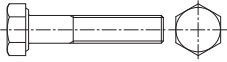
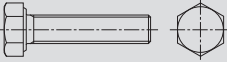
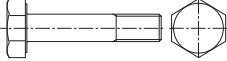
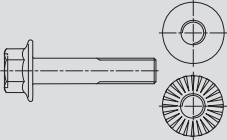
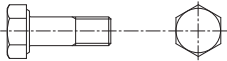
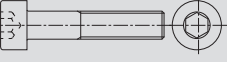
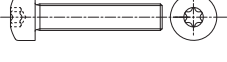
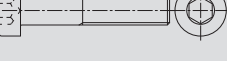
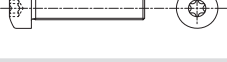
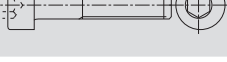
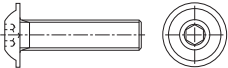
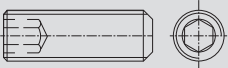
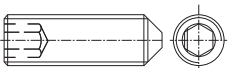
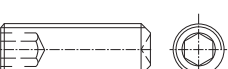
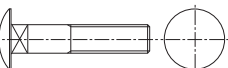
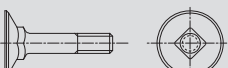
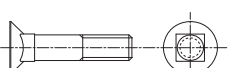
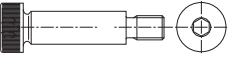
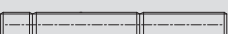
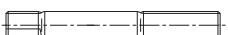
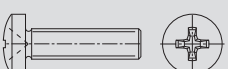
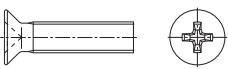
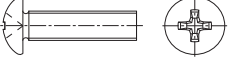
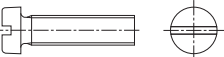
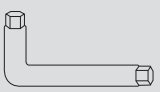
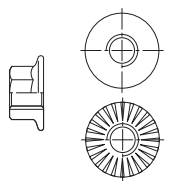


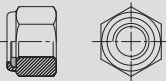
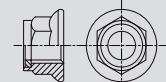
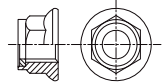
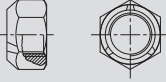
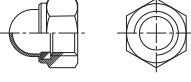
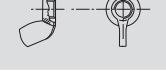
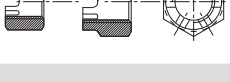
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	FULL THREAD HEXAGON HEAD SCREWS	4017	5739	933	4
	PARTIAL THREAD HEXAGON HEAD SCREWS	8765	5738	960	6
	FULL THREAD HEXAGON HEAD SCREWS	8676	5740	961	8
	LARGE HEX HEAD SCREWS FOR STEEL STRUCTURES	-	5712	6914	10
	HEXAGON FLANGE SCREWS WITH OR WITHOUT SERRATION	UNI EN ISO 1665	-	6921	12
	HEXAGON HEAD SCREWS FOR BLADES	-	-	-	14
HEXAGON SOCKET SCREWS WITH METRIC THREAD					15
	HEXAGON SOCKET HEAD CAP SCREWS	4762	5931	912	16
	HEXAGON SOCKET HEAD CAP SCREWS	12474	5932	912	18
	HEXALOBULAR PAN HEAD SCREWS	14583	-	-	19
	HEXAGON SOCKET THIN HEAD CAP SCREWS	-	9327	7984	20
	LOW CYLINDRICAL HEAD SCREWS WITH EXALOBULAR SOCKET	14580	-	-	21
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	HEXAGON SOCKET SET SCREWS WITH DOG POINT	4028	5925	915	32
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	CROSS RECESSED COUNTERSUNK RAISED HEAD SCREWS	7047	7689	966	48
	CROSS RECESSED HALF ROUND HEAD SCREWS	-	-	-	49

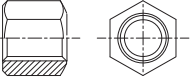
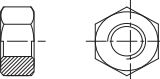
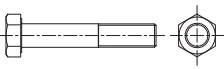
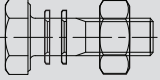
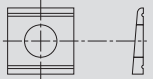
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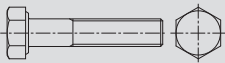
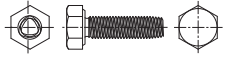
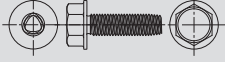
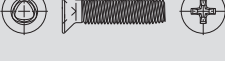
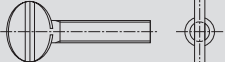
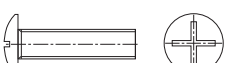
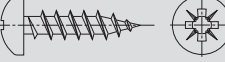
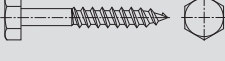
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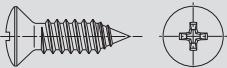
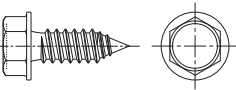
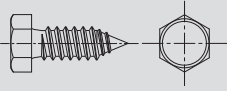
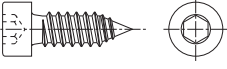
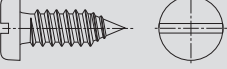
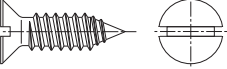
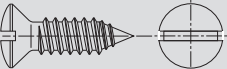
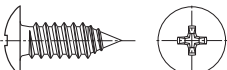
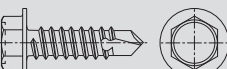
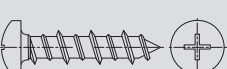
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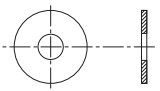
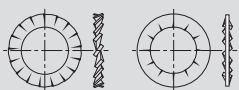
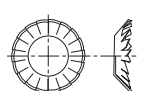
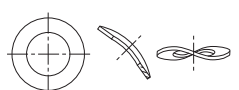
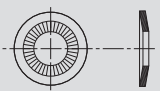
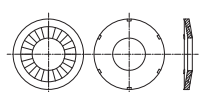
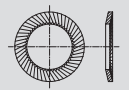
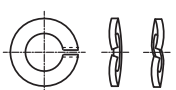
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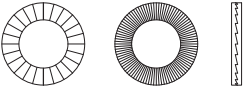
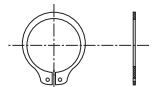
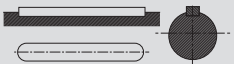
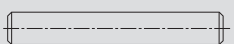
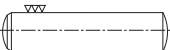
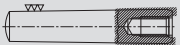
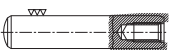
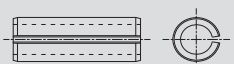
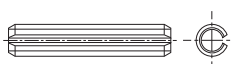
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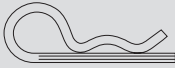
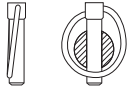
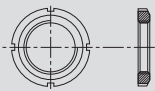
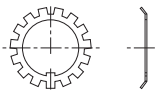
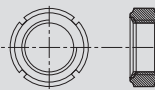
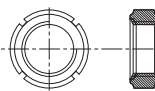
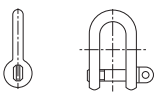
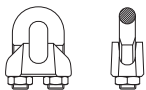
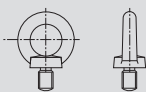
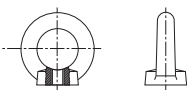
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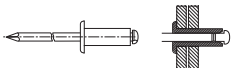
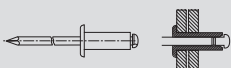
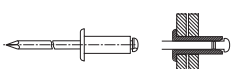
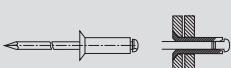
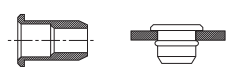
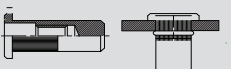
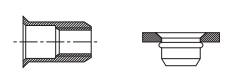
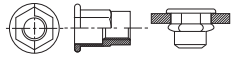
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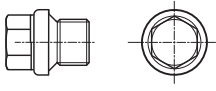
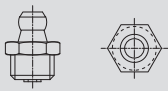
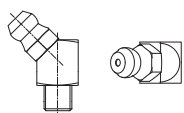
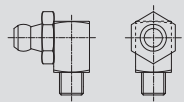
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TEMPERED DOWEL PINS	8734A	6364A	6325	155
TEMPERED DOWEL PINS WITH INTERNAL THREAD	8735	6364B	7979D	157
METRIC THREADED RODS	-	6547	975	42
FLAT WASHERS	7089	6592	125 A	130
CHANNEL CLAMPING PLATES FOR UPN SECTIONS	-	6598	434	94
PARALLEL KEYS	-	6604/A	6885A	152
HEXAGONAL KEYS FOR SOCKET HEX SCREWS	2936	6753	911	54
HEAVY DUTY SPRING PINS	8752	6873	1481	160
SPRING-TYPE STRAIGHT PINS, SLOTTED, LIGHT DUTY	13337	6874	7346	158
SPIRAL SPRING PINS	8750	6875	7343	161
SOCKET HEAD CAP TAPPING SCREWS	-	6947	-	117
HEXAGON HEAD TAPPING SCREWS	1479	6949	7976	116
HEXAGON WASHER HEAD TAPPING SCREWS	-	6950	6928	115
SLOTTED PAN HEAD TAPPING SCREWS	1481	6951	7971	118
SLOTTED COUNTERSUNK HEAD TAPPING SCREWS	1482	6952	7972	119
SLOTTED COUNTERSUNK RAISED HEAD TAPPING SCREWS	1483	6953	7973	120

UNI STANDARDS INDEX

Description	ISO	UNI	DIN	pag.
WIDE FLAT WASHERS	7093	6953	9021	131
PHILLIPS PAN HEAD SELF TAPPING SCREWS	7049	6954	7981	112
PHILLIPS COUNTERSUNK FLAT HEAD SELF TAPPING SCREWS	7050	6955	7982	113
PHILLIPS COUNTERSUNK RAISED HEAD SELF TAPPING SCREWS	7051	6956	7983	114
TAPER PINS	2339	7283	1	153
TAPER PINS WITH INTERNAL THREAD	8736A	7284A	7978A	156
RADIAL CIRCLIPS FOR SHAFTS	-	7434	6799	151
RETAINING RINGS FOR SHAFTS (EXTERNALS)	-	7435- 7436	471	149
RETAINING RINGS FOR HOLES (INTERNALS)	-	7437- 7438	472	150
NYLON INSERT HIGH HEX LOCK NUTS	7040- 10512	7473	982	64
NYLON INSERT THIN HEX LOCK NUTS	10511	7474	985	65
GREASE NIPPLES	-	7663	71412	199
CROSS RECESSED PAN HEAD SCREWS	7045	7687	7985	46
CROSS RECESSED COUNTERSUNK FLAT HEAD SCREWS	7046	7688	965	47
CROSS RECESSED COUNTERSUNK RAISED HEAD SCREWS	7047	7689	966	48
HEX HEAD TRILOBULAR SCREWS	-	8110	7500 D	97
FLANGED HEX HEAD TRILOBULAR SCREWS	-	8111	-	98
CROSS RECESSED PAN HEAD TRILOBULAR SCREWS	-	8112	7500 CE	99
CROSS RECESSED COUNTERSUNK FLAT HEAD TRILOBULAR	-	8113	7500 M	100
FLANGED HEX HEAD DRILLING SCREWS	15480	8117	7504 K	122
PAN HEAD DRILLING SCREWS	15481	8118	7504 N	125
COUNTERSUNK HEAD DRILLING SCREWS	15482	8119	7504 P	124
SQUARE SECTION HELICAL SPRING WASHERS	-	8839	128	141
WAVE SPRING WASHERS TYPE A	-	8840 A	137 A	136
WAVE SPRING WASHERS TYPE B	-	8840 B	137 b	137

UNI STANDARDS INDEX

Description	ISO	UNI	DIN	pag.
SERRATED SPRING WASHERS	-	8842 A-J-AJ	6798 A-J-AJ	134
CONICAL SERRATED SPRING WASHERS	-	8842 V	6798 V	135
STEEL / STEEL BLIND RIVETS	-	9200A	7337A	178
ALUMINIUM / STEEL BLIND RIVETS	-	9200A	7337A	179
STAINLESS STEEL BLIND RIVETS	-	9200A	7337A	180
COPPER BLIND RIVETS	-	9200A	7337A	181
ALUMINIUM / STEEL COUNTERSUNK BLIND RIVETS	-	9200B	7337B	182
HEXAGON SOCKET THIN HEAD CAP SCREWS	-	9327	7984	20
PHILLIPS PAN HEAD HI/LO SELF TAPPING SCREWS FOR PLASTIC	-	9707	-	127

DIN STANDARDS INDEX

Description	ISO	UNI	DIN	pag.
TAPER PINS	2339	7283	1	153
DOWEL PINS	2338B	1707	7	154
SLOTTED PAN HEAD SCREWS	1207	6107	84	51
SPLIT PINS	1234	1336	94	162
FLAT WASHERS	7089	6592	125 A	130
HELICAL SPRING WASHERS (GROWER)	-	1751	127 B	132
SQUARE SECTION HELICAL SPRING WASHERS	-	8839	128	141
WAVE SPRING WASHERS TYPE A	-	8840 A	137 A	136
WAVE SPRING WASHERS TYPE B	-	8840 B	137 b	137
WING NUTS FORM A	-	5448	315	72
WING SCREWS	-	5449	316	101
CHANNEL CLAMPING PLATES FOR UPN SECTIONS	-	6598	434	94
THIN HEX NUTS	4035- 8675	-	439	59
RETAINING RINGS FOR SHAFTS (EXTERNALS)	-	7435- 7436	471	149
RETAINING RINGS FOR HOLES (INTERNALS)	-	7437- 7438	472	150
CHAMFERED SQUARE NUTS	-	5597	557	77
THIN SQUARE NUTS	-	5596	562	76
HEX HEAD WOOD SCREWS	-	704	571	110
LIFTING EYE BOLTS	-	2947	580	173
LIFTING EYE NUTS	-	2948	582	174
CARRIAGE BOLTS (MUSHROOM HEAD SQUARE NECK SCREWS)	8677	5731	603	38
COUNTERSUNK BOLTS 120° WITH SQUARE NECK SCREWS	-	-	605	40
COUNTERSUNK BOLTS 90° WITH SQUARE NECK SCREWS	-	-	608	41
CAST IRON WIRE ROPE CLIPS	13411-5	-	741	172
INTERNAL DRIVE PIPE PLUG WITH CONICAL THREAD HEX SOCKET	-	-	906	196

DIN STANDARDS INDEX

Description	ISO	UNI	DIN	pag.
INTERNAL DRIVE PIPE PLUG WITH CONICAL COLLAR CYLINDRICAL HEX SOCKET	-	-	908	197
HEX HEAD SCREW PLUG WITH COLLAR CYLINDRICAL THREAD	-	-	910	198
HEXAGONAL KEYS FOR SOCKET HEX SCREWS	2936	6753	911	54
HEXAGON SOCKET HEAD CAP SCREWS	4762	5931	912	16
HEXAGON SOCKET HEAD CAP SCREWS	12474	5932	912	18
FLAT POINT HEXAGON SOCKET SET SCREWS	4026	5923-5924	913	28
CONE POINT HEXAGON SOCKET SET SCREWS	4027	5927	914	30
HEXAGON SOCKET SET SCREWS WITH DOG POINT	4028	5925	915	32
CUP POINT HEXAGON SOCKET SET SCREWS	4029	5929	916	34
HEXAGON CAP NUTS LOW TYPE	-	-	917	71
SQUARE WELDING NUTS	-	-	928	80
WELDING HEX NUTS	-	-	929	78
PARTIAL THREAD HEXAGON HEAD SCREWS	4014	5737	931	2
FULL THREAD HEXAGON HEAD SCREWS	4017	5739	933	4
HEX NUTS	-	5588	934	56
STANDARD CASTLE HEX NUTS	7035	5593	935	73
THIN HEX NUTS	-	5589	936	60
THIN CASTLE HEX NUTS	-	5594	937	74
STUDS WITH SHORT END	-	5909	938	44
MEDIUM TAP END STUDS	-	5911	939	45
PARTIAL THREAD HEXAGON HEAD SCREWS	8765	5738	960	6
FULL THREAD HEXAGON HEAD SCREWS	8676	5740	961	8
COUNTERSUNK SLOTTED FLAT HEAD SCREWS	2009	6109	963	52
COUNTERSUNK SLOTTED RAISED HEAD SCREWS	2010	6110	964	53
CROSS RECESSED COUNTERSUNK FLAT HEAD SCREWS	7046	7688	965	47
CROSS RECESSED COUNTERSUNK RAISED HEAD SCREWS	7047	7689	966	48

DIN STANDARDS INDEX

Description	ISO	UNI	DIN	pag.
METRIC THREADED RODS	-	6547	975	42
HEXAGON FULL METAL LOCK NUTS CONELOCK	7042-10513	-	980V	68
KM SLOTTED ROUND NUTS	-	-	981	165
NYLON INSERT HIGH HEX LOCK NUTS	7040-10512	7473	982	64
NYLON INSERT THIN HEX LOCK NUTS	10511	7474	985	65
HEXAGON DOMED CUP LOCK NUTS	-	-	986	69
TURNBUCKLES EYE-EYE*	-	-	1480	175
HEAVY DUTY SPRING PINS	8752	6873	1481	160
HEX DOMED CAP NUTS	-	5721	1587	70
DISC SPRINGS	-	-	2093	142
TOOTH WASHERS TYPE MB	-	-	5406	166
TEMPERED DOWEL PINS	8734A	6364A	6325	155
EXTENSION NUTS	-	5535	6334	75
HIGH HEX NUTS 1,5 X D	-	-	6330 B	85
CONICAL SPRING WASHERS	-	-	6796	146
SERRATED SPRING WASHERS	-	8842 A-J-AJ	6798 A-J-AJ	134
CONICAL SERRATED SPRING WASHERS	-	8842 V	6798 V	135
RADIAL CIRCLIPS FOR SHAFTS	-	7434	6799	151
PARALLEL KEYS	-	6604/A	6885A	152
THIMBLES	-	-	6899 A	171
HEXAGON SOCKET THIN HEAD CAP SCREWS WITH PILOT RECESS	-	-	6912	22
LARGE HEX HEAD SCREWS FOR STEEL STRUCTURES	-	5712	6914	10
LARGE HEX NUTS FOR STEEL STRUCTURES	-	5713	6915	88
STRUCTURAL PLAIN WASHERS	7416	5714	6916	89
HEXAGON FLANGE SCREWS WITH OR WITHOUT SERRATION	UNI EN ISO 1665	-	6921	12

DIN STANDARDS INDEX

Description	ISO	UNI	DIN	pag.
HEXAGONAL FLANGED NUTS WITH OR WITHOUT SERRATION	4161	-	6923	63
NYLON INSERT FLANGED HEX LOCK NUTS	7043	-	6926	66
FULL METAL FLANGED HEX LOCK NUTS	7044	-	6927	67
HEXAGON WASHER HEAD TAPPING SCREWS	-	6950	6928	115
STEEL / STEEL BLIND RIVETS	-	9200A	7337A	178
ALUMINIUM / STEEL BLIND RIVETS	-	9200A	7337A	179
STAINLESS STEEL BLIND RIVETS	-	9200A	7337A	180
COPPER BLIND RIVETS	-	9200A	7337A	181
ALUMINIUM / STEEL COUNTERSUNK BLIND RIVETS	-	9200B	7337B	182
SPIRAL SPRING PINS	8750	6875	7343	161
SPRING-TYPE STRAIGHT PINS, SLOTTED, LIGHT DUTY	13337	6874	7346	158
CROSS RECESSED PAN HEAD TRILOBULAR SCREWS	-	8112	7500 CE	99
HEX HEAD TRILOBULAR SCREWS	-	8110	7500 D	97
CROSS RECESSED COUNTERSUNK FLAT HEAD TRILOBULAR	-	8113	7500 M	100
FLANGED HEX HEAD DRILLING SCREWS	15480	8117	7504 K	122
PAN HEAD DRILLING SCREWS	15481	8118	7504 N	125
COUNTERSUNK HEAD DRILLING SCREWS	15482	8119	7504 P	124
POZI FLAT HEAD CHIPBOARD SCREWS	-	-	7505 A	104
POZI PAN HEAD CHIPBOARD SCREWS	-	-	7505 B	108
POZI OVAL FLAT HEAD CHIPBOARD SCREWS	-	-	7505 C	109
ALUMINIUM / COPPER WASHERS	-	-	7603 A	148
"PAL" EXAGONAL SELF LOCKING COUNTER NUTS	-	-	7967	93
SLOTTED PAN HEAD TAPPING SCREWS	1481	6951	7971	118
SLOTTED COUNTERSUNK HEAD TAPPING SCREWS	1482	6952	7972	119
SLOTTED COUNTERSUNK RAISED HEAD TAPPING SCREWS	1483	6953	7973	120
HEXAGON HEAD TAPPING SCREWS	1479	6949	7976	116
TAPER PINS WITH INTERNAL THREAD	8736A	7284A	7978A	156

DIN STANDARDS INDEX

Description	ISO	UNI	DIN	pag.
TEMPERED DOWEL PINS WITH INTERNAL THREAD	8735	6364B	7979D	157
SQUARE SECTION HELICAL SPRING WASHERS	-	-	7980	133
PHILLIPS PAN HEAD SELF TAPPING SCREWS	7049	6954	7981	112
PHILLIPS COUNTERSUNK FLAT HEAD SELF TAPPING SCREWS	7050	6955	7982	113
PHILLIPS COUNTERSUNK RAISED HEAD SELF TAPPING SCREWS	7051	6956	7983	114
HEXAGON SOCKET THIN HEAD CAP SCREWS	-	9327	7984	20
CROSS RECESSED PAN HEAD SCREWS	7045	7687	7985	46
HEXAGON SOCKET COUNTERSUNK HEAD SCREWS	10642	5933	7991	24
WIDE FLAT WASHERS	7093	6953	9021	131
LINCH PINS	-	-	11023	164
BOLT SECURING WASHERS	-	-	25201	144
GREASE NIPPLES	-	7663	71412	199
SHACKLES	-	-	82101 A	170

HEXAGON HEAD SCREWS WITH METRIC THREAD



Hex head screws are among the most common and versatile fastening systems in industrial, construction, and mechanical applications.

Their main feature is the hexagonal head, which allows efficient tightening using open-end wrenches, sockets, or ratchets. This configuration enables the application of high tightening torques, ensuring a secure and durable fastening even under heavy mechanical stress.

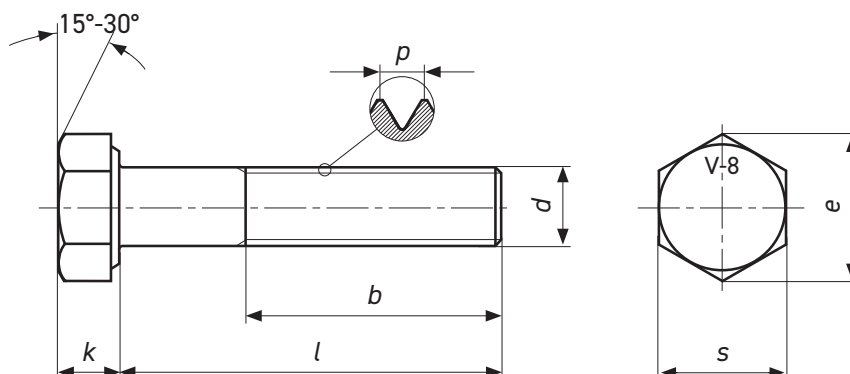
Hex head screws are available with metric threads, compliant with ISO standards, and are produced in different strength classes, materials, and finishes. Among the most common materials are zinc-plated steel, stainless steel, and brass, each suited to specific requirements such as corrosion resistance or compatibility with harsh environments.

These screws are used in a wide range of applications: from assembling metal structures and industrial machinery to automotive and agricultural components. Their strength and ease of use make them ideal for heavy-duty applications and on-site installations. Available with different shank types (partially or fully threaded), hex head screws represent a reliable and standardized solution for structural and mechanical fastening.

PARTIAL THREAD HEXAGON HEAD SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
4014* 5737 931



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

4.8

8.8

A2-70

10.9

12.9

A4-70

A4-80

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B-C

ACCORDING TO ISO 4759-1 CAT A-B-C

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS, Hot dip galvanized - Other coatings on request

d	M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20
p	0,7	0,8	1	1	1,25	1,5	1,75	2	2	2,5	2,5
s*	7	8	10	11	13	17/16	19/18	22/21	24	27	30
k	2,8	3,5	4	4,8	5,3	6,4	7,5	8,8	10	11,5	12,5
e min	7,66	8,79	11,05	12,12	14,38	18,9	21,10	24,49	26,75	30,14	33,53
b ≤ 125	14	16	18	20	22	26	30	34	38	42	46
b 125 ÷ 200		22	24	26	28	32	36	40	44	48	52
b > 200					41	45	49	53	57	61	65

d	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
p	2,5	3	3	3,5	3,5	4	4	4,5	4,5	5
s*	32/34	36	41	46	50	55	60	65	70	75
k	14	15	17	18,7	21	22,5	25	26	28	30
e min	35,72	39,98	45,2	50,85	55,37	60,79	66,14	71,3	76,95	82,6
b ≤ 125	50	54	60	66	72	78	84	90	96	102
b 125 ÷ 200	56	60	66	72	78	84	90	96	102	108
b > 200	69	73	79	85	91	97	103	109	115	121

(*) The ISO standard differs from DIN and UNI standards for the sizes "s" and "e" in the diameters M10, M12, M14, M22. The first hex key value refers to UNI and DIN, while the second value refers to ISO.

d	M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
20	2,63	4,08																			
25	3,12	4,86	6,99																		
30	3,61	5,64	8,06	12,70	16,10																
35	4,04	6,42	9,13	13,60	18,20	31,93															
40	4,53	7,20	10,20	15,10	20,70	35,00	49														
45	5,03	7,98	11,30	16,60	22,20	38,00	54	76													
50	5,52	8,76	12,30	18,10	24,20	41,10	58	82	107	141	183										
55	6,02	9,54	13,40	19,50	25,80	43,80	63	88	115	151	195										
60	6,51	10,30	14,40	21,00	27,80	46,90	67	94	123	161	207	251	320		550	708	850				
65	7,01	11,10	15,50	22,50	29,80	50,00	70	99	131	171	219	266	338								
70	7,50	11,90	16,50	24,00	31,80	53,10	75	105	139	181	231	281	356	465	605	743	930				
75		12,70	17,60	25,50	33,70	56,20	79	111	147	191	243	296	374	488							
80		13,50	18,60	27,00	35,70	59,30	84	117	155	200	255	311	392	511	658	778	1010	1299			
85			19,70	28,50	37,70	62,40	88	123	163	210	267	326	410	534	685						
90		15,1	20,80	30,00	39,60	65,50	92	127	171	220	279	341	428	557	712	813	1090	1368			
95			21,9		41,6	68,60	96,8	133	179	230	291	356	446	580	739	882	1130				
100		16,7	23	33,10	43,6	71,70	101	139	186	240	303	370	464	603	767	951	1170	1443	1650		
105					45,6	74,80	105														
110			25,2		47,5	77,90	109	151	202	260	327	400	500	650	823	1020	1250	1510	1760	2170	
115					49,45	81,00	114														
120			27,4		51,4	84,10	118	164	218	280	351	430	535	695	880	1090	1330	1590	1870	2260	2580
125					53,35	87,20	123														
130			29,6		55,3	90,30	127	174	230	296	374	450	560	720	920	1150	1400	1650	1980	2350	2720
140			31,8		59,2	96,50	136	185	246	316	398	480	595	765	975	1220	1480	1740	2090	2480	2860
150			34		63,1	102,70	145	196	262	336	422	510	630	810	1030	1290	1560	1830	2200	2600	3010
160					67	108,9	153	207	278	356	446	546	665	855	1090	1350	1640	1930	2310	2730	3160
170					70,9	115,1	162	218	294	376	470	570	700	900	1140	1410	1720	2020	2410	2850	3300
180					74,8	121,3	171	229	310	396	494	594	735	945	1200	1480	1800	2120	2520	2980	3440
190					78,7	127,5	180	240	326	416	519	619	770	990	1250	1540	1880	2210	2630	3100	3580
200					82,6	133,7	188	251	342	436	544	644	805	1030	1310	1610	1970	2310	2740	3220	3720
210					86,5	139,9	197	262	358	456	569	669	840	1075	1365	1675	2050	2400	2850	3340	3860
220					90,4	146,1	206	273	373	476	595	695	870	1130	1420	1750	2130	2500	2960	3470	4010
230					94,3	152,3	210	284	387	496	619	719	905	1176	1475	1820	2210	2600	3070	3600	4150
240					98,2	158,5	219	295	403	516	645	745	940	1220	1530	1880	2290	2700	3180	3730	4290
250					102,1	164,7	228	306	418	536	670	770	975	1265	1585	1950	2370	2800	3290	3860	4430
260					106,0	170,9	237	317	434	556	695	795	1010	1310	1640	2020	2450	2900	3400	3990	4570
270					109,9	177,1	246	328	449	576	720	820	1045								
280					113,8	183,3	255	339	465	596	745	845	1080	1400	1750	2150	2610	3100	3620	4250	4850
290					117,7	189,5	264	350	480	616	770	870	1115								
300					121,6	195,7	273	361	496	636	795	895	1150	1490	1860	2290	2770	3300	3840	4500	5130
310									512		820	920	1185								
320									528		845	945	1220	1580	1970					4757	5410
330									544		870	970	1255								
340									560		895	995	1290		2080						
350									576		920	1020	1325								
360									592		945	1045	1360		2190						
370									608		970	1070	1395								
380									624		995	1095	1430		2300						
390									640		1020	1120	1465								
400									656		1045	1145	1500		2410						

 Weight for 1000 pcs

(**) According to the norm sizes above the black line are Class A and below Class B.

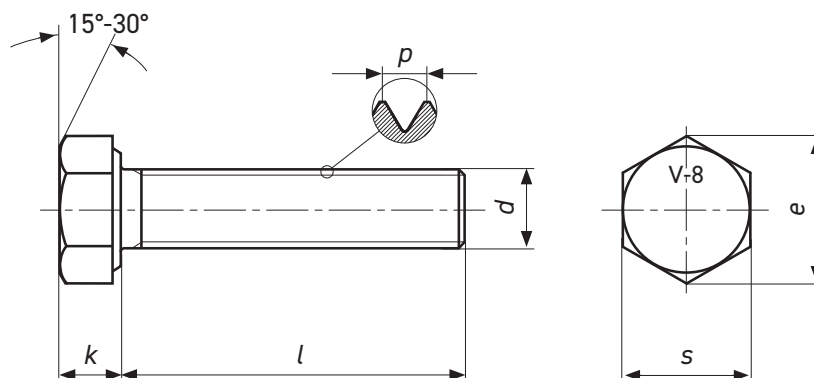
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

The weights indicated are approximate. **Other sizes available on request.**

FULL THREAD HEXAGON HEAD SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
4017* 5739 933



MATERIAL	STEEL		STAINLESS STEEL		BRASS
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1		ACCORDING TO ISO 3506-1		
TENSILE STRENGTH					250 ÷ 400 N/mm²
CLASS	4.8	8.8	A2-70		OT
	10.9	12.9	A4-70	A4-80	
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B-C		ACCORDING TO ISO 4759-1 CAT A-B-C		ACCORDING TO ISO 4759-1 CAT A-B-C
AVAILABLE TREATMENT	Plain, Black, White zinc plated or Yellow zinc plated according to RoHS Hot dip galvanized. Other coatings on request				

d	M3	M4	M5	M6	M7	M8	M10	M12	M14	M16	M18
p	0,5	0,7	0,8	1	1	1,25	1,5	1,75	2	2	2,5
s*	5,5	7	8	10	11	13	17/16	19/18	22/21	24	27
k	2	2,8	3,5	4	4,8	5,3	6,4	7,5	8,8	10	11,5
e min	5,88	7,66	8,79	11,05	12,12	14,38	18,9	21,1	24,49	26,75	30,14

d	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
p	2,5	2,5	3	3	3,5	3,5	4	4	4,5	4,5	5
s*	30	32/34	36	41	46	50	55	60	65	70	80
k	12,5	14	15	17	18,7	21	22,5	25	26	28	33
e min	33,53	35,72	39,98	45,2	50,85	55,37	60,79	66,49	72,02	76,95	82,6

The ISO standard differs from DIN and UNI standards for the sizes "s" and "e" in the diameters M10, M12, M14, M22.
The first hex key value refers to UNI and DIN , while the second value refers to ISO.
Other materials available on request.

	d	M3	M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
/ = LENGTH	6	0,67	1,34																				
	8	0,71	1,49	2,38	3,74		8,5																
	10	0,75	1,64	2,63	4,08	6,53	9,1	16,2															
	12	0,92	1,80	2,87	4,42	6,92	9,8	17,2	24,9														
	14	1	1,95	3,12	4,77	7,39	10,4	18,2	26,3														
	16	1,08	2,10	3,37	5,11	7,86	11,1	19,2	27,7	44													
	18		2,26	3,62	5,46	8,41	11,7	20,2	29,1	46													
	20	1,25	2,41	3,87	5,8	8,91	12,3	21,2	31	48	63,5	88											
	22		2,56	4,12	6,15	9,35	12,9	22,2	33	50	66,2												
	25	1,46	2,80	4,49	6,65	10,1	13,9	23,7	34,1	53	70,2	95,8	124										
	28				7,15		14,9	25,2															
	30	1,67	3,19	5,11	7,51	11,4	15,5	26,2	37,7	57,9	76,9	104	134	168	214								
	35	1,88	3,57	5,73	8,37	12,6	17,1	28,7	41,3	62,9	83,5	112	145	181	229								
	40	2,09	3,96	6,35	9,23	13,9	18,7	31,2	44,9	67,9	90,2	120	155	193	244		448						
	45	2,30	4,34	6,99	10,1	15,1	20,3	33,7	48,5	72,9	97,1	128	165	206	259		472						
	50	2,52	4,73	7,59	11,0	16,4	21,8	36,2	52	77,9	103	136	176	219	274	377	496		797				
	55		5,11	8,19	11,9	17,6	23,4	38,7	55,6	82,9	110	145	186	232	289	397	519		822				
	60		5,50	8,80	12,7	18,8	25,0	41,3	58,2	87,8	117	153	196	244	304	416	543	688	851				
	65			9,40	13,6	20,1	26,6	43,8	62,8	92,8	123	161	207	257	319	435	566	717	886				
	70			10,00	14,4	21,3	28,2	46,3	66,4	97,8	130	169	217	269	334	454	590	746	910				
	75				15,3	22,6	29,8	48,8	70	102	137	177	227	282	348	473	614	775	950				
	80			11,21	16,2	23,8	31,4	51,3	73,6	107	144	186	238	295	363	492	637	806	990	1240	1460		
	85				17,0	25,1	33,0	53,8	77,2	112	150	194	247	308	378	512	661	837	1020	1280	1500		
	90				17,9	26,3	34,6	56,3	80,8	117	157	202	258	321	393	531	685	866	1060	1320	1550		
	95				18,8	27,5	35,2	59,8	84,4	122	164	210	268										
	100				19,6	28,8	37,7	61,3	88	127	170	218	279	346	423	569	732	920	1140	1400	1650	1980	2320
	110				21,3		40,9	66,4	95,2	137	184	235	300	371	453	608	779	978	1200	1480	1740	2090	2450
	120				23,0		43,6	71,4	102	147	197	251	320	397	483	647	827	1040	1260	1560	1840	2190	2570
	130						46,4	76,4	109	157	210	268	340	421	513	685	874	1090	1330	1650	1930	2300	2690
	140						49,1	81,4	116	167	224	284	361	448	543	724	921	1150	1400	1730	2020	2410	2820
	150						51,8	86,4	123	177	237	300	381	473	572	762	969	1210	1470	1810	2120	2520	2940
	160						54,6	91,4	130	187	251	316	402	498	602	801	1010	1270	1540	1890	2210	2630	3060
	170						57,3	96,4	137	197	264	332	422	523	632	839	1060	1330	1610	1970	2300	2740	
	180						60,0	101,4	144	207	278	348	442	548	662	875	1110	1390	1680	2050	2400	2850	3310
	190						62,8	106,4	151	217	291	364	462	573	692	911	1160	1440	1740	2140	2500	2960	
	200						65,5	111,4	158	227	305	380	484	598	722	947	1210	1500	1810	2220	2590	3060	3560
	210																						2700

Weight for 1000 pcs

(**) According to the norm sizes above the black line are Class A and below Class B.

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

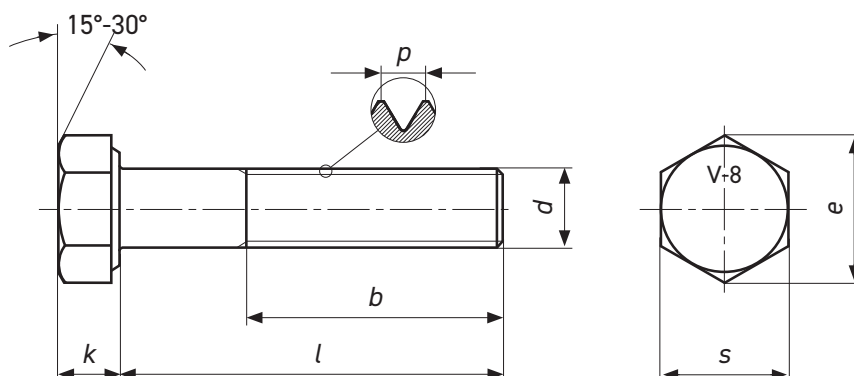
For the weights of the brass products multiply the values by 1,083.

