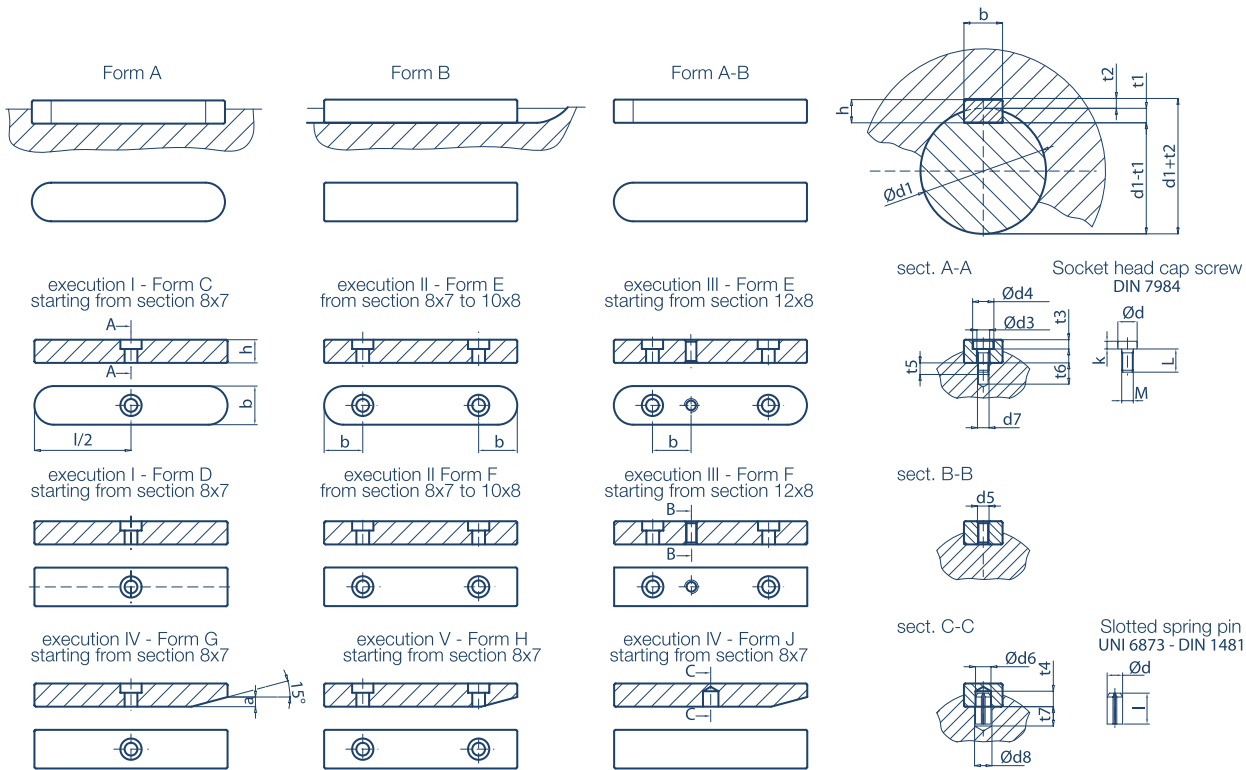


PRODUCT DESCRIPTION AND TECH. DATA

Feather keys according to DIN 6885- UNI 6604 (former ISO 773)

Feather keys are normally used to transmit the torque from the shaft to the hub



FEATHER KEYS

Nomenclature according to the standard:			DESCRIPTION
UNI 6604	UNI 6605	DIN 6885	
Form A		Form A	rounded ends
Form B		Form B	flat ends
	Execution I	Form C	From section 8x7 form A supplied with hole for retaining screw
		Form D	From section 8x7 form B supplied with hole for retaining screw
	Execution II	Form E	From section 8x7 to 10x8 form A supplied with 2 holes for retaining screws
		Form F	From section 8x7 to 10x8 form B supplied with 2 holes for retaining screws
	Execution III	Form E	From section 12x8 form A supplied with 2 holes for retaining screws and 1 threaded hole for the extracting screw
		Form F	From section 12x8 form B supplied with 2 holes for retaining screws and 1 threaded hole for the extracting screw
	Execution IV	Form G	From section 8x7 form B supplied with hole for retaining screw and chamfer
	Execution V	Form H	From section 8x7 form B supplied with 2 holes for retaining screw and chamfer
	Execution VI	Form J	From section 8x7 form B supplied with chamfer and hole for 1 spring dewel sleeve
Form A/B: not included in the standard			if needed the forms A and B can be combined, so that 1 end will be flat and the other one will be rounded

MATERIAL

C45 (1.1191) steel with $R_{\geq 59}$ daN/mm² cold formed according to UNI EN 100083-1
 stainless steel (1.4401 - AISI 316) with $R_{\geq 59}$ daN/mm² - cold formed 39NiCrMo3 (1.6511) available upon request up to size 20x12 mm and 18NiCrMo5 (1.5919) up to size 12x8 mm.

