

# SPRING LOADED UNITS

Always spring loaded units are used in applications such as:-

Guillotines; Presses;  
Moulding Machines; Tool Bases;  
Press Brakes; Shock Loading applications.

Spring loaded ball units reduce damage caused by shock loads. They also allow for dimension changes due to temperature and self-adjust to evenly distribute loads.

## 1507, 1508 and 1509 Units

These units incorporate a plastic scraper seal, which keeps debris outside the ball unit.

Spring loaded ball unit sizes Ø31.7mm, Ø39.7mm and Ø50.8mm have dirt exit holes as standard. All other spring loaded ball units have felt or foam seals as standard.

Spring loaded ball units can be used as die-lifters, inverted or at an angle.

See pages 24 and 25 for details of our Hevi-Load spring loaded ball units and Die-Lifter ball units.

Completely stainless steel (Type15) spring loaded ball units also available upon request with reduced support loads and depress loads.

Spring loaded ball units with ball sizes of Ø25.4mm also available upon request with nylon load ball and stainless bearings (Type 14).

The Type 14 ball units are suitable for light load applications and when object surface protection is required.

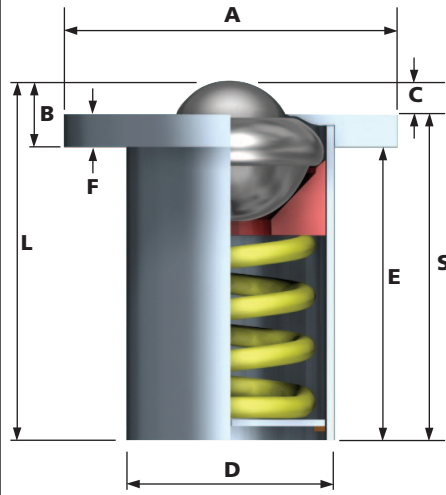
The 1507 and 1509 ball units have 2mm thick pressed steel flanges.

**Do not remove the circlip on any of the spring loaded ball units.**

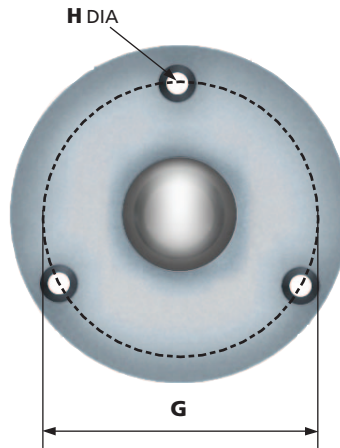
\* Other loads available upon request.

## LARGE TOP FLANGE

Features: Large top flange fixing. Low profile.

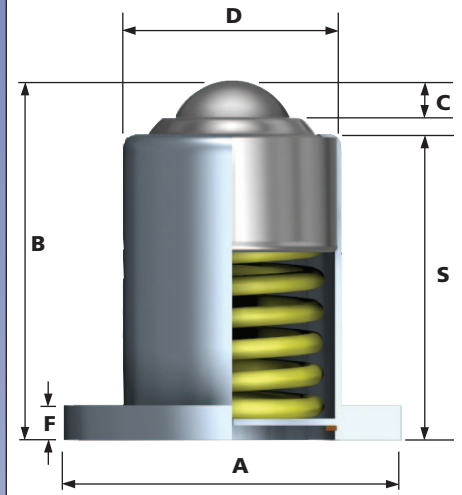


(1018 shown here)

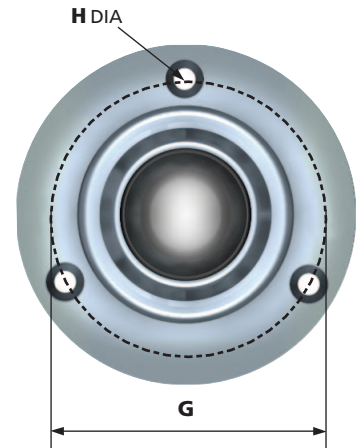


## LARGE BOTTOM FLANGE

Features: Large bottom flange fixing. High profile.



(1032 shown here)



## 5320

Features: The 5320 ball unit is assembled with a 522-0 ball unit (see pages 16-17). The ball unit has a dirt exit hole.

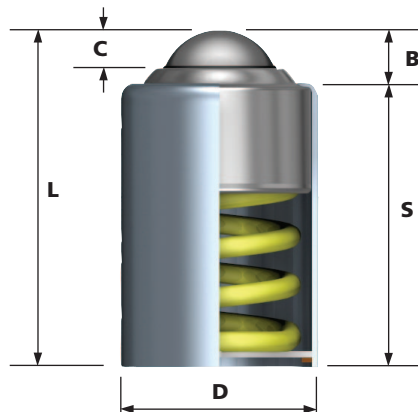


Please see large top flange for dimensions.



