LOŽISKA PRE GULIČKOVÉ SKRUTKY A TRAPÉZOVÉ SKRUTKY

Výber správnej podpory konca guličkovej skrutky či trapézovej skrutky je dôležité pre správnu funkciu celého polohovacieho systému.

Pevné ložiská

Ložiská typu BK / FK / AK / WBK sú vybavené presnými ložiskami s kosoúhlym stykom.Ložisko sa montuje priamo na koniec trapézovej či guličkovej skrutky a zaisťuje sa poistnou maticou. Je vhodné, aby toto spojenie bolo zafixované. Po dokončení montáže je potrebné dodatočne zafixovať maticu pomocou skrutky, ktorá je na nej umiestnená.

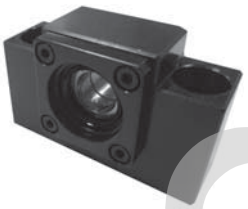
BK



FK



AK



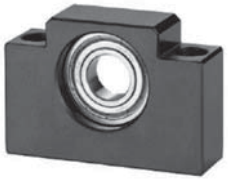
WBK



Voľné ložiská

Ložiská typu BF / FF / AF/ EF sú vybavené osadenými guličkovými ložiskami. Zaistenie sa vykoná poistnými maticami na konci skrutky.

