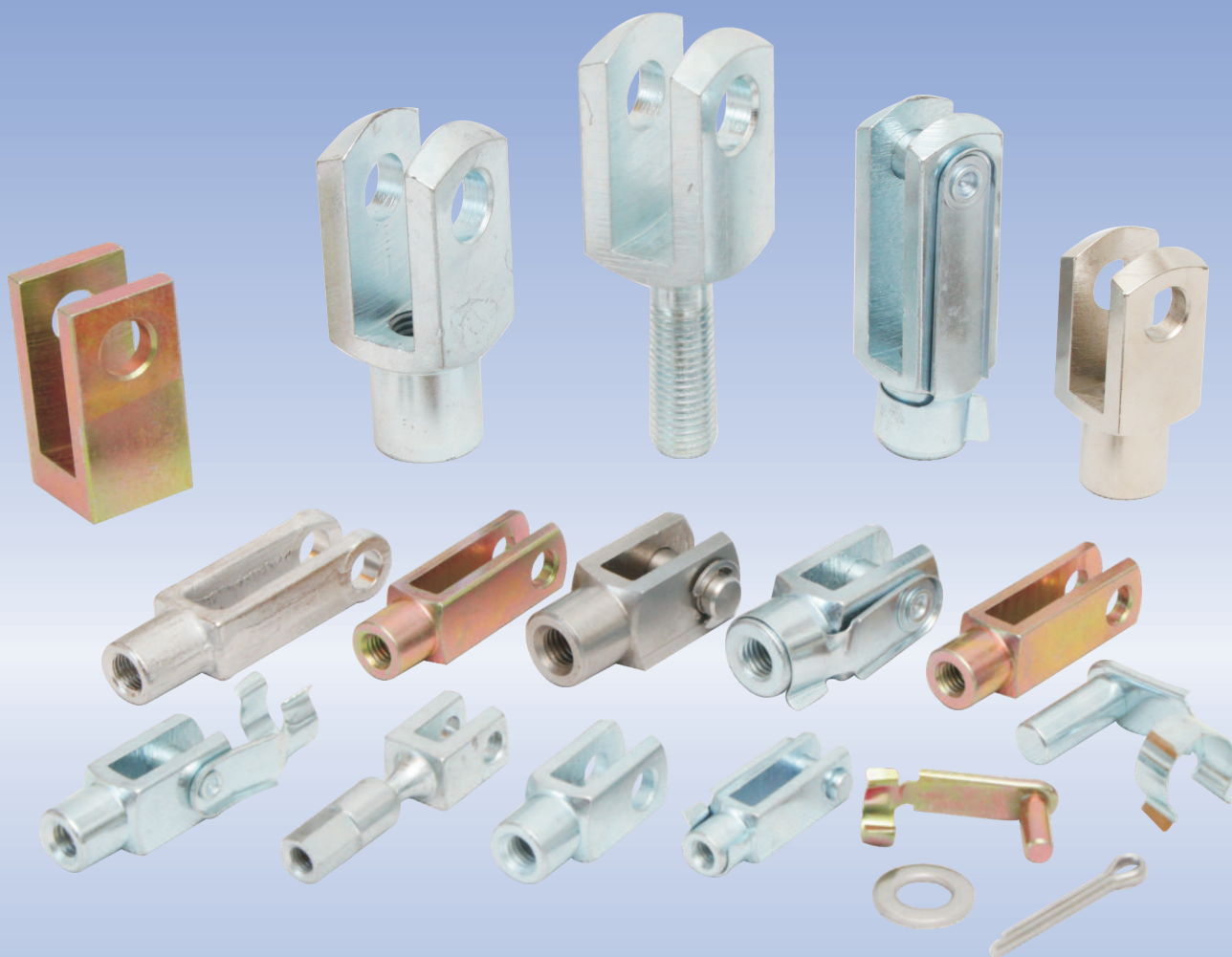
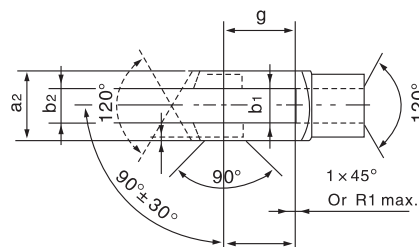
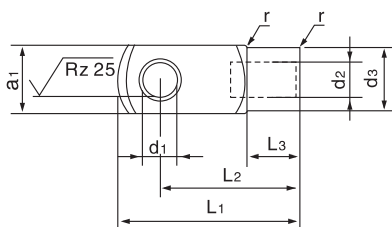