The weights indicated are approximate. **Other sizes available on request.**

PARTIAL THREAD HEXAGON HEAD SCREWS

ISO METRIC FINE THREAD

ISO 8765* UNI 5738 DIN 960



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

8.8

10.9 12.9

A2-70

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B**

ACCORDING TO ISO 4759-1 CAT A-B**

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

<i>d</i>	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22	M24	M27
<i>p</i>	1	1	1,25	1,25	1,5	1,5	1,5	1,5	1,5	1,5	2	2
<i>s*</i>	13	17/16	17/16	19/18	19/8	22/21	24	27	30	32/34	36	41
<i>k</i>	5,3	6,4	6,4	7,5	7,5	8,8	10	11,5	12,5	14	15	17
<i>e min</i>	14,38	18,9	18,9	21,1	21,1	24,49	26,75	30,14	33,53	35,72	39,98	45,2
<i>b < 125</i>	22	26	26	30	30	34	38	42	46	50	54	60
<i>b 125 ÷ 200</i>	28	32	32	36	36	40	44	48	52	56	60	66
<i>b > 200</i>	41	45	45	49	49	53	57	61	65	69	73	79

(*) The ISO standard differs from DIN and UNI standards for the sizes "s" and "e" in the diameters M10, M12, M14, M22.
The first hex key value refers to UNI and DIN , while the second value refers to ISO.

	d	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22	M24	M27
	35	19,1	33,9	33,9	47,6	47,6							
	40	21,1	37,1	37,1	52,0	52,0	73,5						
	45	23,0	40,2	40,2	56,4	56,4	79,0						
	50	25,0	43,4	43,4	60,8	60,8	84,5	111					
	55	27,0		46,5	65,3	65,3	90,1	119					
	60	28,9	49,6	49,6	69,8	69,8	95,7	127	169	216	263	298	
	65	30,9		52,8	74,3	74,3	101	135	179	228	278	326	
	70	32,9	55,8	55,8	78,8	78,8	107	143	189	240	293	354	510
	75	34,8		59,0	83,3	83,3	112	151	199	253	308	382	
	80	36,8		62,2	87,8	87,8	118	159	209	265	323	410	553
	85	38,7		65,4	92,3	92,3			219	277	338		
	90	40,7		69,4	96,7	96,7	129	175	229	290	353	445	597
	100	44,7		75,7	106,1	106,1	140	191	249	314	383	481	642
	110	48,6		82,0	115,3	115,3	152	217	269	339	413	517	687
	120	52,6		88,2	124,5	124,5	164	233	289	363	443	552	732
	130	56,5		94,4	133,7		176	249	308	387	473	588	777
	140	60,5		100,6	142,8	142,8	188	265	328	412	502	623	822
	150	64,4		107,1	152,0	152,0	200	281	348	437	532	659	867
	160	68,4		113,4	161,1	161,1	212	296	368	461	562	694	912
	170			119,7	170,3		224	312	388	486	592	730	957
	180			124,0	179,0		236	328	408	510	621	765	1000
	190						248	344	428	535	651	800	1050
	200						260	360	448	560	681	836	1090
	210												
	220								498				
	240								538				
	260								578				
	280								618				
	300												

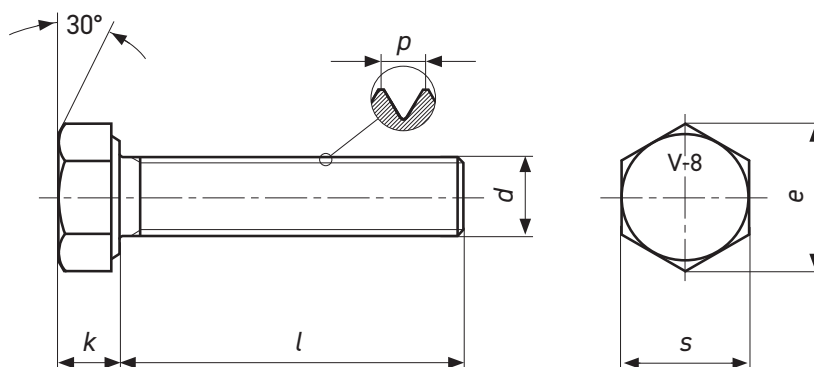
 Weight for 1000 pcs

(**) According to the norm sizes above the black line are Class A and below Class B.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

FULL THREAD HEXAGON HEAD SCREWS

ISO METRIC FINE THREAD

ISO UNI DIN
8676* 5740 961



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 3506-1
CLASS	8.8 10.9 12.9	A2-70
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B**	ACCORDING TO ISO 4759-1 CAT A-B**
AVAILABLE TREATMENT	Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request	

d	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22	M24	M27	M30
p	1	1	1,25	1,25	1,5	1,5	1,5	1,5	1,5	1,5	2	2	2
s*	13	17/16	17/16	19/18	19/18	22/21	24	27	30	32/34	36	41	46
k	5,3	6,4	6,4	7,5	7,5	8,8	10	11,5	12,5	14,0	15	17	18,7
e min	14,38	18,9	18,9	21,1	21,1	24,48	26,75	30,14	33,53	35,72	39,98	45,2	50,85

(*) The ISO standard differs from DIN and UNI standards for the sizes "s" and "e" in the diameters M10, M12, M14, M22.
The first hex key value refers to UNI and DIN , while the second value refers to ISO.

	d	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22	M24	M27	M30
L = LENGTH	10	9,2												
	12	9,8												
	14	10,4												
	16	11,1	21,3	21,3	30,0									
	18	11,8	22,4	22,4	31,3									
	20	12,4	23,5	23,5	32,9	32,9	49	66						
	22	13,0	24,6	24,6	34,3									
	25	14,1	26,2	26,2	36,6	36,6	54	72						
	30	15,7	28,9	28,9	40,3	40,3	59	79	107	139	172			
	35	17,4	31,6	31,6	44,0	44,0	64	85	116	151	185			
	40	19,1	34,3	34,3	47,7	47,7	70	92	124	162	198	254		
	45	20,7	36,9	36,9	51,4	51,4	75	99	133	172	212	270		
	50	22,3	39,6	39,6	55,0	55,0	80	106	142	184	226	287	386	
	55	24,0	42,3	42,3	58,7	58,7	85	113	151	195	240	303		
	60	25,7	45,1		62,4	62,4	91	120	160	207	253	319	427	562
	65	27,3	47,8		66,2	66,2	96	127	168	217	267	336		
	70	29	50,5		70,0	70	101	134	177	228	280	352	467	612
	75	30,7	53,2		73,6	73,6	106	141	185	239	293	368		
	80	32,3	55,8		77,4	77,4	111	148	195	251	307	384	507	663
	90	35,7	61,2		84,8	84,8	122	162	212	272		415	547	714
	100	38,8	66,7		92,2		133	176	229	295		448	587	765
	110				99,2		144	190	247	317		481		816
	120				107		154	204	265	339		513		866
	130						165	218	283			513		917
	140						175	232	300			543		1.697
	150							245	318			572		1.020
	160											602		1.060

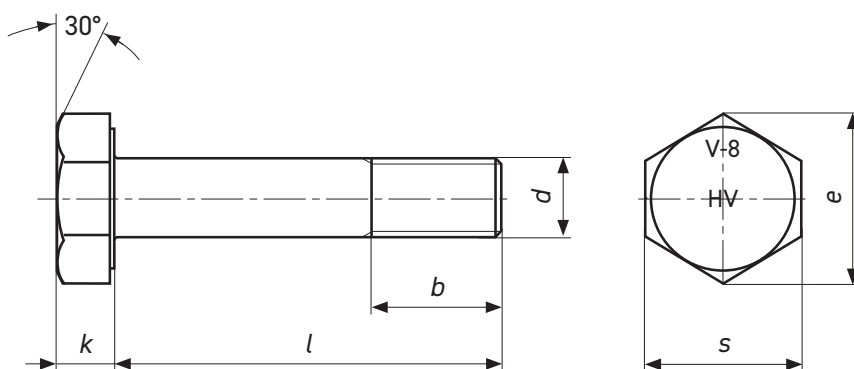
Weight for 1000 pcs

(**) According to the norm sizes above the black line are Class A and below Class B.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

LARGE HEX HEAD SCREWS FOR STEEL STRUCTURES

ISO METRIC COARSE THREAD

ISO UNI DIN
- 5712 6914



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

10.9

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT C

AVAILABLE TREATMENT

Black. Other coatings on request

<i>d</i>	M12	M14	M16	M18	M20	M22	M24	M27	M30
<i>b</i> ⁽¹⁾	21	23	26	28	31	32	34	37	40
<i>b</i> ⁽²⁾	23	25	28	30	33	34	37	39	42
<i>s</i>	22	24	27	30	32	36	41	46	50
<i>k</i>	8	9	10	12	13	14	15	17	19
<i>e</i> min	23,91	26,17	29,56	32,95	35,03	39,55	45,20	50,85	55,37

d	M12	M14	M16	M18	M20	M22	M24	M27	M30
30	49,1								
35	53,6								
40	58,0	75	105		176				 Kg
45	61,1	81	113	150	188				
50	66,6	87	121	160	200	257	326		
55	71,0	93	129	170	212	272	344		
60	75,4	99	137	180	225	286	362	488	
65	79,9	105	145	190	237	301	380	510	
70	84,3	111	153	200	249	316	398	532	674
75			160	210	262	331	415	554	701
80			168	220	274	346	433	576	728
85			176	230	286	361	451	599	756
90			184	240	298	375	467	621	784
95			192	250	310	390	485	644	812
100			199	260	322	405	503	665	838
105			207		335	420	520	688	865
110			215		347	435	538	710	893
115			223		359	450	556	732	921
120			231		372	465	574	755	949
125			239		384	479	591	777	976
130			247		396	494	609	800	1004
135						509	627	822	1032
140					421	524	645	845	1059
145					433	539	662	867	1087
150					446	554	680	890	1115
155					458	569	698	912	1143
160					471	584	716	935	1170
165					483	599	733	957	1198
170					495	614	751	979	1226
175					508	629	769	1002	1254
180					520	644	787	1024	1281
185					533	659	804	1047	1309
190					545	674	822	1069	1337
195					557	689	840	1092	1365
200					570	704	858	1114	1392
205					582		876	1137	1420
210					595		894	1159	1448
215					607		912	1182	1476
220					619		930	1204	1503
225									1531
230									1559
235									1587
240									1614
245									1642
250									1670
260									1725
270									1781

 Weight for 1000 pcs

⁽¹⁾ For shank lengths above the black line.

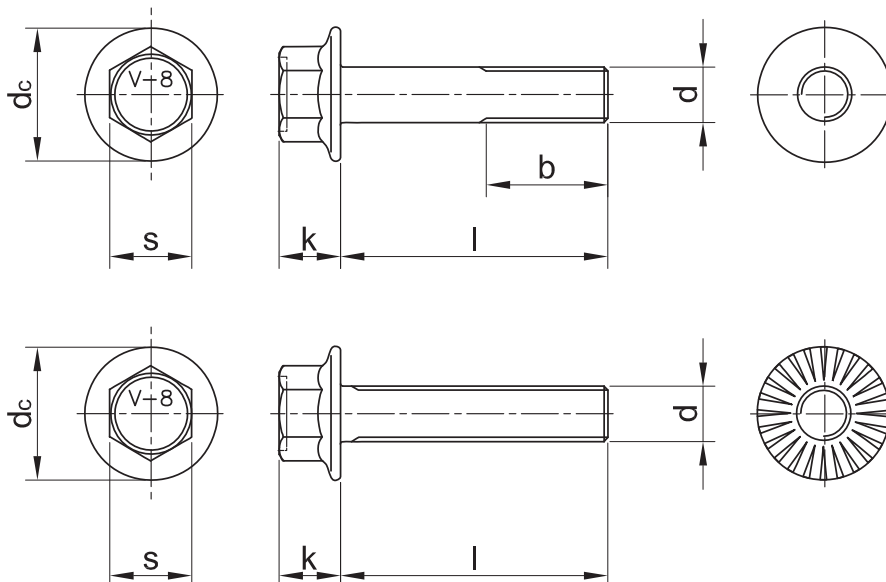
⁽²⁾ For shank lengths below the black line.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON FLANGE SCREWS WITH OR WITHOUT SERRATION

ISO METRIC COARSE THREAD

EN 1665 UNI - DIN 6921*



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

4.8 8.8 10.9

CLASS

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

<i>d</i>	M4	M5	M6	M8	M10	M12	M14	M16	M20
<i>s</i>	7	8	10	13	15/16	16/18	18	21	21/24
<i>p</i>	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5
<i>k</i> max	4	4,8	5,5	7,4	9,1	11,5	12,8	14,4	17,1
<i>d_c</i> max	9,5	11,8	14,2	18	22,3	26,6	30,5	35	43
<i>b</i> < 125	-	16	18	22	26	30	34	38	46
<i>b</i> 125 ÷ 200	-	-	-	28	32	36	40	44	52
<i>b</i> > 200	-	-	-	-	-	-	-	57	65

(*) The EN 1665 standard differs from DIN 6921 in terms of head dimensions.
The first hex key value refers to DIN , while the second value refers to ISO.

l = LENGTH	d	M4	M5	M6	M8	M10	M12	M14	M16	M20
										 Kg
	6	1,84	3,2							
	8	1,99	3,45	5,84						
	10	2,14	3,71	6,18	12,1					
	12	2,3	3,91	6,52	12,7					
	14	2,45	4,12	6,87	13,3					
	16	2,6	4,33	7,21	14	24,7				
	18	2,83	4,69	7,56	14,6	26,2				
	20	2,91	4,84	7,9	15,2	27,7	43,2			
	22			8,25	15,8					
	25	3,3	5,67	8,95	16,7	27,7	46,6		78	
	30	3,69	6,49	11	21,7	31,6	50	66,85	86,8	
	35		8	11,43	23,7	36	53,4	71,89	88,2	
	40		8,8	12,57	25,7	42,4	63	76,94	104,2	
	45		9,6	13,5	25,65	45,45	58,2	85,28	117,6	
	50		10,4	15,5	27,6	48,5	76	103,5	131	
	55			16,5	31,7	51,55	80	95,79	137,5	
	60			17,97	33,7	54,6	84	107,12	144	277
	65			16,05	35,5	57,3	88			
	70			18,5	37,7	60,7	92	117,21	158,4	
	75				39,5					
	80				41,7	66,8	100	126,48	172,25	
	85				43,5					
	90				45,7	72,9	108	138,74	186	
	100				49,7	79	116	151	205,95	

 Weight for 1000 pcs

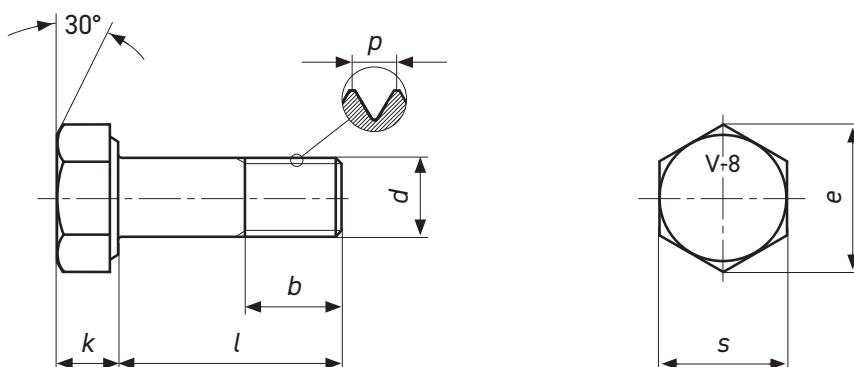
The weights indicated are approximate. **Other sizes available on request.**

HEXAGON HEAD SCREWS FOR BLADES

ISO METRIC FINE THREAD

ISO UNI DIN

- - -



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	7/16	M10	M10	M12	M12	M14	M16
p	14 (*)	1,25	1,5	1,25	1,5	1,5	1,5
s	15,86	17	17	19	19	22	24
e min		18,9	18,9	7,5	7,5	8,8	26,75
k	7,14	6,4	6,4	7,5	7,5	8,8	10
b	16	19	15	18	18	20	25
l							
l = LENGTH	30	30,4	30,3	44,5	44,4		
	35			46,6	46,5	67,0	
	40					73,0	
	45					79,0	
	47						108
	48					83	
	50					85	115
	80	70					
	84	74					

Kg

Weight for 1000 pcs

(*) Threads x inch.

The weights indicated are approximate. Other sizes available on request.

HEXAGON SOCKET SCREWS WITH METRIC THREAD



Hex socket head screws with metric thread are widely used fastening elements in industrial and mechanical applications, valued for their reliability, strength, and ease of assembly.

Their key feature is the internal hex socket in the head, which allows tightening with an Allen key (hex key). This type of drive ensures excellent torque transmission, enabling secure fastening even in tight or hard-to-reach spaces.

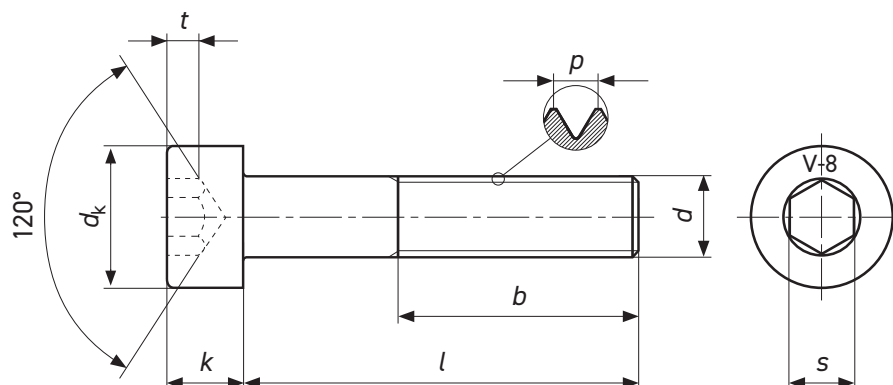
The metric thread, standardized according to ISO norms, guarantees compatibility with a wide range of components and facilitates interchangeability in international assembly systems. Hex socket head screws are available in different head styles, including cylindrical, countersunk, and button head, depending on application requirements.

They are typically manufactured in high-strength steel or stainless steel and may be treated with anti-corrosion coatings for use in aggressive environments. Applications include automotive, precision engineering, electronics, and robotics, where reliability, precision, and robustness are essential. Their versatility and performance make them a key choice in numerous industrial and design contexts.

HEXAGON SOCKET HEAD CAP SCREWS

ISO METRIC COARSE THREAD

ISO 4762 UNI 5931 DIN 912



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

8.8 **10.9**

A2-70

12.9

A4-70 **A4-80**

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20
p	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5
dk max	5,5	7	8,5	10	13	16	18	21	24	27	30
k max	3	4	5	6	8	10	12	14	16	18	20
s	2,5	3	4	5	6	8	10	12	14	14	17
t min	1,3	2,0	2,5	3,0	4,0	5,0	6	7	8	9	10
b	18	20	22	24	28	32	36	40	44	48	52

d	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
p	2,5	3	3	3,5	3,5	4	4	4,5	4,5	5
dk max	33	36	40	45	50	54	58	63	68	72
k max	22	24	27	30	33	36	39	42	45	48
s	17	19	19	22	24	27	27	32	32	36
t min	11	12	13,5	15,5	18	19	21	24	26	28
b	56	60	66	72	78	84	90	96	100	108

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
6	0,71	1,50	2,20																		
8	0,80	1,65	2,45	4,33																	
10	0,88	1,80	2,70	4,70	10,3	17,9															
12	0,96	1,95	2,95	5,07	10,9	18,9															
14	1,05	2,10	3,20	5,44	11,5	19,9															
16	1,16	2,25	3,45	5,75	12,1	20,9	28,5														
18	1,26	2,45	3,70	6,12	13,3	21,9															
20	1,36	2,65	4,01	6,53	13,4	22,9	32,1	43	63,9												
22	1,46	2,90	4,32	6,90	14,0	23,9	33,9	45	66,9												
25	1,61	3,15	4,78	7,59	15,0	25,4	35,7	48	71,3												
30	1,86	3,65	5,55	8,30	16,9	27,9	39,3	53	77,8	111	128										
35	2,11	4,15	6,32	9,91	18,9	30,4	42,9	58	84,4	120	139	211									
40	2,36	4,65	7,09	11,0	20,9	32,9	46,5	63	91,0	129	150	224	270								
45	2,61	5,15	7,86	12,1	22,9	36,1	50,1	68	97,6	138	161	237	285	330	500						
50	2,86	5,65	8,63	13,2	24,9	39,3	54,5	73	106,0	147	172	250	300	352	527						
55		6,15	9,4	14,3	26,9	42,5	58,9	78	114	156	183	263	316	374	554						
60		6,65	10,2	15,4	28,9	45,7	63,4	84	122	165	194	276	330	396	581						
65		7,15	11,0	16,5	31,0	48,9	67,8	90	130	174	205	291	345	418	608						
70		7,65	11,8	17,6	33,0	52,1	71,3	96	138	183	216	306	363	440	635						
75		8,15	12,6	18,7	35,0	55,3	75,8	102	146	193	228	321	379	462	662						
80		8,65	13,4	19,8	37,0	58,5	80,2	108	154	203	241	336	399	484	690	830	1070	1270	1590		
85		9,15	14,2	20,9	39,0	61,7	84,7	114	162	213	252										
90		9,65	15,0	22,0	41,0	64,9	89,1	120	170	223	266	366	435	529	745	900	1150	1350	1690		
95			15,8	23,1	43,0	68,1	93,6	126	178	233	278										
100			16,6	24,2	45,0	71,2	98,0	132	186	243	291	396	471	574	800	970	1230	1430	1790		2460
110			17,4	26,4	49,0	77,5	106,9	144	202	263	316	426	507	619	855	1040	1310	1510	1890		
120				28,6	53,0	83,8	115,8	156	218	283	341	456	543	664	910	1110	1390	1590	2000		2740
125						87,0															
130				30,8	65,7	90,1	125,0	168	234	303	366	486	579	709	965	1180	1470	1650	2100		
140				33,0	69,3	96,7	134,0	180	250	323	391	516	615	754	1020	1250	1550	1740	2210		3020
150				35,2	72,8	102,7	143,0	192	266	343	416	546	651	799	1075	1320	1630	1830	2320		
160				37,4	76,3	109,2	152,1	204	282	363	441	576	687	844	1135	1390	1710	1920	2420		3300
170				39,6	79,8	115,5	161,1	216	298	383	466	606	723	889	1185	1460	1790	2010	2530		3445
180				41,8	83,4	121,8	170,1	228	314	403	491	636	759	934	1240	1530	1870	2100	2640		3590
190				44,0	86,9	128,1	179,2	240	330	423	516	666	795	979	1295	1600	1950	2190	2750		
200				46,2	90,4	134,5	188,2	252	346	443	541	696	831	1024	1350	1670	2030	2280	2860		3870
210					93,9	140,8	197,3	264	362	463	566	726	867	1069	1405			2370			
220					97,4	147,1	206,3	276	378	483	591	756	903	1114	1460	1810	2190	2460	3080		
230					100,9	153,5	215,3	288	394	503	616	786	939	1159	1515			2550			
240					104,5	159,8	224,4	300	410	523	641	816	975	1204	1570	1950	2350	2640	3300		
250					108,0	166,1	233,4	312	426	543	666	846	1011	1249	1625			2730			
260					111,5	172,4	242,5	324	442	563	691	876	1047	1294	1680	2090	2510	2820	3520		
270					115,0	178,8	251,5	336	458	583	716	906	1083	1339	1735			2910			
280					118,5	185,1	260,5	348	474	603	741	936	1119	1384	1790	2230	2670	3000	3740		
290						191,4	269,6	360	490	623	766	966	1155	1429	1845			3090			
300							278,6	372	506	643	791	996	1191	1474	1900	2370	2830	3180	3960		

Weight for 1000 pcs

Upon request, this type of screw can also be supplied fully threaded or with hexalobular socket according to ISO 14579.

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

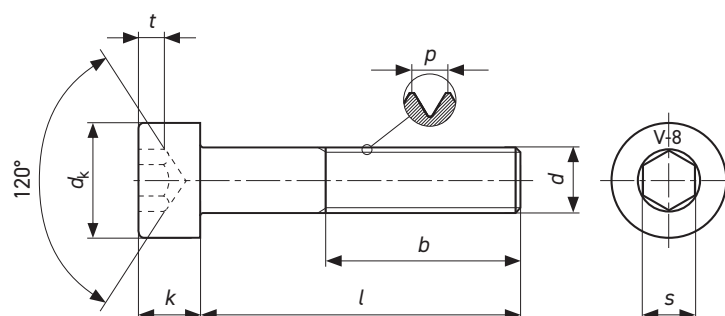
Sizes above the green line have full thread.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET HEAD CAP SCREWS

ISO METRIC FINE THREAD

ISO UNI DIN
12474 5932 912



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

8.8

10.9

12.9

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M8x1	M10x1	M10x1,25	M12x1,25	M12x1,5	M14x1,5	M16x1,5	M20x1,5	M24x2
p	1	1	1,25	1,25	1,5	1,5	1,5	1,5	2
dk max	13	16	16	18	18	21	24	30	36
k max	8	10	10	12	12	14	16	20	24
s	6	8	8	10	10	12	14	17	19
t min	4	5	5	6	6	7	8	10	12
b	28	32	32	36	36	40	44	52	60

l										Kg	
l = LENGTH	12	10,9									
	16	12,1	20,9	20,9							
	20	13,4	22,9	22,9	32,1	32,1					
	25	15,0	25,4	25,4	35,7	35,7					
	30	16,9	27,9	27,9	39,3	39,3	53	77,8			
	35	18,9	30,4	30,4	42,9	42,9	58	84,4			
	40	20,9	32,9	32,9	46,5	46,5	63	91,0	150		
	45	22,9	36,1	36,1	50,1	50,1	68	97,6	161		
	50	24,9	39,3	39,3	54,5	54,5	73	106,0	172	300	
	55	26,9	42,5	42,5	58,9	58,9	78	114	183	316	
	60	28,9	45,7	45,7	63,4	63,4	84	122	194	330	
	70	33,0	52,1	52,1	71,3	71,3	96	138	216	363	
	80	37,0	58,5	58,5	80,2	80,2	108	154	241	399	
	90	34,7	64,9	64,9	89,1	89,1	120	170	266	435	
	100	37,9	71,2	71,2	98,0	98,0	132	186	291	471	
	110				106,9	106,9	144	202	316		
	120				115,8	115,8	156	218	341	543	
	130				125,0	125,0	168	234	366	579	
	140				134,0	134,0		250	391	615	
	150				143,0	143,0		266	416	651	
	160				152,1	152,1		282	441	687	
	180				170,1	170,1		314	491	759	
	190								516		
	200				188,2	188,2		346	541		

Weight for 1000 pcs

Sizes above the green line have full thread. The weights indicated are approximate. Other sizes available on request.

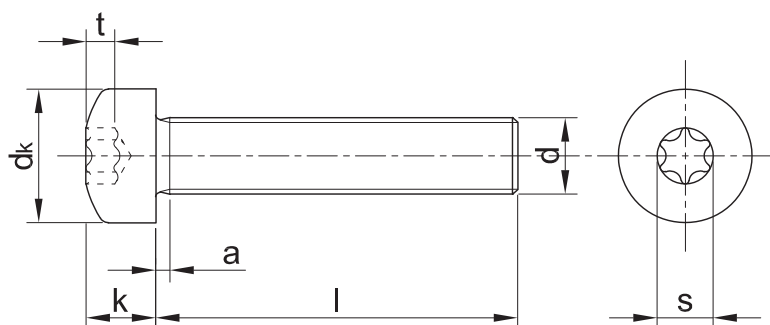
HEXALOBULAR PAN HEAD SCREWS

ISO METRIC COARSE THREAD

ISO
14583

UNI
-

DIN
-



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

4.8

8.8

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated according to RoHS.
Other coatings on request

d	M2	M2,5	M3	M4	M5	M6	M8	M10
dk	4	5	6	8	10	12	16	20
k	1,7	2	2,4	3,1	3,8	4,6	6	7,5
s	1,75	2,4	2,8	3,95	4,5	5,6	7,95	8,95
t max	0,77	1,04	1,27	1,66	1,91	2,42	3,18	4,02
 torx n.	6	8	10	20	25	30	45	50

l								
3	0,178	0,336						
4	0,196	0,366	0,544					
5	0,215	0,396	0,588	1,30				
6	0,233	0,426	0,632	1,38	2,32			
8	0,270	0,486	0,720	1,53	2,57	4,37		
10	0,307	0,546	0,808	1,69	2,81	4,72	9,96	
12	0,344	0,606	0,896	1,84	3,06	5,07	10,6	19,8
14	0,381	0,666	0,984	2,00	3,31	5,42	11,2	20,5
16	0,418	0,726	1,07	2,15	3,56	5,78	11,9	21,8
20	0,492	0,846	1,25	2,46	4,05	6,48	13,2	23,8
25		0,996	1,47	2,85	4,67	7,36	14,8	26,3
30			1,69	3,23	5,29	8,24	16,4	28,8
35				3,62	5,91	9,12	18,0	31,3
40				4,01	6,52	10	19,6	33,9
45					7,14	10,90	21,2	36,4
50					7,76	11,8	22,8	38,9
55						12,6	24,4	41,4
60						13,5	26,0	43,9

 Kg

l = LENGTH

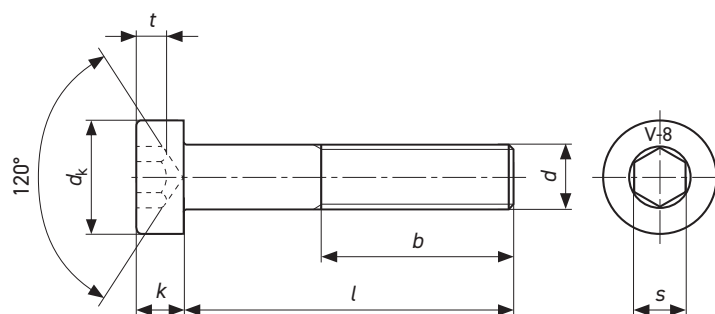
 Weight for 1000 pcs

Screws with nominal length under the line can have partial thread.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET THIN HEAD CAP SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
- 9327 7984



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1*	ACCORDING TO ISO 3506-1
CLASS	8.8 10.9 12.9	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Black, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request	

d	M4	M5	M6	M8	M10	M12	M16
dk	7	8,5	10	13	16	18	24
k	2,8	3,5	4	5	6	7	9
s	2,5	3	4	5	7	8	12
t min	1,1	1,9	2,4	3,2	3,8	4,4	5,8
b	14	16	18	22	26	30	38

l	Kg						
6	0,96						
8	1,12	2,26					
10	1,28	2,50	3,59				
12	1,44	2,74	3,94	8,06			
14	1,60	2,98	4,29	8,66			
16	1,76	3,22	4,64	9,25	14,40		
18	1,95	3,46	4,99	9,85	15,40		
20	2,15	3,77	5,34	10,5	16,4	24,1	
25	2,64	4,54	6,45	12,0	19,0	27,7	
30		5,31	7,56	14,0	21,6	31,3	62,1
35			8,67	16,0	24,7	34,9	68,8
40			9,78	18,0	27,8	39,3	76,5
45				20,0	30,9	43,1	82,2
50				22,0	34,0	48,7	89,6
55				24,0	37,1	52,5	97,0
60				26,0	40,2	56,9	104,0
70					46,4	65,8	119,0
80						74,7	134,0

Weight for 1000 pcs

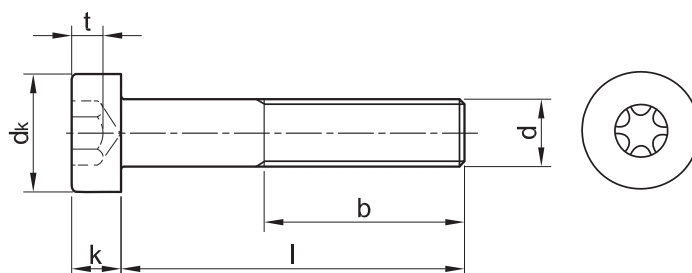
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
Sizes above the green line have full thread. The weights indicated are approximate. **Other sizes available on request.**

(*) The critical cross section of screws covered by this standard can, as consequence of the head geometry and the form of wrench engagement, be located below the hexagon socket and not in the thread. It is recommended that the screws should not be used for the transmission of high axial loads. The form of the key engagement permits the application of prestressing loads corresponding to 70% of the minimum yield point specified for properties of 8.8 screws. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 08.8 or 088, or the dot in the marking symbol may be omitted.**

LOW CYLINDRICAL HEAD SCREWS WITH EXALOBULAR SOCKET

ISO METRIC COARSE THREAD

ISO UNI DIN
14580 - -



MATERIAL		STEEL				STAINLESS STEEL							
MECHANICAL PROPERTIES		ACCORDING TO ISO 898-1*				ACCORDING TO ISO 3506-1							
CLASS		8.8		10.9		A2		A4					
TOLLERANCES		ACCORDING TO ISO 4759-1 CAT A				ACCORDING TO ISO 4759-1 CAT A							
AVAILABLE TREATMENT		Black, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request											
d		M3		M4		M5		M6		M8		M10	
dk		5,5		7		8,5		10		13		16	
k		2,4		2,8		3,5		4		5		6	
t min		1,01		1,1		1,9		2,4		3,2		3,8	
b min		20		20		25		25		30		35	
 torx n.		10		20		25		30		45		50	
l		 Kg											
l = LENGTH	4	0,515											
	5	0,56											
	6	0,604											
	8	0,692											
	10	0,78											
	12	0,868											
	14	0,956											
	16	1,04											
	18	1,95											
	20	1,22											
	25	1,44											
	30	1,66											
	35	8,67											
	40	9,78											
	45	20,0											
50	22,0												
55	24,0												
60	26,0												
70	46,4												
 Weight for 1000 p													

Sizes above the green line have full thread.

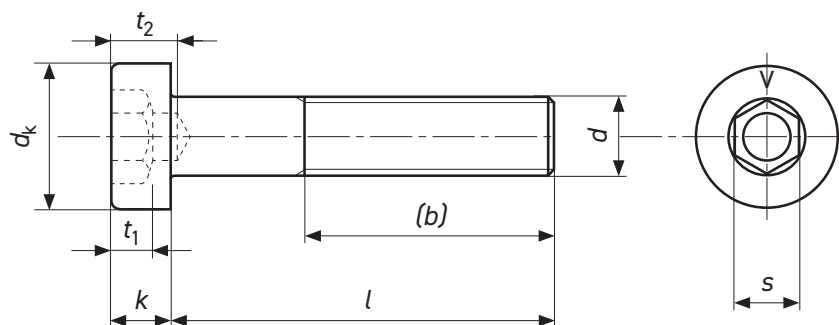
The weights indicated are approximate. **Other sizes available on request.**

(*) The critical cross section of screws covered by this standard can, as consequence of the head geometry and the form of wrench engagement, be located below the hexagon socket and not in the thread. It is recommended that the screws should not be used for the transmission of high axial loads. The form of the key engagement permits the application of prestressing loads corresponding to 70% of the minimum yield point specified for properties of 8.8 screws. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 08.8 o 088, or the dot in the marking symbol may be omitted.**

HEXAGON SOCKET THIN HEAD CAP SCREWS WITH PILOT RECESS

ISO METRIC COARSE THREAD

ISO UNI DIN
- - 6912



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1*	ACCORDING TO ISO 3506-1
CLASS	8.8 10.9	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Black, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request	

d	M5	M6	M8	M10	M12	M14	M16
d _k	8,5	10	13	16	18	21	24
k	3,5	4	5	6,5	7,5	8,5	10
s	4	5	6	8	10	12	14
t ₁	2	2,5	3	3,5	4	4,5	5,5
t ₂ min	4	5	6,5	7,5	9	10	11,5
b	16	18	22	26	30	34	38

(*) The critical cross section of screws covered by this standard can, as consequence of the head geometry and the form of wrench engagement, be located below the hexagon socket and not in the thread. It is recommended that the screws should not be used for the transmission of high axial loads. The form of the key engagement permits the application of prestressing loads corresponding to 70% of the minimum yield point specified for properties of 8.8 screws. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 08.8 or 088, or the dot in the marking symbol may be omitted.**

	d	M5	M6	M8	M10	M12	M14	M16
l = LENGTH	10	2,2	3,6					
	12	2,5	3,9	7,7				
	14	2,8	4,2	8,2				 Kg
	16	3,1	4,5	8,8	15,5	22,3		
	18	3,4	4,8	9,5				
	20	3,7	5,1	10,2	17,0	25,5	37,9	52,6
	25	4,4	6,2	12,5	20,2	29,5	42,5	56,5
	30	5,1	7,3	14,0	22,0	32,5	48,0	63,0
	35	5,8	8,3	15,7	25,5	36,5	53,0	69,7
	40	6,5	9,5	17,5	28,5	40,0	58,0	78,7
	45	7,2	10,5	19,5	31,6	44,0	63,0	85,3
	50	7,9	11,5	21,5	34,8	48,0	69,5	91,5
	55	8,6	12,5	23,4	37,5	52,0	75,5	99,0
	60	9,3	13,6	25,3	40,3	57,0	82,0	107,0
	70		15,8	29,1	46,0	65,0	92,5	122,0
	80		17,9	32,8	52,5	72,0	104,0	140,0
	90				57,8	80,0	116,0	154,0
	100					88,0	127,0	169,0

 Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

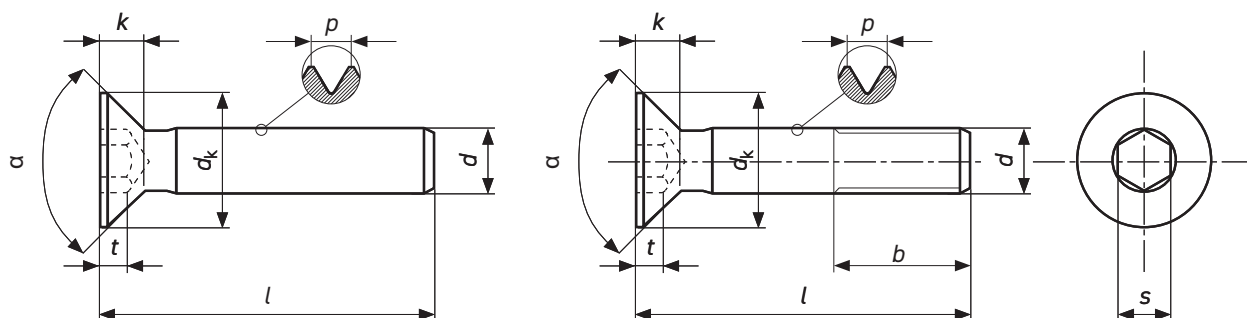
Sizes above the green line have full thread.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET COUNTERSUNK HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 10642 UNI 5933* DIN 7991*



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1**	ACCORDING TO ISO 3506-1
CLASS	4.8 8.8 10.9	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Black - White zinc plated or Yellow zinc plated with dehydrogenation according to RoHS. Other coatings on request	

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
p	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
α	90°(+2°)											60°(+2°)
s	2	2,5	3	4	5	6	8	10	10		12	
dk max	6,72	8,96	11,20	13,44	17,92	22,40	26,88	30,80	33,60		40,32	
b***	12	14	16	18	22	26	30	34	38		46	
k max	1,86	2,48	3,1	3,72	4,96	6,2	7,44	8,4	8,8		10,16	
t min	1,1	1,5	1,9	2,2	3	3,6	4,3	4,5	4,8		5,6	

(*) DIN 7991 and UNI 5933 standards differs from ISO for these sizes

s										12		14
dk max	6	8	10	12	16	20	24	27	30	33	36	39
b***										42		60
k max	1,7	2,3	2,8	3,3	4,4	5,5	6,5	7	7,5	8	8,5	14
t max	1,2	1,8	2,3	2,5	3,5	4,4	4,6	4,8	5,3	5,5	5,9	10,3

(**) As it is possible for the critical cross section in these screws to lie between the hexagon socket and the threaded portion of the shank, they are not to be subjected to the wedge loading test for the strenght class 10.9. Further more the hardness test has been made mandatory for acceptance inspection. For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 010.9 or 0109, for the dot in the marking symbol may be omitted.