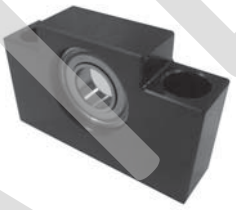
BF



FF

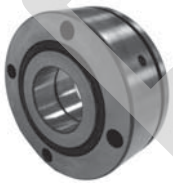


AF

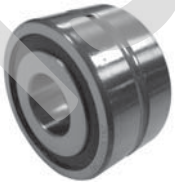


Ložiská

ZKLF



ZKLN



Poistná matica

RM



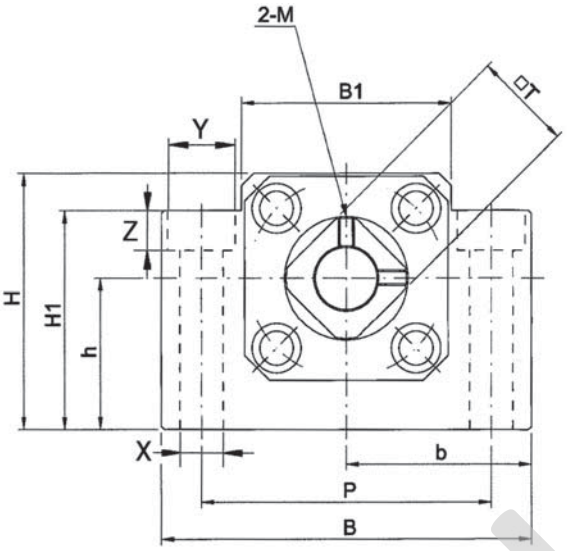
RN

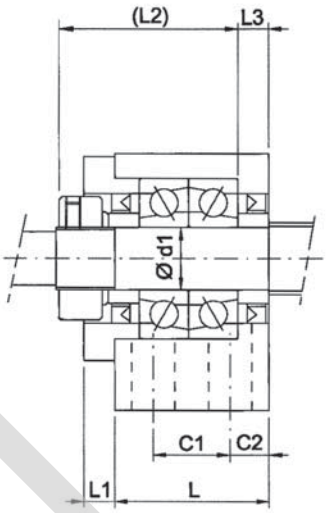


FISATECH

Typ BK domec pre gul. skrutky

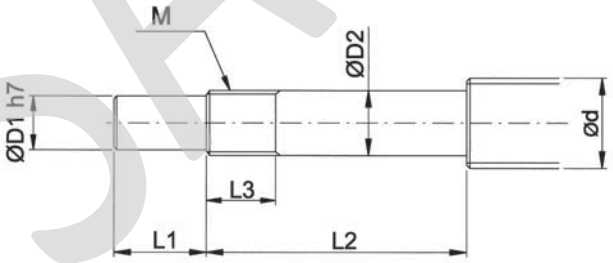






Rozmery /mm/

Typ	Ød1	L	L1	L2	L3	C1	C2	B	H	b	h	B1	H1	T	P	M	X	Y	Z	Ložisko	Váha g
BK10C7	10	25	5	29	5	13	6	60	39	30	22	34	32,5	16	46	3	6,6	10,8	5	7000A	400
BK12C7	12	25	5	29	5	13	6	60	43	30	25	35	32,5	19	46	4	6,6	10,8	1,5	7001A	450
BK15C7	15	27	6	32	6	15	6	70	48	35	28	40	38	22	54	4	6,6	11	6,5	7002A	600
BK17C7	17	35	9	44	7	19	8	86	64	43	39	50	55	24	68	4	9	14	8,5	7203A	1 300
BK20C7	20	35	8	43	8	19	8	88	60	44	34	52	50	30	70	4	9	14	8,5	7004A	1 300
BK25C7	25	42	12	54	9	22	10	106	80	53	48	64	70	35	85	5	11	17	11	7205A	2 400
BK30C7	30	45	14	61	9	23	11	128	89	64	51	76	78	40	102	6	14	20	13	7206A	3 400
BK35C7	35	50	14	67	12	26	12	140	96	70	52	88	79	50	114	8	14	20	13	7207B	4 400
BK40C7	40	61	18	76	15	33	14	160	110	80	60	100	90	50	130	8	18	26	17,5	7208B	6 800



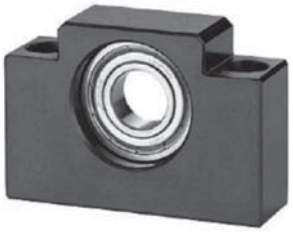
Opracovanie skrutky pre ložisko BK

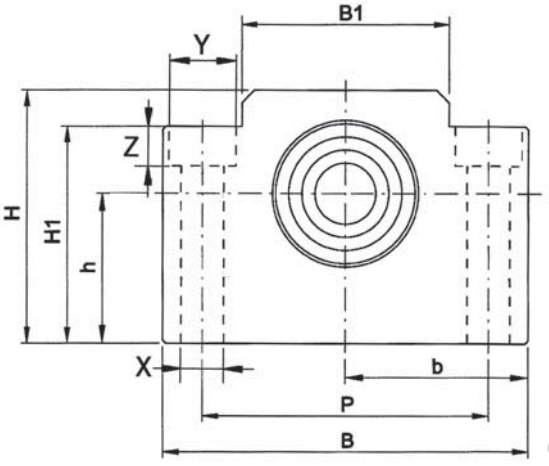
Rozmery /mm/

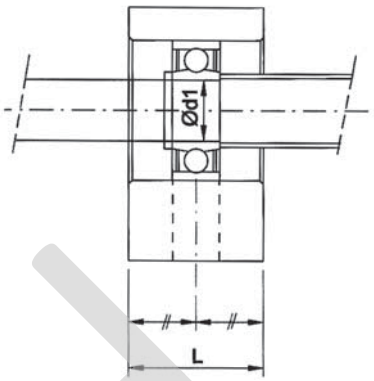
Typ	Guličková skrutka Ød	ØD2 g6	ØD1	L2	L1	M	L3
BK10	12/14/15	10	8	36	15	M10x1	12
BK12	14/15/16	12	10	36	15	M12x1	12
BK15	18/20	15	12	40	20	M15x1	12
BK17	20/25	17	15	53	23	M17x1	17
BK20	25/28	20	17	53	25	M20x1	15
BK25	32/36	25	20	66	30	M25x1,5	20
BK30	36/40	30	25	73	38	M30x1,5	25
BK35	45	35	30	82	45	M35x1,5	26
BK40	50	40	35	94	50	M40x1,5	30

