

Mechanical Properties Arminox Stainless Steel Reinforcement

British Standard BS 6744:2023

Property	British Standard BS 6744: 2023		
Grade	Austenitic - 1.4301, 1.4404, 1.4436 Duplex - 1.4362, 1.4462, 1.4482		
Product	Coil, Bar		
0,2 % proof strength - R_{p0,2}	≥ 500 N/mm ²		
Ultimate tensile strength - R_m	-		
Stress ratio – R_m / R_{p0,2}	≥ 1,08		
Total elongation at max. force - A_{gt}	≥ 5,0 %		
Elongation at fracture - A₅	≥ 14 %		
Elongation at fracture - A₁₀	-		
Bend test	Yes		
Cross sectional area	Nominal		
Ø5	19,6 mm ²		
Ø6	28,3 mm ²		
Ø7	38,5 mm ²		
Ø8	50,3 mm ²		
Ø10	78,5 mm ²		
Ø12	113,1 mm ²		
Ø14	153,9 mm ²		
Ø16	201,1 mm ²		
Ø20	314,2 mm ²		
Ø25	490,9 mm ²		
Ø32	804,2 mm ²		
Ø40	1256,6 mm ²		
Ø50	1963,5 mm ²		
Nominal weight per meter run	Tolerance		
	Ø5 - Ø6		+/- 9 %
	Ø7 - Ø12		+/- 6 %
	>Ø12		+/- 4,5 %
	1.4301	1.4404, 1.4436	1.4362, 1.4462, 1.4482
Ø5	0,155 kg	0,157 kg	0,153 kg
Ø6	0,224 kg	0,226 kg	0,221 kg
Ø7	0,304 kg	0,308 kg	0,300 kg
Ø8	0,397 kg	0,402 kg	0,392 kg
Ø10	0,620 kg	0,628 kg	0,612 kg



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	1.4301	1.4404, 1.4436	1.4362, 1.4462, 1.4482
Ø12	0,893 kg	0,905 kg	0,882 kg
Ø14	1,216 kg	1,231 kg	1,200 kg
Ø16	1,589 kg	1,609 kg	1,569 kg
Ø20	2,482 kg	2,514 kg	2,451 kg
Ø25	3,878 kg	3,927 kg	3,829 kg
Ø32	6,353 kg	6,434 kg	6,266 kg
Ø40	9,927 kg	10,053 kg	9,790 kg
Ø50	15,512 kg	15,708 kg	15,297 kg
Relative rib area f_R	Coil, Bar		
	1.4301 1.4404, 1.4436 1.4362, 1.4462, 1.4482		
Nominal size	Min.		
Ø5	0,035		
Ø6	0,035		
Ø7	0,040		
Ø8	0,040		
Ø10	0,040		
Ø12	0,040		
Ø14	0,056		
Ø16	0,056		
Ø20	0,056		
Ø25	0,056		
Ø32	0,056		
Ø40	0,056		
Ø50	0,056		

