



According To ISO 7379, Head Can Be Plain Or Knurled As Shown Here

Shoulder Diameter d1	6 (1)	8	10	12 (1)	16
Shoulder min.	5.960	7.951	9.951	11.941	15.941
Shoulder max.	5.990	7.987	9.987	11.984	15.984
Shoulder Diameter Tolerance	-.010 mm to -.040 mm		-.013 mm to -.049 mm		-.016 mm to -.059 mm
Shoulder Length Tolerance	+0.25 mm	+0.25 mm	+0.25 mm	+0.25 mm	+0.25 mm
Thread Size & Pitch d2	M5x0.8	M6x1	M8x1.25	M10x1.5	M12x1.75
Thread Class	5g6g	5g6g	5g6g	5g6g	5g6g
Thread Length L2	9.5	11.0	13.0	16.0	18.0
Head Diameter d3	10	13	16	18	24
Head Height max. k	4.50	5.50	7.00	9.00	11.00
Head Height min. k	4.32	5.32	6.78	7.78	9.73
Drive Size s	3	4	5	6	8
Drive Depth min. t	2.4	3.3	4.2	4.9	6.6
Tensile Strength min. psi	159500	159500	159500	159500	159500
Shear Strength psi	95700	95700	95700	95700	95700
Rockwell Hardness	C39-C44	C39-C44	C39-C44	C39-C44	C39-C44

Shoulder Diameter d1	20	24 (1)	Shoulder Bolts	Material	12.9
Shoulder min.	19.928	23.928		Finish	Furnace Black
Shoulder max.	19.980	23.980		Shoulder	Ground
Shoulder Diameter Tolerance	-.020 mm to -.072 mm		<p>Due to the undercut between the shoulder and the thread, the tightening torque has to be lowered from the normal torque for 12.9 material. The 12.9 material is to increase wear resistance on the shoulder.</p>		
Shoulder Length Tolerance	+0.25 mm	+0.25 mm			
Thread Size & Pitch d2	M16x2	M20x2.5			
Thread Class	5g6g	5g6g			
Thread Length L2	22.0	27.0			
Head Diameter d3	30	36	<p>The basic difference between ~ISO 7379 (1983) and ANSI B 18.3.3M (1986) is ANSI has a thread tolerance of 4g6g.</p>		
Head Height max. k	14.00	16.00			
Head Height min. k	13.73	15.73			
Drive Size s	10	12	<p>(1) These sizes are not included in the ISO 7379 standard, but are the accepted sizes in today's market. ISO recognizes 6.5, 13, and 25mm, but these sizes are not readily available outside of production quantities.</p>		
Drive Depth min. t	8.8	10.0			
Tensile Strength min. psi	159500	159500			
Shear Strength psi	95700	95700			
Rockwell Hardness	C39-C44	C39-C44			

FOR MORE DETAILED INFORMATION, PLEASE REFER TO COMPLETE ISO STANDARD , WHICH IS THE GOVERNING STANDARD

ISO 7379 (1983) - LFG 10/01/2016 REVISED