FISATECH

Typ BF podpora gul. skrutiek

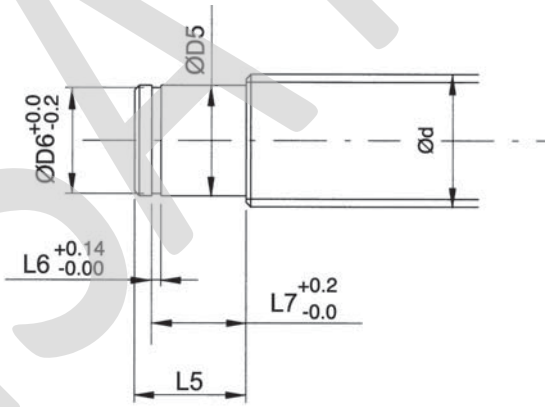






Rozmery /mm/

Typ	Ød1	L	B	H	b	h	B1	H1	P	X	Y	Z	Ložisko	Váha g
BF10	8	20	60	39	30	22	34	32,5	46	6,6	10,8	5	608ZZ	300
BF12	10	20	60	43	30	25	34	32,5	46	6,6	10,8	1,5	6000ZZ	350
BF15	15	20	70	48	35	28	40	38	54	6,6	11	6,5	6002ZZ	400
BF17	17	23	86	64	43	39	50	55	68	9	14	8,5	6203ZZ	750
BF20	20	26	88	60	44	34	52	50	70	9	14	8,5	6004ZZ	770
BF25	25	30	106	80	53	48	64	70	85	11	17	11	6205ZZ	1 450
BF30	30	32	128	89	64	51	76	78	102	14	20	13	6206ZZ	1 950
BF35	35	32	140	96	70	52	88	79	114	14	20	13	6207ZZ	2 250
BF40	40	37	160	110	80	60	100	90	130	18	26	17,5	6208ZZ	3 300



Opracovanie skrutky pre ložisko BF

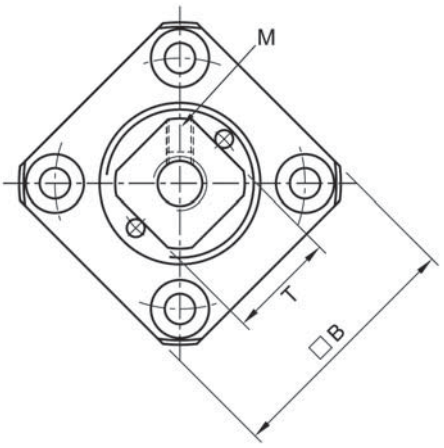
Rozmery - mm

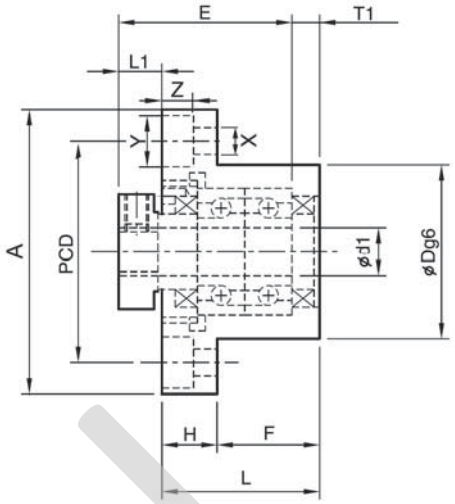
Typ	Guličková skrutka Ød	ØD5	L5	ØD6	L7	L6
BF10	12/14/15	8	10	7,6	7,9	0,9
BF12	14/15/16	10	11	9,6	9,15	1,15
BF15	18/20	15	13	14,3	10,15	1,15
BF17	20/25	17	16	16,2	13,15	1,15
BF20	25/28	20	16	19	13,35	1,35
BF25	32/36	25	20	23,9	16,35	1,35
BF30	36/40	30	21	28,6	17,75	1,75
BF35	45	35	22	33	18,75	1,75
BF40	50	40	23	38	19,95	1,95

FISATECH

Typ FK podpora pre gul. skrutky



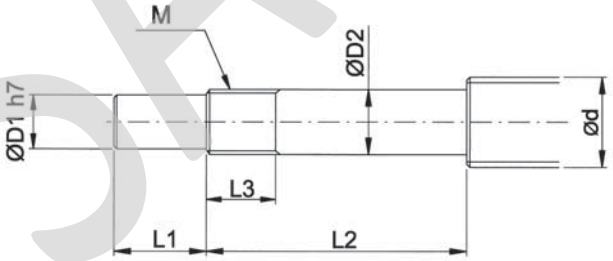




Rozmery /mm/

Typ	Ød1	L	H	F	E	ØD	A	PCD	B	Montáž A L1	Montáž A T1	X	Y	Z	M	T	Ložisko	Váha g
FK6C7	6	20	7	13	22	22	36	28	28	7	3,5	3,4	6,5	4	M3	12	606	120
FK8C7	8	23	9	14	26	28	43	35	35	8,5	4	3,4	6,5	4	M3	14	608	160
FK10C7	10	27	10	17	29,5	34	52	42	42	8	5	4,5	8	4	M3	16	7000A	250
FK12C7	12	27	10	17	29,5	36	54	44	44	8	5	4,5	8	4	M4	19	7001A	260
FK15C7	15	32	15	17	36	40	63	50	52	14	6	5,5	9,5	6	M4	22	7002A	400
FK17C7	17	45	22	23	47	50	77	62	61	12	9	6,6	11	10	M4	24	7003A	850
FK20C7	20	52	22	30	50	57	85	70	68	9	10	6,6	11	10	M4	30	7204A	1 200
FK25C7	25	57	27	30	60	63	98	80	79	16	10	9	15	13	M5	35	7205A	1 600
FK30C7	30	62	30	32	61	75	117	95	93	11	12	11	17,5	15	M6	40	7206A	2 380

C5 : s ložiskom bez axiálnej vôle pre presnosť vretena C5 (na dopyt).



