



BRONALDUR

Bronaldur alloys are high resistance aluminium bronzes and may belong to the compound of the ternary (CuAlFe) and quaternary (CuAlFeNi) alloys.

Chemical composition	Cu %	Fe %	Ni %	Al %	Mn %	Co %
Bronaldur 180 Ni	76,0 – 83,0	4,0-5,5	4,0-6,0	8,5-10,5	0 – 3,0	
Bronaldur 220 Ni	rest	3,0-5,0	4,0-6,0	8,5-11,5	0-1,0	
Bronaldur 260 Ni	rest	5,0-7,0	5,0-7,0	10,5-12,5	0-1,5	
Bronaldur 200	83,0 min.	3,0-5,0	0-1,5	10,0-11,5	0-0,5	-
Bronaldur 300	rest	3,0-5,0	0-0,5	12,0-13,5	0-1,5	-
Bronaldur 380	rest	4,5-6,5	-	14,0-16,0	0-3,25	0-2,5

Mechanical Properties	Bronaldur 180 Ni	Bronaldur 220 Ni	Bronaldur 260 Ni	Bronaldur 200	Bronaldur 300	Bronaldur 380
Norm	EN 1982	EN 12163	EN 12163	SMC	SMC	SMC
Alloy	CC 333 G	CW 307 G	CW 308 G			
Rm	650 N/mm ^q	680 N/mm ^q	750N/mm ^q	560N/mm ^q	690N/mm ^q	
Rp 0,2%	(280)N/mm ^q .	(480)N/mm ^q	(450)N/mm ^q .	(210)N/m ^q .	(400)N/mm ^q .	
A ₅	13% min.	10% min.	10% min.	12% min.	(1)%	
Hardness Brinell	150 min.	170 min.	190 min.	190 min.	260 min.	340 min.
Physical Properties						
Density	7,6 Kg./dm ³	7,6 Kg./dm ³	7,4 Kg./dm ³	7,5 Kg./dm ³	7,20 Kg./dm ³	7,0 Kg./dm ³
Thermal Conductivity	(40) W/m.k	(45) W/m.k	(50)W/m.k	(60)W/m.k	(40)W/m.k	(32)W/m.k