Also available with hexalobular socket (Allen) according to ISO 14581.

(***) Length b refers to the partially threaded shank.

/ = LENGTH	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
	6	0,38	0,77										
	8	0,47	0,92	1,60	2,35								
	10	0,56	1,07	1,85	2,70	5,47							 Kg
	12	0,65	1,23	2,10	3,05	6,10	10,10						
	14	0,72	1,42	2,22	3,25	6,40	11,00						
	16	0,83	1,53	2,59	3,76	7,35	12,10						
	18	0,89	1,76	2,70	3,95	7,64	12,90						
	20	1,00	1,84	3,09	4,46	8,60	14,10	21,20					
	22	1,15	1,98	3,25	4,65	9,56	15,30						
	25	1,35	2,23	3,71	5,34	10,20	16,60	24,80	32,60				
	30	1,63	2,6	4,33	6,22	11,70	19,10	28,50	37,60	51,80			
	35		2,9	4,7	7,10	13,30	21,60	32,10	42,50	58,40		91,40	
	40		3,3	5,4	7,8	14,80	24,10	35,70	47,40	65,10	79,30	102,00	
	45		3,6	6	8,6	16,50	26,30	37,90	52,30	70,70	94,00	110,00	
	50		4,0	6,6	9,5	17,5	30,10	43,00	57,30	78,40	96,00	125,0	179,00
	55		4,3	7,2	10,3	19,2	31,5	45,10	62,30	84,00	104,5	134,0	
	60		4,7	7,8	11,1	21,0	34,6	48,50	67,10	91,70	112,8	143,0	209,00
	65			8,4	12,5	22,5	37,3	53,2	72,00			152,0	
	70			9,0	13,5	24,1	40,0	57,2	76,90	105,0	129,6	161,0	239,00
	80				14,6	27,1	44,2	64,8	81,80	122,0	146,3	179,0	269,00
	90				15,7	30,1	48,6	72,4	86,70	136,9	163,1	197,0	299,00
	100				16,8	33,1	52,9	80	91,60	151,8	179,8	215,0	340,00
	110					36,2	57,2	87,6		166,7	196,6		
	120					39,2	61,5	95,2		181,6	213,3		
	130										230,1		

Weights table for full thread screws supplied as standard

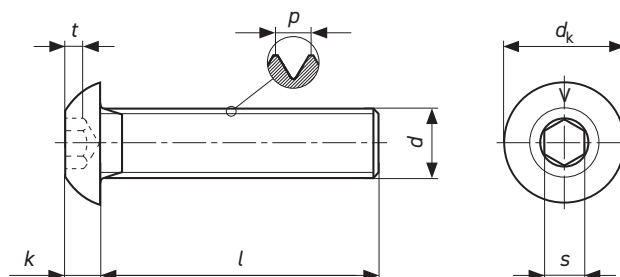
 Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET BUTTON HEAD SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
7380/1 - -



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1*

ACCORDING TO ISO 3506-1

CLASS

8.8

10.9

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black, White zinc plated or Yellow zinc plated with dehydrogenation according to RoHS. Other coatings on request

d	M3	M4	M5	M6	M8	M10	M12
p	0,5	0,7	0,8	1	1,25	1,5	1,75
d _k max	5,7	7,5	9,5	10,5	14	18	21
k max	1,65	2,1	2,7	3,2	4,3	5,3	6,4
s	2	2,5	3	4	5	6	8
t min	1,04	1,3	1,56	2,08	2,6	3,12	4,16

l								Kg	
l = LENGTH	4								
	5								
	6	0,48	0,85	1,7					
	8	0,55	1,10	1,9	3,3				
	10	0,65	1,30	2,2	3,6	7,2			
	12	0,75	1,50	2,5	3,9	7,7			
	14	0,85	1,70	2,8	4,2	8,2			
	16	0,95	1,90	3,1	4,5	8,8	15,5		
	18		2,10	3,4	4,9	9,5	16,7		
	20		2,30	3,7	5,2	10,2	17,9	25,5	
	25		2,80	4,4	6,2	12,5	21,0	29,5	
	30		3,30	5,1	7,3	14,0	22,0	32,5	
	35		3,80	5,8	8,3	15,7	25,5	36,5	
	40		4,30	6,5	9,3	17,5	28,5	40,0	
	45		4,80	7,2	10,3	19,3	31,5	45,0	
	50			7,9	11,3	21,1	34,5	50,0	
	55			8,6	12,3	22,9	37,5	55,0	
	60			9,3	13,3	24,7	40,5	60,0	
	70				14,5	28,3	46,5	70,0	
	80					31,9	52,5	80,0	

Weight for 1000 pcs

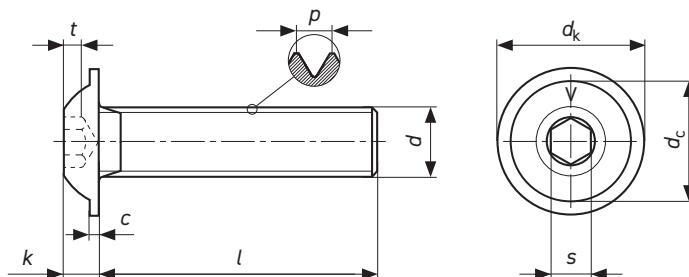
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013. The weights indicated are approximate. **Other sizes available on request.**

(*) For the form of head it is possible that these screws do not respect the yield test charge according to 10.9 class prescribed in ISO 898-1, when tested according to program B. Further more they have to respect all others prescriptions for the strenght class 10.9 of ISO 898-1. Testing the yield point the fracture may occur in the threaded portion, in the head, in the shank or in the junction head/shank. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 10.9 o 109, or the dot in the marking symbol may be omitted.**

HEXAGON SOCKET FLANGED BUTTON HEAD SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
7380/2 - -



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1*

ACCORDING TO ISO 3506-1

CLASS

10.9

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black, White zinc plated or Yellow zinc plated with dehydrogenation according to RoHS. Other coatings on request

d	M3	M4	M5	M6	M8	M10	M12
p	0,5	0,7	0,8	1	1,25	1,5	1,75
dk max	6,9	9,40	11,8	13,6	17,8	21,9	26
dc max	5,2	7,2	8,8	10	13,2	16,5	19,4
c	0,7	0,8	1	1,2	1,5	2	2,4
k	1,65	2,2	2,75	3,3	4,4	5,5	6,6
s	2	2,5	3	4	5	6	8
t min	1,04	1,3	1,56	2,08	2,6	3,12	4,16

l								Kg	
l = LENGTH	4								
	5								
	6	0,48	0,85						
	8	0,55	1,10	1,9					
	10	0,65	1,30	2,2	3,6	7,2			
	12	0,75	1,50	2,5	3,9	7,7			
	14	0,85	1,70	2,8	4,2	8,2			
	16	0,95	1,90	3,1	4,5	8,8	15,5		
	18		2,10	3,4	4,9	9,5	16,7		
	20		2,30	3,7	5,2	10,2	17,9	25,5	
	25		2,80	4,4	6,2	12,5	21,0	29,5	
	30		3,30	5,1	7,3	14,0	22,0	32,5	
	35		3,80	5,8	8,3	15,7	25,5	36,5	
	40		4,30	6,5	9,3	17,5	28,5	40,0	
	45			7,2	10,3	19,3	31,5	45,0	
	50			7,9	11,3	21,1	34,5	50,0	
	55			8,6	12,3	22,9	37,5	55,0	
	60			9,3	13,3	24,7		60,0	
	70				14,3	28,3			
	80								

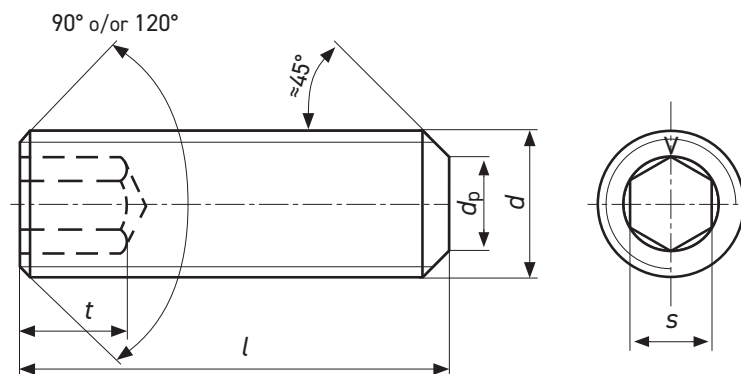
Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013. The weights indicated are approximate. **Other sizes available on request.**
 (*) For the form of head it is possible that these screws do not respect the yield test charge according to 10.9 class prescribed in ISO 898-1, when tested according to program B. Further more they have to respect all others prescriptions for the strenght class 10.9 of ISO 898-1. Testing the yield point the fracture may occur in the threaded portion, in the head, in the shank or in the junction head/shank. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 10.9 o 109, or the dot in the marking symbol may be omitted.**

FLAT POINT HEXAGON SOCKET SET SCREWS

UNI 5923: ISO METRIC COARSE THREAD
UNI 5924: ISO METRIC FINE THREAD

ISO	UNI	DIN
4026	5923-5924	913



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-5	ACCORDING TO ISO 3506-1
CLASS	22H 45H	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B	ACCORDING TO ISO 4759-1 CAT A-B
AVAILABLE TREATMENT	Black, White zinc plated or Yellow zinc plated with dehydrogenation according to RoHS. Other coatings on request	

<i>d</i>	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
<i>p grosso</i>	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
<i>p fine</i>					1	1,25	1,25	1,5	1,5	1,5	1,5	2
<i>d_p max</i>	2	2,5	3,5	4	5,5	7	8,5	10	12	13	15	18
<i>s</i>	1,5	2	2,5	3	4	5	6	6	8	10	10	12
<i>t</i>	1,2-2,0	1,5-2,5	2-3	2-3,5	3-5	4-6	4,8-8	5,6-9	6,4-10	7,2-11	8-12	10-15

	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
l = LENGTH	3	0,10											
	4	0,14	0,22										
	5	0,18	0,30	0,30									
	6	0,22	0,38	0,56	0,76	1,28							
	8	0,31	0,53	0,80	1,11	1,89							
	10	0,40	0,68	1,04	1,46	2,52	3,78						
	12	0,49	0,83	1,28	1,81	3,15	4,78	6,15					
	14	0,54	0,98	1,52	2,08	3,75	5,63	7,60	10,5				
	16	0,67	1,13	1,76	2,51	4,41	6,78	9,6	13,0	15,5			
	20	0,85	1,43	2,24	3,51	5,67	8,76	12,4	17,0	21,5	27,0	32,3	
	25		1,81	2,84	4,09	7,26	11,2	16,0	22,0	28,0	35,2	42,6	57
	30		2,19	3,44	4,97	8,85	13,7	19,6	27,0	34,6	43,4	52,9	72
	35		2,57	4,04	5,85	10,4	16,2	23,2	32,0	41,1	51,5	63,2	87
	40		2,95	4,64	6,73	12,0	18,7	26,8	37,0	47,7	59,6	73,5	102
	45			5,24	7,61	13,6	21,2	30,4	42,0	54,2	67,8	83,8	117
	50			5,84	8,49	15,1	23,7	34,0	47,0	60,8	75,9	94,1	132
	55				9,4	16,7	26,2	37,6	52,0	67,4			
	60			7,04	10,25	18,3	28,6	41,2	57,0	73,9	92,0	114,7	162
	70			8,24	12,01	21,5	33,6	48,4	67,0	87,0	108,1	135,3	192
	80			9,44	13,80	24,6	38,6	55,6	77,0	100,1	124,2	155,9	222
	90					27,8	43,6	62,8	87,0	113,2	140,3	176,5	252
	100					30,9	48,6	70,0	97,0	126,4	156,4	197,1	282

 Kg

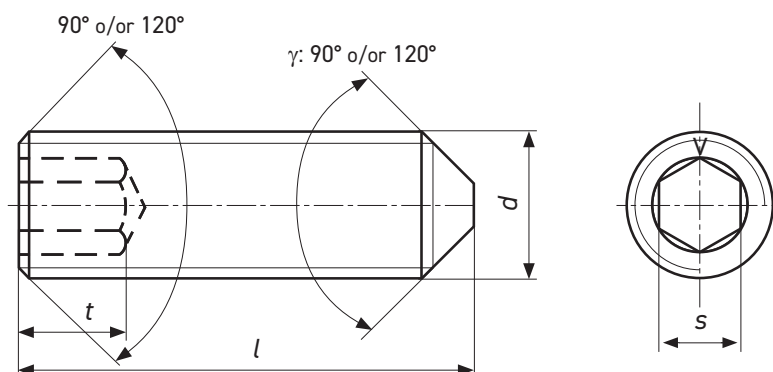
 Weight for 1000 pcs

Lengths over the green dashed line have 120° point.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

CONE POINT HEXAGON SOCKET SET SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
4027 5927 914



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-5	ACCORDING TO ISO 3506-1
CLASS	45H	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B	ACCORDING TO ISO 4759-1 CAT A-B
AVAILABLE TREATMENT	Black, White zinc plated with dehydrogenation according to RoHS. Other coatings on request	

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
p	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
s	1,5	2	2,5	3	4	5	6	6	8	10	10	12
t	1,2-2,0	1,5-2,5	2-3	2-3,5	3-5	4-6	4,8-8	5,6-9	6,4-10	7,2-11	8-12	10-15

	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
l = LENGTH	3												
	4	0,13											
	5	0,17	0,26	0,37									
	6	0,21	0,34	0,49	0,69	1,15							
	8	0,30	0,49	0,73	1,04	1,72							
	10	0,39	0,64	0,97	1,39	2,35	3,41						
	12	0,48	0,79	1,21	1,74	2,98	4,42	6,10					
	14	0,52	0,90	1,47	2,09	3,61	5,42	7,50					
	16	0,66	1,09	1,69	2,44	4,24	6,42	8,90	10,60	14,90			
	20	0,85	1,39	2,17	3,14	5,50	8,40	11,70	14,60	20,10	21,90	30,40	
	25	1,20		2,77	4,02	7,09	10,80	15,30	19,60	26,60	30,10	40,70	54,20
	30			3,37	4,9	8,68	13,30	18,90	24,60	33,20	38,30	51,00	68,70
	35			3,95	5,78	10,30	15,80	22,50	29,60	39,70	46,40	61,30	83,20
	40			4,60	6,66	11,90	18,30	26,10	34,60	46,30	54,50	71,60	98,20
	45			5,20	7,54	13,50	21,00	29,30	39,60	52,60	62,90	81,90	113,00
	50			5,80	8,42		23,50	32,80	44,60	59,10	70,80	92,20	128,00
	60						28,80	39,80	54,60	72,20	86,90	113,00	158,00
	70						33,90	46,60	64,60	85,30	103,00	133,80	
	80						39,40	53,50				154,60	

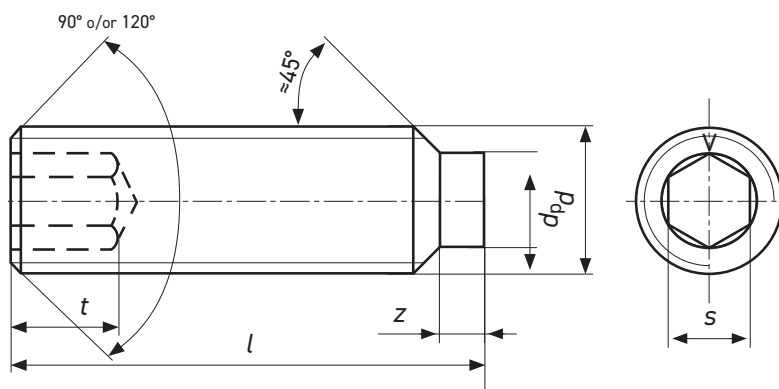
 Weight for 1000 pcs

Lengths above the green dashed line have 120° point.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET SET SCREWS WITH DOG POINT

ISO METRIC COARSE THREAD

ISO UNI DIN
4028 5925 915



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-5

ACCORDING TO ISO 3506-1

CLASS

45H

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black, White zinc plated with dehydrogenation according to RoHS. Other coatings on request

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
p	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
t	1,2-2,0	1,5-2,5	2-3	2-3,5	3-5	4-6	4,8-8	5,6-9	6,4-10	7,2-11	8-12	10-15
z max	1,75	2,25	2,75	3,25	4,3	5,3	6,3	7,36	8,36	9,86	10,36	12,43
d _p max	2	2,5	3,5	4	5,5	7	8,5	10	12	13	15	18
s	1,5	2	2,5	3	4	5	6	6	8	10	10	12

	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
l = LENGTH	3												
	4	0,120											
	5	0,163	0,24	0,41									
	6	0,186	0,292	0,528	0,84								
	8	0,276	0,442	0,708	1,02	1,68							
	10	0,366	0,592	0,948	1,29	2,28	3,60						
	12	0,456	0,742	1,19	1,63	2,68	4,41	6,06					
	14	0,500	0,86	1,40	1,88	3,12	4,51	7,24					
	16	0,636	1,04	1,67	2,34	3,94	6,05	8,91	11,5	15,0			
	20	0,816	1,34	2,15	3,04	5,20	8,02	11,00	15,4	20,1	24,4	28,30	28,30
	25		1,70	2,75	3,92	6,79	10,5	14,60	19,5	25,1	32,6	38,9	55,4
	30		2,06	3,40	4,80	8,38	13,0	18,20	24,5	31,9	38,1	45,5	67,7
	35				5,68	9,97	15,5	21,80	29,5	38,2	46,2	55,8	78,4
	40				6,56	11,60	18	25,40	34,5	44,9	54,3	66,1	93,4
	45					13,20	20		39,5	51,5	62,5	76,4	108,0
	50					14,81	23		44,5	58,1	70,6	86,7	123,0
	60					16,42	25,5		54,5	71,3	86,7	107	153,0
	70					18,03	28,5		64,5	84,5	103,0	127	177,0
	80								74,5	97,7	119,2	147	
	90								84,5	110,9	135,4	167	
	100								94,5	124,1	151,6	187	

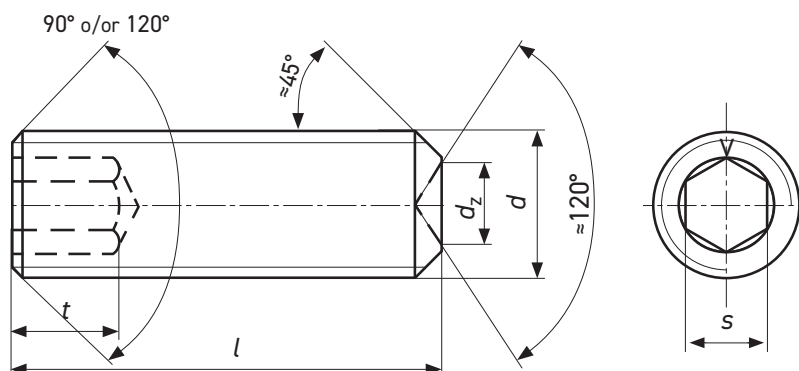
 Weight for 1000 pcs

Lengths above the dotted green line have a 120° chamfer.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

CUP POINT HEXAGON SOCKET SET SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
4029 5929 916



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-5

ACCORDING TO ISO 3506-1

CLASS

45H

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black, White zinc plated with dehydrogenation according to RoHS. Other coatings on request

<i>d</i>	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
<i>p</i>	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
<i>t</i>	1,2-2,0	1,5-2,5	2-3	2-3,5	3-5	4-6	4,8-8	9	6,4-10	11	8-12	10-15
<i>d_z max</i>	1,4	2	2,5	3	5	6	8	9	10	12	14	16
<i>s</i>	1,5	2	2,5	3	4	5	6	6	8	10	10	12

	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
l = LENGTH	3	0,10											
	4	0,14	0,23										
	5	0,18	0,26	0,42									
	6	0,22	0,38	0,54	0,74	1,19							
	8	0,31	0,53	0,78	1,09	1,88							
	10	0,40	0,68	1,02	1,44	2,51	3,72						
	12	0,49	0,83	1,26	1,79	3,14	4,73	6,70					
	14		0,98	1,50	2,04	3,80	5,73						
	16	0,67	1,13	1,74	2,49	4,40	6,73	9,50	12,6	15,70			
	20	0,85	1,43	1,22	3,19	5,66	8,71	12,30	16,6	20,90	26,00	31,10	
	25			2,82	4,07	7,25	11,20	15,90	21,6	27,40	34,20	41,4	55,20
	30				4,95	8,84	13,70	19,50	26,6	34,00	42,40	51,7	70
	35				5,83	10,40	16,20	23,10	31,6	40,50	50,60	62,0	85
	40					12,00	18,70	26,70	36,6	47,10	58,80	72,3	100
	45					13,60	21,20	29,70	41,6	53,30	67,00	82,6	115
	50					15,20	23,60	33,20	46,6	59,80	75,20	92,9	130
	60					18,40	28,50	40,10	56,60	72,80	91,60	114,00	160
	70					21,60	33,40	47,00	66,6	84,50	108,00	135,00	189
	80					24,80	38,30	53,90	76,60		124,40	156,00	
	90						43,20	60,80	86,6		140,80	177,00	
	100								96,60		157,20	198,00	

 Weight for 1000 pcs

Lengths above the dotted green line have a 120° chamfer.
 For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
 The weights indicated are approximate. **Other sizes available on request.**

OTHER SCREWS WITH METRIC THREAD



Metric screws without hex head or socket drive include a wide range of types designed for specific applications, where particular requirements in terms of aesthetics, safety, or functionality are needed. Among the most common are countersunk head screws with slotted or cross recess (Phillips or Pozidriv), cylindrical head screws with Torx drive, and pan head screws with slotted recess.

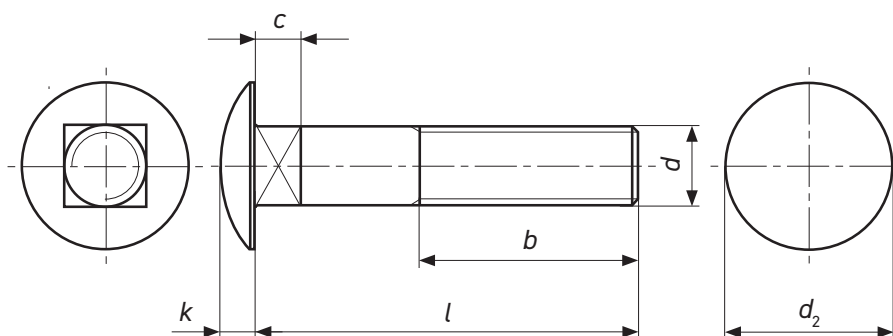
Metric threading, standardized according to ISO norms, ensures compatibility with a wide variety of mechanical components and structures. Countersunk head screws, for example, are used when the head needs to sit flush with the material surface, improving aesthetics or reducing protrusion. Torx drive screws, on the other hand, provide excellent torque transmission and greater resistance to stripping compared to slotted or cross recess screws.

These screws are widely used in sectors such as furniture, electronics, metalworking, and the furniture industry, where a balance between functionality and design is often required. They are available in different materials and finishes, making them suitable for both indoor and outdoor applications.

CARRIAGE BOLTS (MUSHROOM HEAD SQUARE NECK SCREWS)

ISO METRIC COARSE THREAD

ISO UNI DIN
8677 5731 603



MATERIAL	STEEL			STAINLESS STEEL	
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1			ACCORDING TO ISO 3506-1	
CLASS	4.8	8.8	10.9	A2-70	A4-70
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT C			ACCORDING TO ISO 4759-1 CAT C	
AVAILABLE TREATMENT	Plain , White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request				

d	M5	M6	M8	M10	M12	M14	M16
k	3,3	3,88	4,88	5,38	6,95	7	8,95
d ₂ max	13,55	16,55	20,65	24,65	30,65	35	38,8
c	3,5	4,0	5,0	6,0	8,0	9,0	12,0
b l ≤ 125	16	18	22	26	30	34	38
b l > 125		24	28	32	36	40	44
b l > 200			41	45	49	53	57

<i>d</i>	M5	M6	M8	M10	M12	M14	M16
16	4,0	6,9					
20	4,5	7,6					
22							 Kg
25	5,1	8,5	15,4	25,2			
30	5,9	9,6	17,0	27,7	45,7		
35	6,7	10,7	19,0	30,2	49,4		
40	7,5	11,8	21,0	32,7	53,1		
45	8,3	12,9	23,0	35,8	56,8	78,0	
50	9,1	14,0	25,0	38,9	61,2	84,0	
55	9,9	15,1	26,9	42,0	65,6	90,0	
60	10,7	16,2	28,9	45,1	70,0	96,0	
65	11,5	17,3	30,9	48,2	74,4		
70	12,3	18,4	32,9	51,3	78,8	108,0	
75		19,5	34,9	54,4	83		
80	13,9	20,6	36,8	57,5	87	120,0	
90	15,5	22,8	40,8	63,7	96	131,0	
100	17,1	25,0	44,8	69,9	105		
110		27,2	48,8	76,1	114		
120		29,4	52,8	82,3	123		229
130		31,6	56,8	88,5	132		245
140			60,8	95,0	141		261
150			64,8	101,0	150		277
160			68,8	107,0	159		293
170			72,8	113,0	168		
180			76,8	119,0	177		325
190			80,8	125,0	186		325
200			84,8	131,0	195		357
220				143,0	213		368
230				155,0	222		384
240				167,0	231		400
250				179,0	240		416
260				191,0	249		432
280				203,0	267		448
290					276		464
300					285		480
320					303		512
340					321		544
360					339		576
380					357		608
400					375		640
440							704
500							800
540							864

l = LENGTH

Weight for 1000 pcs

Sizes above the green line have full thread.

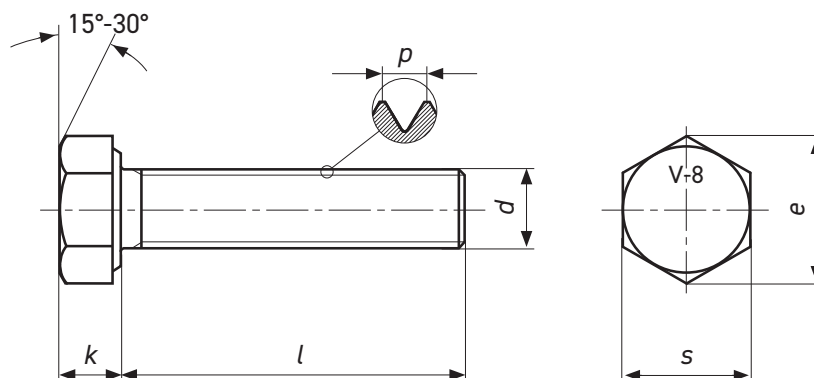
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

The weights indicated are approximate. **Other sizes available on request.**

FULL THREAD HEXAGON HEAD SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
4017* 5739 933



MATERIAL	STEEL		STAINLESS STEEL		BRASS
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1		ACCORDING TO ISO 3506-1		
TENSILE STRENGTH					250 ÷ 400 N/mm²
CLASS	4.8	8.8	A2-70		OT
	10.9	12.9	A4-70	A4-80	
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B-C		ACCORDING TO ISO 4759-1 CAT A-B-C		ACCORDING TO ISO 4759-1 CAT A-B-C
AVAILABLE TREATMENT	Plain, Black, White zinc plated or Yellow zinc plated according to RoHS Hot dip galvanized. Other coatings on request				

d	M3	M4	M5	M6	M7	M8	M10	M12	M14	M16	M18
p	0,5	0,7	0,8	1	1	1,25	1,5	1,75	2	2	2,5
s*	5,5	7	8	10	11	13	17/16	19/18	22/21	24	27
k	2	2,8	3,5	4	4,8	5,3	6,4	7,5	8,8	10	11,5
e min	5,88	7,66	8,79	11,05	12,12	14,38	18,9	21,1	24,49	26,75	30,14

d	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
p	2,5	2,5	3	3	3,5	3,5	4	4	4,5	4,5	5
s*	30	32/34	36	41	46	50	55	60	65	70	80
k	12,5	14	15	17	18,7	21	22,5	25	26	28	33
e min	33,53	35,72	39,98	45,2	50,85	55,37	60,79	66,49	72,02	76,95	82,6

The ISO standard differs from DIN and UNI standards for the sizes "s" and "e" in the diameters M10, M12, M14, M22.
The first hex key value refers to UNI and DIN , while the second value refers to ISO.
Other materials available on request.

d	M3	M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
6	0,67	1,34																				
8	0,71	1,49	2,38	3,74		8,5																
10	0,75	1,64	2,63	4,08	6,53	9,1	16,2															
12	0,92	1,80	2,87	4,42	6,92	9,8	17,2	24,9														
14	1	1,95	3,12	4,77	7,39	10,4	18,2	26,3														
16	1,08	2,10	3,37	5,11	7,86	11,1	19,2	27,7	44													
18		2,26	3,62	5,46	8,41	11,7	20,2	29,1	46													
20	1,25	2,41	3,87	5,8	8,91	12,3	21,2	31	48	63,5	88											
22		2,56	4,12	6,15	9,35	12,9	22,2	33	50	66,2												
25	1,46	2,80	4,49	6,65	10,1	13,9	23,7	34,1	53	70,2	95,8	124										
28				7,15		14,9	25,2															
30	1,67	3,19	5,11	7,51	11,4	15,5	26,2	37,7	57,9	76,9	104	134	168	214								
35	1,88	3,57	5,73	8,37	12,6	17,1	28,7	41,3	62,9	83,5	112	145	181	229								
40	2,09	3,96	6,35	9,23	13,9	18,7	31,2	44,9	67,9	90,2	120	155	193	244		448						
45	2,30	4,34	6,99	10,1	15,1	20,3	33,7	48,5	72,9	97,1	128	165	206	259		472						
50	2,52	4,73	7,59	11,0	16,4	21,8	36,2	52	77,9	103	136	176	219	274	377	496		797				
55		5,11	8,19	11,9	17,6	23,4	38,7	55,6	82,9	110	145	186	232	289	397	519		822				
60		5,50	8,80	12,7	18,8	25,0	41,3	58,2	87,8	117	153	196	244	304	416	543	688	851				
65			9,40	13,6	20,1	26,6	43,8	62,8	92,8	123	161	207	257	319	435	566	717	886				
70			10,00	14,4	21,3	28,2	46,3	66,4	97,8	130	169	217	269	334	454	590	746	910				
75				15,3	22,6	29,8	48,8	70	102	137	177	227	282	348	473	614	775	950				
80			11,21	16,2	23,8	31,4	51,3	73,6	107	144	186	238	295	363	492	637	806	990	1240	1460		
85				17,0	25,1	33,0	53,8	77,2	112	150	194	247	308	378	512	661	837	1020	1280	1500		
90				17,9	26,3	34,6	56,3	80,8	117	157	202	258	321	393	531	685	866	1060	1320	1550		
95				18,8	27,5	35,2	59,8	84,4	122	164	210	268										
100				19,6	28,8	37,7	61,3	88	127	170	218	279	346	423	569	732	920	1140	1400	1650	1980	2320
110				21,3		40,9	66,4	95,2	137	184	235	300	371	453	608	779	978	1200	1480	1740	2090	2450
120				23,0		43,6	71,4	102	147	197	251	320	397	483	647	827	1040	1260	1560	1840	2190	2570
130						46,4	76,4	109	157	210	268	340	421	513	685	874	1090	1330	1650	1930	2300	2690
140						49,1	81,4	116	167	224	284	361	448	543	724	921	1150	1400	1730	2020	2410	2820
150						51,8	86,4	123	177	237	300	381	473	572	762	969	1210	1470	1810	2120	2520	2940
160						54,6	91,4	130	187	251	316	402	498	602	801	1010	1270	1540	1890	2210	2630	3060
170						57,3	96,4	137	197	264	332	422	523	632	839	1060	1330	1610	1970	2300	2740	
180						60,0	101,4	144	207	278	348	442	548	662	875	1110	1390	1680	2050	2400	2850	3310
190						62,8	106,4	151	217	291	364	462	573	692	911	1160	1440	1740	2140	2500	2960	
200						65,5	111,4	158	227	305	380	484	598	722	947	1210	1500	1810	2220	2590	3060	3560
210																						2700

Weight for 1000 pcs

(**) According to the norm sizes above the black line are Class A and below Class B.

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

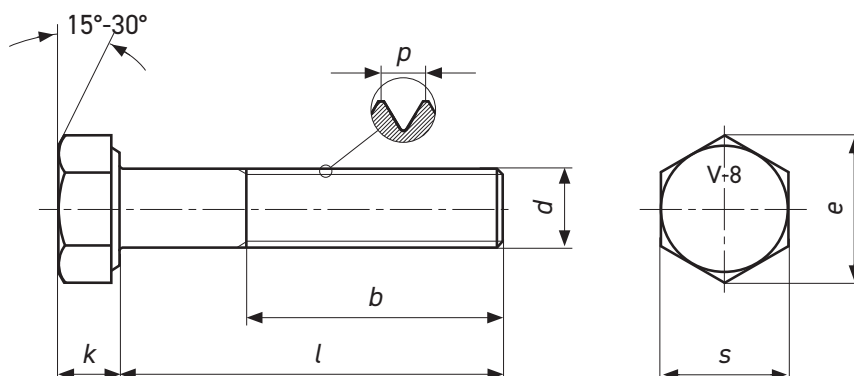
For the weights of the brass products multiply the values by 1,083.