Opracovanie skrutky pre ložisko FK

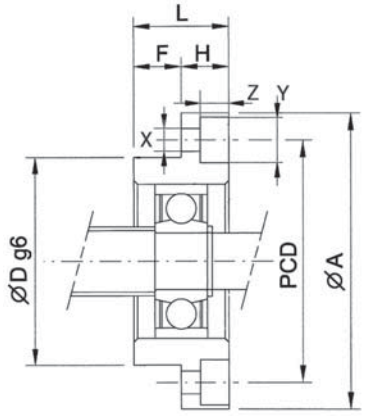
Rozmery /mm/

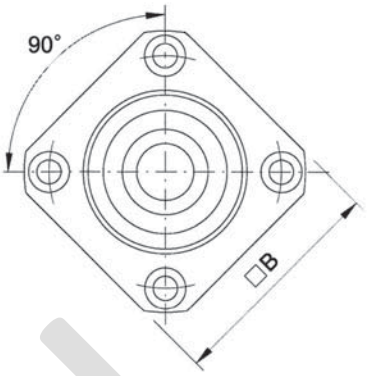
Typ	Guličková skrutka Ød	ØD2 g6	ØD1	L2	L1	M	L3
FK6	8	6	4	28	8	M6x0,75	8
FK8	10-12	8	6	32	9	M8x1	10
FK10	12-15	10	8	38	15	M10x1	14
FK12	14-16-18	12	10	38	15	M12x1	14
FK15	20	15	12	48	20	M15x1	13
FK17	20-25	17	15	61	23	M17x1	19
FK20	25-28	20	17	66	25	M20x1	18
FK25	30-32-36	25	20	76	30	M25x1,5	20
FK30	36-40	30	25	79	38	M30x1,5	31

FISATECH

Typ FF podpora gul. skrutky

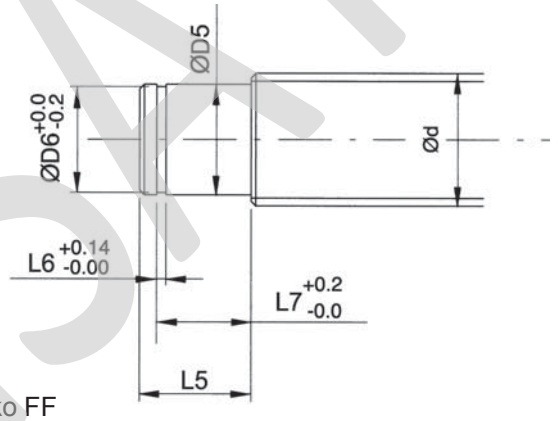






Rozmery /mm/

Typ	Ød1	L	H	F	Ød g6	ØA	PCD	B	X	Y	Z	Ložisko	Váha g
FF6	6	10	6	4	22	36	28	28	3,4	6,5	4	606ZZ	80
FF10	8	12	7	5	28	43	35	35	3,4	6,5	4	608ZZ	100
FF12	10	15	7	8	34	52	42	42	4,5	8	4	6000ZZ	150
FF15	15	17	9	8	40	63	50	52	5,5	9,5	5,5	6002ZZ	220
FF17	17	20	11	9	50	77	62	61	6,6	11	6,5	6203ZZ	350
FF20	20	20	11	9	57	85	70	68	6,6	11	6,5	6204ZZ	450
FF25	25	24	14	10	63	98	80	79	9	14	8,5	6205ZZ	660
FF30	30	27	18	9	75	117	95	93	11	17	11	6206ZZ	1050



