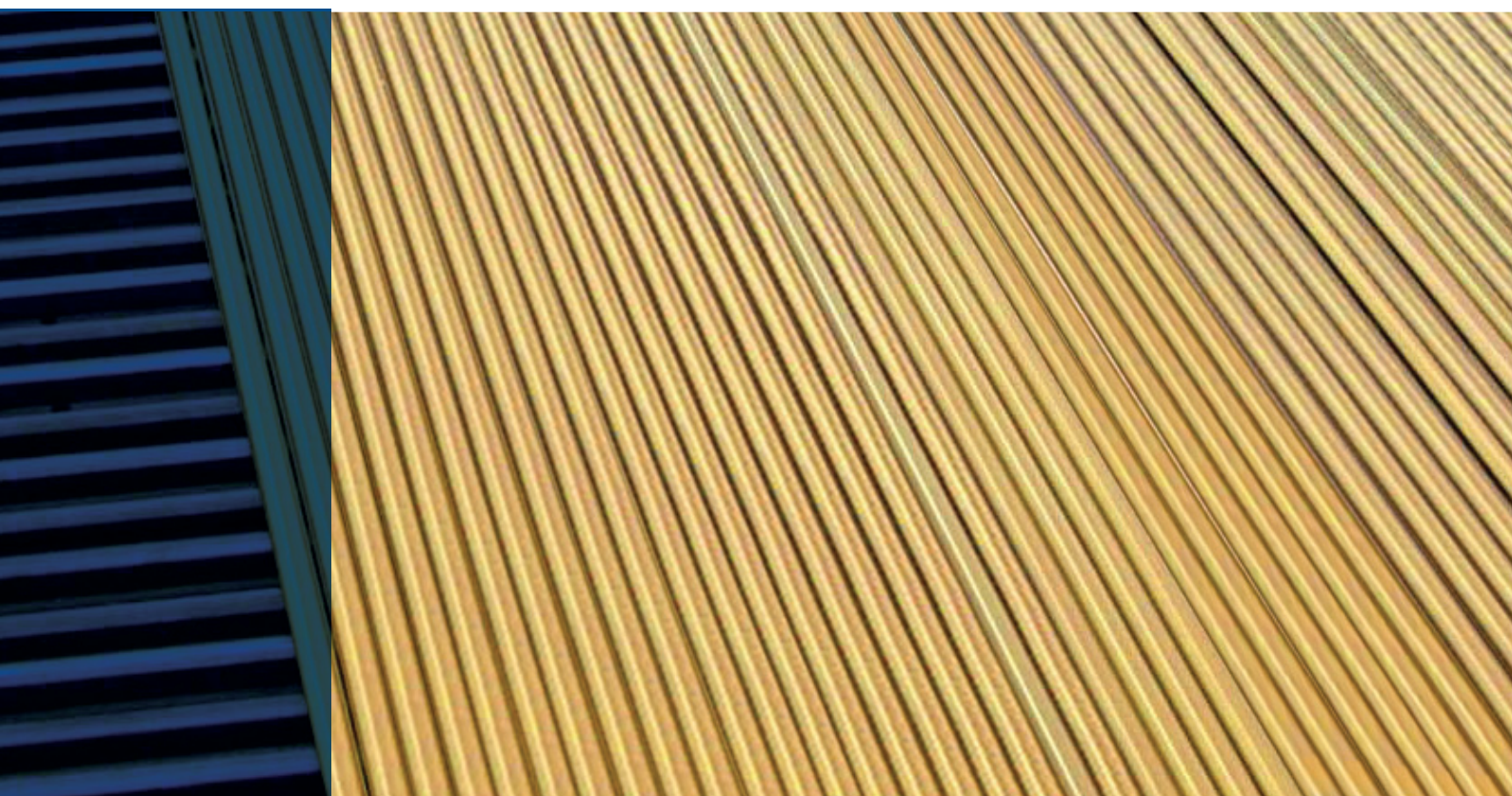


## LDM, strong in specials



### **LDM B.V.**

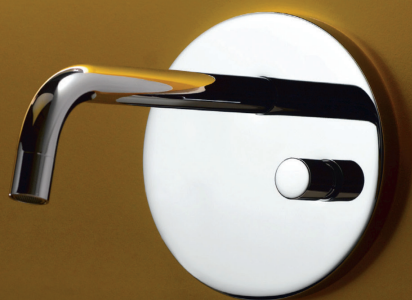
Lipsstraat 44, 5151 RP Drunen, The Netherlands

