



MK MATERIAL

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PRODUCT CATALOGUE

Product Groups

- Clevises (CV)
- Bolts (CB)
- Clevises with bolt (CC)
- Ball studs (BS)
- Ball housings (BH)
- Ball joints (BJ)
- Eyelets (EY)
- Plastics (PL)
- Brackets (BR)

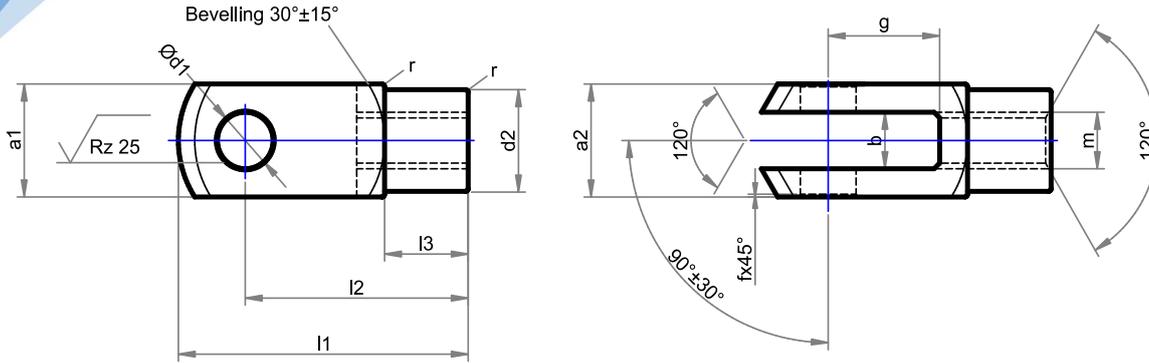
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CV 1 - CLEVIS DIN 71752



Code	d1 H9 (mm)	g ±0,5 (mm)	a1 h11 (mm)	a2 +0,3 -0,16 (mm)	b B13 (mm)	m	d2 ±0,3 (mm)	l1 ±0,5 (mm)	l2 (mm)	l3 (mm)	f ±0,2	r
CV 101	4	8	8		4	M4x0,7	8	21	16 ±0,3	6 ±0,2	0,5	0,5
CV 103	5	10	10		5	M5x0,8	9	26	20 ±0,3	7,5 ±0,2	0,5	0,5
CV 105	6	12	12		6	M6x1	10	31	24 ±0,3	9 ±0,2	0,5	0,5
CV 106	6	24	12		6	M6x1	10	43	36 ±0,4	9 ±0,2	0,5	0,5
CV 107	8	16	16		8	M8x1,25	14	42	32 ±0,4	12 ±0,2	0,5	0,5
CV 108	8	32	16		8	M8x1,25	14	58	48 ±0,4	12 ±0,2	0,5	0,5
CV 109	10	20	20		10	M10x1,5	18	52	40 ±0,4	15 ±0,2	0,5	0,5
CV 110	10	40	20		10	M10x1,5	18	72	60 ±0,4	15 ±0,2	0,5	0,5
CV 111	12	24	24		12	M12x1,75	20	62	48 ±0,4	18 ±0,2	0,5	0,5
CV 112	12	48	24		12	M12x1,75	20	86	72 ±0,4	18 ±0,2	0,5	0,5
CV 113	14	28	27		14	M14x2	24	72	56 ±0,4	22,5 ±0,2	1	1
CV 115	16	32	32		16	M16x2	26	83	64 ±0,4	24 ±0,2	1	1
CV 116	16	64	32		16	M16x2	26	115	96 ±0,4	24 ±0,2	1	1
CV 117	20	40	40		20	M20x2,5	34	105	80 ±0,4	30 ±0,2	1	1,5

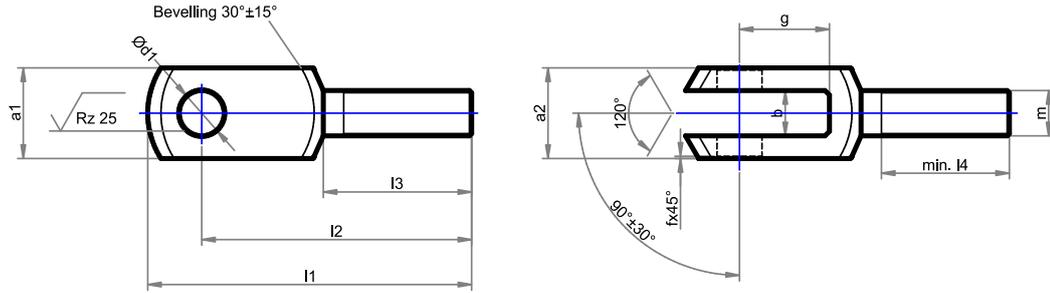
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		J	Heat treated			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	Z	No plating, raw material	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		K	Polished			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material		F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.	
		K	Polished			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	Z	No plating, raw material			F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		K	Polished			
		L	Electropolished			
		Z	No plating, raw material			

F. ex.: CV 101 AAFL:

CV 1 – Clevis type
01 – Clevis size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread
L – Left-handed thread

CV 2 - CLEVIS WITH MALE THREAD



Code	d1 H9 (mm)	g ±0,5 (mm)	a1 h11 (mm)	a2 +0,3 -0,16 (mm)	b B13 (mm)	m	f ±0,2 (mm)	l1 ±0,5 (mm)	l2 ±0,3 (mm)	l3 ±0,2 (mm)	l4 min. ±0,3 (mm)
CV 201	6	12	12	6	6	M6x1	0,5	44	37	20	15
CV 202	8	16	16	8	8	M8x1,25	0,5	57	47	25	20
CV 203	10	20	20	10	10	M10x1,5	0,5	69	57	30	25
CV 204	12	24	24	12	12	M12x1,75	0,5	82	68	35	30
CV 205	14	28	27	14	14	M14x2	1	94	78	40	35
CV 206	16	32	32	16	16	M16x2	1	108	89	45	40
CV 207	20	40	40	20	20	M20x2,5	1	134	109	55	50

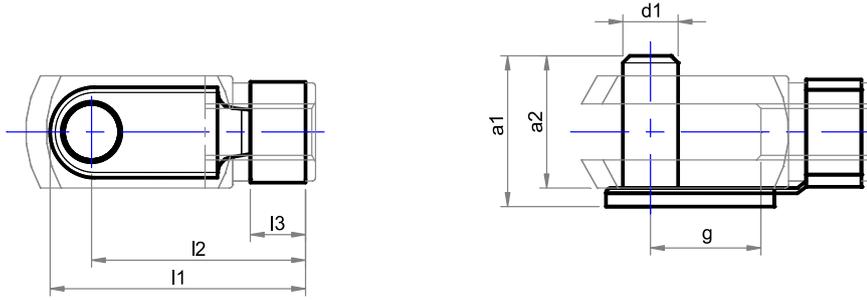
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		J	Heat treated	
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	L Left-handed thread No code for right-handed thread.
		Z	No plating, raw material	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex.: CV 201 AAFL:

CV 2 – Clevis type
01 – Clevis size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread
L – Left-handed thread

CB 1 - FOLDING SPRING BOLT



Code	For clevis	d1 h11 (mm)	g ±0,5 (mm)	a2 ±0,5 (mm)	a1 ±0,5 (mm)	l1 ±0,5 (mm)	l2 ±0,5 (mm)	l3 ±0,5 (mm)
CB 101	CV 101	4	8	9,5	11,25	19	15	4,5
CB 103	CV 103	5	10	12	13,5	23	19	5,5
CB 105	CV 105	6	12	14	16	28	23	6,5
CB 106	CV 106	6	24	14	16	40	35	6,5
CB 107	CV 107	8	16	19	21,5	37	31	8
CB 108	CV 108	8	32	19	21,5	52	46	8
CB 109	CV 109	10	20	23	26	46	39	10
CB 110	CV 110	10	40	23	26	66	59	10
CB 111	CV 111	12	24	28	31	53	47	12
CB 112	CV 112	12	48	28	31	78	69	12
CB 113	CV 113	14	28	31	34	62	52	14
CB 115	CV 115	16	32	36	39	73	62	16
CB 117	CV 117	20	40	45	50	88	76	16

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bolt: Free cutting steel DIN 1.0718 (11SMnPb30+C) Folding spring: Carbon steel 1.1231 / CK67	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
Z	No plating, raw material		

F. ex.: CB 101 AA:

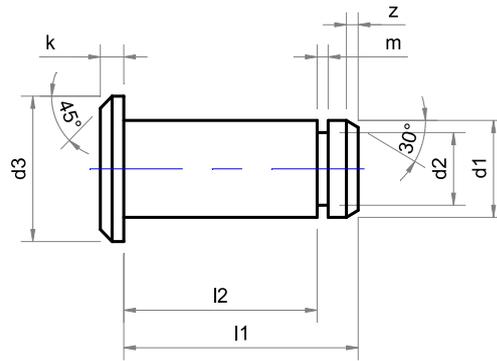
CB 1 – Bolt type

01 – Bolt size

A – Material: Carbon steel bolt and CK67 folding spring

A – Surface treatment: White zinc plated (Zn/White) (standard)

CB 2 - BOLT WITH HEAD AND GROOVE



Code	For clevis	d1 h11 (mm)	d2 h10 (mm)	d3 h14 (mm)	l1 +0,3 (mm)	l2 +0,3 (mm)	k js14 (mm)	m +0,1 (mm)	z (mm)
CB 201	CV 101	4	3,2	6	10,5	8,5	1	0,64	0,5
CB 202	CV 103	5	4	8	13	10,5	1,5	0,74	0,5
CB 203	CV 105	6	5	9	15,5	12,5	1,5	0,74	1
	CV 106								
	CV 201								
CB 204	CV 107	8	6	12	20	16,5	2	0,94	1
	CV 108								
	CV 202								
CB 205	CV 109	10	8	14	25	20,5	2	1,05	1
	CV 110								
	CV 203								
CB 206	CV 111	12	9	17	30	24,5	3	1,15	1,5
	CV 112								
	CV 204								
CB 207	CV 113	14	10	20	33	27,5	3	1,25	1,5
	CV 205								
CB 208	CV 115	16	12	21	38,5	32,5	3,5	1,35	1,5
	CV 206								
CB 209	CV 207	20	17,5	28	46	40,5	4	1,8	1,5

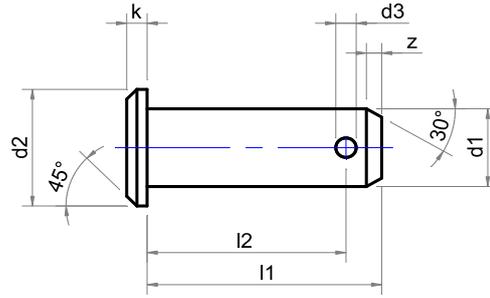
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)		
		B	Black zinc plated (Zn/Black)		
		C	Yellow zinc plated (Zn/Yellow)		
		D	Blue zinc plated (Zn/Blue)		
		E	Green zinc plated (Zn/Green)		
		F	Matte nickel plated		
		G	Shiny nickel plated		
		H	Chrome plated		
		I	Phosphate plated		
		Z	No plating, raw material		
		B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)
				B	Black zinc plated (Zn/Black)
				C	Yellow zinc plated (Zn/Yellow)
D	Blue zinc plated (Zn/Blue)				
E	Green zinc plated (Zn/Green)				
F	Matte nickel plated				
G	Shiny nickel plated				
H	Chrome plated				
I	Phosphate plated				
J	Heat treated				
Z	No plating, raw material				
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303			K	Polished
				Z	No plating, raw material
		D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
Z	No plating, raw material				
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316			K	Polished
		L	Electropolished		
		Z	No plating, raw material		

F. ex.: CB 201 AA:

CB 2 – Bolt type
01 – Bolt size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

CB 3 - BOLT WITH HEAD AND PIN HOLE



Code	For clevis	d1 h11 (mm)	d2 h14 (mm)	d3 H14 (mm)	l1 js15 (mm)	l2 +0,5 (mm)	k js14 (mm)	z (mm)
CB 301	CV 101	4	6	1	12	10	1	0,5
CB 302	CV 103	5	8	1,2	15	12,3	1,5	1
CB 303	CV 105	6	9	1,6	18	15,3	1,5	1
	CV 106							
	CV 201							
CB 304	CV 107	8	12	2	23	19,5	2	1,5
	CV 108							
	CV 202							
CB 305	CV 109	10	14	3,2	29	24,5	2	1,5
	CV 110							
	CV 203							
CB 306	CV 111	12	17	4	35	29,5	3	2
	CV 112							
	CV 204							
CB 307	CV 113	14	19	4	40	32,5	3	2,5
	CV 205							
	CV 115							
CB 308	CV 115	16	21	4	45	38,2	3	2,5
	CV 206							
CB 309	CV 117	20	28	5	53	47	4	2,5
	CV 207							

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)		
		B	Black zinc plated (Zn/Black)		
		C	Yellow zinc plated (Zn/Yellow)		
		D	Blue zinc plated (Zn/Blue)		
		E	Green zinc plated (Zn/Green)		
		F	Matte nickel plated		
		G	Shiny nickel plated		
		H	Chrome plated		
		I	Phosphate plated		
		Z	No plating, raw material		
		B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)
				B	Black zinc plated (Zn/Black)
				C	Yellow zinc plated (Zn/Yellow)
D	Blue zinc plated (Zn/Blue)				
E	Green zinc plated (Zn/Green)				
F	Matte nickel plated				
G	Shiny nickel plated				
H	Chrome plated				
I	Phosphate plated				
J	Heat treated				
Z	No plating, raw material				
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303			K	Polished
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304			Z	No plating, raw material
		K	Polished		
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	Z	No plating, raw material		
		K	Polished		
		L	Electropolished		
		Z	No plating, raw material		

F. ex.: CB 301 AA:

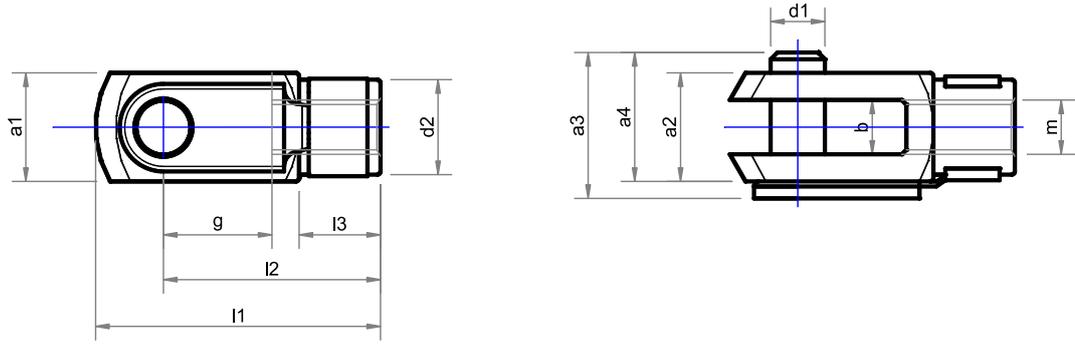
CB 3 – Bolt type

01 – Bolt size

A – Material: Carbon steel

A – Surface treatment: White zinc plated

CC 1 - CLEVIS DIN 71752 WITH FOLDING SPRING BOLT



Code	Clevis	Bolt	d1 h11 (mm)	g ±0,5 (mm)	a4 ±0,5 (mm)	a1 h11 (mm)	a2 +0,3 -0,16 (mm)	a3 ±0,5 (mm)	b B13 (mm)	m	l1 ±0,5 (mm)	d2 ±0,3 (mm)	l2 (mm)	l3 ±0,2 (mm)
CC 101	CV 101	CB 101	4	8	9,5	8		11,25	4	M4x0,7	21	8	16 ±0,3	6
CC 103	CV 103	CB 103	5	10	12	10		13,5	5	M5x0,8	26	9	20 ±0,3	7,5
CC 105	CV 105	CB 105	6	12	14	12		16	6	M6x1	31	10	24 ±0,3	9
CC 106	CV 106	CB 106	6	24	14	12		16	6	M6x1	43	10	36 ±0,4	9
CC 107	CV 107	CB 107	8	16	19	16		21,5	8	M8x1,25	42	14	32 ±0,4	12
CC 108	CV 108	CB 108	8	32	19	16		21,5	8	M8x1,25	58	14	48 ±0,4	12
CC 109	CV 109	CB 109	10	20	23	20		26	10	M10x1,5	52	18	40 ±0,4	15
CC 110	CV 110	CB 110	10	40	23	20		26	10	M10x1,5	72	18	60 ±0,4	15
CC 111	CV 111	CB 111	12	24	28	24		31	12	M12x1,75	62	20	48 ±0,4	18
CC 112	CV 112	CB 112	12	48	28	24		31	12	M12x1,75	86	20	72 ±0,4	18
CC 113	CV 113	CB 113	14	28	31	27		34	14	M14x2	72	24	56 ±0,4	22,5
CC 115	CV 115	CB 115	16	32	36	32		39	16	M16x2	83	26	64 ±0,4	24
CC 117	CV 117	CB 117	20	40	45	40		50	20	M20x2,5	105	34	80 ±0,4	30

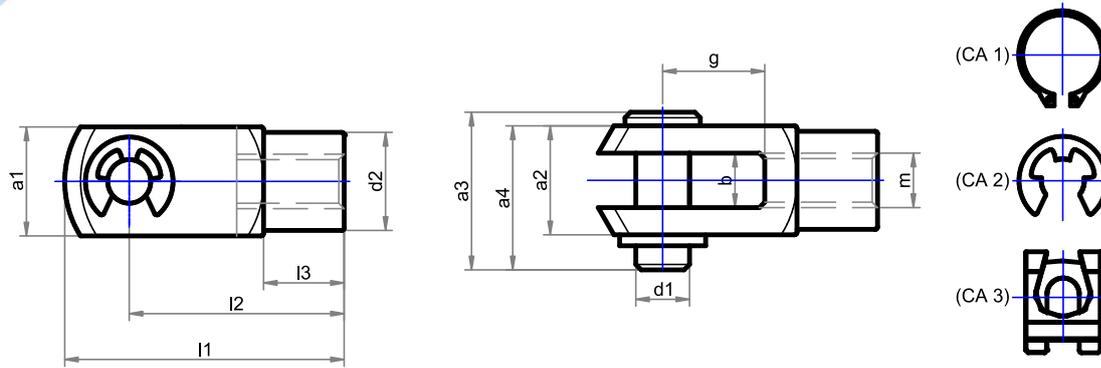
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Clevis: Free cutting steel DIN 1.0718 (11SMnPb30+C) Bolt: Free cutting steel DIN 1.0718 (11SMnPb30+C) Folding spring: Carbon steel 1.1231 / CK67	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.

F. ex.: CC 101 AAF1:

CC 1 – Clevis with folding spring bolt
 01 – Clevis with folding spring bolt size
 A – Material: Carbon steel + CK67
 A – Surface treatment: White zinc plated (Zn/White)
 F – Fine thread
 L – Left-handed thread

CC 2 - CLEVIS DIN 71752 WITH BOLT WITH GROOVE



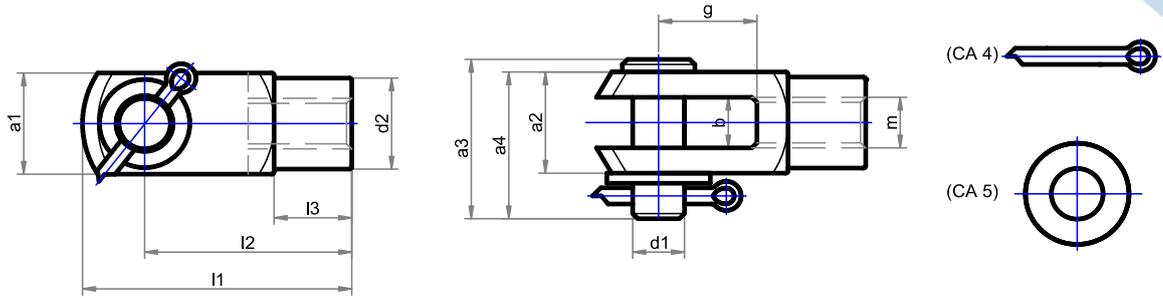
Code	Clevis	Bolt	d1 h9 (mm)	g ±0,5 (mm)	a4 +0,3 (mm)	a1 h11 (mm)	a2 +0,3 -0,16 (mm)	a3 +0,3 (mm)	b B13 (mm)	d2 ±0,3 (mm)	m	l1 ±0,5 (mm)	l2 (mm)	l3 ±0,2 (mm)
CC 201	CV 101	CB 201	4	8	10,5	8		11,5	4	8	M4x0,7	21	16 ±0,3	6
CC 203	CV 103	CB 202	5	10	13	10		14,5	5	9	M5x0,8	26	20 ±0,3	7,5
CC 204	CV 104		5	20	13	10		14,5	5	9	M5x0,8	36	30 ±0,3	7,5
CC 205	CV 105	CB 203	6	12	15,5	12		17	6	10	M6x1	31	24 ±0,3	9
CC 206	CV 106		6	24	15,5	12		17	6	10	M6x1	43	36 ±0,4	9
CC 207	CV 107	CB 204	8	16	20	16		22	8	14	M8x1,25	42	32 ±0,4	12
CC 208	CV 108		8	32	20	16		22	8	14	M8x1,25	58	48 ±0,4	12
CC 209	CV 109	CB 205	10	20	25	20		27	10	18	M10x1,5	52	40 ±0,4	15
CC 210	CV 110		10	40	25	20		27	10	18	M10x1,5	72	60 ±0,4	15
CC 211	CV 111	CB 206	12	24	30	24		33	12	20	M12x1,75	62	48 ±0,4	18
CC 212	CV 112		12	48	30	24		33	12	20	M12x1,75	86	72 ±0,4	18
CC 213	CV 113	CB 207	14	28	33	27		36	14	24	M14x2	72	56 ±0,4	22,5
CC 215	CV 115	CB 208	16	32	38,5	32		42	16	26	M16x2	83	64 ±0,4	24
CC 217	CV 117	CB 209	20	40	46	40		50	20	34	M20x2,5	105	80 ±0,4	30

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		J	Heat treated	
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
		Z	No plating, raw material	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex.: CC 201 AAFL: CC 2 – Clevis with a bolt with groove
 01 – Clevis with a bolt with groove size
 A – Material: Carbon steel
 A – Surface treatment: White zinc plated (Zn/White)
 F – Fine thread
 L – Left-handed thread

CC 3 - CLEVIS DIN 71752 WITH BOLT WITH PIN HOLE



Code	Clevis	Bolt	d1 h9 (mm)	g ±0,5 (mm)	a4 +0,3 (mm)	a1 h11 (mm)	a2 +0,3 -0,16 (mm)	a3 js15 (mm)	b B13 (mm)	m	d2 ±0,3 (mm)	l1 ±0,5 (mm)	l2 (mm)	l3 (mm)
CC 301	CV 101	CB 301	4	8	12	8		13	4	M4	8	21	16 ±0,3	6 ±0,2
CC 303	CV 103	CB 302	5	10	15	10		16,5	5	M4x0,7	9	26	20 ±0,3	7,5 ±0,2
CC 305	CV 105	CB 303	6	12	18	12		19,5	6	M5x0,8	10	31	24 ±0,3	9 ±0,2
CC 306	CV 106		6	24	18	12		19,5	6	M6x1	10	43	36 ±0,4	9 ±0,2
CC 307	CV 107	CB 304	8	16	23	16		25	8	M6x1	14	42	32 ±0,4	12 ±0,2
CC 308	CV 108		8	32	23	16		25	8	M8x1,25	14	58	48 ±0,4	12 ±0,2
CC 309	CV 109	CB 305	10	20	29	20		31	10	M8x1,25	18	52	40 ±0,4	15 ±0,2
CC 310	CV 110		10	40	29	20		31	10	M10x1,5	18	72	60 ±0,4	15 ±0,2
CC 311	CV 111	CB 306	12	24	35	24		38	12	M10x1,5	20	62	48 ±0,4	18 ±0,2
CC 312	CV 112		12	48	35	24		38	12	M12x1,75	20	86	72 ±0,4	18 ±0,2
CC 313	CV 113	CB 307	14	28	40	27		43	14	M12x1,75	24	72	56 ±0,4	22,5 ±0,2
CC 315	CV 115	CB 308	16	32	45	32		48	16	M14x2	26	83	64 ±0,4	24 ±0,2
CC 317	CV 117	CB 309	20	40	53	40		57	20	M16x2	34	105	80 ±0,4	30 ±0,2

