



General Tolerance unless stated  $\pm 0.3\text{mm}$

The individual **product features** are displayed at the foot of the table...

Ref. No.	Ball Size (mm)	Weight in (Kgs)	Support Load (Kgs)		
			TYPE 13 Carbon Steel Balls, Zinc Plated Pressings	TYPE 15 Stainless Steel Balls, Zinc Plated Pressings	TYPE 16 Stainless Steel Balls, Zinc Plated Pressings
0519-21	12.7	0.036	25	25	25
0519-22		0.051			
0519-23		0.042			
0519-24		0.096			
3019-21	19	0.120	50	20	50
3019-22		0.168			
3019-23		0.124			
3019-24		0.220			
1019-21	25.4	0.177	125	125	125
1019-22		0.282			
1019-23		0.190			
1019-24		0.294			
1029-21	32	0.486	250	250	250
1029-22		0.584			
1029-23		0.500			
1029-24		0.740			
2019-21	40	0.850	500	250	500
2019-22		0.960			
2019-23		0.900			
2019-24		1.350			

To order, specify Ref No and TYPE i.e. 0519-21-13

### General Features

**Features:** Tough Series Heavy Duty units are built to provide long working life and to withstand harsh conditions. They have a solid machined body and incorporate both dust seal and dirt exit hole (except No. 0519). They provide a higher load capacity than standard units. Solid steel housing for attachment purposes, but not shock loading. All units are machined using CNC machines from one piece of steel, therefore flanges and threads are integral.

### Also available

All patterns (i.e., 21, 22, 23 and 24) of Ref Numbers 0519, 3019 and 1019 are available with a nylon main ball (Type 14) ideal for light loads and reduced marking applications.

### TUFF Heavy Duty 21



**Features:** Plain solid machined body.

### TUFF Heavy Duty 22



**Features:** Flange fixing either by using rivets or screws.

### TUFF Heavy Duty 23



**Features:** Bolt, drilled hole fixing, Maximum tightening torques range from 10Nm for M6 to 20Nm for M12.

### TUFF Heavy Duty 24



**Features:** Bottom flange fixing either by using rivets or screws. Drilled hole fixing.