



## Material - CSN GX23CrMoV12-1

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - CSN GX23CrMoV12-1 Steel Castings for Pressure Purposes

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 - 0.260	Normalizing or Quenching or Solution Annealing	
Silicon	Si %	0.400 max.		
Manganese	Mn %	0.500 - 0.800		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	11.300 - 12.200		
Molybdenum	Mo %	1.000 - 1.200		
Nickel	Ni %	1.000 max.		
Copper	Cu %	0.300 max.		
Vanadium	V %	0.250 - 0.350		
Tungsten	W %	0.500 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		

  

Mechanical Properties	
Tensile Strength in Mpa	740 - 880
Yield Strength in Mpa	540 min.
Elongation in %	15 min.
Reduction of Area in %	-
Hardness in BHN	-
Impact in Joule	27 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
GX23CrMoV12-1	BS	British	Plate, Tubes and Forging
GX23CrMoV12-1	ISO	International	Casting
1.4931	ISO	International	Casting
GX23CrMoV12-1	ONORM	Australia	Casting
GX23CrMoV12-1	NBN	Belgium	Casting
GX23CrMoV12-1	BDS	Bulgaria	Casting
GX23CrMoV12-1	EN	European Union	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](mailto:marketing@gravitycastindia.com)**

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