

1X12H2BMΦ

also listed as 13KH11N2V2MF

Chemical composition, mechanical and physical property values, and 6 standard designations from 1 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
6 in 1 regions	10 on file

Chemical composition

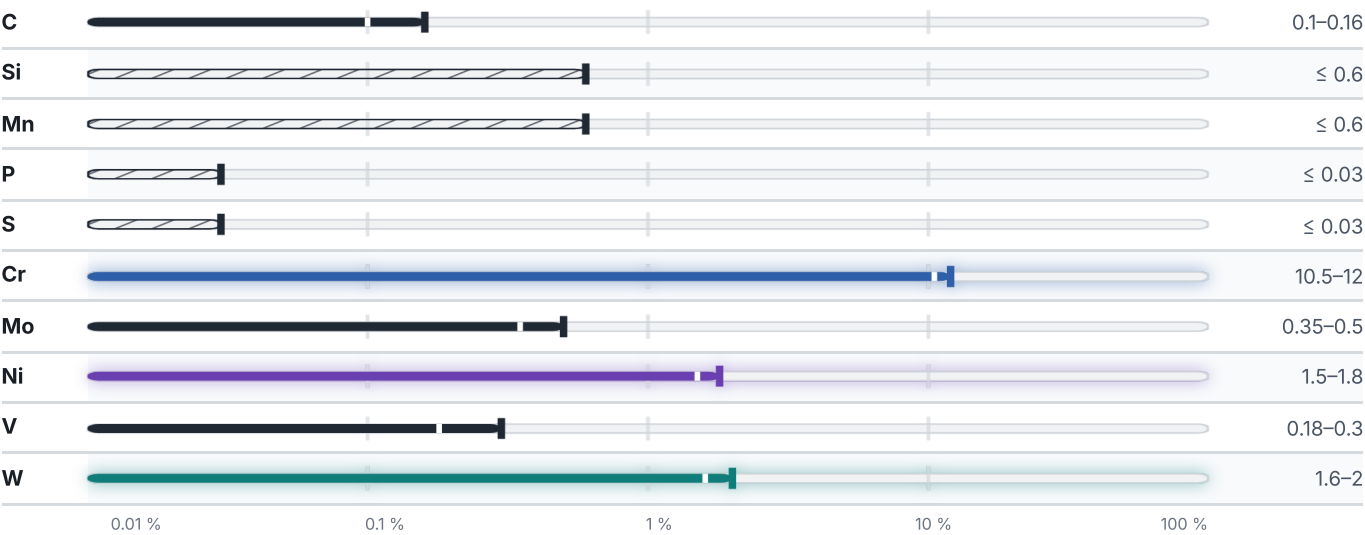
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 83.2 % ● Cr — 11.3 % ● W — 1.8 % ● Ni — 1.7 % ● Traces & impurities · 2.1 %

Logarithmic scale, 0.01 % to 100 % — every value here compares directly, decade by decade.



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

This grade's composition falls outside the published model's validated range (a low-alloy composition window), so no transformation temperature is predicted here.

Mechanical properties

11 values across 3 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Bar, GOST 5949-75	880–1080	735–930	13–15	55	880
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Blank	950	850	10	50	600
CONDITION · DIMENSION	HB				
13KH11N2V2MF (13X11H2B2MΦ) , Bar GOST 5949-75	269				

Physical properties

0 values

CONDITION · DIMENSION	RHO g/cm ³	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)
20	7.8	200	–	20.9
100	–	198	11	22.3
200	–	187	11.7	24
300	–	175	12.2	25
400	–	165	13.3	27.2
450	–	157	–	–
500	–	145	13	28
550	–	125	–	–
600	–	109	13.3	28.5
700	–	–	–	28.9
800	–	–	–	31.4

Designations across standards

6 designations · 1 documented as identical

Russia / CIS	6
13KH11N2V2MF This grade's own name	gost
13Kh11N2V2MFL	gost
13X11H2B2MΦ	gost
1X12H2BMΦ	gost
ЭИ961	gost
ЭИ961Л	gost

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 1X12H2BMΦ
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

MATERIAL NO.
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ISSUED
Aug 15, 2026