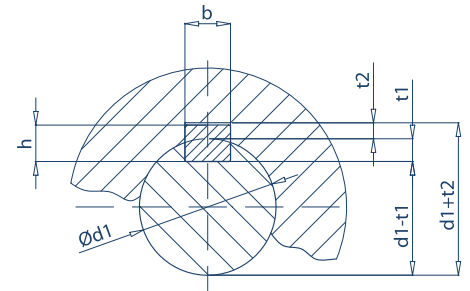
The relationship between the diameter of the shaft and the section of the key indicated in the dimensional tables refers to normal uses

The use of keys with smaller sections is possible if their resistance is sufficient for the force to be transmitted

The use of keys with larger sections is not recommended.

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Tolerances Table for feather keys and keyways



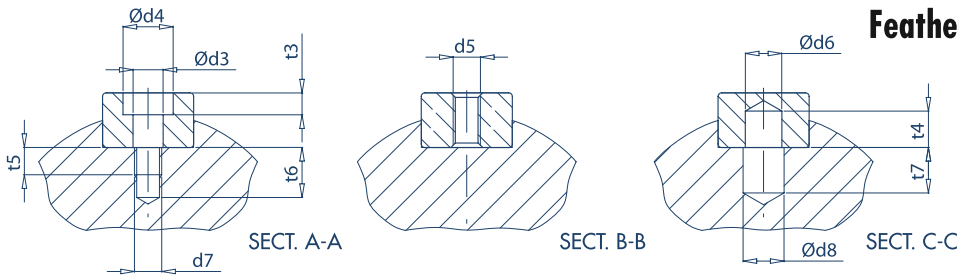
Dimensions mm

FEATHER KEYS

Range		Feather key Section			keyway										
Shaft diameter d	Nominal Dimensions bxh	Tolerances on		Nominal Dimensions b	Width						Depth				
		bh ⁹	h*		Tolerances on b			Shaft			Hub				
					For shaft			For hub			t1		t2		
H9	N9	P9	D10	Js9	P9	Nom.	Tol.	Nom.	Tol.						
from up to	6 8	2 x 2	0	0	2	+0,025 0	0 -0,004	-0,006 -0,031	+0,060 +0,020	±0,012	-0,006 -0,031	1,2		1	
from up to	8 10	3 x 3	-0,025	-0,025	3							1,8		1,4	
from up to	10 12	4 x 4			4							2,5		1,8	
from up to	12 17	5 x 5			5							3		2,3	
from up to	17 22	6 x 4	0 -0,030		6	+0,030 0	0 -0,030	-0,012 -0,042	+0,078 +0,030	±0,015	-0,012 -0,042	2,5	+0,1 0	1,8	+0,1 0
		6 x 5		0 -0,030	6							3		2,3	
		6 x 6			6							3,5		3,5	
from up to	22 30	8 x 5			8							3		2,3	
		8 x 6			8							3,5		2,8	
		8 x 7	0 -0,090		8	+0,036 0	0 -0,036	-0,015 -0,051	+0,098 +0,040	±0,018	-0,015 -0,051	4		3,3	
		8 x 8	0 -0,036		8							5		3,3	
from up to	30 38	10 x 8	0 -0,090		10							5		3,3	
		10 x 10	0 -0,036		10							6		4,3	
from up to	38 44	12 x 8	0 -0,090		12							5		3,3	
		12 x 12	0 -0,043		12							7,5		4,9	
from up to	44 50	14 x 9	0 -0,090		14	+0,043 0	0 -0,043	-0,018 -0,061	+0,120 +0,050	±0,021	-0,018 -0,061	5,5	+0,2 0	3,8	+0,2 0
		14 x 14	0 -0,043		14							9		5,4	
from up to	50 58	16 x 10	0 -0,090		16							6		4,3	
from up to	58 60	18 x 11	0 -0,110		18							7		4,4	
from up to	65 75	20 x 12			20							7,5		4,9	
from up to	75 85	22 x 14	0 -0,052		22	+0,052 0	0 -0,052	-0,022 -0,074	+0,149 +0,065	±0,026	-0,022 -0,074	9		5,4	
from up to	85 95	25 x 14		0 -0,110	25							9		5,4	
from up to	95 110	28 x 16			28							10		6,4	
from up to	110 130	32 x 18			32							11		7,4	
from up to	130 150	36 x 20			36							12		8,4	
from up to	150 170	40 x 22	0 -0,062		40	0,062 0	0 -0,062	-0,026 -0,088	+0,180 +0,080	±0,031	-0,026 -0,088	13		9,4	
from up to	170 200	45 x 25		0 -0,130	45							15		10,4	
from up to	200 230	50 x 28			50							17		11,4	
from up to	230 260	56 x 32			56							20	+0,3 0	12,4	+0,3 0
from up to	260 290	63 x 32	0 -0,074		63	+0,074 0	0 -0,074	-0,032 -0,106	+0,220 +0,100	±0,037	-0,032 -0,106	20		12,4	
from up to	290 330	70 x 36		0 -0,160	70							22		14,4	
from up to	330 380	80 x 40			80							25		15,4	
from up to	380 440	90 x 45	0 -0,087		90	+0,087 0	0 -0,080	-0,037 -0,124	+0,260 +0,120	±0,043	-0,037 -0,124	28		17,4	
from up to	440 500	100 x 50			100							31		19,5	