## PLAIN BODY

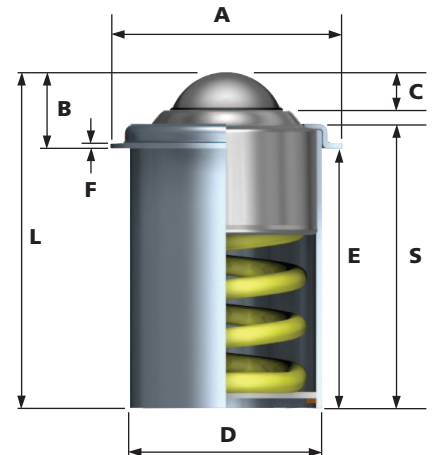
Features: Plain body. Low profile.



(1508 shown here)

## SMALL TOP FLANGE

Features: Small flange. Low profile.



(1509 shown here)

REF No.	BALL SIZE (mm)	WEIGHT (KGS)	DIMENSIONS (mm)									
			A	B	C	D	E	F	G	H	L	S
			Maximum Diameter	Working Height of Ball	Ball Exposure above Outer Ring	Body Diameter	Distance Under Flange to Base	Flange Thickness	P.C.D. or Centres of Fixing Holes	Hole Diameter of Fixing Holes & No. of Fixing Holes	Overall Height	Base to Top of Body

SUPPORT DYNAMIC LOAD (kg)	LOAD TO FULLY DEPRESS (kg)
<b>TYPE 13</b> Carbon Steel Bearings, Zinc Plated Pressings	
<b>TYPE 16</b> Stainless Steel Bearings, Zinc Plated Pressings	

### LARGE TOP FLANGE

<b>3011</b>	19	0.42	66.6 +0.0 -1.0	11.4	3.5	36.5	51.6	7.9	50.8 ±0.2	3x 7	63	59.5
<b>5320</b>	22.2	0.26	50	18.5 ±0.2	4	39	33	14	-	-	51.5	47
<b>1018</b>	25.4	0.57	75 +0.0 -1.0	13.8	5.9	44.5	53.3	7.9	60.3 ±0.2	3x 7	67.1	61.2
<b>1507</b>	25.4	0.40	71.3 +0.0 -1.0	19.3	6.7	44.5	52.9	2	60.4 ±0.2	2x 5.1	72.2	61.3
<b>1028</b>	31.7	1.16	89 +0.0 -1.0	17	7.5	60.0	77.5	9.5	73 ±0.2	3x 7	94.6	87.1
<b>2010</b>	39.7	2.04	101.6 +0.0 -1.0	17.7	8.2	69.8	90		85.7 ±0.2	3x 9	107.7	99.5
<b>4008</b>	50.8	5.1	152.4 +0.0 -1.0	25.7	13.0	101.6	114	127 ±0.2			139.7	126.7

10	30
170*	250*
35	100
50	130
100	180
	170
170	410

\* Other loads available upon request.

### LARGE BOTTOM FLANGE

<b>3012</b>	19	0.42	66.6 +0.0 -1.0	65.1	4.7	36.5	-	7.9	50.8 ±0.2	3x 7	-	55.6
<b>1510</b>	25.4	0.45	75 +0.0 -1.0	72.9	6.7	44.5	-	7.9	60.3 ±0.2	3x 7	-	60.4
<b>1032</b>	31.7	1.02	89 +0.0 -1.0	95.3	7.7	60.0	-	9.5	73 ±0.2	3x 7	-	84.9

10	35
50	130
100	200

### PLAIN BODY

<b>3009</b>	19	0.26	-	9.5	4.7	36.5					65.1	55.6
<b>1016</b>	25.4	0.38	-	11.9	6.3	44.5					70.6	58.7
<b>1508</b>	25.4	0.38	-	12.5	6.7	44.5					72.9	60.4
<b>1026</b>	31.7	0.86	-	10.4	7.7	60.0	-	-	-	-	95.3	84.9
<b>2008</b>	39.7	1.46	-	12.7	9.1	69.8					107.6	94.9
<b>4006</b>	50.8	4.2	-	13	13	101.6					139.7	126.7

10	35
35	140
50	130
100	200
	190
170	410

### SMALL TOP FLANGE

<b>3010</b>	19	0.30	45 +0.0 -1.0	11.4	3.5	36.5	51.6	7.9			63	59.5
<b>1017</b>	25.4	0.44	50 +0.0 -1.0	13.8	5.9	44.5	53.3				67.1	61.2
<b>1509</b>	25.4	0.39	56 +0.0 -1.0	19.3	6.7	44.5	52.9	2			72.2	61.3
<b>1027</b>	31.7	0.99	75 +0.0 -1.0	17	7.5	60.0	77.5	9.5			94.6	87.1
<b>2009</b>	39.7	1.8		17.7	8.2	69.8	90				107.7	99.5
<b>4007</b>	50.8	4.4	114.3 +0.0 -1.0	25.7	13	101.6	114	12.7			139.7	126.7

10	30
35	100
50	130
100	180
	170
170	410

To order, specify REF N° and TYPE, i.e. 3011-13.

General Spring Rating Tolerance ±10%  
General Tolerance unless stated ±0.3mm

