GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-487 Grade 4 Class D (4Q)

Standard Specification for Steel Castings Suitable for Pressure Service

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-487 Grade 4 Class D (4Q) Steel Castings Suitable for Pressure Service

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

Grade Belongs to the Industry - Castings

Chemical Composition		
Carbon	C %	0.300 max.
Manganese	Mn %	1.000 max.
Phosphorus	P %	0.040 max.
Sulphur	S %	0.045 max.
Silicon	Si %	0.800 max.
Vanadium	V %	0.030 max.
Molybdenum	Mo %	0.150 - 0.300
Copper	Cu %	0.500 max.
Nickel	Ni %	0.400 - 0.800
Chromium	Cr %	0.400 - 0.800
Tungsten	W %	0.100 max.
Other	Ot %	0.600 max.
Iron	Fe %	Balance
-	-	-
-	-	-

Heat Treatment
Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	690 min.
Yield Strength in Mpa	515 min.
Elongation in %	17 min.
Reduction of Area in %	35 min.
Hardness in HRC	235 max.
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
J12048	UNS	USA	Steel and Castings
J13047	UNS	USA	Steel and Castings
SA-487 Class 4N	ASME	USA	Steel and Castings
SA-487 Grade 4A	ASME	USA	Steel and Castings
SA-487 Grade 4B	ASME	USA	Steel and Castings
A 487 Grade 4	ASTM	USA	Steel and Castings
A 732 Grade 13Q	ASTM	USA	Steel and 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.