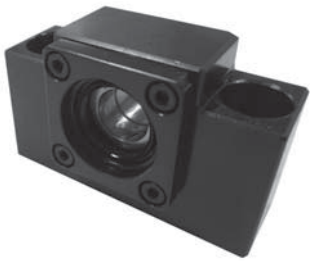
Opracovanie skrutky pre ložisko FF

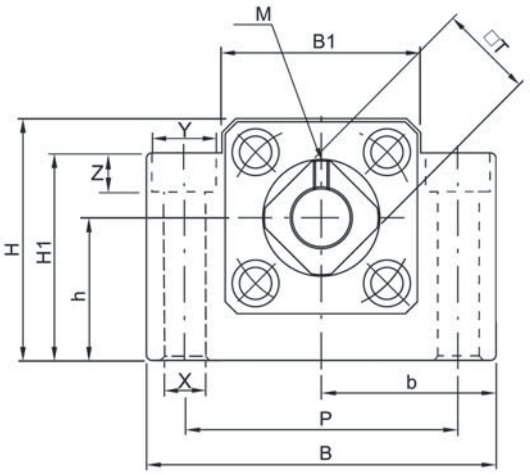
Rozmery /mm/

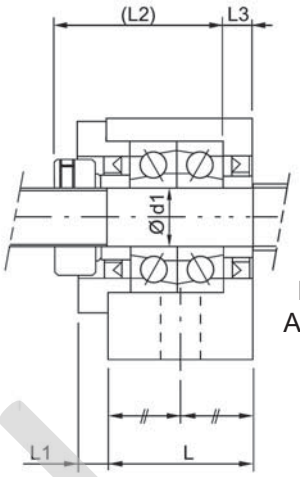
Typ	Guličková skrutka Ød	ØD5	L5	ØD6	L7	L6
FF6	8	6	9	5,7	6,8	0,8
FF10	12/14/15	8	10	7,6	7,9	0,9
FF12	14/15/16	10	11	9,6	9,15	1,15
FF15	18/20	15	13	14,3	10,15	1,15
FF17	20/25	17	16	16,2	13,15	1,15
FF20	25/28/30	20	19	19	15,35	1,35
FF25	30/32/36	25	20	23,9	16,35	1,35
FF30	36/40	30	21	28,6	17,75	1,75

FISATECH

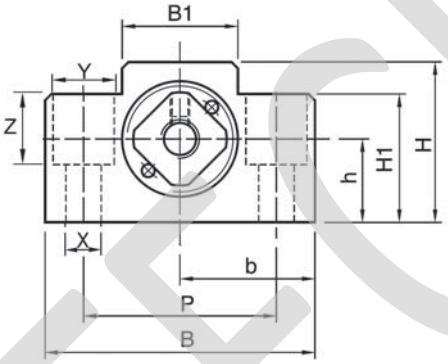
Typ AK/EK podpora gul. skrutky

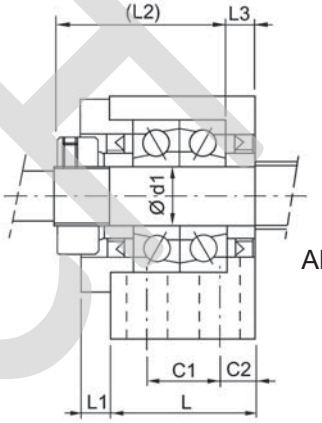






EK6/8
AK12/15



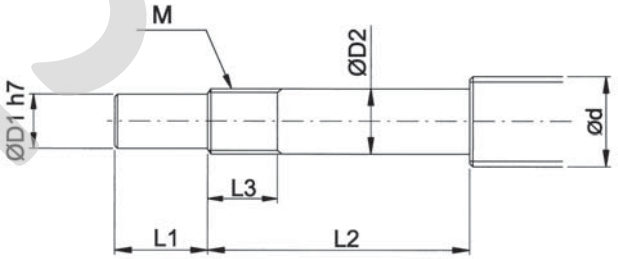


AK20

Rozmery /mm/

Typ	Ød1	L	L1	L2	L3	B	H	b	h	B1	H1	P	X	Y	Z	M	T	C1	C2	Ložisko	Váha g
EK6C7	6	20	5,5	22	5	42	25	21	13	18	20	30	5,5	9,5	11	M3	12	-	-	606	180
EK8C7	8	23	7,5	26	5,5	52	32	26	17	25	26	38	6,6	11	12	M3	14	-	-	608	270
AK12C5	12	24	6	29,5	6	70	43	35	25	36	35	52	9	14	11	M4	19	-	-	7001A	500
AK15C5	15	25	6	38	10	80	49	40	30	41	40	60	11	17	15	M4	22	-	-	7002A	650
AK20C5	20	42	10	53	10	95	58	47,5	30	56	45	75	11	17	15	M4	30	22	10	7204A	1 450

C5 : s ložiskom bez axiálnej vôle pre stupeň presnosti vretena C5 (na dopyt).