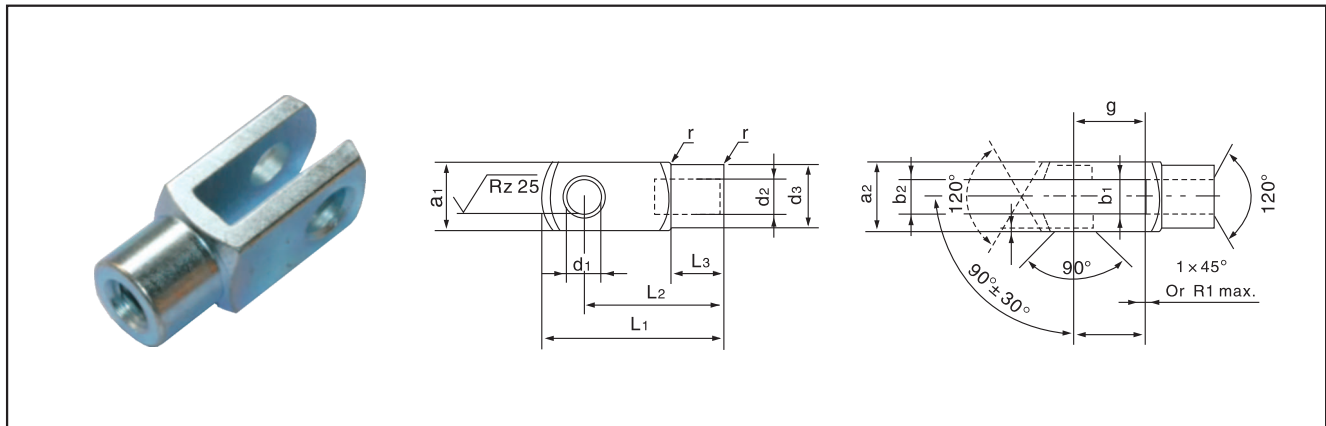
Main Application:

Industrial equipment
Transportation equipment
Construction equipment
Agricultural equipment
Lawn & Garden equipment

Clevises • DIN 71 752/DIN ISO 8140



Part No .	Dimensions mm													Weight kg
	d ₁	g	a ₁	a ₂	b ₁	b ₂	d ₂	d ₃	f	L ₁	L ₂	L ₃	r	
	H9	±0.5	H11	+0.30 -0.16	B13			±0.3	±0.2	±0.5		±0.2		
G4x8	4	8	8	8	4	4	M4x0.7	8	0.5	21	16 ± 0.3	6	0.5	0.005
G4x16	4	16	8	8	4	4	M4x0.7	8	0.5	29	24 ± 0.3	6	0.5	0.007
G5x10	5	10	10	10	5	5	M5x0.8	9	0.5	26	20 ± 0.3	7.5	0.5	0.009
G5x20	5	20	10	10	5	5	M5x0.8	9	0.5	36	30 ± 0.3	7.5	0.5	0.013
G6x12	6	12	12	12	6	6	M6x1.0	10	0.5	31	24 ± 0.3	9	0.5	0.015
G6x24	6	24	12	12	6	6	M6x1.0	10	0.5	43	36 ± 0.4	9	0.5	0.021
G8x16	8	16	16	16	8	8	M8x1.25	14	0.5	42	32 ± 0.4	12	0.5	0.037
G8x16FG	8	16	16	16	8	8	M8x1.0	14	0.5	42	32 ± 0.4	12	0.5	0.037
G8x32	8	32	16	16	8	8	M8x1.25	14	0.5	58	48 ± 0.4	12	0.5	0.054
G8x32FG	8	32	16	16	8	8	M8x1.0	14	0.5	58	48 ± 0.4	12	0.5	0.054
G10x20	10	20	20	20	10	10	M10x1.5	18	0.5	52	40 ± 0.4	15	0.5	0.074
G10x20FG	10	20	20	20	10	10	M10x1.25	18	0.5	52	40 ± 0.4	15	0.5	0.074
G10x40	10	40	20	20	10	10	M10x1.5	18	0.5	72	60 ± 0.4	15	0.5	0.116
G10x40FG	10	40	20	20	10	10	M10x1.25	18	0.5	72	60 ± 0.4	15	0.5	0.116
G12x24	12	24	24	24	12	12	M12x1.75	20	0.5	62	48 ± 0.4	18	0.5	0.121
G12x24FG	12	24	24	24	12	12	M12x1.25	20	0.5	62	48 ± 0.4	18	0.5	0.121
G12x48	12	48	24	24	12	12	M12x1.75	20	0.5	86	72 ± 0.4	18	0.5	0.175
G12x48FG	12	48	24	24	12	12	M12x1.25	20	0.5	86	72 ± 0.4	18	0.5	0.175
G14x28	14	28	27	27	14	14	M14x2.0	24	1.0	72	56 ± 0.4	22.5	1.0	0.178
G14x28FG	14	28	27	27	14	14	M14x1.5	24	1.0	72	56 ± 0.4	22.5	1.0	0.178
G14x56	14	56	27	27	14	14	M14x2.0	24	1.0	101	85 ± 0.4	22.5	1.0	0.258
G14x56FG	14	56	27	27	14	14	M14x1.5	24	1.0	101	85 ± 0.4	22.5	1.0	0.258
G16x32	16	32	32	32	16	16	M16x2.0	26	1.0	83	64 ± 0.4	24	1.0	0.282
G16x32FG	16	32	32	32	16	16	M16x1.5	26	1.0	83	64 ± 0.4	24	1.0	0.282
G16x64	16	64	32	32	16	16	M16x2.0	26	1.0	115	96 ± 0.4	24	1.0	0.411
G16x64FG	16	64	32	32	16	16	M16x1.5	26	1.0	115	96 ± 0.4	24	1.0	0.411
G18x36	18	36	36	36	18	18	M18x2.5	30	1.0	94	72 ± 0.4	27	1.5	0.39
G18x36FG	18	36	36	36	18	18	M18x1.5	30	1.0	94	72 ± 0.4	27	1.5	0.39
G20x40	20	40	40	40	20	20	M20x2.5	34	1.0	105	80 ± 0.4	30	1.5	0.55
G20x40FG	20	40	40	40	20	20	M20x1.5	34	1.0	105	80 ± 0.4	30	1.5	0.55
G20x80	20	80	40	40	20	20	M20x2.5	34	1.0	145	120 ± 0.4	30	1.5	0.80
G20x80FG	20	80	40	40	20	20	M20x1.5	34	1.0	145	120 ± 0.4	30	1.5	0.80

