#### **DESCRIPTION**

CZ135 is a high tensile brass which is alloyed with aluminium, manganese and silicon etc. By alloying brass with strength-increasing elements, you get an alloy that is almost as hard as aluminium bronze, but considerably easier to process. The material also has good corrosion and wear resistance.

# CHEMICAL COMPOSITION

HANT	Elemer	nts c		Min (	%)			Max (%)	ME GAHAM
Silvan	Cu		JHANS M	57.0		o v	AETALSIAME	60.00	c-
ETALS	Pb	GAJIAN <sup>®</sup>	St.	115-	SMETA	. JHRIJS	HPM	0.80	S METALS
INEME	<sub>RAJH</sub> AM Sn	_	ETALS	ME ME!	c.A.HAR	67,	4	0.30	CHANS
HUIT	Fe	ME ALS	JANS ME	PUHA -		EL P	5 NEWE	0.50	64°
5	Al	HUNE IN BIL		1.00	METALS	INEME	PB JHP	2.00	.CIALS
IS METE	JHANG Mn	Har	25	1.50	HURE	BUT	S	3.50	JANS MIL
HEZ.	Ni	TALS	MEIN	THUS EU		5	METAL	0.20	HEI
	Si Si	WE ME, BUHUL	~	0.30	TALS	JS ME I	a Children	1.30	. 5
Total O	thers (excl.	Sn,Pb,Fe,Ni)	-	EINES TE	Mr.	HAR	10	0.50	"ENELL" COTH
RAJ	Zn	S WELL	L'20	E In BUTT		Remai	nder	ME ME BE	Herr

## MECHANICAL PROPERTIES ACCORDING TO BS2874 CZ135 (AS PER TEMPER M)

	1/23	20				18.	, Ca
Range (mm)	From	То	UTS Min (N/mm²)	PS Min (N/mm²)	Elo Min (%)	Hardness Min	Hardness Max
Round (Dia)	1.5	6 40 <sub>4</sub>	550	270	12	Suffer - Striken	-
Roulid (Dia)	40	75	550	270	5 12 ALIHA	-	- 125
Hex (A/F)	3	40	550	270	12	- 1815	45 ME. CAHAR
TICK (A)I)	40	70	550	270	12	NE - 15 ME.	Cerificia.
Square (A/F)	3,115	40	550	270	MS 12 15 ME	Carl Hall	-
Square (A)1)	40	60	550	270	12	-	ALS INF
Rectangle (Thickness)	3	40	550	270	12	- ANS	15 ME - CAHAM
Rectarigle (Tillekiless)	40	50	550	270	12	NE ME	Hu -

### PHYSICAL PROPERTIES

Melting Point	875-910 °C
Density	8.0 g/cm <sup>3</sup>
Electrical Conductivity	7-8 MS/m
Heat conductivity	60-70 W/(m*K)
Heat capacity	377 J/(kg*K)
Coefficient of thermal expansion	20 10-6/ K
Young's modulus	95 GPa

Technique	Suitability
Cold formed	Poor
Hot worked	Good
Machinability Rating	30%
Resistance to corrosion	Excellent
Suitability for soldering	Excellent