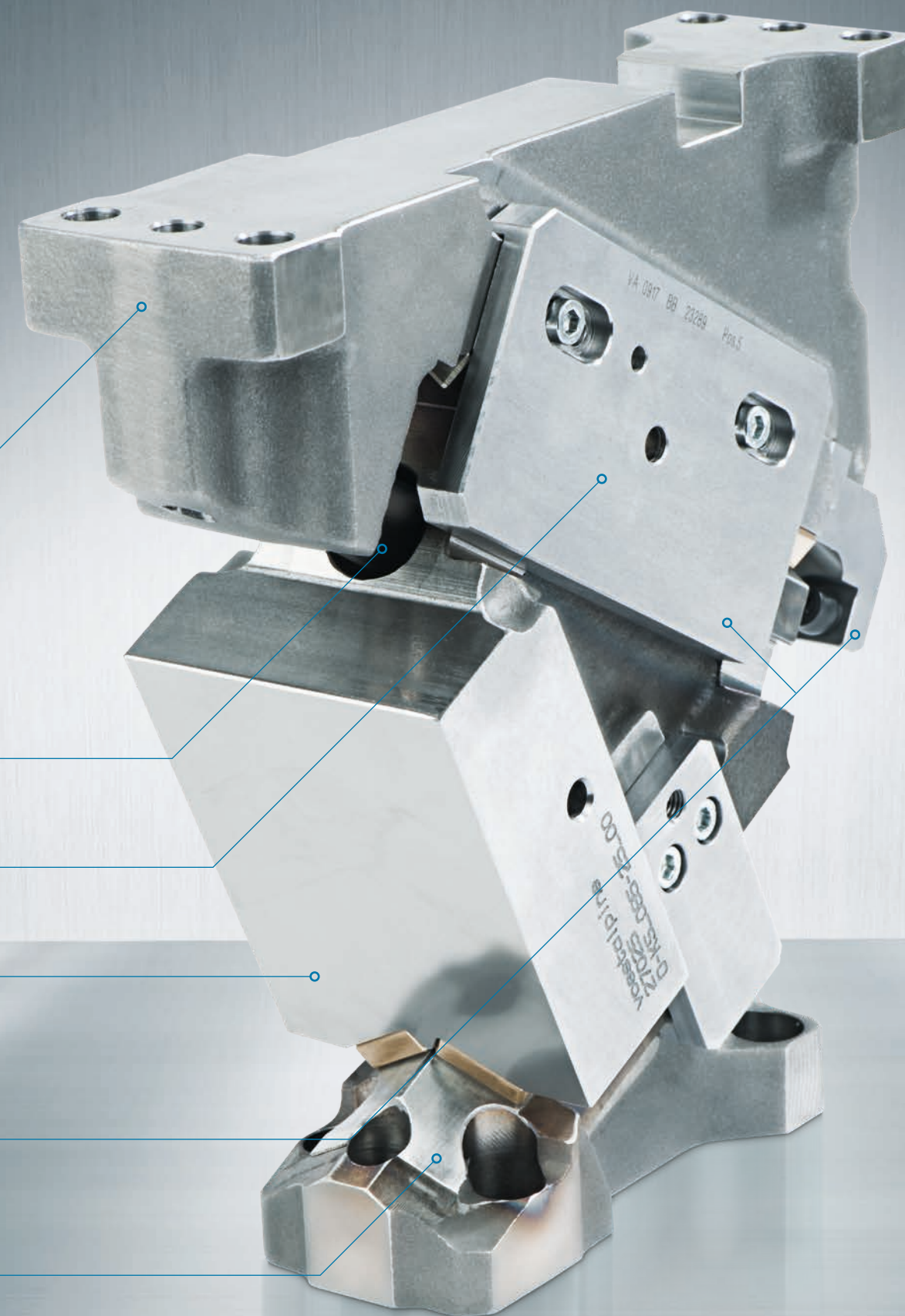
based on certified materials and
optimized surface properties

FLEXIBLY EXCHANGEABLE

from the back or the side – for improved
handling and more efficient tool usage

HARDENED SLIDING SURFACES

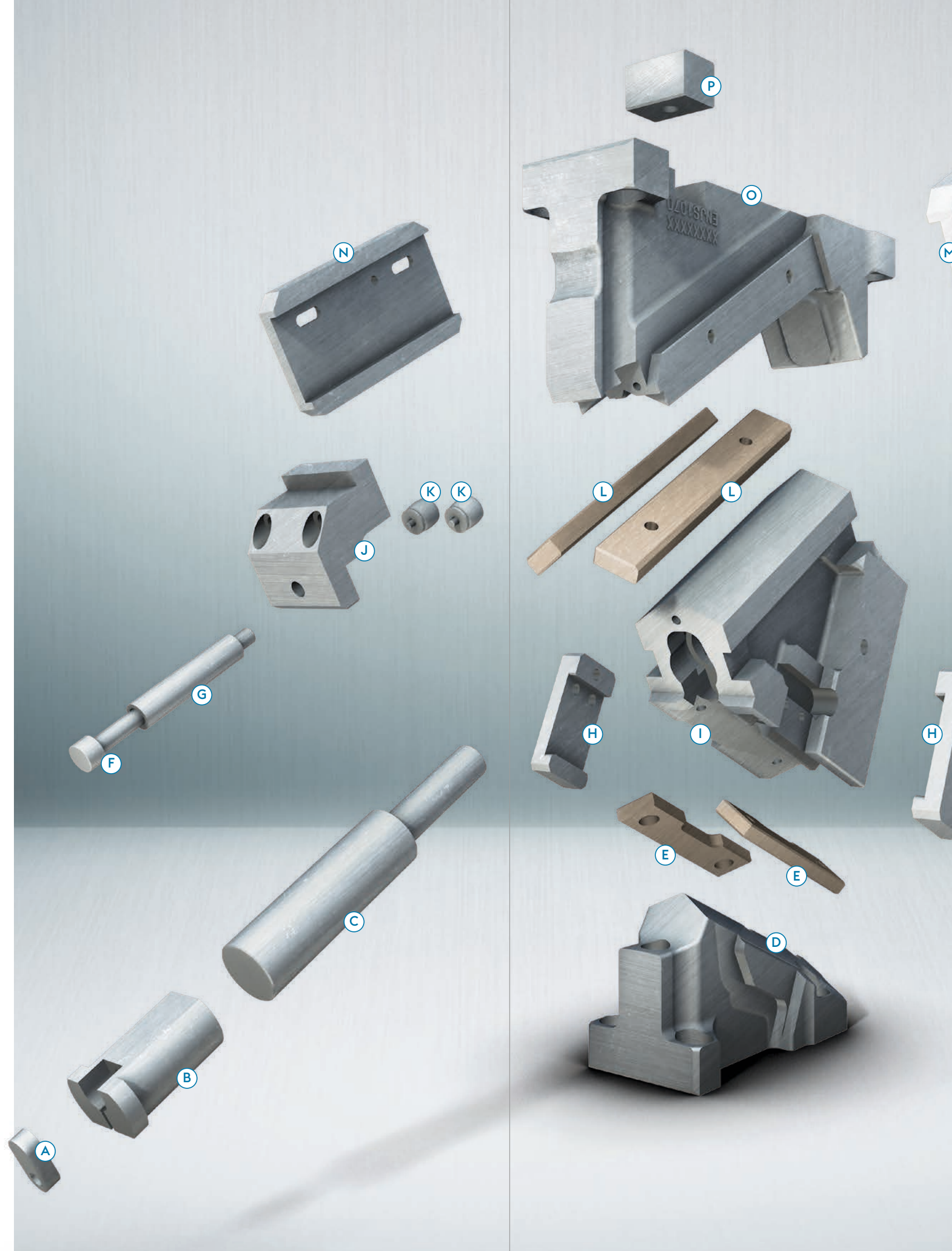
for high loads



Please find the most state-of-the-art O-KS cam units in our product finder:
www.voestalpine.com/camtec/Product-Finder

HIGH- PRECISION DESIGN

The O-KS cam unit consists of very few components, which guarantees high-quality initial installation and maintenance.



- Ⓐ Lock plate
- Ⓑ Blanking-off plate
- Ⓒ Gas spring
- Ⓓ Driver
- Ⓔ Wear plates
- Ⓕ Lock-out screw
- Ⓖ Lock-out shell
- Ⓗ Forced retractor
- Ⓘ Sliding element
- Ⓝ Stop
- Ⓚ Dampers
- Ⓛ Wear plates
- Ⓜ Side plate (left)
- Ⓝ Side plate (right)
- Ⓞ Cam unit bed
- Ⓟ Fitting key

FIND YOUR SOLUTION QUICKLY,
EASILY AND SYSTEMATICALLY.



Our product finder:
www.voestalpine.com/camtec/Product-Finder

With respect to design, ordering and spare parts management, you will find detailed product information quickly and easily in our download center.



O-KS TECHNICAL DETAILS

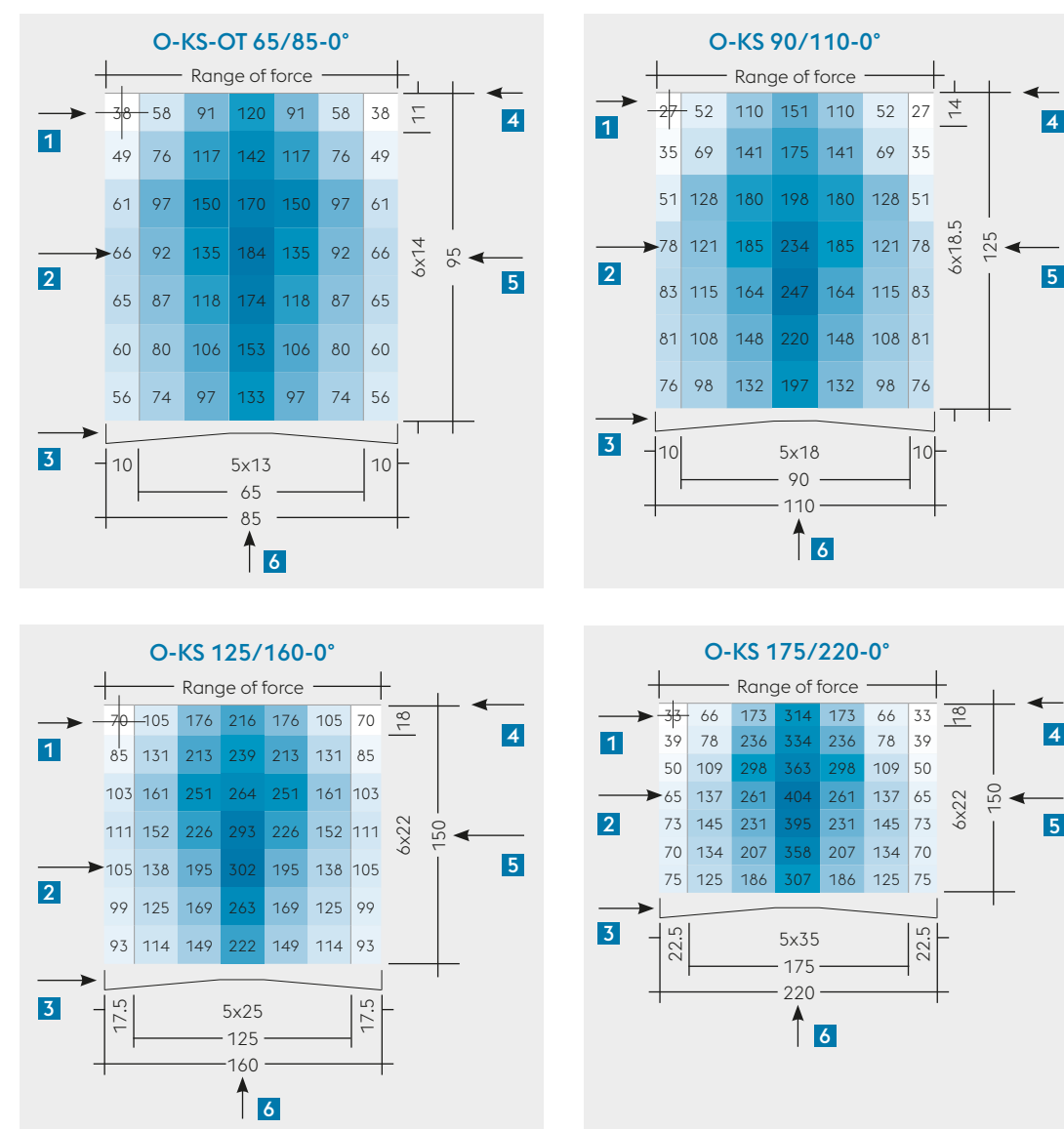
Important information at a glance

Here you will find important technical data for optimized operation of your compact cam unit as well as details on force distribution. Should you have any further questions about O-KS, our experienced team of specialists will be happy to assist you at any time. Please contact us at sales.camtec@voestalpine.com.

	O-KS
Average service life (depending on loads)	2,000,000 strokes
Guaranteed service life	1,000,000 strokes
Precision adjustments made during assembly	Yes
Sliding surfaces	At least Rz 6.3, hardened
Field of application	Shaping, beveling, punching cutting
Angle range	0°-75°
Tensile strength of driver, sliding element and cam bed materials	700 N/mm ² minimum
Available widths	65/85, 90/110, 125/160, 175/220, 260/330, 400/500
Lock-out system	Yes
Guide clamps	1.7225 / Sinter
Positive return	Both sides
Measuring holes	Yes
Gas spring	Yes
Special cam unit options	Yes
Compliant with BAK/VDI	Yes
NAAMs insert point	Yes

PERMISSIBLE CAM FORCES

The following overview shows the permissible cam force in the midpoint of each field in the direction of cam travel (rounded values). In the event of several different forces, the common center of force must be determined and compared with the values indicated in the table. All introduced forces must always be lower than those indicated in the table.



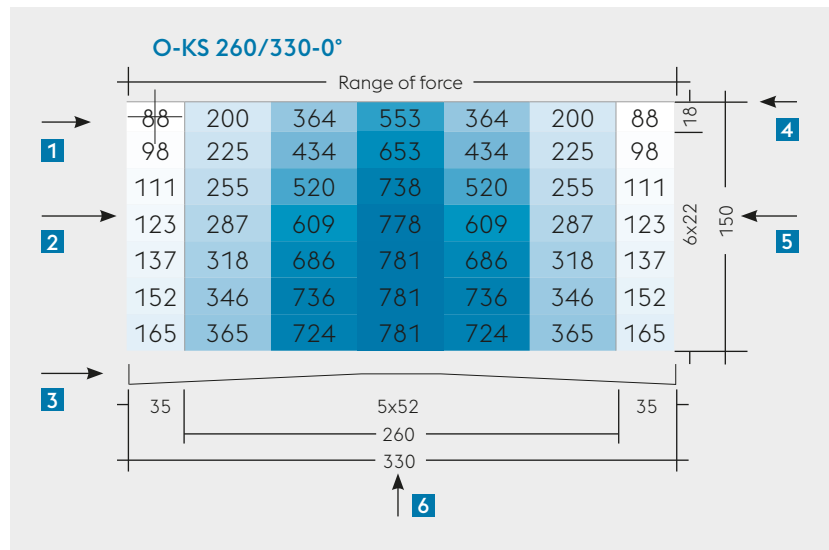
The coloring in the force diagrams reflects tendencies in the range of values from the smallest force to the maximum cam force for each method of support.

