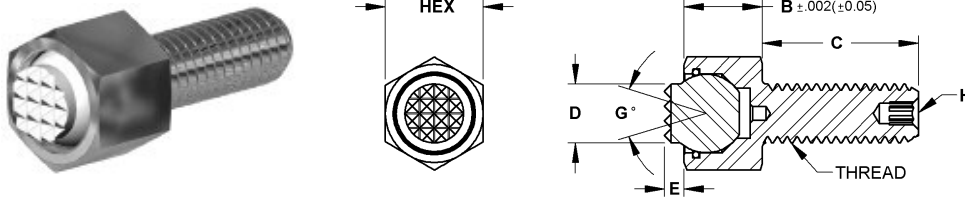


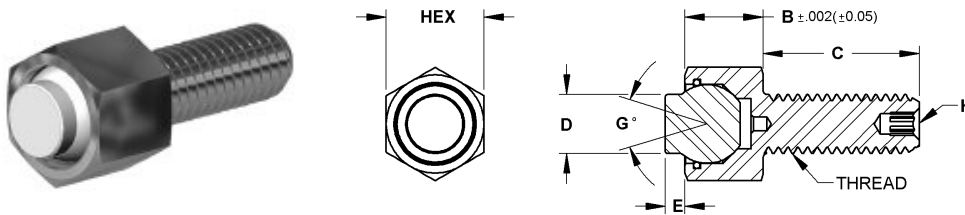
Hex Head – Steel Ball – Serrated



The replaceable serrated ball swivels to allow for better clamping on uneven surfaces. A Viton o-ring holds the ball in place while keeping contaminants out and providing smooth ball movement. The housing is made from alloy steel, heat treated to Rc 43/46 with black oxide finish. The replaceable ball is made from M-2 high speed steel heat treated to Rc 60/62. Replacement balls can be ordered separately.

Part Number	Hex	B Head Height	C Thread Length	D Contact Dia.	E Stand Off	Thread Size	G Degree Swivel	H Int Hex	Ball Dia.	Tooth Pattern	Load Rating Lbs.
FGS-105	3/8	1/4	1/2	5/32	1/16	#10-24	28	—	3/16	SF	1,176
FGS-110	3/8	1/4	1	5/32	1/16	#10-24	28	—	3/16	SF	1,176
FGS-115	7/16	5/16	1/2	1/4	1/16	1/4-20	28	—	9/32	SF	2,441
FGS-120	7/16	5/16	1	1/4	1/16	1/4-20	28	—	9/32	SF	2,441
FGS-125	7/16	5/16	1-1/2	1/4	1/16	1/4-20	28	—	9/32	SF	2,441
FGS-130	1/2	3/8	1/2	5/16	1/16	5/16-18	28	—	3/8	EF	2,792
FGS-135	1/2	3/8	1	5/16	1/16	5/16-18	28	—	3/8	EF	2,792
FGS-140	1/2	3/8	1 1/2	5/16	1/16	5/16-18	28	—	3/8	EF	2,792
FGS-145	5/8	1/2	1/2	3/8	1/8	3/8-16	34	1/8	1/2	EF	3,446
FGS-150	5/8	1/2	1	3/8	1/8	3/8-16	34	1/8	1/2	EF	3,446
FGS-155	5/8	1/2	1 1/2	3/8	1/8	3/8-16	34	1/8	1/2	EF	3,446
FGS-160	13/16	5/8	1	1/2	1/8	1/2-13	40	3/16	5/8	Fine	5,937
FGS-165	13/16	5/8	1 1/2	1/2	1/8	1/2-13	40	3/16	5/8	Fine	5,937
FGS-170	15/16	11/16	1	5/8	1/8	5/8-11	34	1/4	3/4	Fine	9,932
FGS-175	15/16	11/16	2	5/8	1/8	5/8-11	34	1/4	3/4	Fine	9,932

