

(3) 2016 JIS 銅合金鋳物 1/4 Copper alloy cast products

JIS H5120/ 2016 March. 材質規格一覧表 Material specifications (米CDA材、開発材 **Eronz1** 除く)

名称 Formal name	2016 新素材 New alloys	特記事項		記号 Symbol (JIS former symbol)	鋳造方法	化学成分(Chemical composition)質量%,範囲表示のないものは 主成分 <sup>e)</sup> (Major elements)																				
		選択随意 Option	特許、ブランド名 Remarks			Cu	Sn	Pb	Zn	Bi	Se	Fe														
黄銅鋳物 Yellow brass cast products		RoHS ‡		CAC201 (YBsC1)	砂型Sand 金型Permanent	83.0~88.0	-	-	11.0~17.0	-	-	-														
		RoHS ‡		CAC202 (YBsC2)	遠心Centrifugal 精密Precision	65.0~70.0	-	0.5~3.0	24.0~34.0 d)	-	-	-														
		RoHS ‡		CAC203 (YBsC3)		58.0~64.0	-	0.5~3.0	30.0~41.0 d)	-	-	-														
耐脱亜鉛黄銅鋳物 Dezincification resistance brass cast products			サンエツPb 16/JIS PT.	CAC211	砂型Sand 金型Permanent	65.5~68.5	1.1~1.5	0.1~2.0	28.0~31.0 d)	-	-	-														
	鉛レス (Lead free)	RoHS ‡	クリカプラス 16/JIS PT.	CAC221	遠心Centrifugal 精密Precision	66.0~69.0	-	-	26.0~31.0 d)	0.2~1.2	-	-														
	鉛レス (Lead free)	RoHS ‡	サンエツBi 16/JIS PT.	CAC231		66.3~68.5	1.1~1.5	-	28.0~31.0 d)	0.5~0.8	-	-														
	鉛レス (Lead free)	RoHS ‡	NEXTBRASS 16/JIS PT. Licensee	CAC232		66.0~72.0	0.6~1.1	-	26.0~30.0 d)	0.5~0.8	-	-														
高力黄銅鋳物 High strength brass ingots for cast products		RoHS ‡		CAC301 (HBsC1)	砂型Sand 金型Permanent	55.0~60.0	-	-	33.0~42.0 d)	-	-	0.5~1.5														
		RoHS ‡		CAC302 (HBsC2)	遠心Centrifugal 精密Precision	55.0~60.0	-	-	30.0~42.0 d)	-	-	0.5~2.0														
		RoHS ‡		CAC303 (HBsC3)		60.0~65.0	-	-	22.0~28.0 d)	-	-	2.0~4.0														
		RoHS ‡		CAC304 (HBsC4)		60.0~65.0	-	-	22.0~28.0 d)	-	-	2.0~4.0														
青銅鋳物 Bronze cast products				CAC401 (BC1)	砂型Sand 金型Permanent	79.0~83.0	2.0~4.0	3.0~7.0	8.0~12.0	-	-	-														
		RoHS ‡		CAC402 (BC2)	遠心Centrifugal 精密Precision	86.0~90.0	7.0~9.0	-	3.0~5.0	-	-	-														
		RoHS ‡		CAC403 (BC3)		86.5~89.5	9.0~11.0	-	1.0~3.0	-	-	-														
				CAC406 (BC6)		83.0~87.0	4.0~6.0	4.0~6.0	4.0~6.0	-	-	-														
		RoHS ‡		CAC407 (BC7)		86.0~90.0	5.0~7.0	1.0~3.0	3.0~5.0	-	-	-														
		RoHS ‡		CAC408 (-)		84.0~88.0	4.0~6.0	2.0~4.0	5.0~7.0	-	-	-														
	鉛レス (Lead free)	RoHS ‡	ビワライト PT. Licensee	CAC411 (-)		90.0~96.0	3.0~5.0	-	1.0~3.0	-	-	-														
りん青銅鋳物 Phosphor bronze cast products		RoHS ‡		CAC502A (PBC2A)	砂型Sand 遠心Centrifugal 精密Precision	87.0~91.0	9.0~12.0	-	-	-	-	-														
		RoHS ‡		CAC502B (PBC3C)	金型Permanent 遠心Centrifugal	87.0~91.0	9.0~12.0	-	-	-	-	-														
		RoHS ‡		CAC503A (PBC2A)	砂型Sand 遠心Centrifugal 精密Precision	84.0~88.0	12.0~15.0	-	-	-	-	-														
		RoHS ‡		CAC503B (PBC3B)	金型Permanent 遠心Centrifugal	84.0~88.0	12.0~15.0	-	-	-	-	-														
鉛青銅鋳物 Leaded tin bronze cast				CAC602 (LBC2)	砂型Sand 金型Permanent	82.0~86.0	9.0~11.0	4.0~6.0	-	-	-	-														
				CAC603 (LBC3)	遠心Centrifugal 精密Precision	77.0~81.0	9.0~11.0	9.0~11.0	-	-	-	-														
				CAC604 (LBC4)		74.0~78.0	7.0~9.0	14.0~16.0	-	-	-	-														
				CAC605 (LBC5)		70.0~76.0	6.0~8.0	16.0~22.0	-	-	-	-														