Clevises • DIN 71 752/DIN ISO 8140


Part No .	Dimensions mm														Weight kg
	d ₁	g	a ₁	a ₂	b ₁	b ₂		d ₂	d ₃	f	L ₁	L ₂	L ₃	r	
	H9	±0.5	H11	^{+0.30} _{-0.16}	B13				± 0.3	± 0.2	± 0.5		± 0.2		
G25x50	25	50	50	50	25	25	^{+0.70} _{+0.15}	M24x3.0	42	1.5	132	100 ± 0.4	36	1.5	1.10
G25x50FG	25	50	50	50	25	25	^{+0.70} _{+0.15}	M24x2.0	42	1.5	132	100 ± 0.4	36	1.5	1.10
G28x56	28	56	55	55	28	28	^{+0.70} _{+0.15}	M27x3.0	48	1.5	148	112 ± 0.4	40	2.0	1.50
G28x56FG	28	56	55	55	28	28	^{+0.70} _{+0.15}	M27x2.0	48	1.5	148	112 ± 0.4	40	2.0	1.50
G30x54FG	30	54	55	55	30	30	^{+0.70} _{+0.15}	M27x2.0	48	1.5	148	110 ± 0.4	40	2.0	1.44
G30x60	30	60	60	60	30	30	^{+0.70} _{+0.15}	M30x3.5	52	1.5	160	120 ± 0.4	42	2.0	1.97
G30x60FG	30	60	60	60	30	30	^{+0.70} _{+0.15}	M30x2.0	52	1.5	160	120 ± 0.4	42	2.0	1.97
G35x54FG	35	54	70	70	35	35	^{+0.70} _{+0.15}	M36x2.0	60	2.0	188	144 ± 0.4	54	3.0	2.93
G35x72	35	72	70	70	35	35	^{+0.70} _{+0.15}	M36x4.0	60	2.0	188	144 ± 0.4	54	3.0	2.93
G35x72FG	35	72	70	70	35	35	^{+0.70} _{+0.15}	M36x2.0	60	2.0	188	144 ± 0.4	54	3.0	2.93
G36x72	35	72	70	70	36	36	^{+0.70} _{+0.15}	M36x4.0	60	2.0	188	144 ± 0.4	54	3.0	2.93
G36x72FG	35	72	70	70	36	36	^{+0.70} _{+0.15}	M36x2.0	60	2.0	188	144 ± 0.4	54	3.0	2.93
G40x84FG	40	84	85	85	40	40	^{+0.70} _{+0.15}	M42x2.0	70	3.0	232	168 ± 0.4	63.5	5.0	5.64
G42x84	42	84	85	85	42	42	^{+0.70} _{+0.15}	M42x4.5	70	3.0	232	168 ± 0.4	63.5	5.0	5.34
G42x84FG	42	84	85	85	42	42	^{+0.70} _{+0.15}	M42x2.0	70	3.0	232	168 ± 0.4	63.5	5.0	5.34
G50x96	50	96	96	96	50	50	^{+0.70} _{+0.15}	M48x5.0	82	3.0	265	192 ± 0.4	73	5.0	7.86
G50x96FG	50	96	96	96	50	50	^{+0.70} _{+0.15}	M48x2.0	82	3.0	265	192 ± 0.4	73	5.0	7.86

-Code for thread:

Regular thread no code

Regular thread, left-handed LH

Fine-pitch thread FG fine-pitch thread,FG

Ffine-pitch thread, left-handed FGLH

-For semifinished products, tolerance h 11 according to DIN 178

- Radius or 45° bevelling (at manufacturer's choice)

-Material:

1.0718(11SMnPb30+C) polished oiled

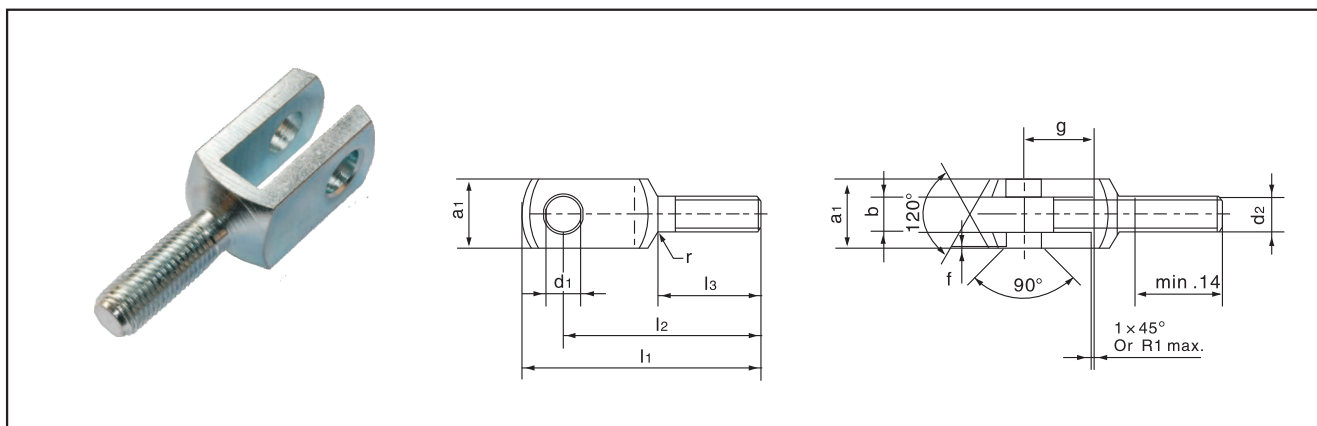
Alternative:stainless steel

-Surface protection

Optional:phosphatized and oiled,electroplated galvanized;passivated
in yellow/clear or white-blue

-Special requests are also available

Clevises with Male Thread



Part No .	d1 h9	g ± 0.5	a1 h11	a2 +0.5 -0.2	b +0.7 +0.15	D2	f ± 0.2	l1 ± 0.2	l2 ± 0.4	l3 ± 0.2	r	Weight 7.85kg/dm3 kg ≈
GM6X12	6	12	12	12	6	M6x1	0.5	44	37	20	0.8	0.015
GM8X16	8	16	16	16	8	M8x1.25	0.5	57	47	25	0.8	0.036
GM10X20	10	20	20	20	10	M10x1.5	0.5	69	57	30	0.8	0.068
GM12X24	12	24	24	24	12	M12x1.75	0.5	82	68	35	0.8	0.122
GM14X28	14	28	27	27	14	M14x2	1	94	78	40	1.2	0.171
GM16X32	16	32	32	32	16	M16x2	1	108	89	45	1.2	0.288
GM20X40	20	40	40	40	20	M20x2.5	1	134	109	55	1.5	0.55

–Material:

Low carbon steel 1020, or equivalent steel.

Alternative: stainless steel.

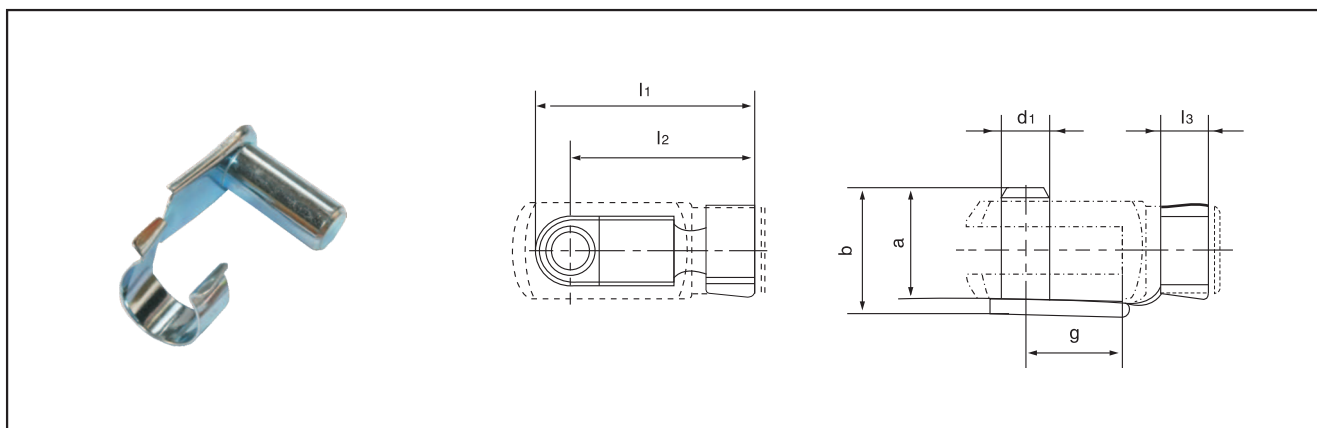
–Surface Protection:

phosphatized and oiled, electroplated

Galvanized, passivated in white-blue or yellow.

–Fine and coarse thread and left hand thread are possible.