The weights indicated are approximate. **Other sizes available on request.**

PARTIAL THREAD HEXAGON HEAD SCREWS

ISO METRIC FINE THREAD

ISO 8765* UNI 5738 DIN 960



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

8.8

10.9 12.9

A2-70

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B**

ACCORDING TO ISO 4759-1 CAT A-B**

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

<i>d</i>	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22	M24	M27
<i>p</i>	1	1	1,25	1,25	1,5	1,5	1,5	1,5	1,5	1,5	2	2
<i>s*</i>	13	17/16	17/16	19/18	19/8	22/21	24	27	30	32/34	36	41
<i>k</i>	5,3	6,4	6,4	7,5	7,5	8,8	10	11,5	12,5	14	15	17
<i>e min</i>	14,38	18,9	18,9	21,1	21,1	24,49	26,75	30,14	33,53	35,72	39,98	45,2
<i>b < 125</i>	22	26	26	30	30	34	38	42	46	50	54	60
<i>b 125 ÷ 200</i>	28	32	32	36	36	40	44	48	52	56	60	66
<i>b > 200</i>	41	45	45	49	49	53	57	61	65	69	73	79

(*) The ISO standard differs from DIN and UNI standards for the sizes "s" and "e" in the diameters M10, M12, M14, M22.
The first hex key value refers to UNI and DIN , while the second value refers to ISO.

	d	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22	M24	M27
	35	19,1	33,9	33,9	47,6	47,6							
	40	21,1	37,1	37,1	52,0	52,0	73,5						
	45	23,0	40,2	40,2	56,4	56,4	79,0						
	50	25,0	43,4	43,4	60,8	60,8	84,5	111					
	55	27,0		46,5	65,3	65,3	90,1	119					
	60	28,9	49,6	49,6	69,8	69,8	95,7	127	169	216	263	298	
	65	30,9		52,8	74,3	74,3	101	135	179	228	278	326	
	70	32,9	55,8	55,8	78,8	78,8	107	143	189	240	293	354	510
	75	34,8		59,0	83,3	83,3	112	151	199	253	308	382	
	80	36,8		62,2	87,8	87,8	118	159	209	265	323	410	553
	85	38,7		65,4	92,3	92,3			219	277	338		
	90	40,7		69,4	96,7	96,7	129	175	229	290	353	445	597
	100	44,7		75,7	106,1	106,1	140	191	249	314	383	481	642
	110	48,6		82,0	115,3	115,3	152	217	269	339	413	517	687
	120	52,6		88,2	124,5	124,5	164	233	289	363	443	552	732
	130	56,5		94,4	133,7		176	249	308	387	473	588	777
	140	60,5		100,6	142,8	142,8	188	265	328	412	502	623	822
	150	64,4		107,1	152,0	152,0	200	281	348	437	532	659	867
	160	68,4		113,4	161,1	161,1	212	296	368	461	562	694	912
	170			119,7	170,3		224	312	388	486	592	730	957
	180			124,0	179,0		236	328	408	510	621	765	1000
	190						248	344	428	535	651	800	1050
	200						260	360	448	560	681	836	1090
	210												
	220								498				
	240								538				
	260								578				
	280								618				
	300												

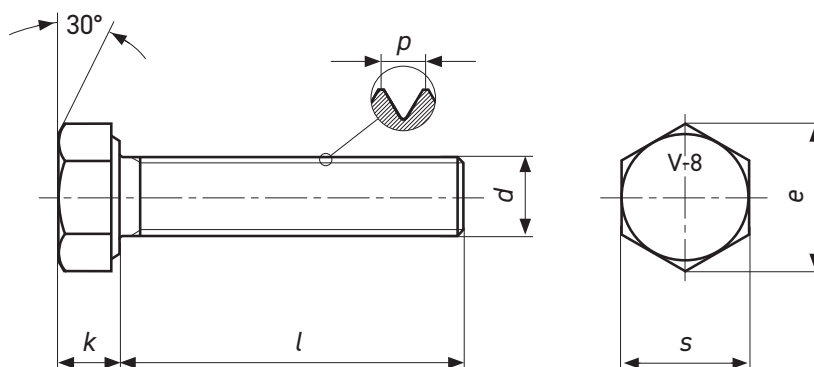
 Weight for 1000 pcs

(**) According to the norm sizes above the black line are Class A and below Class B.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

FULL THREAD HEXAGON HEAD SCREWS

ISO METRIC FINE THREAD

ISO 8676* UNI 5740 DIN 961



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 3506-1
CLASS	8.8 10.9 12.9	A2-70
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B**	ACCORDING TO ISO 4759-1 CAT A-B**
AVAILABLE TREATMENT	Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request	

d	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22	M24	M27	M30
p	1	1	1,25	1,25	1,5	1,5	1,5	1,5	1,5	1,5	2	2	2
s*	13	17/16	17/16	19/18	19/18	22/21	24	27	30	32/34	36	41	46
k	5,3	6,4	6,4	7,5	7,5	8,8	10	11,5	12,5	14,0	15	17	18,7
e min	14,38	18,9	18,9	21,1	21,1	24,48	26,75	30,14	33,53	35,72	39,98	45,2	50,85

(*) The ISO standard differs from DIN and UNI standards for the sizes "s" and "e" in the diameters M10, M12, M14, M22.
The first hex key value refers to UNI and DIN , while the second value refers to ISO.

	d	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22	M24	M27	M30
L = LENGTH	10	9,2												
	12	9,8												
	14	10,4												
	16	11,1	21,3	21,3	30,0									
	18	11,8	22,4	22,4	31,3									
	20	12,4	23,5	23,5	32,9	32,9	49	66						
	22	13,0	24,6	24,6	34,3									
	25	14,1	26,2	26,2	36,6	36,6	54	72						
	30	15,7	28,9	28,9	40,3	40,3	59	79	107	139	172			
	35	17,4	31,6	31,6	44,0	44,0	64	85	116	151	185			
	40	19,1	34,3	34,3	47,7	47,7	70	92	124	162	198	254		
	45	20,7	36,9	36,9	51,4	51,4	75	99	133	172	212	270		
	50	22,3	39,6	39,6	55,0	55,0	80	106	142	184	226	287	386	
	55	24,0	42,3	42,3	58,7	58,7	85	113	151	195	240	303		
	60	25,7	45,1		62,4	62,4	91	120	160	207	253	319	427	562
	65	27,3	47,8		66,2	66,2	96	127	168	217	267	336		
	70	29	50,5		70,0	70	101	134	177	228	280	352	467	612
	75	30,7	53,2		73,6	73,6	106	141	185	239	293	368		
	80	32,3	55,8		77,4	77,4	111	148	195	251	307	384	507	663
	90	35,7	61,2		84,8	84,8	122	162	212	272		415	547	714
	100	38,8	66,7		92,2		133	176	229	295		448	587	765
	110				99,2		144	190	247	317		481		816
	120				107		154	204	265	339		513		866
	130						165	218	283			513		917
	140						175	232	300			543		1.697
	150							245	318			572		1.020
	160											602		1.060

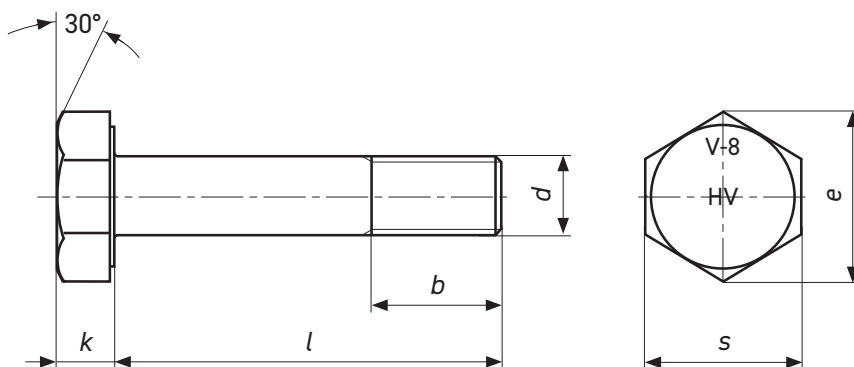
Weight for 1000 pcs

(**) According to the norm sizes above the black line are Class A and below Class B.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

LARGE HEX HEAD SCREWS FOR STEEL STRUCTURES

ISO METRIC COARSE THREAD

ISO UNI DIN
- 5712 6914



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

10.9

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT C

AVAILABLE TREATMENT

Black. Other coatings on request

<i>d</i>	M12	M14	M16	M18	M20	M22	M24	M27	M30
<i>b</i> ⁽¹⁾	21	23	26	28	31	32	34	37	40
<i>b</i> ⁽²⁾	23	25	28	30	33	34	37	39	42
<i>s</i>	22	24	27	30	32	36	41	46	50
<i>k</i>	8	9	10	12	13	14	15	17	19
<i>e</i> min	23,91	26,17	29,56	32,95	35,03	39,55	45,20	50,85	55,37

d	M12	M14	M16	M18	M20	M22	M24	M27	M30
30	49,1								
35	53,6								
40	58,0	75	105		176				 Kg
45	61,1	81	113	150	188				
50	66,6	87	121	160	200	257	326		
55	71,0	93	129	170	212	272	344		
60	75,4	99	137	180	225	286	362	488	
65	79,9	105	145	190	237	301	380	510	
70	84,3	111	153	200	249	316	398	532	674
75			160	210	262	331	415	554	701
80			168	220	274	346	433	576	728
85			176	230	286	361	451	599	756
90			184	240	298	375	467	621	784
95			192	250	310	390	485	644	812
100			199	260	322	405	503	665	838
105			207		335	420	520	688	865
110			215		347	435	538	710	893
115			223		359	450	556	732	921
120			231		372	465	574	755	949
125			239		384	479	591	777	976
130			247		396	494	609	800	1004
135						509	627	822	1032
140					421	524	645	845	1059
145					433	539	662	867	1087
150					446	554	680	890	1115
155					458	569	698	912	1143
160					471	584	716	935	1170
165					483	599	733	957	1198
170					495	614	751	979	1226
175					508	629	769	1002	1254
180					520	644	787	1024	1281
185					533	659	804	1047	1309
190					545	674	822	1069	1337
195					557	689	840	1092	1365
200					570	704	858	1114	1392
205					582		876	1137	1420
210					595		894	1159	1448
215					607		912	1182	1476
220					619		930	1204	1503
225									1531
230									1559
235									1587
240									1614
245									1642
250									1670
260									1725
270									1781

 Weight for 1000 pcs

⁽¹⁾ For shank lengths above the black line.

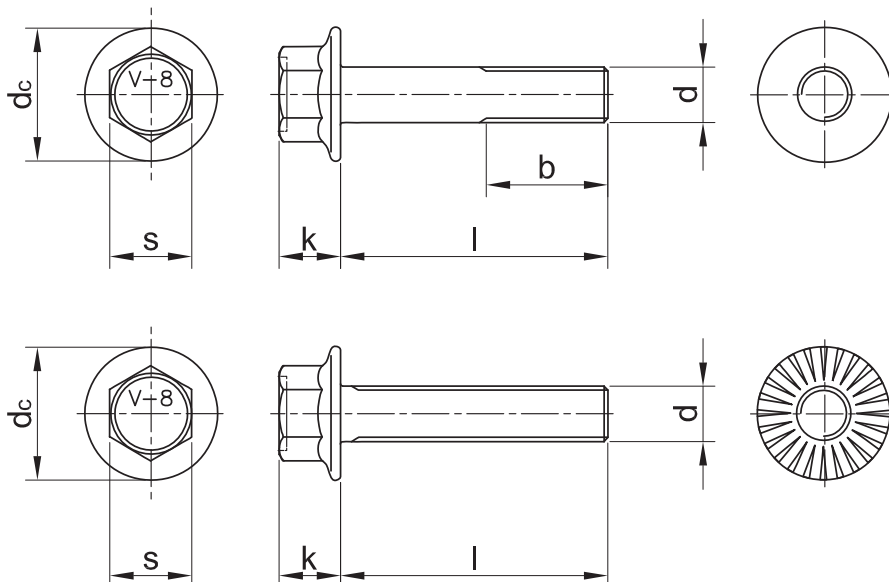
⁽²⁾ For shank lengths below the black line.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON FLANGE SCREWS WITH OR WITHOUT SERRATION

ISO METRIC COARSE THREAD

EN 1665 UNI - DIN 6921*



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

4.8 8.8 10.9

CLASS

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

<i>d</i>	M4	M5	M6	M8	M10	M12	M14	M16	M20
<i>s</i>	7	8	10	13	15/16	16/18	18	21	21/24
<i>p</i>	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5
<i>k</i> max	4	4,8	5,5	7,4	9,1	11,5	12,8	14,4	17,1
<i>d_c</i> max	9,5	11,8	14,2	18	22,3	26,6	30,5	35	43
<i>b</i> < 125	-	16	18	22	26	30	34	38	46
<i>b</i> 125 ÷ 200	-	-	-	28	32	36	40	44	52
<i>b</i> > 200	-	-	-	-	-	-	-	57	65

(*) The EN 1665 standard differs from DIN 6921 in terms of head dimensions.
The first hex key value refers to DIN , while the second value refers to ISO.

l = LENGTH	d	M4	M5	M6	M8	M10	M12	M14	M16	M20
										 Kg
	6	1,84	3,2							
	8	1,99	3,45	5,84						
	10	2,14	3,71	6,18	12,1					
	12	2,3	3,91	6,52	12,7					
	14	2,45	4,12	6,87	13,3					
	16	2,6	4,33	7,21	14	24,7				
	18	2,83	4,69	7,56	14,6	26,2				
	20	2,91	4,84	7,9	15,2	27,7	43,2			
	22			8,25	15,8					
	25	3,3	5,67	8,95	16,7	27,7	46,6		78	
	30	3,69	6,49	11	21,7	31,6	50	66,85	86,8	
	35		8	11,43	23,7	36	53,4	71,89	88,2	
	40		8,8	12,57	25,7	42,4	63	76,94	104,2	
	45		9,6	13,5	25,65	45,45	58,2	85,28	117,6	
	50		10,4	15,5	27,6	48,5	76	103,5	131	
	55			16,5	31,7	51,55	80	95,79	137,5	
	60			17,97	33,7	54,6	84	107,12	144	277
	65			16,05	35,5	57,3	88			
	70			18,5	37,7	60,7	92	117,21	158,4	
	75				39,5					
	80				41,7	66,8	100	126,48	172,25	
	85				43,5					
	90				45,7	72,9	108	138,74	186	
	100				49,7	79	116	151	205,95	

 Weight for 1000 pcs

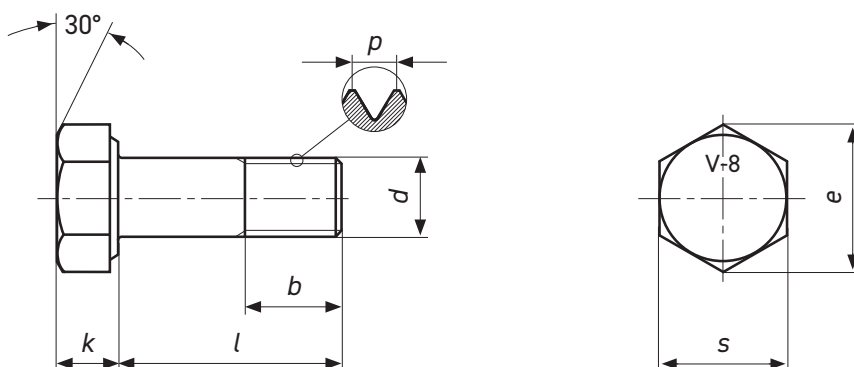
The weights indicated are approximate. **Other sizes available on request.**

HEXAGON HEAD SCREWS FOR BLADES

ISO METRIC FINE THREAD

ISO UNI DIN

- - -



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

<i>d</i>	7/16	M10	M10	M12	M12	M14	M16	
<i>p</i>	14 ^(*)	1,25	1,5	1,25	1,5	1,5	1,5	
<i>s</i>	15,86	17	17	19	19	22	24	
<i>e min</i>		18,9	18,9	7,5	7,5	8,8	26,75	
<i>k</i>	7,14	6,4	6,4	7,5	7,5	8,8	10	
<i>b</i>	16	19	15	18	18	20	25	
<i>l</i>								 Kg
<i>l</i> = LENGTH	30		30,4	30,3	44,5	44,4		
	35				46,6	46,5	67,0	
	40						73,0	
	45						79,0	
	47						108	
	48					83		
	50					85	115	
	80	70						
84	74							

 Weight for 1000 pcs

(*) Threads x inch.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET SCREWS WITH METRIC THREAD



Hex socket head screws with metric thread are widely used fastening elements in industrial and mechanical applications, valued for their reliability, strength, and ease of assembly.

Their key feature is the internal hex socket in the head, which allows tightening with an Allen key (hex key). This type of drive ensures excellent torque transmission, enabling secure fastening even in tight or hard-to-reach spaces.

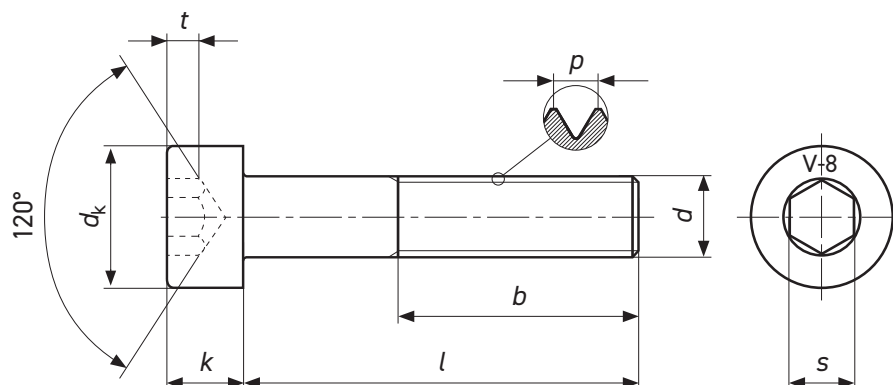
The metric thread, standardized according to ISO norms, guarantees compatibility with a wide range of components and facilitates interchangeability in international assembly systems. Hex socket head screws are available in different head styles, including cylindrical, countersunk, and button head, depending on application requirements.

They are typically manufactured in high-strength steel or stainless steel and may be treated with anti-corrosion coatings for use in aggressive environments. Applications include automotive, precision engineering, electronics, and robotics, where reliability, precision, and robustness are essential. Their versatility and performance make them a key choice in numerous industrial and design contexts.

HEXAGON SOCKET HEAD CAP SCREWS

ISO METRIC COARSE THREAD

ISO 4762 UNI 5931 DIN 912



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

8.8 **10.9**

A2-70

12.9

A4-70 **A4-80**

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20
p	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5
dk max	5,5	7	8,5	10	13	16	18	21	24	27	30
k max	3	4	5	6	8	10	12	14	16	18	20
s	2,5	3	4	5	6	8	10	12	14	14	17
t min	1,3	2,0	2,5	3,0	4,0	5,0	6	7	8	9	10
b	18	20	22	24	28	32	36	40	44	48	52

d	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
p	2,5	3	3	3,5	3,5	4	4	4,5	4,5	5
dk max	33	36	40	45	50	54	58	63	68	72
k max	22	24	27	30	33	36	39	42	45	48
s	17	19	19	22	24	27	27	32	32	36
t min	11	12	13,5	15,5	18	19	21	24	26	28
b	56	60	66	72	78	84	90	96	100	108

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48
6	0,71	1,50	2,20																		
8	0,80	1,65	2,45	4,33																	
10	0,88	1,80	2,70	4,70	10,3	17,9															
12	0,96	1,95	2,95	5,07	10,9	18,9															
14	1,05	2,10	3,20	5,44	11,5	19,9															
16	1,16	2,25	3,45	5,75	12,1	20,9	28,5														
18	1,26	2,45	3,70	6,12	13,3	21,9															
20	1,36	2,65	4,01	6,53	13,4	22,9	32,1	43	63,9												
22	1,46	2,90	4,32	6,90	14,0	23,9	33,9	45	66,9												
25	1,61	3,15	4,78	7,59	15,0	25,4	35,7	48	71,3												
30	1,86	3,65	5,55	8,30	16,9	27,9	39,3	53	77,8	111	128										
35	2,11	4,15	6,32	9,91	18,9	30,4	42,9	58	84,4	120	139	211									
40	2,36	4,65	7,09	11,0	20,9	32,9	46,5	63	91,0	129	150	224	270								
45	2,61	5,15	7,86	12,1	22,9	36,1	50,1	68	97,6	138	161	237	285	330	500						
50	2,86	5,65	8,63	13,2	24,9	39,3	54,5	73	106,0	147	172	250	300	352	527						
55		6,15	9,4	14,3	26,9	42,5	58,9	78	114	156	183	263	316	374	554						
60		6,65	10,2	15,4	28,9	45,7	63,4	84	122	165	194	276	330	396	581						
65		7,15	11,0	16,5	31,0	48,9	67,8	90	130	174	205	291	345	418	608						
70		7,65	11,8	17,6	33,0	52,1	71,3	96	138	183	216	306	363	440	635						
75		8,15	12,6	18,7	35,0	55,3	75,8	102	146	193	228	321	379	462	662						
80		8,65	13,4	19,8	37,0	58,5	80,2	108	154	203	241	336	399	484	690	830	1070	1270	1590		
85		9,15	14,2	20,9	39,0	61,7	84,7	114	162	213	252										
90		9,65	15,0	22,0	41,0	64,9	89,1	120	170	223	266	366	435	529	745	900	1150	1350	1690		
95			15,8	23,1	43,0	68,1	93,6	126	178	233	278										
100			16,6	24,2	45,0	71,2	98,0	132	186	243	291	396	471	574	800	970	1230	1430	1790		2460
110			17,4	26,4	49,0	77,5	106,9	144	202	263	316	426	507	619	855	1040	1310	1510	1890		
120				28,6	53,0	83,8	115,8	156	218	283	341	456	543	664	910	1110	1390	1590	2000		2740
125						87,0															
130				30,8	65,7	90,1	125,0	168	234	303	366	486	579	709	965	1180	1470	1650	2100		
140				33,0	69,3	96,7	134,0	180	250	323	391	516	615	754	1020	1250	1550	1740	2210		3020
150				35,2	72,8	102,7	143,0	192	266	343	416	546	651	799	1075	1320	1630	1830	2320		
160				37,4	76,3	109,2	152,1	204	282	363	441	576	687	844	1135	1390	1710	1920	2420		3300
170				39,6	79,8	115,5	161,1	216	298	383	466	606	723	889	1185	1460	1790	2010	2530		3445
180				41,8	83,4	121,8	170,1	228	314	403	491	636	759	934	1240	1530	1870	2100	2640		3590
190				44,0	86,9	128,1	179,2	240	330	423	516	666	795	979	1295	1600	1950	2190	2750		
200				46,2	90,4	134,5	188,2	252	346	443	541	696	831	1024	1350	1670	2030	2280	2860		3870
210					93,9	140,8	197,3	264	362	463	566	726	867	1069	1405			2370			
220					97,4	147,1	206,3	276	378	483	591	756	903	1114	1460	1810	2190	2460	3080		
230					100,9	153,5	215,3	288	394	503	616	786	939	1159	1515			2550			
240					104,5	159,8	224,4	300	410	523	641	816	975	1204	1570	1950	2350	2640	3300		
250					108,0	166,1	233,4	312	426	543	666	846	1011	1249	1625			2730			
260					111,5	172,4	242,5	324	442	563	691	876	1047	1294	1680	2090	2510	2820	3520		
270					115,0	178,8	251,5	336	458	583	716	906	1083	1339	1735			2910			
280					118,5	185,1	260,5	348	474	603	741	936	1119	1384	1790	2230	2670	3000	3740		
290						191,4	269,6	360	490	623	766	966	1155	1429	1845			3090			
300							278,6	372	506	643	791	996	1191	1474	1900	2370	2830	3180	3960		

Weight for 1000 pcs

Upon request, this type of screw can also be supplied fully threaded or with hexalobular socket according to ISO 14579.

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

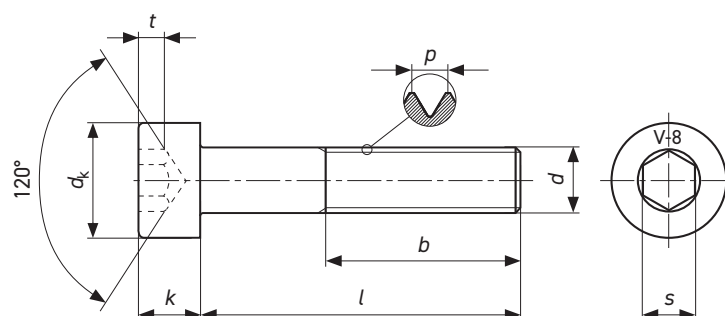
Sizes above the green line have full thread.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET HEAD CAP SCREWS

ISO METRIC FINE THREAD

ISO UNI DIN
12474 5932 912



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

8.8

10.9

12.9

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M8x1	M10x1	M10x1,25	M12x1,25	M12x1,5	M14x1,5	M16x1,5	M20x1,5	M24x2
p	1	1	1,25	1,25	1,5	1,5	1,5	1,5	2
dk max	13	16	16	18	18	21	24	30	36
k max	8	10	10	12	12	14	16	20	24
s	6	8	8	10	10	12	14	17	19
t min	4	5	5	6	6	7	8	10	12
b	28	32	32	36	36	40	44	52	60

l	Kg								
12	10,9								
16	12,1	20,9	20,9						
20	13,4	22,9	22,9	32,1	32,1				
25	15,0	25,4	25,4	35,7	35,7				
30	16,9	27,9	27,9	39,3	39,3	53	77,8		
35	18,9	30,4	30,4	42,9	42,9	58	84,4		
40	20,9	32,9	32,9	46,5	46,5	63	91,0	150	
45	22,9	36,1	36,1	50,1	50,1	68	97,6	161	
50	24,9	39,3	39,3	54,5	54,5	73	106,0	172	300
55	26,9	42,5	42,5	58,9	58,9	78	114	183	316
60	28,9	45,7	45,7	63,4	63,4	84	122	194	330
70	33,0	52,1	52,1	71,3	71,3	96	138	216	363
80	37,0	58,5	58,5	80,2	80,2	108	154	241	399
90	34,7	64,9	64,9	89,1	89,1	120	170	266	435
100	37,9	71,2	71,2	98,0	98,0	132	186	291	471
110				106,9	106,9	144	202	316	
120				115,8	115,8	156	218	341	543
130				125,0	125,0	168	234	366	579
140				134,0	134,0		250	391	615
150				143,0	143,0		266	416	651
160				152,1	152,1		282	441	687
180				170,1	170,1		314	491	759
190								516	
200				188,2	188,2		346	541	

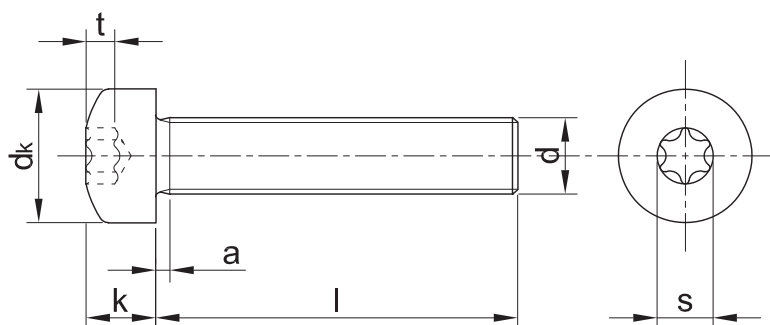
Weight for 1000 pcs

Sizes above the green line have full thread. The weights indicated are approximate. Other sizes available on request.

HEXALOBULAR PAN HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 14583 UNI - DIN -



MATERIAL		STEEL				STAINLESS STEEL		
MECHANICAL PROPERTIES		ACCORDING TO ISO 898-1				ACCORDING TO ISO 3506-1		
CLASS		4.8		8.8		A2		A4
TOLLERANCES		ACCORDING TO ISO 4759-1 CAT A				ACCORDING TO ISO 4759-1 CAT A		
AVAILABLE TREATMENT		Plain - White zinc plated according to RoHS. Other coatings on request						
d	M2	M2,5	M3	M4	M5	M6	M8	M10
dk	4	5	6	8	10	12	16	20
k	1,7	2	2,4	3,1	3,8	4,6	6	7,5
s	1,75	2,4	2,8	3,95	4,5	5,6	7,95	8,95
t max	0,77	1,04	1,27	1,66	1,91	2,42	3,18	4,02
 torx n.	6	8	10	20	25	30	45	50

l								
l = LENGTH	3	0,178	0,336					
	4	0,196	0,366	0,544				
	5	0,215	0,396	0,588	1,30			
	6	0,233	0,426	0,632	1,38	2,32		
	8	0,270	0,486	0,720	1,53	2,57	4,37	
	10	0,307	0,546	0,808	1,69	2,81	4,72	9,96
	12	0,344	0,606	0,896	1,84	3,06	5,07	10,6
	14	0,381	0,666	0,984	2,00	3,31	5,42	11,2
	16	0,418	0,726	1,07	2,15	3,56	5,78	11,9
	20	0,492	0,846	1,25	2,46	4,05	6,48	13,2
	25		0,996	1,47	2,85	4,67	7,36	14,8
	30			1,69	3,23	5,29	8,24	16,4
	35				3,62	5,91	9,12	18,0
	40				4,01	6,52	10	19,6
	45					7,14	10,90	21,2
	50					7,76	11,8	22,8
	55						12,6	24,4
	60						13,5	26,0

Kg

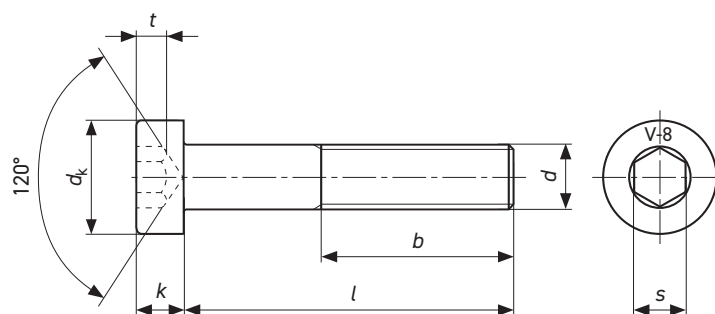
Weight for 1000 pcs

Screws with nominal length under the line can have partial thread.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET THIN HEAD CAP SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
- 9327 7984



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1*	ACCORDING TO ISO 3506-1
CLASS	8.8 10.9 12.9	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Black, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request	

d	M4	M5	M6	M8	M10	M12	M16
dk	7	8,5	10	13	16	18	24
k	2,8	3,5	4	5	6	7	9
s	2,5	3	4	5	7	8	12
t min	1,1	1,9	2,4	3,2	3,8	4,4	5,8
b	14	16	18	22	26	30	38

l	Kg						
6	0,96						
8	1,12	2,26					
10	1,28	2,50	3,59				
12	1,44	2,74	3,94	8,06			
14	1,60	2,98	4,29	8,66			
16	1,76	3,22	4,64	9,25	14,40		
18	1,95	3,46	4,99	9,85	15,40		
20	2,15	3,77	5,34	10,5	16,4	24,1	
25	2,64	4,54	6,45	12,0	19,0	27,7	
30		5,31	7,56	14,0	21,6	31,3	62,1
35			8,67	16,0	24,7	34,9	68,8
40			9,78	18,0	27,8	39,3	76,5
45				20,0	30,9	43,1	82,2
50				22,0	34,0	48,7	89,6
55				24,0	37,1	52,5	97,0
60				26,0	40,2	56,9	104,0
70					46,4	65,8	119,0
80						74,7	134,0

Weight for 1000 pcs

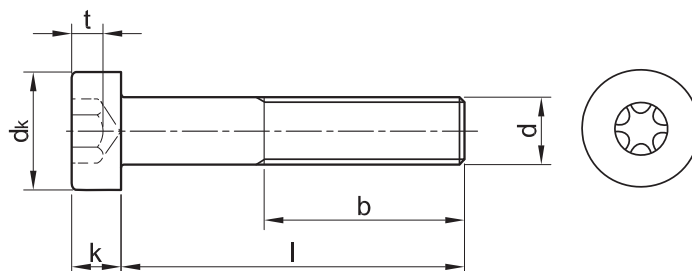
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
Sizes above the green line have full thread. The weights indicated are approximate. **Other sizes available on request.**

(*) The critical cross section of screws covered by this standard can, as consequence of the head geometry and the form of wrench engagement, be located below the hexagon socket and not in the thread. It is recommended that the screws should not be used for the transmission of high axial loads. The form of the key engagement permits the application of prestressing loads corresponding to 70% of the minimum yield point specified for properties of 8.8 screws. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 08.8 or 088, or the dot in the marking symbol may be omitted.**

LOW CYLINDRICAL HEAD SCREWS WITH EXALOBULAR SOCKET

ISO METRIC COARSE THREAD

ISO 14580 UNI - DIN -



MECHANICAL PROPERTIES		ACCORDING TO ISO 898-1*			ACCORDING TO ISO 3506-1		
CLASS		8.810.9			A2A4		
TOLLERANCES		ACCORDING TO ISO 4759-1 CAT A			ACCORDING TO ISO 4759-1 CAT A		
AVAILABLE TREATMENT		Black, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request					
d	M3	M4	M5	M6	M8	M10	
dk	5,5	7	8,5	10	13	16	
k	2,4	2,8	3,5	4	5	6	
t min	1,01	1,1	1,9	2,4	3,2	3,8	
b min	20	20	25	25	30	35	
 torx n.	10	20	25	30	45	50	
l						 Kg	
l = LENGTH	4	0,515					
	5	0,56					
	6	0,604	0,96				
	8	0,692	1,12	2,26			
	10	0,78	1,28	2,50	3,59		
	12	0,868	1,44	2,74	3,94	8,06	
	14	0,956	1,60	2,98	4,29	8,66	
	16	1,04	1,76	3,22	4,64	9,25	14,40
	18		1,95	3,46	4,99	9,85	15,40
	20	1,22	2,15	3,77	5,34	10,5	16,4
	25	1,44	2,64	4,54	6,45	12,0	19,0
	30	1,66		5,31	7,56	14,0	21,6
	35				8,67	16,0	24,7
	40				9,78	18,0	27,8
	45					20,0	30,9
50					22,0	34,0	
55					24,0	37,1	
60					26,0	40,2	
70						46,4	
						 Weight for 1000 p	

Sizes above the green line have full thread.

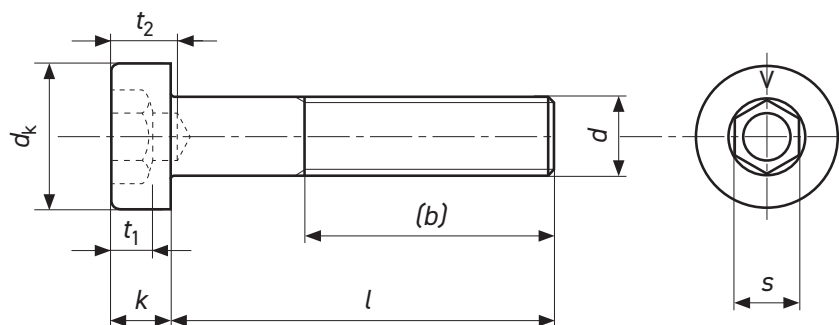
The weights indicated are approximate. **Other sizes available on request.**

(*) The critical cross section of screws covered by this standard can, as consequence of the head geometry and the form of wrench engagement, be located below the hexagon socket and not in the thread. It is recommended that the screws should not be used for the transmission of high axial loads. The form of the key engagement permits the application of prestressing loads corresponding to 70% of the minimum yield point specified for proprieties of 8.8 screws. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 08.8 o 088, or the dot in the marking symbol may be omitted.**

HEXAGON SOCKET THIN HEAD CAP SCREWS WITH PILOT RECESS

ISO METRIC COARSE THREAD

ISO UNI DIN
- - 6912



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1*	ACCORDING TO ISO 3506-1
CLASS	8.8 10.9	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Black, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request	

d	M5	M6	M8	M10	M12	M14	M16
dk	8,5	10	13	16	18	21	24
k	3,5	4	5	6,5	7,5	8,5	10
s	4	5	6	8	10	12	14
t1	2	2,5	3	3,5	4	4,5	5,5
t2 min	4	5	6,5	7,5	9	10	11,5
b	16	18	22	26	30	34	38

(*) The critical cross section of screws covered by this standard can, as consequence of the head geometry and the form of wrench engagement, be located below the hexagon socket and not in the thread. It is recommended that the screws should not be used for the transmission of high axial loads. The form of the key engagement permits the application of prestressing loads corresponding to 70% of the minimum yield point specified for properties of 8.8 screws. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 08.8 or 088, or the dot in the marking symbol may be omitted.**

	d	M5	M6	M8	M10	M12	M14	M16
l = LENGTH	10	2,2	3,6					
	12	2,5	3,9	7,7				
	14	2,8	4,2	8,2				 Kg
	16	3,1	4,5	8,8	15,5	22,3		
	18	3,4	4,8	9,5				
	20	3,7	5,1	10,2	17,0	25,5	37,9	52,6
	25	4,4	6,2	12,5	20,2	29,5	42,5	56,5
	30	5,1	7,3	14,0	22,0	32,5	48,0	63,0
	35	5,8	8,3	15,7	25,5	36,5	53,0	69,7
	40	6,5	9,5	17,5	28,5	40,0	58,0	78,7
	45	7,2	10,5	19,5	31,6	44,0	63,0	85,3
	50	7,9	11,5	21,5	34,8	48,0	69,5	91,5
	55	8,6	12,5	23,4	37,5	52,0	75,5	99,0
	60	9,3	13,6	25,3	40,3	57,0	82,0	107,0
	70		15,8	29,1	46,0	65,0	92,5	122,0
	80		17,9	32,8	52,5	72,0	104,0	140,0
	90				57,8	80,0	116,0	154,0
	100					88,0	127,0	169,0

 Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

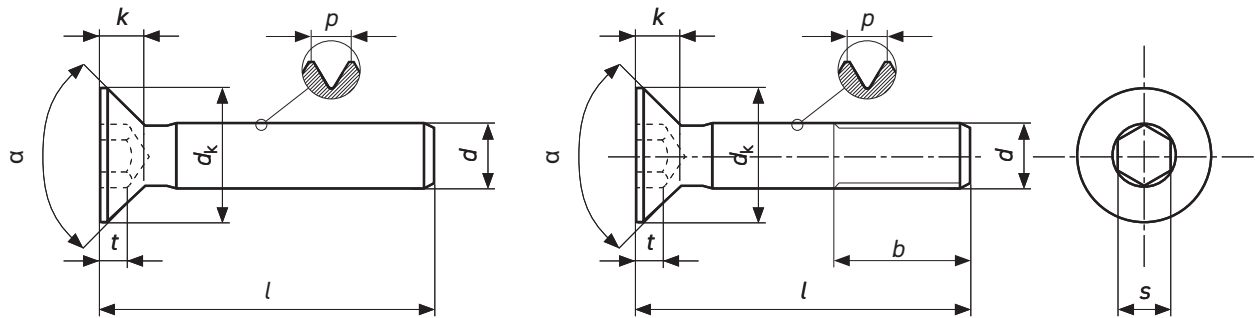
Sizes above the green line have full thread.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET COUNTERSUNK HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 10642 UNI 5933* DIN 7991*



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1**	ACCORDING TO ISO 3506-1
CLASS	4.8 8.8 10.9	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Black - White zinc plated or Yellow zinc plated with dehydrogenation according to RoHS. Other coatings on request	

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
p	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
α	90°(+2°)											60°(+2°)
s	2	2,5	3	4	5	6	8	10	10		12	
dk max	6,72	8,96	11,20	13,44	17,92	22,40	26,88	30,80	33,60		40,32	
b***	12	14	16	18	22	26	30	34	38		46	
k max	1,86	2,48	3,1	3,72	4,96	6,2	7,44	8,4	8,8		10,16	
t min	1,1	1,5	1,9	2,2	3	3,6	4,3	4,5	4,8		5,6	

(*) DIN 7991 and UNI 5933 standards differs from ISO for these sizes

s										12		14
dk max	6	8	10	12	16	20	24	27	30	33	36	39
b***										42		60
k max	1,7	2,3	2,8	3,3	4,4	5,5	6,5	7	7,5	8	8,5	14
t max	1,2	1,8	2,3	2,5	3,5	4,4	4,6	4,8	5,3	5,5	5,9	10,3

(**) As it is possible for the critical cross section in these screws to lie between the hexagon socket and the threaded portion of the shank, they are not to be subjected to the wedge loading test for the strenght class 10.9. Further more the hardness test has been made mandatory for acceptance inspection. For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 010.9 or 0109, for the dot in the marking symbol may be omitted.

Also available with hexalobular socket (Allen) according to ISO 14581.

(***) Length b refers to the partially threaded shank.

