

MATERIAL NUMBER 1.0301 · CLASS 1.0

M1012

Material no. 1.0301

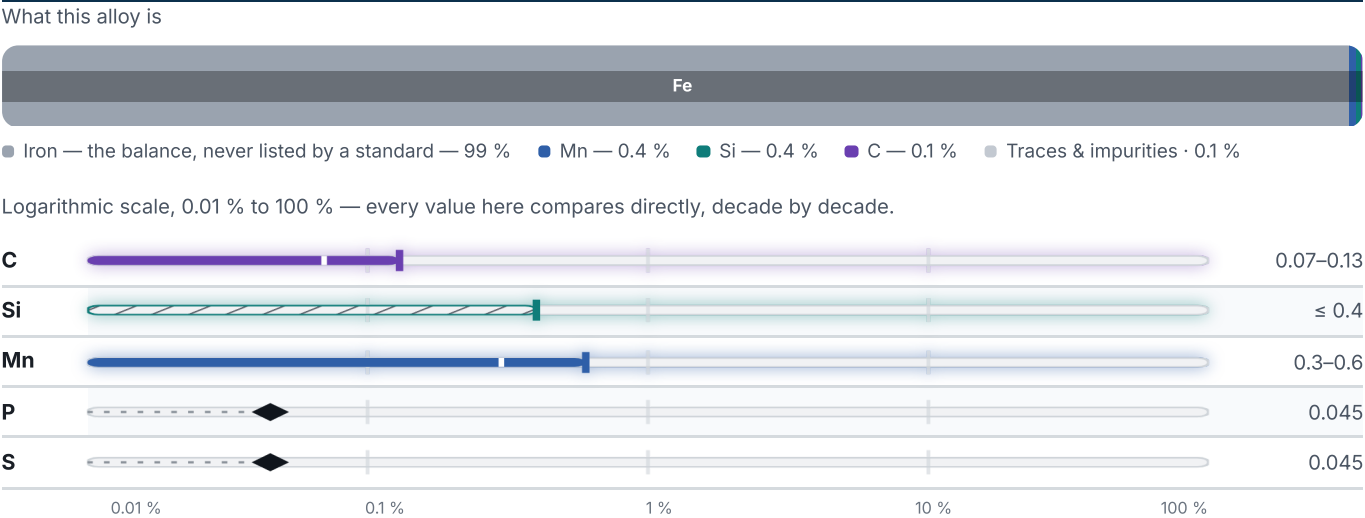
also listed as C10

Chemical composition, mechanical and physical property values, and 63 standard designations from 19 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 63 in 19 regions	PROPERTY VALUES 6 on file
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Chemical composition

Mass fraction in %



The scale is logarithmic, not the element’s raw share of the alloy — the only honest way to fit 0.01 % and 100 % in one picture, and it means every value here can be compared with every other.

Predicted transformation temperatures

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni, Cr, Mo.

Mechanical properties

11 values across 2 conditions

COLD DRAWN / HARD	RM N/mm ²	A %
5 – 10	460–760	8

COLD DRAWN / HARD	RM N/mm²	A %
10 – 16	430–730	9
16 – 40	400–700	10
40 – 63	350–640	12
63 – 100	320–580	12
AS ROLLED AND TURNED		HB
As rolled and turned		92–163

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Annealing	950 °C	—
Quenching	1050 °C	—
Tempering	750 °C	—

Designations across standards

63 designations · 3 documented as identical

United States		13	United Kingdom		10
G10100	This grade's own name	uns	040A04		bs
1010		aisi-sae	040A10		bs
1011		aisi-sae	040A12		bs
1012		aisi-sae	045A10		bs
1110		aisi-sae	045M10		bs
C1010		aisi-sae	10CS		bs
Gr.A		aisi-sae	10HS		bs
M1010	This grade's own name	aisi-sae	1449-10CS		bs
M1012		aisi-sae	CFS3		bs
012		astm	CS10		bs
1006		astm			
1008		astm			
101		astm			

Japan	8	China	2
S09CK	jis	08F	gb
S10C	jis	10	gb
S12C	jis		
S9CK	jis	Russia / CIS	2
SASM1	jis	08KП	gost
STB340	jis	10	gost
STKM12A	jis		
SWMR	jis	Sweden	2
		1233	ss
France	5	1265	ss
AF34	afnor		
AF34C10	afnor	Spain	1
C10	afnor	F.1511	une
C10RR	afnor		
XC10	afnor	Latin America	1
		1010	copant
Italy	5		
1C10	uni	Serbia	1
2C10	uni	Č.1120	srps
C10	uni		
C14	uni	Hungary	1
Fe360	uni	C10	msz
Czechia	3	Romania	1
11353	csn	OLC10	stas
12010	csn		
12021	csn	Bulgaria	1
		10	bds
Poland	3		
10	pn	Austria	1
K10	pn	RC12	onorm
R35	pn		
		Switzerland	1
Europe	2	C10	snv
C10 This grade's own name	din-en		
Ck10	din-en		

Note on use. The data is compiled to the best of our knowledge from publicly available standards and manufacturer documentation. It replaces neither material testing nor an inspection document to EN 10204. Please request a mill certificate to EN 10204 2.1, 3.1 or 3.2 together with your enquiry. The standard in its current valid edition always prevails.

Enquiry about M1012

Quotation, availability, mill certificate or a technical question — directly on the material page.

[Start an enquiry](#)

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

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ISSUED

Aug 20, 2026