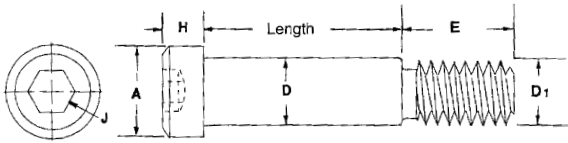


MACHINED HIGH TECHNOLOGY PLASTIC HEX SOCKET HEAD SHOULDER SCREW



Part No. KN202 - (Size Code No.) - (Length Code No.) - (Material Code No.)
 (below) (right) (page 158)

Length Code No.	Length (inches)
-1	1/4
-2	5/16
-3	3/8
-4	7/16
-5	1/2
-6	9/16
-7	5/8
-8	11/16
-9	3/4
-10	13/16
-11	7/8
-12	15/16
-13	1
-14	1 1/4
-15	1 1/2
-16	1 3/4
-17	2
-18	2 1/4
-19	2 1/2
-20	2 3/4
-21	3
-22	3 1/2
-23	4
-24	4 1/2
-25	5

Size Code No.	Shoulder Dia.	D	A	H	J	D1		E Thread Length	
						Nominal Thread Size or Basic Thread Dia.	Threads per inch		
-1	1/4	.247	.366	.183	.125	#10	.190	24	.375
-2	5/16	.310	.429	.214	.156	1/4	.250	20	.438
-3	3/8	.372	.553	.245	.188	5/16	.313	18	.500
-4	1/2	.497	.740	.307	.250	3/8	.375	16	.625
-5	5/8	.622	.864	.370	.312	1/2	.500	13	.750
-6	3/4	.747	.989	.495	.375	5/8	.625	11	.875
-7	1	.997	1.300	.618	.500	3/4	.750	10	1.000
-8	1 1/4	1.247	1.737	.743	.625	7/8	.875	9	1.125

MACHINED HIGH TECHNOLOGY PLASTIC HEX CAP SCREW

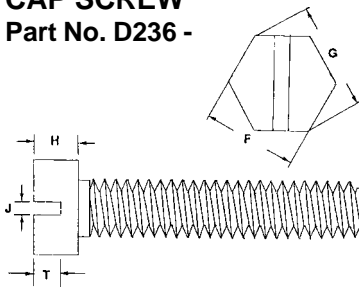
(Available in sizes 1/4-20 through 1-14.)

(Part No.) - (Size Code No.) - (Material Code No.)
 (below) (page 148) (page 158)

*Sizes under 1" are fully threaded.
 Sizes over 1" can be fully threaded on request.*

HEX HEAD SLOTTED CAP SCREW

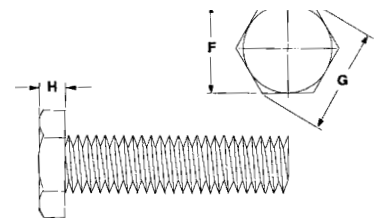
Part No. D236 -



Thread Size	F	G	H
1/4	7/16	.496	5/32
5/16	1/2	.667	13/64
3/8	9/16	.639	15/64
7/16	5/8	.710	9/32
1/2	3/4	.853	5/16
9/16	13/16	.924	23/64
5/8	15/16	1.067	25/64
3/4	1 1/8	1.276	15/32
7/8	1 5/16	1.490	35/64
1	1 1/2	1.703	39/64

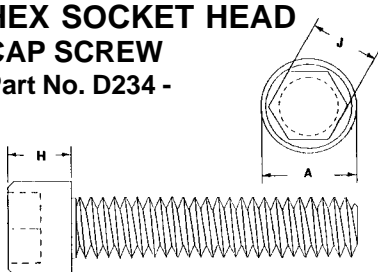
HEX HEAD CAP SCREW

Part No. D235 -



HEX SOCKET HEAD CAP SCREW

Part No. D234 -



Thread Size	A	H	J	Thread Size	A	H	J
0	.093	.058	.050	1/4	.370	.247	.188
1	.115	.071	.062	5/16	.463	.309	.250
2	.137	.084	.078	3/8	.556	.371	.312
3	.157	.097	.078	7/16	.649	.434	.375
4	.180	.110	.094	1/2	.742	.496	.375
5	.201	.123	.094	5/8	.930	.620	.500
6	.222	.136	.109	3/4	1.116	.745	.625
8	.266	.162	.141	7/8	1.302	.870	.750
10	.307	.188	.156	1	1.489	.994	.750