/ = LENGTH	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
	6	0,38	0,77										
	8	0,47	0,92	1,60	2,35								
	10	0,56	1,07	1,85	2,70	5,47							 Kg
	12	0,65	1,23	2,10	3,05	6,10	10,10						
	14	0,72	1,42	2,22	3,25	6,40	11,00						
	16	0,83	1,53	2,59	3,76	7,35	12,10						
	18	0,89	1,76	2,70	3,95	7,64	12,90						
	20	1,00	1,84	3,09	4,46	8,60	14,10	21,20					
	22	1,15	1,98	3,25	4,65	9,56	15,30						
	25	1,35	2,23	3,71	5,34	10,20	16,60	24,80	32,60				
	30	1,63	2,6	4,33	6,22	11,70	19,10	28,50	37,60	51,80			
	35		2,9	4,7	7,10	13,30	21,60	32,10	42,50	58,40		91,40	
	40		3,3	5,4	7,8	14,80	24,10	35,70	47,40	65,10	79,30	102,00	
	45		3,6	6	8,6	16,50	26,30	37,90	52,30	70,70	94,00	110,00	
	50		4,0	6,6	9,5	17,5	30,10	43,00	57,30	78,40	96,00	125,0	179,00
	55		4,3	7,2	10,3	19,2	31,5	45,10	62,30	84,00	104,5	134,0	
	60		4,7	7,8	11,1	21,0	34,6	48,50	67,10	91,70	112,8	143,0	209,00
	65			8,4	12,5	22,5	37,3	53,2	72,00			152,0	
	70			9,0	13,5	24,1	40,0	57,2	76,90	105,0	129,6	161,0	239,00
	80				14,6	27,1	44,2	64,8	81,80	122,0	146,3	179,0	269,00
	90				15,7	30,1	48,6	72,4	86,70	136,9	163,1	197,0	299,00
	100				16,8	33,1	52,9	80	91,60	151,8	179,8	215,0	340,00
	110					36,2	57,2	87,6		166,7	196,6		
	120					39,2	61,5	95,2		181,6	213,3		
	130										230,1		

Weights table for full thread screws supplied as standard

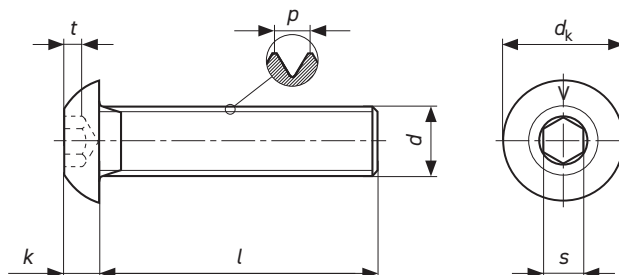
 Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET BUTTON HEAD SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
7380/1 - -



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1*

ACCORDING TO ISO 3506-1

CLASS

8.8

10.9

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black, White zinc plated or Yellow zinc plated with dehydrogenation according to RoHS. Other coatings on request

d	M3	M4	M5	M6	M8	M10	M12
p	0,5	0,7	0,8	1	1,25	1,5	1,75
d _k max	5,7	7,5	9,5	10,5	14	18	21
k max	1,65	2,1	2,7	3,2	4,3	5,3	6,4
s	2	2,5	3	4	5	6	8
t min	1,04	1,3	1,56	2,08	2,6	3,12	4,16

l								Kg	
l = LENGTH	4								
	5								
	6	0,48	0,85	1,7					
	8	0,55	1,10	1,9	3,3				
	10	0,65	1,30	2,2	3,6	7,2			
	12	0,75	1,50	2,5	3,9	7,7			
	14	0,85	1,70	2,8	4,2	8,2			
	16	0,95	1,90	3,1	4,5	8,8	15,5		
	18		2,10	3,4	4,9	9,5	16,7		
	20		2,30	3,7	5,2	10,2	17,9	25,5	
	25		2,80	4,4	6,2	12,5	21,0	29,5	
	30		3,30	5,1	7,3	14,0	22,0	32,5	
	35		3,80	5,8	8,3	15,7	25,5	36,5	
	40		4,30	6,5	9,3	17,5	28,5	40,0	
	45		4,80	7,2	10,3	19,3	31,5	45,0	
	50			7,9	11,3	21,1	34,5	50,0	
	55			8,6	12,3	22,9	37,5	55,0	
	60			9,3	13,3	24,7	40,5	60,0	
	70				14,5	28,3	46,5	70,0	
	80					31,9	52,5	80,0	

Weight for 1000 pcs

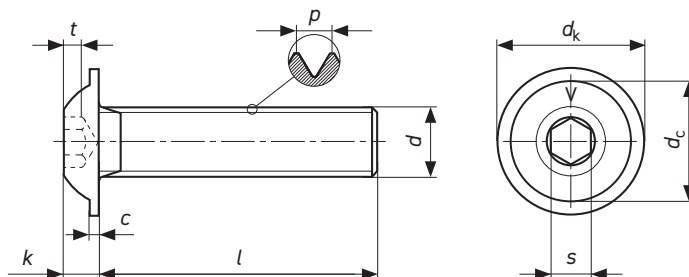
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013. The weights indicated are approximate. **Other sizes available on request.**

(*) For the form of head it is possible that these screws do not respect the yield test charge according to 10.9 class prescribed in ISO 898-1, when tested according to program B. Further more they have to respect all others prescriptions for the strenght class 10.9 of ISO 898-1. Testing the yield point the fracture may occur in the threaded portion, in the head, in the shank or in the junction head/shank. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 10.9 o 109, or the dot in the marking symbol may be omitted.**

HEXAGON SOCKET FLANGED BUTTON HEAD SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
7380/2 - -



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1*

ACCORDING TO ISO 3506-1

CLASS

10.9

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black, White zinc plated or Yellow zinc plated with dehydrogenation according to RoHS. Other coatings on request

d	M3	M4	M5	M6	M8	M10	M12
p	0,5	0,7	0,8	1	1,25	1,5	1,75
dk max	6,9	9,40	11,8	13,6	17,8	21,9	26
dc max	5,2	7,2	8,8	10	13,2	16,5	19,4
c	0,7	0,8	1	1,2	1,5	2	2,4
k	1,65	2,2	2,75	3,3	4,4	5,5	6,6
s	2	2,5	3	4	5	6	8
t min	1,04	1,3	1,56	2,08	2,6	3,12	4,16

l								Kg	
l = LENGTH	4								
	5								
	6	0,48	0,85						
	8	0,55	1,10	1,9					
	10	0,65	1,30	2,2	3,6	7,2			
	12	0,75	1,50	2,5	3,9	7,7			
	14	0,85	1,70	2,8	4,2	8,2			
	16	0,95	1,90	3,1	4,5	8,8	15,5		
	18		2,10	3,4	4,9	9,5	16,7		
	20		2,30	3,7	5,2	10,2	17,9	25,5	
	25		2,80	4,4	6,2	12,5	21,0	29,5	
	30		3,30	5,1	7,3	14,0	22,0	32,5	
	35		3,80	5,8	8,3	15,7	25,5	36,5	
	40		4,30	6,5	9,3	17,5	28,5	40,0	
	45			7,2	10,3	19,3	31,5	45,0	
	50			7,9	11,3	21,1	34,5	50,0	
	55			8,6	12,3	22,9	37,5	55,0	
	60			9,3	13,3	24,7		60,0	
	70				14,3	28,3			
	80								

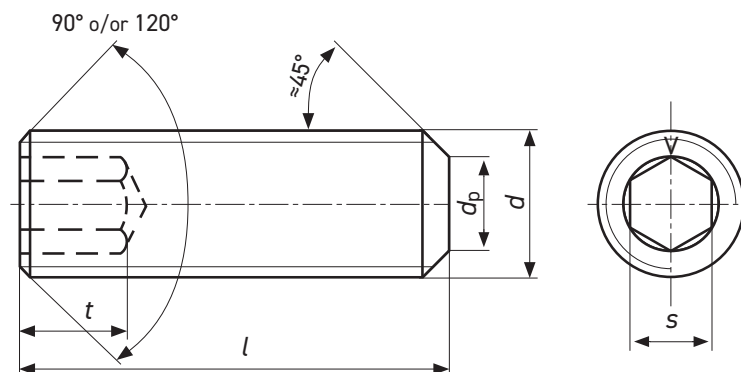
Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013. The weights indicated are approximate. **Other sizes available on request.**
 (*) For the form of head it is possible that these screws do not respect the yield test charge according to 10.9 class prescribed in ISO 898-1, when tested according to program B. Further more they have to respect all others prescriptions for the strenght class 10.9 of ISO 898-1. Testing the yield point the fracture may occur in the threaded portion, in the head, in the shank or in the junction head/shank. **For this reason the standard UNI EN ISO 898-1, paragraph 10.4, prescribes for new production a different marking, where the property class is preceded by the digit 0: it is 10.9 o 109, or the dot in the marking symbol may be omitted.**

FLAT POINT HEXAGON SOCKET SET SCREWS

UNI 5923: ISO METRIC COARSE THREAD
UNI 5924: ISO METRIC FINE THREAD

ISO	UNI	DIN
4026	5923-5924	913



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-5	ACCORDING TO ISO 3506-1
CLASS	22H 45H	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B	ACCORDING TO ISO 4759-1 CAT A-B
AVAILABLE TREATMENT	Black, White zinc plated or Yellow zinc plated with dehydrogenation according to RoHS. Other coatings on request	

<i>d</i>	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
<i>p grosso</i>	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
<i>p fine</i>					1	1,25	1,25	1,5	1,5	1,5	1,5	2
<i>d_p max</i>	2	2,5	3,5	4	5,5	7	8,5	10	12	13	15	18
<i>s</i>	1,5	2	2,5	3	4	5	6	6	8	10	10	12
<i>t</i>	1,2-2,0	1,5-2,5	2-3	2-3,5	3-5	4-6	4,8-8	5,6-9	6,4-10	7,2-11	8-12	10-15

	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
l = LENGTH	3	0,10											
	4	0,14	0,22										
	5	0,18	0,30	0,30									
	6	0,22	0,38	0,56	0,76	1,28							
	8	0,31	0,53	0,80	1,11	1,89							
	10	0,40	0,68	1,04	1,46	2,52	3,78						
	12	0,49	0,83	1,28	1,81	3,15	4,78	6,15					
	14	0,54	0,98	1,52	2,08	3,75	5,63	7,60	10,5				
	16	0,67	1,13	1,76	2,51	4,41	6,78	9,6	13,0	15,5			
	20	0,85	1,43	2,24	3,51	5,67	8,76	12,4	17,0	21,5	27,0	32,3	
	25		1,81	2,84	4,09	7,26	11,2	16,0	22,0	28,0	35,2	42,6	57
	30		2,19	3,44	4,97	8,85	13,7	19,6	27,0	34,6	43,4	52,9	72
	35		2,57	4,04	5,85	10,4	16,2	23,2	32,0	41,1	51,5	63,2	87
	40		2,95	4,64	6,73	12,0	18,7	26,8	37,0	47,7	59,6	73,5	102
	45			5,24	7,61	13,6	21,2	30,4	42,0	54,2	67,8	83,8	117
	50			5,84	8,49	15,1	23,7	34,0	47,0	60,8	75,9	94,1	132
	55				9,4	16,7	26,2	37,6	52,0	67,4			
	60			7,04	10,25	18,3	28,6	41,2	57,0	73,9	92,0	114,7	162
	70			8,24	12,01	21,5	33,6	48,4	67,0	87,0	108,1	135,3	192
	80			9,44	13,80	24,6	38,6	55,6	77,0	100,1	124,2	155,9	222
	90					27,8	43,6	62,8	87,0	113,2	140,3	176,5	252
	100					30,9	48,6	70,0	97,0	126,4	156,4	197,1	282

 Kg

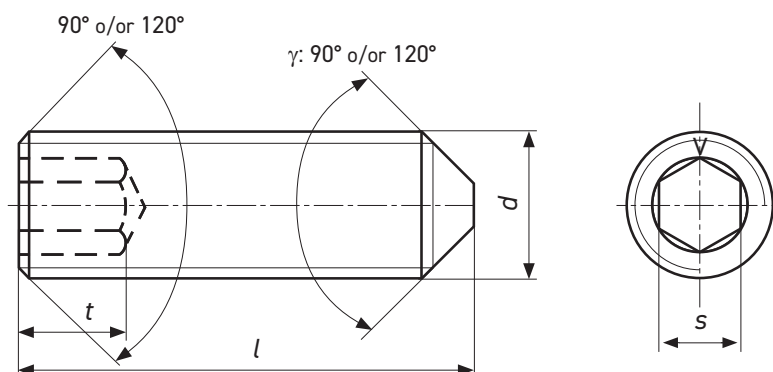
 Weight for 1000 pcs

Lengths over the green dashed line have 120° point.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

CONE POINT HEXAGON SOCKET SET SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
4027 5927 914



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-5	ACCORDING TO ISO 3506-1
CLASS	45H	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B	ACCORDING TO ISO 4759-1 CAT A-B
AVAILABLE TREATMENT	Black, White zinc plated with dehydrogenation according to RoHS. Other coatings on request	

<i>d</i>	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
<i>p</i>	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
<i>s</i>	1,5	2	2,5	3	4	5	6	6	8	10	10	12
<i>t</i>	1,2-2,0	1,5-2,5	2-3	2-3,5	3-5	4-6	4,8-8	5,6-9	6,4-10	7,2-11	8-12	10-15

	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
l = LENGTH	3												
	4	0,13											
	5	0,17	0,26	0,37									
	6	0,21	0,34	0,49	0,69	1,15							
	8	0,30	0,49	0,73	1,04	1,72							
	10	0,39	0,64	0,97	1,39	2,35	3,41						
	12	0,48	0,79	1,21	1,74	2,98	4,42	6,10					
	14	0,52	0,90	1,47	2,09	3,61	5,42	7,50					
	16	0,66	1,09	1,69	2,44	4,24	6,42	8,90	10,60	14,90			
	20	0,85	1,39	2,17	3,14	5,50	8,40	11,70	14,60	20,10	21,90	30,40	
	25	1,20		2,77	4,02	7,09	10,80	15,30	19,60	26,60	30,10	40,70	54,20
	30			3,37	4,9	8,68	13,30	18,90	24,60	33,20	38,30	51,00	68,70
	35			3,95	5,78	10,30	15,80	22,50	29,60	39,70	46,40	61,30	83,20
	40			4,60	6,66	11,90	18,30	26,10	34,60	46,30	54,50	71,60	98,20
	45			5,20	7,54	13,50	21,00	29,30	39,60	52,60	62,90	81,90	113,00
	50			5,80	8,42		23,50	32,80	44,60	59,10	70,80	92,20	128,00
	60						28,80	39,80	54,60	72,20	86,90	113,00	158,00
	70						33,90	46,60	64,60	85,30	103,00	133,80	
	80						39,40	53,50				154,60	

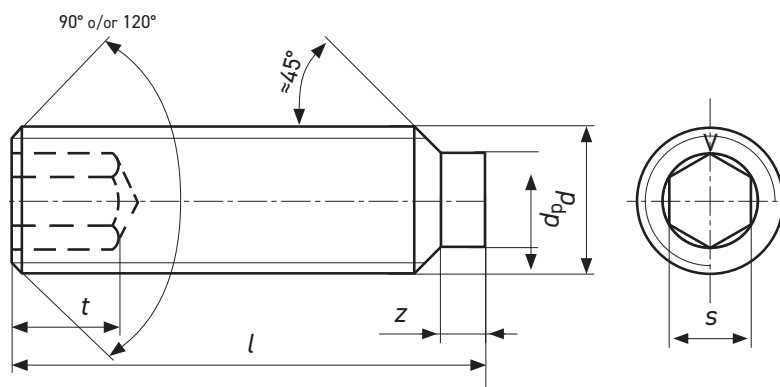
 Weight for 1000 pcs

Lengths above the green dashed line have 120° point.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

HEXAGON SOCKET SET SCREWS WITH DOG POINT

ISO METRIC COARSE THREAD

ISO UNI DIN
4028 5925 915



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-5

ACCORDING TO ISO 3506-1

CLASS

45H

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A-B

ACCORDING TO ISO 4759-1 CAT A-B

AVAILABLE TREATMENT

Black, White zinc plated with dehydrogenation according to RoHS. Other coatings on request

<i>d</i>	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
<i>p</i>	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
<i>t</i>	1,2-2,0	1,5-2,5	2-3	2-3,5	3-5	4-6	4,8-8	5,6-9	6,4-10	7,2-11	8-12	10-15
<i>z</i> max	1,75	2,25	2,75	3,25	4,3	5,3	6,3	7,36	8,36	9,86	10,36	12,43
<i>d_p</i> max	2	2,5	3,5	4	5,5	7	8,5	10	12	13	15	18
<i>s</i>	1,5	2	2,5	3	4	5	6	6	8	10	10	12

	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
l = LENGTH	3												
	4	0,120											
	5	0,163	0,24	0,41									
	6	0,186	0,292	0,528	0,84								
	8	0,276	0,442	0,708	1,02	1,68							
	10	0,366	0,592	0,948	1,29	2,28	3,60						
	12	0,456	0,742	1,19	1,63	2,68	4,41	6,06					
	14	0,500	0,86	1,40	1,88	3,12	4,51	7,24					
	16	0,636	1,04	1,67	2,34	3,94	6,05	8,91	11,5	15,0			
	20	0,816	1,34	2,15	3,04	5,20	8,02	11,00	15,4	20,1	24,4	28,30	28,30
	25		1,70	2,75	3,92	6,79	10,5	14,60	19,5	25,1	32,6	38,9	55,4
	30		2,06	3,40	4,80	8,38	13,0	18,20	24,5	31,9	38,1	45,5	67,7
	35				5,68	9,97	15,5	21,80	29,5	38,2	46,2	55,8	78,4
	40				6,56	11,60	18	25,40	34,5	44,9	54,3	66,1	93,4
	45					13,20	20		39,5	51,5	62,5	76,4	108,0
	50					14,81	23		44,5	58,1	70,6	86,7	123,0
	60					16,42	25,5		54,5	71,3	86,7	107	153,0
	70					18,03	28,5		64,5	84,5	103,0	127	177,0
	80								74,5	97,7	119,2	147	
	90								84,5	110,9	135,4	167	
	100								94,5	124,1	151,6	187	

 Kg

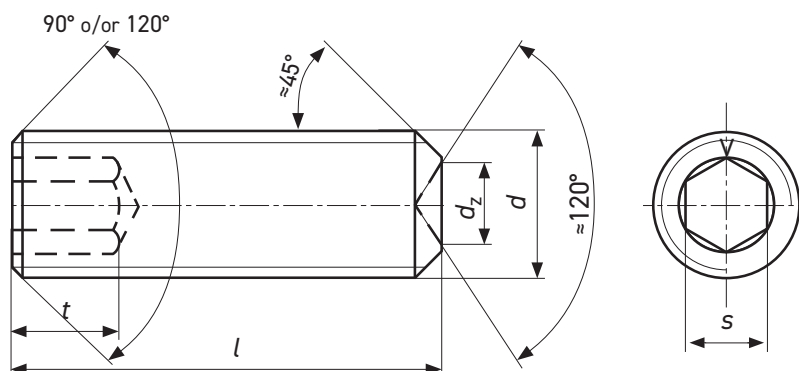
 Weight for 1000 pcs

Lengths above the dotted green line have a 120° chamfer.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

CUP POINT HEXAGON SOCKET SET SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
4029 5929 916



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-5	ACCORDING TO ISO 3506-1
CLASS	45H	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A-B	ACCORDING TO ISO 4759-1 CAT A-B
AVAILABLE TREATMENT	Black, White zinc plated with dehydrogenation according to RoHS. Other coatings on request	

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
p	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5	3
t	1,2-2,0	1,5-2,5	2-3	2-3,5	3-5	4-6	4,8-8	9	6,4-10	11	8-12	10-15
d _z max	1,4	2	2,5	3	5	6	8	9	10	12	14	16
s	1,5	2	2,5	3	4	5	6	6	8	10	10	12

	d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
l = LENGTH	3	0,10											
	4	0,14	0,23										
	5	0,18	0,26	0,42									
	6	0,22	0,38	0,54	0,74	1,19							
	8	0,31	0,53	0,78	1,09	1,88							
	10	0,40	0,68	1,02	1,44	2,51	3,72						
	12	0,49	0,83	1,26	1,79	3,14	4,73	6,70					
	14		0,98	1,50	2,04	3,80	5,73						
	16	0,67	1,13	1,74	2,49	4,40	6,73	9,50	12,6	15,70			
	20	0,85	1,43	1,22	3,19	5,66	8,71	12,30	16,6	20,90	26,00	31,10	
	25			2,82	4,07	7,25	11,20	15,90	21,6	27,40	34,20	41,4	55,20
	30				4,95	8,84	13,70	19,50	26,6	34,00	42,40	51,7	70
	35				5,83	10,40	16,20	23,10	31,6	40,50	50,60	62,0	85
	40					12,00	18,70	26,70	36,6	47,10	58,80	72,3	100
	45					13,60	21,20	29,70	41,6	53,30	67,00	82,6	115
	50					15,20	23,60	33,20	46,6	59,80	75,20	92,9	130
	60					18,40	28,50	40,10	56,60	72,80	91,60	114,00	160
	70					21,60	33,40	47,00	66,6	84,50	108,00	135,00	189
	80					24,80	38,30	53,90	76,60		124,40	156,00	
	90						43,20	60,80	86,6		140,80	177,00	
	100								96,60		157,20	198,00	

 Weight for 1000 pcs

Lengths above the dotted green line have a 120° chamfer.
 For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
 The weights indicated are approximate. **Other sizes available on request.**

OTHER SCREWS WITH METRIC THREAD



Metric screws without hex head or socket drive include a wide range of types designed for specific applications, where particular requirements in terms of aesthetics, safety, or functionality are needed. Among the most common are countersunk head screws with slotted or cross recess (Phillips or Pozidriv), cylindrical head screws with Torx drive, and pan head screws with slotted recess.

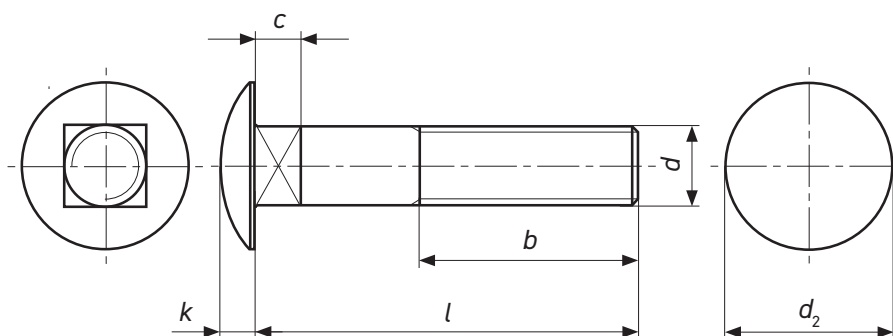
Metric threading, standardized according to ISO norms, ensures compatibility with a wide variety of mechanical components and structures. Countersunk head screws, for example, are used when the head needs to sit flush with the material surface, improving aesthetics or reducing protrusion. Torx drive screws, on the other hand, provide excellent torque transmission and greater resistance to stripping compared to slotted or cross recess screws.

These screws are widely used in sectors such as furniture, electronics, metalworking, and the furniture industry, where a balance between functionality and design is often required. They are available in different materials and finishes, making them suitable for both indoor and outdoor applications.

CARRIAGE BOLTS (MUSHROOM HEAD SQUARE NECK SCREWS)

ISO METRIC COARSE THREAD

ISO UNI DIN
8677 5731 603



MATERIAL	STEEL			STAINLESS STEEL	
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1			ACCORDING TO ISO 3506-1	
CLASS	4.8	8.8	10.9	A2-70	A4-70
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT C			ACCORDING TO ISO 4759-1 CAT C	
AVAILABLE TREATMENT	Plain , White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request				

d	M5	M6	M8	M10	M12	M14	M16
k	3,3	3,88	4,88	5,38	6,95	7	8,95
d ₂ max	13,55	16,55	20,65	24,65	30,65	35	38,8
c	3,5	4,0	5,0	6,0	8,0	9,0	12,0
b l ≤ 125	16	18	22	26	30	34	38
b l > 125		24	28	32	36	40	44
b l > 200			41	45	49	53	57

<i>d</i>	M5	M6	M8	M10	M12	M14	M16
16	4,0	6,9					
20	4,5	7,6					
22							 Kg
25	5,1	8,5	15,4	25,2			
30	5,9	9,6	17,0	27,7	45,7		
35	6,7	10,7	19,0	30,2	49,4		
40	7,5	11,8	21,0	32,7	53,1		
45	8,3	12,9	23,0	35,8	56,8	78,0	
50	9,1	14,0	25,0	38,9	61,2	84,0	
55	9,9	15,1	26,9	42,0	65,6	90,0	
60	10,7	16,2	28,9	45,1	70,0	96,0	
65	11,5	17,3	30,9	48,2	74,4		
70	12,3	18,4	32,9	51,3	78,8	108,0	
75		19,5	34,9	54,4	83		
80	13,9	20,6	36,8	57,5	87	120,0	
90	15,5	22,8	40,8	63,7	96	131,0	
100	17,1	25,0	44,8	69,9	105		
110		27,2	48,8	76,1	114		
120		29,4	52,8	82,3	123		229
130		31,6	56,8	88,5	132		245
140			60,8	95,0	141		261
150			64,8	101,0	150		277
160			68,8	107,0	159		293
170			72,8	113,0	168		
180			76,8	119,0	177		325
190			80,8	125,0	186		325
200			84,8	131,0	195		357
220				143,0	213		368
230				155,0	222		384
240				167,0	231		400
250				179,0	240		416
260				191,0	249		432
280				203,0	267		448
290					276		464
300					285		480
320					303		512
340					321		544
360					339		576
380					357		608
400					375		640
440							704
500							800
540							864

l = LENGTH

Weight for 1000 pcs

Sizes above the green line have full thread.

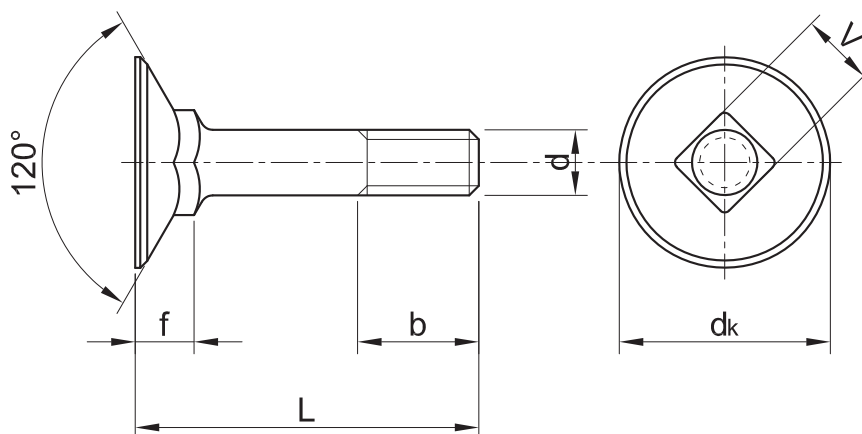
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

The weights indicated are approximate. **Other sizes available on request.**

COUNTERSUNK BOLTS 120° WITH SQUARE NECK SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
- - 605



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

8.8

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT C

AVAILABLE TREATMENT

Plain , White zinc plated according to RoHS. Other coatings on request

<i>d</i>	M5	M6	M8	M10	M12	M14*	M16
<i>dk</i> max	13,55	16,55	20,65	24,65	28,65		38,8
<i>f</i> max	6,3	7,45	9,45	11,55	14,55		17,7
<i>v</i> max	5,48	6,48	8,58	10,58	12,7		16,7
<i>b</i> max <i>l</i> ≤ 120	20	23	28,25	33,5	38,78		48
<i>b</i> max <i>l</i> > 120	-	-	34,25	39,5	44,75		54

<i>l</i>							
25	30,2						
30	32,7				49,2		
35	35,2				52,8		
40	38,2				56,5	81,1	111
45	41,2				60,6	86	117
50	44,3				65	91,4	124
60	50,5				73,9	103	140

Kg

l = LENGTH

*measure not provided for by standard

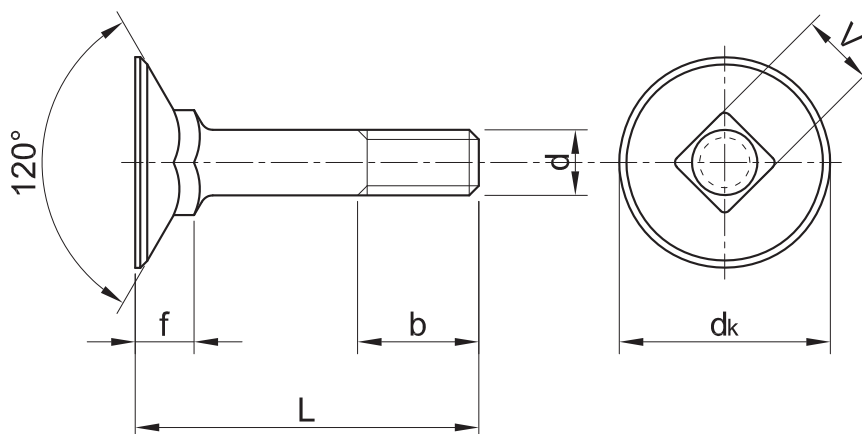
Sizes above the green line have full thread.

The weights indicated are approximate. **Other sizes available on request.**

COUNTERSUNK BOLTS 120° WITH SQUARE NECK SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
- - 605



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

8.8

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT C

AVAILABLE TREATMENT

Plain , White zinc plated according to RoHS. Other coatings on request

<i>d</i>	M5	M6	M8	M10	M12	M14*	M16
<i>dk</i> max	13,55	16,55	20,65	24,65	28,65		38,8
<i>f</i> max	6,3	7,45	9,45	11,55	14,55		17,7
<i>v</i> max	5,48	6,48	8,58	10,58	12,7		16,7
<i>b</i> max <i>l</i> ≤ 120	20	23	28,25	33,5	38,78		48
<i>b</i> max <i>l</i> > 120	-	-	34,25	39,5	44,75		54

<i>l</i>								
25	30,2							
30	32,7				49,2			
35	35,2				52,8			
40	38,2				56,5	81,1	111	
45	41,2				60,6	86	117	
50	44,3				65	91,4	124	
60	50,5				73,9	103	140	

Kg

l = LENGTH

*measure not provided for by standard

Sizes above the green line have full thread.

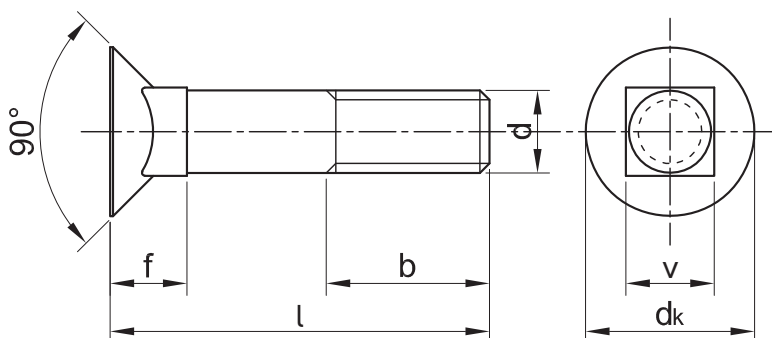
The weights indicated are approximate. **Other sizes available on request.**

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COUNTERSUNK BOLTS 90° WITH SQUARE NECK SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
- - 608



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

8.8

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT C

AVAILABLE TREATMENT

Plain , White zinc plated according to RoHS. Other coatings on request

d	M10	M12	M14	M16
b*	26	30	34	16
dk	20	24	28	32
v	10	12	14	16
f	10	12	14	16

l				
25	30,2			
30	32,7	49,2		
35	35,2	52,8		
40	38,2	56,5	81,1	111
45	41,2	60,6	86	117
50	44,3	65	91,4	124
60	50,5	73,9	103	140

Kg

Weight for 1000 pcs

Sizes above the green line have full thread.

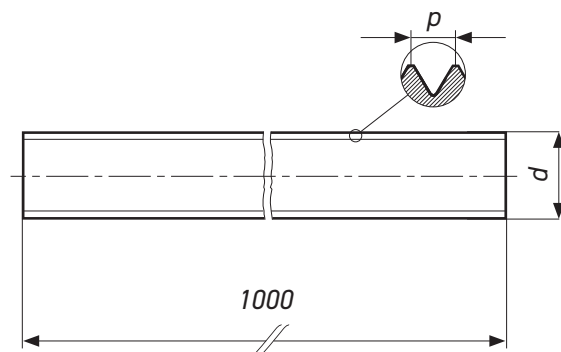
The weights indicated are approximate. **Other sizes available on request.**

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METRIC THREADED RODS

ISO METRIC COARSE THREAD

ISO UNI DIN
- 6547 975



MATERIAL	STEEL			STAINLESS STEEL		BRASS
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1 / ASTM 193			ACCORDING TO ISO 3506-1		
TENSILE STRENGTH						250 ÷ 400 N/mm²
CLASS	4.8	8.8		A2		
	10.9	12.9	B7	A4	OT	
TOLLERANCES	ACCORDING TO ISO 4759-1 / 4159-1 CAT C			ACCORDING TO ISO 4759-1 CAT C		ACCORDING TO ISO 4759-1 CAT C
AVAILABLE TREATMENT	Plain, Black - White zinc plated or Yellow zinc plated according to RoHS, Hot dip galvanized - Other coatings on request					

d	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20
p	0,5	0,7	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5
Kg	44	78	124	177	310	491	712	975	1310	1627	2052
d	M22	M24	M27	M30	M33	M36	M39	M42	M45	M48	M52
p	2,5	3	3	3,5	3,5	4	4	4,5	4,5	5	5
Kg	2526	2956	3821	4883	5758	6804	8085	9322	11000	12400	14700

ISO METRIC THREAD FINE PITCH (STEEL ONLY)

d	M8	M10	M10	M12	M12	M14	M16	M18	M20	M22
p	1	1	1,25	1,25	1,5	1,5	1,5	1,5	1,5	1,5
Kg	319	500	500	725	725	970	1330	1650	2080	2540
d	M24	M27	M30	M33	M36	M39	M42	M45	M48	M52
p	2	2	2	2	3	3	3	3	3	3
Kg	3000	3850	4750	5900	6900	8200	9400	11000	12400	14700

Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

For the weights of the brass products multiply the values by 1,083.

The weights indicated are approximate. Available with lengths 2 mt and 3 mt.

Available according to DIN 976 and with unified thread according to ASTM A193 B7. **Other sizes available on request.**

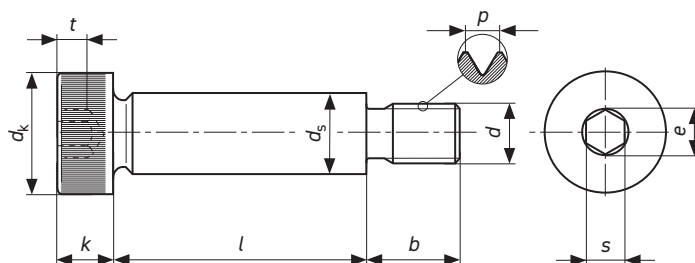
HEXAGON SOCKET HEAD CAP SHOULDER BOLTS

ISO METRIC COARSE THREAD

ISO
7379

UNI
-

DIN
-



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

12.9

A2

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Black.

d	M5	M6	M8	M10	M12	M16	M20	M20*
d _s F9	6	8	10	12	16	20	24	25
d _k	10	13	16	18	24	30	36	36
b	9,5	11	13	16	18	22	27	27
k max	4,5	5,5	7	9	11	14	16	16
s	3	4	5	6	8	10	12	12
e	3,44	4,58	5,72	6,06	9,15	11,43	13,72	13,72
p	0,8	1	1,25	1,5	1,75	2	2,5	2,5

l									Kg	
l = LENGTH	10	6,35								
	12	6,51	13,3							
	16	7,25	14,51	25,4	38,1					
	20	8,16	15,42	27,21	41,73					
	25	9,98	17,24	30,84	45,35					
	30	11,79	19,95	33,57	50,8	94,35				
	40	12,7	23,58	39,9	59,87	111	204			
	50		32,66	46,26	68,95	125	226	364		
	60			51,7	76,2	141	254	384		
	70			58,05	85,27	157	276	418		
	80			63,5	94,35	174	304	475		
	90				103	185	326	497		
	100				112	201	344	531		
	110					217	373	565		
	120					234	399	599		

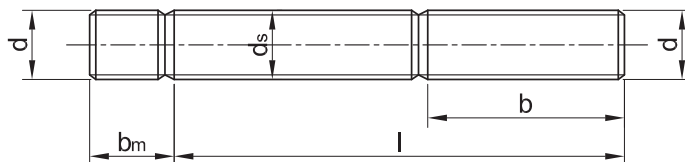
Weight for 1000 pcs

(*) Sizes according to Norm ISO 7389 available on request.
The weights indicated are approximate. **Other sizes available on request.**

STUDS WITH SHORT END

ISO METRIC COARSE THREAD

ISO
-
UNI
5909
DIN
938



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 350 - 1
CLASS	4.8 8.8 10.9	A2
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain , White zinc plated with dehydrogenation according to RoHS. Other coatings on request	

d	M5	M6	M8	M10	M12	M14	M16	M18	M20
p	0,8	1	1,25	1,5	1,75	2	2	2,5	2,5
d _s	5	6	8	10	12	14	26	18	20
b	l ≤ 125	16	18	22	26	30	34	38	42
	125 < l ≤ 200	-	-	-	-	36	40	44	48
b _m	UNI 5909	5	6	8	10	12	14	16	18

l	Kg								
22	3,47								
25	3,93	5,68							
28	4,39	6,36							
30	4,70	6,79	12,5						
35	5,47	7,90	14,8	23,2					
40	6,24	9,01	16,4	26,3	38,8				
45	7,01	10,10	18,4	29,4	43,2	60,0			
50	7,78	11,20	20,4	32,4	47,7	66,0	89,6		
55		12,30	22,4	35,5	52,1	72,1	97,5	123	
60		13,40	24,3	38,6	56,6	78,1	105	133	170
65			26,3	41,7	61,0	84,2	113	143	182
70			28,3	44,8	65,4	90,2	121	153	185
75			30,3	47,9	69,9	96,3	129	163	207
80			32,2	50,9	74,3	102,0	137	173	219
85				54,0	78,8	108,0	145	183	232
90				57,1	83,3	114,0	153	193	244
95				60,2	87,6	120,0	161	203	256
100				63,3	92,1	126,0	169	213	269
110					101,0	139,0	184	233	293
120					110,0	151,0	200	253	318
130						163	216	273	342
140						175	232	293	367

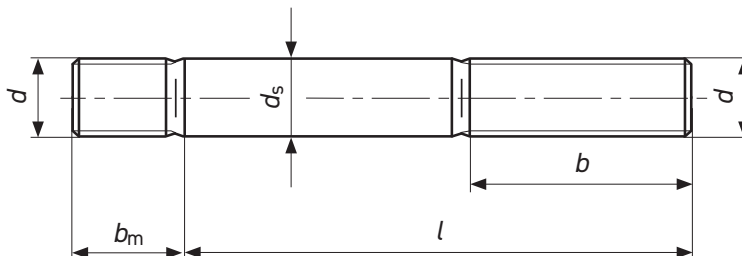
Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

MEDIUM TAP END STUDS

ISO METRIC COARSE THREAD

ISO UNI DIN
- 5911 939*



MATERIAL	STEEL	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 3506-1
CLASS	4.8 8.8 10.9	A2
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Black. Other coatings on request	

d	M6	M8	M10	M12	M16	M20
p	1	1,25	1,5	1,75	2	2,5
d _s	6	8	10	12	16	20
b	18	22	26	30	38	46
b _m	9	12	15	18	22	28

l							Kg
l = LENGTH	20	5,22					
	25	6,16	12,4				
	30	7,24	14,1	24,2			
	35	8,33	16,1	27	41,9		
	40	9,42	18	30,1	46	89,1	
	45	10,5	19,9	33,1	50,3	96,3	
	50	11,6	21,9	36,1	54,7	104	178
	55	12,7	23,8	39,1	59	112	189
	60	13,8	25,7	42,1	63,4	119	201
	65		27,7	45,2	67,7	127	213
	70		29,6	48,2	72,1	135	225
	75		31,5	51,2	76,4	143	237
	80		33,5	54,2	80,8	150	249
	90			60,2	89,5	166	274
	100			66,3	98,2	181	298
	110				107	197	322
	120				116	212	346

Weight for 1000 pcs

(*) La norma DIN 939 si distingue per la lunghezza della radice (1,25 volte il diametro anzichè 1,5 volte il diametro come la UNI 5911).