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		J	Heat treated	
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
		Z	No plating, raw material	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex.: CC 301 AAFL:

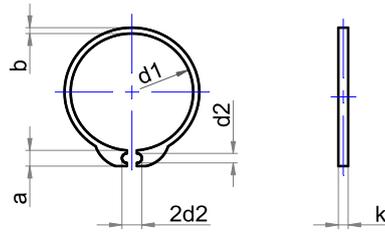
CC 3 – Clevis with a bolt with pin hole
 01 – Clevis with a bolt with pin hole size
 A – Material: Carbon steel
 A – Surface treatment: White zinc plated (Zn/White)
 F – Fine thread
 L – Left-handed thread



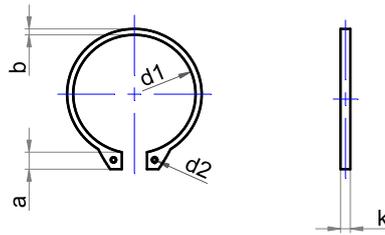
ACCESSORIES FOR CLEVIS GROUP



CA 1 - RETAINING RING DIN 471



Code	For bolt	d1 (mm)	d2 (mm)	max. a (mm)	b (mm)	min. d3 (mm)	k (mm)	Weight (kg) (per 1000 pcs.)
CA 101	CB 201	4	3,7 $+0,04/-0,15$	2,2	0,9	1	0,4 $+0/-0,05$	0,017
CA 102	CB 202	5	4,7 $+0,04/-0,15$	2,5	1,1	1	0,6 $+0/-0,05$	0,066
CA 103	CB 203	6	5,6 $+0,04/-0,15$	2,7	1,3	1,2	0,7 $+0/-0,05$	0,084
CA 104	CB 204	8	7,4 $+0,06/-0,18$	3,2	1,5	1,2	0,8 $+0/-0,06$	0,158



Code	For bolt	d1 (mm)	d2 (mm)	max. a (mm)	b (mm)	min. d2 (mm)	k (mm)	Weight (kg) (per 1000 pcs.)
CA 105	CB 205	10	9,3 $+0,10/-0,36$	3,3	1,8	1,5	1 $+0/-0,06$	0,340
CA 106	CB 206	12	11 $+0,10/-0,36$	3,3	1,8	1,7	1 $+0/-0,06$	0,500
CA 107	CB 207	14	12,9 $+0,10/-0,36$	3,5	2,1	1,7	1 $+0/-0,06$	0,640
CA 108	CB 208	16	14,7 $+0,10/-0,36$	3,7	2,2	1,6	1 $+0/-0,06$	0,700
CA 109	CB 209	20	18,5 $+0,13/-0,42$	4	2,6	2	1,2 $+0/-0,06$	1,300

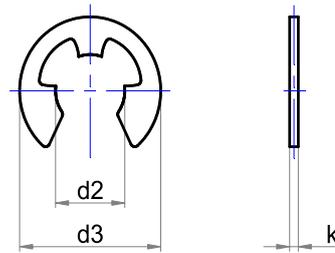
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	B	Black zinc plated (Zn/Black)

F. ex.: CA 101 AB:

CA 1 – Accessory type
01 – Accessory size
A – Material: Carbon steel
B – Surface treatment: Black zinc plated

CA 2 - E-RETAINING RING DIN 6799



Code	For bolt	d1 (mm)	d2 (mm)	d3 (mm)	k (mm)	Weight (kg) (per 1000 pcs.)
CA 201	CB 201	4	3,2	7,3	0,6	0,088
CA 202	CB 202	5	4	9,3	0,7	0,158
CA 203	CB 203	6	5	11,5	0,7	0,236
CA 204	CB 204	8	6	12,3	0,7	0,255
CA 205	CB 205	10	8	16,3	1	0,660
CA 206	CB 206	12	9	18,8	1,1	1,090
CA 207	CB 207	14	10	20,4	1,2	1,250
CA 208	CB 208	16	12	23,4	1,3	1,630
CA 209	CB 209	20	19	37,6	1,75	6,420

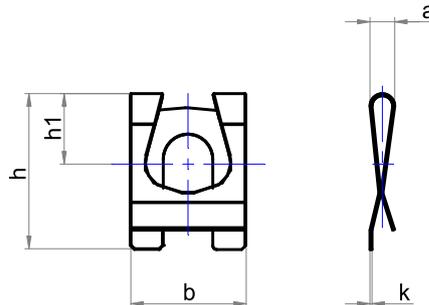
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	B	Black zinc plated (Zn/Black)

F. ex.: CA 201 AB:

CA 2 – Accessory type
01 – Accessory size
A – Material: Carbon steel
B – Surface treatment: Black zinc plated

CA 3 - SL-RETAINER



Code	For bolt	d1 (mm)	b (mm)	h (mm)	h1 (mm)	a ±0,2 (mm)	k (mm)	Weight (kg) (per 1000 pcs.)
CA 301	CB 201	4	7	8,6	4,1	1,9	0,3	0,019
CA 302	CB 202	5	9	10,9	5	2,2	0,4	0,034
CA 303	CB 203	6	11	13,9	6,2	3,1	0,4	0,063
CA 304	CB 204	8	14	18	8,6	3,5	0,45	0,109
CA 305	CB 205	10	18	22	10	3,6	0,5	0,211
CA 306	CB 206	12	22	25,9	11,8	4,8	0,5	0,280
CA 307	CB 207	14	25,1	30,2	13,5	4,8	0,6	0,474
CA 308	CB 208	16	18	34	16,2	4,8	0,6	0,563

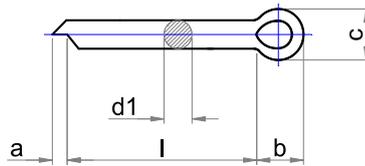
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)

F. ex.: CA 301 AA:

CA 3 – Accessory type
01 – Accessory size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

CA 4 - COTTER PIN DIN 94



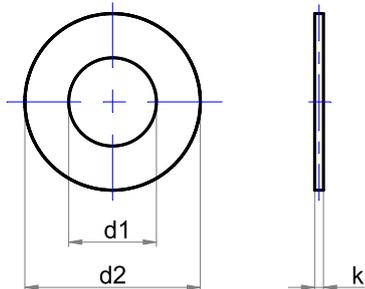
Code	For bolt	d _x l	d ₁ max. (mm)	d ₁ min. (mm)	l (mm)	a max. (mm)	a min. (mm)	b (mm)	c max. (mm)	c min. (mm)	Weight (kg) (per 1000 pcs.)
CA 401	CB 301	1x12	0,9	0,8	12	1,6	0,8	3	1,8	1,6	0,080
CA 402	CB 302	1,2x14	1	0,9	14	2,5	1,25	3	2	1,7	0,160
CA 403	CB 303	1,6x16	1,4	1,3	16	2,5	1,25	3,2	2,8	2,4	0,220
CA 404	CB 304	2x18	1,8	1,7	18	2,5	1,25	4	3,6	3,2	0,400
CA 405	CB 305	3,2x22	2,9	2,7	22	3,2	1,6	6,4	5,8	5,1	1,400
CA 406	CB 306	4x28	3,7	3,5	28	4	2	8	7,4	6,5	2,940
CA 407	CB 307	4x32	3,7	3,5	32	4	2	8	7,4	6,5	3,120
CA 408	CB 308	4x36	3,7	3,5	36	4	2	8	7,4	6,5	3,720
CA 409	CB 309	5x40	4,6	4,4	40	4	2	10	9,2	8	6,410
CA 410	CB 310	6,3x56	5,9	5,7	56	4	2	12,6	11,8	10,3	14,60
CA 411	CB 311	6,3x63	5,9	5,7	63	4	2	12,6	11,8	10,3	15,70
CA 412	CB 312	8x71	7,5	7,3	71	4	2	16	15	13,1	30,40

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material

F. ex.: CA 401 AB: CA 4 – Accessory type 01 – Accessory size A – Material: Carbon steel A – Surface treatment: White zinc plated

CA 5 - FLAT WASHER DIN 125



Code	For bolt	Nominal thread diameter	d ₁ max. (mm)	d ₁ min. (mm)	d ₂ max. (mm)	d ₂ min. (mm)	k (mm)	k max. (mm)	k min. (mm)	Weight (kg) (per 1000 pcs.)
CA 501	CB 301	4	4,48	4,3	9	8,64	0,8	0,9	0,7	0,308
CA 502	CB 302	5	5,48	5,3	10	9,64	1	1,1	0,9	0,443
CA 503	CB 303	6	6,62	6,4	12	11,57	1,6	1,8	1,4	1,020
CA 504	CB 304	8	8,62	8,4	16	15,57	1,6	1,8	1,4	1,830
CA 505	CB 305	10	10,77	10,5	20	19,48	2	1,8	2,2	3,570
CA 506	CB 306	12	13,27	13	24	23,48	2,5	2,7	2,3	6,270
CA 507	CB 307	14	15,27	15	28	27,48	2,5	2,7	2,3	8,620
CA 508	CB 308	16	17,27	17	30	29,48	3	3,3	2,7	11,30
CA 509	CB 309	20	21,33	21	37	36,38	3	3,3	2,7	17,20
CA 510	CB 310	28	29,33	29	50	49,38	4	4,3	3,7	40,90
CA 511	CB 311	30	31,39	31	56	55,26	4	4,3	3,7	53,60
CA 512	CB 312	35	36,62	36	66	64,80	5	5,6	4,4	94,30

Material and surface treatment options are presented in the table below:

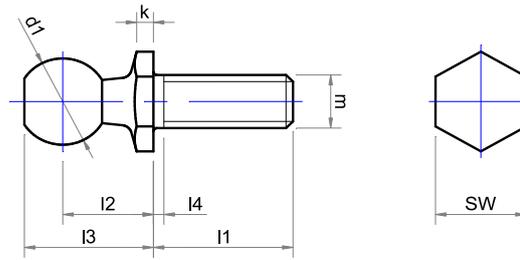
Code	Material	Code	Surface treatment
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material

F. ex.: CA 501 AB: CA 5 – Accessory type 01 – Accessory size A – Material: Carbon steel A – Surface treatment: White zinc plated

BALL JOINT GROUP



BS 1 - HEXAGONAL BALL STUD DIN71803



Code	d1 h9 (mm)	m	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	SW	k +0,4/-0 (mm)	l4 min. (mm)
BS 101	6	M4	10,2	8,5	9,2	8	2	-
BS 102	6	M5	10,2	8,5	9,2	8	2	-
BS 103	8	M5	10,2	9	12,5	8	2	1,2
BS 104	8	M6	10,2	9	12,5	8	2	1,2
BS 105	10	M6	12,5	11	15,5	10	2,2	1,2
BS 106	10	M6	16,5	11	15,5	10	2,2	1,2
BS 107	10	M8	12,5	11	15,5	10	2,2	1,2
BS 108	10	M8	13	12,5	17	13	2,2	1,2
BS 109	10	M8	16,5	12,5	17	13	2,2	1,2
BS 110	10	M8	18	12,5	17	13	2,2	1,2
BS 111	10	M8	20	12,5	17	13	2,2	1,2
BS 112	10	M8	25	12,5	17	13	2,2	1,2
BS 113	10	M8	50	12,5	17	13	2,2	1,2
BS 114	13	M8	16,5	13	18,5	13	2,4	1,5
BS 115	13	M8	20	13	18,5	13	2,4	1,5
BS 116	13	M8	25	13	18,5	13	2,4	1,5
BS 117	13	M8	30	13	18,5	13	2,4	1,5
BS 118	13	M8	50	13	18,5	13	2,4	1,5
BS 119	13	M10	16,5	13	18,5	13	2,4	1,5
BS 120	13	M10	20	13	18,5	13	2,4	1,5
BS 121	13	M10	25	13	18,5	13	2,4	1,5
BS 122	13	M10	50	13	18,5	13	2,4	1,5
BS 123	16	M10	20	16	23	17	2,7	2,5
BS 124	16	M12	20	16	23	17	2,7	2,5
BS 125	19	M14	28	20	28,5	19	3	5
BS 126	19	M16	28	20	28,5	19	3	5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		J	Heat treated			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		Z	No plating, raw material			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.	
		Z	No plating, raw material			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		L	Electropolished			
		Z	No plating, raw material			

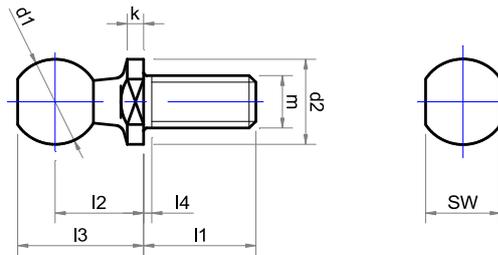
F. ex.: BS 101 AAFL:

BS 1 – Ball stud type
01 – Ball stud size

A – Material: Carbon steel
A – Surface treatment: White zinc plated

F – Fine thread
L – Left-handed thread

BS 2 - BALL STUD DIN 71803 (FORM C)



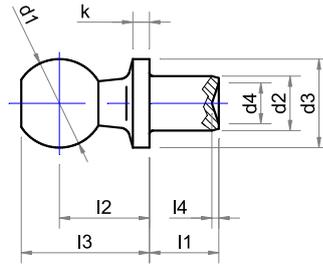
Code	d1 h9 (mm)	m	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	d2 h14 (mm)	SW	k +0,4/-0 (mm)	l4 min. (mm)
BS 201	6	M4	8	8,5	9,2	6	5	2	-
BS 202	8	M5	10,2	9	12,5	8	7	2	1,2
BS 203	10	M6	12,5	11	15,5	10	8	2,2	1,2
BS 204	10	M8	15	12,5	17	13	11	2,4	1,2
BS 205	13	M8	16,5	13	18,5	13	11	2,4	1,2
BS 206	16	M10	20	16	23	16	13	2,7	2,5
BS 207	16	M12	20	16	23	16	13	2,7	2,5
BS 208	19	M14	28	20	28,5	19	16	3	5
BS 209	19	M16	28	20	28,5	19	16	3	5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
		B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	
B	Black zinc plated (Zn/Black)			
C	Yellow zinc plated (Zn/Yellow)			
D	Blue zinc plated (Zn/Blue)			
E	Green zinc plated (Zn/Green)			
F	Matte nickel plated			
G	Shiny nickel plated			
H	Chrome plated			
I	Phosphate plated			
J	Heat treated			
Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	L Left-handed thread No code for right-handed thread.
		Z	No plating, raw material	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex.: BS 201 AAFL: BS 2 – Ball stud type
01 – Ball stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread
L – Left-handed thread

BS 3 - BALL STUD DIN 71803 (FORM B)



Code	d1 h9 (mm)	d2 h11 (mm)	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	d3 h14 (mm)	d4 +0/-0,4 (mm)	k +0,4/-0 (mm)	l1 ±0,1 (mm)
BS 301	6	4	3,5	8,5	9,2	6	3	2	1
BS 302	8	5	4	9	12,5	8	4	2	1
BS 303	8	5	7,5	9	12,5	8	4	2	1
BS 304	8	6	3,5	11	14,5	8	5	2	1
BS 305	8	6	4,5	11	14,5	8	5	2	1
BS 306	10	6	3,5	11	15,5	10	5	2,2	1
BS 307	10	6	3,5	12,5	17	10	5	2,2	1
BS 308	10	6	4,5	11	15,5	10	5	2,2	1
BS 309	10	6	4,5	12,5	17	10	5	2,2	1
BS 310	10	6	8	11	15,5	10	5	2,2	1
BS 311	13	8	4,5	13	18,5	13	6	2,4	1
BS 312	13	8	5	13	18,5	13	6	2,4	1
BS 313	13	8	10	13	18,5	13	6	2,4	1
BS 314	16	10	6	16	23	16	8	2,7	1
BS 315	16	10	13	16	23	16	8	2,7	1
BS 316	19	14	12	20	28,5	19	10	3	1
BS 317	19	14	18	20	28,5	19	10	3	1

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
		B	Carbon steel, f. ex. C1020, C1035, C1040 etc.
B	Black zinc plated (Zn/Black)		
C	Yellow zinc plated (Zn/Yellow)		
D	Blue zinc plated (Zn/Blue)		
E	Green zinc plated (Zn/Green)		
F	Matte nickel plated		
G	Shiny nickel plated		
H	Chrome plated		
I	Phosphate plated		
J	Heat treated		
Z	No plating, raw material		
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex.: BS 301 AAFL:

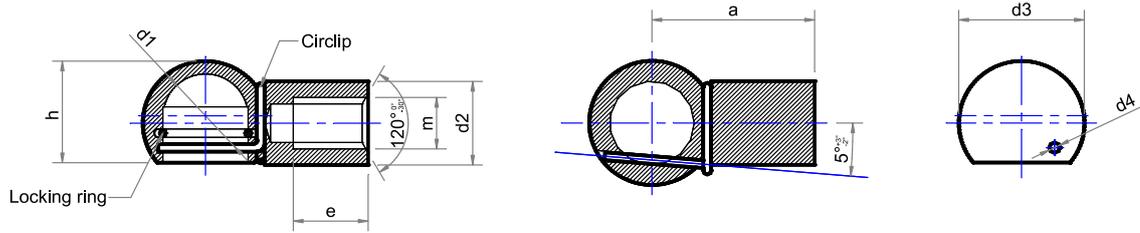
BS 3 – Ball stud type

01 – Ball stud size

A – Material: Carbon steel

A – Surface treatment: White zinc plated

BH 1 - BALL SOCKET DIN 71805



Code	d1 +0,1/-0 (mm)	m	d2 ±0,5 (mm)	d3 ±0,5 (mm)	h ±0,4 (mm)	a ±0,3 (mm)	e min. (mm)	d4 ±0,15 (mm)
BH 101	6	M4	7	10,6	9	22	10,2	-
BH 102	8	M5	8	12,8	10,8	22	10,2	1,3
BH 103	10	M6	10	14,8	12,3	19	10,2	1,3
BH 104	10	M6	10	14,8	12,3	21	10,2	1,3
BH 105	10	M6	10	14,8	12,3	22	10,2	1,3
BH 106	10	M6	10	14,8	12,3	25	11,5	1,3
BH 107	10	M8	10	14,8	12,3	19	10,2	1,3
BH 108	10	M8	10	14,8	12,3	21	10,2	1,3
BH 109	10	M8	10	14,8	12,3	22	10,2	1,3
BH 110	10	M8	10	14,8	12,3	25	11,5	1,3
BH 111	13	M8	13	19,3	15,8	25	11,5	1,6
BH 112	13	M8	13	19,3	15,8	30	14	1,6
BH 113	13	M10	13	19,3	15,8	25	11,5	1,6
BH 114	13	M10	13	19,3	15,8	30	14	1,6
BH 115	16	M10	16	24	20	30	14	1,8
BH 116	16	M10	16	24	20	35	15,5	1,8
BH 117	16	M12	16	24	20	30	14	1,8
BH 118	16	M12	16	24	20	35	15,5	1,8
BH 119	19	M14	22	30	25	45	21,5	1,9
BH 120	19	M16	22	30	25	45	21,5	1,9

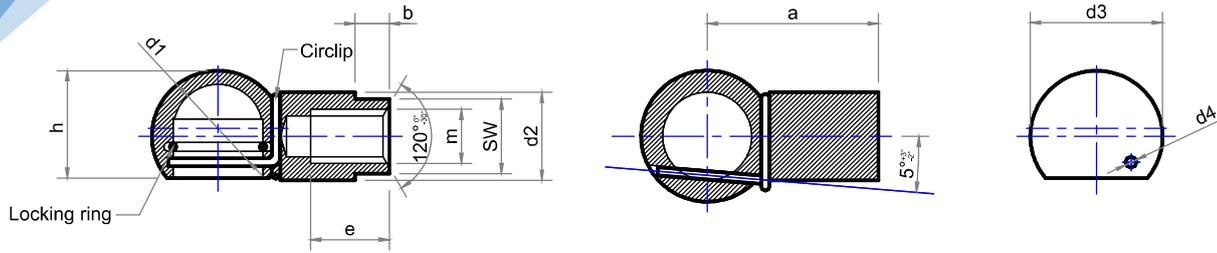
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	L Left-handed thread No code for right-handed thread.		
		Z	No plating, raw material			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		L Left-handed thread No code for right-handed thread.	
		Z	No plating, raw material			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			L Left-handed thread No code for right-handed thread.
		L	Electropolished			
		Z	No plating, raw material			
		Z	No plating, raw material			

F. ex. BH 101 AAFL:

BH 1 – Ball socket type
01 – Ball socket size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread
L – Left-handed thread

BH 2 - SW BALL SOCKET DIN 71805



Code	d1 +0,1/-0 (mm)	m	d2 ±0,5 (mm)	d3 ±0,5 (mm)	h ±0,4 (mm)	a ±0,3 (mm)	e min. (mm)	b ±0,3 (mm)	SW h14 (mm)	d4 ±0,15 (mm)
BH 201	6	M4	7	10,6	9	22	10,2	5	6	-
BH 202	8	M5	8	12,8	10,8	22	10,2	5	6	1,3
BH 203	10	M6	10	14,8	12,3	19	10,2	5	8	1,3
BH 204	10	M6	10	14,8	12,3	21	10,2	5	8	1,3
BH 205	10	M6	10	14,8	12,3	22	10,2	5	8	1,3
BH 206	10	M6	10	14,8	12,3	25	11,5	5	8	1,3
BH 207	10	M8	10	14,8	12,3	19	10,2	5	9	1,3
BH 208	10	M8	10	14,8	12,3	21	10,2	5	9	1,3
BH 209	10	M8	10	14,8	12,3	22	10,2	5	9	1,3
BH 210	10	M8	10	14,8	12,3	25	11,5	5	9	1,3
BH 211	13	M8	13	19,3	15,8	25	11,5	5	11	1,6
BH 212	13	M8	13	19,3	15,8	30	14	5	11	1,6
BH 213	13	M10	13	19,3	15,8	25	11,5	5	11	1,6
BH 214	13	M10	13	19,3	15,8	30	14	5	11	1,6
BH 215	16	M10	16	24	20	30	14	6	14	1,8
BH 216	16	M10	16	24	20	35	15,5	6	14	1,8
BH 217	16	M12	16	24	20	30	14	6	14	1,8
BH 218	16	M12	16	24	20	35	15,5	6	14	1,8
BH 219	19	M14	22	30	25	45	21,5	8	19	1,9
BH 220	19	M16	22	30	25	45	21,5	8	19	1,9

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	Z	No plating, raw material	L Left-handed thread No code for right-handed thread.
		K	Polished	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material	
		K	Polished	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	Z	No plating, raw material	
		K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex. BH 201 AAFL:

BH 2 – Ball socket type

01 – Ball socket size

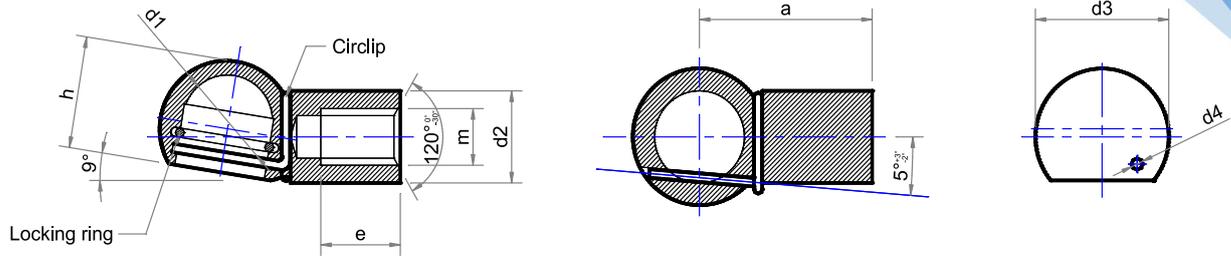
A – Material: Carbon steel

A – Surface treatment: White zinc plated

F – Fine thread

L – Left-handed thread

BH 3 - ANGLED BALL SOCKET DIN 71805



Code	d1 +0,1/-0 (mm)	m	d2 ±0,5 (mm)	d3 ±0,5 (mm)	h ±0,4 (mm)	a ±0,3 (mm)	e min. (mm)	d4 ±0,15 (mm)
BH 301	6	M4	7	10,6	9	22	10,2	-
BH 302	8	M5	8	12,8	10,8	22	10,2	1,3
BH 303	10	M6	10	14,8	12,3	19	10,2	1,3
BH 304	10	M6	10	14,8	12,3	21	10,2	1,3
BH 305	10	M6	10	14,8	12,3	22	10,2	1,3
BH 306	10	M6	10	14,8	12,3	25	11,5	1,3
BH 307	10	M8	10	14,8	12,3	19	10,2	1,3
BH 308	10	M8	10	14,8	12,3	21	10,2	1,3
BH 309	10	M8	10	14,8	12,3	22	10,2	1,3
BH 310	10	M8	10	14,8	12,3	25	11,5	1,3
BH 311	13	M8	13	19,3	15,8	25	11,5	1,6
BH 312	13	M8	13	19,3	15,8	30	14	1,6
BH 313	13	M10	13	19,3	15,8	25	11,5	1,6
BH 314	13	M10	13	19,3	15,8	30	14	1,6
BH 315	16	M10	16	24	20	30	14	1,8
BH 316	16	M10	16	24	20	35	15,5	1,8
BH 317	16	M12	16	24	20	30	14	1,8
BH 318	16	M12	16	24	20	35	15,5	1,8
BH 319	19	M14	22	30	25	45	21,5	1,9
BH 320	19	M16	22	30	25	45	21,5	1,9

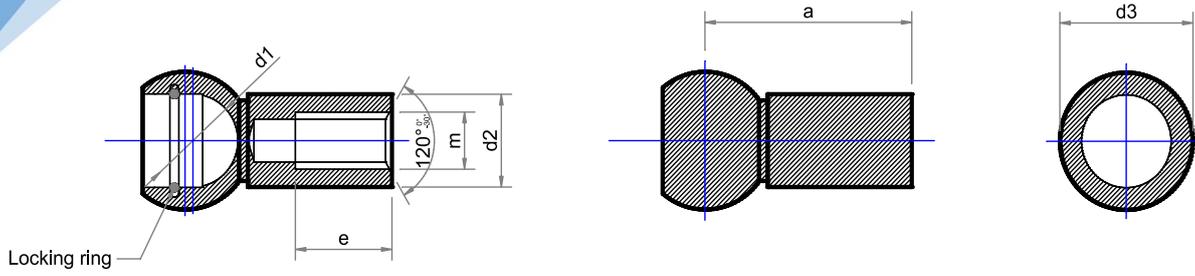
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	L Left-handed thread No code for right-handed thread.		
		Z	No plating, raw material			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		L Left-handed thread No code for right-handed thread.	
		Z	No plating, raw material			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			L Left-handed thread No code for right-handed thread.
		L	Electropolished			
		Z	No plating, raw material			
		Z	No plating, raw material			

F. ex. BH 301 AAFL:

BH 3 – Ball socket type
01 – Ball socket size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread
L – Left-handed thread

BH 4 - AXIAL BALL SOCKET DIN 71805



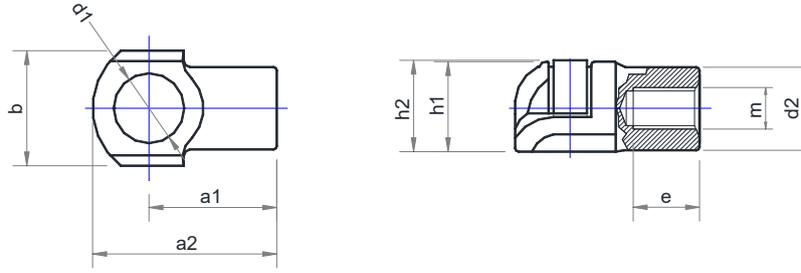
Code	d1 +0,1/-0 (mm)	m	d2 ±0,5 (mm)	d3 ±0,5 (mm)	a ±0,3 (mm)	e min. (mm)	F Tensile strength (N)
BH 401	6	M4	7	10,6	22	10,2	20
BH 402	8	M5	8	12,8	22	10,2	30
BH 403	10	M6	10	14,8	25	11,5	40
BH 404	13	M8	13	19,3	30	14	60
BH 405	16	M10	16	24	35	15,5	80
BH 406	16	M12	16	24	35	15,5	80
BH 407	19	M14	22	30	45	21,5	100
BH 408	19	M16	22	30	45	21,5	100

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
		Z	No plating, raw material	
		K	Polished	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material	
		K	Polished	
		L	Electropolished	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	Z	No plating, raw material	

F. ex. BH 401 AAFL: BH 4 – Ball socket type
01 – Ball socket size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread
L – Left-handed thread

BH 5 – PALIO BALL SOCKET

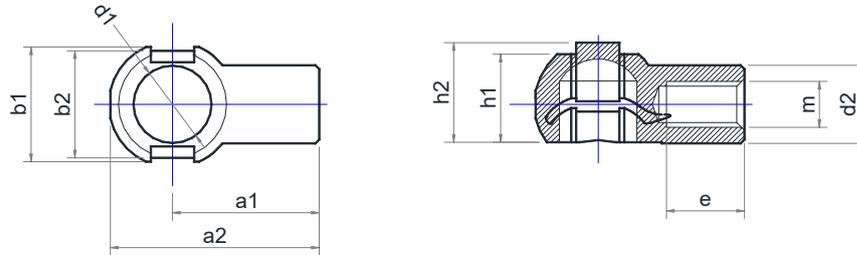


Code	d1 +0,1/-0 (mm)	m	d2 ±0,3 (mm)	a1 ±0,3 (mm)	a2 ±0,3 (mm)	b ±0,3 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)	e min. (mm)
BH 501	10	M6	11,2	18	26	16,3	12,5	13,5	10

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
H	Zamac 5 alloy	B	Black zinc plated (Zn/Black)

F. ex. BH 501 HB:
 BH 5 – Ball socket type
 01 – Ball socket size
 H – Material: Zamac 5 alloy
 B – Surface treatment: White zinc plated



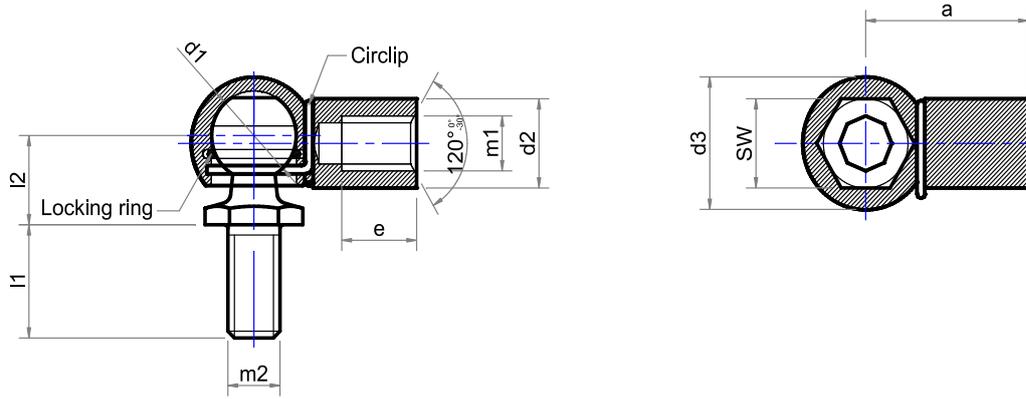
Code	d1 +0,1/-0 (mm)	m	d2 ±0,2 (mm)	a1 ±0,3 (mm)	a2 ±0,3 (mm)	b1 ±0,1 (mm)	b2 ±0,1 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)	e min. (mm)
BH 501	10	M6	10,2	18	27	14	15	11,7	13	10
BH 502	10	M6	10,2	25	33	14	15	11,7	13	11,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	B	Black zinc plated (Zn/Black)

F. ex. BH 501 AB:
 BH 5 – Ball socket type
 01 – Ball socket size
 A – Material: Carbon steel
 B – Surface treatment: White zinc plated

BJ 1 - BALL JOINT DIN 71802



Code	Ball socket	Ball stud	d1 h9 (mm)	m1	m2	a ±0,3 (mm)	l1 ±0,3 (mm)	l2 ±0,3 (mm)	SW h14 (mm)	d2 ±0,5 (mm)	d3 ±0,5 (mm)	e min. (mm)
BJ 101	BH 101	BS 101	6	M4	M4	22	10,2	8,5	8	7	10,6	10,2
BJ 102	BH 102	BS 103	8	M5	M5	22	10,2	9	8	8	12,8	10,2
BJ 103	BH 103	BS 105	10	M6	M6	19	12,5	11	10	10	14,8	10,2
BJ 104	BH 103	BS 108	10	M6	M8	19	13	12,5	13	10	14,8	10,2
BJ 105	BH 104	BS 105	10	M6	M6	21	12,5	11	10	10	14,8	10,2
BJ 106	BH 104	BS 108	10	M6	M8	21	13	12,5	13	10	14,8	10,2
BJ 107	BH 105	BS 105	10	M6	M6	22	12,5	11	10	10	14,8	10,2
BJ 108	BH 105	BS 108	10	M6	M8	22	13	12,5	13	10	14,8	10,2
BJ 109	BH 106	BS 105	10	M6	M6	25	12,5	11	10	10	14,8	11,5
BJ 110	BH 106	BS 108	10	M6	M8	25	13	12,5	13	10	14,8	11,5
BJ 111	BH 106	BS 109	10	M6	M8	25	16,5	12,5	13	10	14,8	11,5
BJ 112	BH 106	BS 111	10	M6	M8	25	20	12,5	13	10	14,8	11,5
BJ 113	BH 107	BS 107	10	M8	M8	19	12,5	11	10	10	14,8	10,2
BJ 114	BH 107	BS 108	10	M8	M8	19	13	12,5	13	10	14,8	10,2
BJ 115	BH 108	BS 107	10	M8	M8	21	12,5	11	10	10	14,8	10,2
BJ 116	BH 108	BS 108	10	M8	M8	21	13	12,5	13	10	14,8	10,2
BJ 117	BH 109	BS 107	10	M8	M8	22	12,5	11	10	10	14,8	10,2
BJ 118	BH 109	BS 108	10	M8	M8	22	13	12,5	13	10	14,8	10,2
BJ 119	BH 110	BS 107	10	M8	M8	25	12,5	11	10	10	14,8	11,5
BJ 120	BH 110	BS 108	10	M8	M8	25	13	12,5	13	10	14,8	11,5
BJ 121	BH 110	BS 109	10	M8	M8	25	16,5	12,5	13	10	14,8	11,5
BJ 122	BH 110	BS 111	10	M8	M8	25	20	12,5	13	10	14,8	11,5
BJ 123	BH 111	BS 114	13	M8	M8	25	16,5	13	13	13	19,3	11,5
BJ 124	BH 111	BS 115	13	M8	M8	25	20	13	13	13	19,3	11,5
BJ 125	BH 111	BS 116	13	M8	M8	25	25	13	13	13	19,3	11,5
BJ 126	BH 112	BS 114	13	M8	M8	30	16,5	13	13	13	19,3	14
BJ 127	BH 112	BS 115	13	M8	M8	30	20	13	13	13	19,3	14
BJ 128	BH 112	BS 116	13	M8	M8	30	25	13	13	13	19,3	14
BJ 129	BH 116	BS 123	16	M10	M10	35	20	16	17	16	24	15,5
BJ 130	BH 116	BS 124	16	M10	M12	35	20	16	17	16	24	15,5
BJ 131	BH 118	BS 124	16	M12	M12	35	20	16	17	16	24	15,5
BJ 132	BH 119	BS 125	19	M14	M14	45	28	20	19	22	30	21,5
BJ 133	BH 119	BS 126	19	M14	M16	45	28	20	19	22	30	21,5
BJ 134	BH 120	BS 126	19	M16	M16	45	28	20	19	22	30	21,5

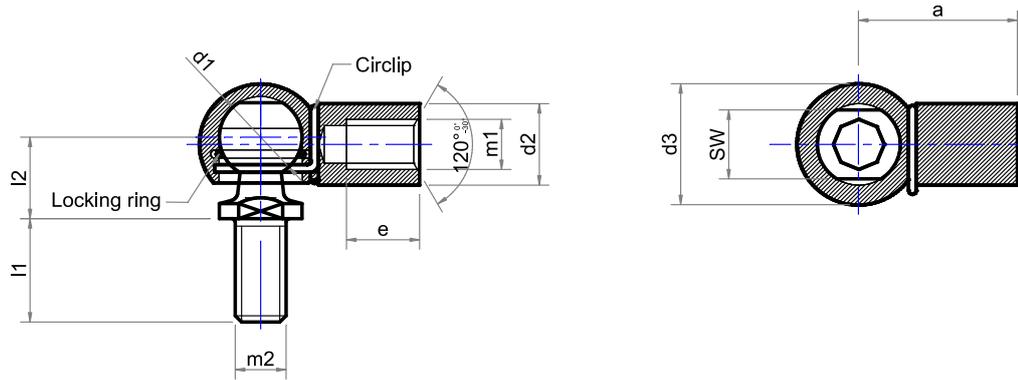
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	L Left-handed thread No code for right-handed thread.		
		Z	No plating, raw material			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		L Left-handed thread No code for right-handed thread.	
		Z	No plating, raw material			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			L Left-handed thread No code for right-handed thread.
		L	Electropolished			
		Z	No plating, raw material			

F. ex. BJ 101 AAFL:

BJ 1 – Ball joint type
01 – Ball joint size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread (ball socket and stud)
L – Left-handed thread (ball socket and stud)

BJ 2 - BALL JOINT DIN 71802



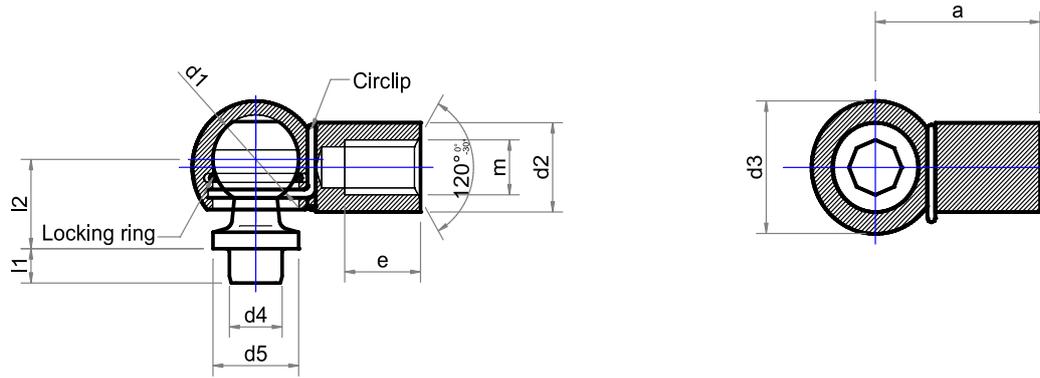
Code	Ball socket	Ball stud	d1 (mm)	m1	m2	a ±0,3 (mm)	l1 ±0,3 (mm)	l2 ±0,3 (mm)	SW h14 (mm)	d2 ±0,5 (mm)	d3 ±0,5 (mm)	e min. (mm)
BJ 201	BH 101	BS 201	6	M4	M4	22	8	8,5	5	7	10,6	10,2
BJ 202	BH 102	BS 202	8	M5	M5	22	10,2	9	7	8	12,8	10,2
BJ 203	BH 103	BS 203	10	M6	M6	19	12,5	11	8	10	14,8	10,2
BJ 204	BH 103	BS 204	10	M6	M8	19	15	12,5	11	10	14,8	10,2
BJ 205	BH 104	BS 203	10	M6	M6	21	12,5	11	8	10	14,8	10,2
BJ 206	BH 104	BS 204	10	M6	M8	21	15	12,5	11	10	14,8	10,2
BJ 207	BH 105	BS 203	10	M6	M6	22	12,5	11	8	10	14,8	10,2
BJ 208	BH 105	BS 204	10	M6	M8	22	15	12,5	11	10	14,8	10,2
BJ 209	BH 106	BS 203	10	M6	M6	25	12,5	11	8	10	14,8	11,5
BJ 210	BH 106	BS 204	10	M6	M8	25	15	12,5	11	10	14,8	11,5
BJ 211	BH 107	BS 204	10	M8	M8	19	15	12,5	11	10	14,8	10,2
BJ 212	BH 108	BS 204	10	M8	M8	21	15	12,5	11	10	14,8	10,2
BJ 213	BH 109	BS 204	10	M8	M8	22	15	12,5	11	10	14,8	10,2
BJ 214	BH 110	BS 204	10	M8	M8	25	15	12,5	11	10	14,8	11,5
BJ 215	BH 111	BS 205	13	M8	M8	25	16,5	13	11	13	19,3	11,5
BJ 216	BH 112	BS 205	13	M8	M8	30	16,5	13	11	13	19,3	14
BJ 217	BH 116	BS 206	16	M10	M10	35	20	16	13	16	24	15,5
BJ 218	BH 118	BS 207	16	M12	M12	35	20	16	13	16	24	15,5
BJ 219	BH 119	BS 208	19	M14	M14	45	28	20	16	22	30	21,5
BJ 220	BH 120	BS 209	19	M16	M16	45	28	20	16	22	30	21,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	L Left-handed thread No code for right-handed thread.		
		Z	No plating, raw material			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		L Left-handed thread No code for right-handed thread.	
		Z	No plating, raw material			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			L Left-handed thread No code for right-handed thread.
		L	Electropolished			
		Z	No plating, raw material			
		Z	No plating, raw material			

F. ex. BJ 201 AAFL: BJ 2 – Ball joint type
01 – Ball joint size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread (ball socket and stud)
L – Left-handed thread (ball socket and stud)

BJ 3 - BALL JOINT DIN 71802



Code	Ball socket	Ball stud	d1 (mm)	m	d4 h11 (mm)	a ±0,3 (mm)	l1 ±0,3 (mm)	l2 ±0,3 (mm)	d5 h14 (mm)	d2 ±0,5 (mm)	d3 ±0,5 (mm)	e min. (mm)
BJ 301	BH 101	BS 301	6	M4	4	22	3,5	8,5	6	7	10,6	10,2
BJ 302	BH 102	BS 302	8	M5	5	22	4	9	8	8	12,8	10,2
BJ 303	BH 102	BS 303	8	M5	5	22	7,5	9	8	8	12,8	10,2
BJ 304	BH 106	BS 308	10	M6	6	25	4,5	11	10	10	14,8	11,5
BJ 305	BH 106	BS 310	10	M6	6	25	8	11	10	10	14,8	11,5
BJ 306	BH 110	BS 310	10	M8	6	25	8	11	10	10	14,8	11,5
BJ 307	BH 111	BS 312	13	M8	8	25	5	13	13	13	19,3	11,5
BJ 308	BH 111	BS 313	13	M8	8	25	10	13	13	13	19,3	11,5
BJ 309	BH 112	BS 312	13	M8	8	30	5	13	13	13	19,3	14
BJ 310	BH 112	BS 313	13	M8	8	30	10	13	13	13	19,3	14
BJ 311	BH 116	BS 314	16	M10	10	35	6	16	16	16	24	15,5
BJ 312	BH 116	BS 315	16	M10	10	35	13	16	16	16	24	15,5
BJ 313	BH 118	BS 314	16	M12	10	35	6	16	16	16	24	15,5
BJ 314	BH 118	BS 315	16	M12	10	35	13	16	16	16	24	15,5
BJ 315	BH 119	BS 316	19	M14	14	45	12	20	19	22	30	21,5
BJ 316	BH 119	BS 317	19	M14	14	45	20	20	19	22	30	21,5
BJ 317	BH 120	BS 316	19	M16	14	45	12	20	19	22	30	21,5
BJ 318	BH 120	BS 317	19	M16	14	45	20	20	19	22	30	21,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	L Left-handed thread No code for right-handed thread.		
		Z	No plating, raw material			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		L Left-handed thread No code for right-handed thread.	
		Z	No plating, raw material			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			L Left-handed thread No code for right-handed thread.
		L	Electropolished			
		Z	No plating, raw material			

F. ex. BJ 301 AAFL:

BJ 3 – Ball joint type

01 – Ball joint size

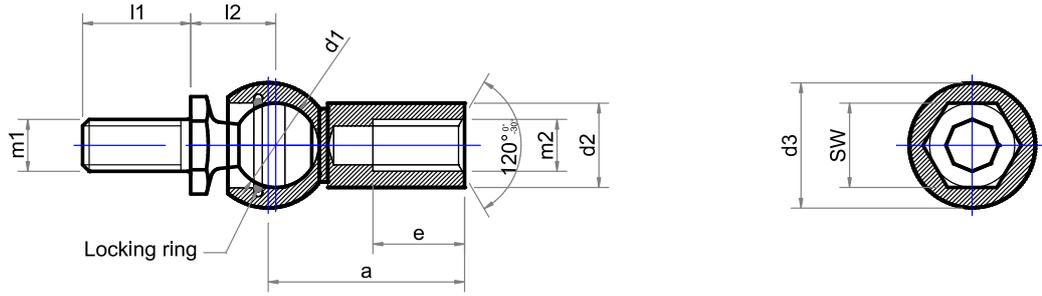
A – Material: Carbon steel

A – Surface treatment: White zinc plated

F – Fine thread (ball socket)

L – Left-handed thread (ball socket)

BJ 4 - AXIAL BALL JOINT DIN 71802



Code	Ball socket	Ball stud	d1	m1	m2	a ±0,3 (mm)	l1 ±0,3 (mm)	l2 ±0,3 (mm)	SW h14 (mm)	d2 ±0,5 (mm)	d3 ±0,5 (mm)	e min. (mm)	F Tensile strength (N)
BJ 401	BH 401	BS 101	6	M4	M4	22	10,2	8,5	8	7	10,8	10,2	20
BJ 402	BH 402	BS 103	8	M5	M5	22	10,2	9	8	8,3	12,8	10,2	30
BJ 403	BH 403	BS 105	10	M6	M6	25	12,5	11	10	10,3	14,8	11,5	40
BJ 404	BH 403	BS 107	10	M6	M8	25	12,5	11	10	10,3	14,8	11,5	40
BJ 405	BH 403	BS 108	10	M6	M8	25	13	12,5	13	10,3	14,8	11,5	40
BJ 406	BH 403	BS 109	10	M6	M8	25	16,5	12,5	13	10,3	14,8	11,5	40
BJ 407	BH 403	BS 111	10	M6	M8	25	20	12,5	13	10,3	14,8	11,5	40
BJ 408	BH 404	BS 114	13	M8	M8	30	16,5	13	13	13,3	19,8	14,0	60
BJ 409	BH 404	BS 115	13	M8	M8	30	20	13	13	13,3	19,8	14,0	60
BJ 410	BH 404	BS 116	13	M8	M8	30	25	13	13	13,3	19,8	14,0	60
BJ 411	BH 405	BS 123	16	M10	M10	35	20	16	17	16,3	23,8	15,5	80
BJ 412	BH 405	BS 124	16	M10	M12	35	20	16	17	16,3	23,8	15,5	80
BJ 413	BH 406	BS 124	16	M12	M12	35	20	16	17	16,3	23,8	15,5	80
BJ 414	BH 407	BS 125	19	M14	M14	45	28	20	19	22,3	29,8	21,5	100
BJ 415	BH 407	BS 126	19	M14	M16	45	28	20	19	22,3	29,8	21,5	100
BJ 416	BH 408	BS 126	19	M16	M16	45	28	20	19	22,3	29,8	21,5	100

