

VDM® Alloy HT 60

Designations and standards

Standard	Material designation
Material Number	2.4867
Designation	NiCr 6015
DIN	17470 / 17741 / 17742
UNS	N06024

Chemical composition (weight- %)

	Ni	Cr	Fe	C	Mn	Si	Cu	Mo	Al	Other
Min.	57,0	14,0	Bal.	-	-	1,0	-	-	-	-
Max.	-	17,0		0,10	1,0	1,75	-	-	0,3	0,04

Mechanische Werte (N/mm², %)

Temperature (°C)	R _{p 0.2}	R _m	A ₅₀
20	≥ 210	≥ 600	≥ 30
Typical values			

Specific electrical resistivity (μΩ cm)

Temperature °C	μ' Ω cm
20	113
200	116
400	120
600	121
800	122
1.000	124
1.200	128

Creep properties (N/mm²)

Temperature °C	R _{p 1.0/10³h}
600	80
700	40
800	15
900	9
1.000	4
1.100	1,5
1.200	0,5

Physical properties at room temperature

Density	(g/cm ³)	8,2				
Specific heat	(J/kgK)	460				
Thermal conductivity	(W/mK)	13,4				
Modulus of elasticity	(kN/mm ²)	200				
Coefficient of thermal expansion from 20 °C to		100	200	400	600	800
	(10 ⁻⁶ /K)	13,5	14,0	15,0	15,5	16,0

Processing

Melting temperature	(°C)	1.390
Max. working temperature	(°C)	Heating element m. ~ 1200, resistance m. ~ 600
Workability		Good
Weldability		Satisfactory

Material characteristics

- Heat resistant
- Strong at high temperatures

Typical applications

- Heavy duty resistors
- Electric heating appliances

Legal notice

4.10.2022

Publisher

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