PO Box 42, 5150 AA Drunen, The Netherlands

tel.: +31 416 389 911 - fax: +31 416 378 655

[www.ldmbrass.com](http://www.ldmbrass.com)

# LDM



## General

BT300 is specially developed for applications with limitation on lead (Pb) content, without loss of efficiency. The alloy meets Californian Law AB1953 and DIN 50930-6. BT300 is our lead free dezincification resistant brass equivalent to CuZn36Pb2As. BT300 can be used for hot stamping and free machining,

ultimately suitable for use in warm, acid waters, water containing Chlorides or organic substances. BT300 has good corrosion resistance characteristics in aggressive environments and passes the dezincification resistance test ISO 6509.

### Related Standards

Actual		
International	ISO	
Europa	EN	CW511L
USA	ASM/SAE	
	ASM	
On request		
Germany**	DIN	
Great Britain**	BS	

LDM processing is based on actual standards

\*\*Former national standard

### Physical properties

Density (g/cm <sup>3</sup> )	8,4	g/cm <sup>3</sup>	0,3 lb/inch
Solidus temperature	902	°C	1656 F
Liquidus temperature	920	°C	1688 F
E-modules (GPa)	105	Gpa	15.229 ksi
Thermal conductivity	110	(W/(m*K))	64 (Btu.ft/(hr.Ft <sup>2</sup> .F) at 68F
Thermal expansion coefficient	21	(0-300C) 10-6/K	70 (68-572F) 10-6F
Electrical conductivity	12	Ms/m	28 21 %IACS
Magnetical permeability	10-6	cm <sup>3</sup> /g	

### Fabrication properties

Forming				
Machinability			poor	
Cold worked			excellent	
Hot worked			good	
Surface treatment				
Polishing mechanical			good	
Polishing chemical			good	
Galvanic			excellent	
Heat treatment				
Melting point range	885-910	°C	1625-1670	F
Hot working	700-800	°C	1292-1472	F
Soft annealing	450-600	°C	842-1112	F
Stress relieving	200-350	°C	392-662	F
Joining				
Soldering			excellent	
Brazing			good	
Gas shielded welding			good	
Resistance welding			good	

### Chemical composition

Cu%	62,0
Zn%	rem
Pb%	max. 0,2
Imp%	0,1

### Ordering information

Typical values	Extruded		Drawn	
Rm (N/mm <sup>2</sup> )	≈ 340 N/mm <sup>2</sup>	≈ 49 ksi	≈ 350 N/mm <sup>2</sup>	≈ 51 ksi
Rp0,2 (N/mm <sup>2</sup> )	≈ 115 N/mm <sup>2</sup>	≈ 17 ksi	≈ 230 N/mm <sup>2</sup>	≈ 33 ksi
A5(%)	≈ 40 %	≈ 40 %	≈ 25 %	≈ 25 %
HB	≈ 80		≈ 100	
Size range	Extruded		Drawn	
Round	1,10-4,72 inch	28-120 mm	0,24-3,94 inch	6-100 mm
Hexagonal	0,98-2,76 inch	25-70 mm	0,24-2,76 inch	6-70 mm
Other shapes	upon request		upon request	

Please note that given values are for information purposes only. You can contact us for more detailed information.





## BT300



### Recommendations

A stress-relief annealing process is recommended for machining purposes to minimize the risk of stress corrosion cracking. Exposure to acidic media may result in dezincification. LDM has drawn up an operating procedure recommendation especially for its valued customers to support them in obtaining the most favorable cycle times and tooling conditions.

Our BlueTap lead free alloys are recyclable with standard brass alloys, as our low lead alloys do not contain Bismuth or Silicon, which is a contaminator to the swarf circulation.



### LDM advantages

LDM aims to be the best in its worldwide niche markets and therefore works closely with its customers to obtain that goal.

- Worldwide expert for special alloys
- ISO 9001 / 14001 certified
- OHSAS 18001 certified
- In time delivery
- Deliver upon promises
- Knowledgeable sales team



LDM is your strategic partner for lead free alloys.

Please take the opportunity to contact us and discuss your specific requirements.

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