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	L Left-handed thread No code for right-handed thread.		
		Z	No plating, raw material			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		L Left-handed thread No code for right-handed thread.	
		Z	No plating, raw material			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			L Left-handed thread No code for right-handed thread.
		L	Electropolished			
		Z	No plating, raw material			

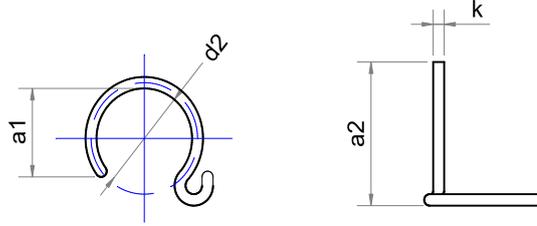
F. ex. BJ 401 AAFL: BJ 4 – Ball joint type
01 – Ball joint size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread (ball socket and stud)
L – Left-handed thread (ball socket and stud)



ACCESSORIES FOR BALL JOINT GROUP



CA 6 - CIRCLIP DIN 71805



Code	Ball housing/ Ball joint d1	d2 (mm)	k (mm)	a1 (mm)	a2 (mm)
CA 601	8	7	1	6,5	12
CA 602	10	8,7	1	7,7	12,5
CA 603	13	11	1,2	9,5	15,7
CA 604	16	13	1,4	11	19
CA 605	19	20	1,5	16,5	24

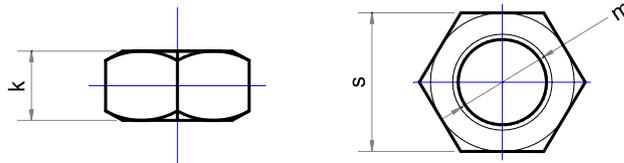
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		G	Shiny nickel plated
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material

F. ex.: AC 601 AA:

AC 6 – Accessory type
01 – Accessory size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

CA 7 - HEXAGONAL NUT DIN 934



Code	m	s min. (mm)	s max. (mm)	k min. (mm)	k max. (mm)
CA 701	M4	6,7	7	2,9	3,2
CA 702	M5	7,7	8	3,7	4
CA 703	M6	9,7	10	4,7	5
CA 704	M8	12,7	13	6,1	6,5
CA 705	M10	16,7	17	7,6	8
CA 706	M12	18,7	19	9,6	10
CA 707	M14	21,7	22	10,3	11
CA 708	M16	23,7	24	12,3	13

Material and surface treatment options are presented in the table below:

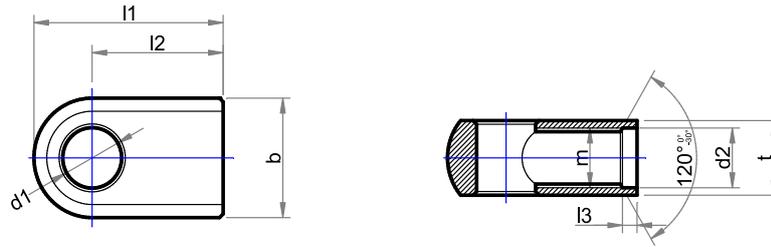
Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
		Z	No plating, raw material	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex.: AC 701 AA:

AC 7 – Accessory type
01 – Accessory size
A – Material: Carbon steel
A – Surface treatment: White zinc plated



EY 1 - EYELET



Code	b ±0,5 (mm)	l2 ±0,3 (mm)	d1 +0,2/-0 (mm)	t ±0,1 (mm)	l1 ±0,3 (mm)	m	d1 +0,2/-0 (mm)	l3 ±0,1 (mm)
EY 101	16	16	6,1	10	24	M6	6	2
EY 102	16	16	6,1	10	24	M8	8	2
EY 103	16	16	8,1	10	24	M8	8	2
EY 104	16	16	8,1	12	24	M8	8	2
EY 105	16	16	10,1	12	24	M8	8	2
EY 106	16	17	8,1	10	25	M8	8	2
EY 107	16	18	6,1	10	26	M6	6	2
EY 108	16	18	6,1	10	26	M8	8	2
EY 109	16	18	8,1	10	26	M6	6	2
EY 110	16	18	8,1	10	26	M8	8	2
EY 111	16	18	8,1	12	26	M10	10	2
EY 112	16	18	10,1	10	26	M8	8	2
EY 113	16	18	10,1	12	26	M10	10	2
EY 114	16	19	8,1	10	27	M6	6	2
EY 115	16	19	10,1	10	27	M6	6	2
EY 116	16	20	8,1	12	28	M8	8	2
EY 117	16	20	8,1	12	28	M10	10	2
EY 118	16	22	8,1	12	30	M8	8	2
EY 119	16	22	8,1	12	30	M10	10	2
EY 120	16	22	10,1	12	30	M8	8	2
EY 121	16	22	10,1	12	30	M10	10	2

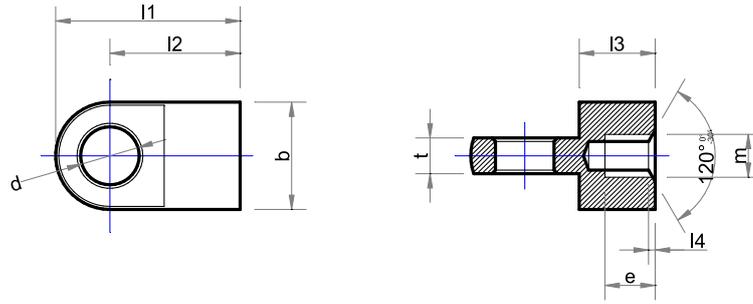
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)	
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		J	Heat treated	
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
		Z	No plating, raw material	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex.: EY 101 AAFL:

EY 1 – Eyelet type
 01 – Eyelet size
 A – Material: Carbon steel
 A – Surface treatment: White zinc plated
 F – Fine thread
 L – Left-handed thread

EY 2 - EYELET



Code	b h11 (mm)	l2 ±0,3 (mm)	d1 +0,2/-0 (mm)	t ±0,1 (mm)	l1 ±0,3 (mm)	m	l3 ±0,1 (mm)	e min. (mm)	l4 ±0,1 (mm)
EY 201	15	18	6,1	5	25,5	M6	10,5	7	1
EY 202	15	18	8,1	5	25,5	M6	10,5	7	1
EY 203	15	20	8,1	5	27,5	M6	11,5	8	1
EY 204	15	22	6,1	5	29,5	M6	10	8	1
EY 205	15	22	6,1	5	29,5	M8	12,5	8	1
EY 206	15	22	8,1	5	29,5	M6	12,5	9	1
EY 207	15	22	8,1	5	29,5	M8	12,5	9	1
EY 208	15	22	8,1	10	29,5	M8	12,5	9	1
EY 209	15	25	8,1	5	32,5	M6	12,5	11	1
EY 210	15	25	8,1	5	32,5	M8	12,5	9	1
EY 211	15	27	8,1	10	34,5	M8	15	11	1
EY 212	15	30	8,1	5	37,5	M6	12,5	11	1
EY 213	18	18	8,1	10	27	M8	10,5	9	1
EY 214	18	20	8,1	10	29	M8	10,5	9	1
EY 215	18	22	8,1	10	31	M8	12,5	9	1
EY 216	18	25	8,1	10	34	M8	12,5	11	1
EY 217	18	25	10,1	10	34	M8	12,5	11	1
EY 218	18	30	8,1	10	39	M8	12,5	11	1
EY 219	18	30	8,1	10	39	M10	15	13	1
EY 220	18	35	8,1	10	44	M10	19	15	1
EY 221	20	22	10,1	12	32	M10	10	7	1
EY 222	20	30	10,1	12	40	M10	15	13	1
EY 223	20	35	8,1	10	45	M8	20	14	1
EY 224	20	35	10,1	10	45	M8	20	14	1
EY 225	20	35	10,1	10	45	M10	20	14	1
EY 226	20	35	10,1	12	45	M10	20	14	1

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
		B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	
B	Black zinc plated (Zn/Black)			
C	Yellow zinc plated (Zn/Yellow)			
D	Blue zinc plated (Zn/Blue)			
E	Green zinc plated (Zn/Green)			
F	Matte nickel plated			
G	Shiny nickel plated			
H	Chrome plated			
I	Phosphate plated			
J	Heat treated			
Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material	
		K	Polished	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	Z	No plating, raw material	
		K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

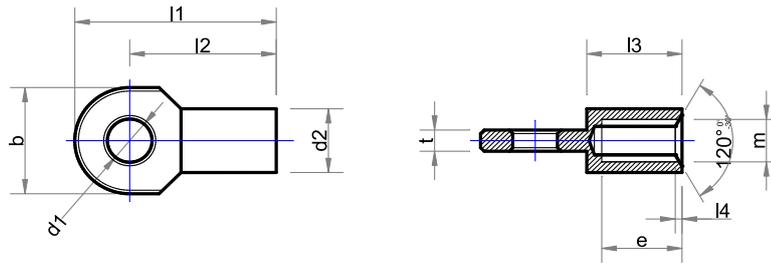
F. ex.: EY 201 AAFL

EY 2 – Eyelet type
F – Fine thread

01 – Eyelet size
L – Left-handed thread

A – Material: Carbon steel A – Surface treatment: White zinc plated

EY 3 - EYELET



Code	b ±0,1 (mm)	l2 ±0,3 (mm)	d1 +0,2/-0 (mm)	t ±0,1 (mm)	l1 ±0,3 (mm)	d2 h11 (mm)	l3 ±0,1 (mm)	m	e min. (mm)	l4 ±0,1 (mm)
EY 301	13	15	6,1	3	21,5	10	8,8	M6	7	1
EY 302	15	20	6,1	3	27,5	9	13	M6	11	1
EY 303	15	22	6,1	3	29,5	9	13	M6	11	1
EY 304	15	22	6,1	5	29,5	9	13	M6	11	1
EY 305	15	22	6,1	5	29,5	10	13	M8	11	1
EY 306	15	22	8,1	3	29,5	9	13	M6	11	1
EY 307	15	22	8,1	5	29,5	9	13	M6	11	1
EY 308	15	22	8,1	5	29,5	10	13	M8	11	1
EY 309	15	25	8,1	5	32,5	9	14	M6	11	1
EY 310	15	25	8,1	5	32,5	10	14	M8	11	1
EY 311	15	25	10,1	5	32,5	9	14	M6	11	1
EY 312	15	25	10,1	5	32,5	10	14	M8	11	1
EY 313	15	30	8,1	5	37,5	10	15	M8	11	1
EY 314	15	30	10,1	5	37,5	10	15	M8	11	1

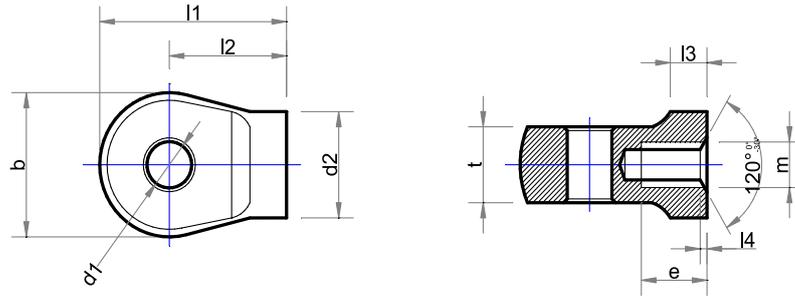
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
		B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	
B	Black zinc plated (Zn/Black)			
C	Yellow zinc plated (Zn/Yellow)			
D	Blue zinc plated (Zn/Blue)			
E	Green zinc plated (Zn/Green)			
F	Matte nickel plated			
G	Shiny nickel plated			
H	Chrome plated			
I	Phosphate plated			
J	Heat treated			
Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material	
		K	Polished	
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	Z	No plating, raw material	
		K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex.: EY 301 AAFL:

EY 3 – Eyelet type
 01 – Eyelet size
 A – Material: Carbon steel
 A – Surface treatment: White zinc plated
 F – Fine thread
 L – Left-handed thread

EY 4 - EYELET



Code	b ±0,1 (mm)	l2 ±0,3 (mm)	d1 +0,2/-0 (mm)	t ±0,1 (mm)	l1 ±0,3 (mm)	d2 h11 (mm)	l3 ±0,1 (mm)	m	e min. (mm)	l4 ±0,1 (mm)
EY 401	19	16	6,1	10	25,5	14	5	M6	9	1
EY 402	19	16	6,1	12	25,5	14	5	M8	9	1
EY 403	19	16	8,1	10	25,5	14	5	M6	7	1
EY 404	19	16	8,1	12	25,5	14	5	M8	7	1
EY 405	19	18	6,1	10	27,5	14	5	M6	9	1
EY 406	19	18	6,1	12	27,5	14	5	M8	9	1
EY 407	19	18	8,1	10	27,5	14	5	M8	9	1
EY 408	19	18	8,1	12	27,5	14	5	M10	9	1
EY 409	19	18	10,1	10	27,5	14	5	M8	11	1
EY 410	19	18	10,1	12	27,5	14	5	M10	11	1
EY 411	19	20	6,1	12	29,5	14	5	M8	11	1
EY 412	19	20	8,1	12	29,5	14	5	M8	11	1
EY 413	19	20	10,1	12	29,5	14	5	M8	11	1
EY 414	19	21	6,1	10	30,5	14	9	M6	11	1
EY 415	19	21	8,1	10	30,5	14	9	M6	11	1
EY 416	19	21	10,1	10	30,5	14	9	M6	11	1
EY 417	19	22	8,1	10	31,5	14	9	M6	11	1
EY 418	19	22	10,1	10	31,5	14	9	M8	11	1
EY 419	20	21	8,1	10	31	14	9	M6	11	1
EY 420	20	22	8,1	10	32	14	9	M8	11	1
EY 421	20	28	10,1	10	38	14	10	M8	11	1

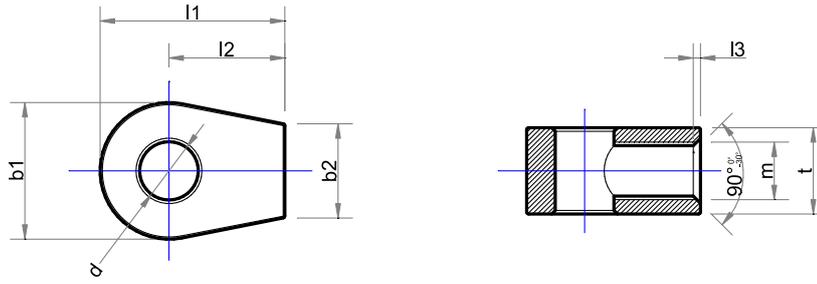
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
B	Carbon steel, f. ex. C1020, C1035, C1040 etc.	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		J	Heat treated	
Z	No plating, raw material			
C	Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.
Z	No plating, raw material			
D	Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
Z	No plating, raw material			
E	Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex.: EY 401 AAPL:

EY 4 – Eyelet type
01 – Eyelet size
A – Material: Carbon steel
A – Surface treatment: White zinc plated
F – Fine thread
L – Left-handed thread

EY 5 – ZAMAC EYELET



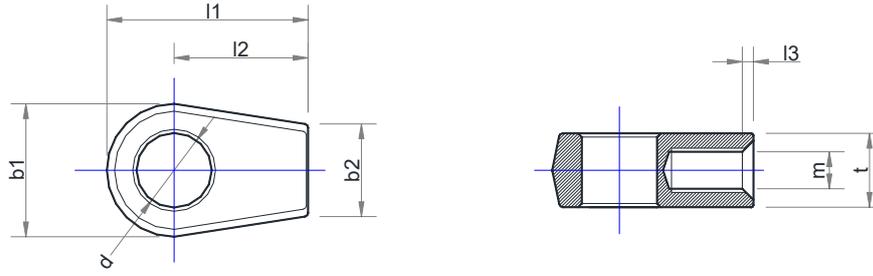
Code	b1 ±0,1 (mm)	l2 ±0,2 (mm)	d +0,2/-0 (mm)	t ±0,2 (mm)	l1 ±0,2 (mm)	b2 ±0,2 (mm)	m	l3 ±0,1 (mm)
EY 501	19	16	6,1	12	25,5	13	M6	1
EY 502	19	16	6,1	12	25,5	13	M8	1
EY 503	19	16	6,1	12	25,5	13	M10	1
EY 504	19	16	8,1	12	25,5	13	M6	1
EY 505	19	16	8,1	12	25,5	13	M8	1
EY 506	19	16	8,1	12	25,5	13	M10	1
EY 507	19	16	10,1	12	25,5	13	M6	1
EY 508	19	16	10,1	12	25,5	13	M8	1
EY 509	19	16	10,1	12	25,5	13	M10	1
EY 510	19	16	12,1	12	25,5	13	M6	1
EY 511	19	16	12,1	12	25,5	13	M8	1
EY 512	19	16	12,1	12	25,5	13	M10	1

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
H	Zamac 5 alloy	A	White zinc plated (Zn/White)	F Fine thread No code for standard thread. L Left-handed thread No code for right-handed thread.

F. ex.: EY 501 HAPL: EY 5 – Eyelet type
 01 – Eyelet size
 H – Material: Zamac 5 alloy
 A – Surface treatment: White zinc plated
 F – Fine thread
 L – Left-handed thread

EY 6 – ZAMAC EYELET



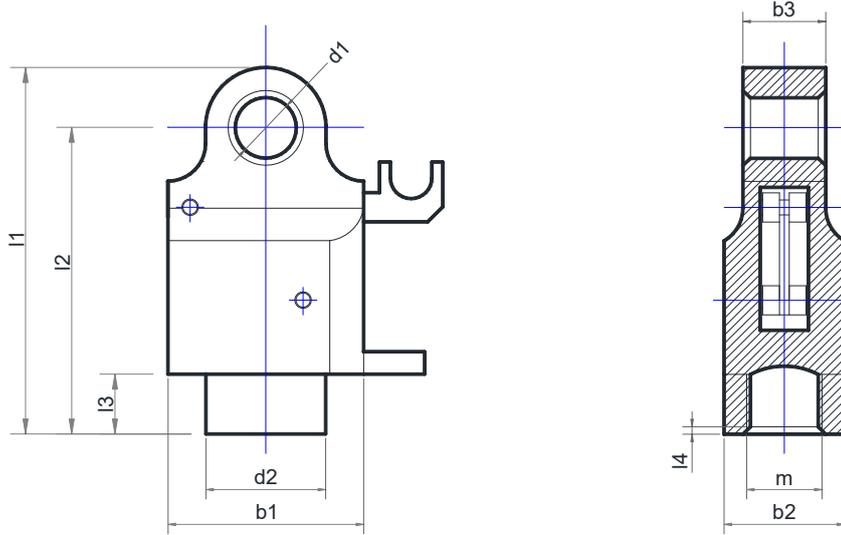
Code	b1 ±0,1 (mm)	l2 ±0,2 (mm)	d +0,2/-0 (mm)	t ±0,2 (mm)	l1 ±0,2 (mm)	b2 ±0,2 (mm)	m	l3 ±0,1 (mm)
EY 601	18	18	6,1	10	27	12,4	M6	1,5
EY 602	18	18	6,1	10	27	12,4	M8	1,5
EY 603	18	18	8,1	10	27	12,4	M6	1,5
EY 604	18	18	8,1	10	27	12,4	M8	1,5
EY 605	18	18	10,1	10	27	12,4	M6	1,5
EY 606	18	18	10,1	10	27	12,4	M8	1,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
H	Zamac 5 alloy	A	White zinc plated (Zn/White)	<p>F Fine thread No code for standard thread.</p> <p>L Left-handed thread No code for right-handed thread.</p>

F. ex.: EY 601 HAPL: EY 6 – Eyelet type
01 – Eyelet size
H – Material: Zamac 5 alloy
A – Surface treatment: White zinc plated
F – Fine thread
L – Left-handed thread

SP1001 – ZAMAC RELEASE SYSTEM HEAD



Code	d1 +0,2/-0 (mm)	b3 +0/-0,15 (mm)	l1 ±0,2 (mm)	l2 ±0,2 (mm)	l3 +0/-0,2 (mm)	d2 ±0,1 (mm)	b1 +0/-0,2 (mm)	b2 +0,1/-0 (mm)	m	l4 ±0,1 (mm)
SP1001	8,1	11	49	41	8	15,9	26	16	M10x1	1

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
H	Zamac 5 alloy	A	White zinc plated (Zn/White)

F. ex.: SP1001 HA:

SP1001 – Product type

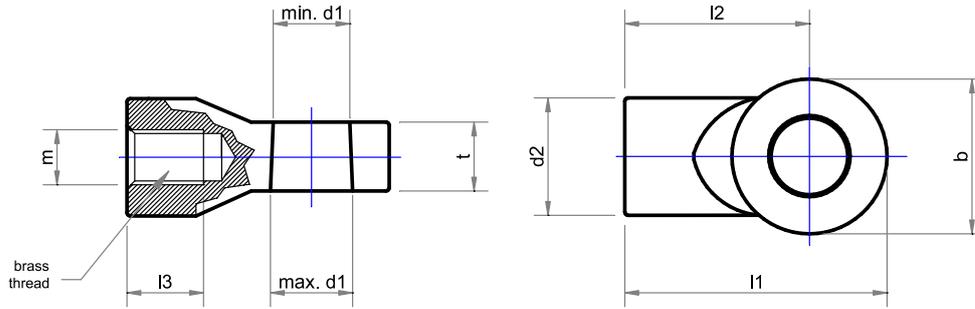
H – Material: Zamac 5 alloy

A – Surface treatment: White zinc plated

PLASTIC END FITTING GROUP



PL 1 - PLASTIC EYELET WITH BRASS THREAD

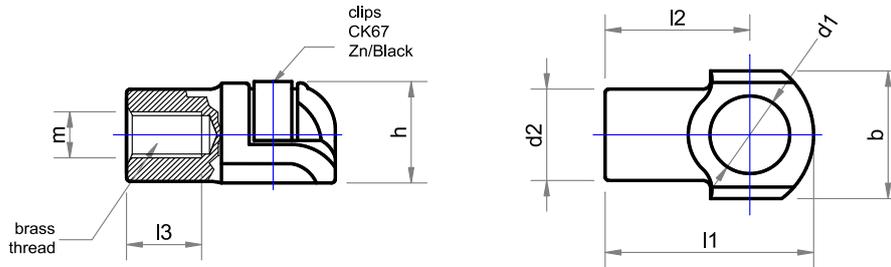


Code	d1 min. (mm)	d1 max. (mm)	m	l2 ±0,3 (mm)	l1 ±0,3 (mm)	d2 ±0,3 (mm)	b ±0,3 (mm)	t ±0,1 (mm)	l3 min. (mm)
PL 101	11,1	12	M6	27	38	17	22,5	10	11
PL 102	11,1	12	M8	27	38	17	22,5	10	11