Folding Spring Bolts · FKB series



Part No.	Suitable for clevis	d1 h11	g	a	b	l1	l2	l3	Weight [kg] 100 pieces
FKB4 x 8	G 4 x 8	4	8	9.5	11.1	19	15	4.5	0.145
FKB5 x 10	G 5 x 10	5	10	12	13.7	23	19	5.5	0.254
FKB5 x 20	G 5 x 20	5	20	12	13.8	33	29	5.5	0.31
FKB6 x 12	G 6 x 12	6	12	14	16.2	28	23	6.5	0.458
FKB6 x 24	G 6 x 24	6	24	14	16.3	40	35	6.5	0.516
FKB8 x 16	G 8 x 16	8	16	19	21.6	37	30	8	1.059
FKB8 x 32	G 8 x 32	8	32	19	21.6	52	46	8	1.155
FKB10 x 20	G 10 x 20	10	20	23	26	46	38	10	1.938
FKB10 x 40	G 10 x 40	10	40	23	26.3	66	58	10	2.046
FKB12 x 24	G 12 x 24	12	24	28	31.1	53	45	12	3.306
FKB12 x 48	G 12 x 48	12	48	28	31.2	78	69	12	3.5
FKB14 x 28	G 14 x 28	14	28	31	34.1	62	52	14	4.722
FKB14 x 56	G 14 x 56	14	56	31	34	92	82	14	5.076
FKB16 x 32	G 16 x 32	16	32	36	39.5	73	62	16	6.94
FKB16 x 64	G 16 x 64	16	64	36	39.2	103	92	16	7.44
FKB20 x 40	G 20 x 40	20	40	45	50	87.5	71.5	16	13

–Material:

Bolt, low carbon steel 1020,

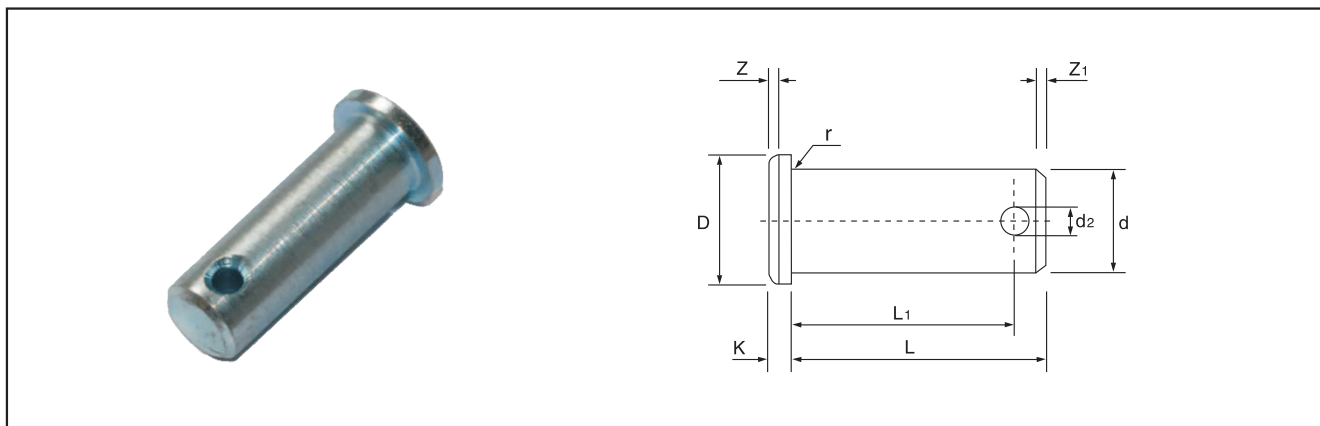
Alternative, stainless steel.

Feather, spring steel 65Mn, quenched

–Surface protection

phosphatized, oiled, zinc plate, passivated in white–blue or yellow.

Bolt with Bore • PB series



Part No.	Dimensions mm									weight
	d h11	D ₂ h14	D h12	K js14	L +0.3 ≈ 0	L ₁ +0.5 ≈ 0	R	Z	Z ₁ ≈	≈ kg
PB4	4	1	6	1	12	10	0.3	0.5	0.8	0.001
PB5	5	1.2	8	1.5	15	12.6	0.3	0.5	0.8	0.003
PB6	6	1.6	9	1.5	18	15.3	0.5	0.5	1	0.005
PB8	8	2	12	2	23	19.5	0.5	1	1	0.010
PB10	10	3.20	14	2	29	24.5	0.5	1	1.5	0.019
PB12	12	4	17	3	35	29.5	0.5	1.5	2	0.034
PB14	14	4	20	3	40	32.5	1	1.5	2.5	0.053
PB16	16	4	21	3	45	37.5	1	1.5	2.5	0.067
PB20	20	5	26	4	54	47	1	2	3	0.125
PB25	25	6	32	5	67	59	1	2	3	0.260

–Material:

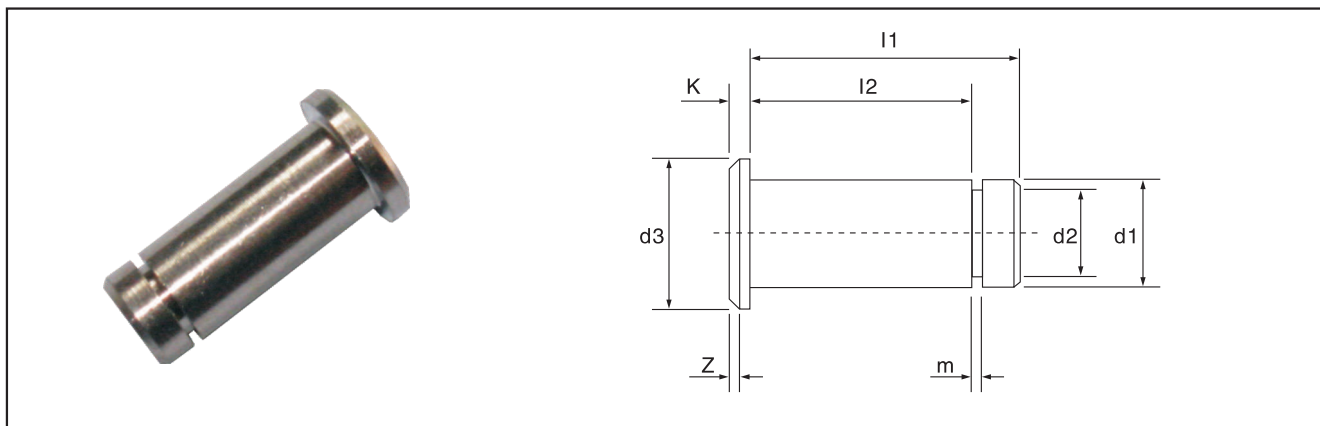
Carbon steel .

Alternative:stainless steel.

–Surface Protection:

Galvanized ,passivated in white–blue or yellow.

–Special request are available.

Bolt with Slot.PA series


Part No.	d1	d2	d3	l1	l2	k	m	z	Weight (Kg) 100pcs
	h11	-0.2	h14	js 15	+0.3	js 14	+0.1		
PA4	4	3.2	6	10.5	8.5	1	0.64	0.5	0.12
PA5	5	4	8	13	10.5	1.5	0.74	0.5	0.24
PA6	6	5	9	15.5	12.5	1.5	0.74	0.5	0.43
PA8	8	6	12	20	16.5	2	0.94	1	0.90
PA10	10	8	14	25	20.5	2	1.05	1	1.72
PA12	12	9	17	30	24.5	3	1.15	1.5	2.95
PA14	14	10	20	33	27.5	3	1.25	1.5	4.10

-Material:

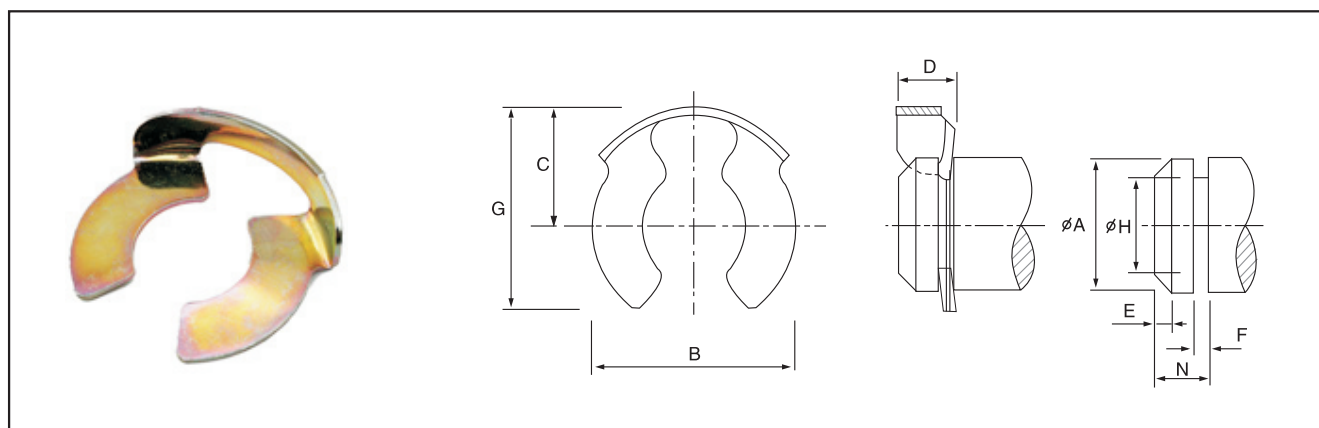
Low carbon steel 1020,
Alternative, stainless steel.

-Surface Protection:

Zinc plate, passivated in white-blue or yellow

-Special request are available.

