

BRONZE

LG2 – Leaded Gunmetal

Typical Analysis (Ave. values %)	Cu	Pb	Sn	Zn	P	Ni	Al	Fe
	85.0	5.0	5.0	5.0	0.025	1.0	0.002	0.30
NEAREST STANDARD	AS		BS		ASTM		SAE	
	83600		LG2		83600		40	

DESCRIPTION	<p>LG2 has Excellent machining properties. Medium strength, good pressure toughness and is not subject to dezincification and has reasonable corrosion resistance to sea water and brine, making it suitable for pump and valve components.</p>
	<p>LG2 is suitable for bearings having light loads and low to medium speeds with adequate lubrication and for very light duty gears when loading is negligible.</p>

APPLICATIONS	Pressure tight requirements, Valve bodies, Pump bodies
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MECHANICAL PROPERTIES	Manufacturing Process	Tensile Strength MPa	Yield Strength 0.2% MPa	Elongation %	Hardness range HB
	Continuous Cast	270	100	13	75
	Centrifugal Cast	220	110	8	80

GENERAL PROPERTIES	Specific Gravity	8.8
	Compressive strength 0.1% Permanent set	100 MPa
	Machinability rating Free machining brass = 100	84
	Operating temperature, max	230°C
	Stress relieve	260°C

Round cast										
SIZE RANGE	12.7	22.22	31.75	50.8	69.85	88.9	127	165.1	203.2	279.4
	15.88	25.4	38.1	57.15	76.2	101.6	139.7	177.8	228.6	304.8
	19.05	28.58	44.45	63.5	82.55	114.3	152.4	190.5	254	
Hollow Bar Cast										
SIZE RANGE	25.4x12.7		63.5x19.05		88.9x38.1		127x69.85		190.5x101.6	
	25.4x15.87		63.5x25.4		88.9x44.45		127x88.9		190.5x127	
	25.4x19.05		63.5x31.75		88.9x50.8		127x101.6		190.5x152.4	
	31.75x12.7		63.5x38.1		88.9x57.15		139.7x50.8		203.2x76.2	
	31.75x15.87		63.5x44.45		88.9x63.5		139.7x63.5		203.2x101.6	
	31.75x19.05		63.5x50.8		88.9x69.85		139.7x69.85		203.2x114.3	
	31.75x25.4		69.85x25.4		88.9x76.2		139.7x76.2		203.2x127	
	38.1x12.7		69.85x31.75		95.25x50.8		139.7x88.9		203.2x152.4	
	38.1x19.05		69.85x38.1		95.25x63.5		139.7x101.6		203.2x165.1	
	38.1x25.4		69.85x44.45		95.25x69.85		139.7x114.3		215.9x177.8	
	38.1x31.75		69.85x50.8		95.25x76.2		152.4x50.8		228.6x101.6	
	44.45x19.05		69.85x57.15		101.6x25.4		152.4x63.5		228.6x127	
	44.45x25.4		76.2x25.4		101.6x38.1		152.4x76.2		228.6x152.4	
	44.45x31.75		76.2x38.1		101.6x44.45		152.4x88.9		228.6x177.8	
	44.45x38.1		76.2x44.45		101.6x50.8		152.4x101.6		228.6x203.2	
	50.8x19.05		76.2x50.8		101.6x63.5		152.4x114.3		254x152.4	
	50.8x25.4		76.2x57.15		101.6x76.2		152.4x127		254x177.8	
	50.8x31.75		76.2x63.5		101.6x88.9		165.1x101.6		254x203.2	
	50.8x38.1		82.55x25.4		114.3x50.8		165.1x114.3		279.4x203.2	
	57.15x19.05		82.55x38.1		114.3x63.5		165.1x127		279.4x228.6	
	57.15x25.4		82.55x44.45		114.3x76.2		165.1x139.7		304.8x152.4	
	57.15x31.75		82.55x50.8		114.3x88.9		177.8x76.2		304.8x203.2	
	57.15x38.1		82.55x63.5		114.3x101.6		177.8x101.6		304.8x228.6	
	57.15x44.45		82.55x69.85		127x50.8		177.8x127		330.2x203.2	
	57.15x50.8		88.9x25.4		127x63.5		177.8x152.4			

Sizes normally stocked in Australia. Some branches may not hold the entire range.

Other sizes available on request.

PB1 – Phosphorus Bronze

Typical Analysis (Ave. values %)	Cu	Pb	Sn	Ni	Zn	Sb	P	Al
	88.0	0.25	11.0	0.10	0.05	0.20	1.00	0.005
NEAREST STANDARD	AS		BS		SAE		ASTM	
	90710		PB1		65		C90700	

DESCRIPTION	PB1 has good machining properties, high strength and good corrosion resistance to sea water and brine, making it suitable for pump and valve components.
	PB1 is suitable for heavy load gears, worm wheels and bearings having medium to high loads and speeds with good resistance to impact loading or pounding. PB1 must have good lubrication and alignment.

