

## DIECASTING ALLOYS

Chemical composition (UNI 1774) % by weight	ZAMA 15 ZNAL4CU1/ZL5/ZL0410	ZAMA 12 ZNAL4CU3/ZL2/ZL0430	ZAMA 13 ZNAL4/ZL3/ZL0400
Al	3.8 - 4.2	3.8 - 4.2	3.8 - 4.2
Cu	0.7 - 1.1	2.7 - 3.3	≤ 1.03
Mg	0.035 - 0.06	0.035 - 0.06	0.035 - 0.06
Pb	≤ 0.003	≤ 0.003	≤ 0.003
Fe	≤ 0.020	≤ 0.020	≤ 0.020
Cd	≤ 0.003	≤ 0.003	≤ 0.003
Sn	≤ 0.001	≤ 0.001	≤ 0.001
Si	≤ 0.020	≤ 0.020	≤ 0.020
Ni	≤ 0.001	≤ 0.001	≤ 0.001
Zn	resto	resto	resto

Physical properties	ZAMA 15 ZNAL4CU1/ZL5/ZL0410	ZAMA 12 ZNAL4CU3/ZL2/ZL0430	ZAMA 13 ZNAL4/ZL3/ZL0400
Density (kg/dm <sup>3</sup> A 20° C)	6.7	6.8	6.6
Solidification range °C	380 - 386	379 - 390	381 - 387
casting temperature °C	400 - 440	400 - 440	400 - 440
Electrical conductivity 20°C % IACS	26	25	27
Coefficient of thermal expansion cm/cm x 10 <sup>-6</sup> /°C	27.4	27.8	27.4
Thermal conductivity 20°C W/m/hr/°C	108.9	104.6	113
Solidification shrinkage %	1.17	1.17	1.25

MECHANICAL PROPERTIES	ZAMA 15 ZNAL4CU1/ZL5/ZL0410	ZAMA 12 ZNAL4CU3/ZL2/ZL0430	ZAMA 13 ZNAL4/ZL3/ZL0400
Tensile strenght MPa	280 - 310	300 - 330	250 - 280
Elongation %	7	8	10
Hardness Brinnell	80 - 90	85 - 100	75 - 85

PACKAGE	NOMINAL WEIGHT	DIMENSION (mm)
INGOT	8	520 x 75 x 52
PACKING	1000	810 X 520 X 640 (on pallet)