16/JIS 新登録(New entry)  
Licensee.(製造販売実施権保有)  
PT.(特許品.Need the license agreements)  
‡ CdについてRoHS規制に合致しているか都度分析確認(Cd should be made an analysis every and each time to make sure if it is matchable in RoHS/Eu..)  
(内は旧記号を表す。(-)は旧記号はない。(-)Former name in JIS. (-)No former name

a) 許容限度(許容最大値)を示す。% max  
b) 分析対象元素。その他の残余成分の分析は、受け渡し当事者間の協定による。Indicated elements are in need of chemical analysis each time..In other residue elements,shall be agreed by the parties concerned.

(Except CDA/USA and **Eronz1** our original designs )

”以下”とします。A%未満:<A , A<:A%超える。(Mass %. % maximum except as indicated. A% under :<A , A<:A% over)

主成分 <sup>e)</sup> (Major elements)							残余成分 <sup>a)</sup> Residual elements																
Ni	P	Al	Mn	Si	S	Sb	Sn	Pb	Zn	Fe	Sb	Ni	P	Al	Se	Mn	Si	Bi	S				
-	-	-	-	-	-	-	0.1	0.5 b)	-	0.2	-	0.2	-	0.2	-	-	-	-	-				
-	-	-	-	-	-	-	1.0	-	-	0.8	-	1.0	-	0.5	-	-	-	-	-				
-	-	-	-	-	-	-	1.0	-	-	0.8	-	1.0	-	0.5	-	-	-	-	-				
-	0.05~0.1	0.01~0.1	-	-	-	0.06~0.15	-	-	-	0.2	-	0.2	-	-	-	-	0.05	-	-				
0.2~1.0	0.005~0.1	0.8~1.4	-	-	-	-	0.5	0.25 b)	-	0.5	-	-	-	-	-	-	0.3	-	-				
-	0.05~0.1	0.01~0.1	-	-	-	0.06~0.15	-	0.25 b)	-	0.2	-	0.2	-	-	-	-	0.05	-	-				
-	-	0.35~0.6	-	0.4~0.8	-	0.02~0.20	-	0.25 b)	-	0.2	-	0.2	0.03	-	-	0.2	-	-	-				
-	-	0.5~1.5	0.1~1.5	-	-	-	1.0	0.4	-	-	-	1.0	-	-	-	-	0.1	-	-				
-	-	0.5~2.0	0.1~3.5	-	-	-	1.0	0.4	-	-	-	1.0	-	-	-	-	0.1	-	-				
-	-	3.0~5.0	2.5~5.0	-	-	-	0.5	0.2	-	-	-	0.5	-	-	-	-	0.1	-	-				
-	-	5.0~7.5	2.5~5.0	-	-	-	0.2	0.2	-	-	-	0.5	-	-	-	-	0.1	-	-				
-	-	-	-	-	-	-	-	-	-	0.35	0.2	1.0	0.05 c)	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	1.0 b)	-	0.2	0.2	1.0	0.05 c)	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	1.0 b)	-	0.2	0.2	1.0	0.05 c)	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	-	-	0.3	0.2	1.0	0.05 c)	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	-	-	0.2	0.2	1.0	0.05 c)	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	-	-	0.3	0.2	1.0	0.05 c)	0.01	-	-	0.01	-	-				
0.1~1.0	-	-	-	-	0.2~0.6	-	-	0.25 b)	-	0.5	0.2	-	0.10 c)	0.01	-	-	0.01	-	-				
-	0.05~0.20	-	-	-	-	-	-	0.3	0.3	0.2	0.05	1.0	-	0.01	-	-	0.01	-	-				
-	0.15~0.50	-	-	-	-	-	-	0.3	0.3	0.2	0.05	1.0	-	0.01	-	-	0.01	-	-				
-	0.05~0.20	-	-	-	-	-	-	0.3	0.3	0.2	0.05	1.0	-	0.01	-	-	0.01	-	-				
-	0.15~0.50	-	-	-	-	-	-	0.3	0.3	0.2	0.05	1.0	-	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	-	1.0	0.3	0.3	1.0	0.1 c)	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	-	1.0	0.3	0.5	1.0	0.1 c)	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	-	1.0	0.3	0.5	1.0	0.1 c)	0.01	-	-	0.01	-	-				
-	-	-	-	-	-	-	-	-	1.0	0.3	0.5	1.0	0.1 c)	0.01	-	-	0.01	-	-				

c) 金型鋳造及び金型を用いた遠心鋳造の場合は,0.5%以下とする。For permanent mold casting and centrifugal casting with metal mold, phosphorous shall be 0.5% max.  
d) Znの含有率(%)は、分析した元素の合計を100%から差し引いたものとする。ただし、その中にはZn以外の分析しない元素が含まれる。Zn content(%) shall be determined as the balance of 100 per cent. It has other unanalyzed(unnamed) elements.  
e) “-”と記載された欄は、化学成分を規定しないため、分析しなくてよい。About indicated “-”,allowed not to analyze due to the out of stipulation of content.