Code	Material	Tensile strength
F	Body: PA66 GF30 Thread: Brass	3000 N

F. ex.: PL 101: PL 1 – End fitting type 01 – End fitting size

PL 2 - PLASTIC BALL SOCKET WITH BRASS THREAD

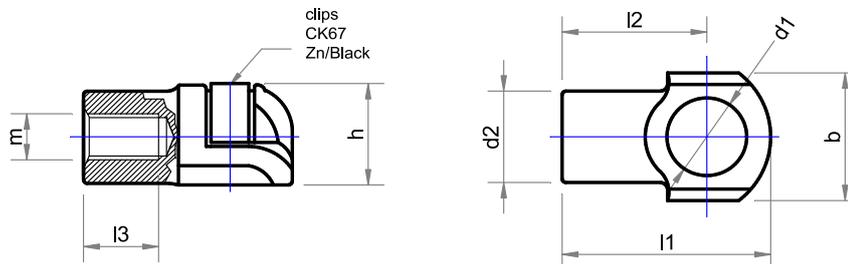


Code	d1 +0,2 (mm)	m	l2 ±0,3 (mm)	l1 ±0,3 (mm)	d2 ±0,1 (mm)	b ±0,3 (mm)	h ±0,3 (mm)	l3 min. (mm)
PL 201	10	M6	18	27	12	16	13	9,5

Code	Material	Tensile strength
F	Body: PA66 GF30 Clip: CK67 Zn/Black Thread: Brass	2000 N

F. ex.: PL 201: PL 2 – End fitting type 01 – End fitting size

PL 2 - PLASTIC BALL SOCKET

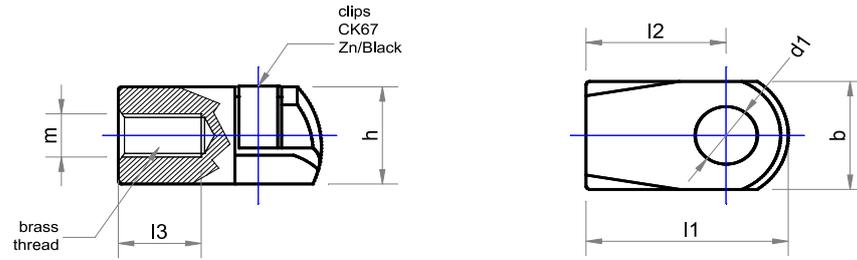


Code	d1 +0,2 (mm)	m	l2 ±0,3 (mm)	l1 ±0,3 (mm)	d2 ±0,1 (mm)	b ±0,3 (mm)	h ±0,3 (mm)	l3 min. (mm)
PL 202	10	M6	18	27	12	16	13	9,5

Code	Material	Tensile strength
F	Body: PA66 GF30 Clip: CK67 Zn/Black Thread: PA66 GF30	2000 N

F. ex.: PL 202: PL 2 – End fitting type 02 – End fitting size

PL 3 - PLASTIC BALL SOCKET WITH BRASS THREAD

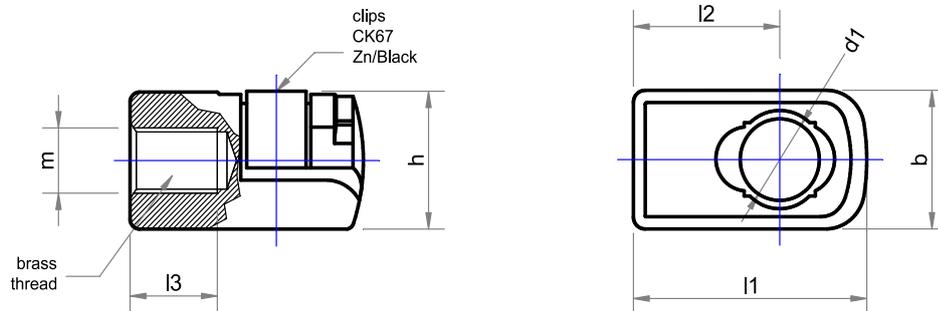


Code	d1 +0,2 (mm)	m	l2 ±0,3 (mm)	l1 ±0,3 (mm)	b ±0,3 (mm)	h ±0,1 (mm)	l3 min. (mm)
PL 301	8	M6	18	26	15	13,5	11

Code	Material	Tensile strength
F	Body: PA66 GF30 Clip: CK67 Zn/Black Thread: Brass	2000 N

F. ex.: PL 301: PL 3 – End fitting type 01 – End fitting size

PL 4 - PLASTIC BALL SOCKET WITH BRASS THREAD

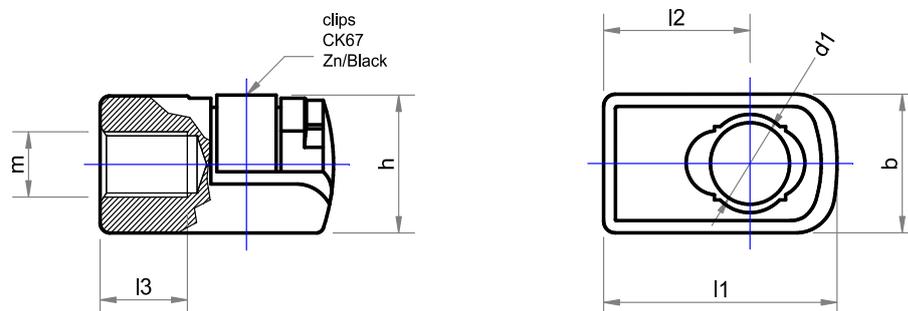


Code	d1 +0,2 (mm)	m	l2 ±0,3 (mm)	l1 ±0,3 (mm)	b ±0,3 (mm)	h ±0,1 (mm)	l3 min. (mm)
PL 401	10	M6	18	29,5	17	16	11
PL 402	10	M8	18	29,5	17	16	11

Code	Material	Tensile strength
F	Body: PA66 GF30 Clip: CK67 Zn/Black Thread: Brass	3000 N

F. ex.: PL 401: PL 4 – End fitting type 01 – End fitting size

PL 4 - PLASTIC BALL SOCKET

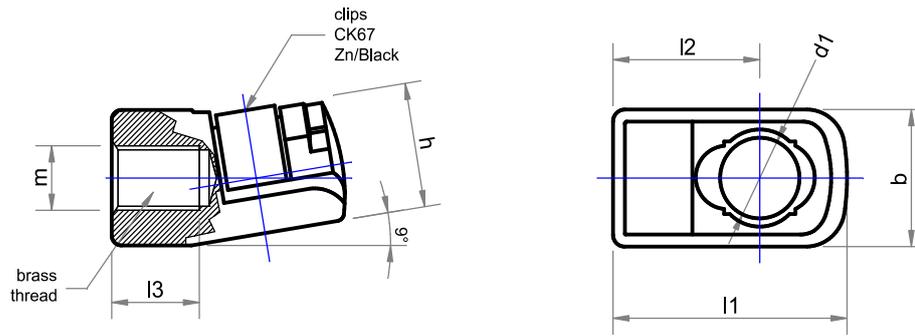


Code	d1 +0,2 (mm)	m	l2 ±0,3 (mm)	l1 ±0,3 (mm)	b ±0,3 (mm)	h ±0,1 (mm)	l3 min. (mm)
PL 403	10	M6	18	29,5	17	16	11

Code	Material	Tensile strength
F	Body: PA66 GF30 Clip: CK67 Zn/Black Thread: PA66 GF30	2000 N

F. ex.: PL 401: PL 4 – End fitting type 01 – End fitting size

PL 5 - PLASTIC BALL SOCKET WITH BRASS THREAD



Code	d1 +0,2 (mm)	m	l2 ±0,3 (mm)	l1 ±0,3 (mm)	b ±0,3 (mm)	h ±0,3 (mm)	l3 min. (mm)
PL 501	10	M6	19	29,5	17	16	11
PL 502	10	M8	19	29,5	17	16	11

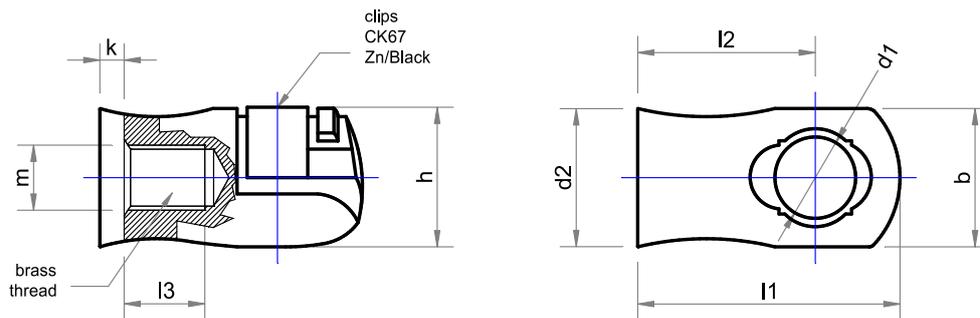
Code	Material	Tensile strength
F	Body: PA66 GF30 Clip: CK67 Zn/Black Thread: Brass	3000 N

F. ex.: PL 501:

PL 5 – End fitting type

01 – End fitting size

PL 6 - PLASTIC BALL SOCKET WITH BRASS THREAD



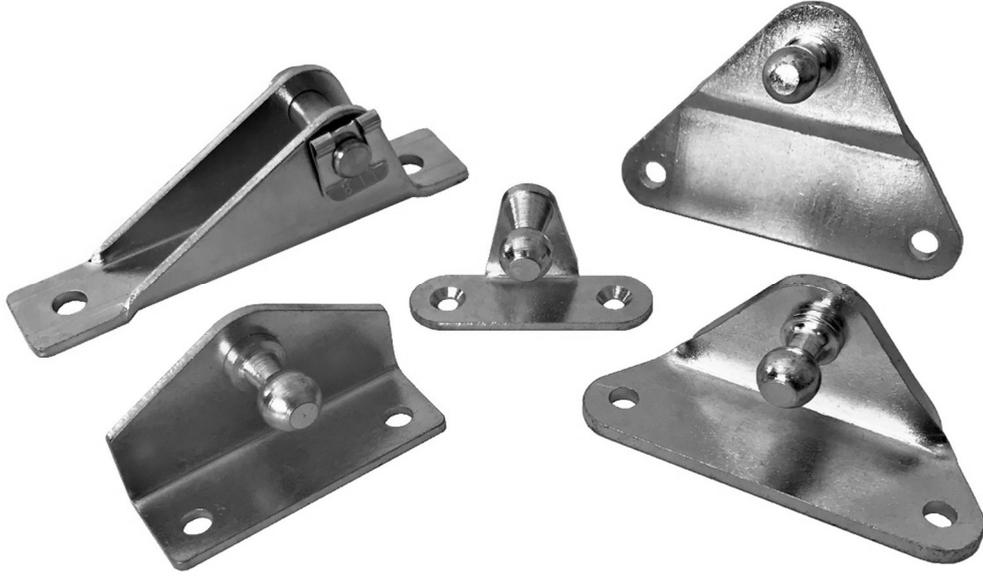
Code	d1 +0,2 (mm)	m	l2 ±0,3 (mm)	l1 ±0,3 (mm)	k ±0,1 (mm)	d2 ±0,3 (mm)	b ±0,3 (mm)	h ±0,3 (mm)	l3 min. (mm)
PL 601	10	M6	22	32,5	3,6	17	17,5	16	10
PL 602	10	M8	22	32,5	3	17	17,5	16	10

Code	Material	Tensile strength
F	Body: PA66 GF30 Clip: CK67 Zn/Black Thread: Brass	3000 N

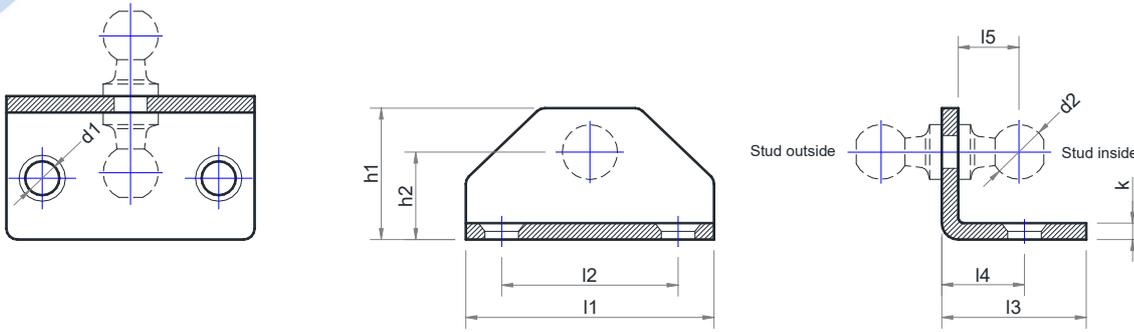
F. ex.: PL 601:

PL 6 – End fitting type

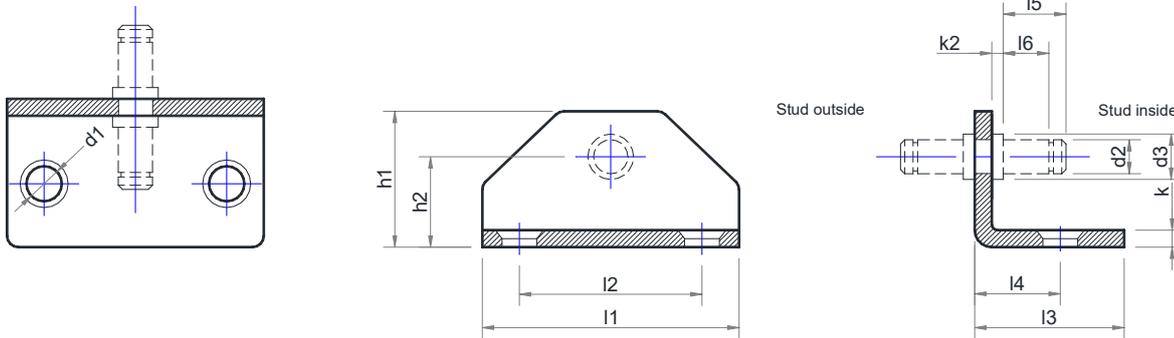
01 – End fitting size



BR 1001 - "L" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)	k ±0,1 (mm)	d2 h9 (mm)	l5 ±0,3 (mm)
BR 100102 (I/O)	45	32	26,2	15	6,2	24	16	3	10	11
BR 100103 (I/O)	45	32	26,2	15	6,2	24	16	3	10	12,5
BR 100104 (I/O)	45	32	26,2	15	6,2	24	16	3	13	13



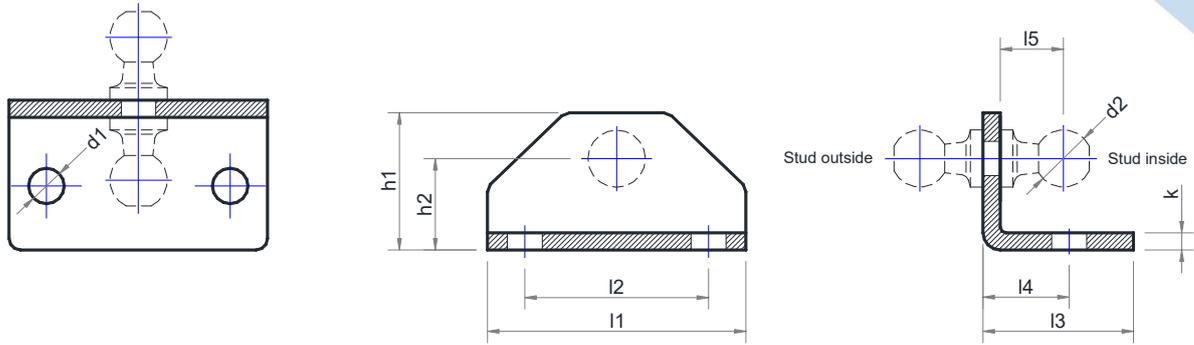
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	l6 ±0,3 (mm)	l5 ±0,3 (mm)
BR 100106 (I/O)	45	32	26,2	15	6,2	24	16	3	6	8	2	8	11
BR 100107 (I/O)	45	32	26,2	15	6,2	24	16	3	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

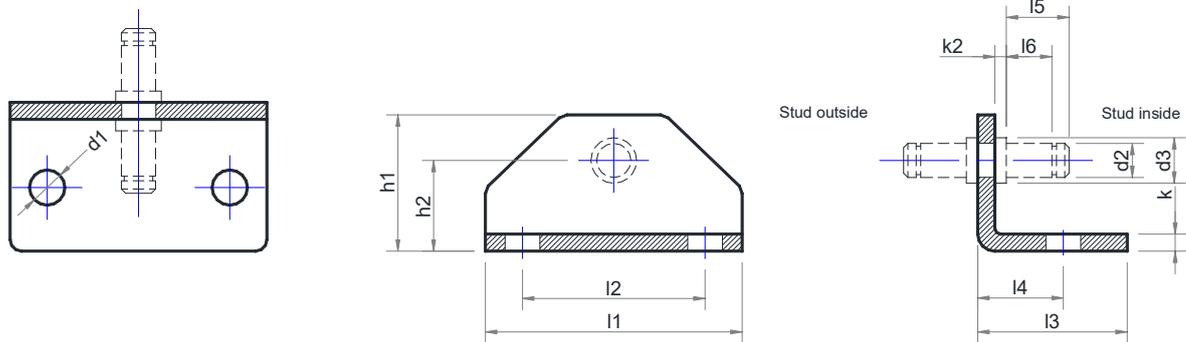
Code	Material	Code	Surface treatment	Other
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	Z	No plating, raw material	
		K	Polished	
		Z	No plating, raw material	
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
		K	Polished	
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	L	Electropolished	
		Z	No plating, raw material	
		Z	No plating, raw material	

F. ex. BR100101IAA: BR 1001 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 1002 - "L" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)	k ±0,1 (mm)	d2 h9 (mm)	l5 ±0,3 (mm)
BR 100202 (I/O)	45	32	26,2	15	6,2	24	16	3	10	11
BR 100203 (I/O)	45	32	26,2	15	6,2	24	16	3	10	12,5
BR 100204 (I/O)	45	32	26,2	15	6,2	24	16	3	13	13



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	l6 ±0,3 (mm)	l5 ±0,3 (mm)
BR 100206 (I/O)	45	32	26,2	15	6,2	24	16	3	6	8	2	8	11
BR 100207 (I/O)	45	32	26,2	15	6,2	24	16	3	8	10	2	12	15,5

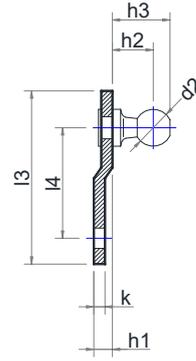
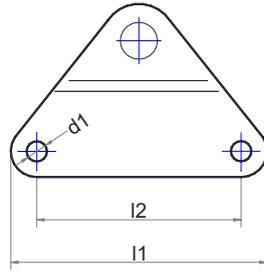
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	Z	No plating, raw material	
		K	Polished	
		Z	No plating, raw material	
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
		Z	No plating, raw material	
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

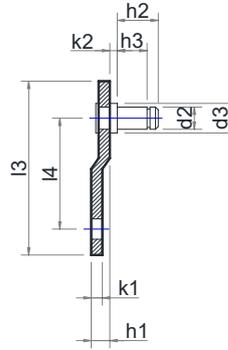
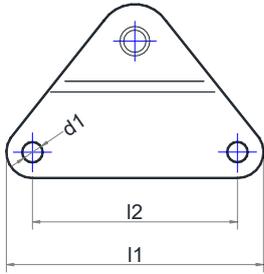
F. ex. BR100201 AAI:

BR 1002 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 2001 – “Z” BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 +0,5/-0 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h2 ±0,3 (mm)	h3 ±0,3 (mm)
BR 200101	69	55	47	30	5	5	3	8	11	14,5
BR 200102	69	55	47	30	5	5	3	10	11	15,5
BR 200103	69	55	47	30	5	5	3	10	12,5	17
BR 200104	69	55	47	30	5	5	3	13	13	18,5



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 +0,5/-0 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h3 ±0,3 (mm)	h2 ±0,3 (mm)
BR 200106	69	55	47	30	5	5	3	6	8	2	8	11
BR 200107	69	55	47	30	5	5	3	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex. BR200101AA:

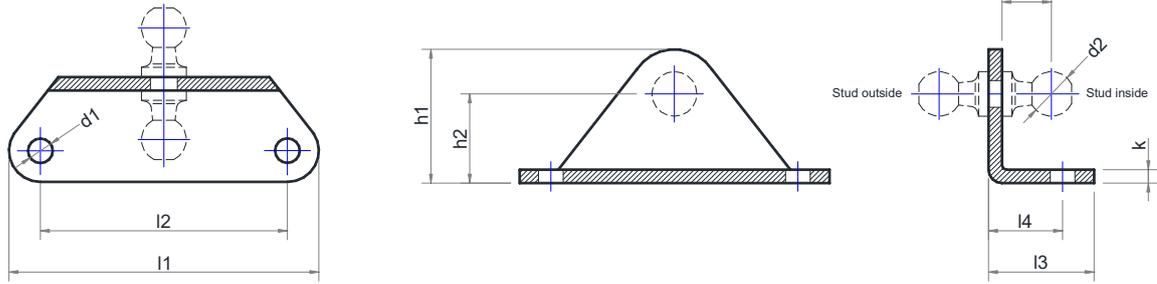
BR 2001 – Bracket type

01 – Stud size

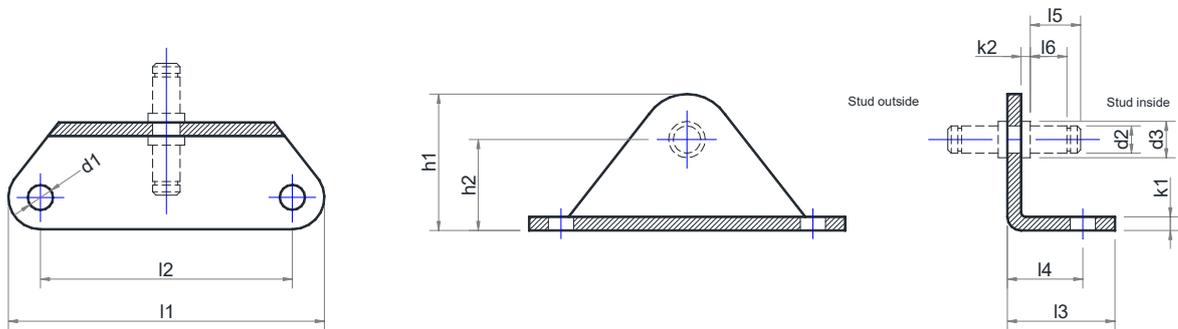
A – Material: Carbon steel

A – Surface treatment: White zinc plated

BR 2001 - "L" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	d1 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k ±0,1 (mm)	d2 h9 (mm)	l5 ±0,3 (mm)
BR 200101 (I/O)	69	55	23,5	16,5	5	29,5	19,5	3	8	11
BR 200102 (I/O)	69	55	23,5	16,5	5	29,5	19,5	3	10	11
BR 200103 (I/O)	69	55	23,5	16,5	5	29,5	19,5	3	10	12,5
BR 200104 (I/O)	69	55	23,5	16,5	5	29,5	19,5	3	13	13



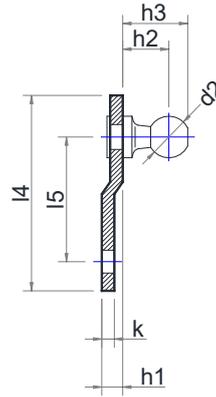
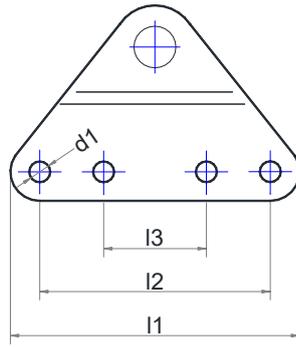
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	d1 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	l6 ±0,3 (mm)	l5 ±0,3 (mm)
BR 200106 (I/O)	69	55	23,5	16,5	5	29,5	19,5	3	6	8	2	8	11
BR 200107 (I/O)	69	55	23,5	16,5	5	29,5	19,5	3	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

