



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A389 Grade C23

Standard Specification for Steel Castings, Alloy, Specially Heat-Treated, for Pressure-Containing Parts, Suitable for High-Temperature Service

Group - Steel Castings

Sub Group - ASTM A389 / A389M Steel Castings, Alloy, Specially Heat-Treated, for Pressure-Containing Parts

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 max.	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.600 max.		
Manganese	Mn %	0.300 - 0.800		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	1.000 - 1.500		
Molybdenum	Mo %	0.450 - 0.650		
Vanadium	V %	0.150 - 0.250		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	483 min.
-	-	-	Yield Strength in Mpa	276 min.
-	-	-	Elongation in %	18 min.
-	-	-	Reduction of Area in %	35 min.
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J12080	UNS	USA	Casting
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

ONE STOP SOLUTION FOR METAL PARTS