(4) 2016		JIS 銅合金鋳物 2/4 Copper alloy cast products										
JIS H5120/ 2016 March.		材質規格一覧表 Material specifications (※CDA材、開発材 <b>Bronz1</b> 除く)										
名称 Formal name	2016 新素材 New alloys	特記事項 Option		記号 Symbol (JIS former symbol)	鋳造方法	化学成分(Cheical composition) 質量%, 範囲表示のないものは 主成分 <sup>a)</sup> (Major elements)						
		選択随意 Remarks	特許、ブランド名 Remarks			Cu	Sn	Pb	Zn	Bi	Se	Fe
アルミニウム青銅鋳物 Aluminium bronze cast products		RoHS		CAC701 (A0BC1)	砂型Sand 金型Permanent	85.0~90.0	-	-	-	-	-	1.0~3.0
		RoHS		CAC702 (A0BC2)	遠心Centrifugal 精密Precision	80.0~88.0	-	-	-	-	-	2.5~5.0
		RoHS		CAC703 (A0BC3)		78.0~85.0	-	-	-	-	-	3.0~6.0
		RoHS		CAC704 (A0BC4)		71.0~84.0	-	-	-	-	-	2.0~5.0
シルズン青銅鋳物 Silzin bronze cast products	鉛レス (Lead free)	RoHS		CAC801 (SzBC1)	砂型Sand 金型Permanent	84.0~88.0	-	-	9.0~11.0	-	-	-
	低鉛 (Low lead)	RoHS		CAC802 (SzBC2)	遠心Centrifugal 精密Precision	78.5~82.5	-	-	14.0~16.0	-	-	-
	鉛レス (Lead free)	RoHS		CAC803 (SzBC3)		80.0~84.0	-	-	13.0~15.0	-	-	-
	鉛レス (Lead free)	RoHS	PT.Licensee Ecobrass	CAC804 (-)		74.0~78.0	-	-	18.0~22.5	-	-	-
ビスマス青銅鋳物 Bismuth bronze cast products	鉛レス (Lead free)	RoHS	PT.	CAC901 (-)	砂型Sand 金型Permanent	86.0~90.6	4.0~6.0	-	4.0~8.0	0.4<~1.0	-	-
	鉛レス (Lead free)	RoHS		CAC902 (-)	遠心Centrifugal 精密Precision	84.5~90.0	4.0~6.0	-	4.0~8.0	1.0<~2.5	-	-
	鉛レス (Lead free)	RoHS		CAC903 (-)	金型Permanent 遠心Centrifugal	83.5~88.5	4.0~6.0	-	4.0~8.0	2.5<~3.5	-	-
	鉛レス (Lead free)	RoHS	PT.Licensee クリカブロンズ	CAC904 (-)	砂型Sand 金型Permanent	82.5~87.5	3.0~5.0	-	6.0~9.0	1.0~2.0	-	-
	鉛レス (Lead free)	RoHS	PT.Licensee クリカLN	CAC905 (-)	遠心Centrifugal 精密Precision	80.1~85.1	1.5~3.0	-	12.0~17.0	0.4~0.9	-	-
	鉛レス (Lead free)	RoHS	LF5A <b>Bronz1</b> Joyalloy	CAC906 (-) ☆		77.5~83.0	2.0~3.0	-	14.0~17.0	0.9<~1.5	-	-
	鉛レス (Lead free)	RoHS	<b>Bronz1</b> Joyalloy PT.on file	LF5A2 JIS規格外品 Out of JIS	砂型Sand	80.0~82.0	0.8~1.5	-	15.5~18.5	0.4~1.0	-	-
	鉛レス (Lead free)	RoHS	PT.キーパロイ セーフアロイ	CAC911 (-)	砂型Sand 金型Permanent	83.0~90.6	3.5~6.0	-	4.0~9.0	0.8~2.5	0.1~0.5	-
ビスマスセレン青銅鋳物 Bismuth selenium bronze cast products	鉛レス (Lead free)	RoHS	Keepalloy /Safealloy	CAC912 (-)	遠心Centrifugal 精密Precision	83.3~90.4	2.5~5.5	-	5.0~9.0	0.8~1.5	0.1~0.5	-

16/JIS 新登録(New entry)  
Licensee. (製造販売実施権保有)  
PT. (特許品. Need the license agreements)  
‡ Cd(ついでRoHS規制に合致しているか都度分析確認 (Cd should be made an analysis every and each time to make sure if it is matchable in RoHS/Eu..))  
( )内は旧記号を表す。(-)は旧記号はない。( )Former name in JIS . (-)No former name

RoHS (Pbのみについてローズ対応のもの。/2015 3月現在 Matching RoHS/Eu in Pb.As of Mar.2015)

a) 許容限度(許容最大値)を示す。分析対象元素[注b参照]以外の成分の分析は、注文者の要求がある場合、または製造業者の選定によって行う。  
Show a permissible maximum limit. The chemical analysis other than element of analysis(See note b) should be done when be demonded from a purchaser or and in case of a choce of manufacturer.

b) 分析対象元素 Element covered by analysis.