* the deviation values are referred to the tolerances h9 for square sections and h11 for rectangular sections

Feather keys executions



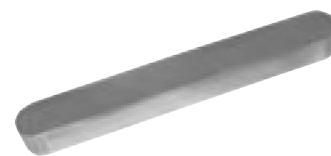
Feather key Section		Sect. A-A							Sect. B-B	Sect. C-C				Slotted spring pin	
Nominal Dimensions bxh	Minimum length of application L	a*	Ød3	Ød4	d7	t3	t5	t6	d5	Ød6 H12	Ød8	t4	t7	Socket head cap screw Thread	diameter
2 x 2															
3 x 3															
4 x 4															
5 x 5															
6 x 4															
6 x 5															
6 x 6															
8 x 5															
8 x 6															
sizes in which is not possible to apply C - D - E - F - G - H - J forms															
8 x 7	40	3	3,4	6	M3	2,4	4	7	M3	4	4,5	4	5	4 x 8	M3 x 8
8 x 8															
10 x 8	50	3	3,4	6	M3	2,4	5	8	M3	4	4,5	4	5	4 x 8	M3 x 10
10 x 10															
12 x 8	56	3	4,5	8	M4	3,2	6	10	M4	5	5,5	5	7	5 x 10	M4 x 10
12 x 12															
14 x 9	63	3,5	5,5	10	M5	4,1	6	10	M5	6	6,5	6	8	6 x 12	M5 x 10
14 x 14															
16 x 10	70	4	5,5	10	M5	4,1	6	10	M5	6	6,5	6	8	6 x 12	M5 x 10
18 x 11	80	4,5	6,6	11	M6	4,8	6	11	M6	8	9	7	11	8 x 16	M6 x 12
20 x 12	90	5	6,6	11	M6	4,8	6	11	M6	8	9	8	10	8 x 16	M6 x 12
22 x 14	100	5,5	6,6	11	M6	4,8	8	13	M6	8	9	8	10	8 x 16	M6 x 12
25 x 14	100	5,5	9	14	M8	6	9	15	M8	10	11	10	12	10 x 20	M8 x 16
28 x 16	110	6,5	11	18	M10	7,3	9	16	M10	12	13	10	18	12 x 24	M10 x 16
32 x 18	110	7	11	18	M10	7,3	10	17	M10	12	13	12	16	12 x 24	M10 x 20
36 x 20	125	8	14	20	M12	8,3	12	20	M12	16	17	14	20	16 x 30	M12 x 25
40 x 22	125	9	14	20	M12	8,3	12	20	M12	16	17	16	18	16 x 30	M12 x 25
45 x 25	125	10	14	20	M12	8,3	15	22	M12	16	17	16	18	16 x 30	M12 x 30
50 x 28	140	11	14	20	M12	8,3	12	19	M12	16	17	16	18	16 x 32	M12 x 30
56 x 32	160	13	14	20	M12	8,3	13	20	M12	16	17	16	18	16 x 32	M12 x 35
63 x 32	180	13	14	20	M12	8,3	13	20	M12	16	17	16	18	16 x 32	M12 x 35
70 x 36	200	14	18	26	M16	11,5	17	24	M16	20	21	20	24	20 x 40	M16 x 40
80 x 40	220	16	18	26	M16	11,5	18	25	M16	20	21	20	24	20 x 40	M16 x 45
90 x 45	250	18	22	33	M20	13,5	20	28	M20	25	26	25	30	25 x 50	M20 x 50
100 x 50	280	20	22	33	M20	13,5	20	28	M20	25	26	25	30	25 x 50	M20 x 50

