KEY TO ALLOYS - BRASS BAR & ANGLE

Alloy	Name	Used for
352	Leaded 63/37 arsenical brass	High speed machining of plumber's hardware, valve spindles
353	Riveting & machining brass	Good machinability & ductility: cistern ball arms, handles, electrical terminals
360	American free cutting brass	Best machinability & good ductility. Capable of limited cold forming after machining, so that riveting, staking, bending, thread rolling etc are possible: gears, pinions, electrical terminals
380	Section brass	Extruded sections: angles, channels, flats
385	Free cutting brass	Best machinability, no cold forming: nuts, bolts, screw threads
486	Arsenical leaded naval brass	Good machinability, hot forgeability: domestic & marine hardware
686	Leaded high tensile brass	Good strength & machinability: corrosion resistant fasteners, marine hardware

Approximate Composition (%)

Alloy	352	353	360	380	385	486	686
Copper	61.5	62	61	58.5	58	61	58.5
Zinc	35	36	36	39	38	37	37
Lead	3.25	1.75	3.75	2.5	4	1.25	1
Tin						1	0.75
Arsenic	0.15					trace	
Iron							0.75
Manganese							1
Aluminium				0.03			0.75

Typical Properties, Drawn

Alloy	352	353	360	380	385	486	686
0.2% Proof Stress, MPa	165	185	185	155	215	185	250
Tensile Strength, MPa	370	430	430	465	495	465	540
Elongation, %	30	25	20	15	15	15	20
Hardness, HV	110	130	140	150	150	140	160
Machinability	100%	80%	100%	80%	100%	85%	70%