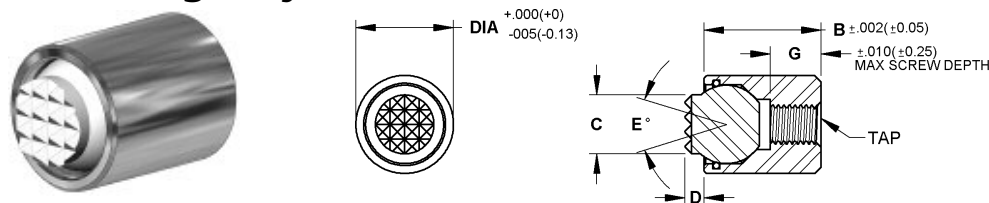
Hex Head – Steel Ball – Flat



The replaceable flat ball swivels to allow for better clamping on uneven surfaces. A Viton o-ring holds the ball in place while keeping contaminants out and providing smooth ball movement. The housing is made from alloy steel, heat treated to Rc 43/46 with black oxide finish. The replaceable ball is made from M-2 high speed steel heat treated to Rc 60/62. Replacement balls can be ordered separately. Grippers with flat delrin balls are available.

Part Number	Hex	B Head Height	C Thread Length	D Contact Dia.	E Stand Off	Thread Size	G Degree Swivel	H Int Hex	Ball Dia.	Load Rating Lbs.
FGS-205	3/8	1/4	1/2	5/32	1/16	#10-24	28	—	3/16	1,176
FGS-210	3/8	1/4	1	5/32	1/16	#10-24	28	—	3/16	1,176
FGS-215	7/16	5/16	1/2	1/4	1/16	1/4-20	28	—	9/32	2,441
FGS-220	7/16	5/16	1	1/4	1/16	1/4-20	28	—	9/32	2,441
FGS-225	7/16	5/16	1-1/2	1/4	1/16	1/4-20	28	—	9/32	2,441
FGS-230	1/2	3/8	1/2	5/16	1/16	5/16-18	28	—	3/8	2,792
FGS-235	1/2	3/8	1	5/16	1/16	5/16-18	28	—	3/8	2,792
FGS-240	1/2	3/8	1-1/2	5/16	1/16	5/16-18	28	—	3/8	2,792
FGS-245	5/8	1/2	1/2	3/8	1/8	3/8-16	34	1/8	1/2	3,446
FGS-250	5/8	1/2	1	3/8	1/8	3/8-16	34	1/8	1/2	3,446
FGS-255	5/8	1/2	1 1/2	3/8	1/8	3/8-16	34	1/8	1/2	3,446
FGS-260	13/16	5/8	1	1/2	1/8	1/2-13	40	3/16	5/8	5,937
FGS-265	13/16	5/8	1 1/2	1/2	1/8	1/2-13	40	3/16	5/8	5,937
FGS-270	15/16	11/16	1	5/8	1/8	5/8-11	34	1/4	3/4	9,932
FGS-275	15/16	11/16	2	5/8	1/8	5/8-11	34	1/4	3/4	9,932

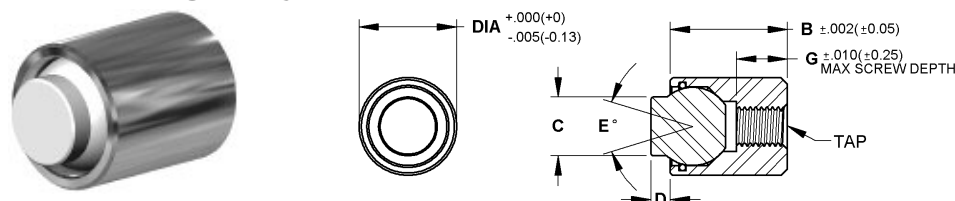
Base Design Style – Steel Ball – Serrated



Compact body allows for installation in tight areas. The housing is tapped for backside fastening. The replaceable serrated ball swivels to allow for better clamping on uneven surfaces. A Viton o-ring holds the ball in place while keeping contaminants out and providing smooth ball movement. The housing is made from alloy steel, heat treated to Rc 43/46 with black oxide finish. The replaceable ball is made from M-2 high speed steel heat treated to Rc 60/62. Replacement balls can be ordered separately.

