



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - ONORM GX23CrMoV12-1

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - ONORM 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	NBN	Belgium	Casting
GX23CrMoV12-1	BDS	Bulgaria	Casting
GX23CrMoV12-1	CSN	Czech Republic	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)**

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.

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