

FREE MACHINING D.Z.R. "LEAD FREE" COMMERCIAL BRASS WIRE

(Escomatic quality lead free brass rod and wire)

Aviva Model 3 is the optimum choice for all free machining applications less than 9.53mm (3/8") diameter. Available in sizes as small as 1.60mm (1/16") diameter, this superior alloy can be supplied in straight length or coil. Aviva Model 3 is highly suited to precision Escomatic and Swiss machining operations and can be utilized for the production of electronic connector pins and other high precision parts.

In response to the RoHS initiatives to eliminate leaded brass from connector pins and associated products, Aviva Metals® is proud to announce the development of Aviva Model 3, Ruby Red Brass, Free Machining DZR (Dezincification-Resistant) "Lead Free" commercial brass that has already received patents in several European and Asian countries with patents pending in North America. Over the years Aviva Metals® have engineered a Free Machining and "true" DZR Lead Free Brass alternative, resulting in the solution that we believe is far superior to any other lead free brass being offered globally!

Aviva Model 3, Ruby Red Brass, Free Machining DZR "Lead Free" commercial brass has excelled far beyond manufacturer's expectations in numerous ways, inclusive of the fact that it is readily and easily recyclable (and it is the first true green brass) as it has been shown not to negatively contaminate leaded brasses in numerous casting tests. Aviva Model 3, Ruby Red Brass, Free Machining DZR "Lead

Free" commercial brass has excellent machinability, 90% min (when compared to C360 Leaded Brass), and has mechanical properties similar to traditional leaded free cutting brasses. It also has outstanding conductivity of 37% IACS min which is 43% higher than C360 Leaded Brass/C353 Leaded Brass. Aviva Model 3 does not contain harmful contaminants such as Silicon, Bismuth, or Arsenic. It also has excellent cold working capabilities, thread rolls very well and can be electroplated like copper. Aviva Model 3 Brass can be produced with a very low iron content, which results in a very low magnetic permeability unit of 0.99992 c.g.s. or less.



LEGISLATIONS

- California "AB SDWA 1417 1953"
 - NSF 61
- Annex G
 - RoHS





Aviva Model 3[™] Ruby Red Brass[™] Free Machining DZR "Lead Free" Commercial Brass Wire

DISTINCT ADVANTAGES OF AVIVA MODEL 3, Puly Red Bruss FREE MACHINING DZR "LEAD FREE" COMMERCIAL BRASS WIRE

- Small sizes 1.60mm (1/16") 9.53mm (3/8") in straight lengths and coils, with H8 tolerances for connector pin applications.
- 43% Higher electrical conductivity over C36000 Leaded Brass/C35300 Leaded Brass
- Excellent thread rolling characteristics
- Readily recyclable Will not contaminate Leaded Brasses
- Extended tool life due to excellent machinability
- Excellent plating characteristics
- Good bending capabilities

- No tooling change outs required or resetting of CNC machines. Use the same setting as regular leaded brass
- A true DZR Brass with less than 15% Zinc
- Very low magnetic permeability
- Rods can be supplied with chamfered ends

GENERAL TENSILE STRENGTHS STANDARDS FOR WIRE 1.60MM" (1/16") - 9.53MM (3/8")

Temper Designation		Tensile S	trength, KSI	Tensile Strength, MPa		
Code	Name	Min	Max	Min	Max	
H00	eighth-hard	43	57	295	395	
H01	quarter-hard	53	65	365	450	
H02	half-hard	66	77	455	530	
H03	three-quarter hard	76	86	525	595	
H04	hard	83	92	570	635	
H06	extra-hard	94	102	650	700	

All wire sizes, straight lengths and coils can be modified to have hardness ranges, or grain size ranges, designed to meet our customers specifications

CHEMICAL COMPOSITION

	Cu	Zn*	Pb	Те	Sn	Ni	Fe	Impurities
min	85.5	-	-	0.30	-	-	-	-
max	87.5	14.5	0.09	0.90	0.20	0.10	0.10	0.025

Aviva Model 3 contains less than 15% zinc, and therefore is a true DZR Brass, with guaranteed corrosion resistance, and will not be subjected to white rust or oxidation.

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