Part Number	Dia	B Length	C Contact Dia.	D Stand Off	E Degree Swivel	Tap	G Thread Depth	Ball Dia	Tooth Pattern	Load Rating Lbs.
FGS-305	3/8	5/16	5/32	1/16	28	#4-40	1/4	3/16	SF	1,835
FGS-310	3/8	7/16	5/32	1/16	28	#4-40	5/16	3/16	SF	1,835
FGS-315	3/8	11/16	5/32	1/16	28	#4-40	5/16	3/16	SF	1,835
FGS-320	7/16	3/8	1/4	1/16	28	#8-32	5/32	9/32	SF	3,339
FGS-325	7/16	15/16	1/4	1/16	28	#8-32	1/2	9/32	SF	3,339
FGS-330	1/2	1/2	5/16	1/16	28	#10-32	5/32	3/8	EF	4,697
FGS-335	1/2	1	5/16	1/16	28	#10-32	5/8	3/8	EF	4,697
FGS-340	5/8	13/16	3/8	1/8	34	1/4-28	1/4	1/2	EF	5,849
FGS-345	13/16	7/8	1/2	1/8	40	5/16-24	11/32	5/8	Fine	10,925
FGS-350	15/16	7/8	5/8	1/8	34	3/8-24	9/32	3/4	Fine	13,325

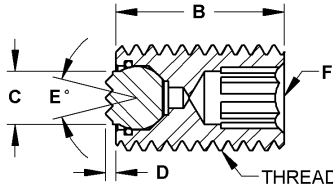
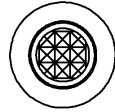
Base Design Style – Steel Ball – Flat



Compact body allows for installation in tight areas. The housing is tapped for backside fastening. The replaceable flat ball swivels to allow for better clamping on uneven surfaces. A Viton o-ring holds the ball in place while keeping contaminants out and providing smooth ball movement. The housing is made from alloy steel, heat treated to Rc 43/46 with black oxide finish. The replaceable ball is made from M-2 high speed steel heat treated to Rc 60/62. Replacement balls can be ordered separately. Grippers with flat delrin balls are available.

Part Number	Dia	B Length	C Contact Dia.	D Stand Off	E Degree Swivel	Tap	G Thread Depth	Ball Dia	Load Rating Lbs.
FGS-405	3/8	5/16	5/32	1/16	28	#4-40	1/4	3/16	1,835
FGS-410	3/8	7/16	5/32	1/16	28	#4-40	5/16	3/16	1,835
FGS-415	3/8	11/16	5/32	1/16	28	#4-40	5/16	3/16	1,835
FGS-420	7/16	3/8	1/4	1/16	28	#8-32	5/32	9/32	3,339
FGS-425	7/16	15/16	1/4	1/16	28	#8-32	1/2	9/32	3,339
FGS-430	1/2	1/2	5/16	1/16	28	#10-32	5/32	3/8	4,697
FGS-435	1/2	1	5/16	1/16	28	#10-32	5/8	3/8	4,697
FGS-440	5/8	3/4	3/8	1/8	34	1/4-28	1/4	1/2	5,849
FGS-445	13/16	7/8	1/2	1/8	40	5/16-24	11/32	5/8	10,925
FGS-450	15/16	7/8	5/8	1/8	34	3/8-24	9/32	3/4	13,325

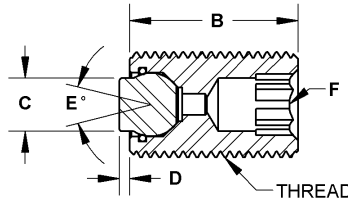
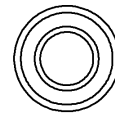
Threaded Body – Steel Ball – Serrated



The replaceable serrated ball swivels to allow for better clamping on uneven surfaces. A Viton o-ring holds the ball in place while keeping contaminants out and providing smooth ball movement. The housing is made from alloy steel, heat treated to Rc 43/46 with black oxide finish. The replaceable ball is made from M-2 high speed steel heat treated to Rc 60/62. Replacement balls can be ordered separately.