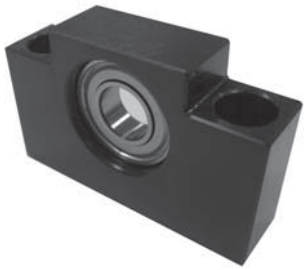
Opracovanie skrutky pre ložiská AK a EK

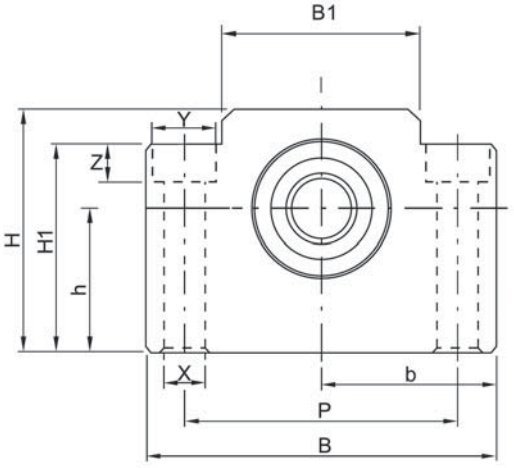
Rozmery /mm/

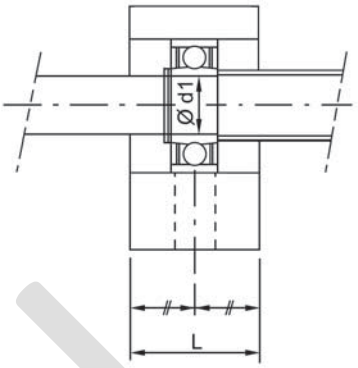
Typ	Guličková skrutka Ød	ØD2 g6	ØD1	L2	L1	M	L3
EK6	8	6	4	28	8	M6x0,75	8
EK8	10/12	8	6	32	6	M8x1	10
AK12	14/15/16	12	10	36	15	M12x1	12
AK15	18/20	15	12	48	20	M15x1	13
AK20	20/25	20	17	64	25	M20x1	16

FISATECH

Typ AF/EF podpora pre gul. skrutky

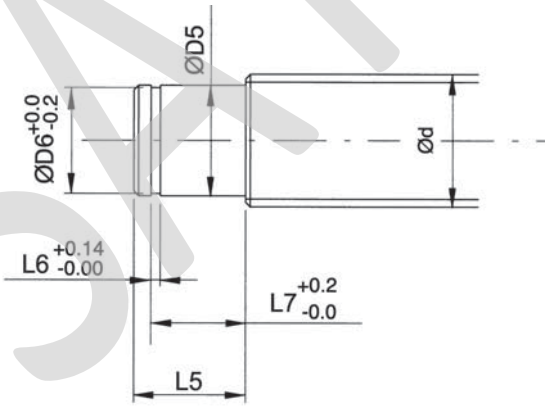






Rozmery /mm/

Typ	Ød1	L	B	H	b	h	B1	H1	P	X	Y	Z	Ložisko	Váha g
EF6	6	12	42	25	21	13	18	20	30	5,5	9,5	11	606ZZ	100
EF8	6	14	52	32	26	17	25	26	38	6,6	11	12	606ZZ	160
AF12	10	20	70	43	35	25	36	36	52	9	14	11	6000ZZ	370
AF15	15	20	80	49	40	30	41	40	60	9	14	11	6002ZZ	450
AF20	20	26	95	58	47,5	30	56	45	75	11	17	15	6204ZZ	750



Opracovanie skrutky pre ložiská AF a EF

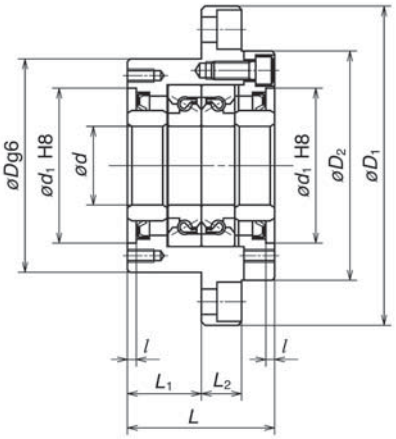
Rozmery /mm/

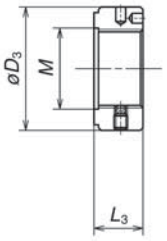
Typ	Guličková skrutka Ød	ØD5	L5	ØD6	L7	L6
EF6	8	6	9	5,7	6,8	0,8
EF8	10	6	9	5,7	6,8	0,8
AF12	14/15/16	10	11	9,6	9,15	1,15
AF15	18/20	15	13	14,3	10,15	1,15
AF17	20/25	17	16	16,2	13,15	1,15
AF20	25/28/30	20	19	19	15,35	1,35