HIGH TECHNOLOGY PLASTIC HEX SOCKET SCREWS, CAP SCREWS and BOLTS SIZE CODE CHART

Size Code No.	Thread Size	Length	Size Code No.	Thread Size	Length	Size Code No.	Thread Size	Length	Size Code No.	Thread Size	Length	Size Code No.	Thread Size	Length
-1	0-80	1/8	-68	6-40	1/2	-135	5/16-18	3/8	-202	1/2-13	1	-269	3/4-10	1 3/4
-2	0-80	1/4	-69	6-40	9/16	-136	5/16-18	7/16	-203	1/2-13	1 1/4	-270	3/4-10	2
-3	0-80	5/16	-70	6-40	5/8	-137	5/16-18	1/2	-204	1/2-13	1 1/2	-271	3/4-16	3/8
-4	0-80	3/8	-71	6-40	3/4	-138	5/16-18	9/16	-205	1/2-13	1 3/4	-272	3/4-16	7/16
-5	0-80	7/16	-72	6-40	7/8	-139	5/16-18	5/8	-206	1/2-13	2	-273	3/4-16	1/2
-6	0-80	1/2	-73	6-40	1	-140	5/16-18	3/4	-207	1/2-20	1/4	-274	3/4-16	9/16
-7	0-80	9/16	-74	8-32	1/8	-141	5/16-18	7/8	-208	1/2-20	5/16	-275	3/4-16	5/8
-8	0-80	5/8	-75	8-32	1/4	-142	5/16-18	1	-209	1/2-20	3/8	-276	3/4-16	3/4
-9	0-80	3/4	-76	8-32	5/16	-143	5/16-18	1 1/4	-210	1/2-20	7/16	-277	3/4-16	7/8
-10	0-80	7/8	-77	8-32	3/8	-144	5/16-18	1 1/2	-211	1/2-20	1/2	-278	3/4-16	1
-11	0-80	1	-78	8-32	7/16	-145	5/16-24	1/4	-212	1/2-20	9/16	-279	3/4-16	1 1/4
-12	2-56	1/8	-79	8-32	1/2	-146	5/16-24	5/16	-213	1/2-20	5/8	-280	3/4-16	1 1/2
-13	2-56	1/4	-80	8-32	9/16	-147	5/16-24	3/8	-214	1/2-20	3/4	-281	3/4-16	1 3/4
-14	2-56	5/16	-81	8-32	5/8	-148	5/16-24	7/16	-215	1/2-20	7/8	-282	3/4-16	2
-15	2-56	3/8	-82	8-32	3/4	-149	5/16-24	1/2	-216	1/2-20	1	-283	7/8-9	1/2
-16	2-56	7/16	-83	8-32	7/8	-150	5/16-24	9/16	-217	1/2-20	1 1/4	-284	7/8-9	9/16
-17	2-56	1/2	-84	8-32	1	-151	5/16-24	5/8	-218	1/2-20	1 1/2	-285	7/8-9	5/8
-18	2-56	9/16	-85	10-24	1/8	-152	5/16-24	3/4	-219	1/2-20	1 3/4	-286	7/8-9	3/4
-19	2-56	5/8	-86	10-24	1/4	-153	5/16-24	7/8	-220	1/2-20	2	-287	7/8-9	7/8
-20	2-56	3/4	-87	10-24	5/16	-154	5/16-24	1	-221	9/16-18	1/4	-288	7/8-9	1