(Except CDA/USA and <b>Bronz1</b> our original designs )																				
”以下”とします。 A%未満:<A , A<:A%超える。 (Mass % . % maximum except as indicated. A% under :<A , A<:A% over)																				
主成分 <sup>a)</sup> (Major elements)							残余成分 <sup>a,b)</sup> Residual elements													
Ni	P	Al	Mn	Si	S	Sb	Sn	Pb	Zn	Fe	Sb	Ni	P	Al	Se	Mn	Si	Bi	S	
0.1~1.0	-	8.0~10.0	0.1~1.0	-	-	-	0.1	0.1	0.5	-	-	-	-	-	-	-	-	-	-	-
1.0~3.0	-	8.0~10.5	0.1~1.5	-	-	-	0.1	0.1	0.5	-	-	-	-	-	-	-	-	-	-	-
3.0~6.0	-	8.5~10.5	0.1~1.5	-	-	-	0.1	0.1	0.5	-	-	-	-	-	-	-	-	-	-	-
1.0~4.0	-	6.0~9.0	7.0~15.0	-	-	-	0.1	0.1	0.5	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	3.5~4.5	-	-	-	0.1	-	-	-	-	-	0.5	-	-	-	-	-	-
-	-	-	-	4.0~5.0	-	-	-	0.3	-	-	-	-	-	0.3	-	-	-	-	-	-
-	-	-	-	3.2~4.2	-	-	-	0.2	-	0.3	-	-	-	0.3	-	0.2	-	-	-	-
-	0.05~0.2	-	-	2.7~3.4	-	-	0.6	0.25 b)	-	0.2	0.10	0.2	-	-	0.10	0.1	-	0.20	-	-
-	-	-	-	-	-	-	-	0.25 b)	-	0.3	0.3	1.0	0.05 c)	0.01	0.10>b)	-	0.01	-	0.08	-
-	-	-	-	-	-	-	-	0.25 b)	-	0.3	0.3	1.0	0.05 c)	0.01	0.10>b)	-	0.01	-	0.08	-
-	-	-	-	-	-	-	-	0.25 b)	-	0.3	0.3	1.0	0.5	0.01	0.10>b)	-	0.01	-	0.08	-
1.5~2.5	-	-	-	-	-	-	-	0.25 b)	-	0.3	0.3	-	0.05 c)	0.01	0.10>b)	-	0.01	-	0.08	-
-	-	-	-	-	-	-	-	0.25 b)	-	0.3	0.05>	0.5	0.05 c)	0.01	0.10>b)	-	0.01	-	-	-
-	-	-	-	-	-	-	-	0.25 b)	-	0.3	0.05>	0.2	0.05 c)	0.01	0.10>b)	-	0.01	-	-	-
-	-	-	-	-	-	-	-	0.25	-	0.3	0.2	0.2	0.05	0.01	-	-	0.01	-	-	-
-	-	-	-	-	-	-	-	0.25 b)	-	0.3	0.2	1.0	0.1>c)	0.01	-	-	0.01	-	0.08	-
0.2~1.0	0.1~0.25	-	-	-	-	-	-	0.25 b)	-	0.3	0.2	-	-	0.01	-	-	0.01	-	0.08	-

c) 金型鋳造及び金型を用いた遠心鋳造の場合は、0.5%以下とする。For parmanent mold casting and centrifugal casting with metal mold, phosphorous shall be 0.5% max.

d) Znの含有率(%)は、分析した元素の合計を100%から差し引いたものとする。ただし、その中にはZn以外の分析しない元素が含まれる。Zn content(%) shall be determined as the balance of 100 per cent. It has other unanalyzed(unnamed) elements.