- 1 Force in the midpoint of each field
- 2 Value of force kN
- 3 Cam unit bottom
- 4 Top work face
- 5 Height of work face
- 6 Work face width

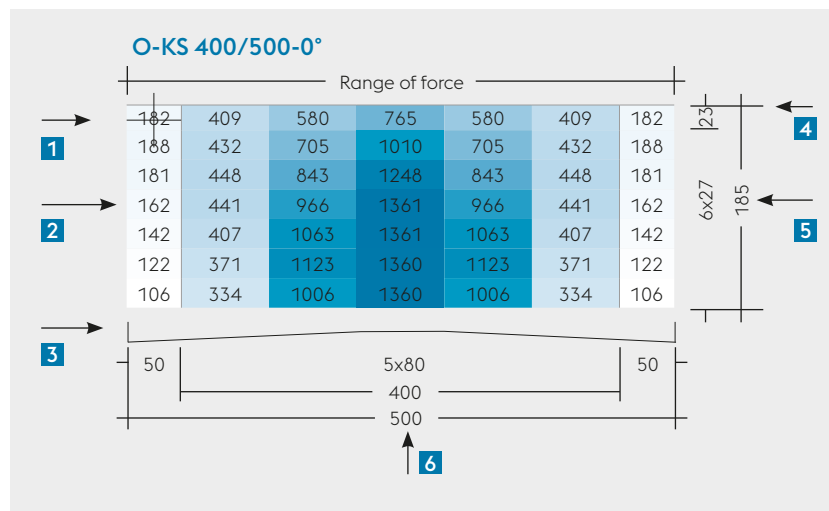
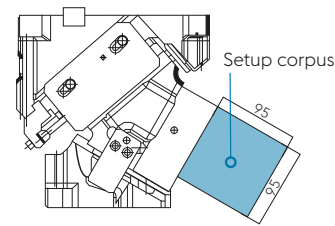
The height and width of the work surface are always displayed in proportion to each other.

The O-KS features a highly convincing force diagram that depicts both shouldering and fitting key support.

PERMISSIBLE CAM FORCES



As a guideline, the length of the setup corpus must not exceed the height of the work surface. The setup corpus should be as compact as possible. Additional sliding plate supports should be provided for longer superstructures. Please contact engineering.camtec@voestalpine.com if you have any questions.



- Force in the midpoint of each field
- Value of force kN
- Cam unit bottom
- Top work face
- Height of work face
- Work face width



The coloring in the force diagrams reflects tendencies in the range of values from the smallest force to the maximum cam force for each method of support.

The O-KS features a highly convincing force diagram that depicts both shouldering and fitting key support.

O-KS ASSEMBLY 1

FORCE DISTRIBUTION AND PERMISSIBLE CAM FORCES

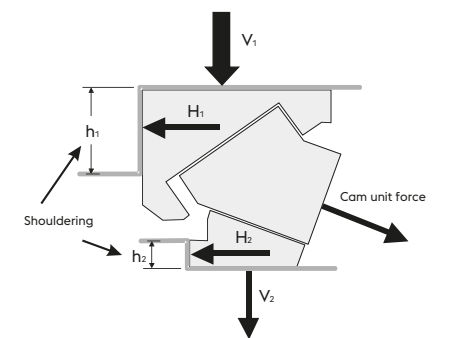
O-KS 65/85 mm cam unit specifications

Identification number		Designation		Angle	Weight [kg]		Stroke [mm]
O-KS 65	O-KS 85	O-KS 65	O-KS 85		O-KS 65	O-KS 85	
27000	27020	O-KS 65-0°	O-KS 85-0°	0°	16.2	17.0	28.93
27001	27021	O-KS 65-5°	O-KS 85-5°	5°	16.3	17.1	29.04
27002	27022	O-KS 65-10°	O-KS 85-10°	10°	15.7	16.5	35.00
27003	27023	O-KS 65-15°	O-KS 85-15°	15°	15.8	16.6	35.69
27004	27024	O-KS 65-20°	O-KS 85-20°	20°	15.7	16.5	36.86
27005	27025	O-KS 65-25°	O-KS 85-25°	25°	15.8	16.6	38.22
27006	27026	O-KS 65-30°	O-KS 85-30°	30°	15.6	16.4	35.38
27007	27027	O-KS 65-35°	O-KS 85-35°	35°	15.7	16.5	37.41
27008	27028	O-KS 65-40°	O-KS 85-40°	40°	15.9	16.8	39.57
27009	27029	O-KS 65-45°	O-KS 85-45°	45°	16.1	16.9	42.87
27010	27030	O-KS 65-50°	O-KS 85-50°	50°	16.3	17.1	47.16
27011	27031	O-KS 65-55°	O-KS 85-55°	55°	16.4	17.2	52.85
27012	27032	O-KS 65-60°	O-KS 85-60°	60°	15.9	16.7	49.24
27013	27033	O-KS 65-65°	O-KS 85-65°	65°	16.2	17.0	46.61
27014	27034	O-KS 65-70°	O-KS 85-70°	70°	16.2	17.0	57.59
27015	27035	O-KS 65-75°	O-KS 85-75°	75°	16.2	17.1	76.10

O-KS 65/85 mm cam unit force distribution

Angle	Maximum cam force [kN]	Force distribution at maximum cam force [kN]				Shouldering [mm]		Stripping force [kN]
		V1	H1	V2	H2	h1	h2	
0°	184	154	184	154	0	155	20	6.8
5°	209	164	195	146	13	155	20	7.6
10°	186	186	156	154	27	125	30	6.6
15°	202	189	159	137	37	125	30	7.6
20°	187	211	122	147	54	100	60	6.5
25°	203	215	124	129	60	100	60	7.3
30°	200	163	137	63	36	105	60	12.2
35°	205	163	136	45	32	105	60	15.2
40°	208	192	111	58	49	100	80	12.8
45°	213	191	110	40	40	100	80	15.4
50°	217	191	110	25	29	100	80	19.0
55°	220	191	110	11	16	100	80	21.0
60°	212	222	39	39	67	40	110	12.0
65°	218	222	39	25	53	40	110	13.8
70°	222	222	39	13	37	40	110	20.0
75°	225	222	39	5	19	40	110	20.5

The cam unit force is distributed as shown in the sketch:

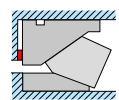


- Shouldering: h_1 (top), h_2 (bottom)
 Press: V_1 (vertical)
 Cam base: H_1 (horizontal), H_2 (horizontal)
 Driver: V_2 (vertical)

O-KS ASSEMBLY 1

65 mm and 85 mm models

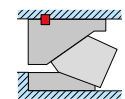
Permissible cam forces



Shouldering

Shouldering support at top and bottom

O-KS 65/85-0°							O-KS 65/85-5°							O-KS 65/85-10°							O-KS 65/85-15°						
38	58	91	120	91	58	38	31	47	81	118	81	47	31	37	57	93	128	93	57	37	30	47	83	125	83	47	30
49	76	117	142	117	76	49	40	65	112	142	112	65	40	48	76	120	154	120	76	48	38	64	114	156	114	64	38
61	97	150	170	150	97	61	53	90	150	174	150	90	53	61	97	151	182	151	97	61	51	89	151	187	151	89	51
66	92	135	184	135	92	66	62	97	146	209	146	97	62	70	100	152	186	152	100	70	65	103	163	201	163	103	65
65	87	118	174	118	87	65	62	91	131	205	131	91	62	69	94	136	186	136	94	69	67	97	146	202	146	97	67
60	80	106	153	106	80	60	59	83	117	192	117	83	59	64	87	119	172	119	87	64	63	89	128	195	128	89	63
56	74	97	133	97	74	56	54	76	105	160	105	76	54	59	79	105	152	105	79	59	58	81	114	173	114	81	58
65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width						



Fitting key

Fitting key support at top, shouldering support at bottom

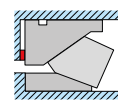
O-KS 65/85-0°							O-KS 65/85-5°							O-KS 65/85-10°							O-KS 65/85-15°						
32	37	37	37	37	37	32	29	36	39	39	39	36	29	35	44	45	45	45	44	35	30	41	48	48	48	41	30
36	37	37	37	37	37	36	33	39	39	39	39	33	33	39	44	45	45	45	44	39	36	47	48	48	48	47	36
36	37	37	37	37	37	36	39	39	40	40	40	39	39	44	45	45	45	45	44	39	41	48	48	48	48	41	30
37	37	37	37	37	37	37	39	39	40	40	40	39	39	44	45	45	45	45	44	39	47	48	48	48	48	47	36
37	37	37	37	37	37	37	40	40	40	40	40	40	40	44	45	45	45	45	44	39	48	48	48	48	48	47	36
37	37	37	37	37	37	37	40	40	40	40	40	40	40	45	45	45	45	45	44	39	49	49	48	48	49	49	48
37	37	37	37	37	37	37	40	40	40	40	40	40	40	45	45	45	45	45	44	39	48	49	49	49	49	49	48
65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width						

Rounded values

O-KS ASSEMBLY 1

65 mm and 85 mm models

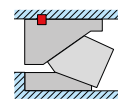
Permissible cam forces



Shouldering

Shouldering support at top and bottom

O-KS 65/85-20°							O-KS 65/85-25°							O-KS 65/85-30°							O-KS 65/85-35°						
37	56	93	132	93	56	37	30	47	81	127	81	47	30	17	26	49	99	49	26	17	14	21	39	78	39	21	14
48	75	120	158	120	75	48	38	64	113	158	113	64	38	22	37	77	147	77	37	22	18	30	64	132	64	30	18
61	97	149	187	149	97	61	50	87	150	192	150	87	50	29	56	127	190	127	56	29	23	45	110	191	110	45	23
74	108	160	187	160	108	74	67	109	174	203	174	109	67	41	82	167	200	167	82	41	32	68	166	205	166	68	32
73	100	145	186	145	100	73	68	103	156	202	156	103	68	47	81	151	199	151	81	47	41	77	155	205	155	77	41
68	91	129	181	129	91	68	66	94	137	203	137	94	66	48	74	128	198	128	74	48	44	73	132	205	132	73	44
62	84	114	167	114	84	62	61	85	121	187	121	85	61	45	64	104	177	104	64	45	43	65	109	179	109	65	43
65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width						



Fitting key

Fitting key support at top, shouldering support at bottom

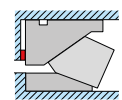
O-KS 65/85-20°							O-KS 65/85-25°							O-KS 65/85-30°							O-KS 65/85-35°						
36	49	58	58	58	49	36	30	44	62	63	62	44	30	17	26	44	57	44	26	17	14	21	37	56	37	21	14
44	58	58	58	58	58	44	37	55	63	63	63	55	37	22	35	57	57	57	35	22	18	29	52	59	52	29	18
51	58	59	59	59	58	51	45	63	63	63	63	45	45	29	45	57	57	57	45	29	23	38	59	59	59	38	23
58	58	59	59	59	58	58	55	63	63	63	63	55	55	38	56	57	57	57	56	38	32	51	59	59	59	51	32
59	59	59	59	59	59	59	58	63	63	63	63	58	58	44	57	57	57	57	57	44	39	58	60	59	60	58	39
58	59	59	59	59	59	58	58	63	63	63	63	58	58	46	58	58	57	58	58	46	43	60	60	59	60	60	43
56	59	59	59	59	59	56	55	63	63	63	63	55	55	44	56	58	58	58	56	44	43	57	60	60	60	57	43
65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width						

Rounded values

O-KS ASSEMBLY 1

65 mm and 85 mm models

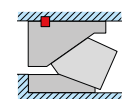
Permissible cam forces



Shouldering

Shouldering support at top and bottom

O-KS 65/85-40°							O-KS 65/85-45°							O-KS 65/85-50°							O-KS 65/85-55°							
18	29	57	113	57	29	18	15	23	44	92	44	23	15	11	16	29	62	29	16	11	10	13	22	45	22	13	10	
24	41	88	161	88	41	24	19	32	71	149	71	32	19	14	22	50	119	50	22	14	11	17	38	96	38	17	11	
32	62	143	208	143	62	32	25	49	124	205	124	49	25	18	34	90	192	90	34	18	14	26	71	176	71	26	14	
44	85	167	208	167	85	44	34	70	163	211	163	70	34	20	44	124	217	124	44	20	14	28	61	150	220	150	61	28
53	88	149	207	149	88	53	46	83	152	213	152	83	46	28	61	150	220	150	61	28	14	32	63	146	214	146	63	32
55	83	129	204	129	83	55	50	82	137	211	137	82	50	32	63	146	214	146	63	32	14	34	60	124	182	124	60	34
52	74	111	180	111	74	52	48	74	119	184	119	74	48	42	68	123	185	123	68	42	14	34	60	124	182	124	60	34
65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							



Fitting key

Fitting key support at top, shouldering support at bottom

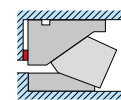
O-KS 65/85-40°							O-KS 65/85-45°							O-KS 65/85-50°							O-KS 65/85-55°							
18	29	54	74	54	29	18	15	23	42	70	42	23	15	11	16	28	52	28	16	11	10	13	22	44	22	13	10	
24	40	73	74	73	40	24	19	31	60	77	60	31	19	14	22	47	78	47	22	14	11	17	37	80	37	17	11	
32	52	74	74	74	52	32	25	43	77	77	77	43	25	18	33	78	79	78	33	18	14	26	62	80	62	26	14	
44	71	75	75	75	71	44	34	57	77	77	77	57	34	20	37	78	80	78	37	20	14	28	51	80	80	80	51	28
52	75	75	75	75	75	52	46	72	77	77	77	72	46	28	51	80	80	80	51	28	14	32	53	81	81	81	53	32
55	74	75	75	75	74	55	50	73	78	78	78	73	50	32	53	81	81	81	53	32	14	34	54	82	82	82	54	34
52	70	76	75	76	70	52	48	68	77	78	77	68	48	42	61	80	80	80	61	42	14	34	54	82	82	82	54	34
65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							

