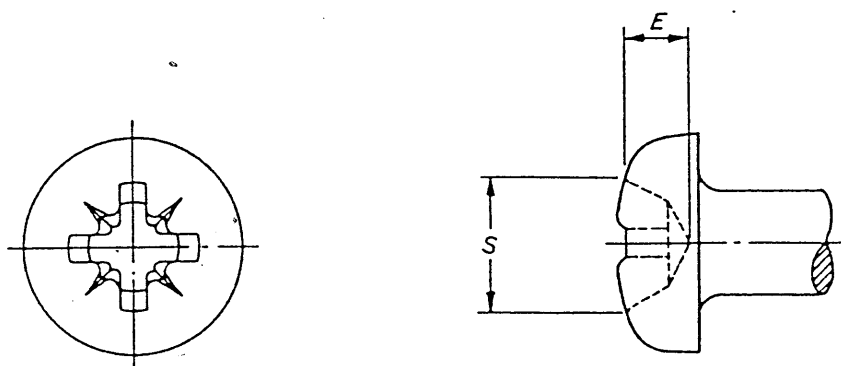


149-551 TO 565

TABLE 4A. RECESSED PAN HEAD MACHINE SCREWS.
METRIC SERIES

Enlarged view of recessed head

Dimensions in millimetres

1	2	3	4	5	6	7
Recessed heads						
<i>d</i>	<i>E</i>		Penetration*		<i>S</i>	
Nominal size and thread diameter	Depth of recess		Penetration*		Recess diameter	Recess and driver point number
	Max.	Min.	Max.	Min.	Nom.	
M2.5	1.85	1.44	1.57	1.16	2.64	1
M3	2.11	1.70	1.83	1.42	2.89	1
(M3.5)	2.34	1.88	1.93	1.47	3.91	2
M4	2.72	2.26	2.31	1.85	4.27	2
(M4.5)	2.92	2.46	2.51	2.05	4.47	2
M5	3.10	2.64	2.72	2.26	4.67	2
M6	4.06	3.60	3.51	3.05	6.76	3
M8	4.85	4.39	4.17	3.71	8.46	4
M10	6.40	5.94	5.72	5.26	9.96	4

NOTE. Nominal thread diameters shown in brackets are non-preferred.

* See Appendix A.

Typical mechanical properties and application torques for Pozidriv recess mild steel machine screws

Thread	Major dia (in)	Minor dia (in)	Tensile breaking load		Breaking torque		Tightening torque	
			lbf.min	kgf.min	lbf.ft	kgf.m	lbf.ft	kgf.m
6-32 UNC	0.138	0.0987	509	231	1.30	0.180	0.75	0.104
6-40 UNF	0.138	0.1073	589	268	1.45	0.200	0.91	0.126
8-32 UNC	0.164	0.1257	784	355	2.21	0.301	1.48	0.205
8-36 UNF	0.164	0.1299	826	374	2.52	0.348	1.65	0.228
10-24 UNC	0.190	0.1389	980	444	3.43	0.461	1.98	0.274
10-32 UNF	0.190	0.1517	1190	539	3.95	0.544	2.47	0.341
1/2-20 UNC	0.250	0.1897	1781	807	8.30	1.150	5.42	0.750
1/2-28 UNF	0.250	0.2062	2039	923	9.40	1.300	6.25	0.865
3/4-18 UNC	0.3125	0.2443	2935	1330	17.30	2.392	10.8	1.492
3/4-24 UNF	0.3125	0.2614	3247	1472	18.30	2.530	11.5	1.605
7/8-16 UNC	0.375	0.2993	4340	1985	30.00	4.150	17.7	2.445
7/8-24 UNF	0.375	0.3239	4919	2230	34.00	4.700	19.5	2.700
M3	mm 3.000	mm 2.387	447	202	0.90	0.172	0.70	0.096
M4	4.000	3.141	765	347	1.90	0.262	1.25	0.172
M5	5.000	4.019	1238	559	4.00	0.544	3.00	0.415
M6	6.000	4.773	1750	783	7.00	1.07	5.00	0.690
M8	8.000	6.455	3184	1445	16.80	2.50	11.80	1.63
M10	10.000	8.180	4750	2180	35.00	5.80	23.50	3.25

The properties

The properties shown are for steel screws produced to 25 tonf/in² (39.37 kgf/mm²) minimum tensile strength (BS 1981) and ISO metric grade 4.8 (BS 4183).

Torque values are given as a guide to control application. The information was obtained from tests with self-colour screws assembled with standard hexagon nuts and washers. Applications involving special lubricants, alternative lengths of thread engagement, surface coatings and electroplated finishes will give different values from assemblies with the normal self-colour finish.

Tightening torques for brass screws are approximately 10 per cent less than those quoted for mild steel. Values for high tensile steel fasteners ('S' quality and metric grade 8.8) at 55 tonf/in² (86.6 kgf/mm²) are approximately 75 per cent greater than those quoted for mild steel.

Tensile breaking loads for brass screws are 80 per cent of those given for mild steel. Values for high tensile steel screws are slightly greater than twice those quoted for mild steel.