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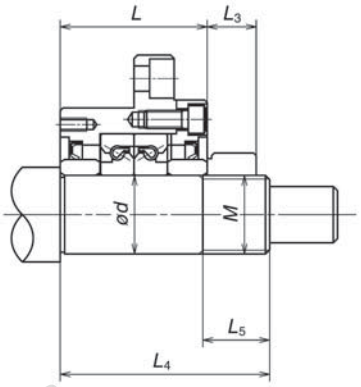
Typ WBK podpora pre gul. skrutky



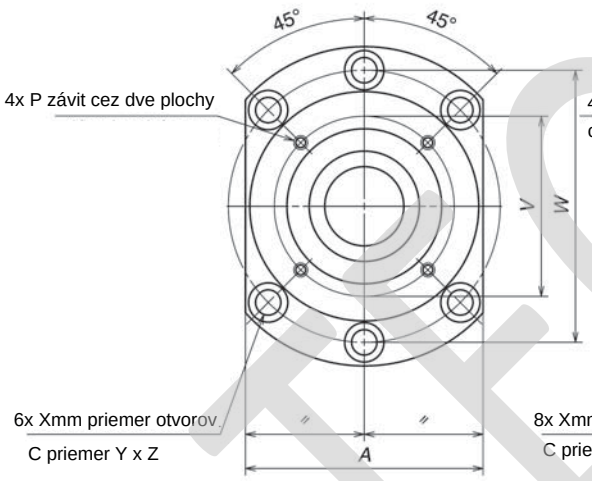




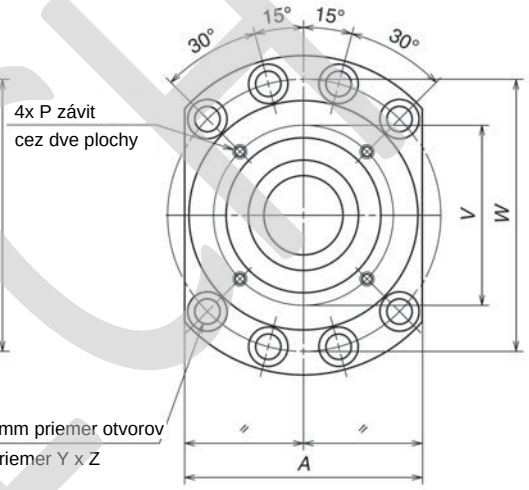
matica utiahnutia



obrobenie skrutky



d ≤ 30



d ≥ 35

Rozmery /mm/

Typ	d	D	D1	D2	L	L1	L2	A	W	X	Y	Z	d1	l	V	P
WBK17DF	17	70	106	72	60	32	15	80	88	9	14	8,5	45	3	58	M5
WBK20DF	20	70	106	72	60	32	15	80	88	9	14	8,5	45	3	58	M5
WBK25DF	25	85	130	90	66	33	18	100	110	11	17	11	57	4	70	M6
WBK30DF	30	85	130	90	66	33	18	100	110	11	17	11	57	4	70	M6
WBK35DF	35	95	142	102	66	33	18	106	121	11	17	11	69	4	80	M6
WBK40DF	40	95	142	102	66	33	18	106	121	11	17	11	69	4	80	M6