-21	2-56	7/8	-88	10-24	3/8	-155	5/16-24	1 1/4	-222	9/16-18	5/16	-289	7/8-9	1 1/4
-22	2-56	1	-89	10-24	7/16	-156	5/16-24	1 1/2	-223	9/16-18	3/8	-290	7/8-9	1 1/2
-23	3-48	1/8	-90	10-24	1/2	-157	3/8-16	1/4	-224	9/16-18	7/16	-291	7/8-9	1 3/4
-24	3-48	1/4	-91	10-24	9/16	-158	3/8-16	5/16	-225	9/16-19	1/2	-292	7/8-9	2
-25	3-48	5/16	-92	10-24	5/8	-159	3/8-16	3/8	-226	9/16-18	9/16	-293	7/8-14	1/2
-26	3-48	3/8	-93	10-24	3/4	-160	3/8-16	7/16	-227	9/16-18	5/8	-294	7/8-14	9/16
-27	3-48	7/16	-94	10-24	7/8	-161	3/8-16	1/2	-228	9/16-18	3/4	-295	7/8-14	5/8
-28	3-48	1/2	-95	10-24	1	-162	3/8-16	9/16	-229	9/16-18	7/8	-296	7/8-14	3/4
-29	3-48	9/16	-96	10-32	1/8	-163	3/8-16	5/8	-230	9/16-18	1	-297	7/8-14	7/8
-30	3-48	5/8	-97	10-32	1/4	-164	3/8-16	3/4	-231	9/16-18	1 1/4	-298	7/8-14	1
-31	3-48	3/4	-98	10-32	5/16	-165	3/8-16	7/8	-232	9/16-18	1 1/2	-299	7/8-14	1 1/4
-32	4-40	1/8	-99	10-32	3/8	-166	3/8-16	1	-233	9/16-18	1 3/4	-300	7/8-14	1 1/2
-33	4-40	1/4	-100	10-32	7/16	-167	3/8-16	1 1/4	-234	9/16-18	2	-301	7/8-14	1 3/4
-34	4-40	3/8	-101	10-32	1/2	-168	3/8-16	1 1/2	-235	5/8-11	3/8	-302	7/8-14	2
-35	4-40	7/16	-102	10-32	9/16	-169	3/8-24	1/4	-236	5/8-11	7/16	-303	1-8	1/2
-36	4-40	1/2	-103	10-32	5/8	-170	3/8-24	5/16	-237	5/8-11	1/2	-304	1-8	9/16
-37	4-40	9/16	-104	10-32	3/4	-171	3/8-24	3/8	-238	5/8-11	9/16	-305	1-8	5/8
-38	4-40	5/8	-105	10-32	7/8	-172	3/8-24	7/16	-239	5/8-11	5/8	-306	1-8	3/4
-39	4-40	3/4	-106	10-32	1	-173	3/8-24	1/2	-240	5/8-11	3/4	-307	1-8	7/8
-40	4-40	7/8	-107	1/4-20	1/8	-174	3/8-24	9/16	-241	5/8-11	7/8	-308	1-8	1
-41	4-40	1	-108	1/4-20	1/4	-175	3/8-24	5/8	-242	5/8-11	1	-309	1-8	1 1/4
-42	5-40	1/8	-109	1/4-20	5/16	-176	3/8-24	3/4	-243	5/8-11	1 1/4	-310	1-8	1 1/2
-43	5-40	1/4	-110	1/4-20	3/8	-177	3/8-24	7/8	-244	5/8-11	1 1/2	-311	1-8	1 3/4
-44	5-40	3/8	-111	1/4-20	7/16	-178	3/8-24	1	-245	5/8-11	1 3/4	-312	1-8	2