Rounded values

O-KS ASSEMBLY 1

65 mm and 85 mm models

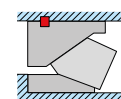
Permissible cam forces



Shouldering

Shouldering support at top and bottom

O-KS 65/85-60°							O-KS 65/85-65°							O-KS 65/85-70°							O-KS 65/85-75°						
18	30	63	117	63	30	18	16	24	49	106	49	24	16	11	16	33	74	33	16	11	10	14	25	55	25	14	10
23	43	98	166	98	43	23	19	34	79	165	79	34	19	12	19	43	112	43	19	12	10	14	25	55	25	14	10
31	66	158	211	158	66	31	25	53	135	218	135	53	25	14	23	58	135	58	23	14	11	16	33	74	33	16	11
44	88	171	212	171	88	44	34	73	172	216	172	73	34	15	29	79	183	79	29	15	10	14	25	55	25	14	10
49	87	154	212	154	87	49	43	80	159	217	159	80	43	12	19	43	112	43	19	12	10	14	25	55	25	14	10
49	78	134	211	134	78	49	47	77	141	218	141	77	47	15	29	79	183	79	29	15	10	14	25	55	25	14	10
46	68	111	180	111	68	46	44	68	118	183	118	68	44	20	47	138	221	138	47	20	10	14	25	55	25	14	10
65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width						



Fitting key

Fitting key support at top, shouldering support at bottom

O-KS 65/85-60°							O-KS 65/85-65°							O-KS 65/85-70°							O-KS 65/85-75°						
18	30	63	117	63	30	18	16	24	49	106	49	24	16	11	16	33	74	33	16	11	10	14	25	55	25	14	10
23	43	98	166	98	43	23	19	34	79	165	79	34	19	12	19	43	112	43	19	12	10	14	25	55	25	14	10
31	66	158	206	158	66	31	25	53	135	218	135	53	25	14	23	58	135	58	23	14	11	16	33	74	33	16	11
44	88	171	208	171	88	44	34	73	172	216	172	73	34	15	29	79	183	79	29	15	10	14	25	55	25	14	10
49	87	154	210	154	87	49	43	80	159	217	159	80	43	12	19	43	112	43	19	12	10	14	25	55	25	14	10
49	78	134	210	134	78	49	47	77	141	218	141	77	47	15	29	79	183	79	29	15	10	14	25	55	25	14	10
46	68	111	180	111	68	46	44	68	118	183	118	68	44	20	47	138	224	138	47	20	10	14	25	55	25	14	10
65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width							65 mm width 85 mm width						

Rounded values

O-KS ASSEMBLY 2

Use our product finder to quickly and simply find just the right O-KS model for your needs:
www.voestalpine.com/camtec/Product-Finder

FORCE DISTRIBUTION AND PERMISSIBLE CAM FORCES

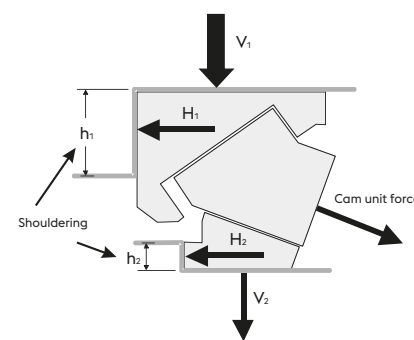
O-KS 90/110 mm cam unit specifications

Identification number		Designation		Angle	Weight [kg]		Stroke [mm]
O-KS 90	O-KS 110	O-KS 90	O-KS 110		O-KS 90	O-KS 110	
27040	27060	O-KS 90-0°	O-KS 110-0°	0°	35.0	36.1	28.93
27041	27061	O-KS 90-5°	O-KS 110-5°	5°	34.8	36.0	29.04
27042	27062	O-KS 90-10°	O-KS 110-10°	10°	34.7	35.8	35.00
27043	27063	O-KS 90-15°	O-KS 110-15°	15°	34.7	35.8	35.69
27044	27064	O-KS 90-20°	O-KS 110-20°	20°	34.0	35.2	36.86
27045	27065	O-KS 90-25°	O-KS 110-25°	25°	34.1	35.2	38.22
27046	27066	O-KS 90-30°	O-KS 110-30°	30°	34.4	35.6	35.38
27047	27067	O-KS 90-35°	O-KS 110-35°	35°	34.8	35.9	37.41
27048	27068	O-KS 90-40°	O-KS 110-40°	40°	33.6	34.7	39.57
27049	27069	O-KS 90-45°	O-KS 110-45°	45°	34.0	35.1	42.89
27050	27070	O-KS 90-50°	O-KS 110-50°	50°	34.2	35.3	47.16
27051	27071	O-KS 90-55°	O-KS 110-55°	55°	34.4	35.5	52.85
27052	27072	O-KS 90-60°	O-KS 110-60°	60°	32.9	34.0	49.24
27053	27073	O-KS 90-90°	O-KS 110-65°	65°	33.3	34.4	46.61
27054	27074	O-KS 90-70°	O-KS 110-70°	70°	33.5	34.6	57.59
27055	27075	O-KS 90-75°	O-KS 110-75°	75°	33.7	34.8	76.10

O-KS 90/110 mm cam unit force distribution

Angle	Maximum cam force [kN]	Force distribution at maximum cam force [kN]				Shouldering [mm]		Stripping force [kN]
		V1	H1	V2	H2	h1	h2	
0°	247	207	247	207	0	190	30	6.8
5°	297	233	278	207	18	190	30	7.6
10°	308	308	258	255	45	148	30	6.7
15°	323	302	253	218	59	148	30	7.5
20°	325	367	212	256	93	109	65	6.4
25°	347	367	212	220	103	109	65	7.2
30°	361	294	247	114	66	143	65	12.2
35°	372	295	248	82	57	143	65	16.1
40°	370	341	197	103	87	102	105	11.7
45°	373	334	193	71	71	102	105	15.4
50°	385	339	195	44	52	102	105	24.4
55°	390	339	196	20	28	102	105	23.5
60°	366	384	68	67	115	52	135	11.1
65°	376	383	68	43	91	52	135	14.0
70°	384	384	68	23	64	52	135	22.1
75°	388	384	68	9	33	52	135	23.5

The cam unit force is distributed as shown in the sketch:

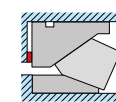


Shouldering: h_1 (top), h_2 (bottom)
 Press: V_1 (vertical)
 Cam base: H_1 (horizontal), H_2 (horizontal)
 Driver: V_2 (vertical)

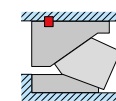
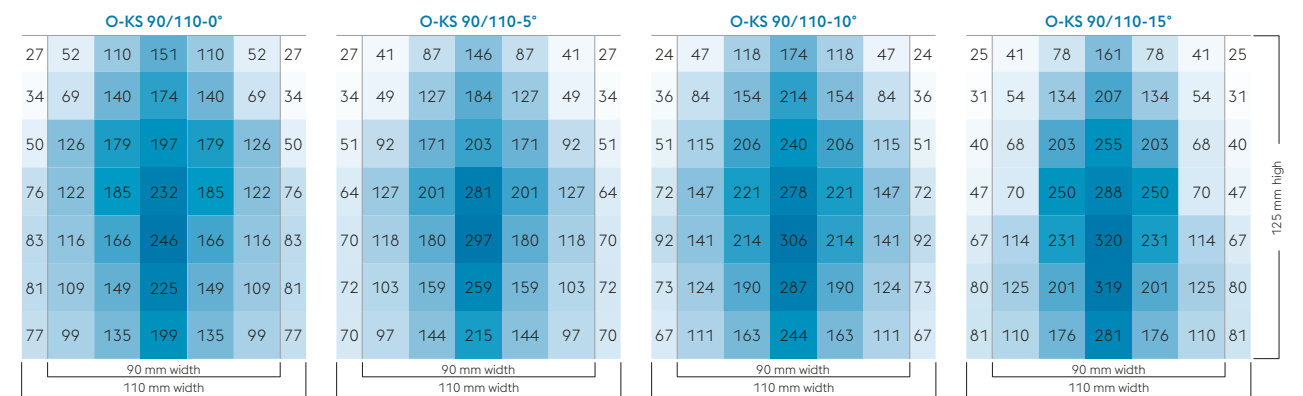
O-KS ASSEMBLY 2

90 mm and 110 mm models

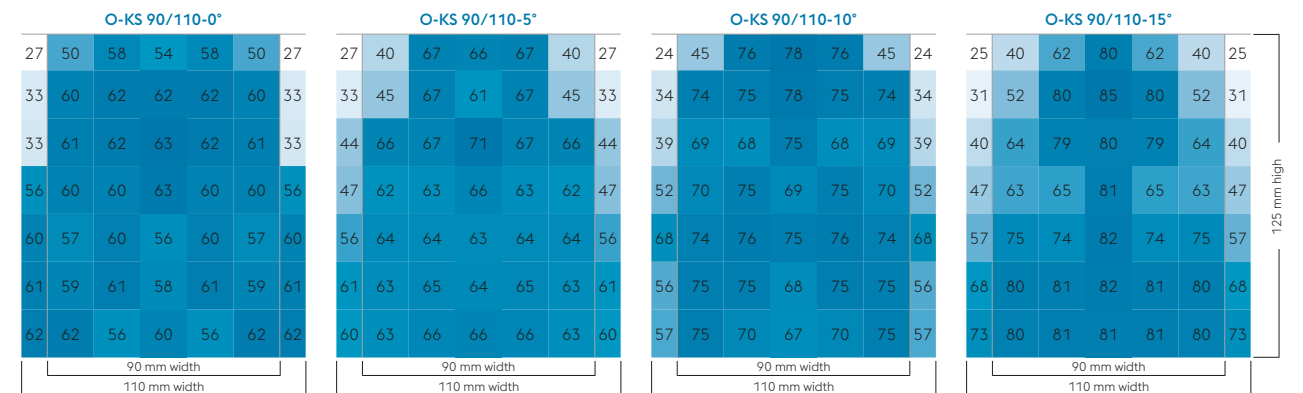
Permissible cam forces



Shouldering
 Shouldering support at top and bottom



Fitting key
 Fitting key support at top, shouldering support at bottom

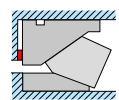


Rounded values

O-KS ASSEMBLY 2

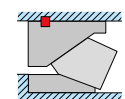
90 mm and 110 mm models

Permissible cam forces



Shouldering
Shouldering support at top and bottom

O-KS 90/110-20°						O-KS 90/110-25°						O-KS 90/110-30°						O-KS 90/110-35°								
35	58	125	209	125	58	35	42	97	185	97	42	27	12	16	31	73	31	16	12	11	14	24	30	24	14	11
51	92	174	251	174	92	51	33	56	152	238	152	33	15	20	50	148	50	20	15	12	16	37	55	37	16	12
55	129	230	289	230	129	55	36	39	213	289	213	36	19	27	44	225	44	27	19	17	23	45	203	45	23	17
57	146	280	317	280	146	57	64	133	273	336	273	64	27	53	188	297	188	53	27	18	24	162	292	162	24	18
59	148	254	324	254	148	59	73	144	253	347	253	73	33	68	213	343	213	68	33	19	25	213	355	213	25	19
81	141	216	319	216	141	81	73	131	224	347	224	73	36	78	197	361	197	78	36	29	51	211	373	211	51	29
90	127	187	293	187	127	90	71	123	195	324	195	71	44	82	173	329	173	82	44	37	72	185	349	185	72	37
90 mm width 110 mm width						90 mm width 110 mm width						90 mm width 110 mm width						90 mm width 110 mm width								



Fitting key
Fitting key support at top, shouldering support at bottom

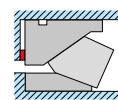
O-KS 90/110-20°						O-KS 90/110-25°						O-KS 90/110-30°						O-KS 90/110-35°									
35	57	98	99	98	57	35	27	41	83	106	83	41	27	12	16	31	57	31	16	12	11	14	24	30	24	14	11
50	87	99	94	99	87	50	33	55	105	107	105	55	33	15	20	49	92	49	20	15	12	16	37	45	37	16	12
47	98	99	100	99	98	47	36	36	102	103	102	36	36	19	27	41	95	41	27	19	17	23	43	95	43	23	17
45	98	99	100	99	98	45	54	91	102	104	102	91	54	27	49	84	95	84	49	27	18	21	89	97	89	21	18
47	99	98	100	98	99	47	63	104	105	105	105	104	63	33	63	95	95	95	63	33	19	21	98	94	98	21	19
70	98	98	100	98	98	70	36	74	95	95	95	74	36	29	47	98	95	98	47	29	37	69	98	96	98	69	37
83	97	99	100	99	97	83	44	79	95	95	95	79	44	37	69	98	96	98	69	37	37	69	98	96	98	69	37
90 mm width 110 mm width						90 mm width 110 mm width						90 mm width 110 mm width						90 mm width 110 mm width									

Rounded values

O-KS ASSEMBLY 2

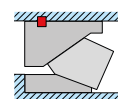
90 mm and 110 mm models

Permissible cam forces



Shouldering
Shouldering support at top and bottom

O-KS 90/110-40°						O-KS 90/110-45°						O-KS 90/110-50°						O-KS 90/110-55°									
13	17	34	96	34	17	13	12	15	27	62	27	15	12	8	9	14	35	14	9	8	7	8	11	13	11	8	7
15	21	60	165	60	21	15	14	18	43	130	43	18	14	9	12	21	88	21	12	9	9	11	17	35	17	11	9
19	31	121	270	121	31	19	18	23	45	246	45	23	18	11	14	37	192	37	14	11	11	16	40	162	40	16	11
27	56	222	348	222	56	27	21	35	170	340	170	35	21	15	26	128	300	128	26	15	14	22	80	284	80	22	14
33	71	243	370	243	71	33	25	45	237	368	237	45	25	21	42	195	370	195	42	21	17	30	158	361	158	30	17
42	85	228	366	228	85	42	29	52	235	373	235	52	29	29	58	232	386	232	58	29	21	42	194	385	194	42	21
44	87	197	352	197	87	44	37	67	204	368	204	67	37	33	63	230	379	230	63	33	21	46	206	389	206	46	21
90 mm width 110 mm width						90 mm width 110 mm width						90 mm width 110 mm width						90 mm width 110 mm width									