Retaining Clips · CLM series



Part No.	ΦA	B	C	D	E	F	G	ΦH	N	Weight/100 in Kgs
CLM4	4.00	7	4.3	2.6	0.50	0.74	7.0	3.2	2.1	0.013
	3.93					0.64		3.1	1.9	
CLM5	5.00	8	5.2	2.8	0.50	0.84	8.4	4.1	2.6	0.016
	4.93					0.64		3.9	2.4	
CLM6	6.00	11	6.8	3.5	0.75	0.84	11.7	5.1	3.1	0.035
	5.93					0.64		4.9	2.9	
CLM8	8.00	12	7.4	4	1.00	1.04	11.8	6.1	3.6	0.039
	7.91					0.84		5.9	3.4	
CLM10	10.00	16	9.5	5	1.00	1.15	15.9	8.2	4.6	0.081
	9.91					0.95		7.8	4.4	
CLM12	12.00	17	11.5	6	1.25	1.25	18.5	9.2	5.1	0.115
	11.89					1.05		8.8	4.9	
CLM14	14.00	19.7	11.9?	6.7	1.25	1.35	20.0	10.2	5.6	0.156
	13.89					1.15		9.8	5.4	
CLM16	16.00	23.2	14.6	7.0	1.50	1.45	24.5	12.2	6.1	0.26
	15.89					1.25		11.8	5.9	
CLM24	24.00	34	18.5	9.0	1.50	1.90	34.0	18.0	8.2	0.65
	23.87					1.70		17.6	7.8	

–Material:

Spring steel 65Mn,hardened and tempered.

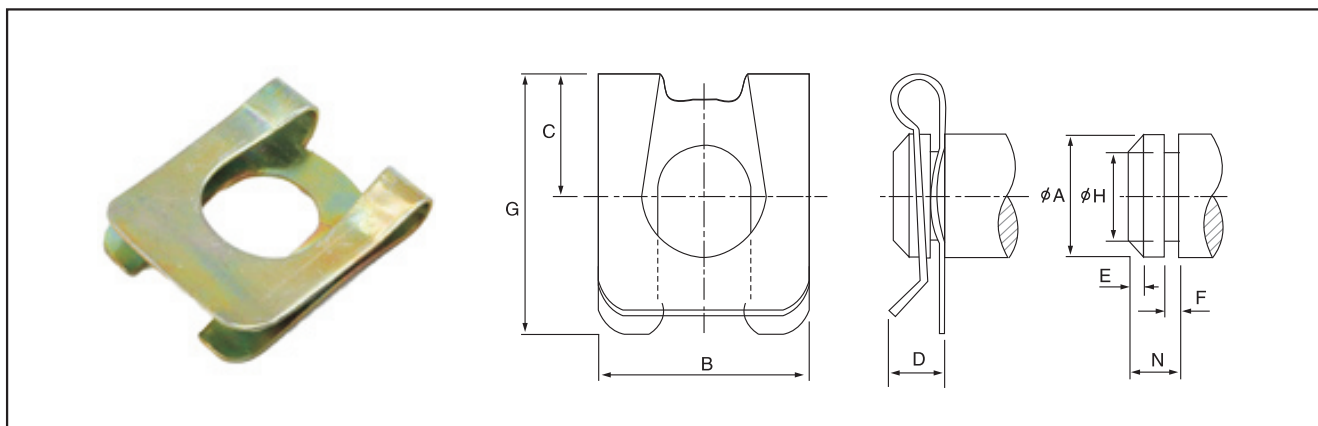
–Surface protection:

Zinc plate,passivated in yellow or white.

–Easily assembled by hand without tools.

–For use with pins.

–Dimensions are in mm.

Safety Fastener • CFM series


Part No.	ΦA	B	C	D	E	F	G	ΦH	N	Weight /100pcs in Kgs
CFM4	4.00	7	4.0	2.2	0.50	0.74	8.75	3.2	2.1	0.02
	3.93					0.64		3.1	1.9	
CFM5	5.00	9	4.5	2.3	0.50	0.84	11.00	4.1	2.6	0.03
	4.93					0.64		3.9	2.4	
CFM6	6.00	11	6.0	3.3	0.75	0.84	14.25	5.1	3.1	0.07
	5.93					0.64		4.9	2.9	
CFM8	8.00	14	8.0	3.5	1.00	1.04	17.25	6.1	3.6	0.11
	7.91					0.84		5.9	3.4	
CFM10	10.00	18	10.3	4.6	1.00	1.15	21.75	8.2	4.6	0.21
	9.91					0.95		7.8	4.4	
CFM12	12.00	22	12.0	4.6	1.25	1.25	25.50	9.7	5.1	0.29
	11.89					1.05		8.8	4.9	

–Material:

Spring steel 65Mn, hardened and tempered.

–Surface protection:

Zinc plate, passivated in yellow or white.