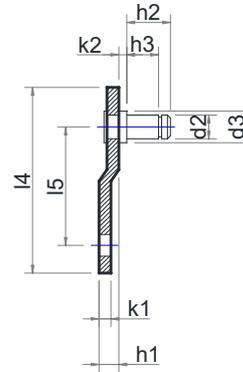
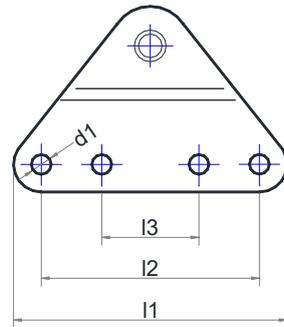
Code	Material	Code	Surface treatment	Other
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	I Stud inside O Stud outside
		Z	No plating, raw material	
		Z	No plating, raw material	
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	I Stud inside O Stud outside
		Z	No plating, raw material	
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	I Stud inside O Stud outside
		L	Electropolished	
		Z	No plating, raw material	

F. ex. BR200101IAA: BR 2001 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 2002 – “Z” BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 +0,5/-0 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h2 ±0,3 (mm)	h3 ±0,3 (mm)
BR 200201	69	55	24,5	47	30	5	5	3	8	11	14,5
BR 200202	69	55	24,5	47	30	5	5	3	10	11	15,5
BR 200203	69	55	24,5	47	30	5	5	3	10	12,5	17
BR 200204	69	55	24,5	47	30	5	5	3	13	13	18,5



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 +0,5/-0 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h3 ±0,3 (mm)	h2 ±0,3 (mm)
BR 200206	69	55	24,5	47	30	5	5	3	6	8	2	8	11
BR 200207	69	55	24,5	47	30	5	5	3	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex. BR200201AA:

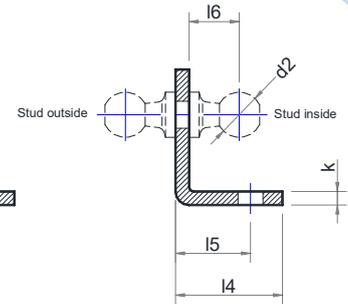
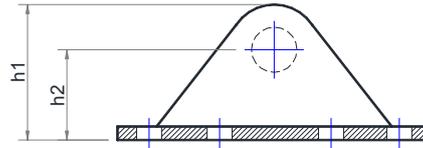
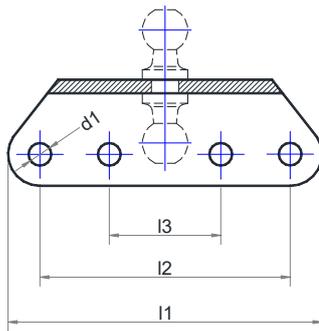
BR 2002 – Bracket type

01 – Stud size

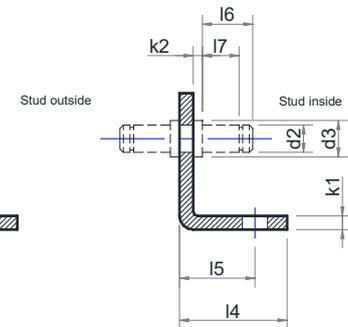
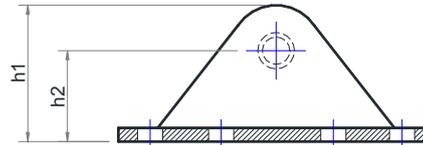
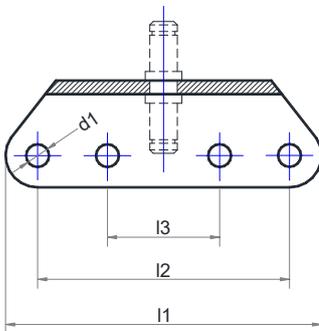
A – Material: Carbon steel

A – Surface treatment: White zinc plated

BR 2002 - "L" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	l5 ±0,5 (mm)	d1 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k ±0,1 (mm)	d2 h9 (mm)	l6 ±0,3 (mm)
BR 200201 (I/O)	69	55	24,5	23,5	16,5	5	29,5	19,5	3	8	11
BR 200202 (I/O)	69	55	24,5	23,5	16,5	5	29,5	19,5	3	10	11
BR 200203 (I/O)	69	55	24,5	23,5	16,5	5	29,5	19,5	3	10	12,5
BR 200204 (I/O)	69	55	24,5	23,5	16,5	5	29,5	19,5	3	13	13



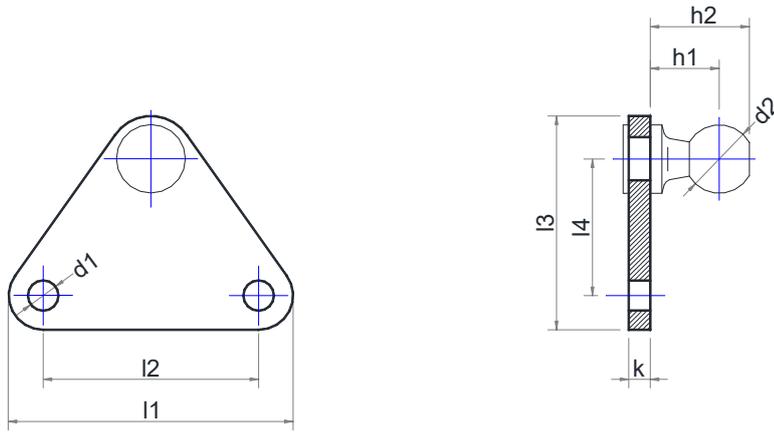
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	l5 ±0,5 (mm)	d1 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	l7 ±0,3 (mm)	l6 ±0,3 (mm)
BR 200206 (I/O)	69	55	24,5	23,5	16,5	5	29,5	19,5	3	6	8	2	8	11
BR 200207 (I/O)	69	55	24,5	23,5	16,5	5	29,5	19,5	3	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material	
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	

F. ex. BR2002011AA: BR 2002 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 2003 - BRACKET



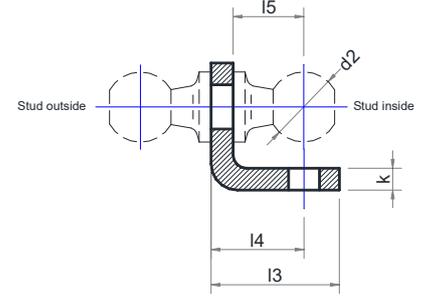
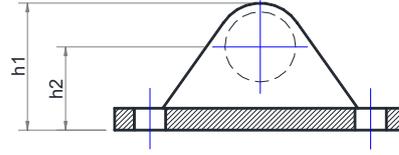
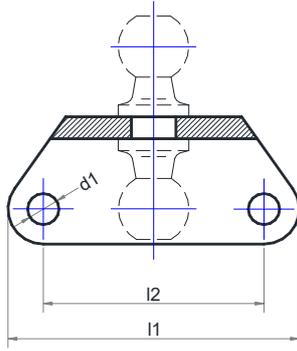
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	d1 ±0,1 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)
BR 200304	66	50	50	32	7,1	5	13	13	18,5
BR 200305	66	50	50	32	7,1	5	16	16	23

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex. BR200301AA: BR 2003 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 2003 – “L” BRACKET



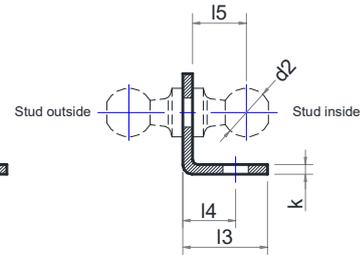
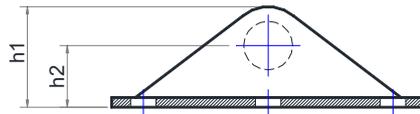
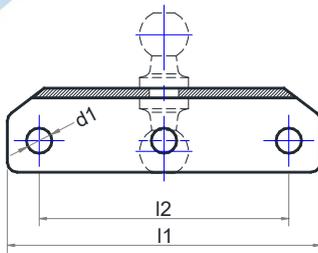
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	d1 ±0,1 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k ±0,1 (mm)	d2 h9 (mm)	l5 ±0,3 (mm)
BR 200304 (I/O)	66	50	29	21,1	7,1	29	19	5	13	13
BR 200305 (I/O)	66	50	29	21,1	7,1	29	19	5	16	16

Material and surface treatment options are presented in the table below:

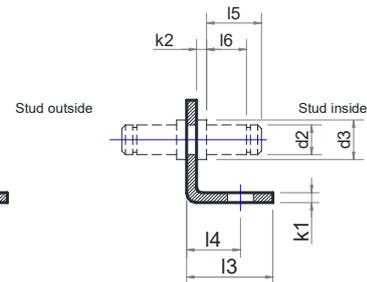
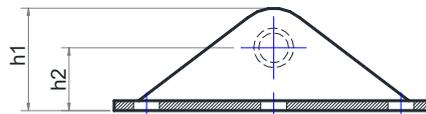
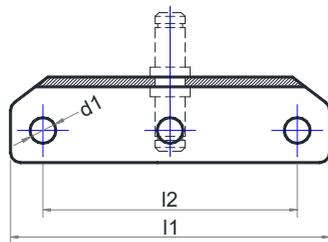
Code	Material	Code	Surface treatment	Other		
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	Z	No plating, raw material	I Stud inside O Stud outside		
		K	Polished			
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material		I Stud inside O Stud outside	
		K	Polished			
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	Z	No plating, raw material			I Stud inside O Stud outside
		L	Electropolished			
		Z	No plating, raw material			

F. ex. BR2003011AA: BR 2003 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 3001 - "L" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	d1 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k ±0,1 (mm)	d2 h9 (mm)	l5 ±0,3 (mm)
BR 300101 (I/O)	64	51	17	10,5	5,2	20,5	12,5	2	8	11
BR 300102 (I/O)	64	51	17	10,5	5,2	20,5	12,5	2	10	11
BR 300103 (I/O)	64	51	17	10,5	5,2	20,5	12,5	2	10	12,5



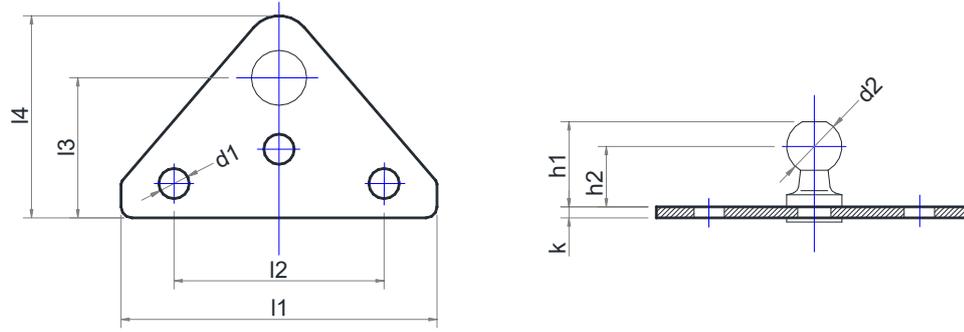
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	d1 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	l6 ±0,3 (mm)	l5 ±0,3 (mm)
BR 300106 (I/O)	64	51	17	10,5	5,2	20,5	12,5	2	6	8	2	8	11
BR 300107 (I/O)	64	51	17	10,5	5,2	20,5	12,5	2	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

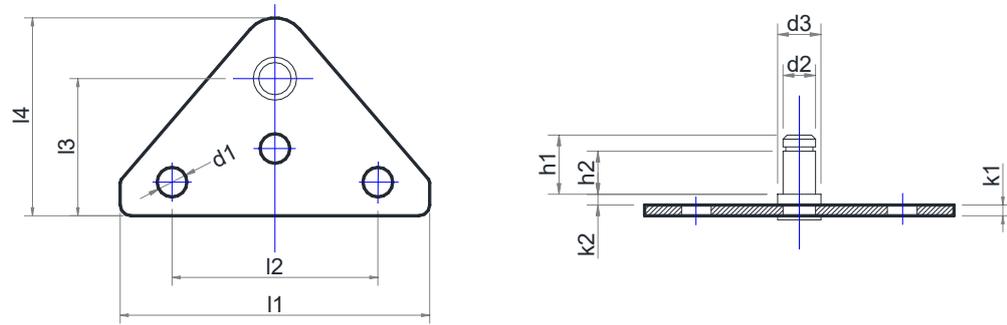
Code	Material	Code	Surface treatment	Other		
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	I Stud inside O Stud outside		
		Z	No plating, raw material			
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		I Stud inside O Stud outside	
		Z	No plating, raw material			
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			I Stud inside O Stud outside
		L	Electropolished			
		Z	No plating, raw material			

F. ex. BR300101AA: BR 3001 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 3002 - BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h2 ±0,5 (mm)	h1 ±0,5 (mm)
BR 300201	57,15	38	25,5	36,8	5,5	2	8	11	14,5
BR 300202	57,15	38	25,5	36,8	5,5	2	10	11	15,5
BR 300203	57,15	38	25,5	36,8	5,5	2	10	12,5	17



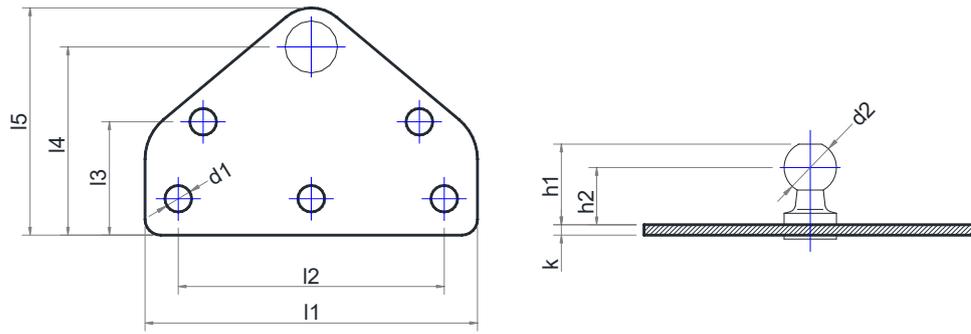
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 300206	57,15	38	25,5	36,8	5,5	2	6	8	2	8	11
BR 300207	57,15	38	25,5	36,8	5,5	2	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

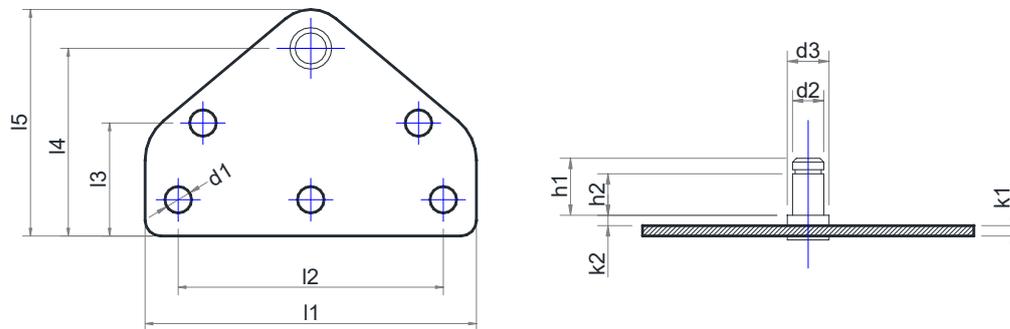
Code	Material	Code	Surface treatment	Other
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	I Stud inside O Stud outside
		Z	No plating, raw material	
		Z	No plating, raw material	
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	I Stud inside O Stud outside
		Z	No plating, raw material	
		Z	No plating, raw material	
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	I Stud inside O Stud outside
		L	Electropolished	
		Z	No plating, raw material	
		Z	No plating, raw material	

F. ex. BR300201AA: BR 3002 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 3003 - BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 ±0,3 (mm)	d1 +0,2/-0 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h2 ±0,5 (mm)	h1 ±0,5 (mm)
BR 300301	63,5	50,8	21,8	36,2	43,7	5,1	2	8	11	14,5
BR 300302	63,5	50,8	21,8	36,2	43,7	5,1	2	10	11	15,5
BR 300303	63,5	50,8	21,8	36,2	43,7	5,1	2	10	12,5	17



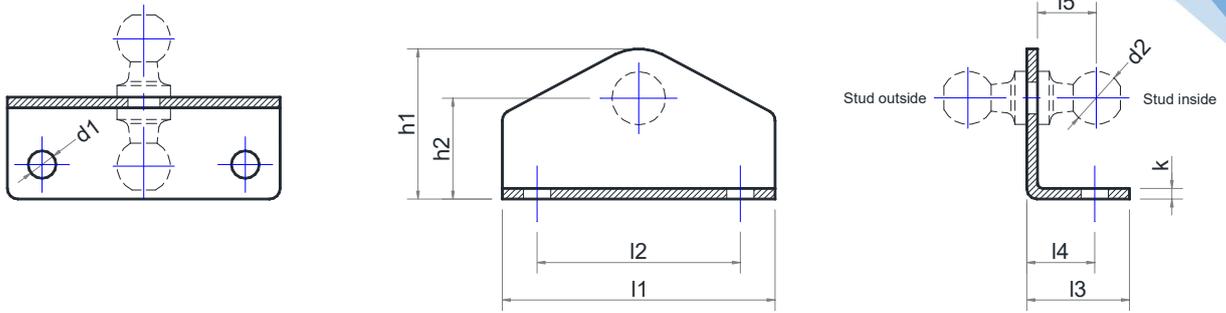
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 ±0,3 (mm)	d1 +0,2/-0 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 300306	63,5	50,8	21,8	36,2	43,7	5,1	2	6	8	2	8	11
BR 300307	63,5	50,8	21,8	36,2	43,7	5,1	2	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

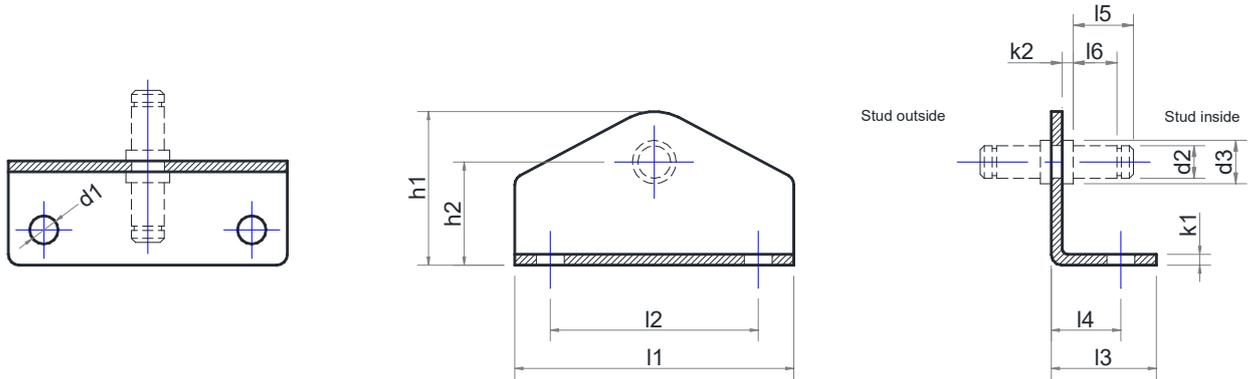
Code	Material	Code	Surface treatment	Other		
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
		Z	No plating, raw material			
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	I Stud inside O Stud outside		
		Z	No plating, raw material			
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		I Stud inside O Stud outside	
		Z	No plating, raw material			
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			I Stud inside O Stud outside
		L	Electropolished			
		Z	No plating, raw material			
		Z	No plating, raw material			

F. ex. BR300301AA: BR 3003 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 4001 - "L" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	d1 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k ±0,1 (mm)	d2 h9 (mm)	l5 ±0,3 (mm)
BR 400102 (I/O)	51	38	19,2	12,7	5,2	28,3	19	2	10	11
BR 400103 (I/O)	51	38	19,2	12,7	5,2	28,3	19	2	10	12,5



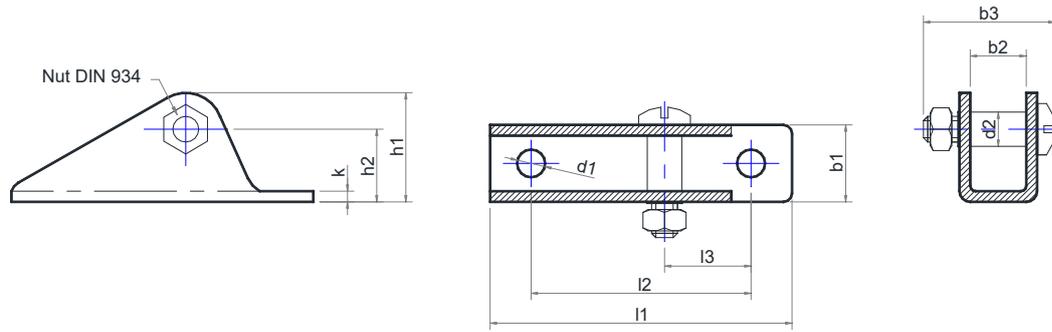
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	d1 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	l5 ±0,3 (mm)	l6 ±0,3 (mm)
BR 400106 (I/O)	51	38	19,2	12,7	5,2	28,3	19	2	6	8	2	11	8
BR 400107 (I/O)	51	38	19,2	12,7	5,2	28,3	19	2	8	10	2	15,5	12

Material and surface treatment options are presented in the table below:

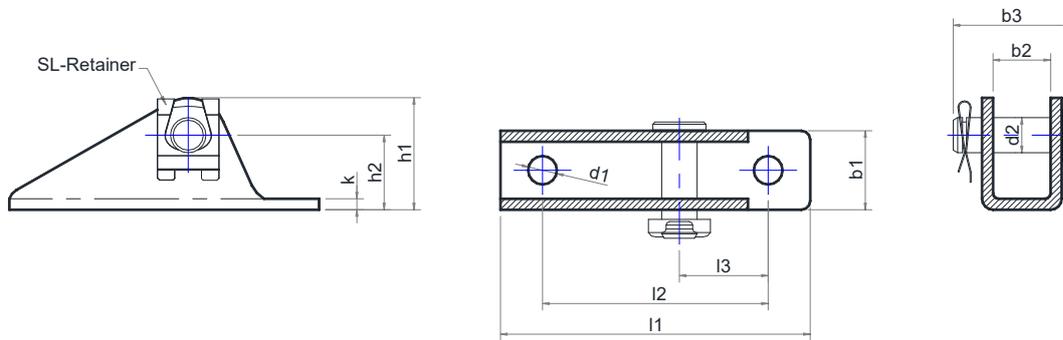
Code	Material	Code	Surface treatment	Other
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	I Stud inside O Stud outside
		Z	No plating, raw material	
		Z	No plating, raw material	
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	I Stud inside O Stud outside
		Z	No plating, raw material	
		Z	No plating, raw material	
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	I Stud inside O Stud outside
		L	Electropolished	
		Z	No plating, raw material	
		Z	No plating, raw material	

F. ex. BR3001011AA: BR 3001 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 501 - "U" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	k ±0,1 (mm)	l3 ±0,3 (mm)	d1 ±0,1 (mm)	d2 h11 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	b1 ±0,3 (mm)	b2 ±0,3 (mm)	b3 ±0,3 (mm)
BR 501101	70	51	2,5	20	6,5	8	25,5	17	18	13	30,5
BR 501201	70	51	2,5	20	6,5	10	25,5	17	18	13	31,9



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	k ±0,1 (mm)	l3 ±0,3 (mm)	d1 ±0,1 (mm)	d2 h11 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	b1 ±0,3 (mm)	b2 ±0,3 (mm)	b3 ±0,3 (mm)
BR 501102	70	51	2,5	20	6,5	8	25,5	17	18	13	26,5
BR 501202	70	51	2,5	20	6,5	10	25,5	17	18	13	26,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C) Nut/SL-Retainer: Standard	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		Z	No plating, raw material
		L	Electropolished
		Z	No plating, raw material

