

WIRE DATA SHEET ZAPP 26MO FOR WIRELINES



ZAPP IS CERTIFIED ACCORDING TO ISO 9001

ZAPP 26MO

is a high-alloy austenitic stainless steel for service in highly corrosive conditions in oil and gas environments.

STANDARDS

_ UNS: N08926
_ W.Nr.: 1.4529

The grade is characterized by:

- _ Very good resistance to stress corrosion cracking (SCC) in H₂S, chloride and CO₂ environments
- _ Very good resistance to pitting in chloride-containing environments because of its high PRE* value of 43 minimum
- _ Very good resistance to general corrosion
- _ High mechanical strength and correspondingly high breaking loads
- _ Maximum recommended service temperature: 250 °C

* PRE, Pitting Resistance Equivalent = %Cr + 3.3 x %Mo + 16 x %N

CHEMICAL COMPOSITION (NOMINAL) %

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N
≤ 0.020	0.4	0.8	≤ 0.030	≤ 0.005	20.5	25	6.3	0.8	0.2

FORMS OF SUPPLY

SLICKLINES

Zapp 26Mo slicklines are supplied cold drawn and degreased in continuous lengths.

Slicklines

Diameter		Breaking load		Weight	
mm	in.	N	lbf	kg/1,000 m	lb/1,000 ft
2,083	0.082	5,398	1,214	27.3	18.31
2,337	0.092	6,805	1,530	34.4	23.05
2,667	0.105	8,851	1,990	44.8	30.02
2,743	0.108	9,365	2,105	47.4	31.76
3,175	0.125	12,545	2,820	63.4	42.55
3,556	0.140	15,740	3,541	79.6	53.37
3,810	0.150	18,064	4,061	91.4	61.27
4,064	0.160	20,557	4,621	103.8	69.60

ARMOR WIRE

Zapp 26Mo logging cable armor wire is supplied cold drawn and degreased in continuous lengths without welds in sizes according to the table. The standard surface is matt, providing reduced friction in the pre-form head and increased productivity. Other armor wire dimensions can be manufactured on request.

Logging cable armor wire

Diameter		Breaking load		Weight	
mm	in.	N	lbf	kg/1,000 m	lb/1,000 ft
0.617	0.0243	495	111	2.39	1.60
0.787	0.0310	806	181	3.89	2.61
0.820	0.0323	875	197	4.22	2.83
0.909	0.0358	1,075	242	5.19	3.48
1,130	0.0445	1,660	373	8.02	5.38

MECHANICAL PROPERTIES

Zapp 26Mo is tested and certified in accordance with a minimum tensile strength. Proof strength is in the range of 85 % of the tensile strength. This means that Zapp 26Mo can resist high loads without permanent set of the wire.

Mechanical properties for slicklines, at 20 °C (68 °F)

Proof strength Rp0.2		Tensile strength Rm	
MPa	ksi	MPa	ksi
≥ 1,350	≥ 195	≥ 1,585	≥ 230

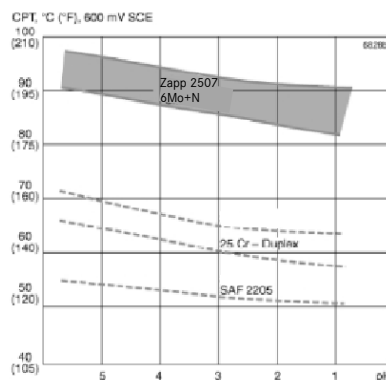
Mechanical properties for logging cable armor wire, at 20°C (68°F)

Proof strength Rp0.2		Tensile strength Rm	
MPa	ksi	MPa	ksi
≥ 1,405	≥ 204	≥ 1,655	≥ 240

CORROSION RESISTANCE

PITTING

Zapp 26Mo can resist very high temperatures in aggressive environments without being attacked by pitting. All stainless steels have a critical pitting temperature (CPT) above which there is a risk of pitting. Results of laboratory tests of the critical pitting temperature (CPT) for Zapp 26Mo and some other stainless steels, as a function of pH values in 3% NaCl solution, is shown in the diagram.



HYDROGEN SULPHIDE INDUCED CORROSION

Zapp 26Mo has been specially developed to be resistant in most common well conditions, including H₂S and CO₂ containing environments.

PHYSICAL PROPERTIES

- _ Density: 8.0 g/cm³, 0.29 lb/in³
- _ Thermal expansion: 20 - 100 °C, 14x10⁻⁶/°C, 68 - 210 °F, 8x10⁻⁶/°F
- _ Thermal conductivity, at 20 °C (68 °F): 10 W/m °C, 6 Btu/ft h °F
- _ Resistivity: at 20 °C (68 °F), 0.96 μΩm, 37.7 μΩin
- _ Modulus of elasticity, at 20 °C (68 °F): 195,000 MPa, 283,000 ksi

Zapp Precision Metals (Sweden) AB

PRECISION WIRE

Järnverksleden 8
811 34 Sandviken
Sweden

Phone +46 26 265467

precisionmetals-sweden@zapp.com

www.zapp.com

The illustrations, drawings, dimensional and weight data and other information included in this data sheet are intended only for the purposes of describing our products and represent non-binding average values. They do not constitute quality data, nor can they be used as the basis for any guarantee of quality or durability. The applications presented serve only as illustrations and can be construed neither as quality data nor as a guarantee in relation to the suitability of the material. This cannot substitute for comprehensive consultation on the selection of our products and on their use in a specific application. The brochure is not subject to change control.

Last revision: February 2019