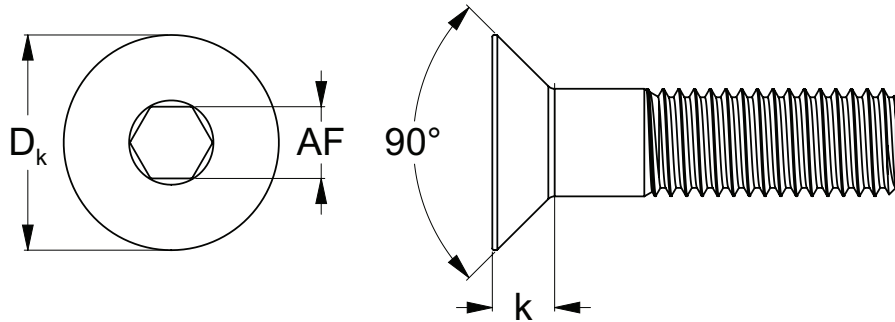




TECHNICAL

Tightening Torques for SCSO



**Socket Head Cap Screw – Flat Head (Countersunk) – Basic Dimensions & Tightening Torques
DIN 7991 – Property Class 012.9 Coarse Threads**

Size	Head Diameter	Head Height	Drive Size	UTS	Yield	Clamp Load	Plain	Zinc Plated	Zinc Flake
d	ØD _k	k	AF						
mm	mm	mm	mm	kN	kN	kN	Nm	Nm	Nm
M4	8	2.3	2.5	8.5	6.8	3.7	2.9	2.0	3.2
M5	10	2.8	3.0	13.9	11.0	6.0	5.9	4.1	6.5
M6	12	3.3	4.0	19.6	15.6	8.4	10.1	7.0	11.1
M8	16	4.4	5.0	35.7	28.4	15.4	24.6	17.2	27.1
M10	20	5.5	6.0	56.6	45.0	24.4	48.7	34.1	53.6
M12	24	6.5	8.0	82.3	65.4	35.4	85.0	59.5	93.5
M16	30	7.5	10.0	153.0	122.0	65.9	211.0	148.0	232.0
M20	36	8.5	12.0	239.0	190.0	103.0	412.0	288.0	453.0
M24	39	14.0	14.0	345.0	274.0	148.0	712.0	498.0	783.0

Notes:

1. Tightening torque values are given as a guide only and are based on first tightening of single assemblies in isolation.
2. Clamp load is calculated for 420Mpa bolt stress.
3. Nut factors (*k*) used for calculation on installation torque: Plain 0.2; Zinc Plated = 0.14; ZFS = 0.22.