* execution Form G-H-J

FEATHER KEYS

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Feather keys standard lengths DIN 6885-UNI 6604 (former ISO 773)



FEATHER KEYS

bxh (mm)	length L (mm)															
	feather keys length tolerance: up to 28 mm from 0 to -0,20 mm, over 28 up to 80 mm from 0 to -0,30 mm, over 80 mm from 0 to -0,50 mm keyway tolerance: up to 28 mm from +0,20 to 0 mm, over 28 up to 80 mm from +0,30 to 0, over 80 mm from +0,50 to 0 mm															
3x3	8	10	12	14	15	16	18	20	22	25	28	30	32	35	36	40
Kg/100 pcs	0,05	0,07	0,08	0,09	0,11	0,11	0,12	0,14	0,15	0,17	0,19	0,21	0,22	0,24	0,25	0,28
4x4	8	10	12	14	15	16	18	20	22	25	28	30	32	35	36	40
Kg/100 pcs	0,09	0,12	0,14	0,17	0,18	0,19	0,22	0,24	0,27	0,30	0,34	0,37	0,39	0,43	0,44	0,49
5x5	8	10	12	14	15	16	18	20	22	25	28	30	32	35	36	40
Kg/100 pcs	0,14	0,17	0,21	0,25	0,27	0,29	0,33	0,37	0,41	0,47	0,53	0,57	0,61	0,66	0,69	0,76
6x4	10	12	14	15	16	18	20	22	25	28	30	32	35	36	40	45
Kg/100 pcs	0,17	0,20	0,24	0,26	0,28	0,31	0,35	0,38	0,43	0,49	0,52	0,56	0,61	0,62	0,69	0,78
6x5	10	12	14	15	16	18	20	22	25	28	30	32	35	36	40	45
Kg/100 pcs	0,21	0,26	0,30	0,33	0,35	0,39	0,43	0,48	0,54	0,61	0,65	0,69	0,76	0,78	0,87	0,98
6x6	10	12	14	15	16	18	20	22	25	28	30	32	35	36	40	45
Kg/100 pcs	0,26	0,31	0,36	0,39	0,42	0,47	0,52	0,59	0,67	0,76	0,80	0,86	0,96	0,98	1,09	1,23
8x5	12	14	15	16	18	20	22	25	28	30	32	35	36	40	45	50
Kg/100 pcs	0,34	0,40	0,43	0,46	0,51	0,57	0,63	0,71	0,80	0,85	0,91	1,00	1,03	1,14	1,28	1,42
8x6	12	14	15	16	18	20	22	25	28	30	32	35	36	40	45	50
Kg/100 pcs	0,41	0,48	0,51	0,55	0,62	0,68	0,75	0,85	0,96	1,03	1,09	1,20	1,23	1,37	1,54	1,71
8x7	12	14	15	16	18	20	22	25	28	30	32	35	36	40	45	50
Kg/100 pcs	0,48	0,56	0,60	0,64	0,72	0,81	0,89	1,03	1,16	1,24	1,34	1,45	1,51	1,69	1,91	2,13
8x8	15	16	18	20	22	25	28	30	32	35	36	40	45	50	55	56
Kg/100 pcs	0,68	0,72	0,81	0,91	1,00	1,13	1,27	1,36	1,45	1,58	1,63	1,81	2,04	2,26	2,49	2,53
10x8	15	16	18	20	22	25	28	30	32	35	36	40	45	50	55	56
Kg/100 pcs	0,85	0,91	1,02	1,13	1,25	1,44	1,63	1,76	1,88	2,07	2,13	2,38	2,70	3,01	3,32	3,39
10x10	15	20	22	25	28	30	32	35	36	40	45	50	55	56	60	63
Kg/100 pcs	1,06	1,41	1,56	1,77	1,98	2,12	2,26	2,47	2,55	2,83	3,18	3,53	3,89	3,96	4,24	4,45
12x8	15	20	22	25	28	30	32	35	36	40	45	50	55	56	60	63
Kg/100 pcs	1,03	1,37	1,51	1,71	1,92	2,08	2,22	2,45	2,52	2,82	3,20	3,58	3,95	4,03	4,34	4,56
12x12	20	22	25	28	30	32	35	36	40	45	50	55	56	60	63	65
Kg/100 pcs	2,05	2,26	2,57	2,87	3,08	3,28	3,59	3,69	4,10	4,62	5,13	5,64	5,75	6,16	6,46	6,67
14x9	20	22	25	28	30	32	35	36	40	45	50	55	56	60	63	65