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(5) 2016 JIS 銅合金鋳物 3/4 Copper alloy cast products									
JIS H5120/ 2016 March.			機械的性質 Mechanical properties						
名称 Formal name	記号 Symbol (JIS former symbol)	★分類記号 Classification mark	試験片 Test specimens	引張試験Tensile test		硬さ試験Hardness test		参考(Information only)	
				引張強さ Tensile strength N/mm <sup>2</sup>	伸び Elongation %	ブリネル硬さ Brinell hardness HBW		引張試験 0.2%耐力 Yield strength 0.2% N/mm <sup>2</sup>	硬さ試験 Brinell hardness HBW
黄銅鋳物 Yellow brass cast products	CAC201 (YBsC1)	-	B号	145min	25min	-	-	-	-
	CAC202 (YBsC2)	-		195min	20min	-	-	-	-
	CAC203 (YBsC3)	-		245min	20min	-	-	-	-
耐脱亜鉛黄銅鋳物 Dezincification resistance brass cast products	CAC211	R	A号	195min	15min	-	-	-	-
	CAC221	K	B号	215min	20min	-	-	-	-
	CAC231	H	A号	195min	15min	-	-	-	-
	CAC232 <i>Bronz1</i>	J		195min	15min	-	-	-	-
高力黄銅鋳物 High strength brass cast products	CAC301 (HBsC1)	-	B号	430min	20min	-	-	140min	90min(10/1000)
	CAC302 (HBsC2)	-		490min	18min	-	-	175min	100min(10/1000)
	CAC303 (HBsC3)	-		635min	15min	165min(10/3000)	-	305min	-
	CAC304 (HBsC4)	-		755min	12min	200min(10/3000)	-	410min	-
青銅鋳物 Bronze cast products	CAC401 (BC1)	-	A号	165min	15min	-	-	-	-
	CAC402 (BC2)			245min	20min	-	-	-	-
	CAC403 (BC3)			245min	15min	-	-	-	-
	CAC406 (BC6)	P		195min	15min	-	-	90min	60min(10/1000)
	CAC407 (BC7)	-		215min	18min	-	-	-	-
	CAC408 (-)	-		195min	15min	-	-	-	-
	CAC411 (-)	I		195min	15min	-	-	100min	-
りん青銅鋳物 Phosphor bronze cast products	CAC502A (PBC2A)	-	A号	195min	5min	60min(10/1000)	-	120min	-
	CAC502B (PBC3C)	-	E号	295min	5min	80min(10/1000)	-	145min	-
	CAC503A (PBC2A)	-	A号	195min	1min	80min(10/1000)	-	135min	-
	CAC503B (PBC3B)	-	E号	265min	3min	90min(10/1000)	-	145min	-
鉛青銅鋳物 Leaded tin bronze cast products	CAC602 (LBC2)	-	A号	195min	10min	65min(10/500)	-	100min	-
	CAC603 (LBC3)	-		175min	7min	60min(10/500)	-	80min	-
	CAC604 (LBC4)	-		165min	5min	55min(10/500)	-	80min	-
	CAC605 (LBC5)	-		145min	5min	45min(10/500)	-	60min	-

( )内は旧記号を表す。( - )は旧記号はない。( )Former name in JIS . (-)No former name

★分類記号について(参考): 鋳造品のリサイクルを助けるため、分類記号が検討された。検討結果として、受け渡し当事者間の協定にもとづいて表示してもよいことになった。Re: Classification mark(Information only) To support the recycle of casting products, the classification mark on some materials have been considered in JIS committee. In the finding, those marks have been agreed to indicate and or write on cast products under the contract by the parties concerned.

