

**MASTER  
ALLOY**
**X-BRASS01**

BRASS FOR CASTING

**GENERAL INFORMATION**
**General information**

Typology	Brass
Color	Yellow
Color shade	Rich yellow
Production process	Casting
Grain refinement level	High
Deoxidation level	Very high

**Commercial composition (%)**

CU	75.0
ZN	22.0
SI	3.0

**Melting Temperatures**

Solidus [°C]	855.0
Liquidus [°C]	920.0
Melting range [°C]	65.0

**FULL CHARACTERIZATION DATA**
**Color coordinates**

L *	a*	b*	c*	Yellow Index
88.6	1.2	14.1	14.2	

**Mechanical characteristics**

As cast hardness [HV 0.2]	160.0
Tensile strength (Rm) [Mpa]	648.0
Yield strength (Rp0.2) [MPa]	525.0
Elongation at rupture (A) [%]	20.0

**Physical characteristics**

Density [g/cm³]	8.3
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**General characteristics**

As cast grain size [µm]	350.0
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**Product applications**

Casting in closed systems  
 Casting in open systems  
 Casting without stones

**CASTING PROCESSING PARAMETERS**
**Pre-melting temperature**

Temperature [°C]

**POURING TEMPERATURES**

	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660	720	1040	1070
> 1.2 mm	460	600	1000	1020
0.5 - 1.2 mm	580	650	1020	1040

**Trees without stones**

Let the flask cool down for 5 minutes, then quench it in water.

**Stone-in-place casting trees**

Let the flask cool down for 30-45 minutes, then quench it in water.

**Pickling**

Dip in RADIAL solution (50 g/l conc. at 60°C) for 2 minutes, or in sulphuric acid (10% concentration at 50°C) for 5 minutes.