Kg/100 pcs	1,81	1,99	2,27	2,54	2,72	2,90	3,17	3,26	3,66	4,15	4,65	5,06	5,24	5,62	5,93	6,15
14x14	30	35	40	45	50	55	56	60	63	65	70	80	85	90	100	110
Kg/100 pcs	4,23	4,93	5,64	6,34	7,05	7,75	7,90	8,46	8,88	9,16	9,87	11,28	11,98	12,69	14,10	15,51
16x10	30	35*	40	45	50	55	56	60	63	65	70	80	85	90	100	110
Kg/100 pcs	3,43	4,00	4,57	5,22	5,85	6,43	6,60	7,07	7,77	8,37	9,57	10,27	10,87	12,17	13,37	13,80
18x11	30	40	45	50	55	56	60	63	65	70	75	80	90	100	110	120
Kg/100 pcs	4,30	5,74	6,45	7,17	7,88	8,10	8,65	9,19	9,56	10,30	11,06	11,80	13,40	14,90	16,50	17,80
20x12	40	45	50	55	56	60	63	70	80	90	100	110	120	125	130	140
Kg/100 pcs	6,80	7,65	8,50	9,62	9,79	10,30	11,09	12,39	14,29	16,19	17,99	19,89	21,50	22,69	23,20	25,59
22x14	50	55	60	63	70	80	90	100	110	120	125	130	140	150*	160	180
Kg/100 pcs	10,83	11,92	13,00	14,06	15,76	18,16	20,66	23,06	25,46	27,60	29,06	30,00	32,66	34,50	37,56	42,36
24x14	60	63	70	80	90	100	110	120	125	130	140	150	160	180	200	220
Kg/100 pcs	14,40	15,10	17,00	19,50	22,50	24,80	27,40	30,00	31,50	32,80	35,20	38,00	40,50	48,00	51,00	55,00
25x14	60	63	70	80	90	100	110	120	125	130	140	150	160	180	200	220
Kg/100 pcs	13,90	15,60	17,70	20,50	23,20	26,00	28,70	31,00	32,80	34,00	37,00	39,30	42,50	48,00	53,50	58,90
28x16	55	60	70	80	90	100	110	120	125	130	140	145	150	160	180	200
Kg/100 pcs	17,40	19,00	22,20	26,00	29,60	33,10	36,60	39,50	41,90	43,50	47,10	50,30	54,20	61,20	68,20	75,30
32x18	65	70	80	90	100	110	120	125	130	140	150	160	170	180	200	220
Kg/100 pcs	27,20	29,20	33,40	37,60	42,10	47,60	49,50	53,40	55,50	60,20	64,00	69,20	73,90	78,30	87,30	96,40
36x20	80	90	100	110	120	125	130	140	150	160	170	180	200	220	250	280
Kg/100 pcs	41,30	46,50	52,10	57,80	63,00	68,50	74,70	79,80	86,00	92,20	97,60	108,60	119,60	136,60	153,60	164,50
40x22	70	90	100	110	120	125	130	140	150	160	180	200	220	240	250	280
Kg/100 pcs	43,79	56,30	62,80	70,10	76,30	80,40	83,00	90,80	96,60	105,10	118,10	132,10	146,10	160,40	167,10	187,10
45x25	100	110	120	125	130	140	150	160	180	200	220	240	245	250	260	280
Kg/100 pcs	80,00	88,00	96,50	101,50	105,00	115,50	122,00	132,50	150,50	168,50	185,50	202,30	206,60	212,50	219,20	238,50
50x28																
56x 32																
63x 32																
70x 36																
80x 40																
90x 45																
100x 50																

available upon request

Note: the weight is referred to Form A (mass volume 7,85 kg/mm³)
Sizes in inches upon request Technical reading from page 83 to page 85

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