-45	5-40	7/16	-112	1/4-20	1/2	-179	3/8-24	1 1/4	-246	5/8-11	2	-313	1-12	1/2
-46	5-40	1/2	-113	1/4-20	9/16	-180	3/8-24	1 1/2	-247	5/8-18	3/8	-314	1-12	9/16
-47	5-40	9/16	-114	1/4-20	5/8	-181	7/16-14	1/4	-248	5/8-18	7/16	-315	1-12	5/8
-48	5-40	5/8	-115	1/4-20	3/4	-182	7/16-14	5/16	-249	5/8-18	1/2	-316	1-12	3/4
-49	5-40	3/4	-116	1/4-20	7/8	-183	7/16-14	3/8	-250	5/8-18	9/16	-317	1-12	7/8
-50	5-40	7/8	-117	1/4-20	1	-184	7/16-14	7/16	-251	5/8-18	5/8	-318	1-12	1
-51	5-40	1	-118	1/4-20	1 1/4	-185	7/16-14	1/2	-252	5/8-18	3/4	-319	1-12	1 1/4
-52	6-32	1/8	-119	1/4-20	1 1/2	-186	7/16-14	9/16	-253	5/8-18	7/8	-320	1-12	1 1/2
-53	6-32	1/4	-120	1/4-28	1/8	-187	7/16-14	5/8	-254	5/8-18	1	-321	1-12	1 3/4
-54	6-32	5/16	-121	1/4-28	1/4	-188	7/16-14	3/4	-255	5/8-18	1 1/4	-322	1-12	2
-55	6-32	3/8	-122	1/4-28	5/16	-189	7/16-14	7/8	-256	5/8-18	1 1/2	-323	1-14	1/2
-56	6-32	7/16	-123	1/4-28	3/8	-190	7/16-14	1	-257	5/8-18	1 3/4	-324	1-14	9/16
-57	6-32	1/2	-124	1/4-28	7/16	-191	7/16-14	1 1/4	-258	5/8-18	2	-325	1-14	5/8
-58	6-32	9/16	-125	1/4-28	1/2	-192	7/16-14	1 1/2	-259	3/4-10	3/8	-326	1-14	3/4
-59	6-32	5/8	-126	1/4-28	9/16	-193	1/2-13	1/4	-260	3/4-10	7/16	-327	1-14	7/8
-60	6-32	3/4	-127	1/4-28	5/8	-194	1/2-13	5/16	-261	3/4-10	1/2	-328	1-14	1
-61	6-32	7/8	-128	1/4-28	3/4	-195	1/2-13	3/8	-262	3/4-10	9/16	-329	1-14	1 1/4
-62	6-32	1	-129	1/4-28	7/8	-196	1/2-13	7/16	-263	3/4-10	5/8	-330	1-14	1 1/2
-63	6-40	1/8	-130	1/4-28	1	-197	1/2-13	1/2	-264	3/4-10	3/4	-331	1-14	1 3/4
-64	6-40	1/4	-131	1/4-28	1 1/4	-198	1/2-13	9/16	-265	3/4-10	7/8	-332	1-14	2
-65	6-40	5/16	-132	1/4-28	1 1/2	-199	1/2-13	5/8	-266	3/4-10	1	-333	1-14	2 1/2
-66	6-40	3/8	-133	5/16-18	1/4	-200	1/2-13	3/4	-267	3/4-10	1 1/4	-334	1-14	3
-67	6-40	7/16	-134	5/16-18	5/16	-201	1/2-13	7/8	-268	3/4-10	1 1/2	-335	1-14	3 1/2

