

HIGHT ALUMINIUM ZINC ALLOYS

Chemical composition (UNI 1774) % by weight	ZAMA 8 ZNAL8CU1/ZL8/ZL0810	ILZRO 12 ZNAL11CU1/ZL12	ITL 328 ZNAL27/CU2/ZL27
Al	8.2 - 8.8	10.8-11.5	25.5-28
Cu	0.9 - 1.3	0.5-1.2	2.0-2.5
Mg	0.02 - 0.03	0.02-0.03	0.012-0.02
Pb	≤ 0.005	≤ 0.005	≤ 0.005
Fe	≤ 0.035	≤0.050	≤0.070
Cd	≤ 0.005	≤0.005	≤0.005
Sn	≤ 0.002	≤0.002	≤0.002
Si	≤ 0.035	≤0.050	≤0.070
Ni	≤ 0.001	≤0.001	≤0.001
Zn	resto	resto	resto

Physical properties	ZAMA 8 ZNAL8CU1/ZL8/ZL0810	ILZRO 12 ZNAL11CU1/ZL12	ITL 328 ZNAL27/CU2/ZL27
Density (kg/dm ³ A 20° C)	6.3	6.0	5.0
Solidification range °C	375 - 404	377-432	375-484
Sand casting temperature °C	-	460-580	540-580
Die casting temperature °C	420 - 440	465-520	540-580
Electrical conductivity 20°C %IACS	27.7	28	30
Coefficient of thermal expansion com/cm x 10 ⁻⁶ /°C	23.3	24.2	26
Thermal conductivity 20°C W/m/hr/°C	114.7	116.1	125.5
Solidification shrinkage %	1.10	1.25	1.30

CARATTERISTICHE MECCANICHE	ZAMA 8 ZNAL8CU1/ZL8/ZL0810		ILZRO 12 ZNAL11CU1/ZL12		ITL 328 ZNAL27CU2/ZL27	
	diecast	sand	diecast	sand	diecast	sand
Tensile strenght MPa	375 - 378	240 - 270	385 - 405	270 - 310	407 - 440	400 - 440
Elongation	6 - 10	1 - 2	4 - 5	3 - 4	1 - 2	3 - 6
Hardness Brinnell BHN (500kg-10mm)	100 - 106	85 - 90	95 - 115	92 - 96	110 - 120	110 - 120

PACKAGE	NOMINAL WEIGHT (Kg)	DIMENSION (mm)
INGOT	6 - 8	520 x 75 x 52
PACKING	800 - 1000	810 X 520 X 640 (on pallet)