

[illegible]

Conversion factor: $1.0 \text{ MPa} = 1.0 \text{ N/mm}^2 = 145 \text{ psi}$. Strengths are based on nominal area

BDS ISO 6933-2:2016 Weight Requirements, Nominal Area etc. (Table 2).													
Nominal bar dia., mm	6	8	10	12	14	16	20	22*	25	28	32	40	50
Nominal cross sectional area, sq.mm	28.3	50.3	78.5	113	154	201	314	380	491	616	804	1257	1964
Nominal mass per unit length	0.222	0.395	0.616	0.887	1.21	1.58	2.46	2.96	3.85	4.84	6.31	9.87	15.42
Permissible deviation, %	±8	±8	±6	±6	±5	±5	±5	±5	±4	±4	±4	±4	±4

*22mm dia. bar is not covered in BDS ISO 6933-2:2016, its properties are derived following the formulae used for other bar sizes

Actual diameter of bars are shown for informative purpose only. It is not a requirement of BDS ISO 6935-2:2016. Actual diameter is the diameter of a perfectly round plain bar having same mass per unit length.

BDS ISO 6935-2 Tensile Requirements for Common Steel Grades

Steel Grade	Yield Strength, R_{eH} , MPa		Ductility Properties		
	Min.	Max.	R_m/R_{eH} min.	Elongation, % (min.)	At R_m
B400C-R	400	--	1.15	14	7
B400C-R	400	--	1.15	14	7
B500C-R	500	--	1.15	14	7
B500C-R	500	--	1.15	14	7
B600C-R	600	--	1.15	10	7
B450C-R	450	1.25 R_{eH} (min.)	1.15	--	7.5
B400D-R	400	1.3 R_{eH} (min.)	1.25	17	8
B420D-R	420	1.3 R_{eH} (min.)	1.25	16	8
B500D-R	500	1.3 R_{eH} (min.)	1.25	13	8

Countersigned by:

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09 May 2023

Test performed by:

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Important Note: Samples as supplied to us have been tested. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that the samples are sent in a secure and sealed cover/packet/container under the signature of a competent authority. In order to avoid fraudulent fabrication of test results, this report has been printed on a security paper. It is also recommended that the test results be collected by a duly authorized person.

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