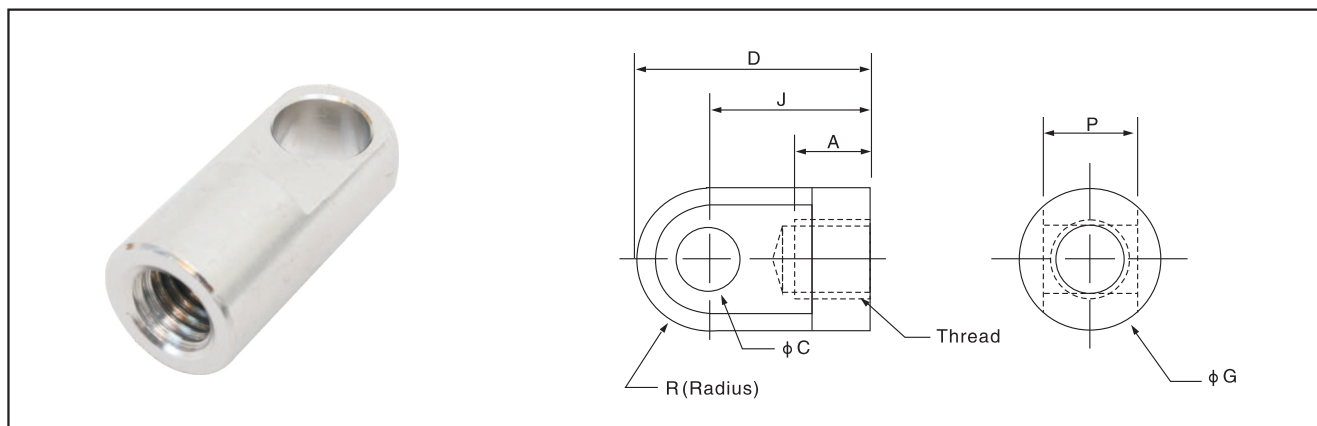
–Easily assembled by hand without tools.

–For use with pins.

–Dimensions are in mm.

–Inch series are also available.

Eyelets • ED series



Part No .	Thread	A	C	D	G	J	P	R
ED4	M3.5x0.6	4	8	12	4.1	16	4	4
ED5	M5x0.8	6	10	16	6.1	21	6	5
ED8	M8x1.25	6	14	20	8.1	27	10	7
ED10	M10x1.5	8	18	25	8.1	29.5	12	9
ED14	M14x1.5	19	25	40	14.1	53	14	12.5

–Material:

Carbon steel

Alternative:aluminum and stainless steel.

–Surface Protection:

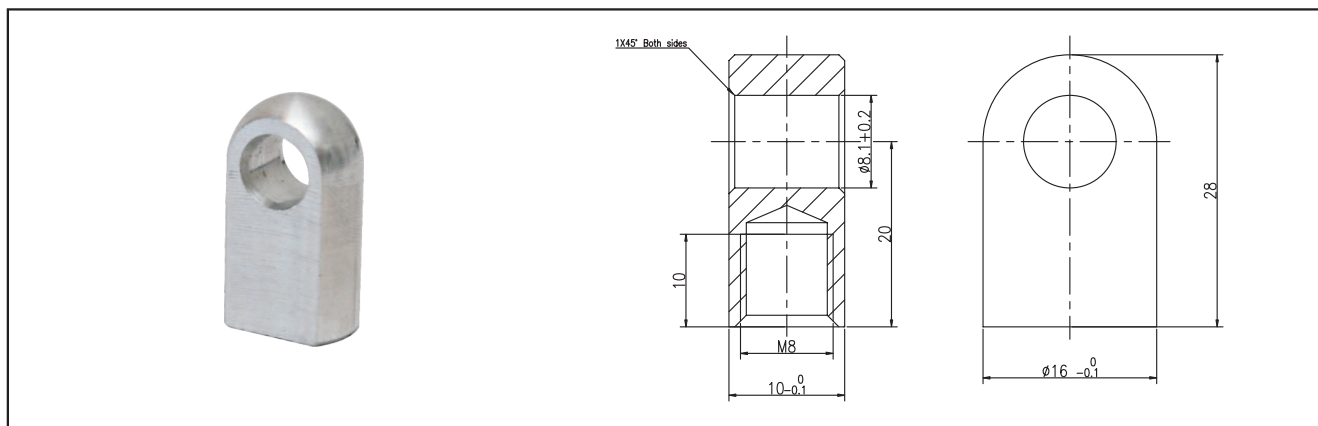
Zinc plate/clear

–Dimensions are in mm.

–Left hand thread possible.

–Special versions upon request.

Eyelets · EW series



Part No .			Dimensions mm					
Normal Steel	Stainless Steel	Aluminum	A	C	D	E	F+0.2	G
EW600	EW600-SS	EW600-ALM	M6	16	8	19	8.1	28
EW801	EW801-SS	EW801-ALM	M8	16	6	16	6.1	25
EW802	EW802-SS	EW802-ALM	M8	16	6	18	6.1	27
EW803	EW803-SS	EW803-ALM	M8	16	8	16	8.1	25
EW804	EW804-SS	EW804-ALM	M8	16	8	16	8.1	25
EW805	EW805-SS	EW805-ALM	M8	16	8	20	8.1	29
Ew100	EW100-SS	EW100-ALM	M10	16	10	20	10.1	29

Dimensions are in mm.

-Material:

Low carbon steel

Alternative:aluminum and stainless steel.

-Surface Protection:

Normal steel,zinc plate,clear or white-blue.

Stainless steel,electropolishing.

Aluminum,anodisation.

-Special versions upon request.

*When you send us inquiry,please specify the raw material and surface protection.