Fitting key
Fitting key support at top, shouldering support at bottom

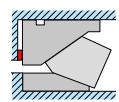
O-KS 90/110-40°						O-KS 90/110-45°						O-KS 90/110-50°						O-KS 90/110-55°									
13	17	34	86	34	17	13	12	15	27	62	27	15	12	8	9	14	35	14	9	8	7	8	11	13	11	8	7
15	21	59	124	59	21	15	14	18	42	119	42	18	14	9	12	21	82	21	12	9	9	11	16	32	16	11	9
19	31	119	124	119	31	19	18	23	43	126	43	23	18	11	14	36	128	36	14	11	11	16	39	125	39	16	11
27	53	120	124	120	53	27	21	33	113	125	113	33	21	15	25	114	131	114	25	15	14	22	77	132	77	22	14
33	67	117	124	117	67	33	25	41	125	128	125	41	25	21	40	129	128	129	40	21	17	28	117	132	117	28	17
42	81	116	124	116	81	42	29	48	126	129	126	48	29	29	55	129	122	129	55	29	21	39	131	132	131	39	21
44	84	116	122	116	84	44	37	64	126	121	126	64	37	33	60	128	115	128	60	33	21	44	131	125	131	44	21
90 mm width 110 mm width						90 mm width 110 mm width						90 mm width 110 mm width						90 mm width 110 mm width									

Rounded values

O-KS ASSEMBLY 2

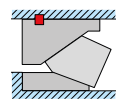
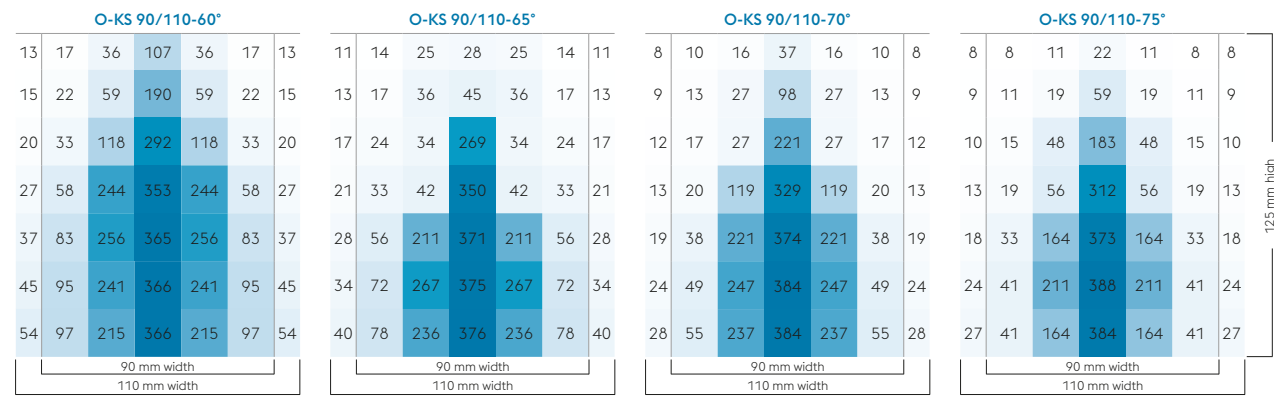
90 mm and 110 mm models

Permissible cam forces



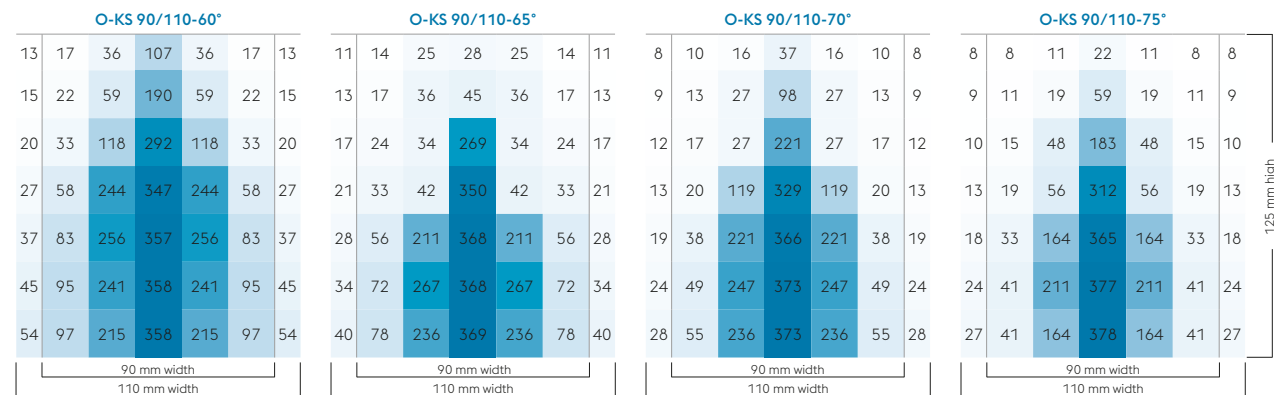
Shouldering

Shouldering support at top and bottom



Fitting key

Fitting key support at top, shouldering support at bottom



Rounded values

O-KS ASSEMBLY 3

FORCE DISTRIBUTION AND PERMISSIBLE CAM FORCES

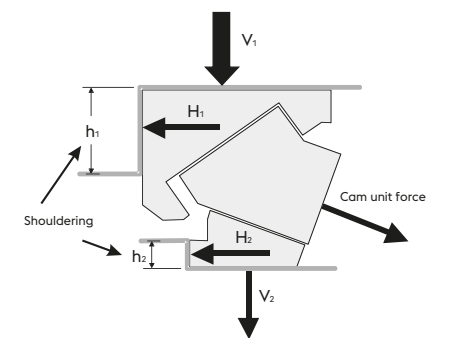
O-KS 125/160 mm cam unit specifications

Identification number		Designation		Angle	Weight [kg]		Stroke [mm]
O-KS 125	O-KS 160	O-KS 125	O-KS 160		O-KS 125	O-KS 160	
27100	27120	O-KS 125-0°	O-KS 160-0°	0°	57.5	59.7	35.35
27101	27121	O-KS 125-5°	O-KS 160-5°	5°	57.3	59.5	35.49
27102	27122	O-KS 125-10°	O-KS 160-10°	10°	56.7	59.0	42.78
27103	27123	O-KS 125-15°	O-KS 160-15°	15°	56.7	58.9	43.62
27104	27124	O-KS 125-20°	O-KS 160-20°	20°	56.7	58.9	46.08
27105	27125	O-KS 125-25°	O-KS 160-25°	25°	56.8	59.0	47.78
27106	27126	O-KS 125-30°	O-KS 160-30°	30°	54.2	56.4	44.23
27107	27127	O-KS 125-35°	O-KS 160-35°	35°	54.4	56.7	46.76
27108	27128	O-KS 125-40°	O-KS 160-40°	40°	54.0	56.3	50.87
27109	27129	O-KS 125-45°	O-KS 160-45°	45°	54.4	56.7	55.11
27110	27130	O-KS 125-50°	O-KS 160-50°	50°	55.1	57.3	48.50
27111	27131	O-KS 125-55°	O-KS 160-55°	55°	55.3	57.5	54.36
27112	27132	O-KS 125-60°	O-KS 160-60°	60°	54.5	56.8	49.24
27113	27133	O-KS 125-125°	O-KS 160-65°	65°	54.8	57.1	46.61
27114	27134	O-KS 125-70°	O-KS 160-70°	70°	55.1	57.4	57.59
27115	27135	O-KS 125-75°	O-KS 160-75°	75°	55.1	57.4	76.10

O-KS 125/160 mm cam unit force distribution

Angle	Maximum cam force [kN]	Force distribution at maximum cam force [kN]				Shouldering [mm]		Stripping force [kN]
		V1	H1	V2	H2	h1	h2	
0°	302	253	302	253	0	190	40	9.2
5°	305	239	285	213	19	190	40	10.3
10°	376	376	316	311	55	150	40	9.2
15°	395	369	310	267	72	150	40	10.3
20°	392	443	256	309	113	115	85	8.8
25°	422	446	258	268	125	115	85	9.9
30°	405	330	277	128	74	130	85	17.6
35°	420	333	280	92	65	130	85	23.2
40°	422	389	225	118	99	105	135	16.8
45°	440	394	228	83	83	105	135	22.2
50°	430	378	218	49	58	105	135	33.0
55°	445	387	223	22	32	105	135	25.4
60°	428	449	79	78	135	53	160	14.8
65°	441	450	79	50	107	53	160	18.6
70°	460	460	81	28	76	53	160	27.7
75°	445	440	78	10	38	53	160	25.5

The cam unit force is distributed as shown in the sketch:

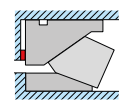


Shouldering: h₁ (top)
h₂ (bottom)
Press: V₁ (vertical)
Cam base: H₁ (horizontal)
Driver: H₂ (horizontal)
V₂ (vertical)

O-KS ASSEMBLY 3

125 mm and 160 mm models

Permissible cam forces

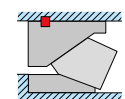


Shouldering
Shouldering support at top and bottom

O-KS 125/160-0°						O-KS 125/160-5°						O-KS 125/160-10°						O-KS 125/160-15°									
74	102	182	217	182	102	74	49	72	119	181	119	72	49	66	98	162	251	162	98	66	58	85	140	251	140	85	58
92	135	217	237	217	135	92	56	90	157	208	157	90	56	85	128	217	282	217	128	85	65	103	188	289	188	103	65
110	166	251	262	251	166	110	69	124	211	238	211	124	69	91	159	285	310	285	159	91	83	139	285	326	285	139	83
112	152	224	293	224	152	112	91	150	240	259	240	150	91	111	175	281	340	281	175	111	105	169	302	360	302	169	105
106	137	194	299	194	137	106	96	138	207	303	207	138	96	110	160	242	379	242	160	110	109	160	259	389	259	160	109
100	124	168	260	168	124	100	94	125	177	281	177	125	94	107	144	206	334	206	144	107	107	148	220	360	220	148	107
93	113	147	220	147	113	93	88	113	153	238	153	113	88	100	131	178	277	178	131	100	98	134	189	306	189	134	98

125 mm width / 160 mm width (for each model)

150 mm high



Fitting key
Fitting key support at top, shouldering support at bottom

O-KS 125/160-0°						O-KS 125/160-5°						O-KS 125/160-10°						O-KS 125/160-15°									
74	92	111	112	111	92	74	49	71	109	125	109	71	49	66	96	137	144	137	96	66	58	85	134	160	134	85	58
88	113	112	112	112	113	88	56	86	124	125	124	86	56	85	120	146	143	146	120	85	65	100	160	160	160	100	65
96	112	112	112	112	112	96	68	113	123	125	123	113	68	90	141	145	145	145	141	90	83	124	161	161	161	124	83
102	112	112	112	112	112	102	86	122	121	125	121	122	86	106	145	145	145	145	106	105	152	161	161	161	152	105	
100	111	112	112	112	111	100	94	122	118	124	118	122	94	109	145	143	143	143	145	109	109	148	156	158	156	148	109
98	112	112	113	112	112	98	94	118	122	125	122	118	94	107	137	144	144	144	137	107	107	141	159	159	159	141	107
93	109	112	112	112	109	93	88	110	124	123	124	110	88	100	128	145	143	145	128	100	98	131	160	157	160	131	98

125 mm width / 160 mm width (for each model)

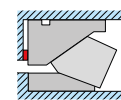
150 mm high

Rounded values

O-KS ASSEMBLY 3

125 mm and 160 mm models

Permissible cam forces

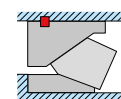


Shouldering
Shouldering support at top and bottom

O-KS 125/160-0°						O-KS 125/160-25°						O-KS 125/160-30°						O-KS 125/160-35°									
63	88	153	301	153	88	63	58	79	136	285	136	79	58	21	29	50	113	50	29	21	18	24	42	87	42	24	18
74	119	198	340	198	119	74	65	93	179	354	179	93	65	26	38	71	190	71	38	26	21	31	61	157	61	31	21
89	134	267	377	267	134	89	85	137	249	371	249	137	85	33	55	129	280	129	55	33	28	45	99	269	99	45	28
108	179	331	378	331	179	108	102	161	277	398	277	161	102	40	76	241	352	241	76	40	37	71	195	366	195	71	37
116	176	286	378	286	176	116	115	173	290	428	290	173	115	56	102	227	394	227	102	56	49	92	220	409	220	92	49
114	161	240	359	240	161	114	115	163	255	416	255	163	115	61	107	200	367	200	107	61	57	97	197	394	197	97	57
106	145	204	319	204	145	106	104	144	216	360	216	144	104	65	103	174	307	174	103	65	61	95	167	332	167	95	61

125 mm width / 160 mm width (for each model)

150 mm high



Fitting key
Fitting key support at top, shouldering support at bottom

O-KS 125/160-20°						O-KS 125/160-25°						O-KS 125/160-30°						O-KS 125/160-35°									
63	88	147	201	147	88	63	58	79	132	221	132	79	58	21	29	50	113	50	29	21	18	24	42	87	42	24	18
74	118	181	202	181	118	74	65	93	168	221	168	93	65	26	38	71	177	71	38	26	21	31	61	148	61	31	21
89	127	201	202	201	127	89	85	135	221	221	221	135	85	33	54	122	197	122	54	33	28	45	95	209	95	45	28
108	163	202	202	202	163	108	102	155	221	221	221	155	102	40	71	192	197	192	71	40	37	71	185	209	185	71	37
116	166	202	198	202	166	116	115	166	221	221	221	166	115	56	100	198	195	198	100	56	49	91	204	205	204	91	49
114	157	202	201	202	157	114	115	160	221	221	221	160	115	61	107	186	193	186	107	61	57	97	184	202	184	97	57
106	144	191	202	191	144	106	104	144	205	221	205	144	104	65	103	166	194	166	103	65	61	95	159	204	159	95	61

125 mm width / 160 mm width (for each model)

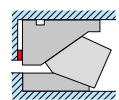
150 mm high

Rounded values

O-KS ASSEMBLY 3

125 mm and 160 mm models

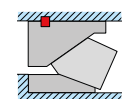
Permissible cam forces



Shouldering

Shouldering support at top and bottom

O-KS 125/160-40°							O-KS 125/160-45°							O-KS 125/160-50°							O-KS 125/160-55°							
21	29	52	126	52	29	21	19	26	45	99	45	26	19	19	44	106	131	106	44	19	10	13	19	31	19	13	10	
25	38	74	210	74	38	25	23	33	66	183	66	33	23	21	47	112	165	112	47	21	12	17	34	82	34	17	12	
33	55	124	317	124	55	33	30	49	114	312	114	49	30	23	49	119	253	119	49	23	15	25	67	231	67	25	15	
41	77	226	399	226	77	41	39	76	221	406	221	76	39	26	51	130	403	130	51	26	12	20	40	125	397	125	40	20
51	93	237	414	237	93	51	49	92	242	417	242	92	49	29	60	183	430	183	60	29	10	15	25	67	231	67	25	15
60	106	215	402	215	106	60	59	101	220	428	220	101	59	20	40	125	397	125	40	20	12	17	34	82	34	17	12	
66	106	185	343	185	106	66	63	100	191	380	191	100	63	29	60	183	430	183	60	29	12	17	34	82	34	17	12	
125 mm width 160 mm width							125 mm width 160 mm width							125 mm width 160 mm width							125 mm width 160 mm width							