METRIC HEX CAP SCREWS AND FIT BOLTS SIZE CODE CHART

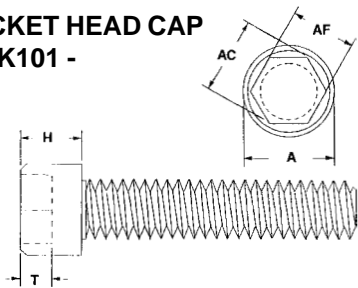
ALL DIMENSIONS GIVEN IN MILLIMETERS

Size Code No.	Thread Size	Length	Size Code No.	Thread Size	Length	Size Code No.	Thread Size	Length	Size Code No.	Thread Size	Length
-1000	M2 x 0,4	3mm	-25	M3 x 0,5	20mm	-52	M5 x 0,8	20mm	-77	M8 x 1,25	35mm
-1	M2 x 0,4	4mm	-26	M3 x 0,5	25mm	-53	M5 x 0,8	25mm	-78	M8 x 1,25	40mm
-2	M2 x 0,4	5mm	-27	M3 x 0,5	30mm	-54	M5 x 0,8	30mm	-79	M8 x 1,25	45mm
-3	M2 x 0,4	6mm	-28	M3,5 x 0,6	5mm	-55	M5 x 0,8	35mm	-80	M8 x 1,25	50mm
-4	M2 x 0,4	8mm	-29	M3,5 x 0,6	6mm	-56	M5 x 0,8	40mm	-81	M8 x 1,25	55mm
-5	M2 x 0,4	10mm	-30	M3,5 x 0,6	8mm	-57	M6 x 1,00	5mm	-82	M8 x 1,25	60mm
-6	M2 x 0,4	12mm	-31	M3,5 x 0,6	10mm	-58	M6 x 1,00	8mm	-83	M8 x 1,25	65mm
-600	M2 x 0,4	15mm	-32	M3,5 x 0,6	12mm	-59	M6 x 1,00	10mm	-84	M8 x 1,25	70mm
-7	M2 x 0,4	16mm	-33	M3,5 x 0,6	16mm	-60	M6 x 1,00	12mm	-85	M10 x 1,50	10mm
-8	M2 x 0,4	20mm	-34	M3,5 x 0,6	20mm	-603	M6 x 1,00	15mm	-853	M10 x 1,50	15mm
-9	M2 x 0,4	25mm	-35	M3,5 x 0,6	25mm	-61	M6 x 1,00	16mm	-86	M10 x 1,50	16mm
-10	M2,5 x 0,45	4mm	-36	M3,5 x 0,6	35mm	-62	M6 x 1,00	20mm	-87	M10 x 1,50	20mm
-11	M2,5 x 0,45	5mm	-37	M4 x 0,7	6mm	-63	M6 x 1,00	25mm	-88	M10 x 1,50	25mm
-12	M2,5 x 0,45	6mm	-38	M4 x 0,7	8mm	-64	M6 x 1,00	30mm	-89	M10 x 1,50	30mm
-13	M2,5 x 0,45	8mm	-39	M4 x 0,7	10mm	-65	M6 x 1,00	35mm	-90	M10 x 1,50	35mm
-14	M2,5 x 0,45	10mm	-40	M4 x 0,7	12mm	-66	M6 x 1,00	40mm	-91	M10 x 1,50	40mm
-15	M2,5 x 0,45	12mm	-41	M4 x 0,7	16mm	-67	M6 x 1,00	45mm	-92	M10 x 1,50	50mm
-16	M2,5 x 0,45	16mm	-42	M4 x 0,7	20mm	-68	M6 x 1,00	50mm	-93	M10 x 1,50	60mm
-17	M2,5 x 0,45	20mm	-43	M4 x 0,7	25mm	-69	M6 x 1,00	55mm	-94	M10 x 1,50	70mm
-18	M2,5 x 0,45	25mm	-44	M4 x 0,7	30mm	-70	M8 x 1,25	8mm	-95	M10 x 1,50	75mm
-19	M3 x 0,5	5mm	-45	M4 x 0,7	35mm	-71	M8 x 1,25	10mm	-96	M12 x 1,75	20mm
-20	M3 x 0,5	6mm	-46	M4 x 0,7	40mm	-72	M8 x 1,25	12mm	-97	M12 x 1,75	30mm
-21	M3 x 0,5	8mm	-47	M5 x 0,8	6mm	-723	M8 x 1,25	15mm	-98	M12 x 1,75	40mm
-22	M3 x 0,5	10mm	-48	M5 x 0,8	8mm	-73	M8 x 1,25	16mm	-99	M12 x 1,75	50mm
-23	M3 x 0,5	12mm	-49	M5 x 0,8	10mm	-74	M8 x 1,25	20mm	-100	M12 x 1,75	60mm
-233	M3 x 0,5	15mm	-50	M5 x 0,8	12mm	-75	M8 x 1,25	25mm	-101	M12 x 1,75	70mm
-24	M3 x 0,5	16mm	-51	M5 x 0,8	15mm	-76	M8 x 1,25	30mm	-102	M12 x 1,75	75mm

MACHINED HIGH TECHNOLOGY PLASTIC METRIC HEX CAP SCREWS and BOLTS

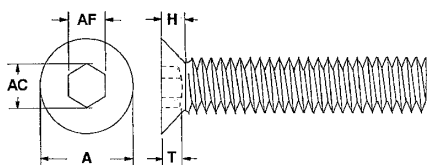
(Part No.) - (Size Code No.) - (Material Code No.)
(below) (page 157) (below)