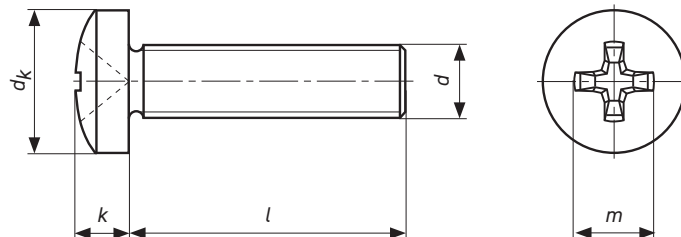
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

The weights indicated are approximate. **Other sizes available on request.**

CROSS RECESSED PAN HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 7045 UNI 7687 DIN 7985



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

4.8

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M2	M2,5	M3	M4	M5	M6	M8	M10
dk	4	5	6	8	10	12	16	20
k	1,7	2	2,4	3,1	3,8	4,6	6	7,5
m	2,35	2,70	3,10	4	5,30	6,80	8,80	9,90
N° Phillips	1	1	1	2	2	3	4	4

Kg

l	M2	M2,5	M3	M4	M5	M6	M8	M10
4	0,20	0,37	0,54					
5	0,22	0,40	0,59	1,40				
6	0,23	0,43	0,63	1,48	2,66			
7			0,68	1,56				
8	0,27	0,49	0,72	1,63	2,91	4,37		
10	0,31	0,55	0,81	1,79	3,16	4,72	10,90	
12	0,34	0,61	0,90	1,94	3,41	5,07	11,50	21,20
14	0,38	0,67	0,98	2,10	3,66	5,42	12,20	22,20
16	0,42	0,73	1,07	2,25	3,91	5,78	12,80	23,20
18			1,16	2,41	4,16	6,14		
20	0,49	0,85	1,25	2,56	4,41	6,48	14,20	25,20
22			1,34	2,72	4,66	6,82		
25		1,00	1,47	2,94	5,03	7,36	15,80	27,70
30		1,18	1,71	3,44	5,70	8,24	17,50	30,20
35				3,94	6,50	9,12	19,10	32,70
40				4,44	7,30	10,00	20,70	35,20
45					8,00	10,90	22,30	37,70
50					8,77	11,80	23,90	41,20
55					9,52	12,60	25,50	43,70
60					10,27	13,50	27,10	46,20
65					11,02	14,33	28,70	
70					11,77	15,18	30,30	
75					12,52	16,03	31,90	
80					13,27	16,88	33,50	
90							36,63	
100							39,60	

l = LENGTH

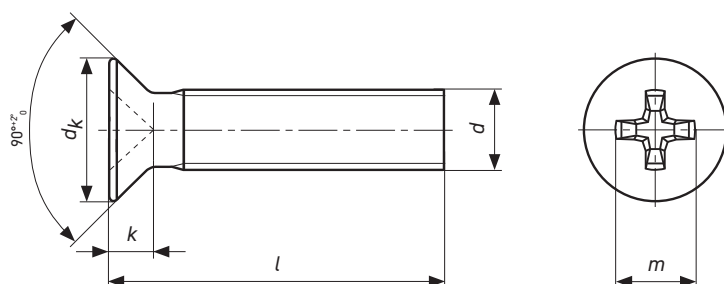
Weight for 1000 pcs

Screws with nominal length under the line (green for steel, blue for stainless steel) can have partial thread.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

CROSS RECESSED COUNTERSUNK FLAT HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 7046 UNI 7688 DIN 965



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

4.8

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M2	M2,5	M3	M4	M5	M6	M8	M10
d _k	3,8	4,7	5,6	7,5	9,2	11	14,5	18
k	1,2	1,5	1,65	2,2	2,5	3	4	5
m	2,35	2,70	3,10	4	5,30	6,80	8,80	9,90
N° Phillips	1	1	1	2	2	3	4	4

Kg

l								
l = LENGTH	4	0,12	0,21	0,29				
	5	0,14	0,24	0,34	0,83			
	6	0,15	0,27	0,38	0,90	1,24		
	7			0,42	0,98			
	8	0,19	0,33	0,47	1,06	1,48	2,38	
	10	0,23	0,39	0,56	1,22	1,72	2,73	5,68
	12	0,27	0,45	0,64	1,37	1,96	3,08	6,32
	14	0,31	0,51	0,73	1,53	2,20	3,43	6,96
	16	0,34	0,57	0,82	1,68	2,44	3,78	7,60
	18			0,91	1,83			
	20	0,42	0,69	1,00	2,00	2,92	4,48	8,88
	22			1,09	2,17			
	25		0,84	1,22	2,39	3,52	5,36	10,50
	30			1,44	2,78	4,12	6,23	12,10
	35			1,66	3,17	4,72	7,11	13,70
	40			1,88	3,56	5,32	7,98	15,30
	45			2,10	3,95	5,92	8,86	16,90
	50			2,32	4,34	6,52	9,73	18,50
	55				4,73	7,12	10,60	20,10
	60				5,12	7,72	11,50	21,70
	65				5,51	8,32	12,38	23,30
	70				5,90	8,92	13,27	24,90
	75					9,52	14,16	26,50
	80					10,12	15,04	28,10
	90					11,63	17,27	32,15
	100						19,10	35,43

Weight for 1000 pcs

Screws with nominal length under the line (green for steel, blue for stainless steel) can have partial thread.

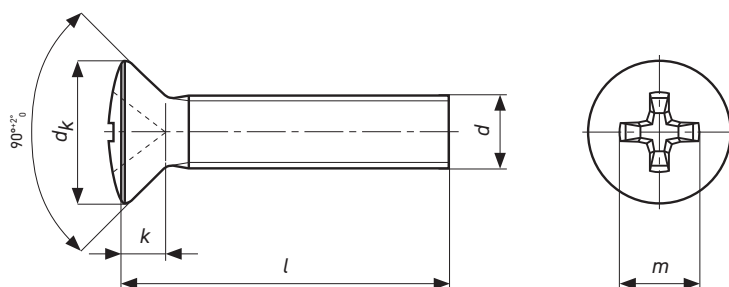
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

The weights indicated are approximate. **Other sizes available on request.**

CROSS RECESSED COUNTERSUNK RAISED HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 7047 UNI 7689 DIN 966



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

4.8

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M2	M2,5	M3	M4	M5	M6	M8
dk	3,8	4,7	5,6	7,5	9,2	11	14,5
k	1,2	1,5	1,65	2,2	2,5	3	4
m	2,35	2,70	3,10	4	5,30	6,80	8,80
N° Phillips	1	1	1	2	2	3	4

l

Kg

4	0,14	0,24	0,35				
5	0,16	0,27	0,40	0,99			
6	0,18	0,30	0,44	1,07	1,49		
7				1,15			
8	0,21	0,36	0,53	1,23	1,74	2,79	
10	0,25	0,42	0,62	1,39	1,97	3,14	6,89
12	0,29	0,48	0,70	1,54	2,21	3,49	7,53
14	0,33	0,54	0,79	1,70	2,45	3,84	8,17
16	0,36	0,60	0,88	1,85	2,69	4,19	8,81
18				2,01	2,93		
20	0,44	0,72	1,06	2,17	3,17	4,89	10,10
22		—	1,15	2,30	3,41		
25		0,87	1,28	2,56	3,77	5,77	11,70
30			1,50	2,95	4,37	6,64	13,30
35				3,34	4,97	7,52	14,90
40				3,73	5,57	8,39	16,50
45				4,12	6,16	9,27	18,10
50				4,51	6,76	10,10	19,70
55					7,36	11,00	21,30
60					7,96	11,90	22,90
65					8,56	13,11	
70					9,41	14,01	
80						15,82	
90						17,63	
100						19,43	

Weight for 1000 pcs

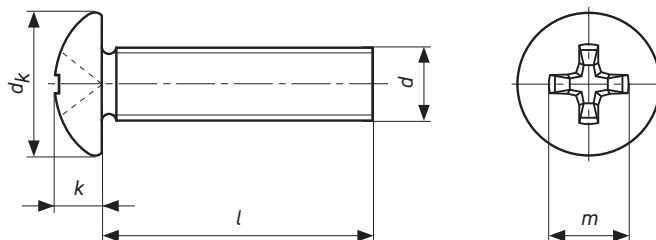
Screws with nominal length under the line (green for steel, blue for stainless steel) can have partial thread.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

CROSS RECESSED HALF ROUND HEAD SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN

- - -



MATERIAL	STEEL	STAINLESS STEEL	
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 3506-1	
CLASS	4.8	A2	A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A	
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request		

d	M4	M5	M6
dk	9	10	12
k	2,8	3,4	4,2
m	4	5,30	6,80
N° Phillips	2	3	4

l				Kg
l = LENGTH	5	1,08		
	6	1,15	1,92	
	8	1,30	2,16	
	10	1,45	2,40	3,45
	12	1,60	2,64	3,80
	14	1,75	2,88	4,15
	16	1,90	3,12	4,50
	18	2,05	3,36	4,85
	20	2,20	3,60	5,30
	22	2,35	3,84	5,60
	25		4,20	6,10
	30		4,80	6,90
	35		5,40	7,70

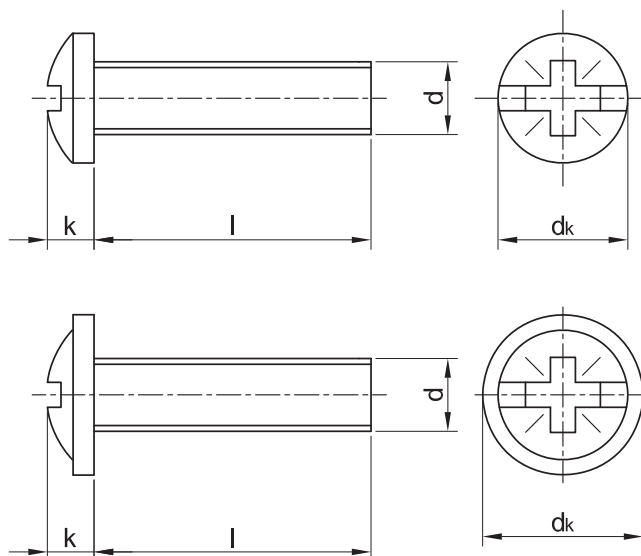
Weight for 1000 pcs

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

POZI COMBI TRUSS HEAD MACHINE SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

4.8

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M4*	M5	M6
dk	9,0-9,5	10-10,5	14 - 14,40
k max	2,3	2,5-3	3,0-3,50

l				Kg
l = LENGTH	8	1,30	2,10	
	10	1,45	2,40	4,00
	12	1,60	2,64	4,18
	14	1,75	2,90	4,35
	15	1,82	3,05	4,53
	16	1,90	3,15	5,15
	20	2,20	3,70	5,80
	25	2,50	4,30	6,70
	30	2,95	4,90	7,60
	35	3,30	5,50	8,50
	40	3,70	6,10	9,40
	45	4,10	6,70	10,30
	50	4,50	7,30	11,20
	55	4,90	7,90	12,10
	60	5,30	8,50	13,00

Weight for 1000 pcs

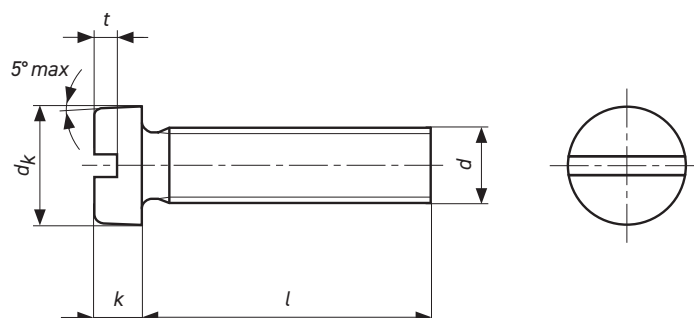
* Collar version only.

The weights indicated are approximate. **Other sizes available on request.**

SLOTTED PAN HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 1207 UNI 6107 DIN 84



MATERIAL	STEEL	STAINLESS STEEL		BRASS
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1		ACCORDING TO ISO 3506-1	ACCORDING TO ISO 3506-1
TENSILE STRENGTH				250 ÷ 400 N/mm ²
CLASS	4.8	A2	A4	OT
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A		ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request			

d	M2	M2,5	M3	M4	M5	M6	M8	M10
dk	3,8	4,7	5,5	7	8,5	10	13	16
k	1,3	1,6	2	2,6	3,3	3,9	5	6
t min	0,6	0,7	0,9	1,2	1,5	1,8	2,1	2,4

l									Kg
l = LENGTH	4	0,18	0,30	0,52					
	5	0,20	0,33	0,56	1,09				
	6	0,22	0,36	0,60	1,17	2,05			
	7			0,65	1,19				
	8	0,25	0,42	0,69	1,33	2,30	3,56		
	10	0,29	0,48	0,78	1,47	2,55	3,92	7,85	
	12	0,33	0,54	0,87	1,63	2,80	4,27	8,49	14,60
	14	0,37	0,60	0,96	1,79	3,05	4,62	9,13	15,60
	16	0,40	0,65	1,04	1,95	3,30	4,98	9,77	16,60
	18			1,14	2,11	3,55	5,34		
	20	0,48	0,78	1,22	2,25	3,78	5,69	11,00	18,60
	22			1,30	2,43	4,05	6,06		
	25		0,93	1,44	2,64	4,40	6,56	12,60	21,10
	30			1,66	3,02	5,02	7,45	14,20	23,60
	35			1,88	3,41	5,62	8,25	15,80	26,10
	40			2,10	3,80	6,25	9,20	17,40	28,60
	45			2,32	4,19	6,88	10,00	18,90	31,10
	50			2,54	4,58	7,50	10,90	20,60	33,60
	55			2,76	4,97	8,13	11,80	22,10	36,10
	60			2,98	5,36	8,75	12,70	23,70	38,60
	65				5,75	9,38	13,60	25,20	41,10
	70				6,14	10,00	14,50	26,80	43,60
	75				6,53	10,63	15,40	28,30	46,10
	80				6,92	11,25	16,30	29,80	48,60
	90				7,70	12,50	18,10	32,80	
	100				8,48	13,75	19,90	35,80	

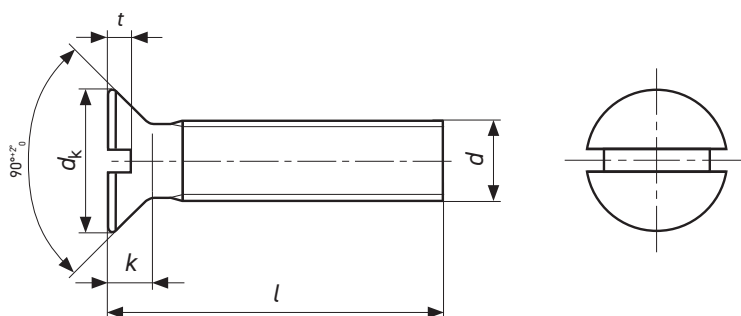
Weight for 1000 pcs

Screws with nominal length under the line (green for steel, blue for stainless steel, red for brass) can have partial thread.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013. For the weights of the brass products multiply the values by 1,083.
The weights indicated are approximate. **Other sizes available on request.**

COUNTERSUNK SLOTTED FLAT HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 2009 UNI 6109 DIN 963



MATERIAL	STEEL	STAINLESS STEEL		BRASS
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 3506-1		ACCORDING TO ISO 3506-1
TENSILE STRENGTH				250 ÷ 400 N/mm ²
CLASS	4.8	A2	A4	OT
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A		ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request			

d	M2	M2,5	M3	M4	M5	M6	M8	M10
dk	3,8	4,7	5,6	7,5	9,2	11	14,5	18
k	1,2	1,5	1,65	2,2	2,5	3	4	5
t max	0,6	0,6	0,85	1,1	1,3	1,6	2,1	2,6

l									Kg	
l = LENGTH	4	0,12	0,21	0,31						
	5	0,14	0,24	0,34						
	6	0,15	0,27	0,38	0,90					
	7			0,43	0,98					
	8	0,19	0,33	0,47	1,06	1,48	2,38			
	10	0,23	0,39	0,56	1,22	1,72	2,73	5,68		
	12	0,27	0,45	0,64	1,37	1,96	3,08	6,32	9,54	
	14	0,31	0,51	0,73	1,53	2,20	3,43	6,96	10,60	
	16	0,34	0,57	0,82	1,68	2,44	3,78	7,60	11,60	
	18			0,91	1,83	2,68	4,13			
	20	0,42	0,69	1,00	2,00	2,92	4,48	8,88	13,60	
	25		0,84	1,22	2,39	3,52	5,36	10,50	16,10	
	30			1,44	2,78	4,12	6,23	12,10	18,70	
	35			1,66	3,17	4,72	7,11	13,70	21,20	
	40			1,88	3,56	5,32	7,98	15,30	23,70	
	45			2,10	3,95	5,92	8,80	16,90	26,20	
	50			2,32	4,34	6,52	9,73	18,50	28,80	
	55				4,73	7,12	10,60	20,10	31,30	
	60				5,12	7,72	11,50	21,70	33,80	
	65				5,51	8,32	12,38	23,30	36,30	
	70				5,90	8,92	13,27	24,90	38,90	
	75					9,52	14,15	26,50	41,40	
	80					10,12	15,04	28,10	43,90	

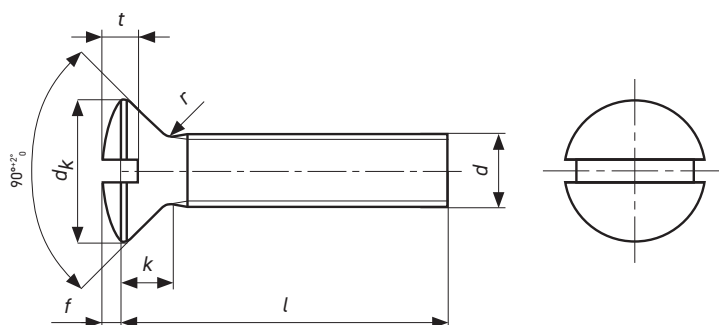
Weight for 1000 pcs

Screws with nominal length under the green line can have partial thread.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013. For the weights of the brass products multiply the values by 1,083.
The weights indicated are approximate. **Other sizes available on request.**

COUNTERSUNK SLOTTED RAISED HEAD SCREWS

ISO METRIC COARSE THREAD

ISO 2010 UNI 6110 DIN 964



MATERIAL	STEEL	STAINLESS STEEL	BRASS
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 3506-1	ACCORDING TO ISO 3506-1
TENSILE STRENGTH			250 ÷ 400 N/mm ²
CLASS	4.8	A2-70 A4-70	OT
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request		

d	M2	M2,5	M3	M4	M5	M6	M8	M10
dk	3,8	4,7	5,6	7,5	9,2	11	14,5	18
k	1,2	1,5	1,65	2,2	2,5	3	4	5
f	0,6	0,6	0,75	1	1,25	1,5	2	2,5
t max	1	1,2	1,45	1,9	2,3	2,8	3,7	4,6

Kg

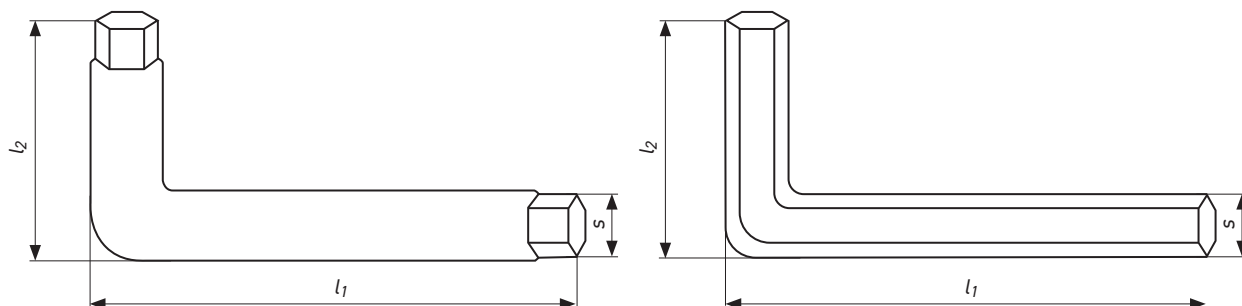
l	M2	M2,5	M3	M4	M5	M6	M8	M10
4	0,14	0,24						
5	0,16	0,27	0,40					
6	0,18	0,30	0,44	1,07				
7			0,49	1,15				
8	0,21	0,36	0,53	1,23	1,73	2,79		
10	0,25	0,42	0,62	1,39	1,97	3,14	6,89	
12	0,29	0,48	0,70	1,54	2,21	3,49	7,53	11,40
14	0,25	0,54	0,79	1,70	2,45	3,84	8,17	12,50
16	0,36	0,60	0,88	1,85	2,69	4,19	8,81	13,50
18			0,97	2,00	2,93			
20	0,44	0,72	1,06	2,17	3,17	4,89	10,10	15,50
25		0,87	1,28	2,56	3,77	5,77	11,70	18,00
30			1,50	2,95	4,37	6,64	13,30	20,60
35				3,34	4,97	7,52	14,90	23,10
40				3,73	5,57	8,39	16,50	25,60
45				4,12	6,16	9,27	18,10	28,10
50				4,51	6,76	10,10	19,70	30,70
55				4,73	7,11	11,00	21,30	33,20
60				5,11	7,71	11,90	22,90	35,70
65							24,50	38,20
70							26,10	40,80
75							27,70	43,30
80							29,30	45,80

Weight for 1000 pcs

Screws with nominal length under the line (green for steel, blue for stainless steel, red for brass) can have partial thread.
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013. For the weights of the brass products multiply the values by 1,083.
The weights indicated are approximate. **Other sizes available on request.**

HEXAGONAL KEYS FOR SOCKET HEX SCREWS

ISO 2936 UNI 6753 DIN 911



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

6.8

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

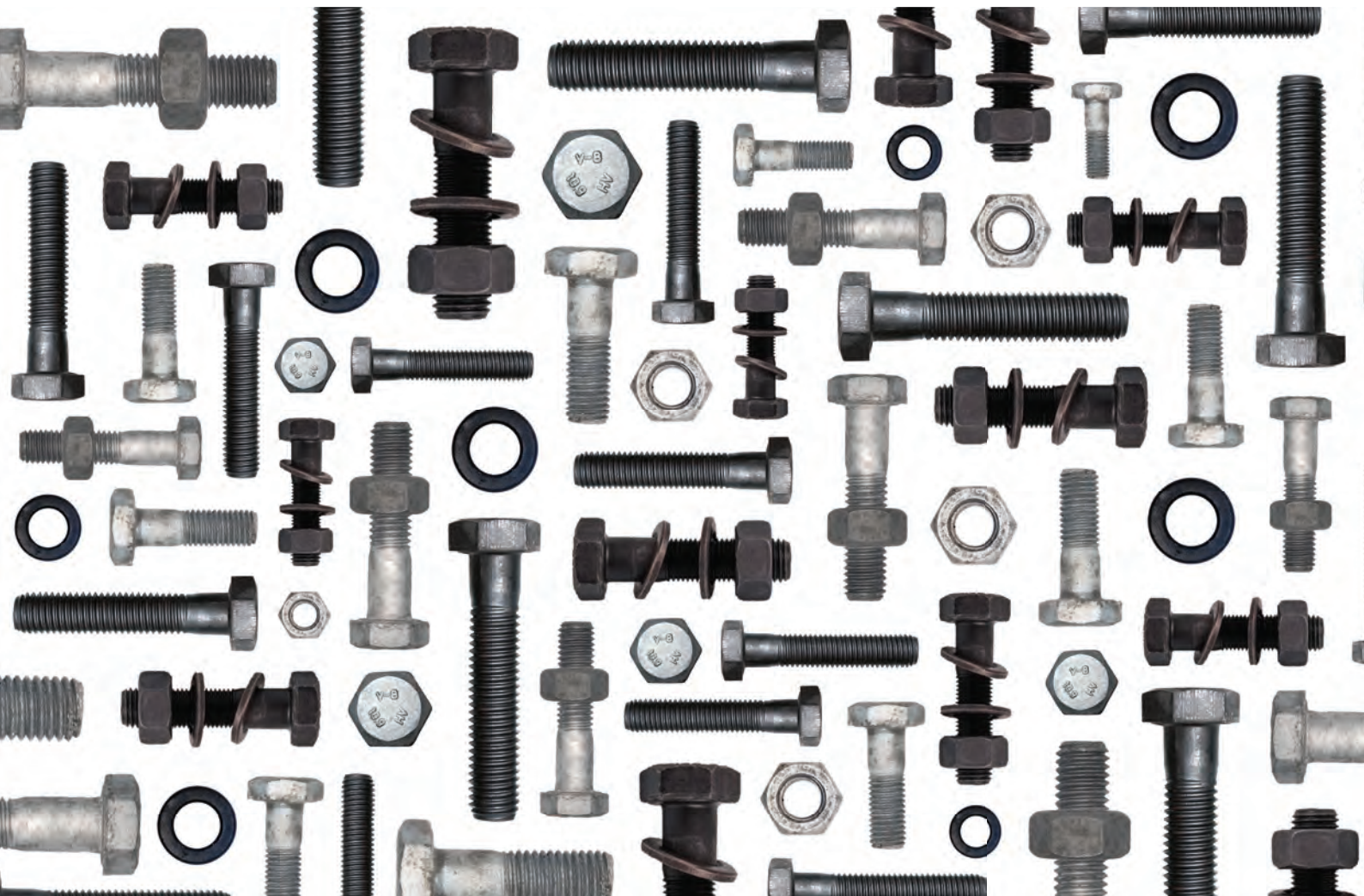
Zincato bianco. Altri trattamenti a richiesta

s	l ₁	l ₂	
2,5	56	20	3,3
3	60	25	5,7
4	68	30	11,8
5	78	32	19,8
6	86	38	31,3
8	98	42	60,9

 Weight for 1000 pcs

Fully hexagonal shank available. Hexalobular (Allen) key available.
The weights indicated are approximate. **Other sizes available on request.**

STRUCTURAL BOLTS



Structural bolting is a set of fastening elements specifically designed to join load-bearing components in metal structures, ensuring strength, stability, and long-term safety. It is mainly used in construction, industrial buildings, bridges, and all steelworks where high static and dynamic loads must be supported.

The main components of structural bolting are high-strength bolts, nuts, and flat washers. Structural bolts, generally compliant with European standards (such as EN 14399 or EN 15048), are manufactured from special steels with high mechanical strength classes (8.8, 10.9), and treated to ensure durability and corrosion protection. They can be used in shear, tension, or preloaded connections, depending on the project.

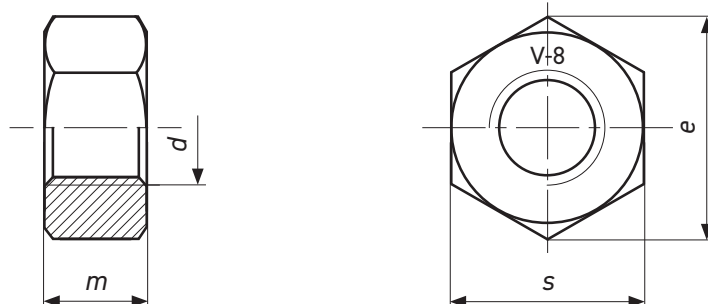
A distinctive feature of structural bolting is the possibility of controlled tightening by torque or by elongation, to ensure the correct tension in the connections. In particular, in preloaded bolts, the tightening force actively contributes to the joint's resistance.

The use of structural bolting is essential to meet the safety and reliability standards required in modern construction, where every detail impacts the overall performance of the structure.

LARGE HEX NUTS FOR STEEL STRUCTURES

ISO METRIC COARSE THREAD

ISO UNI DIN
- 5713 6915



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-2

CLASS

10

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT B

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

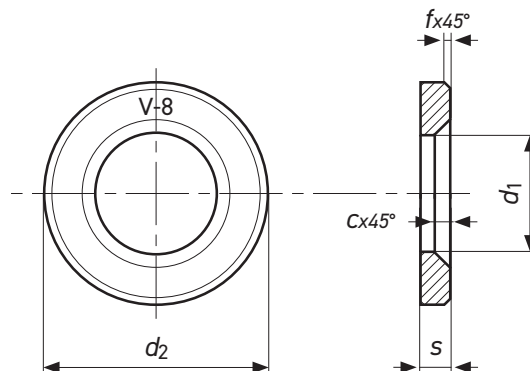
d	e min	m	s	 Kg
M12	23,91	10	22	23,3
M14	26,17	11	24	29,5
M16	29,56	13	27	44,8
M18	32,95	15	30	63,0
M20	35,03	16	32	73,9
M22	39,55	18	36	104,0
M24	45,2	19	41	155,0
M27	50,85	22	46	224,0
M30	55,37	24	50	300,0
M36	66,44	29	60	515

 Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

STRUCTURAL PLAIN WASHERS

ISO 7416 UNI 5714 DIN 6916



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO DIN 17200

CLASS

300HV

TOLLERANCES

ACCORDING TO ISO 4759-3 CAT A

AVAILABLE TREATMENT

Black - White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

<i>d</i>	<i>d</i> ₁	<i>d</i> ₂	<i>s</i>	<i>f</i>	<i>c</i>	 Kg
M12	13	24	3	0,5	1,6	7,03
M14	15	28	4	1	1,6	9,34
M16	17	30	4	1	1,6	14,60
M18	19	34	4	1	1,6	18,90
M20	21	37	4	1	2	19,60
M22	23	39	4	1	2	24,30
M24	25	44	4	1	2	30,60
M27	28	50	5	1	2,5	50,20
M30	31	56	5	1	2,5	63,2
M36	37	66	6	1,5	3	115

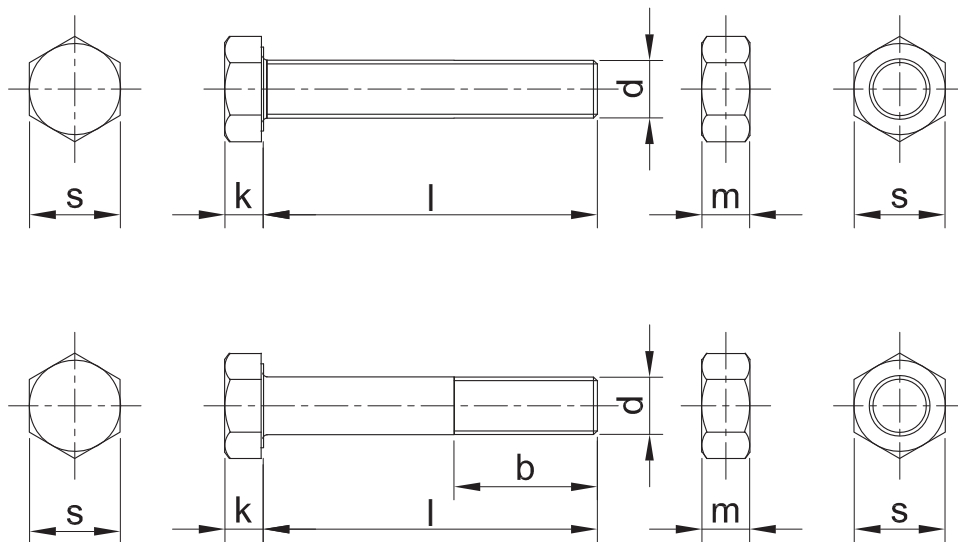
 **Weight for 1000 pcs**

The weights indicated are approximate. **Other sizes available on request.**

HIGH STRENGTH NOT PRELOADED STRUCTURAL BOLT ASSEMBLY

ISO METRIC COARSE THREAD

EN
15048



MATERIAL

SCREW: STEEL

NUT: STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 20898-2

CLASS

8.8

8

TOLLERANCES

ACCORDING TO ISO 4759-1

ACCORDING TO ISO 4759-1

AVAILABLE TREATMENT

White zinc plated according to RoH, HDG

	<i>d</i>	M8	M10	M12	M14	M16	M18
	<i>p</i>	1,25	1,5	1,75	2	2	2,5
	<i>s*</i>	13	16	18	21	24	27
	<i>k</i>	5,3	6,4	7,5	8,8	10	11,5
	<i>e min</i>	14,38	18,9	21,10	24,49	26,75	30,14
	<i>m</i>	6,4 - 6,8	8,04 - 8,4	10,37 - 10,8	12,1 - 12,8	14,1 - 14,8	15,1 - 15,8
per gli insiemi viti DIN 4014	<i>b ≤ 125</i>	22	26	30	34	38	42
	<i>b 125 ÷ 200</i>	28	32	36	40	44	48
	<i>b > 200</i>	41	45	49	53	57	61

	<i>d</i>	M20	M22	M24	M27	M30	M36
	<i>p</i>	2,5	2,5	3	3	3,5	4
	<i>s*</i>	30	34	36	41	46	55
	<i>k</i>	12,5	14	15	17	18,7	22,5
	<i>e min</i>	33,53	35,72	39,98	45,2	50,85	60,79
	<i>m</i>	16,9 - 18	18,1 - 19,4	20,2 - 21,5	22,5 - 23,8	24,3 - 25,6	29,4 - 31
per gli insiemi viti DIN 4014	<i>b ≤ 125</i>	46	50	54	60	66	78
	<i>b 125 ÷ 200</i>	52	56	60	66	72	84
	<i>b > 200</i>	65	69	73	79	85	97

Screws according to ISO 4014 (partial thread) or ISO 4017 (full thread) . Nuts according to standard 4032. Weights are given for information only.

Other sizes available on request.

	d	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36
	20													
	25													
	30	21,3												
	35	23,4	43,53											
	40	25,9	46,6	66,3										
	45	27,4	49,6	71,3	101									
	50	29,4	52,7	75,3	107	140,3	190,4	247,4						
	55	31	55,4	80,3	113	148,3	200,4	259,4						
	60	33	58,5	84,3	119	156,3	210,4	271,4	330	430		783	996	1243
	65	35	61,6	87,3	124	164,3	220,4	283,4	345	448				
	70	37	64,7	92,3	130	172,3	230,4	295,4	360	466	630	838	1031	1323
	75	38,9	67,8	96,3	136	180,3	240,4	307,4	375	484	653			
	80	40,9	70,9	101,3	142	188,3	249,4	319,4	390	502	676	891	1066	1403
	85	42,9	74	105,3	148	196,3	259,4	331,4	405	520	699	918		
	90	44,8	77,1	109,3	152	204,3	269,4	343,4	420	538	722	945	1101	1483
	95	46,8	80,2	114,1	158	212,3	279,4	355,4	435	556	745	972	1170	1523
	100	48,8	83,3	118,3	164	219,3	289,4	367,4	449	574	768	1000	1239	1563
	105	50,8	86,4	122,3										
	110	52,7	89,5	126,3	176	235,3	309,4	391,4	479	610	815	1056	1308	1643
	115	54,65	92,6	131,3										
	120	56,6	95,7	135,3	189	251,3	329,4	415,4	509	645	860	1113	1378	1723
	125		98,8	140,3										
	130		101,9	144,3	199	263,3	345,4	438,4	529	670	885	1153	1438	1793
	140		108,1	153,3	210	279,3	365,4	462,4	559	705	930	1208	1508	1873
	150		114,3	162,3	221	295,3	385,4	486,4	589	740	975	1263	1578	1953
	160		120,5	170,3	232	311,3	405,4	510,4	525	775	1020	1323	1638	2033
	170		126,7	179,3	243	327,3	425,4	534,4	549	810	1065	1373	1698	2113
	180		132,9	188,3	254	343,3	445,4	558,4	573	845	1110	1433	1768	2193
	190		139,1	197,3	265	359,3	465,4	583,4	598	880	1155	1483	1828	2273
	200		145,3	205,3	276	375,3	485,4	608,4	623	915	1195	1543	1898	2363
	210		151,5	214,3	287	391,3	505,4	633,4	648	950	1240	1598	1963	2443
	220		157,7	223,3	298	406,3	525,4	659,4	674	980	1295	1653	2038	2523
	230		163,9	227,3	309	420,3	545,4	683,4	698	1015	1341	1708	2108	2603
	240		170,1	236,3	320	436,3	565,4	709,4	724	1050	1385	1763	2168	2683
	250		176,3	245,3	331	451,3	585,4	734,4	749	1085	1430	1818	2238	2763
	260		182,5	254,3	342	467,3	605,4	759,4	774	1120	1475	1873	2308	2843
	270		188,7	263,3	353	482,3	625,4	784,4	799	1155				
	280		194,9	272,3	364	498,3	645,4	809,4	824	1190	1565	1983	2438	3003
	290		201,1	281,3	375	513,3	665,4	834,4	849	1225				
	300		207,3	290,3	386	529,3	685,4	859,4	874	1260	1655	2093	2578	3163

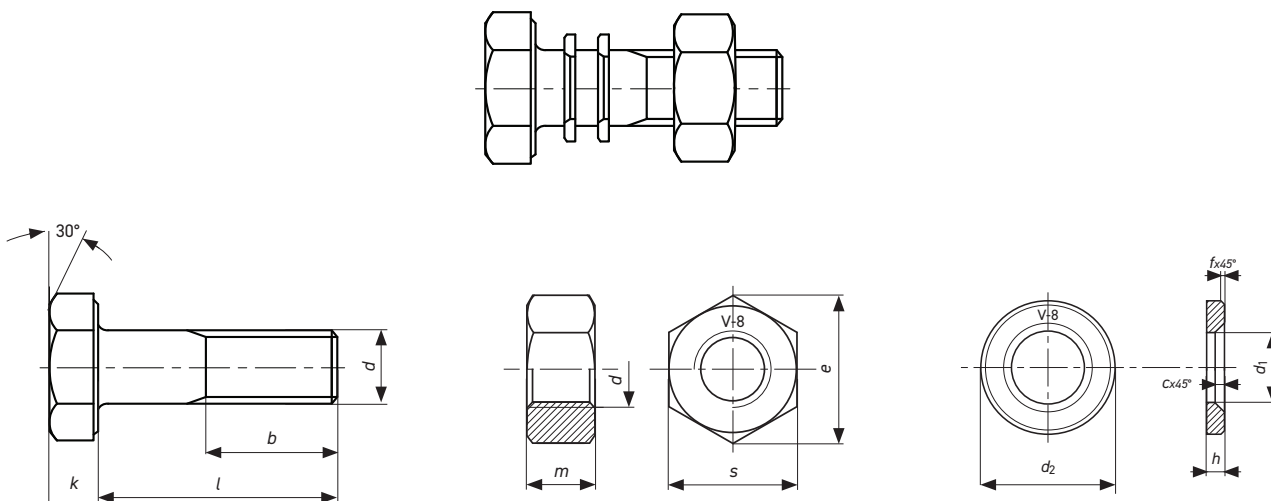
l = LENGTH

 Weight for 1000 pcs

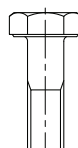
HIGH STRENGTH PRELOADED STRUCTURAL BOLT ASSEMBLY HV TYPE

ISO METRIC COARSE THREAD

UNI EN ISO
14399 - 4



MATERIAL	1 x SCREW: STEEL	1 x NUT: STEEL	2 x WASHER: STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 898-2	ACCORDING TO EN 14399-6
CLASS	10.9	10	300HV
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT C	ACCORDING TO ISO 4759-1 CAT B	ACCORDING TO ISO 4759-3 CAT A
AVAILABLE TREATMENT	Black. HDG Other coatings on request		

	d	M12	M16	M20	M22	M24	M27	M30	M36
b		23	28	33	34	37	39	42	52
s		22	27	32	36	41	46	50	60
k		8	10	13	14	15	17	19	23
e min		23,91	29,56	35,03	39,55	45,20	50,85	55,37	66,44

	d	s	m	e min
M12		22	10	23,91
M16		27	13	29,56
M20		32	16	35,03
M22		36	18	39,55
M24		41	19	45,20
M27		46	22	50,85
M30		50	24	55,37
M36		60	29	66,44

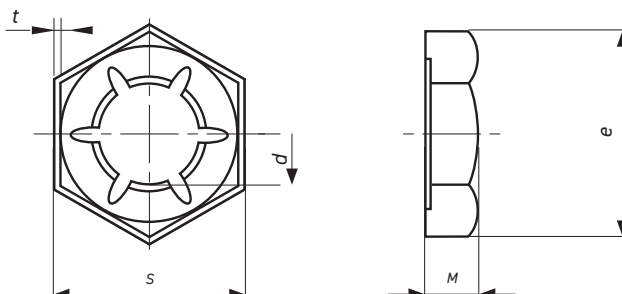
	d	d ₁	d ₂	h	f	c
M12		13	24	3	0,5	1,6
M16		17	30	4	1	1,6
M20		21	37	4	1	2
M22		23	39	4	1	2
M24		25	44	4	1	2
M27		28	50	5	1	2,5
M30		31	56	5	1	2,5
M36		37	66	6	1,25	2,5

Other sizes available on request.