Fitting key

Fitting key support at top, shouldering support at bottom

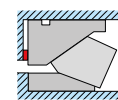
O-KS 125/160-40°							O-KS 125/160-45°							O-KS 125/160-50°							O-KS 125/160-55°							
21	29	52	126	52	29	21	19	26	45	99	45	26	19	19	44	106	131	106	44	19	10	13	19	31	19	13	10	
25	38	74	203	73	38	25	23	33	66	178	66	33	23	21	47	112	165	112	47	21	12	17	34	82	34	17	12	
33	55	121	269	121	55	33	30	49	112	281	112	49	30	23	49	119	253	119	49	23	15	25	67	226	67	25	15	
41	77	218	269	218	77	41	39	76	214	281	214	76	39	26	51	130	403	130	51	26	12	20	40	117	271	117	40	20
51	93	227	269	227	93	51	49	92	233	280	233	92	49	29	60	174	279	174	60	29	10	15	25	67	226	67	25	15
60	106	207	269	207	106	60	59	101	210	281	210	101	59	20	40	125	397	125	40	20	12	17	34	82	34	17	12	
66	106	180	269	180	106	66	63	100	185	281	185	100	63	29	60	174	279	174	60	29	12	17	34	82	34	17	12	
125 mm width 160 mm width							125 mm width 160 mm width							125 mm width 160 mm width							125 mm width 160 mm width							

Rounded values

O-KS ASSEMBLY 3

125 mm and 160 mm models

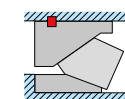
Permissible cam forces



Shouldering

Shouldering support at top and bottom

O-KS 125/160-60°							O-KS 125/160-65°							O-KS 125/160-70°							O-KS 125/160-75°						
22	31	53	129	53	31	22	19	26	47	104	47	26	19	12	16	26	48	26	16	12	10	13	19	31	19	13	10
26	39	77	227	77	39	26	22	34	70	193	70	34	22	12	17	33	82	33	17	12	10	13	19	31	19	13	10
34	58	143	355	143	58	34	29	47	106	330	106	47	29	14	21	43	115	43	21	14	15	24	66	234	66	24	15
42	76	217	415	217	76	42	39	74	187	424	187	74	39	18	30	85	270	85	30	18	15	24	66	234	66	24	15
55	104	276	418	276	104	55	51	102	266	430	266	102	51	25	48	147	432	147	48	25	19	39	124	410	124	39	19
67	121	259	419	259	121	67	60	113	258	432	258	113	60	33	71	231	449	231	71	33	28	60	193	432	193	60	28
74	121	223	406	223	121	74	66	110	220	425	220	110	66	36	73	208	435	208	73	36	28	60	193	432	193	60	28
125 mm width 160 mm width							125 mm width 160 mm width							125 mm width 160 mm width							125 mm width 160 mm width						



Fitting key

Fitting key support at top, shouldering support at bottom

O-KS 125/160-60°							O-KS 125/160-65°							O-KS 125/160-70°							O-KS 125/160-75°						
22	31	53	129	53	31	22	19	26	47	104	47	26	19	12	16	26	48	26	16	12	10	13	19	31	19	13	10
26	39	77	227	77	39	26	22	34	70	193	70	34	22	12	17	33	82	33	17	12	10	13	19	31	19	13	10
34	58	143	355	143	58	34	29	47	106	330	106	47	29	14	21	43	115	43	21	14	15	24	66	234	66	24	15
42	76	217	415	217	76	42	39	74	187	424	187	74	39	18	30	85	270	85	30	18	15	24	66	234	66	24	15
55	104	276	418	276	104	55	51	102	266	430	266	102	51	25	48	147	432	147	48	25	19	39	124	410	124	39	19
67	121	259	419	259	121	67	60	113	258	432	258	113	60	33	71	231	449	231	71	33	28	60	193	432	193	60	28
74	121	223	406	223	121	74	66	110	220	425	220	110	66	36	73	208	435	208	73	36	28	60	193	432	193	60	28
125 mm width 160 mm width							125 mm width 160 mm width							125 mm width 160 mm width							125 mm width 160 mm width						

Rounded values

O-KS ASSEMBLY 4

Use our product finder to quickly and simply find just the right O-KS model for your needs:
www.voestalpine.com/camtec/Product-Finder

FORCE DISTRIBUTION AND PERMISSIBLE CAM FORCES

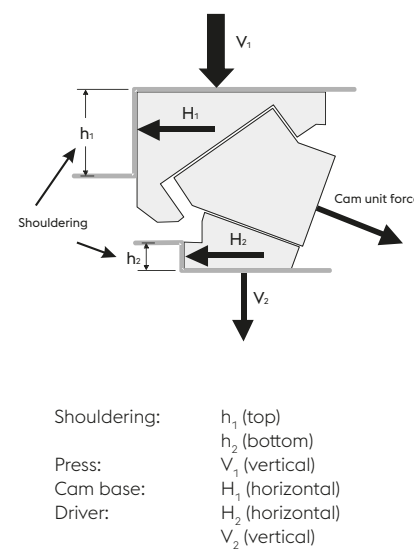
O-KS 175/220 mm cam unit specifications

Identification number		Designation		Angle	Weight [kg]		Stroke [mm]
O-KS 175	O-KS 220	O-KS 175	O-KS 220		O-KS 175	O-KS 220	
27140	27160	O-KS 175-0°	O-KS 220-0°	0°	85.5	88.4	41.78
27141	27161	O-KS 175-5°	O-KS 220-5°	5°	85.4	88.2	41.94
27142	27162	O-KS 175-10°	O-KS 220-10°	10°	83.8	86.7	50.56
27143	27163	O-KS 175-15°	O-KS 220-15°	15°	83.9	86.8	51.55
27144	27164	O-KS 175-20°	O-KS 220-20°	20°	82.1	85.0	55.30
27145	27165	O-KS 175-25°	O-KS 220-25°	25°	82.2	85.1	59.24
27146	27166	O-KS 175-30°	O-KS 220-30°	30°	79.3	82.2	53.07
27147	27167	O-KS 175-35°	O-KS 220-35°	35°	79.9	82.8	56.11
27148	27168	O-KS 175-40°	O-KS 220-40°	40°	78.7	81.6	62.18
27149	27169	O-KS 175-45°	O-KS 220-45°	45°	78.9	81.8	67.36
27150	27170	O-KS 175-50°	O-KS 220-50°	50°	79.8	82.9	60.63
27151	27171	O-KS 175-55°	O-KS 220-55°	55°	79.7	82.8	67.94
27152	27172	O-KS 175-60°	O-KS 220-60°	60°	79.8	82.7	68.94
27153	27173	O-KS 175-75°	O-KS 220-65°	65°	79.4	82.3	60.59
27154	27174	O-KS 175-70°	O-KS 220-70°	70°	80.0	83.1	74.86
27155	27175	O-KS 175-75°	O-KS 220-75°	75°	79.2	82.3	98.93

O-KS 175/220 mm cam unit force distribution

Angle	Maximum cam force [kN]	Force distribution at maximum cam force [kN]				Shouldering [mm]		Stripping force [kN]
		V1	H1	V2	H2	h1	h2	
0°	404	339	404	339	0	190	38	15.6
5°	456	358	426	318	28	190	38	17.5
10°	566	566	475	468	82	148	38	15.5
15°	606	567	476	410	110	148	38	17.3
20°	576	651	376	454	165	115	82	14.9
25°	605	640	369	384	179	115	82	16.7
30°	562	458	384	177	102	130	82	28.3
35°	544	431	362	119	84	130	82	37.4
40°	605	558	322	169	142	100	130	28.8
45°	615	551	318	117	117	100	130	38.0
50°	650	572	330	74	88	100	130	42.5
55°	643	559	323	32	46	100	130	39.4
60°	637	668	118	116	201	50	148	25.9
65°	638	650	115	72	155	50	148	31.4
70°	663	663	117	40	110	50	148	42.6
75°	662	654	115	15	56	50	148	39.5

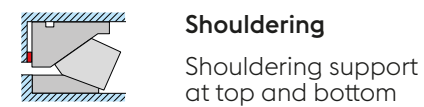
The cam unit force is distributed as shown in the sketch:



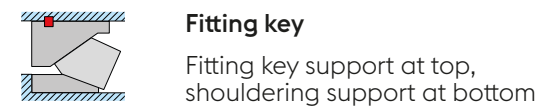
O-KS ASSEMBLY 4

175 mm and 220 mm models

Permissible cam forces



O-KS 175/220-0°								O-KS 175/220-5°								O-KS 175/220-10°								O-KS 175/220-15°							
79	66	173	314	173	66	79	74	112	147	253	147	112	74	64	101	201	364	201	101	64	56	88	180	390	180	88	56				
86	78	236	334	236	78	86	87	124	183	234	183	124	87	73	122	254	428	254	122	73	61	100	240	454	240	100	61				
102	109	298	363	298	109	102	94	137	319	381	319	137	94	79	135	346	478	346	135	79	68	117	311	497	311	117	68				
120	137	261	404	261	137	120	107	159	272	404	272	159	107	95	155	313	518	313	155	95	81	144	320	497	320	144	81				
133	145	231	395	231	145	133	94	151	242	456	242	151	94	99	155	275	566	275	155	99	84	141	291	606	291	141	84				
125	134	207	358	207	134	125	100	137	200	399	200	137	100	104	148	241	482	241	148	104	91	139	256	534	256	139	91				
116	125	186	307	186	125	116	101	130	182	331	182	130	101	102	137	211	388	211	137	102	93	136	225	424	225	136	93				



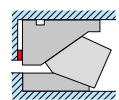
O-KS 175/220-0°								O-KS 175/220-5°								O-KS 175/220-10°								O-KS 175/220-15°							
79	65	138	167	138	65	79	74	112	144	180	144	112	74	64	101	184	189	184	101	64	56	88	173	236	173	88	56				
86	74	142	183	142	74	86	87	123	161	166	161	123	87	73	119	169	214	169	119	73	61	99	217	236	217	99	61				
102	99	159	182	159	99	102	94	126	195	192	195	126	94	79	124	222	214	222	124	79	68	109	214	237	214	109	68				
120	128	154	177	154	128	120	107	151	179	180	179	151	107	95	148	220	215	220	148	95	81	137	232	237	232	137	81				
133	141	160	176	160	141	133	94	147	189	180	189	147	94	99	151	220	213	220	151	99	84	137	230	216	230	137	84				
125	133	173	181	173	133	125	100	136	180	176	180	136	100	104	147	219	212	219	147	104	91	138	231	214	231	138	91				
116	122	158	183	158	122	116	101	129	167	194	167	129	101	102	137	204	221	204	137	102	93	136	216	232	216	136	93				

Rounded values

O-KS ASSEMBLY 4

175 mm and 220 mm models

Permissible cam forces

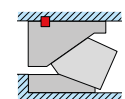


Shouldering
Shouldering support at top and bottom

O-KS 175/220-20*						O-KS 175/220-25*						O-KS 175/220-30*						O-KS 175/220-35*									
87	125	208	427	208	125	87	74	100	175	425	175	100	74	63	90	158	241	158	90	63	29	40	80	172	80	40	29
97	146	266	481	266	146	97	76	91	183	486	183	91	76	67	98	176	360	176	98	67	32	46	107	293	107	46	32
105	160	331	521	331	160	105	85	117	312	524	312	117	85	71	97	143	391	143	97	71	36	55	122	446	122	55	36
120	185	392	565	392	185	120	90	154	322	596	322	154	90	71	104	252	562	252	104	71	38	60	123	535	123	60	38
127	183	343	576	343	183	127	104	156	335	605	335	156	104	75	114	244	548	244	114	75	43	75	211	544	211	75	43
125	171	296	572	296	171	125	108	165	306	601	306	165	108	74	110	204	454	204	110	74	44	78	226	533	226	78	44
120	163	278	500	278	163	120	110	161	268	531	268	161	110	71	103	175	364	175	103	71	47	79	202	476	202	79	47

175 mm width / 220 mm width (repeated for each model)

150 mm high



Fitting key
Fitting key support at top, shouldering support at bottom

O-KS 175/220-20*						O-KS 175/220-25*						O-KS 175/220-30*						O-KS 175/220-35*									
87	125	201	270	201	125	87	74	100	170	306	170	100	74	63	90	157	213	157	90	63	29	40	80	172	80	40	29
97	145	252	274	252	145	97	76	91	174	295	174	91	76	67	98	172	274	172	98	67	32	46	106	269	106	46	32
105	157	287	280	287	157	105	85	117	301	275	301	117	85	71	97	137	261	137	97	71	36	55	115	287	115	55	36
120	176	286	281	286	176	120	90	154	309	306	309	154	90	71	104	238	250	238	104	71	38	60	110	245	110	60	38
127	179	286	286	286	179	127	104	155	307	303	307	155	104	75	114	231	270	231	114	75	43	75	197	241	197	75	43
125	170	274	287	274	170	125	108	164	287	305	287	164	108	74	110	196	275	196	110	74	44	78	214	268	214	78	44
120	163	272	286	272	163	120	110	161	257	304	257	161	110	71	103	171	274	171	103	71	47	79	193	282	193	79	47

175 mm width / 220 mm width (repeated for each model)

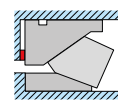
150 mm high

Rounded values

O-KS ASSEMBLY 4

175 mm and 220 mm models

Permissible cam forces

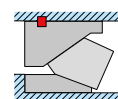


Shouldering
Shouldering support at top and bottom

O-KS 175/220-40*						O-KS 175/220-45*						O-KS 175/220-50*						O-KS 175/220-55*									
62	91	159	234	159	91	62	45	54	105	186	105	54	45	39	53	91	137	91	53	39	37	51	86	116	86	51	37
67	99	174	358	174	99	67	53	75	147	252	147	75	53	44	62	115	162	115	62	44	41	59	108	139	108	59	41
71	109	203	536	203	109	71	53	68	130	388	130	68	53	48	71	134	186	134	71	48	47	68	119	177	119	68	47
75	121	262	597	262	121	75	50	55	141	569	141	55	50	53	81	172	532	172	81	53	51	77	157	535	157	77	51
75	116	237	605	237	116	75	61	86	207	615	207	86	61	57	89	190	621	190	89	57	56	86	190	622	190	86	56
73	113	224	515	224	113	73	65	97	256	614	256	97	65	62	98	203	650	203	98	62	59	90	170	643	170	90	59
70	107	201	417	201	107	70	68	104	240	535	240	104	68	65	101	205	592	205	101	65	61	95	194	643	194	95	61

