

Technical Data Sheet
Hot Rolled Carbon and Low Alloy Steel Rebars
Grade B500B

Size: 8-32 mm

Delivery Standard: DIN 488, BS 4449:2005, ISO 6935-2, GOST 5781, INSO 3132

Shape:



1-Dimensional Properties

Nominal Diameter	Nominal Cross Area	1m bar weighth	12m bar weighth	Transverse rib (mm) width	Transverse rib (mm) height (min)	Longitudinal rib (mm) width	Longitudinal rib (mm) height (max)	Rib spacing
d	A _n (mm ²)	(kg/m)	w (kg)	b ₁	h ₁	b ₂	h ₂	c (mm)
8	50.3	0.367-0.423	4.408-5.072	0.8-1.6	0.52	1	1.2	4.8-6.6
10	78.5	0.585-0.647	7.022-7.762	1.0-2.0	0.65	1.3	1.5	5.5-7.5
12	113	0.844-0.932	10.123-11.189	1.2-2.4	0.78	1.5	1.8	6.1-8.3
14	154	1.15-1.27	13.79-15.25	1.4-2.8	0.91	2	2.1	7.1-9.7
16	201	1.50-1.66	18.01-19.91	1.6-3.2	1.04	2	2.4	8.2-11.0
18	254	1.90-2.10	22.80-25.20	1.8-3.6	1.17	2	2.7	9.2-12.4
20	314	2.35-2.59	28.16-31.12	2.0-4.0	1.30	2	3	10.2-13.8
22	380	2.83-3.13	33.97-37.55	2.2-4.4	1.43	2	3.3	11.2-15.2
25	491	3.70-4.00	44.35-48.05	2.5-5.0	1.63	2	3.8	12.8-17.3
28	616	4.64-5.02	55.64-60.28	2.8-5.6	1.82	2.5	4.2	14.3-19.3
32	804	6.06-6.56	72.69-78.75	3.2-6.4	2.08	3	4.5	16.3-22.1

2-Chemical Analysis

Grade	Standard	C	Si	Mn	P	S
B500B	BS 4449:2005	≤0.18-0.22	≤0.3	0.6-0.8	≤0.050	≤0.050

3-Mechanical Properties

Grade	Symbol	Yield Strength	Tensile Strength	Elongation (%)		
		ReH, N/mm ²	R _m , N/mm ²	A ₅	A ₁₀	A _{gt}
B500B	B500B	≥500	R _m /ReH ≥ 1.08	≥10	-	-