物理的性質と二次加工データ** Physical properties and Fabrication practices					相当材 Nearest applicable		参考 Reference	
比重 Specific gravity	導電率 Electrical conductivity IACS % @20°C	縦弾性係数 Kgf/mm <sup>2</sup> Modulus of elasticity	半田付け Soldering	被削性 Machinability	USA	EN	用途例 <sup>a)</sup> Typical uses	
					ASTM	BS		
					SAE	DIN		
						SCB6 CuZn15As(CC760S)	フランジ類、電気部品、装飾用品など Flanges, Electrical components, dressings etc.	
8.45	19.5	8,400	優 excellent	80	C85400 (41)	CuZn33Pb2 (CC750S)	電気部品、計器部品、一般機械部品など Electrical components, Instrument parts, General machinery parts etc.	
8.40	22	9,840	良 good	80	C85700	CuZn39Pb1Al (CC754S)	給排水金具、電気部品、建築金具、一般機械部品、日用品など Plumbing fittings, Electrical components, Architectural hardwares etc.	
							給水用具・給水管用各種部品など Water supply devices, Fittings for water supply pipe etc.	
							給水用具・給水管用各種部品など Water supply devices, Fittings for water supply pipe etc.	
							給水用具・給水管用各種部品など Water supply devices, Fittings for water supply pipe etc.	
8.30	16.8	11,240	優 excellent	70	C89720		給水用具・給水管用各種部品など Water supply devices, Fittings for water supply pipe etc.	
8.3	22	10,540	可 Fair	26	C86500 (43)	CuZn35Mn2Al1Fe1 (CC765S)	船用プロペラー、弁座、弁棒、軸受保持器、アーム、ギアなど Marine propellers, Valve seats, Valve stems, Bearing retainers, Arms, Gears etc.	
8.32	19	9,840	可 Fair	65	C86400	CuZn34Mn3Al2Fe1 (CC764S)	船用プロペラー、軸受、弁座、弁棒、軸受保持器、シリンダなど Marine propellers, Bearings, Valve seats, Valve stems, Bearing retainers, Cylinders etc.	
7.85	7.5	10,540	劣 poor	30	C86200 (430A)	CuZn25Al5MnFe3 (CC762S)	低速高荷重用摺動部品、大形バルブ、ステム、ウォームギアなど Low-speed and heavy-duty sliding parts, Large valves, stems, worm gears etc.	
7.84	8.0	10,000	劣 poor	8	C86300 (430B)		低速高荷重用摺動部品、橋梁支承板、ナット、ウォームギア、耐摩耗版など Low-speed and heavy-duty sliding parts, Bridge bearing plates, nuts, Worm gears, Wear resistance plates etc.	
8.7	16.4	9,150	優 excellent	90	C84400	LG1 CuSn3Zn8Pb5(CC490K)	軸受、銘板、一般機械部品など Bearings, Name plates, General machinery parts etc.	
8.81	12	9,840	優 excellent	30	C90300 (620)		軸受、ポンプ部品、バルブ、歯車、船用丸窓、電動機器部品など Bearings, Pumps & related parts, water supply devices, Valves, Gears, Marine round windows etc.	
8.73	11	10,540	優 excellent	30	C90500 (62)	G1 CuSn10Zn	軸受、ポンプ部品、バルブ、歯車、船用丸窓、一般機械部品など Bearings, Pumps & related parts, water supply devices, Valves, Gears, Marine round windows etc.	
8.83	15	9,500	優 excellent	84	C83600 (40)	LG2 CuSn5Zn5Pb5(CC491K)	バルブ、ポンプ部品、給水用具、水道用資機材、軸受、一般機械部品など Valves, Pumps & related parts, Parts for water supply devices and plumbing, General machinery parts etc.	
8.65	14.3	9,840	優 excellent	42	C92200 (622)	LG4	バルブ、ポンプ部品、給水用具、水道用資機材、軸受、一般機械部品など Valves, Pumps & related parts, Parts for water supply devices and plumbing, General machinery parts etc.	
							バルブ、ポンプ部品、給水用具、水道用資機材、軸受、一般機械部品など Valves, Pumps & related parts, Parts for water supply devices and plumbing, General machinery parts etc.	
8.69				75	C83470		給水用具・給水管用各種部品、一般機械部品など Parts for water supply devices and plumbing, General machinery parts etc.	
							中高速・高荷重用軸受、シリンダ、バルブなど Bearings for intermediate and high speed with heavy-duty, cylinders, valves etc.	
8.78	9.6	10,540	優 excellent	20	C90700 (65)	PB4 CuSn10(CC480K)	歯車、ウォームギア、軸受け、羽根車、一般機械部品など Gears, Worm gears, Bearings, Impellers, General machinery parts etc.	
							摺動部品、油圧シリンダ、スリーブ、歯車、製紙用ロールなど Sliding parts, Hydraulic cylinders, Sleeves, Gears, Rolles for paper making etc.	
							中高速・高荷重用軸受、シリンダ、バルブなど Bearings for intermediate and high speed with heavy-duty, cylinders, valves etc.	
8.95	10	7,740	良 good	80	C93700 (64)	LB2 CuSn10Pb10(CC495K)	中高速・高荷重用軸受、大型エンジン用軸受 Bearings for intermediate and high speed with heavy-duty, Bearings for large engine etc.	
9.25	11.5	7,400	良 good	80	C93800 (67)	LB1 CuSn7Pb15(CC496K)	中高速・高荷重用軸受け、車両用軸受けなど Bearings for intermediate and high speed with heavy-duty, Bearings for vehicle etc.	
9.4	10	7,400	良 good	80	C94500	LB5 CuSn5Pb20(CC497K)	中高速・高荷重用軸受、エンジン用軸受など Bearings for intermediate and high speed with heavy-duty, Bearing for engine etc.	

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<sup>a)</sup> 給水用具・給水管部品とは、給水管、止水栓及び給水栓における配管部品、バルブ、コックなどを指す。水道用資機材とは、 上水道・工業用水道のための取水、浄水及び配水の施設における配管部品、バルブ、ポンプなどを指す。

"Water supply devices, Fittings for water supply pipe etc." means piping parts on water supply-pipes and stop valves. And also mean valves, cocks etc. "Facilities concerned" means parts on a pipe which is used at the facilities like water take, the water purification and water supply. And mean valves and pumps attached them.