175 mm width / 220 mm width (repeated for each model)

150 mm high



Fitting key
Fitting key support at top, shouldering support at bottom

O-KS 175/220-40*						O-KS 175/220-45*						O-KS 175/220-50*						O-KS 175/220-55*									
62	91	159	234	159	91	62	45	54	105	186	105	54	45	39	53	91	137	91	53	39	37	51	86	116	86	51	37
67	99	172	320	172	99	67	53	75	147	250	147	75	53	44	62	115	162	115	62	44	41	59	108	139	108	59	41
71	109	193	298	193	109	71	53	68	129	366	129	68	53	48	71	134	175	134	71	48	47	68	118	168	118	68	47
75	121	250	346	250	121	75	50	55	130	328	130	55	50	53	81	161	283	161	81	53	51	77	148	333	148	77	51
75	116	225	350	225	116	75	61	86	195	352	195	86	61	57	89	178	353	178	89	57	56	86	179	367	179	86	56
73	113	216	354	216	113	73	65	97	244	360	244	97	65	62	98	190	369	190	98	62	59	90	166	559	166	90	59
70	107	198	347	198	107	70	68	104	233	363	233	104	68	65	101	195	371	195	101	65	61	95	194	643	194	95	61

175 mm width / 220 mm width (repeated for each model)

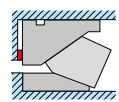
150 mm high

Rounded values

O-KS ASSEMBLY 4

175 mm and 220 mm models

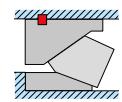
Permissible cam forces



Shouldering

Shouldering support at top and bottom

O-KS 175/220-60°								O-KS 175/220-65°								O-KS 175/220-70°								O-KS 175/220-75°							
57	81	143	260	143	81	57	44	60	107	158	107	60	44	37	51	86	129	86	51	37	37	49	77	113	77	49	37				
61	90	170	431	170	90	61	48	69	133	224	133	69	48	41	59	105	154	105	59	41	41	56	99	151	99	56	41				
65	102	202	595	202	102	65	53	79	168	475	168	79	53	46	67	128	175	128	67	46	45	65	129	199	129	65	45				
69	110	211	627	211	110	69	59	94	227	601	227	94	59	51	76	167	582	167	76	51	49	74	166	557	166	74	49				
71	115	234	637	234	115	71	63	106	258	638	258	106	63	55	86	198	655	198	86	55	53	82	193	657	193	82	53				
70	113	243	634	243	113	70	68	115	280	633	280	115	68	59	95	212	663	212	95	59	57	89	202	662	202	89	57				
66	105	216	579	216	105	66	70	116	272	631	272	116	70	62	99	207	652	207	99	62	59	91	192	632	192	91	59				
175 mm width 220 mm width								175 mm width 220 mm width								175 mm width 220 mm width								175 mm width 220 mm width							



Fitting key

Fitting key support at top, shouldering support at bottom

O-KS 175/220-60°								O-KS 175/220-65°								O-KS 175/220-70°								O-KS 175/220-75°							
57	81	143	260	143	81	57	44	60	107	158	107	60	44	37	51	86	129	86	51	37	37	49	77	113	77	49	37				
61	90	170	431	170	90	61	48	69	133	224	133	69	48	41	59	105	154	105	59	41	41	56	99	151	99	56	41				
65	102	202	595	202	102	65	53	79	168	475	168	79	53	46	67	128	175	128	67	46	45	65	129	199	129	65	45				
69	110	211	627	211	110	69	59	94	227	601	227	94	59	51	76	167	582	167	76	51	49	74	166	557	166	74	49				
71	115	234	637	234	115	71	63	106	258	638	258	106	63	55	86	198	655	198	86	55	53	82	193	657	193	82	53				
70	113	243	634	243	113	70	68	115	280	633	280	115	68	59	95	212	663	212	95	59	57	89	202	662	202	89	57				
66	105	216	579	216	105	66	70	116	272	631	272	116	70	62	99	207	652	207	99	62	59	91	192	632	192	91	59				
175 mm width 220 mm width								175 mm width 220 mm width								175 mm width 220 mm width								175 mm width 220 mm width							

Rounded values

O-KS ASSEMBLY 5

FORCE DISTRIBUTION AND PERMISSIBLE CAM FORCES

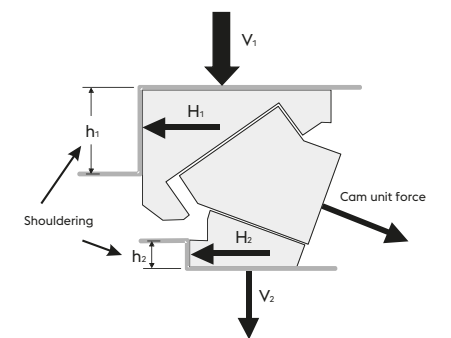
O-KS 260/330 mm cam unit specifications

Identification number		Designation		Angle	Weight [kg]		Stroke [mm]
O-KS 260	O-KS 330	O-KS 260	O-KS 330		O-KS 260	O-KS 330	
27180	27200	O-KS 260-0°	O-KS 330-0°	0°	151.5	156.7	41.78
27181	27201	O-KS 260-5°	O-KS 330-5°	5°	151.4	156.6	42.75
27182	27202	O-KS 260-10°	O-KS 330-10°	10°	148.7	153.9	52.04
27183	27203	O-KS 260-15°	O-KS 330-15°	15°	148.9	154.1	53.68
27184	27204	O-KS 260-20°	O-KS 330-20°	20°	147.5	152.7	57.82
27185	27205	O-KS 260-25°	O-KS 330-25°	25°	148.1	153.3	61.50
27186	27206	O-KS 260-30°	O-KS 330-30°	30°	142.0	147.6	56.61
27187	27207	O-KS 260-35°	O-KS 330-35°	35°	142.5	148.1	60.26
27188	27208	O-KS 260-40°	O-KS 330-40°	40°	140.5	146.1	67.04
27189	27209	O-KS 260-45°	O-KS 330-45°	45°	140.7	146.3	73.32
27190	27210	O-KS 260-50°	O-KS 330-50°	50°	141.5	147.1	64.94
27191	27211	O-KS 260-55°	O-KS 330-55°	55°	141.4	146.9	81.96
27192	27212	O-KS 260-60°	O-KS 330-60°	60°	143.3	149.0	68.94
27193	27213	O-KS 260-65°	O-KS 330-65°	65°	143.2	148.9	60.59
27194	27214	O-KS 260-70°	O-KS 330-70°	70°	143.1	148.7	74.86
27195	27215	O-KS 260-75°	O-KS 330-75°	75°	142.5	148.0	98.93

O-KS 260/330 mm cam unit force distribution

Angle	Maximum cam force [kN]	Force distribution at maximum cam force [kN]				Shouldering [mm]		Stripping force [kN]
		V1	H1	V2	H2	h1	h2	
0	781	655	781	655	0	186	48	30.9
5	827	649	773	577	50	186	48	34.6
10	802	802	673	663	117	142	48	30.7
15	857	801	672	580	155	142	48	34.4
20	773	874	505	610	222	110	82	29.6
25	827	874	505	525	245	110	82	33.2
30	806	657	551	254	147	125	83	56.0
35	829	657	552	182	127	125	83	61.6
40	830	765	442	231	194	95	145	57.2
45	846	759	438	160	160	95	145	61.7
50	536	471	272	61	72	95	145	57.6
55	725	630	364	36	52	95	145	53.4
60	830	870	153	151	262	45	180	51.7
65	849	866	153	96	206	45	190	61.8
70	666	666	117	40	110	45	190	57.7
75	639	632	111	14	54	45	190	53.5

The cam unit force is distributed as shown in the sketch:

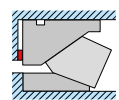


Shouldering: h₁ (top), h₂ (bottom)
 Press: V₁ (vertical)
 Cam base: H₁ (horizontal), H₂ (horizontal)
 Driver: V₂ (vertical)

O-KS ASSEMBLY 5

260 mm and 330 mm models

Permissible cam forces



Shouldering
Shouldering support at top and bottom

O-KS 260/330-0°

88	200	364	553	364	200	88
98	225	434	653	434	225	98
111	255	520	738	520	255	111
123	287	609	778	609	287	123
137	318	686	781	686	318	137
152	346	736	781	736	346	152
165	365	724	781	724	365	165

O-KS 260/330-5°

59	156	276	424	276	156	59
66	179	350	555	350	179	66
76	207	439	693	439	207	76
86	238	540	792	540	238	86
97	270	637	822	637	270	97
109	302	721	827	721	302	109
120	324	736	827	736	324	120

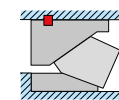
O-KS 260/330-10°

100	222	387	586	387	222	100
109	247	456	678	456	247	109
123	278	544	773	544	278	123
136	309	632	799	632	309	136
150	339	708	802	708	339	150
164	366	753	802	753	366	164
172	370	738	802	738	370	172

O-KS 260/330-15°

69	188	311	493	311	188	69
76	213	389	625	389	213	76
87	244	484	758	484	244	87
98	278	591	849	591	278	98
108	310	685	857	685	310	108
120	342	761	857	761	342	120
121	338	751	857	751	338	121

Permissible cam forces



Fitting key
Fitting key support at top, shouldering support at bottom

O-KS 260/330-0°

65	115	164	221	164	115	65
72	128	195	261	195	128	72
82	145	234	295	234	145	82
92	163	274	311	274	163	92
103	180	309	313	309	180	103
114	196	332	313	332	196	114
124	207	327	313	327	207	124

O-KS 260/330-5°

41	89	124	169	124	89	41
46	102	157	222	157	102	46
53	118	197	277	197	118	53
60	134	243	317	243	134	60
68	152	287	329	287	152	68
77	170	325	331	325	170	77
85	183	332	331	332	183	85

O-KS 260/330-10°

74	127	174	234	174	127	74
81	141	205	271	205	141	81
91	158	245	309	245	158	91
102	176	285	320	285	176	102
112	192	320	321	320	192	112
123	208	340	321	340	208	123
131	210	333	321	333	210	131

O-KS 260/330-15°

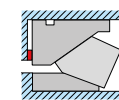
47	108	140	197	140	108	47
52	122	175	250	175	122	52
59	139	218	303	218	139	59
67	158	266	340	266	158	67
75	176	309	343	309	176	75
83	193	343	343	343	193	83
84	191	339	343	339	191	84

Rounded values

O-KS ASSEMBLY 5

260 mm and 330 mm models

Permissible cam forces



Shouldering
Shouldering support at top and bottom

O-KS 260/330-20°

92	196	346	525	346	196	92
102	219	413	625	413	219	102
114	247	496	715	496	247	114
128	278	584	768	584	278	128
142	307	664	773	664	307	142
157	335	728	773	728	335	157
172	356	727	773	727	356	172

O-KS 260/330-25°

61	159	265	413	265	159	61
68	182	338	531	338	182	68
77	209	425	670	425	209	77
88	240	525	778	525	240	88
99	273	626	819	626	273	99
112	306	715	827	715	306	112
123	329	736	827	736	329	123

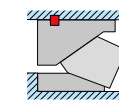
O-KS 260/330-30°

57	75	130	252	130	75	57
65	96	226	436	226	96	65
74	122	343	618	343	122	74
84	150	462	765	462	150	84
93	176	549	801	549	176	93
103	193	582	806	582	193	103
108	194	535	806	535	194	108

O-KS 260/330-35°

50	62	76	152	76	62	50
55	80	173	359	173	80	55
62	104	297	590	297	104	62
69	129	423	768	423	129	69
76	148	509	820	509	148	76
80	158	539	829	539	158	80
81	152	498	829	498	152	81

Permissible cam forces



Fitting key
Fitting key support at top, shouldering support at bottom

O-KS 260/330-20°

70	112	156	210	156	112	70
77	125	186	250	186	125	77
87	141	223	286	223	141	87
98	158	263	307	263	158	98
108	174	299	309	299	174	108
120	190	329	309	329	190	120
132	202	328	309	328	202	132

O-KS 260/330-25°

19	84	103	144	103	84	19
22	96	142	202	142	96	22
27	110	185	266	185	110	27
32	126	236	315	236	126	32
39	142	291	331	291	142	39
46	160	337	331	337	160	46
52	174	329	331	329	174	52

O-KS 260/330-30°

48	43	58	101	58	43	48
54	54	101	174	101	54	54
61	68	154	247	154	68	61
69	83	208	306	208	83	69
77	97	247	320	247	97	77
84	107	262	323	262	107	84
89	108	241	323	241	108	89

O-KS 260/330-35°

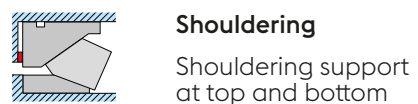
42	36	34	61	34	36	42
46	46	77	144	77	46	46
51	58	133	236	133	58	51
57	71	190	307	190	71	57
62	81	229	328	229	81	62
66	87	243	332	243	87	66
66	84	224	332	224	84	66

Rounded values

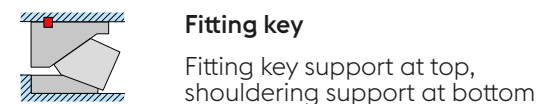
O-KS ASSEMBLY 5

260 mm and 330 mm models

Permissible cam forces



Permissible cam forces



O-KS 260/330-40°

63	86	162	313	162	86	63
70	107	262	487	262	107	70
79	134	382	687	382	134	79
89	162	500	818	500	162	89
100	187	580	830	580	187	100
108	202	594	830	594	202	108
112	198	537	830	537	198	112

260 mm width
330 mm width
150 mm high

O-KS 260/330-40°

63	77	82	157	82	77	63
70	92	119	221	119	92	70
79	112	174	312	174	112	79
89	134	227	372	227	134	89
100	153	264	377	264	153	100
108	168	270	377	270	168	108
112	167	244	377	244	167	112

260 mm width
330 mm width
150 mm high

O-KS 260/330-45°

53	80	231	176	231	80	53
61	96	275	372	275	96	61
69	114	327	580	327	114	69
78	133	380	759	380	133	78
85	152	426	832	426	152	85
92	167	460	846	460	167	92
97	178	483	846	483	178	97

260 mm width
330 mm width
150 mm high

O-KS 260/330-45°

53	68	119	86	119	68	53
61	80	125	169	125	80	61
69	95	149	264	149	95	69
78	112	173	345	173	112	78
85	128	194	378	194	128	85
92	141	209	385	209	141	92
97	151	220	385	220	151	97

