## **DESCRIPTION**

Brass with zinc as the main add elements of copper alloy, has a beautiful yellow, generally referred to as brass. Copper zinc simple binary alloy called ordinary brass or brass. Zinc in 36 ~ 42% between the brass alloy composed and solid solution, the most commonly used are zinc 40% of brass. In order to improve the performance of the common brass, often add other elements, such as Mn some time used as de oxidant, its small quantity have a grain refining effect.

### CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)		
Cu	57.00	59.00		
Pb	-9 -80 -3	0.80		
Al		0.10		
Fe	-	1.50		
Mn	1.00	2.50		
Ni	, J	0.10		
Sn	- " - " - " - " - " - " - " - " - " - "	0.50		
Si	- 4	0.10		
Total Others	- // - //	0.5		
Zn	Remainder			

# MECHANICAL PROPERTIES ACCORDING TO DIN 17672 (AS PER TEMPER F44)

Range (mm)	From	То	UTS Min (N/mm²)	PS Min (N/mm²)	Elo Min (%)	Hardness Min (HB)	Hardness Max
Round (Dia)	10	80	440	170	20	120	- 10
Hex (a/F)	9	70	440	170	20	120	Ç-1
Square (A/F)	9	60	440	170	20	120	-
Rectangle (Thickness)	5	30	440	170	20	120	- 6

# PHYSICAL PROPERTIES

Density	8.45 g/cm3

## **FABRICATION PROPERTIES**

Workability in cold conditions.

Good corrosion resistance.

For machine parts when substantial strength and corrosion resistance are required.

## **TYPICAL USES**

- > Fittings
- > Valves
- > Bolts and nuts
- > In a refrigeration and air conditioning