(6) 2016 JIS 銅合金鋳物 4/4 Copper alloy cast products

名称 Formal name		記号 Symbol (JIS former symbol)	★分類記号 Classification mark	試験片 Test specimens	引張試験 Tensile test 引張強さ Tensile strength N/mm <sup>2</sup>	伸び Elongation %	硬さ試験 Hardness test ブリネル硬さ Brinell hardness HBW	参考 (Information only) 引張試験 Yield strength 0.2% N/mm <sup>2</sup>		硬さ試験 Brinell hardness HBW
アルミニウム青銅鋳物 Aluminium bronze cast products	CAC701 (A0BC1)	—	F号	F号	440min	25min	80min(10/1000)	—	—	
	CAC702 (A0BC2)	—			490min	20min	120min(10/1000)	—	—	
	CAC703 (A0BC3)	—			590min	15min	150min(10/3000)	245min	—	
	CAC704 (A0BC4)	—			590min	15min	160min(10/3000)	270min	—	
シルジン青銅鋳物 Silzin bronze cast products	CAC801 (SzBC1)	—	A号	A号	345min	25min	—	—	—	
	CAC802 (SzBC2)	—			440min	12min	—	—	—	
	CAC803 (SzBC3)	—			390min	20min	—	—	—	
	CAC804 (—)	E			300min	15min	—	150min	—	
ビスマス青銅鋳物 Bismuth bronze cast products	CAC901 (—)	—	A号	A号	215min	18min	—	90min	—	
	CAC902 (—)	—			195min	15min	—	90min	60min(10/1000)	
	CAC903B (—)	—	B	E号	215min	15min	—	—	—	
	CAC904 (—)	—			195min	15min	—	90min	60min(10/1000)	
	CAC905 (—)	—	A号	A号	195min	15min	—	—	—	
	CAC906 (—) <i>Bronz1</i>	—			195min	15min	—	—	—	
LF5A2 <i>Bronz1</i> JIS規格外品 Out of JIS	(B)	(A号)	(A号)	(165min)	(15min)	—	—	—		
ビスマスセレン青銅鋳物 Bismuth selenium bronze cast	CAC911 (—)	—	S	A号	195min	15min	—	90min	60min(10/1000)	
	CAC912 (—)	—			195min	15min	—	100min	—	

( )内は旧記号を表す。(—)は旧記号はない。( )Former name in JIS. (—)No former name

★分類記号について(参考): 鋳造品のリサイクルを助けるため、JIS標準化委員会で分類記号が検討された。検討結果として、受け渡し当事者間の協定にもとづいて表示してもよいことになった。

Re: Classification mark (Information only)

To support the recycle of casting products, the classification mark on some materials have been considered in JIS committee. In the finding, those marks have been agreed to indicate and or write on cast products under the contract by the parties concerned.

TP 形状及び 採取位置 The test bar coupon forms and Picking location.