260 mm width
330 mm width
150 mm high

O-KS 260/330-50°

22	43	182	159	182	43	22
26	54	230	343	230	54	26
30	66	280	421	280	66	30
35	78	330	495	330	78	35
39	90	370	530	370	90	39
44	102	404	536	404	102	44
48	110	430	536	430	110	48

260 mm width
330 mm width
150 mm high

O-KS 260/330-50°

22	33	93	76	93	33	22
26	41	105	156	105	41	26
30	50	127	191	127	50	30
35	59	150	225	150	59	35
39	68	168	241	168	68	39
44	78	184	244	184	78	44
48	85	195	244	195	85	48

260 mm width
330 mm width
150 mm high

O-KS 260/330-55°

24	43	188	153	188	43	24
28	55	238	320	238	55	28
32	68	297	502	297	68	32
35	77	343	652	343	77	35
37	84	381	713	381	84	37
39	92	410	725	410	92	39
41	93	417	725	417	93	41

260 mm width
330 mm width
150 mm high

O-KS 260/330-55°

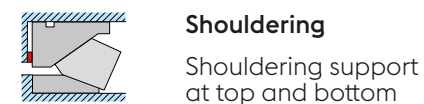
24	43	188	153	188	43	24
28	55	238	320	238	55	28
32	68	297	502	297	68	32
35	77	343	652	343	77	35
37	84	381	713	381	84	37
39	92	410	725	410	92	39
41	93	417	725	417	93	41

260 mm width
330 mm width
150 mm high

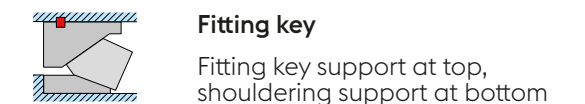
O-KS ASSEMBLY 5

260 mm and 330 mm models

Permissible cam forces



Permissible cam forces



O-KS 260/330-60°

61	70	43	289	43	70	61
69	84	70	462	70	84	69
78	100	102	663	102	100	78
88	118	132	804	132	118	88
98	135	150	828	150	135	98
107	150	156	830	156	150	107
112	154	147	830	147	154	112

260 mm width
330 mm width
150 mm high

O-KS 260/330-60°

61	70	43	289	43	70	61
69	84	70	462	70	84	69
78	100	102	663	102	100	78
88	118	132	804	132	118	88
98	135	150	828	150	135	98
107	150	156	830	156	150	107
112	154	147	830	147	154	112

260 mm width
330 mm width
150 mm high

O-KS 260/330-65°

52	63	85	174	85	63	52
58	84	182	373	182	84	58
66	108	312	581	312	108	66
74	134	431	760	431	134	74
82	156	522	834	522	156	82
88	171	559	849	559	171	88
93	174	532	849	532	174	93

260 mm width
330 mm width
150 mm high

O-KS 260/330-65°

52	63	85	174	85	63	52
58	84	182	373	182	84	58
66	108	312	581	312	108	66
74	134	431	760	431	134	74
82	156	522	834	522	156	82
88	171	559	849	559	171	88
93	174	532	849	532	174	93

260 mm width
330 mm width
150 mm high

O-KS 260/330-70°

21	34	102	181	102	34	21
24	47	183	315	183	47	24
27	62	280	473	280	62	27
30	78	379	602	379	78	30
33	90	443	655	443	90	33
37	100	470	666	470	100	37
39	99	456	666	456	99	39

260 mm width
330 mm width
150 mm high

O-KS 260/330-70°

21	34	102	181	102	34	21
24	47	183	315	183	47	24
27	62	280	473	280	62	27
30	78	379	602	379	78	30
33	90	443	655	443	90	33
37	100	470	666	470	100	37
39	99	456	666	456	99	39

260 mm width
330 mm width
150 mm high

O-KS 260/330-75°

22	35	103	188	103	35	22
23	47	187	353	187	47	23
25	61	292	526	292	61	25
24	69	381	630	381	69	24
24	74	414	639	414	74	24
23	72	417	639	417	72	23
23	67	375	625	375	67	23

260 mm width
330 mm width
150 mm high

O-KS 260/330-75°

22	35	103	188	103	35	22
23	47	187	353	187	47	23
25	61	292	526	292	61	25
24	69	381	630	381	69	24
24	74	414	639	414	74	24
23	72	417	639	417	72	23
23	67	375	625	375	67	23

260 mm width
330 mm width
150 mm high

Rounded values

Rounded values

O-KS ASSEMBLY 6

Use our product finder to quickly and simply find just the right O-KS model for your needs:
www.voestalpine.com/camtec/Product-Finder

FORCE DISTRIBUTION AND PERMISSIBLE CAM FORCES

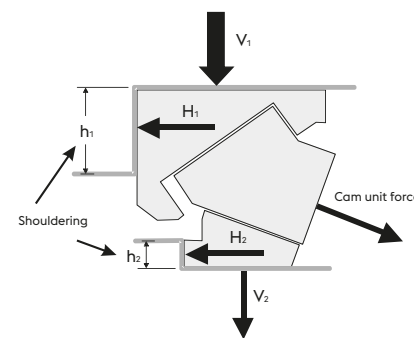
O-KS 400/500 mm cam unit specifications

Identification number		Designation		Angle	Weight [kg]		Stroke [mm]
O-KS 400	O-KS 500	O-KS 400	O-KS 500		O-KS 400	O-KS 500	
27220	27240	O-KS 400-0°	O-KS 500-0°	0°	308.7	321.3	41.78
27221	27241	O-KS 400-5°	O-KS 500-5°	5°	307.2	319.8	42.75
27222	27242	O-KS 400-10°	O-KS 500-10°	10°	300.7	313.3	52.04
27223	27243	O-KS 400-15°	O-KS 500-15°	15°	300.0	312.6	53.68
27224	27244	O-KS 400-20°	O-KS 500-20°	20°	294.5	307.0	57.82
27225	27245	O-KS 400-25°	O-KS 500-25°	25°	294.0	306.6	61.50
27226	27246	O-KS 400-30°	O-KS 500-30°	30°	283.6	296.4	64.99
27227	27247	O-KS 400-35°	O-KS 500-35°	35°	287.7	300.6	60.26
27228	27248	O-KS 400-40°	O-KS 500-40°	40°	279.7	292.5	75.42
27229	27249	O-KS 400-45°	O-KS 500-45°	45°	286.7	299.6	73.32
27230	27250	O-KS 400-50°	O-KS 500-50°	50°	288.4	301.1	64.94
27231	27251	O-KS 400-55°	O-KS 500-55°	55°	291.5	304.1	81.96
27232	27252	O-KS 400-60°	O-KS 500-60°	60°	280.4	293.2	68.94
27233	27253	O-KS 400-400°	O-KS 500-65°	65°	285.4	298.3	60.59
27234	27254	O-KS 400-70°	O-KS 500-70°	70°	288.8	301.6	74.86
27235	27255	O-KS 400-75°	O-KS 500-75°	75°	289.0	300.9	98.93

O-KS 400/500 mm cam unit force distribution

Angle	Maximum cam force [kN]	Force distribution at maximum cam force [kN]				Shouldering [mm]		Stripping force [kN]
		V1	H1	V2	H2	h1	h2	
0°	1361	1142	1361	1142	0	228	30	87.8
5°	1453	1140	1359	1014	89	228	41	84.2
10°	1264	1264	1061	1045	184	179	45	88.0
15°	1179	1103	925	797	214	179	45	84.3
20°	1358	1535	886	1071	390	135	79	88.1
25°	1449	1532	884	920	429	135	90	84.4
30°	1237	1008	846	390	225	157	90	63.3
35°	1148	910	764	252	176	157	90	59.4
40°	1125	1037	599	314	263	120	140	63.3
45°	1156	1036	598	219	219	120	160	59.5
50°	1090	959	553	124	147	120	160	55.5
55°	1013	881	508	51	73	120	160	51.5
60°	1131	1185	209	206	356	59	155	63.5
65°	1151	1173	207	130	280	59	170	59.6
70°	1174	1174	207	71	195	59	185	55.6
75°	1022	1010	178	23	86	59	185	51.5

The cam unit force is distributed as shown in the sketch:

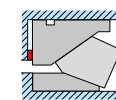


Shouldering: h_1 (top), h_2 (bottom)
 Press: V_1 (vertical)
 Cam base: H_1 (horizontal)
 Driver: H_2 (horizontal), V_2 (vertical)

O-KS ASSEMBLY 6

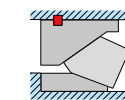
400 mm and 500 mm models

Permissible cam forces



Shouldering
Shouldering support at top and bottom

Permissible cam forces



Fitting key
Fitting key support at top, shouldering support at bottom

O-KS 400/500-0°

182	409	580	765	580	409	182
188	432	705	1010	705	432	188
181	448	843	1248	843	448	181
162	441	966	1361	966	441	162
142	407	1063	1361	1063	407	142
122	371	1123	1360	1123	371	122
106	334	1006	1360	1006	334	106

400 mm width / 500 mm width, 185 mm high

O-KS 400/500-0°

128	163	145	305	145	163	128
132	173	176	305	176	173	132
126	179	211	305	211	179	126
113	176	242	305	242	176	113
99	163	266	305	266	163	99
85	148	281	305	281	148	85
74	133	252	305	252	133	74

400 mm width / 500 mm width, 185 mm high

O-KS 400/500-5°

51	255	326	336	326	255	51
55	273	457	620	457	273	55
59	288	596	946	596	288	59
62	299	745	1251	745	299	62
55	306	886	1444	886	306	55
47	288	996	1453	996	288	47
41	261	980	1453	980	261	41

400 mm width / 500 mm width, 185 mm high

O-KS 400/500-5°

36	102	98	336	98	102	36
38	109	137	336	137	109	38
42	115	179	336	179	115	42
44	119	223	336	223	119	44
38	122	266	336	266	122	38
33	115	299	336	299	115	33
28	104	294	336	294	104	28

400 mm width / 500 mm width, 185 mm high

O-KS 400/500-10°

167	295	433	523	433	295	167
177	314	548	769	548	314	177
188	336	672	1042	672	336	188
198	359	798	1222	798	359	198
206	383	911	1264	911	383	206
212	404	995	1264	995	404	212
207	413	1026	1264	1026	413	207

400 mm width / 500 mm width, 185 mm high

O-KS 400/500-10°

59	86	58	290	58	86	59
64	93	96	355	96	93	64
70	100	137	355	137	100	70
76	108	177	355	177	108	76
82	117	221	355	221	117	82
88	125	262	355	262	125	88
93	133	286	355	286	133	93

400 mm width / 500 mm width, 185 mm high

O-KS 400/500-15°

85	214	193	290	193	214	85
91	233	319	511	319	233	91
100	251	456	730	456	251	100
109	271	592	962	592	271	109
117	292	738	1140	738	292	117
126	313	872	1179	872	313	126
132	331	952	1179	952	331	132

400 mm width / 500 mm width, 185 mm high

O-KS 400/500-15°

124	144	204	361	204	144	124
130	153	244	361	244	153	130
136	162	280	361	280	162	136
139	171	309	361	309	171	139
137	172	327	361	327	172	137
134	174	331	361	331	174	134
123	164	310	361	310	164	123

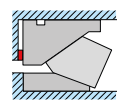
400 mm width / 500 mm width, 185 mm high

Rounded values

O-KS ASSEMBLY 6

400 mm and 500 mm models

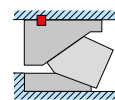
Permissible cam forces



Shouldering

Shouldering support at top and bottom

Permissible cam forces



Fitting key

Fitting key support at top, shouldering support at bottom

O-KS 400/500-20°

206	361	680	1007	680	361	206
217	384	813	1245	813	384	217
227	406	933	1358	933	406	227
232	428	1031	1357	1031	428	232
228	429	1089	1356	1089	429	228
223	436	1103	1357	1103	436	223
204	410	1035	1356	1035	410	204

400 mm width
500 mm width
185 mm high

O-KS 400/500-20°

124	144	204	361	204	144	124
130	153	244	361	244	153	130
136	162	280	361	280	162	136
139	171	309	361	309	171	139
137	172	327	361	327	172	137
134	174	331	361	331	174	134
123	164	310	361	310	164	123

400 mm width
500 mm width
185 mm high

O-KS 400/500-25°

105	249	330	335	330	249	105
113	266	451	617	451	266	113
121	285	586	923	586	285	121
130	304	733	1248	733	304	130
139	323	877	1440	877	323	139
148	342	990	1449	990	342	148
153	359	1027	1449	1027	359	153

400 mm width
500 mm width
185 mm high

O-KS 400/500-25°

95	100	115	330	115	100	95
101	106	158	375	158	106	101
109	114	176	375	176	114	109
117	122	220	375	220	122	117
125	129	263	375	263	129	125
133	137	297	375	297	137	133
138	144	308	375	308	144	138

400 mm width
500 mm width
185 mm high

O-KS 400/500-30°

81	196	260	465	260	196	81
83	210	457	806	457	210	83
84	220	656	1125	656	220	84
84	226	809	1237	809	226	84
82	227	870	1237	870	227	82
80	224	797	1237	797	224	80
71	217	586	1179	586	217	71

400 mm width
500 mm width
185 mm high

O-KS 400/500-30°

73	79	104	402	104	79	73
74	84	183	402	183	84	74
75	88	262	402	262	88	75
76	90	324	402	324	90	76
74	91	348	402	348	91	74
72	90	319	402	319	90	72
64	87	234	402	234	87	64

400 mm width
500 mm width
185 mm high

O-KS 400/500-35°

34	135	133	167	133	135	34
36	162	251	414	251	162	36
38	196	382	772	382	196	38
40	212	549	1065	549	212	40
41	221	656	1148	656	221	41
42	227	652	1148	652	227	42
43	228	537	1110	537	228	43

400 mm width
500 mm width
185 mm high

O-KS 400/500-35°

30	54	55	167	55	54	30
33	65	101	396	101	65	33
34	78	153	410	153	78	34
36	85	219	410	219	85	36
37	89	263	410	263	89	37
38	91	261	410	261	91	38
39	91	215	410	215	91	39

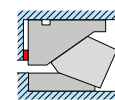
400 mm width
500 mm width
185 mm high

Rounded values

O-KS ASSEMBLY 6

400 mm and 500 mm models

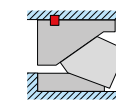
Permissible cam forces



Shouldering

Shouldering support at top and bottom

Permissible cam forces



Fitting key

Fitting key support at top, shouldering support at bottom

O-KS 400/500-40°

76	245	228	402	228	245	76
78	261	405	710	405	261	78
79	273	588	1023	588	273	79
80	281	724	1125	724	281	80
79	284	777	1125	777	284	79
77	279	713	1125	713	279	77
66	269	525	1072	525	269	66