"PAL" EXAGONAL SELF LOCKING COUNTER NUTS

ISO METRIC COARSE THREAD

ISO UNI DIN
- - 7967



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO **UNI 7064**

CLASS

C70

TOLLERANCES

ACCORDING TO **ISO 4759-1 CAT A**

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request

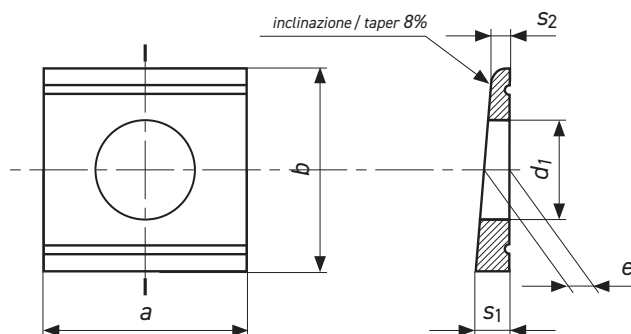
	plated	d	e	s	t	m	Kg
M 4	0,7	3.5	8.1	7.0	0.3	2.5	-
M 5	0,8	4.5	9.2	8.0	0.4	2.5	-
M 6	1	5.3	11.5	10.0	0.4	3.0	0,4
M 8	1,25	6.9	15.0	13.0	0.5	3.5	0,9
M 10	1,5	8.6	19.6	17.0	0.5	4.0	1,4
M 12	1,75	10.4	21.9	19.0	0.6	4.5	1,9
M 14	2	12.0	25.4	22.0	0.6	5.0	2,5
M 16	2	14.1	27.7	24.0	0.7	5.0	3,4
M 18	2,5	15.5	31.2	27.0	0.7	5.5	4,1
M 20	2,5	17.6	34.6	30.0	0.8	6.0	5,8
M 22	2,5	19.6	36.9	32.0	0.8	6.0	6,4
M 24	3	21.0	41.6	36.0	0.9	7.0	9,5
M 27	3	24.2	47.3	41.0	1.0	7.0	13
M 30	3,5	26.6	53.1	46.0	1.1	8.0	17,5
M 33	3,5	29.8	57.7	50.0	1.2	8.0	22
M 36	4	32.2	63.5	55.0	1.3	9.0	26
M 39	4	35.2	69.3	60.0	1.3	9.0	29,9
M 42	4,5	37.6	75.0	65.0	1.4	11.0	30
M 45	4,5	40.9	80.8	70.0	1.5	12.0	-
M 48	5	43.9	86.5	75.0	1.6	14.0	-
M 52	5	48.2	92.4	80.0	1.7	16.0	-

 **Weight for 1000 pcs**

The weights indicated are approximate. **Other sizes available on request.**

CHANNEL CLAMPING PLATES FOR UPN SECTIONS

ISO UNI DIN
- 6598 434



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO UNI EN ISO 10025	ACCORDING TO UNI EN ISO 10025
CLASS	100 HV	A2 A4
TOLLERANCES	ACCORDING TO UNI 6602 CAT A - ISO 4759-3	ACCORDING TO UNI 6602 CAT A - ISO 4759-3
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request	

d	d ₁	a	b	s ₁	s ₂	e	 Kg
M 8	9	22	22	3,8	2	3	9,57
M 10	11	22	22	3,8	2	3	8,85
M 12	13,5	26	30	4,9	2,5	3,5	18,4
M 14	15,5	32	36	5,9	3	4,5	33,6
M 16	17,5	32	36	5,9	3	4,5	31,8
M 18	20	40	44	7	3,5	5,25	59,3
M 20	22	40	44	7	3,5	5,25	56,9
M 22	24	44	50	8	4	6	82,3
M 24	26	56	56	8,5	4	6,26	128
M 27	30	59	59	8,7	4	6,26	119
M 30	33	62	62	9,5	4	6,52	153

 Weight for 1000 pcs

The weights indicated are approximate. **Other sizes available on request.**

OTHER SCREWS



Screws are fastening elements designed to meet specific needs in the industrial, construction, woodworking, and plastics sectors.

Hex head screws UNC/UNF, typical of the American imperial system, are ideal for heavy-duty mechanical applications. Self-tapping screws – available in various versions (hex head, flanged, pan head or countersunk with cross recess) – are designed to create their own threading in softer materials such as thin metals or plastics.

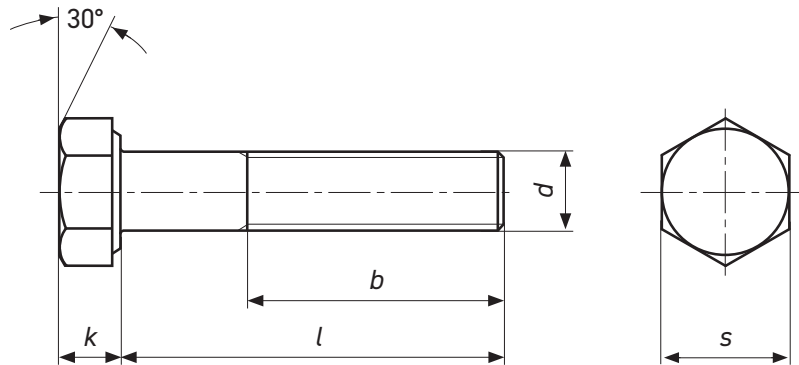
Wood screws, available with hex head or Torx drive, ensure a strong grip in chipboard panels and wooden materials, also thanks to TSP and TSC versions specifically developed for the furniture sector. Self-tapping screws, in different head configurations (cylindrical, countersunk, domed), are designed to penetrate materials without pre-drilling, with applications ranging from metal to plastic. Some variants feature combined or special drives.

Among the more technical solutions are self-drilling screws, ideal for quick fastening in sheet metal, and drywall screws, lightweight yet resistant. Completing the range are special screws such as thumb screws, wing screws, and Poeliers screws, often used for decorative, manual, or quick applications.

HEXAGON HEAD SCREWS UNC/UNF

US STANDARD NATIONAL COARSE THREAD/FINE THREAD UNIFIED

ANSI
B18 2.1



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO SAE J 429

ACCORDING TO SAE J 429

CLASS

5

8

9

A2

A4

TOLLERANCES

ACCORDING TO ASME ANSI B 1.1 - 2B

ACCORDING TO ASME B18.6.3

AVAILABLE TREATMENT

Black - Other coatings on request

<i>d</i> inches	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"
<i>d</i> mm	6,35	7,94	9,52	11,11	12,7	14,29	15,88	19,05	22,22	25,4
<i>s</i>	7/16"	1/2"	9/16"	5/8"	3/4"	13/16"	15/16"	1 1/8"	1 5/16"	1 1/2"
<i>k</i>	5/32"	13/64"	15/64"	9/32"	5/16"	23/64"	25/64"	15/32"	35/64"	39/64"
<i>b</i>	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 3/4"	2"	2 1/4"
<i>p</i> ** UNC	20	18	16	14	13	12	11	10	9	8
<i>p</i> ** UNF	28	24	24	20	20	18	18	16	14	12

<i>l</i> inches	<i>l</i> mm											Kg
1/2"	12,70	5,35	9,03	13,30								
5/8"	15,88	5,94	9,98	14,70								
3/4"	19,05	6,53	10,93	16,10	23,05	36,80	39,00					
7/8"	22,23	7,12	11,88	17,50	24,95	39,30	42,80					
1"	25,40	7,89	12,83	18,90	26,85	41,80	55,36	67,00	115,88			
1 1/4"	31,75	9,43	15,28	22,10	30,66	46,90	61,84	75,90	127,39			
1 1/2"	38,10	10,97	17,73	26,10	35,47	52,70	68,31	84,80	138,90	196,30		
1 3/4"	44,45	12,51	20,18	29,70	41,70	59,10	74,78	93,70	150,40	213,90		
2"	50,80	14,05	22,63	33,30	46,01	65,50	81,25	102,60	161,91	231,60	329,26	
2 1/4"	57,15	15,59	25,08	36,90	50,95	71,90	87,72	111,50	173,42	249,23	349,66	
2 1/2"	63,50	17,13	27,53	40,50	55,88	78,30	94,20	120,40	184,92	266,88	370,06	
2 3/4"	69,85	18,67	29,98	44,10	60,82	84,70	100,67	129,30	196,43	284,53	390,45	
3"	76,20	20,21	32,43	47,70	65,75	91,10	107,14	138,20	207,94	302,18	410,85	
3 1/4"	82,55	21,75	34,88	51,30	70,69	97,50	113,61	147,10	219,44	319,83	431,25	
3 1/2"	88,90	23,29	37,33	54,90	75,63	103,90	120,08	156,00	230,95	337,48	451,64	
3 3/4"	95,25	24,83	39,78	58,50	80,56	110,30	126,56	164,90	242,46	355,13	472,04	
4"	101,60	26,37	42,23	62,10	85,50	116,70	133,03	173,80	253,96	372,78	492,44	
4 1/2"	114,30						146,00	192,00	277,00	409,00	534,00	

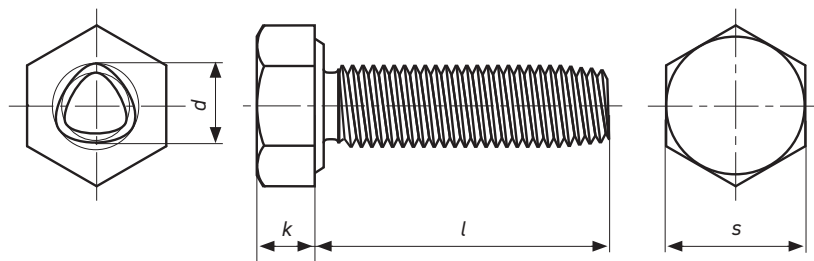
Weight for 1000 pcs

(*) Class 5 SAE corresponds to ISO 8.8. Class SAE 8 corresponds to ISO 10.9. Class SAE 9 corresponds to ISO 12.9.

(**) *p* = Threads per inch. The weights indicated are approximate. Other sizes available on request.

HEX HEAD TRILOBULAR SCREWS

ISO UNI DIN
- 8110 7500 D



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO ISO 7323-6

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

White zinc plated according to RoHS - Other coatings on request

<i>d</i>	3	3,5	4	5	6	8
<i>p</i>	0,5	0,6	0,7	0,8	1	1,25
<i>d</i> min	2,88	3,36	3,84	4,82	5,77	7,72
<i>d</i> max	2,95	3,44	3,93	4,92	5,9	7,88
<i>s</i>	5	5,55	7	8	10	13
<i>k</i> min	1,62	2,42	2,42	3,12	4,95	5,95

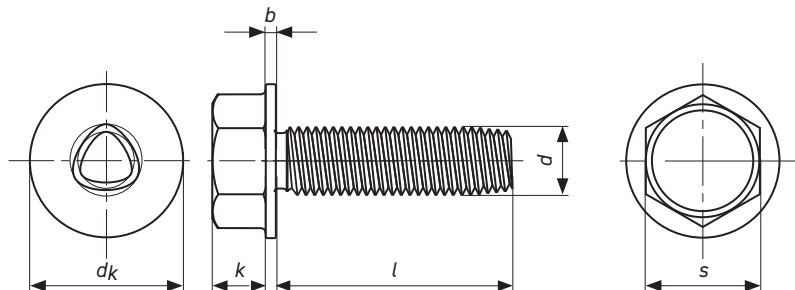
<i>l</i>							 Kg
<i>l</i> = LENGTH	6	0,538	0,775				
	8	0,621	0,887	1,248	2,02		
	10	0,705	0,998	1,393	2,25	4,14	
	12		1,109	1,538	2,49	4,48	
	14		1,220	1,684	2,72	4,81	9,07
	16		1,331	1,829	2,96	5,15	9,67
	20		1,554	2,120	3,43	5,83	10,89
	25			2,483	4,01	6,67	12,40
	30			2,847	4,60	7,52	13,91
	35			3,210	5,19	8,39	15,43
	40				5,77	9,21	16,94

 Weight for 1000 pcs

The weights indicated are approximate. **Other sizes available on request.**

FLANGED HEX HEAD TRILOBULAR SCREWS

ISO UNI DIN
- 8111 -



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO ISO 7323-6

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

White zinc plated according to RoHS - Other coatings on request

	3	3,5	4	5	6	8
<i>p</i>	0,5	0,6	0,7	0,8	1	1,25
<i>d</i> min	2,88	3,36	3,84	4,82	5,77	7,72
<i>d</i> max	2,95	3,44	3,93	4,92	5,9	7,88
<i>s</i>	5	5,55	7	8	10	13
<i>k</i> min	1,62	2,42	2,42	3,12	4,95	5,95
<i>b</i> min	0,3	0,4	0,5	0,5	0,8	0,9
<i>dk</i>	5,8÷6,2	6,8÷7,5	8,5÷9,2	9,8÷10,5	12,2÷13,2	15,9÷17,2

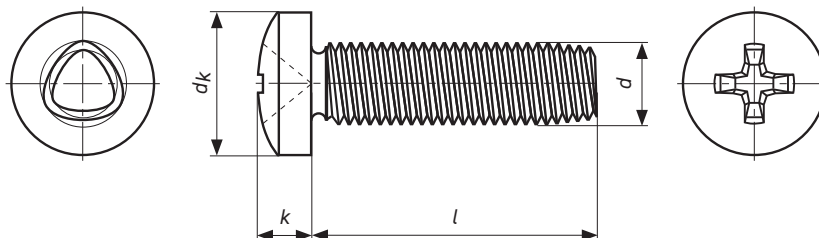
<i>l</i>							 Kg
<i>l</i> = LENGTH	6	0,627	0,927				
	8	0,710	1,038	1,566	2,387		
	10	0,794	1,149	1,713	2,621	5,06	9,54
	12		1,260	1,860	2,856	5,40	10,15
	14		1,372	2,007	3,091	5,73	10,75
	15		1,428	2,081	3,209	5,90	
	16		1,483	2,154	3,326	6,07	11,36
	20			2,448	3,796	6,75	12,57
	25			2,816	4,383	7,59	14,08
	30			3,184	4,970	8,44	15,59
	35			3,551	5,557	9,28	17,11
	40				6,15	10,13	18,62

Weight for 1000 pcs

The weights indicated are approximate. **Other sizes available on request.**

CROSS RECESSED PAN HEAD TRILOBULAR SCREWS

ISO UNI DIN
- 8112 7500 CE



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO ISO 7323-6

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request

<i>d</i>	2,5	3	3,5	4	5	6
<i>p</i>	0,45	0,5	0,6	0,7	0,8	1
<i>d</i> min	2,39	2,88	3,36	3,84	4,82	5,77
<i>d</i> max	2,46	2,95	3,44	3,93	4,92	5,9
<i>d_k</i> max	5	6	7	8	10	12
<i>k</i>	2	2,4	2,7	3,1	3,8	4,6
 N° Phillips	1	1	2	2	2	3

<i>l</i>							 Kg
5	0,400	0,666					
6	0,430	0,710		1,48			
8	0,490	0,798		1,63	2,91		
10	0,550	0,876		1,79	3,16	4,14	
12	0,610	0,954		1,94	3,41	4,49	
14	0,670	1,030		2,10	3,66	4,84	
15	0,700	1,070		2,33	3,79		
16	0,730	1,110		2,56	3,91	5,29	
20		1,270		2,94	4,41	6,00	
25		1,470		3,44	5,03	6,87	
30		1,710		3,94	5,70	7,75	
35				4,44	6,50	8,60	
40					7,30	9,50	
45					8,00	10,40	
50					8,70	11,30	

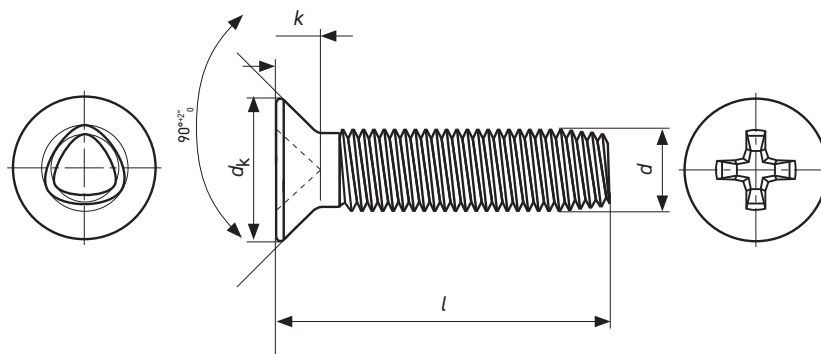
 Weight for 1000 pcs

Hexalobular (Allen) key available

The weights indicated are approximate. **Other sizes available on request.**

CROSS RECESSED COUNTERSUNK FLAT HEAD TRILOBULAR

ISO UNI DIN
- 8113 7500 M



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO ISO 7323-6

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

White zinc plated according to RoHS - Other coatings on request

<i>d</i>	2,5	3	3,5	4	5	6
<i>p</i>	0,45	0,5	0,6	0,7	0,8	1
<i>d</i> min	2,39	2,88	3,36	3,84	4,82	5,77
<i>d</i> max	2,46	2,95	3,44	3,93	4,92	5,9
<i>dk</i> max	4,7	5,6	6,5	7,5	9,2	11
<i>k</i>	1,5	1,65	1,93	2,2	2,5	3
 <i>N° Phillips</i>	1	1	2	2	2	3

 Kg

<i>l</i>						
6	0,266					
8	0,326	0,467		1,06	1,70	
10	0,386	0,555		1,22	1,95	
12	0,446	0,643		1,37	2,19	3,25
14	0,507	0,731		1,45	2,32	3,43
15	0,537	0,776		1,53	2,44	3,60
16	0,567	0,820		1,53	2,44	3,60
20				1,84	2,94	4,31
25				2,22	3,55	5,19
30				2,61	4,16	6,08
35				3,00	4,65	6,96
40				3,38	5,40	7,84

 Weight for 1000 pcs

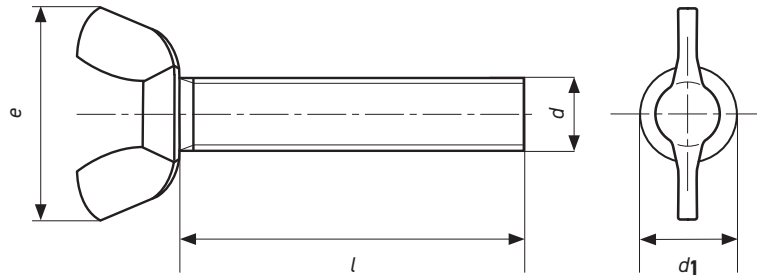
Hexalobular (Allen) key available

The weights indicated are approximate. **Other sizes available on request.**

WING SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN
- 5449 316*



MATERIAL

STEEL

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

ACCORDING TO ISO 3506-1

CLASS

4.8

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT C

ACCORDING TO ISO 4759-1 CAT C

AVAILABLE TREATMENT

Plain, White zinc plated or Yellow zinc plated according to RoHS. Other coatings on request

d	M3	M4	M5	M6	M8	M10	M12
e	17,6	17,6	22,5	27,8	30,3	36,2	49,4
d1	8	8	10,3	12,7	13,8	16,5	22,5

l								Kg
l = LENGTH	10	2,32	2,66	5,21	8,34	11,26		
	12	2,43	2,85	5,52	9,23	12,87		
	15	2,54	3,04	5,82	10,13	14,48	23,98	
	20	2,76	3,43	6,44	11,02	16,09	26,48	56,30
	25	2,98	3,82	7,05	11,92	17,70	28,98	60,00
	30	3,20	4,21	7,66	12,81	19,31	31,49	63,71
	35		4,60	8,27	13,70	20,92	34,00	67,41
	40		5,99		14,60	22,53	36,50	71,12
	45				15,50	24,14	39,01	74,82
	50				16,40	25,75	41,52	78,53
	55						44,03	82,23
	60						46,53	85,94

Weight for 1000 pcs

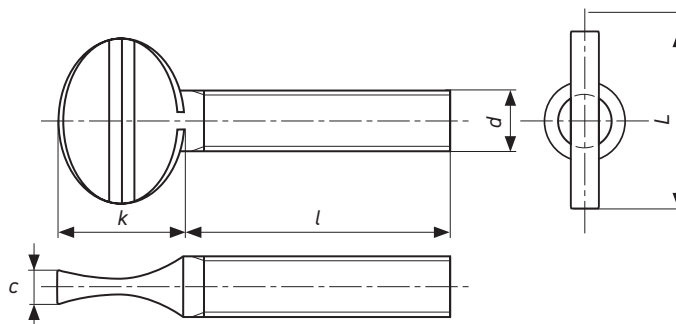
The version according to DIN 316 has different fin shape and dimensions.
The weights indicated are approximate. **Other sizes available on request.**

THUMB SCREWS

ISO METRIC COARSE THREAD

ISO UNI DIN

- - -



MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 898-1

CLASS

4.8

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT C

AVAILABLE TREATMENT

White zinc plated according to RoHS - Other coatings on request

d	M4	M5	M6	M8	M10
k	7-7,7	9,5-10,8	13-14	15,5-17	16-19
L	11,2	14	16,5	22	26
c	2,6	3,1	4,1	4,7	6

l

Kg

10	1,60	3,36			
12	1,76	3,60	5,52		
15	1,92	3,84	5,86		
20	2,08	4,08	6,20	10,58	
25	2,40	4,20	6,88	12,10	16,90
30	3,20	4,80	7,74	14,00	19,30
35	4,00	5,40	8,60	15,90	21,70
40	4,80	6,00	9,46	17,80	24,10
45		6,60	10,32	19,70	26,50
50			11,18	21,60	28,90
55			12,04	23,50	31,30

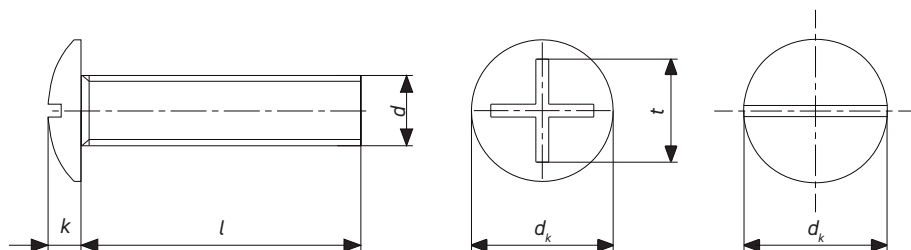
Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

ROOFING SCREWS

ISO METRIC COARSE THREAD

NFE
27-128



MATERIAL	STEEL	STAINLESS STEEL*
MECHANICAL PROPERTIES	ACCORDING TO ISO 898-1	ACCORDING TO ISO 3506-1
CLASS	4.8	A2
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT C	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request	

d	M4	M5	M6	M8
dk	9,5-9,8	11,8-12,0	13,8-14,0	18,3-18,7
k max	2,20	2,70	3,3	4,4
t	7,00	9,00	10,00	14,00

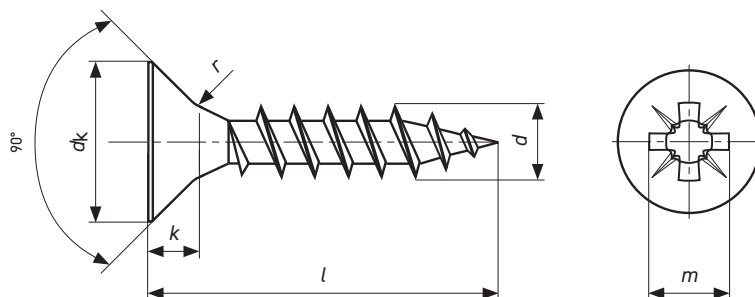
l					Kg
l = LENGTH	8	1,53			
	10	1,68		4,00	
	12	1,83		5,13	
	16	2,13	3,65	5,82	12,26
	20	2,43	4,13	6,51	13,50
	25	2,80	4,73	7,37	15,07
	30	3,18	5,33	8,24	16,63
	35	3,55	5,93	9,10	18,20
	40	3,93	6,53	9,97	19,76
	45	4,30	7,13	10,83	21,33
	50	4,68	7,73	11,70	22,88
	60			13,42	26,00
	70			15,14	29,12
	80			16,80	32,25

Weight for 1000 pcs

*The stainless steel version has only one notch.
For stainless steel A2 products, multiply the weight values for 1,01.
The weights indicated are approximate. **Other sizes available on request.**

POZI FLAT HEAD CHIPBOARD SCREWS

ISO UNI DIN
- - 7505 A



MATERIAL

STEEL HARDENED

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

ACCORDING TO ISO 3506-4

CLASS

C15

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

White zinc plated or Yellow zinc plated according to RoHS
- Other coatings on request

<i>d</i>	2,5	3	3,5	4	4,5	5	6
<i>d_k</i> max	5,00	6,00	7,00	8,00	9,00	10,00	12,00
<i>d_k</i> min	4,70	5,70	6,64	7,64	8,64	9,64	11,57
<i>k</i> max	1,40	1,80	2,00	2,35	2,55	2,85	3,35
<i>r</i> ≈	1,50	1,50	1,80	2,00	2,20	2,50	2,50
 <i>N° Pozid Recess</i>	1	1	2	2	2	2	3
<i>deep</i>	3,00	3,00	4,00	4,40	4,80	5,30	6,60
max		2,01	2,06	2,51	2,92	3,45	3,45
min	1,38	1,76	1,60	2,05	2,46	2,99	2,99

<i>d</i>	2,5	3	3,5	4	4,5	5	6
10	0,24	0,38	0,52				
12	0,28	0,44	0,60	0,81			
16	0,37	0,57	0,77	1,03	1,30		
18	0,41	0,63	0,86	1,14	1,43		
20	0,45	0,69	0,94	1,25	1,55	1,95	2,85
25	0,55	0,84	1,15	1,52	1,87	2,35	3,41
30		0,99	1,36	1,79	2,19	2,74	3,98
35		1,14	1,58	2,07	2,52	3,13	4,54
40		1,30	1,79	2,34	2,84	3,53	5,10
45		1,46	2,00	2,61	3,16	3,92	5,67
50			2,22	2,89	3,48	4,32	6,23
55				3,17	3,80	4,71	6,79
60				3,43	4,12	5,10	7,36
70*				3,97	4,76	5,89	8,48
80*					5,40	6,68	9,61
90*						7,47	10,74
100*						8,25	11,86
110*						8,60	12,99
120*						9,30	14,12
130*							15,25
140*							16,37
150*							17,50
160*							18,63
180*							20,50
200*							23,26
220*							26,12
240*							28,35

l = LENGTH

Weight for 1000 pcs

(*) Threaded shaft max 63 mm.

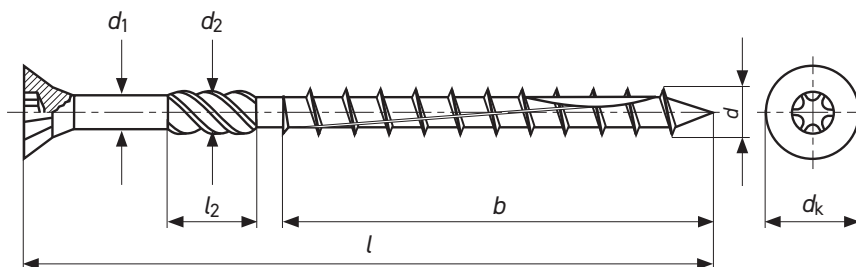
Per i pesi dei prodotti in acciaio inossidabile A2 moltiplicare i valori per 1,01, A4 per 1,013.

The weights indicated are approximate. **Other sizes available on request.**

TORX FLAT HEAD WOOD SCREWS

ISO UNI DIN

- - -



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Yellow zinc plated according to RoHS - Other coatings on request

<i>d</i>	4	4,5	5	6	8,0	10,0
<i>d_k</i> max	8,0	9,0	10,0	12,1	15,0	18,2
<i>d_k</i> min	7,50	8,50	9,65	11,50	14,3	17,4
<i>d₁</i>	2,80 - 2,9	3,1 - 3,2	3,45 - 3,55	4,2 - 4,3	5,73 - 5,83	6,95 - 7,05
<i>d₂</i>	3,5 - 3,8	3,7 - 4	3,7 - 4,4	4,8 - 5,2	6,8 - 7,2	8 - 8,5
<i>l₂</i>	4,8 - 5	6,7 - 7	7,6 - 8	9,9 - 12,9	9,9 - 12,9	9,9 - 12,9
<i>Torx</i> nr.	T20	T25	T25	T30	T40	T50

	d							d							
	4	4,5	5	6	8	10		4	4,5	5	6	8	10		
d = DIAMETER - l = LENGTH	l	b						l							 Kg
	20	-						20	1,5						
	30	18	18	18				30	1,7	2	2,85				
	35	20	20	20				35	1,9	2,3	3,1				
	40	24	24	24				40	2,1	2,6	3,35				
	45	27	27	27				45	2,4	2,9	3,73				
	50	30	30	30				50	2,6	3,25	4,1				
	60	35	35	35	35			60	3,2	3,85	4,85	7,15			
	70	42	42	42	42			70	3,6	4,5	5,65	8,55			
	80		50	50	50	50	52	80		5,12	6,4	9,55	17,8		
	90			50	50	50	52	90			7,15	10,55	19,9	29,9	
	100			50	50	50	52	100			7,9	11,9	22,1	32,8	
	110			50	50	50	52	110			8,6	13,25	22,6	35,8	
	120			70	70	80	80	120			9,3	14,6	23,1	38,7	
	130				70	80	80	130				15,95	26,6	41,7	
	140				70	80	80	140				17,3	30,1	44,8	
	160				70	80	80	160				18,65	34,2	50,9	
	180				70	80	80	180				20	38,2	56,9	
	200				70	80	80	200				21,35	42,3	63,0	
	220				70	80	80	220				22,7	46,3	69,0	
240				70	80	80	240				24,05	50,4	75,1		
260				70	80	80	260				25,4	54,4	81,1		
280				70	80	80	280				26,75	58,5	87,2		
300				70	80	80	300				28,1	62,5	93,2		
320					80	80	320					66,6	99,3		
340					80	80	340					70,6	105,3		
360					80	80	360					74,7	111,4		
380					80	80	380					78,7	117,4		
400					80	80	400					82,8	123,5		

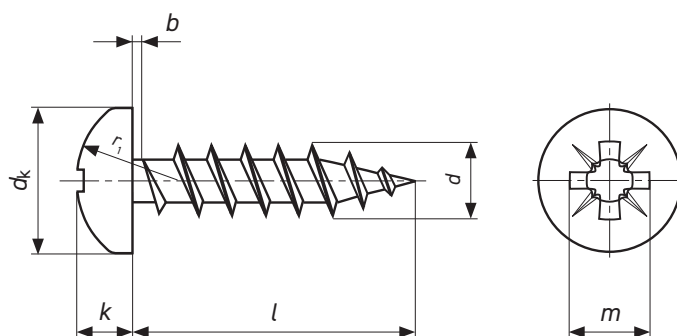
 Kg

 Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

POZI PAN HEAD CHIPBOARD SCREWS

ISO UNI DIN
- - 7505 B



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 2702	ACCORDING TO ISO 3506-4
CLASS	C15	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request	

d	2,50	3,00	3,50	4,00	4,50	5,00	6,00
dk max	4,90	5,90	6,90	7,90	8,80	9,80	11,75
dk min	4,60	5,60	6,54	7,54	8,44	9,44	11,32
k min	2,00	2,25	2,60	2,80	3,00	3,50	4,10
k max	1,75	2	2,35	2,55	2,75	3,2	3,8
r1 ≈	4,98	6,02	6,73	8,05	9,09	9,98	10,84
b max	0,70	0,80	0,90	1,05	1,30	1,45	1,75
N° Pozzi Recess	1	1	2	2	2	2	3
m ≈	2,60	3,00	4,10	4,30	5,00	5,00	6,60
deep	max	1,52	1,93	2,11	2,36	3,10	3,38
	min	1,27	1,68	1,65	1,90	2,64	3,02

l								Kg
l = LENGTH	10	0,38	0,58	0,81	1,12			
	12	0,42	0,64	0,90	1,23			
	16	0,50	0,76	1,07	1,44	1,77		
	18	0,54	0,83	1,15	1,55	1,90		
	20	0,58	0,89	1,24	1,66	2,03	2,78	4,12
	25	0,69	1,04	1,45	1,94	2,35	3,18	4,69
	30		1,19	1,66	2,21	2,67	3,57	5,24
	35		1,34	1,87	2,48	2,99	3,96	5,81
	40		1,50	2,09	2,76	3,31	4,36	6,39
	45		1,66	2,30	3,03	3,63	4,75	6,93
	50			2,51	3,30	3,95	5,15	7,50
	55				3,57	4,27	5,55	8,07
	60				3,85	4,59	5,93	8,62
	70*				4,40	5,23	6,76	9,75
	80*						7,59	10,88
	90*						8,42	12,00

Weight for 1000 pcs

(*) Threaded shaft max 63 mm.

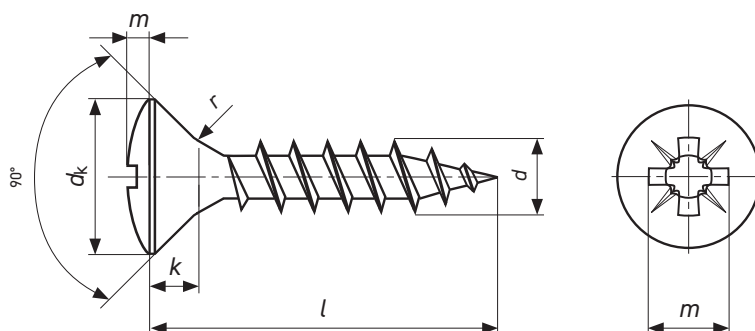
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

The weights indicated are approximate. **Other sizes available on request.**

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POZI OVAL FLAT HEAD CHIPBOARD SCREWS

ISO UNI DIN
- - 7505 C



MATERIAL

STEEL HARDENED

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

ACCORDING TO ISO 3506-4

CLASS

C15

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

White zinc plated or Yellow zinc plated according to RoHS
- Other coatings on request

	2,50	3,00	3,50	4,00	4,50	5,00	6,00
d_k max	5,00	6,00	7,00	8,00	9,00	10,00	12,00
d_k min	4,70	5,70	6,64	7,64	8,64	9,64	11,57
k max	1,40	1,80	2,00	2,35	2,55	2,85	3,35
$r \approx$	1,50	1,50	1,80	2,00	2,20	2,50	2,50
 N° Pozi Recess	1	1	2	2	2	2	3
$m \approx$	3,05	3,00	4,00	4,40	4,80	5,30	6,60
deep	max	2,01	2,06	2,51	2,92	3,45	3,45
	min	1,38	1,76	1,60	2,05	2,99	2,99

l								 Kg
l = LENGTH	12	0,32	0,52	0,73				
	16	0,40	0,64	0,90	1,20			
	18	0,44	0,70	0,99	1,31			
	20	0,48	0,76	1,07	1,42	1,80	2,53	3,44
	25	0,59	0,92	1,29	1,69	2,12	2,72	4,01
	30		1,07	1,50	1,97	2,44	3,12	4,57
	35		1,22	1,71	2,24	2,76	3,59	5,13
	40		1,37	1,92	2,51	3,08	3,91	5,70
	45			2,14	2,79	3,40	4,30	6,26
	50			2,35	3,06	3,72	4,69	6,82
	60				3,60	4,36	5,48	7,95
	70*					5,00	6,27	9,08
	80*						7,06	10,20

Weight for 1000 pcs

(*) Threaded shaft max 63 mm.

