



SANDVIK CS-9A FOR WIRELINES WIRE

DATASHEET

Sandvik CS-9A is a carbon steel wire according to API9A for service in non-corrosive conditions in oil and gas wells.

STANDARDS

- DIN: 17223 part 1

CHEMICAL COMPOSITION (NOMINAL) %

C	Si	Mn	P	S	Cu
0.7	≤0.35	0.7	≤0.040	≤0.040	≤0.20

FORMS OF SUPPLY

Sandvik CS-9A is supplied in the form of cold drawn and oiled wire in continuous lengths without welds.

Sandvik CS-9A is available in two alternatives; ST (standard tensile) and UHT (ultra high tensile).

Dimension		Breaking load		Weight	
mm	in.	kN	lbf	kg/1000m	lbs/1000ft
		ST/UHT	ST/UHT		
2.083	0.082	5.53/6.56	1244/1475	26.5	17.8
2.337	0.092	6.97/8.26	1566/1857	33.4	22.4
2.667	0.105	8.89/10.76	1998/2419	43.5	29.2
2.743	0.108	9.10/11.38	2114/2559	46.0	30.9
3.175	0.125	12.6/15.25	2832/3428	61.6	41.4

MECHANICAL PROPERTIES

Sandvik CS-9A is tested and certified in accordance with minimum tensile strength.

At 20°C (68°F)

Tensile strength, R _m					
Dimension		Standard tensile		Ultra high tensile	
mm	in.	MPa	ksi	MPa	ksi
2.083	0.082	>1624	>236	>1926	>279
2.337	0.092	>1624	>236	>1926	>279
2.667	0.105	>1591	>231	>1926	>279

Tensile strength, R _m					
Dimension		Standard tensile		Ultra high tensile	
mm	in.	MPa	ksi	MPa	ksi
3.175	0.125	>1591	>231	>1926	>279

PHYSICAL PROPERTIES

Density: 7.8 g/cm³, 0.28 lb/in³

Modulus of elasticity: 206 000 MPa, 29 800 ksi

Thermal expansion

20 - 100°C	11*10 ⁻⁶ / °C
68 - 210°F	8 * 10 ⁻⁶ / °F

Thermal conductivity: 45 W/m °C, 26 Btu/ft h °F

Disclaimer: Recommendations are for guidance only, and the suitability of a material for a specific application can be confirmed only when we know the actual service conditions. Continuous development may necessitate changes in technical data without notice. This datasheet is only valid for Sandvik materials.