400 mm width
500 mm width
185 mm high

O-KS 400/500-40°

69	123	137	335	137	123	69
70	131	243	592	243	131	70
71	137	353	612	353	137	71
72	141	434	612	434	141	72
71	142	466	612	466	142	71
69	139	428	612	428	139	69
60	135	315	612	315	135	60

400 mm width
500 mm width
185 mm high

O-KS 400/500-45°

23	111	160	230	160	111	23
24	203	231	469	231	203	24
25	214	410	831	410	214	25
25	219	561	1111	561	219	25
25	217	648	1156	648	217	25
23	211	616	1156	616	211	23
20	202	473	1068	473	202	20

400 mm width
500 mm width
185 mm high

O-KS 400/500-45°

23	102	108	123	108	102	23
24	122	139	328	139	122	24
25	128	246	582	246	128	25
25	131	337	777	337	131	25
25	130	389	777	389	130	25
23	127	370	777	370	127	23
20	121	284	748	284	121	20

400 mm width
500 mm width
185 mm high

O-KS 400/500-50°

24	148	292	299	292	148	24
25	167	328	684	328	167	25
26	187	361	1090	361	187	26
26	204	378	1090	378	204	26
27	218	380	1090	380	218	27
27	226	380	1090	380	226	27
27	228	380	1090	380	228	27

400 mm width
500 mm width
185 mm high

O-KS 400/500-50°

24	118	234	272	234	118	24
25	134	262	622	262	134	25
26	150	289	991	289	150	26
26	163	303	991	303	163	26
27	174	304	991	304	174	27
27	181	304	991	304	181	27
27	183	304	991	304	183	27

400 mm width
500 mm width
185 mm high

O-KS 400/500-55°

24	160	305	330	305	160	24
24	180	354	409	354	180	24
26	200	386	701	386	200	26
28	214	394	940	394	214	28
29	224	394	1013	394	224	29
30	228	394	1013	394	228	30
30	228	394	1013	394	228	30

400 mm width
500 mm width
185 mm high

O-KS 400/500-55°

24	160	305	330	305	160	24
24	180	354	409	354	180	24
26	200	386	701	386	200	26
28	214	394	940	394	214	28
29	224	394	1013	394	224	29
30	228	394	1013	394	228	30
30	228	394	1013	394	228	30

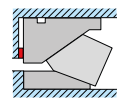
400 mm width
500 mm width
185 mm high

Rounded values

O-KS ASSEMBLY 6

400 mm and 500 mm models

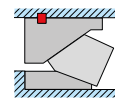
Permissible cam forces



Shouldering

Shouldering support at top and bottom

Permissible cam forces



Fitting key

Fitting key support at top, shouldering support at bottom

O-KS 400/500-60°

66	267	402	451	402	267	66
66	275	548	764	548	275	66
65	279	678	1059	678	279	65
61	275	765	1131	765	275	61
51	266	777	1131	777	266	51
39	250	707	1131	707	250	39
32	230	557	1023	557	230	32

400 mm width
500 mm width
185 mm high

O-KS 400/500-60°

66	267	402	451	402	267	66
66	275	548	764	548	275	66
65	279	678	1059	678	279	65
61	275	765	1131	765	275	61
51	266	777	1131	777	266	51
39	250	707	1131	707	250	39
32	230	557	1023	557	230	32

400 mm width
500 mm width
185 mm high

O-KS 400/500-65°

32	191	208	210	208	191	32
32	203	354	467	354	203	32
32	216	508	828	508	216	32
33	222	623	1106	623	222	33
34	224	684	1151	684	224	34
32	220	664	1151	664	220	32
28	212	576	1064	576	212	28

400 mm width
500 mm width
185 mm high

O-KS 400/500-65°

32	191	208	210	208	191	32
32	203	354	467	354	203	32
32	216	508	828	508	216	32
33	222	623	1106	623	222	33
34	224	684	1151	684	224	34
32	220	664	1151	664	220	32
28	212	576	1064	576	212	28

400 mm width
500 mm width
185 mm high

O-KS 400/500-70°

24	210	215	220	215	210	24
21	215	372	424	372	215	21
22	218	528	821	528	218	22
22	214	638	1127	638	214	22
22	205	677	1174	677	205	22
21	190	622	1174	622	190	21
20	176	513	1039	513	176	20

400 mm width
500 mm width
185 mm high

O-KS 400/500-70°

24	210	215	220	215	210	24
21	215	372	424	372	215	21
22	218	528	821	528	218	22
22	214	638	1127	638	214	22
22	205	677	1174	677	205	22
21	190	622	1174	622	190	21
20	176	513	1039	513	176	20

400 mm width
500 mm width
185 mm high

O-KS 400/500-75°

22	213	216	392	216	213	22
20	208	374	690	374	208	20
18	199	549	956	549	199	18
16	186	641	1022	641	186	16
13	169	651	1022	651	169	13
10	148	563	1022	563	148	10
9	125	440	861	440	125	9

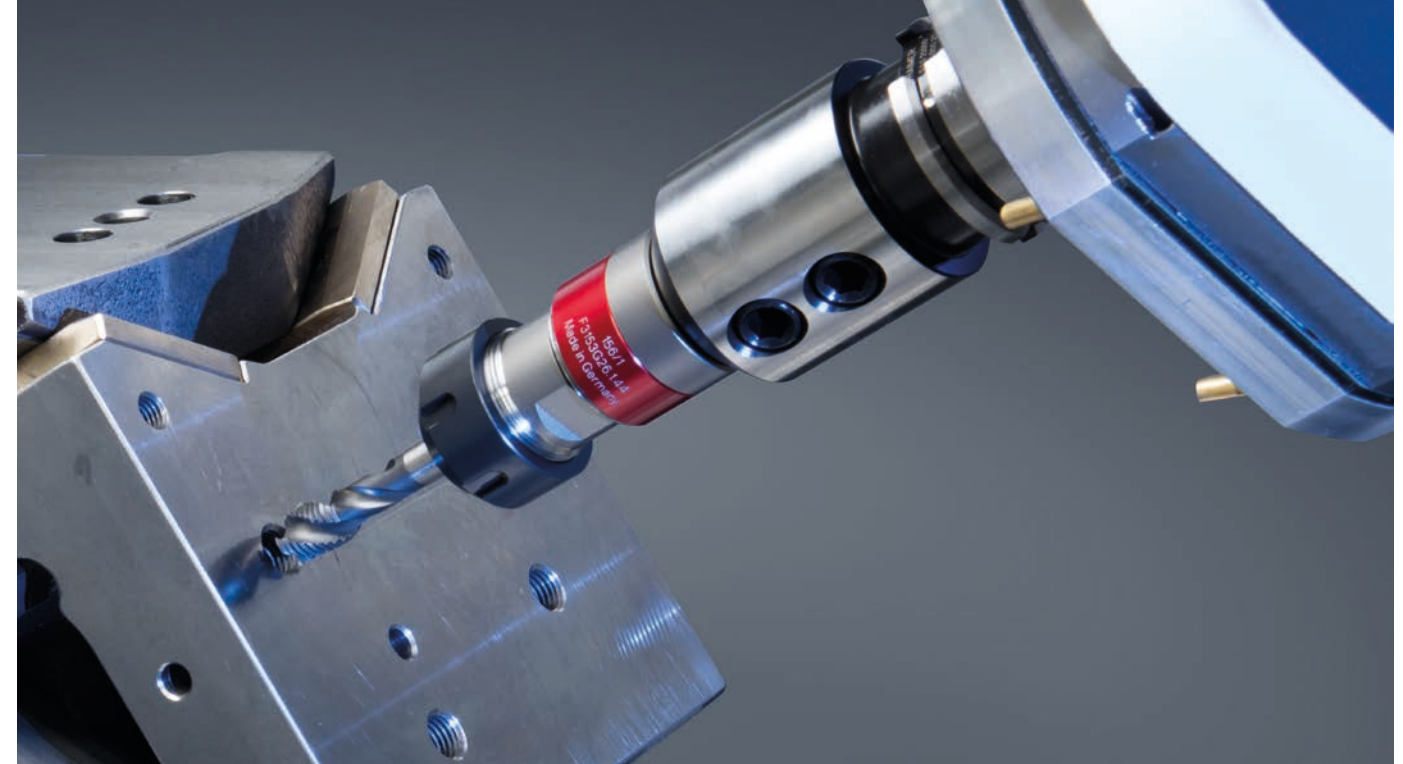
400 mm width
500 mm width
185 mm high

O-KS 400/500-75°

22	213	216	392	216	213	22
20	208	374	690	374	208	20
18	199	549	956	549	199	18
16	186	641	1022	641	186	16
13	169	651	1022	651	169	13
10	148	563	1022	563	148	10
9	125	440	861	440	125	9

400 mm width
500 mm width
185 mm high

Rounded values



CUSTOM PROCESSING

Flexible, precise and economical

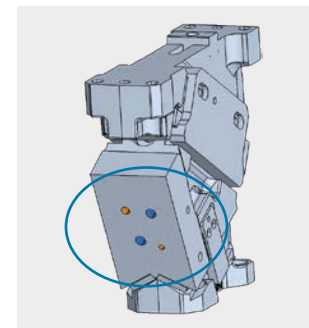
voestalpine Camtec provides comprehensive preparation of your cam unit: Individual adjustment of the work surface width, e.g. from 110 to 105 mm, will guarantee maximum flexibility. We would be happy to use your CAD data to prepare threads, pre-drill bore holes, carry out customi-

zed milling or mount elements on your cam unit. This saves our customers from having to perform additional work steps. Please send us any inquiries pertaining to standard preprocessing of the work face or other customized preprocessing to anarbeitung.camtec@voestalpine.com

Example of O-KS preprocessing

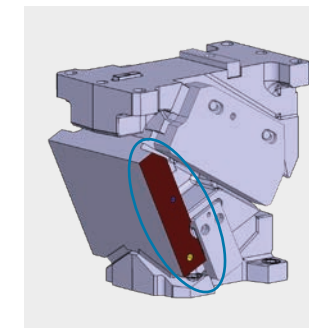
Processing on working face

Standard preprocessing



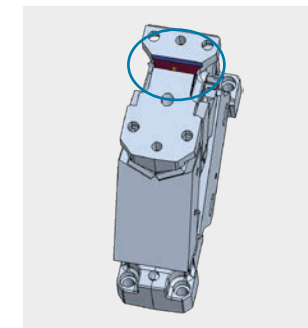
Adjustment of working surface width

Extended preprocessing



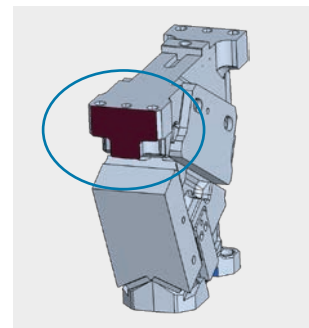
Processing on punch (groove)

Extended preprocessing

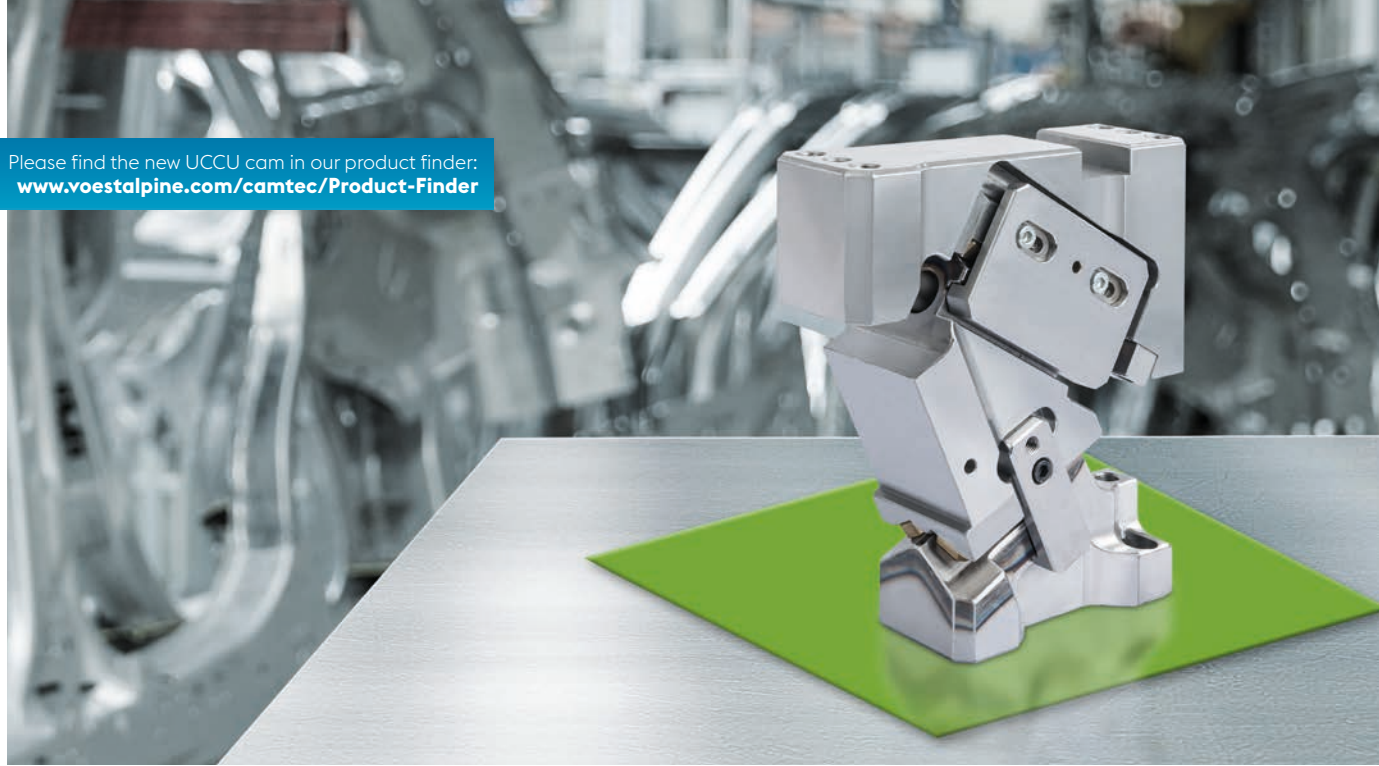


Processing on cam bed

Extended preprocessing



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www.voestalpine.com/camtec/Product-Finder



UCCU FOR NEARLY LIMITLESS APPLICATION

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The result: a cam unit designed to efficiently meet every tool requirement.

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