CDA35330 (DZR Brass)

Chemical Composition
(%max., unless shown as range or min.)

	Cu	As	Pb[1]	Zn
Min. /Max.	59.5-64.0	.02-.25	1.5-3.0	Rem.
Nominal	61.7	.13	2.5	-

(1) Pb may be reduced to 1.0% by agreement.
Note: Cu + Sum of Named Elements, 99.5% min.

Applicable Specifications No information available.

Common Fabrication Processes
No information available.

Fabrication Properties No information available.

Mechanical Properties (measured at room temperature, 68 F (20 C)

Temper	Section Size	Cold Work	Typ/Min	Temp	Tensile Strength	Yield Strength (0.5% ext. under load)	Yield Strength (0.2% offset)	Yield Strength (0.05% offset)	El	Rockwell Hardness	Vickers Hard.	Brinell Hard.	Shear Strength	Fatigue Strength*	Izod Impact Strength
	in.	%		F	ksi	ksi	ksi	ksi	%	B	CF30T	500	5003000	ksi	ksi	ft-lb
	mm.			C	MPa	MPa	MPa	MPa						MPa	MPa	J
Rod and Wire															
H02	>2	0	typ	68	40	25	-	-	35-	-	-	-	-	-	0.0
	>50			20	335	180	-	-	35-	-	-	-	-	-	0.0
O60	=<1	0	min	68	-	-	-	-	-	40-	-	-	-	-	0.0
	=<25			20	-	-	-	-	-	40-	-	-	-	-	0.0
O60	=<1	0	typ	68	40	25	-	-	25-	-	-	-	-	-	0.0
	=<25			20	345	140	-	-	25-	-	-	-	-	-	0.0
H02	1 - 2	0	max	68	-	-	-	-	-	65-	-	-	-	-	0.0
	25 - 50			20	-	-	-	-	-	65-	-	-	-	-	0.0
H02	1/2 - 1	0	max	68	-	-	-	-	-	75-	-	-	-	-	0.0
	12 - 25			20	-	-	-	-	-	75-	-	-	-	-	0.0
H02	1 - 2	0	min	68	-	-	-	-	-	40-	-	-	-	-	0.0
	25 - 50			20	-	-	-	-	-	40-	-	-	-	-	0.0
H02	1/2 - 1	0	min	68	-	-	-	-	-	40-	-	-	-	-	0.0
	12 - 25			20	-	-	-	-	-	40-	-	-	-	-	0.0
H02	=<1/2	0	min	68	-	-	-	-	-	65-	-	-	-	-	0.0
	=<12			20	-	-	-	-	-	65-	-	-	-	-	0.0
O60	=<1	0	max	68	-	-	-	-	-	70-	-	-	-	-	0.0
	=<25			20	-	-	-	-	-	70-	-	-	-	-	0.0
H02	=<1/2	0	max	68	-	-	-	-	-	85-	-	-	-	-	0.0
	=<12			20	-	-	-	-	-	85-	-	-	-	-	0.0
H02	>2	0	min	68	-	-	-	-	-	30-	-	-	-	-	0.0
	>50			20	-	-	-	-	-	30-	-	-	-	-	0.0
H02	>2	0	max	68	-	-	-	-	-	55-	-	-	-	-	0.0
	>50			20	-	-	-	-	-	55-	-	-	-	-	0.0
H02	1 - 2	0	typ	68	45	30	-	-	30-	-	-	-	-	-	0.0
	25 - 50			20	330	120	-	-	30-	-	-	-	-	-	0.0
H02	=<1/2	0	typ	68	55	40	-	-	10-	-	-	-	-	-	0.0
	=<12			20	385	290	-	-	10-	-	-	-	-	-	0.0
H02	1/2 - 1	0	typ	68	50	35	-	-	20-	-	-	-	-	-	0.0
	12 - 25			20	350	215	-	-	20-	-	-	-	-	-	0.0

*Fatigue Strength: 100 x 10^6 cycles,
unless indicated as [N] X 10^6.

Physical Properties

	US Customary	Metric
Melting Point - Liquidus	1660 F	905 C
Melting Point - Solidus	1645 F	895 C
Density	8.450 lb/in^3 at 68 F	0.0 gm/cm^3 @ 20 C
Specific Gravity	8.450	8.45
Electrical Resistivity	63.60 ohms-cmil/ft @ 68 F	10.5 microhm-cm @ 20 C
Electrical Conductivity	26 %IACS @ 68 F	0.15 MegaSiemens/cm @ 20 C
Coefficient of Thermal Expansion	12.40 $\cdot 10^{-6}$ per ^{o}F (68-572 F)	21.5 $\cdot 10^{-6}$ per ^{o}C (20-300 C)
Modulus of Elasticity in Tension	15000 ksi	103000 MPa

Tempers Most Commonly Used

	Other
R&W	H02, O60

Typical Uses

Plumbing
Plumbers' Brass Goods, Plumbing Fittings

Casting Characteristics
No casting characteristics available for this alloy.