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Certificate No: LR24154264WA Issue Date: 12/06/2024 Expiry Date: 11/06/2027

## Copper Alloy Castings For Valves, Liners, Bushes And Fittings

Manufacturer V K Valves Pvt.Ltd.

**Address** C-106, Focal Point, Ext-509, Jalandhar, 144004, India

**Type** Short Freezing Range Alloys

Long Freezing Range Alloys

This approval is subject to compliance with the Rules for the Manufacture, Testing and Certification of Materials. The full details of the processes and grades to which this approval applies are given on subsequent pages of this certificate.

This certificate is issued to the named manufacturer, and is valid until the expiry date specified. Lloyd's Register is to be notified of any change that may affect the validity of this certificate, and reserves the right to cancel or withdraw this certificate.



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**Clive Arnold** 

Metallurgy Team - Lead Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group

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# Copper Alloy Castings For Valves, Liners, Bushes And Fittings

Copper Alloy Castings for Valves, Liners, Bushes and Fittings	Phosphor bronze	Grades	Maximum Weight	Units
-	-	CuSn10P	0.25	Tonnes
-	-	CuSn10PbP	0.25	Tonnes
-	-	CuSn11P	0.25	Tonnes
-	-	CuSn12	0.25	Tonnes
Copper Alloy Castings for Valves, Liners, Bushes and Fittings	Gunmetal	Grades	Maximum Weight	Units
-	-	CuSn10Zn2	0.25	Tonnes
Copper Alloy Castings for Valves, Liners, Bushes and Fittings	Leaded gunmetal	Grades	Maximum Weight	Units
-	-	CuSn5Pb5Zn5	0.25	Tonnes
-	-	CuSn6Zn4Pb2	0.25	Tonnes
-	-	CuSn7Pb3Zn3	0.25	Tonnes
Copper Alloy Castings for Valves, Liners, Bushes and Fittings	Leaded bronze	Grades	Maximum Weight	Units
-	-	CuSn5Pb9	0.25	Tonnes
-	-	CuSn5Pb20	0.25	Tonnes
-	-	CuSn9Pb15	0.25	Tonnes
-	-	CuSn10Pb10	0.25	Tonnes



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## Copper Alloy Castings For Valves, Liners, Bushes And Fittings

Copper Alloy Castings for Valves, Liners, Bushes and Fittings	Copper 30% nickel	Grades	Maximum Weight	Units
-	-	CuNi30Nb	0.25	Tonnes
-	-	CuNi30Cr	0.25	Tonnes
Copper Alloy Castings for Valves, Liners, Bushes and Fittings	Copper 10% nickel	Grades	Maximum Weight	Units
-	-	CuNi10Nb	0.25	Tonnes
Copper Alloy Castings for Valves, Liners, Bushes and Fittings	Aluminium bronze	Grades	Maximum Weight	Units
-	-	CuAl10Fe5Ni5	0.25	Tonnes

### **Additional Remarks**

### **Copper Alloy Castings**

Long freezing range alloys: Phosphor bronze, Gunmetal, Leaded gunmetal and Leaded bronze, details as per Appendix.

Grades for Approved applications only: CuSn10PbP, CuSn10P, CuSn7Pb3Zn3 and CuSn9Pb15
Short freezing range alloys: Copper 30% Nickel, Copper 10% Nickel and Aluminium bronze, details as per Appendix.

Grades for Approved applications only: CuNi30Cr, CuNi30Nb and CuNi10Nb



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