



**B500B - FRANCE**

STANDARD: NF A35-080-1:2013

PRODUCT TYPE: NF A 35-080-1 B500B (VAL500S)

DIMENSION: Ø mm 8 - 10 - 12 - 14 - 16 - 20 - 25 - 32 - 40

**CHEMICAL COMPOSITION (%)**

	C	S	P	Cu	N	Ceq	It is permitted to exceed the maximum values for carbon by 0,03 % by mass, provided that the carbon equivalent value is decreased by 0,02 % by mass
Cast analysis	0,22	0,050	0,050	0,80	0,012	0,50	
Product analysis	0,24	0,055	0,055	0,85	0,014	0,52	

**MECHANICAL PROPERTIES**

	Characteristic value	Single value
UPPER YIELD STRENGTH ReH (MPa)	≥500	≥475 <sup>(*)</sup>
R <sub>m</sub> /ReH	≥1,08	≥1,06
R <sub>e act</sub> /R <sub>e nom</sub>	≤1,30	≤1,32
PERCENTAGE TOTAL ELONGATION AT MAXIMUM FORCE Agt (%)	≥5,0	≥4,0

<sup>(\*)</sup>A test unit fulfills the requirements if the mean of individual values is ≥ 5100 MPa and no individual result is ≤475 MPa (AFCAB Procedure D3.3)

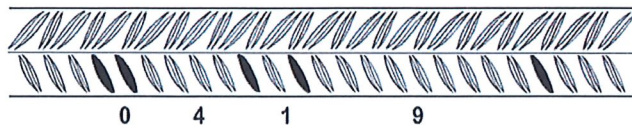
**GEOMETRY**

DEVIATION FROM NOMINAL MASS (%)	±4,5	
RELATIVE RIB AREA f <sub>R</sub>	Ø=8÷10÷12	≥0,040
	Ø>12	≥0,056

**BEND AND RE-BEND**

Angle of bend		
= 180°		
Bend mandrel		
Ø ≤ 16 mm	Ø > 16 mm	
3Ø	6Ø	
Angle of bend	Ageing	Angle of re-bend
= 90°	1 h (-0,+15 min) to 100°C ±10°C	≥ 20°
Bend mandrel		
Ø ≤ 16 mm	per 16 < Ø ≤ 25 mm	Ø > 25 mm
5Ø	8Ø	10Ø

**MARKING**



QCE

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