F. ex. BR501101AA:

BR 501 – Bracket type

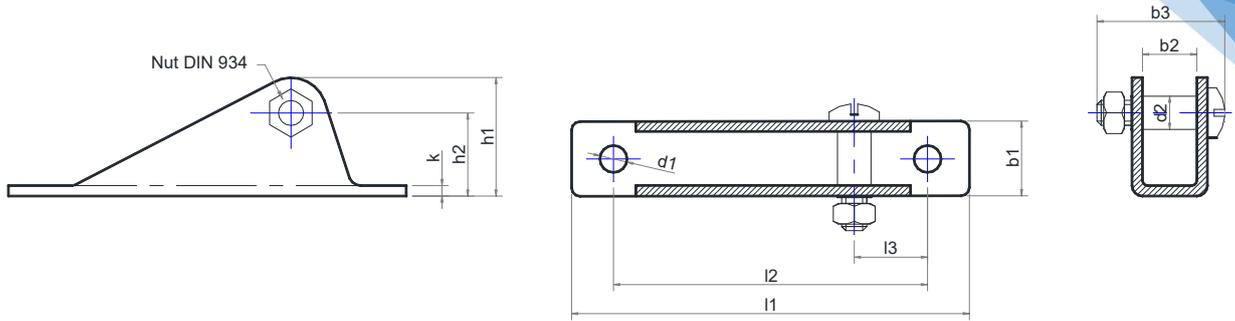
1 - Stud size

01 - Mounting type

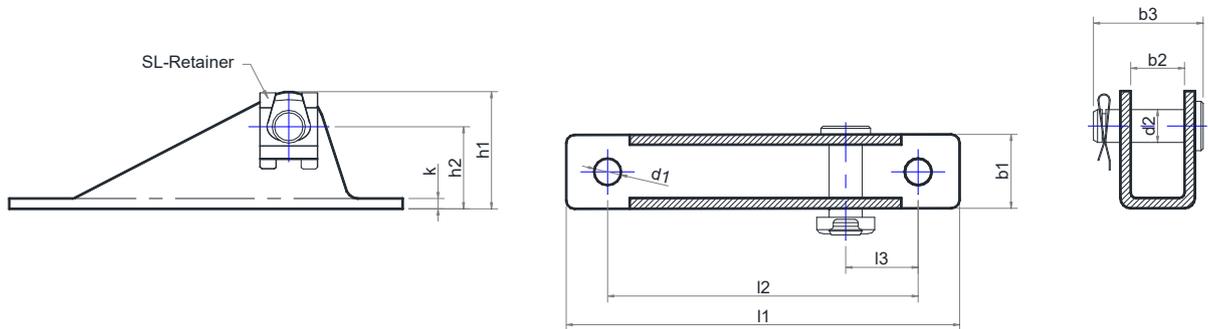
A - Material: Carbon steel

A - Surface treatment: White zinc plated

BR 502-BR 503 - "U" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	k ±0,1 (mm)	l3 ±0,3 (mm)	d1 ±0,1 (mm)	d2 h11 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	b1 ±0,5 (mm)	b2 ±0,5 (mm)	b3 ±0,3 (mm)
BR 502101	95	75	2,5	18	6,5	8	28,5	20	18	13	30,5
BR 502201	95	75	2,5	18	6,5	10	28,5	20	18	13	31,9
BR 503101	105	85	2,5	22,5	6,5	8	31,5	23	18	13	30,5
BR 503201	105	85	2,5	22,5	6,5	10	31,5	23	18	13	31,9



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	k ±0,1 (mm)	l3 ±0,3 (mm)	d1 ±0,1 (mm)	d2 h11 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	b1 ±0,5 (mm)	b2 ±0,5 (mm)	b3 ±0,3 (mm)
BR 502102	95	75	2,5	18	6,5	8	28,5	20	18	13	26,5
BR 502202	95	75	2,5	18	6,5	10	28,5	20	18	13	26,5
BR 503102	105	85	2,5	22,5	6,5	8	31,5	23	18	13	26,5
BR 503202	105	85	2,5	22,5	6,5	10	31,5	23	18	13	26,5

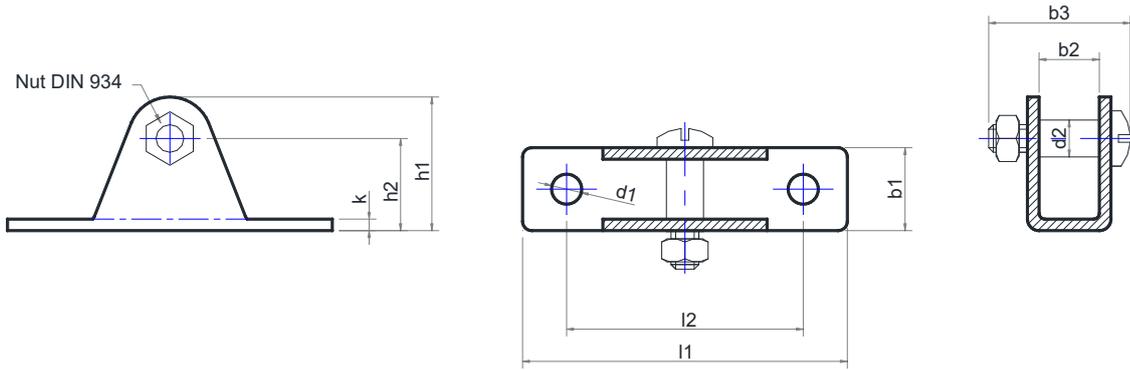
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C) Nut/SL-Retainer: Standard	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	Z	No plating, raw material
		K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
		K	Polished
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	L	Electropolished
		Z	No plating, raw material
		Z	No plating, raw material

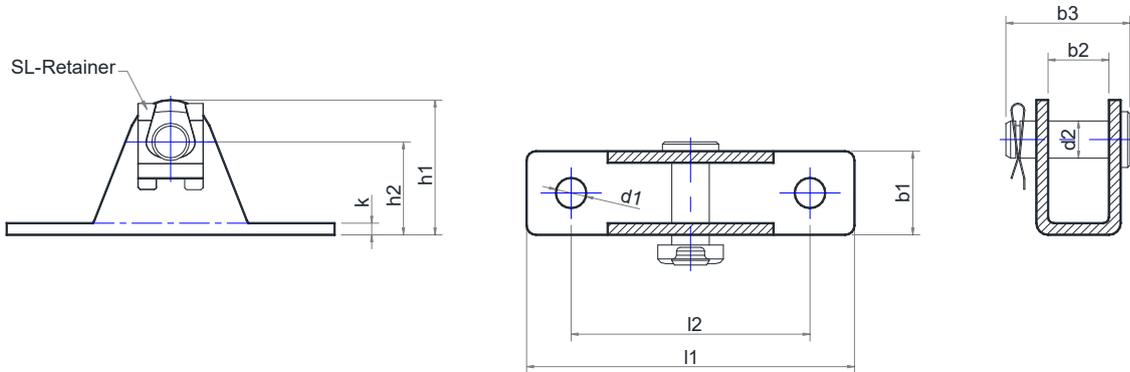
F. ex. BR502101AA:

BR 502 – Bracket type
1 - Stud size
01 – Mounting type
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 504 - "U" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	k ±0,1 (mm)	d1 ±0,1 (mm)	d2 h11 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	b1 ±0,3 (mm)	b2 ±0,3 (mm)	b3 ±0,3 (mm)
BR 504101	70	51	2,5	6,5	8	29	20	18	13	30,5
BR 504201	70	51	2,5	6,5	10	29	20	18	13	31,9



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	k ±0,1 (mm)	d1 ±0,1 (mm)	d2 h11 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	b1 ±0,3 (mm)	b2 ±0,3 (mm)	b3 ±0,3 (mm)
BR 504102	70	51	2,5	6,5	8	29	20	18	13	26,5
BR 504202	70	51	2,5	6,5	10	29	20	18	13	26,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C) Nut/SL-Retainer: Standard	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex. BR504101AA:

BR 504 – Bracket type

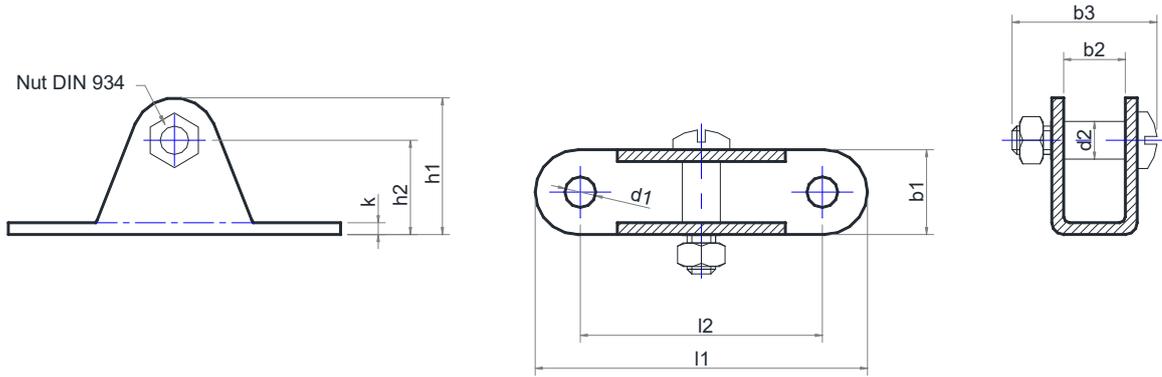
1 - Stud size

01 - Mounting type

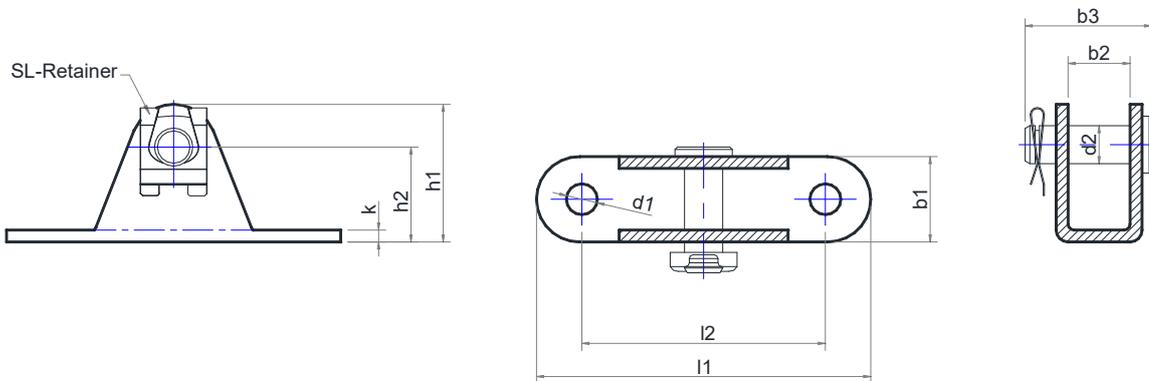
A - Material: Carbon steel

A - Surface treatment: White zinc plated

BR 505 - "U" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	k ±0,1 (mm)	d1 ±0,1 (mm)	d2 h11 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	b1 ±0,3 (mm)	b2 ±0,3 (mm)	b3 ±0,3 (mm)
BR 505101	70	51	2,5	6,5	8	29	20	18	13	30,5
BR 505201	70	51	2,5	6,5	10	29	20	18	13	31,9



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	k ±0,1 (mm)	d1 ±0,1 (mm)	d2 h11 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	b1 ±0,3 (mm)	b2 ±0,3 (mm)	b3 ±0,3 (mm)
BR 505102	70	51	2,5	6,5	8	29	20	18	13	26,5
BR 505202	70	51	2,5	6,5	10	29	20	18	13	26,5

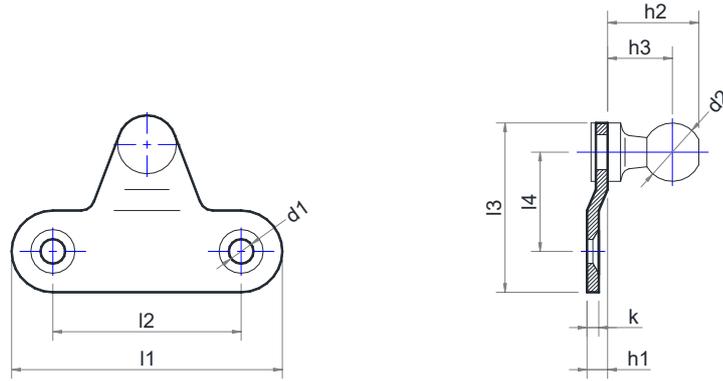
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C) Nut/SL-Retainer: Standard	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

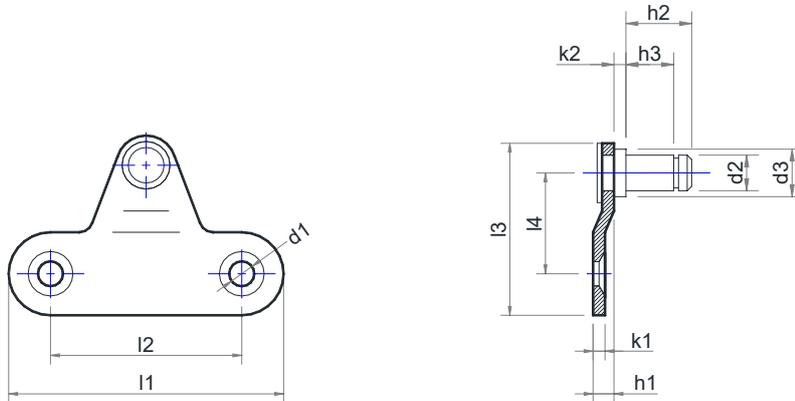
F. ex. BR505101AA:

BR 5015 – Bracket type
1 - Stud size
01 – Mounting type
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 6001 – “Z” BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 600101	46,2	32,2	31	19	4,1	3,5	2	8	11	14,5
BR 600102	46,2	32,2	31	19	4,1	3,5	2	10	11	15,5
BR 600103	46,2	32,2	31	19	4,1	3,5	2	10	12,5	17



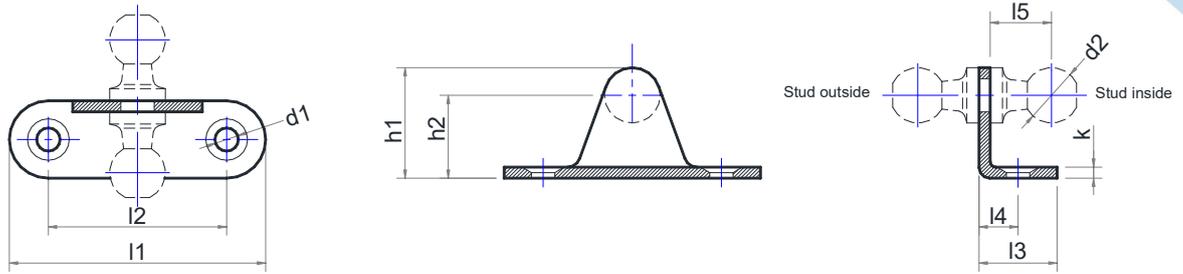
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h3 ±0,3 (mm)	h2 ±0,3 (mm)
BR 600106	46,2	32,2	31	19	4,1	3,5	2	6	8	2	8	11
BR 600107	46,2	32,2	31	19	4,1	3,5	2	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

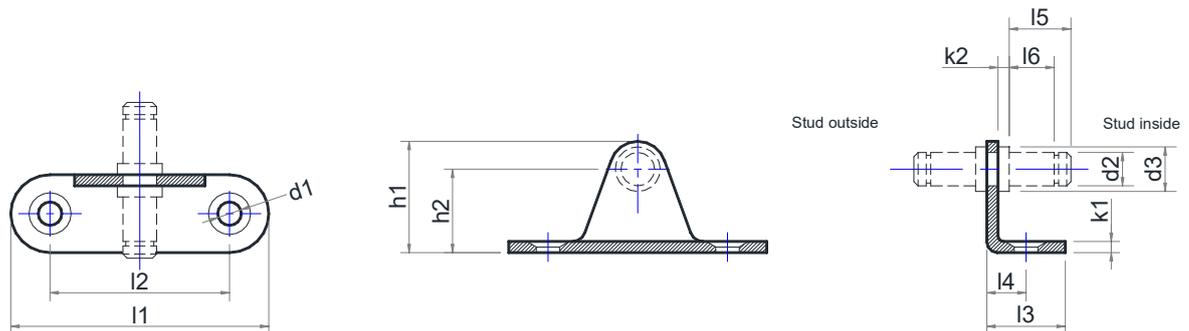
Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
		K	Polished
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material
		K	Polished
		L	Electropolished
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material
		Z	No plating, raw material

F. ex. BR600101AA: BR 6001 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 6001 - "L" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)	k ±0,1 (mm)	d2 h9 (mm)	l5 ±0,3 (mm)
BR 600101 (I/O)	46,2	32,2	14	7	4,1	20	15	2	8	11
BR 600102 (I/O)	46,2	32,2	14	7	4,1	20	15	2	10	11
BR 600103 (I/O)	46,2	32,2	14	7	4,1	20	15	2	10	12,5



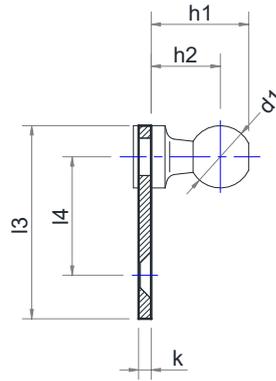
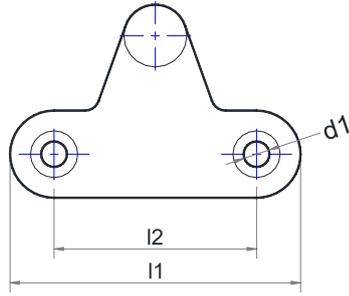
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	l5 ±0,3 (mm)	l6 ±0,3 (mm)
BR 600106 (I/O)	46,2	32,2	14	7	4,1	20	15	2	6	8	2	11	8
BR 600107 (I/O)	46,2	32,2	14	7	4,1	20	15	2	8	10	2	15,5	12

Material and surface treatment options are presented in the table below:

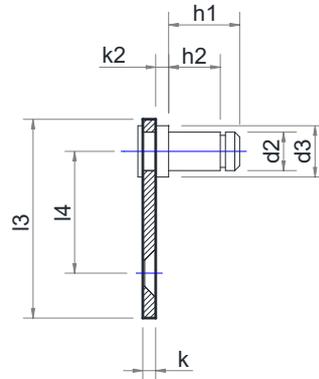
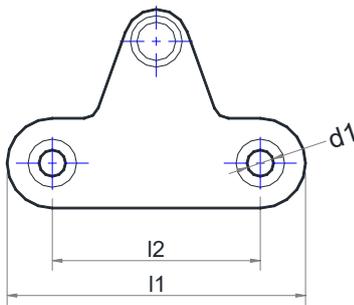
Code	Material	Code	Surface treatment	Other
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside
		B	Black zinc plated (Zn/Black)	
		C	Yellow zinc plated (Zn/Yellow)	
		D	Blue zinc plated (Zn/Blue)	
		E	Green zinc plated (Zn/Green)	
		F	Matte nickel plated	
		G	Shiny nickel plated	
		H	Chrome plated	
		I	Phosphate plated	
		Z	No plating, raw material	
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished	
		Z	No plating, raw material	
		Z	No plating, raw material	
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished	
		Z	No plating, raw material	
		Z	No plating, raw material	
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished	
		L	Electropolished	
		Z	No plating, raw material	
		Z	No plating, raw material	

F. ex. BR600101IAA: BR 6001 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 6002 – BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 600201	46,2	32,2	31	19	4,1	3,5	2	8	11	14,5
BR 600202	46,2	32,2	31	19	4,1	3,5	2	10	11	15,5
BR 600203	46,2	32,2	31	19	4,1	3,5	2	10	12,5	17



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	d1 +0,2/-0 (mm)	h1 ±0,3 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h3 ±0,3 (mm)	h2 ±0,3 (mm)
BR 600206	46,2	32,2	31	19	4,1	3,5	2	6	8	2	8	11
BR 600207	46,2	32,2	31	19	4,1	3,5	2	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		Z	No plating, raw material
		L	Electropolished
		Z	No plating, raw material

F. ex. BR600201AA:

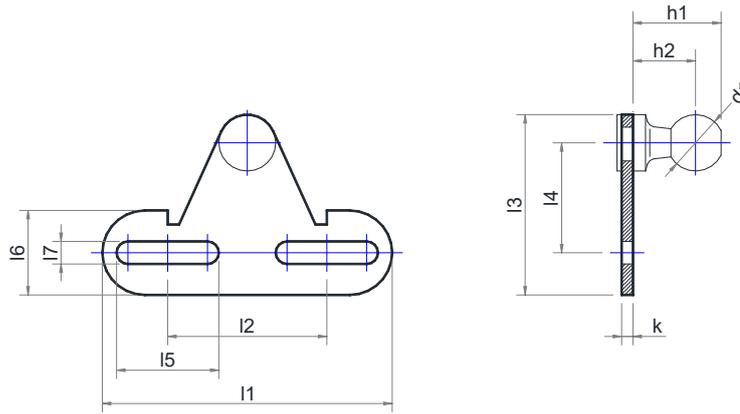
BR 6002 – Bracket type

01 – Stud size

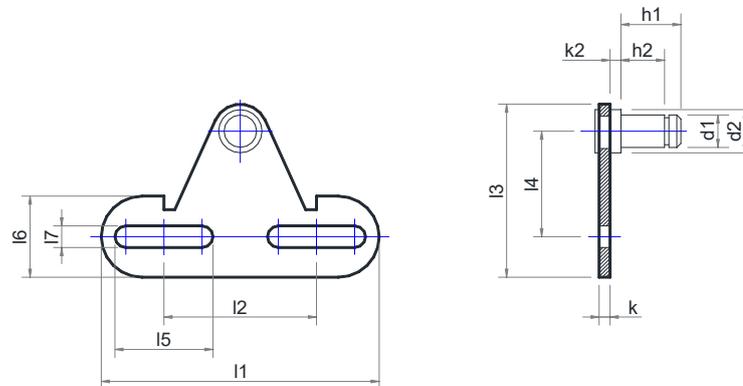
A – Material: Carbon steel

A – Surface treatment: White zinc plated

BR 6003 – BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 +0,2/-0 (mm)	l6 ±0,3 (mm)	l7 +0,2/-0 (mm)	k ±0,1 (mm)	d1 h9 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 600301	51	28	32	19,5	18	15	4	2	8	11	14,5
BR 600302	51	28	32	19,5	18	15	4	2	10	11	15,5
BR 600303	51	28	32	19,5	18	15	4	2	10	12,5	17



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 +0,2/-0 (mm)	l6 ±0,3 (mm)	l7 +0,2/-0 (mm)	k1 ±0,1 (mm)	d1 h11 (mm)	d2 h14 (mm)	k2 +0,4/-0 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 600306	51	28	32	19,5	18	15	4	2	6	8	2	8	11
BR 600307	51	28	32	19,5	18	15	4	2	8	10	2	12	15,5

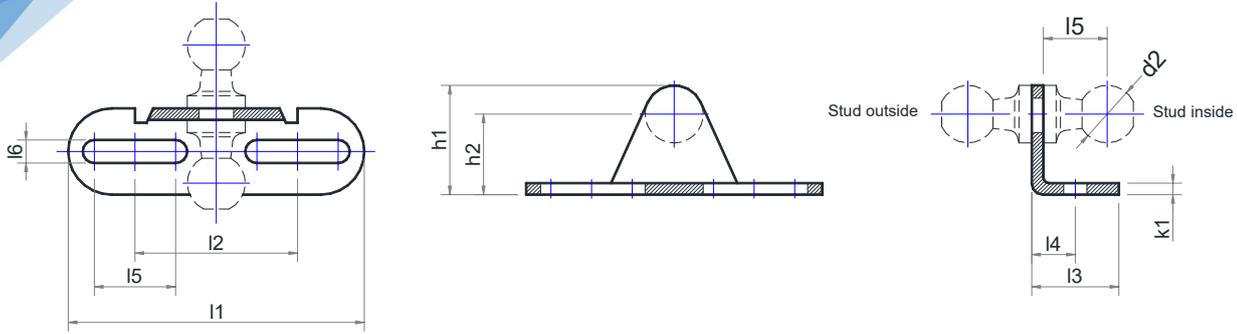
Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