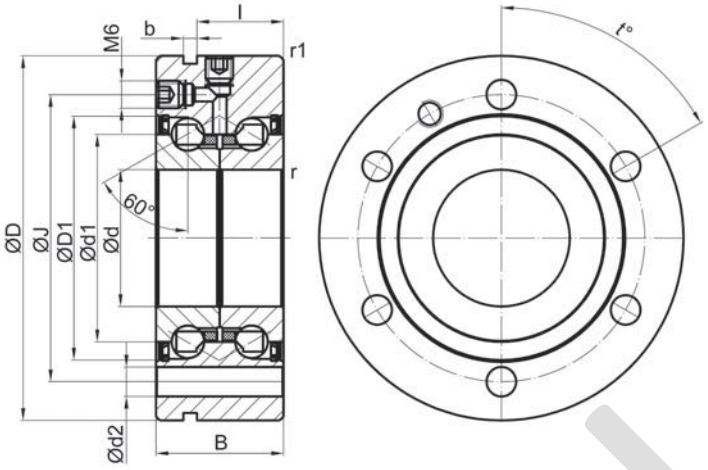
Typ	Zaťaženie Dyn. Ca	Zaťaženie axialne dovolené	Predpätie	Axiálna tuhosť	Štartovací moment	Poistná matica			Váha	Rozmery konca hriadeľa		
						M	D3	L3		d	L4	L5
	kgf	kgf	kgf	kgf/µm	kgf-cm	mm	mm	mm	g	mm	mm	mm
WBK17DF	2 240	2 710	220	75	1/1,9	M17x1	37	18	1 970	17	81	23
WBK20DF	2 240	2 710	220	75	1/1,9	M20x1	40	18	1 970	20	81	23
WBK25DF	2 910	4 580	320	100	1,6/2,9	M25x1,5	45	20	3 300	25	89	26
WBK30DF	2 980	4 400	340	105	1,7/3	M30x1,5	50	20	3 400	30	89	26
WBK35DF	3 150	5 100	390	120	1,9/3,5	M35x1,5	55	22	3 750	35	92	30
WBK40DF	3 250	5 300	400	125	2/3,7	M40x1,5	60	22	3 650	40	92	30

Poznámka : ložiská s kosoúhlym stykom 60° a presnosťou P4

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Typ ZKLF ložisková jednotka pre gul. skrutky

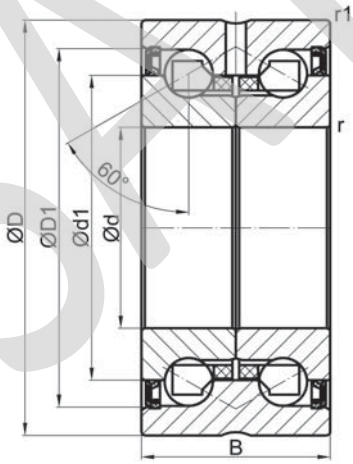




Typ	Rozmery /mm/ d	D	B	b	d1	d2	D1	l	J	r1 Min.	r Min.	t	Zaťaženie /kN/ Ca	Coa	Cua	Rýchlosť Max ot/min	Váha g
ZKLF 1255 2RS	12	55	25	3	25	6,8	33,5	17	42	0,6	0,3	120	17,0	24,7	0,91	3 800	370
ZKLF 1560 2RS	15	60	25	3	28	6,8	36	17	46	0,6	0,3	120	17,9	28	1,04	3 500	430
ZKLF 1762 2RS	17	62	25	3	30	6,8	38	17	48	0,6	0,3	120	19	31	1,15	3 300	450
ZKLF 2068 2RS	20	68	28	3	34,5	6,8	44	19	53	0,6	0,3	90	26	47	1,74	3 000	610
ZKLF 2575 2RS	25	75	28	3	40,5	6,8	49	19	58	0,6	0,3	90	28	55	2,04	2 600	720
ZKLF 3080 2RS	30	80	28	3	45,5	6,8	54	19	63	0,6	0,3	60	29	64	2,37	2 200	780
ZKLF 3590 2RS	35	90	34	3	52	8,8	63	25	75	0,6	0,3	90	41	89	3,30	2 000	1 130
ZKLF 40100 2RS	40	100	34	3	58	8,8	68	25	80	0,6	0,3	90	43	101	3,75	1 800	1 460
ZKLF 50115 2RS	50	115	34	3	72	8,8	82	25	94	0,6	0,3	60	47	126	4,65	1 500	1 860

Typ ZKLN





Typ	Rozmery /mm/ d	D	B	d1	D1	r1 Min.	r Min.	Zaťaženie /kN/ Ca	Coa	Cua	Rýchlosť Max ot/min	Váha g
ZKLN 1545 2RS	15	45	25	28	36	0,6	0,3	17,9	28	1,04	3 500	210
ZKLN 1747 2RS	17	47	25	30	38	0,6	0,3	18,8	31	1,15	3 300	220
ZKLN 2052 2RS	20	52	28	34,5	44	0,6	0,3	26	47	1,74	3 000	310
ZKLN 2557 2RS	25	57	28	40,5	49	0,6	0,3	27,5	55	2,04	2 600	340
ZKLN 3062 2RS	30	62	28	45,5	54	0,6	0,3	29	64	2,37	2 200	390
ZKLF 3572 2RS	35	72	34	52	63	0,6	0,3	41	89	3,30	2 000	510
ZKLF 4075 2RS	40	75	34	58	68	0,6	0,3	43	101	3,75	1 800	610

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