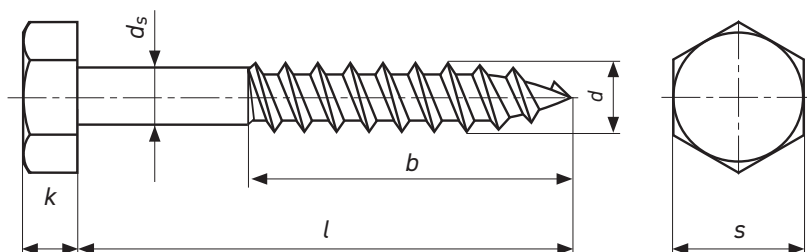
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

The weights indicated are approximate. **Other sizes available on request.**

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HEX HEAD WOOD SCREWS

ISO
-
UNI
704
DIN
571



$$b_{min} = 0,6 \times l$$

MATERIAL		STEEL				STAINLESS STEEL	
MECHANICAL PROPERTIES		ACCORDING TO ISO 898 - 1:2001				ACCORDING TO ISO 3506-1	
CLASS		4.8				A2	A4
TOLLERANCES		ACCORDING TO ISO 4759-1 CAT C				ACCORDING TO ISO 4759-1 CAT C	
AVAILABLE TREATMENT		Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request					
d	5	6	7	8	10	12	16
d _s min	4,52	5,52	6,42	7,42	9,42	11,3	15,3
s	8	10	12	13	17	19	24
k	3,5	4	5	5,5	7	8	10
l							
20	3,42						 Kg
25	4,02	5,82		11,50			
30	4,62	6,62		12,90			
35	5,12	7,42	11,28	14,20			
40	5,82	8,22	12,42	15,60	28,00		
45	6,43	8,94	14,78	16,90	30,00		
50	7,03	9,64	16,00	18,20	32,10		
55		10,50	17,10	19,60			
60	8,23	11,20	18,20	20,90	36,50	51,80	
65		11,97	19,30	22,20			
70	9,43	12,74	20,97	23,60	40,70	57,80	
80	10,63	14,27	23,30	26,50	45,20	64,50	
90		15,80	25,64	29,40	49,90	71,00	130,00
100		17,34	28,00	32,00	54,00	77,10	141,00
110		18,87	30,27	34,80	58,40	83,40	152,00
120		20,40	32,60	37,55	62,30	89,50	163,00
130		21,93	35,00	40,30	66,50	95,70	175,00
140		23,46	37,35	43,05	70,80	101,88	187,00
150		25,00	39,72	45,80	74,95	108,06	198,00
160		26,53		48,55	79,15	114,24	209,00
170					83,35	120,42	
180				54,05	87,55	126,60	232,14
200				59,55	91,75	138,96	255,00
220				65,05	100,15	151,32	277,86
240				70,55	108,55	163,68	300,71
250					116,95	169,86	
260				76,05	125,35	176,04	323,57

Kg

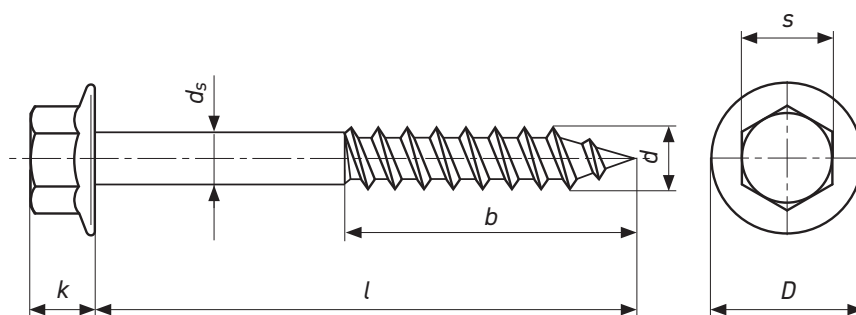
l = LENGTH

Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

HEXAGONAL FLANGED HEAD WOOD SCREWS

ISO UNI DIN



$$b_{min} = 0,6 \times l$$

MATERIAL

STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 202 - 1:2001

CLASS

4.8

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

White zinc plated according to RoHS - Other coatings on request

<i>d</i>	6,5
<i>d_s min</i>	5,1 ÷ 5,2
<i>D</i>	14,2 ÷ 15
<i>k</i>	5,5
<i>s</i>	10

<i>l</i>	<i>b</i>	 Kg
40	40	8,70
45	45	9,90
50	50	11,00
60	60	12,50
70	60 ± 1,5	14,00
80	60 ± 1,5	15,50
90	60 ± 1,5	17,00
100	60 ± 1,5	18,50
110	60 ± 1,5	20,00
120	60 ± 1,5	21,50
130	60 ± 1,5	23,00
140	60 ± 1,5	24,50
150	60 ± 1,5	26,00
160	60 ± 1,5	27,50
170	60 ± 1,5	29,00
180	60 ± 1,5	30,50

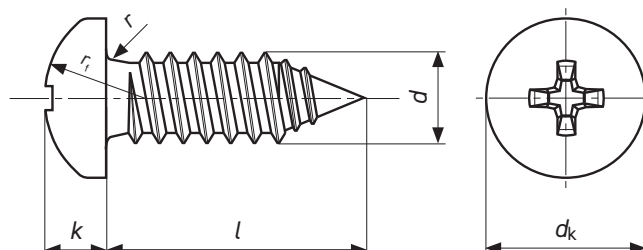
l = LENGTH

 Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

PHILLIPS PAN HEAD SELF TAPPING SCREWS

ISO 7049 UNI 6954 DIN 7981



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 2702	ACCORDING TO ISO 3506-4
CLASS	C15	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request	

	2,2	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	2	4	6	7	8	10	12	14
d_k	4,2	5,6	6,9	7,5	8,2	9,5	10,8	12,5
K_{max}	1,8	2,2	2,6	2,8	3,05	3,55	3,95	4,55
K_{min}	1,55	1,95	2,35	2,55	2,75	3,25	3,65	4,25
r	0,3	0,4	0,5	0,5	0,6	0,7	0,8	0,9
r_f	3,4	4,4	5,4	5,8	6,2	7,2	8,2	9,5
N° Phillips	1	1	2	2	2	2	3	3

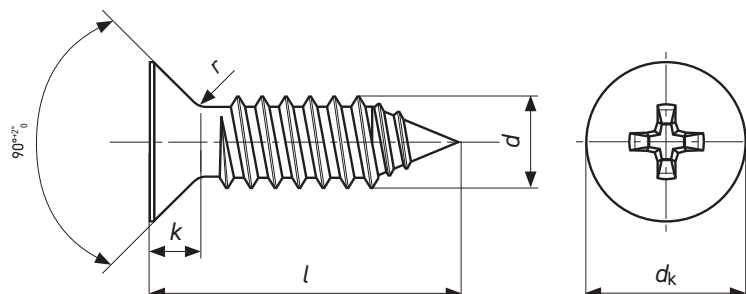
										 Kg
l = LENGTH	<i>l mm</i>	<i>l inches</i>								
	4,5	3/16"	0,16	0,33						
	6,5	1/4"	0,20	0,40	0,64	0,86	1,02			
	9,5	3/8"	0,26	0,51	0,79	1,05	1,22	1,85		
	13	1/2"	0,33	0,63	0,97	1,27	1,46	2,20	3,20	3,90
	16	5/8"	0,39	0,74	1,12	1,46	1,67	2,50	3,60	4,44
	19	3/4"		0,85	1,27	1,65	1,88	2,80	4,00	4,98
	22	7/8"		0,96	1,42	1,84	2,10	3,10	4,38	5,52
	25	1"		1,07	1,57	2,03	2,30	3,40	4,76	6,06
	32	1"1/4		1,33	1,92	2,47	2,80	4,10	5,67	7,32
	38	1"1/2		1,44	2,22	2,85	3,17	4,70	6,45	8,40
	45	1"3/4			2,57	3,30	3,65	5,40	7,30	9,66
	50	2"			2,82	3,62	3,99	5,90	7,95	10,56
	60	-						7,34	10,77	14,54
	70	-						8,63	13,38	18,24
80	-						9,91	15,99	21,94	

Weight for 1000 pcs

Available without tip and with Torx imprint according to ISO 14585
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

PHILLIPS COUNTERSUNK FLAT HEAD SELF TAPPING SCREWS

ISO 7050 UNI 6955 DIN 7982



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 2702	ACCORDING TO ISO 3506-4
CLASS	C15	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request	

d	2,2	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	2	4	6	7	8	10	12	14
dk	4,3	5,5	6,8	7,5	8,1	9,5	10,8	12,4
k	1,3	1,7	2,1	2,3	2,5	3	3,4	3,8
r max	0,8	1,1	1,4	1,5	1,6	1,9	2,1	2,4
N° Phillips	1	1	2	2	2	2	3	3

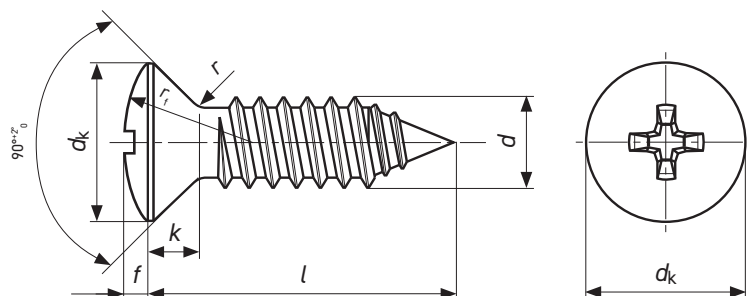
l mm		l inches							
l = LENGTH	4,5	3/16"	0,10	0,23					
	6,5	1/4"	0,14	0,28	8,39	0,47			
	9,5	3/8"	0,20	0,50	0,54	0,66	0,77	1,10	
	13	1/2"	0,27	0,48	0,72	0,88	1,02	1,45	2,11
	16	5/8"	0,33	0,58	0,87	1,07	1,23	1,75	2,49
	19	3/4"		0,69	1,02	1,26	1,44	2,05	2,87
	22	7/8"		0,80	1,17	1,45	1,65	2,35	3,26
	25	1"		0,91	1,32	1,64	1,86	2,65	3,65
	32	1 1/4"		1,16	1,85	2,31	2,35	3,35	4,56
	38	1 1/2"		1,34	2,15	2,46	2,77	3,95	5,34
	45	1 3/4"			2,32	2,99	3,26	4,65	6,25
	50	2"			2,57	3,31	3,61	5,15	6,90
	60							6,32	8,42
	70							7,34	9,76
	80							8,37	11,09

Weight for 1000 pcs

Available without tip and with hexalobular imprint according to ISO 14586
For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.
The weights indicated are approximate. **Other sizes available on request.**

PHILLIPS COUNTERSUNK RAISED HEAD SELF TAPPING SCREWS

ISO 7051 UNI 6956 DIN 7983



MATERIAL

STEEL HARDENED

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

ACCORDING TO ISO 3506-4

CLASS

C15

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request

d	2,2	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	2	4	6	7	8	10	12	14
dk	4,3	5,5	6,8	7,5	8,1	9,5	10,8	12,4
f	0,7	0,9	1,2	1,3	1,4	1,5	1,7	2
k	1,3	1,7	2,1	2,3	2,5	3	3,4	3,8
r	0,8	1,1	1,4	1,5	1,6	1,9	2,1	2,4
rf	3,8	4,6	5,4	6	6,6	8,2	9,4	11,1
N° Phillips	1	1	2	2	2	2	3	3

l mm l inches									
l = LENGTH	4,5 3/16"	0,14	0,26						
	6,5 1/4"	0,18	0,33	0,57	0,70	0,86			
	9,5 3/8"	0,24	0,44	0,72	0,89	1,07	1,53		
	13 1/2"	0,31	0,57	0,90	1,11	1,32	1,88	2,64	3,46
	16 5/8"	0,37	0,67	1,05	1,30	1,53	2,18	3,12	4,00
	19 3/4"		0,78	1,20	1,50	1,74	2,48	3,50	4,54
	22 7/8"		0,89	1,35	1,68	1,95	2,78	3,89	5,08
	25 1"		1,00	1,50	1,87	2,16	3,08	4,28	5,62
	32 1 1/4"		1,25	1,85	2,31	2,65	3,78	5,19	6,88
	38 1 1/2"		1,47	2,15	2,70	3,30	4,38	5,97	7,96
	45 1 3/4"			2,5	3,15	3,8	5,08	6,88	9,22
	50 2"			2,75	3,54	4,30	5,58	7,53	10,12

Kg

Weight for 1000 pcs

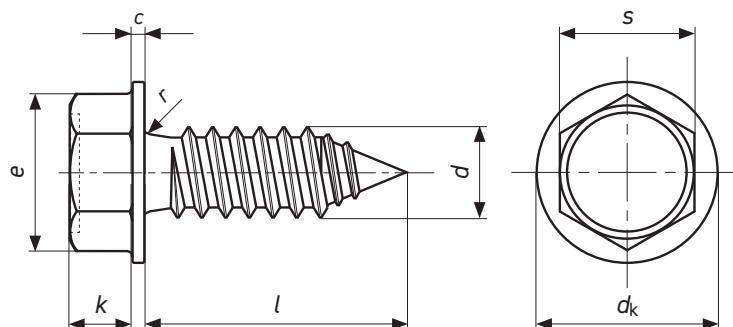
Available without tip.

For stainless steel A2 products, multiply the weight values for 1,01, A4 by 1,013.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON WASHER HEAD TAPPING SCREWS

ISO UNI DIN
- 6950 6928



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request

d	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	4	6	7	8	10	12	14
S h13 max	5	5,5	7	7	8	8	10
dk	6,5	7,21	9,18	9,73	10,61	11,08	13,86
e min	5,45	6	7,66	7,66	8,87	8,87	11,05
k min	1,62	2,42	2,42	2,92	3,12	4,15	4,95
r max	0,4	0,5	0,6	0,6	0,7	0,8	0,9
r min	0,2	0,3	0,4	0,4	0,4	0,5	0,7
C min	0,4	0,6	0,6	0,8	0,9	1	1

<i>l</i> mm		<i>l</i> inches							 Kg
<i>l</i> = LENGTH	4,5	3/16"							
	6,5	1/4"	0,43	0,93					
	9,5	3/8"	0,54	1,10	1,14	1,84	2,48		
	13	1/2"	0,66	1,28	1,35	2,09	2,80	3,64	5,44
	16	5/8"	0,77	1,44	1,54	2,31	3,10	4,01	5,96
	19	3/4"	0,87	1,59	1,73	2,50	3,39	4,40	6,49
	22	7/8"		1,74	1,93	2,74	3,68	4,78	7,01
	25	1"			2,12	2,95	3,97	5,17	7,54
	32	1"1/4					4,66	6,06	8,76
	38	1"1/2						6,82	9,82
45	1"3/4							11,10	
50	2"							12,00	

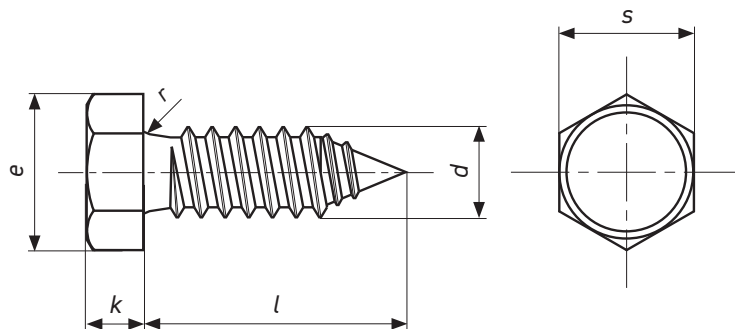
Weight for 1000 pcs

Available without tip.

The weights indicated are approximate. **Other sizes available on request.**

HEXAGON HEAD TAPPING SCREWS

ISO 1479 UNI 6949 DIN 7976



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 2702	ACCORDING TO ISO 3506-4
CLASS	C15	A2
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	White zinc plated or Yellow zinc plated according to RoHS Other coatings on request	

d	3,5	4,2	4,8	5,5	6,3	8
N ISO	6	8	10	12	14	
s max	5,5	7	8	8	10	13
s min	5,32	6,78	7,78	7,78	9,78	12,73
e min	5,96	7,59	8,71	8,71	10,95	14,26
k min	2,3	2,6	3,3	3,6	4,1	5,2
r max	0,1	0,2	0,25	0,25	0,4	

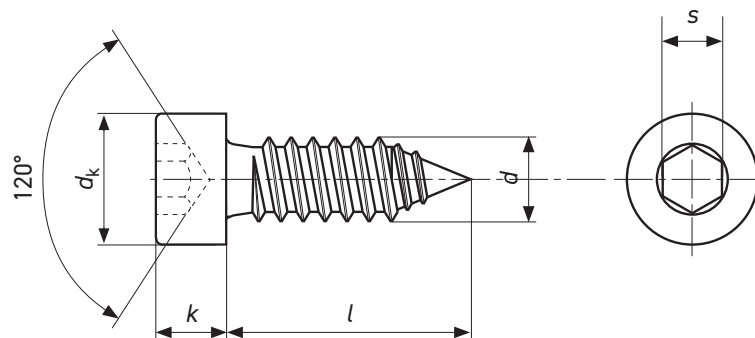
l mm							Kg
l = LENGTH	6,5	0,60					
	9,5	0,74	1,29	1,70			
	13	0,92	1,54	2,02	2,72	4,25	
	16	1,08	1,76	2,32	3,09	4,77	8,5
	19	1,23	1,97	2,61	3,48	5,30	9,40
	22		2,19	2,90	3,86	5,82	10,3
	25		2,40	3,19	4,25	6,35	11,2
	32		2,91	3,88	5,14	7,57	13,3
	38			4,46	5,9	8,63	15,1
	45			5,16	6,81	9,89	17,2
	50			5,66	7,46	10,8	18,7

Weight for 1000 pcs

The weights indicated are approximate. **Other sizes available on request.**

SOCKET HEAD CAP TAPPING SCREWS

ISO UNI DIN
- 6947 -



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request

<i>d</i>	4,2	4,8	5,5	6,3
<i>N ISO</i>	8	10	12	14
<i>d_k</i>	10	10	10	10
<i>k min</i>	5,7	5,7	5,7	5,7
<i>s</i>	5	5	5	5

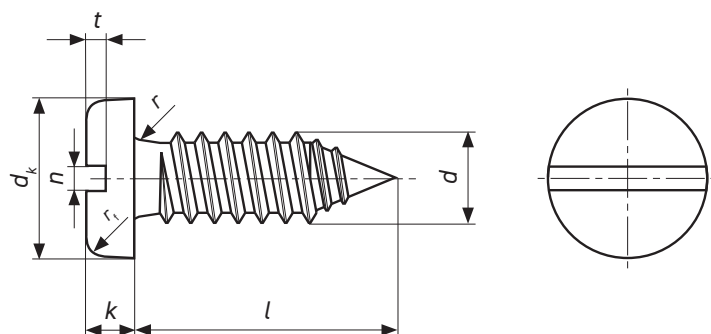
<i>l mm</i>					 Kg
13		2,85	4	5,3	
16	2,1	3,2	4,5	5,8	
19		3,9	5,1	6,4	
22		4	5,5	7	
25		4,4	6	7,6	
32		5,4	7,3	9,2	
38		6,2	8,4	10,6	
45		7,2	9,7	12,1	
50		8,0	10,6	13,2	

 Weight for 1000 pcs

The weights indicated are approximate. **Other sizes available on request.**

SLOTTED PAN HEAD TAPPING SCREWS

ISO 1481 UNI 6951 DIN 7971



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 2702	ACCORDING TO ISO 3506-4
CLASS	C15	A2
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS Other coatings on request	

d	2,2	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	2	4	6	7	8	10	12	14
dk	4,2	5,6	6,9	7,5	8,2	9,5	10,8	12,5
r max	0,3	0,4	0,5	0,5	0,6	0,7	0,8	0,9
k max	1,35	1,75	2,1	2,25	2,45	2,8	3,2	3,65
k min	1,15	1,5	1,85	2	2,15	2,5	2,85	3,3
n	0,6	0,8	1	1	1,2	1,2	1,6	1,6
rf	0,9	1	1,2	1,3	1,3	1,6	2	2,2
t min	0,55	0,75	0,95	1,05	1,15	1,35	1,55	1,8
t max	0,8	1	1,25	1,4	1,5	1,7	1,95	2,2

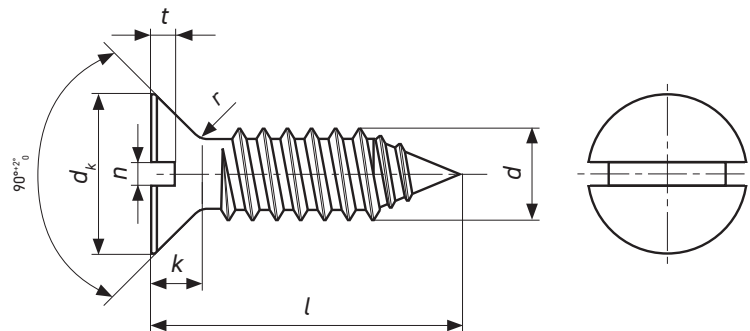
l mm l inches										Kg
l = LENGTH	4,5	3/16"	0,17	0,35						
	6,5	1/4"	0,21	0,42	0,74	0,88	1,05			
	9,5	3/8"	0,27	0,53	0,84	1,07	1,26	1,85		
	13	1/2"	0,34	0,66	1,02	1,29	1,50	2,20	2,95	4,32
	16	5/8"	0,40	0,77	1,17	1,48	1,71	2,50	3,34	4,86
	19	3/4"		0,87	1,32	1,67	1,92	2,80	3,73	5,40
	22	7/8"		0,98	1,47	1,86	2,13	3,10	4,12	5,94
	25	1"		1,09	1,62	2,05	2,34	3,40	4,51	6,48
	32	1 1/4"		1,34	1,97	2,50	2,83	4,10	5,42	7,74
	38	1 1/2"			2,27	2,87	3,25	4,70	6,20	8,82
	45	1 3/4"					3,74	5,40	7,11	10,08
	50	2"							7,76	10,98

Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

SLOTTED COUNTERSUNK HEAD TAPPING SCREWS

ISO 1482 UNI 6952 DIN 7972



MATERIAL

STEEL HARDENED

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

ACCORDING TO ISO 3506-4

CLASS

C15

A2

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS

Other coatings on request

d	2,2	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	2	4	6	7	8	10	12	14
dk	4,3	5,5	6,8	7,5	8,1	9,5	10,8	12,4
K	1,3	1,7	2,1	2,3	2,5	3	3,4	3,8
n	0,6	0,8	1	1	1,2	1,2	1,6	1,6
r max	0,8	1,1	1,4	1,5	1,6	1,9	2,1	2,4
t min	0,4	0,5	0,6	0,7	0,75	0,85	1	1,2
t max	0,6	0,75	0,95	1,05	1,15	1,35	1,5	1,75

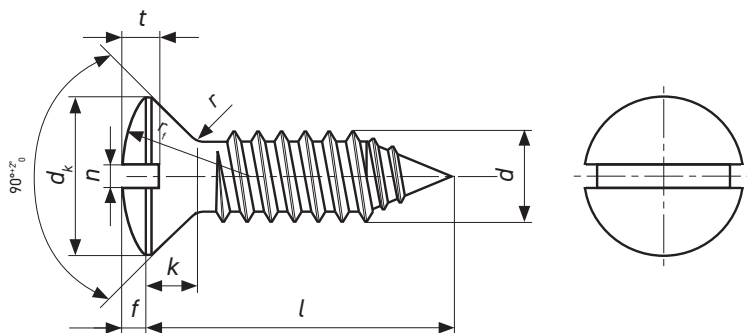
	<i>l</i> mm	<i>l</i> inches									 Kg
<i>l</i> = LENGTH	4,5	3/16	0,10								
	6,5	1/4	0,14	0,24							
	9,5	3/8	0,20	0,35	0,54	0,66	0,78	1,10			
	13	1/2	0,27	0,48	0,72	0,88	1,02	1,45	2,11	2,53	
	16	5/8	0,34	0,58	0,87	1,07	1,23	1,75	2,49	3,07	
	19	3/4		0,69	1,02	1,26	1,44	2,05	2,87	3,61	
	22	7/8		0,80	1,17	1,45	1,65	2,35	3,26	4,15	
	25	1"		0,91	1,32	1,64	1,86	2,65	3,65	4,69	
	32	1"1/4			1,67	2,08	2,35	3,35	4,56	5,95	
	38	1"1/2			1,97	2,46	2,77	3,95	5,34	7,03	
	45	1"3/4					3,26	4,65	6,25	8,29	
	50	2"							6,90	9,19	

Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

SLOTTED COUNTERSUNK RAISED HEAD TAPPING SCREWS

ISO 1483 UNI 6953 DIN 7973



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 2702	ACCORDING TO ISO 3506-4
CLASS	C15	A2
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	Plain - White zinc plated or Yellow zinc plated according to RoHS Other coatings on request	

d	2,2	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	2	4	6	7	8	10	12	14
dk	4,3	5,5	6,8	7,5	8,1	9,5	10,8	12,4
f	0,7	0,9	1,2	1,3	1,4	1,5	1,7	2
K	1,3	1,7	2,1	2,3	2,5	3	3,4	3,8
n	0,6	0,8	1	1	1,2	1,2	1,6	1,6
rf	3,8	4,6	5,4	6	6,6	8,2	9,4	11,1
t min	0,95	1,25	1,55	1,7	1,85	2,15	2,45	2,85
t max	1,15	1,5	1,9	2,05	2,25	2,6	2,95	3,45

l mm l inches										 Kg
l = LENGTH	4,5	3/16	0,14							
	6,5	1/4	0,18	0,33						
	9,5	3/8	0,24	0,44	0,72	0,89	1,07	1,88		
	13	1/2	0,31	0,57	0,90	1,11	1,32	2,18	3,12	4,00
	16	5/8	0,37	0,67	1,05	1,30	1,53	2,48	3,50	4,54
	19	3/4		0,78	1,20	1,49	1,74	2,78	3,89	5,08
	22	7/8			0,35	1,68	1,95	3,08	4,28	5,62
	25	1"			1,50	1,87	2,16	3,78	5,19	6,88
	32	1"1/2					2,65	4,38	5,97	7,96
	38	1"3/4						5,08	6,88	9,24
	45	2"								

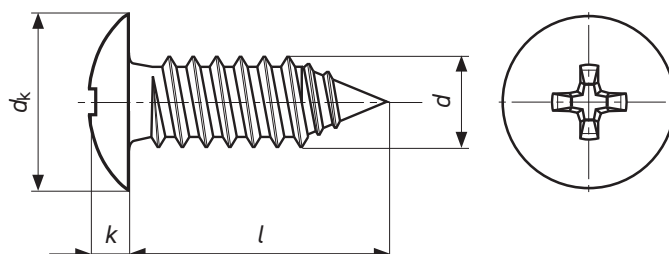
 Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

PHILLIPS HALF ROUND HEAD TAPPING SCREWS

ISO UNI DIN

- - -



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain - White zinc plated or Yellow zinc plated according to RoHS - Other coatings on request

<i>d</i>	3,5	3,9	4,2	4,8	5,5
<i>N ISO</i>	6	7	8	10	12
<i>d_k max</i>	7,5	8,6	9,5	11,4	12,5
<i>k</i>	2,1	2,3	2,5	3	3,4
<i>N° Phillips</i>	2	2	2	2	3

<i>l mm</i>		<i>l inches</i>					 Kg
<i>l = LENGTH</i>	6,5	1/4	0,68	0,91			
	9,5	3/8	0,83	1,10	1,4		
	13	1/2	1,01	1,29	1,7	2,6	3,9
	16	5/8	1,16	1,60	1,9	2,8	4,3
	19	3/4	1,31	1,70	2,1	3,1	4,6
	22	7/8	1,46	1,95	2,3	3,4	4,9
	25	1"	1,61	2,16	2,4	3,7	5,3
	32	1"1/4	1,99	2,37	2,9	4,4	6,3
	38	1"1/2	2,35	2,58	3,2	5,0	6,9
	45	1"3/4			3,6	5,7	7,8
	50	2"			3,9	6,2	8,4
	60	2"3/8			4,5	7,2	9,8
	70	2"3/4			5,2	8,1	11,3
	80	3"1/4			5,8	9,1	12,7
	90	3"5/8					14,1
	100	3"1/2			14,12		

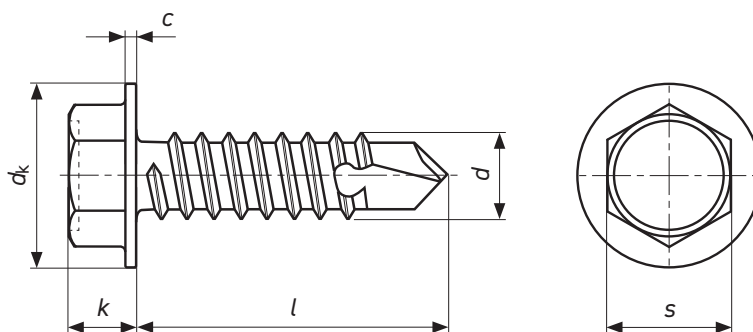
Weight for 1000 pcs

Available without tip.

The weights indicated are approximate. **Other sizes available on request.**

FLANGED HEX HEAD DRILLING SCREWS

ISO UNI DIN
15480 8117 7504 K



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 2702	ACCORDING TO ISO 3506-4
CLASS	C15	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	White zinc plated according to RoHS Other coatings on request	

<i>d</i>	3,5	3,9	4,2	4,8	5,5	6,3
<i>N ISO</i>	6	7	8	10	12	14
<i>k</i> max	3,45	3,45	4,25	4,45	5,45	6,45
<i>k</i> min	3,2	3,2	4	4,15	5,15	6,15
<i>dk</i> max	8,3	8,3	8,8	10,5	11	13,2
<i>dk</i> min	7,6	7,6	8,1	9,8	10	12,2
<i>c</i> min	0,6	0,6	0,8	0,9	1	1
<i>s</i> max = nom	5,5	5,5	7	8	8	10
<i>s</i> min	5,32	5,32	6,78	7,78	7,78	9,78
steel thickness max	2,25	2,4	3	4,4	5,25	6

<i>d</i>				3,5	3,9	4,2	4,8	5,5	6,3
	<i>l mm</i>	<i>l inches</i>	<i>thread</i>	 Kg					
<i>l</i> = LENGTH	9,5	3/8	9,5	1,20					
	13	1/2	13	1,35	1,45	1,70	2,60		
	16	5/8	16	1,45	1,60	1,85	2,90	3,60	5,80
	19	3/4	19	1,70	1,88	2,10	3,20	4,00	6,40
	22	7/8	22		2,07	2,30	3,60	4,50	7,00
	25	1"	25		2,29	2,50	3,90	4,90	7,60
	32	1"1/4	32		2,70	3,00	4,20	5,90	9,00
	38	1"1/2	38			3,5	4,60	6,80	10,10
	45	1"3/4	45				5,00	7,75	11,50
	50	2"	50				5,30	8,50	12,50
	60		60					10,00	13,7
	70		70						14,9
	80		65±5						16,3
	90		65±5						17,7
	100		65±5						19,1
	110		65±5						20,9
	120		65±5						22,7
	130		65±5						24,2
	140		65±5						25,8
	150		65±5						27,4
160		65±5						28,9	
170		65±5						30,4	
180		65±5						31,9	
190		65±5						33,4	
200		65±5						34,9	

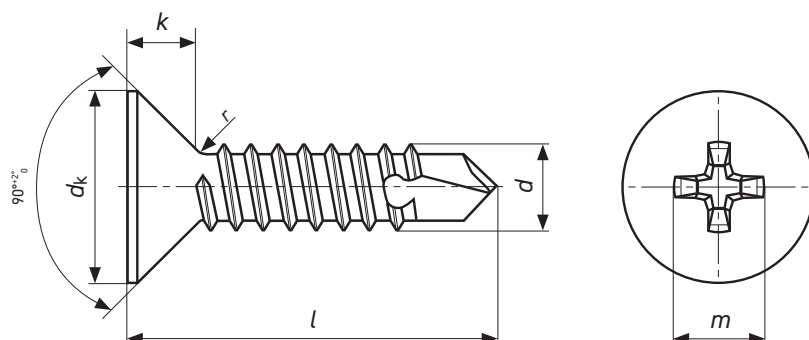
l = LENGTH

 **Weight for 1000 pcs**

The weights indicated are approximate. **Other sizes available on request.**

COUNTERSUNK HEAD DRILLING SCREWS

ISO UNI DIN
15482 8119 7504 P



MATERIAL	STEEL HARDENED	STAINLESS STEEL
MECHANICAL PROPERTIES	ACCORDING TO ISO 2702	ACCORDING TO ISO 3506-4
CLASS	C15	A2 A4
TOLLERANCES	ACCORDING TO ISO 4759-1 CAT A	ACCORDING TO ISO 4759-1 CAT A
AVAILABLE TREATMENT	White zinc plated according to RoHS Other coatings on request	

d	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	4	6	7	8	10	12	14
k max	1,7	2,35	2,45	2,6	2,8	3	3,15
dk max	5,5	7,3	7,9	8,4	9,3	10,3	11,3
dk min	1,2	6,9	7,3	8	8,9	9,9	10,9
m rif	3,2	4,4	4,5	4,6	5,2	6,6	6,8
steel thickness	1,9	2,25	2,6	3	4,4	5,25	6

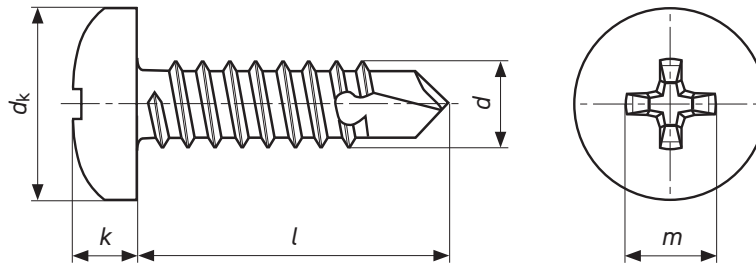
	l mm	l inches	thread							Kg
l = LENGTH	13	1/2"	13	0,48	0,72	0,9	1,10	1,50		
	16	5/8"	16	0,59	0,88	1,1	1,30	1,60	2,50	
	19	3/4"	19	0,70	1,10	1,3	1,50	1,80	2,80	3,60
	22	7/8"	22	0,90	1,20	1,46	1,70	2,40	3,30	4,15
	25	1"	25	1,00	1,40	1,65	1,90	2,70	3,70	4,70
	32	1 1/4"	32		1,80	1,9	2,50	3,40	4,70	5,95
	38	1 1/2"	38		2,00	2,15	3,00	4,00	5,40	7,10
	45	1 3/4"	45				3,60	4,70	6,30	8,40
	50	2"	50					5,20	7,00	9,30
	60		60					5,70		10,10
	70		70					6,30		11,80
	80		65±5					6,90		13,60
	90		65±5							15,30
	100		65±5							17,10

Weight for 1000 pcs

The weights indicated are approximate. Other sizes available on request.

PAN HEAD DRILLING SCREWS

ISO UNI DIN
15481 8118 7504 N



MATERIAL

STEEL HARDENED

STAINLESS STEEL

MECHANICAL PROPERTIES

ACCORDING TO ISO 2702

ACCORDING TO ISO 3506-4

CLASS

C15

A2

A4

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

White zinc plated according to RoHS - Other coatings on request

d	2,9	3,5	3,9	4,2	4,8	5,5	6,3
N ISO	4	6	7	8	10	12	14
k max	2,4	2,6	3,1	3,5	3,7	4	4,6
k min	2,15	2,35	2,8	3,2	3,4	3,7	4,3
dk max	5,6	7	7,5	8	9,5	11	12
dk min	5,3	6,64	7,14	7,64	9,14	10,57	11
m rif	3	3,9	4,2	4,4	4,9	6,4	6,9
steel thickness	1,9	2,25	2,65	3	4,4	5,25	6
 N° Phillips	1	2	2	2	2	3	3

 Kg

	l mm	l inches	thread					
	9,5	3/8"	9,5	0,54	1,05			
	13	1/2"	13	0,66	1,20	1,3	1,50	2,20
	16	5/8"	16	0,77	1,40	1,5	1,80	2,50
	19	3/4"	19	0,88	1,50	1,7	1,95	2,80
	22	7/8"	22		1,70	1,85	2,20	3,10
	25	1"	25		2,00	2,1	2,40	3,40
	32	1 1/4"	32					4,10
	38	1 1/2"	38					4,70
	45	1 3/4"	45					5,40
	50	2"	50					5,90
	60		60					6,90
	70		70					
	80		80					
	90		90					
	100		100					

l = LENGTH

 Weight for 1000 pcs

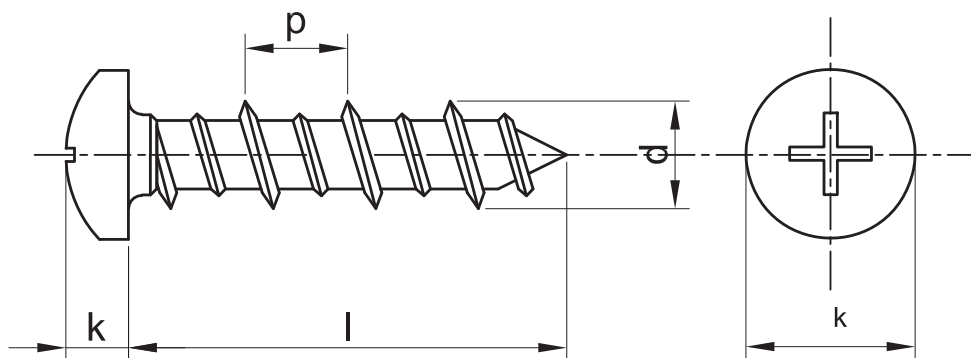
Available without tip and with Torx imprint.

For product weights in stainless steel A2 multiply the values by 1.01, A4 by 1.013.

The weights indicated are approximate. **Other sizes available on request.**

PHILLIPS PAN HEAD HI/LO SELF TAPPING SCREWS FOR PLASTIC

ISO UNI DIN
- 9707 -



MATERIAL

STEEL HARDENED

MECHANICAL PROPERTIES

ACCORDING TO UNI 7323/12

CLASS

C15

TOLLERANCES

ACCORDING TO ISO 4759-1 CAT A

AVAILABLE TREATMENT

Plain, White zinc plated according to RoHS
Other coatings on request

<i>d</i>	3	3,5	4	4,5	5	5,5	6	7
<i>k</i>	2	2,2	2,6	2,8	3,05	3,55	3,95	4,55
<i>d_k</i>	4,9	5,6	6,9	7,5	8,2	9,5	10,8	12,5
<i>pitch</i>	2,1	2,5	2,7	2,8	3	3	3,1	3,5
 <i>N° Phillips</i>	1	1	2	2	2	2	3	3

<i>l mm</i>									 Kg
l = LENGTH	8	0,23	0,43						
	10	0,28	0,51						
	12	0,33	0,60	0,90		1,35			
	14	0,37	0,67	1,05	1,36	1,57			
	16	0,40	0,74	1,12	1,46	1,67	2,50	3,60	
	18	0,45	0,80	1,20	1,56	1,78	2,65	3,80	
	20	0,50	0,91	1,29	1,67	1,90	2,82	4,21	5,25
	25	0,63	1,10	1,57	2,03	2,30	3,40	4,76	6,06
	30		1,29	1,85	2,25	2,62	3,84	5,31	5,86
	35			2,13	2,67	3,22	4,33	5,95	8,00
	40			2,41	3,05	3,68	4,95	6,80	8,84
	45			2,69	3,43	4,14	5,40	7,10	9,66
	50			3,00	3,80	4,60	5,90	7,80	10,56

Weight for 1000 pcs

The weights indicated are approximate. **Other sizes available on request.**