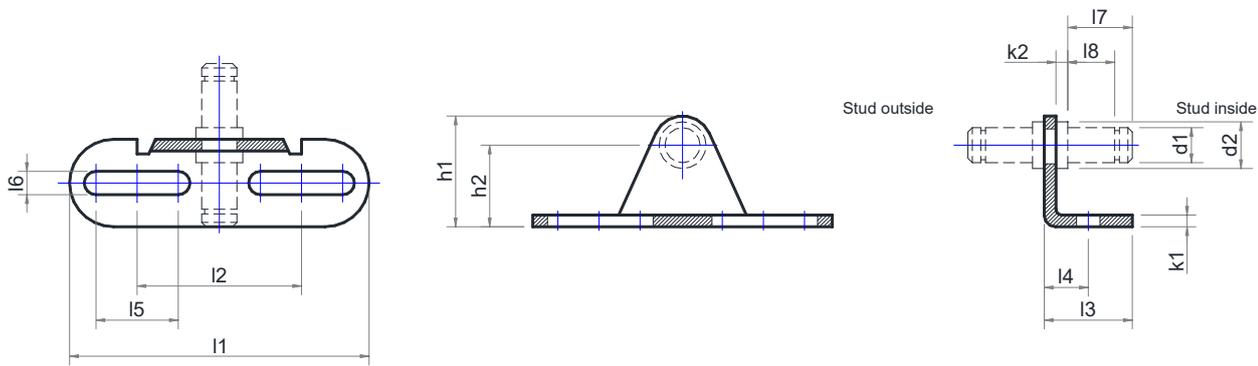
F. ex. BR600301AA:

BR 6003 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 6003 – “L” BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	l5 +0,2/-0 (mm)	l6 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k ±0,1 (mm)	d1 h9 (mm)	l7 ±0,3 (mm)
BR 600301 (I/O)	51	28	15	7,5	18	4	19	14	2	8	11
BR 600302 (I/O)	51	28	15	7,5	18	4	19	14	2	10	11
BR 600303 (I/O)	51	28	15	7,5	18	4	19	14	2	10	12,5



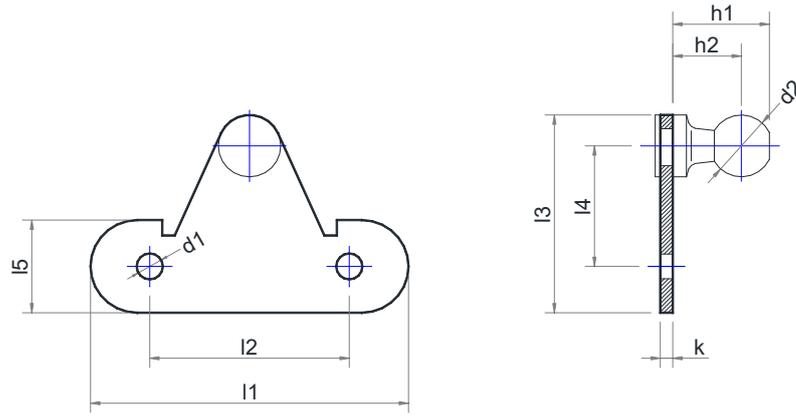
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	l5 +0,2/-0 (mm)	l6 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k1 ±0,1 (mm)	d1 h11 (mm)	d2 h14 (mm)	k2 +0,4/-0 (mm)	l8 ±0,3 (mm)	l7 ±0,3 (mm)
BR 600306 (I/O)	51	28	15	7,5	18	4	19	14	2	6	8	2	8	11
BR 600307 (I/O)	51	28	15	7,5	18	4	19	14	2	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

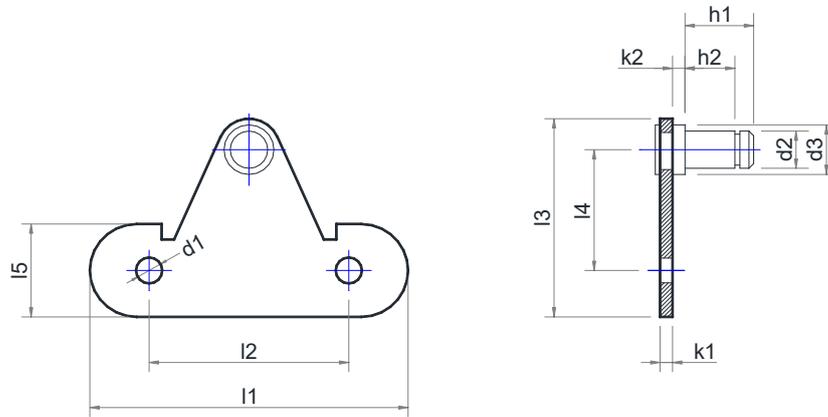
Code	Material	Code	Surface treatment	Other		
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	Z	No plating, raw material	I Stud inside O Stud outside		
		K	Polished			
		Z	No plating, raw material			
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		I Stud inside O Stud outside	
		Z	No plating, raw material			
		K	Polished			
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			I Stud inside O Stud outside
		L	Electropolished			
		Z	No plating, raw material			
		Z	No plating, raw material			

F. ex. BR 600301IAA: BR 6003 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 6004 – BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 ±0,3 (mm)	d1 +0,2/-0 (mm)	k ±0,1 (mm)	d1 h9 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 600401	51	32	32	19,5	15	4,2	2	8	11	11
BR 600402	51	32	32	19,5	15	4,2	2	10	11	11
BR 600403	51	32	32	19,5	51	4,2	2	10	12,5	12,5



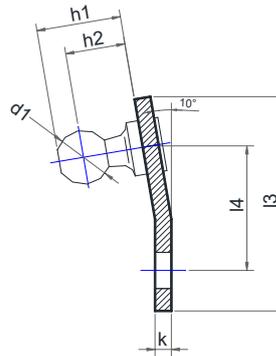
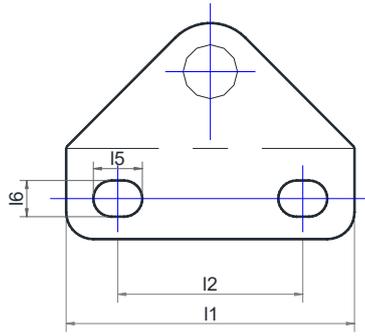
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 ±0,3 (mm)	d1 +0,2/-0 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 600406	51	32	32	19,5	15	4,2	2	6	8	2	8	11
BR 600407	51	32	32	19,5	15	4,2	2	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

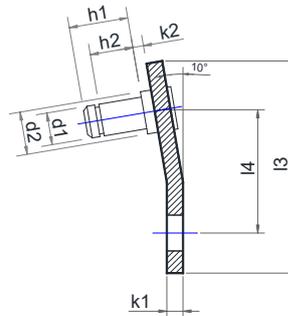
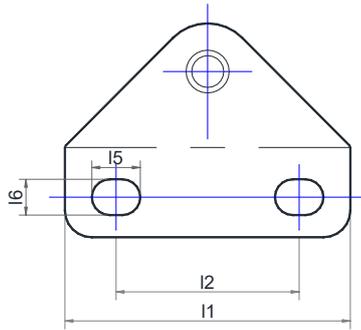
Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex. BR600401AA: BR 6004 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 7001-BR 7002 – BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 +0,2/-0 (mm)	l6 +0,2/-0 (mm)	k ±0,1 (mm)	d1 h9 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 700101	53	34	39,7	23	9	6,7	3	8	11	14,5
BR 700102	53	34	39,7	23	9	6,7	3	10	11	15,5
BR 700103	53	34	39,7	23	9	6,7	3	10	12,5	17
BR 700104	53	34	39,7	23	9	6,7	3	13	13	18,5
BR 700204	53	34	41,7	25	9	6,7	4	13	13	18,5
BR 700205	53	34	41,7	25	9	6,7	4	16	16	23



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,3 (mm)	l4 ±0,3 (mm)	l5 +0,2/-0 (mm)	l6 +0,2/-0 (mm)	k1 ±0,1 (mm)	d1 h11 (mm)	d2 h14 (mm)	k2 +0,4/-0 (mm)	h2 ±0,3 (mm)	h1 ±0,3 (mm)
BR 700106	53	34	39,7	23	9	6,7	3	6	8	2	8	11
BR 700107	53	34	39,7	23	9	6,7	3	8	10	2	12	15,5
BR 700207	53	34	41,7	25	9	6,7	4	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
		K	Polished
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	Z	No plating, raw material
		K	Polished
		L	Electropolished
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material
		Z	No plating, raw material

F. ex. BR700101AA:

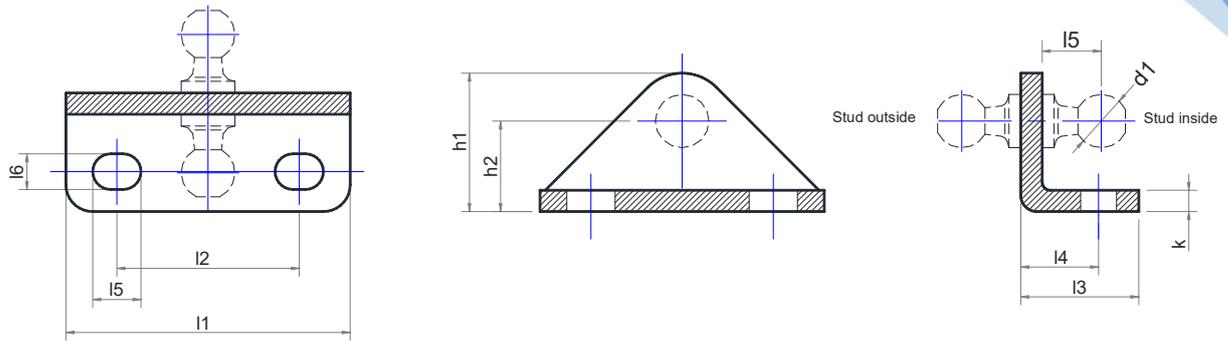
BR 7001 – Bracket type

01 – Stud size

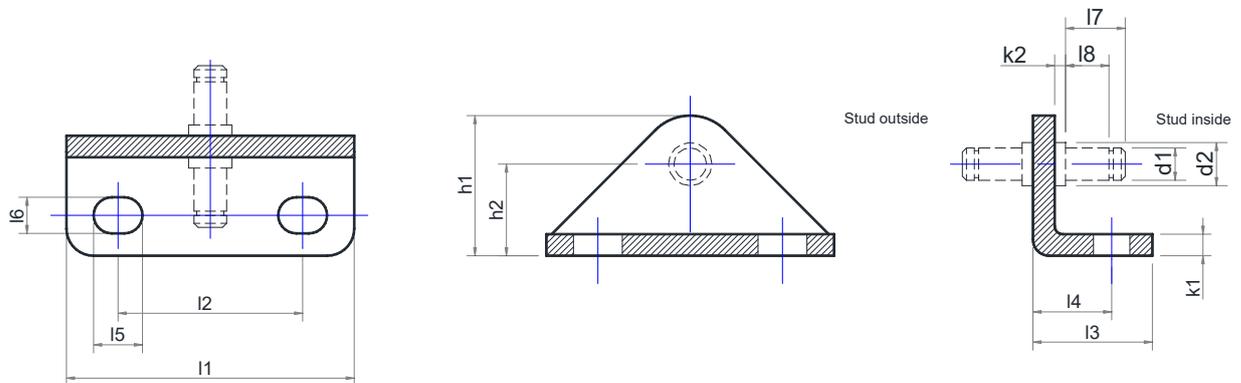
A – Material: Carbon steel

A – Surface treatment: White zinc plated

BR 7001-BR 7002- "L" BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	l5 +0,2/-0 (mm)	l6 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k ±0,1 (mm)	d1 h9 (mm)	l5 ±0,3 (mm)
BR 700101 (I/O)	53	34	19	11,5	9	6,7	26	17	3	8	11
BR 700102 (I/O)	53	34	19	11,5	9	6,7	26	17	3	10	11
BR 700103 (I/O)	53	34	19	11,5	9	6,7	26	17	3	10	12,5
BR 700104 (I/O)	53	34	19	11,5	9	6,7	26	17	3	13	13
BR 700204 (I/O)	53	34	22	14,5	9	6,7	26	17	4	13	13
BR 700205 (I/O)	53	34	22	14,5	9	6,7	26	17	4	16	16



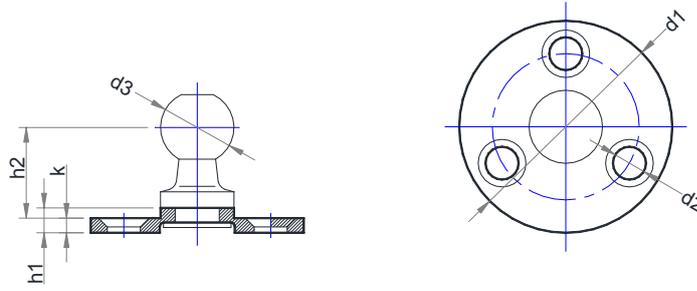
Code	l1 ±0,3 (mm)	l2 ±0,3 (mm)	l3 ±0,5 (mm)	l4 ±0,5 (mm)	l5 +0,2/-0 (mm)	l6 +0,2/-0 (mm)	h1 ±0,5 (mm)	h2 ±0,5 (mm)	k1 ±0,1 (mm)	d1 h11 (mm)	d2 h14 (mm)	k2 +0,4/-0 (mm)	l8 ±0,3 (mm)	l7 ±0,3 (mm)
BR 700106 (I/O)	53	34	19	11,5	9	6,7	26	17	3	6	8	2	8	11
BR 700107 (I/O)	53	34	19	11,5	9	6,7	26	17	3	8	10	2	12	15,5
BR 700207 (I/O)	53	34	22	14,5	9	6,7	26	17	4	8	10	2	12	15,5

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment	Other		
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)	I Stud inside O Stud outside		
		B	Black zinc plated (Zn/Black)			
		C	Yellow zinc plated (Zn/Yellow)			
		D	Blue zinc plated (Zn/Blue)			
		E	Green zinc plated (Zn/Green)			
		F	Matte nickel plated			
		G	Shiny nickel plated			
		H	Chrome plated			
		I	Phosphate plated			
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	Z	No plating, raw material	I Stud inside O Stud outside		
		K	Polished			
		Z	No plating, raw material			
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished		I Stud inside O Stud outside	
		Z	No plating, raw material			
		Z	No plating, raw material			
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished			I Stud inside O Stud outside
		L	Electropolished			
		Z	No plating, raw material			
		Z	No plating, raw material			

F. ex. BR 7001011AA: BR 7001 – Bracket type
01 – Stud size
I – Stud inside
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 8001 – CIRCULAR BRACKET



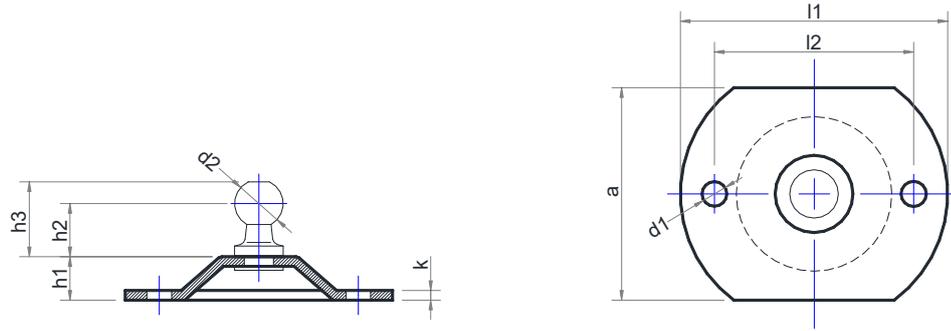
Code	d1 ±0,3 (mm)	k ±0,1 (mm)	d2 +0,2/-0 (mm)	d3 h9 (mm)	h1 ±0,3 (mm)	h2 ±0,3 (mm)
BR 800101	29	2	4	8	3,4	11
BR 800102	29	2	4	10	3,4	11
BR 800103	29	2	4	10	3,4	12,5

Material and surface treatment options are presented in the table below:

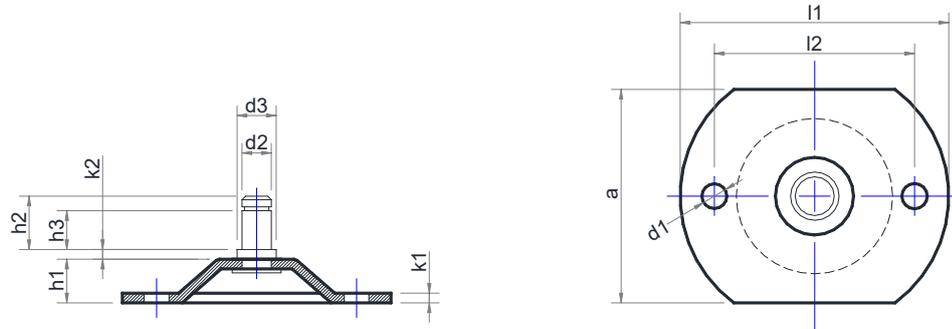
Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex. BR 800101 AAI: BR 8001 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 9001- BR 9002 - BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,5 (mm)	a ±0,3 (mm)	d1 ±0,1 (mm)	h1 ±0,3 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h2 ±0,3 (mm)	h3 ±0,3 (mm)
BR 900101	55,5	40,5	44,5	5	9	2	8	11	14,5
BR 900102	55,5	40,5	44,5	5	9	2	10	11	15,5
BR 900103	55,5	40,5	44,5	5	9	2	10	12,5	17
BR 900104	55,5	40,5	44,5	5	9	2	13	13	18,5
BR 900201	55,5	40,5	44,5	5	10	3	8	11	14,5
BR 900202	55,5	40,5	44,5	5	10	3	10	11	15,5
BR 900203	55,5	40,5	44,5	5	10	3	10	12,5	17
BR 900204	55,5	40,5	44,5	5	10	3	13	13	18,5



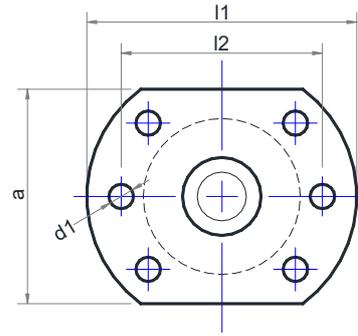
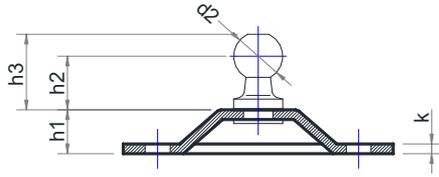
Code	l1 ±0,3 (mm)	l2 ±0,5 (mm)	a ±0,3 (mm)	d1 ±0,1 (mm)	h1 ±0,3 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h2 ±0,3 (mm)	h3 ±0,3 (mm)
BR 900106	55,5	40,5	44,5	5	9	2	6	8	2	11	8
BR 900107	55,5	40,5	44,5	5	9	2	8	10	2	15,5	12
BR 900206	55,5	40,5	44,5	5	10	3	6	8	2	11	8
BR 900207	55,5	40,5	44,5	5	10	3	8	10	2	15,5	12

Material and surface treatment options are presented in the table below:

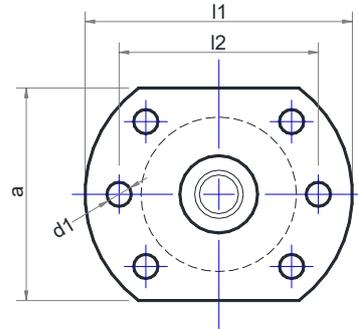
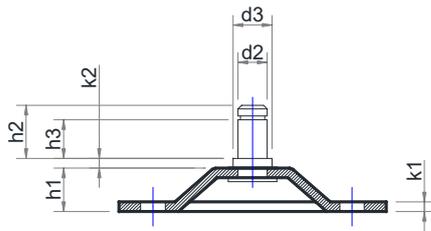
Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex. BR900101 AAI: BR 9001 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

BR 9003-BR 9004 - BRACKET



Code	l1 ±0,3 (mm)	l2 ±0,5 (mm)	a ±0,3 (mm)	d1 ±0,1 (mm)	h1 ±0,3 (mm)	k ±0,1 (mm)	d2 h9 (mm)	h2 ±0,3 (mm)	h3 ±0,3 (mm)
BR 900301	55,5	40,5	44,5	5	9	2	8	11	14,5
BR 900302	55,5	40,5	44,5	5	9	2	10	11	15,5
BR 900303	55,5	40,5	44,5	5	9	2	10	12,5	17
BR 900304	55,5	40,5	44,5	5	9	2	13	13	18,5
BR 900401	55,5	40,5	44,5	5	10	3	8	11	14,5
BR 900402	55,5	40,5	44,5	5	10	3	10	11	15,5
BR 900403	55,5	40,5	44,5	5	10	3	10	12,5	17
BR 900404	55,5	40,5	44,5	5	10	3	13	13	18,5



Code	l1 ±0,3 (mm)	l2 ±0,5 (mm)	a ±0,3 (mm)	d1 ±0,1 (mm)	h1 ±0,3 (mm)	k1 ±0,1 (mm)	d2 h11 (mm)	d3 h14 (mm)	k2 +0,4/-0 (mm)	h2 ±0,3 (mm)	h3 ±0,3 (mm)
BR 900306	55,5	40,5	44,5	5	9	2	6	8	2	11	8
BR 900307	55,5	40,5	44,5	5	9	2	8	10	2	15,5	12
BR 900406	55,5	40,5	44,5	5	10	3	6	8	2	11	8
BR 900407	55,5	40,5	44,5	5	10	3	8	10	2	15,5	12

Material and surface treatment options are presented in the table below:

Code	Material	Code	Surface treatment
A	Bracket: Carbon steel sheet Stud: Free cutting steel DIN 1.0718 (11SMnPb30+C)	A	White zinc plated (Zn/White)
		B	Black zinc plated (Zn/Black)
		C	Yellow zinc plated (Zn/Yellow)
		D	Blue zinc plated (Zn/Blue)
		E	Green zinc plated (Zn/Green)
		F	Matte nickel plated
		G	Shiny nickel plated
		H	Chrome plated
		I	Phosphate plated
		Z	No plating, raw material
C	Bracket and stud: Stainless steel 1.4305 (X8CrNiS18-9) / AISI 303	K	Polished
		Z	No plating, raw material
D	Bracket and stud: Stainless steel 1.4301 (X8CrNiS18-9) / AISI 304	K	Polished
		Z	No plating, raw material
E	Bracket and stud: Stainless steel 1.4401 (X8CrNiS18-9) / AISI 316	K	Polished
		L	Electropolished
		Z	No plating, raw material

F. ex. BR900301 AAI: BR 9003 – Bracket type
01 – Stud size
A – Material: Carbon steel
A – Surface treatment: White zinc plated

IMPORTANT INFORMATION

MANUFACTURING TIME

Some products are available directly from the stock, but some are shipped after realizing the manufacturing plan. Therefore, some products may be currently not available in the stock. Stainless steel products are not kept in the stock.

We offer the possibility of manufacturing non-standard products (size, material or surface treatment) on the basis of Customer's documentation (picture, drawing, sample, etc.).

In-stock products are shipped within **1 week**.

Production lead-times for out of stock products are listed below.

Production lead-time for free cutting steel products is **2-4 week**.

Production lead-time for plastic products is **2-4 week**.

Production lead-time for carbon steel products is **3-5 week**.

Production lead-time for stainless steel products is **4-6 week**.

Note: Production lead-time for some orders can be speeded up on Customer's request.