Part Number	Thread	B Thread Length	C Contact Dia.	D Stand Off	E Degree Swivel	F Hex	Ball Dia	Tooth Pattern	Load Rating Lbs.
FGS-505	3/8-16	1/2	5/32	1/16	28	3/16	3/16	SF	1,763
FGS-510	3/8-16	1	5/32	1/16	28	3/16	3/16	SF	1,763
FGS-515	3/8-16	2	5/32	1/16	28	3/16	3/16	SF	1,763
FGS-520	1/2-13	3/4	1/4	1/16	28	1/4	9/32	SF	4,527
FGS-525	1/2-13	1	1/4	1/16	28	1/4	9/32	SF	4,527
FGS-530	1/2-13	2	1/4	1/16	28	1/4	9/32	SF	4,527
FGS-535	1/2-13	3	1/4	1/16	28	1/4	9/32	SF	4,527
FGS-540	5/8-11	1	5/16	1/16	28	5/16	3/8	EF	6,131
FGS-545	5/8-11	2	5/16	1/16	28	5/16	3/8	EF	6,131
FGS-550	5/8-11	3	5/16	1/16	28	5/16	3/8	EF	6,131
FGS-555	3/4-10	1	3/8	1/8	34	3/8	1/2	EF	8,150
FGS-560	3/4-10	2	3/8	1/8	34	3/8	1/2	EF	8,150
FGS-565	3/4-10	3	3/8	1/8	34	3/8	1/2	EF	8,150

Threaded Body – Steel Ball – Flat



The replaceable flat ball swivels to allow for better clamping on uneven surfaces. A Viton o-ring holds the ball in place while keeping contaminants out and providing smooth ball movement. The housing is made from alloy steel, heat treated to Rc 43/46 with black oxide finish. The replaceable ball is made from M-2 high speed steel heat treated to Rc 60/62. Replacement balls can be ordered separately. Grippers with flat delrin balls are available.

Part Number	Thread Size	B Thread Length	C Contact Dia.	D Stand Off	E Degree Swivel	F Int. Hex.	Ball Dia	Load Rating Lbs.
FGS-605	3/8-16	1/2	5/32	1/16	28	3/16	3/16	1,763
FGS-610	3/8-16	1	5/32	1/16	28	3/16	3/16	1,763
FGS-615	3/8-16	2	5/32	1/16	28	3/16	3/16	1,763
FGS-620	3/8-16	3	5/32	1/16	28	3/16	3/16	1,763
FGS-625	1/2-13	3/4	1/4	1/16	28	1/4	9/32	4,527
FGS-630	1/2-13	1	1/4	1/16	28	1/4	9/32	4,527
FGS-635	1/2-13	2	1/4	1/16	28	1/4	9/32	4,527
FGS-640	1/2-13	3	1/4	1/16	28	1/4	9/32	4,527
FGS-645	5/8-11	1	5/16	1/16	28	5/16	3/8	6,131
FGS-650	5/8-11	2	5/16	1/16	28	5/16	3/8	6,131
FGS-655	5/8-11	3	5/16	1/16	28	5/16	3/8	6,131
FGS-660	3/4-10	1	3/8	1/8	34	3/8	1/2	8,150
FGS-665	3/4-10	2	3/8	1/8	34	3/8	1/2	8,150
FGS-670	3/4-10	3	3/8	1/8	34	3/8	1/2	8,150