APPLICATIONS	Gears, Bearings, Heavy load bushes.
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MECHANICAL PROPERTIES	Manufacturing Process	Tensile Strength MPa	Yield Strength 0.2% MPa	Elongation %	Hardness range HB
	Continuous Cast	360	170	8	80
	Centrifugal Cast	340	170	7	80

GENERAL PROPERTIES	Specific Gravity	8.80
	Machinability rating Free machining brass = 100	30
	Operating temperature, max	250°C
	Stress relieve	260°C

Round cast										
SIZE RANGE	19.05	31.75	50.8	69.85	82.55	114.3	152.4			
	25.4	38.1	57.15	76.2	101.6	127				
Hollow Bar Cast										
SIZE RANGE	50.8x25.4		76.2x25.4		101.6x38.1		127x50.8		152.4x76.2	
	63.5x25.4		76.2x38.1		101.6x50.8		127x63.5			
	63.5x38.1		76.2x50.8		101.6x63.5		139.7x88.9			
	63.5x44.45		88.9x63.5		114.3x63.5		152.4x50.8			

Sizes normally stocked in Australia. Some branches may not hold the entire range.

Other sizes available on request.

954 – Aluminium Bronze

Typical Analysis (Ave. values %)	Cu	Fe	Ni	Mn	Al
	83.0	4.0	1.5	0.50	11.0
NEAREST STANDARD	AS		ASTM		SAE
	95400		C95400		J461/J462

DESCRIPTION	954 is very hard and abrasive resistant has excellent strength and wear resistance with reasonable machining properties. These physical properties remain good at elevated temperatures. General corrosion resistance is good, but under some circumstances may suffer dealuminification.
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APPLICATIONS	High strength bearings, Good impact resistance, Poor anti-seizure properties.
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MECHANICAL PROPERTIES	Manufacturing Process	Tensile Strength MPa	Yield Strength 0.2% MPa	Elongation %	Hardness range HB
	Continuous Cast	586	221	12	180
	Centrifugal Cast	515	205	12	170

GENERAL PROPERTIES	Specific Gravity	7.45
	Compressive strength 0.1% Permanent set	265 MPa
	Machinability rating Free machining brass = 100	60
	Operating temperature, max	260°C
	Stress relieve	316°C

Round cast										
SIZE RANGE	19.05	31.75	44.45	57.15	76.2	101.6	127			
	25.4	38.1	50.8	63.5	88.9	114.3	152.4			
Hollow Bar Cast										
SIZE RANGE	50.8x25.4		76.2x50.8		101.6x38.1		114.3x63.5		152.4x50.8	
	50.8x38.1		88.9x25.4		101.6x63.5		114.3x76.2		152.4x76.2	
	63.5x38.1		88.9x38.1		101.6x76.2		127x63.5		152.4x101.6	
	63.5x50.8		88.9x63.5		114.3x38.1		127x76.2		165.1x101.6	
	76.2x38.1		101.6x38.1		114.3x50.8		127x88.9			

Sizes normally stocked in Australia. Some branches may not hold the entire range.

Other sizes available on request

<u>LOCATIONS</u>					
Bohler Uddeholm Australia Pty Ltd ABN 15000013052					
Sydney	129-135 McCredie Rd Guildford	2161	Ph (02) 8724 5554	Fax (02) 8724 5555	
Newcastle	3 Pavilion Pl Cardiff	2285	Ph (02) 4954 6611	Fax (02) 4956 5773	
Albury	1 Eames St Albury	2640	Ph (02) 6041 3399	Fax (02) 6041 1820	
Wollongong	40 Doyle Ave Unanderra	2526	Ph (02) 4272 6544	Fax (02) 4272 7563	
Marayong	1/21 Binney Rd Marayong	2148	Ph (02) 9831 4431	Fax (02) 9671 1682	
Melbourne	282-290 Greens Rd Dandenong	3175	Ph (03) 9767 5554	Fax (03) 9767 5555	
Bayswater	4 Ramage St Bayswater	3153	Ph (03) 9729 7356	Fax (03) 9738 0850	
Adelaide	1 Williams Cir Pooraka	5095	Ph (08) 8368 4554	Fax (08) 8368 4555	
Brisbane	12-18 Limestone St Darra	4076	Ph (07) 3712 9554	Fax (07) 3712 9555	
Townsville	9-11 Caldwell St Garbutt	4814	Ph (07) 4479 4800	Fax (07) 4725 1316	
Perth	29-33 Gauge Cir Canningvale	6155	Ph (08) 9455 8672	Fax (08) 9455 8673	
Kewdale	5 Beete St Welshpool	6106	Ph (08) 9350 9582	Fax (08) 9350 9683	
Launceston	20 Murphy St Invermay	7248	Ph (03) 6334 3542	Fax (03) 6331 4001	
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