HEX SOCKET HEAD CAP Part No. K101 -



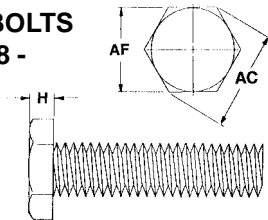
Thread Size	A	H	T	AF	AC
	max	nom	min	nom	min
M2 x 0,4	3,80	1,93	1,00	1,50	1,73
M2,5 x 0,45	4,45	2,43	1,10	2,00	2,30
M3 x 0,5	5,50	2,93	1,30	2,50	2,87
M4 x 0,7	7,00	3,91	2,00	3,00	3,44
M5 x 0,8	8,50	4,91	2,50	4,00	4,58
M6 x 1,0	10,00	5,85	3,00	5,00	5,72
M8 x 1,25	13,00	7,82	4,00	6,00	6,86
M10 x 1,5	16,00	9,82	5,00	8,00	9,15
M12 x 1,75	18,00	11,78	6,00	10,00	11,53

COUNTERSUNK HEX SOCKET HEAD CAP Part No. K301 -



Thread Size	A	H	T	AF	AC
	max	max	nom	nom	min
M3 x 0,5	6,00	1,70	1,20	2,00	2,30
M4 x 0,7	8,00	2,30	1,80	2,50	2,87
M5 x 0,8	10,00	2,80	2,30	3,00	3,44
M6 x 1,0	12,00	3,30	2,50	4,00	4,58
M8 x 1,25	16,00	4,40	3,50	5,00	5,72
M10 x 1,5	20,00	5,50	4,40	6,00	6,86
M12 x 1,75	24,00	6,50	4,60	8,00	9,15

HEX HEAD BOLTS Part No. J108 -

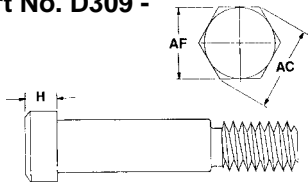


Thread Size	AF	H	AC
	nom	nom	min
M5 x 0,8	8,00	3,50	8,63
M6 x 1,00	10,00	4,00	10,89
M8 x 1,25	13,00	5,30	14,20
M10 x 1,5	17,00	6,40	18,72
M12 x 1,75	19,00	7,50	20,88

MACHINED HIGH TECHNOLOGY PLASTIC METRIC HEX FIT BOLTS

(Part No.) - (Size Code No.) - (Material Code No.)
(below) (page 157) (below)

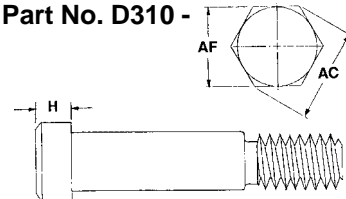
HEX FIT BOLTS with Long Threaded Dog Point Part No. D309 -



Thread Size	AF	H	AC
	nom	nom	min
M8	13,00	5,30	14,38
M10	16/17,00	6,40	17,77/18,90
M12	18/19,00	7,50	19,85/20,88

*Parts are made to DIN dimensions.
Materials are selected by customer.*

HEX FIT BOLTS with Short Threaded Dog Point Part No. D310 -



Available in the following materials:

Material Code	Material Name	Material Code	Material Name	Material Code	Material Name
-3	Lexan®, (clear)	-24	Delrin®, (white)	-38	Fiber Glass G10
-4	Lexan®, (black)	-27	PVC	-39	UHMW®
-5	Ultem® 1000	-28	CPVC	-40	PFA, (Teflon®)
-11	Polypropylene	-29	Teflon®	-41	Halar®
-13	Polyethylene	-30	Tefzel®	-60	Nylon 6/6, 30% Short Glass-filled
-14	ABS	-32	PCTFE	-64	Delrin®, 25% Short Glass-filled
-15	PEEK™	-33	Polysulfone	-77	Ultem® 2300, (natural)
-18	Nylon 6/6, (natural)	-35	Noryl®	-78	Nylon 6/6, (black)
-23	Nylon Super Tough	-37	PVDF	-194	Nylon 46, 30% Glass-filled, Heat Stabilized
				-195	Nylon 46, 30% Glass-filled, Flame Retardant, H.S.
				-213	Vespe®
				-272	PVC, (white)
				-273	PVC, (black)
				-226	Radel® A200, Polyethersulfone
				-228	Radel® AG330, 30% Glass-filled
				-229	Radel® R5000, Polyphenylsulfone