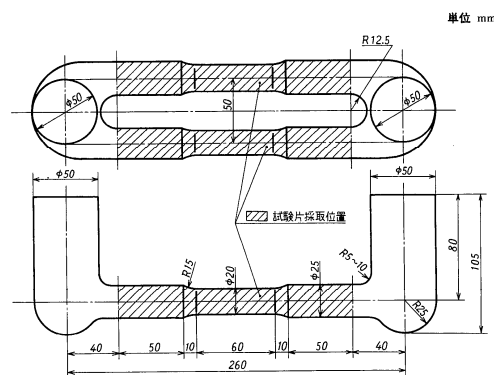


図1-A号供試材の形状、寸法及び試験片の採取位置

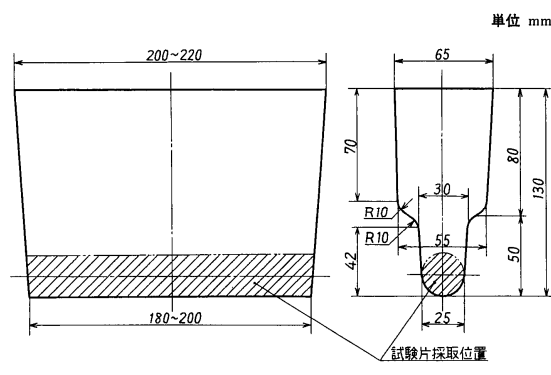


図2-B号供試材の形状、寸法及び試験片の採取位置

物理的性質と二次加工データ* Physical properties and Fabrication practices					相当材 Nearest applicable		参考 Reference
比重 Specific gravity	導電率 Electrical conductivity IACS % @20°C	縦弾性係数 Kgf/mm <sup>2</sup> Modulus of elasticity	半田付け Soldering	被削性 Machinability	USA	EN	用途例 <sup>a)</sup> Typical uses
					ASTM	BS	
					SAE	DIN	
7.64	29.1	10,540	良 good	60	C95200	AB1 CuAl10Fe2(CC331G)	耐酸ポンプ、軸受、歯車、バルブシート、プランジャ、製紙用ロール など Pumps with acid-proof, Bearings, Gears, Valve seats, Plungers, Rolls for paper making machine etc.
7.45	13	10,900	良 good	60	C95400 C95400	CuAl10Ni3Fe2 (CC332G)	船用小型プロペラ、軸受、歯車、バルブシート、羽根車、ボルト、ナットなど Marine small propellers, Bearings, Gears, Valve seats, Impellers, Bolts, Nuts etc.
7.64	7.1	11,600	良 good	50	C95800	AB2 CuAl10Fe5Ni5 (CC333G)	船用プロペラ、羽根車、バルブ、歯車、ポンプ部品、化学工業用機器部品など Marine propellers, Impellers, Valve seats, Parts for pump, Parts for chemical industry devices etc.
7.53	3.1	12,660	良 good	50	C95700		船用プロペラ、軸受、歯車、化学用機器部品など Marine propellers, Bearings, Gears, Parts for chemical industry devices etc.
							船用機装品、軸受、歯車など Marine outfits, Bearings, Gears etc.
8.3	6.7	10,800	不可 Not recommended	50	C87500 C87500		船用機装品、軸受、歯車、ボートプロペラなど Marine outfits, Bearings, Gears, Propellers for boat etc.
8.3	6.7	10,830	不可 Not recommended	50	C87400 C87400	CuZn16Si4 (CC761S)	船用機装品、軸受、歯車、など Marine outfits, Bearings, Gears etc.
8.3	8	10,690	優 excellent	70	C87850		給水用具・給水管用各種部品、軸受、歯車など Water supply tools and Various parts for water supply pipes, Bearings, Gears etc.
							給水用具・給水管用各種部品、水道資機材、バルブ、継手など Water supply tools and Various parts for devices and plumbing, Valves, Fittings etc.
8.65	16.8	9,140	優 excellent	80	C89844		給水用具・給水管用各種部品、水道資機材、バルブ、継手など Water supply tools and Various parts for devices and plumbing, Valves, Fittings etc.
8.80	16.8	9,140	優 excellent	85	C89844		給水用具・給水管用各種部品、水道資機材など Water supply tools and Various parts for devices and plumbing, etc.
8.70	14.6	10,500	優 excellent	76	C89845		給水用具・給水管用各種部品、水道資機材、バルブ、継手など Water supply tools and Various parts for devices and plumbing, Valves, Fittings etc.
8.68			優 excellent	70			給水用具・給水管用各種部品、バルブ、継手など Water supply tools and Various parts for plumbing, Valves, Fittings etc.
8.63	12		優 excellent	80	C89842		給水用具・給水管用各種部品、バルブ、継手など Water supply tools and Various parts for plumbing, Valves, Fittings etc.
8.71	18.5		優 excellent	80			給水用具・給水管用各種部品、バルブ、継手など Water supply tools and Various parts for plumbing, Valves, Fittings etc.
8.7	17		優 excellent	75			給水用具・給水管用各種部品、水道資機材、バルブ、継手など Water supply tools and Various parts for devices and plumbing, Valves, Fittings etc.
							給水用具・給水管用各種部品、水道資機材、蒸気用器具部品など Water supply tools and Various parts for devices and plumbing, Parts for steam device.

\*\* 米 CDAによる 相当材のデータまたは 開発者(社)のデータにもとづく。

By CDA(U.S.A) data in the nearest applicable material. Or by material developers

<sup>a)</sup> 給水用具・給水管部品とは、給水管、止水栓及び給水栓における配管部品、バルブ、コックなどを指す。水道用資機材とは、上水道・工業用水道のための取水、浄水及び配水の施設における配管部品、バルブ、ポンプなどを指す。

"Water supply devices, Fittings for water supply pipe etc." means piping parts on water supply-pipes and stop valves. And also means valves, cocks etc. "Facilities concerned" means parts on a pipe which is used at the facilities like water take, the water purification and water supply. And means valves and pumps attached them.

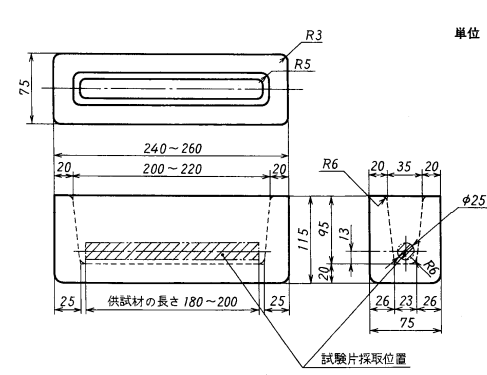


図3-E号供試材鋳造用金型の形状、寸法及び試験片の採取位置

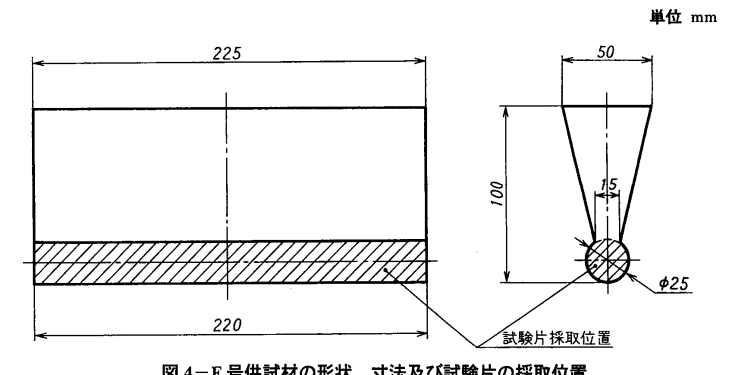


図4-F号供試材の形状、寸法及び試験片の採取位置