

1. Name of component – Protective Housing & Protective Housing Cover

2. Weight- 22 Kg for housing
15 g for cover

3. Casting: Aluminum Alloy Casting

Finish:

The castings shall be properly fettled and dressed and shall be thoroughly cleaned. The castings shall be supplied either in un-machined, rough machined or finish machined conditions as specified in the order/drawing.

Freedom From Defects :

The castings shall be sound and free from harmful defects, such as blow holes, inclusions, shrinkage, gas cavities, hot spots, cold shuts cracks gross porosities, dross etc, which may adversely affect the machining and utility of castings.

4. Raw Material Description:

A) Chemical Composition:

The chemical composition of the material, when analyzed in accordance with IS : 504 (Methods for chemical analysis of Aluminum its alloys) or any other conventional/instrumental methods shall be as follows :

Element	Percent .	
	Min	Max.
"Copper	-	0.1
Silicon	10.0	13.0
Magnesium	0.2	0.6
Iron	-	0.6
Manganese	0.3	0.7
*Nickel	-	0.1
*Zinc	-	0.1
*Lead	-	0.1
*Tin	-	0.05
*Titanium	-	0.2
Aluminum Remainder		

* These elements need not be determined when the material supplied conforms with the mechanical properties specified in this specification. However, the supplier shall ensure that the composition of the material is within the limits specified above.

B). Mechanical Properties:

The test specimen when tested in accordance with IS : 1608 shall the following tensile properties:

Methods of casting	Tensile strength N/mm², min	% Elongation on 5.65VSo gauge	Hardness BHN, min.
Length, min. Sand	—	-	55
Chill Cast	170	3	65

5. Fig

